2B

Initial Study

City of Milpitas
Milpitas Storm Drain Master Plan 2012 Update

City of Milpitas

September 2013

TABLE OF CONTENTS

Page

1.0 INTRODUCTION AND PURPOSE 1
2.0 PROJECT INFORMATION 2
2.1 PROJECT TITLE 2
2.2 PROJECT LOCATION 2
2.3 LEAD AGENCY NAME AND ADDRESS 2
2.4 LEAD AGENCY CONTACT INFORMATION 2
2.5 GENERAL PLAN DESIGNATION AND ZONING DISTRICT 2
3.0 PROJECT DESCRIPTION 5
3.1 PROJECT BACKGROUND 5
3.2 OVERVIEW OF THE PROPOSED PROJECT 5
3.3 PROJECT COMPONENTS 6
3.4 PROPERTY AND EASEMENT ACQUISITIONS 12
3.5 PERMITS AND APPROVALS 12
3.6 USES OF THE INITIAL STUDY 12
4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND DISCUSSION OF IMPACTS 13
4.1 AESTHETICS 14
4.2 AGRICULTURAL AND FORESTRY RESOURCES 16
4.3 AIR QUALITY 18
4.4 BIOLOGICAL RESOURCES 23
4.5 CULTURAL RESOURCES 31
4.6 GEOLOGY AND SOILS 35
4.7 GREENHOUSE GAS EMISSIONS 40
4.8 HAZARDS AND HAZARDOUS MATERIALS 44
4.9 HYDROLOGY AND WATER QUALITY 49
4.10 LAND USE 57
4.11 MINERAL RESOURCES 59
4.12 NOISE 60
4.13 POPULATION AND HOUSING 64
4.14 PUBLIC SERVICES 65
4.15 RECREATION 67
4.16 TRANSPORTATION 69
4.17 UTILITIES AND SERVICE SYSTEMS 72
4.18 MANDATORY FINDINGS OF SIGNIFICANCE 76
5.0 REFERENCES 79
6.0 LEAD AGENCY AND CONSULTANTS 81
LEAD AGENCY 81
CONSULTANTS 81

TABLE OF CONTENTS

Page

FIGURES

Figure 1: Regional Map 3
Figure 2: Vicinity Map 4

TABLES

Table 1: Proposed Milpitas Strom Drain Master Plan Improvements 7
Table 4.4-1: Special Status Species within the City of Milpitas 23
Table 4.5-1: City of Milpitas Designated Cultural Resources 31
Table 4.8-1: Geotracker Open Cases within the City of Milpitas 44
Table 4.17-1: City of Milpitas Drainage Facilities Jurisdiction 73

APPENDIX

Appendix A: City of Milpitas Storm Drain Master Plan

1.0 INTRODUCTION AND PURPOSE

This Initial Study (IS) of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (Title 14, California Code of Regulations §15000 *et seq.*), and the regulations and policies of the City of Milpitas. The purpose of this IS is to provide objective information regarding the environmental consequences of the proposed project to the decision makers who will be reviewing and considering the project.

This IS evaluates the environmental impacts that might reasonably be anticipated to result from the implementation of the City of Milpitas Storm Drain Master Plan. All documents referenced in this IS are available for public review at the City offices, 455 East Calaveras Boulevard, Milpitas, CA 95035, during normal business hours.

The City is the Lead Agency under CEQA and has prepared this Initial Study to address the impacts of implementing the proposed project.

2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Milpitas Storm Drain Master Plan

2.2 PROJECT LOCATION

The project is located in the City of Milpitas, California.

2.3 LEAD AGENCY NAME AND ADDRESS

City of Milpitas
455 East Calaveras Boulevard
Milpitas, CA 95035

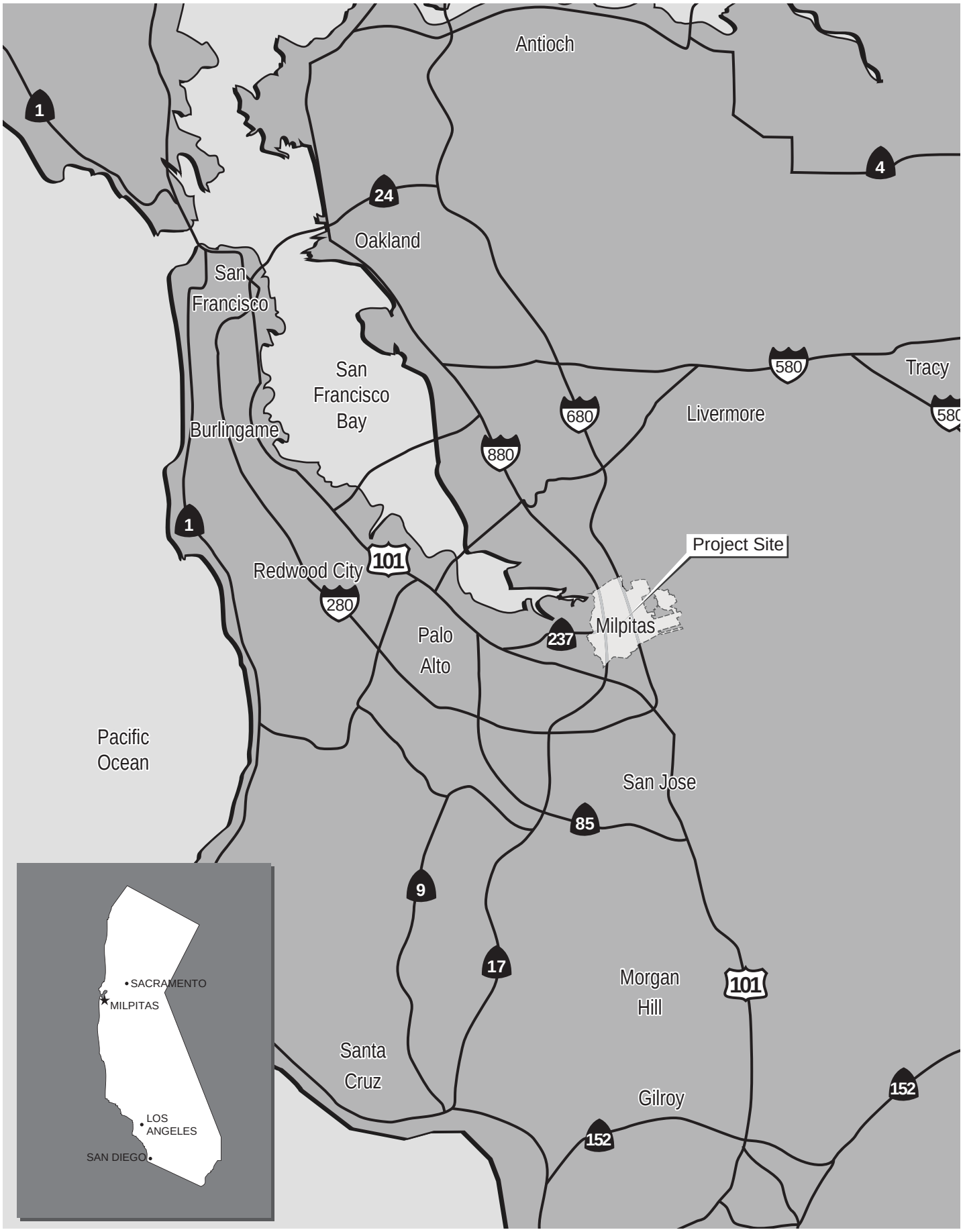
2.4 LEAD AGENCY CONTACT INFORMATION

Sheldon AhSing
Senior Planner
(408) 586-3278

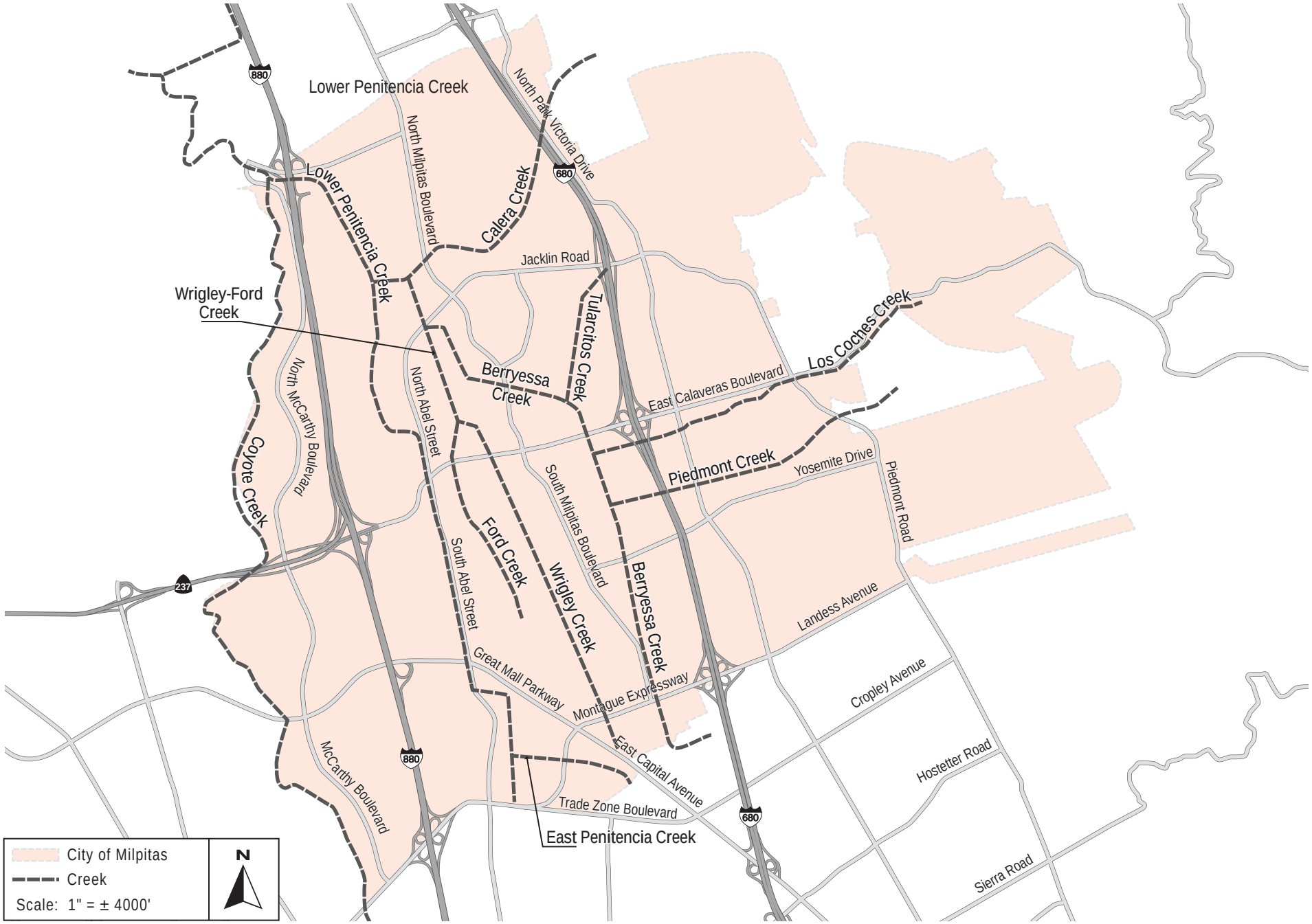
2.5 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

General Plan Designation and Zoning:

The project will occur within existing City roadway rights-of-way (ROW) and utility easements. Part of the project will also occur adjacent to existing waterways and Parks and Open Space (POS) areas.



REGIONAL MAP FIGURE 1



VICINITY MAP

FIGURE 2

3.0 PROJECT DESCRIPTION

3.1 PROJECT BACKGROUND

Flooding within the City of Milpitas (City) is caused by two basic interrelated factors: 1) major creeks and channels that overflow due to limited capacity in relation to flood flows; and 2) inadequate capacity of local drainage facilities. Urbanization tends to increase the rate of runoff generated from local precipitation. Once primarily agricultural with an economy dominated by fruit and vegetable growers, the City has evolved into a more fully urban community. Urbanization within the City is generally confined between Coyote Creek to the west and the Calaveras Foothills (Diablo Range) to the east. The western half of the City has developed as a mix of residential, commercial, and industrial development, with parks, schools, and greenbelts woven into the urban fabric. Future development in the City, particularly non-hillside residential, will tend to be infill development which will become denser as the population increases. Recent land use changes and growth have been most concentrated within the Midtown and Transit Area Specific Plan (TASP) areas; and therefore, storm drain systems serving these tributary areas have the most potential to be impacted by new development.

Stormwater runoff in the City is collected in a system of underground pipes and a network of street gutters. Local runoff flows into creeks and channels that run through the City ultimately discharge to San Francisco Bay (Bay). Drainage in the City is generally from the southeast to the northwest. Storm drain systems close to the Bay also tend to rely heavily upon pumping facilities to move water. The City owns and operates 13 stormwater pumping stations. The Santa Clara Valley Water District (SCVWD) is the City's primary partner in the management of local stormwater issues. The SCVWD manages most of the major drainage-ways in the City including Los Coches Creek, Berryessa Creek, Calera Creek, Coyote Creek, Lower Penitencia Creek, Piedmont Creek, and Tularcitos Creek.

The City completed its first comprehensive Storm Drainage Master Plan in 2001. The City is now over fifty years old and is beginning to experience the effects of aging storm drainage infrastructure, the need to maintain and replace expensive equipment and facilities, and changing regulatory requirements. The Storm Drain Master Plan (SDMP), prepared by *Schaaf & Wheeler* in December 2012, is the first major update of the 2001 document, and has been undertaken to implement a prioritized capital improvement program (CIP) that meets environmental regulatory requirements. The SDMP focuses on storm drainage and flood management, which are only two factors in the overall management of stormwater within the City. The City's storm drain CIP also addresses stormwater infrastructure needs and stormwater quality protection needs defined by the San Francisco Regional Water Quality Control Board's (RWQCB) Municipal Regional Storm Water Permit, National Pollutant Discharge Elimination System (NPDES) permit. Under the requirements of this permit, redevelopment or new development must include source controls (i.e., low impact development) for runoff volumes and velocity/intensity. These requirements are further described in Section 4.9.1.5.

3.2 OVERVIEW OF THE PROPOSED PROJECT

The proposed project is the implementation of the Milpitas SDMP, which identifies the capital improvements needed to maintain recommended levels of protection against stormwater runoff, and the need for a revenue stream that would allow the necessary capital improvements to keep the storm

drain system in working order for the adjacent land uses into the future. The SDMP is based on ultimate build-out within the City's boundaries according to the General Plan's Land Use Map (October 2012). This approach has been taken because the City has, for the most part, developed a significant portion of its available land. Less than 10 percent of developable parcels are still available for new development and the remaining vacant developable land is scattered throughout the City as fairly small parcels. As a result, the SDMP proposes improvements necessary to achieve desired storm drain performance goals as if the City were fully developed.

3.3 PROJECT COMPONENTS

The Milpitas SDMP is divided into different types of improvement projects throughout the City's storm drainage system. The type of improvement would vary from location to location and be designed based on by construction constraints, including available ROW and existing utilities. The types of improvements are listed in Table 1 and further described below.

Any proposed storm drainage system component would be designed in conformance with the City's standards. The SDMP includes design criteria for new collection systems that discharge into existing systems.

3.3.1 Pipeline Installation

To increase the pipeline storm drain system capacity, there are two types of proposed projects: installing new relief sewer pipelines parallel to existing pipelines; and replacing overloaded pipelines with larger diameter pipes in the same locations. The pipelines would be installed either in-street, or within utility corridors, City-owned parcels, or City easements (refer to Table 1). Construction would occur within open trenches using conventional cut and cover construction techniques or using trenchless microtunneling methods.

3.3.2 Outfalls

Each of the City's storm drainage collection systems discharges into one of Coyote Creek's tributaries, by either gravity or pumping. The proposed project would include the replacement of existing outfalls, installation of new outfalls, or new outfalls where none exists. The proposed outfall improvement locations are shown in Table 1. All outfall improvements would take place in engineered (concrete lined) channels. Outfalls to major drainage facilities would be equipped with properly maintained flap gates or other devices to prevent creek water from flowing back into the storm drains.

3.3.3 Pump Station Improvements

Some pump stations within the City do not have the pumping or storage capacity to account for runoff for the area tributary during a 100-year storm event. The proposed project would include on-site equipment upgrades or rehabilitation to four of the City's stormwater pumping stations noted in Table 1.

TABLE 1
PROPOSED MILPITAS STROM DRAIN MASTER PLAN IMPROVEMENTS

Project Name	Pipe Installation In-Street R.O.W.	Pipe Installation Off-Street Public R.O.W.	Replace Existing Outfall to Creek or Install New Outfall Near Existing	New Pipe Outfall to Creek Where None Exists	Creek Name / Location (All Locations at Engineered Channel)	On-Site Equipment Upgrade or Rehabilitation
Park View Drive SD Improvement	**X**	X				
Wool Drive SD Improvement	X					
Traughber Street SD Replacement	X	X				
Sycamore Drive SD Improvements	X					
Dempsey Road SD Relief	X		X		Los Coches Creek at Dempsey Road	
Edsel Drive SD Improvements	X		X		Los Coches Creek at Dempsey Road	
Spence Creek Pump Station Standby Power						X
Silvera Street SD Replacement		X				
Redwood Avenue Relief Drain	X					
Abbot Avenue Relief Drain	X					
Maple Avenue Relief Drain	X					
Chestnut Avenue Relief Drain	X					
Heath Street Relief Drain	X					
North Abel Street Relief Drain	X					
Vasona Street SD Improvement	X	X				
Lexington Street SD Improvements	X	X				
Coyote Street Relief Drain	X					
Wrigley Way SD Replacement	X	X	X		Berryessa Creek downstream from Piedmont Creek	
Jacklin Road Relief Drain	X		X		Outfall to ditch that parallels Interstate 680	
North Hillview Drive Relief Drain	X	X	X		Tularcitos Creek at North Hillview Drive	
Tramway Drive SD Improvement	X		X		Tularcitos Creek at Tramway Drive	
Fanyon Street SD Improvement	X					

TABLE 1
PROPOSED MILPITAS STROM DRAIN MASTER PLAN IMPROVEMENTS

Project Name	Pipe Installation In-Street R.O.W.	Pipe Installation Off-Street Public R.O.W.	Replace Existing Outfall to Creek or Install New Outfall Near Existing	New Pipe Outfall to Creek Where None Exists	Creek Name / Location (All Locations at Engineered Channel)	On-Site Equipment Upgrade or Rehabilitation
Temple Drive SD Improvement	X					
Calaveras Ridge Drive SD Improvement	X					
Calaveras Road Outfall Relocation	X			X	Los Coches Creek at Temple Drive	
Buckeye Court SD Replacement		X				
Cottonwood Drive SD Improvements	X					
Barber Lane SD Improvements	X					
McCarthy Blvd SD Improvements	X					
Murphy Ranch Road SD Improvement	X					
Sumac Drive SD Improvement	X					
North Milpitas Blvd SD Relief	X		X		Calera Creek at North Milpitas Boulevard	
Roswell/Canton SD Improvements	X					
Carnegie Drive SD Improvements	X					
South Main Street SD Improvements	X					
Carlo Street Relief Drain	X		X		Lower Penitencia Creek at Carlo Street	
Abbott Pump Station Improvement						X
Arizona Avenue Relief Drain	X					
Wilson Way SD Improvements	X	X				
Summerwind Way Relief Drain	X					
Milmont Drive Relief Drain	X					
Jergens Drive Relief Drain	X	X				
Connect Twin RCP Crossing at SVBX	X	X				
Vista Way Relief Drain	X		X		Piedmont Creek at Vista Way	
Falcato Drive Relief Drain	X					

TABLE 1
PROPOSED MILPITAS STROM DRAIN MASTER PLAN IMPROVEMENTS

Project Name	Pipe Installation In-Street R.O.W.	Pipe Installation Off-Street Public R.O.W.	Replace Existing Outfall to Creek or Install New Outfall Near Existing	New Pipe Outfall to Creek Where None Exists	Creek Name / Location (All Locations at Engineered Channel)	On-Site Equipment Upgrade or Rehabilitation
Watson Court Relief Drain	X		X		Lower Penitencia Creek at Montague Expressway	
Calaveras Ridge Drive SD Outfall	X	X		X	Ravine Adjacent to Country Club Drive	
Glasgow Court Relief Drain	X					
Loch Lomond Court Relief Drain	X					
Park Hill Drive SD Improvement	X					
Minnis Circle SD Replacement		X				
Minnis Pump Station Rehabilitation[1]						X
Lawton Drive SD Relief	X					
Montague Exwy SD Improvements	X					
Montague Exwy SD Improvements at Lower Penitencia Creek	X		X		Lower Penitencia Creek at Montague Expressway	
Tarob Court Outfall Relocation		X		X	East Penitencia Creek upstream from Montague Epwy.	
Lundy Place Relief Line	X					
West Capitol Avenue Relief Lines	X		X		Lower Penitencia Creek downstream Capitol Avenue	
Woodland Way SD Improvements	X					
Corning Avenue SD Improvements	X					
Junipero Drive Relief Drain	X		X		Lower Penitencia Creek between Corning Avenue and Serra Way	
South Abbott Avenue Relief Drain	X					
Rudyard Drive Relief Drain	X	X				
Gingerwood Drive Relief Drain	X					

TABLE 1
PROPOSED MILPITAS STROM DRAIN MASTER PLAN IMPROVEMENTS

Project Name	Pipe Installation In-Street R.O.W.	Pipe Installation Off-Street Public R.O.W.	Replace Existing Outfall to Creek or Install New Outfall Near Existing	New Pipe Outfall to Creek Where None Exists	Creek Name / Location (All Locations at Engineered Channel)	On-Site Equipment Upgrade or Rehabilitation
Berryessa Street Relief Drain	X					
South Park Victoria Drive Relief Drain	X					
Dempsey Road Relief Drain	X					
Los Pinos Avenue SD Improvement	X	X				
Tramway Drive Relief Drains	X					
Penitencia Pump Station[2]						X

Notes:
1 – This pump station would have an increase in discharge capacity for the 100-year runoff from its service area. However, this station pumps discharge to Calera Creek which is currently over-capacity, so the upgrade to this pump station cannot be undertaken until the SCVWD completes improvements to Calera Creek.
2 – This pump station would be replaced in-kind with a new pump station. There would be no capacity changes associated with the upgrades to this pump station.

3.3.4 Debris Basins

Sediment and debris contained in runoff that enters storm drain systems at the edge of the hillsides surrounding the City has been found to deposit within the storm drains as the topography flattens out toward the west portion of the City. The sediment- and debris-laden runoff is more easily carried within the steeper pipes and streets, but as the topographic gradient is reduced, the sediment and debris cannot be readily carried through the pipes and streets, is deposited, and can block storm drains. The proposed project would include debris basins and trash racks to better handle the sediment and debris loads, thereby improving this maintenance issue. The debris basins would be located in the non-native ruderal grassland (riparian and upland) land at the base of the hillsides along Evans Road, Piedmont Road, and Country Club Drive. While the debris basins would have relatively small footprints (a typical basin might occupy a space roughly 50 feet in each dimension), additional right-of-way from properties adjacent to these roads may be required to accommodate the drainage basins. These areas are presently used as open space ad grazing land. The project would also include inlet retrofits along these same roadways, which would consist of improvements to the existing inlets to reduce the amount of sediment and debris getting into the storm drain system.

3.3.5 General Maintenance

The storm drain and channel system cannot function properly if one of the components is plugged, and blocked inlets or pipes can cause flooding. The proposed project includes routine maintenance for the storm drain system to prevent malfunction of the system, especially during storm events (CEQA Guidelines § 15301(b)). Routine maintenance to be conducted can include, but is not limited to; inlet inspection and cleaning, storm drain pipe and engineered channel cleaning, detention basin dredging, pump and engine exercising, equipment lubrication, and motor/engine control testing. The City would determine the frequency and extent of the maintenance on a system-by-system basis.

3.3.6 Construction Schedule and Equipment

Construction activities for the proposed projects would typically occur within periodic activity peaks, requiring brief periods of significant effort followed by longer periods of reduced activities. Construction within or adjacent to existing streets may require temporary lane closures and traffic control. Construction activities associated with outfall replacement/placement would take place during the summer (dry) season. Construction equipment used for the proposed project would likely include, but is not limited to, scrapers, bulldozers, backhoe loaders, concrete trucks, cranes, pile driving equipment and asphalt/paving/concrete equipment.

3.3.7 Staging Areas

Staging areas for storage of pipe, construction equipment, and other materials would be located in existing developed areas and at locations that would minimize hauling distances and long-term disruption. The proposed staging areas for construction materials and equipment would be located within the portion of the roadway ROW between the ditch lines, curb lines, or toe of fills. The City would confirm designated areas for staging for the Contractor's use.

3.4 PROPERTY AND EASEMENT ACQUISITIONS

The proposed project would take place entirely within the existing City ROW; additional property or easement acquisitions would not be required.

3.5 PERMITS AND APPROVALS

It is anticipated that the project may require the following permits and/or approvals prior to construction. Only work within stream channels would require permits from the U.S. Army Corps of Engineers (USACE), the RWQCB, and/or California Department of Fish and Wildlife (CDFW). Additional local approvals and regulatory permits may also be required.

Agency	Type of Approval
U.S. Army Corps of Engineers (ACOE)	Section 404
Regional Water Quality Control Board (RWQCB)	Section 401 and/or Waste Discharge Requirement
California Department of Fish and Wildlife (CDFW)	Streambed Alteration Agreement
Santa Clara Valley Water District (SCVWD)	Encroachment Permit
City of Milpitas	Encroachment Permit and Tree Removal Permit
PG&E	Utility Relocation Agreement
Caltrans	Encroachment Permit
Kinder-Morgan	Utility Relocation Agreement
Public Utility Commission (PUC)	Encroachment Permit
AT&T	Utility Relocation Agreement

3.6 USES OF THE INITIAL STUDY

This IS would be used to obtain a Mitigated Negative Declaration (MND) for the proposed project, which determines that with the implementation of mitigation and standard measures identified, the project would not have a significant effect on the environment. The MND would be used to obtain the necessary permits and/or approvals for the proposed project.

4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND DISCUSSION OF IMPACTS

This section describes the existing environmental conditions on and near the subject site, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the CEQA Guidelines, was used to identify environmental impacts that could occur if the proposed project is implemented. The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of the checklist. This section identifies environmental impacts from the project and an explanation for those impacts determined to be less than significant. Mitigation measures are identified and described for all significant impacts and evaluated briefly for the expected effectiveness/feasibility of these measures, where necessary.

4.1 AESTHETICS

4.1.1 Setting

The project is located within the City of Milpitas. The City lies at the base of the Diablo Range and encompasses approximately 18 square miles; approximately 13 square miles of this area represents the incorporated portion of the City.[1]

The City of Milpitas is primarily an urban community, developed with a mix of residential, commercial, and industrial uses within two distinct sub areas of the City; approximately 10.1 square miles of valley floor, and approximately 3.5 square miles of hillside. The relatively flat valley floor occupies the western half of the City, and extends from Coyote Creek in the west to Piedmont Road, Evans Road and the northerly portion of North Park Victoria Drive in the east. The entire valley floor is within the City's incorporated limits and is almost fully urbanized with man-made features and streetscapes. The only open space areas within the valley floor are adjacent to Coyote Creek. The hillside occupies the eastern half of the City. This area is much steeper than the valley floor and is characterized by open space, including a golf course, and some scattered pockets of residential development.

The distinctive rolling hills of the Diablo Range to the east and the tree-lined Coyote Creek corridor to the west constitute scenic resources within the City. Monument Peak, the most prominent summit in the eastern Milpitas hills, is one of the oldest and most well-known symbols of the City. It currently has a broadcasting antenna which provides several television channels to the San Francisco Bay Area. The City's General Plan establishes a network of scenic routes within the City, which are streets or corridors that pass through an area of scenic value, provide efficient connections between such areas, or provide distant views of scenic resources.

4.1.2 Environmental Checklist and Discussion of Impacts

AESTHETICS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	1,2
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	1,2
3) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	1,2

[1] City of Milpitas. 2010. *Milpitas General Plan*. October 2010.

AESTHETICS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐	1,2

4.1.2.1 *Scenic Views and Visual Character*

Construction of the proposed project would be visible from nearby land uses and would involve short-term negative aesthetic affects, including open trenches for pipeline installation, as well as the presence of construction equipment and materials. Because construction impacts would be temporary, they are considered to be less than significant.

Once built, the storm drain pipeline would be buried underground and not visible. The outfalls would be placed nearby an existing outfall location, or within an existing engineered channel. The visual character of the proposed pipeline alignments and outfall locations would be the same before and after construction of the proposed project. Operation and maintenance of the proposed project would not affect any visual resources within the City.

4.1.2.2 *Light and Glare*

There would be no lighting associated with the proposed project. Therefore, the project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. If nighttime construction is required, construction crews working at night would direct any artificial lighting onto the work area to minimize the spillover of light or glare onto adjacent areas.

4.1.2.3 *Impacts to Scenic Vistas*

The project does not include erecting structures that would block any scenic views. Because the proposed pipeline would be placed below grade and the outfalls would be placed within existing engineered channels at locations that are minimally visible to the public, it is not expected that the proposed project would substantially degrade existing views of the area.

4.1.3 <u>Conclusion</u>

Implementation of the proposed project would not substantially change the visual character and quality of the site and would not result in significant visual or aesthetic impacts**. [Less Than Significant Impact]**

4.2 AGRICULTURAL AND FORESTRY RESOURCES

4.2.1 Setting

The Santa Clara County Important Farmlands Map (2010) depicts that there is no farmland of statewide importance in the City of Milpitas. However, within the City limits, prime farmland exists between N. McCarthy Boulevard and Coyote Creek, north of State Route 237. A small part of this area along Coyote Creek is used for growing a variety of truck and field crops that include wheat, walnuts, grapes, and apricots.[2]

4.2.2 Environmental Checklist and Discussion of Impacts

AGRICULTURAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) 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?	☐	☐	☐	☒	1,2,5
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	1,2
3) 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 Codes section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒	1,2,3
4) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1,2
5) 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?	☐	☐	☐	☒	1,2

[2] City of Milpitas. 2010. *Milpitas General Plan*. October 2010.

4.2.2.1 *Impacts to Agricultural Lands*

The surrounding areas for the proposed pipeline and outfall improvement locations are fully developed with urban uses, and the proposed project would not result in or induce the conversion of farmland or forest land to non-agricultural or non-forest uses. For these reasons, the proposed project would not result in a loss of agricultural or forestry land or impacts to agricultural or forestry resources.

4.2.3 Conclusion

The proposed project would not result in a loss of agricultural or forestry land, or impacts to agricultural or forestry resources. **[No Impact]**

4.3 AIR QUALITY

4.3.1 Setting

The project is located in the San Francisco Bay Area Air Basin within the Santa Clara Valley. The climate is affected by its proximity to both the Pacific Ocean and the Bay, which has a moderating influence. The Bay Area is considered to be one of the cleanest metropolitan areas in the country with respect to air quality. However, the air pollution potential of the Santa Clara Valley is high. The Valley has a large population and the largest complex of mobile sources making it a major source of particulate and photochemical air pollution. In addition, photochemical precursors from San Francisco, San Mateo, and Alameda counties can be carried along by the prevailing winds to the Santa Clara Valley making it a major ozone receptor. Geographically, the Valley tends to channel pollutants to the southeast with its northwest/southeast orientation, and concentrate pollutants by its narrowing to the southeast. Meteorologically, on high-ozone low-inversion summer days, the pollutants can be recirculated by the prevailing north-westerly winds in the afternoon and the light winds in the late evening and early morning, increasing the impact of emissions significantly.

The ambient air quality in a given area depends on the quantities of pollutants emitted within the area, transport of pollutants to and from surrounding areas, local and regional meteorological conditions, as well as the surrounding topography of the air basin. Air quality is described by the concentration of various pollutants in the atmosphere. Units of concentration are generally expressed in parts per million (ppm) or micrograms per cubic meter (µg/m3).

4.3.1.1 *Regulatory Overview*

As required by the Federal Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for six major air pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter including respirable particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$), sulfur oxides, and lead. Pursuant to the California Clean Air Act, the State of California has established the California Ambient Air Quality Standards (CAAQS). The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation, and other aspects of the general welfare. CAAQS are generally the same or more stringent than NAAQS. Thus, CAAQS are used as the comparative standard in analyses, except for the 1-hour NO_2 standard where both the NAAQS and CAAQS standards are evaluated.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor exhaust. Cars and trucks release at least forty different TACs. The most important, in terms of health risk, are diesel particulate, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to TACs can result from emissions from normal operations as well as accidental releases.

The California Air Resources Board (CARB) coordinates and oversees both state and federal air quality control programs in California. The CARB establishes state air quality standards, monitors existing air quality, limits allowable emissions from mobile and stationary sources, and is responsible for developing the State Implementation Plan (SIP). The CARB has divided the state into many single and multi-county air basins. The City of Milpitas is located in Santa Clara County and this area is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) in the San Francisco Air Basin.

On September 15, 2010, the BAAQMD adopted the Bay Area 2010 Clean Air Plan, which serves to update the Bay Area ozone plan (2005 Ozone Strategy) to comply with state air quality planning requirements to include all feasible measures to reduce emissions of ozone precursors. The Bay Area 2010 Clean Air Plan also provides an integrated, multi-pollutant strategy to improve air quality, protect public health, and protect the climate. The Bay Area 2010 Clean Air Plan includes 55 measures for reducing pollution, including stationary source measures, mobile source measures, transportation control measures, land use and local impact measures, and energy and climate measures.

BAAQMD CEQA Guidelines

In December 2010, the California Building Industry Association (BIA) filed a lawsuit in Alameda County Superior Court challenging toxic air contaminants (TACs) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$) thresholds adopted by the BAAQMD in its 2010 CEQA Air Quality Guidelines (*California Building Industry Association v. Bay Area Air Quality Management District, Alameda County Superior Court Case No. RG10548693*). One of the identified concerns is inhibiting infill and smart growth in the urbanized Bay Area. On March 5, 2012, the Superior Court found that the adoption of thresholds by the BAAQMD in its CEQA Air Quality Guidelines is a CEQA project and BAAQMD is not to disseminate officially sanctioned air quality thresholds of significance until BAAQMD fully complies with CEQA. No further findings or rulings on the thresholds in the BAAQMD CEQA Air Quality Guidelines were made.

The City understands the effect of the lawsuit to be that BAAQMD may eventually prepare an environmental review document before BAAQMD adopts the same or revised thresholds. However, the ruling in the case does not equate to a finding that the quantitative metrics in the BAAQMD thresholds are incorrect or unreliable for meeting goals in the Bay Area 2010 Clean Air Plan. Moreover, the determination of whether a project may have a significant effect on the environment is subject to the discretion of each Lead Agency, based upon substantial evidence. Notwithstanding the BIA lawsuit, which has no binding or preclusive effect on the City of Milpitas's discretion to decide on the appropriate thresholds to use for determining the significance of air quality impacts, the City has carefully considered the thresholds previously prepared by BAAQMD and regards the thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. Evidence supporting these thresholds has been presented in the following documents:

- BAAQMD. *Thresholds Options and Justification Report*. 2009.
- BAAQMD. *CEQA Air Quality Guidelines*. May 2011. (Appendix D)
- California Air Pollution Control Officers Association (CAPCOA). *Health Risk Assessments for Proposed Land Use Projects*. 2009.
- California Environmental Protection Agency, California Air Resources Board (CARB). *Air*

Quality and Land Use Handbook: A Community Health Perspective. 2005.

The analysis in this IS is based upon the general methodologies in the most recent BAAQMD CEQA Air Quality Guidelines (dated May 2012) and numeric thresholds for the San Francisco Bay Basin.

4.3.1.2 *Existing Air Quality*

The BAAQMD monitors air quality conditions at 31 locations throughout the Bay Area. The nearest air monitoring station to the project area is the San Jose Central Monitoring Station. The latest published four year period of monitoring and highest air pollutant concentrations measured for this station is from 2008 through 2011. Ozone concentrations exceeded the 8-hour NAAQS two times in 2008 and three times in 2010. Ozone concentrations exceeded the state 1-hour standard two times in 2008, five times in 2010, and once in 2011. The state 8-hour ozone standard was exceeded five times in 2008, three times in 2010, and once in 2011. The state PM_{10} standard was exceeded once in 2008. The federal $PM_{2.5}$ standard was exceeded five times in 2008, and three times each in 2010 and 2011.

The project is located in an area which experiences violations of federal and state air quality standards on various occasions each year. Specifically, the San Francisco Bay Area experiences violations of standards for ozone and particulates. The number of violations per year varies due to meteorological conditions. The region is, however, in attainment with regard to carbon monoxide.

4.3.1.3 *Sensitive Receptors*

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as "sensitive receptors". Locations that may contain a high concentration of these sensitive population groups within the City include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

4.3.2 <u>Environmental Checklist and Discussion</u>

AIR QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	1,2
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	1,2

AIR QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☒	☐	1,2
4) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	1,2
5) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒	1,2

4.3.2.1 *Long-term Regional and Local Impacts*

The proposed project involves the installation of storm drain pipelines and outfall improvements, and would not increase long-term traffic within the project area. The proposed project would not result in significant local or regional long-term air quality impacts, since it would not generate additional permanent vehicle trips within the project area.

4.3.2.2 *Short-term Air Quality Impacts*

Construction-Related Pollutant Emissions

Construction activities associated with the proposed project would generate pollutant emissions from the following construction activities: (1) site preparation; (2) construction workers traveling to and from construction sites; (3) delivery of construction supplies to construction sites and hauling of debris from construction sites; and (4) fuel combustion by on-site construction equipment. These construction activities would create dust and exhaust emissions from equipment and vehicles. PM_{10}, $PM_{2.5}$, and diesel exhaust would be the pollutants of greatest concern. Construction activities would temporarily affect local air quality, causing a temporary increase in particulate dust and other emissions, which may result in temporary nuisances to the adjacent land uses.

Standard measures are included in the project to avoid or reduce short-term construction related impacts to a less than significant level.

Standard Measures: The project includes the following measures during all phases of construction to minimize emissions and fugitive dust:

- Water all active construction areas at least twice daily and more often during windy periods to prevent visible dust from leaving the site. Active areas adjacent to existing land uses shall be kept damp at all times or shall be treated with non-toxic stabilizers or dust palliatives.

- Notify residents in the vicinity that could be affected by project grading sufficiently prior to construction activities. A construction monitor will be appointed to respond to questions and complaints and will take corrective action within 48 hours.

- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two (2) feet of freeboard.

- Apply water at least three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.

- Sweep daily (or more often if necessary) to prevent visible dust from leaving the construction areas (preferably with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality.

- Sweep streets daily, or more often if necessary (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.

- Hydroseed or apply (non-toxic) soil stabilizers to inactivate construction areas (previously graded areas inactive for 10 days or more).

- Enclose, cover, and/or water at least twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.) to prevent visible dust from leaving the site.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

- Replant vegetation in disturbed areas as quickly as possible.

Odors

Construction activities could produce occasional odors from diesel equipment exhaust. However, the proposed project would be of short duration and these potential odors are not expected to frequently or significantly affect local populations.

4.3.3 Conclusion

The proposed project would not result in long-term local or regional air quality impacts. Short-term, construction-related air quality impacts would not be significant with implementation of dust and emission control measures included in the project. **[Less than Significant Impact]**

4.4 BIOLOGICAL RESOURCES

4.4.1 Setting

4.4.1.1 *Existing Habitat*

The majority of the City of Milpitas is built out with developed and landscaped areas. Developed hardscape includes all paved surfaces including road surfaces, parking lots, buildings, and sidewalks. The landscaped areas support a variety of intentionally planted and maintained ornamental plantings and few native species. The bulk of the developed area provides little habitat for most wildlife. Many common bird species may forage in the trees and shrubs within the City. Year-round resident birds are expected to nest in the landscape vegetation in low numbers. Common mammals such as eastern grey squirrels and black rats use the landscape vegetation and non-native ruderal grassland (riparian and upland) at the base of the hillsides for nesting and foraging. Common bats may utilize landscape trees as night roosts and occasional day roosts. Occasional common amphibians may utilize the creek channels within the City and aquatic foraging birds may occasionally forage in the creek channels when flowing.

The project site is not part of an adopted habitat conservation plan or within the area covered by the draft Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan currently being prepared by local, state, and federal agencies.

4.4.1.2 *Special-Status Species*

An October 2010 search of the California Natural Diversity Data Base (CNDDB) for the Milpitas General Plan update identified special status species within the City, listed below in Table 4.4-1. These species are typically found in riparian, marshland, ruderal grasslands, and woodland habitats and not within the urban areas of the City.

TABLE 4.4-1
SPECIAL STATUS SPECIES WITHIN THE CITY OF MILPITAS

Species	Federal Status	CA State Status	CA Department of Fish and Wildlife Status
California Tiger Salamander	Threatened	Threatened	--
California Red-legged Frog	Threatened	--	--
California Clapper Rail	Endangered	Endangered	--
Western Snowy Plover	Threatened	--	--
Salt-marsh Harvest Mouse	Endangered	Endangered	--
Vernal Pool Tadpole Shrimp	Endangered	--	--
Steelhead – Central California Coast	Threatened	--	--
Alameda Whipsnake	Threatened	Threatened	--
White Tail Kite			Fully Protected
Golden Eagle			Fully Protected & Watch List
Burrowing Owl			Species of Special Concern
Salt-marsh Common Yellowthroat			Species of Special Concern
Alameda Song Sparrow			Species of Special Concern

TABLE 4.4-1 SPECIAL STATUS SPECIES WITHIN THE CITY OF MILPITAS			
Species	**Federal Status**	**CA State Status**	**CA Department of Fish and Wildlife Status**
Tricolored Blackbird			Species of Special Concern
Foothill Yellow-legged Frog			Species of Special Concern
Townsend's Big-eared Bat			Species of Special Concern
Alkali milk-vetch	None; Plant rare, threatened, or endangered in CA and elsewhere, but more common elsewhere.		
California seablite	Endangered		
Contra Costa goldfieds	Endangered		
Robust Spineflower	Endangered		
Source: City of Milpitas. 2010. *Milpitas General Plan, Chapter 4, Open Space & Environmental Conservation Element*. October 2010.			

4.4.1.3 *Regulatory Setting*

City of Milpitas General Plan Conservation Policies

The following Open Space & Environmental Conservation Guiding Principles and Implementing Policies in the City of Milpitas General Plan are for protection of biotic resources within the City.

Principle 4.b-G-1	Protect and conserve open spaces which are necessary for wildlife habitats and unique ecological patterns.
Principle 4.b-G-2	Preserve and protect populations and supporting habitat of special status species within the Planning Area, including species that are state or federally-listed as Rare, Threatened, or Endangered, all federal "candidate" species for listing and other species proposed for listing, and all California Species of Special Concern.
Policy 4.b-I-1	Strictly enforce grading regulations controlling removal of vegetative cover from hillside areas.
Policy 4.b-I-2	Preserve remaining stands of trees.
Policy 4.b-I-3	Recreation use of essentially virgin areas should be centered around activities which have a minimally disruptive effect on natural vegetation.
Policy 4.b-I-4	Require a biological assessment of any project site where sensitive species are present, or where habitats that support known sensitive species are present.
Policy 4.b-I-5	Utilize sensitive species information acquired through biological assessments, project land use, planning and design.

City of Milpitas Code

According to City Code Title X Streets and Sidewalks, Chapter 2 Tree Maintenance and Protection, Section 7 Tree Protection and Heritage Tree Program, trees protected in the City include:

- All trees which have a 56-inch or greater circumference of any trunk measured 4 ½ feet from the ground and located on developed residential property.

- All trees which have a 37-inch or greater circumference of any trunk measured 4 ½ feet from the ground and located on developed commercial or industrial property.

- All trees which have a 37-inch or greater circumference of any trunk measured 4 ½ feet from the ground, when removal relates to any transaction for which zoning approval or subdivision approval is required.

- Any tree existing at the time of a zoning or subdivision approval and was a specific subject of such approval or otherwise covered by subsection (b) above.

- All trees which have a 37-inch or greater circumference of any trunk measured 4 ½ feet from the ground and located on a vacant, undeveloped or underdeveloped property.

- All heritage trees or groves of trees.

In accordance with City Code Title X Streets and Sidewalks, Chapter 2 Tree Maintenance and Protection, Section 9 Replacement or Compensation, reimbursement/recovery for impacts to trees shall include the following:

- Reimbursement to the City for the full costs of time and materials to prune, remove and/or replace trees within the public right-of-way or tree planting easements;

- Reimbursement to the City for the value of the removed or damaged tree as determined by an arborist certified by the International Society of Arboriculture utilizing the current edition of the "Guide for Plant Appraisal, International Society of Arboriculture"; or

- A combination of the above terms as determined by the Public Works Director.

4.4.2 Environmental Checklist and Discussion

BIOLOGICAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) 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?	☐	☒	☐	☐	1,2
2) 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?	☐	☒	☐	☐	1,2
3) 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?	☐	☒	☐	☐	1,2
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☒	☐	☐	1,2
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐	1,2
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	1,2

4.4.2.1 *Developed and Landscaped Habitat Impacts*

Project-related impacts that would occur to the developed and landscaped habitats along the proposed storm drain alignment routes include impacts related to grading and excavation to dig the pipeline trench, vehicle movement and compaction on staging areas, and construction access to all areas. Impacts to developed habitat would not cause loss of any natural habitat, only changes to the structure of developed and landscaped areas. Developed and landscaped habitats such as those occurring along the storm drain line routes in the City are common in the project region and elsewhere in Santa Clara County, as well as along the Bay. Wildlife species that may use developed areas for breeding or foraging have access to ample, similar habitat in adjacent areas that will not be affected by construction. Therefore, impacts to developed habitats are not considered significant.

4.4.2.2 *Impacts to Common Wildlife Species*

A number of common, urban-tolerant wildlife species are likely to utilize the project area, particularly in the open space areas, for foraging, shelter, or nesting. Common terrestrial wildlife species such as birds and mammals could be impacted by project construction activities including concrete cutting and trenching. Impacts could occur through direct mortalities of individuals, loss of nests, and loss of habitat. These species all have robust populations, and the relatively small number of individuals that may potentially suffer mortality as a result of project activities would not have a substantial effect on regional populations. Likewise, the amount of habitat expected to be lost as a result of project activities is a very small fraction of the total habitat available to these species regionally, and thus the project is not expected to have a significant impact on common wildlife populations.

4.4.2.3 *Impacts to Non-native Rural Grassland (Riparian and Upland)*

Upland non-native ruderal grassland habitat types are abundant and widespread regionally and are not ecologically sensitive. The non-native ruderal grassland vegetation is dominated by plants that are well adapted to the region's climate and can rapidly reproduce in the absence of supplemental water. This habitat is not of suitable quality to support special status plant species. The wildlife species associated with these upland habitats are likewise locally and regionally abundant, and are not sensitive to localized losses of foraging or breeding habitat. Therefore, impacts to these upland habitats, and the loss of potential wildlife foraging opportunities associated with these habitats, are not considered significant.

Project-related impacts that would occur to the riparian non-native annual grassland habitat at the proposed locations for the debris basins include impacts related to grading and excavation for the debris basin, vehicle movement and compaction on staging areas, and construction access to all areas. Such impacts are potentially significant because these riparian areas may contain habitat for special-status plant and wildlife species, including wetlands. The loss of this habitat would be a significant impact.

IMPACT BIO-1: Construction activities for the debris basins could result in the degradation of riparian habitat for special-status plant and wildlife species. **(Significant Impact)**

Project Specific Mitigation Measures: The following mitigation measures will be implemented to reduce impacts to riparian habitats:

MM BIO-1.1: The project will be subject to individual biological resource surveys completed by qualified biologists at each debris basin location to determine the presence of special status species and/or habitat and potential impacts. If significant biological resource impacts are identified, the biological resource surveys will include mitigation measures that shall be implemented to reduce these impacts, as necessary.

4.4.2.4 Impacts to Aquatic Habitat

Construction activities for outfall improvements may result in impacts to water quality by introducing sediment or other contaminants into the engineered channels at the proposed outfall locations. Such impacts are potentially significant because these channels may contain habitat for special-status plant and wildlife species, including wetlands. In addition, the channels drain into downstream sensitive aquatic and wetland habitats, and the San Francisco Bay, all of which provide habitat for several special-status plant and wildlife species. The loss of this habitat would also be a significant impact.

IMPACT BIO-2: Construction activities for outfall improvements could result in the degradation of aquatic habitat for special-status plant and wildlife species. **(Significant Impact)**

Project Specific Mitigation Measures: The following mitigation measures will be implemented to reduce impacts to aquatic habitats:

MM BIO-2.1: Once the proposed outfall improvements are identified, the project will be subject to individual biological resource surveys completed by qualified biologists at each outfall location to determine the presence of special status species and/or habitat and potential impacts. If significant biological resource impacts are identified, the biological resource surveys will include mitigation measures that shall be implemented to reduce these impacts, as necessary. Mitigation measures could include at least the following:

- To minimize impacts to aquatic species, construction within the channels would be restricted to the dry season.
- No construction-related or earthen material will be allowed to enter into or be placed where it may be washed by rainfall or runoff into the channels.
- To protect water quality in the channels, the project would conform to the California Stormwater Quality Association's Stormwater Best Management Practice (BMP) Handbook for New and Redevelopment. Implementation of the water quality protection BMPs, including

installation of silt fencing between the project and the creek, would prevent adverse impacts to water quality in the creek and minimize potential impacts to aquatic species.

- Regulatory agency permits may also be required for projects within the creek channel. Agencies with potential regulatory authority include ACOE, RWQCB, CDFW, and the SCVWD. All of the conditions of the regulatory permits shall be implemented as part of the project.

4.4.2.5 *Impacts to Special-Status Species*

Raptors (birds of prey) could use the large trees surrounding the pipeline alignment or outfall location areas for nesting or as a roost. Raptors are protected by the Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703, et seq.) and California Department of Fish and Wildlife (CDFW) Code Sections 3503, 3503.5, and 2800. Construction disturbance near raptor nests can result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment in the trees adjacent to the northern boundary of the project site. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFW. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact.

IMPACT BIO-3: Construction activities associated with the proposed project could result in the loss of fertile eggs, nesting raptors, or other migratory birds, or nest abandonment. **(Significant Impact)**

Project Specific Mitigation Measures: The following mitigation measures will be implemented during construction to avoid abandonment of raptor and other protected migratory birds nests:

MM BIO-3.1: Construction activities shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February through August.

MM BIO-3.2: If it is not possible to schedule construction between September and January, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). During this survey, the ornithologist will inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the CDFW shall be notified of the survey results prior to any ground disturbing activity. Avoidance measures will be developed through consultation with CDFW on a case-by-case basis. These could include construction buffer areas or seasonal avoidance.

4.4.2.6 *Impacts to Trees*

Construction staging and activities could result in damage to the root zones of trees surrounding the pipeline alignment or outfall location areas. Damage to ordinance-sized trees would conflict with local policies and therefore, would constitute a significant impact. Prior to implementation of the proposed pipeline and outfall improvements, the project will be subject to a tree survey to determine the presence of ordinance-size trees per the City code. If ordinance-size trees are identified, the project will include the following standard measures, consistent with City code, to address impacts to trees:

Standard Measures:

- *Protect/Preserve Heritage Trees During Construction.* The City shall require that a project's site design reflects every reasonable effort to preserve existing trees, including the development of conditions to protect heritage trees during construction. Heritage trees shall be trimmed, pruned, or removed only when it is demonstrated that preservation of these trees would result in an unreasonable solution for the proposed use or where a condition of hazard or danger of disease exists.

- *Inventory any Trees to be Removed prior to Construction*. Prior to implementing the improvements, the number of ordinance-size trees that would be removed shall be evaluated on the basis of species, size, condition, location, and heritage tree criteria. Condition and location value of trees shall be determined by an arborist or landscape architect.

- *Replace with New Trees.* If trees must be removed, they shall be replaced with new trees. The replacement tree size shall be determined in accordance with the City Code Title X Streets and Sidewalks, Chapter 2 Tree Maintenance and Protection, Section 9 Replacement or Compensation.

4.4.3 Conclusions

The construction of storm drain improvements in developed and landscaped habitats would not result in significant impacts with implementation of the above described mitigation measures.

Outfall improvements may result in significant impacts related to water quality and the loss of habitat. Mitigation measures will be determined once the project locations are identified to reduce impacts to a less than significant level.

[Less Than Significant Impact with Mitigation]

4.5 CULTURAL RESOURCES

4.5.1 Setting

4.5.1.1 *Archaeological Resources*

The lands now occupied by the City of Milpitas were once a part of the home territory of the Tamyen tribelet of Costanoan (Ohlone) Indians. Two notable Costanoan village sites lay within the City limits of Milpitas.[3] A huge shellmound that is located near the present-day Elmwood Correctional Facility on South Abel Street, was discovered in 1949 and dates back to the eighteenth century. The other village site is located on the Jose Maria Alviso Adobe property near the corner of Calaveras Road and Piedmont Road. This village is at least 3,000 years old and one of only a handful of archaeological sites in California with such a long history of continuous occupation.

4.5.1.2 *Historic Resources*

The City's present-day origins can be traced to the presence of Spaniards in the South Bay in the latter part of the 18th century. In the mid-19th century, the area was a stopover-point for travelers between Sutter Fort and San Jose. By the late 1850s, a stage line was operating between San Jose and Oakland with stops in the City. In the latter part of the 19th century, the City emerged as a marketing center for farmers widely scattered along the plains and the hills. The Southern Pacific Railroad ran a line from Stockton to San Jose reaching the City in 1869, which led to initiation of new commercial enterprises and consolidation of the Citys' position as an important shipping point of the rapidly farmanizing valley. In 1920s, construction of the San Jose branch of the Western Pacific Railroad gave the community access to a second rail line.

Currently, there are fifteen sites within the City that are officially designated and locally registered as Milpitas Cultural Resources (refer to Table 4.5-1). The Jose Maria Alviso Adobe and Milpitas Grammar School are included in the National Register of Historic Places (NRHP). The two adobes listed are also eligible for the States' Historic Landmark or Point of Historical Interest status.

TABLE 4.5-1
CITY OF MILPITAS DESIGNATED CULTURAL RESOURCES

Site	Locally Registered	Nationally Registered
Jose Higera Adobe	X	
Cactus hedge	X	
Jose Maria Alviso Adobe	X	X
Milpitas Hotel (1857) and Fat Boy Restaurant (1924)	X	
Bellew-McCarthy Ranchstead Site	X	
Shaughnessy-Murphy Ranchstead Site	X	
Old St. Johns Church Site	X	
Curtner House (Weller Estate)	X	
Milpitas Grammar School	X	X

[3] City of Milpitas. 2010. *Milpitas General Plan, Chapter 4, Open Space & Environmental Conservation Element*. October 2010.

TABLE 4.5-1 CITY OF MILPITAS DESIGNATED CULTURAL RESOURCES		
Site	**Locally Registered**	**Nationally Registered**
Smith's Corner	X	
Dr. Smith House (Devries Home)	X	
Winsor Blacksmith Shop	X	
Barber House	X	
O'toole Elms Site	X	
Winsor Tank House	X	
Source: City of Milpitas. 2010. *Milpitas General Plan, Chapter 4, Open Space & Environmental Conservation Element*. October 2010.		

4.5.2 Environmental Checklist and Discussion

CULTURAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	☐	☐	☐	☒	1,2
2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☒	☐	☐	1,2
3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☒	☐	☐	1,2
4) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	1,2

4.5.2.1 *Impacts to Archaeological Resources*

The proposed pipeline alignment and outfall locations do not contain any known archaeological resources, but given that the project is within an area that contains known resources, there is potential for unanticipated cultural resources to be encountered during project construction activities.

Impact CUL-1: Construction activities could disturb unknown buried archaeological resources. (**Significant Impact**)

Project Specific Mitigation Measures: The proposed project will include the following mitigation measures to avoid or reduce impacts to cultural resources:

MM CUL–1.1: In the event of the inadvertent exposure of prehistoric or historic cultural resources during construction, all work within 25 feet of the discovery shall be stopped to allow for the identification and evaluation of the significance of

the cultural materials by a qualified archaeologist meeting the Secretary of the Interior's standards (CEQA Guideline 15064.5(f)). If the cultural materials are determined to be significant, a qualified archaeologist shall develop an appropriate treatment plan in consultation with the City's Environmental Planner to mitigate impacts to materials to a less than significant impact. The plan could include avoidance and preservation measures to preserve the materials in place; scientific collection and analysis; preparation of a professional report in accordance with current professional standards; and/or, professional museum curation of collected cultural materials and resource documentation.

MM CUL-1.2: The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity within the project area shall comply with applicable State laws. Pursuant to Section 7050.5 of the California Health and Safety Code, and California Public Resources Code (PRC) Section 5097.94, in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Medical Examiner shall be immediately notified and shall make a determination as to whether the remains are Native American.

In the event of the coroner's determination that the human remains are Native American, notification of the Native American Heritage Commission (NAHC), is required who shall appoint a Most Likely Descendant (MLD) (PRC Section 5097.98). The archaeological consultant, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. California Public Resources Code allows 48 hours to reach agreement on these matters. If the MLD and the other parties do not agree on the reburial method, the project will follow PRC Section 5097.98(b) which states that ". . . the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance."

With implementation of these measures, construction of the proposed project would have a less than significant impact on archaeological resources.

4.5.2.2 *Impacts to Historic Resources*

The proposed pipeline and outfall improvement locations do not contain any historic properties or districts that are listed or eligible for inclusion in the NRHP or the California Register of Historic Resources. Therefore, there is a low potential of impacting historic-period resources during construction.

4.5.2.3 *Impacts to Paleontological Resources*

Geology of the project area consists of alluvial fan deposits of the Quaternary age. Geologic units of the Quaternary age are generally not considered sensitive for paleontological resources, because biological remains younger than 10,000 years are not usually considered fossils. Therefore, it is highly unlikely that the project area contains any paleontological resources.

4.5.3 Conclusion

Implementation of the proposed project would not result in any impacts to historic or paleontological resources. Inclusion of the mitigation measures would reduce potential impacts to unknown buried archaeological resources during construction to a less than significant level. **[Less Than Significant Impact with Mitigation]**

4.6 GEOLOGY AND SOILS

4.6.1 Setting

4.6.1.1 *Geological Features*

The project site is located in the Santa Clara Valley between the Santa Cruz Mountains to the west and Diablo/Mount Hamilton Range to the east. The Santa Clara Valley trends north to south and is typified by flat, mostly urbanized terrain cut by northward-draining rivers and creeks. The topography of the project area is mostly flat and slopes gently to the northwest towards the Bay.

The Santa Clara Valley is located within the Coast Ranges geomorphic province of California; an area characterized by northwest-trending ridges and valleys, underlain by strongly deformed sedimentary and metamorphic rocks of the Franciscan Complex. The Santa Clara Valley consists of a large structural basin containing alluvial deposits derived from the surrounding mountain ranges. Alluvial deposits are interbedded with bay and lacustrine (lake) deposits in the north-central region.

4.6.1.2 *Geologic Conditions*

Soils

The slopes and small valleys of the City are blanketed by organic-material rich colluvial soil, which has moved downslope and accumulated on lower slopes and in canyon bottoms. All of the bedrock formations produce colluvial soil, which may be as thick as 15 feet on the valley floor. Residual soils are generally silty and sandy clay, less than two feet thick, and highly expansive. The relatively flat, valley floor of the City is underlain by alluvial soil of Quaternary age. This soil consists of interlayered, poorly sorted gravel, sand, silt, and clay deposited by water. The thickness of the alluvial soil increases westward from zero at the base of the hillside to 1,000 feet or more at the western edge of the City.[4] Because soil composition varies vertically as well as laterally, several soil types may underlie different sites within the City.

Seismicity and Seismic Hazards

The project area is located in the seismically-active Santa Clara County, which is designated as Seismic Activity Zone 4 (most seismically-active zone in the United States) by the Uniform Building Code. The faults in the region are capable of generating earthquakes of magnitude 7.0 or higher on the Richter scale. Therefore, it is expected that earthquakes in the region could produce very strong ground shaking in the project area during the life of the proposed project.

The hillside portion of the City is located within an Earthquake Fault Zone as defined and mapped under the Alquist-Priolo Earthquake Fault Zoning Act.[5,6] The project area is located on nearly flat

[4] City of Milpitas. 2010. *Milpitas General Plan, Chapter 5, Seismic and Safety Element*. October 2010.
[5] CA State Department of Conservation. Regulatory Maps. Milpitas Revised Official Map, Effective January 1, 1982. Accessed April 22, 2013. Available at: http://gmw.consrv.ca.gov/shmp/download/quad/MILPITAS/maps/MILPITAS.PDF

terrain and is not identified on any California Geological Survey Seismic Hazard Zone maps as being potentially susceptible to earthquake-induced landslides.[7]

The three active faults with the greatest potential for ground shaking within the City are the San Andreas, Hayward, and Calaveras faults. The Hayward fault trends northwestward through the western portion of the City foothills. The Calaveras fault trends northwestward through Calaveras Reservoir, approximately 1-1/2 miles northeast of the eastern edge of the City. The San Andreas fault trends northwestward through the Santa Cruz Mountains approximately 13 miles southwest of the City. Earthquake hazards consist of hazards produced by surface fault rupture, and hazards produced by ground shaking. Only the Hayward fault zone is located within the City hillside area and capable of producing surface fault rupture in the City. However, the Hayward fault is not known to be creeping, where a fault moves steadily at the surface, in the City of Milpitas.[8] Fault creep can separate curbs and paving slabs, crack asphalt and walls, and damages buildings. Other faults in the region may also produce significant ground shaking. Therefore, the potential for strong ground shaking in the project area is considered moderate to high.

Liquefaction

Soil liquefaction is a phenomenon in which generally saturated, cohesionless soils undergo a temporary decrease in strength during earthquake ground shaking and acquire a degree of mobility sufficient to permit ground deformation. In extreme cases, the soil particles can become suspended in groundwater, resulting in the deposit becoming mobile and fluid-like. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface. Most of the alluvial soil in the City is expansive and susceptible to liquefaction.

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as a steep bank of a stream channel. Alluvial areas along the creeks in the City may be susceptible to lateral spreading.

[6] Association of Bay Area Governments (ABAG). *Alquist-Priolo Earthquake Fault Zones Map, Milpitas Quadrangle*. Accessed April 23, 2013. Available at: http://www.quake.ca.gov/gmaps/ap/ap_maps.htm.
[7] County of Santa Clara. *Geologic Hazard Zones Maps (Hazard Zones Map #12)*. October 2012. Accessed April 24, 2013. Available at: http://www.sccgov.org/sites/planning/GIS/GeoHazardZones/Documents/GeohazardMapsATLAS2.pdf
[8] City of Milpitas. 2010. *Milpitas General Plan, Chapter 5, Seismic and Safety Element*. October 2010.

4.6.2 Environmental Checklist and Discussion

GEOLOGY AND SOILS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
a) Rupture of a known earthquake fault, as described 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.)	☐	☐	☒	☐	1,2,7,9
b) Strong seismic ground shaking?	☐	☐	☒	☐	1,2,7,9
c) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	1,2,7,8
d) Landslides?	☐	☐	☐	☒	1,2,8
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	1,2,8
3) 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?	☐	☐	☒	☐	1,2,7,8
4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐	1,2,7
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	1,2

4.6.2.1 *Geologic and Soil Conditions*

The project area contains moderately expansive soils which may expand and contract with changes in soil moisture conditions. Damage resulting from expansive soil conditions can be avoided by incorporating City of Milpitas engineering standard practices.

The proposed project would involve excavation and grading practices necessary to construct the improvements. There are no other geologic features within the project area that would pose special or unique hazards to the proposed improvements.

4.6.2.2 *Seismicity and Seismic Hazards*

It is expected that the project area would be subject to significant seismic events over the life of the project. The storm drain pipelines and outfalls would be exposed to hazards associated with severe ground shaking during a major earthquake on one of the region's active faults. This hazard is not unique to the project, because it applies throughout the greater Bay Area. To mitigate the effects of strong ground shaking, all planned structures would be designed and constructed in accordance with the prevailing design and construction standards and the most recent California Building Code. With these standard design and construction measures in place, impacts associated with strong ground shaking would be less than significant.

The hillside portion of the project area is located within the Alquist-Priolo Earthquake Fault Zone; however, the valley floor of the City is not located within this zone and the Hayward fault does not exhibit surface creep within the City. Therefore, the likelihood of ground rupture from faulting across the project area is low.

The potential for liquefaction occurring at the project site during seismic shaking is high to moderate. If liquefiable soils are present and potentially capable of significant seismic reconsolidation, construction methods would be used to help mitigate the potential for disruption due to liquefaction-induced settlement, including the choice of materials and installation techniques. With the adjustment of materials and techniques, as necessary, liquefaction is expected to have a less than significant impact.

4.6.2.3 *Other Geologic and Soil Considerations*

Since the project site is relatively flat and the existing slopes have established landscaping to help control erosion, there is no erosion hazard associated with the soils on the site. The project alignment is located outside of the Santa Clara County Geologic Hazard Zones for compressible soil, landslides, and dike failure.[9]

Since the proposed project would not generate any wastewater in operation, impacts associated with the ability of the soils to support septic tanks or alternative wastewater disposal systems would not occur.

[9] County of Santa Clara. *Geologic Hazard Zones Maps* (*Compressible Soil, Landslide, and Dike Failure Hazard Zones* Map #12*)*. October 2012. Accessed April 22, 2013. Available at: http://www.sccgov.org/sites/planning/GIS/GeoHazardZones/Documents/GeohazardMapsATLAS2.pdf

4.6.3 Conclusion

The project would not be exposed to any significant geology and soils impacts associated with rupture of an earthquake fault across the site, landslides, soil erosion, or soil capability for supporting septic tanks. With standard construction methods and recommendations incorporated into the design and construction process, geologic- or soil-related impacts associated with seismic ground shaking, liquefaction, lateral spreading, and expansive soils would be less than significant. **[Less Than Significant Impact]**

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Setting and Regulatory Overview

This section provides a general discussion of global climate change and focuses on emissions from human activities that alter the chemical composition of the atmosphere. The discussion on global climate change and greenhouse gas (GHG) emissions is based upon the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32), the 2006 and 2009 Climate Action Team (CAT) reports to Governor Schwarzenegger and the Legislature, and research, information and analysis completed by the International Panel on Climate Change (IPCC), the United States Environmental Protection Agency, CARB, CAT, and the BAAQMD.

Global climate change refers to changes in weather including temperatures, precipitation, and wind patterns. Global temperatures are modulated by naturally occurring and anthropogenic (generated by mankind) atmospheric gases such as carbon dioxide, methane, and nitrous oxide.[10] These gases allow sunlight into the Earth's atmosphere but prevent heat from radiating back out into outer space and escaping from the earth's atmosphere, thus altering the Earth's energy balance. This phenomenon is known as the "greenhouse" effect.

Naturally occurring GHGs include water vapor,[11] carbon dioxide, methane, nitrous oxide, and ozone. Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but are for the most part solely a product of industrial activities.

Agencies at the international, national, state, and local levels are considering strategies to control emissions of gases that contribute to global warming. There is no comprehensive strategy that is being implemented on a global scale that addresses climate change; however, in California a multi-agency "CAT", has identified a range of strategies and the Air Resources Board (ARB), under AB 32, has approved the *Climate Change Scoping Plan***.** AB 32 requires achievement by 2020 of a statewide GHG emissions limit equivalent to 1990 emissions, and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. The ARB and other state agencies are currently working on regulations and other initiatives to implement the *Scoping Plan.*[12] By 2050, the state plans to reduce emissions to 80 percent below 1990 levels.

The California Natural Resources Agency, as required under state law (Public Resources Code section 21083.05), has amended the State CEQA Guidelines to address the analysis and mitigation of

[10] IPCC. *2007: Summary for Policymakers.* In: *Climate Change 2007: The Physical Science Bases*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available at: http://ipcc.ch/

[11] Concentrations of water are highly variable in the atmosphere over time, with water occurring as vapor, cloud droplets and ice crystals. Changes in its concentration are also considered to be a result of climate feedbacks rather than a direct result of industrialization or other human activities. For this reason, water vapor is not discussed further as a greenhouse gas.

[12] A San Francisco Superior Court order under *Association of Irritated Residents et al. v. CARB* (March 2010) requires the California Air Resources Board to complete additional environmental review before implementing the Cap and Trade Program outlined in the Climate Change Scoping Plan.

GHG emissions. In the recently adopted changes to the CEQA Guidelines, Lead Agencies retain discretion to determine the significance of impacts from GHG emissions based upon individual circumstances. Neither CEQA nor the CEQA Guidelines provide a specific methodology for analysis of GHGs and under the 2010 amendments to the CEQA Guidelines, a Lead Agency may describe, calculate, or estimate GHG emissions resulting from a project and use a model and/or qualitative analysis or performance based standards to assess impacts.

Given the global scope of global climate change, the challenge under CEQA is for a Lead Agency to translate the issue down to the level of a CEQA document for a specific project in a way that is meaningful to the decision making process. Under CEQA, the essential questions are whether a project creates or contributes to an environmental impact or is subject to impacts from the environment in which it would occur, and what mitigation measures are available to avoid or reduce impacts.

4.7.1.1 *BAAQMD CEQA Guidelines*

BAAQMD adopted an updated version of its CEQA air quality thresholds (June 2010) and developed guidelines for assessing and mitigating impacts under CEQA, including thresholds for GHG emissions. Under the June 2010 threshold, if a project would result in operational-related GHG emissions of 1,100 metric tons of carbon dioxide equivalents a year or more, or 4.6 metric tons of carbon dioxide equivalents per service population (residents and employees) per a year, it would make a cumulatively considerable contribution to GHG emissions and result in a cumulatively significant impact to global climate change. A threshold for stationary sources[13] of 10,000 metric tons of carbon dioxide equivalents a year also was adopted. The guidelines also outline a methodology for estimating GHGs, including use of the URBEMIS model and a BAAQMD GHG Model (BGM) for direct emissions from land use projects.

While useful for most residential and mixed use projects, these thresholds have limitations when applied to industrial projects that have relatively high indirect GHG emissions given their electricity use. Even with the incorporation of substantial efficiencies and mitigation measures, industrial projects are generally unlikely to fall below the thresholds of 1,100 metric tons of carbon dioxide equivalents per year or greater than 4.6 metric tons of carbon dioxide equivalents per service population.

As discussed above in Section *4.3 Air Quality* the analysis in this IS is based upon the general methodologies in the most recent BAAQMD CEQA Air Quality Guidelines (dated May 2012) and numeric thresholds for the San Francisco Bay Basin.

4.7.1.3 *Existing GHG Emissions*

The project area includes existing roadways, City owned improved parcels/easements, and engineered channels and does not itself "generate" GHG emissions; however GHG emissions are

[13] Stationary sources, such as boilers and emergency backup generators, burn fuels and directly emit greenhouse gases from combustion.

indirectly generated within the project area from electricity and natural gas usage at the land uses surrounding the site, and directly from automobile trips to/from the project area.

4.7.2 Environmental Checklist and Discussion of Impacts

GREENHOUSE GAS EMISSIONS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1,2
2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	1,2,6

4.7.2.1 *Greenhouse Gas Emissions Impacts*

Given the overwhelming scope of global climate change, it is not anticipated that a single project would have an individually discernable effect on global climate change. It is more appropriate to conclude that the greenhouse gas emissions generated by the proposed project would combine with emissions across the state, nation, and globe to cumulatively contribute to global climate change.

Improvements to the City's storm drain system would not generate long-term GHG impacts. Electricity needs at the pump stations to be rehabilitated would not increase substantially and will improve efficiency and decrease electricity needs and fuel consumption. Emergency generators (both electric and diesel powered) are currently used at the pump station locations as well.

The proposed project would result in minor increases in GHGs associated with construction activities. Project construction will result in GHG emissions from the following construction related sources: (1) construction equipment emissions; and (2) emissions from construction workers personal vehicles traveling to and from the construction site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. BAAQMD has not established a quantitative threshold or standard for determining whether a project's construction-related GHG emissions are significant.

Construction GHG emissions would be intermittent and substantially less than the lower reporting limit for major stationary sources established by the CARB. That reporting limit requires sources that generate more than 25,000 metric tons per year of CO_2 to report GHG emissions to CARB. The proposed project would include standard measures to address air quality during construction

(described above in *Section 4.3 Air Quality*), which would further reduce construction-related GHG emissions. Consequently, project construction would not have a significant impact on the environment from GHG emissions.

The proposed project would not conflict with any existing GHG laws, plans, policies, or regulations adopted by the California legislature, the CARB, or BAAQMD. Therefore, this impact would be less than significant.

4.7.3 Conclusion

The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHGs. The proposed project would not result in a significant impact from GHG emissions. **[Less Than Significant Impact]**

4.8 HAZARDS AND HAZARDOUS MATERIALS

4.8.1 Setting

Hazardous materials are commonly used in agriculture and by large institutions, commercial and industrial businesses, and to a lesser extent residences. Hazardous materials include a broad range of common substances such as motor oil and fuel, pesticides, detergents, paint, and solvents. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed of, or released into the environment in the event of an accident.

As late as the early 1950s, orchards and farms dotted the City landscape. In 1953, the Ford Motor Company began constructing an assembly plant south of downtown in a strip between the two railroad tracks; the town was incorporated in the following year.

The City experienced rapid growth in the last 46 years and developed into a suburban center. Development on the majority of the valley floor is fairly new, with the exception of the Great Mall (previously Ford Motor Company plant), and some scattered subdivisions and buildings along Main Street.

4.8.1.1 *Hazardous Materials*

There are 29 regulated sites within the City of Milpitas that are identified on the State Water Resources Control Board (SWRCB) GeoTracker.[14] Of these sites, six are currently open cases, as listed in Table 4.8-1 below.

TABLE 4.8-1
GEOTRACKER OPEN CASES WITHIN THE CITY OF MILPITAS

Site Name	Address	Type of Site	Clean-up Status
Cook Paint & Varnish	201 Sinclair Frontage Road	Cleanup Program Site	Inactive
Southern Pacific Transportation Co	80 Railroad Avenue	Cleanup Program Site	Inactive
Beacon	10 North Main Street	Leaking UST Cleanup Site	Verification Monitoring
Mobil #10-JQP (BP 11223)	97 S. Abbott Avenue	Leaking UST Cleanup Site	Remediation
USA Petroleum #102	200 Serra Way	Leaking UST Cleanup Site	Remediation
Preston Pipelines	151 Bothelo Avenue	Leaking UST Cleanup Site	Remediation

Source: State Water Resources Control Board. Geotracker Database Search for City of Milpitas, CA.

[14] Geotracker is the Water Boards' data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks [USTs], Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites.

In the event of a hazardous materials emergency in the City, several agencies are responsible for timely response, depending on the extent and type of the incident. The Santa Clara County Hazardous Materials Response Team composed of representatives of the Santa Clara County Fire Department, California Department of Forestry, and member cities responds to large scale, emergency hazardous material incidents within the City.

The Milpitas Fire Department is responsible for non-emergency hazardous materials reports within the City. If and when these non-emergency incidents become a threat to groundwater supplies, the RWQCB takes control of the case. The Fire Department also monitors above ground and underground storage tanks (USTs) and combustible and flammable liquids for leaks and spills.

4.8.1.3 *Other Hazards*

The Norman Y. Mineta San José International Airport is located approximately 4.5 miles to the south of the City. According to the adopted County-wide Comprehensive Land Use Plan (CLUP) for the Norman Y. Mineta San José International Airport, the City is not located in the Airport's safety zone and or any of the noise contours.[15] The City is also not located in an area that is subject to Federal Aviation Regulations, Part 77, Objects Affecting Navigable Airspace (commonly referred to as FAR part 77). [16] There are no private airstrips within the vicinity of the project area.

During summer, and in prolonged periods without rainfall, grasses, trees and other vegetation in the City become extremely dry and act as potential fuel for fires. The grasses on the hillsides are light fuel vegetation, which in the event of a fire burn quickly.

The City is served by the Milpitas Unified School District (MUSD), Berryessa Union High School District and Eastside Union School District. MUSD operates nine elementary, two middle, and two high schools. In addition to public schools, private and parochial schools also serve the City.

4.8.2 <u>Environmental Checklist and Discussion of Impacts</u>

HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐	1,2

[15] Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan Santa Clara County, Norman Y. Mineta San Jose International Airport*. May 25, 2011.
[16] FAR part 77 sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing reflective surfaces, flashing lights, electronic interference, and other potential hazards to aircraft in flight.

HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
2) 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?	☐	☒	☐	☐	1,2,10
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	1,2
4) 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?	☐	☒	☐	☐	1,2,10
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1,2,11
6) 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?	☐	☐	☐	☒	1,2
7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐	1,2
8) 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?	☐	☐	☒	☐	1,2

4.8.2.1 *Hazardous Materials Impacts*

Operation of the proposed project would not result in the routine use or transport of hazardous materials within the project area, or the release of hazardous materials into the environment. Construction activities associated with the project could create a hazard to the public and/or the environment due to the transportation, use, and disposal of miscellaneous hazardous substances. These substances include, but are not limited to, gasoline, diesel fuel, hydraulic fluids, and paint.

Impact HAZ-1: Construction activities associated with the project could create a hazard to the public and/or the environment due to the transportation, use, and disposal of miscellaneous hazardous substances. **(Significant Impact)**

Project Specific Mitigation Measures: Implementing the mitigation measure described below, would reduce the potential impacts from construction-related hazardous materials to a less than significant level.

MM HAZ-1.1: *Store, Handle, Use Hazardous Materials in Accordance with Applicable Laws.* The City shall ensure that all construction-related hazardous materials and hazardous wastes shall be stored, handled, and used in a manner consistent with relevant and applicable federal, state, and local laws. In addition, construction-related hazardous materials and hazardous wastes shall be staged and stored away from residences, stream channels, and steep banks to keep these materials a safe distance from nearby residents and prevent them from entering surface waters in the event of an accidental release.

Because there are existing open regulated sites within the City, soil and groundwater along the proposed pipeline alignment routes and at the outfall locations may be contaminated with hydrocarbons and volatile organic compounds (VOCs). Because some excavation and grading activities would be necessary for site preparation and project construction, it is possible that contaminated soil or groundwater would be encountered.

Impact HAZ-2: Construction activities could expose workers to contaminated groundwater and/or soil if encountered under the site and not handled properly. **(Significant Impact)**

Project Specific Mitigation Measures: The following mitigation measure would reduce impacts to construction workers from contaminated groundwater and/or soil:

MM HAZ-2.1: *Properly Dispose of Contaminated Soil and/or Groundwater.* If contaminated soil and/or groundwater is encountered, or if suspected contamination is encountered during project construction, work shall be halted in the area, and the type and extent of the contamination shall be identified. A contingency plan to dispose of any contaminated soil or groundwater will be developed through consultation with appropriate regulatory agencies. If dewatering or hydrostatic testing of the pipeline is to occur during project construction, the

water will be discharged to the City's wastewater treatment plant rather than released into any drainage system which would require prior approval from the RWQCB.

4.8.2.2 *Other Hazards*

Impact HAZ-3: Because the project involves construction on City roadways, the project has the potential to impair emergency response to the surrounding area. **(Significant Impact)**

Project Specific Mitigation Measures: Mitigation measures listed below would reduce the potential impacts to a less than significant level.

MM HAZ-3.1: *Develop and Maintain Emergency Access Strategies*. In conjunction with the mitigation measure identified in *Section 4.16 Transportation* (Develop a Traffic Control Plan), comprehensive strategies for maintaining emergency access shall be developed. Strategies shall include, but are not limited to, maintaining steel trench plates at the construction sites to restore access across open trenches and identification of alternate routing around construction zones. Also, police, fire, and other emergency service providers shall be notified of the timing, location, and duration of the construction activities and the location of detours and lane closures.

Construction of the proposed project could occur within one-quarter mile of several schools. However, none of the City schools are located on the existing roadways, City owned improved parcels/easements, or engineered channels associated with the proposed pipeline alignment and outfall improvements locations, and with the incorporation of the above mitigation measures, potential impacts will be reduced to a less than significant level.

The project area is located within the valley floor portion of the City. Therefore, the likelihood of wildland fires within the project area is low. The proposed project area is not within or adjacent to any wildland areas and would not be exposed to wildland fires. The project is not within an airport land use plan, and there are no airports or private airstrips within a two mile radius. The installation of the pipeline and outfall improvements would not conflict with any airport safety compatibility standards or exceed any Federal Aviation Regulations (FAR) Part 77 height limitations.

4.8.3 Conclusion

With incorporation of the mitigation measures, hazards or hazardous materials impacts would be reduced to a less than significant level. **[Less Than Significant Impact with Mitigation]**

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 Setting

4.9.1.1 *Hydrology*

Six intermittent streams (Scott, Calera, Tularcitos, Piedmont, Berryessa, and Los Coches) flow out of the hillsides surrounding the City and cross the valley floor. Most of the intermittent streams have been channelized through the valley floor of the City (refer to Figure 2). In the western part of the City, the Lower Penitencia and Coyote Creeks carry water from these streams northward into the San Francisco Bay.

4.9.1.2 *Flooding*

City-wide Flood Areas

Approximately half of the City's valley floor lies within one of the Special Flood Hazard Areas as defined by the Federal Emergency Management Act's (FEMA) Floor Insurance Rate Maps (FIRM).[17] Almost all land west of the Southern Pacific Railroad lies within the 100-year Flood Zone and all land west of Interstate 680 (I-680) is part of the 500-year Flood Zone. Flood control in the City is provided by a variety of federal, state, and local agencies. Milpitas is located within the East Zone of the Flood Control Benefit Assessment District, the proceeds of which go to the SCVWD to provide maintenance and an increased level of flood protection by accelerating construction projects throughout the County, some of which are located in the City of Milpitas.[18]

Localized Flooding at City Water Ways

Coyote Creek
All of Milpitas eventually drains to Coyote Creek, which also drains the eastern half of the Santa Clara Valley. The SCVWD operates two water supply reservoirs within the drainage area (Anderson and Coyote), which provide limited flood attenuation pools. The SCVWD has completed a levee improvement project on Coyote Creek between San Francisco Bay and Montague Expressway, which has effectively removed areas in the City located west of I-880 and north of Montague Expressway from the floodplain. This area is now mapped as Zone X, which represents areas of 100-year flood with average depths of less than one foot (local residual flooding), and areas protected by levees from the 100-year flood.

Calera Creek
Extreme storm event runoff in Calera Creek spills over the south bank upstream of North Park Victoria Road and I-680, flooding the adjacent Higuera Adobe Park within the City. This spill is

[17] Federal Emergency Management Agency, *Flood Insurance Rate Map, Community Panel Nos. 06085C0066H, 06085C0067H*, May 18, 2009.
[18] Regulatory flood hazards within Milpitas are under study as of December 2012. This re-evaluation of special flood hazard zones has been undertaken as part of the Silicon Valley BART Extension managed by the Santa Clara Valley Transportation Authority (VTA). As such, flood hazards discussed herein are subject to change, however, given the nature of the project, should not change potential flooding impacts.

forced back into the creek by a series of landscape berms. South bank spills downstream flow toward Berryessa Creek, where levees trap the water at Hidden Lake and the Berryessa Pump Station. Hidden Lake serves as a forebay to Berryessa Pump Station. It is located within Hidden Lake Park, south of North Milpitas Boulevard. Flood water that cannot be pumped into Berryessa Creek forms a residual floodplain northeast of the intersection of North Milpitas Boulevard and Jacklin Road.

Los Coches Creek

Upstream of I-680, the Los Coches Creek channel does not have sufficient capacity to carry the 100-year discharge. Inadequate channel capacity at Old Piedmont Road causes flood water to spill to the south through adjacent properties to the streets, and then flows westerly (downhill) to I-680 where it is trapped and ponds.

Lower Penitencia Creek

Lower Penitencia Creek receives floodwater spilled from adjacent drainage basins at Trimble Road, but spilled water is stored behind the railroad tracks near South Main Street, thereby reducing the discharge. The railroad tracks serve as a defacto levee and water ponds behind the tracks before spilling over the railroad tracks and then flowing through Capitol Avenue and Trade Zone Boulevard.

Lower Penitencia Creek overflows to the west from just south of the Elmwood Correctional Facility on South Abel Street, north to the Coyote Creek confluence. I-880 is sufficiently elevated that floodwaters do not cross the freeway. Rather they are forced to the north, flowing parallel to I-880 toward the California Circle Pump Station, where they are eventually pumped into Lower Penitencia Creek and Coyote Creek. The east bank levee of Lower Penitencia Creek is fully accredited for published base flood discharges between the confluence with Berryessa Creek and Coyote Creek.

Inundation Hazards

According to the State Office of Emergency Services for Santa Clara County, parts of the City along the Calaveras Road area east of I-680 could be inundated by failure of the 38-foot high Sandy Wool Lake Dam, located in Ed Levine Park. [19] The Office of Emergency Services maintains an evacuation plan in the unlikely event that a failure of the dam were to occur.

4.9.1.3 *Storm Drainage*

Drainage in the City of Milpitas generally flows westward. The City collects and disposes its stormwater via a storm drainage network consisting of catch basins, conveyance piping, pump stations, and outfalls to creeks. The City has approximately 123 miles of storm pipe, 3,000 catch basins, approximately four miles of drainage channels/creeks, and stormwater pump stations. Stormwater collection efforts are guided by the Floodplain Management Plan, which is a compilation of different management sources, and is designed to be a flexible and growing instrument. Each of the City's storm drainage collection systems discharges into one of Coyote Creek's tributaries, whether by gravity or by pumping.

[19] City of Milpitas. 2010. *Milpitas General Plan, Figure 5-3.* October 2010.

The SCVWD owns and maintains most of the major drainage facilities in the City of Milpitas, further described below in Section 4.17.

4.9.1.4 *Groundwater*

The project area is located within the Santa Clara Valley Groundwater Basin (Santa Clara Basin) of the South Bay basins. Groundwater is relatively shallow (10 to 50 feet below ground surface [bgs]) in the headwater area of the Santa Clara Basin, increasing to depths of 100 to 300 feet bgs in the interior of the basin, and then decreasing to zero approaching the San Francisco Bay. In the valley floor portion of the City, water seeps into unlined streambeds and recharges the groundwater supply. In some parts of the valley floor, the groundwater table may reach to levels near the ground surface during the rainy season.

4.9.1.5 *Water Quality*

Surface Water

Water quality varies with surrounding land use categories including: open space, commercial/ residential, and industrial. In 2010, 2011, and 2012, the City collected over 2,000 drinking water samples for analysis in State certified laboratories. The water supplied in Milpitas did not exceed any water quality standards in 2010.[20] In addition, the water supplied in Milpitas met all EPA and State drinking water health standards in 2011 and 2012.[21] The estimated annual pollutant loads are highly variable from year to year, reflecting the variability in runoff volumes.

Groundwater

Groundwater monitoring results in the Santa Clara Valley show that water quality is excellent to good for all major zones of the Santa Clara Basin. Drinking water standards are met at public water supply wells without the use of treatment methods. Contaminants are generally not detected; however, some limited areas of the Santa Clara Basin contain concentrations of mineral salts, which adversely affect groundwater uses.

[20] City of Milpitas. *City of Milpitas 2011 Consumer Confidence Report.* Accessed April 23, 2013. Available at: http://www.ci.milpitas.ca.gov/_pdfs/pw_water_quality_report.pdf

[21] City of Milpitas. *City of Milpitas Water Quality 2012 Consumer Confidence Report; June 2013.* Accessed June 18, 2013. Available at: http://www.ci.milpitas.ca.gov/_pdfs/pw_water_quality_report.pdf

Regulatory Framework

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA's regulations include the NPDES permit program, which controls sources that discharge pollutants into Waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by water quality control boards, which for the Santa Clara area is the San Francisco Bay RWQCB.

The San Francisco Bay RWQCB's overall mission is to protect surface waters and groundwater in the region. The RWQCB carries out its mission by addressing region-wide water quality concerns through the creation and triennial update of a Water Quality Control Plan (Basin Plan). The Basin Plan is the master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the region. The most recent Basin Plan was approved by the Office of Administrative Law on December 31, 2011.[22]

Under Section 303(d) of the 1972 Clean Water Act, states are required to identify impaired surface water bodies and develop total maximum daily loads (TMDLs) for contaminants of concern.[23] The TMDL is the quantity of pollutant that can be safely assimilated by a water body without violating water quality standards. None of the water bodies within the project area are on the Section 303(d) list. Berryessa Creek, Calera Creek, Los Coches Creek, Scott Creek, and Penitencia Creek are considered "unassessed/condition unknown" on the EPA's list of impaired water bodies. Coyote Creek is considered polluted with pesticides and total toxic chemicals.[24]

NPDES Permit Programs

General Construction Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California. For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction.[25] Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation.

Once grading begins, the SWPPP must be kept on-site and updated as needed while construction progresses. The SWPPP details the site-specific Best Management Practices (BMPs) to control

[22] RWQCB. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan).* Accessed June 18, 2013. Available at: http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/planningtmdls/basinplan/web/docs/bp_ch1withcover.pdf
[23] California State Water Resources Control Board. *Total Maximum Daily Load Program.* Accessed April 23, 2013. Available at: http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_approved.shtml
[24] U.S. Environmental Protection Agency. *How's My Waterway?* Accessed April 23, 2013. Available at: http://watersgeo.epa.gov/mywaterway/
[25] Santa Clara Valley Urban Runoff Pollution Prevention Program. *Stormwater Pollution Control Requirements*. Updated December 5, 2005.

erosion and sedimentation and maintain water quality during the construction phase. The SWPPP also contains a summary of the structural and non-structural BMPs to be implemented during the post-construction period, pursuant to the nonpoint source control practices and procedures encouraged by Santa Clara County and the RWQCB.

Municipal Stormwater Permit

The San Francisco Bay RWQCB also has issued a Municipal Storm Water NPDES Permit (Permit Number CAS612008). In an effort to standardize stormwater management requirements throughout the region, this permit replaces the formerly separate countywide municipal stormwater permits with a regional permit for 76 Bay Area municipalities, including the City of Milpitas.

Under the NPDES Municipal Storm Water Permit, projects that create, add, or replace 5,000 square feet or more of impervious surface area are required to control post-development stormwater through source control and treatment control Best Management Practices (BMPs). Additional requirements must be met by some large projects that create one acre or more of impervious surfaces (see hydromodification discussion below).

Low Impact Development

Low Impact Development (LID) is a stormwater management strategy designed to manage runoff as close to its source as possible. LID incorporates a variety of natural and built features to reduce the rate of surface water runoff, filter pollutants out of runoff, facilitate infiltration of water into the ground surface, and reuse the water on-site. As of December 1, 2011, LID Treatment Control Measures (TCMs) replaced the previously required post-construction/operation treatment control measures. TCMs are comprised of bio-treatment, harvesting and re-use of runoff on-site, infiltration, and evapotranspiration.

Hydromodification

Hydromodification is a change in stormwater runoff characteristics from a watershed caused by changes in land use conditions (i.e., urbanization) that alter the natural cycling of water. Changes in land use conditions can cause runoff volumes and velocity to increase which can result in a decrease in natural vegetation, changing of river/creek bank grades, soil compaction, and the creation of new drainages.

In addition to water quality controls, the City's NPDES Municipal Permit has hydromodification controls as defined in the Hydromodification Management Plan (HMP). The NPDES permit requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally influenced areas or directly into the Bay, drain into hardened channels, or are infill projects in subwatersheds that are 65 percent or more impervious based on the watershed map. The HMP Applicability Map for the City of Milpitas shows what areas of the City may be subject to hydromodification requirements.[26]

[26] Santa Clara Valley Urban Runoff Pollution Prevention Program. *HMP Applicability Map – City of Milpitas.* November 2010. http://www.scvurppp-w2k.com/HMP_app_maps/Milpitas_HMP_Map.pdf

4.9.2 Environmental Checklist and Discussion of Impacts

HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	1,2
2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒	1,2
3) 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?	☐	☐	☐	☒	1,2
4) 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?	☐	☐	☐	☒	1,2
5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	1,2,4
6) Otherwise substantially degrade water quality?	☐	☐	☒	☐	1,2
7) 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?	☐	☐	☐	☒	1,2,12
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒	1,2,12
9) 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?	☐	☐	☐	☒	1,2
10) Be subject to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	1,2

4.9.2.1 *Hydrology and Flooding*

Based on the flood maps for the City, flooding could infrequently occur along the proposed pipeline improvements routes or at the outfall improvement locations during an extended period of very severe storms. Construction of the proposed project would occur consistent with the Code of Federal Regulations for the National Flood Insurance Program. The City of Milpitas Municipal Code requires projects within the City to meet requirements set forth under the Floodplain Management Regulations (Title XI Zoning, Planning and Annexation, Chapter 15 Floodplain Management). The proposed project improvements would comply with these regulations.

The project area is not subject to flash flooding. The installation of pipelines, outfall and pump station improvements would not cause additional flooding, impede flood flows, or expose people or structures to a significant risk of loss, injury or death involving flooding.

4.9.2.2 *Storm Drainage/Runoff*

The proposed project is improvements to the City's storm drain system to improve the overall management of stormwater within the City in the future. The proposed project would achieve the desired storm drain performance goals to maintain recommended levels of protection against stormwater runoff, and keep the storm drain system in working order.

The proposed project areas would be returned to pre-construction conditions and would not increase the impervious surfaces and therefore, would not create new areas of low permeability. As a result, no additional runoff is expected to be generated by the proposed project. Therefore, the proposed project would not result in runoff exceeding the capacity of the existing or planned stormwater drainage systems.

4.9.2.3 *Groundwater*

Deeper open trenching during construction may encounter groundwater along portions of the proposed pipeline alignments or outfall locations; therefore, dewatering may be necessary. Penetration of the water table could result in impacts to groundwater supplies in extreme cases as the groundwater supply is in a deeper aquifer, due to dewatering during excavation and construction activities. However, dewatering during the excavation and construction would be carried out only as necessary, and the length of time and volume of water removed during dewatering would be minimized through appropriate scheduling of construction activities. Temporary pumping of groundwater out of the work area is not anticipated to alter the amount of impervious area or groundwater use. Therefore, the proposed project would not alter the groundwater recharge potential or lower the local groundwater table level.

Dewatering can draw groundwater onto the site from off-site locations and groundwater that collects in excavations can include sediment from surrounding soils. The potential for increased sedimentation could impact the groundwater quality due to the presence of possible VOCs in the surrounding soils. Dewatering required during excavation and construction of the project site would be required to follow the measures described in Section 4.8, *Hazardous Materials.* The mitigation

measures will reduce the potential for increase in sedimentation in groundwater and the degradation of groundwater quality.

4.9.2.4 *Water Quality*

Excavation, grading, and construction activities associated with the proposed project would expose and disturb soils, resulting in potential increases in erosion and siltation in and downstream of the project area. Generally, excavation, grading, paving, and other construction activities would expose disturbed and loosened soils to erosion by wind and runoff. Construction activities could therefore result in increased erosion and siltation, including nutrient loading and increasing the total suspended solids concentration.

Additionally, refueling and parking of construction equipment and other vehicles on-site during construction may result in oil, grease, or related pollutant leaks and spills that may discharge into storm drains. Improper handling, storage, or disposal of fuels and materials or improper cleaning of machinery close to area waterways could cause water quality degradation.

The proposed project will include standard BMPs consistent with the Municipal NPDES permit. To reduce potentially significant erosion and siltation, the City and/or its selected contractor(s) shall implement the BMPs and erosion control measures that it has already established and required in their standard construction specifications and as required by the RWQCB, which could include the following construction phase measures for water quality. These measures will reduce and avoid water quality impacts during construction.

Standard Measures: The project includes the following measures during all phases of construction to minimize water quality construction impacts.

- *Implement Construction Best Management Practices.* BMPs to reduce erosion and siltation may include the following measures: avoidance of construction activities during inclement weather; limitation of construction access routes and stabilization of access points; stabilization of cleared, excavated areas by providing vegetative buffer strips, providing plastic coverings, and applying ground base on areas to be paved; protection of adjacent properties by installing sediment barriers or filters, or vegetative buffer strips; stabilization and prevention of sediments from surface runoff from discharging into storm drain outlets; and use of sediment controls and filtration to remove sediment from water generated by dewatering.

4.9.3 Conclusion

Stormwater runoff from the project site would not exceed the capacity of the existing storm drainage system or contribute significantly to downstream flooding. With the incorporation of the standard measures and BMPs, the proposed project would not result in significant water quality impacts during construction periods. **[Less Than Significant Impact]**

4.10 LAND USE

4.10.1 Setting

The City of Milpitas is divided into three sections by I-680 and I-880. To the west of I-880 is a largely industrial and commercial area. Between I-880 and I-680 is an industrial zone in the south and residential neighborhoods in the north. Other residential neighborhoods and undeveloped areas lie east of I-680.

Approximately one-third of the developed land in the valley floor of the City is devoted to Single Family Low-Density Residential use, with all designated residential areas accounting for approximately 46 percent of the valley floor area of the City. Approximately 25 percent of the valley floor is designated for industrial (manufacturing and industrial park) uses and approximately 15 percent of the total land in the valley floor is vacant and available for development.

4.10.1.1 *Land Use Plan Designations*

City of Milpitas General Plan and Zoning

The project area includes existing City roadway ROW and includes the following street classifications:

- Expressway - Provide for movement of through-traffic.
- Arterial - Collect and distribute traffic from freeways and expressways to collector streets and vice versa.
- Collector - Serve as connectors between local and arterial streets and provide direct access to parcels.
- Local Street - Provide access to parcels.

The project area also includes existing utility easements and City-owned improved parcels/easements, which can occur on a variety of General Plan and zoning designations throughout the City. Part of the project would also occur adjacent to existing waterways and Park and Open Space (POS) areas.

Other Plans

The project area is not located in an area protected by a habitat conservation plan. The proposed project is not within the San José International Airport Influence Area and is not subject to any Airport Land Use Plans.

4.10.2 Environmental Checklist and Discussion of Impacts

LAND USE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Physically divide an established community?	☐	☐	☐	☒	1,2
2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒	1,2,3
3) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	1,2

4.10.2.1 *Compatibility with Surrounding Land Uses*

The proposed project work would be temporary and would consist of the installation of pipelines and outfall and pump station improvements to serve adjacent land uses stormwater runoff in the future. The project activities would not physically alter the existing land uses. Because the project improvements would take place within existing roadways, City-owned improved parcels/easements, and existing engineered channels, the proposed project would not physically divide an established community.

The project work would only be visible to immediately adjacent land uses. The construction would be temporary; all disturbed/graded areas would be returned to pre-construction conditions and replanted with native vegetation, as applicable. The proposed project does not include any permanent features that would be inconsistent with existing land uses.

4.10.2.2 *Consistency with Plans and Programs*

The construction of the project would not change the designation of any roadways, or parcels/easements and would not be inconsistent with the General Plan classifications or zoning designations of the project area.

4.10.3 Conclusion

The proposed project would not conflict with plans or policies adopted for the purpose of avoiding or mitigating environmental impacts, and would not result in any land use conflicts or inconsistency with existing zoning or designations. **[No Impact]**

4.11 MINERAL RESOURCES

4.11.1 Setting

The State Office of Mine Reclamation's list of mines (the AB 3098 List) regulated under the Surface Mining and Reclamation Act (SMARA) does not include any mines within the City.[27] The City of Milpitas contains four areas identified by the State Geologist as containing Regionally Significant Construction Aggregate Resources. These areas are located in the foothills outside City limits and are part of the South San Francisco Bay Production-Consumption Region.[28] These areas contain sandstone deposits and all are currently being quarried. The project area does not contain any known or designated mineral resources, and has not been used for mineral extraction in the past.

4.11.2 Environmental Checklist and Discussion of Impacts

MINERAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) 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?	☐	☐	☐	☒	1,2,13
2) 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

4.11.3 Conclusion

The project site is not within an area that contains any known or designated mineral resources, and has not been used for mineral extraction. Therefore, the proposed project would not result in the loss of the availability of a mineral resource. **[No Impact]**

[27] State Office of Mine Reclamation. *AB 3098 List*. January 2010. Accessed April 23, 2013. Available at: <http://www.conservation.ca.gov/omr/ab_3098_list/Documents/AB3098 percent20List percent20for percent20January percent2012-2010.pdf>

[28] City of Milpitas. 2010. Milpitas General Plan, October 2010.

4.12 NOISE

4.12.1 Setting

4.12.1.1 *Background*

Noise level or intensity is measured in decibels (dB), and ranges from zero dB at the threshold of hearing to 140 dB, which is the threshold of pain. The sensitivity of human hearing decreases at extremely low and high frequencies and this is taken into account by the "A-weighted" decibel scale, which is sometimes expressed as "dBA." In evaluating noise increases, it is important to know that a three dB change in noise level is just noticeable to the human ear, a five dB change is easily noticeable, and a 10 dB increase is perceived as a doubling of loudness.

Since the sensitivity to noise increases during the evening and at night, and because excessive noise interferes with the ability to sleep, 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a five dB penalty added to evening (7:00 p.m. - 10:00 p.m.) and a 10 dB addition to nocturnal (10:00 p.m. - 7:00 a.m.) noise levels. The Day/Night Average Sound Level, DNL or Ldn, is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

4.12.1.2 *Regulatory Overview and Background*

City of Milpitas General Plan

The policies of the City of Milpitas General Plan are intended to provide guidance for determining land use compatibility with respect to noise. The Noise Element of the City of Milpitas's General Plan identifies noise and land use compatibility standards for various land uses (General Plan Table 6-1). The noise compatibility limits are defined as normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. The City establishes 70 Ldn as the normally acceptable noise compatibility limit for most land uses.

Milpitas Municipal Code - Regulation of Noise and Vibration

Title V – Public Health, Safety and Welfare, Chapter 213 Noise Abatement, of the City of Milpitas Municipal Code regulates noise and vibration. The code states that it shall be unlawful for any person in any district zoned for residential use to make, continue or cause to be made or continued any disturbing noise between the hours of 10:00 p.m. in the evening and 7:00 a.m. in the morning. Disturbing noise is defined as any sound or vibration caused by sound which occurs with such intensity, frequency or in such a manner as to disturb the peace and quiet of any person.

4.12.1.3 *Existing Noise Conditions*

Traffic and the railroads are the principal noise sources in the City. Sporadic noise from aircraft and construction-related activities also contributes to the noise environment in the City. A noise

measurement survey was conducted in the City for the General Plan during December 1993, to determine noise levels throughout the community. Future noise levels were also included as part of the General Plan, based on projected traffic volumes. Noise levels projected for 2010 ranged between 60 and 65dB along most major roadways within the City, with levels increasing to 75dB at locations closest to I-880 and I-680.

No airports are located within ¼-mile of the City. The closest airport is the Norman Y. Mineta San José International Airport, located approximately 4.5 miles south of the project area. There are no private airstrips within the vicinity of the project area.

4.12.2 Environmental Checklist and Discussion of Impacts

NOISE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project result in:					
1) 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?	☐	☐	☒	☐	1,2
2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	1,2
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1,2
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1,2
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1,2,11
6) 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?	☐	☐	☐	☒	1,2

4.12.2.1 *Long-term Noise Impacts*

The project proposes the installation of pipeline improvements underground, outlet improvements within engineered channels, and pump stations upgrades and would not result in any permanent features that would generate additional long-term noise. There are no proposed pump station upgrades that would increase noise generation. Most pumps and pump drivers are located within structures. Those pumps and motors that are not located within a structure are generally submersible (below water) and do not generate significant noise at the property boundary. Any standby generator not located within a building would be located within a sound-attenuating enclosure and would be operated periodically for short tests and during emergencies.

4.12.2.2 *Short-term Construction Noise*

The construction of the proposed project would generate short-term noise at adjacent uses, including sensitive land uses such as residences. The major noise generating activities associated with project construction would include truck trips on City streets as well as excavation and grading. The grading and excavation activities associated with the project would generate additional truck trips, which would temporarily increase noise levels. Construction-related motorized equipment could exceed the 65 Ldn short range exterior noise level established by the City.

Standard Measures: In order to minimize the adverse effects of construction noise, the following measures are included in the proposed project as applicable:

- Pile-driving will be limited to the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday.

- Equipment will use available noise suppression devices and properly maintained mufflers. Construction noise would be reduced by using quiet or "new technology" equipment, particularly the quieting of exhaust noises by use of improved mufflers. All internal combustion engines used at the project site will be equipped with the type of muffler recommended by the vehicle manufacturer. In addition, all equipment will be maintained in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train, and other components.

- Temporary walls/barriers/enclosures will be erected around stationary construction equipment when such equipment will be operated for an extended period of time (i.e., more than 2-3 days). Noise barrier walls and enclosures will consist of absorptive material in order to prevent impacts upon other land uses due to noise reflection. In addition, complete enclosure structures shall close or secure any openings where pipes, hoses, or cables penetrate the enclosure structure.

The proposed project would also be required to comply with the City's construction noise regulations. Given that construction noise would be mitigated and temporary, this increase in noise would not result in significant noise impacts to sensitive land uses during construction.

4.12.3 Conclusion

Implementation of the proposed project would not expose sensitive receptors to noise levels in excess of standards established in the City's General Plan and noise ordinance. The project would not

expose sensitive uses to substantial permanent noise. Implementation of the proposed project would result in temporarily elevated noise levels due to project construction. Standard avoidance measures will be implemented to reduce construction noise to a less than significant level**. [Less Than Significant Impact]**

4.13 POPULATION AND HOUSING

4.13.1 Setting

The project is located within the City of Milpitas. The City's 2010 population was 69,100 people. Between 2000 and 2010, the City's population increased by 6,290 people at a rate of 1.00 percent per year. Build-out under the 2010 land use designations of the General Plan would result in an additional population of approximately 37,000 in the City, or a total population of approximately 106,100 in the City.

4.13.2 Environmental Checklist and Discussion

POPULATION AND HOUSING					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	1,2
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1,2
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1,2

4.13.2.1 Discussion of Impacts

The purpose of the proposed project is to improve the function of the storm drain system within the City. Therefore, the proposed project would not substantially change existing storm drain demands or land uses and would not affect additional population growth either directly or indirectly. In addition, operation and maintenance would not result in a substantial increase in numbers of permanent workers/employees within the City. The nature of the proposed project is such that it would not displace any housing. The project does not include the construction of new housing or businesses that might induce nearby population growth, nor would it displace substantial numbers of people. The proposed project would also not displace people living in or occupying those areas from which right-of-way may be acquired.

4.13.3 Conclusion

The proposed project would not result in any significant impacts on population and housing within the project area or regionally. **[No Impact]**

4.14 PUBLIC SERVICES

4.14.1 Setting

The proposed project is located within the City of Milpitas. Fire, police, and emergency services are provided by the City.

4.14.1.1 *Police*

The City of Milpitas police department has 130 employees including 95 sworn police officers. The Milpitas police department serves over 70,000 residents in a 13.63 square mile urban area.[29]

4.14.1.2 *Fire*

The Milpitas Fire Department has three battalions for emergency response and a unit for fire prevention services. There are four fire stations within the city.[30]

4.14.1.3 *Schools*

The City is served by the MUSD, Berryessa Union High School District and Eastside Union School District. MUSD operates nine elementary (grades K-5; Burnett, Curtner, Pameroy, Randall, Rose, Sinnott, Spangler, Weller, and Zanker), two middle (grades 6-8; Rancho Milpitas and Russell) and two high (grades 9-12; Milpitas High and Calaveras Hills) schools. In addition to public schools, private and parochial schools also serve the City. A total of 9,869 students were enrolled in the MUSD in April 2010; less than the total capacity of 11,466. The Berryessa Union High School District had a total enrollment of 8,361 students; less than the capacity of 9,764 and the Eastside Union School District had a total enrollment of 24,728 students as of April 2010. Growth from the buildout of the current General Plan is anticipated to result in the addition of approximately 1,428 students to the City.[31]

4.14.1.4 *Parks*

As of October 2010, the City included approximately 201 developed City parklands and 1,544 acres of the Ed Levin Regional Park, part of which is within City limits. The only existing community park in the City is the 24.4 acre Sports Center, which serves as a special-use facility because it contains sports fields and facilities. Other parks within the City include: neighborhood parks; special-use parks; urban parks; linear parks; and private recreation facilities.

---

[29] City of Milpitas. *Milpitas Police Department.* 2012. Accessed April 23, 2013. http://www.ci.milpitas.ca.gov/government/police/default.asp

[30] City of Milpitas. *Fire Station Locations*. 2012. Accessed April 23, 2013. http://www.ci.milpitas.ca.gov/government/fire/stations.asp

[31] Using Milpitas Unified School District (MUSD) student generation rates of 0.031 students for Single Family Dwelling developments, 0.12 students for Regular Attached developments, and 0.40 for Below Market-Rate (BMR) developments.

4.14.2 Environmental Checklist and Discussion of Impacts

PUBLIC SERVICES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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:					
Fire Protection?	☐	☐	☐	☒	1,2
Police Protection?	☐	☐	☐	☒	1,2
Schools?	☐	☐	☐	☒	1,2
Parks?	☐	☐	☐	☒	1,2
Other Public Facilities?	☐	☐	☐	☒	1,2

4.14.2.1 *Impacts to Public Services*

The project proposes to install improvements to the storm drain system within the City and would not generate population growth. The proposed project would not increase the demand for the kinds of public services that would support new residents and employees, such as schools, parks, fire, police, or other public facilities. As a result, no impacts are anticipated and no mitigation is required.

4.14.3 Conclusion

The proposed project would not increase the need for public services nor result in any new or more substantial adverse physical impacts associated with a need for new facilities in order to maintain acceptable levels of service or performance objectives for public services. **[No Impact]**

4.15 RECREATION

4.15.1 Setting

As of October 2010, the City included approximately 201 developed city parkland and 1,544 acres of the Ed Levin Regional Park, part of which is within City limits. The only existing community park within the City is the 24.4 acre Sports Center, which serves as a special-use facility because it contains sports fields and facilities. Neighborhood parks in the City fall into two categories: typical walk to parks that serve the immediate neighborhood, and parks containing a community-use facility. The City's current inventory includes 43.3 acres of neighborhood parks. Special-use parks include mini-parks, linear parks, creek trails, flood retention areas, Community Garden, Senior Center, Rancho Milpitas Middle School Ball field, and Community/Civic Center. A total of 15 acres of the City's inventory consists of special-use parks. Urban parks are small facilities, generally less than one acre in size, which accommodate the daily recreation or passive needs of nearby residents. Linear parks are narrow corridors of land that have been developed primarily as a trail system. The City has taken advantage of the Hetch-Hetchy ROWs for the development of a linear park system. The trail system within the City consist of several miles of pedestrian and bicycle trails on flood control levees and on the Hetch Hetchy corridor.

4.15.2 Environmental Checklist and Discussion of Impacts

RECREATION					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) 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
2) 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?	☐	☐	☐	☒	1,2

4.15.2.1 *Impacts to Recreation Facilities*

The project proposes to install improvements to the storm drain system within the City and would not generate new development or new residents. It would not increase the use of or demand for City or neighborhood recreational facilities. As a result, the proposed project would have no impact on recreation in the project area. Additionally, there would be no need to construct new or expand existing recreational facilities as a result of the proposed project.

4.15.3 Conclusion

The proposed project would not result in impacts to recreational facilities or require the expansion or construction of new facilities. **[No Impact]**

4.16 TRANSPORTATION

4.16.1 Setting

4.16.1.1 Street Network

The project area includes existing City roadway ROW and includes the following street classifications:

- Expressway - Provide for movement of through-traffic.
- Arterial - Collect and distribute traffic from freeways and expressways to collector streets and vice versa.
- Collector - Serve as connectors between local and arterial streets and provide direct access to parcels.
- Local Street - Provide access to parcels.

4.16.1.2 Transit Facilities

The Valley Transportation Authority (VTA) provides a majority of the bus service for the City. Local bus routes provide service to Mountain View, Sunnyvale, Great America, southeast and east San Jose, and Evergreen College. Service to the Fremont BART station is provided by express buses. Additionally, Alameda County (AC) Transit provides lines from the City to Fremont, including the Fremont BART Station. The Alum Rock-Santa Teresa Line travels through Milpitas stopping at three locations: Montague Expressway, Great Mall Transit Center (bus transfer station), and I-880/Milpitas at Tasman Drive/Alder.

The bus transfer station and park-and-ride lot at the Great Mall transit center acts as a hub for most of the bus lines that serve the City. Frequent service (less than 30 minute headway) is offered primarily during peak hours (6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m. on weekdays) while headways increase to 30 minutes or more during the midday, after 6:00 p.m., and on weekends and holidays.

4.16.1.3 *Pedestrian and Bicycle Facilities*

The City is crossed by two freeways and two railroad tracks which fragment the City's circulation system, including facilities for biking and walking. In addition, many shopping centers and neighborhoods are accessed through a limited number of entrances, through which pedestrians and bicyclists must compete with automobiles for safe passage to their destination.

Many parts of the City, however, hold good potential for recreational biking and walking, including along Coyote Creek and within the hillside areas. There are also additional opportunities along many of the creek channels and the Hetch-Hetchy ROW. Crosswalks (signalized and unsignalized) are located throughout the project area.

4.16.2 Environmental Checklist and Discussion of Impacts

TRANSPORTATION/TRAFFIC					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)?	☐	☒	☐	☐	1,2
2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒	1,2
3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒	1,2
4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☐	☒	1,2
5) Result in inadequate emergency access?	☐	☒	☐	☐	1,2
6) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒	1,2

4.16.2.1 *Operational Impacts*

The purpose of the proposed project is to improve existing storm drain lines, outfalls, and pump stations within the City to meet the overall management of stormwater for adjacent land uses in the future. The proposed project would be located within existing roadway ROW, City owned improved easements/parcels, and engineered channels. Therefore, the proposed project would not substantially change land uses and would not affect traffic or transportation. In addition, operation and maintenance would not result in an increase in numbers of permanent workers/employees, and as such, would not generate additional traffic trips. Because the project would not generate additional traffic trips, no additional analysis is necessary and impacts would be considered less than significant.

The proposed project does not involve the use of air transit, nor is it expected to cause any change in air traffic patterns. The proposed project does not propose to make changes to roadways that would create road hazards or alter design features developed to mitigate such hazards

4.16.2.2 *Short-term Construction Impacts*

Additional traffic would be generated from workers coming to and from the site daily and from the delivery of construction equipment. Trucks would be needed for the removal and import of excavation and fill materials; however, there would be a low volume of peak hour truck traffic. The minor increase in traffic would be temporary in nature and only occur during construction activities. Construction traffic could adversely affect traffic in construction areas and temporarily create travel hazards due to slow and unusual vehicles, vehicle parking, and the presence of workers. Slow traffic could adversely affect emergency vehicle response capabilities.

Impact TRAF-1: Construction traffic could temporarily slow traffic, create travel hazards, and impair emergency access on the City's roadways. **(Significant Impact)**

Project Specific Mitigation Measures: The proposed project would include the measures minimize traffic disruptions during construction.

MM TRAF-1.1: *Prepare and Implement Traffic Control Plan.* In conjunction with the mitigation measure identified in *Section 4.4.8 Hazards and Hazardous Materials* (Develop and Maintain Emergency Access Strategies), the City shall require the contractor to prepare and implement effective traffic control plans to show specific methods for maintaining traffic flows. Examples of traffic control measures to be considered include: 1) use of flaggers to maintain alternating one-way traffic while working on one-half of the street; 2) use of advance construction signs and other public notices to alert drivers of activity in the area; and 3) use of "positive guidance" detour signing on alternate access streets to minimize inconvenience to the driving public.

MM TRAF-1.2: *Return Roads to Pre-construction Condition.* Following construction, the City shall ensure that road surfaces that are damaged during construction are returned to their pre-construction condition or better.

With the incorporation of the above mitigation measures, the potential temporary construction-related impacts to traffic would be less than significant.

4.16.3 Conclusion

The proposed project would not generate additional permanent traffic trips or otherwise impact the transportation system. Construction-related traffic impacts would be reduced to less than significant with implementation of mitigation measures included in the project. **[Less Than Significant Impact with Mitigation]**

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Setting

4.17.1.1 *Water Supply*

The City provides treated water purchased from the San Francisco Public Utilities Commission (SFPUC) and the SCVWD. With minor exceptions, SFPUC water is provided to the residential areas of the City, while the SCVWD water is distributed to the industrial areas. In addition to these two potable supply sources, the City has constructed a non-potable recycled water system (i.e. South Bay Water Recycling Program) for landscape irrigation uses in selected areas west of I-680. The City's emergency water supply consists of two local groundwater wells and three emergency interties (to permit exchange of water during short-term emergency situations), one with the San Jose Water Company and two with the Alameda County Water District.[32] The 2009/2010 average water consumption in the City was approximately 11,500 acre feet per year. The domestic water purchases for 2010/2011 was 10,300 acre feet per year and for 2011/2012 was 10,460 acre-feet per year. The City's current Water Master Plan was adopted in Spring 2010.

4.17.1.2 *Sanitary Sewer and Wastewater Treatment*

Wastewater from the City is treated by the San Jose/Santa Clara Water Pollution Control Plant (WPCP). The WPCP has the capacity to treat 167 million gallons per day (mgd) of wastewater and has a current average daily flow of approximately 121 mgd. In 2009/2010, the City discharged 8.4 mgd and is contractually limited to a flow of 14.25 mgd.

4.17.1.3 *Storm Drainage*

Drainage in the City generally flows westward. The City collects and disposes its stormwater via a storm drainage network consisting of catch basins, conveyance piping, pump stations, and outfalls to creeks. The City has approximately 123 miles of storm pipe, 3,000 catch basins, approximately four miles of drainage channels/creeks, and 13 stormwater pump stations. Stormwater collection efforts are guided by the Floodplain Management Plan, which is a compilation of different management sources and is designed to be a flexible and growing instrument. Each of the City's storm drainage collection systems discharges into one of Coyote Creek's tributaries, whether by gravity or by pumping.

The SCVWD owns and maintains most of the major drainage facilities in the City as shown in Table 4.17-1.

[32] City of Milpitas. *Water Master Plan Update.* December 2009.

Table 4.17-1 City of Milpitas Drainage Facilities Jurisdiction		
Facility Name	**SCVWD Jurisdiction**	**City Jurisdiction**
Berryessa Creek	Headwaters to Lower Penitencia Creek	none
Calera Creek	Headwaters to Berryessa Creek	none
Coyote Creek	Headwaters to San Francisco Bay	none
Ford Creek	none	Sinnott Lane to Wrigley-Ford Creek
Los Coches Creek	Headwaters to Berryessa Creek	none
Lower Penitencia Creek	Montague Expressway to Coyote Creek	none
East Penitencia Creek	Upstream of Montague Expressway	none
Piedmont Creek	Sequoia Drive to Berryessa Creek	Headwaters to Sequoia Drive
Tularcitos Creek	Interstate 680 to Berryessa Creek	Headwaters to Interstate 680
Wrigley Creek	none	Capitol Avenue to Wrigley-Ford Creek
Wrigley-Ford Creek	none	Confluence to Berryessa Creek
Source: City of Milpitas Storm Drain Master Plan. December 2012.		

Most of Los Coches Creek, from its confluence with Berryessa Creek upstream to Old Piedmont Road, is concrete lined with drop sections to dissipate energy. Through the City, Lower Penitencia Creek is lined with concrete and has floodwalls to protect adjacent properties. Piedmont Creek is an excavated earth channel from Berryessa Creek upstream to I-680. To the east until Roswell Drive, Piedmont Creek is a concrete channel. Tularcitos Creek is an excavated earth channel from Berryessa Creek to the I-680. Wrigley-Ford Creek is an excavated channel along the Southern Pacific and Western Pacific railroads.

4.17.1.4 *Solid Waste*

The Newby Island Landfill, located on Dixon Landing Road in San Jose serves the City of Milpitas. The Newby Island Landfill has approximately remaining capacity of 5.8 million cubic yard as of December 31, 2012[33] and is permitted to operate through 2025.

4.17.2 Environmental Checklist and Impacts

UTILITIES AND SERVICE SYSTEMS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	1,2

[33] Source: King, Rick. Personal communications with Newby Island Sanitary Landfill General Manager. May 14, 2013.

UTILITIES AND SERVICE SYSTEMS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
2) 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?	☐	☐	☐	☒	1,2,14
3) 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?	☐	☐	☒	☐	1,2,4
4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒	1,2,14
5) 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?	☐	☐	☐	☒	1,2
6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	1,2
7) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐	1,2

4.17.2.1 *Water Supply and Wastewater*

The proposed project would not use any water during operation and would not create any new connections to the existing water system. The proposed project therefore, would not have any impact on the City water supply or freshwater treatment facilities. During construction, portable toilets and wash areas would be used and the wastewater hauled and treated off-site. Since the proposed project would not produce any wastewater in operation, the project would have no impact on wastewater treatment capacity.

4.17.2.2 *Sanitary Sewer*

The proposed project would not generate any wastewater or sewage in operation, or require connections to the City's sanitary sewer system. The project would not impact the capacity of existing treatment facilities such that a new or expanded facility would be required.

4.17.2.3 *Storm Drainage*

The proposed project is improvements to the City's storm drain system components to meet the overall management of stormwater within the City in the future. The proposed project would achieve the desired storm drain performance goals to maintain acceptable levels of protection against stormwater runoff and keep the storm drain system in working order.

The proposed project would be located within existing roadways, City owned improved parcels/easements, and engineered channels. The proposed project would not require or result in the construction of additional off-site stormwater drainage facilities.

4.17.2.4 *Solid Waste*

Since the proposed project would not generate any solid waste in operation, it would not impact the capacity of Newby Island landfill. Solid waste generated as a by-product of construction will be hauled off-site and would comply with applicable local, state, and federal laws governing solid waste management.

4.17.3 Conclusion

The proposed project would not exceed the capacity of existing utilities and service systems for water, wastewater, stormwater, and solid waste or require expansion of public utilities or services which could result in significant impacts. **[Less Than Significant Impact]**

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
1) 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?	☐	☒	☐	☐	1-14
2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐	1-14
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐	1-14

4.18.1 Project Impacts

The project would result in temporary air quality and noise impacts during construction. With implementation of the standard measures identified in this Initial Study, construction impacts would be reduced. Because the nature of the identified impacts are temporary and will be reduced or avoided, the proposed project would not have a cumulatively considerable impact on air quality or noise in the project area.

Project construction has the potential to take nests, eggs, young, or individuals of protected bird species. Project construction of the outfall improvements also has the potential to degrade aquatic habitat for special-status plant and wildlife species. The proposed project includes the mitigation measures to reduce and avoid impacts to aquatic habitat and raptors. Implementation of the mitigation measures will reduce impacts to a less than significant level.

The project site is within an area that contains archaeological resources. As a result, the project site has a potential for unknown buried resources to be present. The proposed project includes mitigation measures to reduce impacts to undiscovered cultural resources. Implementation of these mitigation measures will reduce impacts to archaeological resources to a less than significant level.

Construction activities associated with the project could create a hazard to the public and/or the environment due to the transportation, use, and disposal of miscellaneous hazardous substances.

Because there are existing open regulated sites within the City, soil and groundwater along the proposed pipeline alignment routes and at the outfall locations may be contaminated, which could expose construction workers to hazardous materials. Implementation of the mitigation measures will reduce these impacts to less than significant levels.

Because the project involves construction on City roadways, the project has the potential to result in slower traffic and impair emergency access to the surrounding area. Construction traffic could also temporarily create travel hazards on the City's roadways. Implementation of the mitigation measures will reduce impacts to a less than significant level.

As discussed in the respective sections of this report *(refer to Section 4. Environmental Setting, Checklist, and Discussion of Impacts),* the proposed project would have no impact or a less than significant impact on aesthetics, agricultural and forestry resources, geology and soils, GHG emissions, hydrology and water quality, mineral resources, population and housing, public services, recreation, and utility and service systems.

There are no recently approved or reasonably foreseeable projects that, when combined with the proposed project, would result in a cumulatively considerable impact.

4.18.2 Conclusion

Implementation of the proposed project would not result in any significant unavoidable impacts, impacts that are cumulatively considerable, or directly or indirectly cause substantial adverse effects on human beings. **[Less Than Significant Impact With Mitigation]**

CHECKLIST INFORMATION SOURCES

1. Professional judgment and expertise of the environmental specialist preparing this assessment, based upon a review of the site and surrounding conditions, as well as a review of the project plans.

2. City of Milpitas. *Milpitas General Plan*. January 2002 Update.

3. City of Milpitas. *Zoning Ordinance and Map*. December 2011.

4. City of Milpitas *Storm Drain Master Plan*. December 2012.

5. California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2010*. Map. June 2011.

6. Bay Area Air Quality Management District. *CEQA Guidelines Update-Thresholds of Significance*. June 2010.

7. CA State Department of Conservation. Regulatory Maps. *Milpitas Revised Official Map,* Effective January 1, 1982.

8. County of Santa Clara. *Geologic Hazard Zones Maps* (*Compressible Soil, Landslide, and Dike Failure Hazard Zones* Map #12*)*. October 2012.

9. Association of Bay Area Governments (ABAG). *Alquist-Priolo Earthquake Fault Zones Map, Milpitas Quadrangle*.

10. State Water Resources Control Board. *Geotracker Database Search for City of Milpitas, CA.*

11. Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan Santa Clara County, Norman Y. Mineta San Jose International Airport.* May 25, 2011.

12. Federal Emergency Management Agency, *Flood Insurance Rate Map, Community Panel Nos. 06085C0066H, 06085C0067H*, May 18, 2009.

13. State Office of Mine Reclamation. *AB 3098 List*. January 2010.

14. City of Milpitas. *Water Master Plan Update.* December 2009.

5.0 REFERENCES

Association of Bay Area Governments (ABAG). *Alquist-Priolo Earthquake Fault Zones Map, Milpitas Quadrangle*. Accessed April 23, 2013. Available at: http://www.quake.ca.gov/gmaps/ap/ap_maps.htm.

Bay Area Air Quality Management District. *CEQA Guidelines Update-Thresholds of Significance*. June 2010.

California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2010*. Map. June 2011.

CA State Department of Conservation. Regulatory Maps. *Milpitas Revised Official Map, Effective January 1, 1982*. Accessed April 22, 2013. Available at: http://gmw.consrv.ca.gov/shmp/download/quad/MILPITAS/maps/MILPITAS.PDF

California State Water Resources Control Board. *Total Maximum Daily Load Program.* Accessed April 23, 2013. Available at: http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_approved.shtml

City of Milpitas. *City of Milpitas 2011 Consumer Confidence Report.* Accessed April 23, 2013. Available at: http://www.ci.milpitas.ca.gov/_pdfs/pw_water_quality_report.pdf

City of Milpitas. *Milpitas General Plan*. January 2002 Update

City of Milpitas. *Zoning Map*. December 2011.

City of Milpitas. *Milpitas Police Department.* 2012. Accessed April 26, 2013. http://www.ci.milpitas.ca.gov/government/police/default.asp

City of Milpitas. *Fire Station Locations*. 2012. Accessed April 26, 2013. http://www.ci.milpitas.ca.gov/government/fire/stations.asp

City of Milpitas. *Water Master Plan Update.* December 2009.

County of Santa Clara. *Geologic Hazard Zones Maps* (*Compressible Soil, Landslide, and Dike Failure Hazard Zones* Map #12*)*. October 2012. Accessed April 24, 2013. Available at: http://www.sccgov.org/sites/planning/GIS/GeoHazardZones/Documents/GeohazardMapsATLAS2.pdf

Federal Emergency Management Agency, *Flood Insurance Rate Map, Community Panel Nos. 06085C0066H, 06085C0067H*, May 18, 2009.

IPCC. *2007: Summary for Policymakers.* In: *Climate Change 2007: The Physical Science Bases*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available at: http://ipcc.ch/

Santa Clara Valley Urban Runoff Pollution Prevention Program. *Stormwater Pollution Control Requirements*. Updated December 5, 2005.

Santa Clara Valley Urban Runoff Pollution Prevention Program. *HMP Applicability Map – City of Milpitas.* November 2010. http://www.scvurppp-w2k.com/HMP_app_maps/Milpitas_HMP_Map.pdf

Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan Santa Clara County, Norman Y. Mineta San Jose International Airport*. May 25, 2011.

State Office of Mine Reclamation. *AB 3098 List*. January 2010. Accessed April 25, 2013. Available at: <http://www.conservation.ca.gov/omr/ab_3098_list/Documents/AB3098 percent20List percent20for percent20January percent2012-2010.pdf>

State Water Resources Control Board. *Geotracker Database Search for City of Milpitas, CA*. Accessed April 23, 2013. Available at: http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Milpitas+CA

U.S. Environmental Protection Agency. *How's My Waterway?* Accessed April 23, 2013. Available at: http://watersgeo.epa.gov/mywaterway/

Persons Contacted:

Anderson, Chuck. P.E. Schaaf & Wheeler Consulting Engineers. Personal Communication. March 2013.

6.0 LEAD AGENCY AND CONSULTANTS

LEAD AGENCY

City of Milpitas
Sheldon AhSing, Senior Planner
Jeffery Leung, Associate Civil Engineer

CONSULTANTS

David J. Powers & Associates, Inc.
Environmental Consultants and Planners
Jodi Starbird, Principal Project Manager
Meryka Dirks, Project Manager
Zach Dill, Graphic Artist

Schaaf & Wheeler
Consulting Civil Engineers
Charles D. Anderson, P.E

Appendix A

City of Milpitas Storm Drain Master Plan
(attached as CD to this document)