

*San Ramon Canyon Storm Drain Improvements  
and Emergency Slope Stabilization*


*NEPA Environmental Information Document  
CEQA Initial Study  
Early Consultation Public Draft*

**City of Rancho Palos Verdes, California**

**Prepared For:**  
**Harris & Associates**  
34 Executive Park, Suite 150  
Irvine, CA 92614  
**Contact: Randall Berry, P.E.**  
(949) 655-3900

**On behalf of the**  
**City of Rancho Palos Verdes**  
**Public Works Dept.**  
30940 Hawthorne Blvd.  
Rancho Palos Verdes, CA 90275  
**Contact: Alan Braatvedt, P.E.**  
(310) 544-5253

**Prepared By:**  
**SFC Consultants**  
65 Post, Suite 1000  
Irvine, CA 92168  
**Contact: Sandra F. Jacobs REA**  
(949) 348-1233

 July 12, 2011

© 2010 Google

© 2010 Europa Technologies  
Image U.S. Geological Survey

© 2010 Google

Imagery Date: Nov 15, 2009

33°43'37.41" N 118°19'45.71" W elev 364 ft

Eye alt 1808 ft

**NEPA Draft Environmental Information Document**  
**CEQA Draft Initial Study Checklist**

Project Title: San Ramon Canyon Storm Drain Improvements and Emergency Slope Stabilization

Lead Agency Name and Address:

City of Rancho Palos Verdes  
Public Works Dept.  
30940 Hawthorne Blvd.  
Rancho Palos Verdes, CA 90275

Contact Person and Phone Number: Mr. Alan Braatvedt, P.E., (310) 544-5253

Project Location: San Ramon Canyon, north and south of W.25<sup>th</sup> Street/Palos Verdes Drive East, in the City of Rancho Palos Verdes, Los Angeles County, California. Location maps are provided below.

General Plan Designation: Natural Environment/Hazard

Zoning: OH Open Space Hazard

Existing Environment, Surrounding Land Uses and Setting: The open space areas of San Ramon Canyon are comprised of non-native grasslands, coastal sage scrub and bare slopes in the steep canyon area. Photos of existing settings are provided below. Surrounding land uses are generally residential and natural open space. Detailed existing settings will be provided in the Environmental Assessment and Mitigated Negative Declaration.

List of Participants and Other federal and state agencies consulted as part of the document/Cross Cutters (e.g. permits, financing approval, or participation agreement):

- EPA Region 9 (Pacific Southwest)
- Federal Highway Administration
- U.S. Fish and Wildlife Services
- U.S. Army Corp of Engineers
- California Department of Fish and Game
- California Department of Transportation
- California Coastal Commission
- Los Angeles Regional Water Quality Control Board
- City of Rancho Palos Verdes



Project Purpose and Need:

The San Ramon Canyon storm drain project is intended to serve a necessary drainage purpose to prevent potential degradation of topsoil, property damage, and potentially avoid a hazard to public safety.

Erosion and flash flood episodes within San Ramon Canyon ranges from moderate to severe. Areas of severe erosion are generally in the area of the Tarapaca landslide and downstream. The episodic and active downslope movement of the Tarapaca landslide is forcing the flowline of the canyon to shift westerly, causing increased erosion of the western walls of the canyon. These areas are directly downslope of the switchbacks of PVDE, in particular, the lower switchback. The PVDE switchbacks are a significant ingress and egress for residents, commuters and emergency personnel. Based on the geotechnical documentation, the canyon walls are eroding at an average rate of about 5 feet per year. Continued annual erosion of these areas may cause stability issues with PVDE. Moderate to severe erosion of the canyon walls and floor due to heavy flow of surface water and flash flooding during rains has caused deep cutting of the canyon, in some areas generating vertical cuts up to 30 feet in height. Instability of these cuts is triggering surficial failures and topple of the vertical walls. Buttress filling of the canyon and the proposed storm drain will reduce the rate of erosion within the canyon, reduce the flow of water and debris down canyon, and reduce the movement of the Tarapaca landslide.

Description of the Undertaking/Project: The project area of potential affect (area of impact) would include a new mid-canyon storm drain inlet structure and tunnel alignment north of W. 25<sup>th</sup> Street, that would gravity flow through a tunnel to a cut and covered section of buried pipe located south of W. 25<sup>th</sup> Street, and transition into a second tunnel to a new outlet structure at the base of the bluff. Total storm drain alignment is approximately 4,200 lineal feet. The existing storm drain below W.25<sup>th</sup> Street would remain in place and serve as backup as necessary. No improvements are proposed to the existing storm drain system, which is primarily located in the City of Los Angeles. A more detailed description of the undertaking and photos are provided below.



Detailed Description of the Undertaking/Project:

*Inlet Structure.* The inlet structure and storm drain project would be designed to handle existing upstream flows for a 100-year storm event. It would provide for a dry weather low-flow bypass to direct smaller flows and “first flush” through the restored streambed in the canyon, taking advantage of infiltration and biological pollutant uptake available in the new riparian system and lower canyon area.

*Buttress Fill.* In addition to construction of the inlet structure in the canyon and tunnel, a dirt filled gravity-type buttress and associated terrace drains would be constructed within the canyon in order to reduce the potential for future deep-seated movement within the actively failing portion of the canyon that is caused by the active Tarapaca landslide. This gravity buttress will be created by filling the canyon floor by up to approximately 20 to 30 feet in depth from the inlet structure, to a point downstream of the existing Tarapaca landslide area for a distance of approximately 900-feet, tapering down to join the existing canyon bottom. The fill will be placed on a thin drainage layer of crushed rock, with a filter fabric layer to prevent the fine particles from clogging the sub-soil drainage system. The canyon fill will be placed in engineered layers with multiple stepped notches to lock it into the existing canyon walls. Rip rap energy dissipaters will be placed into the new, elevated, stream-bed and the flattened slopes will be hydro-seeded with an approved native plant mix in combination with jute mesh, fiber rolls and other recommended erosion control measures that will allow the plants time to establish a root system. This filled canyon area will ultimately become the mitigation area for re-establishment of native species impacted during construction. This mitigation will be monitored through a Landscape Establishment Conformance Plan, and is described in further detail below.



Photo: View north up San Ramon Canyon near inlet structure.



Photo: View south down San Ramon Canyon near butress fill area.

*Construction Access Roads north of W. 25<sup>th</sup> Street.* This project would require construction of two access roads north of W. 25<sup>th</sup> Street. The first access road would be constructed from the northern-most switchback of PVDE in order to access the canyon for construction of the inlet structure. When construction of the project is complete, this first access road would be subsequently paved and serve as the permanent maintenance road for the City. The permanent access road must be paved in order to avoid uncontrolled infiltration of water into the canyon from storm event. The second access road would be constructed from the southern-most switchback of PVDE and provide temporary construction access for the butress fill portion of the project. Given the topographic constraints the canyon presents, the access roads will be designed and constructed in a manner that minimizes grading and retaining walls. At the project's completion, this second temporary access road would be removed and the area re-graded and re-vegetated to reflect original contours to the greatest extent possible. Construction of both access roads would likely coincide with commencement of the tunnel drilling operations.

*Tunnel and Cut and Cover Pipe.* A large diameter tunnel will be constructed from the inlet structure to a point below the steep slopes, south W. 25<sup>th</sup> Street. A pipe will be installed in this tunnel and the annular space between the pipe and tunnel will be filled by pumping a cement-slurry into the space. The pipe from the storm drain tunnel will connect to a section of pipe that will be installed using a cut and cover method of installation. The cut and cover pipe extends approximately 1,700 feet to a point just a couple of hundred feet from the ocean bluff top where it will connect to another tunnel to the outlet structure. The cut and cover pipe section will be located within an existing 100' wide utility easement and, after construction, will ultimately enhance the open space and recreation area by restoring the natural area above this portion of the pipeline. A second shorter tunnel will be drilled to a new outlet structure at the bluff face.



Photo: View north toward the tunnel alignment and 100' easement, cut and cover area.



Photo: View south toward the tunnel alignment and 100' easement, cut and cover area.

*Outlet Structure.* The outlet structure would be located above the high tide line. The beach apron will include large beach boulders to dissipate flow velocities and protect the beach from erosion. Construction related runoff will be confined to the beach and will not enter the ocean.



Photo: View of coastal bluff near outlet area.

*Construction Access south of W. 25<sup>th</sup> Street.* Construction access south of W. 25<sup>th</sup> Street will primarily come through an existing access road from the adjacent trailer park to the east. Secondary access to this area may be required from W. 25<sup>th</sup> Street and may remain after construction as a casual trail, creating a gateway to this open space parcel.

*Construction Staging.* Construction staging would occur within the existing 100' wide utility corridor south of W. 25<sup>th</sup> Street near the proposed lower tunnel launching pit. A smaller staging area will be located near the northern PVDE switchback where the first canyon access road will be located.

*Traffic Control.* Traffic control measures during construction will be implemented to maintain continuous through-traffic and emergency access on Palos Verdes Drive and along W. 25<sup>th</sup> Street.

Area of Potential Affect/Project Impacts: Construction of the inlet structure and canyon stabilization (buttress fill and terrace drains) will impact approximately 0.07 acres of jurisdictional drainage only because of the canyon's connection to the ocean. As identified in the biological report, this jurisdictional drainage is not considered wetlands habitat. The filling of this jurisdictional drainage within the San Ramon Canyon will require appropriate mitigation as part of an ACOE 404 permit and RWQCB 401 permit. Post-construction re-vegetation of the streambed and affected canyon

slopes with native vegetation will be required at a 3:1 ratio (2.1 acres total) through a Landscape Establishment Conformance Plan and described in further detail below. Re-vegetation activity will include a plant palette, consistent with the Resource Agency and Native Plant Society criteria, that lists exact species of plants to be restored and the native plants derived from local genetic sources be used. If the restoration does not meet the proposed 2.1 acres, the City may elect to mitigate jurisdictional impacts within other NCCP approved projects.

Coastal sage scrub (CSS) habitat has been identified, and approximately 0.34 acres of CSS may be permanently impacted from construction of the buttress fill and access/maintenance roads. The resulting impacts from construction of the Outlet structure at the bluff would include approximately 0.02 acres of Southern coastal bluff scrub.

Grassland habitat impacts from construction of the inlet structure, buttress fill, access/maintenance roads and lower buried pipe, would be approximately 1.36 acres, as outlined in an addendum to the biological report.

The City NCCP identifies the lower San Ramon Canyon repair as an approved project with an allowable impact area maximum of 2.0 acres of CSS habitat, and 6.0 acres of non-native grassland habitat. Based on the impact areas identified for this project, the 0.34 acres of CSS habitat, 0.02 acres of Southern coastal bluff scrub, and 1.36 acres of grassland habitat will not exceed the allowable maximum for the NCCP approved project. However, site specific California Gnatcatcher protocol surveys will be conducted and appropriate mitigation recommended as part of the project description and as required by the California Department of Fish and Game.

A project summary table of habitat impact areas is provided below.

**Project Summary Table of Habitat Impact Areas**

<b>Location</b>	<b>Lineal Feet</b>	<b>Cut CY</b>	<b>Fill CY</b>	<b>Habitat Impact area</b>
<b>Canyon Inlet Structure</b>	50 ft	660cy	285 cy	0.04 acres jurisdictional drainage.
<b>Canyon Tunnel</b>	1,900 ft	3,000 cy	-	0
<b>Buttress Fill and Terrace drains</b>	n/a	32,900 cy	-	0.37 acres Bare Slope. 1.36 acres Grass land. 0.03 acres jurisdictional drainage. 0.34 acres of CSS.
<b>PVDS Stabilization and access/maintenance road</b>	n/a	7,900 cy	-	Grassland impacts included in total above. CSS impacts included in total above.
<b>Lower trench for cut and cover section of buried pipe</b>	1,900 ft	7,090 cy	-	Grassland impacts included in total above.
<b>Lower Tunnel</b>	300 ft	Incl.	-	0
<b>Outlet structure</b>	50 ft	660cy	285 cy	0.02 acres Southern coastal bluff scrub.

**Mitigation:**

*Landscape Establishment Conformance Mitigation Plan* would include the following:

- All related coordination and specification preparation required to enforce this establishment / mitigation plan as conditioned by the MND/FONSI and outside regulatory agencies.
- The plan will include a description of the enhancement and restoration activities, timelines, plant palettes, maintenance and monitoring.
- The monitoring would include:
  - ✓ Detailing physical work to be performed by others to prevent the re-invasion of non-native plants.
  - ✓ Prepare annual report after the initial mitigation implemented, photo documentation from designated “photo stations.”
  - ✓ Documentation of re-vegetation survival percentages/sizes/species.
  - ✓ Direct/document the number and species of replacement plants (shrubs & trees).



- ✓ Documentation of the methods used to assess all parameters.
- ✓ Survival goals include: minimum of 80% on year one and 100% thereafter and/or 75% coverage with native woody species after 3-years and 90% after 5-years. Non-native species shall comprise less than 5% of the cover after 5-years. Monitoring and replacement plants will be required for the 5-year period mentioned, with the option of stopping the plan 2-years prior IF all success criteria is met.

Other areas of potential affect, project impacts and mitigation may include:

- ❖ Aesthetic impacts would be mitigated using camouflage elements for the new storm drain outlet structure on the beach.
- ❖ Air Quality impacts would be short term construction related.
- ❖ Cultural resource impacts and corresponding monitoring by both archaeological and Native Americans.
- ❖ Geotechnical impacts and appropriate mitigation. (Project elements of landslide and PVDE stabilization).
- ❖ Hydrologic impacts and appropriate mitigation. (Project elements of alleviating downstream flooding and enhancing public safety).
- ❖ Noise impacts would be short term construction related.
- ❖ Transportation/Traffic impacts would be mitigation using traffic control measure to be outlined in the MND/FONSI.

The San Ramon Canyon storm drain project is intended to serve a necessary drainage purpose to prevent potential degradation of topsoil, property damage, and potentially avoid a hazard to public safety.

Project Alternatives/Alternative Analysis: The list of alternatives below is representative only. The NEPA EA/CEQA MND document will provide more detailed project alternative descriptions and analysis consistent with the alternatives reviewed and approved by the City of Rancho Palos Verdes. The list of alternatives below is for Early Consultation purposes only.

**Project Alternatives**

Alternative	Impacts vs. Proposed Project	Cumulative impacts
1. Upper canyon inlet structure tunnel design.	Higher costs because of longer tunnel. Greater environmental and jurisdictional impacts than proposed project because of additional canyon fill to stabilize PVDE switchbacks.	None.
2. Mid canyon inlet structure and canyon fill utilizing existing LA County storm drain system.	Greater environmental and jurisdictional impacts than proposed project due to additional canyon fill. Greater downstream impacts to residential uses because the existing storm drain is undersized below the mobile home park. Entire length of storm drain would require upsizing.	None.
3. Upper canyon inlet structure and canyon fill utilizing existing LA County storm drain system.	Greater environmental and jurisdictional impacts than proposed project due to additional canyon fill. Greater downstream impacts to residential uses because the existing storm drain is undersized below the mobile home park. Entire length of storm drain would require upsizing.	None.
4. Low-cost alternative	Clean out of the existing storm drain inlet structure at W. 25 <sup>th</sup> Street. Out of City of RPV jurisdiction. Potentially greater jurisdictional impacts in the lower canyon.	None.
5. No Action alternative	Less environmental impacts than the proposed project. Goals and objectives not realized of protecting life and property due to flooding and stabilization of PVDE switchbacks from continued slope failure.	None.



Cumulative Effects: In discussing environmental impacts for the proposed project and alternatives, all direct, indirect, and cumulative impacts will be analyzed. In general, cumulative effects from the proposed storm drain and slope stabilization project are not anticipated. The NEPA EA/FONSI and CEQA MND will provide a detailed cumulative analysis.

Source Documents: The source documents as noted in the attached Initial Study Checklist, and will be included in the draft MND/FONSI.

- 1.0 Natural Resources Assessment, Wetlands Delineation, Biological Report, Sept. 2010.
- 2.0 South Central Coastal Information Center, August 25, 2010. Native American Heritage Commission and Native American Consultation.
- 3.0 Harris & Associates, Hydrology and Hydraulics Study for San Ramon Canyon Storm Drain. Pending Final.
- 4.0 GMU Geotechnical, Inc. Preliminary Geotechnical Study Report for San Ramon Canyon Storm Drain System, City of Rancho Palos Verdes, CA. Sept. 27, 2010.
- 5.0 Rancho Palos Verdes Local Coastal Program.
- 6.0 Santa Monica Bay Watershed Management Area, and 303(d) lists.
- 7.0 City of Rancho Palos Verdes General Plan.
- 8.0 Rancho Palos Verdes Citywide NCCP.
- 9.0 California Agricultural Land Evaluation and Site Assessment Model, 1997.
- 10.0 Air Resources Board, Cal EPA, Urban Forest Greenhouse Gas Protocols.

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

**DETERMINATION:** On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and an ENVIRONMENTAL ASSESSMENT - NEGATIVE DECLARATION will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project and revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT/FINDING OF NO SIGNIFICANT IMPACT - MITIGATED NEGATIVE DECLARATION will be prepared.	<b>X</b>
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT STATEMENT - REPORT is required.	
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 attached sheets. An ENVIRONMENTAL IMPACT STATEMENT - REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed in an earlier EIS - EIR or EA/FONSI - NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIS - EIR or EA/FONSI - NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	

Signature

Date

Mr. Alan Braatvedt, P.E.  
Name



Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	--------------------------	--------------------------------	--	------------------------------	-----------

<b>1. AESTHETICS. Would the project:</b>					
a) Have a substantial adverse effect on a scenic vista?	Photo simulations		X		
<p><b>The proposed project will not have a substantial adverse effect on a scenic vista. The new buttress fill will be located at the canyon floor, which is not visible to the public, and will be planted with new native vegetation. Mitigation would be proposed to camouflage the new storm drain outlet structure at the beach. The inlet structure will be camouflaged to the greatest extent possible while maintaining the integrity of the new design.</b></p>					
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings or historic buildings within a scenic highway?	Photo simulations		X		
<p><b>The proposed project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings or historic buildings within a scenic highway. The new buttress fill will be located at the bottom of the canyon floor, will not be visible to the public, and will be planted with new native vegetation. Mitigation would be proposed to camouflage the new storm drain outlet structure at the beach. The inlet structure will be camouflaged to the greatest extent possible while maintaining the integrity of the new design.</b></p>					
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	Photo simulations		X		
<p><b>The proposed project will not substantially degrade the existing visual character or quality of the site and its surroundings. The new buttress fill will not be visible by the public and will be planted with new native vegetation. Mitigation would be proposed to camouflage the new storm drain outlet structure at the beach. The inlet structure will be camouflaged to the greatest extent possible while maintaining the integrity of the new design.</b></p>					
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?					X
<p><b>The proposed project includes a new storm drain facility, which is not anticipated to create a new source of substantial light or glare, which would adversely affect day or nighttime views of the area.</b></p>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	--------------------------	--------------------------------	--	------------------------------	-----------

<b>2. AGRICULTURE AND FORESTRY RESOURCES. Would the project:</b>					
a) Convert Prime, Unique or Statewide Importance Farmland to non-agricultural use?	9.0				X
<b>The project area is not located in, nor is adjacent to, designated agricultural land. The proposed project will not convert prime, unique or statewide importance farmland to non-agricultural use.</b>					
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	9.0				X
<b>The project area is not located in, nor is adjacent to, designated agricultural land or a Williamson Act contract. No impacts are anticipated.</b>					
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51101(g))?	9.0				X
<b>The project area is not located in, nor is adjacent to, designated forested or timberland. The project will not conflict with existing zoning, nor cause the rezoning, of forest land, timberland or Timberland Production. No impacts are anticipated.</b>					
d) Result in the loss of forest land or conversion of forest land to non-forest use?	9.0				X
<b>The project area is not located in, nor is adjacent to, designated forest land. The proposed project will not result in the loss of forest land or conversion of forest land to non-forest use. No impacts are anticipated.</b>					
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	9.0				X
<b>The proposed project will not result in other changes to the existing environment, nor result in conversion of farmland to non-agricultural use, or conversion of forest land to non-forest use. No impacts are anticipated.</b>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	--------------------------	--------------------------------	--	------------------------------	-----------

<b>3. AIR QUALITY (Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.) Would the project:</b>					
a) Violate any air quality standard or contribute to an existing or projected air quality violation?	10				X
<b>The proposed project includes a new storm drain facility, which will not violate any air quality standard or contribute to an existing or projected air quality violation.</b>					
b) Expose sensitive receptors to substantial pollutant concentrations?	10		X		
<b>The proposed project, after construction, is not anticipated to expose sensitive receptors to substantial pollutant concentrations. Short term construction related dust will use construction dust reduction measures. These measures include but are not limited to: maintaining construction equipment in good working condition, avoiding construction equipment idling in residential areas and utilizing low-sulfur burning fuels.</b>					
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	10				X
<b>The proposed project is not anticipated to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).</b>					
d) Create objectionable odors affecting a substantial number of people?	10		X		
<b>The proposed project, after construction, is not anticipated to create objectionable odors affecting a substantial number of people. Short term construction related dust will use construction dust reduction measures. These measures include but are not limited to: maintaining construction equipment in good working condition, avoiding construction equipment idling in residential areas and utilizing low-sulfur burning fuels.</b>					
e) Conflict with or obstruct the implementation of any applicable air quality plan.	10				X
<b>The proposed project is not anticipated to conflict with or obstruct the implementation of any applicable air quality plans.</b>					



Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	--------------------------	--------------------------------	--	------------------------------	-----------

<b>4. BIOLOGICAL RESOURCES. Would the project:</b>					
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, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<b>1</b>		<b>X</b>		
<p><b>Approximately 0.34 acres of Coastal Sage Scrub (CSS) may be permanently impacted due to construction of this project. The resulting impacts from construction of the outlet structure at the bluff would include approximately 0.02 acres of Southern coastal bluff scrub. The City NCCP identifies the lower San Ramon Canyon repair as an approved project with an allowable impact area maximum of 2.0 acres of CSS habitat, and 6.0 acres of non-native grassland habitat. Based on the biological report prepared for this project, the 0.34 acres of CSS habitat and 1.36 acres of grassland habitat will not exceed the allowable maximum for the NCCP approved project.</b></p> <p><b>Site specific Gnatcatcher protocol surveys will be conducted as part of the NEPA/CEQA document. Based on the biological report and the Citywide NCCP, impacts can be mitigated to less than significant levels.</b></p>					
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 U.S. Fish and Wildlife Service?	<b>1</b>		<b>X</b>		
<p><b>The project will impact approximately 0.07 acres of jurisdictional drainage. Based on the biological report and delineation, the jurisdictional drainage of San Ramon Canyon does not support any wetlands or riparian habitat. Impacts from the canyon and jurisdictional fill will be mitigated by post-construction re-vegetation of the new streambed at a 3:1 ratio or a total of 2.1 acres. If the restoration does not meet the proposed 2.1 acres, the City may elect to mitigate jurisdictional impacts within other NCCP approved projects.</b></p>					



Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?	1		X		
<p><b>The project will impact approximately 0.07 acres of jurisdictional drainage. Based on the biological report and delineation, the jurisdictional drainage of San Ramon Canyon does not support any wetlands or riparian habitat. The project will be required to obtain the necessary permits for the jurisdictional drainage as outlined in the biological report. Impacts from the canyon and jurisdictional fill will be mitigated by the re-vegetation of the new streambed at a 3:1 ratio or a total of 2.1 acres. If the restoration does not meet the proposed 2.1 acres, the City may elect to mitigate jurisdictional impacts within other NCCP approved projects. Based on the biological report and the Citywide NCCP, impacts will be mitigated to less than significant levels.</b></p>					
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?	1			X	
<p><b>The proposed project will not 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. Based on the biological report, the canyon is part of a fragmented natural area and does not provide significant habitat value due to the velocities associated with each flood event. Because of this flood “flushing” effect, the canyon is basically environmental “sterile”. The biological report did not find suitable raptor nesting habitat in the project area.</b></p>					
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	1		X		
<p><b>The proposed project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The City NCCP identifies the lower San Ramon Canyon repair as an approved project with an allowable impact area maximum of 2.0 acres of CSS habitat, and 6.0 acres of non-native grassland habitat. Based on the biological report prepared for this project, the 0.34 acres of CSS habitat and 1.36 acres of grassland habitat, does not exceed the allowable maximum for the NCCP approved project.</b></p>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other local, regional or state habitat conservation plan?	1		X		
<p><b>The proposed project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other local, regional or state habitat conservation plan. The City NCCP identifies the lower San Ramon Canyon repair as an approved project with an allowable impact area maximum of 2.0 acres of CSS habitat, and 6.0 acres of non-native grassland habitat. Based on the biological report prepared for this project, the 0.34 acres of CSS habitat and 1.36 acres of grassland habitat, does not exceed the allowable maximum from the NCCP approved project. Based on the biological report and the Citywide NCCP, impacts will be mitigated to less than significant levels.</b></p>					
<p><b>5. CULTURAL RESOURCES. Would the project:</b></p>					
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines?	2		X		
<p><b>The proposed project will not cause substantial adverse change in any significance of a historical resource defined in Section 15064.5 of CEQA. Because of the flood “flushing” effect, the canyon is basically sterile of cultural resources. However, a cultural resource survey will be conducted as part of the NEPA/CEQA document. Cultural resource monitors will be recommended during construction.</b></p>					
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines?	2		X		
<p><b>The proposed project will not cause substantial adverse change in any significance of an archaeological resource defined in Section 15064.5 of CEQA Because of the flood “flushing” effect, the canyon is basically sterile of cultural resources. However, a cultural resource survey will be conducted as part of the NEPA/CEQA document. Cultural resource monitors will be recommended during construction. Native American monitoring during excavation will be recommended.</b></p>					
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	2			X	
<p><b>The proposed project will not destroy any unique paleontological resources or unique geologic features.</b></p>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	2			X	
<p>The project will not disturb any human remains, including those interred outside of formal cemeteries. Because of the flood “flushing” effect, the canyon is basically sterile of cultural resources. However, a cultural resource survey will be conducted as part of the NEPA/CEQA document. Cultural resource monitors will be recommended during construction. Native American monitoring during excavation will be recommended.</p>					
<p><b>6. GEOLOGY-SOILS-SEISMICITY. Would the project:</b></p>					
a) Expose people or structures to 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?	4		X		
<p>The site is not currently located within an Alquist-Priolo Earthquake Fault Zone. In addition, there are no known active faults that pass directly through the site. The nearest known active fault is the Palos Verdes fault, located approx. 5.4 km from the site. The Newport-Inglewood fault is located approx. 15.6 km. Given the proximity of the site to these and numerous other active and potentially active faults, the site would be subject to earthquake ground motions. As such, the project will be required to mitigate for potential impacts from ground displacement. Therefore, the project mitigation will require consistency with Public Resources Code Section 2693(c).</p>					
ii) Strong seismic ground shaking?	4		X		
<p>Strong seismic ground shaking may be anticipated due to the Palos Verdes and Newport-Inglewood faults, as well as other numerous active and potentially active faults. As such, the project will be required to mitigate for potential impacts from ground displacement and strong seismic ground shaking. Therefore, the project mitigation will require consistency with Public Resources Code Section 2693(c).</p>					
iii) Seismic-related ground failure, including liquefaction?	4		X		
<p>Given the depth to groundwater outlined in the geotechnical report, and the well-consolidated nature of the landslide and bedrock materials on site, the potential for liquefaction and lateral spreading of these materials is low. However, localized areas where the canyon is underlain by recent alluvium or colluvium may be subject to these seismic hazards should these surficial soils be saturated at the time of the seismic event. As such, the project will be required to mitigate for potential impacts from seismic-related ground failure, including liquefaction. Therefore, the project mitigation will require consistency with Public Resources Code Section 2693(c).</p>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iv) Landslides?	4		X		
<p>Given the site is predominately underlain by a large, dormant landslide, and the existing walls and slopes of San Ramon Canyon are generally over-steepened due to erosion, the potential for further landsliding due to a large seismic event is high. Buttress filling of the canyon and the proposed storm drain will reduce the rate of erosion with in the canyon, reduce the flow of water and debris down canyon, and reduce the movement of the Tarapaca landslide.</p>					
b) Result in substantial soil erosion or loss of topsoil?	4		X		
<p>Erosion within San Ramon Canyon ranges from moderate to severe. Areas of severe erosion are generally in the area of the Tarapaca landslide and downstream. The episodic and active downslope movement of the Tarapaca landslide is forcing the flowline of the canyon to shift westerly, causing increased erosion of the western walls of the canyon. These areas are directly downslope of the switchbacks of PVDE, in particular, the lower switchback. Based on the geotechnical report, it appears that the canyon walls are eroding at an average rate of about 5 feet per year. Continued annual erosion of these areas may cause stability issues with PVDE. Moderate to severe erosion of the canyon walls and floor due to heavy flow of surface water and flash flooding during rains has caused deep cutting of the canyon, in some areas generating vertical cuts up to 30 feet in height. Instability of these cuts is triggering surficial failures and topple of the vertical walls. Buttress filling of the canyon and the proposed storm drain will reduce the rate of erosion with in the canyon, reduce the flow of water and debris down canyon, and reduce the movement of the Tarapaca landslide.</p>					
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?	4		X		
<p>As discussed in b) above, San Ramon Canyon is subject to severe erosion due to flash flooding episodes and continued westerly movement of the Tarapaca Landslide. Buttress filling of the canyon and the proposed storm drain will reduce the rate of erosion with in the canyon, reduce the flow of water and debris down canyon, and reduce the movement of the Tarapaca landslide.</p>					
d) Be located on expansive soil, as defined by the Uniform Building Code, thus creating substantial risks to life or property?	4				X
<p>Based on the geotechnical report, the proposed project is anticipated to have no such impact.</p>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	4				X
<p><b>The proposed project includes construction of a new storm drain. Based on the geotechnical report, the proposed project is anticipated to have no such impact on the use of septic tanks or wastewater disposal.</b></p>					
<p><b>7. GREENHOUSE GAS EMISSIONS. Would the project:</b></p>					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					X
<p><b>The proposed project includes construction of a new storm drain facility. As a result, it is not anticipated to generate greenhouse gas emissions either directly or indirectly. No impacts are anticipated.</b></p>					
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?					X
<p><b>The proposed project includes a new storm drain facility. As a result, it is not anticipated to generate greenhouse gas emissions either directly or indirectly. No impacts are anticipated.</b></p>					
<p><b>8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:</b></p>					
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?					X
<p><b>The proposed project includes construction of a new storm drain. As a result, it is not anticipated to create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.</b></p>					

Issues and Supporting Information Sources	Source Document- Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?					X
<b>The proposed project includes construction of a new storm drain. As a result, it is not anticipated to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release or hazardous material in to the environment.</b>					
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?					X
<b>The proposed project includes construction of a new storm drain facility. As a result, it is not anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.</b>					
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 create a significant hazard to the public or the environment?					X
<b>The project site is not listed as a hazardous material site pursuant to Government Code Section 65962.5. No impacts are anticipated as a result of the project. Notwithstanding, however, if hazardous materials are encountered during excavation, the City will contract with the appropriate hazardous materials contractor.</b>					
e) For a project within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport, would the project result in a safety hazard for people residing or working in the project area?					X
<b>The proposed project is not located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport, would the project result in a safety hazard for people residing or working in the project area.</b>					
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.					X

Issues and Supporting Information Sources	Source Document- Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	---------------------------	--------------------------------	--	------------------------------	-----------

The proposed project is not located within the vicinity of a private airstrip. Thus the proposed project will not result in a safety hazard for people residing or working in the project area.

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

The proposed project is not anticipated to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. The project will alleviate the flooding problem which has blocked W.25<sup>th</sup> Street with water, mud and debris after past storm events.

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

The proposed project is anticipated to have less than significant impacts with the implementation of fire safety measures to avoid overheating of construction equipment during the summer fire season.

**9. HYDROLOGY AND WATER QUALITY. Would the project:**

a) Violate any water quality standards or waste discharge requirements?	3		X		
---	---	--	---	--	--

Under the Los Angeles County existing MS4 Permit, the City of Rancho Palos Verdes will require compliance with the NPDES for excavation, trenching, and dewatering adjacent to the ocean. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared as warranted to address construction storm water runoff. The SWPPP may be incorporated into the City's Water Quality Management Plan. All construction activity will be required to comply with construction site runoff control minimum control measures, as outlined by the LARWQCB. Impacts are considered less than significant with this mitigation incorporated.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?	3				X
---	---	--	--	--	---

Based on the geotechnical report, in general, groundwater was not observed during the investigation. One geotechnical boring encountered seepage or a perched zone of groundwater at 103-feet of depth. The storm drain and buttressing project will not substantially deplete groundwater supplies. The proposed project is anticipated to have no such impact.



Issues and Supporting Information Sources	Source Document- Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	3			X	
<p><b>While the project will alter the existing drainage pattern of the site, it will not alter the course of a stream or river in a manner which would result in substantial erosion or siltation on- or off-site. Areas of severe erosion are generally in the area of the Tarapaca landslide and further downstream. The episodic and active downslope movement of the Tarapaca landslide is forcing the flowline of the canyon to shift westerly, causing increased erosion of the western walls of the canyon. Buttress filling of the canyon and the proposed storm drain will reduce the rate of erosion within the canyon, reduce the flow of water and debris down canyon, and reduce the movement of the Tarapaca landslide. The project will alleviate the flooding and siltation problem which has historically blocked W.25<sup>th</sup> Street with water, mud and debris after past storm events.</b></p>					
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	3			X	
<p><b>While the project will alter the existing drainage pattern of the site, it will not alter the course of a stream or river in a manner which would result in substantial flooding on- or off-site. Construction of the storm drain will help to alleviate flooding of San Ramon Canyon and alleviate the flooding and siltation problem that has historically blocked W.25<sup>th</sup> Street with water, mud and debris after past storm events. As such, impacts are considered less than significant.</b></p>					
e) 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?	3			X	
<p><b>The existing storm drain system currently does not meet the flow capacity needs during a storm event, which currently results in flooding of San Ramon Canyon and W. 25<sup>th</sup> Street. Therefore, the new storm drain will greatly improve the storm flow capacity and minimize flooding. Thus, impacts are considered less than significant.</b></p>					
f) Otherwise substantially degrade water quality.	3			X	

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	--------------------------	--------------------------------	--	------------------------------	-----------

The San Ramon Canyon storm drain project will not otherwise substantially degrade nor alter water quality. The storm drain is intended to serve a necessary drainage purpose to prevent potential degradation of topsoil, property damage, and potentially avoid a hazard to public safety. The quality of water entering the new drain remains the same. Construction Best Management Practices will prevent construction related erosion. Thus, impacts are considered less than significant.

g) Place housing within a 100-year flood hazard area, as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate map or other flood hazard delineation map?	3			X	
---	---	--	--	---	--

The proposed project includes construction of a new storm drain facility, and will not place housing within a 100-year flood hazard area, as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate map or other flood hazard delineation map. Impacts are considered less than significant.

h) Place within a 100-year flood hazard area, structures which would impede or redirect flood flows?	3			X	
--	---	--	--	---	--

The project includes construction of a new storm drain facility, and will not place within a 100-year flood hazard area, structures which would impede or redirect flood flows. The new storm drain pipe will help to direct the storm flows in a controlled manner. Therefore, impacts are considered less than significant.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	3			X	
--	---	--	--	---	--

The project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. Construction of the storm drain project does not include a levee or dam, nor is it in the vicinity of a levee or dam. The proposed storm drain project will alleviate the flooding of San Ramon Canyon and alleviate the flooding and siltation problem that historically has blocked W.25<sup>th</sup> Street with water, mud and debris after past storm events. As a result, the project will benefit the area. Therefore, less than significant impacts are anticipated.

j) Expose people or property to inundation by seiche, tsunami, or mudflow?	3			X	
--	---	--	--	---	--



Issues and Supporting Information Sources	Source Document- Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	---------------------------	--------------------------------	--	------------------------------	-----------

Based on review of the Torrance/San Pedro Quadrangle to the Tsunami Inundation Map for Emergency Planning prepared by the California Geological Survey (CGS, 2009) (contained in the geotechnical report), the area at the toe of the bluff within the project site may be susceptible to Tsunami inundation. No mitigation is proposed for this potential impact. Further, the proposed project will address the current mudflow problem that results after storm events. Therefore, impacts are considered less than significant.

k) Have construction impact on storm water runoff?			X		
--	--	--	---	--	--

BMP's during construction will be required as part of the NPDES permit for the City. The tunnel outlet at the beach will be required to be fully lined and bordered with sandbags so that absolutely no debris or construction water of any kind is allowed to the ocean. There will be stiff penalties imposed upon the contractor for any accidental violation. The tunneling operations will be required to use conveyors or other means other than hydraulic slurry pumping to convey the spoils so as to prevent a potential spill onto to the beach.

l) Have post construction activity impact on storm water runoff?	3				X
--	---	--	--	--	---

The proposed project will not have post construction activity impact on storm water runoff. After construction, the new storm drain will help alleviate flooding.

**10. LAND USE AND PLANNING. Would the project:**

a) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to a general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating environmental effects?	7, 8			X	
---	------	--	--	---	--

The proposed project is not anticipated to conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project including, but not limited to a general plan, specific plan, local coastal program or zoning ordinance. The City NCCP identifies the lower San Ramon Canyon repair as an approved project with an allowable impact area maximum of 2.0 acres of CSS habitat, and 6.0 acres of non-native grassland habitat. Based on the biological report prepared for this project, the 0.34 acres of CSS habitat and 1.36 acres of grassland habitat, does not exceed the allowable maximum from the NCCP approved project. Therefore, the project is consistent with the City's NCCP. Impacts are considered less than significant.



Issues and Supporting Information Sources	Source Document- Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	7, 8			X	
<p>The proposed project is not anticipated to conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project. The City NCCP identifies the lower San Ramon Canyon repair as an approved project with an allowable impact area maximum of 2.0 acres of CSS habitat, and 6.0 acres of non-native grassland habitat. Based on the biological report prepared for this project, the 0.34 acres of CSS habitat and 1.36 acres of grassland habitat, does not exceed the allowable maximum from the NCCP approved project. Therefore, the project is consistent with the City's NCCP. Impacts are considered less than significant.</p>					
c) Be incompatible with existing land use in the vicinity?	7, 8			X	
<p>The proposed project is not anticipated to be incompatible with existing land use in the vicinity. The project includes a subterranean drainage and piping that will not be visible; fill material at the canyon floor will be hydroseeded which will result in native foliage that will screen the area so that it is not apparent; and the outlet structure will contain natural elements to blend the structure into the landscape. As such, impacts are considered less than significant.</p>					
d) Conflict with any applicable habitat conservation plan or natural community conservation plan?	7, 8			X	
<p>The proposed project is not anticipated to conflict with any applicable habitat conservation plan or natural community conservation plan. The City NCCP identifies the lower San Ramon Canyon repair as an approved project with an allowable impact area maximum of 2.0 acres of CSS habitat, and 6.0 acres of non-native grassland habitat. Based on the biological report prepared for this project, the 0.34 acres of CSS habitat and 1.36 acres of grassland habitat, does not exceed the allowable maximum from the NCCP approved project. Therefore, the project is consistent with the City's NCCP. Impacts are considered less than significant.</p>					
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	7, 8				X
<p>The proposed project is occurring in a canyon and includes a subterranean storm drain facility. The project will not be conducted within a residential neighborhood. As such, the project will have no such impact.</p>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	--------------------------	--------------------------------	--	------------------------------	-----------

<b>11. ENERGY AND MINERAL RESOURCES. Would the project:</b>					
a) Conflict with adopted energy conservation plans.					<b>X</b>
<b>The proposed project is a new storm drain facility and does not result in a use that requires electricity or other form of energy to operate. As such, the project will not conflict with any energy conservation plans and will have no impact.</b>					
b) Use non-renewable resources in a wasteful and inefficient manner.					<b>X</b>
<b>The proposed project includes a new storm drain facility that will not use non-renewable resources. As such, the proposed project will have no such impact.</b>					
c) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?					<b>X</b>
<b>The project site is not known to contain mineral resources of value to the region and/or state residences. As such, there will be no environmental impacts resulting from the proposed project with respect to mineral resource issues.</b>					
d) 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?					<b>X</b>
<b>No land use plan delineates the site as a locally important mineral resource recovery site. As such, the proposed project is anticipated to have no such impact.</b>					



Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	--------------------------	--------------------------------	--	------------------------------	-----------

<b>12. NOISE. Would the project result in:</b>					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	7		X		
<p><b>After construction, the project will not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</b></p> <p>Short-term construction-related noise will be generated during construction. Sources of noise during construction include truck road-noise, backup alarming and motorized construction equipment. Construction duration of 4 to 6 weeks will require noise mitigation. The noise impacts during construction could be mitigated to less than significant levels by limiting hours of construction, maintaining construction equipment in good working order, and prohibiting certain construction related activities such as rock crushing.</p>					
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	7			X	
<p><b>After construction, the project will not expose persons to or generate excessive ground-borne vibration or ground-borne noise levels. The proposed project may create short-term construction vibration. These impacts are considered to be less than significant.</b></p>					
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	7			X	
<p><b>The long-term noise levels which may occur during maintenance of the storm drain facility will not be excessive. Therefore, impacts are considered less than significant.</b></p>					
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	7		X		
<p><b>After construction, the project will not create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.</b></p> <p>Short-term construction-related noise will be generated during construction. Sources of noise during construction include truck road-noise, backup alarming and motorized construction equipment. While the short-term noise levels will not be in excessive, the construction duration of 4 to 6 weeks will require noise mitigation. The noise impacts during construction could be mitigated to less than significant levels by limiting hours of construction, maintaining construction equipment in good working order, and prohibiting certain construction related activities such as rock crushing.</p>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has been adopted, within 2 miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels?	7				X
<b>The proposed project is not located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport, would the project result in a safety hazard for people residing or working in the project area.</b>					
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	7				X
<b>The proposed project is not located within the vicinity of a private airstrip. Thus the proposed project will not result in a safety hazard for people residing or working in the project area, and will have no such impact.</b>					
<b>13. POPULATION AND HOUSING. Would the project:</b>					
a) Cumulatively exceed official regional or local population projects?					X
<b>The proposed project includes a new storm drain facility to address flooding, and is not a residential development project. Thus, the project is not anticipated to cumulatively exceed official regional or local population projects.</b>					
b) Induce substantial growth in an area, either directly or indirectly (for example, through projects in an undeveloped area of major infrastructure)?					X
<b>The proposed project includes a new storm drain facility to address flooding and is not anticipated to induce substantial growth in an area, either directly or indirectly.</b>					
c) Displace substantial numbers of existing housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?					X
<b>The proposed project includes a new storm drain facility to address flooding and does not require displacement of any residences. As such, there is no impact.</b>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?					X
<b>The proposed project includes a new storm drain facility and will not displace any person, nor necessitate the construction of replacement housing elsewhere.</b>					
<b>14. PUBLIC SERVICES. Would the project:</b>					
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
i) Fire protection?					X
<b>The proposed project includes a new storm drain facility to address flooding of San Ramon Canyon and W. 25<sup>th</sup> Street. As a result, neither the project nor the resulting use will require additional fire protection service. Thus, the proposed project will have no impact on fire protection.</b>					
ii) Police protection?					X
<b>The proposed project includes a new storm drain facility to address flooding of San Ramon Canyon and W. 25<sup>th</sup> Street. As a result, neither the project nor the resulting use will require additional police protection service. Thus, the proposed project will have no impact on police protection.</b>					
iii) Schools?					X
<b>The proposed project does not result in an increase in the student population. As such, the project will have no such impact on schools.</b>					
iv) Parks?					X
<b>The proposed project does not generate additional population that would utilize park facilities. As such, the project will have no such impact.</b>					

Issues and Supporting Information Sources	Source Document- Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	---------------------------	--------------------------------	--	------------------------------	-----------

v) Other public facilities?					X
-----------------------------	--	--	--	--	---

The proposed project is anticipated to have no such impact on other public facilities in the City.

**15. RECREATION. Would the project:**

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X	
--	--	--	--	---	--

A new trail is proposed along the southern portion of the project, south of W 25<sup>th</sup> Street, to minimize visual impacts after construction and facilitate pedestrian access to the coast. The proposed project is not anticipated to 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. Impacts are therefore less than significant on existing recreational facilities.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X	
---	--	--	--	---	--

A new trail is proposed along the southern portion of the project, south of W 25<sup>th</sup> Street, to minimize visual impacts after construction and facilitate pedestrian access to the coast. Impacts are therefore less than significant on existing recreational facilities.

**16. TRANSPORTATION / TRAFFIC. Would the project:**

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?			X		
--	--	--	---	--	--

During construction, short-term related traffic impacts may result. Mitigation measures will be implemented which limits the number of construction vehicles on the street at one time, traffic control measures, construction timing and construction phasing to avoid peak hours.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?					X
--	--	--	--	--	---

The proposed project is not anticipated to exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.



Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in inadequate emergency access or inadequate access to nearby uses?			<b>X</b>		
<p><b>After construction, the proposed project is not anticipated to result in inadequate emergency access or inadequate access to nearby uses. During construction, short-term access impacts may result. Mitigation measures will be implemented which limits the number of construction vehicles on the street at one time, traffic control measures, construction timing and construction phasing to avoid peak hours.</b></p>					
d) Result in insufficient parking capacity on-site or off-site?			<b>X</b>		
<p><b>After construction there will be no long-term parking impacts. During construction, short-term related parking impacts may result. Mitigation measures will be implemented which limits the number of construction vehicles on the street at one time, traffic control measures, construction timing and construction phasing to avoid peak hours.</b></p>					
e) Result in change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.			<b>X</b>		
<p><b>Short-term construction related parking issues will result without short-term parking mitigation for the construction vehicles. As such, mitigation measures will address construction vehicle staging and storage to a less than significant impact.</b></p>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with adopted policies, plans or programs supporting alternative transportation, including mass transit and non-motorized travel and relevant components of the circulation system (e.g., bus turnouts, bicycle racks)?					X
<b>The proposed project includes a new storm drain facility, which does not increase demand for transportation. Thus, the project will not conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).</b>					
g) Substantially increase hazards due to a design figure (e.g. sharp curve or dangerous intersections) or incompatible uses (e.g. farm equipment)?					X
<b>The proposed project will not result in the reconfiguration of any streets or highways, Thus, the proposed storm drain project will not increase hazards due to a design figure (e.g. sharp curve or dangerous intersections) or incompatible uses ( e.g. farm equipment).</b>					
<b>17. UTILITIES AND SERVICE SYSTEMS. Would the project:</b>					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?					X
<b>The proposed project includes a new storm drain facility, which does not increase demand or exceed requirements for wastewater treatment facilities. Thus, the project will not exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board.</b>					
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					X
<b>The proposed project includes a new storm drain facility, which does not increase demand for new water or wastewater treatment facilities or expansion of existing facilities.</b>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X	
<p><b>The San Ramon Canyon storm drain project is intended to serve a necessary drainage purpose and to prevent potential degradation of topsoil, property damage, and potentially avoid a hazard to public safety. The existing San Ramon Canyon storm drain will remain in place as act as an “over-flow” during significant storm events.</b></p> <p><b>Construction of the new storm drain will have short-term environmental effects on traffic, air quality and noise that can all be mitigated to less than significant levels. Long-term environmental effects on biological and cultural resources after construction will be mitigated to less than significant levels. Other long-term environmental effects after construction are considered a beneficial impact from the improvement of storm flows.</b></p>					
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?					X
<p><b>The proposed storm drain project is anticipated to have no such impact on existing water supplies available to serve the City.</b></p>					
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?					X
<p><b>The proposed storm drain project is not anticipated to result in a determination by the wastewater treatment provider that is has adequate capacity to serve demand.</b></p>					
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X	
<p><b>The project will generate additional waste from regular maintenance and cleaning of the catch basins. Based on information from the City's public works dept, the local landfills have sufficient disposal capacity. Therefore, the proposed project is anticipated to have a less than significant impact on solid waste disposal.</b></p>					
g) Comply with federal, state and local statutes and regulations related to solid waste?					X
<p><b>The proposed storm drain project complies with all federal, state and local statutes related to solid waste.</b></p>					

Issues and Supporting Information Sources	Source Document-Appendix	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	--------------------------	--------------------------------	--	------------------------------	-----------

16. MANDATORY FINDINGS OF SIGNIFICANCE
<p>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p>
<p><b>With mitigation incorporated into the project description, construction of the storm drain will not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.</b></p> <p><b>The City NCCP identifies the lower San Ramon Canyon repair as an approved project with an allowable impact area maximum of 2.0 acres of CSS habitat, and 6.0 acres of non-native grassland habitat. Based on the biological report prepared for this project, the 0.34 acres of CSS habitat and 1.36 acres of grassland habitat do not exceed the allowable maximum from the NCCP approved project.</b></p> <p><b>Construction of the inlet structure and canyon stabilization (buttress fill and terrace drains) will impact approximately 0.07 acres of jurisdictional drainage because of the canyon’s connection to the ocean. This jurisdictional drainage is not considered wetlands habitat. Post-construction re-vegetation of the streambed and affected canyon slopes with native vegetation will be required at a 3:1 ratio (2.1 acres total). Re-vegetation activity will include a plant palette, consistent with the Resource Agency and Native Plant Society criteria, that lists exact species of plants to be restored and the native plants derived from local genetic sources be used. If the restoration does not meet the proposed 2.1 acres, the City may elect to mitigate jurisdictional impacts within other NCCP approved projects.</b></p> <p><b>The San Ramon Canyon storm drain project is intended to serve a necessary drainage purpose to prevent potential degradation of topsoil, property damage, and potentially avoid a hazard to public safety. The project will not violate any water quality standards.</b></p>
<p>b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.)</p>
<p><b>The proposed project will have no such cumulatively considerable impact.</b></p>
<p>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>
<p><b>The proposed project will have no such impact. The project will create a beneficial impact from the improvement.</b></p>