

ATTACHMENT 1

MID's February 2012 Initial Study/Proposed Mitigated Negative Declaration
(IS/MND) and the addendum to the IS/MND dated June 29, 2012

Merced Irrigation District

Arena Canal/Howard Lateral and McConnell Lateral Water Conservation Project

Initial Study/Proposed Mitigated Negative Declaration

February, 2012

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Appendix B: Cultural Records Search by Central California Information Center (California Historical Resources Information System, Department of Anthropology-California State University, Stanislaus).	

References and Resources

The United States of America will hereinafter be referred to as "U.S."

California will hereinafter be referred to as the "State."

Merced County may hereinafter be referred to as the "County," unless otherwise noted.

California Environmental Quality Act will hereinafter be referred to as "CEQA."

Delhi County Water District may hereinafter be referred to as the "District."

Merced Irrigation District will hereinafter be referred to as "M.I.D."

The San Joaquin Valley Air Pollution Control District is also referred to as "SJVAPCD".

The Merced County Association of Governments is also referred to as "MCAG".

Specific Urban Development Plan will hereinafter be referred to as "SUDP."

The Merced County General Plan, 2000, is available from the Merced County office at 2222 M. St., Merced, CA, or can be viewed on-line at <http://www.co.merced.ca.us/index.asp?nid=436>.

The most recent published copy of the *Merced County General Plan Map* can be found at http://www.mcaggis.com/gallery/County/county_gp.pdf. Information used in this Initial Study may not reflect changes made to the General Plan since the publication of this document.

An on-line copy of the *California Agricultural Land Evaluation and Site Assessment Model (1997)* can be found at <http://www.consrv.ca.gov/dlrp/LESA/Documents/lesamodl.pdf>.

Maps prepared pursuant to the *Farmland Mapping and Monitoring Program of the California Resources Agency* can be found at <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2006/>.

Federally protected wetlands (Sec. 404, CWA) are identified via Google Earth utilizing WetlandsData.KMZ available at <http://www.fws.gov/wetlands/data/GoogleEarth.html>.

A list of cleanup sites and hazardous waste permitted facilities can be found at <http://www.envirostor.dtsc.ca.gov/public/>.

Proposed Findings

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gas Emission | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> None | | |

DETERMINATION:

On the basis of this initial evaluation:

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

Signature

Date

Garth Pecchenino, Project Engineer
Printed Name

Merced Irrigation District
For

Initial Study

1. Project Title

Merced Irrigation District McConnell Pipeline, Arena Canal and Howard Lateral Rehabilitation Project.

2. Lead Agency Name and Address

Merced Irrigation District
744 W. 20th Street
Merced, CA 95340

3. Contact Person and Phone Number

Mr. Ryan Lippincott
(209) 722-5761, ext. 2857

4. Project Location

Refer to Figure 1, Location Map, page 6.

The proposed McConnell Lateral Pipeline lies in Sec. 14, T6S, R11E. The proposed pipeline will be approximately 1,350 feet long starting at the McConnell Lateral and terminating at the Hammett Lateral. Arena Canal and Howard Lateral lie in Sec. 2, 3, 9 & 10, T7S, R11E. The project begins at Bell Road with the earthen Arena Canal, approximately 4,900 feet long; then transfers to a concrete lined channel for approximately one mile to a siphon at Sunset Avenue where it converts to the Howard Lateral. The Howard lateral runs approximately one mile to Atwater-Jordan Road which is where the project terminates.

5. Project Sponsor's Name and Address

Merced Irrigation District
744 W. 20th Street
Merced, CA 95340

6. General Plan Designation

(A) Agricultural¹

7. Zoning

(A-1) General Agricultural²

8. Description of Project

The project comprises the installation of a pipeline (the proposed McConnell Lateral Pipeline) and the rehabilitation of portions of the Arena Canal and Howard Lateral. The proposed McConnell Lateral Pipeline is intended to reuse and deliver water to growers in Merced County while eliminating the potential to have an impact on the Merced River which is a host to ecosystems for various fish and aquatic species. The proposed pipeline will run parallel to a portion of the existing Livingston Canal, starting at the existing spill structure for the McConnell Lateral to the Livingston Canal and terminating at the beginning of the Hammett Lateral.

¹ http://www.mcaggis.com/gallery/County/county_gp.pdf, sa Figure 4 – General Plan, Page 30.

² http://www.mcaggis.com/gallery/County/county_zone.pdf, sa Figure 5 – Zoning, Page 31.

The Arena Canal and Howard Lateral rehabilitation project will help to increase the efficiency of the water system by lowering the friction factor, thereby raising the capacity to handle the flows from saved McConnell Lateral spills and reduce the seepage plaguing this facility. This seepage requires more water to be taken out of the Bay-Delta system that could have otherwise been used for irrigation. With this elimination in seepage there will be more water available in the reservoirs that are part of the Bay-Delta system providing a very beneficial resource in dry or drought years. See Figure 2, Site Plan, page 7.

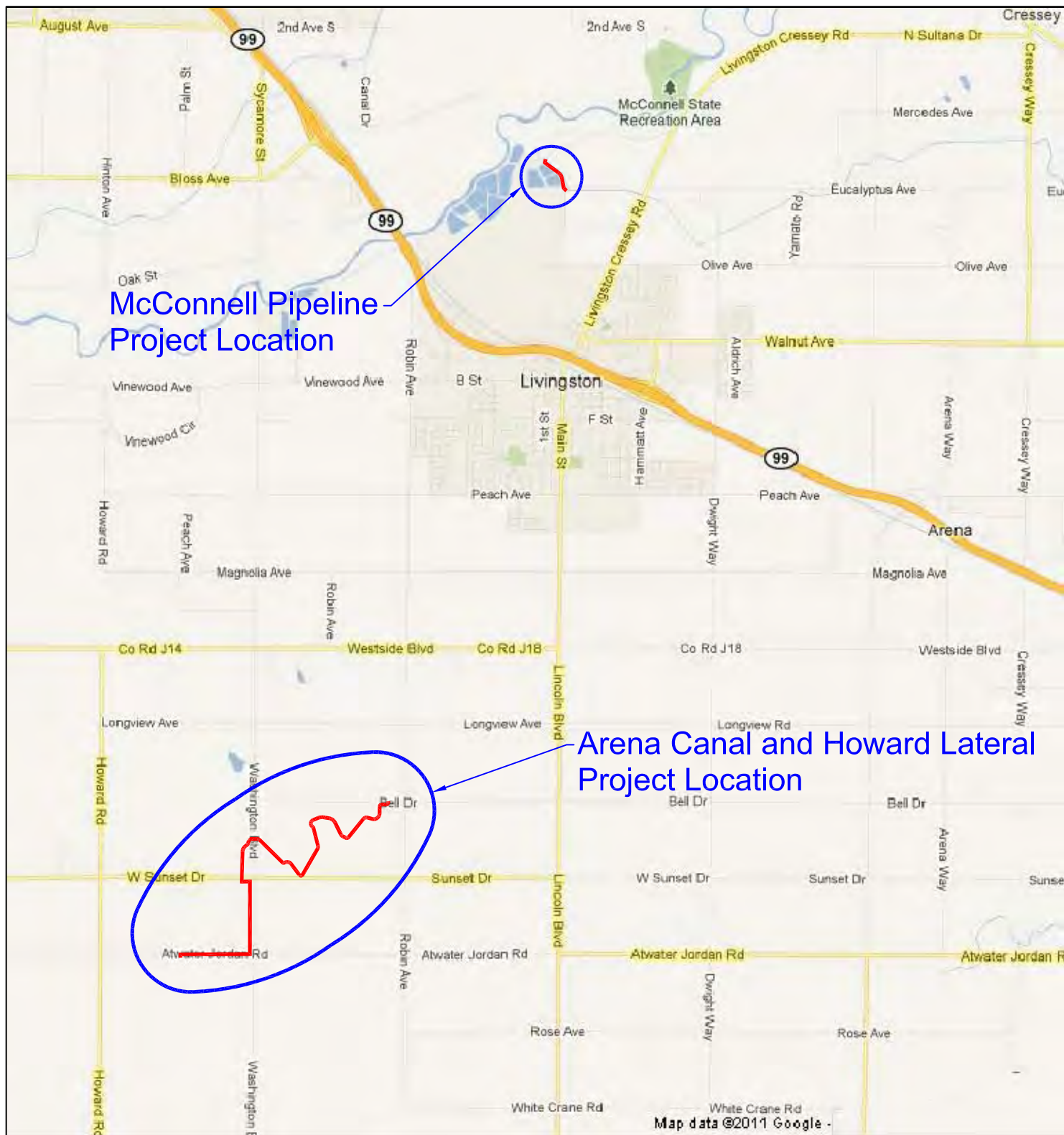
9. Surrounding Land Uses and Setting

The proposed McConnell Lateral Pipeline lies in Sec. 14, T6S, R11E; Arena Canal and Howard Lateral lie in Sec. 2, 3, 9 & 10, T7S, R11E in Merced County, CA. The proposed McConnell pipeline project alignment lies adjacent to the existing Livingston Canal. The Livingston Waste Water Treatment Facility is southwest of this alignment. The Arena Canal and Howard Lateral alignments pass through lands that are zoned, and whose usages are, agricultural, which consist of orchards, vineyards and grain crops. The pipeline alignment and existing canals also parallel road alignments and pass between fields in some areas. See Figures 3 and 4, Aerial View, pages 8 and 9.

10. Other Agencies

The Merced Irrigation District is the lead agency with ultimate responsibility for project approval, which will be in the form of a Board resolution. Other public agencies whose secondary approvals may be required (e.g., permits, financing approval, or participation agreement) are:

Agency	Type of Approval
Merced County Department of Public Works	Encroachment Permit
U.S. Bureau of Reclamation South-Central California Area Office 1243 "N" St., Fresno, CA 93721	



Merced County

Figure 1: Location Map

Source: Google Maps, 2011

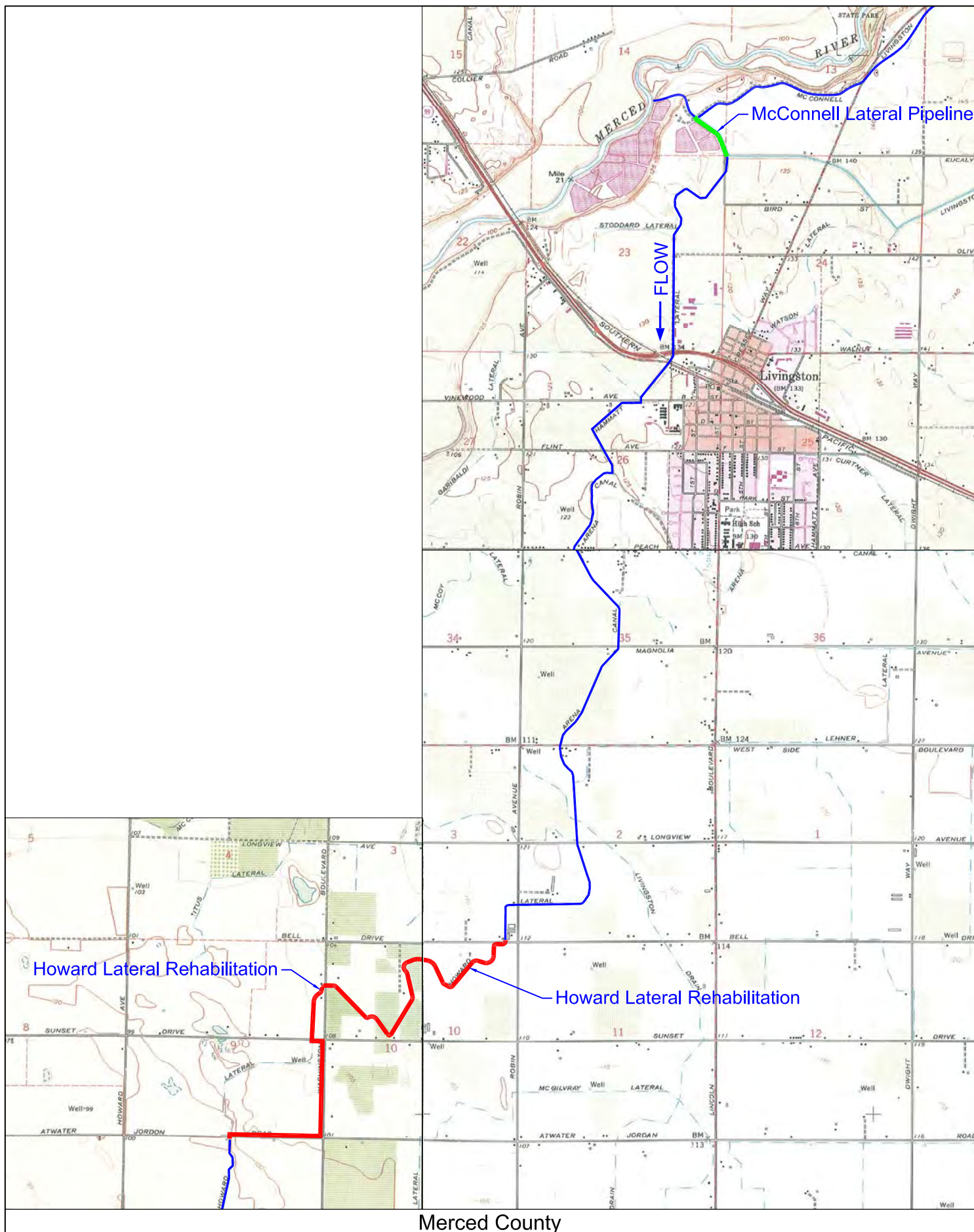


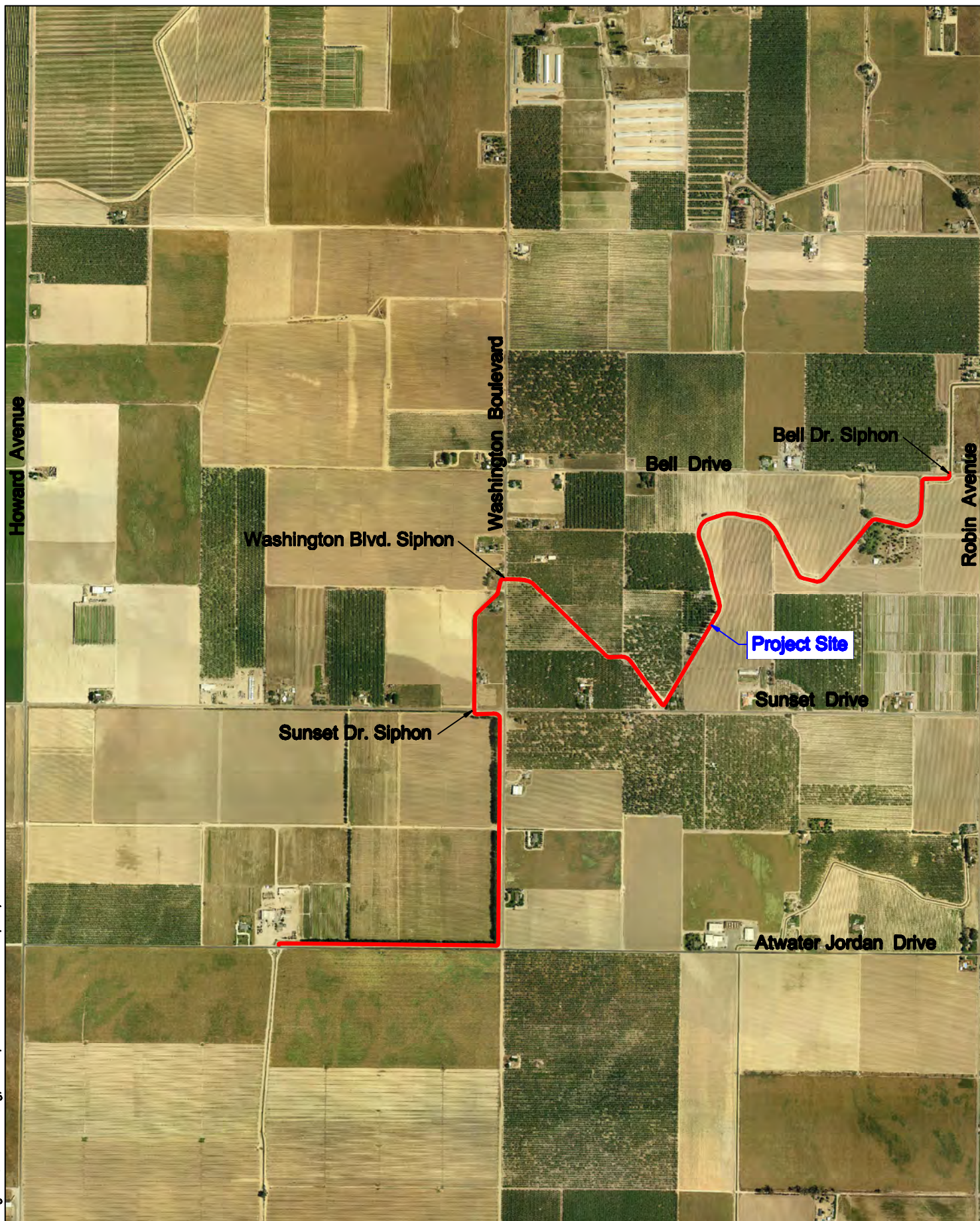
Figure 2: Site Plan

Source: USGS Cressey, Stevinson and Arena Quadrangles



Figure 3: Aerial Photograph

Source: Merced Irrigation District Aerial Photography



Merced County

Figure 4: Aerial Photograph
Source: Merced Irrigation District Aerial Photography

Issues

I. AESTHETICS

DISCUSSION

This environmental issue focuses on the impacts of a project on scenic vistas and the overall appearance of the project in the community context. Issues of light and glare, community view-sheds, architectural compatibility with existing development or a specific site or setting are all part of the issue of "Aesthetics" as addressed within the framework of CEQA.

SETTING

The proposed McConnell Lateral pipeline lies in Sec. 14, T6S, R11E. The proposed pipeline is approximately 1,350 feet long starting at the end of the McConnell Lateral and terminating at the head of the Hammett Lateral. The proposed pipeline will lie adjacent to the Livingston Canal and adjacent to the Livingston Waste Water Treatment Facility.

Arena Canal and Howard Lateral lie in Sec. 2, 3, 9 & 10, T7S, R11E. The irrigation pipeline and irrigation lateral alignment will require new easements and pass through rural lands that are zoned, and whose usages are, agricultural. A portion of the project will lie adjacent to road right-of-ways.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project will have no adverse effect on existing scenic vistas.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historical buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not located near or within a state scenic highway and therefore would not result in damaging scenic resources (Merced County General Plan 2000).

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Project will not substantially degrade the existing visual character of quality of the site and its surroundings.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project may include short-term construction lighting. This will not create a new source of substantial light or glare.

II. AGRICULTURAL AND FORESTRY RESOURCES

DISCUSSION

This environmental issue focuses on the impact of a project on farmland, agricultural productivity, and forestry resources. Environmental concerns focus on the loss of agricultural cropland or forestlands as inventoried by the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, agricultural zoning, Williamson Act Contract lands, the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation, and California State inventory of forest land as compiled by the California Department of Forestry and Fire Protection. An additional area of concern is the potential changes resulting from a project that could lead to future conversion of agricultural lands to non-agricultural uses, or the depletion of forest land or timberland.

SETTING

According to the Farmland Mapping and Monitoring Program of the California Department of Conservation, Division of Land Resource Protection ³:

The proposed McConnell Lateral pipeline will lie adjacent to the existing Livingston Canal alignment. This alignment is bounded on the north by "Farmland of Statewide Importance" and on the south by "Urban and Built-Up Land." The proposed pipeline will lie between the existing

³ ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/mer08_no.pdf

canal and the Livingston Waste Water Treatment Facility. Additional easements will be required for this proposed pipeline alignment.

New easements will be required for the existing Arena Canal and Howard Lateral project. A map detailing the surrounding agricultural resources can be seen on Exhibit 5, Agricultural Resources, page 14.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

New easements will be required for the facilities that will convey irrigation water to local farms and benefit the local agricultural community. The easements will lie within existing farming roads that are not being used for agricultural purposes. No lands will be converted to non-agricultural use due to the project.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project will not result in changing any existing zoning or agricultural use nor is it under Williamson Act control.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The project will not conflict with the existing zoning that would result in conversion to non-forest land or timberland use.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project will not result in the loss of forest land or conversion of forest land to non-forest use.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
e) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

New easements will be required for the proposed project. The easements will lie within existing farming roads that are not being used for agricultural purposes. Therefore, these additional easements will not result in the conversion of land to non-agricultural or non-forest use.

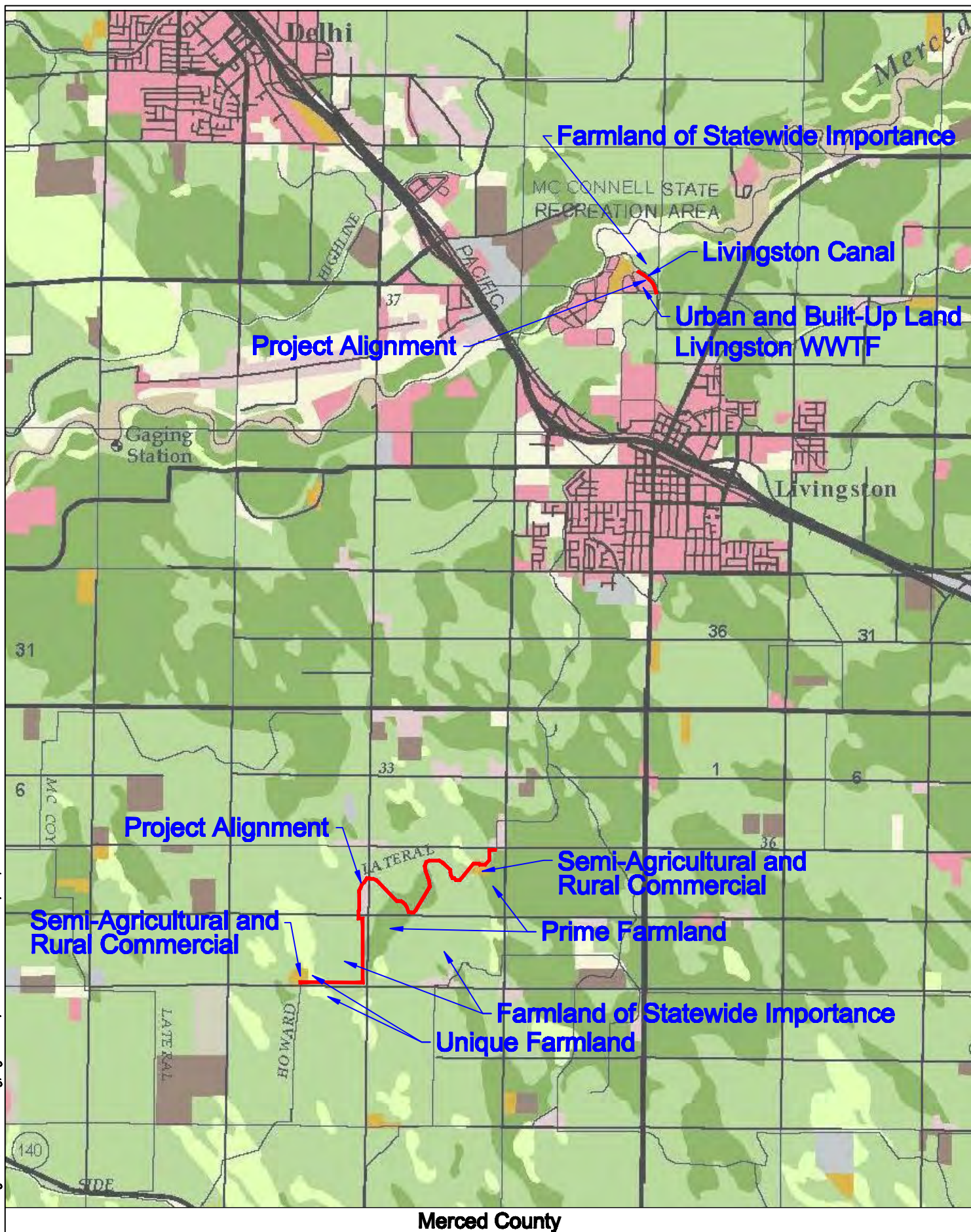


Figure 5: Agricultural Resources

Source: California Department of Conservation, Division of Land Resource Protection
Farmland Mapping and Monitoring Program, Map Published January, 2010

III. AIR QUALITY

DISCUSSION

This environmental issue focuses on the impacts of a project on air quality. Issues over project consistency with applicable air quality plans, policies and regulations, increases of any pollutant for which the area has been designated as a “non-attainment” area. Additional concerns are over the exposure of sensitive receptors, such as people, to high levels of air pollution or odors.

SETTING

The proposed site is located in Merced County, which is designated a part of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

EVALUATION

Where applicable, the significant criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The only potential for conflict with the air quality plan of the SJVAPCD is during the construction phase of the project.

The San Joaquin Valley Air Basin is classified as non-attainment for Ozone and particulate matter (PM₁₀). Any increase in these pollutants is considered to be substantial. Air emissions resulting from pipeline construction include the use of internal combustion engines and the generation of dust. These emissions would have a less than significant impact on overall air quality.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The only conflict with air quality standards will occur during the construction phase as vehicles and equipment generate PM₁₀, i.e. dust. Though temporary and less than significant, standard dust suppression measures will be implemented. The proposed project will not result in a prolonged or substantial violation of air quality standards.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The construction and use of the proposed McConnell pipeline and the construction and rehabilitation of the lining for Arena Canal and Howard Lateral will have virtually no impact on cumulative net increases of criteria pollutants for which the region is non-attainment.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project will not expose sensitive receptors to substantial pollutant concentrations. Any emissions of PM₁₀ during construction, though temporary and less than significant, will be reduced by standard practices to suppress dust.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
e) Would the project create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed McConnell pipeline will be located underground, and, except for odors due to vehicles and dust during the construction phase, will not create any objectionable odors. The Arena Canal and Howard Lateral are existing M.I.D. irrigation facilities and will not create any objectionable odors.

IV. BIOLOGICAL RESOURCES

DISCUSSION

This environmental issue focuses on the impacts of a project on biological resources such as sensitive plant or animal species or their habitat, or riparian habitat or interference with the normal movements of wildlife species in the vicinity of a project. Additional concerns focus on consistency of a project with adopted plans, policies and regulations regarding wildlife, habitat conservation planning, local wildlife preservation plans and policies or wetlands.

SETTING

The proposed McConnell Lateral pipeline lies between a rural, agricultural setting to the northeast and the Livingston Waste Water Treatment Facility to the southwest, in Merced County, north of the community of Livingston in Sec. 14, T6S, R11E, M.D.B.&M.

The lands surrounding the existing Arena Canal and the existing Howard Lateral are primarily zoned as Agricultural⁴. See Figure 5, page 12.

The entire alignment for this project is in highly disturbed lands and is subject to routine farming practices adjacent to the alignment.

The proposed site is not within a Resource Conservation Area or Resource Management Area (Merced County General Plan, 2000)⁵.

A “baseline biological resource assessment” was conducted by Moore Biological Consultants on December 1, 2011 (report dated January 13, 2012). Summaries of that report are cited below (Moore) and the full report is attached at the end of this document (Appendix A).

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project have substantial adverse effect, either directly or indirectly or through habitat modifications, on any species indentified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Departments of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed McConnell Lateral pipeline project will be placed along an existing dirt road parallel to the Livingston Canal and will therefore not substantially affect any existing habitats on any species indentified as a candidate, sensitive, or special status species. That portion of the Arena Canal and Howard Lateral improvement project will not adversely modify any existing candidate, sensitive or special species habitats.

⁴ http://www.mcaggis.com/gallery/County/county_zone.pdf, sa Figure 5 – Zoning, Page 31.

⁵ <http://www.co.merced.ca.us/index.aspx?NID=436>

Special Status Plant Species: The above noted biological resource assessment by Moore indicates that “None of these habitat types occur along the alignments. Due to lack of suitable habitat, no special-status plant species are expected to occur along the alignments.” (Moore).

Special Status Wildlife Species: The Moore biological assessment indicates that the potential for occurrence of special status wildlife species along the project alignment is considered low. However, Swainson’s hawk, burrowing owl and valley elderberry longhorn beetle (VELB) are the only species that have potential to occur along the alignments on more than a transitory or very occasional basis, and are discussed further below:

Swainson’s Hawk: Moore’s assessment states that “There are a few suitable nest trees along and near the alignments that could be used by nesting Swainson’s hawks. Open grassland, alfalfa, and other cropland near these trees provide high-quality Swainson’s hawk foraging habitat and increases the suitability of the trees in the area being used for nesting.”

Burrowing Owls: Additionally, “No burrowing owls were observed along the alignment during the 2011 survey. There are a few areas of open grassland and cropland near the alignment that could be used by foraging burrowing owls. A few suitable ground squirrel burrows were also observed along ditches, banks of irrigation laterals, and in some of the parcels adjacent to the alignment. However, none of these burrows had any evidence of burrowing owl occupancy (i.e. whitewash, feathers and/or pellets). Despite these negative findings, burrowing owls could nest along or near the alignment in the future.”

Valley Elderberry Longhorn Beetle: “There is a blue elderberry shrub near the north end of the McConnell Lateral Pipeline alignment. No other blue elderberry shrubs were observed within or adjacent to the alignments. The shrub is approximately 50 feet northwest of the point in the dirt road where the McConnell Lateral Pipeline will tie in with the McConnell Lateral.” “Despite its location in a non-riparian setting in the waste water treatment plant parcel, it is possible VELB inhabits this elderberry shrub. However, it would not be expected to occur along the dirt road where the new pipeline will be constructed.” (Moore).

Moore recommends:

- IV-1 Pre-construction surveys for nesting Swainson’s hawks in the project area should be conducted if construction commences between March 1 and September 15. The survey should include all large trees visible from the alignment. If active nests are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction.
- IV-2 Pre-construction surveys for burrowing owls in the project area should be conducted if construction commences between February 1 and August 31. The survey should include the ruderal areas along the alignment, and all areas of open grassland visible from the alignment. If occupied burrows are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction.
- IV-3 Disturbance to the blue elderberry shrub should be avoided by restricting ground disturbance activities near the elderberry shrubs to the minimum needed to accomplish the project. Additionally, work should be scheduled between July 1 and April 1 to avoid potentially adverse impacts to any adult VELB that may have emerged and be present on the leaves or stems of the elderberry shrubs.
- IV-4 Orange safety fencing should be installed along the edges of the shrub facing construction activities (i.e., south and east), at a distance of 20 feet outside the dripline of the shrub. The fencing will alert workers of the environmentally sensitive area and prevent physical disturbance to the shrub cluster. It the waste water treatment plant

parcel is utilized for staging or parking, the fencing would also be needed along the west side of the shrub.

- IV-5 Trees and shrubs along the alignments could be used by nesting raptors and other protected birds. Any trees that need to be removed or trimmed to facilitate the project, (if any) should be felled or trimmed outside of the general bird nesting season (February 1 through August 31) or a nesting bird survey should be conducted immediately prior to tree removal. If active nests are found, tree felling should be delayed until the young have fledged.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The site and area of the proposed project contains no important riparian habitat or any sensitive natural community as identified by any federal, state or regional agency. "Due to the lack of suitable habitat, no special-status plant species are expected to occur along the alignments" and "The potential for intensive use of habitats along the alignment by special-status wildlife species is generally considered low" (Moore).

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site does not contain wetlands. M.I.D.'s Livingston Canal, McConnell Lateral, Howard Lateral, Hammatt Lateral, and Arena Canal are potentially jurisdictional waters of the U.S.; however, the proposed project construction in M.I.D.'s irrigation facilities qualifies as an exempt activity⁶.

⁶ Army Corps of Engineers Regulatory Guidance Letter 07-02.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

“Due to lack of suitable habitat, it is unlikely that special-status plants would occur along the alignments.

“With the exception of Swainson’s hawk, burrowing owl, and valley elderberry longhorn beetle, no special-status wildlife species are expected to occur along or near the alignment on more than a very occasional or transitory basis.” (Moore)

Moore recommends:

- IV-1** Pre-construction surveys for nesting Swainson’s hawks in the project area should be conducted if construction commences between March 1 and September 15. The survey should include all large trees visible from the alignment. If active nests are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction.
- IV-2** Pre-construction surveys for burrowing owls in the project area should be conducted if construction commences between February 1 and August 31. The survey should include the ruderal areas along the alignment, and all areas of open grassland visible from the alignment. If occupied burrows are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction.”
- IV-3** Trees and shrubs along the alignments could be used by nesting raptors and other protected birds. Any trees that need to be removed or trimmed to facilitate the project, (if any) should be felled or trimmed outside of the general bird nesting season (February 1 through August 31) or a nesting bird survey should be conducted immediately prior to tree removal. If active nests are found, tree felling should be delayed until the young have fledged.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
e) Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project site is not within a Resource Conservation Area or Resource Management Area (Merced County General Plan, 2000)⁷, nor would it conflict with any known policies protecting biological resources.

⁷ <http://www.co.merced.ca.us/index.aspx?NID=436> , Chapter VI:Open Space/Conservation.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There is no adopted Habitat Conservation Plan or Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan on or around the proposed development site (Merced County General Plan, 2000)⁷. The project would have no effect upon fish or wildlife resources.

V. CULTURAL RESOURCES

DISCUSSION

This environmental issue focuses on the impacts of a project on cultural resources including, but not limited to, the adverse change to a significant historical or archaeological resource. Other areas of concern include the potential for a project to adversely impact a unique paleontological resource or geologic feature or disturb any human remains.

SETTING

The proposed project is comprised of the installation of a pipeline (proposed McConnell Lateral pipeline) and the rehabilitation of portions of the Arena Canal and Howard Lateral.

The proposed McConnell Lateral pipeline lies in Sec. 14, T6S, R11E. The proposed pipeline is approximately 1,350 feet long starting at the end of the McConnell Lateral and terminating at the head of the Hammett Lateral. See Figure 2, Site Plan, page 7.

Arena Canal and Howard Lateral lie in Sec. 2, 3, 9 & 10, T7S, R11E. The project begins at Bell Road with the earthen Arena Canal, approximately 4,900 feet long; then transfers to a concrete lined channel for approximately one mile to a siphon at Sunset Avenue where it converts to the Howard Lateral. The Howard Lateral runs approximately one mile to Atwater-Jordan Road which is where the project terminates. See Figure 2, Site Plan, page 7.

Both the pipeline construction and the canal/lateral rehabilitation will take place in areas that are already highly disturbed by historically recent human activities. The probability that cultural resources would be discovered and/or disturbed would be highly unlikely.

EVALUATION

A records search was conducted by **Central California Information Center** (CCIC - California Historical Resources Information System, Department of Anthropology-California State University, Stanislaus) on November 15, 2011. A copy of that report is included at the end of this document (Appendix B). The records search reports as follows: "Prehistoric or historic archaeological resources: None have been reported to the Information Center."

Recommendations and Comments by the **Central California Information Center** are included in the text below.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project area and adjacent areas are not known to contain any historical resource as defined in §15064.5 of the CEQA Guidelines.

The CCIC has conducted a records search⁸ of their files and has reviewed the following resources: National Register of Historic Places, the California Register of Historic Places, the *California Inventory of Historic Resources* (1976), the *California Historic Landmarks* (1990), and the California Points of Historical Interest listing (May 1992 and updates), the Directory of Properties in the Historic Property Data File (HPDF) and the Archaeological Determinations of Eligibility (ADOE) (Office of Historic Preservation current computer lists dated 08-15-2011 and 08-09-2011, respectively) the CALTRANS state and Local Bridge Survey (1989 and updates), the *Survey of Surveys* (1989), GLO Plats and other pertinent historic data available at the CCIC. The summary of their records search is as follows:

1. Prehistoric or historic archaeological resources: None have been reported to the Information Center.
2. Prehistoric or historic resources within the immediate vicinity of the project area: None have been reported to the Information Center.
3. Resources that are known to have value to cultural groups: None have been formally reported to the Information Center.

Based on existing data in **Central California Information Center** data:

1. For the proposed McConnell Lateral Pipeline: CCIC recommends archaeological consultation and monitoring by a professional archaeologist prior to excavation for the pipeline; and formal documentation and evaluation of the McConnell and Hammatt Laterals, if they will be impacted.
2. For the Howard Lateral/Arena Canal Rehabilitation project: CCIC recommends vigilance during any ground disturbance (excavation)—should there be any—for the siphons and canal rehabilitation, i.e., noting the presence of artifacts, historic refuse, foundations, etc.; and formal documentation and evaluation of the canals.

Recommendations:

- V-1** A professional archaeologist shall be consulted prior to initial excavation. Consultation and monitoring maybe required during excavation at archaeologist's discretion.
- V-2** In accordance with Federal and State law, if any historical resources (a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old) are discovered during project-related

⁸ **Central California Information Center** (California Historical Resources Information System, Department of Anthropology-California State University, Stanislaus) CCIC File # 8091 I, dated November 15, 2011.

activities, all work is to stop and the lead agency and a qualified professional are to be consulted to determine the importance and appropriate treatment of the find. If Native American remains are found the County Coroner and the Native American Heritage Commission, Sacramento (916-653-4082) are to be notified immediately for recommended procedures.

- V-3** If any archaeological or cultural resource is found, the firm or individual retained is responsible for submitting any report of findings to the Central California Information Center, including one copy of the narrative report and two copies of any records that document historical resources found as a result of field work.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project area and adjacent areas are not known to contain any archaeological resource as defined in §15064.5 of the CEQA Guidelines, but the CCIC recommends archaeological monitoring during excavation of the pipeline and any other ground disturbance.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The site and area is not known to contain any known unique paleontological resource or site, or a unique geologic feature.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The construction proposed as part of the project is not expected to impact any human remains, including those interred outside of formal cemeteries. Any deep trenching or excavation is subject to state rules and regulations concerning the uncovering of cultural resource materials.

VI. GEOLOGY AND SOILS

DISCUSSION

This environmental issue focuses on the impacts of natural geologic or soil conditions on a project as well as the impacts of a project on soil erosion.

SETTING

The proposed project site is flat and will not involve construction activities that will have any impact on the geologic stability of the area.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Will the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42 ⁹ .)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslide?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project site is not located within an area delineated on the Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist. The Merced County General Plan contains a geologic study that shows the project site is located in an area with relatively low

⁹ <http://www.consrv.ca.gov/cgs/rghm/ap/Pages/Index.aspx>

exposure to seismic risk. Since the site is flat, there is no danger of landslides (Merced County General Plan, 2000)¹⁰.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No erosion or loss of topsoil will occur except what is normally expected during the rainy season.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project site is not located on a geological 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 as identified in the county general plan (Merced County General Plan, 2000)¹¹.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project site does not contain expansive soil as defined in Table 18-1-B of the Uniform Building Code (cf. Section 1803.5.3 of the California Building Code (2010)). The installation of the proposed pipeline does not create a substantial risk to life or property. The project will not entail construction of residences or any other structures that house people.

¹⁰ <http://www.co.merced.ca.us/index.aspx?NID=436> Chapter V:Safety

¹¹ <http://www.co.merced.ca.us/index.aspx?NID=436> Chapter V:Safety

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
e) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not include the use of any septic tanks or alternative wastewater disposal systems.

VII. GREENHOUSE GAS EMISSIONS

DISCUSSION

This environmental issue focuses on the impacts of a project with respect to greenhouse gas emissions. Individual projects typically include the following sources of greenhouse gas emissions: Activities resulting in exhaust emissions of greenhouse gasses from fuel combustion in diesel- or gasoline-powered vehicles and equipment during construction; motor vehicle trips generated by workers arriving at and leaving the project site; Motor vehicle trips resulting from a particular land use (residents, shoppers, workers, vendors, etc.); On-site greenhouse gas emissions from space and water heating equipment, landscape maintenance equipment, fireplaces/stoves, etc.; and off-site emissions produced at utility providers associated with the project's utility and water demands.

SETTING

The proposed project site is located in rural, agricultural lands and is not subject to an increase in traffic or other greenhouse gas producing sources other than that generated during construction.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project will not create a significant increase in greenhouse gas emissions except during construction. Since these emissions will be short-term, there will be a less than significant impact on the environment due to greenhouse gas emissions generated by this project.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The construction phase of the proposed project is short-term and will not conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gasses.

VIII. HAZARDS AND HAZARDOUS MATERIALS

DISCUSSION

This environmental issue focuses on the impacts of a project with respect to hazards. The creation of new hazardous conditions or activities that will result in people or property being exposed to existing hazards is the primary area of focus under this environmental issue. Hazards include, but are not limited to, hazardous materials, hazards associated with aircraft and airports or wild land fires. An additional concern is the consistency of a project with emergency response plans or emergency evacuation plans.

SETTING

The proposed project site does not have a history of hazardous materials being present or a history of land uses that would involve the use or storage of hazardous materials. The Hazardous Waste site inventory of Merced County and the State Department of Health Services did not reveal the existence of any hazardous conditions on the project site¹².

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

¹² <http://www.envirostor.dtsc.ca.gov/public/> (County=Merced)

The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project will not create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There are no schools within a one-quarter mile radius of the project site.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is not located on a site that is included on a list of hazardous waste sites compiled pursuant to Government Code Section 65962.5. The project site is not on the Hazardous Waste and Substances Site List (Cortese List) (California Environmental Protection Agency, 2007)¹³.

¹³ <http://www.envirostor.dtsc.ca.gov/public/search.asp?basic=True> (County=Merced)

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is not located in the vicinity of any airport land use plan.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is not located within the vicinity of a private airstrip.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan within the county.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
h) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>