# County of Santa Clara

Department of Planning and Development

County Government Center, East Wing,  $7^{\rm th}$  Floor 70 West Hedding Street San Jose, California 95110

Administration Development Services Fire Marshal Planning

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# Notice of Intent to Adopt a Mitigated Negative Declaration

A notice, pursuant to the California Environmental Quality Act of 1970, as amended (Public Resources Code 21,000, et sec.) that the following project will not have a significant effect on the environment.

File Number	TAZ	APN(s)		Date		
PLN20-109		712-21-008		5/18/2021		
Project Name		Project Type				
New Single-Family Residence on Palm Morgan Hill	Avenue,	Building Site Approval				
Person or Agency Carrying Out Proj	ect	Address	Phone Number			
County of Santa Clara		Palm Avenue, Morgan Hill (408) 299-5759				
Name of Applicant		Address	Phone	e Number		
Nelson Cheng/ Ocean Queen USA, Inc		3016 Baylis Street, Fremont (510		579-5507		

### **Project Location**

The proposed building site is located within the rural unincorporated area of the County of Santa Clara, south of San José, in an area recognized as Coyote Valley, and surrounding land uses include agricultural fields, single family residences (across from Palm Avenue), horse boarding/ranch, and an open space preserve adjacent to the west. Residential homes are located to the east and south. The subject property is 9.6 acres, with a General Plan designation of Agriculture – Large Scale, and is within an Exclusive Agriculture zoning district, consisting of prime farmland soil.

The topography of the building site is generally flat with an approximate slope of 2 percent (2%) towards the southeast of the property. Fisher Creek is located 0.15 miles north of the property and traverses across the adjacent Coyote Valley Open Space Preserve and neighboring lots.

### **Project Description**

See Attachment A for project description.

### **Purpose of Notice**

The purpose of this notice is to inform you that the County Planning Staff has recommended that a Mitigated Negative Declaration be approved for this project. County of Santa Clara Planning Staff has reviewed the Initial Study for the project, and based upon substantial evidence in the record, **finds that although the proposed project could initially have a significant effect on the environment, changes or alterations have been incorporated into the project to avoid or reduce impacts to a point where clearly no significant effects will occur.** The project site is not on a list of hazardous material sites as described by Government Code 65962.5 (Cortese List).

It should be noted that the approval of a Mitigated Negative Declaration does not constitute approval of the project under consideration. The decision to approve or deny the project will be made separately on June 24<sup>th</sup>, 2021.

Public Review Period: 30 days Begins: 5/18/21 Ends: 6/17/21

Public Comments regarding the correctness, completeness, or adequacy of this negative declaration are invited and must be received on or before the above date. Such comments should be based on specific environmental concerns. Written comments should be addressed to the attention of Lara Tran at the County of Santa Clara Planning Office, County Government Center, 70 W. Hedding Street, San Jose, CA 95110, Tel: (408) 299-5770. A file containing additional information on this project may be reviewed at the Planning Office website under the file number appearing at the top of this form. For additional information regarding this project and the Mitigated Negative Declaration, please contact Lara Tran at (408) 299-5759 or lara.tran@pln.sccgov.org.

### The Mitigated Negative Declaration and Initial Study may be viewed at the following locations:

- (1) Santa Clara County Planning Office, 70 West Hedding Street, East Wing, 7th Floor, San Jose, CA 95110
- (2) Planning & Development website <u>www.sccgov.org/sites/dpd</u> (under "Development Projects" > "Current Projects")

### Responsible Agencies sent a copy of this document

California Department of Fish and Wildlife Santa Clara Valley Habitat Agency

Santa Clara Valley Open Space Authority

Mitigation Measures included in the project to reduce potentially significant impacts to a less than significant level:

See Attachment B on separate page.

A reporting or monitoring program must be adopted for measures to mitigate significant impacts at the time the Negative Declaration is approved, in accord with the requirements of section 21081.6 of the Public Resources Code.

D 11	DocuSigned by:	
Prepared by: Lara Tran, Associate Planner	lara tran	5/18/2021
·	Docusion grature	Date
Approved by: Leza Mikhail, Principal Planner	leza Mikhail	5/18/2021
	4272684C30A646B Signature	Date

### Attachment A

Notice of Intent – Adopt a Mitigated Negative Declaration (MND) Single-Family Residence at Palm Avenue, Morgan Hill

### **Project Description**

The project is a Building Site Approval application to construct an approximately 4,374 square foot, two-story single-family residence located at Palm Avenue, Morgan Hill (APN: 712-21-008). The subject property is 9.6 acres in size and is characterized as a rectangular shaped lot at the western end of Palm Avenue. To the west of the parcel is the Coyote Valley Open Space Preserve owned by the Santa Clara Valley Open Space Authority (OSA). To the north, east, and south of the parcel are agricultural fields, single-family homes, and a commercial stable (Coyote Canyon Ranch), which are all within unincorporated Santa Clara County.

The proposed residence takes access from Palm Avenue and is proposed in the middle of the 9.6-acre parcel. The proposed residence meets the County of Santa Clara Zoning Ordinance Development Standards for the Exclusive Agriculture zoning, Chapter 2.20.030, by being located a minimum of 30-feet away from all property lines. In addition to the single-family residence, associated proposed improvements include a 20 ft. wide asphalt driveway with a 3-foot shoulder, a fire-truck turnaround constructed with aggregate base rock and asphalt, and a 390 square foot paved pad for two (2) 5,000-gallon water tanks, and a 200 square foot paved pad for a 1,000-gallon propane tank. A septic tank and leach field is proposed to be installed northwest of the residence. Total impervious surface for the project is approximately 9,945 square feet, consisting primarily of the footprint of the proposed residence, driveway, fire turnaround, and pads for the water tanks and propane tanks. Overall, proposed development will encompass 2.4% of the entire 9.6-acre parcel, leaving 97.6% of the existing property as undeveloped land.

Total grading quantities for the proposed development include 93 cubic yards of cut and 115 cubic yards of fill, with a maximum cut depth of 4 feet. Most of the proposed grading is to establish the foundation for the residence and fire turnaround. No trees are proposed for removal. An encroachment permit from the County Roads and Airports is required due to construction work for the new driveway proposed within the County Road right-of-way (ROW) from Palm Avenue. Additionally, County Roads and Airports is requiring a 30-ft. half-street dedication of right of way for Palm Avenue.

### Attachment B

Notice of Intent – Adopt a Mitigated Negative Declaration (MND) Single-Family Residence at Palm Avenue, Morgan Hill MITIGATION MEASURES

### **BIOLOGY**

- <u>BIO MIT 1:</u> Workers Environmental Training. Prior to the start of the project, a worker's environmental training shall be performed with the entire construction team. The training shall address species identification, natural history, local occurrence, and the protection measures implemented during the project, including actions to take if a badger is encountered. All workers who receive the training must sign a certification sheet. Each new crew member must receive the environmental training prior to starting work.

  Applicant shall provide a copy of the certification sheet to the County Planning Division to verify that the Worker Environmental Training was implemented prior to construction activities.
- BIO-MIT 2: Conduct Pre-construction Survey. No less than 14 days but no more than 30 days prior to the initial ground disturbance at the project site, a pre-construction survey shall be conducted by a qualified biologist. The biologist will search for burrows of an appropriate size and shape, evidence of recent activity and other signs, such as tracks and scat. All dens will be mapped and their status (whether the dens are active at the time of the survey) will be determined. If no potential burrows are found on the property, the project should proceed immediately, within two weeks. Written results of the preconstruction survey will be submitted to the California Department of Fish and Wildlife (CDFW) within five days of survey completion and prior to the start of ground disturbance and/or construction. The applicant is required to provide a copy of the preconstruction survey results to the County Planning Division to verify status of burrows (if any) prior to the start of construction.
- BIO-MIT 3: Potential Buffer Zone and Relocation of American badger: If a potential den is found, the qualified biologist shall determine if it is active using camera traps for three (3) consecutive nights. If a den is determined to be active, CDFW shall be consulted regarding measures to avoid take. These may include establishing a temporary buffer zone around active dens during construction, and relocation through trapping or passively. Destruction of dens will not occur without prior consultation with and approval from CDFW. If a badger den is found, the Planning Division shall be notified immediately, and any approval provided by the CDFW shall be forward to the Planning Division for record keeping purposes.
- BIO-MIT 4: Installation of Fence Around Perimeter of the Construction Envelope. Regardless of whether potential dens are identified, an exclusion fence should be installed around the perimeter of the construction envelope to exclude possible badger occurrence onto the project site during construction activities. At a minimum, the exclusion fence shall be constructed from Department of Transportation (DOT) grade silt fence. The fence should be buried one (1) foot below grade and encircle the project site

and incorporate a gate that would allow construction vehicle access and serve as a barrier to wildlife trespass. The installation of the fence should be monitored by a qualified biologist. The applicant is required to provide evidence of fence installation around perimeter of the construction envelope prior to start of construction.

• **BIO-MIT 5:** Daytime Restriction. All construction activities shall be in conformance with the Santa Clara County Noise Ordinance Section B11-154 and prohibited between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and Saturdays, or at any time on Sundays for the duration of construction. Additionally, all construction shall be restricted to daylight times and shall not extend after sunset.

# **INITIAL STUDY**

# **Environmental Checklist and Evaluation for the County of Santa Clara**

File Number:	PLN20-109	<b>Date:</b> 3/15/2021
<b>Project Type:</b>	Building Site Approval	<b>APN(s):</b> 712-21-008
Project Location / Address:	Palm Avenue, Morgan Hill	<b>GP Designation:</b> Agriculture Large Scale
Owner's Name:	Ocean Queen USA, Inc.	Zoning: A-40Ac
Applicant's Name:	Nelson Cheng	Urban Service Area: None

# **Project Description**

The project is a Building Site Approval application to construct an approximately 4,374 square foot, two-story single-family residence located at Palm Avenue, Morgan Hill (APN: 712-21-008) see **Attachment 1** – *Plan Set*. The subject property is 9.6 acres in size and is characterized as a rectangular shaped lot at the western end of Palm Avenue. To the west of the parcel is the Coyote Valley Open Space Preserve owned by the Santa Clara Valley Open Space Authority (OSA). To the north, east, and south of the parcel are agricultural fields, single-family homes, and a commercial stable (Coyote Canyon Ranch), which are all within unincorporated Santa Clara County.

The proposed residence takes access from Palm Avenue and is proposed in the middle of the 9.6-acre parcel. The proposed residence meets the County of Santa Clara Zoning Ordinance Development Standards for the Exclusive Agriculture zoning, Chapter 2.20.030, by being located a minimum of 30-feet away from all property lines. In addition to the single-family residence, associated proposed improvements include a 20 ft. wide asphalt driveway with a 3-foot shoulder, a fire-truck turnaround constructed with aggregate base rock and asphalt, and a 390 square foot paved pad for two (2) 5,000-gallon water tanks, and a 200 square foot paved pad for a 1,000-gallon propane tank. A septic tank and leach field is proposed to be installed northwest of the residence. Total impervious surface for the project is approximately 9,945 square feet, consisting primarily of the footprint of the proposed residence, driveway, fire turnaround, and pads for the water tanks and propane tanks. Overall, proposed development will encompass 2.4% of the entire 9.6-acre parcel, leaving 97.6% of the existing property as undeveloped land.

Total grading quantities for the proposed development include 93 cubic yards of cut and 115 cubic yards of fill, with a maximum cut depth of 4 feet. Most of the proposed grading is to establish the foundation for the residence and fire turnaround. No trees are proposed for removal. An encroachment permit from the County Roads and Airports is required due to construction work for the new driveway proposed within the County Road right-of-way (ROW) from Palm Avenue. Additionally, County Roads and Airports is requiring a 30-ft. half-street dedication of right of way for Palm Avenue.

# **Environmental Setting and Surrounding Land Uses**

The proposed building site is located within the rural unincorporated area of the County of Santa Clara, south of San José, in an area recognized as Coyote Valley, and surrounding land uses include agricultural fields, single family residences (across from Palm Avenue), horse boarding/ranch, and an open space preserve adjacent to the west. Residential homes are located to the east and south. The subject property is 9.6 acres, with a General Plan designation of Agriculture – Large Scale, and is within an Exclusive Agriculture zoning district, consisting of prime farmland soil.

The topography of the building site is generally flat with an approximate slope of 2 percent (2%) towards the southeast of the property - see **Attachment 1**. Fisher Creek is located 0.15 miles north of the property and traverses across the adjacent Coyote Valley Open Space Preserve and neighboring lots.

Assembly Bill 948 was adopted into law on September 27, 2019 and codified at sections 35180 to 35186 of the California Public Resources Code. AB 948 recognizes Coyote Valley is a "unique landscape providing agricultural, wildlife, recreational, climate, and other natural infrastructure benefits and is a resource of statewide significance in need of restoration, conservation, and enhancement." In addition, AB 948 requires Coyote Valley to be "acknowledged as an area of statewide significance in local planning documents developed or update don or after January 1, 2020, affecting land use within Coyote Valley." Coyote Valley is also recognized as a critical corridor for wildlife migrating between the Santa Cruz Mountains and the Diablo Range. Per Section 15300.2(a) of the California Environmental Quality Act (CEQA) a single-family residence may not be deemed exempt from environmental review and qualify for a Categorical Exemption if the project "may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies." As the property is located within the Coyote Valley that is recognized under AB 948 as an environmental resource designated, precisely mapped and adopted pursuant to state law, a Categorical Exemption Section 15303, Class 3, is not applicable for the proposed residence.

According to the County of Santa Clara Geographic Information System (GIS) data and California Natural Diversity Database (CNDDB), the entire property is within the golden eagle area and is also adjacent to the area for the American badger. A biological assessment regarding the golden eagle and American badger was prepared as part of the project (**Attachment 2**). The property is also within the coverage area of the Santa Clara Valley Habitat Plan and has a mapped landcover of Grain/Row-Crop, Hay, and Pasture, and is also within a mapped plant survey area for Santa Clara Valley dudleya and most beautiful jewel flower. The property is not located within County liquefaction or landslide areas or FEMA flood zone.

### Other agencies sent a copy of this document:

California Department of Fish and Wildlife Santa Clara Valley Habitat Agency Santa Clara Valley Open Space Authority The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

# ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The	proposed project could potenti	ally result in one or more environmental	effects in the following areas:						
	Aesthetics	☐ Agriculture / Forest Resources	☐ Air Quality						
$\boxtimes$	<b>Biological Resource</b>	☐ Cultural Resources	☐ Energy						
	Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials						
	Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources						
	Noise	Population / Housing	☐ Public Services						
	Recreation	☐ Transportation	☐ Tribal Cultural Resources						
	<b>Utilities / Service Systems</b>	☐ Wildfire	☐ Mandatory Findings of Significance						
DF	ETERMINATION: (To be comple	eted by the Lead Agency)							
<u>On</u>	the basis of this initial evaluation	<u> </u>							
	I find that the proposed project CECLARATION will be prepared.	OULD NOT have a significant effect on the	environment, and a NEGATIVE						
sig		project could have a significant effect on the revisions in the project have been made by <b>ARATION</b> will be prepared.							
sig app DE	nificant effects (a) have been analyplicable standards, and (b) have be	project could have a significant effect on the yzed adequately in an earlier EIR or NEGAT en avoided or mitigated pursuant to that earlies or mitigation measures that are imposed up	TIVE DECLARATION pursuant to ier EIR or NEGATIVE						
☐ IM	I find that the proposed project MIPACT REPORT is required.	1AY have a significant effect on the environ	ment, and an ENVIRONMENTAL						
pui des	☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on the attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.								
		4.	29/2021						
Sig	gnature	 Dat							
_	ara Tran	To-	<del></del>						
L L	int name	For							

### ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

Α.	AESTHETICS					
					IMP	ACT
Except as provided in Public Resources Code section 21099, would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	<u>No</u> <u>Impact</u>	Source
a)	Have a substantial adverse effect on a scenic vista?					2,3,4, 6,17f
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, along a designated scenic highway?					3, 6,7 17f
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?					2,3
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?					3,4

### **SETTING:**

The subject property is 9.6 acres in size and is characterized as a rectangular shaped lot at the corner of Palm Avenue and Kalana Avenue. To the west of the parcel is the Coyote Valley Open Space Preserve owned by the Santa Clara Valley Open Space Authority (OSA). To the north, east, and south of the parcel are single-family homes, a commercial stable (Coyote Canyon Ranch), and vacant land with prime soils that can be used as agricultural fields immediately adjacent to the parcel, which are all within unincorporated Santa Clara County.

The proposed undeveloped property is flat, with a 2% slope and contains two (2) 10-inch oak trees located on Palm Avenue on the west side of the property. The subject property has a General Plan designation of Agriculture – Large Scale with an Exclusive Agriculture zoning designation. The property takes access from Palm Avenue, which is a County maintained road. Palm Avenue is not a County-designated scenic road nor is the property in a Design Review Viewshed area identified in the County General Plan or Zoning Ordinance. The property is within the Coyote Valley and is adjacent to the Coyote Valley Open Space Preserve which is part of the Coyote Valley Conservation Program (Assembly Bill [AB] 948). Although AB 948 recognizes Coyote Valley as an area of statewide significance, the legislation does not expressly designate Coyote Valley as a scenic resource.

The area around the building site is vacant and existing trees are not proposed for removal. The proposed development is visible from Palm Avenue, neighboring homes sites and surrounding uses.

The development includes a new, two-story, ranch-style, single-family residence without any exterior lighting proposed.

### **DISCUSSION:**

**a, b & d)** No Impact – The subject property is not located within a scenic vista recognized by the County of Santa Clara General Plan and Zoning Ordinance, nor does it have a Design Review zoning overlay or Scenic Road zoning overlay. The property takes access from Palm Avenue, which is not designated as a scenic road or highway. The proposed project will not have substantial adverse effect or substantially damage scenic resources such as trees, rocks, outcroppings, or historic buildings. The property is less than a mile from the closest scenic road (Santa Teresa Boulevard) and more than 2 miles west from a scenic highway.

Additionally, the proposed development does not include any proposed outdoor lighting. Due to these circumstances, the project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area with the required condition of approval.

c) Less Than Significant—Although the property is not located in an identified scenic vista within the County of Santa Clara, nor does it have a Design Review or Scenic Road zoning overlay, it is within an area of the County referred to as the Coyote Valley, and is adjacent to the Coyote Valley Open Space Preserve, both of which are part of the Coyote Valley Conservation Program (AB 948). The project includes development of a new 33-foot-tall, two-story, single-family residence that will be visually prominent, as seen from Palm Avenue, for views looking northwest of the property towards the Coyote Open Space Preserve. However, neither the County nor AB 948 discuss or define 'scenic vistas' or vantage points for the public to observe concerning the Coyote Valley Open Space Preserve. The County designated "scenic vistas" within the Zoning Ordinance include the land within the Design Review and Scenic Road zoning overlay areas, which do not apply to the property. Furthermore, in terms of protecting scenic resources, the County's General Plan is limited to protecting scenic significance such as ridgelines, within the hillsides, adjacent to streams, transportation corridors and county entranceways (R-RC98), all of which are not applicable to the existing property. The property is generally flat and is adjacent to agricultural lands with residential and agricultural uses and not located to a hillside or adjacent to any ridgelines, streams, or scenic roads.

The proposed location of the single-family residence is in an agricultural area with other single-family residences and agricultural uses such as a commercial stable on a neighboring lot. Single-family residences surrounding and within walking distance of the existing property consists of homes that are single to two-story tall structures that ranges from 3,000 square feet to over 5,000 square feet. The project is consistent to the visual character of the neighborhood as the development is a two-story single-family residence in an agricultural area that is similar to existing residential properties and structures. The proposed project minimizes development to a small footprint (less than 10,000 square feet of impervious surface) and maintains the majority of the 9.6-acre property as undeveloped (approximately 2.4% of the total 9.6-acre parcel). As the property is located within an agricultural area with existing residences and other buildings of similar or larger sizes on parcels surrounding the property and the given the minimal footprint and size of the residence (compared to other surrounding

homes) the project is consistent to the surrounding visual character and would not substantially degrade the visual setting of the area.					

	AGRICULTURE / FOREST RESOURCES							
Cal opt incl Dep Ass	In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.							
				IMPACT	•			
wc	OULD THE PROJECT:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	<u>No</u> <u>Impact</u>	Source		
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?					3,23,24,26		
b)	Conflict with existing zoning for agricultural use?					9,21a		
c)	Conflict with an existing Williamson Act Contract or the County's Williamson Act Ordinance (Section C13 of County Ordinance Code)?							
d)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?					1, 28		
e)	Result in the loss of forest land or conversion of forest land to non-forest use?					32		
f)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?							

The subject property has a General Plan designation of Agriculture – Large Scale and is zoned Exclusive Agriculture. According to the United States Department of Agriculture's (USDA) "Soils of Santa Clara County," the property consists of prime farmland soils. The property is not encumbered by a Williamson Act contract and is not within a forest or timberland area. Surrounding uses are agricultural, with a horse boarding and ranching facility across from Palm Avenue and residential uses

throughout the eastern portion of the neighborhood on Palm Avenue. The property has historically been used for cultivating field crops such as hay.

The location of the property is in the Coyote Valley which, Assembly Bill 948 acknowledged as being a resource of statewide significance due to the characteristics of its natural and agricultural lands, which have "been subject to intense development pressure and [are] in need of restoration, conservation, and enhancement" (California Public Resources Code Section 35182(b)).

### Discussion:

**b, c, d, & e)** No Impact – The property is not encumbered by a Williamson Act contract, or within a forestland/timberland area, and therefore the proposed development would not conflict with County Williamson Act Guidelines, the County's Williamson Act Ordinance, or existing zoning for forestland or timberland areas. No trees are proposed for removal, and the property is not within a forestland area, and therefore the proposed development does not result in the loss of forest land. The County's existing zoning allows for a single-family residence 'by-right' in an Exclusive Agriculture zoning district.

a & f) Less Than Significant Impact – According to the USDA's "Soils of Santa Clara County" the property consists of prime farmland soils, the highest-quality designation of agricultural soils. According to the State Department of Conservation's Farmland Mapping and Monitoring Program, the property consists primarily of soils characterized as Farmland of Local Importance. Construction of the single-family residence as proposed would partially result in the conversion and permanent loss of the prime agricultural soils in the areas that are proposed for physical development. The conversion of prime agricultural soils would result from the construction of the 9,945 square feet of impervious surfaces proposed as part of this application, constituting approximately 2.4% of the total 9.6-acre parcel. While this loss of prime agricultural soils is permanent, it is a less-than-significant impact as 97.6% of the property is not proposed for development. As a point of comparison, the County's policies implementing the California Land Conservation Act of 1965, also known as the Williamson Act, provides that up to 10% of a property may be developed without compromising agricultural viability.

The subject 9.6-acre parcel is adjacent to another agricultural parcel (APN: 712-21-007), which is flag-shaped, 20 acres in size, and also contains prime agricultural soils. Historically, these two parcels have been cultivated for agricultural purposes as a contiguous area of approximately 30 acres, without fencing or obstruction between parcels. Each parcel is individually owned, and each subject to the County's current zoning ordinance, which allows single-family residences as a 'by-right' use.

Although the two properties have historically been managed as a larger contiguous area, and the new residential development of the subject 9.6-acre parcel may decrease the agricultural viability of the adjacent 20-acre parcel, the contiguous parcels continue are not required to be managed and operated together for agricultural purposes and thus the project would not result in a significant impact to agricultural resources associated with the subject property.

C.	AIR QUALITY									
	Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.									
			I	MPACT						
WC	OULD THE PROJECT:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	<u>No</u> <u>Impact</u>	Source				
a)	Conflict with or obstruct implementation of the applicable air quality plan?					5,29, 30				
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?					5,29, 30				
c)	Expose sensitive receptors to substantial pollutant concentrations?					5,29, 30				
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?					5, 29, 30				

The proposed development includes a single-family residence which takes access from Palm Avenue, a County maintained road in the unincorporated area of Santa Clara County. Surrounding land uses immediately adjacent to the building site are the Coyote Valley Open Space Preserve to the west (approximately 400 feet from the proposed residence), a horse boarding/ranch with a single-family residence to the south (approximately 600 feet from the proposed residence), and single family homes to the east and north (closest home is approximately 670 feet from the proposed residence). Land uses surrounding the property include vacant, undeveloped land with restrooms and a parking lot, agriculture, and single-family homes.

### **DISCUSSION:**

a, b, c, & d) No Impact – The proposed project is located within the San Francisco Bay Area Air Quality Management District (BAAQMD), which regulates air pollutants, including those generated by construction and operation of development projects. These criteria pollutants include reactive organic gases, carbon monoxide, nitrogen dioxide, and particulate matter (PM). BAAQMD also regulates toxic air contaminants (fine particulate matter), long-term exposure to which is linked with respiratory conditions and increased risk of cancer. Major sources of toxic air contaminants in the Bay Area include major automobile and truck transportation corridors (e.g., freeways and expressways) and stationary sources (e.g., factories, refineries, power plants). The subject property takes access from Palm Avenue, approximately 2 miles southwest of Highway 101 and 1 mile of Monterey Road, in unincorporated Santa Clara County.

The operational criteria pollutant screening size for evaluating air quality impacts for single-family residential projects established by BAAQMD is 325 dwelling units, and the construction-related

screening size for single-family residential projects is 114 dwelling units. Emissions generated from the proposed one single-family residence is below the BAAQMD operational-related emissions and construction emission thresholds.

Development of the proposed single-family residence would involve construction activities. Dust would be created during the construction of the proposed structures and site improvements. However, dust emissions would be controlled through standard Best Management Practices (BMPs) dust control measures that would be a condition of the project. Per the BAAQMD screening criteria, for single-family residential uses, construction emissions impacts are less than significant for projects of 114 dwelling units or less. The proposed project involves the construction of one single-family residence with a driveway, drainage improvements, and utility services. The proposed residential use would not expose sensitive receptors (such as children, elderly, or people with illness) to substantial pollutant concentrations or involve criteria pollutants emissions. Minimal addition of residences and nominal increase in population would not significantly increase the regional population growth, nor would it cause significant changes in daily vehicle travel.

As such, the proposed development would not conflict with or obstruct implementation of an applicable air quality plan, result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, expose sensitive receptors to substantial pollutant concentrations, or result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

#### **MITIGATION:**

D.	BIOLOGICAL RESOURCES									
		IMPACT								
wc	OULD THE PROJECT:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significa nt Impact	<u>No</u> <u>Impact</u>	Source				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					1, 7, 17b, 17o, 32				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?					3,7, 8a, 17b, 17e, 22d, 22e, 33				
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					3, 7, 17n, 33				
d)	Have a substantial adverse effect on oak woodland habitat as defined by Oak Woodlands Conservation Law (conversion/loss of oak woodlands) – Public Resource Code 21083.4?					1, 3, 31, 32				
e)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?					1,7, 17b, 17o, 32				
f)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					32				
g)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?					3,4, 171				

The property contains hayfield (barley and annual ryegrass) and weedy vegetation where agricultural uses have been consistent on the project site since at least the 1990s. Fisher Creek is approximately 700 feet north of the existing property and the proposed building site takes access from Palm Avenue, which is a County maintained road. The proposed development will not cross any watercourses or riparian habitat. According to the California Natural Diversity Database (CNDDB), the entire property is within the golden eagle area where a golden eagle was recorded in 2014 near McKean Road and Bailey Road, which is 2 miles from the existing property. A portion of the property is also adjacent to the location of an American badger that was recorded in 2018 on the Coyote Open Space Preserve.

The property is also within the coverage area for the Santa Clara Valley Habitat Plan and has a mapped landcover of Grain/Row-Crop, Hay, and Pasture, Disked/Short-Term fallowed and is located within an area that requires plant surveys for Santa Clara Valley dudleya and most beautiful jewel flower, although there is no serpentine landcover mapped as occurring on the property.

### **DISCUSSION:**

**b, c, d, e, f, & g)** No Impact – The building site and area is not located in any state or federally protected wetlands or adjacent to any riparian habitat. The property also does not have any known wetlands and is not within any mapped Oak Woodland area and the property is currently vacant with two (2) trees located to the west and south off the property. Additionally, the parcel is not located in any sensitive landcovers such as serpentine.

The property is located within the coverage area for the Santa Clara Valley Habitat Plan (HCP), a programmatic Habitat Conservation Plan and Natural Communities Conservation Plan. The project is a covered project under the the Santa Clara Valley Habitat Plan, and will obtain endangered species clearance for any potential impacts to plant and wildlife species addressed by the Habitat Plan, through payment of Habitat Plan fees and adherence to conditions of approval required for Habitat Plan coverage. The property has a mapped landcover of Grain/Row-Crop, Hay, and Pasture, Disked/Short-Term, which is common for agricultural lands, and there is no mapped sensitive natural communities on the property, as mapped by the Habitat Plan. Although the property is within a required plant survey areas for Santa Clara Valley dudleya and most beautiful jewel flower, the property does not contain any evidence of serpentine landcover or serpentine outcrop, that is the supportive habitat for these plant species, and aerial images of the property shows the property is composed of grain/row-crop and pasture lands. As part of its conservation strategy, Habitat Plan implementation, addresses the critical wildlife corridors identified in AB948. The project is in conformance with HCP and will not create a conflict or impact to the habitat conversation plan.

- e) Less than Significant AB 948 recognizes Coyote Valley as an area of statewide significance and identifies that it provides a critical corridor for wildlife migrating between the Santa Cruz Mountains and the Diablo Range. The project will not have an impact on any migration corridors as it is a covered project under the Santa Clara Valley Habitat Plan, which programmatically addresses impacts to migration corridors identified in the Habitat Plan area, including the requirement for projects to adhere to conditions of approval.
- a) Less than Significant with Mitigation According to the California Natural Diversity Database (CNDDB), the property is within the golden eagle area where a golden eagle was recorded in 2014 near McKean Road and Bailey Road, which is 2 miles from the existing property. Although the golden eagle is not a covered species under the Santa Clara Valley Habitat Plan, it is protected under the Migratory Bird Treaty Act and is addressed in the Santa Clara Valley Habitat Plan. According to the Biological Resources Evaluation Report prepared by Brian Mori of Biological Consulting Services in April 2021 (source 32), an onsite field survey did not find any evidence of habitat or nesting habitat for the golden eagle within 660 feet of the property. The two (2) 10-inch oak trees off on Palm Avenue and along the western portion of the lot (which will remain according to proposed plans) did not contain any nesting sites for the golden eagle. The biology report concluded that due to a lack of nesting habitat on or immediately adjacent to the property, no significant impact to the golden eagle is expected. According to the California Natural Diversity Database (CNDDB), a portion of the existing property is adjacent to an area where the American badger was last observed in August 2018 within the Coyote Open Space Preserve area. Badgers primarily occur in grassland, open scrub, and habitats with friable soils. The Santa Clara Valley provides habitat for American badger in open spaces, agricultural, and rural residential landscapes outside of urban areas. The Biological Resources Evaluation Report prepared by Brian Mori of Biological Consulting Services in April 2021 (source 32), found evidence of burrows along the project site's western property line but there was no presence (or signs of presence) of the American badger at the burrows (source 32). Although no badger dens were observed on the

property, potential habitat is present with a 2018 record of an American badger was recorded from the adjacent Coyote Valley Open Space Preserve. Therefore, in order to avoid potential impacts to the American Badger during construction, precautionary mitigation measures shall be incorporated in the conditions of approval including a pre-construction survey conducted by a qualified biologist prior to commencement of any construction activities (BIO-MIT2), a potential buffer zone and notification to California Department of Fish and Wildlife (CDFW) if an a active badger den is found (BIO-MIT3), and installation of a fence around the perimeter of the construction area to exclude possible badger occurrence onto the property during construction activities ((BIO-MIT4) shall be in place. Prior to commencement of the project, the construction team shall have an environmental training to ensure proper environmental procedures and protections will be follow before, during, and after the project construction (BIO-MIT1). Adherence to the mitigation measures will reduce any potentially significant impacts to the American Badger to a less than significant level.

### **MITIGATION:**

- <u>BIO MIT 1: Workers Environmental Training</u>. Prior to the start of the project, a worker's environmental training shall be performed with the entire construction team. The training shall address species identification, natural history, local occurrence, and the protection measures implemented during the project, including actions to take if a badger is encountered. All workers who receive the training must sign a certification sheet. Each new crew member must receive the environmental training prior to starting work. Applicant shall provide a copy of the certification sheet to the County Planning Division to verify that the Worker Environmental Training was implemented prior to construction activities.
- BIO-MIT 2: Conduct Pre-construction Survey. No less than 14 days but no more than 30 days prior to the initial ground disturbance at the project site, a pre-construction survey shall be conducted by a qualified biologist. The biologist will search for burrows of an appropriate size and shape, evidence of recent activity and other signs, such as tracks and scat. All dens will be mapped and their status (whether the dens are active at the time of the survey) will be determined. If no potential burrows are found on the property, the project should proceed immediately, within two weeks. Written results of the preconstruction survey will be submitted to the California Department of Fish and Wildlife (CDFW) within five days of survey completion and prior to the start of ground disturbance and/or construction. The applicant is required to provide a copy of the preconstruction survey results to the County Planning Division to verify status of burrows (if any) prior to the start of construction.
- BIO-MIT 3: Potential Buffer Zone and Relocation of American badger: If a potential den is found, the qualified biologist shall determine if it is active using camera traps for three (3) consecutive nights. If a den is determined to be active, CDFW shall be consulted regarding measures to avoid take. These may include establishing a temporary buffer zone around active dens during construction, and relocation through trapping or passively. Destruction of dens will not occur without prior consultation with and approval from CDFW. If a badger den is found, the Planning Division shall be notified immediately, and any approval provided by the CDFW shall be forward to the Planning Division for record keeping purposes.
- <u>BIO-MIT 4: Installation of Fence Around Perimeter of the Construction Envelope</u>. Regardless of whether potential dens are identified, an exclusion fence should be installed around the perimeter of the construction envelope to exclude possible badger occurrence onto the project

site during construction activities. At a minimum, the exclusion fence shall be constructed from Department of Transportation (DOT) grade silt fence. The fence should be buried one (1) foot below grade and encircle the project site and incorporate a gate that would allow construction vehicle access and serve as a barrier to wildlife trespass. The installation of the fence should be monitored by a qualified biologist. The applicant is required to provide evidence of fence installation around perimeter of the construction envelope prior to start of construction.

• <u>BIO-MIT 5: Daytime Restriction</u>. All construction activities shall be in conformance with the Santa Clara County Noise Ordinance Section B11-154 and prohibited between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and Saturdays, or at any time on Sundays for the duration of construction. Additionally, all construction shall be restricted to daylight times and shall not extend after sunset.

E.	E. CULTURAL RESOURCES								
					IMP	ACT			
wc	OULD THE PROJECT:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	<u>No</u> <u>Impact</u>	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	Source	
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines, or the County's Historic Preservation Ordinance (Division C17 of County Ordinance Code) – including relocation, alterations or demolition of historic resources?							3, 16, 19, 40, 41	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines?							3, 19, 40, 41	
c)	Disturb any human remains including, those interred outside of formal cemeteries?							3, 19, 40, 41	

Total grading quantities for the proposed development are 93 cubic yards of cut and 115 cubic yards of fill with a maximum cut depth of 4 feet. Most the proposed grading is to establish a fire truck turn around and to establish the building foundation beneath the proposed residence. No existing structures are proposed to be demolished as the lot is vacant.

### **DISCUSSION:**

- **a, b, & d)** No Impact The project does not require a Grading Approval and/or a Grading Permit pursuant to County Grading Ordinance C12-406 as the grading quantities are below 150 cubic yards of cut or fill and it is less than 5 feet in vertical depth. The development and building site will not cause any alteration, relocation, or demolition to historic resources pursuant to the County's Historic Ordinance (Division C17) as the parcel is vacant. Additionally, the building site will not have any adverse effect to archeological resources as the proposed grading is not significant enough to require a Grading Approval or Grading Permit by the County of Santa Clara. The proposed development is more than 700 feet from Fisher Creek and is not adjacent to any watercourses in the area which may increase the likelihood of containing archeological resources. AB 948 does not recognize Coyote Valley for historic or pre-historic resources, therefore, no impact to any historic resources shall occur.
- c) Substantially Mitigated by Uniformly Applicable Development Policies –In the event that human skeletal remains are encountered, the applicant is required by County Ordinance No. B6-18 to immediately notify the County Coroner. Upon determination by the County Coroner that the remains are Native American, the coroner shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of section 7050.5 of the Health and Safety Code and the County

Coordinator of Indian affairs. No further disturbance of the site may be made except as authorized by the County Coordinator of Indian Affairs in accordance with the provisions of state law and this chapter. If artifacts are found on the site a qualified archaeologist shall be contacted along with the County Planning Office. No further disturbance of the artifacts may be made except as authorized by the County Planning Office.

# **MITIGATION**:

F.	ENERGY							
					IMP	ACT		
wo	OULD THE PROJECT:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	<u>No</u> <u>Impact</u>	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	Source
a)	Result in potentially significant environmental impact do to wasteful, inefficient, or unnecessary construction of energy resources during project consumption or operation?							3, 5
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?							5

The proposed project includes construction of a new single-family residence with a proposed leach field and 2,500 gallon septic tank, two (2) 5,000-gallon water tanks for domestic fire sprinklers and hydrant, an onsite well for domestic water and a proposed area for a 1,000 gallon propane tank for residential use. An approximately 964 square foot landscaping area is proposed as part of the project, and therefore, compliance to the Santa Clara County Landscaping Ordinance is required.

### **DISCUSSION:**

a & b) No Impact — The new single-family residence is a relatively low-impact development and does not propose to utilize energy resources, such as gas, electricity and water, in an inefficient manner during construction or during its use as a residence. Additionally, the proposed residence and its associated energy resources does not conflict with local or state plans for energy efficiency. As such, the proposed project does will not result in potentially significant environmental impact do to wasteful, inefficient, or unnecessary construction of energy resources during project consumption or operation and will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

### **MITIGATION**:

G.	GEOLOGY AND SOILS									
			IMPACT							
wo	OULD THE PROJECT:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	<u>No</u> <u>Impact</u>	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	Source		
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:									
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.							6, 17c, 43		
	ii) Strong seismic ground shaking?							6, 17c		
	iii) Seismic-related ground failure, including liquefaction?							6, 17c, 17n, 18b		
	iv) Landslides				$\boxtimes$			6, 17L, 118b		
b)	Result in substantial soil erosion or the loss of topsoil?							6, 14, 23, 24		
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?							2, 3, 17c, 23, 24, 42		
d)	Be located on expansive soil, as defined in the report, <i>Soils of Santa Clara County</i> , creating substantial direct or indirect risks to life or property?							14,23, 24,		
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?							3,6, 23,24,		
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?							2,3,4,40,41		

The topography of the building site is flat with an approximate slope of 2 percent (2%) towards the southeast of the property. The property is not located in the County's Landslide Hazard Area, County's

Liquefaction Hazard Area, or adjacent to any earthquake fault zones. The County Geologist did not require a Geologic or Geotechnical Report or had any geologic requirements due to the lack of geologic hazards on the parcel.

### **DISCUSSION**:

**a- i, iii, & iv, b, c, d, e, & f)** No Impact — County GIS does not identify any faults located near the project area. As such, the proposed project will not directly or indirectly cause potential substantial adverse effects due to the rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Additionally, the property is not within a Santa Clara County landslide hazard zone or a liquefaction hazard zone and therefore the proposed project does not directly or indirectly cause potential substantial adverse effects due to landslides or liquefaction. As such, there is no impact.

### **MITIGATION**:

Н.	H. GREENHOUSE GAS EMMISSIONS												
			IMPACT										
wo	OULD THE PROJECT:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	<u>No</u> Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	Source					
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?							5,29, 30					
b)	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?							5,29, 30					

The proposed project includes the construction and use of the property as a single-family residence.

Given the overwhelming scope of global climate change, it is not anticipated that a single development project would have an individually discernible effect on global climate change. It is more appropriate to conclude that the greenhouse gas emissions generated by a proposed project would combine with emissions across the state, nation, and globe to cumulatively contribute to global climate change. The primary GHG associated with a development project is carbon dioxide, which is directly generated by fuel combustion (vehicle trips, use of natural gas for buildings) and indirectly generated by use of electricity.

### **DISCUSSION:**

**a & b)** No Impact – Due to the relatively small scale of the project (a single-family residence; a firetruck turnaround, drainage improvements and utility connections), and compliance with existing County and State requirements listed below, which will minimize greenhouse gas emissions, it is anticipated that the proposed project will not result in any cumulatively considerable greenhouse gas emissions.

The project is required to comply with the Cal Green, which applies mandatory green building requirements to new single-family dwellings. These measures include higher energy efficiency standards and requirements to minimize water usage and the use of natural resources. Implementation of these measures will act to reduce potential greenhouse gas emissions from the proposed project. The proposed use as a single-family residence would not conflict with any applicable plan, policy or regulation for reducing the emissions of greenhouse gases.

The single-family residence will have minimal greenhouse gas emission impacts and would involve GHG emissions through the operation of construction equipment and from worker/builder supply vehicles, which typically use fossil-based fuels to operate. Project excavation, grading, and construction would be temporary, occurring only over the construction period, and would not result in a permanent increase in GHG emissions. The single-family residence would consume electricity; however, the amount would be minimal, and therefore would not make a cumulatively considerable contribution to the effect of GHG emissions on the environment. As such, the project would have no impact on greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the

environment, and would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

# **MITIGATION**:

I.	HAZARDS & HAZARDOUS MAT	ΓERIALS									
		IMPACT									
WC	OULD THE PROJECT:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	<u>No</u> <u>Impact</u>	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	Source			
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?							1, 3, 4, 5			
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?							2, 3, 5			
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school?							46			
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?							47			
e)	For a project located within an airport land use plan referral area or, where such a plan has not been adopted, within two miles of a public airport or public use airport, or in the vicinity of a private airstrip, would the project result in a safety hazard, or excessive noise for people residing or working in the project area?							3, 22a			
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?							5, 48			
g)	Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?							4, 17g			

The proposed project is not located at or adjacent to any hazardous sites. The project site is not listed on the County of Santa Clara Hazardous Waste and Substance Sites List, it is not located in the County

Airport Land Use plan area and is not located but is adjacent to the Wildland Urban Interface Fire Area (WUI).

### **DISCUSSION:**

a, b, c, d, e, f, & g) No Impact – The proposed project is residential and would not involve the use or transportation of any hazardous materials, and it is not located on site designated as hazardous under Section 65962.5, as verified on EnviroStor, accessed on March 17, 2021.

The project is located within an agricultural area and would not change the local roadway circulation pattern, access, or otherwise physically interfere with local emergency response plans. The access to the project site is from an existing public road and through a driveway. The development plans have been reviewed and conditionally approved by the County Fire Marshal's Office. The proposed project will not impair or physically interfere with any emergency response or evacuation plans.

As the property is not within a ¼ mile of a school, its location outside of the County Airport Land Use plan area, and because it is not listed on the Hazardous Waste and Substance Sites List, the proposed project does not have an impact on emitting hazardous substances within a ¼ mile of a school, creating a significant hazard to the public or the environment due to its listing as a hazardous materials site, or create a safety hazard, or excessive noise for people residing or working in the project area due to its proximity to an airport.

The project is adjacent to the Wildland Urban Interface area (WUI) and is not within the WUI area and has been reviewed and conditioned by the Santa Clara County Fire Marshal's Office. As such, this project will not expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires.

### **MITIGATION**:

J.	HYDROLOGY AND WATER QUALITY	_						•	
			IMPACT						
Wo	uld the project:	Potentiall Y Significan t Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE	
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?							34, 32, 36, 39	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?							3, 4, 32, 36, 39	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:							3, 17n, 36	
i)	Result in substantial erosion or siltation on- or off-site						$\boxtimes$	3, 17p, 36	
II)	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;							1, 3, 5, 36, 21a	
III)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or							1, 3, 5	
IV)	Impede or redirect flood flows?						$\boxtimes$	3, 17p,	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				$\boxtimes$			18b, 18d 3, 18b, 18d	
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?							2, 3, 4, 17p	

The proposed development is not located within a FEMA Flood Zone. The proposed development consists of new impervious surface of approximately 9,945 square feet, primarily due to the footprint of the proposed residence, driveway, fire turnaround, and pads for the water tanks and propane tank. As stated in the Stormwater Control Plan, prepared by Ryan Haley in November of 2020 (source 32), in order to ensure that the new development does not increase the stormwater runoff from the existing site, the new asphalt driveway and roof outlets are designed to flow and drained to the grassed landscape. An infiltration trench has been designed for flood control purposes. This feature doubles as a water quality measure as it will promote percolation of asphalt runoff to the groundwater. The flood control mitigations are incorporated and designed in conformance with the County of Santa Clara Stormwater Management Guidance Manual and the Santa Clara Valley Urban Runoff Pollution Prevention Program.

The domestic and emergency water is provided by an onsite well located north of the property (approximately 240 feet from the proposed leach field) and two (2) 5,000-gallon water tanks are proposed as part of the project.

As the property is located within the area of Coyote Valley which is recognized under AB 948 as an area of statewide significance of natural resources for many climate and natural infrastructure benefits, including flood attenuation from improved wetlands, increased water supply from groundwater recharge, and carbon sequestration from natural and working lands. The proposed development is located within a high groundwater area identified from the Valley Water groundwater map for Coyote Valley.

### **DISCUSSION:**

- **d, & e) No Impact** The proposed project does not include the use of pollutants or hazardous materials. Additionally, the property is not located within a FEMA flood zone. Therefore, it is unlikely that pollutants from construction would be released due to flooding. Therefore, the project will not have any impact to hazardous materials or conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan.
- a & b,) Less than Significant Impact The project does require an on-site wastewater treatment system (OWST) which consists of a leach field and a 2,500-gallon septic tank. The OSWT and associated improvements have been reviewed and approved by the Department of Environmental Health ensuring that the proposed OWST is designed and sized to meet all applicable water quality standards, soil requirements, and groundwater standards.

Although the property is located within a high ground water area identified from Valley Water, the septic tests and soil inspections for the leach field and septic in 2015 (source 32) confirmed there was no evidence of disturbance of groundwater 15 feet below ground. The Department of Environmental Health concluded there would not be potential for contamination as the ground water is deeper than 15 feet. Therefore, the proposed project does not substantially degrade surface or ground water quality, substantially decrease groundwater supplies, or interfere substantially with groundwater recharge. As such, the project imposes less than significant impact to items a & b, listed above and does not require mitigation.

c-i, c-ii, c-iii, c-iv) Substantially Mitigated by Uniformly Applicable Development Policies – The proposed project includes approximately 9,945 square feet of new impervious surface area for a single-family residence (2.4% coverage of the site) and will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. As stated in the Stormwater Control Plan, prepared by Ryan Haley in November of 2020, in order to ensure that the new development does not increase the stormwater runoff from the existing site, the new asphalt driveway and roof outlets are designed to flow and drained to the grassed landscape. Runoff and flow treatment measure will use the 2:1 ratio of impervious to a "self-retained" area and achieves water quality treatment. An infiltration trench has been designed for flood control purposes. This feature doubles as a water quality measure as it will promote percolation of asphalt runoff to the groundwater. The flood control mitigations are achieved using an infiltration trench which outlets to the roadside ditch of Palm Avenue.

Standard conditions are incorporated into the project, and implemented in the County of Santa Clara Stormwater Management Guidance Manual, and the Santa Clara Valley Urban Runoff Pollution Prevention Program is to lessen any potential impact for erosion and stormwater that may derive from

a standard single-family residence, such as the subject project. Based on standard Best Management Practices (BMP), the proposed site will not result in substantial erosion or siltation on or off site due to implementation of BMPs (HYD-CONDITION 1) and stormwater design to avoid excessive run-off and downstream flooding (HYD-CONDITION 2). Due to the design of the proposed drainage system according to the County's development policies incorporated into the conditions of approval and as a standard requirement, the proposed project will have a less than significant impact on items c-i, c-ii, c-iii, c-iv listed above.

### STANDARD CONDITIONS OF APPROVAL:

- <u>HYD CONDITION 1:</u> Best Management Practices (BMPs). The improvement plans shall include an Erosion and Sediment Control Plan that outlines seasonally appropriate erosion and sediment controls during the construction period). **Include the County's Standard Best Management Practice Plan Sheets BMP-1 and BMP-2 with the Plan Set prior to grading or building permit issuance**.
- <u>HYD CONDITION 2: Stormwater.</u> The applicant shall include one of the following site design measures in the project design:
  - A. Direct hardscape and/or roof runoff onto vegetated areas,
  - B. Collect roof runoff in cisterns or rain barrels for reuse, or
  - C. Construct hardscape (driveway, walkways, patios, etc.) with permeable surfaces.

Include one of the design measures listed about in the Plan Set prior to grading or building permit issuance. Though only one site design measure is required, it is encouraged to include multiple site design measures in the project design. For additional information, please refer to the C.3 Stormwater Handbook (June 2016) available at the following website: www.scvurppp.org > Resources > reports and work products > New Development and Redevelopment > C.3 Stormwater Handbook (June 2016).

K.	K. LAND USE									
			IMPACT							
WOULD THE PROJECT:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE		
a)	Physically divide an established community?				$\boxtimes$			2, 4		
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?							8a, 9, 18a		

The western side of the property is boarded by the Coyote Valley Open Space Preserve and the entire property is within the County of Santa Clara. The surrounding land uses are agricultural with a horse boarding and ranching facility across from Palm Avenue and residential uses throughout the southern and eastern portion of the neighborhood on Palm Avenue. The development area has a General Plan Designation of Agriculture – Large Scale with an Exclusive Agriculture zoning district.

### **DISCUSSION:**

- a) No Impact The proposed development is over 400 feet from the nearest residence and the majority of the area is vacant land. Due to the proposed development's distance from existing neighborhoods, the project does not physically divide an established community. The County's General Plan for Agriculture Large Scale is to support and enhance rural character, preserve agriculture and prime agricultural soils, protect and promote wise management of natural resources, avoid risks associated with the natural hazards characteristic of those areas, and protect the quality of reservoir watersheds critical to the region's water supply. Allowable land uses within an Exclusive Agriculture designation includes very low-density residential development, such as the proposed project.
- b) Less than Significant Impact The proposed project will not disrupt any existing agricultural use or operation as the building site area consists of less than 10,000 square feet of impervious surface and the property will continue to able to produce and cultivate hay currently used. The project will not prevent future agricultural use as the development is a low-density single-family residence that is consistent to surrounding single-family residential use on agricultural land within the neighborhood. Although the development is within the Coyote Valley area, it is not located within an open space preserve or conservation easement (such as Williamson Act). The project the project conforms with and is a covered project under the Santa Clara Valley Habitat Plan. Due to the project's conformance with the County General Plan and Zoning policies, the project will not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

# **MITIGATION**:

L.	MINERAL RESOURCES									
			IMPACT							
wo	OULD THE PROJECT:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	<u>No</u> Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE		
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?							1, 2, 3, 6, 44		
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?							1, 2, 3, 6, 8a		

The project consists of a single-family residence and does not include utilizing the subject property for mining. No known valuable mineral resources are located on the subject property, which are delineated on a local general plan, specific plan, or other land use plan.

### **DISCUSSION:**

**a & b)** No Impact – Due to the project's use of the property as a single-family residence, and the lack of known valuable mineral resources within the proposed development, the project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

### **MITIGATION:**

M.	M. NOISE								
			IMPACTS						
wo	DULD THE PROJECT RESULT IN:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	<u>No</u> <u>Impact</u>	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE	
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?							8a, 13, 22a, 45	
b)	Generation of excessive groundborne vibration or groundborne noise levels?				$\boxtimes$			13, 45	
c)	For a project located within the vicinity of a private airstrip or an airport land use plan referral area or, where such a plan has not been adopted, within two miles of a public airport, public use airport, or private airstrip, would the project expose people residing or working in the project area to excessive noise levels?							1, 5, 22a	

The project consists of the development of a new single-family residence and associated improvements including a firetruck turnaround and utility connections. Local ambient noise comes from the nearby residences, agricultural livestock, and minor occasional traffic noise of an existing parking lot from the Coyote Open Space Preserve. The project is not located in an airport land use plan referral area.

#### **DISCUSSION:**

a) Less than significant impact – Construction of the proposed single-family residence will temporarily elevate noise levels in the immediate project area from the use of construction equipment. Construction noise could have an impact on the nearest residential uses. Implementation of noise abatement measures described below will reduce potential construction impacts to a less-than-significant level. Noise levels would not exceed standards of the Santa Clara County Noise Ordinance. Noise impacts on the residential uses near the project site would be minimal and temporary.

The County General Plan Noise Element measures noise levels in Day-Night Average Sound Level (DNL), a 24-hour time weighted average, as recommended by the Environmental Protection Agency (EPA) for community noise planning. Noise Compatibility Standards for exterior noise specify three (3) classifications of compatibility between ambient noise levels at the site and various land uses: satisfactory, cautionary, and critical. According to the Noise Element Noise Compatibility Standards for Land Use in Santa Clara County, the satisfactory exterior noise compatibility standard for residential land uses is 55 dB (Ldn value in dBs).

County Noise Ordinance restricts exterior noise limits, for a cumulative period not to exceed more than 30 minutes in any hour, for one- and two- family residential land uses at 45 dBA between 10:00 p.m.to 7:00 a.m., and 55 dBA between 7:00 a.m. to 10:00 p.m. In addition, specifically prohibited acts include

amplified sound, such as musical instruments, radios, and loudspeakers, between 10:00 p.m. to 7:00 a.m., or construction activity during weekdays and Saturday's hours from 7:00 p.m. to 7:00 a.m, or at any time on Sundays or holidays.

The noise levels created during the grading and demolition/construction of this project could create a temporary disturbance. The project is required to conform to the County Noise Ordinance at all times for construction. Construction noise (including noise generated by truck traffic to and from the project site) is regulated by time-of-work restrictions and decibel maximum specified in the County Noise Ordinance. Thus, it is anticipated that short-term noise resulting from the grading and demolition/construction will not present a significant impact to neighboring property owners. Therefore, the project would not create any noise impacts.

b) & c) No impact — Although grading is proposed on the property to establish the single-family residence, the grading quantities are not significant enough to warrant a need for a Grading Approval/Grading Permit from the County as the quantities are less than 150 cubic yards of cut or fill and less than 5 feet in vertical depth. Not to mention, the property is relatively flat and not located within any geologic hazard, landslide, or liquefaction zones. Therefore, excessive ground vibrations and ground noise is not projected for the project. Additionally, the property is not located within the vicinity of a private airstrip or an airport land use plan referral area or, within two miles of a public airport so there would not be an impact.

### **MITIGATION:**

N.	N. POPULATION AND HOUSING								
				IMPAC'	Τ				
WOULD THE PROJECT:		Potentially Significant Impact	<u>Less Than</u> <u>Significant</u> <u>With Mitigation</u> <u>Incorporated</u>	Less Than Significant Impact	<u>No</u> Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development	SOURC E	
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?						Policies	1, 3, 4	
b)	Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?							1, 2, 3, 4	

The proposed project includes the development of a single-family residence on a vacant lot with domestic and emergency water provided by an onsite well located north of the property (approximately 240 feet from the proposed leach field) and two (2) 5,000-gallon water tanks that are proposed as part of the project. The property is bordered by the Coyote Open Space Preserve and vacant land immediately to the east and residential uses to the south and north.

# **DISCUSSION:**

a & b) No Impact – Under the County of Santa Clara's General Plan and Housing Element, the population within the Agriculture district have already been planned and accounted. The County's Zoning Ordinance allows the construction of a single-family residence 'by-right' in A-40 acre zone. Palm Avenue is a County maintained road that is already built. The construction of the single-family residence would not directly or indirectly require extensions of roads or other infrastructure. Additionally, no commercial, industrial, or institutional uses are proposed. The property includes an on-site well and will require an on-site wastewater treatment system (OWST) which consists of a leach field and a 2,500-gallon septic tank. There are no other adjacent or nearby parcels that would be able to access the existing on-site well (unless by consent by the owner) and create an increase in population growth. The eastern portion of the parcel is surrounded by single-family residences and agricultural uses and the remaining adjacent parcels to the west is the Coyote Open Space Preserve which is not available for development. As such, the project will not displace substantial numbers of existing housing or people, nor necessitate the construction of replacement housing elsewhere.

# **MITIGATION:**

None required.

O. PUBLIC SERVICES							
			IMPA	СТ			
WOULD THE PROJECT:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significan t Impact	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:							
<ul><li>i) Fire Protection?</li><li>ii) Police Protection?</li><li>iii) School facilities?</li><li>iv) Parks?</li></ul>							1, 3, 5 1, 3, 5 1, 3, 5 1, 3, 5, 17h
v) Other public facilities?							1, 3, 5

The project is in the Local Response Area (LRA) with South Santa Clara County Fire Protection (County Fire) as first responders for fire protection. The property is not located within a high fire hazard local response area. Emergency calls would go to the Santa Clara County Sheriff's Office communications. The property has an on-site well for domestic water and two (2) 5,000-gallon water tanks for fire sprinklers and hydrant. Gas is provided by the proposed 2,500-gallon propane tank and electric services will be provided by PG&E.

# **DISCUSSION:**

**a-i, a-ii, a-iii, a-iv, & a-v)** No Impact – The proposed project includes a single-family residence, and no commercial, industrial, or institutional uses are proposed. The proposed single-family residence has a minimal increase in the overall neighborhood population and would not significantly increase the need for additional fire or police protection to the area. Other public services, such as those provided by schools or parks, would not be significantly impacted.

# **MITIGATION:**

• None required.

P.	RECREATION									
			IMPACT							
WOULD THE PROJECT:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE		
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?							1, 2, 4, 5, 17h		
b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?							1, 3, 4, 5		

The project, a single-family residence, is low-density and does not include the use of the project area for recreational purposes, although it is located adjacent to the Open Space Preserve.

### DISCUSSION:

**a & b)** No Impact – The proposed project is for a new single-family residence and will not result in an impact to existing parks or recreational facilities due to the minimal increase in population to the neighborhood. As such, the project would not cause a substantial physical deterioration of existing recreational facilities.

Additionally, the proposed single-family residence does not include any recreational uses or structures, nor does the addition of a new-single family residence require an expansion to existing recreational facilities. As such, the project does not have an impact on item b listed above.

# **MITIGATION**:

• None required.

			IMPACT					
WC	OULD THE PROJECT:		YES				NO	1
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?							1, 4, 5, 6, 7, 49, 52
b)	Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? <sub>1</sub>							6, 49, 50, 52
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?							3, 5, 6,7, 52
d)	Result in inadequate emergency access?				$\boxtimes$			1, 3, 5, 48, 52

The proposed single-family residence takes access from Palm Avenue, which is a County maintained road. Access will be utilizing a 20 ft. wide asphalt drive way from Palm Avenue.

# **DISCUSSION:**

a, b, c, & d) No Impact – The proposed project, consisting of a single-family residence will generate approximately 10 daily vehicle trips, according to the Institute of Traffic Engineers Trip Generation, 10th edition data (10 trips/day). According to the Santa Clara Valley Transportation Authority Transportation Impact Analysis Guidelines, a transportation impact analysis is not required to be performed for projects that would generate fewer than 100 net new weekday (AM or PM peak hour) or weekend peak hour trips, including both inbound and outbound trips. Additionally, the project was reviewed and conditionally approved by the County Fire Marshal's Office to ensure adequate fire safety access is proposed. Therefore, the project will not generate substantial new traffic, impair existing transportation facilities, or result in inadequate emergency access. Construction activities for the proposed structures would involve a small number of vehicle trips related to delivery of material and workers commuting to the site. Because the number of trips would be temporary and small in number, and road use in the vicinity is relatively light, the proposed project would not have impacts on

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<sup>1</sup> The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide. The County of Santa Clara has elected not to be governed by the provisions of this section until they become effective statewide on July 1, 2020.

traffic and circulation. Onsite parking for the proposed single-family residence is in conformance with the County parking requirements.

# **MITIGATION**:

• None required.

R. TRIBAL CULTURAL RESOURCES							
			IMPA	CT			
WOULD THE PROJECT:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:							
<ul> <li>i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</li> </ul>							
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.							

The subject property does not contain any known Tribal Cultural Resources that are eligible or listed in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). The property is not located near any creeks, streams, or water course, which has as high potential for cultural or tribal resources. Ground disturbance will be very minimal as the proposed grading for the project are 93 cubic yards of cut and 115 cubic yards of fill, with a maximum cut depth of 4 feet, which does not require a Grading Approval and a Grading Permit from the County of Santa Clara.

# **DISCUSSION:**

**a-i & a-ii)** No Impact – The County has not received any letters from Native American tribes requesting tribal consultation per Public Resources Code, Section 21080.3.1(b) regarding the potential for a Native American tribal cultural resource located on or near the project site. Hence, there is no evidence to indicate the presence of a tribal cultural resource listed or eligible for listing in the

California Register of Historical Resources, or of significance pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Therefore, the proposed single-family

residence would not cause a substantial adverse change in the significance of a tribal cultural resource, and no mitigation measures would be necessary.

# **MITIGATION**:

• None required.

				IMP <i>A</i>	CT			
WOULD THE PROJECT:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?							3,6,70
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years							1, 3, 6,24b
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?							1, 3,6,70
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?							1, 3, 5,6
e)	Be in non-compliance with federal, state, and local management and reduction statutes and regulations related to solid waste?							3,5, 6

The proposed project, a new single-family residence, includes an existing onsite well, a proposed leach field and a 2,500-gallon septic tank. The proposed utility connection will begin with the existing electrical pole located at the southwest corner of the property and the electrical line will be trenched underground for power connection to the proposed residence. The project will have a 1,000-gallon propane tank and sanitary sewer line is connected from the septic tank to the leach field for wastewater treatment.

# **DISCUSSION:**

a, b, c, d, & e) No Impact – The OWTS was reviewed, approved and conditioned by the Department of Environmental Health to confirm that the septic system is adequate and sufficient to serve the residential use. The existing onsite well and septic system are sufficient to serve the project, and as proposed, there is no impact to items b and c listed above.

As a standard condition of approval for all projects within the County of Santa Clara, property owners are to provide proof of garbage service at the time of final occupancy sign-off. Garbage service in the

unincorporated areas of Santa Clara County is mandatory. As such, there is no impact to item d and e listed above.

# **MITIGATION:**

• None required.

T. '	T. WILDFIRE								
				IMPA	CT				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE	
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?							1, 2, 3, 6, 44	
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?							1, 2, 3, 6,8a	
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?							1, 2, 4, 5, 17h	
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?							1, 3, 4, 5	

The proposed project includes a new single-family residence located on a parcel that is within a Agriculture zoning district. The property is not located within a Wild Urban Interface (WUI) fire protection area; however, it is immediately adjacent to the WUI. The area of the proposed development is flat, with a slope of approximately two percent (2%), and the entire property is vacant with the location of the proposed residence clear of vegetation.

# **DISCUSSION:**

- a, c, & d) No Impact The project was reviewed and conditionally approved in accordance with the Santa Clara County Fire Marshal's Office. The project includes adequate fire safety access and emergency evacuation, as such the project does not impair an adopted emergency response plan or emergency evacuation plan. The installation of a firetruck turnaround and two (2) 5,000-gallon water tanks to the proposed development site does not exacerbate fire risk that may result in temporary or ongoing impacts to the environment. Additionally, the proposed development is on a flat site and is therefore not at risk of downstream flooding or landslides, because of runoff, post-fire slope instability, or drainage changes. As such, the project imposes no impact to items a, c, and d listed above.
- **b)** Less Than Significant The proposed project is not located within the WUI, but is immediately adjacent to the WUI area, and therefore, could be at risk of uncontrolled spread of a wildfire. However, due to the project's the installation of appropriate fire safety requirements such as adequate fire

access for emergency services, wharf hydrant, adequate water tanks for fire suppression, as well as a residential fire sprinkler system complying with CFMO-SP6 throughout the residence, the proposed project will have a less than significant impact to exposing the project occupants to the spread of wildfire.

# **MITIGATION:**

• None required.

U.	MANDATORY FINDING OF SIGNIFI	CANCE						
					IMP	ACT		
WC	OULD THE PROJECT:		YES				NO	
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	<u>Less Than</u> <u>Significant</u> <u>Impact</u>	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies	SOURCE
a)	Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?							1 to 52
b)	Have impacts that are individually limited, but cumulatively considerable ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?							1 to 52
c)	Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?							1 to 52

# **DISCUSSION:**

a) & b) Less Than Significant Impact - As discussed in the Biological Resources section, impacts of the proposed project on special status species or habitat would either be less than significant or would be reduced to a less-than-significant level through incorporation of mitigation measures. The proposed project would not have the potential to substantially reduce the habitat of any fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number of, or restrict the range of, a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

Individually limited but cumulative impacts could occur with development of the proposed project, but they would be less than significant. Incremental effects of the proposed project related to a cumulative environmental impact include the conversion of prime farmland and other changes in the existing environment which, due to their location or nature, could result in the additional conversion of farmland. The incremental effects of the proposed project on cumulative regional impacts to

agricultural resources are not cumulatively significant when viewed in context of the past, current, and/or probable future projects. In recent years, the County has received a less-than-significant number of applications for new single-family homes and other developments impacting farmland in the area of the subject property. However, the project is less than 2% of the site, the proposed project will not contribute to any cumulatively significant loss of agricultural resources in Coyote Valley.

c) No Impact. The proposed project is a single-family residence. As described in the environmental topic sections of the Initial Study, the proposed project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

# **Initial Study Source List\***

- 1. Environmental Information Form https://www.sccgov.org/sites/dpd/DocsForms/Doc uments/EnvAss Form.pdf
- 2. Field Inspection
- 3. Project Plans
- Working knowledge of site and conditions
- 5. Experience with other Projects of This Size and **Nature**
- 6. County Expert Sources:

Geologist

https://www.sccgov.org/sites/dpd/PlansOrdinance s/GeoHazards/Pages/Geology.aspx

Fire Marshal

https://www.sccgov.org/sites/dpd/AboutUs/Fire/P ages/Fire.aspx

**Roads & Airports** 

https://www.sccgov.org/sites/rda/Pages/rda.aspx

**Environmental Health** 

https://www.sccgov.org/sites/deh/Pages/deh.aspx

**Land Development Engineering** 

https://www.sccgov.org/sites/dpd/AboutUs/LDE/P ages/LDE.aspx

Parks & Recreation

https://www.sccgov.org/sites/parks/Pages/Welco me-to-Santa-Clara-County-Parks.aspx

**Zoning Administration**,

Comprehensive Planning,

**Architectural & Site Approval Committee** Secretary

7. Agency Sources:

Santa Clara Valley Water District

https://www.valleywater.org/

Santa Clara Valley Transportation Authority

http://www.vta.org/

Midpeninsula Regional Open Space District

https://openspace.org/

U.S. Fish & Wildlife Service

https://www.fws.gov/

CA Dept. of Fish & Game

https://www.wildlife.ca.gov/

**Caltrans** 

https://dot.ca.gov/

**U.S. Army Corps of Engineers** 

https://www.usace.army.mil/

Regional Water Quality Control Board

https://www.waterboards.ca.gov/Public Works Depts. of individual cities

Planning Depts. of individual cities:

Santa Clara County (SCC) General Plan

https://www.sccgov.org/sites/dpd/PlansOrdinance s/GP/Pages/GP.aspx

The South County Joint Area Plan

https://www.sccgov.org/sites/dpd/DocsForms/Doc uments/GP Book B.pdf

**SCC Zoning Regulations (Ordinance)** https://www.sccgov.org/sites/dpd/DocsForms/Doc uments/ZonOrd.pdf

10. County Grading Ordinance

https://library.municode.com/ca/santa clara coun ty/codes/code of ordinances?nodeld=TITCCODE LAUS DIVC12SULADE CHIIIGRDR#TOPTITLE

11. SCC Guidelines for Architecture and Site Approval

https://www.sccgov.org/sites/dpd/DocsForms/Doc uments/ASA\_Guidelines.pdf

- 12. SCC Development Guidelines for Design Review https://www.sccgov.org/sites/dpd/DocsForms/Doc uments/DR Guidelines.pdf
- 13. County Standards and Policies Manual (Vol. I -Land Development) https://www.sccgov.org/sites/dpd/DocsForms/Doc uments/StandardsPoliciesManual Vol1.pdf
- 14. Table 18-1-B of the Uniform Building Code (expansive soil regulations) [1994 version] http://digitalassets.lib.berkeley.edu/ubc/UBC 1994 v2.pdf
- 15. SCC Land Use Database
- 16. Santa Clara County Heritage Resource (including Trees) Inventory [computer database]
- 17. GIS Database
  - a. SCC General Plan Land Use, and Zoning
  - USFWS Critical Habitat & Riparian Habitat
  - Geologic Hazards
  - Archaeological Resources d.
  - Water Resources
  - Viewshed and Scenic Roads f
  - Fire Hazard
  - Parks, Public Open Space, and Trails
  - i. Heritage Resources - Trees
  - Topography, Contours, Average Slope j.
  - k.
  - HCP Data (habitat models, land use coverage etc)
  - m. Air photos
  - **USGS** Topographic n.
  - Dept. of Fish & Game, Natural Diversity Data
  - FEMA Flood Zones p.
  - Williamson Act q.
  - Farmland monitoring program
  - Traffic Analysis Zones
  - Base Map Overlays & Textual Reports (GIS)
- 18. Paper Maps
  - a. SCC Zoning
  - Barclay's Santa Clara County Locaide Street Atlas
  - Color Air Photos (MPSI)
  - Santa Clara Valley Water District Maps of Flood Control Facilities & Limits of 1% Flooding

# **Initial Study Source List\***

- e. Soils Overlay Air Photos
- f. "Future Width Line" map set
- 2019 CEQA Statute Guidelines [Current Edition] http://resources.ca.gov/ceqa/docs/2019 CEQA St atutes and Guidelines.pdf

Area Specific: San Martin, Stanford, and Other Areas

### San Martin

20a. San Martin Integrated Design Guidelines <a href="https://www.sccgov.org/sites/dpd/DocsForms/Documents/SanMartin">https://www.sccgov.org/sites/dpd/DocsForms/Documents/SanMartin</a> DesignGuidelines.pdf

20b.San Martin Water Quality Study

20c.Memorandum of Understanding (MOU) between Santa Clara County & Santa Clara Valley Water District

### **Stanford**

- 21a. Stanford University General Use Permit (GUP),
  Community Plan (CP), Mitigation and Monitoring
  Reporting Program (MMRP) and Environmental
  Impact Report (EIR)
  <a href="https://www.sccgov.org/sites/dpd/Programs/Stanford/Pages/Docs.aspx">https://www.sccgov.org/sites/dpd/Programs/Stanford/Pages/Docs.aspx</a>
- 21b. Stanford Protocol and Land Use Policy
  Agreement
  <a href="https://www.sccgov.org/sites/dpd/Programs/Stanford/Pages/Docs.aspx">https://www.sccgov.org/sites/dpd/Programs/Stanford/Pages/Docs.aspx</a>

### Other Areas

- 22a. South County Airport Comprehensive Land Use Plan and Palo Alto Airport comprehensive Land Use Plan [November 19, 2008]
- 22b.Los Gatos Hillsides Specific Area Plan https://www.sccgov.org/sites/dpd/DocsForms/Docume nts/GP Book B.pdf
- 22c.County Lexington Basin Ordinance Relating to Sewage Disposal
- 22d. User Manual Guidelines & Standards for Land Uses Near Streams: A Manual of Tools, Standards and Procedures to Protect Streams and Streamside Resources in Santa Clara County by Valley Water Resources Protection Collaborative, August 2005 Revised July 2006.

https://www.valleywater.org/contractors/doingbusinesses-with-the-district/permits-for-working-ondistrict-land-or-easement/guidelines-and-standardsfor-land-use-near-streams

22e. Guidelines and Standards for Land Use Near Streams: Streamside Review Area – Summary prepared by Santa Clara County Planning Office, September 2007. 22f. Monterey Highway Use Permit Area <a href="https://www.sccgov.org/sites/dpd/DocsForms/Docume">https://www.sccgov.org/sites/dpd/DocsForms/Docume</a> nts/SanMartin GeneralPlanInformation.pdf

### Soils

23.USDA, SCS, "Soils of Santa Clara County

24.USDA, SCS, "Soil Survey of Eastern Santa Clara County"

### Agricultural Resources/Open Space

- 25. Right to Farm Ordinance
- 26. State Dept. of Conservation, "CA Agricultural Land Evaluation and Site Assessment Model"

  <a href="https://www.conservation.ca.gov/dlrp/Documents/TOC%20and%20Intro.pdf">https://www.conservation.ca.gov/dlrp/Documents/TOC%20and%20Intro.pdf</a>
- Open Space Preservation, Report of the Preservation 2020 Task Force, April 1987 [Chapter IV]
- Williamson Act Ordinance and Guidelines (current version) <a href="https://www.sccgov.org/sites/dpd/Programs/WA/Pages/WA.aspx">https://www.sccgov.org/sites/dpd/Programs/WA/Pages/WA.aspx</a>

### **Air Quality**

- BAAQMD Clean Air Plan http://www.baaqmd.gov/~/media/files/planning- and-research/plans/2017-clean-air- plan/attachment-a -proposed-final-cap-vol-1-pdf.pdf?la=en
- BAAQMD CEQA Air Quality Guidelines (2017)http://www.baaqmd.gov/~/media/files/planningand-research/ceqa/ceqa guidelines may2017pdf.pdf?la=en
- 31. BAAQMD Annual Summary of Contaminant Excesses & BAAQMD, "Air Quality & Urban Development Guidelines for Assessing Impacts of Projects & Plans" [current version]

Biological Resources/
Water Quality & Hydrological Resources/
Utilities & Service Systems"

- 32. Site-Specific Biological Report
- 33. Santa Clara County Tree Preservation Ordinance https://www.sccgov.org/sites/dpd/DocsForms/Doc uments/Tree Ordinance.pdf

Section C16, Santa Clara County Guide to Evaluating Oak Woodlands Impacts <a href="https://www.sccgov.org/sites/dpd/DocsForms/Documents/Oakwoodlands Guide.pdf">https://www.sccgov.org/sites/dpd/DocsForms/Documents/Oakwoodlands Guide.pdf</a>

# **Initial Study Source List\***

Santa Clara County Guidelines for Tree Protection and Preservation for Land Use Applications <a href="https://www.sccgov.org/sites/dpd/DocsForms/Documents/Brochure TreePreservation.pdf">https://www.sccgov.org/sites/dpd/DocsForms/Documents/Brochure TreePreservation.pdf</a>

- 33. Clean Water Act, Section 404
  <a href="https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404">https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404</a>
- 34. Santa Clara Valley Water District GIS Data: https://www.valleywater.org/learningcenter/watersheds-of-santa-clara-valley
- 35. CA Regional Water Quality Control Board, Water Quality Control Plan, San Francisco Bay Region [1995]
- 36. Santa Clara Valley Water District, Private Well Water Testing Program [12-98]
- 37. SCC Nonpoint Source Pollution Control Program, Urban Runoff Management Plan [1997]
- 38. County Environmental Health / Septic Tank Sewage Disposal System - Bulletin "A"
- 39. County Environmental Health Department Tests and Reports

### **Archaeological Resources**

- 40. Northwest Information Center, Sonoma State University
- 41. Site Specific Archaeological Reconnaissance Report

### Geological Resources

- 42. Site Specific Geologic Report
- 43. State Department of Mines and Geology, Special Report #42
- 44. State Department of Mines and Geology, Special Report #146

Greenhouse Gas Emissions

45. BAAQMD CEQA Air Quality Guidelines (2017)http://www.baaqmd.gov/~/media/files/planningand-research/ceqa/ceqa guidelines may2017pdf.pdf?la=en

### Hazards & Hazardous Materials

- 46. Section 21151.4 of California Public Resources Code
- 47. State Department of Toxic Substances, Hazardous Waste and Substances Sites List
- 48. County Office of Emergency Services Emergency Response Plan [1994 version]

### **Noise**

49. County Noise Ordinance
<a href="https://www.sccgov.org/sites/cpd/programs/NP/D">https://www.sccgov.org/sites/cpd/programs/NP/D</a>
ocuments/NP Noise Ordinance.pdf

### Transportation/Traffic

- 50. Official County Road Book
- 51. Site-specific Traffic Impact Analysis Report

### **Tribal Cultural Resources**

 Office of Planning and Research. 2017. Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA

### Wildfire

53. Office of Planning and Research. 2020. Fire Hazard Planning Technical Advisory

<sup>\*</sup>Items listed in bold are the most important sources and should be referred to during the first review of the project, when they are available. The planner should refer to the other sources for a particular environmental factor if the former indicates a potential environmental impact.

# COUNTY OF SANTA CLARA

General Construction **Specifications** 

# GENERAL CONDITIONS

ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY

\_\_\_\_\_ THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS. 3) THE COUNTY OF SANTA CLARA STANDARD SPECS, 4) STATE OF CALIFORNIA STANDARD DETAILS, 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE SATISFACTION OF THE COUNTY. DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE.

DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL DEVELOPER SHALL OBTAIN ENCROACHMENT PERMITS FROM THE SANTA CLARA

VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE COUNTY'S INSPECTOR.

DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN

UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA. 5. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED. DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE

COUNTY INSPECTOR. ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.

. UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORONER AT (4008) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18). THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.

ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN

WRITING BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

# **CONSTRUCTION** STAKING

THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND REPLACEMENT OF CONSTRUCTION GRADE STAKES. THE STAKES ARE TO BE ADEQUATELY IDENTIFIED, LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM BACK OF CURB.

ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR. PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR TO ESTABLISH OR RE-ESTABLISH THE PROJECT BOUNDARY 14. TOTAL DISTURBED AREA FOR THE PROJECT

BEGINNING OF THE WORK ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.

AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE

# CONSTRUCTION INSPECTION

PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION. INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR

COMPLIANCE WITH PLANS & SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDENT OF CONSTRUCTION. SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY LAND DEVELOPMENT INSPECTOR AT PHONE (408) 299-6868 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION

DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM. THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR TO COMMENCEMENT OF THE BUILDING FOUNDATION.

# SITE PREPARATION (CLEARING AND GRUBBING) EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN

AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE A) TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF 1. PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO

B) FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE

UTILITY POLES AND OTHER OBSTRUCTIONS IN THE WAY OF CONSTRUCTION. JTILITY LOCATION, TRENCHING & BACKFILI

CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND

ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.

ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE. UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY, GAS AND WATER MAINS SHALL BE INSTALLED

OUTSIDE THE PAVED AREAS. TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE STRUCTURAL SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 95% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH

RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS DIRECTED BY THE COUNTY. TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE AS TRENCH BACKFILL BUT THE

COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED. BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

# ETAINING WALLS

REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING CONTINUAL CONTROL OF THE COUNTY INSPECTOR. INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND

SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

# GRADING

EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IS SHALL BE STRIPPED OF ALL VEGETATION. TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL, THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 5:1, IT SHALL BE BENCHED AND THE FILL KEYED IN TO ACHIEVE STABILITY. WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. BEFORE COMPACTION BEGINS, THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION

EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE. SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S) DELINEATED ON THE PLAN.

4. NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS. THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING

AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY. MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL.

LOCATION	CUT (C.Y.)	FILL (C.Y.)	NET	MAX CUT HT	MAX FILL HT
RESIDENCE	4	115	111 F	1	0
INFILTRATION TRENCH	29	0	29 C	4	0
POOL/HARDSCAPE	1	ı		ı	_
LANDSCAPE	-	_		ı	_
DRIVEWAY	60	0	60 C	0	1
OFF SITE IMPROVEMENTS	1	1		0	_
TOTAL	93	115	22 (FILL)		

NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE. EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP

NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD. 8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.

9. THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95% 10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION. 11. THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY

ENGINEER FOR BUILDING OCCUPANCY. 12. THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED AREA. 13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL.

PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT 16. THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

# TREE PROTECTION

CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY

1. FOR ALL TREES TO BE RETAINED WITH A CANOPY IN THE DEVELOPMENT AREA OR INTERFACES WITH THE LIMITS OF GRADING FOR ALL PROPOSED DEVELOPMENT ON SITE. THE TREES SHALL BE PROTECTED BY THE PLACEMENT. OF RIGID TREE PROTECTIVE FENCING, CONSISTENT WITH THE COUNTY INTEGRATED LANDSCAPE GUIDELINES, AND INCLUDE THE FOLLOWING: FENCING SHOULD BE PLACED ALONG THE OUTSIDE EDGE OF THE DRIPLINE

OF THE TREE OR GROVE OF TREES. THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PERIOD AND SHALL BE INSPECTED PERIODICALLY FOR

DAMAGE AND PROPER FUNCTION. FENCING SHALL BE REPAIRED, AS NECESSARY, TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES. SIGNAGE STATING, "WARNING- THIS FENCING SHALL NOT BE REMOVED WITHOUT PERMISSION FROM THE SANTA CLARA COUNTY PLANNING OFFICE (408) 299-5770. COUNTY OF SANTA CLARA TREE

PROTECTION MEASURES MAY BE FOUND AT http://www.sccplanning.gov." SHALL BE PLACED ON THE TREE PROTECTIVE FENCING UNTIL FINAL OCCUPANCY. 2. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, TREE PROTECTIVE FENCING SHALL BE SECURELY IN PLACED AND INSPECTED BY THE LAND

# ACCESS ROADS AND DRIVEWAYS

3. SEE EXISTING TREE PROTECTION DETAILS FOR MORE INFORMATION.

DEVELOPMENT ENGINEERING INSPECTOR.

DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1 1/4 INCHES

2. ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15 LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM 2-INCH ASPHALT LIFT OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING. 3. THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES

AND LOCAL RESIDENTS. 4. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR

ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM. ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT - I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC..

# STREET LIGHTING

1. PACIFIC GAS & ELECTRIC ELECTROLIER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE.

# SANITARY SEWER

1. THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN FOR REFERENCE ONLY.

ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION INVOLVED. INSPECTION AFTERCONSTRUCTION. OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

# PORTLAND CEMENT CONCRETE

1. CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE

# AIR QUALITY. LANDSCAPING AND EROSION CONTROL

WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.

3. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY (NON-TOXIC) SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES.

SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES. THE USE OF DRY POWDER SWEEPING IS PROHIBITED. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS

CARRIED ONTO ADJACENT PUBLIC STREETS. THE USE OF DRY POWDER SWEEPING IS PROHIBITED. ALL CONSTRUCTION VEHICLES, EQUIPMENT AND DELIVERY TRUCKS SHALL HAVE A MAXIMUM IDLING TIME OF 5 MINUTES (AS REQUIRED BY THE CALIFORNIA AIRBORNE TOXIC CONTROL MEASURE TITLE 13, SECTION 2485 OF CALIFORNIA CODE OF REGULATIONS (CCR)). ENGINES SHALL BE SHUT OFF IF CONSTRUCTION REQUIRES LONGER IDLING TIME UNLESS NECESSARY FOR

PROPER OPERATION OF THE VEHICLE. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR. ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED

IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT

SHALL BE CHECKED BY A CERTIFIED MECHANIC AND DETERMINED TO BE RUNNING IN PROPER CONDITION PRIOR TO OPERATION. 9. POST A SIGN THAT IS AT LEAST 32 SQUARE FEET MINIMUM 2 INCHES LETTER HEIGHT VISIBLE NEAR THE ENTRANCE OF CONSTRUCTION SITE THAT IDENTIFIES THE FOLLOWING REQUIREMENTS. OBTAIN ENCROACHMENT PERMIT FOR SIGN FROM ROADS DEPARTMENT OR OTHER APPLICABLE AGENCY IF REQUIRED.

A. 15 MILES PER HOUR (MPH) SPEED LIMIT 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES

TELEPHONE NUMBER TO CONTACT THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGARDING DUST COMPLAINTS. NOTE PHONE NUMBER OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AIR POLLUTION COMPLAIN HOTLINE OF 1-800-334-6367. 10. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING. 1. ALL EXPOSED DISTURBED AREAS SHALL BE SEEDED WITH BROME SEED SPREAD AT THE RATE OF 5 LB. PER 1000 SQUARE FEET (OR APPROVED EQUAL). SEEDING AND WATERING SHALL BE MAINTAINED AS REQUIRED TO ENSURE

12. ALL DITCHES SHALL BE LINED PER COUNTY STANDARD SD8. 13. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & OUTFALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. ENERGY DISSIPATERS SHALL BE INSTALLED AT ALL DITCH OUTFALLS. WHERE OUTFALLS ARE NOT INTO AN EXISTING CREEK OR WATER COURSE, RUNOFF SHALL BE RELEASED TO SHEET FLOW.

14. PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADE SLOPES AND REDUCE THE POTENTIAL FOR EROSION OF THE SUBJECT SITE 15. PERMANENT LANDSCAPING SHOWN ON THE ATTACHED LANDSCAPE PLAN MUST BE INSTALLED AND FIELD APPROVED BY THE COUNTY PLANNING OFFICE PRIOR

TO FINAL APPROVAL BY THE COUNTY ENGINEER, AND FINAL OCCUPANCY

RELEASE BY THE BUILDING INSPECTION OFFICE. 16. THE OWNER SHALL PREPARE AND PRESENT A WINTERIZATION REPORT TO THE COUNTY INSPECTOR FOR REVIEW PRIOR TO OCTOBER 15TH OF EVERY YEAR. 17. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL INSTALL AND MAINTAIN CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPS) ON THE PROJECT SITE AND WITHIN THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL TO PREVENT THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, AND WASTE INTO THE SANTA CLARA COUNTY RIGHT-OF-WAY, STORM SEWER WATERWAYS, ROADWAY INFRASTRUCTURE. BMPS SHALL INCLUDE, BUT NOT BE

LIMITED TO THE FOLLOWING; A. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND

EQUIPMENT LAYDOWN / STAGING AREAS. B. PREVENTION OF TRACKING OF MUD. DIRT, AND CONSTRUCTION MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.

PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WE WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY. 18. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES. INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS,

PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN

YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY. 19. EROSION CONTROL PLAN IS A GUIDE AND SHALL BE AMENDED AS NECESSARY TO PREVENT EROSION AND ILLICIT DISCHARGES ON A YEAR AROUND BASIS. DEPENDING ON THE SEASON, WEATHER, AND FIELD CONDITIONS. EROSION CONTROL MEASURES IN ADDITION TO THOSE NOTED IN THE PERMITTED PLANS MAY BE NECESSARY. FAILURE TO INSTALL SITE SITE AND SITUATIONALY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

# STORM DRAINAGE AND STORMWATER MANAGEMENT

1. DEVELOPER IS RESPONSIBLE FOR ALL NECESSARY DRAINAGE FACILITIES WHETHER SHOWN ON THE PLANS OR NOT AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THE ADEQUACY AND CONTINUED MAINTENANCE OF THESE FACILITIES IN A MANNER WHICH WILL PRECLUDE ANY HAZARD TO LIFE, HEALTH, OR DAMAGE TO ADJOINING PROPERTY, CONSISTENT WITH NPDES PERMIT CAS612008 / ORDER NO. R2-2009-0047 AND NPDES PERMIT CAS000004/ ORDER NO. 2013-0001-DWQ.

DROP INLETS SHALL BE COUNTY STANDARD TYPE 5 UNLESS OTHERWISE NOTED ON THE PLANS. THE DEVELOPER'S ENGINEER SHALL BE RESPONSIBLE FOR THE PROPER LOCATION OF DROP INLETS. WHERE STREET PROFILE GRADE EXCEEDS 6% DROP INLETS SHALL BE SET AT 500 ANGLE CURB LINE TO ACCEPT WATER OR AS SHOWN ON THE PLANS. WHERE CULVERTS ARE INSTALLED THE DEVELOPER SHALL BE RESPONSIBLE

FOR GRADING THE OUTLET DITCH TO DRAIN TO AN EXISTING SWALE OR TO AN OPEN AREA FOR SHEET FLOW. UPON INSTALLATION OF DRIVEWAY CONNECTIONS, PROPERTY OWNERS SHALL

PROVIDE FOR THE UNINTERRUPTED FLOW OF WATER IN ROADSIDE DITCHES. THE COUNTY SHALL INSPECT UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

# AS-BUILT PLANS STATEMENT

THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (\_\_\_ WERE) (\_\_\_ WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (^). THERE (\_\_\_\_WERE) \_ WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL A.

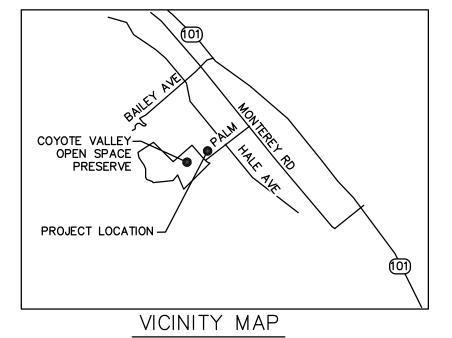
# SIGNATURE

NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPYOF

# GEOTECHNICAL ENGINEER OBSERVATION

A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGIC REPORTS SHALL BE SUBMITTED PRIOR TO THE GRADING COMPLETION AND RELEASE OF THE BOND.





# SINGLE FAMILY RESIDENCE FOR NELSON CHENG

SCOPE OF WORK

1. THE DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF THE WORK PROPOSED ON THE EROSION CONTROL PLAN. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE EROSION CONTROL PLANS AND ANY MODIFICATIONS OF THE EROSION COTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION. 2. CONSTRUCT 20' WIDE ASPHALT DRIVEWAY 3. CONSTRUCT NEW SINGLE FAMILY RESIDENCE 4. CONSTRUCT NEW SEPTIC SYSTEM

5. INSTALL WATER STORAGE TANKS 6. CONSTRUCT STORMWATER PERCOLATION TRENCH

# COUNTY LOCATION

# SURVEY MONUMENT PRESERVATION

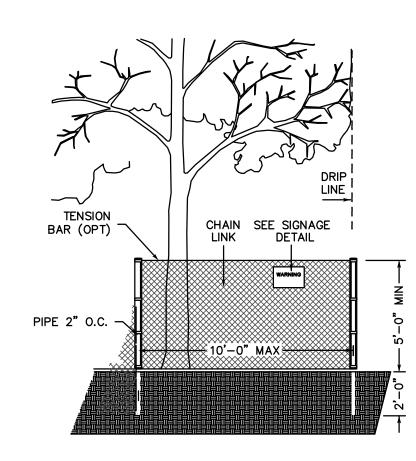
PROJECT LOCATION -

CONSTRUCTION ACTIVITY.

1. THE LANDOWNER / CONTRACTOR MUST PROTECT AND ENSURE THE PERPETUATION OF SURVEY MONUMENTS AFFECTED BY CONSTRUCTION

. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE, STAKE, AND FLAG OR OTHERWISE IDENTIFY WITH PAINT OR OTHER MARKINGS ALL PERMANENT SURVEY MONUMENTS OF RECORD AND ANY UNRECORDED MONUMENTS THAT ARE DISCOVERED THAT ARE WITHIN 50 FEET OF THE

3. THE LANDOWNER, CONTRACTOR AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING MONUMENT, CORNER STAKE, OR ANY OTHER PERMANENT SURVEYED MONUMENT SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE COUNTY SURVEYOR'S OFFICE PRIOR TO DISTURBING SAID MONUMENTS AND RESET PERMANENT MONUMENT(S) IN THE SURFACE OF THE NEW CONSTRUCTION OR SET A WITNESS MONUMENT(S) TO PERPETUATE THE LOCATION IF ANY PERMANENT MONUMENT COULD BE DESTROYED, DAMAGED, COVERED, DISTURBED, OR OTHERWISE OBLITERATED. THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL FILE A CORNER RECORD OR RECORD OF SURVEY WITH COUNTY SURVEYOR PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.



# EXISTING TREE PROTECTION DETAILS

PRIOR TO THE COMMENCEMENT OF ANY GRADING, TREE PROTECTIVE FENCING SHALL BE IN PLACE IN ACCORDANCE WITH THE TREE PRESERVATION PLAN AND INSPECTED BY A CERTIFIED ARBORIST. THE ARBORIST SHALL MONITOR CONSTRUCTION ACTIVITY TO ENSURE THAT THE TREE PROTECTION MEASURES ARE IMPLEMENTED AND ADHERED TO DURING CONSTRUCTION. THIS CONDITION SHALL BE INCORPORATED INTO THE GRADING PLANS.

2. FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN-LINK OR EQUIVALENT STRENGTH/ DURABILITY). 3. FENCE SHALL BE SUPPORTED BY VERTICAL POSTS DRIVEN 2 FEET (MIN) INTO

FUNCTION, REPAIRED AS NECESSARY TO PROVIDE A PHYSICAL BARRIER FROM

THE GROUND AND SPACED NOT MORE THAN 10 FEET APART. TREE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE DURING THE CONSTRUCTION PERIOD, INSPECTED PERIODICALLY FOR DAMAGE AND PROPER

CONSTRUCTION ACTIVITIES, AND REMAIN IN PLACE UNTIL THE FINAL 5. A SIGN THAT INCLUDES THE WORDS, "WARNING: THIS FENCE SHALL NOT BE REMOVED WITHOUT THE EXPRESSED PERMISSION OF THE SANTA CLARA COUNTY PLANNING OFFICE," SHALL BE SECURELY ATTACHED TO THE FENCE IN A VISUALLY PROMINENT LOCATION.

> COUNTY OF SANTA CLARA LAND DEVELOPMENT ENGINEERING & SURVEYING GRADING / DRAINAGE PERMIT NO. ISSUED BY: \_\_\_\_\_

PROPOSED BUILDING PROPOSED MAJOR CONTOUR PROPOSED MINOR CONTOUR \_\_\_\_ 492 \_\_\_\_ \_\_ EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR PROPOSED SPOT GRADE **ELEVATION** PROPOSED BASEROCK PROPOSED ASPHALT PROPOSED CATCH BASIN PROPOSED VEGETATED SWALE GRADE BREAK PROPOSED FLOW ARROW PROPOSED STORM DRAIN PIPE → 37 LF 8" SD →

LEGEND

# SHEET INDEX

C-1	TITLE SHEET
C-2	GRADING AND DRAINAGE PLAN
C-3	DETAILS
C-4	EROSION CONTROL PLAN
BMP 1	COUNTY STANDARD BEST MANAGEMENT PRACTICES SHEET 1
BMP 2	COUNTY STANDARD BEST MANAGEMENT PRACTICES SHEET 2

ENGINEER'S NAME: RYAN HALEY, PE CORNERSTONE CIVIL INC.

SANTA CRUZ, CA 95062 PHONE NO. (831) 346-5446 FAX NO.

Revision 3

ADDRESS: 2528 CHARLENE LANE

Revision 1 712-21-008 Revision 2 Co. File

Sheet

ISSUED BY: \_\_\_\_

OF PORTABLE TOILETS.

ENCROACHMENT PERMIT NO.

COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS

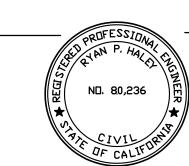
NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY

STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT

WITHUOT AN ENCROACHEMENT PERMIT, INCLUDING THE

ENGINEER'S STATEMENT I HEREBY STATE THAT THESE PLANS ARE IN COMPLIANCE WITH ADOPTED COUNTY STANDARDS, THE APPROVED TENTATIVE MAP (OR PLAN) AND CONDITIONS OF APPROVAL PERTAINING THERETO DATED FILE(S) NO.

DATE NOVEMBER 2, 2020



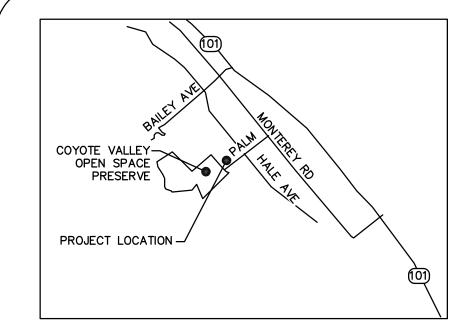
80,236 R.C.E. NO. SEPTEMBER 30, 2022 EXPIRATION DATE

EXPIRATION DATE

# COUNTY ENGINEER'S NOTE

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITTEE OF ENGINEER FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS CONTAINED IN THE PLANS. IF, DURING THE COURSE OF CONSTRUCTION, THE PUBLIC INTEREST REQUIRES A MODIFICATION OF (OR DEPARTURE FROM) THE SPECIFICATIONS OF THE PLANS, THE COUNTY SHALL HAVE THE AUTHORITY TO REQUIRE THE SUSPENSION OF WORK, AND THE NECESSARY MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.

R.C.E. NO.



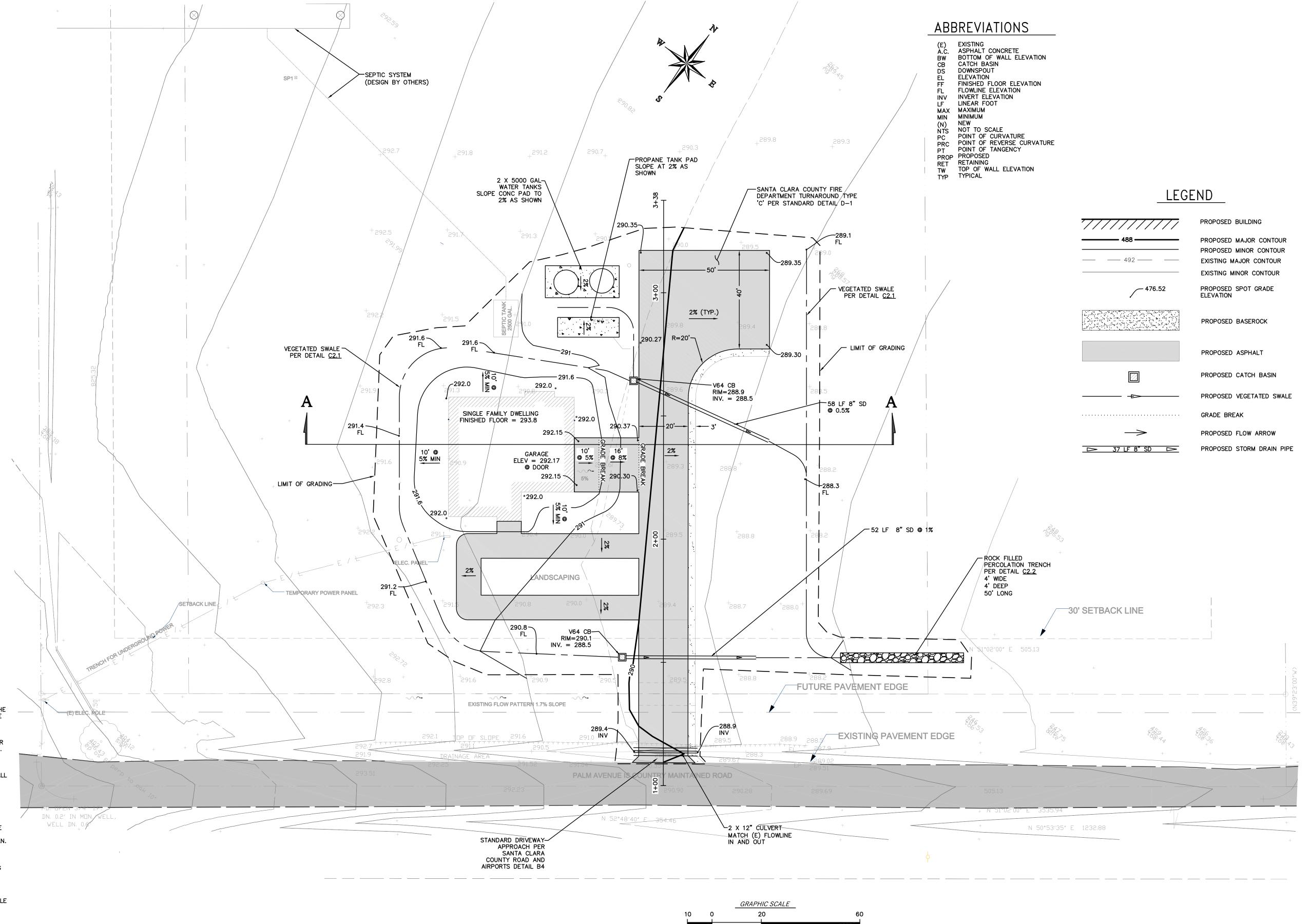
VICINITY MAP - NOT TO SCALE

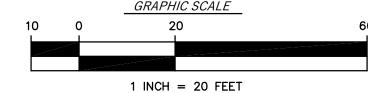
# IMPERVIOUS SUMMARY

ITEM	EXISTING	PROPOSED				
I I LIVI	LAISTING	CREATED	REPLACED			
BUILDING	0	2,305	0			
ASPHALT	0	9,659	0			
BASEROCK	0	571	00			
0.5 FACTOR A	PPLIED	286				
TOTAL	9,945 SF (	CREATED O	R REPLACED			

# GENERAL NOTES

- OWNER:
   NELSON CHENG
   O PALM AVENUE
   MORGAN HILL SANTA CLARA COUNTY, CA
- 2. ARCHITECTURAL PLANS: J AND P HOUSE DESIGN PO BOX 923 CUPERTINO, CA 95014
- 3. ALL GRADING OPERATIONS SHALL CONFORM TO SECTION 19 OF THE CALTRANS STANDARD SPECIFICATIONS, AND SHALL ALSO BE DONE IN CONFORMANCE WITH THE REQUIREMENTS OF THE COUNTY OF SANTA CLARA
- 4. THE CONTRACTOR SHALL NOTIFY THE COUNTY GRADING INSPECTOR AT LEAST 48 HOURS PRIOR TO TO THE START OF CONSTRUCTION.
- 5. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY DISCREPANCY OCCURRING ON THE DRAWINGS OR FOUND IN HIS COORDINATION WORK. NO CHANGES IN APPROVED PLANS SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE PROJECT ENGINEER AND THE COUNTY OF SANTA CRUZ.
- 6. WORK SHALL BE LIMITED TO 8:00 A.M. TO 5:00 PM WEEKDAYS. NON-NOISE PRODUCING ACTIVITIES, SUCH AS INTERIOR PAINTING, SHALL NOT BE SUBJECT TO THIS RESTRICTION.
- 7. NO LAND CLEARING, GRADING OR EXCAVATING SHALL TAKE PLACE BETWEEN OCTOBER 15 AND APRIL 15 UNLESS THE PLANNING DIRECTOR APPROVES A SEPARATE WINTER EROSION CONTROL PLAN.
- 8. BETWEEN OCTOBER 15 AND APRIL 15, EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. DURING CONSTRUCTION SUCH PROTECTION MAY CONSIST OF MULCHING AND/OR PLANTING OF NATIVE VEGETATION OF ADEQUATE DENSITY. BEFORE COMPLETION OF THE PROJECT, ANY EXPOSED SOIL ON DISTURBED SLOPES SHALL BE PERMANENTLY PROTECTED FROM EROSION.
- 9. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO, OR USES OF, THESE PLANS. ALL CHANGES MUST BE IN WRITING AND MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.





DISCLAIMER

THE DATA SET FORTH ON THIS SHEET IS THE PROPERTY OF CORNERSTONE CIVIL INC. IT IS AN INSTRUMENT OF SERVICE AND MAY NOT BE REPRODUCED, ALTERED OR USED WITHOUT THE CONSENT OF THE ENGINEER. THE PROPER TRANSFER OF ELECTRONIC DATA SHALL BE THE USER'S RESPONSIBILITY WITHOUT LIABILITY TO THE ENGINEER. UNAUTHORIZED USE IS PROHIBITED.

# STORM DRAINAGE SPECIFICATIONS

- ALL INLETS SHALL BE CONCRETE OLDCASTLE CHRISTY PRODUCTS OR APPROVED EQUAL.
   ALL STORM DRAIN PIPES SHALL BE SDR-26, HDPE SCHEDULE 40 OR APPROVED EQUAL.
- 3. ALL ROOF DRAINS SHALL OUTLET TO SPLASHBLOCKS ON LANDSCAPING

# ENGINEER'S NOTE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OR RECORD OR NOT SHOWN ON THESE DRAWINGS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL CALL U.S.A. DIG ALERT TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES. 1(800)624—1444

NGLE FAMILY DWELLING
FOR NELSON CHENG
O PALM AVENUE

CORNERSTONE CIVIL

Land Development Engineering 2528 Charlene Lane Santa Cruz, CA (831) 346-5446



DATE

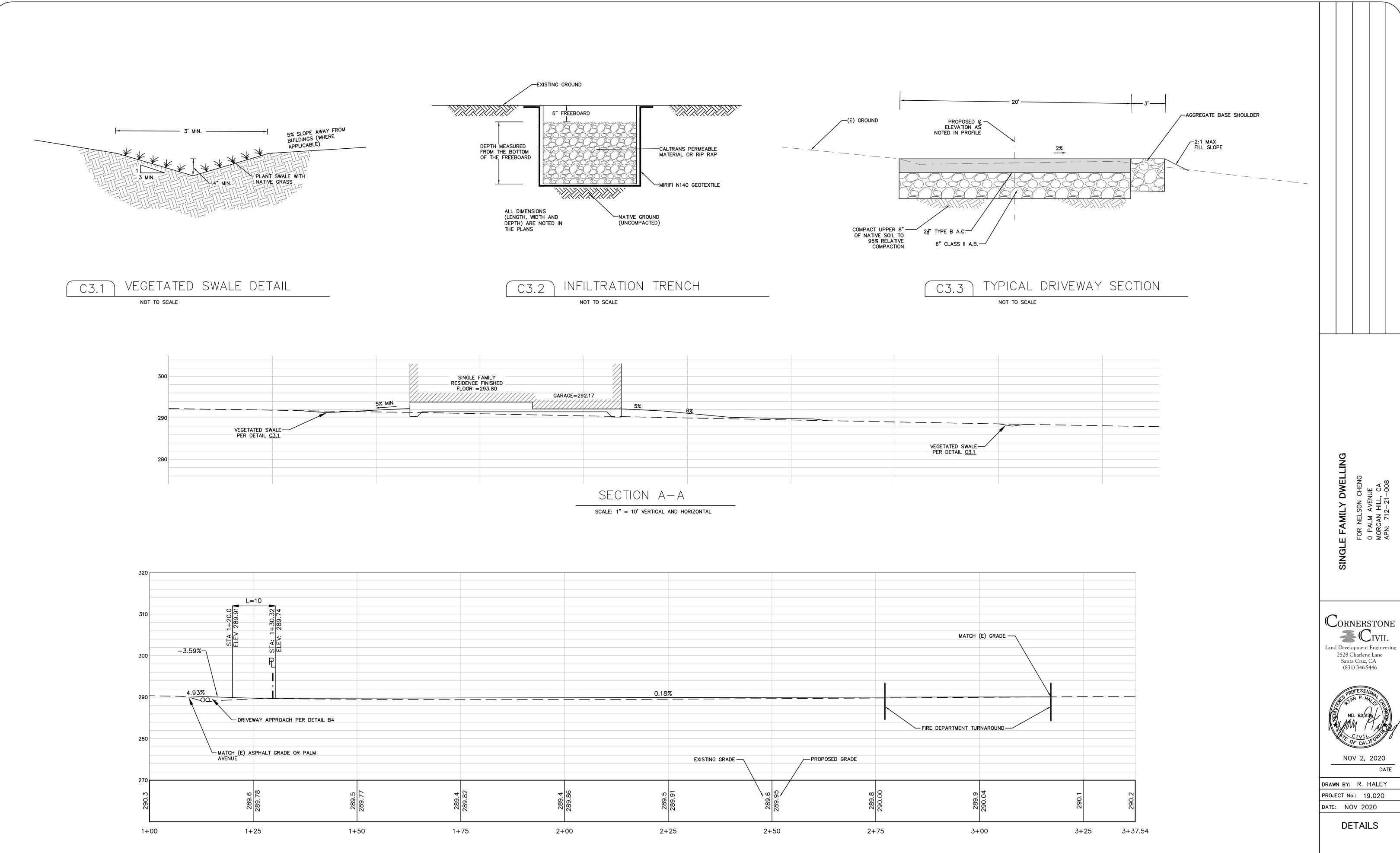
NOV 2, 2020

DRAWN BY: R. HALEY
PROJECT No.: 19.020

DATE: NOV 2020

GRADING & DRAINAGE PLAN

 $\mathbb{C}-2$ 



DRIVEWAY PROFILE SCALE: 1" = 10' VERTICAL AND HORIZONTAL

DATE

# TOTAL DISTURBED AREA = 31,000 SF (0.71 ACRES)

# SITE HOUSEKEEPING REQUIREMENTS

1. ALL LOOSE STOCKPILED CONSTRUCTION MATERIALS THAT ARE NOT ACTIVELY BEING USED (I.E. SOIL, SPOILS, AGGREGATE, FLY-ASH, STUCCO, HYDRATED LIME, ETC.) SHALL BE COVERED AND BERMED.

- 2. ALL CHEMICALS SHALL BE STORED IN WATERTIGHT CONTAINERS (WITH APPROPRIATE SECONDARY CONTAINMENT TO PREVENT ANY SPILLAGE OR LEAKAGE) OR IN A STORAGE SHED (COMPLETELY ENCLOSED).
- 3. EXPOSURE OF CONSTRUCTION MATERIALS TO PRECIPITATION SHALL BE MINIMIZED. THIS DOES NOT INCLUDE MATERIALS AND EQUIPMENT THAT ARE DESIGNED TO BE OUTDOORS AND EXPOSED TO ENVIRONMENTAL CONDITIONS
- (I.E. POLES, EQUIPMENT PADS, CABINETS, CONDUCTORS, INSULATORS, BRICKS, ETC.). 4. BEST MANAGEMENT PRACTICES TO PREVENT THE OFF-SITE TRACKING OF LOOSE CONSTRUCTION AND LANDSCAPE MATERIALS SHALL BE IMPLEMENTED.

- LANDSCAPE MATERIALS

  1. CONTAIN STOCKPILED MATERIALS SUCH AS MULCHES AND TOPSOIL WHEN THEY ARE NOT ACTIVELY BEING USED. CONTAIN FERTILIZERS AND OTHER LANDSCAPE MATERIALS WHEN THEY ARE NOT ACTIVELY BEING USED.
- DISCONTINUE THE APPLICATION OF ANY ERODABLE LANDSCAPE MATERIAL WITHIN 2 DAYS BEFORE A FORECASTED RAIN EVENT OR DURING PERIOD OF PRECIPITATION.
- 4. APPLY ERODABLE LANDSCAPE MATERIAL AT QUANTITIES AND APPLICATION RATES ACCORDING TO MANUFACTURE RECOMMENDATIONS OR BASED ON WRITTEN SPECIFICATIONS BY KNOWLEDGEABLE AND EXPERIENCED FIELD
- 5. STACK ERODABLE LANDSCAPE MATERIAL ON PALLETS AND COVERING OR STORING SUCH MATERIALS WHEN NOT

# BEING USED OR APPLIED.

- <u>VEHICLE STORAGE AND MAINTENANCE</u>

  1. MEASURES SHALL BE TAKEN TO PREVENT OIL, GREASE, OR FUEL TO LEAK IN TO THE GROUND, STORM DRAINS OR
- 2. ALL EQUIPMENT OR VEHICLES, WHICH ARE THE BE FUELED, MAINTAINED AND STORED ONSITE SHALL BE IN A DESIGNATED AREA FITTED WITH APPROPRIATE BMP'S.
- 3. LEAKS SHALL BE IMMEDIATELY CLEANED AND LEAKED MATERIALS SHALL BE DISPOSED OF PROPERLY.
- WASTE MANAGEMENT DISPOSAL OF ANY RINSE OR WASH WATERS OR MATERIALS ON IMPERVIOUS OR PERVIOUS SITE SURFACES OR INTO
- 2. SANITATION FACILITIES SHALL BE CONTAINED (E.G., PORTABLE TOILETS) TO PREVENT DISCHARGES OF POLLUTANTS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER, AND SHALL BE LOCATED A MINIMUM OF 20 FEET
- AWAY FROM AN INLET, STREET OR DRIVEWAY, STREAM, RIPARIAN AREA OR OTHER DRAINAGE FACILITY. 3. SANITATION FACILITIES SHALL BE INSPECTED REGULARLY FOR LEAKS AND SPILLS AND CLEANED OR REPLACED AS
- 4. COVER WASTE DISPOSAL CONTAINERS AT THE END OF EVERY BUSINESS DAY AND DURING A RAIN EVENT.
  5. DISCHARGES FROM WASTE DISPOSAL CONTAINERS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER
- SHALL BE PREVENTED. 6. STOCKPILED WASTE MATERIAL SHALL BE CONTAINED AND SECURELY PROTECTED FROM WIND AND RAIN AT ALL
- TIMES UNLESS ACTIVELY BEING USED. 7. PROCEDURES THAT EFFECTIVELY ADDRESS HAZARDOUS AND NON-HAZARDOUS SPILLS SHALL BE IMPLEMENTED.

  8. EQUIPMENT AND MATERIALS FOR CLEANUP OF SPILLS SHALL BE AVAILABLE ON SITE AND THAT SPILLS AND LEAKS
- SHALL BE CLEANED UP IMMEDIATELY AND DISPOSED OR PROPERLY; AND 9. CONCRETE WASHOUT AREAS AND OTHER WASHOUT AREAS THAT MAY CONTAIN ADDITIONAL POLLUTANTS SHALL BE CONTAINED SO THERE IS NO DISCHARGE INTO THE UNDERLYING SOIL AND ONTO THE SURROUNDING AREAS.

# EROSION CONTROL MEASURES

EROSION IS TO BE CONTROLLED AT ALL TIMES ALTHOUGH SPECIFIC MEASURES SHOWN ARE TO BE IMPLEMENTED AT A MINIMUM BY OCTOBER 15.

THE STORM DRAIN SYSTEM SHALL BE PREVENTED.

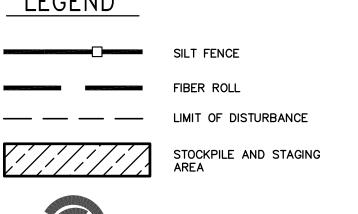
- UNLESS SPECIFIC MEASURES ARE SHOWN OR NOTED ON THIS PLAN, ALL COLLECTED RUNOFF SHALL BE CARRIED TO DRAINAGE COURSES IN LINED CONDUITS. DISCHARGE SHALL BE IN THE LOCATIONS SHOWN ON THE PLANS.
- 3. THE DESIRED END RESULT OF THESE MEASURES IS TO CONTROL SITE EROSION AND PREVENT SEDIMENT TRANSPORT OFF THE SITE. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO SEE THAT ANY ADDITIONAL MEASURES NECESSARY TO MEET THIS GOAL ARE IMPLEMENTED. IF FAILED INSPECTIONS BY COUNTY STAFF SHOW THIS GOAL IS NOT BEING MET, ADDITIONAL MEASURES MAY BE REQUIRED.
- 4. ALL DISTURBED AREAS NOT CURRENTLY BEING USED FOR CONSTRUCTION SHALL BE SEEDED WITH THE FOLLOWING SEED MIXTURE: WINTER BARLEY 25#/ACRE
- 5. AFTER SEEDING, STRAW MULCH WILL BE APPLIED IN 4" (AVG.) LAYERS.
- 6. AMMONIUM PHOSPHATE FERTILIZER, 6-3-3, SHALL BE APPLIED AT A RATE OF 30 LBS. PER ACRE. ON SLOPES GREATER THAN 20% EROSION CONTROL BLANKET (NORTH AMERICAN GREEN) SHALL BE APPLIED.
- 7. SILT BARRIERS SHALL BE PLACED END TO END AND STAKED DOWN ALONG THE BOTTOM OF ALL GRADED SLOPES.
- 8. DURING DRY AND WINDY PERIODS, DISTURBED SOIL SHALL BE SPRINKLED WITH WATER UNTIL DAMPENED AND REPEATED AS NEEDED TO PREVENT DUST

ALL EROSION CONTROL MEASURES INCLUDING BUT NOT LIMITED TO SILT FENCES, FIBER ROLLS AND SLOPE PROTECTION SHALL BE IN PLACE BY OCTOBER 15TH. THE ENGINEER OF RECORD SHALL INSPECT ONCE EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

# LEGEND

# EXPOSED SLOPE MEASURES

- 1. COVER ALL EXPOSED SLOPES
- 2. STRAW 2 TONS/ACRE ON SLOPES ≤ 20% WITH SOIL
- 3. USE NORTH AMERICAN GREEN C125 OR EQUAL ON SLOPES >20%.

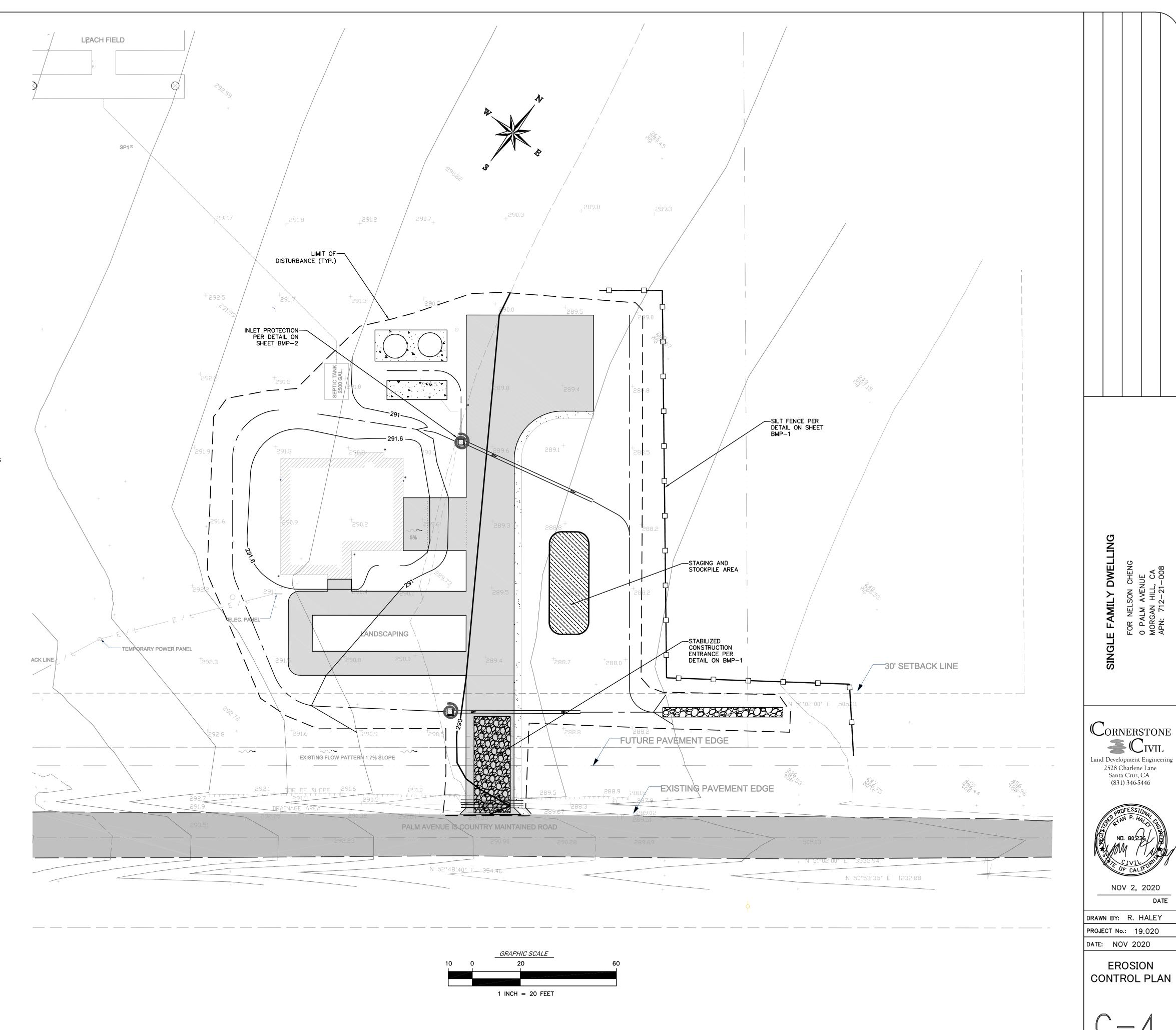




STABILIZED CONSTRUCTION ENTRANCE

FIBER ROLL INLET

PROTECTION



NOV 2, 2020

**EROSION** 

2528 Charlene Lane Santa Cruz, CA (831) 346-5446

50' Min

or four times the circumference

of the largest construction vehicle tire,

**Velocity Dissipation Devices** 

CASQA Detail EC-10

-Key in 6"-9"

entire perimeter

whichever is greater

# **Silt Fence**

LEGEND Tomped backfill Max reach = 500' (See note 1) Slope direction Direction of flow Optional maintenance opening detail Cross barrier, (See note 10) stoke Fabric ---PLAN SILT FENCE -End detail

**CASQA Detail SE-1** 

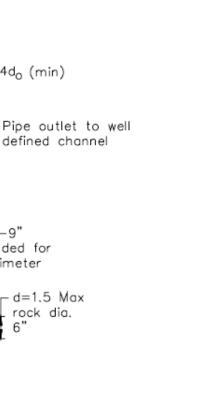
# NOTES

- 1. Construct the length of each reach so that the change in base elevation along the reach does not exceed 1/3 the height of the linear borrier, in no case shall the reach length exceed 500
- The last 8'-0" of fence shall be turned up slope.
- 3. Stake dimensions are naminal.
- 4. Dimension may very to fit field condition.
- 5. Stakes shall be spaced at 8'-0" maximum and shall be positioned on downstream side of fence.
- 6. Stakes to overlap and fence fabric to fold around each stake one full turn. Secure fabric to stake with 4 staples.
- 7. Stokes shall be driven tightly together to prevent potential flow-through of sediment at joint. The tops of the stakes
- 8. For end stake, fence fabric shall be folded around two stakes one full turn and secured with 4 staples.
- Minimum 4 staples per stake. Dimensions shown are typical.
- 10. Cross barriers shall be a minimum of 1/3 and a maximum of 1/2 the height of the linear barrier.
- 11. Maintenance openings shall be constructed in a manner to ensure sediment remains behind silt fence.
- Joining sections shall not be placed at sump locations.
- 13. Sandbag rows and layers shall be offset to eliminate gaps.

# CROSS BARRIER DETAIL

SECTION C-C





SECTION A-A

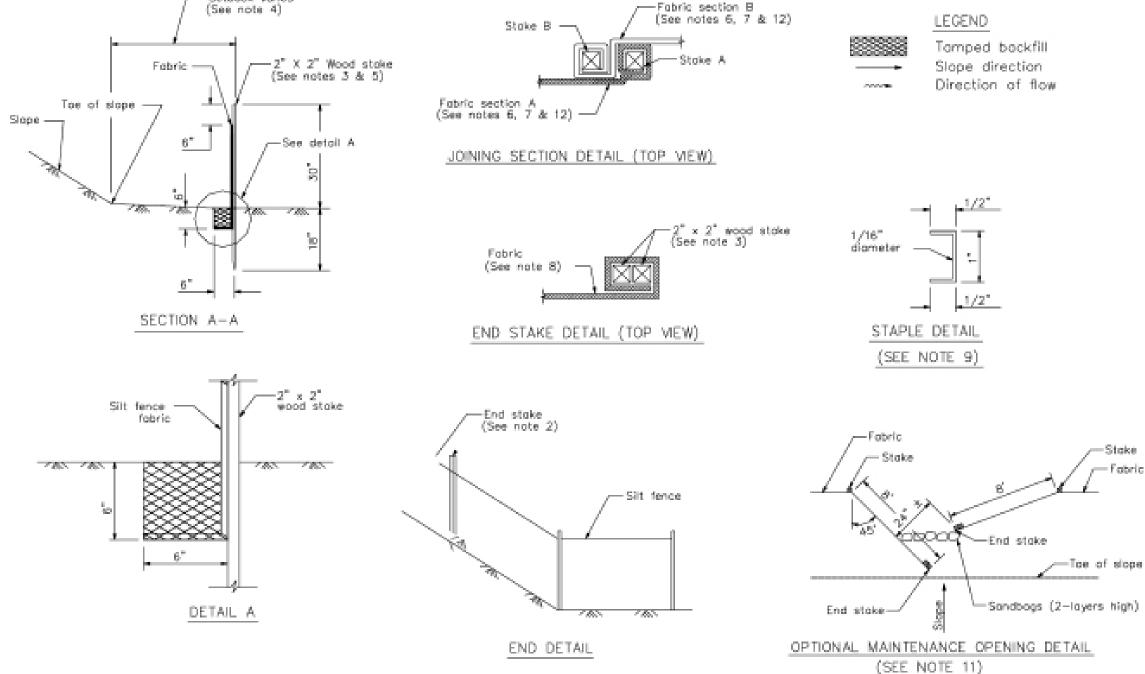
PLAN VIEW

Existing

Grade

\* Length per ABAG Design Standards

# Silt Fence CASQA Detail SE-1



Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003. Available from www.cabmphandbooks.com.

# STANDARD BEST MANAGEMENT PRACTICE NOTES

- 1. Solid and Demolition Waste Management: Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or
- 2. <u>Hazardous Waste Management</u>: Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
- 3. <u>Spill Prevention and Control</u>: Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-13 to C-14) or latest.
- 4. <u>Vehicle and Construction Equipment Service and Storage</u>: An area shall be designated for the maintenance, where onsite maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or latest.
- 5. Material Delivery, Handling and Storage: In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
- 6. <u>Handling and Disposal of Concrete and Cement</u>: When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
- . <u>Pavement Construction Management</u>: Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
- 6. Contaminated Soil and Water Management: Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or
- . <u>Sanitary/Septic Water Management</u>: Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or
- 10. <u>Inspection & Maintenance</u>: Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

# STANDARD EROSION CONTROL NOTES

1. Sediment Control Management

<u>Tracking Prevention & Clean Up</u>: Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or, more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.

Storm Drain Inlet and Catch Basin Inlet Protection: All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.

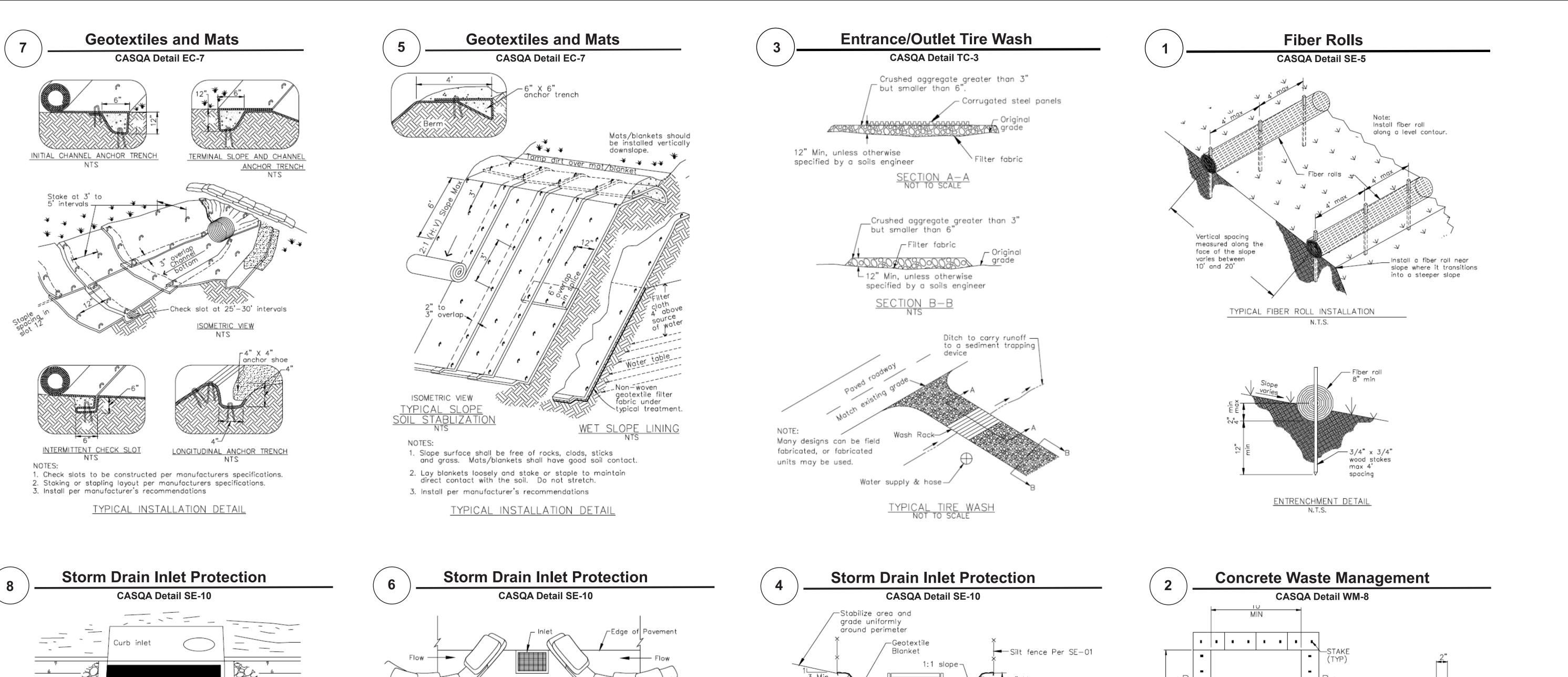
Storm Water Runoff: No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.

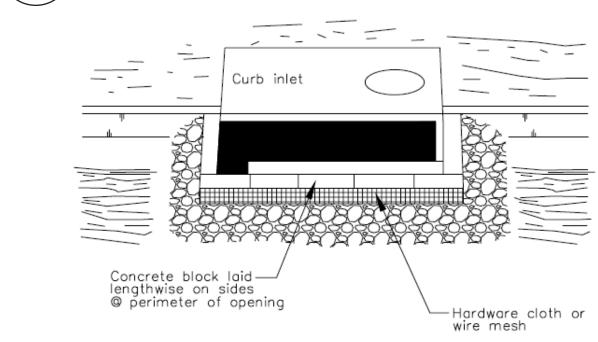
<u>Dust Control</u>: The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

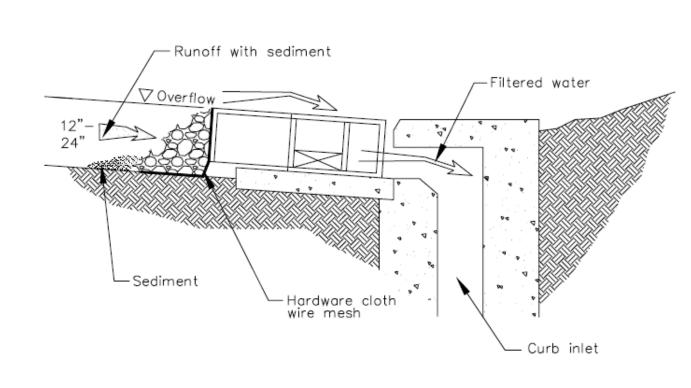
Stockpiling: Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures(tarps, straw bales, silt fences, ect.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.

- 2. <u>Erosion Control</u>: During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
- 3. <u>Inspection & Maintenance</u>: Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/ or alternative control measures implemented immediately, within 24 hours of the problem being identified.
- 4. Project Completion: Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
- 5. It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
- 6. Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

CHENG HILL, (-21-00) MORGAN APN: 712-3 NEL 0 P/

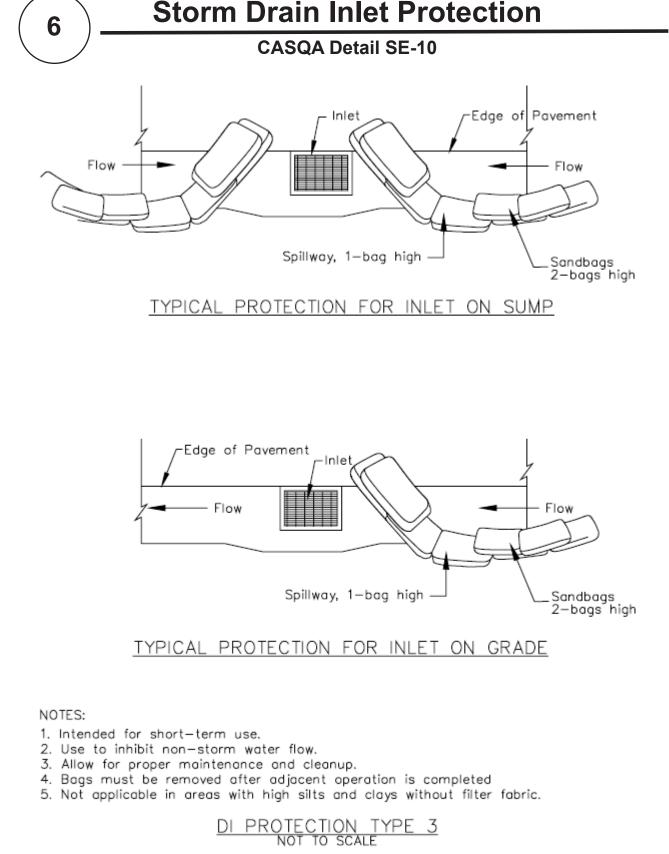


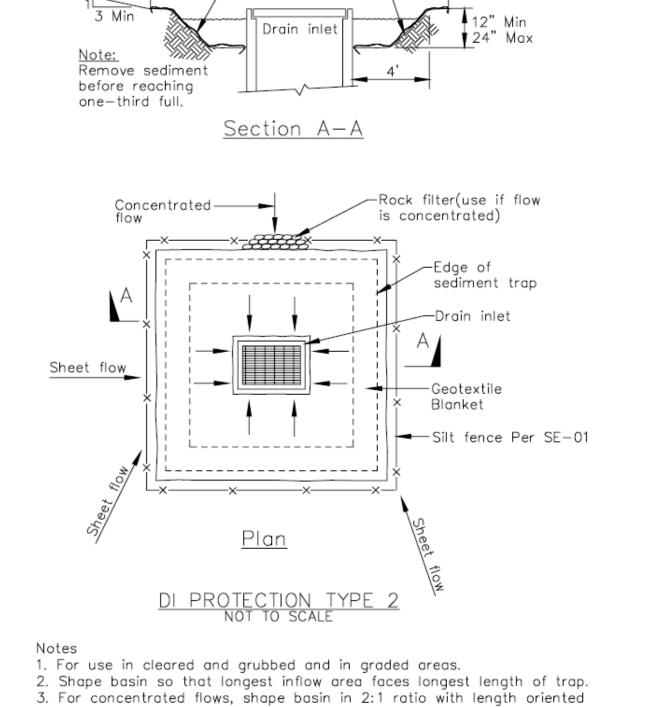




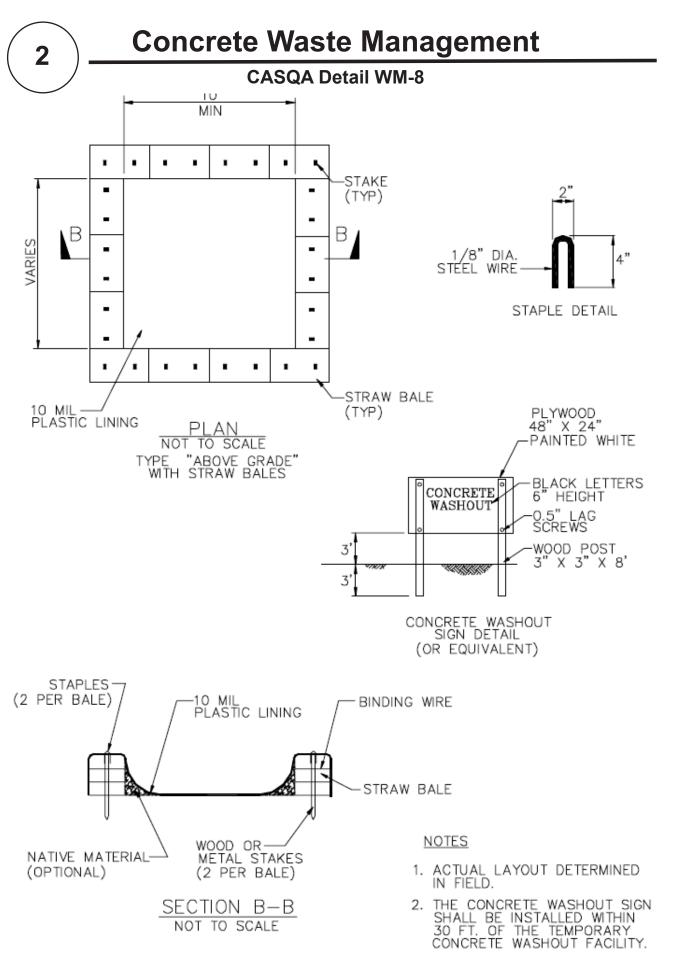
DI PROTECTION - TYPE 4

Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003. Available from www.cabmphandbooks.com.





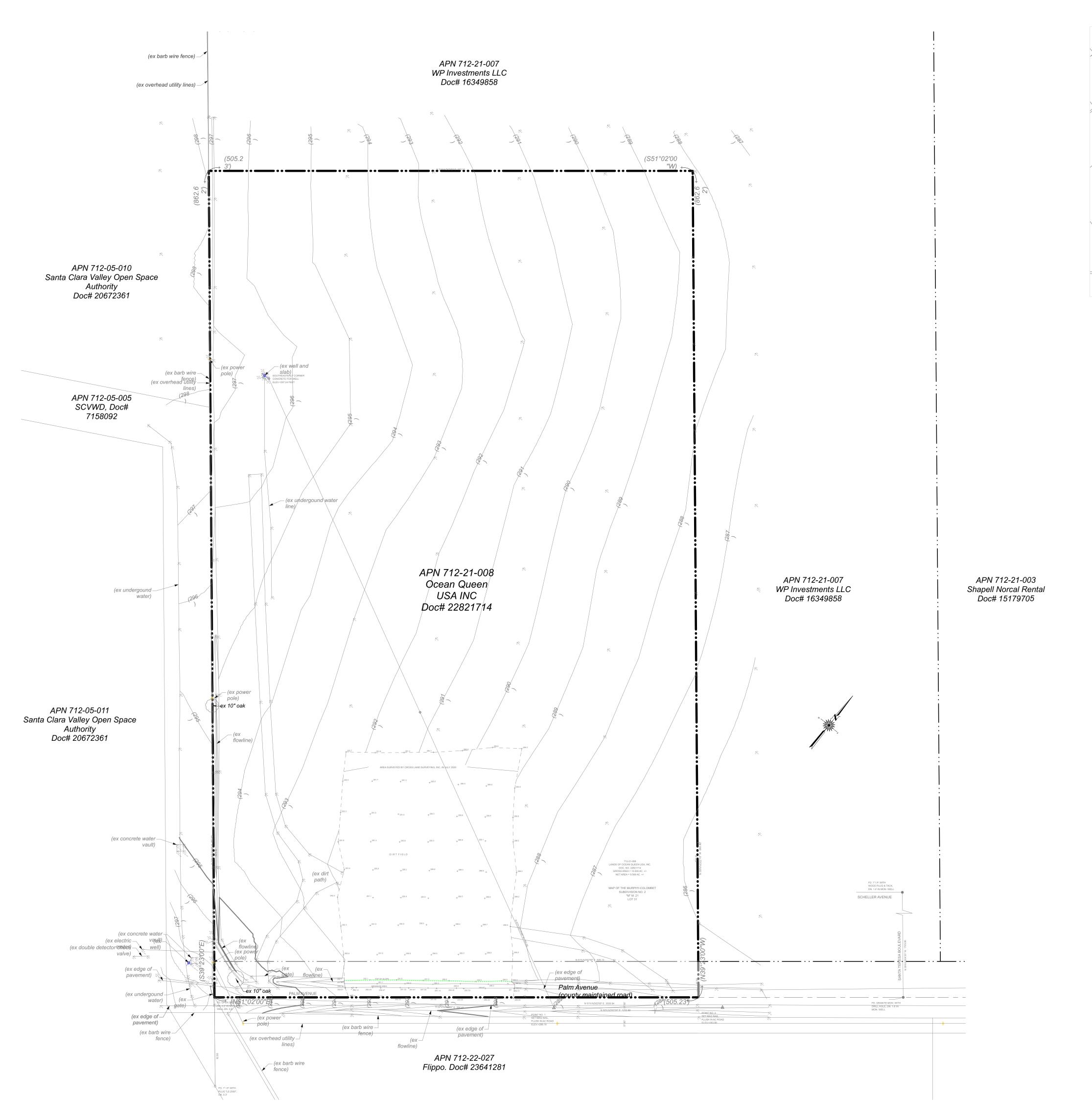
towards direction of flow.

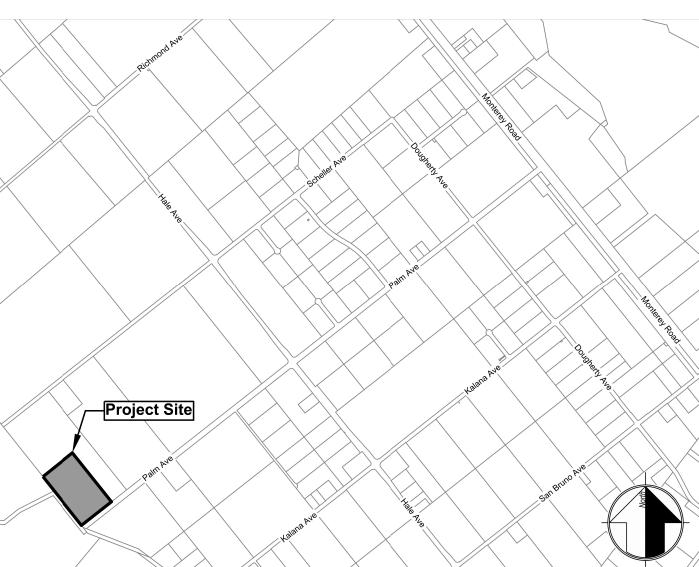


NELSON CHI O PALM AVE MORGAN H APN: 712-21

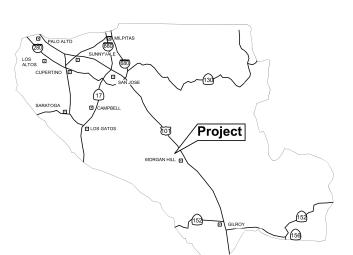
Information Project



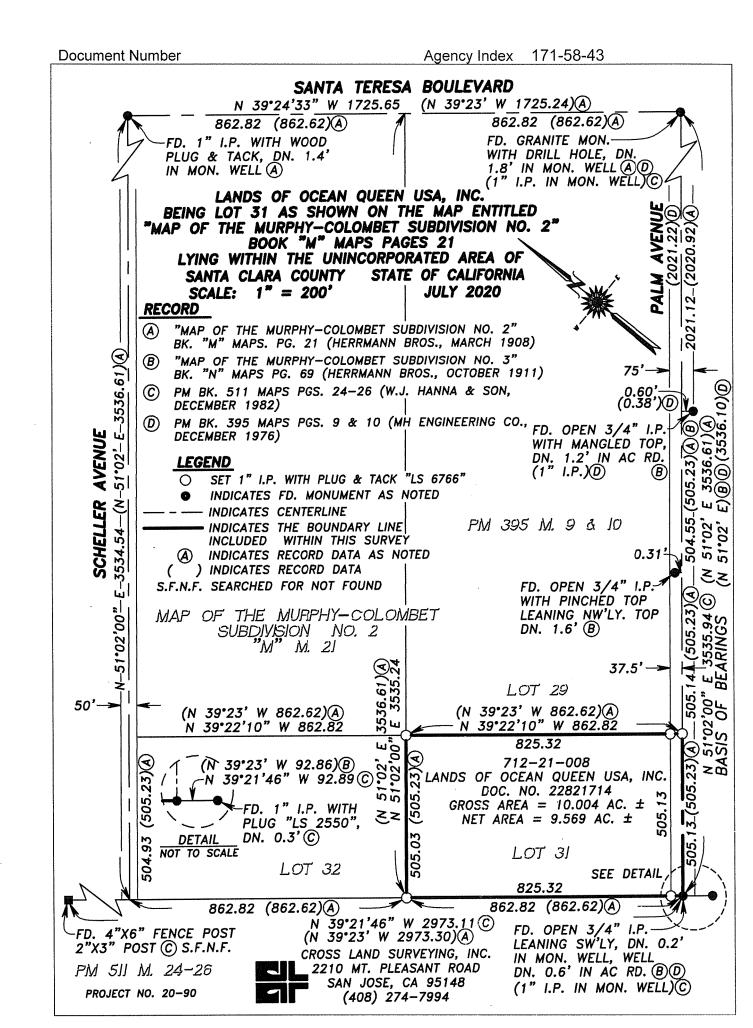




Vicinity Map



COUNTY LOCATION MAP



Corner Record

BPELSG-2016



CONTRACTOR

OWNER

OCEAN QUEEN INC.
1650 DELTA CT.
HAYWARD, CA 94544

LVE, RANCH HOUSE

ENUE, MORGAN HILL, CA 95037

JOB#

A.P.N.

A.P.N.

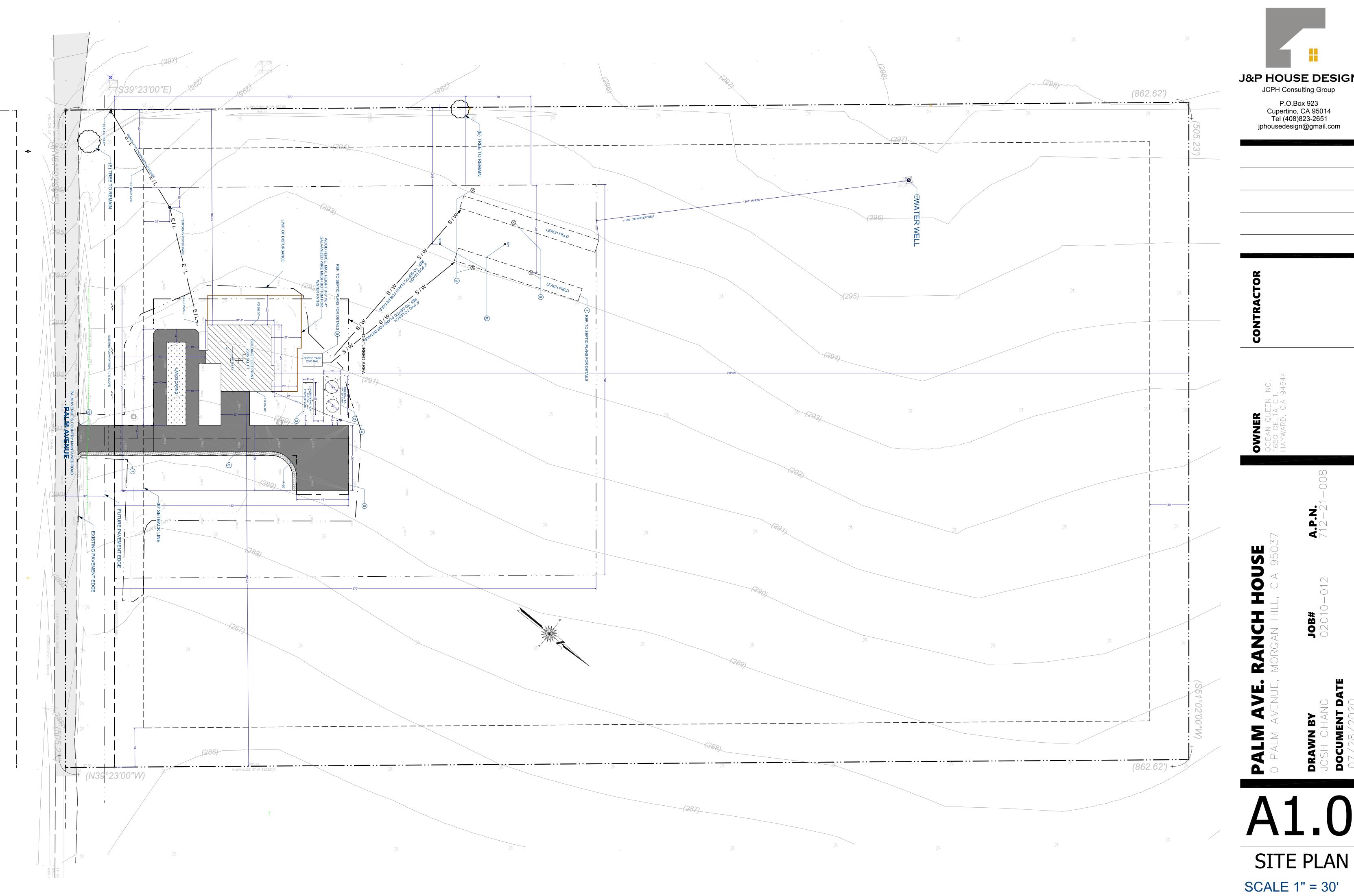
AG. 02010-012 712-21-00

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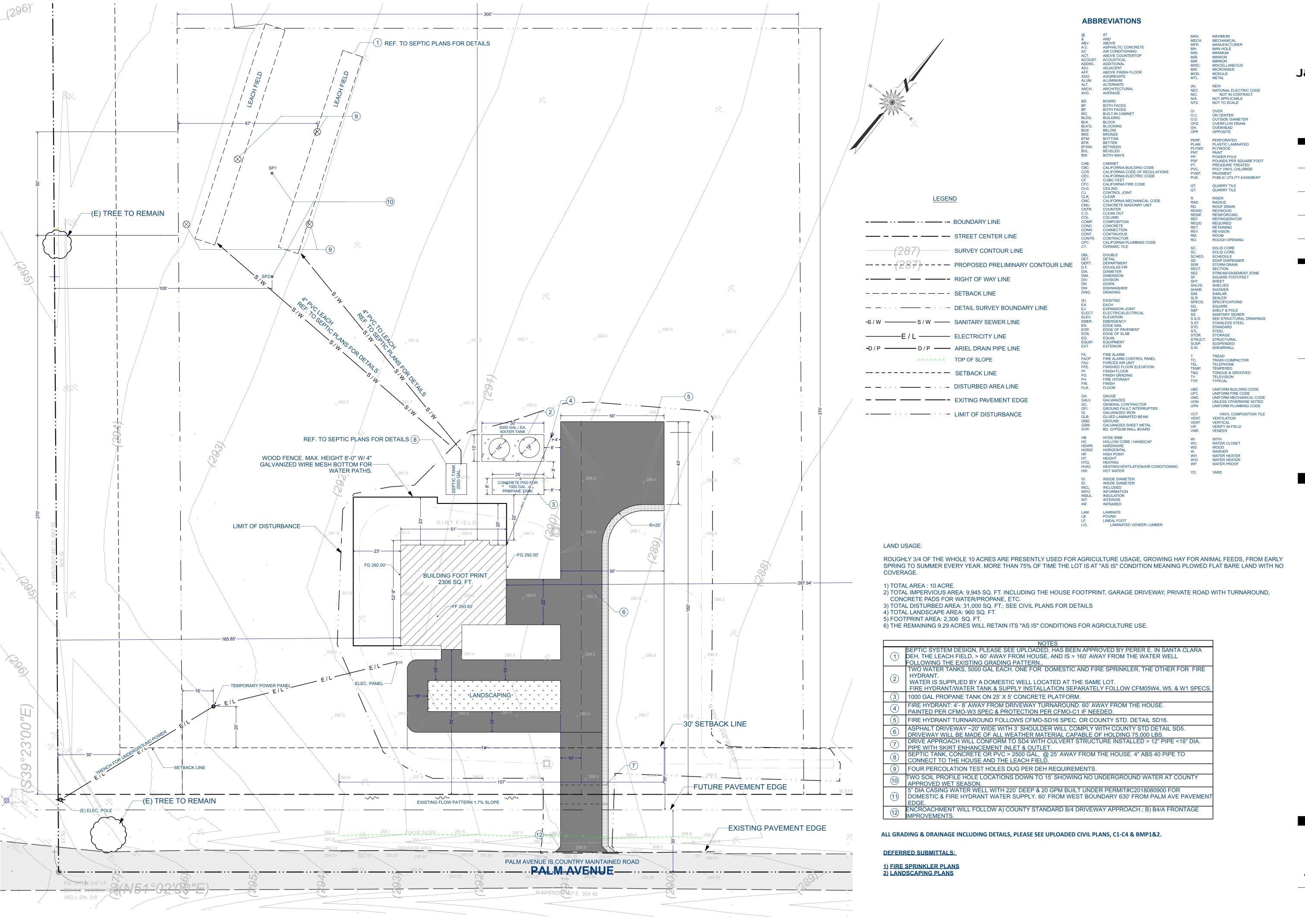
DRAW

COVER

SCALE 1" = 50'



J&P HOUSE DESIGN



J&P HOUSE DESIGN
JCPH Consulting Group
P.O.Box 923

Cupertino, CA 95014 Tel (408)823-2651 jphousedesign@gmail.com

ONTRACTOR

OWNER

OCEAN QUEEN INC.
1650 DELTA CT.
HAYWARD, CA 94544

2020

**JOB**#

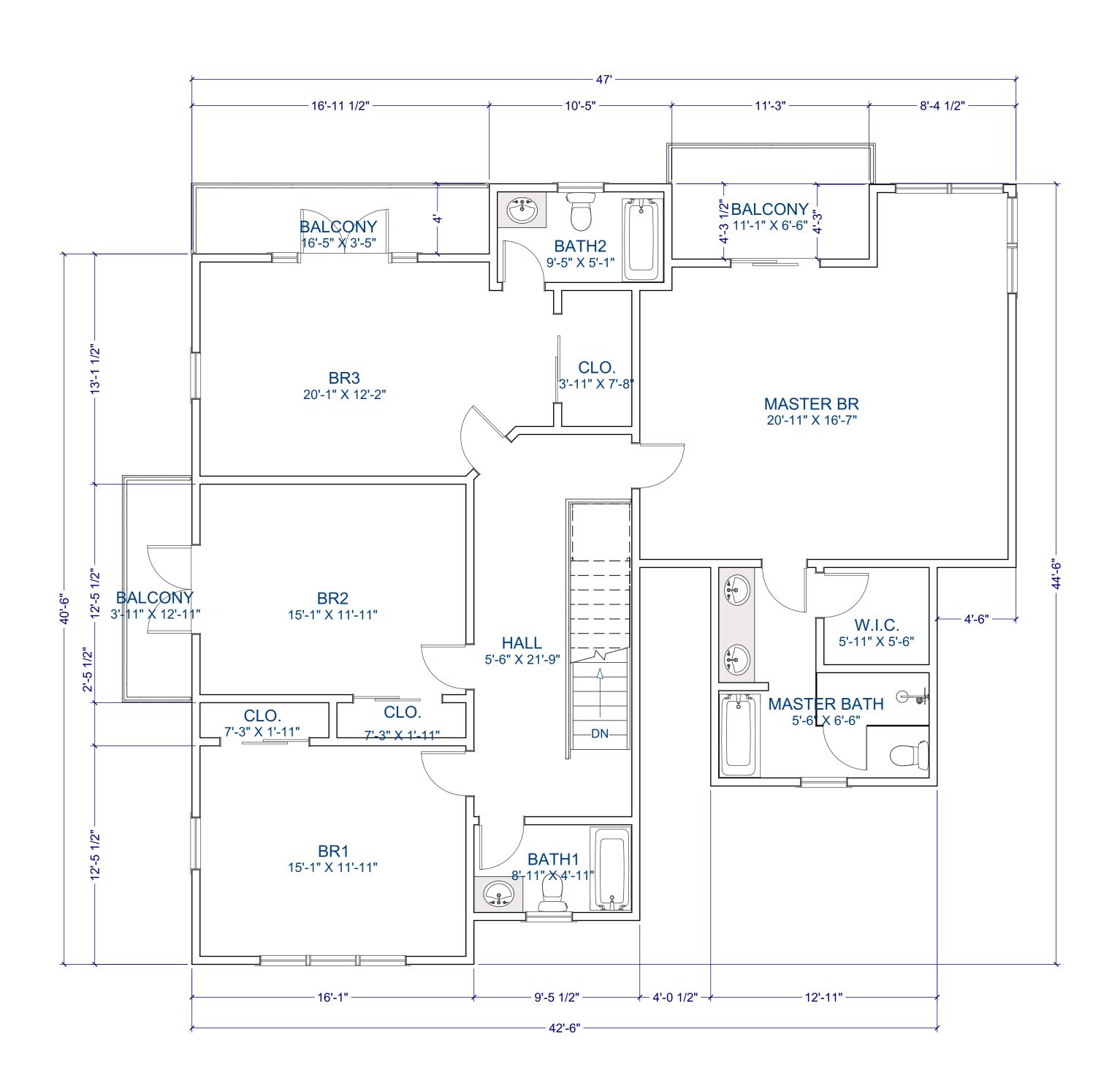
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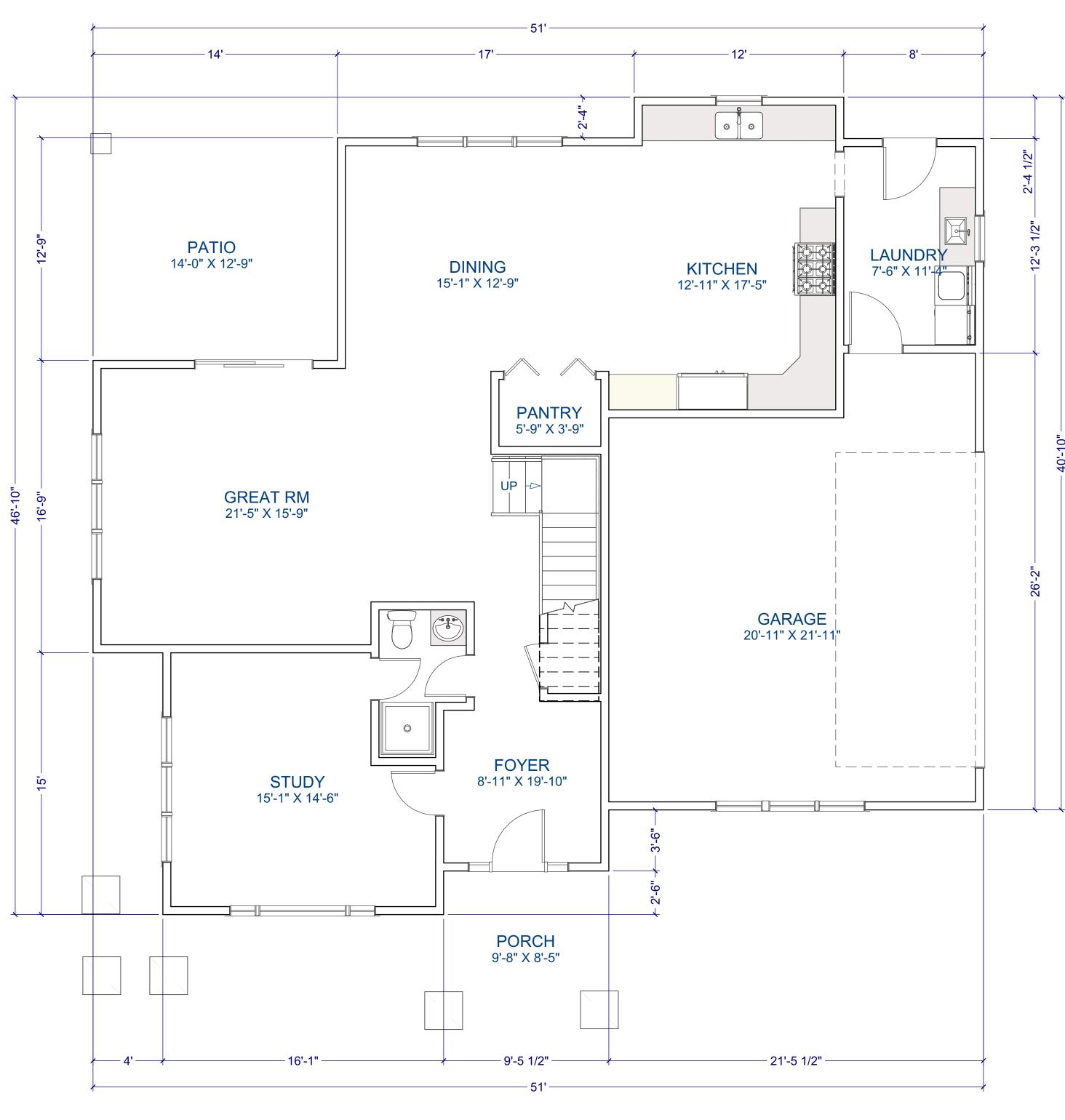
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41.1

SITE PLAN

SCALE 1" = 20'.

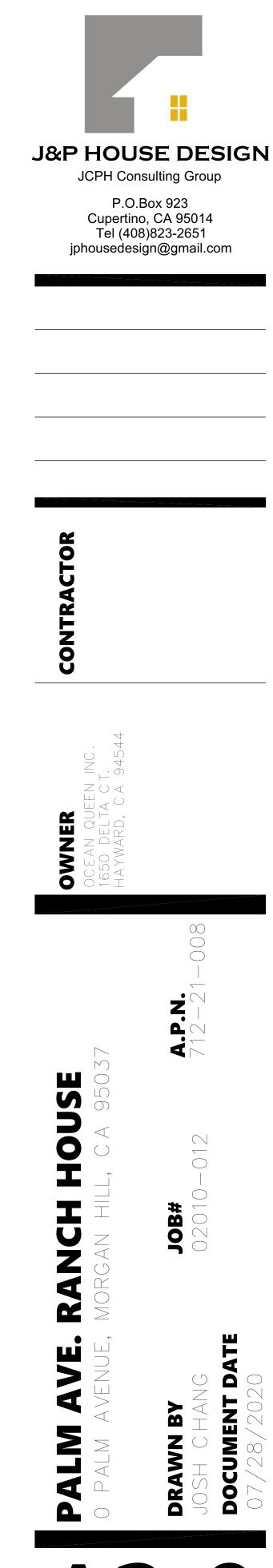




2nd Floor Plan View Dimensioned

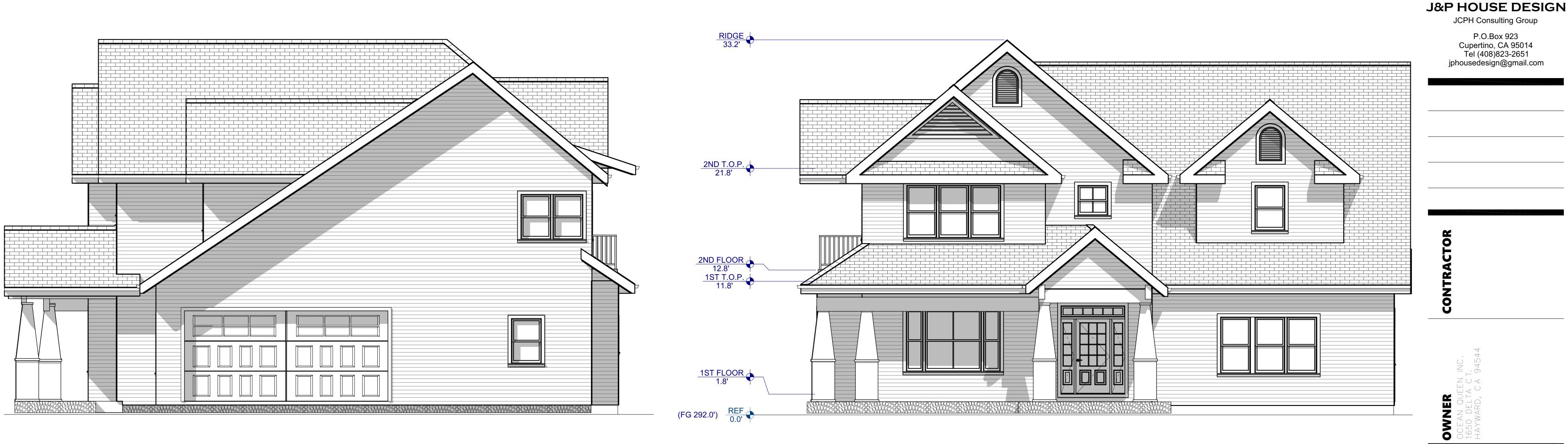
1st Floor Plan View Dimensioned

E1

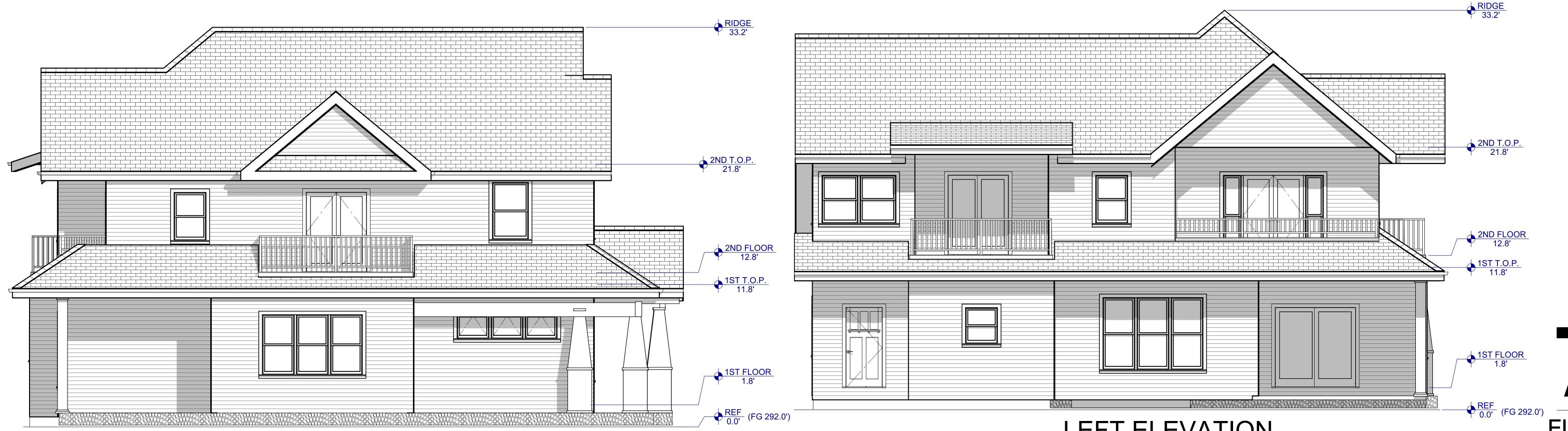


A2.0
FLOOR PLAN

SCALE 1/4" = 1"





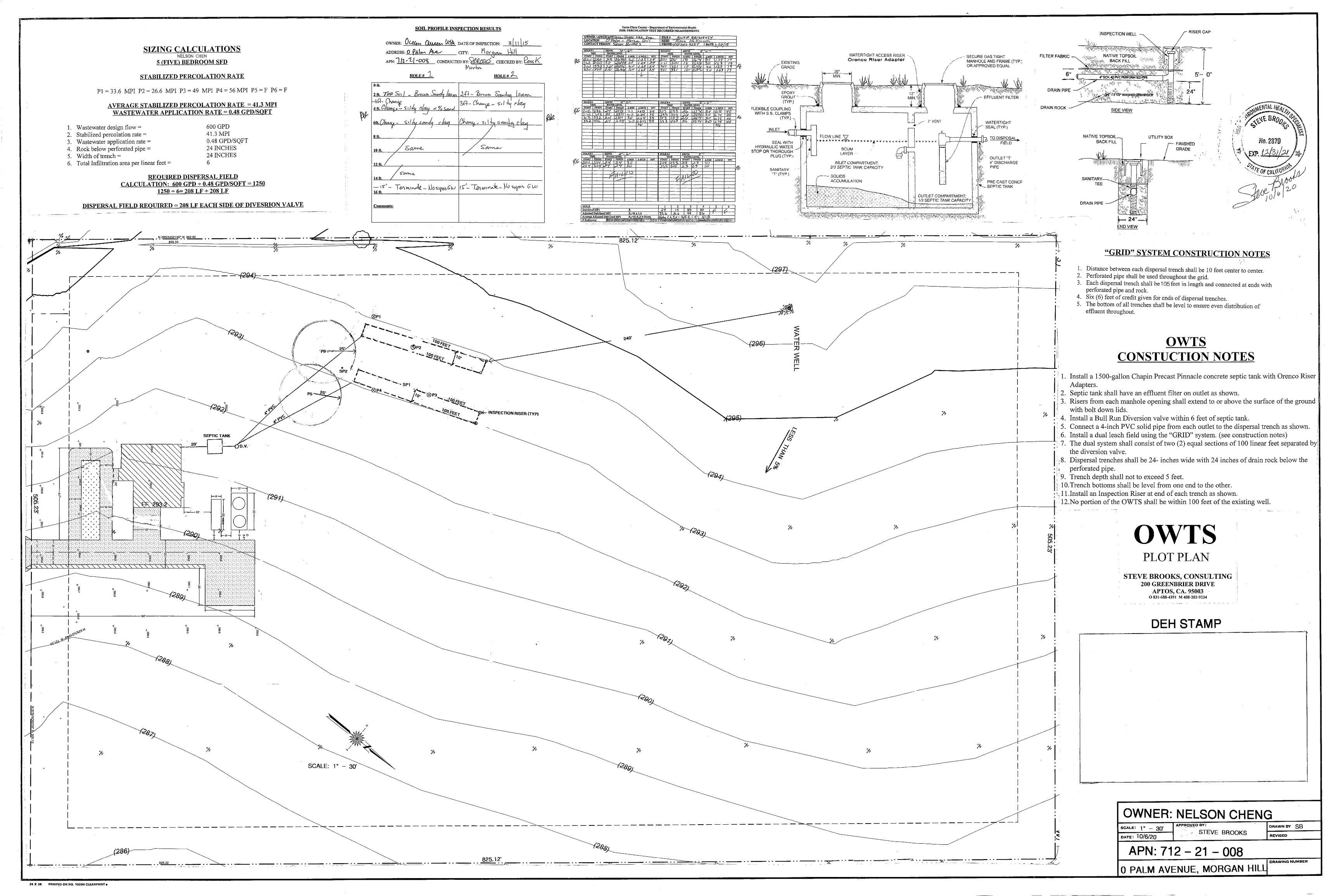


LEFT ELEVATION

**ELEVATIONS** 

JCPH Consulting Group

P.O.Box 923 Cupertino, CA 95014 Tel (408)823-2651 jphousedesign@gmail.com



### **BRYAN MORI BIOLOGICAL CONSULTING SERVICES**

1016 Brewington Avenue, Watsonville, CA 95076 831.728.1043 (O) 310.408.6690 moris4wildlife@earthlink.net



April 26, 2021

Nelson Cheng 3016 Baylis Street Fremont, CA 94538

# RE: CHENG PROPERTY/PALM AVENUE BIOLOGICAL ASSESSMENT

### Dear Nelson:

This letter-report presents the findings of the biological assessment performed on APN 712-21-008, Morgan Hill, CA. The purpose of the study was to address both the golden eagle (Aquila chrysaetos) and American badger (Taxus taxideas), as requested by the Santa Clara County Planning Department.

### Methods

A reconnaissance-level field survey was performed at the project site on 21 April 2021 to assess the habitat conditions for both the golden eagle and American badger. Approximately 25-foot wide transects were walked throughout the property, searching for potential badger dens, especially within the construction envelopes for the leach fields and the single-family residential unit. Concurrently, 10x40 binoculars were used to search for golden eagle nests within a 660-feet zone extending from the project boundary adjoining the Coyote Valley Open Space Preserve. The golden eagle assessment area was determined by using the standard 660-foot buffer width used for state endangered bald eagle (Haliaeetus leucocephalus) nests during construction (USFWS 2007). Following the transect survey through the project site, trails of the open space preserve also were used to search the trees within the assessment area.

In addition to the site assessment, the California Natural Diversity Data Base (CNDDB) Morgan Hill Quadrangle, community science websites iNaturalist and eBird, and the <u>Breeding Bird Atlas of Santa Clara County, California</u> (Bousman 2007) were reviewed for records of golden eagle and American badger in the region.

# **Existing Conditions**

The Santa Clara Valley Habitat Agency identifies the project parcel as agricultural and valley floor lands with land cover characterized by grain, row crop, hay pasture and disced field. These conditions are current and were verified during the site 21 April 2021 site visit. The project site contains both hayfield (uniform barley and annual ryegrass) and ruderal

(=weedy) vegetation typified by wild radish, mustard, milk thistle and annual grasses (**Figure 1**). The project development envelope encompasses mostly ruderal vegetation and does not appear to be in hayfield production, presently. Two small live oak trees grow along the western boundary of the property. Agricultural uses have been consistent on the project site, since at least the 1990s, based on review of Google Earth aerial maps.



Figure 1. Photo of the project site looking northwestward from the southeast corner of the property. Note the hayfield of uniform barley and ryegrass in the foreground and the dense stand of mustard (yellow flowers) in the background. The hills of Coyote Valley Open Space Preserve are seen in the distance.

# Golden Eagle

The golden eagle is a State fully protected species and species of special concern (CDFW 2020). Golden eagles are considered uncommon residents throughout California and typically inhabit open grasslands and oak savannah, rugged mountainous regions and deserts (Katzner et al 2020). Golden eagles require extensive areas of habitat for feeding and maintaining territories, with nesting territories estimated to range from 19 to 36 sq. mi. (Palmer 1988). They hunt in grasslands and other open habitats primarily for jack rabbits, cottontails and ground squirrels (Thelander 1974; Palmer 1988). Nest sites are usually located in secluded sites, with a vantage of the surrounding area, and are typically built on escarpments, in large, tall trees, or occasionally on transmission towers (Palmer 1988; Katzner et al 2020). Nests are constructed from branches and other vegetation and are refurbished year-round with added nest material; successful nests are re-used in subsequent years, progressively becoming enlarged (Palmer 1988). Nesting territories may contain multiple alternate nest sites (Katzner et al 2020). Golden eagles produce one brood, and the clutch usually consists of one to three eggs. Incubation is mostly performed by the female and lasts 41 - 45 days. Fledging can occur as early as 45 days, and late as 81 days, after hatching. Juvenile birds stay with the parents from one to six months after fledging.

Local Occurrence: In Santa Clara County, the golden eagle population is estimated to contain twenty pairs, with most occupying the Diablo Range and five pairs in the Santa Cruz Mountains (Bousman 2007). Known nest sites in the Santa Cruz Mountains range in elevation from 380 ft. to 3,500 ft. and include Calero Reservoir, the Loma Prieta vicinity and the foothills west of Morgan Hill (Bousman 2007). Nesting golden eagles are not expected on the valley floor.

Neither the project site nor the surrounding habitat within 660 ft. supports nesting habitat, due to the lack of secluded nest sites. Additionally, the area is frequented by recreational users of the Coyote Valley Open Space Preserve. The quality of foraging habitat on the project site is compromised, due to the site's historic and current use for hay production. However, because golden eagles occupy expansive territories, the project site is likely contained within the territory of golden eagles nesting elsewhere in the Santa Cruz Mountains, as evident by the many golden eagle observations recorded at the adjacent Coyote Valley Open Space Preserve (https://www.inaturalist.org; https://ebird.org; CNDDB 2021).

# American Badger

The American badger is a State species of special concern (CDFW 2020). Badgers primarily occur in grassland, open scrub and savannah habitats with friable soils. However, a variety of other habitats are utilized including open scrub and woodlands. An abundant supply of prey species (especially fossorial mammals) is an essential habitat requirement, with dens in the Diablo Range often associated with ground squirrel colonies (J. H. Quinn 2008). Depending on sex and prey availability, home ranges can vary from 2 km<sup>2</sup> to 500 km<sup>2</sup> (Quinn 2015. Badgers can disperse up to 100 km and move up to 20 km per night (Quinn 2015). Badgers excavate burrows for denning and occupy new day-use dens nightly (Quinn 2015). Badgers favor intermediate slopes and open ground cover for denning (K. L. Huck 2010). Reproductive dens are more extensive and complex than day use or wintering dens, and can consist of separate dens for birthing (natal) and rearing (maternity). Such dens appear to support less ground vegetation than non-reproductive sites (K. L. Huck 2010). Females tend to use favorable reproductive sites yearly (K. L. Huck 2010). Kits typically are born in late March and early April and leave the natal den in late June to early July. Once fairly widespread, this species has declined or disappeared over large areas of the state, due their low reproductive rate, high juvenile mortality and sensitivity to habitat fragmentation from agriculture and urban developments (Quinn 2015; Bolster 1998).

Local Occurrence: The Santa Clara Valley provides habitat for American badger in open spaces, and agricultural and rural residential landscapes outside of highly-developed urban zones. In the Morgan Hill quadrangle, the CNDDB lists 12 records of American badger, including one from the Coyote Valley Open Space Preserve, west of the project site, on 3 August 2018. The observation was of an adult at a den entrance in the rocky serpentine habitat, west of the preserve parking lot.

The project site supports potential denning and foraging habitat for American badger, although compromised due to the current and historic use of the site for hay production, which would result in the annual destruction of burrows during discing, sowing and

harvesting activities, as well as periodic reductions in prey availability. During the site reconnaissance, no badger sized burrow were observed on the building envelope or for the proposed leach fields. Many of the burrows observed were of gophers and ground squirrels and appeared old and inactive, with many openings occluded and with spider webbing (Figure 3). Active ground squirrel colonies were observed long the project site's west fence line, with a couple of burrow entrances large enough to accommodate a badger (Figure 4). However, no badger sign (e.g., large dirt aprons, claw marks at the burrow entrance, scat) was observed at these burrows.

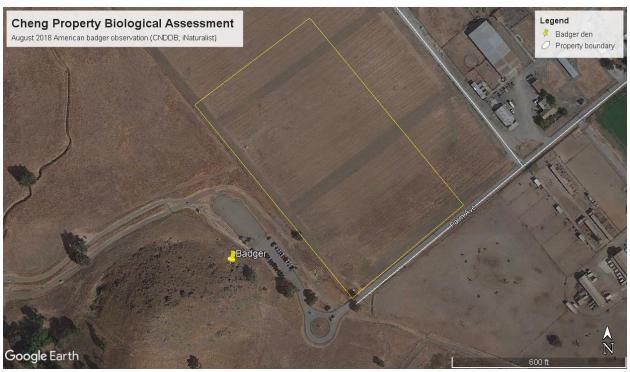


Figure 2. American badger observation, Coyote Valley Open Space Preserve. Note the agricultural use on the project parcel.



Figure 3. Old gopher burrows (center) observed with the building envelope.



Figure 4. One of the active ground squirrel colonies along the western border of the project site. Some burrows were large enough to accommodate a badger but lacked sign, such as large dirt apron, claw digging marks or scat.

# Potential Project Impacts and Recommendations

The proposed project is a single-family residential unit on 9.59 acres (**Figure 5**). The development area is roughly 1 acre, with the remaining parcel to be left undeveloped.

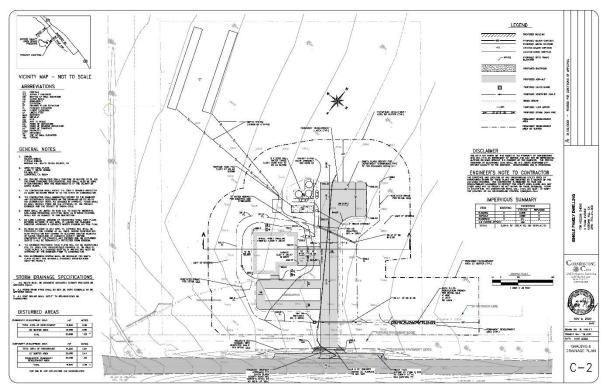


Figure 5. Proposed site plan.

**Golden Eagle**. Given the lack of nesting habitat on or immediately adjacent to the project site, no significant impacts to golden eagles are expected, as a result of the project. Additional protection measures do not appear necessary for the project.

**American Badger.** Although no badger dens were observed on the project site, potential habitat is present, and a 2018 record of badger was recorded from the adjacent open space preserve. Therefore, precautionary protection measures should be incorporated into the project, during construction activities, as follows:

- A qualified biologist will conduct a preconstruction survey for American badger dens no less than 14 days and no more than 30 days, prior to the beginning of ground disturbance at the project site. The biologist will search for burrows of appropriate size and shape, evidence of recent activity and other sign, such as tracks and scat. All dens will be mapped and their status specifically, whether they are active at the time of the survey will be determined. If no potential burrows are found on the project site, the project should proceed immediately, within two weeks. If this timeline cannot be met, an additional pre-construction survey must be performed.
- If a potential den is found, the qualified biologist shall determine if it is active using camera traps for three consecutive nights. If a den is determined to be active, CDFW

shall be consulted regarding measures to avoid take. These may include establishing a temporary buffer zone around active dens during construction, and relocation either through trapping or passively. Destruction of dens will not occur without prior consultation with and approval from CDFW.

- Following the survey, written results of the preconstruction survey will be submitted to CDFW within five days of survey completion and prior to the start of ground disturbance and/or construction.
- Regardless of whether potential dens are identified, an exclusion fence should be
  installed around the perimeter of the construction envelope to exclude possible
  badger occurrence onto the project site during construction activities. At a
  minimum, the exclusion fence shall be constructed from DOT grade silt fence. The
  fence should be buried one foot below grade and encircle the project site and
  incorporate a gate that would allow construction vehicle access and serve as a barrier
  to wildlife trespass. The installation of the fence should be monitored by a qualified
  biologist.
- Prior to the start of the project, a worker's environmental training shall be performed with the entire construction team. The training shall address species identification, natural history, local occurrence and the protection measures to be implemented during the course of the project, including actions to take if a badger is encountered. All workers that receive the training must sign a certification sheet. Each new crew member must receive the environmental training, prior to starting work.

If you have any questions or comments regarding this report, please feel free to contact me anytime.

Sincerely,

Bryan Mori Consulting Biologist

### REFERENCES

- Bolster, B. C., editor. 1998. Terrestrial Mammal Species of Special Concern in California. Draft Final Report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Report submitted to California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No.FG3146WM.
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- California Department of Fish and Wildlife. 2020. Special Animals List.
- California Natural Diversity Data Base. 2021. Rarefind Morgan Hill Quadrangle. California Department of Fish and Wildlife.
- Huck, K. L. 2010. Reproductive Den Habitat Characterization of American Badgers (*Taxidea taxus*) in Central California. *Master's Theses*. Paper 3868. http://scholarworks.sjsu.edu/etd\_theses/3868.
- Katzner, T. E., Kochert, M. N., Steenoff, K., McIntyre, C. L., Craig, E. H. and T. A. Miller. 2020. Golden Eagle (Aquila chrysaetos). In The Cornell Lab of Ornithology Birds of World Version 2.0. American Ornithological Society.
- Palmer, R. S. (Ed.). 1988. Handbook of North American Birds, Diurnal Raptors Vols. 4 & 5. Yale University Press
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- Quinn, J. H. 2008. The ecology of the American badger *Taxidea taxus* in California: assessing conservation needs on multiple scales. PhD Thesis. Ecology Office of Graduate Studies, University of California, Davis.
- Thelander, C.G. 1974. Nesting territory utilization by Golden Eagles (Aquila chrysaetos) in California during 1974, Special Wildlife Investigations, California Department of Fish and Game, Sacramento, CA.
- US Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines.

# Stormwater Control Plan

For

**Nelson Cheng** 

At 0 Palm Avenue, Morgan Hill, CA

APN: 712-21-008



11/02/2020

Prepared by

Cornerstone Civil - 2528 Charlene Lane, Santa Cruz, CA

**Design Criteria:** This design has been done in accordance with the County of Santa Clara Stormwater Management Guidance Manual, the Santa Clara Valley Urban Runoff Pollution Prevention Program and the requirements of the Department of Roads and Airports. The project creates or replaces less than 10,000 Square feet and is considered a 'Tier 1' Project.

**Background:** The site is currently undeveloped at the end of Palm Avenue, Morgan Hill in the unincorporated portion of Santa Clara County. The site is very flat with an approximate average slope of 2% towards the southeast. The south side of the property is bounded by the Right-of-Way of Palm avenue. There is an existing vegetated roadside ditch.

**Discussion:** The project proposes to construct a new single-family dwelling, garage, access driveway, fire department turnaround, water storage tanks and septic system. The entire site flows to the southeast and will do so post development. The tier 1 requirements have been met onsite for Limited Impact Development (LID) and Source Control Measures (SCM) as follows:

- The new asphalt driveway sheet flows to grassed landscape. This uses the 2:1 ratio of impervious to "self retained' area and achieves water quality treatment even though it is not required for a tier 1 project.
- The new building structure outlets all roof drainage to landscaping via splashblocks.
- All new roof drainage and upslope drainage will be routed through a grass lined swale which will be planted with native grass.
- An infiltration trench has been designed for flood control purposes. This feature doubles as a water quality measure as it will promote percolation of asphalt runoff to the groundwater.

The Roads and Airports department has required the detention of both the 10 and 100 year storm events to maintain pre-development runoff rates. This is achieved through an infiltration trench at the southeast corner of the property. This trench is sized in accordance with the Santa Clara Stormwater Management Guidance Manual section 6.3.3.

**Conclusion:** This project has Tier 1 Post-Construction Requirements. The requirements for LID and SCM have been achieved using various methods described above. The flood control mitigations required by the Road and Airports Department are achieved using an infiltration trench which outlets to the roadside ditch of Palm Avenue.

# **County of Santa Clara**

# **Department of Planning and Development**

County Government Center, East Wing 70 West Hedding Street, 7<sup>th</sup> Floor San Jose, California 95110



# **CLEAN WATER QUESTIONNAIRE**

### Which Projects Must Comply with Stormwater Requirements? (READ THIS FIRST)

All projects that create and/or replace 10,000 sq. ft. or more of impervious surface on the project site must fill out this worksheet and submit it with the development project application.

All restaurants, auto service facilities, retail gasoline outlets, and uncovered parking lot projects (stand-alone or part of another development project, including the top uncovered portion of parking structures) that create and/or replace 5,000 sq. ft. or more of impervious surface on the project site must also fill out this worksheet.

Interior remodeling projects, routine maintenance or repair projects such as re-roofing and re-paving, and single family homes that are not part of a larger plan of development are **NOT** required to complete this worksheet.

### What is an Impervious Surface?

An impervious surface is a surface covering or pavement that prevents the land's natural ability to absorb and infiltrate rainfall/stormwater. Impervious surfaces include, but are not limited to rooftops, walkways, paved patios, driveways, parking lots, storage areas, impervious concrete and asphalt, and any other continuous watertight pavement or covering. Pervious pavement, underlain with pervious soil or pervious storage material (e.g., drain rock), that infiltrates rainfall at a rate equal to or greater than surrounding unpaved areas OR that stores and infiltrates the water quality design volume specified in Provision C.3.d of the Municipal Regional Stormwater Permit (MRP), is not considered an impervious surface.

### **For More Information**

For more information regarding selection of Best Management Practices for stormwater pollution prevention or stormwater treatment contact the Development Services Office: (408) 299-5770

1. Project Information Project Name: CHENG SFR APN # 712-21-018
Project Address: 0 PALM AVENUE MORGAN HILL, CA
Cross Streets: HALE AVENUE
Applicant/Developer Name: NELSON CHENG
Project Phase(s): 1 of 1 Engineer: RYAN HALEY, PE CORNERSTONE CIVIL INC
Project Type (Check all that apply):  New Development Redevelopment
✓Private □Public
Residential Commercial Industrial Mixed Use Institutional
☐ Restaurant
Other(5013-5014, 5541, 7532-7534, 7536-7539)
Project Description: NEW SINGLE FAMILY RESIDENCE, ASPHALT DRIVEWAY, SEPTIC SYSTEM, WATER SUP
ON A FLAT UNDEVELOPED PARCEL
Project Watershed/Receiving Water (creek, river or bay):_Coyote Creek

### 2. Project Size

a. Total Site Area: 9.59 acres b. Total Site Area Disturbed: 0.71 acres (including clearing, grading, or excavating)					acres
Site Totals	Total Existing (Pre-project) Area (ft²)	Existing Area Retained <sup>1</sup> (ft <sup>2</sup> )	Existing Area Replaced <sup>2</sup> (ft <sup>2</sup> )	New Area Created <sup>2</sup> (ft <sup>2</sup> )	Total Post- Project Area (ft²)
c. Total Impervious Area (IA)	0	0	0	9,945	9945
d. Total new and replaced imper	vious area		9,9	45	
e. Total Pervious Area ( <b>PA</b> ) <sup>3</sup>	417,740				407,795
f. Total Area (IA+PA)	417,740				417,740
g. Percent Replacement of IA in	Redevelopment Proj	ects: (Existing IA	Replaced ÷ Existin	ng Total IA) x 100	0% 0.00 %
https://www.v  No, applican  MRP Provision C.		water_issues/pro overage under t	egrams/stormwate he State Constru	r/construction.ht	tml) Permit.
a. Is #2.d. equal to 1 facilities, retail g	<b>10,000</b> sq. ft. or mass outlets, and sta		-	r restaurants, ai	uto service
☐ Yes, C.3. sou	rce control, site d	lesign and treati	ment requiremer	nts apply	
✓ No, C.3. sour	rce control and sit	e design require	ements may app	ly – check with	n local agency
b. For redevelopme	nt projects, is #2.g	g. equal to 50%	or more?		
-	uirements (site de oply to the entire s	-	e control, as app	ropriate, and st	tormwater

☑ No, C.3. requirements only apply to the impervious area created and/or replaced c. Does the project create and/or replace 5,000 sf or more of impervious surface parking? ✓ Yes, C.3. requirements may apply to the entire site – check with local agency

h Total Site Area Disturbed: 0.71

acres

# 5.

☐ No

Ну	dromodification Management (HM) Applicability:
a.	Does the project create and/or replace one acre or more of impervious surface AND is the total post-project impervious area greater than the pre-project (existing) impervious area?
	☐ Yes (continue)
b.	Is the project located in an area of HM applicability (green area) on the HM Applicability Map? ( <a href="www.scvurppp.org/hmp-map">www.scvurppp.org/hmp-map</a> )
	☐ Yes, the project must implement HM requirements
	✓ No, the project is exempt from HM requirements

<sup>&</sup>lt;sup>1</sup> "Retained" means to leave existing IA in place. An IA that goes through maintenance (e.g., pavement resurfacing/slurry seal/grind), but no change in grade is considered "retained".

<sup>&</sup>lt;sup>2</sup> The "new" and "replaced" IA are based on the total area of the site and not specific locations on site. For example, impervious parking created over a pervious area is not "new" IA, if an equal amount of pervious area replaces IA somewhere else on the site. Constructed IA on a site that does not exceed the total pre-project IA will be considered "replaced" IA. A site will have "new" IA only if the total post-project IA exceeds the total pre-project IA (total post-project IA – total pre-project IA = New IA).

<sup>&</sup>lt;sup>3</sup> Include bioretention areas, infiltration areas, green roofs, and pervious pavement in PA calculations.

Site Design Measures	Source Control Measures	<b>Treatment Measures</b>
Minimize land disturbed (e.g., protect trees and soil)	Wash area/racks, drain to sanitary sewer <sup>5</sup>	None (all impervious surface drains to self-
Minimize impervious surfaces (e.g., reduction in	Covered dumpster area, drain to sanitary sewer <sup>6</sup>	retaining areas)  LID Treatment
post-project impervious surface)  Minimum-impact street or parking lot design (e.g., parking on top of or under buildings)  ✓ Cluster structures/ pavement  ✓ Disconnected downspouts (direct runoff from roofs, sidewalks, patios to landscaped areas)  Pervious pavement  Green roof  ✓ Other self-treating⁴ area (e.g., landscaped areas)  ✓ Self-retaining⁴ area  Interceptor trees³  Rainwater harvesting and use (e.g., rain barrel, cistern for designated use) <sup>5</sup> ✓ Preserved open space:  ac. or sq. ft. (circle one)  Protected riparian and wetland areas/buffers (Setback from top of bank: ft.)  Other  Flow Duration Controls for Hydrones.	<u> </u>	Bioretention area  Flow-through planter  Tree Well Filter or Trench with bioretention soils  Rainwater harvest/use (e.g., cistern or rain barrel for designated use, sized for C.3.d treatment)  Infiltration trench  Infiltration well/dry well  Subsurface Infiltration  System (e.g. vault or large diameter conduit over drain rock)  Other  Non-LID Treatment Methods  Proprietary high flow rate tree box filter <sup>7</sup> Proprietary high flow media filter (sand, compost, or proprietary media) <sup>7</sup> Vegetated filter strip <sup>8</sup> Extended detention basin <sup>8</sup> Vegetated swale <sup>8</sup> Other
Extended Undergr Detention basin vault	ound tank or Bioretention with out control	let Other
4 See SCVI IDDDD C3 Handbook for def	initions https://sayurppp.org/2016/06/20/c 3 eto	muustan handhaalt juna 2016/

<sup>&</sup>lt;sup>4</sup> See SCVURPPP C3 Handbook for definitions. <a href="https://scvurppp.org/2016/06/20/c-3-stormwater-handbook-june-2016/">https://scvurppp.org/2016/06/20/c-3-stormwater-handbook-june-2016/</a>
<sup>5</sup> Optional site design measure; does not have to be sized to comply with Provision C.3.d treatment requirements.

<sup>&</sup>lt;sup>6</sup> Subject to sanitary sewer authority requirements.

<sup>&</sup>lt;sup>7</sup> These treatment measures are only allowed if the project qualifies as a "Special Project".

<sup>&</sup>lt;sup>8</sup> These treatment measures are only allowed as part of a multi-step treatment process (i.e., for pretreatment).

# **TABLE 1 SUMMARY SHEET**

Nelson Cheng
O Palm Avenue

Morgan Hill, CA

APN: 712-21-008



Mean Annual Precipitation (M.A.P.)= 23 in Hydraulic Soil Group A

#### **PRE DEVELOPMENT**

TOTAL WATERSHED 0.73 ACRES

32000 FT

IMPERVIOUS AREA (C=0.9)	0	(Table 2)
SEMI-PERVIOUS AREA (C=0.5)	0	(Table 2)
PERVIOUS AREA (C=0.2)	32000	(Table 2)
WEIGHTED 'C' VALUE	0.2	(Table 2)

Time	e of Concentration (T <sub>c</sub> )	16	Min	(Table 3)
	10 YEAR Runoff Rate	0.229371	CFS	(Table 2)
	100 YEAR Runoff Rate	0.330364	CFS	(Table 2)

### POST DEVELOPMENT

### TOTAL WATERSHED 0.747727 ACRES

32571 FT

IMPERVIOUS AREA (C=0.9)	9946	(Table 2)
SEMI-PERVIOUS AREA (C=0.5)	571	(Table 2)
PERVIOUS AREA (C=0.2)	22054	(Table 2)
WEIGHTED 'C' VALUE	0.419014	(Table 2)

Time	$e$ of Concentration ( $T_c$ )	18	Min	(Table 3)
	10 YEAR Runoff Rate	0.455267	CFS	(Table 2)
	100 YEAR Runoff Rate	0.65419	CFS	(Table 2)

#### DESIGN

**DETENTION REQUIRED** 

STORAGE CAPACITY

100-Year Storm Detention Volume = 310.8726 FT<sup>3</sup>

TOTAL

310.8726 FT<sup>3</sup>

TYPE: ROCK FILLED CHANNEL

LENGTH = 60 FT

WIDTH = 4 FT

DEPTH = 4 FT

# **TABLE 2 HYDROLOGY CALCULATION**

**Nelson Cheng 0** Palm Avenue Morgan Hill, CA APN: 712-21-008

Hydraulic Soil Type A

$$x_{T,D} = A_{T,D} + (B_{T,D}MAP)$$
 (3-3)

Where: precipitation depth for a specific return period and storm  $\chi_{T,D}$ 

duration (inches)

Treturn period (years) D storm duration (hours)

 $A_{T,D}$ ,  $B_{T,D}$ coefficients from Tables B-1 and -2 (dimensionless)

MAP =Mean Annual Precipitation (inches)

The precipitation intensity,  $i_{\text{T,D}}$  is given by:

$$i_{T,D} = \frac{x_{T,D}}{D} \tag{3-4}$$

### PRE-DEVELOPMENT FLOWRATE

WEIGHTED 'C' VALUE

	'C' VALUE	AREA	СхА
IMPERVIOUS	0.9	0	0
SEMI-PERVIOUS	0.5	0	0
PERVIOUS	0.2	32000	6400

TOTAL 32000 6400

 $C_{AVERAGE} = (C \times A)/A$  $C_{AVERAGE} =$ 0.2

# 10-YEAR RAINFALL INTENSITY

#### 100-YEAR RAINFALL INTENSITY

IFALL IIVI	ALL INTENSITY 100-YEAR RAINFALL INTENSITY			VOLL
T =	10 Years		T =	100 Years
D =	16 T <sub>c</sub> (Table 3)	)	D =	16 T <sub>C</sub> (Table 3)
$A_{TD}=$	0.2996782		A <sub>TD</sub> =	0.430198267
$B_{TD}=$	0.004921267		$B_{TD}=$	0.007150333
MAP =	23 in. (Table 1	)	MAP =	23 in. (Table 1)
i= -	$A_{TD} + (B_{TD}MAP)$		i=	A <sub>TD</sub> + (B <sub>TD</sub> MAP)
i=	1.55 in/hr		i=	2.23 in/hr

#### **FLOWRATES**

STORM	'C'	i	Α	Q (cfs)
10 YEAR	0.200	1.548253	32000	0.229371
100 YEAR	0.200	2.22996	32000	0.330364

### **POST-DEVELOPMENT FLOWRATE**

#### WEIGHTED 'C' VALUE

	'C' VALUE	AREA	СхА
IMPERVIOUS	0.9	9946	8951.4
SEMI-PERVIOUS	0.5	571	285.5
PERVIOUS	0.2	22054	4410.8

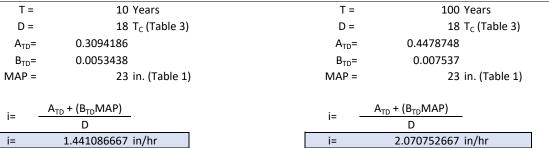
TOTAL

32571 13647.7

 $C_{AVERAGE} = (C \times A)/A$  $C_{AVERAGE} = 0.4190138$ 

### 10-YEAR RAINFALL INTENSITY

### 100-YEAR RAINFALL INTENSITY



### **FLOWRATES**

STORM	'C'	i	Α	Q (cfs)
10 YEAR	0.419	1.441087	32571	0.455267
100 YEAR	0.419	2.070753	32571	0.65419

#### **DELTA**

STORM	PRE-DEVELOPMENT FLOWRATE (CFS)	POST-DEVELOPMENT FLOWRATE (CFS)	DELTA (Δ)
10 YEAR	0.229370741	0.455266632	0.2259
100 YEAR	0.330364407	0.654190073	0.3238

### STORAGE VOLUME REQUIRED

VOLUME = Q<sub>DELTA</sub> X TIME OF CONCENTRATION (T<sub>c</sub>)
VOLUME = 0.3238 \* 16 \* 60 (SEC/MIN)

VOLUME REQUIRED = 310.8726 FT<sup>3</sup>

Table B-1: Parameters  $A_{\scriptscriptstyle T,D}$  and  $B_{\scriptscriptstyle T,D}$  for TDS Equation

5-min 0.120194 0.001385 10-min 0.166507 0.001956 115-min 0.176618 0.003181 30-min 0.212497 0.005950 1-hr 0.253885 0.010792 2-hr 0.330848 0.019418 3-hr 0.374053 0.027327 6-hr 0.425178 0.045735 12-hr 0.409397 0.069267 24-hr 0.314185 0.096343 48-hr 0.314185 0.096343 48-hr 0.444080 0.134537 72-hr 0.447104 0.159461 5-YR RETURN PERIOD 5-min 0.170347 0.001857 10-min 0.228482 0.002758 15-min 0.250029 0.004036 30-min 0.307588 0.007082 1-hr 0.357109 0.013400 0.24242 3-hr 0.451840 0.024242 3-hr 0.55237 0.060859 12-hr 0.554937 0.660859 12-hr 0.562227 0.094871 24-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003 10-min 0.298682 0.003569 15-min 0.20063 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.673277 0.224003 10-min 0.258682 0.003569 15-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.525054 0.0070715 12-hr 0.661638 0.0111660 24-hr 0.652500 48-hr 0.55017 0.162550 48-hr 0.591660 0.038944 6-hr 0.525064 0.070715 12-hr 0.591660 0.038944 6-hr 0.55017 0.162550 48-hr 0.55017 0.162550 48-hr 0.55017 0.162550 48-hr 0.591660 0.038944 6-hr 0.525064 0.070715 12-hr 0.641638 0.0111660 24-hr 0.55017 0.162550 48-hr 0.55017 0.162550 48-hr 0.55017 0.162550 48-hr 0.55017 0.162550 48-hr 0.591660 0.038944 6-hr 0.55017 0.162550 48-hr 0.591660 0.038944 6-hr 0.55017 0.162550 48-hr 0.55017 0.162550 48-	2-YR RETURN PERIOD		
15-min	5-min	0.120194	0.001385
30-min	10-min	0.166507	0.001956
1-hr 0.253885 0.010792 2-hr 0.330848 0.019418 3-hr 0.374053 0.027327 6-hr 0.425178 0.045735 12-hr 0.409397 0.069267 24-hr 0.314185 0.096343 48-hr 0.444080 0.134537 72-hr 0.447104 0.159461  5-YR RETURN PERIOD 5-min 0.170347 0.001857 10-min 0.228482 0.002758 15-min 0.25029 0.004036 30-min 0.307588 0.007082 1-hr 0.357109 0.013400 2-hr 0.451840 0.024242 3-hr 0.512583 0.034359 6-hr 0.554937 0.060859 12-hr 0.55227 0.094871 24-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.201876 0.002063 10-min 0.258681 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.0027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660	15-min	0.176618	0.003181
2-hr 0.330848 0.019418 3-hr 0.374053 0.027327 6-hr 0.425178 0.045735 12-hr 0.409397 0.069267 24-hr 0.314185 0.096343 48-hr 0.444080 0.134537 72-hr 0.447104 0.159461  5-YR RETURN PERIOD 5-min 0.170347 0.001857 10-min 0.228482 0.002758 15-min 0.250029 0.004036 30-min 0.307588 0.007082 1-hr 0.357109 0.013400 2-hr 0.451840 0.024242 3-hr 0.512583 0.034359 6-hr 0.552937 0.060859 12-hr 0.474528 0.136056 48-hr 0.692427 0.094871 24-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.655051 0.0382445	30-min	0.212497	0.005950
3-hr 0.374053 0.027327 6-hr 0.425178 0.045735 12-hr 0.409397 0.069267 24-hr 0.314185 0.096343 48-hr 0.444080 0.134537 72-hr 0.447104 0.159461  5-YR RETURN PERIOD 5-min 0.170347 0.001857 10-min 0.228482 0.002758 15-min 0.307588 0.007082 1-hr 0.357109 0.013400 2-hr 0.451840 0.024242 3-hr 0.512583 0.034359 6-hr 0.512583 0.034359 6-hr 0.554937 0.060859 12-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.201876 0.002063 10-min 0.258681 0.007879 1-hr 0.477723 0.014802 2-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.625550 48-hr 0.6567017 0.162550	1-hr	0.253885	0.010792
6-hr 0.425178 0.045735 12-hr 0.409397 0.069267 24-hr 0.314185 0.096343 48-hr 0.444080 0.134537 72-hr 0.447104 0.159461  5-YR RETURN PERIOD 5-min 0.170347 0.001857 10-min 0.228482 0.002758 15-min 0.250029 0.004036 30-min 0.307588 0.007082 1-hr 0.451840 0.024242 3-hr 0.451840 0.024242 3-hr 0.512583 0.034359 6-hr 0.554937 0.060859 12-hr 0.45227 0.094871 24-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.692504 0.070715 12-hr 0.641638 0.111660 24-hr 0.652501 0.003250	2-hr	0.330848	0.019418
12-hr       0.409397       0.069267         24-hr       0.314185       0.096343         48-hr       0.444080       0.134537         72-hr       0.447104       0.159461         5-YR RETURN PERIOD       0.001857         10-min       0.228482       0.002758         15-min       0.250029       0.004036         30-min       0.307588       0.007082         1-hr       0.357109       0.013400         2-hr       0.451840       0.024242         3-hr       0.512583       0.034359         6-hr       0.554937       0.060859         12-hr       0.562227       0.094871         24-hr       0.474528       0.136056         48-hr       0.692427       0.187173         72-hr       0.673277       0.224003         10-YR RETURN PERIOD       0.673277       0.224003         10-min       0.258682       0.003569         15-min       0.294808       0.004710         30-min       0.367861       0.007879         1-hr       0.427723       0.014802         2-hr       0.522608       0.027457         3-hr       0.591660       0.038944	3-hr	0.374053	0.027327
24-hr	6-hr	0.425178	0.045735
48-hr 72-hr 0.444080 0.134537 72-hr 0.447104 0.159461  5-YR RETURN PERIOD  5-min 0.170347 0.001857 10-min 0.228482 0.002758 15-min 0.250029 0.004036 30-min 0.307588 0.007082 1-hr 0.357109 0.013400 2-hr 0.451840 0.024242 3-hr 0.512583 0.034359 6-hr 0.554937 0.060859 12-hr 0.562227 0.094871 24-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.62550 48-hr 0.567017 0.162550 48-hr 0.832445 0.221820	12-hr	0.409397	0.069267
72-hr	24-hr	0.314185	0.096343
5-YR RETURN PERIOD 5-min 10-min 0.228482 0.002758 15-min 0.250029 0.004036 30-min 0.307588 0.007082 1-hr 0.451840 0.024242 3-hr 0.512583 0.034359 6-hr 0.554937 0.606859 12-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.591660 0.038944 6-hr 0.625054 0.011660 0.038944 6-hr 0.62550 0.021820	48-hr	0.444080	0.134537
5-min       0.170347       0.001857         10-min       0.228482       0.002758         15-min       0.250029       0.004036         30-min       0.307588       0.007082         1-hr       0.357109       0.013400         2-hr       0.451840       0.024242         3-hr       0.512583       0.034359         6-hr       0.554937       0.060859         12-hr       0.562227       0.094871         24-hr       0.474528       0.136056         48-hr       0.692427       0.187173         72-hr       0.673277       0.224003         10-YR RETURN PERIOD         5-min       0.201876       0.002063         10-min       0.258682       0.003569         15-min       0.294808       0.004710         30-min       0.367861       0.007879         1-hr       0.427723       0.014802         2-hr       0.522608       0.027457         3-hr       0.591660       0.038944         6-hr       0.625054       0.070715         12-hr       0.641638       0.111660         24-hr       0.567017       0.162550         48-hr	72-hr	0.447104	0.159461
10-min       0.228482       0.002758         15-min       0.250029       0.004036         30-min       0.307588       0.007082         1-hr       0.357109       0.013400         2-hr       0.451840       0.024242         3-hr       0.512583       0.034359         6-hr       0.554937       0.060859         12-hr       0.562227       0.094871         24-hr       0.474528       0.136056         48-hr       0.692427       0.187173         72-hr       0.673277       0.224003         10-YR RETURN PERIOD       5-min       0.201876       0.002063         10-min       0.258682       0.003569         15-min       0.294808       0.004710         30-min       0.367861       0.007879         1-hr       0.427723       0.014802         2-hr       0.522608       0.027457         3-hr       0.591660       0.038944         6-hr       0.625054       0.070715         12-hr       0.641638       0.111660         24-hr       0.567017       0.162550         48-hr       0.832445       0.221820	5-YR RETURN PERIOD		
15-min 0.250029 0.004036 30-min 0.307588 0.007082 1-hr 0.357109 0.013400 2-hr 0.451840 0.024242 3-hr 0.512583 0.034359 6-hr 0.554937 0.060859 12-hr 0.562227 0.094871 24-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.657017 0.162550 48-hr 0.832445 0.221820	5-min	0.170347	0.001857
30-min 0.307588 0.007082  1-hr 0.357109 0.013400  2-hr 0.451840 0.024242  3-hr 0.512583 0.034359  6-hr 0.554937 0.060859  12-hr 0.562227 0.094871  24-hr 0.474528 0.136056  48-hr 0.692427 0.187173  72-hr 0.673277 0.224003  10-YR RETURN PERIOD  5-min 0.201876 0.002063  10-min 0.258682 0.003569  15-min 0.294808 0.004710  30-min 0.367861 0.007879  1-hr 0.427723 0.014802  2-hr 0.522608 0.027457  3-hr 0.591660 0.038944  6-hr 0.625054 0.070715  12-hr 0.625054 0.111660  24-hr 0.62550  48-hr 0.567017 0.162550  48-hr 0.832445 0.221820	10-min	0.228482	0.002758
1-hr       0.357109       0.013400         2-hr       0.451840       0.024242         3-hr       0.512583       0.034359         6-hr       0.554937       0.660859         12-hr       0.562227       0.094871         24-hr       0.474528       0.136056         48-hr       0.692427       0.187173         72-hr       0.673277       0.224003         10-YR RETURN PERIOD       5-min       0.201876       0.002063         10-min       0.258682       0.003569         15-min       0.294808       0.004710         30-min       0.367861       0.007879         1-hr       0.427723       0.014802         2-hr       0.522608       0.027457         3-hr       0.591660       0.038944         6-hr       0.625054       0.070715         12-hr       0.641638       0.111660         24-hr       0.567017       0.162550         48-hr       0.832445       0.221820	15-min	0.250029	0.004036
2-hr 0.451840 0.024242 3-hr 0.512583 0.034359 6-hr 0.554937 0.060859 12-hr 0.562227 0.094871 24-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.62501	30-min	0.307588	0.007082
3-hr 0.512583 0.034359 6-hr 0.554937 0.060859 12-hr 0.562227 0.094871 24-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.62500 48-hr 0.832445 0.221820	1-hr	0.357109	0.013400
6-hr 0.554937 0.060859 12-hr 0.562227 0.094871 24-hr 0.474528 0.136056 48-hr 0.692427 0.187173 72-hr 0.673277 0.224003  10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.567017 0.162550 48-hr 0.832445 0.221820	2-hr	0.451840	0.024242
12-hr       0.562227       0.094871         24-hr       0.474528       0.136056         48-hr       0.692427       0.187173         72-hr       0.673277       0.224003         10-YR RETURN PERIOD       0.002063         5-min       0.258682       0.003569         15-min       0.294808       0.004710         30-min       0.367861       0.007879         1-hr       0.427723       0.014802         2-hr       0.522608       0.027457         3-hr       0.591660       0.038944         6-hr       0.625054       0.070715         12-hr       0.641638       0.111660         24-hr       0.567017       0.162550         48-hr       0.832445       0.221820	3-hr	0.512583	0.034359
24-hr       0.474528       0.136056         48-hr       0.692427       0.187173         72-hr       0.673277       0.224003         10-YR RETURN PERIOD       0.002063         5-min       0.258682       0.003569         15-min       0.294808       0.004710         30-min       0.367861       0.007879         1-hr       0.427723       0.014802         2-hr       0.522608       0.027457         3-hr       0.591660       0.038944         6-hr       0.625054       0.070715         12-hr       0.641638       0.111660         24-hr       0.567017       0.162550         48-hr       0.832445       0.221820	6-hr	0.554937	0.060859
48-hr	12-hr	0.562227	0.094871
72-hr 0.673277 0.224003  10-YR RETURN PERIOD  5-min 0.201876 0.002063  10-min 0.258682 0.003569  15-min 0.294808 0.004710  30-min 0.367861 0.007879  1-hr 0.427723 0.014802  2-hr 0.522608 0.027457  3-hr 0.591660 0.038944  6-hr 0.625054 0.070715  12-hr 0.641638 0.111660  24-hr 0.567017 0.162550  48-hr 0.832445 0.221820	24-hr	0.474528	0.136056
10-YR RETURN PERIOD 5-min 0.201876 0.002063 10-min 0.258682 0.003569 15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.567017 0.162550 48-hr 0.832445 0.221820	48-hr	0.692427	0.187173
5-min     0.201876     0.002063       10-min     0.258682     0.003569       15-min     0.294808     0.004710       30-min     0.367861     0.007879       1-hr     0.427723     0.014802       2-hr     0.522608     0.027457       3-hr     0.591660     0.038944       6-hr     0.625054     0.070715       12-hr     0.641638     0.111660       24-hr     0.567017     0.162550       48-hr     0.832445     0.221820	72-hr	0.673277	0.224003
10-min     0.258682     0.003569       15-min     0.294808     0.004710       30-min     0.367861     0.007879       1-hr     0.427723     0.014802       2-hr     0.522608     0.027457       3-hr     0.591660     0.038944       6-hr     0.625054     0.070715       12-hr     0.641638     0.111660       24-hr     0.567017     0.162550       48-hr     0.832445     0.221820	10-YR RETURN PERIOD		
15-min 0.294808 0.004710 30-min 0.367861 0.007879 1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.567017 0.162550 48-hr 0.832445 0.221820	5-min	0.201876	0.002063
30-min     0.367861     0.007879       1-hr     0.427723     0.014802       2-hr     0.522608     0.027457       3-hr     0.591660     0.038944       6-hr     0.625054     0.070715       12-hr     0.641638     0.111660       24-hr     0.567017     0.162550       48-hr     0.832445     0.221820	10-min	0.258682	0.003569
1-hr 0.427723 0.014802 2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.567017 0.162550 48-hr 0.832445 0.221820	15-min	0.294808	0.004710
2-hr 0.522608 0.027457 3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.567017 0.162550 48-hr 0.832445 0.221820	30-min	0.367861	0.007879
3-hr 0.591660 0.038944 6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.567017 0.162550 48-hr 0.832445 0.221820	1-hr	0.427723	0.014802
6-hr 0.625054 0.070715 12-hr 0.641638 0.111660 24-hr 0.567017 0.162550 48-hr 0.832445 0.221820	2-hr	0.522608	0.027457
12-hr 0.641638 0.111660 24-hr 0.567017 0.162550 48-hr 0.832445 0.221820	3-hr	0.591660	0.038944
24-hr 0.567017 0.162550 48-hr 0.832445 0.221820	6-hr	0.625054	0.070715
48-hr 0.832445 0.221820	12-hr	0.641638	0.111660
	24-hr	0.567017	0.162550
70 h	48-hr	0.832445	0.221820
/2-nr 0.810509 0.265469	72-hr	0.810509	0.265469

Table B-2: Parameters  $A_{\scriptscriptstyle T,D}$  and  $B_{\scriptscriptstyle T,D}$  for TDS Equation

Return Period/Duration	At,d	BED
25-YR RETURN PERIOD		
5-min	0.230641	0.002691
10-min	0.287566	0.004930
15-min	0.348021	0.005594
30-min	0.443761	0.008719
1-hr	0.508791	0.016680
2-hr	0.612629	0.031025
3-hr	0.689252	0.044264
6-hr	0.693566	0.083195
12-hr	0.725892	0.132326
24-hr	0.675008	0.195496
48-hr	0.989588	0.264703
72-hr	0.967854	0.316424
50-YR RETURN PERIOD		
5-min	0.249324	0.003241
10-min	0.300971	0.006161
15-min	0.384016	0.006315
30-min	0.496301	0.009417
1-hr	0.568345	0.017953
2-hr	0.672662	0.033694
3-hr	0.754661	0.048157
6-hr	0.740666	0.092105
12-hr	0.779967	0.147303
24-hr	0.747121	0.219673
48-hr	1.108358	0.295510
72-hr	1.075643	0.353143
100-YR RETURN PERIOD		
5-min	0.269993	0.003580
10-min	0.315263	0.007312
15-min	0.421360	0.006957
30-min	0.553934	0.009857
1-hr	0.626608	0.019201
2-hr	0.732944	0.036193
3-hr	0.816471	0.051981
6-hr	0.776677	0.101053
12-hr	0.821859	0.162184
24-hr	0.814046	0.243391
48-hr	1.210895	0.325943
72-hr	1.175000	0.389038

# **TABLE 3 TIME OF CONCENTRATION**

Nelson Cheng 0 Palm Avenue Morgan Hill, CA APN: 712-21-008

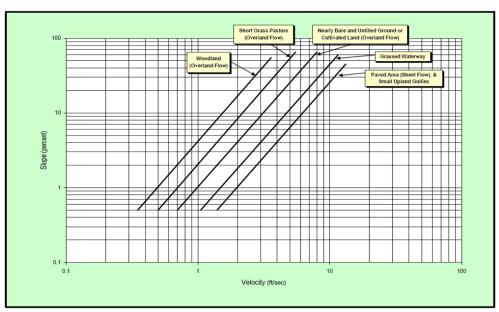


Figure A-1: Overland Flow Velocity

### PRE-DEVELOPMENT TIME OF CONCENTRATION (T<sub>c</sub>)

FOR PIPES USE MANNINGS EQN V=

 $V=1.49/n*R_h^(2/3)*S^1/2)$ 

FOR OVERLAND FLOW USE FIG A-1 ABOVE

DEACH #	INVERT	INVERT	LENGTH	SLOPE	OVERLAND	SURFACE (FIGURE A-	DIAMETER	MANNINGS	VELOCITY	TRAVEL TIME
KEACH #	REACH # UP	DOWN	WN LENGTH	SLOPE	OR PIPE	1)	(IN.)	MAINININGS	(FT./SEC)	(MINUTES)
1	293	286	326	2%	OVERLAND	SHORT GRASS	-	-	1	5.43

-TOTAL 5.43

INITIAL OVERLAND FLOW (FROM DRAINAGE MANUAL SECTION 3.4.2 #1 10

PRE-DEVELOPMENT TC = 16

### POST-DEVELOPMENT TIME OF CONCENTRATION (T<sub>c</sub>)

DEACH #	INVERT	INVERT	LENGTH	SLOPE	OVERLAND	SURFACE (FIGURE A-	DIAMETER	NAANINIINICC	VELOCITY	TRAVEL TIME
REACH #	UP	DOWN	LENGIH	SLOPE	OR PIPE	1)	(IN.)	MANNINGS	(FT./SEC)	(MINUTES)
1	293	290	172	2%	OVERLAND	SHORT GRASS	-	-	1	2.87
2	288.5	288.1	58	1%	PIPE	N/A (PIPE)	0.66	0.012	3.102013	0.31
3	288.1	286	150	1%	OVERLAND	GRASS WATERWAY	-	-	0.7	3.57

SUB-TOTAL 6.75

INITIAL OVERLAND FLOW (FROM DRAINAGE MANUAL SECTION 3.4.2 #2 11

POST-DEVELOPMENT TC = 18

# **TABLE 4 INFILTRATION & STORAGE**

**Nelson Cheng** 0 Palm Avenue Morgan Hill, CA APN: 712-21-008

#### **ROCK FILLED INFILTRATION TRENCH**

SATURATED HYDRAULIC CONDUCTIVITY (K<sub>SAT</sub>) 2.7 μm/SEC

0.3826764 IN/HR TRECH DEPTH 4 FT TRENCH WIDTH 4 FT LENGTH 50 FT PERCENT VOIDS 40%

320 FT<sup>3</sup> STORAGE VOLUME= INFILTRATION SURFACE AREA 600 FT<sup>2</sup>  $Q_{INFILTRATION} =$ 0.005315 CFS

310.87 FT<sup>3</sup> (FROM TABLE 2) STORAGE REQUIRED

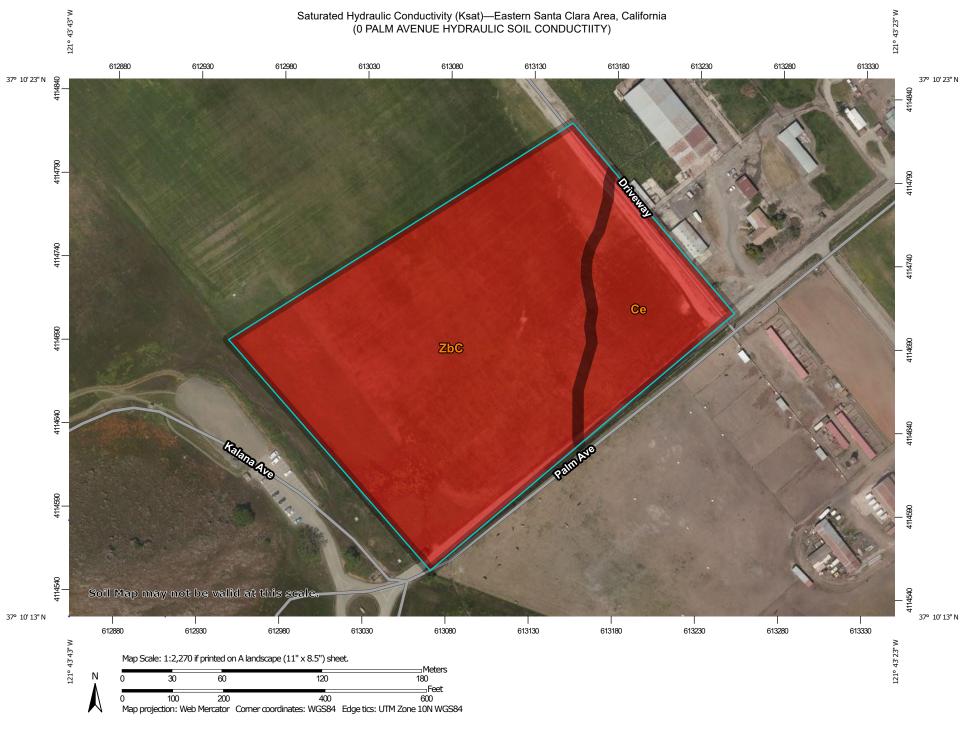
310.87 FT<sup>3</sup> REQUIRED  $FT^3$ STORAGE = 320 > OKAY

#### **TOTAL DRAIN OF SYSTEM**

320 FT<sup>3</sup> **VOLUME TO DRAIN** 0.005315 CFS  $Q_{INFILTRATION} =$ 

TIME TO DRAIN = 60207.528 SECONDS

16.724 HOURS



#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

#### Soil Rating Polygons

= 2.7000

Not rated or not available

#### Soil Rating Lines

-

= 2.7000

الورزاعو

Not rated or not available

#### **Soil Rating Points**

= 2.7000

Not rated or not available

#### **Water Features**



Streams and Canals

#### Transportation

---

~

Interstate Highways

~

**US Routes** 

Rails



Major Roads



Local Roads

#### Background



Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eastern Santa Clara Area, California Survey Area Data: Version 16, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Apr 13, 2019—Apr 23, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# **Saturated Hydraulic Conductivity (Ksat)**

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
Се	Campbell silty clay, muck substratum	2.7000	1.8	18.5%
ZbC	Zamora clay loam, 2 to 9 percent slopes	2.7000	8.1	81.5%
Totals for Area of Intere	est	10.0	100.0%	

# **Description**

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

# **Rating Options**

Units of Measure: micrometers per second Aggregation Method: Dominant Component Component Percent Cutoff: None Specified

Tie-break Rule: Fastest
Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 24
Bottom Depth: 48

Units of Measure: Inches



COUNTY OF SANTA CLARA PLANNING OFFICE 70 W. HEDDING ST., SAN JOSE, CA 95110 (408) 299-5770

October 21, 2020 11:59:09 AM. The GIS data used in this analysis was compiled from various sources. While deemed reliable, the Planning Office assumes no liability.

**Location and Jurisdiction** 

APN: 712-21-008

Site Address: PALM AV MORGAN HILL CA 95037-9340 City/State/ZIP: 1650 DELTA CT HAYWARD CA 94544

Jurisdiction: Unincorporated

<u>Urban Service Area</u>: None

<u>Sphere of Influence</u>: San Jose

Supervisor District: 1
Special Districts:

• Fire Protection District: South Santa Clara County Fire Protection District

Sanitary District: N/AWater District: N/A

Area Information

Recorded Size (source: Assessor's office): 9.59 acres

General Plan Land Use

Land Use Plan Designation: Agriculture Large Scale (100%)

**Zoning District** 

Zoning: A-40Ac

Other Planning Information

HCP Study Area: IN

**HCP Rural Development Areas: IN** 

Special Resources/Hazards/Constraints Areas

FEMA Flood Zone: **D (100%)**Drains to: San Francisco Bay

Mean annual precipitation: 23 inches

