ADMINISTRATIVE DRAFT

Initial Study
2020 and 2021 Water Pipeline Replacement Project

Project Location
Beaumont, Riverside County, California

Prepared for:

Beaumont-Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223

Prepared by:

Geovironment Consulting
630 W 7th Street
San Jacinto, CA 92583

March 2023

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Project Information

1. **Project Title:**

   2020 and 2021 Water Pipeline Replacement Project

2. **Lead Agency Name and Address:**

   Beaumont-Cherry Valley Water District
   560 Magnolia Avenue
   Beaumont, CA 92223

3. **Contact Person and Phone Number:**

   Mark Swanson, (951) 845-9581

4. **Project Locations:**

   The service area of the District covers approximately 28 square miles, and the District's sphere of influence covers approximately 37.5 square miles, virtually all of which is located within the County of Riverside, and includes the community of Cherry Valley, the City of Beaumont, and small portions of the City of Calimesa.
   The Project sites are in six different locations in the unincorporated Community of Cherry Valley in Riverside County. Pipeline 1 is located in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. Pipeline 2 is located in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. Pipeline 3 is located in Star Lane, Sky Lane, and View Drive, a distance of approximately 390 feet for Star Lane, 390 feet for View Drive and 295 feet in length for Sky Lane. Pipeline 4 is located in Utica Way from Vineland Street to an existing in-line valve. Pipeline 5 is located in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. Pipeline 6 is located in Avenida Miravilla near Quail Road, a distance of approximately 300 feet.

5. **Proponent's Name and Address:**

   Beaumont-Cherry Valley Water District
   560 Magnolia Avenue
   Beaumont, CA 92223

6. **Surrounding Zoning and General Plan Designations:**

Pipeline 1 Surrounding:	**Zoning**	**Land Use Designation**
North	R-1	MDR
East	R-1	MDR
South	R-1	MDR
West	R-1	MDR

Pipeline 2 Surrounding:	**Zoning**	**Land Use Designation**
North	R-1	MDR
East	R-1	MDR
South	R-1	MDR
West	R-1	MDR

Pipeline 3 Surrounding:	Zoning	Land Use Designation
North	A-P	RC-VLDR
East	A-1-1	RC-VLDR
South	R-1	MDR
West	A-1-1	RC-VLDR

Pipeline 4 Surrounding:	Zoning	Land Use Designation
North	A-1-1-1	RC-VLDR
East	A-1-1	RC-VLDR
South	A-1-1	RC-VLDR
West	A-1-1	RC-VLDR

Pipeline 5 Surrounding:	Zoning	Land Use Designation
North	R-A-1, A-1-1, A-1	RC-VLDR
East	R-A-1	RC-VLDR
South	A-1	RC-VLDR
West	W-2	RR

Pipeline 6 Surrounding:	Zoning	Land Use Designation
North	R-1-1	RC-VLDR
East	R-1-1	RC-VLDR
South	R-A-1	RC-VLDR
West	R-1-1	RC-VLDR

8. **Description of Project:**

For the 2021 calendar year, the District has identified six (6) sections of pipeline infrastructure within its service area that require replacement.

PIPELINE 1
Pipeline 1 scope of work includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The work includes abandonment of existing pipeline in Lambert Road, installing new meter services, laterals, and appurtenances (including individual service lines for each property), reconnect services to the new pipeline, remove existing blowoff valve, and replace with new fire hydrants (one located at existing blowoff location and one new hydrant at the end of the cul-de-sac). The new pipeline will connect to the existing 10-inch diameter steel pipeline located in Napoleon Street. Said connection will require a cut-in tee detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 2
Pipeline 2 scope of work includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. Abandon the existing pipeline in Bing Place, install new meter services, laterals, and appurtenances (including individual services lines for each property), reconnect services to the new pipeline, remove existing blow off valve, and replace with new fire hydrants (one located at existing blowoff location and one new hydrant at the end of the cul-de-sac). The new pipeline will connect to the existing 10-inch diameter steel pipeline located in Napoleon Street. Said connection

will require a cut-in tee detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 3

Pipeline 3 scope of work includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The existing Sky Lane and Star Lane pipelines are each connected to an existing 12-inch diameter DIP located in Orchard Street. The Star Lane pipeline is approximately 390 feet in length, the Sky Lane pipeline is approximately 395 feet in length and the View Drive pipeline is approximately 390 feet. The existing pipelines within Star Lane, Sky Lane, and View Drive are to be abandoned-in-place and the new main lines constructed adjacent to said existing pipelines. Installation of new meter services, laterals, and appurtenances shall be per District standards with individual services to each property (no split services). New fire hydrants shall be located and included as part of the design in accordance with fire department standards, coordinated with District staff, and approved by the jurisdiction agency. The new pipelines located in Star Lane and Sky Lane will connect to the existing 12-inch diameter DIP pipeline located in Orchard Street. Said connection will require a cut-in tee detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 4

Pipeline 4 scope of work includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street to an existing in-line valve (as identified by District field staff). The existing pipeline in Utica Way shall be abandoned and most likely removed with the proposed pipeline to be constructed adjacent to the existing. New water services, laterals and appurtenances shall be connected to the new pipeline. The new pipeline will connect to the existing 10-inch diameter steel pipeline located in Vineland Street. Said connection will require a cut-in tee detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 5

Pipeline 5 scope of work includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The existing pipeline in Avenida Sonrisa shall be abandoned-in-place and the new main line constructed adjacent to the existing. Installation of new meter services, laterals, and appurtenances to be per District standards with individual services to each property (no split services). New fire hydrants shall be located and included as part of the design in accordance with fire department standards, coordinated with District staff, and approved by the jurisdictional agency. The new pipeline will connect to the existing 6-inch diameter steel pipeline located in Avenida San Timoteo and the existing 6-inch diameter Asbestos-Cement pipe (ACP) pipeline located approximately 700 feet east of Avenida Miravilla. Said connection will require a cut-in tee detail, as provided by the District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 6

Pipeline 6 scope of work includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The existing pipeline in Avenida Miravilla shall be abandoned and most likely removed with the proposed pipeline to be constructed adjacent to the existing. Installation of new meter services, laterals, and appurtenances to be per District standards with individual services to each property (no split services). New fire hydrants shall be located and included as part of the design in accordance with fire department standards, coordinated with District staff, and approved by the jurisdictional agency. The new pipeline will connect to the existing 6-inch diameter ACP pipeline located near Quail Road. Said connection

will require a cut-in tee detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down. Avenida Miravilla is a relatively narrow road and is lined with large trees, so particular attention should be paid to ensure that an alignment can be determined with little impact to trees.

9. Surrounding Land Uses and Setting:

The area surrounding the six Project sites includes mostly residential uses and roads.

PIPELINE 1&2
The areas to the north, south, east and west of Pipeline 1 and Pipeline 2 consists of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1 and Pipeline 2. Pipeline 1 sits at approximately 2893 feet amsl. Pipeline 2 sits at approximately 2878 feet amsl. Noble Creek is located to the west of Pipeline 1 approximately 0.25 miles away and to the west of Pipeline 2 approximately 0.28 miles away.

PIPELINE 3
The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The areas to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR). Pipeline 3 sits at approximately 2752 feet amsl.

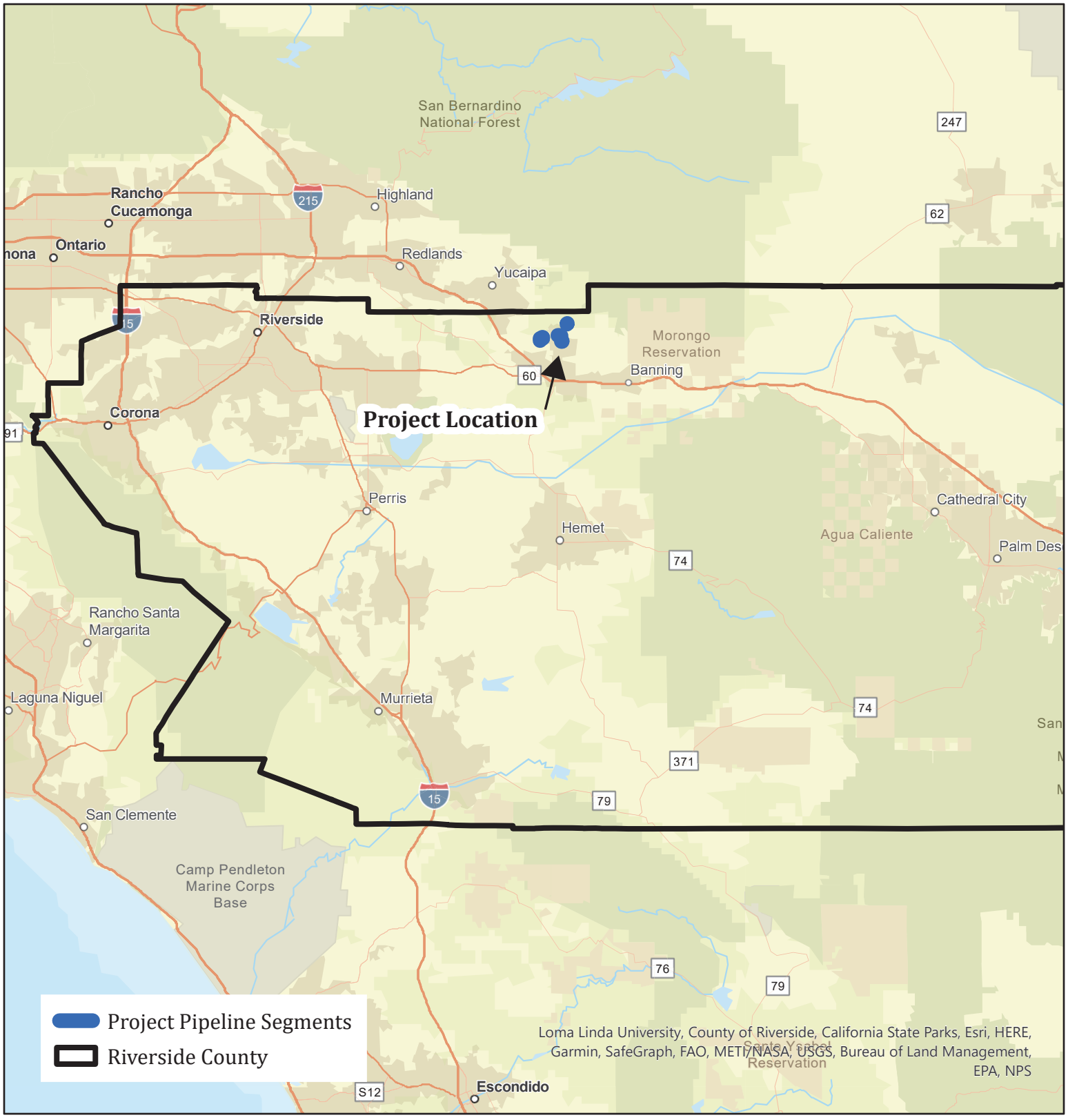
PIPELINE 4
The areas to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR) land use. Vineland Street sits perpendicular to Utica Way, the road Pipeline 4 will be located in. Pipeline 4 sits at approximately 2740 feet amsl.

PIPELINE 5
The areas to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and are designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. Noble Creek is located approximately 140 feet east to the most eastern portion of the pipeline location. Little San Gorgonia Creek is located approximately 405 feet west from the most western portion of the pipeline location. Pipeline 5 sits at approximately 2924 feet amsl.

PIPELINE 6
The areas to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. Pipeline 6 sits at approximately 3,308 feet amsl. Little San Gorgonio Creek is located approximately 0.27 miles to the northwest from the pipeline location. Noble Creek is located to the east of the Project site approximately 0.2 miles to the southeast from the pipeline location.

N
0 5 10 20 Miles
1:780,000

Figure 1 - Regional Vicinity Map
2020 - 2021 Pipeline Replacement



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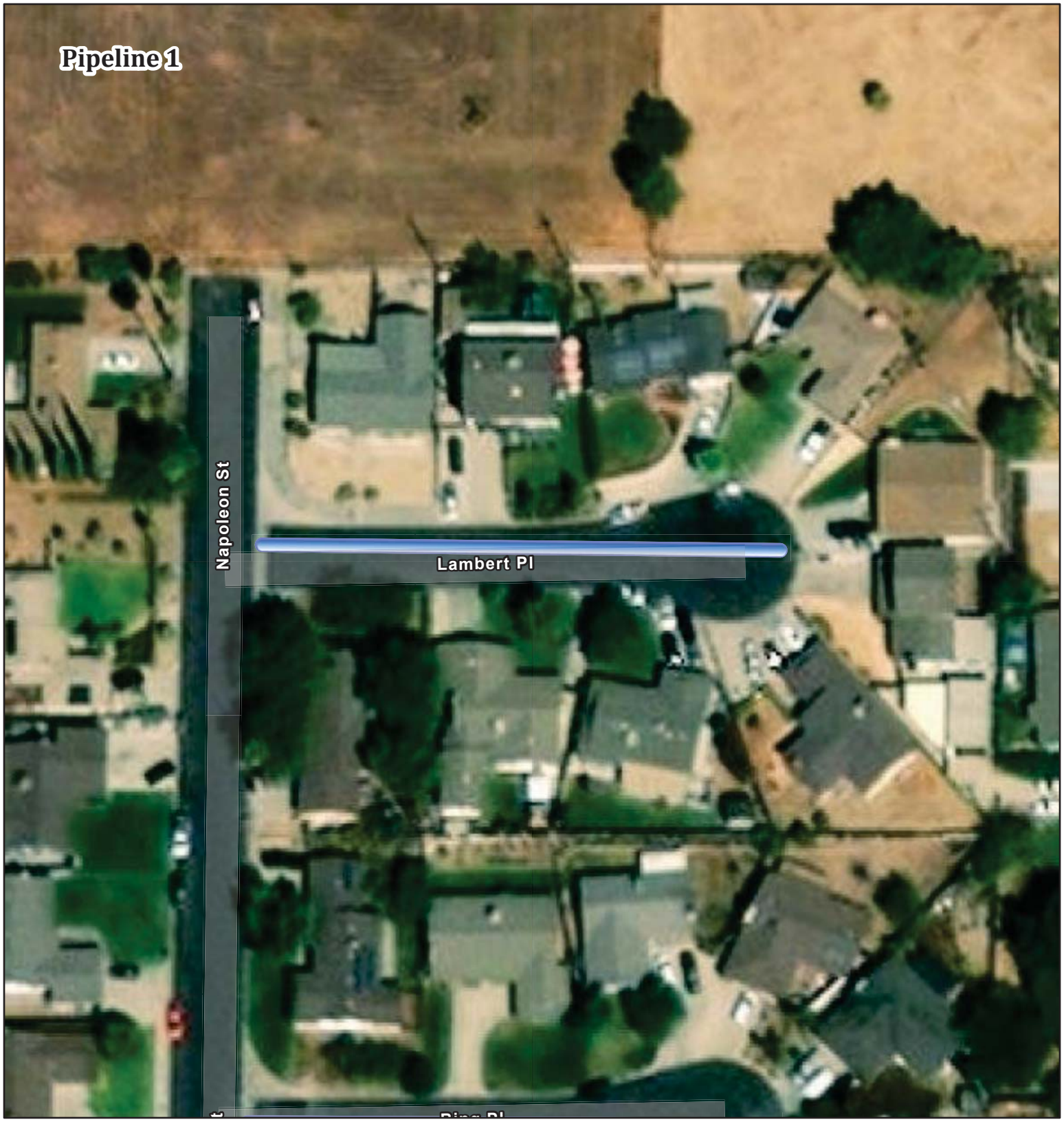
N

0 0.01 0.01 0.03 Miles

1:880

Figure 2 - Project Area
2020 - 2021 Pipeline Replacement



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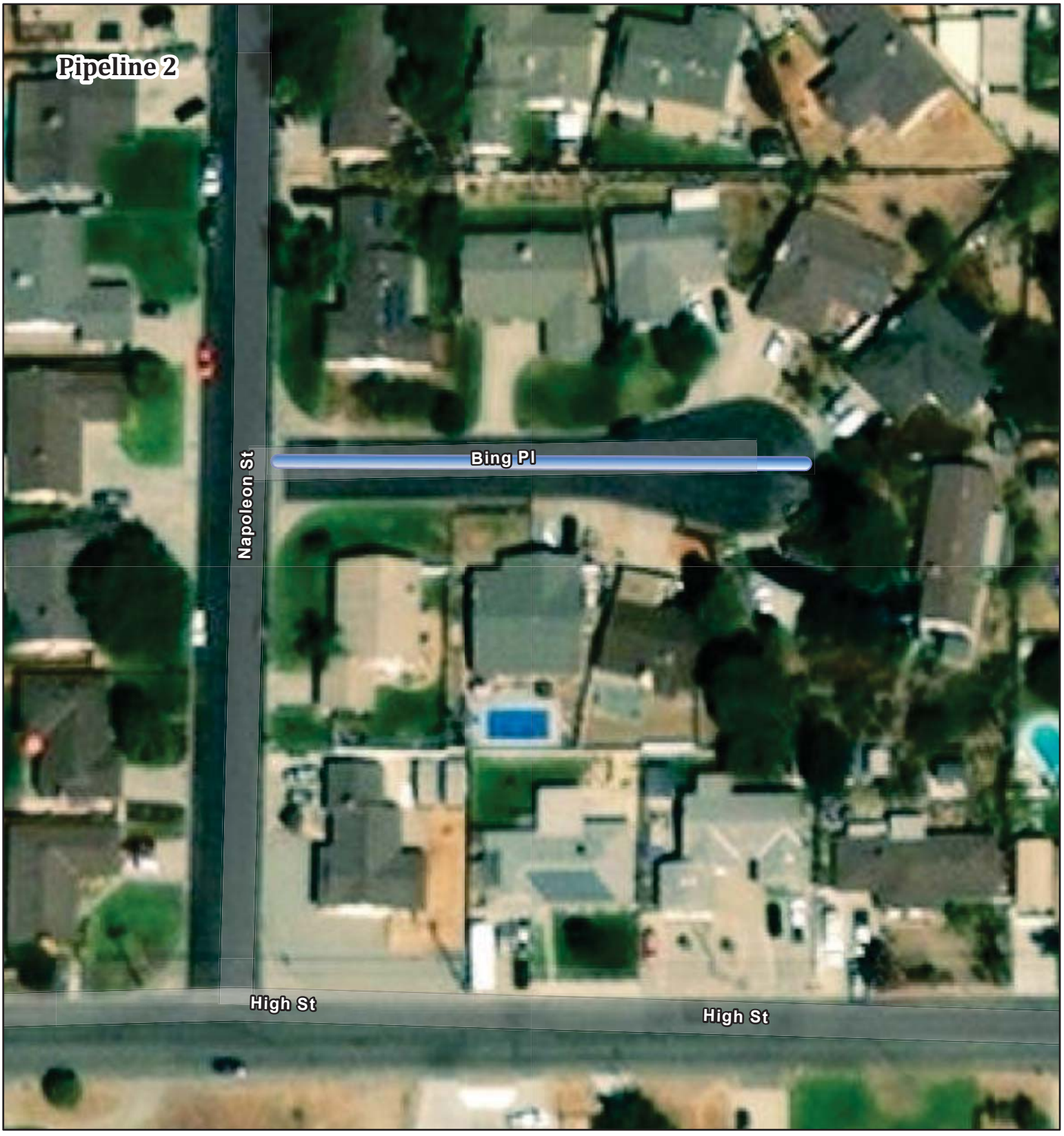
N

0 0.01 0.01 0.03 Miles

1:880

Figure 2 - Project Area
2020 - 2021 Pipeline Replacement



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N
0 0.01 0.02 0.04 Miles
1:1,300

Figure 2 - Project Area
2020 - 2021 Pipeline Replacement

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Figure 2 - Project Area
2020 - 2021 Pipeline Replacement

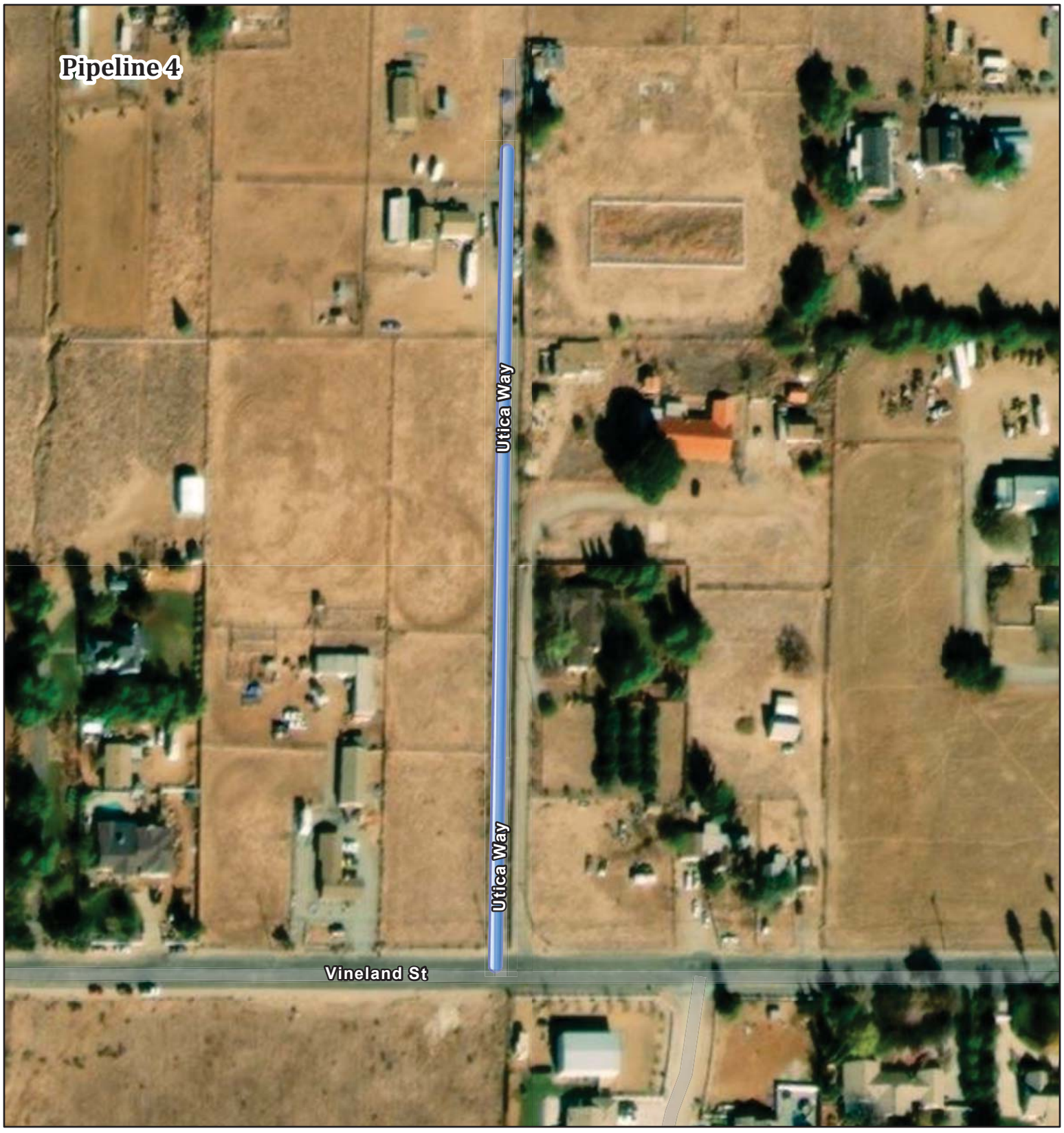

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Figure 2 - Project Area
2020 - 2021 Pipeline Replacement

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N
0 0.01 0.01 0.03 Miles
1:1,000

Figure 2 - Project Area
2020 - 2021 Pipeline Replacement

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Figure 3 - Site Photographs
2020 - 2021 Pipeline Replacement

PIPELINE 1

West View of Lambert Place

East View of Lambert Place

East View in Middle of Lambert Place

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PIPELINE 2

East View of Bing Place

West View of Bing Place

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PIPELINE 3


South View of Star Lane


North View of Star Lane


Southwestern View - Corner of View Dr. & Star Ln.


North View of Sky Lane


East View of View Drive


South View of Sky Lane

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PIPELINE 4

North View of Utica Way

South View of Utica Way

North View of Utica Way into Residence

Northeast View of Pipeline Alignment

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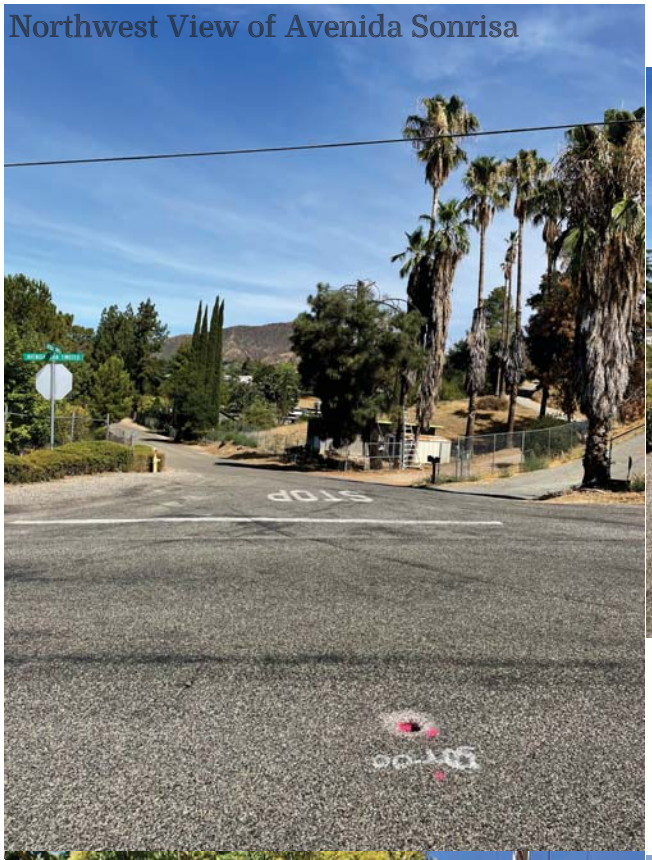
PIPELINE 5

Northwest View of Avenida Sonrisa



West View of Avenida Sonrisa

East View of Avenida Sonrisa

West View at West End of Pipeline 5

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PIPELINE 6

South View of Avenida Miravilla

North View of Avenida Miravilla

Southwest View - South End of Pipeline 6

Southwest View of Avenida Miravilla

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Environmental Factors

Environmental Factors Potentially Affected:

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

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

The IS/MND fully addresses the environment, as described by CEQA, as "the physical conditions which existing within the area which will be affected by a proposed Project including land, air, water, flora, fauna, noise, objects of historic or aesthetic significance." A detailed analysis of environmental impacts will be presented for each resource area (listed above) utilizing the model Environmental Checklist Form found in Appendix G of the CEQA Guidelines §15063(f). Impacts to the environment for construction and operation of the Project will be assessed and described, and the level of significance of impacts will be measured against criteria that have been established by regulation, accepted standards, or other definable criteria. The use of an MND is only permissible if all potentially significant environmental impacts assessed in the IS are rendered less than significant with incorporation of mitigation measures.

Each environmental resource area is reviewed by analyzing a series of questions (i.e., Initial Study Checklist) regarding level of impact posed by the Project. Substantiation is provided to justify each determination. One of four following conclusions is then provided as a determination of the analysis for each of the major environmental factors.

No Impact. A finding of no impact is made when it is clear from the analysis that the Project would not affect the environment.

Less than Significant Impact. A finding of a less than significant impact is made when it is clear from the analysis that a Project would cause no substantial adverse change in the environment and no mitigation is required.

Less than Significant Impact with Mitigation Incorporated. A finding of a less than significant impact with mitigation incorporated is made when it is clear from the analysis that a Project would cause no substantial adverse change in the environment when mitigation measures are successfully implemented by the Project proponent. In this case, the Project proponent would be responsible for implementing measures identified in a Mitigation Monitoring and Reporting Plan (MMRP).

Potentially Significant Impact. A finding of a potentially significant impact is made when the analysis concludes that the proposed Project could have a substantially adverse change in the environment for one or more of the environmental resources assessed in the checklist. Typically, preparation of an Environmental Impact Report (EIR) would be required in the case of potentially significant impact. No findings of significant impact were determined to potentially result from the Project.

Environmental 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 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 impact" or "potentially significant unless mitigated" impact on the environment but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed 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
Printed Name	Title

Environmental Checklist of Impacts

I. Aesthetics

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Except as provided in Public Resources Code Section 21099, would the project have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

No Impact. The Project site is located at six different locations in rural Cherry Valley, a community characterized by residential, residential agriculture uses, animal-keeping uses, and open space. Each site is surrounded by different zoning and land uses.

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east, and west of Pipeline 1 and Pipeline 2 consists of single-family residential houses (R-1) and is designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. Pipeline 1 sits at approximately 2893 feet amsl. No scenic vistas exist on or in the vicinity of the site. No impact would occur.

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consists of single-family residential houses (R-1) and is designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. Pipeline 2 sits at approximately 2878 feet amsl. No scenic vistas exist on or in the vicinity of the site. No impact would occur

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and is designated very low density residential (RC-VLDR). Pipeline 3 sits at approximately 2752 feet amsl. No scenic vistas exist on or in the vicinity of the site. No impact would occur.

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street to an existing in-line valve (as identified by District field staff). The area to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR) land use. Vineland Street sits perpendicular to Utica Way, the road Pipeline 4 will be located in. Pipeline 4 sits at approximately 2740 feet amsl. No scenic vistas exist on or in the vicinity of the site. No impact would occur.

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The area to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and are designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. Pipeline 5 sits at approximately 2924 feet amsl. No scenic vistas exist on or in the vicinity of the site. No impact would occur.

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The area to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. Pipeline 6 sits at approximately 3,308 feet amsl. No scenic vistas exist on or in the vicinity of the site. No impact would occur.

The proposed six Project pipelines would blend with surrounding aesthetic, as the Project entails pipeline improvements that will be covered by roads. No designated scenic vistas exist on each of the six Project sites or in the immediate vicinity of the sites, and the proposed Project would have no impacts on scenic vistas.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Except as provided in Public Resources Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

No Impact. The California Scenic Highways and Historic Parkways Program of 1963 was established "to preserve and protect highway corridors located in areas of outstanding natural beauty" from alteration that would diminish the aesthetics value of the adjacent lands. The proposed Project is not located within an officially designated state scenic highway of the California Scenic Highway Mapping System[1]. Route 243 is the nearest eligible scenic highway to the Project and is located approximately 7.85 miles southeast of the nearest pipeline site (Pipeline 2).[2] It would not be impacted by the proposed Project. The Project sites are located in the rural Cherry Valley community with very low-density residential uses, agricultural uses, and open space. The Project sites are not located within a state scenic highway, and there are no trees, rock outcroppings, or historic buildings within a state scenic highway on or near the six Project pipeline sites. Therefore, no impacts associated with scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway would occur as a result of the Project.

1 California Department of Transportation (2022). The California Scenic Highway Program.
2 County of Riverside (2015, December 8). The County of Riverside, The Pass Area Plan. Figure 9 Scenic Highways.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Except as provided in Public Resources Code Section 21099, would the project, in nonurbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒

No Impact. Construction of the Project would result in short-term impacts to the Project site's existing visual character or quality of the site and its surroundings during site preparation and construction activity. However, visual impacts associated with construction would be those anticipated within a populated, rural environment experiencing growth. In its built condition, the Project would consist of pipeline replacement in roads at six locations within the Cherry Valley community. New fire hydrants shall be located and included as part of the design in accordance with fire department standards, coordinated with District staff, and approved by the jurisdictional agency. The new water pipelines would be developed within the street and invisible after construction. The roads where the six pipelines will be located would be backfilled, covered, and repaved. The Project would be required to comply with the County of Riverside Ordinances, including Title 15 specifying building and construction standards.[3] It would not degrade the existing visual character or quality of the site and its surroundings. No impact would result to existing visual character of the site and surroundings.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Except as provided in Public Resources Code Section 21099, would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

No Impact. No spotlighting, floodlighting, or glare-producing equipment would be used or installed on the Project area prior to, during, or following construction activities. The Pass Area Plan (PAP) Policy 9.1 states to adhere to Riverside County's lighting requirements for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Palomar Observatory.[4] County Code Chapter 8.80, Outdoor Lighting, provide minimum requirements for outdoor lighting to reduce light trespass and glare, and to protect the health, property, and well-being of residents in the unincorporated areas of the county. Section 8.80.050 requires outdoor luminaires be located, adequately shielded, and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way.[5] Outdoor luminaires shall not blink, flash, or rotate. No impact involving light, or glare is anticipated to occur as a result of the Project.

[3] County of Riverside (July 27, 2022) Codified County of Riverside Ordinance. Title 15 Building and Construction, Chapter 15.04 Building Regulations.

[4] County of Riverside (September 28, 2021) County of Riverside General Plan. The Pass Area Plan. Land Use Section 8.80.050 Standard.

[5] County of Riverside (July 27, 2022) Codified County of Riverside Ordinance. Title 8 Health and Safety, Chapter 8.80 Outdoor Lighting, Section.

II. Agriculture and Forestry Resources

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒

No Impact. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project sites or within the community. The proposed Project includes six pipelines, which are each aligned in five paved roads and one established dirt (gravel) road.

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 1 and Pipeline 2 consists of single-family residential houses (R-1) and is designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. Pipeline 1 sits at approximately 2893 feet amsl. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site or within the vicinity. No impact would occur.

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consists of single-family residential houses (R-1) and is designated medium density residential (MDR) land use. Pipeline 2 sits at approximately 2878 feet amsl. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site or within the vicinity. No impact would occur.

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and the is designated very low density residential (RC-VLDR). Pipeline 3 sits at approximately 2752 feet amsl. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site or within vicinity. No impact would occur.

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street to an existing in-line valve (as identified by District field staff). The area to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR) land use. Vineland Street sits perpendicular to Utica Way, the road Pipeline 4 will be located in. Pipeline 4 sits at approximately 2740 feet amsl. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site or within the vicinity. No impact would occur.

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The area to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and are designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. Pipeline 5 sits at approximately 2924 feet amsl. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site or within the vicinity. No impact would occur.

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The area to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. Pipeline 6 sits at approximately 3,308 feet amsl. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site or within the vicinity. No impact would occur.

The site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program. As such, the Project has no potential to convert such lands to a non-agriculture use and no impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

No Impact. The proposed six segments of pipelines that would be replaced are each located in five paved roads and one established dirt (gravel) road in the community of Cherry Valley.

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 1 and Pipeline 2 consists of single-family residential houses (R-1) and is designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site or within the vicinity. No impact would occur.

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consists of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site or within the vicinity. No impact would occur.

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive, all of which are paved roads. The area to the north of Pipeline 3 is zoned for light agriculture

with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and the are designated very low density residential (RC-VLDR). No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site. No impact would occur.

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street, to an existing in-line valve (as identified by District field staff). Utica way extends into a parcel zoned light agriculture (A-1-1) and is designated very low density residential (RC-VLDR) land use. The area to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR) land use. Although it is located within an agriculture use zoning area, it is specifically located under a private road and would not conflict with existing zoning as the project includes pipeline replacement under the gravel road. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site. No impact would occur.

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla (a paved road), a distance of approximately 1,380 feet. The area to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and is designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site. No impact would occur.

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla (a paved road) from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The area to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. No Prime or Unique Farmland or lands under the Williamson Act exist on the Project site. No impact would occur.

The five of the six sites are not zoned for agricultural use or under a Williamson Act contract. Pipeline 4 is located on a light agriculture (A-1-1) zoned parcel; however, it is located under a gravel private road that would not impact the existing zoning for agriculture use or Williamson Act contract. No impact to existing zoning for agricultural use or Williamson Act contract would occur as a result of the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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))?	☐	☐	☐	☒

No Impact. The community of Cherry Valley is located in rural mountainous lands with a variety of trees, shrubs, and grasses. The nearest forest timberlands area to the Project is associated with San Bernardino National Forest

located approximately 4 miles from the Project sphere. The forest is approximately 1,287 square miles and includes seven wilderness areas: San Gorgonio, Cucamonga, San Jacinto, South Fork San Jacinto, Santa Rosa, Cahuilla Mountain and Bighorn Mountain. Forest headquarters are located in the city of San Bernardino.

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 1 and Pipeline 2 consists of single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The nearest timberlands area is associated with San Bernardino National Forest located approximately 1.74 miles to the northeast of Pipeline 1. No impact would occur.

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consists of single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The nearest timberlands area is associated with San Bernardino National Forest located approximately 1.79 miles to the northeast of Pipeline 2. No impact would occur.

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and R-A-5, residential agriculture and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned A-1-1, light agriculture and the is designated very low density residential (RC-VLDR). The nearest timberlands area is associated with San Bernardino National Forest located approximately 1.16 miles to the north of Pipeline 3. No impact would occur.

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street, to an existing in-line valve (as identified by District field staff). Utica way extends into a parcel zoned A-1-1, light agriculture and is designated very low density residential (RC-VLDR) land use. The area to the north, east, south, and west of Pipeline 4 is zoned A-1-1, light agriculture and is designated very low density residential (RC-VLDR) land use. The nearest timberlands area is associated with San Bernardino National Forest located approximately 1.13 miles to the northeast of Pipeline 4. No impact would occur.

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The area to the north, south, and east of Pipeline 5 is zoned R-A-1, residential agriculture and is designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. The nearest timberlands area is associated with San Bernardino National Forest located approximately 1.5 miles to the northeast of Pipeline 5. No impact would occur.

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla (a paved road) from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The area to the north, west, and east of Pipeline 6 is zoned for single family residential (R-1-1) and is designated as very low density residential (RC-VLDR) land use. The area

to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. The nearest timberlands area is associated with San Bernardino National Forest located approximately 0.6 miles to the northeast of Pipeline 6. No impact would occur.

The six Project pipelines would not conflict with existing zoning for, or cause rezoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. No designated forest land or timberland occurs on the Project site, and the Project would result in no impact to such use.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒

No Impact. The Project sites are each located within paved or gravel roads in the community of Cherry Valley.

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 1 and Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. No loss of forest land or conversion of forest land to non-forest use would occur. No impact would occur.

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. No loss of forest land or conversion of forest land to non-forest use would occur. No impact would occur.

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR). No loss of forest land or conversion of forest land to non-forest use would occur. No impact would occur.

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street, to an existing in-line valve (as identified by District field staff). Utica way extends into a parcel zoned light agriculture (A-1-1) and is designated very low density residential (RC-VLDR) land use. The area to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR) land use. No loss of forest land or conversion of forest land to non-forest use would occur. No impact would occur.

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The area to the north, south,

and east of Pipeline 5 is zoned R-A-1, residential agriculture and is designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. No loss of forest land or conversion of forest land to non-forest use would occur. No impact would occur.

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla (a paved road) from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The area to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. No loss of forest land or conversion of forest land to non-forest use would occur. No impact would occur.

As discussed in response c) above, no forest lands occur in close proximity to the Project site. No designated forest land would be converted to non-forest uses for the Project. As a result, the Project would result in no impact to forest lands.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒

No Impact. The Project proposes development of six water pipeline replacements that tie-into existing water distribution system within the existing street right of way. As discussed in response b), c), and d) above, no Prime or Unique Farmland or lands under the Williamson Act exist on the Project site or within the vicinity and no forest lands occur in close proximity to the Project site. The nearest forest land is associated with San Bernardino National Forest several miles to the north of the Project site. The proposed Project doesn't involve the use of designated farmland or forest land, conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use and no impact to such resources would occur as a result of development of the Project.

III. Air Quality

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

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

Less than Significant Impact. The basis for air quality review in the Project area is evaluating consistency with the South Coast Air Quality Management District (SCAQMD) regulations, which are designed to bring the South Coast Air

Basin (SCAB), including the Community of Cherry Valley, into attainment for all National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

An ambient air quality standard (AAQS) defines the maximum amount of a pollutant that can be present in outdoor air without harm to the public's health. Ambient air quality standards for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb) have been set by both the State of California and the federal government. The State has also set standards for sulfates ($SO_4(2-)$) and visibility. AAQSs are set to regulate air emissions from stationary and mobile sources to achieve clean air and to protect even the most sensitive individuals in our communities.

Growth projections from Riverside County Unincorporated Area are provided to the Southern California Association of Governments (SCAG), which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. The SCAQMD in conjunction with the California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), and USEPA prepares and regularly updates an Air Quality Management Plan (AQMP 2016) to set forth an integrated program to achieve compliance with air quality standards in the Basin.[6] Currently, the Community of Cherry Valley is out of compliance with CAAQS PM_{10} and ozone standards and NAAQS for $PM_{2.5}$ and ozone standards.[7] Table 1 illustrates attainment status and attainment dates by criteria pollutant in the SCAB.

Table 1 - South Coast Air Basin Attainment Status

Criteria Pollutant	Standard	Averaging Time	Designation[1]	Attainment Date[2]
1-Hour Ozone[3]	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (revised deadline)
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone[4]	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	NAAQS	2015 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	1-Hour (20 ppm) 8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO_2[5]	NAAQS	2010 1-Hour (0.10 ppm)	Unclassifiable/ Attainment	N/A (attained)
	NAAQS	1971 Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-Hour (0.18 ppm) Annual (0.030 ppm)	Attainment	---
SO_2[6]	NAAQS	2010 1-Hour (75 ppb)	Designations Pending (expect Unclassifiable/ Attainment)	N/A (attained)
	NAAQS	1971 24-Hour (0.14 ppm) 1971 Annual (0.03 ppm)	Unclassifiable/ Attainment	3/19/1979 (attained)
PM10	NAAQS	1987 24-hour (150 µg/m^3)	Attainment (Maintenance)[7]	7/26/2013 (attained)
	CAAQS	24-hour (50 µg/m^3) Annual (20 µg/m^3)	Nonattainment	N/A
PM2.5[8]	NAAQS	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2019

6 Southern Coast Air Quality Management District (2016, March). Air Quality Management Plan
7 California Air Resources Board (2018). Air Designation Maps – State and National

Criteria Pollutant	Standard	Averaging Time	Designation[1]	Attainment Date[2]
	NAAQS	1997 Annual (15.0 µg/m^3)	Attainment	8/24/2016
	NAAQS	2012 Annual (12.0 µg/m^3)	Nonattainment (Serious)	12/31/2025
	CAAQS	Annual (12.0 µg/m^3)	Nonattainment	N/A
Lead[9]	NAAQS	2008 3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial) (Attainment determination requested)	12/31/2015
Hydrogen Sulfide (H_2S)	CAAQS	3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial)[i)]	---
Sulfates	CAAQS	24-Hour (25 µg/m^3)	Attainment	---
Vinyl Chloride	CAAQS	24-Hour (0.01 ppm/26 µg/m^3)	Attainment	---

Notes:
a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable
b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration
c) The 1979 1-hour O_3 standard (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard and therefore has some continuing obligations with respect to the revoked standard
d) 1997 8-hour O3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O3 standard is still subject to anti-backsliding requirements
e) New NO_2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO_2 standard retained
f) The 1971 annual and 24-hour SO2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO2 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.
g) Annual PM10 standard was revoked, effective December 18, 2006; 24-hour PM10 NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM10 maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.
h) Attainment deadline for the 2006 24-Hour PM2.5 NAAQS (designation effective December 14, 2009) is December 31, 2019 (end of the 10th calendar year after effective date of designations for Serious nonattainment areas). Annual PM2.5 standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m3. Designations effective April 15, 2015, so Serious area attainment deadline is December 31, 2025.
i) Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect to remain in attainment based on current monitoring data; attainment re-designation request pending.

Source: SCAQMD, 2016 Air Quality Management Plan.

The CARB defines attainment as the category given to an area with no violations in the past three years.[7] CARB prepares a State Implementation Plan (SIP) for NAAQS that exceed the significance thresholds to demonstrate the means to attainment. SIPs are a compilation of new and previously submitted plans, programs (including monitoring, modeling, permitting, etc.), district rules, state regulations and federal controls. Many of California's SIPs rely on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations and limits on emissions from consumer products.[7]

The Project would result in short-term air quality impacts over a short-term construction period comprised of site preparation and grubbing, grading, pipe construction, and paving. Short-term impacts would be related to vehicle/equipment exhaust, fugitive dust, asphalt/concrete slurry, pipe construction, and paving the Project site. Operation phase air quality impacts are expected to be limited to vehicular traffic trip generation; area sources associated with landscape equipment; energy use; solid waste generation; and water and waste generation onsite. Additionally, the proposed Project would be required to comply with the following regulatory rules from the SCAQMD and State of California (State). SCAQMD rules that are applicable, but not limited to the proposed project:

- Rule 402 Nuisance – Controls the emissions of odors and other air contaminants;
- Rule 403 Fugitive Dust – Controls the emissions of fugitive dust;
- Rules 1108 and 1108.1 Cutback and Emulsified Asphalt – Controls the VOC content in asphalt;
- Rule 1113 Architectural Coatings – Controls the VOC content in paints and solvents; and
- Rule 1143 Paint Thinners – Controls the VOC content in paint thinners.

State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to the proposed project:

- CCR Title 13, Article 4.8, Chapter 9, Section 2449 – In use Off-Road Diesel Vehicles;
- CCR Title 13, Section 2025 – On-Road Diesel Truck Fleets; and
- CCR Title 24 Part 11 – California Green Building Standards.

The Project's criteria pollutant mass air emissions would be below the thresholds of significance for construction and operation and the Project would comply with applicable SCAQMD and CCR rules and requirements. Considering the Project is consistent with the County's General Plan and would not contribute to growth in the area, it would not conflict with or obstruct implementation of the AQMP, and impacts are considered less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard	☐	☐	☒	☐

Less than Significant Impact. The Project proposes development of six water pipeline replacements that tie-into existing water distribution system within the existing street right of way. The Project area not in an area out of attainment according to the United States Environmental Protection Agency's "Current Nonattainment Counties for All Criteria Pollutants."[8] However, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). The greatest source of emissions is from mobile sources, which travel throughout the local area; however, Project emissions are not expected to exceed thresholds. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. Impacts will be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the project expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Less than Significant Impact. Sensitive receptors include a class of receivers considered "sensitive" to environmental factors. By definition, sensitive receptors include, but are not limited to, residential uses, hospitals, schools, daycare facilities, elderly housing, and convalescent facilities. The nearest sensitive receptors to the Project site are single family residences located approximately 50 feet from the roads the Pipelines will be located within.

[8] United States Environmental Protection Agency. Current Nonattainment Counties for All Criteria Pollutants. Retrieved from: https://www3.epa.gov/airquality/greenbook/ancl.html Accessed: 2022, September 20

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed Project. According to SCAQMD methodology, health effects from carcinogenic air toxins are usually described in terms of "individual cancer risk." "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a lifetime will contract cancer, based on the use of standard risk-assessment methodology.[6]

Given the limited number of heavy-duty construction equipment and the short-term construction schedule, the Proposed Project would not result in a long-term (i.e., 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. Particulate matter (PM) from diesel exhaust is the predominant toxic air contaminant (TAC) in most areas and according to the California Almanac of Emissions and Air Quality 2013 Edition, prepared by CARB. About 80 percent of the outdoor TAC cancer risk is from diesel exhaust. Some chemicals in diesel exhaust, such as benzene and formaldehyde, have been listed as carcinogens by State Proposition 65 and the Federal Hazardous Air Pollutants program.[9]

Construction and operation of the Project would not exceed any thresholds of significance for criteria pollutants. Due to the nominal number of diesel truck trips that are anticipated to be generated by the proposed Project, a less than significant TAC impact would occur during the construction and on-going operations of the proposed Project and no mitigation would be required. The proposed Project will be required to comply with the air quality emissions rules established by SCAQMD and the Code of Regulations (CCRs) legislated and enforced by the State of California (State) identified in question a) of this section. Construction activity would be short-lived and would be required to comply with applicable SCAQMD rules and regulations to ensure a clean construction site. No significant short-term toxic air contaminant impacts would occur during construction of the proposed Project. As such, the Project is not expected to expose sensitive receptors to substantial pollutant concentrations and potential impacts are less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Less than Significant Impact. Odors are one of the most obvious forms of air pollution to the general public. Odors can present significant problems for both the source and the surrounding community. Although offensive odors seldom cause physical harm, they can cause agitation, anger, and concern to the general public. Most people determine an odor to be offensive (objectionable) if it is sensed longer than the duration of a human breath; typically, two to five seconds.

Potential odors associated with the Project would be diesel exhaust during the construction period. However, construction vehicle emissions at the Project site would be short-term, intermittent, and subject to air dispersion. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. It should also be noted that any odors that are released from the proposed Project would be anticipated to dissipate to less than significant levels prior to impacting the nearest sensitive receptors.

In addition, the Project would be subject to compliance with SCAQMD's Rule Book Regulation IV – Prohibitions, Rule 402, regarding nuisance. SCAQMD Rule 402 states, "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such

[9] California Air Resources Board (2014 May). The California Almanac of Emissions and Air Quality – 2013 Edition.

persons or the public or which cause, or have a natural tendency to cause, injury or damage to business or property." The Project contractor would be subject to enforcement of said rules. Therefore, any potential odor impacts would be considered less than significant, and no mitigation would be required.

IV. Biological Resources

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project 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?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The proposed Project includes replacing six pipelines within the BCVWD purveyance system in the community of Cherry Valley. According to the Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Habitat Assessment performed by Geovironment Consulting in August 2022 for the Project site (see Appendix B for the report), the six proposed pipeline replacement sites are located in a developed, rural setting with mostly Developed/Disturbed/General Barren vegetation.[10] According to the biological survey performed by a Geovironment Consulting biologist on July 21, 2022, the sites offer no suitable habitat for both special-status and MSHCP narrow endemic plant species.[10]

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 1 and Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. No MSHCP designated survey areas were identified on the Pipeline 1 Project site or its respective 500-foot survey area boundary.[10] The road is paved and will be repaved once construction of the pipeline replacement is completed. There are no trees on site. The 500-foot survey buffer was composed of Urban/Developed/Disturbed Land according to the habitat assessment.[10] Additionally, no regulatory-status flora or fauna were detected during the biological reconnaissance survey conducted on July 21, 2022.[10] The Project site and its surrounding survey area did not provide habitat or potential habitat for special-status species.[10]

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. No MSHCP designated survey areas were identified on the Pipeline 2 Project site or its respective 500-foot survey area boundary.[10] The road is paved and will be repaved once construction of the pipeline replacement is completed. There are no trees on site. The 500-foot survey buffer was composed of Urban/Developed/Disturbed Land according to the habitat assessment.[10] Additionally, no regulatory-status flora or fauna were detected during

[10] Geovironment Consulting (2022 August). Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Habitat Assessment 2020 and 2021 Water Pipeline Replacement Project.

the biological reconnaissance survey conducted on July 21, 2022.[10] The Project site and its surrounding survey area did not provide habitat or potential habitat for special-status species.[10]

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and is designated very low density residential (RC-VLDR). Pipeline 3 is located near a MSHCP survey area for burrowing owl, and it was concluded that Pipeline 3 Project site's likelihood of providing even low-quality habitat for burrowing owl does not currently exist and is unlikely to exist in the future.[10] Pipeline 3 is also located near a MSHCP survey area for narrow endemic plant species survey; however, the site and its surrounding survey area did not provide habitat for the MSHCP narrow endemic species or special-status species.[10] Vegetation surrounding the proposed pipeline segment included ornamental landscaping and irrigation infrastructure associated with residential landscaping.[10] APN 407-110-021 to the north of Orchard Street consisted of a disturbed and non-native grassland lot consisting of non- native species such as Russian thistle, California black mustard, and yellow star thistle.[10] Additionally, no regulatory-status flora or fauna were detected during the biological reconnaissance survey conducted on July 21, 2022.[10]

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street, to an existing in-line valve (as identified by District field staff). Utica Way extends into a parcel zoned light agriculture (A-1-1) and is designated very low density residential (RC-VLDR) land use. The area to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR) land use. Pipeline 4 is located near a MSHCP survey area for burrowing owl and it was concluded that the burrows detected during the site survey were currently occupied by California ground squirrels only and no indicators of the presence of burrowing owls utilizing the burrows, or of burrowing owls were detected on-site.[10] Pipeline 4 is also located near a MSHCP survey area for narrow endemic plant species survey; however, the site and its surrounding survey area did not provide habitat for the MSHCP narrow endemic species.[10] Vegetation of the site consisted of non-native grasses. The majority of the site segment was lined with California black mustard (Brassica nigra), a non-native invasive plant. The pipeline segment is located within a gravel road that will remove some non-native vegetation and will be backfilled following completion of pipeline replacement.[10] It offers no suitable habitat for both special-status and MSHCP narrow endemic plant species.[10] Additionally, no regulatory-status flora or fauna were detected during the biological reconnaissance survey conducted on July 21, 2022.[10]

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The area to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and are designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. Pipeline 5 is located near a MSHCP survey area for burrowing owl and it was concluded that the burrows detected during the site survey were occupied by California ground squirrels only and no indicators of the presence of burrowing owls utilizing the burrows, or of burrowing owls were detected on-site.[10] Pipeline 5 is also located near a MSHCP survey area for narrow endemic plant species survey; however, the site and its surrounding survey area did not provide habitat for the MSHCP narrow endemic species or special-status species.[10] Vegetation surrounding the site consisted of ornamental landscaping associated with the surrounding

landscape, non-native grasses, and coastal scrub.[10] Additionally, no regulatory-status flora or fauna were detected during the biological reconnaissance survey conducted on July 21, 2022.[10]

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla (a paved road) from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The area to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. Pipeline 6 is located near a MSCHP designated survey area for narrow endemic plant species; however, the site and its surrounding survey area did not provide habitat for MSHCP narrow endemic species or special-status species.[10] The surrounding vegetation consisted of Coast live oak and ornamental vegetation associated with residential landscaping. Surrounding Coast live oak (Quercus agrifolia) species provide canopy cover over a small portion of the proposed segment.[10] The segment is located within a paved road that will be repaved following completion of construction of pipeline replacement. No regulatory-status flora or fauna were detected during the biological reconnaissance survey conducted on July 21, 2022. The site did not provide potential habitat or habitat for special-status species.[10]

The Project would not have a substantial adverse effect, either directly or through habitat modification, 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. The immediate surrounding area of each segment is considered to be disturbed land and offers no suitable habitat for both special- status wildlife and plants.[10] No sensitive, threatened, or endangered plant species were found on the site during the habitat assessment.[10] Pre-construction surveys for burrowing owl are recommended at Pipeline 3, Pipeline 4, and Pipeline 5 to further reduce any potential for impacts to burrowing owl.[10] Preconstruction surveys for burrowing owl should be conducted not more than 30 days prior to the initiation of ground disturbance. The proposed Project shall also comply with the Standard Best Management Practices (BMPs) of the MSHCP (Volume I, Appendix C), also located in section 10.0 of Appendix B of this report.[10] Impact to species would be less than significant with implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3.

Mitigation Measure

BIO-1 **MSHCP Protocol and Preconstruction Surveys for Burrowing Owl:** To minimize impacts and to adhere to the Western Riverside MSHCP mitigation requirements regarding burrowing owl, it is recommended that:

- Conduct Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (protocol dated March 29, 2006).
- No more than 30 days prior to the first ground-disturbing activities, the project applicant shall retain a qualified biologist to conduct a preconstruction survey on the project site. The survey shall establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines.
- On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership need not be surveyed. The survey shall take place near the sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. During the breeding season (February 1–August 31), surveys shall document whether burrowing owls are nesting on or directly adjacent to disturbance areas. During

the non-breeding season (September 1– January 31), surveys shall document whether burrowing owls are using habitat on or directly adjacent to any disturbance area. Survey results will be valid only for the season during which the survey is conducted.

- If burrowing owls are not discovered, further mitigation is not required. If burrowing owls are observed during the pre-construction surveys, the applicant shall perform the following measures to limit the impact on the burrowing owls:

    1. Avoidance shall include establishment of a 160-foot non-disturbance buffer zone. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg laying and incubation, or that the juveniles from the occupied burrows have fledged. During the non-breeding season (September 1-January 31), the project proponent shall avoid the owls and the burrows they are using, if possible. Avoidance shall include the establishment of a 160-foot non disturbance buffer zone.

  If it is not possible to avoid occupied burrows, passive relocation shall be implemented. Owls shall be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation. The project area shall be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Plastic tubing or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

BIO-2 **Procedures if Burrowing Owl is found on-site:** Focused burrow survey that includes natural burrows or suitable man-made structures needs to be conducted as described below.

- A systematic survey for burrows including burrowing owl sign should be conducted by walking through suitable habitat over the entire survey area (i.e. the project site and within 150 meters). Pedestrian survey transects need to be spaced to allow 100 percent visual coverage of the ground surface.

- The distance between transect center lines should be no more than 30 meters (approximately 100 feet) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys.

- The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed should be recorded and mapped, including GPS coordinates. If the survey area contains natural or man-made structures that could potentially support burrowing owls, or owls are observed during the burrow surveys, the systematic surveys should continue as prescribed in Part B. If no potential burrows are detected, no further surveys are required. A written report including photographs of the project site, location of burrowing owl habitat surveyed, location of transects, and burrow survey methods should be prepared. If the report indicates further surveys are not required, then the report should state the reason(s) why further focused burrowing owl surveys are not necessary.

- Focused Burrowing Owl Surveys will consist of site visits on four separate days. The first one may be conducted concurrent with the Focused Burrow Survey.

    1. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors using binoculars and/or spotting scopes should scan all suitable habitat, location of mapped

burrows, owl sign, and owls, including perch locations to ascertain owl presence. This is particularly important if access has not been granted for adjacent areas with suitable habitat.

2. A survey for owls and owl sign should then be conducted by walking through suitable habitat over the entire project site and within the adjacent 150 meters (approximately 500 feet). These "pedestrian surveys" should follow transects (i.e. Survey transects that are spaced to allow 100 percent visual coverage of the ground surface. The distance between transect centerlines should be no more than 30 meters (approximately 100 feet) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys. It is important to minimize disturbance near occupied burrows during all seasons.

If access is not obtained, then the area adjacent to the project site shall also be surveyed using binoculars and/or spotting scopes to determine if owls are present in areas adjacent to the project site. This 150-meter buffer zone is included to fully characterize the population. If the site is determined not to be occupied, no further surveys are required until 30 days prior to grading (see Pre-construction Surveys below).

After completion of appropriate surveys, a final report shall be submitted to the Riverside County Environmental Programs Department and the RCA Monitoring Program Administrator, which discusses the survey methodology, transect width, duration, conditions, and results of the survey. Appropriate maps showing burrow locations shall be included.

BIO-3 **Western Riverside Best Management Practices (Volume I, Appendix C):** The Proposed Project shall comply with the Standard BMPS of the MSHCP (Volume I, Appendix C), as follows:

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.

2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.

3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.

4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.

5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.

6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.

7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.

8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.

10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.

11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.

12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.

13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).

14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the

completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated. The proposed Project includes six pipeline replacements within the BCVWD purveyance system within the Community of Cherry Valley. According to the Western Riverside County MSHCP Consistency Analysis and Habitat Assessment performed by Geovironment Consulting in August 2022 for the Project site (see Appendix B for the report), the literature search yielded no riparian or riverine features within any of the six proposed pipeline replacement alignments.[10] Though no jurisdictional areas were within the proposed Project pipeline alignments, two riverine features were found within Pipeline 5's respective 500-foot survey buffer during the literature search.[10]

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 1 and Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. No hydrological features or MSHCP riparian/riverine features were observed or detected at Pipeline 1 during the biological reconnaissance survey performed on July 21, 2022.[10] The vegetation community of the site consisted of General Barren, Urban/Developed/Disturbed land.[10] Additionally, no sensitive natural communities were detected during the site survey.[10]

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. No hydrological features or MSHCP riparian/riverine features were observed or detected at Pipeline 2 during the biological reconnaissance survey performed on July 21, 2022.[10] The vegetation community of the site consisted of General Barren, Urban/Developed/Disturbed land.[10] Additionally, no sensitive natural communities were detected during the site survey.[10]

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and are designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and the are designated very low density residential (RC-VLDR). No hydrological features or MSHCP riparian/riverine features were observed or detected at Pipeline 3 during the biological reconnaissance survey performed on July 21, 2022.[10] The

vegetation community of the site consisted of General Barren, Urban/Developed/Disturbed land.[10] Additionally, no sensitive natural communities were detected during the site survey.[10]

PIPELINE 4

The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street, to an existing in-line valve (as identified by District field staff). Utica Way extends into a parcel zoned light agriculture (A-1-1) and is designated very low density residential (RC-VLDR) land use. The area to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR) land use. No hydrological features or MSHCP riparian/riverine features were observed or detected at Pipeline 4 during the biological reconnaissance survey performed on July 21, 2022.[10] The vegetation community of the site consisted of General Barren, Urban/Developed/Disturbed land.[10] Additionally, no sensitive natural communities were detected during the site survey.[10]

PIPELINE 5:

The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The area to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and is designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. Noble Creek is located approximately 225 feet east of Pipeline 5 but separated from the feature by public roads and residential development.[10] Little San Gorgonio Creek is located approximately 388 feet to the west of Pipeline 5, but also separated from the feature by public roads and residential development.[10] No hydrological features or MSHCP riparian/riverine features were observed or detected at Pipeline 5 during the biological reconnaissance survey performed on July 21, 2022.[10] The vegetation community of the site consisted of General Barren, Urban/Developed/Disturbed land. Additionally, no sensitive natural communities were detected during the site survey.[10]

PIPELINE 6:

The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla (a paved road) from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The area to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. No hydrological features or MSHCP riparian/riverine features were observed or detected at Pipeline 6 during the biological reconnaissance survey performed on July 21, 2022.[10] The Project site itself is within a paved road, however the immediate surrounding vegetation community is comprised of Coastal Oak Woodland.[10] Additionally, no sensitive natural communities were detected during the site survey.[10]

The proposed Project shall also comply with the Standard Best Management Practices (BMPs) of the MSHCP (Volume I, Appendix C), also located in section 10.0 of Appendix B of this report to avoid any potential direct or indirect impacts to riparian/riverine features within Pipeline 5's respective 500 foot survey buffer and to avoid any potential direct or indirect impacts to other sensitive natural communities identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.[10] Impact to riparian

habitat or other sensitive natural communities would be less than significant with implementation of Mitigation Measures BIO-3, Western Riverside Best Management Practices (Volume I, Appendix C).

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the project have a substantial adverse effect on federally protected state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. Riparian habitat is associated with areas that become saturated with water from surface or ground-water resources and retain enough water to enable riparian flora and fauna to thrive. Though no jurisdictional areas were within the proposed Project sites, Noble Creek is located approximately 225 feet east of Pipeline 5 but separated from the feature by public roads and residential development.[10] Little San Gorgonio Creek is located approximately 388 feet to the west of Pipeline 5, but also separated from the feature by public roads and residential development.[10] With implementation of Mitigation Measure BIO-3, Western Riverside Best Management Practices (Volume I, Appendix C), no impact to 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 would result from the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated. The six Project pipeline sites do not provided linkage to wildlife corridors and native habitat.[10] Five of the six Project pipelines are located within paved roads and one of the six Project pipelines is located within a gravel road composed of primarily disturbed, ruderal vegetation. The surrounding area of each site offers little habitat value to resident or migratory wildlife and no habitat for migratory fish.[10] However, while the Project sites do not have native habitat due to urbanization, Coastal live oak within the immediate surrounding and canopy cover of Project Pipeline 6 alignment could offer nesting habitat to birds protected under the Migratory Bird Treaty Act (MBTA) and the *California Fish and Game Code* §3503, §3503.5, and §3513, such as ducks, geese, songbirds, gulls, shorebirds, wading birds, and/or birds of prey.[10] If Project activities occur during the bird nesting season (typically February 15 through September 1), a nesting bird survey shall be performed prior to construction to attenuate the potential for significant impact to migratory birds.[10] Implementation of Mitigation Measure BIO-4 would reduce potential impacts to migratory birds to less than significant.

Mitigation Measure

BIO-4 **Nesting Bird Surveys.** If Project activities occur during the bird nesting season (i.e., February 1 through August 31), a pre-construction nesting bird survey should be performed by a qualified biologist no more than three days prior to any construction activities to avoid any direct or indirect impacts

to active nests and thus ensure compliance with the Migratory Bird Treaty Act (MBTA) and California Fish and Wildlife Code.

Additional measures may be put in place based on the results of the nesting bird survey at the discretion of the biologist performing the survey. These may include measures such as construction personnel training, the establishment of no disturbance buffers, on-site construction monitoring and/or spot monitoring.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

Less than Significant Impact. There are coast live oak trees adjacent to the Project Pipeline 6 site.[10] The Project does not entail the removal of coast live oak or native vegetation. The Project is located within the Pass Area Plan which contains significant oak woodland areas that provide habitat and maintain environmental quality. The Pass Area Plan policy PAP 15.1 explains to protect viable oak woodlands through adherence to the Oak Tree Management Guidelines and Best Management Practices adopted by Riverside County.[4] The County of Riverside Open Space Element also include policies OS 9.3 and OS 9.4 to conserve native vegetation and oak tree resources in the county. Furthermore, Riverside County Ordinance 559 prohibits the removal of any living native tree on any parcel or property greater than one-half acre in size, located in an area above five thousand (5,000) feet in elevation within the unincorporated area of the County without first obtaining a tree removal permit.[11] Pipeline 6 sits at approximately 3,308 feet above mean sea level (amsl). However, according to Ordinance 559, public utilities are exempt from the requirement to obtain a tree removal permit for projects related to the construction and maintenance of facilities under their jurisdiction. The project would be exempt from a tree removal permit since it is a public utility project; however, the Project does not entail the removal of trees or native vegetation at any of the six Project pipeline replacement sites. The Project would comply with all County policies or ordinances protecting biological resources, such as tree preservation and a less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☒	☐

Less than Significant Impact. The Project is located in the Pass Area Plan and within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Western Riverside County MSHCP Consistency Analysis (Analysis) located in Appendix B of this report provides the results of the required MSHCP assessments to determine if the proposed 2020 and 2021 Water Pipeline Replacement project (Project), was consistent with the goals and objectives of the MSHCP. Pipeline 6 500-foot survey buffer was within Subunit 2: Badlands/San Bernardino National Forest of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP); however, Pipeline 1 – Pipeline 5 were not located within a specific Criteria Cell, Criteria Area, Cell Group, or Subunit.[10] The Project would not conflict with any long-term conservation goals of the MSHCP. A portion of the Project area is located within a

[11] County of Riverside (2018, July 30). County of Riverside Code of Ordinances, Ordinance No. 559 Regulating the Removal of Trees

MSHCP-designated assessment area for two Narrow Endemic Plants; many-stemmed dudleya (Dudleya multicaulis) and Yucaipa onion (Allium marvinii).[10] The Project area does not support suitable habitat (i.e., clay soils and rock outcrops) for those two species.[10] Pipeline 3 and Pipeline 4 survey areas were located within a MSHCP-designated assessment area for burrowing owl.[10] The Project area does not support suitable habitat for burrowing owl.[10] The Project would result in less than significant impacts to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

V. Cultural Resources

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒

No Impact. According to §15064.5 of the CEQA Guidelines, generally, a resource is considered "historically significant" by a lead agency if the resource meets the criteria for listing on the California Register of Historical Resources (California Public Resources Code, §5024.1, Title 14 CCR, §4852) including the following: (A) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (B) is associated with the lives of persons important in our past; (C) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or (D) has yielded, or may be likely to yield, information important in prehistory or history. A historical resource could be an object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant based on the above-stated criteria, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

The entire Project area has been disturbed through grading and disking; thus, any construction activities would not constitute a significant impact to any historical resources under CEQA. Five of the Project pipelines are located within paved roads and one within a dirt road. The proposed Project would have no impact on any historical resources as defined in §15064.5.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated. The six-pipeline replacement Project is located within six roads. Five paved roads and one gravel road. The current pipeline systems within these six roads are proposed to be abandoned. While Project improvements are not anticipated to impact native base rock or native soils that could contain unique archaeological sites deemed significant per §15064.5 of the CEQA Guidelines, Mitigation Measure CULT-1 would reduce the potential for impact to less than significant.

Mitigation Measure

CULT-1 **Archeological Resources.** If unanticipated cultural resources are unearthed during construction excavations, the contractor shall cease all earth-disturbing activities within a 100-foot radius of the area of discovery until the discovery can be evaluated by a qualified paleontologist to assess the significance of such resources and shall meet with the City Director of Development Services to assess the significance of such resources and shall meet and confer regarding mitigation for such resources in order to comply with California Public Resources Code §21083.2(b).

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The closest cemetery to the proposed Project alignment is the Mountain View Cemetery at 1315 Edgar Ave, Beaumont, CA 92223-1809 located approximately 2.45 miles south of the nearest pipeline Project site (Pipeline 2). Project activity would not impact the cemetery. Though unlikely, Mitigation Measure CULT-2 would reduce impacts to human remains to less than significant.

Mitigation Measure

CULT-2 **Human Remains.** If human remains are encountered, California Health and Safety Code §7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code §5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately identify the "most likely descendants(s)" for purposes of receiving notification of discovery. The most likely descendant(s) shall then make recommendations within 48 hours and engage in consultation concerning the treatment of the remains as provided in Public Resources Code §5097.98.

VI. Energy

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐

Less than Significant Impact. Section 4.1 Energy Resources of the Riverside County General Plan EIR defines "energy" as a force that enables "work" to be done and "energy conservation" is defined in terms of: decreased reliance on natural gas and electricity; decreased per-capita energy consumption; and increased use of renewable energy sources. "Energy efficiency" involves the creation and use of technology to produce the same end product

using less energy.[12] Construction and operation of the Project would be subject to energy efficiency regulations, standards and goals including CCR Title 24 Building Energy Efficiency Standards, Assembly Bill 341 (AB 341) for trash recycling, and the County's Climate Action Plan. In addition, the Project would be required to comply with the SCAQMD and State regulatory rules identified in Table 5 of response c) of Section III. Air Quality that are aimed at reducing unnecessary truck and equipment energy consumption during Project construction and operation. Project compliance with State and local energy efficiency regulations, standards and goals would reduce the potential for environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources, during Project construction or operation to a less than significant impact.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Less than Significant Impact. The Project would be subject to the most recent rulemaking updates to CCR Title 24, Building Energy Efficiency Standards. Title 24 efficiency standard for residential and nonresidential new construction and alterations are updated approximately every three years: buildings for windows, insulation, lighting, air conditioning systems, water heating, digital controls, escalators, elevators and other features that reduce energy consumption in houses and businesses. Since 1978, Title 24 standards have helped protect the environment by reducing more than 250 million metric tons of greenhouse gas emissions (or the equivalent of removing 37 million cars off California roads)[13]. The Project would also be subject to goals and policies in the County's Climate Action Plan, prepared on November 2019.[14] In addition, the Project would be subject to energy efficiency regulations such as AB 341 signed on July 1, 2012, requiring all businesses in California that generate four or more cubic yards of waste per week (i.e., the size of a dumpster) to recycle. The Community of Cherry Valley's hauler, Waste Management, offers a wide variety of recycling services. The Project would result in less than significant impact to a state or local plan for renewable energy or energy efficiency.

[12] County of Riverside (2015, February). County of Riverside General Plan Environmental Impact Report. Section 4.1 Energy Resources.

13 California Energy Commission (2019, April). California Energy Commission, 2022 Building Energy Efficiency Standards – Title 24.

[14] County of Riverside (2019, November). County of Riverside Climate Action Plan Update.

VII. Geology and Soils

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐

Less than Significant Impact. The main purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. It requires any structure for human occupation to be set back at least 50 feet from an active fault. According to the California Geologic Survey (CGS), faults are classified as active, potentially active, or inactive. Under Alquist-Priolo Earthquake Fault Zoning Map Act, the State of California defines active faults as faults that have historically produced earthquakes or shown evidence of movement within the past 11,000 years (during the Holocene Epoch).[15] The Project site is located in the seismically active Southern California region characterized by major faults and fault zones. The six Project pipelines are located in six different locations throughout the Community of Cherry Valley. The Project is located between the San Andreas Fault Zones; however, the Riverside County Fault Zone Maps do not indicate any active faults or fault zones extending across any of the six Project sites.[16] The nearest active sites to the Project area are the Banning Fault located approximately 0.95 miles to the northwest of the Project site and the San Andreas Fault located approximately 1.65 miles to the southeast of the Project site.

Additionally, according to the Riverside County Parcel Reports for each of the surrounding parcels of each of the six Project sites, the Project isn't located within a currently designated Alquist-Priolo (AP) Earthquake Fault Zone. Impacts to people or structures, including risk of loss, injury, or death, due to rupture of an earthquake fault as a result of the Project would be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	ii) Strong seismic ground shaking?	☐	☐	☒	☐

Less than Significant Impact. The proposed site is situated in a seismically active region. As is the case for most areas of Southern California, ground shaking resulting from earthquakes associated with nearby and more distant faults may occur at the Project site. During the life of the Project, seismic activity associated with active faults can be expected to generate moderate to strong ground shaking at the site. The potential for surface rupture resulting from the movement of nearby major faults is not known with certainty but is considered low. The Project would be subject to compliance with Title 15, Chapter 15.60 Earthquake Fault Area Construction of the Codified County of Riverside

[15] California Department of Conservation (2022). California Geological Survey Alquist-Priolo Earthquake Fault Zones. Retrieved from: https://www.conservation.ca.gov/cgs/alquist-priolo

[16] County of Riverside (2021, September 28). County of Riverside General Plan, Safety Element, Figure 1: Fault Lines

Ordinance as it may relate to the Project.[17] As a result, impacts to people or structures, including risk of loss, injury, or death, associated with seismic ground-shaking would be less than significant as a result of the Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

Less than Significant Impact. Ground shaking can induce "secondary" seismic hazards such as liquefaction, dynamic densification, and ground rupture, including dynamic settlement (liquefaction and/or dry settlement). Liquefaction is the transformation of a granular material from a solid state into a liquefied state due to increased pore-water pressures. Soils and clastic sediment with particle size in the medium sand to silt range are particularly susceptible to liquefaction when they are saturated with water and shaken by an earthquake. Liquefaction at or near the surface can result in foundation failure and property damage. The County Liquefaction Zones map indicates the Project area is not within a CSG Liquefaction Zone.[18] Additionally, according to the Riverside County Parcel Reports for each of the surrounding adjacent parcels to the six Project pipelines, the Project has a low potential for liquefaction. In addition, the Project would comply with the Codified County of Riverside Ordinance, including Title 15 Building and Construction for development of the Project. Therefore, potential impacts associated with seismic-related failure, including liquefaction, are considered less than significant

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
iv) Landslides?	☐	☐	☒	☐

Less than Significant Impact. Seismically induced landslides and other slopes failures are common occurrences during or soon after earthquakes. A combination of geological conditions leads to landslide vulnerability, such as high seismic potential; rapid uplift and erosion resulting in steep slopes and deeply incised canyons; highly fractured and folded rock; and rock with inherently weak components such as silt or clay layers. Landslides are often triggered by seismic activity; however, slope failure does not need to be triggered by an earthquake. Strong ground motions can worsen existing unstable slope conditions, particularly if coupled with saturated ground conditions. According to the Pass Area Plan Slope Stability map in the County of Riverside General Plan, the Project area is within a low to locally moderate susceptibility to seismically induced landslides and rockfalls.[19] The Project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving landslides, and less than significant impact would occur.

[17] County of Riverside (2022, July 27). Riverside County Code of Ordinances, Title 15, Chapter 15.60 – Earthquake Fault Area Construction Regulations.

[18] County of Riverside (2021, September 28) County of Riverside General Plan, Safety Element, Figure 2: Liquefaction Zones

[19] County of Riverside (2015, December 8). County of Riverside General Plan, The Pass Area Plan, Figure 16 – The Pass Area Plan Slope Instability.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. Construction of the Project could result in soil erosion or loss of topsoil during grubbing and grading activity and development activity. In areas that would require topsoil exposure for construction of new pavement, exposed soils would be compacted and paved over quickly and/or properly covered until developed. In general, the Project would be required to comply with the Codified County of Riverside Ordinances, including Chapter 16.52, Soil Erosion, and Chapter 13.12, Stormwater Drainage System Protection Regulations. Additionally, the Project would be required to comply with Section 402 of the federal Clean Water Act which requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for projects impacting 1 or more acres of landmass. Furthermore, all construction activities would be required to comply with SCAQMD Rule 403 regarding the control of fugitive dust. In addition, implementation of Mitigation Measure GEO-1 would reduce impacts involving soil erosion or loss of topsoil to less than significant levels.

Mitigation Measure

GEO-1 **Prepare and Implement Storm Water Pollution Prevention Plan (SWPPP)**. Prior to issuance of a Grading or Building Permit, and as part of compliance with the NPDES requirements, a Notice of Intent shall be prepared and submitted to the Santa Ana Regional Water Quality Control Board (RWQCB) providing notification and intent to comply with the State of California General Construction Permit. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable." All recommendations in the Plan shall be implemented during area demolition/preparation, grading, and construction. The Project shall comply with each of the recommendations detailed in the Plan to mitigate potential storm water runoff impacts. Construction Best Management Practices (BMPs) included in the Plan, shall include but not be limited to:

- Construction waste shall be disposed of properly in accordance with applicable federal, state and local regulations. Use appropriately labeled recycling bins to recycle construction materials including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and vegetation. Non-recyclable materials/wastes shall be taken to an appropriate landfill. Toxic wastes must be discarded at a licensed regulated disposal site.
- Leaks, drips and spills shall be cleaned up immediately to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.
- Pavement shall not be hosed down at material spills. Dry cleanup methods shall be used whenever possible.
- Dumpsters shall be covered and maintained.
- Gravel approaches shall be used where truck traffic is frequent to reduce soil compaction and the tracking of sediment into streets shall be limited.
- Vehicle/equipment maintenance, repair, and washing shall be conducted away from storm drains or exposed soils. Major repairs shall be conducted off-site. Drip pans or drop clothes shall be used to catch drips and spills.
- Regularly water newly graded areas and exposed dirt stockpiles;
- Follow Project SWPPP procedures to prevent sediment and nuisance runoff from entering the drainage.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☒	☐

Less than Significant Impact. The Project is not located on a geological unit or soil identified as being unstable or having the potential to result in or off-site landslide, lateral spreading, subsidence, and liquefaction or collapse. According to the Pass Area Plan Seismic Hazards map, the Project site isn't located within an active fault zone.[16] According to the Pass Area Plan Slope Stability map in the County of Riverside General Plan, the Project area is within a low to locally moderate susceptibility to seismically induced landslides and rockfalls.[19] Additionally, the Project site was previously developed and would be located under the existing street with engineered and compacted fill dirt material. Compliance with the applicable County building and construction codes would lessen impacts associated with any potential for unstable geologic unit or soil and associated potential for on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse to less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☒	☐

Less than Significant Impact. Expansive soils shrink when dry and swell when wet as a result of a high percentage of clay. Expansion can exert enough pressure to crack sidewalks, driveways, basement floors, pipelines, and even foundations. The Project consists of six pipeline replacements within the Community of Cherry Valley. Five of the six Project sites have been paved and one of the six Project sites consists of a gravel road. Compliance with applicable County building and construction codes would lessen impacts associated with any potential for expansive soils to less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒

No Impact. The Project would not involve the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater. Therefore, no impact related to incapability of soil to support the use of septic tanks or alternative wastewater disposal systems would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. Paleontological resources are the fossilized biotic remains of ancient environments, including fossilized flora and fauna. Riverside County has been assessed for geologic formations known to potentially contain paleontological resources. Lands with low, undetermined or high potential for finding paleontological resources are mapped on the County's Paleontological Sensitivity Resources map. The Project is not expected to directly or indirectly destroy unique geological features. The County of Riverside General Plan Paleontological Sensitivity Map shows the Project site in an area of "undetermined potential (u)" for paleontological resources[20]. Paleontological fossils are typically encountered during grading in geologic formations that contain important non-human fossil. The Project would result in shallow subsurface impacts within a developed area that contains engineered fill material within street right of way. While Project improvements are not anticipated to impact native base rock or native soils that could contain unique paleontological sites, implementation of Mitigation Measure GEO-2 would reduce the potential for significant impact to paleontological resources to less than significant.

Mitigation Measure

GEO-2 **Paleontological Resources.** If unanticipated paleontological resources are unearthed during construction excavations, the contractor shall cease all earth-disturbing activities within a 100-foot radius of the area of discovery until the discovery can be evaluated by a paleontologist to assess the significance of such resources and shall meet with the City Director of Development Services to confer regarding mitigation for such resources in order to comply with California Public Resources Code §5097.5.

[20] County of Riverside (2013, December 16). County of Riverside General Plan, Open Space Element, Figure OS-8 – Paleontological Sensitivity.

VIII. Greenhouse Gas Emissions

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☒	☐

Less than Significant Impact. Greenhouse gas (GHG), as codified in CEQA Guidelines §15364.5, includes, but is not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Greenhouse gases are gases that cause and contribute to climate change, commonly referred to as global warming. They vary in potency and are usually measured in tons or million metric tons of carbon dioxide equivalents. Transportation followed by electricity generation and natural gas used in buildings are the largest sources of California's GHG emissions.[21] As legislation like Assembly Bill 32 (California Global Warming Solution Act of 2006), California Senate Bill 97 and Executive Order S-3-05 have brought the requirement for GHG reductions to the forefront of Californian conscientious, GHG reductions have become important, through increased vehicle fuel efficiency, building energy efficiency and increased reliance on renewable energy sources.

The County of Riverside Climate Action Plan (CAP) was updated and adopted in November 2019. Chapter 4 of the CAP discusses County measures for GHG emissions reduction programs and regulations. To continue reductions consistent with the State's long-term emissions reduction goals, the County would need to reduce emissions in 2030 by 525,511 MT CO2e from an Adjusted Business-As-Usual (ABAU) forecast and by 2,982,947 MT CO2e from an ABAU forecast by 2050. Riverside County as a whole emitted 4,905,518 MT CO2e in 2017. The largest portion of Riverside County's 2017 emissions were from transportation (36 percent), followed by agriculture (34 percent), and electricity and natural gas in buildings (24 percent).[14]

The Project is a total of six pipeline replacement segments within roads throughout the Community of Cherry Valley. The Project does not propose the development of any residential or commercial buildings and does not propose development for agriculture uses. The Proposed Project is anticipated to generate GHG emissions from construction equipment and area sources, energy usage, mobile sources, waste disposal and water usage associated with construction. Considering the short-term nature of construction activities as well as the minimal total GHG emissions estimated for Project construction and operation, the Project is not expected to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, potential impacts associated with GHG emissions from the Project would be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project conflict with an applicable plan, policy or regulation adopted for the purpose or reducing the emissions of greenhouse gases?	☐	☐	☐	☒

No Impact. The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG emissions. The County of Riverside adopted the County of Riverside Climate Action

21 Institute of Local Government (2011, September). Evaluating Greenhouse Gas Emissions as Part of California's Environmental Review Process: A Local Official's Guide.

Plan in 2019, that was prepared to meet the requirements of state laws that include a GHG emissions inventory and detailed actions for the unincorporated area of Cherry Valley to meet the GHG emissions reduction targets that the County committed to. Through implementation of the sustainability features required by the County, the proposed Project would result in no impact.

IX. Hazards and Hazardous Materials

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. Construction activities associated with the proposed Project would use small quantities of hazardous and flammable substances routinely utilized in the operation of equipment and vehicles, including but not limited to, oil, diesel fuel, and transmission fluid. Transport, use, or disposal of these hazardous substances during construction would occur according to instructions provided by the product manufacturer, including proper methods of storage and disposal. The potential for the release of these materials is considered low and, even if a release were to occur it would not result in a significant hazard to the public, surrounding uses, or the environment due to the small quantities of these materials associated with construction and operation. However, to ensure the Project area is kept clean and free of hazards during construction, the Project would implement Mitigation Measure HAZ-1 described below. Therefore, the proposed Project would have a less than significant impact with mitigation incorporated on the public or the environment as a result of the routine transport, use, or disposal of hazardous materials.

Mitigation Measure

HAZ-1 **Spill Prevention and Clean-up Best Management Practices**. To reduce the potential for materials and pollutants associated with construction to be discharged to the environment, the Project Proponent will implement the following:

- Containment and cleanup equipment (e.g., absorbent pads, mats, socks, granules, drip pans, shovels, and lined clean drums) will be at the staging areas and construction site for use, as needed.
- Staging areas where refueling, storage, and maintenance of equipment occur will not be located within 100 feet of drainages to reduce the potential for contamination by spills.
- Construction equipment will be maintained and kept in good operating condition to reduce the likelihood of line breaks or leakage.
- No refueling or servicing will be done without absorbent material (e.g. absorbent pads, mats, socks, pillows, and granules) or drip pans underneath to contain spilled material. If these activities result in an accumulation of materials on the soil, the soil will be removed and disposed of properly.
- If a spill is detected, construction activity will cease immediately, and the Contractor will immediately react to safely contain and remove spilled materials.
- Spill areas will be restored to pre-spill conditions, as practicable.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project would involve the use of concrete, asphalt, slurry seal, and solvents during construction. Use and storage of such hazardous materials would be required to comply with product labeling and disposal requirements. As discussed above in item 4.8 a), the Project would implement spill prevention and clean-up best management practices identified in Mitigation Measure HAZ-1 described above to reduce the potential for the release of hazard to the public or the environment through during construction of the Project. As a result, impacts to the public and environment from hazardous materials would be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☒	☐

Less than Significant Impact. The Project would involve the use of concrete, asphalt, slurry seal, and solvents during construction use and storage of which would be required to comply with product labeling.

PIPELINE 1. Cherry Valley Brethren Preschool is the nearest school to Pipeline 1 Project site and is located approximately 0.84 miles northwest of the anticipated construction route.

PIPELINE 2. Beaumont High school is the nearest school to Pipeline 2 Project site and is located approximately 0.85 miles southwest of the anticipated construction route.

PIPELINE 3. Cherry Valley Brethren Preschool is the nearest school to Pipeline 3 Project site and is located approximately 0.05 miles southeast of the anticipated construction route.

PIPELINE 4. Cherry Valley Brethren Preschool is the nearest school to Pipeline 4 Project site and is located approximately 1.04 miles east of the anticipated construction route.

PIPELINE 5. Cherry Valley Brethren Preschool is the nearest school to Pipeline 5 Project site and is located approximately 0.7 miles southwest of the anticipated construction route.

PIPELINE 6. Cherry Valley Brethren Preschool is the nearest school to the Project site located approximately 2.02 miles southwest of the anticipated construction route.

The proposed Project does not involve transporting or emitting acutely hazardous materials that could result in a danger to a nearby school. Impacts resulting from emission of acutely hazardous materials in proximity to a school would be less than significant impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒

No Impact. The proposed Project is not located on a site included on a list of hazardous materials sites compiled pursuant to California Government Code §65962.5. (www.envirostor.dtsc.ca.gov/public/ or http://geotracker.waterboards.ca.gov accessed on September 20, 2022). No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	For a project located within an airport land use plan or, where such a plan has 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?	☐	☐	☐	☒

No Impact. The nearest public airport to the proposed Project site is Banning Municipal Airport in Banning, CA (BNG / KBNG) which is 4.66 miles away. The Project is not located within an airport land use plan or within 2 miles of a public airport or public use airport, and it would not result in a safety hazard for people residing or working in the project area.[2] No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

No Impact. County of Riverside Code Chapter 2.100, Emergency Management Organization, provides for, among other responsibilities, the preparation and implementation of plans for the protection of persons and property within the County in the event of the emergency or disaster conditions; and the coordination of the disaster functions of the County with all other public agencies, corporations, organizations, and affected private persons. The Project would comply with Codified County of Riverside Ordinances, including Title 15 specifying building and construction standards, and no impact to an adopted emergency response plan or emergency evacuation plan would result from the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g)	Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires??	☐	☐	☒	☐

Less than Significant Impact. The Project site is located in an area of Very High/High/Moderate FHSZ on the Wildfire Susceptibility map for the Pass Area Plan of the County of Riverside General Plan.[22] The County of Riverside The Pass Area Plan policy PAP 18.1 states that all proposed development located within High or Very High Fire Hazard Severity Zones shall protect life and property from wildfire hazards through adherence to policies identified in the Fire Hazards (Building Code and Performance Standards), Wind-Related Hazards and General and Long-Range Fire Safety Planning section of the General Plan Safety Element.[2] The topography is dominated by hillsides and canyons, resulting in channels or air flow that can create extremely erratic winds on the slopes and in the canyons. The potential for a severe wildfire to occur is increased if dense vegetation growth and accumulations of dead plant material are present. Weather conditions and steep terrain also increase the hazardous wildfire potential; however, these conditions do not cause wildfires. The potential for risk of loss, injury or death due to wildlands fires exist in the Project area. Human error, arson, high-voltage lines, vehicles and lightning are the primary causes of wildfires. The Project will comply with all County Building Code and Performance Standards In order to ensure that the Project does not result in a fire hazard, Mitigation Measure HAZ-2, described below, will be implemented to reduce the potential for impacts resulting from wildlands fires to less than significant with mitigation incorporated.

Mitigation Measure

HAZ-2 **Fire Prevention Best Management Practices**. In order to reduce the potential for a wildfire during construction, the Project will implement the following mitigation measures:

- **Comply with Applicable Laws**. Comply with all applicable laws of the State of California.
- **Confine Welding Activity**. Confine welding activity to areas having a minimum radius of ten feet cleared to mineral soil, wet down an area within 25 feet in all directions from welding operations with a 0.3 percent Class A Foam Solution, and utilize a welding tent or metal shield where possible to deflect sparks. Include one shovel and one backpack five-gallon water-filled tank with pump with each welder.
- **Prevent Fire and Extinguish Fires**. Be responsible for preventing the escape of fires as a result of Project construction and have a fully charged fire extinguisher (U.L. rated at 2-A: 10-B: C, or larger) on each truck, personnel vehicle, tractor, grader and other heavy equipment, at all times.
- **Prohibit Smoking**. Under no circumstances shall smoking be permitted while employees are operating light or heavy equipment, or walking or working, near native habitat.
- **Clear Key Areas of Flammable Material**. Equipment service areas, parking areas, and gas and oil storage areas shall be cleared of all flammable material for a radius of at least ten feet. Small mobile or stationary internal combustion engine sites shall be cleared of flammable material for a slope distance of at least 10 feet from such engine.
- **Remove Waste**. The construction contractor shall remove all waste materials from the Project site on a daily basis, as able.

[22] County of Riverside (2022, March 3). County of Riverside General Plan, The Pass Area Plan. Figure 12 The Pass Area Plan Wildfire Susceptibility Map.

- **Notify 9-1-1.** Construction workers shall notify 9-1-1 of any fires along roads or in or near the Project area as soon as feasible.
- **Maintain Fire Prevention Service Access**. Access roads shall remain open and passable for emergency vehicles at all times.
- **Use Spark Arrestors**. Equip all diesel and/or gasoline-operated engines with spark arresters that meet standards set forth in the National Wildfire Coordinating Group publication for Multi-position Small Engines, #430-1, or General Purpose and Locomotive, #430-2. Spark arrestors are not required on equipment powered by exhaust-driven turbo charged engines or motor vehicles equipped with a maintained muffler.
- **Use Water Tank**. BCVWD or its contractor shall furnish a water truck and/or hose, or a water buffalo attachment, with a pick-up truck at the staging area during construction.

X. Hydrology and Water Quality

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project is located in the Santa Ana River Watershed. The Project consists of six pipeline replacements within the BCVWD's water purveyance system in the Community of Cherry Valley. The Project would not result in downstream water pollution (e.g., bacterial indicators, metals nutrients pesticides, toxic organic compounds, sediments trash & debris, oil & grease), sedimentation, and/or flooding. The Project will not violate any water quality standards or waste discharge requirements. Potential short-term surface water quality impacts related to Project construction activities include runoff of loose soils and/or construction wastes and fuels that could potentially percolate into the ground or runoff onto the street. As no expansion of the site's septic systems is proposed and the septic systems are in operation, impacts will be less than significant. Impacts to groundwater would be less than significant.

However, the Project would be required to comply with Section 402 of the Clean Water Act, which requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for construction impacts to 1 acre or more. Implementation of Mitigation Measure GEO-1: Prepare and Implement a SWPPP identified in Section VII. Geology and Soils would reduce impacts to water quality standards during construction to less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒

No Impact. The Project would consist of six pipeline replacements within the BCVWD's water purveyance system in the Community of Cherry Valley and would not involve the extraction of groundwater. The Project is not anticipated to alter or deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The Project would entail improvement

of the water system of the existing water purveyor (BCVWD). No impact to groundwater would occur as a result of the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i)	result in a substantial erosion or siltation on-or off-site?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated. No stream or river exists on any of the Project Sites. The Project consists of six pipeline replacements within the BCVWD's water purveyance system in the Community of Cherry Valley. Noble Creek is approximately 0.25 miles to the east of Pipeline 1 and Pipeline 2. Little San Gorgonio Creek is approximately 0.68 miles southeast from Pipeline 3 and 0.69 miles from Pipeline 4. Noble Creek is approximately 0.04 miles southeast from Pipeline 5 and 0.22 miles east from Pipeline 6. Little San Gorgonio Creek is approximately 0.08 miles east of Pipeline 5 and 0.27 miles west from Pipeline 6. The Project wouldn't substantially alter the existing drainage pattern of the sites or areas, 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 offsite. With implementation of Mitigation Measure GEO-1: Prepare and Implement a SWPPP identified in Section VII. Geology and Soils, the Project wouldn't 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 offsite. Impacts will be less than significant with mitigation incorporated.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
ii)	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. No stream or river exists on any of the Project Sites. The Project consists of six pipeline replacements within the BCVWD's water purveyance system in the Community of Cherry Valley. Noble Creek is approximately 0.25 miles to the east of Pipeline 1 and Pipeline 2. Little San Gorgonio Creek is approximately 0.68 miles southeast from Pipeline 3 and 0.69 miles from Pipeline 4. Noble Creek is approximately 0.04 miles southeast from Pipeline 5 and 0.22 miles east from Pipeline 6. Little San Gorgonio Creek is approximately 0.08 miles east of Pipeline 5 and 0.27 miles west from Pipeline 6. With implementation of Mitigation Measure GEO-1: Prepare and Implement a SWPPP identified in Section VII. Geology and Soils, the Project wouldn't substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Impacts will be less than significant with mitigation incorporated.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
iii)	create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project would not increase impervious surfaces and/or nuisance and storm flows such that flows could not be accommodated by the existing storm drain system. Existing drainage will remain unaltered given the existing urban development of the site. The Project would not result in runoff that would exceed the capacity of existing or planned storm water drainage systems or result in downstream water pollution (e.g., pathogens, sedimentation, metals, hydrocarbons, nitrates). With implementation of Mitigation Measure GEO-1: Prepare and Implement a SWPPP identified in Section VII. Geology and Soils, the Project wouldn't create or contribute runoff water which would exceed the capacity of existing or planed stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts will be less than significant with mitigation incorporated.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
iv)	impede or redirect flood flows?	☐	☐	☐	☒

No Impact. The Project site is located in Zone X, an area of minimal zone hazard, according to FEMA Flood Panel #06065C0805G.[23] The Project entails six pipeline replacements within within the BCVWD's water purveyance system in the Community of Cherry Valley. The Project is anticipated to result in no impact with regard to impeding or redirecting flood flows.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project cause or expose people and structures to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

No Impact. The Project is located inland and away from any open water source or flood control dam that could result in a seiche, tsunami, or mudflow. The Project would not cause or expose people and structures to inundation by seiche, tsunami, or mudflow. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated. Noble Creek flows to San Timoteo Creek which flows to the Santa Ana River and out to the Pacific Ocean. The Project site is within the boundary of the Santa Ana Region Basin Plan for surface and groundwater. Storm flows from the Project site will be contained onsite via soil percolation or

[23] FEMA (2022). FEMA Flood Map Service Center: Search By Address.

sheet flow into the municipal separate storm sewer system (MS4). The Project wouldn't result in direct impacts to Noble Creek or ground water. With implementation of Mitigation Measure GEO-1: Prepare and Implement a SWPPP identified in Section VII. Geology and Soils, the Project wouldn't conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts will be less than significant with mitigation incorporated.

XI. Land Use/Planning

Evaluation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project physically divide an established community?	☐	☐	☐	☒

No Impact. The proposed Project involves six pipeline replacements within the BCVWD's water purveyance system in the Community of Cherry Valley. The purpose of the Project is to improve the conveyance system to accommodate growth in the area. The Project wouldn't physically divide an established community and no impact is anticipated.

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 1 and Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. In its built condition, Pipeline 1 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. In its built condition, Pipeline 2 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and the is designated very low density residential (RC-VLDR). In its built condition, Pipeline 3 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street to an existing in-line valve (as identified by District field staff). The area to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and is designated very low density residential (RC-VLDR) land use. Vineland Street sits perpendicular to Utica Way, the road Pipeline

4 will be located in. In its built condition, Pipeline 4 would not be visible because the road would be backfilled and covered following construction of pipeline replacement. No impact would occur.

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The area to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and are designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. In its built condition, Pipeline 5 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The areas to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. In its built condition, Pipeline 6 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

The purpose of the Project is to improve the conveyance system to accommodate growth in the area. The Project wouldn't physically divide an established community and no impact is anticipated.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

No Impact. The Project is located in the Pass Area Plan and the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Project consists of six pipeline replacements within the BCVWD's water purveyance system in the Community of Cherry Valley.

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The areas to the north, south, east and west of Pipeline 1 and Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. In its built condition, Pipeline 1 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. In its built condition, Pipeline 2 would

not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and the are designated very low density residential (RC-VLDR). In its built condition, Pipeline 3 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street to an existing in-line valve (as identified by District field staff). The areas to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and is designated very low density residential (RC-VLDR) land use. Vineland Street sits perpendicular to Utica Way, the road Pipeline 4 will be located in. In its built condition, Pipeline 4 would not be visible because the road would be backfilled and covered following construction of pipeline replacement. No impact would occur.

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The areas to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and are designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. In its built condition, Pipeline 5 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The areas to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. In its built condition, Pipeline 6 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

No general plan or zone change would be required for the Project. The Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impact is anticipated.

XII. Mineral Resources

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project 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?	☐	☐	☐	☒

No Impact. The Project is located on 6 different street segments within the Community of Cherry Valley. The Project is located in MRZ-3, an area where the available geological information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined.[24] Mining would be incompatible with the area's current and future land uses. No mineral resource reserved exist on the Project or vicinity. Accordingly, no impact to availability of valuable mineral resources would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project 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?	☐	☐	☐	☒

No Impact. The Project is located on six different street segments within the Community of Cherry Valley. No locally important mineral recovery site exists on the Project sites or vicinity. As mentioned in section 6.12 a) above, the Project site is located in an MRZ-3 zone. The Project wouldn't result in the loss of availability of a mineral recovery site identified in a local general plan, specific plan, or other land use plan. No impact would occur.

XIII. Noise

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

Less than Significant Impact. The Project would result in short-term construction noise associated with site preparation, demolition, grading, and construction.

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west

[24] County of Riverside General Plan (2013, December 6). County of Riverside General Plan Environmental Impact Report No. 521, Mineral Resources Zone Map, Figure 4.1.4.1

of Pipeline 1 and Pipeline 2 consists of single-family residential houses (R-1) and ar designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. In its built condition, Pipeline 1 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. In its built condition, Pipeline 2 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The area to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR). In its built condition, Pipeline 3 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street to an existing in-line valve (as identified by District field staff). The areas to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR) land use. Vineland Street sits perpendicular to Utica Way, the road Pipeline 4 will be located in. In its built condition, Pipeline 4 would not be visible because the road would be backfilled and covered following construction of pipeline replacement. No impact would occur.

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The areas to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and are designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. In its built condition, Pipeline 5 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The areas to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land

use. In its built condition, Pipeline 6 would not be visible because the road would be repaved following construction of pipeline replacement. No impact would occur.

Pursuant to Title 9 – Public Peace, Morals and Welfare, Chapter 9.52 Noise Regulation of the Codified County of Riverside Ordinance, when sound becomes noise it may jeopardize the health, safety, or general welfare of Riverside County residents and degrade their quality of life. Section 19.52.020, Exemptions, dismisses sound emanating from a list of sources, including A) facilities owned or operated by or for a government agency; and B) capital improvement projects of a government agency. Construction noise is one of the most common mobile noise sources in the County and the use of pile drivers, drills, trucks, pavers, graders, and a variety of other equipment can result in short, sporadic elevated noise levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Construction noise reduction methods should be utilized to the maximum extent feasible near sensitive receptors, such as homes.

The Project is not itself growth-inducing, any incremental increase in noise is not anticipated to result in exceedance of noise level standards and therefore would not be readily audible over ambient noise levels at any of the nearby sensitive receptors, namely the residential uses surrounding the Project site. Project operational noise would comply with the goals and policies of the County's General Plan and County Municipal Code and is not expected to expose sensitive receptors to excessive noise levels and impacts are anticipated to be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Less than Significant Impact. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site but is expected to be very short term and is not anticipated to result in structural damage. No increase in ground borne vibration or noise is anticipated during Project operation. In general, no significant impacts involving vibration or ground borne noise level would result from the Project and impacts would be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	For a project located within the vicinity of a private airstrip or 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?	☐	☐	☐	☒

No Impact. The closest airport is the Banning Municipal Airport located approximately 8.33 miles southeast of the Project site. The Banning Municipal Airport Influence Areas is approximately 6.31 miles southeast of the Project site.[25] The Project is not located within an airport land use plan or within two miles of a public airport. No impact would occur.

[25] County of Riverside (2015, December 8). The County of Riverside General Plan, The Pass Area Plan. Figure 4 The Pass Area Plan, Overlays and Policy Areas.

XIV. Population and Housing

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project 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)?	☐	☐	☐	☒

No Impact. The population of the Cherry Valley community was approximately 6,362 at the 2010 census and 5,891 at the 2000 census. Population grew in the community at a rate of approximately 7 percent which is significantly slower than the greater Riverside County, which has doubled in a twenty-year span and estimated to be 2,450,758 as of 2018. The Project proposes construction of six pipeline replacements within six road segments located throughout the Community of Cherry Valley. BCVWD has been servicing the area since approximately 1919 with water infrastructure. While the proposed Project wouldn't induce growth in the community, it would improve the BCVWD water service to the area. No impact involving substantial population growth in the area is anticipated as a result of the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact. The Project proposes replacement of six pipelines located in six different roads located throughout the Community of Cherry Valley.

PIPELINE 1:
The proposed Pipeline 1 includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 1 and Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. Pipeline 1 sits at approximately 2893 feet amsl. No impact would occur.

PIPELINE 2:
The proposed Pipeline 2 includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The area to the north, south, east and west of Pipeline 2 consist of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1. Pipeline 2 sits at approximately 2878 feet amsl. No impact would occur.

PIPELINE 3:
The proposed Pipeline 3 includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and residential agriculture (R-A-5) and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential

(MDR) land use. The areas to the east and west of Pipeline 3 are zoned light agriculture (A-1-1) and the is designated very low density residential (RC-VLDR). Pipeline 3 sits at approximately 2752 feet amsl. No impact would occur.

PIPELINE 4
The proposed Pipeline 4 includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street to an existing in-line valve (as identified by District field staff). The areas to the north, east, south, and west of Pipeline 4 are zoned light agriculture (A-1-1) and are designated very low density residential (RC-VLDR) land use. Vineland Street sits perpendicular to Utica Way, the road Pipeline 4 will be located in. Pipeline 4 sits at approximately 2740 feet amsl. No scenic vistas exist on or in the vicinity of the site. No impact would occur.

PIPELINE 5:
The proposed Pipeline 5 includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The areas to the north, south, and east of Pipeline 5 are zoned residential agriculture (R-A-1) and are designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. Noble Creek is located approximately 140 feet east to the most eastern portion of the pipeline location. Little San Gorgonia Creek is located approximately 405 feet west from the most western portion of the pipeline location. Pipeline 5 sits at approximately 2924 feet amsl. No impact would occur.

PIPELINE 6:
The proposed Pipeline 6 includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The areas to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. Pipeline 6 sits at approximately 3,308 feet amsl. No impact would occur.

The Project would not displace existing people or housing. No impact is anticipated.

XV. Public Services

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any or the public services: Fire protection? Police protection? Schools? Parks? Other public facilities?	☐	☐	☒	☐

Less than Significant Impact. Table 3 identified public service facilities in the Project area.

Table 2 - Public Service Facilities

Public Service	Location in or near Cherry Valley	Distance from Project Site
Riverside County Fire Station No. 22	10055 Avenida-Miravilla Beaumont, CA 92223	~ 0.64 miles from Pipeline 1 ~ 0.67 miles from Pipeline 2 ~ 1.19 miles from Pipeline 3 ~ 1.44 miles from Pipeline 4 ~ 0.3 miles from Pipeline 5 ~ 1.61 miles from Pipeline 6
Beaumont Police Department	660 Orange Ave, Beaumont, CA 92223	~ 3.48 miles from Pipeline 1 ~ 3.42 miles from Pipeline 2 ~ 3.86 miles from Pipeline 3 ~ 3.76 miles from Pipeline 4 ~ 3.93 miles from Pipeline 5 ~ 5.09 miles from Pipeline 6
Beaumont Public Library	125 E 8th Street Beaumont, CA 92223	~ 3.48 miles from Pipeline 1 ~ 3.42 miles from Pipeline 2 ~ 3.61 miles from Pipeline 3 ~ 3.46 miles from Pipeline 4 ~ 3.89 miles from Pipeline 5 ~ 5.1 miles from Pipeline 6
Bogart Park	9600 Cherry Avenue	~ 1.14 miles from Pipeline 1 ~ 1.19 miles from Pipeline 2 ~ 2.57 miles from Pipeline 3 ~ 2.81 miles from Pipeline 4 ~ 0.91 miles from Pipeline 5 ~ 0.67 miles from Pipeline 6

Source: City Website and Google Earth, 2022
Note: "~" = approximately

The Project would not involve an increase in population using public services with exception of construction workers. The Project would include replacing six pipelines within roads throughout the Community of Cherry Valley. The Project would not result in significant threats of deterioration to the existing levels of service at public service facilities nor the need to build additional public service facilities. A less than significant impact to public services would occur as a result of the Project.

XVI. Recreation

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

No Impact. The Project consists of replacing six pipelines within six different roads located in the Community of Cherry Valley. It does not involve any elements that would result in an impact to nearby park or recreational facilities. No impacts to park facilities would occur as a result of the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse effect on the environment?	☐	☐	☐	☒

No Impact. The Project consists of replacing six pipelines within roads located in the Community of Cherry Valley. The Project would not impact recreational facilities or require the construction or expansion of recreational facilities which would otherwise have an adverse physical effect on the environment. No impacts to recreational facilities are expected as a result of implementing this Project.

XVII. Transportation/Traffic

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒

No Impact. The Project doesn't include alternative modes of transportation, bicycles or pedestrian facilities. The Project consists of replacing six pipelines within BCVWD purveyance system located in the Community of Cherry Valley. The Project would comply the County of Riverside Circulation Element regulations and policies. Construction and operation of the Project would result in an incremental increase in traffic on nearby roads but

would not result in an appreciable increase in traffic to the existing average daily traffic (ADT) on street segments or the level of service (LOS) at intersections. Under California law, every county with an urbanized area of 50,000 or more people must adopt a Congestion Management Program (CMP). The Riverside County CMP monitors levels of service and congestion throughout the County along the major corridors. The nearest CMP monitoring facility in the Project vicinity is State Route 79 (SR 79) and Interstate 10 (I-10) in the City of Beaumont. Exhibit 4-1A Level of Service on CMP System in Western Riverside shows that SR 79 near the I-10 operates at an acceptable LOS C with an ADT of 2,150 and it isn't deficient per Caltrans Performance Measurement System (PeMS) Speed Data[26]. The Project's contribution of vehicles to the local CMP-monitored corridors would be minimal and would not result in a significant cumulative contribution to the flow of traffic on any major thoroughfares included in the congestion management program (CMP) system for Riverside County. The Project would not conflict with existing applicable plans, policies, or ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. No impact to such facilities would result from the Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project conflict or be consistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project site is accessed by I-10 freeway and a local roadway network consisting of arterial, secondary, and collector streets. In general, daily construction vehicle trips would be short-term and have a relatively small impact on daily traffic generation in the area. In addition, through traffic on roadways in the construction areas would be maintained at all times during construction.
The Project would result in less than significant impact to the circulation system as long as it complies with County's applicable plans, policies, and ordinance related to the circulation system. In addition, at the County's direction, construction traffic controls would be in place where deemed necessary, and at least one lane of travel would be open at all times for through traffic during construction. The Project would be serviced by a small crew of BCVWD employees during operation, as needed, and would not add appreciable vehicular traffic to the street system. Implementation of Mitigation Measure TRAF-1 would reduce construction impacts to traffic circulation to less than significant with mitigation incorporated.

Mitigation Measure

TRAF-1 **Traffic Control Measures.** At the County's direction, traffic controls will be put in place where deemed necessary, and at least one lane of street will be open at all times for through traffic. Traffic controls will maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, or flag persons to ensure that traffic can flow. Construction road segments will remain without any significant roadway hazards remaining at the end of the construction day.

[26] Riverside County Transportation Commission (2011, December 14). 2011 Riverside County Congestion Management Program.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

No Impact. The Project would be designed and engineered in compliance with the County of Riverside standards; Caltrans standards; and the requirements of the California Manual of Uniform Traffic Control Devices (CMUTCD), as applicable. For example, CMC Title 12 Street, Sidewalks and Public Places establishes compliance with street grades, construction and maintenance of sidewalks, curbs, and driveways. As a result, the Project would not increase a hazard due to a design feature or incompatible use, and no impact would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project result in inadequate emergency access?	☐	☒	☐	☐

Less than Significant Impact. The Project would be designed and engineered in compliance with the County of Riverside standards; Caltrans standards; and the requirements of the California Manual of Uniform Traffic Control Devices (CMUTCD), as applicable. At least one lane would remain open at all times for through traffic during construction as described in Mitigation Measure TRAF-1 in response a) above. A less than significant impact to emergency access is anticipated with implementation of Mitigation Measure TRAF-1, as a result of the Project.

XVIII. Tribal Cultural Resources

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐

No Impact. The Project does not require new development on any of the six proposed Project sites. The Project would consist of six pipeline replacements within the BCVWD purveyance system that would improve the current district water pipeline infrastructure. Five of the six sites are located under paved roads, and one of the six sites is located under a rough graded, gravel road. The Project would not cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is listed or eligible for listing in the

California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). No impacts would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

No Impact. The Project does not require new development on any of the six proposed Project sites. The Project would consist of six pipeline replacements within the BCVWD purveyance system that would improve the current district water pipeline infrastructure. Five of the six sites are located under paved roads, and one of the six sites is located under a rough graded, gravel road. The Project would not cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. in applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. No impacts would occur.

XIX. Utilities and Service Systems

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

Less than Significant Impact. While the Project would consist of six pipeline replacements throughout the Community of Cherry Valley, the Project isn't growth-inducing and wouldn't require relocation or construction of facilities for water, wastewater, storm water drainage, electric power, natural gas, or telecommunications. The Project would not tie-in to the existing sewage system. Impacts on utilities are anticipated to be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒

No Impact. The Project would consist of six pipeline replacements. Construction of the Project would utilize water on any exposed dirt during demolition, grading and construction of the Project as a dust and erosion control measure. Use of water for watering during construction would be adequately met by existing entitlements through a fire hose or watering truck. No impacts related to sufficiency of water supply is anticipated.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the project 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?	☐	☐	☐	☒

No Impact. Construction of the Project might require use of an on-site portable restroom during the construction period that would be serviced by a rental company in that line of business (e.g. United Rental). If a port-a-potty is provided by the Project contractor, the service provider would handle disposal of the waste based on its existing business relationship with the local treatment facility. During operation, the Project wouldn't generate wastewater because there are no greywater generating facilities proposed or existing at the Project site. No sink basins or toilets are proposed. The Project wouldn't increase wastewater generation and treatment at a wastewater treatment provider. No impact would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goal?	☐	☐	☒	☐

Less than Significant Impact. Solid waste disposal in the Project area is provided by Lamb Canyon Landfill at 16411 Lamb Canyon Road, Beaumont, CA 92223. The Project would generate some amount of construction and operation waste. Examples of solid waste generated during construction include grubbed vegetation, crew food scraps, and construction packaging material. The Project would generate a nominal amount of solid waste on a weekly basis during construction and operation in comparison to the landfill's capacity. The proposed Project would have a less than significant impact on landfills.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the project comply with federal, state, and local management statutes and regulations related to solid waste?	☐	☐	☒	☐

Less than Significant Impact. State law currently requires that local jurisdictions divert at least 50% of their solid waste from landfills through conservation, recycling, and composting. Like all California communities, the Cherry Valley community is required to comply with State regulations. In general, the Project would be subject to Riverside County Ordinance, such as Chapter 8.132 Solid Waste Collection and Disposal. CR&R Environmental Services provides trash pick-up in the Cherry Valley community. Impacts related to solid waste would be less than significant as a result of the Project.

XX. **Wildfire**

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The proposed Project is located in a Very High/High/Moderate FHSZ as mapped on Figure 12, The Pass Area Plan Wildfire Susceptibility[25]. The Project vicinity is rural and characterized by shrubs and trees, and homes in a hillside area. The potential for a severe wildfire to occur is increased if dense vegetation growth and accumulations of dead plant material are present. Weather conditions and steep terrain also increase the hazardous wildfire potential; however, these conditions do not cause wildfires. Human error, arson, high-voltage lines, vehicles and lightning are the primary causes of wildfires. As identified in response g) of Section XI. Hazards and Hazardous Materials, the proposed Project would implement Mitigation Measure HAZ-2, Fire Prevention Best Management Practices, during construction to reduce the risk of a fire hazard. Mitigation Measure HAZ-2 includes compliance with applicable laws, confine welding activity, prevent fire and extinguish fires, prohibit smoking, clear key areas of flammable material, remove waste, notify 9-1-1, maintain fire prevention service access, use spark arrestors. During construction and operation, it is anticipated that fire and police services would be able to adequately service the Project in an emergency. The Project is anticipated to have a less than significant on an adopted emergency response plan or emergency evacuation plan.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated. The proposed Project is located in a Very High/High/Moderate FHSZ as mapped on Figure 12, The Pass Area Plan Wildfire Susceptibility.[25] As identified in response g) of Section XI. Hazards and Hazardous Materials, the proposed Project would implement Mitigation Measure HAZ-2, Fire Prevention Best Management Practices, during construction to reduce the risk of a fire hazard. Mitigation Measure HAZ-2 includes compliance with applicable laws, confine welding activity, prevent fire and extinguish fires, prohibit smoking, clear key areas of flammable material, remove waste, notify 9-1-1, maintain fire prevention service access, use spark arrestors. The availability of water certainly wouldn't exacerbate wildfire risk. During construction and operation, it is anticipated that fire and police services would be able to adequately service the Project in an emergency. Implementation of Mitigation Measure HAZ-2 would reduce impacts related to wildfire risk to less than significant with mitigation incorporated.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒

No Impact. The proposed Project is located in a Very High/High/Moderate FHSZ as mapped on Figure 12, The Pass Area Plan Wildfire Susceptibility.[25] The Project doesn't include the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that would exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. The availability of water certainly wouldn't exacerbate wildfire risk. No impact is anticipated.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The proposed Project is located in a Very High/High/Moderate FHSZ as mapped on Figure 12, The Pass Area Plan Wildfire Susceptibility. Please refer to Section VII. Geology and Soils responses a) and c) for a discussion and of the Project site's geologic stability. Please also refer to Section X. Hydrology and Water Quality responses a) through e). The Project site would be located under the existing street with engineered and compacted fill dirt material. Existing fill should be considered suitable for re-use as compacted fills. With implementation of Mitigation Measures HAZ-1 and HAZ-2, the proposed Project wouldn't expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts are anticipated to be less than significant with mitigation incorporated.

XXI. Mandatory Findings of Significance

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. As discussed in Section IV, Biological Resources; Section V, Cultural Resources; Section VI, Geology; Section VIII, Hazards and Hazardous Materials; Section X, Hydrology and Water Quality; Section XVI, Transportation/Traffic; and Section XX, Wildfire with implementation of Mitigation Measure BIO-1: MSHCP Protocol and Preconstruction Surveys for Burrowing Owl, BIO-2: Procedures if Burrowing Owl is found on-site; BIO-3: Western Riverside Best Management Practices, BIO-4 Nesting Bird Surveys; CULT-1: Archeological Resources; CULT-2: Human Remains; GEO-1: Prepare and Implement Stormwater Pollution Prevention Plan (SWPPP); GEO-2 Paleontological Resources; HAZ-1: Spill Prevention and Clean-up Best Management Practices; HAZ-2: Fire Prevention Best Management Practices; TRAF-1: Traffic Control Measures, impacts from the Project would be reduced to a less than significant level, and as a result, would not result in any significant Project or cumulative environmental impacts to biological or cultural resources. The short- and long-term effects associated with the Project would not be considered cumulatively considerable.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐

Less than Significant Impact. As discussed in the preceding responses to Section I through Section XVIII, this Project would not result in any significant Project or cumulative environmental impacts. The short-term and long-term effects associated with Project would not be considered cumulatively considerable.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Less than Significant Impact. As discussed in the preceding responses to the entire list of impact questions, this Project would not result in any significant environmental impacts to persons. Sufficient construction control measures have been identified to reduce short-term construction impacts to a level of less than significant.

Compliance with the existing federal, state and local regulations, along with standard design criteria, would ensure that the proposed Project does not directly or indirectly cause a substantial adverse effect on human beings.

List of Preparers

Technical Studies	Preparers
IS/MND	Geovironment Consulting Andy Minor, M.S. Carmen Gardner, M.C.R.S. Mathew Hyland, M.S.
Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Analysis and Habitat Assessment	Geovironment Consulting Andy Minor, M.S. Carmen Gardner, M.C.R.S.

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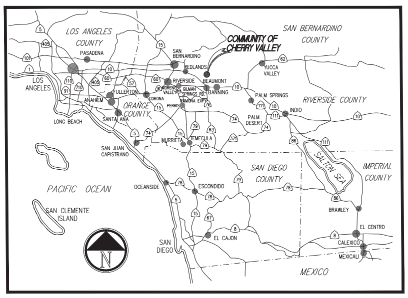
Appendix A
Water Improvement Plan

BEAUMONT - CHERRY VALLEY WATER DISTRICT

RIVERSIDE COUNTY, CALIFORNIA
PLANS FOR THE CONSTRUCTION OF
THE

2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

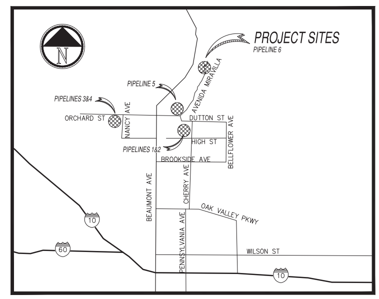


VICINITY MAP

N.T.S

BOARD OF DIRECTORS

DANIEL SLAWSON	PRESIDENT
LONA WILLIAMS	VICE PRESIDENT
JOHN COVINGTON	BOARD MEMBER
DAVID HOFFMAN	TREASURER
ANDY RAMIREZ	SECRETARY
DANIEL JAGGERS, P.E.	GENERAL MANAGER



LOCATION MAP

N.T.S

ENGINEER'S NOTE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY A CONTRACTOR SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THIS PLAN. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN, AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS, AND IS RESPONSIBLE FOR THE PROTECTION OF, AND ANY DAMAGE TO THESE LINES OR STRUCTURES.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE
CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

ALL DISTANCES ARE HORIZONTAL MEASUREMENTS, CONTRACTOR TO VERIFY ALL QUANTITIES

BENCHMARK

THE BENCHMARK USED IS NATIONAL GEODETIC SURVEY (NGS) DATASHEET DESIGNATION "CHERRY", PID AH5235

DESCRIBED BY SOUTHERN CALIFORNIA EARTHQUAKE CENTER 1992 (MWC), STATION IS LOCATED ABOUT 5.3 MI EAST-SOUTHEAST OF YUCAIPA AND 5.1 MI NORTH-NORTHEAST OF BEAUMONT, JUST SOUTH OF THE RIVERSIDE-SAN BERNARDINO COUNTY LINE IN CHERRY VALLEY.

ELEVATION = 3738.870' (NAVD 88)
ALL ELEVATIONS SHOWN ON THESE DRAWINGS BASED ON NAVD88 DATUM, UNLESS OTHERWISE NOTED

BASIS OF BEARING

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 6, BASED LOCALLY ON CONTINUOUS OPERATING REFERENCE STATIONS (CORS) "GISA" AND "MLFP" NAD83(2011) (EPOCH: 2010.00). ALL BEARINGS AND DISTANCES SHOWN ON THIS SURVEY ARE GRID. GROUND DISTANCES MAY BE OBTAINED BY DIVIDING THE GRID DISTANCE BY THE COMBINED SCALE FACTOR OF 0.99986680. CALCULATIONS ARE MADE AT CP#1 BASE WITH COORDINATES N 2301573.205, E 6347696.704
GRID DISTANCE/0.99986680= GROUND DISTANCE

SOURCE OF TOPOGRAPHIC:

PROJECT CONTROL ESTABLISHED BY COZAD AND FOX INC. SEPTEMBER 2021
AERIAL PHOTOGRAMMETRIC SURVEY PROVIDED BY INLAND AERIAL SURVEY, INC. AUGUST 2021
FIELD SURVEY PERFORMED BY COZAD AND FOX SEPTEMBER 2021

SHEET INDEX

RECMD	COUNTY OVERSITE ENGINEER	REGISTRATION	DATE SIGNED

APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.

Z:\2103000\DWG\PLANS\C-1_TITLE SHEET.DWG PLOT DATE: 2/14/2022

REFER TO SPEC NO. ___________

MS4394 IP210134

Cozad & Fox, Inc.
CIVIL / STRUCTURAL ENGINEERS
MUNICIPAL CONSULTANTS / PLANNERS
SURVEYORS / GPS
151 South Girard Street • Hemet, Ca 92544
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PREPARED UNDER THE SUPERVISION OF:

DATE: XX/XX/2022 BRIAN D. FOX
REGISTERED CIVIL ENGINEER NO. 57264

REGISTERED PROFESSIONAL ENGINEER BRIAN D. FOX CIVIL STATE OF CALIFORNIA — PRELIMINARY

JOB NO. 2103000
DESIGNED A.J.R.
DRAWN D.D.S.
CHECKED B.FOX
APPROVED
REG. NO.

REV	DATE	DESCRIPTION:	BY

BENCHMARK: SEE SHEET 1

SCALE: AS SHOWN

BEAUMONT-CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

DISTRICT ENGINEER R.C.E. NO. DATE

2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

TITLE SHEET

SHEET NO. C-1 OF 12 SHTS

XX/XX/2022
DATE

CONSTRUCTION NOTES

GENERAL

1. EQUIPMENT AND MATERIALS, INCLUDING PIPING, VALVES, FITTINGS, DRAINS, PIPE SUPPORTS, ETC., ARE SHOWN ON THE DRAWINGS BY SYMBOLS. PIPE SIZE IS SHOWN AS STANDARD CALL OUT WITH SIZE AND PIPE DUTY. CONTRACTOR SHALL FURNISH AND INSTALL EQUIPMENT AND MATERIALS AS SHOWN ON THE DRAWINGS BY SYMBOLS AND NOTES, INCLUDING MINOR PIPE FITTINGS, ADAPTERS, AND APPURTENANCES NECESSARY TO PROVIDE COMPLETE, OPERABLE SYSTEMS.

2. DIMENSION TO BE VERIFIED PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING EQUIPMENT DEPENDENT UPON DIMENSION. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS WITH ACTUAL FABRICATED EQUIPMENT DELIVERED TO PROJECT OR AS-BUILT CONDITIONS. CONTRACTOR SHALL ALLOW FOR ADJUSTMENTS TO CONNECTIONS TO EQUIPMENT DUE TO FABRICATION TOLERANCES, FIELD TOLERANCES AND INSTALLATION TOLERANCES.

3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND CROSS CHECK DETAILS AND DIMENSIONS SHOWN ON THE DRAWINGS. FLOOR AND WALL OPENINGS, SLEEVES, PENETRATIONS AND OTHER CIVIL, STRUCTURAL, MECHANICAL, OR ELECTRICAL REQUIREMENTS MUST BE COORDINATED BEFORE CONTRACTOR PROCEEDS WITH CONSTRUCTION.

4. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON DRAWINGS.

5. THE PRECISE DIMENSIONS AND LOCATIONS OF ALL OPENINGS AND PENETRATIONS SHALL BE DETERMINED FOR THE ACTUAL EQUIPMENT BEING FURNISHED. SHOP DRAWINGS WITH ADEQUATE ACCURATE DIMENSIONS MUST BE SUBMITTED AND REVIEWED PRIOR TO CONTRACTOR CONSTRUCTING FACILITIES THAT ARE AFFECTED BY SAID EQUIPMENT.

6. CONTRACTOR IS ADVISED THAT THE WORK ON THIS PROJECT MAY INVOLVE WORKING IN A CONFINED SPACE. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING WORK AREA CLASSIFICATIONS AND IMPLEMENTATION OF ALL PRACTICES AND PROCEDURES REQUIRED FOR "CONFINED SPACES" UNDER THE CALIFORNIA ADMINISTRATIVE CODE, TITLE 8.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROJECT SITE SECURITY. PROJECT SITE SHALL REMAIN SECURED AT ALL TIMES BY EXISTING DISTRICT FENCE, INSTALLED FENCE OR TEMPORARY 6' HIGH CHAIN LINK FENCE.

8. CONTRACTOR SHALL PROVIDE HIS OWN SANITARY AND OFFICE FACILITIES INCLUDING TELEPHONE AND TEMPORARY POWER.

9. APPROVAL OF DISTRICT IMPLIES NO PERMISSION OTHER THAN THAT WITHIN THE DISTRICT'S JURISDICTION. ALL PERMITS REQUIRED BY LAW AND NOT ALREADY OBTAINED BY THE DISTRICT SHALL BE ACQUIRED BY CONTRACTOR. REQUIREMENTS OF DISTRICT SHALL TAKE PRECEDENCE OVER REQUIREMENTS OF OTHER AGENCIES ONLY WHERE DISTRICT REQUIREMENTS ARE MORE STRINGENT.

10. CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT ON PRIVATE OR PUBLIC PROPERTY. CONTRACTOR MAY STORE MATERIALS AND EQUIPMENT ON SITE, ON DISTRICT'S PROPERTY IN DESIGNATED AREAS.

UNDERGROUND FACILITIES AND EXISTING IMPROVEMENTS

1. THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES (PIPING, VALVES, CONDUCTORS, ELECTRICAL CONDUIT, ETC.) ARE SHOWN IN AN APPROXIMATE WAY ONLY AND ARE BASED ON OWNER'S EXISTING RECORDS. CONTRACTOR SHALL EXERCISE CARE DURING EXCAVATIONS TO AVOID DAMAGE TO SAID FACILITIES. CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND FACILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY DAMAGES WHICH RESULT FROM HIS FAILURE TO EXACTLY LOCATE AND PROTECT ANY AND ALL FACILITIES.

   AT LEAST 48 HOURS BEFORE COMMENCING ANY EXCAVATION, CONTRACTOR SHALL REQUEST UNDERGROUND SERVICE ALERT (1-800-227-2600) AND NON-MEMBER COMPANIES OR UTILITIES TO MARK OR OTHERWISE INDICATE THE LOCATION(S) OF THEIR SUBSURFACE FACILITIES INCLUDING, BUT NOT LIMITED TO, STRUCTURES, VAULTS, PIPING, VALVES, CONDUCTORS, CONDUIT, CABLES, AND SERVICE CONNECTIONS.

2. THE FIRST ITEM OF WORK (WITHIN 45 DAYS OF EXECUTION OF CONTRACT, AND AT LEAST 10 DAYS PRIOR TO CONSTRUCTION), CONTRACTOR SHALL EXCAVATE AND EXPOSE ("POTHOLE") EXISTING FACILITIES IN LOCATIONS WHERE NEW FACILITIES ARE PROPOSED TO ESTABLISH THE EXACT HORIZONTAL LOCATION, SIZE, AND ELEVATION, AND DETERMINE IF THERE WILL BE AN INTERFERENCE WITH PROPOSED FACILITIES. CHANGES OR DELAYS CAUSED BY CONTRACTOR'S FAILURE TO PERFORM "POTHOLING" AND INTERFERENCE LOCATION WORK SHALL NOT BE ELIGIBLE FOR EXTRA WORK COMPENSATION OR TIME EXTENSION.

   CONTRACTOR SHALL SUBMIT "POTHOLE" DATA (EXACT ELEVATION, SIZE, AND HORIZONTAL LOCATION) TO DISTRICT FOR EVERY UTILITY EXPOSED. BASED ON SAID "POTHOLE DATA", DISTRICT MAY MODIFY BELOW GRADE PIPING ALIGNMENT AND GRADE TO AVOID EXISTING PIPING AND WILL SUBMIT MODIFICATIONS, IF ANY, TO CONTRACTOR WITHIN TWO WEEKS OF RECEIPT OF ALL "POTHOLE" DATA.

3. CONTRACTOR SHALL REPLACE IN KIND ALL EXISTING IMPROVEMENTS DAMAGED OR REMOVED BY CONSTRUCTION ACTIVITIES. LIMITS OF REMOVAL AND REPLACEMENT SHALL BE APPROVED BY THE DISTRICT PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.

SITE WORK AND GRADING

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF THE CALIFORNIA BUILDING CODE (LATEST EDITION), SOILS REPORT, AND CONTRACT DOCUMENTS. IN THE EVENT OF CONFLICT BETWEEN THESE DOCUMENTS, THE MOST STRINGENT REQUIREMENTS SHALL PREVAIL.

2. RELATIVE COMPACTION OF 95% SHALL MEAN SOIL COMPACTED TO A DRY DENSITY EXCEEDING 95% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 1557, LATEST EDITION.

3. ALL DEBRIS, BRUSH, AND RUBBISH SHALL BE REMOVED AND DISPOSED OF TO LEAVE THE AREA WHICH HAS BEEN DISTURBED WITH A NEAT AND FINISHED APPEARANCE FREE FROM ALL DEBRIS. WHERE REMOVAL OF SUBSURFACE OBSTRUCTIONS IS NECESSARY, CAVITIES CREATED BY THE REMOVAL SHALL BE CLEARED OF ALL LOOSE DEBRIS AND SOIL AND SHAPED TO PROVIDE ACCESS FOR BACKFILLING AND COMPACTION EQUIPMENT. SAID MATERIALS SHALL BE LEGALLY DISPOSED OF IN AN APPROVED OFFSITE LOCATION (CITY OR COUNTY LANDFILL).

4. ALL AREAS TO BE GRADED SHALL BE STRIPPED OF VEGETATION AND DELETERIOUS MATERIAL. VEGETATION AND DELETERIOUS MATERIALS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.

SITE WORK AND GRADING (CONTINUED)

5. EXCAVATED NATIVE SOILS MAY BE UTILIZED FOR SELECT FILL MATERIAL, PROVIDED THESE MATERIAL ARE FREE OF VEGETATIVE MATTER AND OTHER DELETERIOUS SUBSTANCES, AND SHALL NOT CONTAIN ROCKS OR IRREDUCIBLE MATERIALS GREATER THAN 8" IN MAXIMUM DIMENSION.

   ROCK MAY BE STOCKPILED ALONG, AND AS PART OF, THE 4' EARTHEN BERM OR USED AS RIP-RAP PROVIDED IT MEETS DETAIL REQUIREMENTS.

6. IF REQUIRED, CONTRACTOR SHALL IMPORT SUFFICIENT QUANTITIES OF SELECT FILL MATERIAL TO ACHIEVE THE SPECIFIED FINISHED GRADES AND MINIMUM RELATIVE COMPACTION. IMPORT SELECT FILL MATERIAL SHALL BE INORGANIC, GRANULAR, NON-EXPANSIVE SOIL, FREE OF ROCKS OR LUMPS GREATER THAN 6" IN MAXIMUM DIMENSION. IMPORT SELECT FILL MATERIAL SHALL MEET THE USCS CLASSIFICATIONS OF SM, SP-SM, OR SW-SM WITH 5% TO 35% PASSING THE No.200 SIEVE.

7. CONTRACTOR SHALL PREPARE SOIL BASED ON GEOTECHNICAL RECOMMENDATION AS IDENTIFIED IN REPORT DATED JULY 27, 2018. PREPARED BY CONVERSE CONSULTANTS ACCORDING TO THE INTENDED USE.

8. SELECT FILL MATERIAL SHALL BE PLACED IN LIFTS NO GREATER THAN 8" IN UNCOMPACTED THICKNESS AND COMPACTED TO THE SPECIFIED MINIMUM RELATIVE COMPACTION PER GEOTECHNICAL SOILS REPORT SEC. 9.4. PREPARED BY CONVERSE CONSULTANTS

9. DISTRICT SHALL APPROVE PREPARATION OF ALL NATURAL GROUND SURFACE PRIOR TO PLACEMENT OF FILL ON THAT SURFACE.

10. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING EROSION AND DUST, CONTROL MEASURES PER CONTRACTOR'S SWPPP, AND AS NECESSARY TO COMPLY WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

11. CRUSHED MISCELLANEOUS BASE (CMB) SHALL BE PER SPPWC SECTION 200-2.4, FINE GRADATION.

12. 3/4" GRADED CRUSHED ROCK OR 3/4" CRUSHED ROCK SHALL MEET SPPWC SECTION 200-1.2 FOR 3/4" GRADATION AND SHALL BE PLACED AND COMPACTED WITH A SMOOTH DRUM ROLLER.

PERMANENT ASPHALT CONCRETE PAVEMENT

PERMANENT ASPHALT CONCRETE PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH COUNTY OF RIVERSIDE, DEPT. OF TRANSPORTATION STANDARDS,AND PROJECT ENCROACHMENT PERMIT REQUIRES REVIEW PER DISTRICT @ NEXT PLAN CHECK FOR ALL WORK COMPLETED WITHIN CHERRY AVENUE AND INTERNATIONAL PARK ROAD. ALL SITE WORK A.C. PAVEMENT SHALL BE CONSTRUCTIBLE PER SPECIFICATION SECTION 02700, EXCEPT AS MODIFIED HEREAFTER.

A. PREPARATION

UPPER 12" OF SUBGRADE BENEATH CRUSHED BASE SHALL BE SCARIFIED AND COMPACTED TO 95% RELATIVE COMPACTION MINIMUM.

B. THICKNESS

UNLESS NOTED OTHERWISE, PERMANENT ASPHALT CONCRETE PAVEMENT SHALL BE HOT PLACED TO A MINIMUM OF 4" TOTAL THICKNESS PLACED OVER 8" OF CRUSHED MISCELLANEOUS BASE (PER SPPWC SECTION 200-2.4, FINE GRADATION). ASPHALT CONCRETE PAVEMENT AND CRUSHED MISCELLANEOUS BASE SHALL BE COMPACTED TO 95% RELATIVE COMPACTION MINIMUM.

C. ASPHALT CONCRETE PAVEMENT SPECIFICATIONS

PERMANENT PAVEMENT SHALL BE PLACED IN ACCORDANCE WITH COUNTY OF RIVERSIDE AND PLACED IN TWO LIFTS. THE FIRST LIFT SHALL BE 2.8" AND MAY BE PLACED WITH A BLADE AND ROLLER. THE SECOND LIFT SHALL BE 1.2" AND SHALL BE PLACED WITH A SELF-PROPELLED MECHANICAL SPREADING AND PAVING MACHINE.

THE SECOND LIFT SHALL OVERLAP TRENCH EDGES 1' MINIMUM, AND EDGES SHALL BE FEATHERED TO MEET EXISTING PAVEMENT. AFTER PLACEMENT, PAVEMENT SHALL NOT VARY MORE THAN 0.01' FROM A STRAIGHT EDGE PLACED ACROSS ANY TRENCH.

PAVEMENT MATERIALS SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SECTION 203-6. UNLESS NOTED OTHERWISE, THE FIRST LIFT SHALL BE B-PG64-10 AND THE SECOND LIFT SHALL BE C2-PG64-10.

WHERE SHOWN ON THE DRAWINGS, THE EXISTING PAVEMENT SHALL BE GROUND DOWN 0.10' AND SHALL BE CAPPED WITH A C2-PG64-10 AC MIX. THE CAP SHALL BE INSTALLED WITH THE SECOND LIFT OF ACCESS ROAD PAVING.

D. REMOVAL OF EXISTING AC PAVEMENT

ALL PAVING REMOVED FOR ROAD REPLACEMENT AND/OR PIPELINE TRENCHING SHALL BE HAULED FROM SITE AND DISPOSED OF AT A LEGAL DISPOSAL SITE THE CONTRACTOR SHALL PROVIDE THE DISTRICT WITH A DISPOSABLE RECEIPT FOR DISPOSED MATERIAL.

WHERE EXISTING ASPHALT CONCRETE PAVEMENT IS TO BE REMOVED FOR INSTALLATION OF BELOW GRADE PIPING, CONTRACTOR SHALL SAW CUT EXISTING ASPHALT PAVEMENT EDGES (1' ADDITIONAL EACH SIDE OF TRENCH) TO STRAIGHT, NEAT, VERTICAL EDGES, EITHER PERPENDICULAR TO OR PARALLEL WITH THE TRENCH. CONTRACTOR SHALL EXCAVATE UNDERLYING SUBGRADE TO PROPER GRADE AND COMPACT IT TO 95% RELATIVE COMPACTION MINIMUM.

PERMANENT ASPHALT CONCRETE PAVEMENT (CONTINUED)

E. INSTALLATION

FINISHED GRADE SHALL MATCH EXISTING GRADES WHERE NEW PAVING ABUTS EXISTING PAVING. UNLESS NOTED OTHERWISE, ALL EXPOSED PAVING EDGES SHALL BE PLACED AGAINST 2"x4" REDWOOD HEADERS.

F. PAVEMENT STRIPING

ALL PAVEMENT STRIPING OR MARKINGS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED FOLLOWING PLACEMENT OF PERMANENT ASPHALT CONCRETE PAVEMENT OR PLACEMENT OF SLURRY SEAL OVER EXISTING ASPHALT CONCRETE PAVEMENT.

PIPING / VALVES

1. PIPE MATERIALS AND TEST PRESSURES SHALL BE AS SPECIFIED IN PROJECT SPECS. ALL PIPING SHALL BE CONSTRUCTED WITH RESTRAINED JOINTS. RESTRAINED JOINTS SHALL BE FLANGED, VICTAULIC (GROOVED TYPE), WELDED, THREADED, OR EQUAL. FLANGED AND VICTAULIC JOINTS SHALL BE PROVIDED WHERE SHOWN.

2. PIPELINE ELEVATIONS SHOWN ARE FOR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED. PIPELINES SHALL BE STRAIGHT GRADE BETWEEN ELEVATIONS SHOWN. CONTRACTOR SHALL PROVIDE ALL SHORTS, SPOOLS, AND FITTINGS NECESSARY TO MEET ELEVATIONS SPECIFIED.

3. VALVES SHALL COMPLY WITH REQUIREMENTS OF THE SPECIFICATIONS, AS LISTED IN EQUIPMENT AND MATERIALS DESCRIPTIONS, AS SHOWN BY SYMBOL ON THE DRAWINGS, AND AS SPECIFIED HEREON. UNLESS NOTED OTHERWISE, VALVES 4" AND LARGER SHALL BE FLANGED AND FURNISHED WITH GEAR OPERATORS. ALL VALVES ABOVE GRADE SHALL BE FURNISHED WITH HAND WHEEL OPERATORS (8" MINIMUM DIAMETER). BURIED VALVES SHALL BE FURNISHED WITH VALVE BOXES AND STEM EXTENSIONS PER DISTRICT STANDARD DRAWINGS. ALL BURIED VALVES SHALL BE INSTALLED IN ACCORDANCE WITH DISTRICT STANDARD PLATE 2.

4. UNLESS OTHERWISE SPECIFIED, FLANGED BUTTERFLY VALVES SHALL BE PROVIDED WITH DUCTILE IRON BODIES AND DUCTILE IRON DISCS.

5. ALL PIPE ZONE BEDDING AND TRENCH BACKFILL SHALL BE IMPORTED WITH A MINIMUM S.E. EQUAL TO 30 AND SHALL BE APPROVED BY THE DISTRICT AND PER DISTRICT STANDARD DRAWING PLATE 6-1. BEDDING MATERIALS SHALL BE VIBRATED IN-PLACE TO ACHIEVE COMPACTION.

   BACKFILL ABOVE THE PIPE ZONE SHALL BE EITHER COMMERCIAL IMPORTED MATERIAL OR SELECT NATIVE MATERIAL (SCREENED OR WASHED).

6. PIPE SHALL BE INSTALLED IN TRENCH CONDITION AND AS SPECIFIED IN SPECIFICATION SECTION 15020. BACKFILL SHALL BE COMPLETED INCLUDING COMPACTION TESTS PRIOR TO PRESSURE TESTING. BACKFILL IN PIPE ZONE SHALL BE COMPACTED BY HAND TAMPING TO MINIMUM 90% COMPACTION. WHERE PIPE IS LOCATED UNDER CONCRETE SLABS, ALL TRENCH BACKFILL SHALL BE MINIMUM 95% COMPACTION.

7. PIPING WHERE STUBBED THROUGH SLABS/FOUNDATIONS SHALL BE DOUBLE WRAPPED WITH 33 MIL PVC TAPE.

8. CONTRACTOR SHALL BACKFILL WITH TWO SACK CEMENT/SAND SLURRY, OR CONTROLLED DENSITY FILL (CDF) IN ACCORDANCE WITH SPECIFICATION SECTION 02252, ALL PIPELINE CROSSINGS WITH EXISTING MAINLINE UTILITIES AND AT LOCATIONS SHOWN ON THE CONSTRUCTION DRAWINGS. THE TWO SACK CEMENT/SAND SLURRY SHALL EXTEND FIVE FEET ON EACH SIDE OF THE EXISTING FACILITY AND EXTEND FROM THE BOTTOM OF THE PROPOSED PIPELINE TO THE SPRINGLINE OF THE EXISTING FACILITY TO BE SUPPORTED.

9. UNLESS OTHERWISE SHOWN, MINIMUM COVER ON BELOW GRADE PIPE SHALL BE 48".

10. UNLESS NOTED OTHERWISE, TRENCH BACKFILL SHALL BE COMPACTED TO 90% RELATIVE COMPACTION (MINIMUM).

11. ALL BELOW GRADE PIPE UNDER CONCRETE SLABS AND LESS THAN 48" BELOW THE TOP OF SLAB SHALL BE BACKFILLED WITH 2 SACK CEMENT/SAND SLURRY.

12. ALL BELOW GRADE PIPE UNDER CONCRETE FOUNDATIONS SHALL BE BACKFILLED WITH 2 SACK CEMENT/SAND SLURRY TO THE BOTTOM OF THE FOUNDATION AND 2' BEYOND THE FOUNDATION LIMITS.

13. UNLESS SPECIFIED OTHERWISE, PRESSURE RATING FOR ALL VALVES SHALL BE AS SPECIFIED SPECIFICATION SECTION 15020.

14. ALL PIPING AND APPURTENANCES CONTAINING WATER (2" AND SMALLER) SHALL BE INSULATED PER SPECIFICATION SECTION 15020 AND ALL VALVES (2" AND SMALLER) SHALL BE INSULATED PER SPECIFICATION SECTION 15020.

15. ALL NON-POTABLE DIP SHALL BE ENCASED IN PURPLE POLYETHYLENE BAGS. ALL POTABLE DIP SHALL BE ENCASED IN BLACK POLYETHYLENE BAGS.
    (CLEAR POLYETHYLENE BAGS MAY BE SUBSTITUTED IF BLACK IS UNAVAILABLE)

16. ALL PIPE SHALL BE RESTRAINED. WHERE MECHANICAL JOINTS ENDS ARE CALLED OUT (M.J.), THE JOINT SHALL INCLUDE AN EBAA IRON SERIES 1100, "MEGA-LUG" TYPE JOINT RESTRAINT SYSTEM.

CONCRETE CONSTRUCTION

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTIONS 03100, 03200, 03300, AND NOTES HEREIN. UNLESS NOTED OTHERWISE, ALL CONCRETE FOUNDATIONS (INCLUDING, BUT NOT LIMITED TO, TANK FOUNDATIONS, BELOW GRADE MANHOLE AND VAULT BASES, AND SLABS ON GRADE) SHALL BE PLACED ON SOIL SCARIFIED TO A MINIMUM DEPTH OF 12" AND THEN COMPACTED TO 95% RELATIVE COMPACTION. ALL CONCRETE SHALL BE CLASS "A" STRUCTURAL CONCRETE UNLESS INDICATED OTHERWISE ON DRAWINGS. FOR ALL CONCRETE, USE TYPE II PORTLAND CEMENT.

2. CONCRETE FINISHING

   A. GRADE SLABS AND FLOOR SLABS SHALL RECEIVE A MONOLITHIC TROWEL FINISH FOLLOWED BY A LIGHT BROOM FINISH AS APPROVED BY DISTRICT.

   B. ALL EXPOSED EXTERIOR FORMED CONCRETE SHALL RECEIVE A "SACKED" FINISH PER CAST-IN-PLACE CONCRETE SPECIFICATIONS, 03100, 03200, AND 03300.

3. THE LOCATION OF ALL CONSTRUCTION JOINTS NOT SPECIFICALLY NOTED OR SHOWN SHALL BE APPROVED BY THE DISTRICT.

4. ALL NON-SHRINK GROUT SHALL BE NON-METALLIC.

STRUCTURAL AND MISCELLANEOUS STEEL

1. ALL STRUCTURAL AND MISCELLANEOUS STEEL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 05100, AND 13200.

2. STRUCTURAL STEEL SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND ERECTION.

3. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION AND/OR AWWA D100. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATION (UNLESS NOTED OTHERWISE):

WIDE FLANGE (W AND WT) SECTIONS:	ASTM A992 Fy=36 KSI
CHANNELS AND MISC. SHAPES (C,MC,S,M,HP):	ASTM A36 Fy=36 KSI
ANGLES AND PLATES:	ASTM A36 Fy=36 KSI
PIPE COLUMNS (STANDARD,X-STRG, XX-STRG):	ASTM A53 TYPE E, GR B Fy=36 KSI
TUBES:	ASTM A500, GR B Fy=46 KSI

4. ALL WELDING SHALL COMPLY WITH AMERICAN WELDING SOCIETY (AWS) SPECIFICATIONS AND SHALL BE EXECUTED BY ELECTRIC ARC PROCESS WITH ELECTRODES HAVING A MINIMUM TENSILE STRENGTH OF 70KSI. COMPLETE AND PARTIAL PENETRATION GROOVE WELDS SHALL BE PERFORMED USING "INNERSHIELD" AND "ML-2" SEMI-AUTOMATIC EQUIPMENT. ALL WELDERS SHALL BE AWS CERTIFIED FOR THE TYPE OF WELDING PERFORMED.

5. WHERE FILLET WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINIMUM SIZE WELDS AS SPECIFIED IN THE AISC MANUAL OF STEEL CONSTRUCTION, LATEST EDITION, SPECIFICATION J2.2.B.

6. NUTS ON BOLTS OF SLOTTED CONNECTIONS SHALL BE INSTALLED FINGER-TIGHT ONLY, WITH THREADS SPOILED, UNLESS NOTED OTHERWISE.

7. STRUCTURAL STEEL EMBEDDED IN CONCRETE OR MASONRY SHALL BE UNPAINTED.

8. UNLESS NOTED OTHERWISE, ALL MACHINE BOLTS, ANCHOR BOLTS, DEFERRED BOLTING DEVICES, AND FASTENERS SHALL BE 316 STAINLESS STEEL. UNLESS NOTED OTHERWISE, ALL ANCHOR BOLTS FOR ROTATING OR VIBRATING EQUIPMENT SHALL BE CAST-IN-PLACE OR DRILLED AND EPOXIED. EPOXY ANCHORS SHALL BE HILTI HIT C-100 SYSTEM, RED HEAD EPCON SYSTEM, OR EQUAL. PRIOR TO INJECTING EPOXY, EACH DRILLED HOLE SHALL BE CLEANED OUT WITH A NYLON BRUSH. CONTRACTOR SHALL INSTALL DOWELS AND ANCHOR BOLTS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

WATER NOTES:

1. ALL WORK SHOWN ON THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH THE "DISTRICT STANDARDS FOR THE FURNISHING OF MATERIALS AND THE CONSTRUCTION OF WATER AND RECYCLED WATER FACILITIES AND PREPARATION OF WATER SYSTEM PLANS", LATEST REVISION, AND THE ADOPTED ADDENDUMS THERETO.

2. WORK SHALL BE PERFORMED BY A CONTRACTOR LICENSED IN THE STATE OF CALIFORNIA, EXPERIENCED IN WATER UTILITY CONSTRUCTION.

3. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA AT 811 / 800-227-2600 FOR LOCATION OF ALL UNDERGROUND UTILITIES, TWO WORKING DAYS PRIOR TO COMMENCING WORK.

4. CONTRACTOR SHALL NOTIFY THE DISTRICT AT (951) 845-9581 TWO WORKING DAYS PRIOR TO COMMENCING WORK ON THE WATER UTILITY INSTALLATION. CONTRACTOR SHALL NOTIFY DISTRICT BY PRECEDING WEDNESDAY AT 4:00 P.M. PRIOR TO WORKING DURING THE WEEKEND. CANCELLATIONS SHALL BE NOTIFIED TO THE DISTRICT BY PRECEDING FRIDAY AT 3:00 P.M.

5. NO EXISTING DISTRIBUTION SYSTEM VALVE SHALL BE OPERATED BY THE CONTRACTOR. DISTRICT PERSONNEL WILL OPERATE ALL NECESSARY VALVES.

6. CONTRACTOR TO INSTALL MINIMUM 1"COPPER, TYPE K, SERVICE LATERALS IN ACCORDANCE WITH DISTRICT SPECIFICATIONS SHOWN ON DISTRICT STANDARD PLATE 6-2, PLATE 6-3, AND PLATE 12.

7. CONTRACTOR SHALL COORDINATE ALL RECONNECTS WITH DISTRICT PERSONNEL PRIOR TO ANY CONNECTIONS OR RETIREMENTS OF ANY DISTRICT FACILITIES.

8. CONTRACTOR SHALL BEAR ALL COSTS FOR THE CORRECTION OR REMOVAL AND REPLACEMENT OF DEFECTIVE WORK, AND ALL ADDITIONAL DIRECT AND INDIRECT COSTS THE CITY, COUNTY, OR DISTRICT MAY INCUR ON ACCOUNT OF DEFECTIVE WORK, INCLUDING THE COSTS OF ADDITIONAL ADMINISTRATIVE, PROFESSIONAL CONSULTANT, INSPECTION, TESTING, AND OTHER SERVICES.

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PREPARED UNDER THE SUPERVISION OF:
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BRIAN D. FOX
REGISTERED CIVIL ENGINEER NO. 57264

REGISTERED PROFESSIONAL ENGINEER BRIAN D. FOX CIVIL STATE OF CALIFORNIA — PRELIMINARY

JOB NO.	2103000
DESIGNED	A.J.R.
DRAWN	D.D.S.
CHECKED	B.FOX
APPROVED	
REG. NO.	

REV	DATE	DESCRIPTION:	BY

BENCHMARK: SEE SHEET 1

SCALE: AS SHOWN

BEAUMONT-CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

DISTRICT ENGINEER   R.C.E. NO.   DATE

2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

CONSTRUCTION NOTES

SHEET NO. C-2 OF 12 SHTS

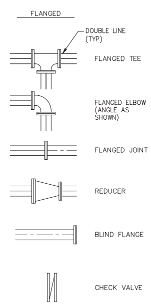
XX/XX/2022 DATE

Z:\2103000\DWG\PLANS\C-2_ GENERAL NOTES.DWG PLOT DATE:2/14/2022

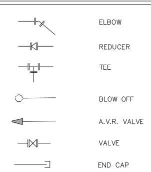
SYMBOLS AND LEGEND

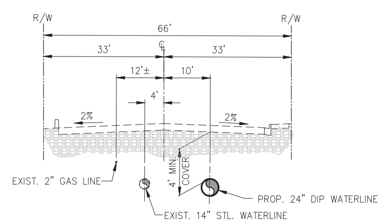
C–C / C–9	SECTION CUT SECTION "C–C" SHOWN ON DRAWING C–9.
30RW	30= DIAMETER OF PIPELINE RW= DUTY OF PIPELINE
81	PROPOSED FINISH CONTOUR.
(81)	EXISTING CONTOUR.
	CHAIN LINK FENCE, 6' HIGH W/3 STRANDS BARBED WIRE PER SPECIFICATIONS.
	PROPOSED FACILITY
	EXISTING FACILITY
	EXIST. EDGE OF PAVEMENT
	EXIST. CURB AND GUTTER
	EXIST. UNDERGROUND EDISON
	EXIST. UNDERGROUND TELEPHONE/COMM.
	EXIST. GAS
	EXIST. FENCE
	EXIST. 6" WATER
	EXIST. 14" WATER
	LIMIT OF GRADING (DAYLIGHT)
	GRADING (TOE)
	PROPOSED 36" GRADED SWALE
	PROPOSED WATER LINE
	EDGE OF DIRT ROAD
	CENTERLINE
	RIGHT OF WAY
	PROPERTY LINE
	FUT R/W LINE
	RETAINING WALL
	INTERCEPTOR DRAIN
	ASPHALT CONCRETE PAVING
	SLOPE
	BUILDING
	SHRUB TREE LINE
	PALM TREE
	EXIST. POWER POLE ANCHOR (GUY WIRE)
	EXIST. STREET LIGHT
WM	EXIST. WATER METER AND SERVICE LATERAL
	EXIST. LARGE WOOD SIGN
	EXIST. POWER POLE
	EXIST. FIRE HYDRANT
	EXIST. GAS METER
TEL R.	EXIST. TELEPHONE RISER
	EXISTING WATER VALVE
	EXISTING UTILITY POLE
	EXIST. ROCK LINE

SITE PIPING SYMBOLS



TRANSMISSION MAIN SYMBOLS





CHERRY AVENUE

N.T.S.

ABBREVIATIONS AND NOTATIONS

A/C	AIR CONDITIONER	G	GAS	PSI	POUNDS PER SQUARE INCH
A.C.,AC	ASPHALT CONCRETE	GA.	GAUGE	R	RADIUS
AV	AIR VALVE	GB	GRADE BREAK	RC, R.C.	RELATIVE COMPACTION
BFV	BUTTERFLY VALVE	HDPE	HIGH DENSITY POLYETHYLENE	RDG	RIDGE
BOT	BOTTOM	HP	HIGH POINT	REQ.	REQUIRED, REQUIREMENTS
BC	BEGINNING CURVE	HWL	HIGH WATER LEVEL	R/W	RIGHT OF WAY
CG	CENTER GRADE	ID, I.D.	INSIDE DIAMETER	SCH, SCHED	SCHEDULE
CL., ℄	CENTERLINE	INV.	INVERT ELEVATION	SPEC	BOUND SPECIFICATIONS
CL EL	CENTERLINE ELEVATION	KSI	KILOPOUNDS PER SQUARE INCH	SQ.	SQUARE
CLR.	CLEAR, CLEARANCE	LF	LINEAR FEET	SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION)
CMB	CRUSHED MISCELLANEOUS BASE	LLWL	LOW LOW WATER LEVEL		
CMU	CONCRETE MASONRY UNIT	LWL	LOW WATER LEVEL	STA.	STATION
CONC.	CONCRETE	MAX.	MAXIMUM	ST. STL, S.S.	STAINLESS STEEL
CONT.	CONTINUOUS	MGD	MILLION GALLONS PER DAY	STD DWG	STANDARD DRAWING– REFER TO BOUND SPECIFICATION
DIA.	DIAMETER	MH	MANHOLE	T&B	TOP AND BOTTOM
DWG.	DRAWING	MIN.	MINIMUM	TB	TOP OF BERM ELEVATION
E.#	EAST COORDINATE	MISC.	MISCELLANEOUS	TC	TOP OF CURB ELEVATION
EC	END CURVE	N.#	NORTH COORDINATE	TEL.	TELEPHONE
EG	EXISTING GRADE ELEVATION	N/A	NOT APPLICABLE,. NOT AVAILABLE	TF	TOP OF FOOTING ELEVATION
EL	ELEVATION			TG	TOP OF GRATE ELEVATION, TOP OF GRATING
EP	EDGE OF PAVING	N.I.C.	NOT IN CONTRACT	THK.	THICK, THICKNESS
EQ.	EQUAL, EQUALLY	No.	NUMBER	T.O.P.	TOP OF PIPE ELEVATION
E.W.	EACH WAY	N.T.S.	NOT TO SCALE	TW	TOP OF WALL ELEVATION
EXIST, (E)	EXISTING	O.C.	ON CENTER	TYP, TYP.	TYPICAL
FF, FIN, FLR	FINISH FLOOR ELEVATION	OD, O.D.	OUTSIDE DIAMETER	USCS	UNIFIED SOIL CLASSIFICATION SYSTEM
FG	FINISH GRADE ELEVATION	OH	OPPOSITE HAND	UNO, U.N.O.	UNLESS NOTED OTHERWISE
FL., FL	FLOW LINE ELEVATION	OHE	OVERHEAD ELECTRICAL	W	WATER
FLG'D	FLANGE, FLANGED	PL, PL	PROPERTY LINE	W/	WITH
FS	FINISH SURFACE ELEVATION	PP	POWER POLE	WT.	WEIGHT
FTG	FOOTING				
FUT.	FUTURE CONSTRUCTION				
Fy	YIELD STRENGTH OF STEEL				

ABBREVIATIONS FOR PIPE MATERIALS

ABS	ACRYLONITRILE BUTADIENE STYRENE	ECTFE	ETHYLENE–CHLOROTRIFLUOROETHYLENE
AGS	ADVANCED GROOVE SYSTEM	FRP	FIBERGLASS REINFORCED PLASTIC
BSP	BLACK STEEL PIPE	GIP	GALVANIZED IRON PIPE (STD.WT.)
BFV	BUTTERFLY VALVE	HDG	HOT DIPPED GALVANIZED (SCH.40 STEEL UNO)
CCP	CONCRETE CYLINDER PIPE	HDPE	HIGH DENSITY POLYETHYLENE
CIP	CAST IRON PIPE	PTFE	POLYTETRAFLUOROETHYLENE
CISP	CAST IRON SOIL PIPE	PVC	POLYVINYL CHLORIDE
CMC	CEMENT MORTAR COATED	PVDF	POLYVINYLIDENE FLUORIDE
CML	CEMENT MORTAR LINED	RCP	REINFORCED CONCRETE PIPE
CMLC, CML&C	WELDED STEEL PIPE CEMENT MORTAR LINED AND COATED	RSGV	RESILIENT SEAT GATE VALVE
		SCS	SEAMLESS CARBON STEEL
CML&TC	WELDED STEEL PIPE CEMENT MORTAR LINED, TAPE WRAPPED, AND CEMENT MORTAR COATED	SS, ST. STL.	STAINLESS STEEL (SCH.40 UNO)
		STD.WT.	STANDARD WEIGHT
CMP	CORRUGATED METAL PIPE	STL.	STEEL
CPVC	CHLORINATED POLYVINYL CHLORIDE	VCP	VITRIFIED CLAY PIPE (EXTRA–STRENGTH)
CT	CYLINDER THICKNESS	WSP	WELDED STEEL PIPE
DI	DUCTILE IRON	1/4"CT	WSP WITH 1/4" STEEL CYLINDER THICKNESS
DIP	DUCTILE IRON PIPE		

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E–MAIL bfox@kbcozad.com

PREPARED UNDER THE SUPERVISION OF:

DATE: XX/XX/2022 BRIAN D. FOX
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REGISTERED PROFESSIONAL ENGINEER · BRIAN D. FOX · CIVIL · STATE OF CALIFORNIA · PRELIMINARY

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DRAWN	D.D.S.
CHECKED	B.FOX
APPROVED	
REG. NO.	

REV	DATE	DESCRIPTION:	BY

BENCHMARK: SEE SHEET 1

SCALE: AS SHOWN

BEAUMONT–CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

DISTRICT ENGINEER R.C.E. NO. DATE

2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

LEGENDS, SYMBOLS, AND ABBREVIATIONS

SHEET NO. C–3 OF 12 SHTS

XX/XX/2022
DATE

Z:\2103000\DWG\PLANS\C–3_ LEGENDS_ SYMBOLS AND ABB.DWG PLOT DATE:2/14/2022

DEMOLITION PLAN

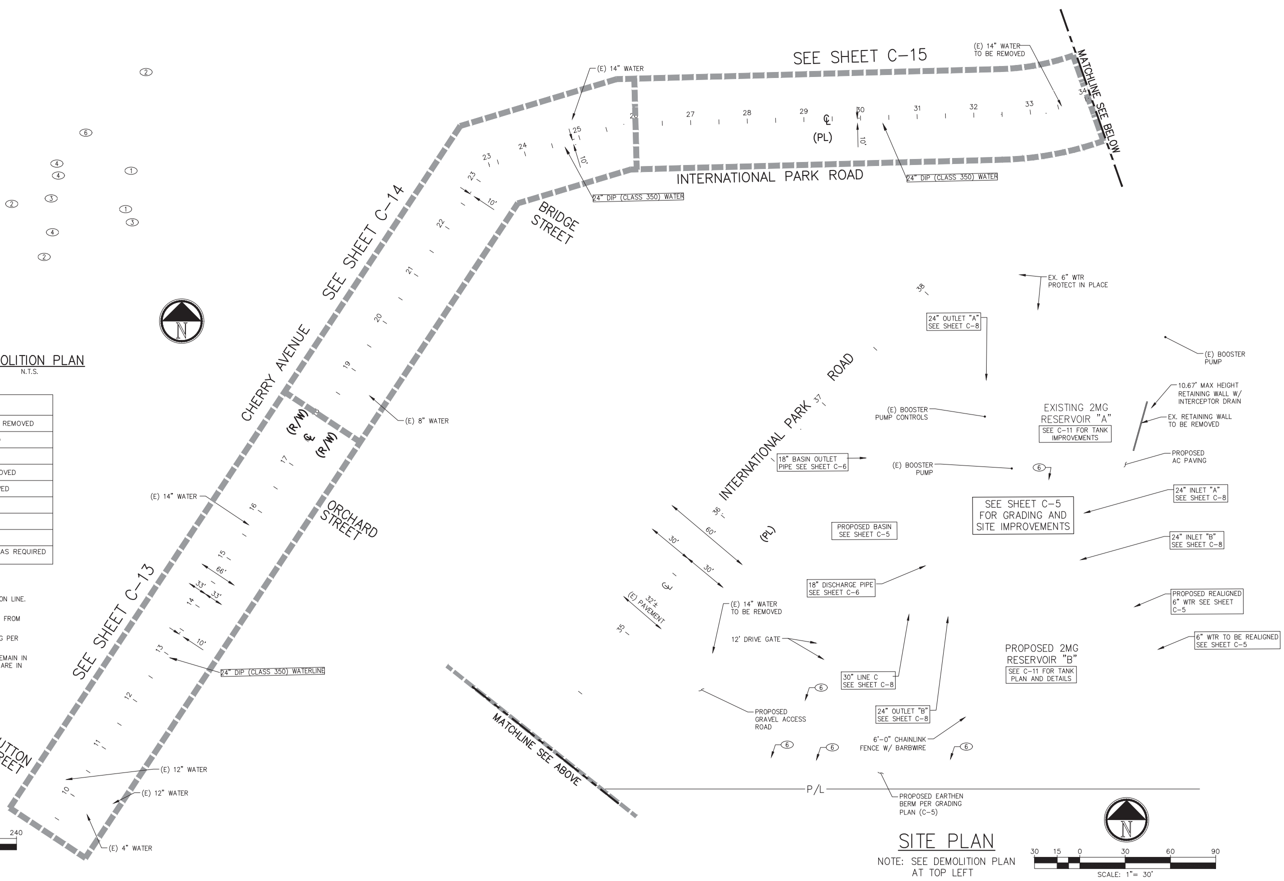
N.T.S.

DEMOLITION NOTES	
(1)	EXISTING TANK RING & FOUNDATION TO BE REMOVED
(2)	EXISTING CHAINLINK FENCE TO BE REMOVED
(3)	EXISTING STRUCTURE TO BE REMOVED
(4)	EXISTING MISC. APPURTENANCE TO BE REMOVED
(5)	EXISTING MISC. RV FACILITIES TO BE REMOVED
(6)	EXISTING TREE TO BE REMOVED
(7)	EXISTING TREE PROTECT IN PLACE
(8)	EXISTING WALL TO BE REMOVED
(9)	EXISTING 14" STEEL WATERLINE – REMOVE AS REQUIRED SEE **NOTE BELOW

SEQUENCE OF WORK

1. CONSTRUCT NEW 2MG RESERVOIR AND TRANSMISSION LINE.
2. AFTER NEW TANK AND TRANSMISSION LINE ARE OPERATIONAL, REMOVE EXISTING TANK AND PIPING FROM SERVICE.
3. REMOVE AND RE-CONFIGURE EXISTING TANK PIPING PER APPROVED PLAN.

**NOTE: 14" STEEL WATERLINE TO BE REMOVED MUST REMAIN IN OPERATION UNTIL NEW TANK AND TRANSMISSION LINE ARE IN SERVIVCE.



SITE PLAN

NOTE: SEE DEMOLITION PLAN AT TOP LEFT

30 15 0 30 60 90
SCALE: 1"= 30'

NOTE:
ALL DISTANCES ARE HORIZONTAL MEASUREMENTS. CONTRACTOR TO VERIFY ALL QUANTITIES

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BEAUMONT-CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

DISTRICT ENGINEER   R.C.E. NO.   DATE

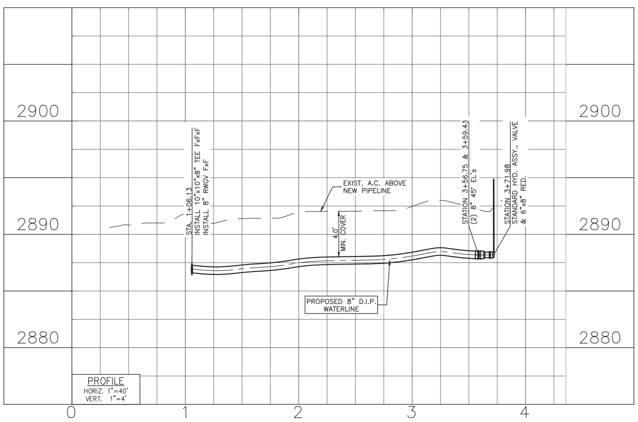
2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

INDEX MAP & SITE PLAN

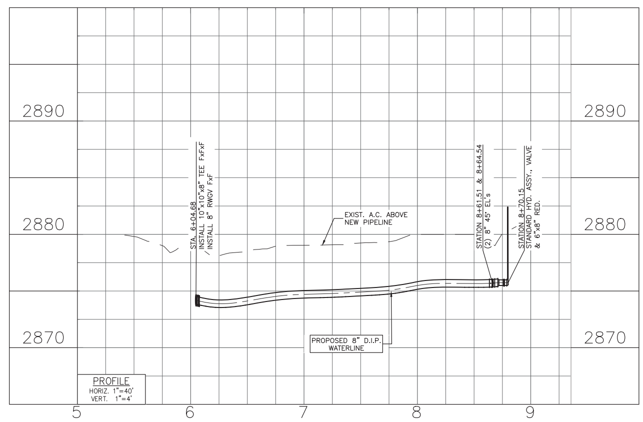
SHEET NO. C-4 OF 12 SHTS

XX/XX/2022 DATE

Z:\2103000\DWG\PLANS\C-4_INDEX MAP & SITE PLAN.DWG PLOT DATE: 2/14/2022

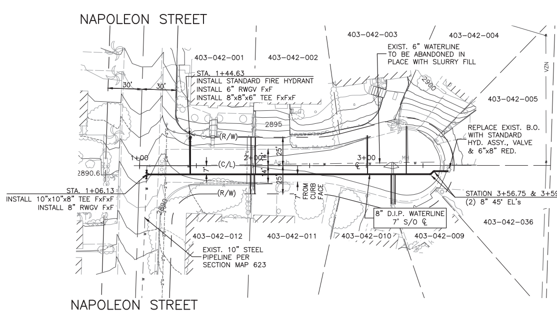


LAMBERT ROAD PROFILE

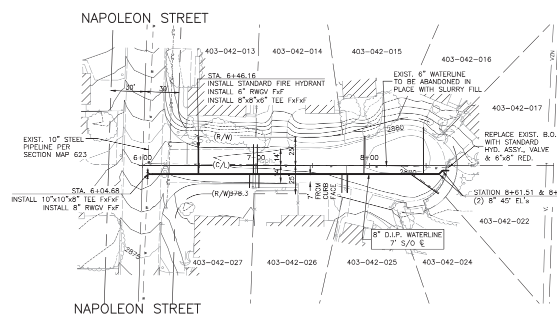


BING PLACE PROFILE

NOTE: CONTRACTOR TO PROVIDE RECEIPT OF PROPER DISPOSAL OF ALL ACP MATERIAL FROM DISPOSAL FACILITY



LAMBERT ROAD



BING PLACE

NOTE:
ALL DISTANCES ARE HORIZONTAL MEASUREMENTS. CONTRACTOR TO VERIFY ALL QUANTITIES

SCALE: 1" = 40'

Cozad & Fox, Inc. CIVIL / STRUCTURAL ENGINEERS, MUNICIPAL CONSULTANTS / PLANNERS, SURVEYORS / GPS. 151 South Girard Street • Hemet, Ca 92544. TEL. (951) 652-4454 • FAX (951) 766-8942. E-MAIL bfox@kbcozad.com	PRELIMINARY	JOB NO. 2103000; DESIGNED A.J.R.; DRAWN D.D.S.; CHECKED B.FOX; APPROVED; REG. NO.	REV / DATE / DESCRIPTION / BY
PREPARED UNDER THE SUPERVISION OF: DATE: XX/XX/2022 BRIAN D. FOX REGISTERED CIVIL ENGINEER NO. 57264			

BENCHMARK: SEE SHEET 1

SCALE: AS SHOWN

BEAUMONT-CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

DISTRICT ENGINEER | R.C.E. NO. | DATE

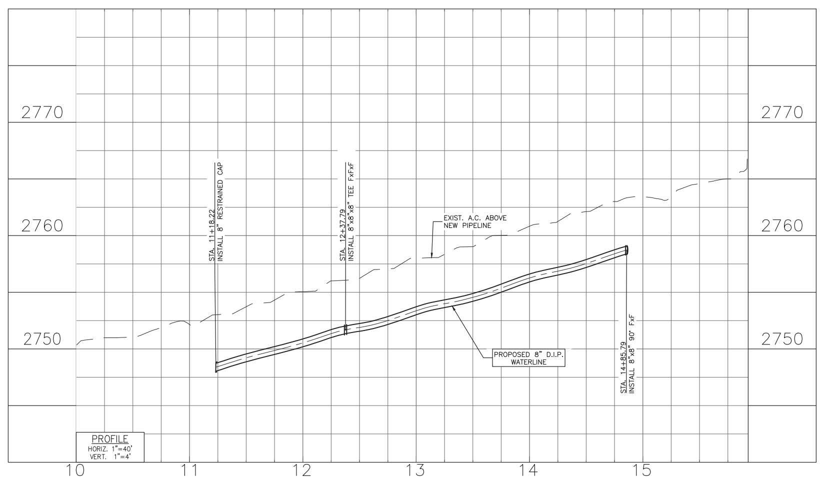
2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

PLAN AND PROFILE
LAMBERT ROAD AND BING PLACE
STA 0+00 TO STA 9+00

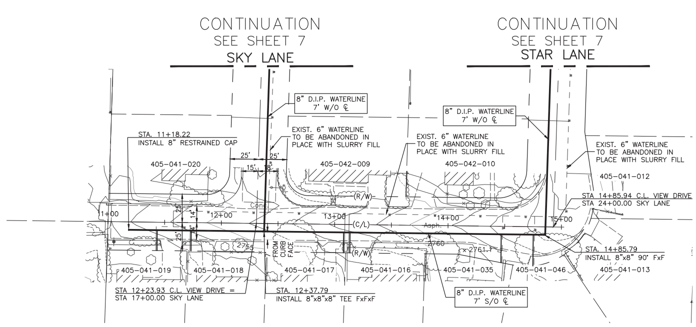
SHEET NO. C-4 OF 12 SHTS

XX/XX/2022 DATE

Z:\2103000\DWG\PLANS\C-5_ PPL1&2_P&P.DWG PLOT DATE: 2/14/2022



VIEW DRIVE PROFILE



NOTE: CONTRACTOR TO PROVIDE RECEIPT OF PROPER DISPOSAL OF ALL ACP MATERIAL FROM DISPOSAL FACILITY

VIEW DRIVE

SCALE: 1" = 40'

NOTE:
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BENCHMARK: SEE SHEET 1

SCALE: AS SHOWN

BEAUMONT–CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

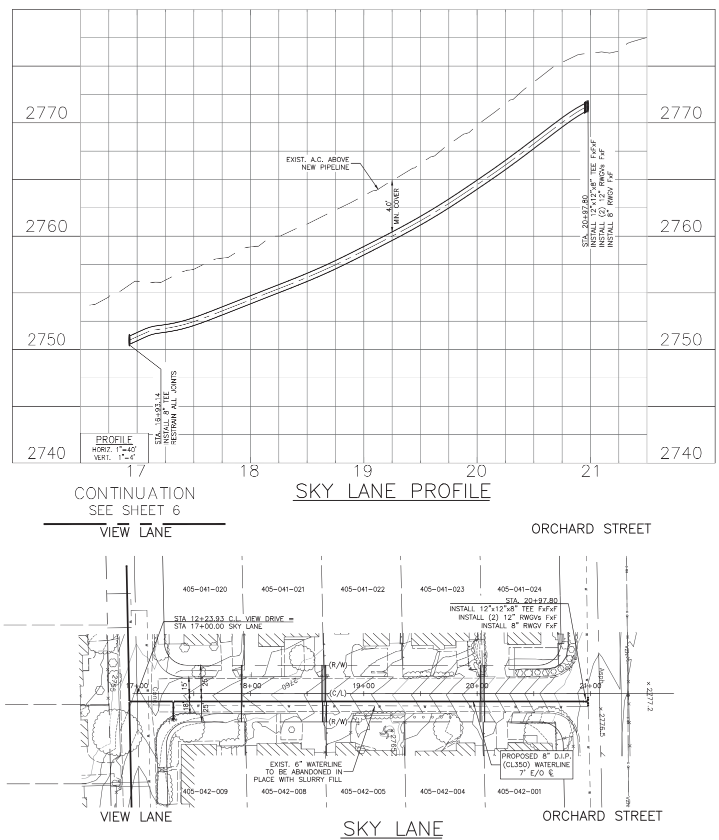
DISTRICT ENGINEER | R.C.E. NO. | DATE

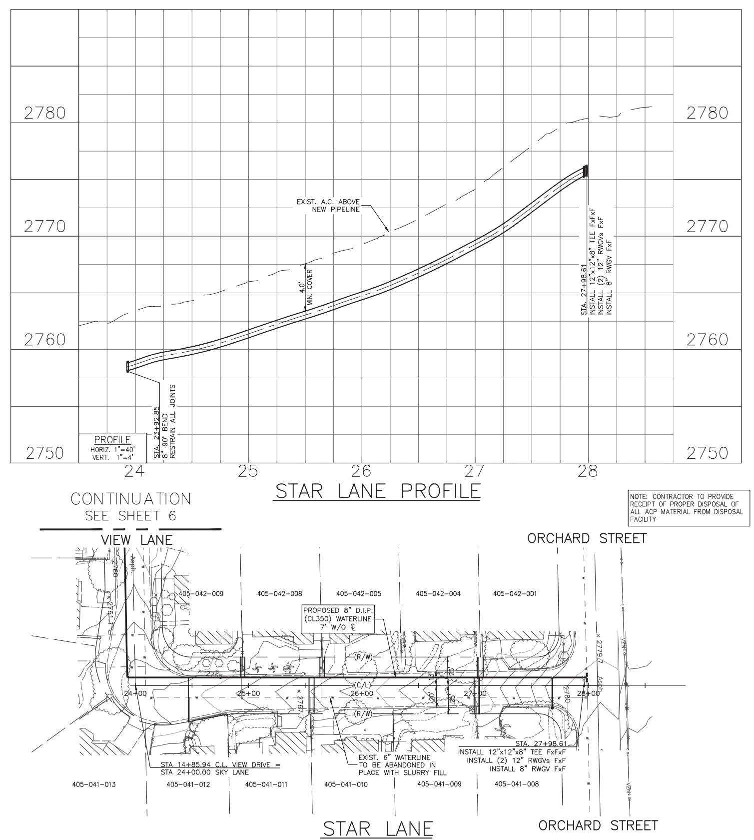
2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

PLAN AND PROFILE
VIEW DRIVE
STA 9+00 TO STA 18+00

SHEET NO. C-5
OF 12 SHTS
XX/XX/2022
DATE

Z:\2103000\DWG\PLANS\C-6 PPL3_P&P.DWG PLOT DATE:2/14/2022





NOTE: CONTRACTOR TO PROVIDE RECEIPT OF PROPER DISPOSAL OF ALL ACP MATERIAL FROM DISPOSAL FACILITY

NOTE:
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40 20 0 40 80 120
SCALE: 1" = 40'

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REGISTERED PROFESSIONAL ENGINEER — BRIAN D. FOX — CIVIL — STATE OF CALIFORNIA — PRELIMINARY

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BENCHMARK
SEE SHEET 1

SCALE
AS SHOWN

BEAUMONT-CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

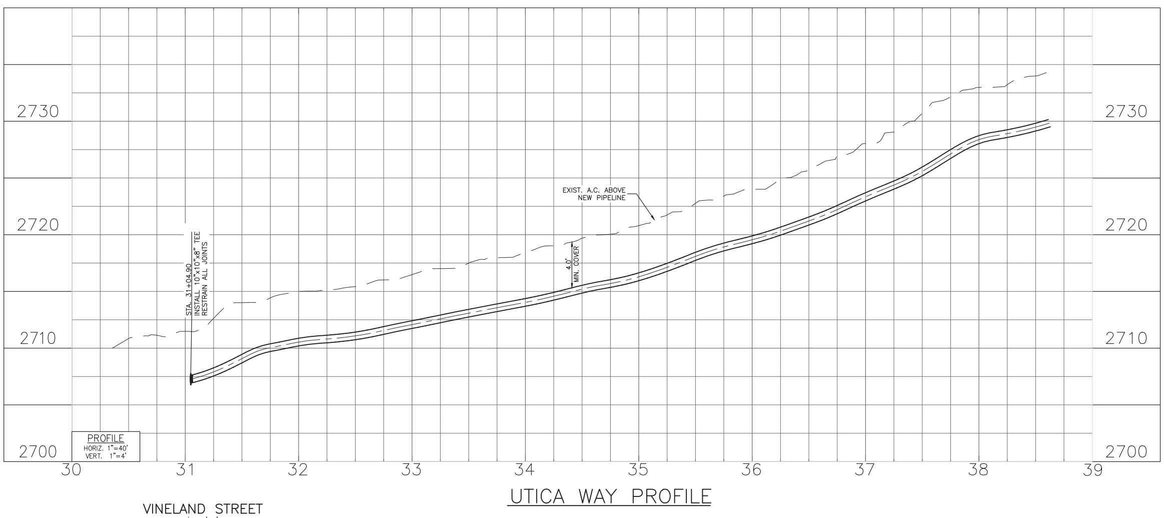
DISTRICT ENGINEER R.C.E. NO. DATE

2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

PLAN AND PROFILE
SKY LANE AND STAR LANE
STA 16+50 TO STA 28+75

SHEET NO.
C-7
OF 12 SHTS
XX/XX/2022
DATE

Z:\2103000\DWG\PLANS\C-7_ PPL3_P&P.DWG PLOT DATE:2/14/2022



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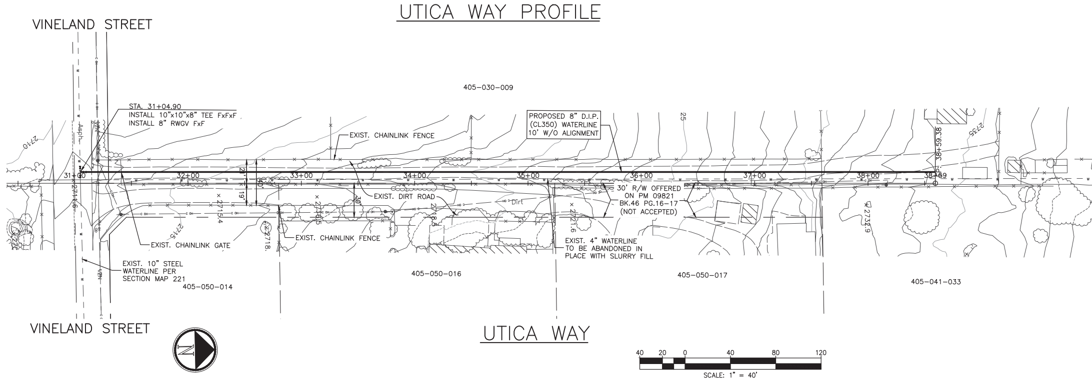

NOTE:
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Z:\2103000\DWG\PLANS\C-8_ PPL4_P&P.DWG PLOT DATE:2/14/2022

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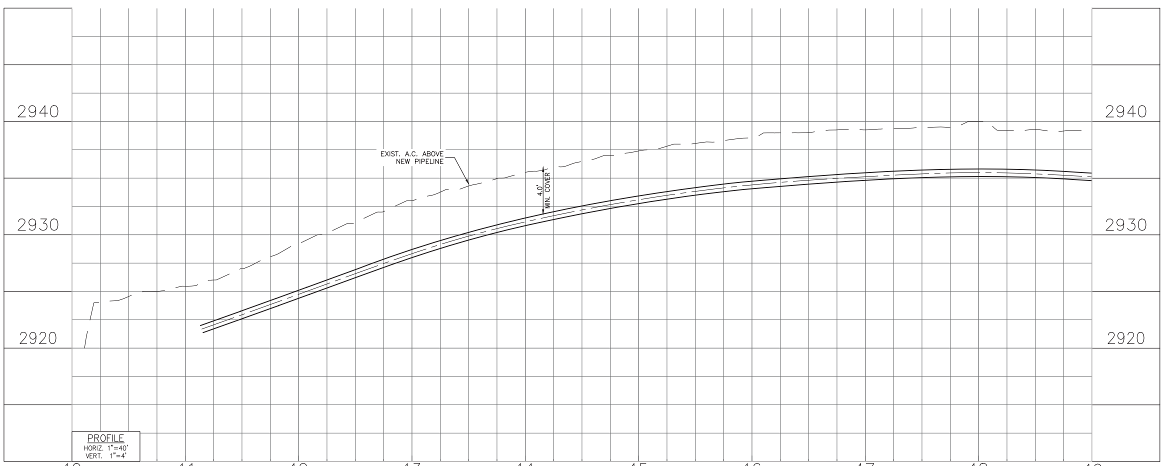
BEAUMONT-CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

DISTRICT ENGINEER R.C.E. NO. DATE

2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

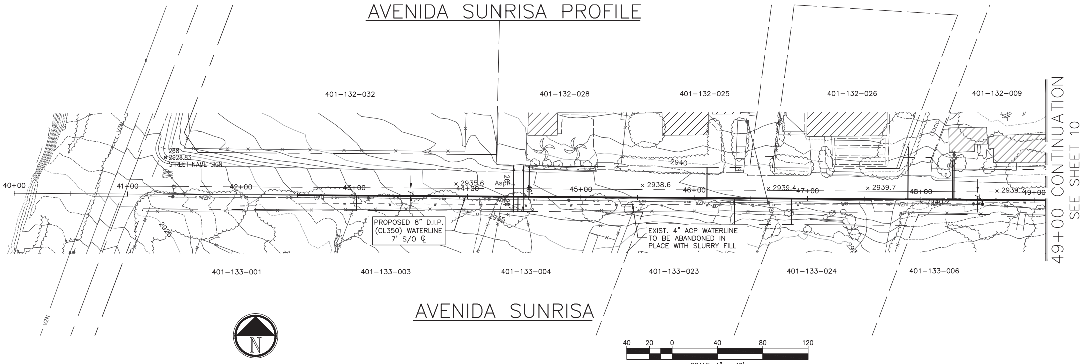
PLAN AND PROFILE
UTICA WAY
STA 30+00 TO STA 39+00

SHEET NO.
C-8
OF 12 SHTS
XX/XX/2022
DATE



AVENIDA SUNRISA PROFILE

NOTE: CONTRACTOR TO PROVIDE RECEIPT OF PROPER DISPOSAL OF ALL ACP MATERIAL FROM DISPOSAL FACILITY



AVENIDA SUNRISA

SCALE: 1" = 40'

NOTE:
ALL DISTANCES ARE HORIZONTAL MEASUREMENTS. CONTRACTOR TO VERIFY ALL QUANTITIES

Z:\2103000\DWG\PLANS\C-9-10_ PPL5_P&P.DWG PLOT DATE:2/14/2022

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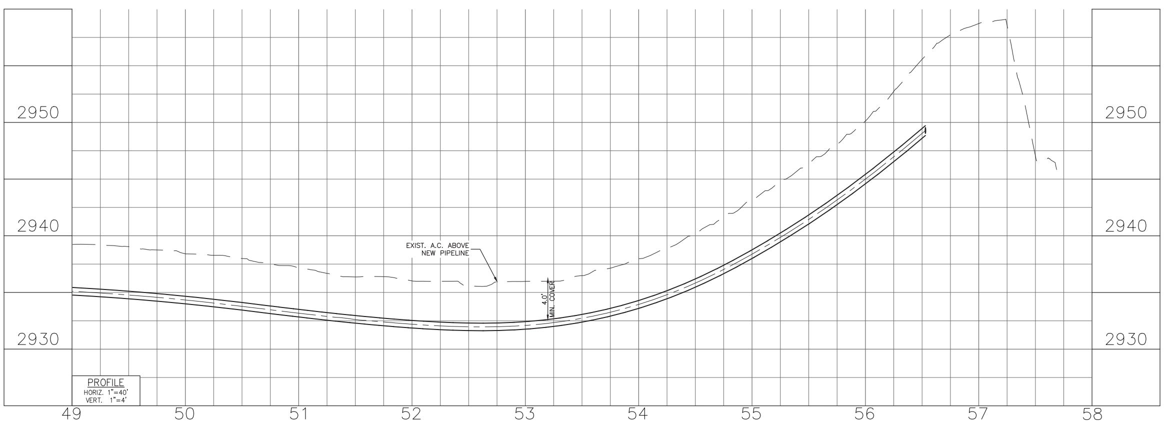
BEAUMONT-CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

DISTRICT ENGINEER R.C.E. NO. DATE

2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

PLAN AND PROFILE
AVENIDA SONRISA
STA 40+00 TO STA 49+00

SHEET NO.
C-9
OF 12 SHTS
XX/XX/2022
DATE



AVENIDA SUNRISA PROFILE

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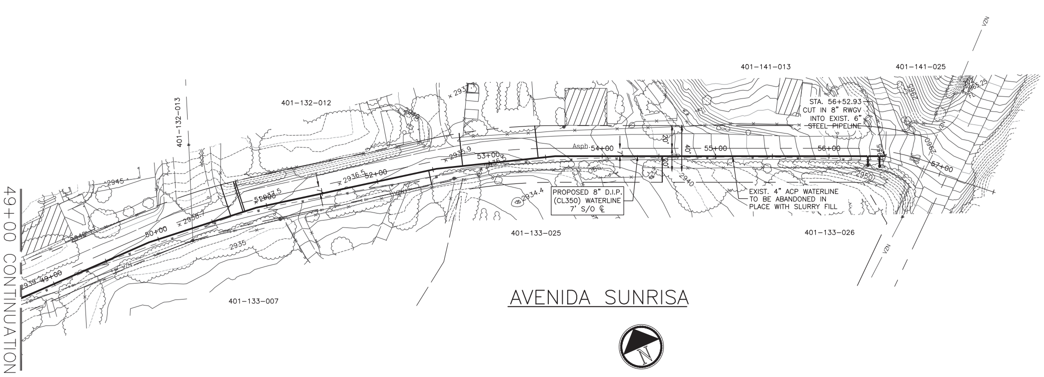

AVENIDA SUNRISA

SCALE: 1" = 40'

NOTE:
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SEE SHEET 1

SCALE
AS SHOWN

BEAUMONT–CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA

DISTRICT ENGINEER · R.C.E. NO. · DATE

2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT

PLAN AND PROFILE
AVENIDA SONRISA
STA 49+00 TO STA 58+00

SHEET NO.
C–10
OF 12 SHTS
XX/XX/2022
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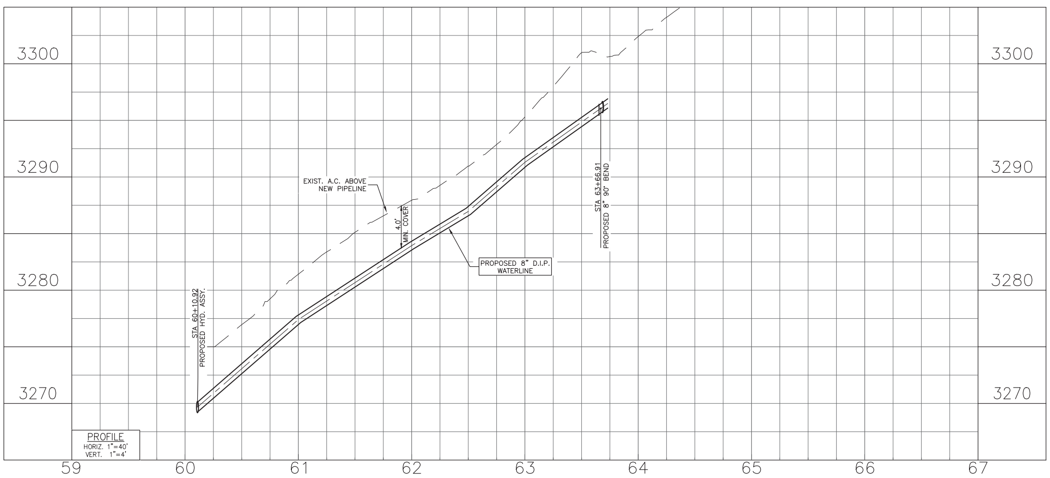
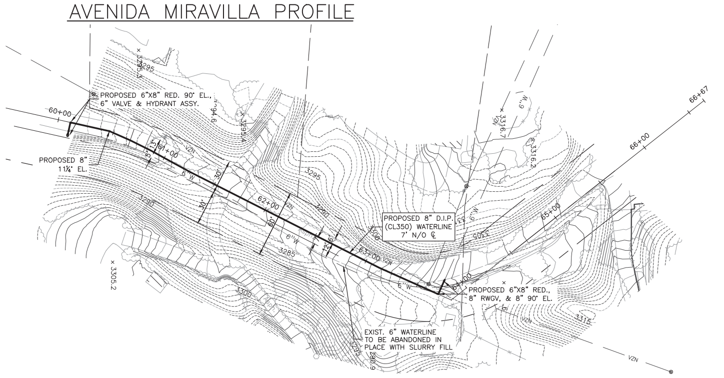
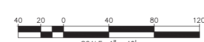


AVENIDA MIRAVILLA PROFILE

NOTE: CONTRACTOR TO PROVIDE RECEIPT OF PROPER DISPOSAL OF ALL ACP MATERIAL FROM DISPOSAL FACILITY





AVENIDA MIRAVILLA

NOTE:
ALL DISTANCES ARE HORIZONTAL MEASUREMENTS. CONTRACTOR TO VERIFY ALL QUANTITIES

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CIVIL / STRUCTURAL ENGINEERS MUNICIPAL CONSULTANTS / PLANNERS SURVEYORS / GPS 151 South Girard Street • Hemet, Ca 92544 TEL (951) 652-4454 • FAX (951) 766-8942 E-MAIL bfox@kbccozad.com PREPARED UNDER THE SUPERVISION OF: DATE: XX/XX/2022 BRIAN D. FOX REGISTERED CIVIL ENGINEER NO. 57264	PRELIMINARY	JOB NO. 2103000 DESIGNED A.J.R. DRAWN D.D.S. CHECKED B.FOX APPROVED REG. NO.	REV DATE DESCRIPTION BY	BENCHMARK SEE SHEET 1 SCALE AS SHOWN	BEAUMONT-CHERRY VALLEY WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA DISTRICT ENGINEER R.C.E. NO. DATE
2020 AND 2021 WATER PIPELINE REPLACEMENT PROJECT PLAN AND PROFILE AVENIDA MIRAVILLA STA 9+00 TO STA 18+00	SHEET NO. C-12 OF 12 SHTS XX/XX/2022 DATE				

Appendix B
Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Analysis and Habitat Assessment

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Habitat Assessment

2020 and 2021 Water Pipeline Replacement Project

Project Location
Cherry Valley, Riverside County, California

Permittee:
County of Riverside, California
4080 Lemon Street
Riverside, CA 92501

Applicant:

Beaumont-Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223

Prepared by:

Geovironment Consulting
630 W 7th Street
San Jacinto, CA 92583

August 2022

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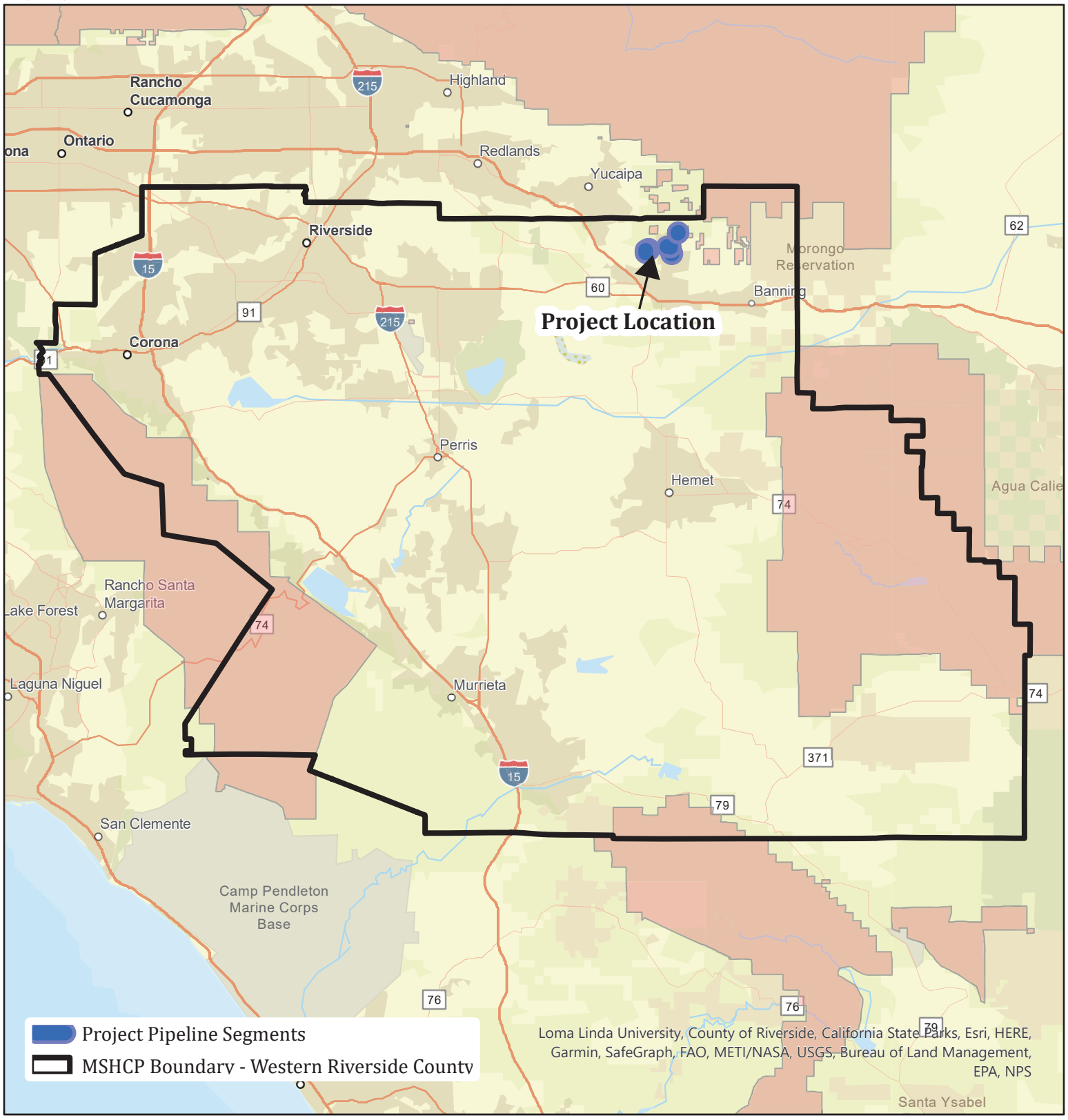

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N

0 0.2 0.4 0.8 Miles

Figure 2 - Vicinity Map
2020 - 2021 Pipeline Replacement

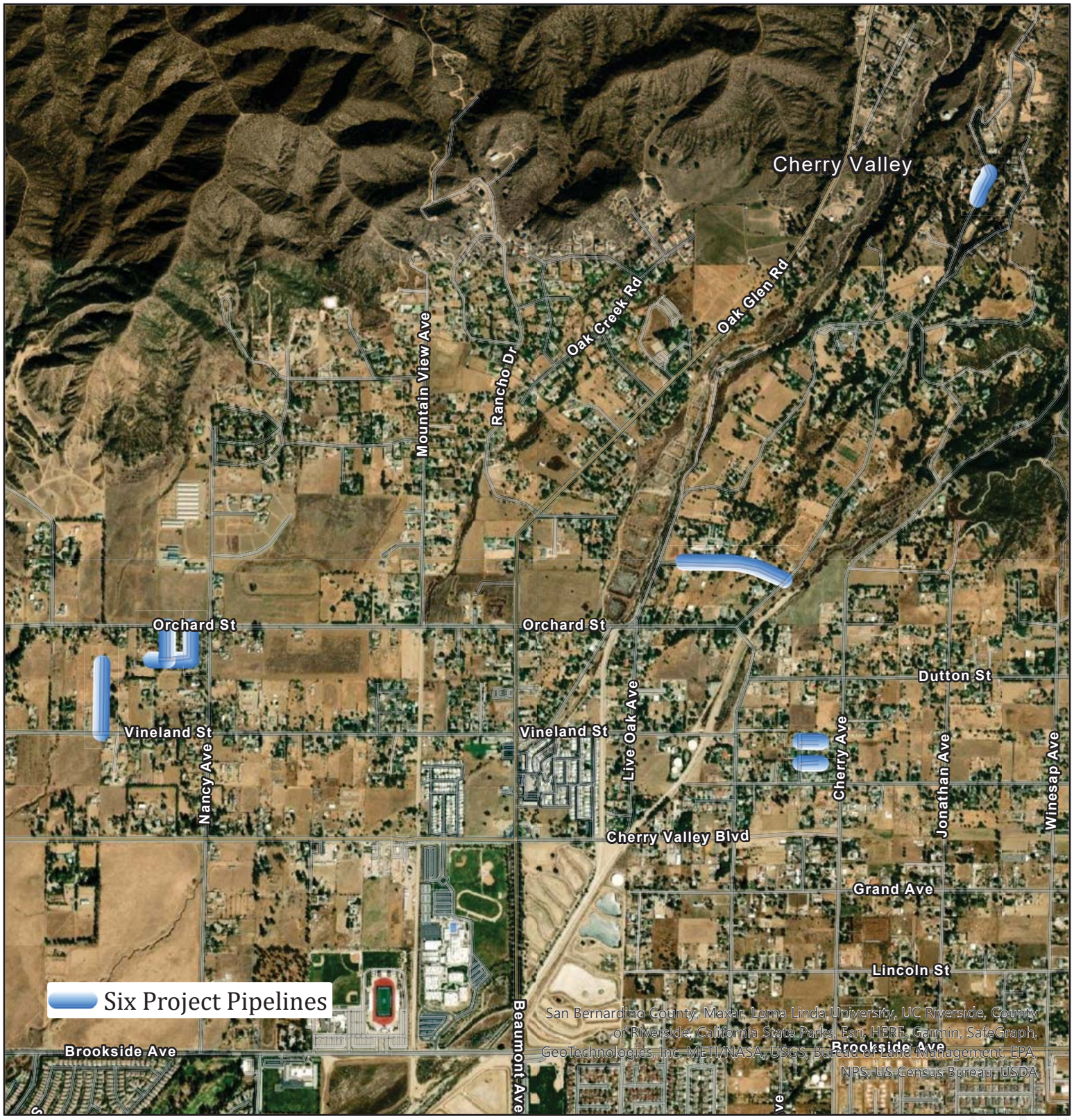

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Figure 3 - USGS Topographic Map
2020 - 2021 Pipeline Replacement

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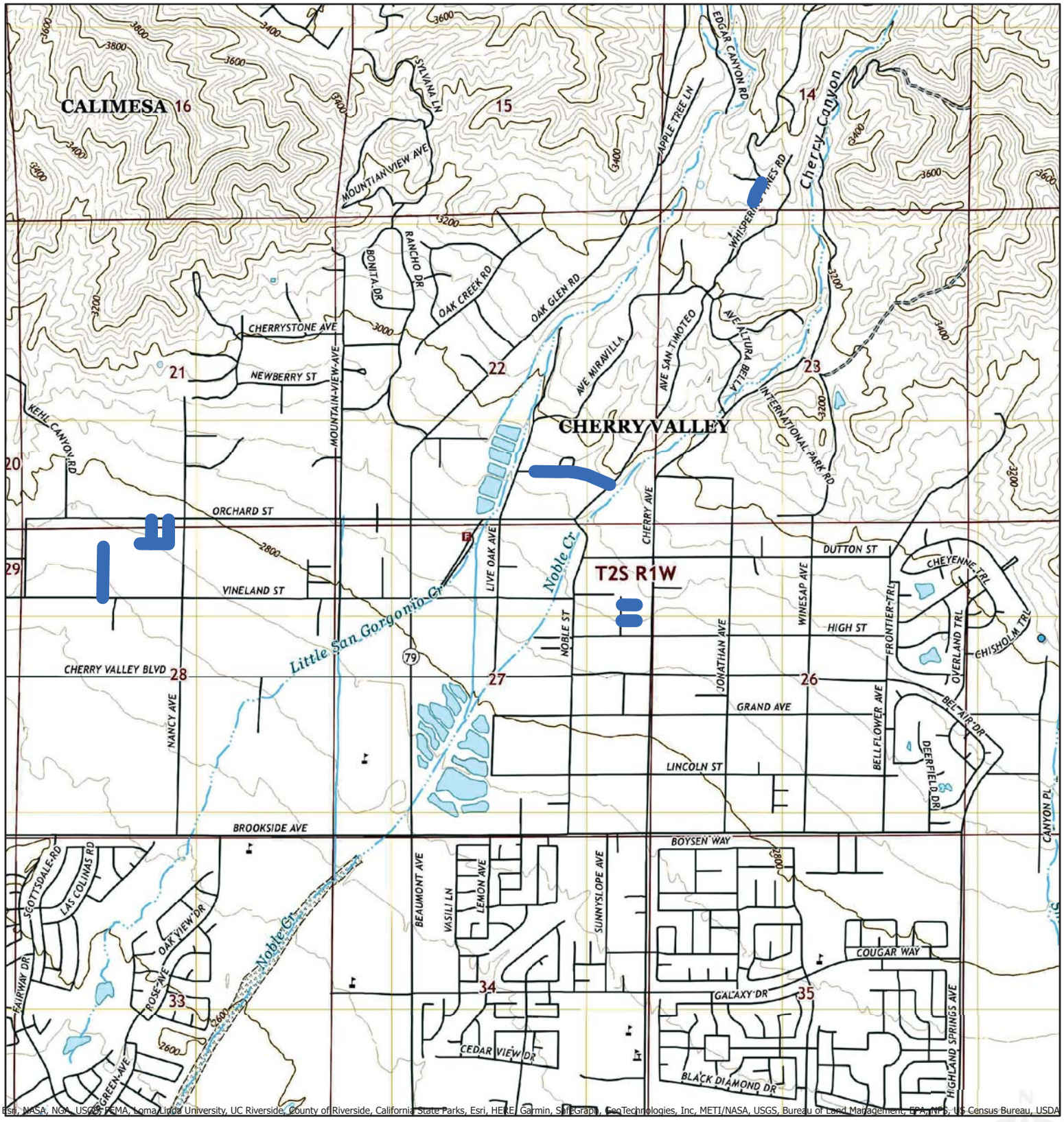

Esri, NASA, NGA, USGS, FEMA, Loma Linda University, UC Riverside, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

Project Pipeline Replacement Segments

1:32,000

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N

0 0.05 0.1 0.2 Miles

Figure 4 - Project Area
2020 - 2021 Pipeline Replacement

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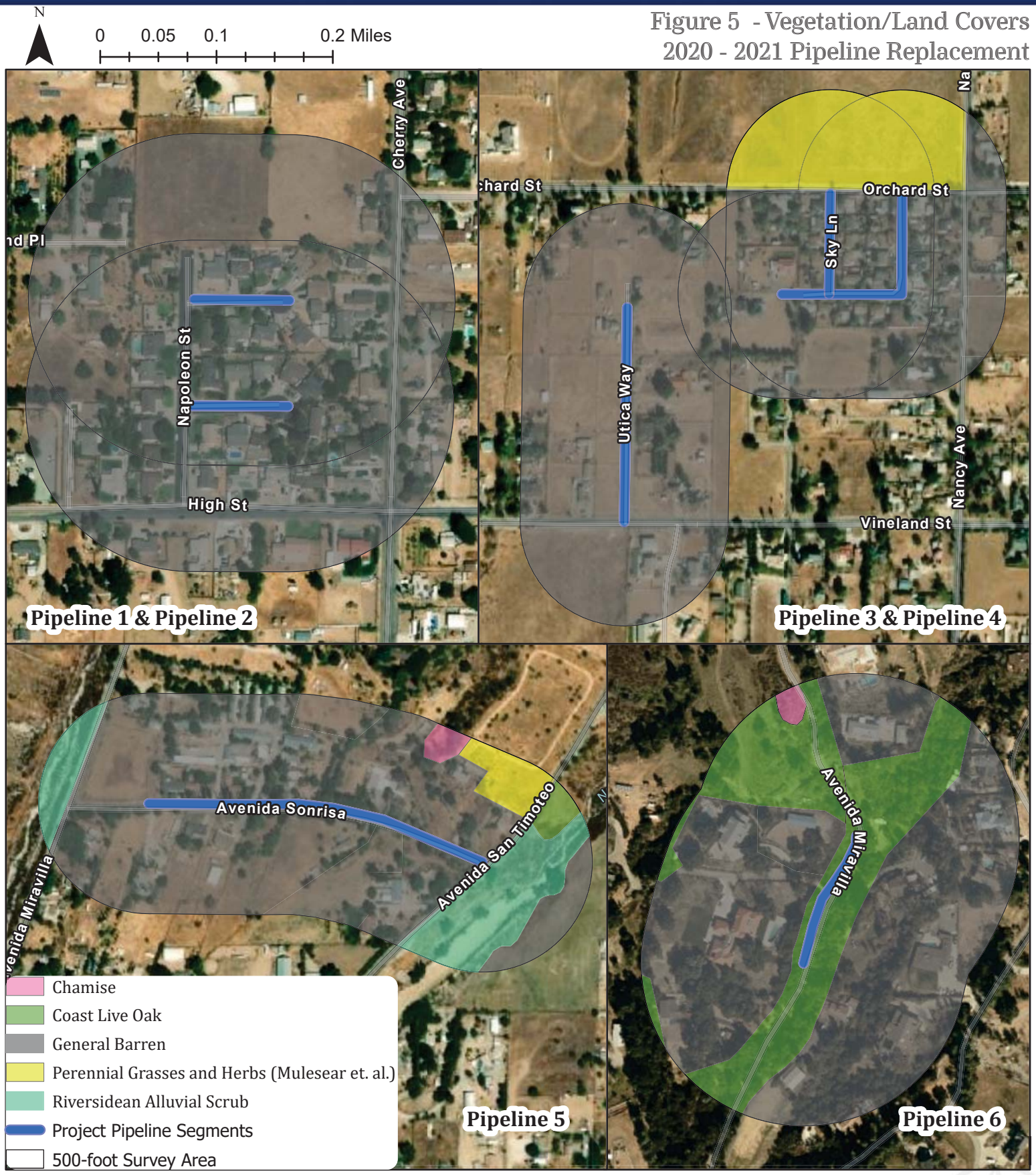
Figure 5 - Vegetation/Land Covers
2020 - 2021 Pipeline Replacement



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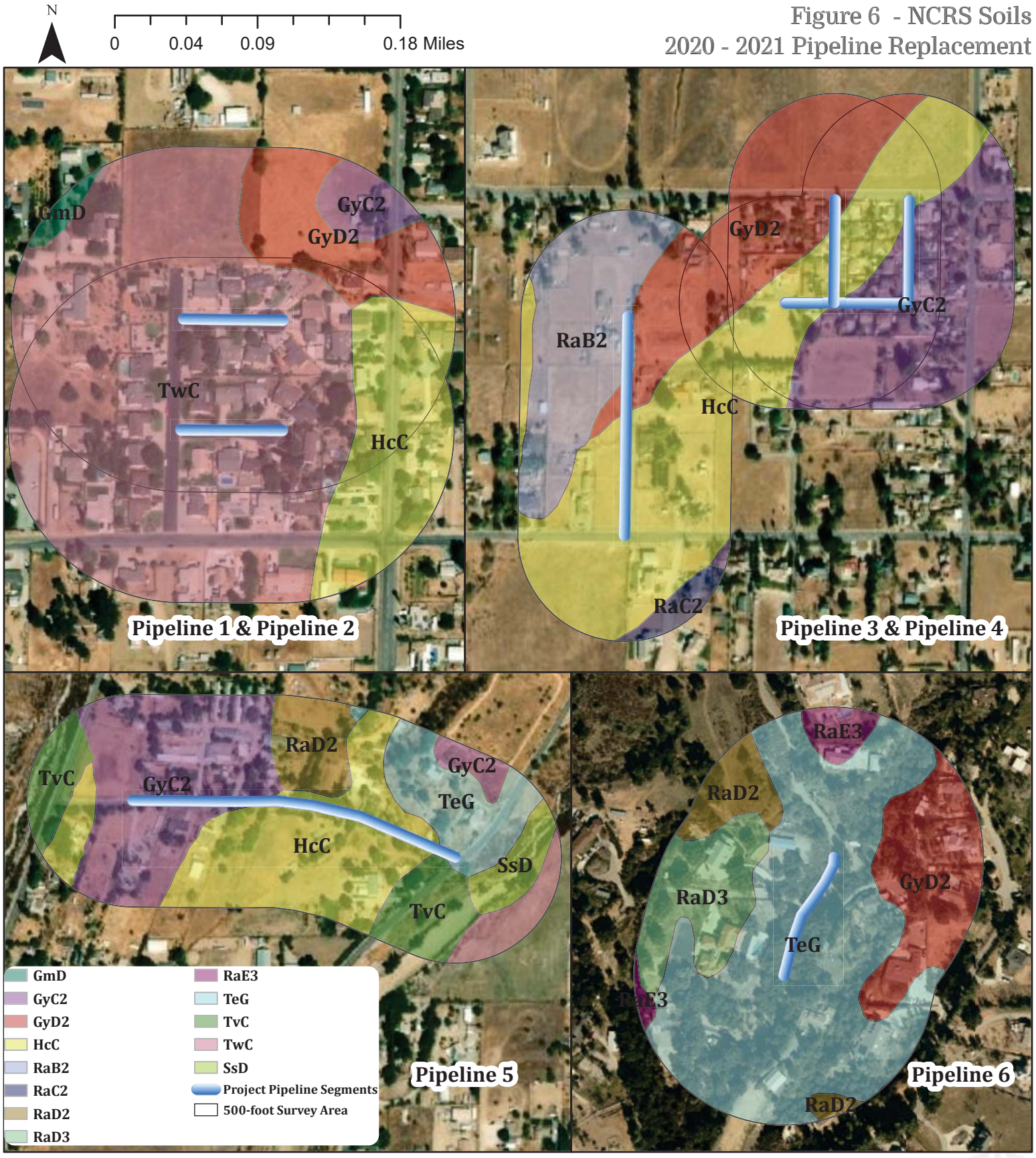
2020 - 2021 Pipeline Replacement



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2020 - 2021 Pipeline Replacement

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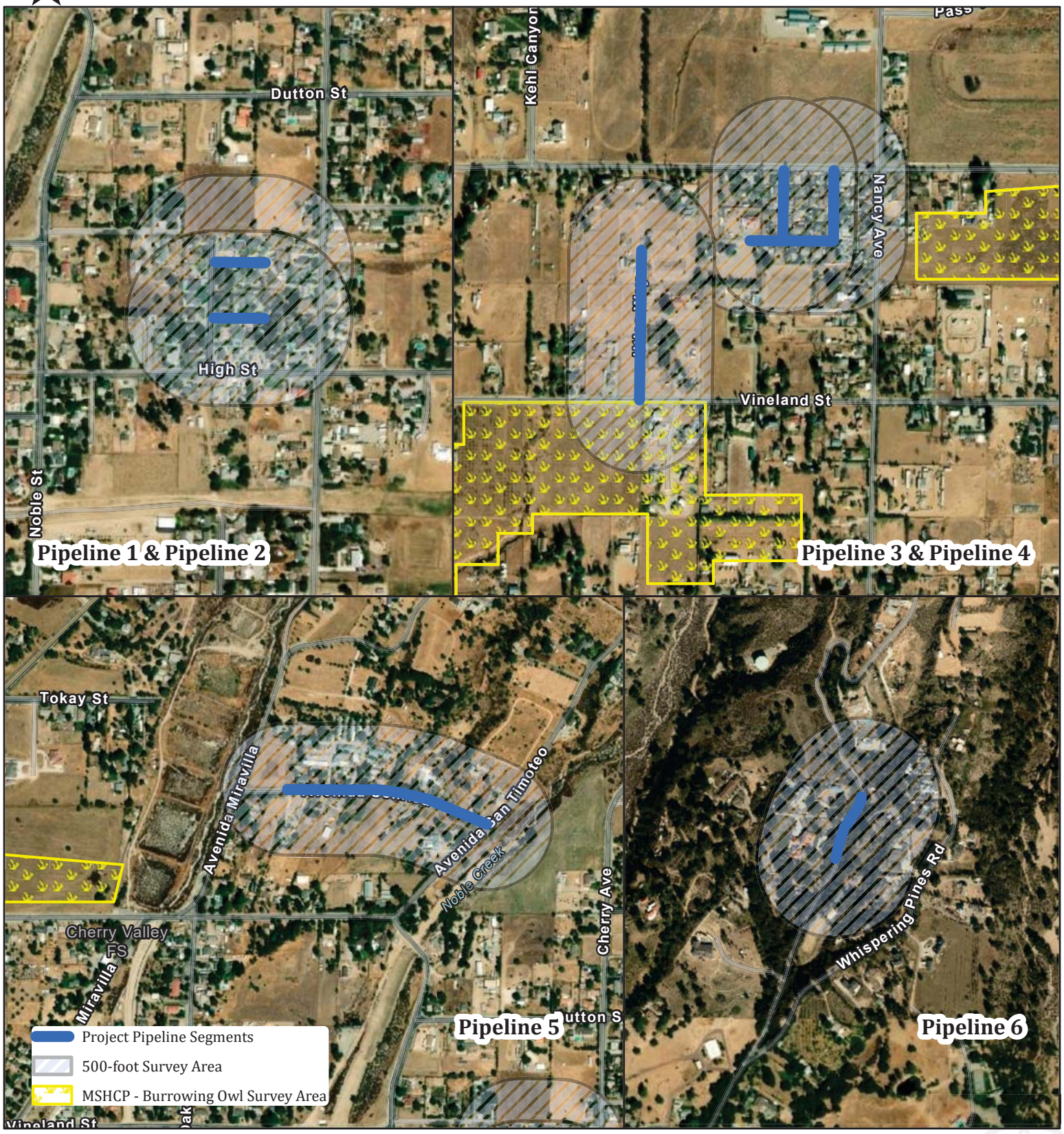
Figure 8 - Burrowing Owl Survey Area
2020 - 2021 Pipeline Replacement



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2020 - 2021 Pipeline Replacement

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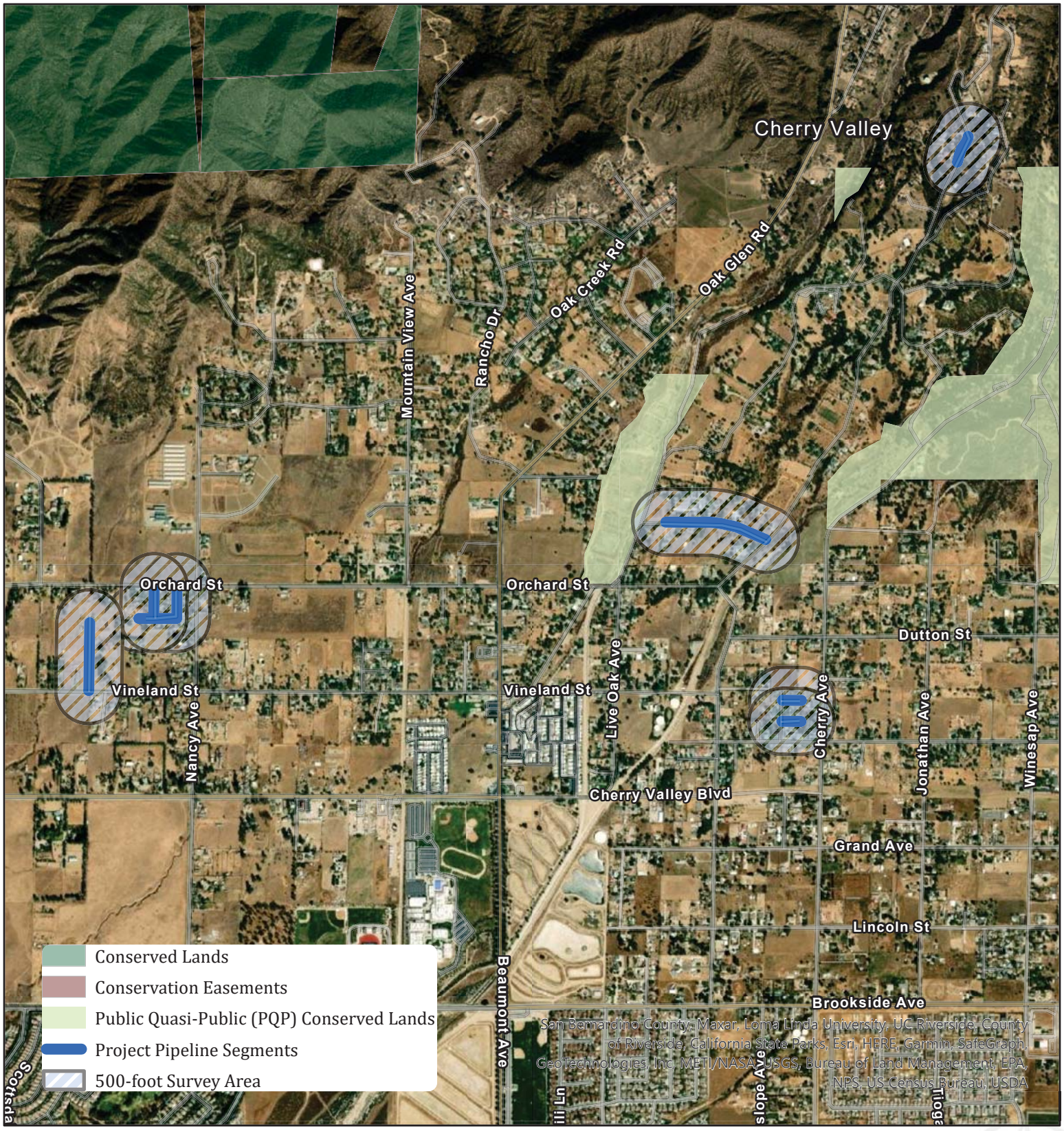
Figure 10 - Public Quasi-Public Lands
2020 - 2021 Pipeline Replacement



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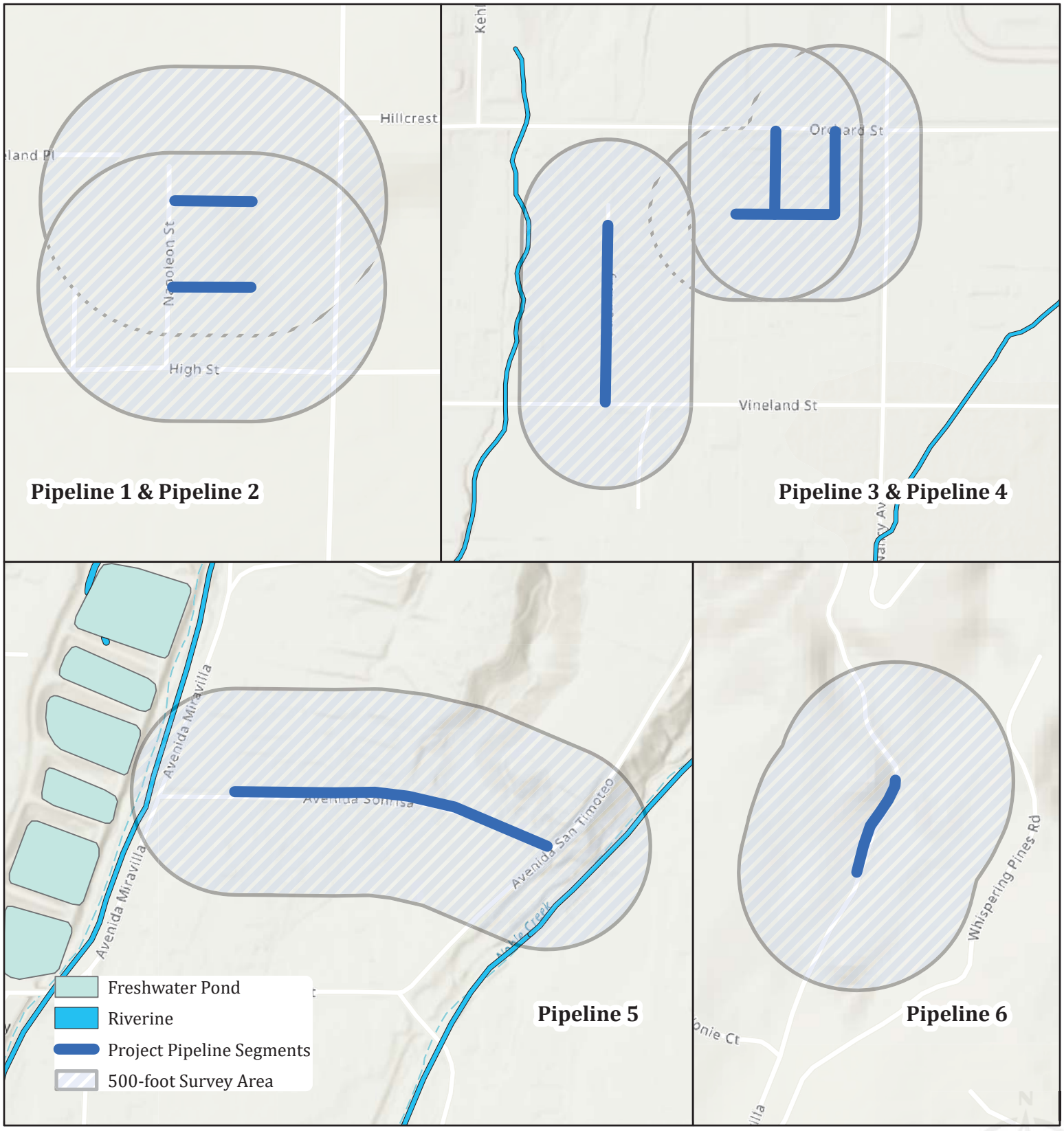
2020 - 2021 Pipeline Replacement



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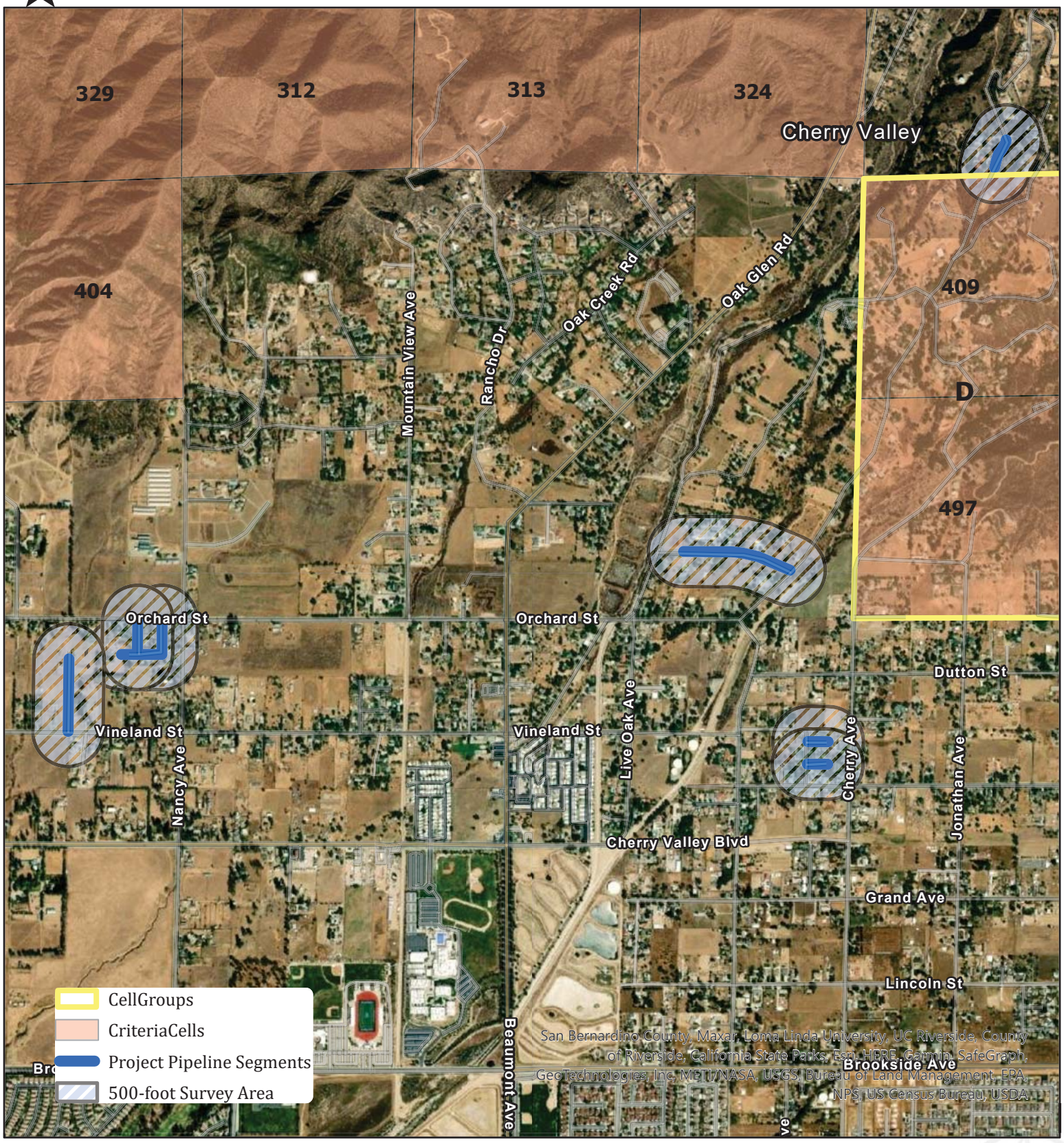

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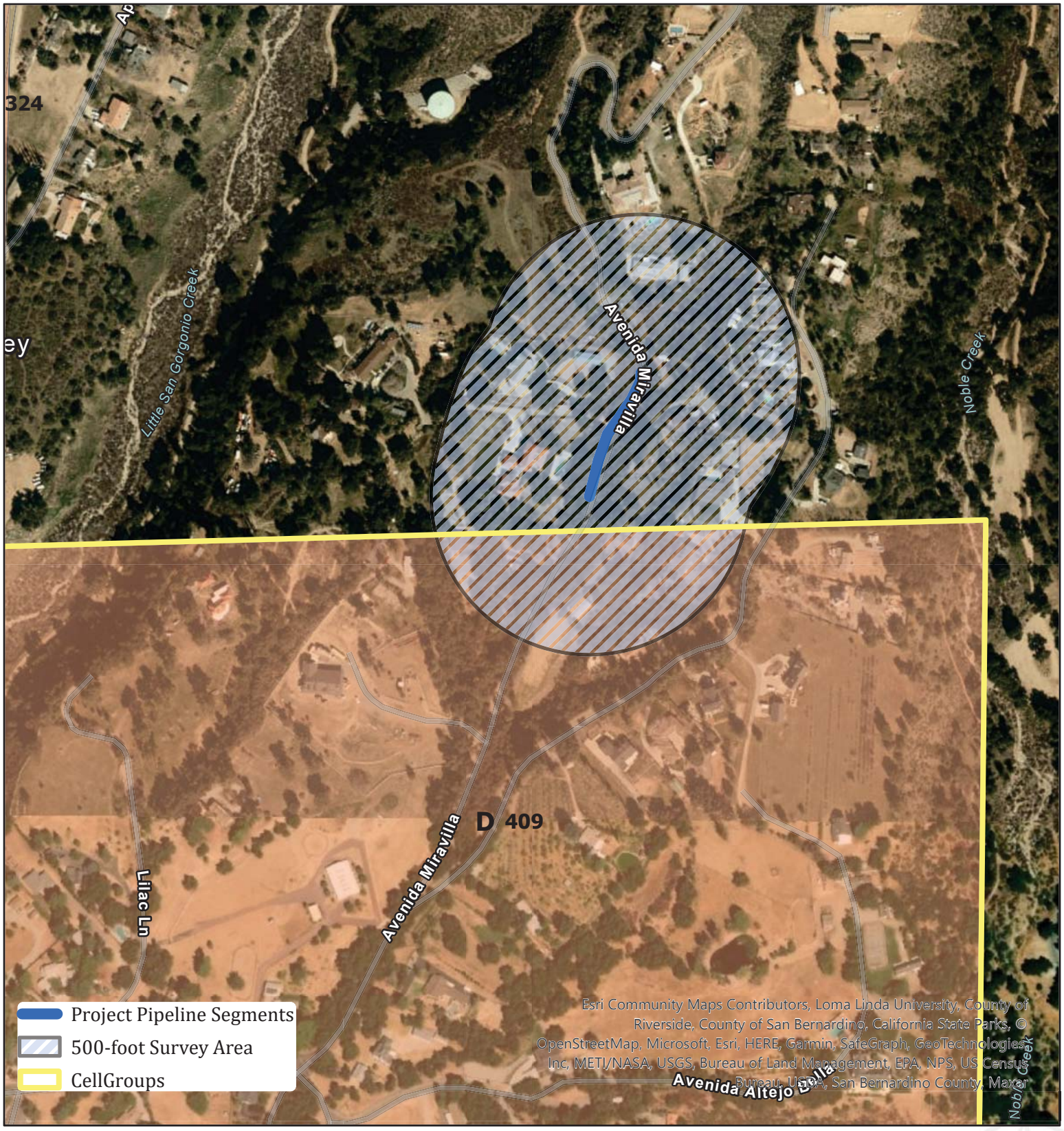
2020 - 2021 Pipeline Replacement



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1.0 Executive Summary

This Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis (Analysis) provides the results of the required MSHCP assessments to determine if the proposed 2020 and 2021 Water Pipeline Replacement project (Project), was consistent with the goals and objectives of the MSHCP. Pipeline 1 and Pipeline 2 and their surrounding adjacent APNs do not require any focused surveys according to the RCA MSHCP Information Map.[1] Pipeline 3 located in Star Lane, Sky Lane, and View Drive will connect to a pipeline segment that runs through Orchard Street, a MSHCP designated covered road.[1] Further, APN 407-110-021 adjacent to the north of Pipeline 3 requires a MSHCP-designated assessment area for a Narrow Endemic Plant Survey for Yucaipa Onion (*Allium marvinii*) and Many-stemmed dudleya (*Dudleya multicaulis*) according to the RCA MSHCP Information Map (Table 1).[1] APN 405-160-002 and APN 405-140-003 are located within a MSHCP-designated assessment area for Burrowing Owl (*Athene cunicularia*) (BOUW) and Narrow Endemic Plant Survey Area for Yucaipa onion (*Allium marvinii*) and Many-stemmed dudleya (*Dudleya multicaulis*), which is directly south of Pipeline 4, located in Utica Way (Table 2).[1] An MSHCP-designated Covered Trail runs horizontal through Pipeline 5, located in Avenida Sonrisa.[1] APN 401-131-006 located to the northwest of Pipeline 5, APN 401-132-013 located to the north of Pipeline 5, and APNs 401-142-036 and 401-142-011 located to the east of Pipeline 5 require Narrow Endemic Plant Survey Area for Yucaipa Onion (*Allium marvinii*) and Many-stemmed dudleya (*Dudleya multicaulis*)(Table 3).[1] Additionally, the southern end of Pipeline 6 in Avenida Miravilla, is approximately 55 feet from Criteria Cell 409, Cell Group D, and Subunit 2 – Badlands/San Bernardino National Forest and adjacent to an MSHCP-designated assessment area for a Narrow Endemic Plant Survey for Yucaipa onion (*Alluim marvinii*) and Many-stemmed dudleya (*Dudleya multicaulis)* (APN 401-190-006 and APN 401-190-006) (Table 4).[1]

Table 1. Pipeline 3 MSHCP Requirements for APN 407-110-021

APN 407-110-021 (Northern Adjacent Parcel)	
Roughstep	2
AP Subunit	NA
Cellgroup	Not in a Cellgroup
Criteria Cell	Not in a Criteria Cell
Survey Area - Amphibian	Not in an amphibian survey area
Survey Area – Burrowing Owl	Not in a burrowing owl survey area
Survey Area – Mammal	Not in a mammal survey area
Survey Area – Narrow Endemic Plants	Marvin's Onion, Many-stemmed dudleya
Survey Area – Criteria Area Species	Not in a criteria area species survey area
Delhi Sands Flower-loving Fly	Not in a Delhi Sand Flower-loving fly survey area
Source: Regional Conservation Authority (2022a). "RCA MSHCP Information Map". Website: https://wrcrca.maps.arcgis.com/apps/webappviewer/ Accessed: July 18, 2022	

[1] Regional Conservation Authority (2022a). "RCA MSHCP Information Map". Website: https://wrcrca.maps.arcgis.com/apps/webappviewer/ Accessed: July 18, 2022

Table 2. Pipeline 4 MSHCP Requirements for APN 405-140-003 and APN 405-160-020

APN	**405-140-003 (Southern Adjacent Parcel)**	**405-160-022 (Southern Adjacent Parcel)**
Roughstep	2	2
AP Subunit	NA	NA
Cellgroup	Not in a Cellgroup	Not in a Cellgroup
Criteria Cell	Not in a Criteria Cell	Not in a Criteria Cell
Survey Area - Amphibian	Not in an amphibian survey area	Not in an amphibian survey area
Survey Area – Burrowing Owl	Burrowing Owl	Burrowing Owl
Survey Area – Mammal	Not in a mammal survey area	Not in a mammal survey area
Survey Area – Narrow Endemic Plants	Marvin's Onion, Many-stemmed dudleya	Marvin's Onion, Many-stemmed dudleya
Survey Area – Criteria Area Species	Not in a criteria area species survey area	Not in a criteria area species survey area
Delhi Sands Flower-loving Fly	Not in a Delhi Sand Flower-loving fly survey area	Not in a Delhi Sands Flower-loving Fly survey area
Source: Regional Conservation Authority (2022a). "RCA MSHCP Information Map". Website: https://wrcrca.maps.arcgis.com/apps/webappviewer/ Accessed: July 18, 2022		

Table 3. Pipeline 5 MSHCP Requirements for APN 401-142-011

APN 401-142-011 (Southwest Adjacent Parcel)	
Roughstep	2
AP Subunit	NA
Cellgroup	Not in a Cellgroup
Criteria Cell	Not in a Criteria Cell
Survey Area - Amphibian	Not in an amphibian survey area
Survey Area – Burrowing Owl	Not in a burrowing owl survey area
Survey Area – Mammal	Not in a mammal survey area
Survey Area – Narrow Endemic Plants	Marvin's Onion, Many-stemmed dudleya
Survey Area – Criteria Area Species	Not in a criteria area species survey area
Delhi Sands Flower-loving Fly	Not in a Delhi Sand Flower-loving fly survey area
Source: Regional Conservation Authority (2022a). "RCA MSHCP Information Map". Website: https://wrcrca.maps.arcgis.com/apps/webappviewer/ Accessed: July 18, 2022	

Table 4. Pipeline 6 MSHCP Requirements for APN 401-170-048 and APN 401-170-070

APN	401-170-048 (Northwest Adjacent Parcel)	401-170-070 (Southwest Adjacent Parcel)
Roughstep	2	2
AP Subunit	NA	NA
Cellgroup	Not in a Cellgroup	Not in a Cellgroup
Criteria Cell	Not in a Criteria Cell	Not in a Criteria Cell
Survey Area - Amphibian	Not in an amphibian survey area	Not in an amphibian survey area
Survey Area – Burrowing Owl	Not in a burrowing owl survey area	Not in a burrowing owl survey area
Survey Area – Mammal	Not in a mammal survey area	Not in a mammal survey area
Survey Area – Narrow Endemic Plants	Marvin's Onion, Many-stemmed dudleya	Marvin's Onion, Many-stemmed dudleya
Source: Regional Conservation Authority (2022a). "RCA MSHCP Information Map". Website: https://wrcrca.maps.arcgis.com/apps/webappviewer/ Accessed: July 18, 2022		

The six pipeline segments are located in roads and not located within the MSHCP designated survey areas itself, however, a number of the APNs in the Project's 500-foot buffers are located within the survey area for Narrow Endemic Plant Survey and Burrowing Owl Survey.

The six pipeline replacement segments are located at six different sites in the unincorporated Community of Cherry Valley in Riverside County. Pipeline 1 is located in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. Pipeline 2 is located in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. Pipeline 3 is located in Star Lane, Sky Lane, and View Drive, a distance of approximately 390 feet for Star Lane, 390 feet for View Drive and 295 feet in length for Sky Lane. Pipeline 4 is located in Utica Way from Vineland Street to an existing in-line valve. Pipeline 5 is located in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. Pipeline 6 is located in Avenida Miravilla near Quail Road, a distance of approximately 300 feet.

The Project is located within The Pass Area Plan (PAP) in the Cherry Valley Policy Area. The Pass, or more specifically the San Gorgonio Pass Area, is a distinctive geographical area between the Coachella, San Jacinto, and Moreno Valleys and contains three Subunits.[2] The proposed Project was not located in a Subunit and was not located within a Criteria Cell.[1] The six pipeline segment sites are not targeted for long-term conservation as a part of the MSHCP Reserve Assembly.

Geovironment Consulting biologist conducted the habitat assessment of the six Project pipeline sites on July 21, from 7:30 a.m. – 11:00 a.m. Weather conditions during the habitat assessment were

[2] County of Riverside Transportation and Land Management Agency Environmental Programs Department (2003a). Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Final MSHCP – Volumes 1 and 2. Approved June 17, 2003 (as amended).

sunny, clear skies, and temperature at 75°F (degrees Fahrenheit). The field survey included an on-foot investigation of a 500-foot buffer surrounding the Project sites. Notes were taken on general site conditions, vegetation, and suitability of habitat for various special-interest elements. All plant and animal species observed or otherwise detected during this field survey were noted and are listed in Appendix C.

The objective of the survey was to investigate general site conditions, general habitat, soil conditions, presence of indicator species, slope, aspect, hydrology, and to identify potentially suitable habitat areas for any special-status plant and wildlife species that may be on-site as indicated by the literature review and RCA map. Any potential sensitive habitats or areas on-site or in the immediate vicinity that could potentially support special-status floral or faunal species, as well as MSHCP species indicated in the RCA map, including burrowing owl (*Athene cunicaria*), Yucaipa onion (*Allium marvinii*), and many-stemmed dudleya (*Dudleya multicaulis*) were paid special attention to during the site assessment.

2.0 Introduction

The purpose of this Consistency Analysis (Analysis) report is to summarize the biological data for the proposed 2020 and 2021 Water Pipeline Replacement Project and to document project's consistency with the goals and objectives of the Western Riverside County Multiple Species Habitat Conservation Plan. The proposed project consists of six pipeline replacements within the community of Cherry Valley.

2.1 Project Area

The proposed Project is located within six public roads, five paved roads and one gravel road, throughout the Community of Cherry Valley in Riverside County, California. The location of the proposed Project is depicted on the U.S. Geological Survey (USGS) Beaumont, California 7.5-minute topographic quadrangle on Sections 21, 28, 27, 22, 14 and Township T2S R1W (Figure 3).

2.2 Project Location

Pipeline 1 is located in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. Pipeline 2 is located in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. Pipeline 3 is located in Star Lane, Sky Lane, and View Drive, a distance of approximately 390 feet for Star Lane, 390 feet for View Drive and 295 feet in length for Sky Lane. Pipeline 4 is located in Utica Way from Vineland Street to an existing in-line valve. Pipeline 5 is located in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. Pipeline 6 is located in Avenida Miravilla near Quail Road, a distance of approximately 300 feet.

2.3 Project Description

The District has identified six (6) sections of pipeline infrastructure within its service area that require replacement (Figure 4). The service area of the District covers approximately 28 square miles, and the District's sphere of influence covers approximately 37.5 square miles, virtually all of which is located within the County of Riverside, and includes the community of Cherry Valley, the City of Beaumont, and small portions of the City of Calimesa.

PIPELINE 1

Pipeline 1 scope of work includes replacing an aging 6-inch diameter steel pipeline in Lambert Road from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. The work includes abandonment of existing pipeline in Lambert Road, installing new meter services, laterals, and appurtenances (including individual service lines for each property), reconnect services to the new pipeline, remove existing blowoff valve, and replace with new fire hydrants (one located at existing blowoff location and one new hydrant at the end of the cul-de-sac. The new pipeline will connect to the existing 10-inch diameter steel pipeline located in Napoleon Street. Said connection will require a cut-in tee detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 2

Pipeline 2 scope of work includes replacing an aging 6-inch diameter steel pipeline in Bing Place from Napoleon Street to the end of the cul-de-sac, a distance of approximately 240 feet. Abandon the existing pipeline in Bing Place, install new meter services, laterals, and appurtenances (including individual services lines for each property), reconnect services to the new pipeline, remove existing blow off valve, and replace with new fire hydrants (one located at existing blowoff location and one new hydrant at the end of the cul-de-sac). The new pipeline will connect to the existing 10-inch diameter steel pipeline located in Napoleon Street. Said connection will require a cut-in-tie detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 3

Pipeline 3 scope of work includes replacing a series of three aging 6-inch diameter steel pipelines in Star Lane, Sky Lane, and View Drive. The existing Sky Lane and Star Lane pipelines are each connected to an existing 12-inch diameter DIP located in Orchard Street. The Star Lane pipeline is approximately 390 feet in length, the Sky Lane pipeline is approximately 395 feet in length and the View Drive pipeline is approximately 390 feet. The existing pipelines within Star Lane, Sky Lane, and View Drive are to be abandoned-in-place and the new main lines constructed adjacent to said existing pipelines. Installation of new meter services, laterals, and appurtenances shall be per District standards with individual services to each property (no split services). New fire hydrants shall be located and included as part of the design in accordance with fire department standards, coordinated with District staff, and approved by the jurisdiction agency. The new pipelines located in Star Lane and Sky Lane will connect to the existing 12-inch diameter DIP pipeline located in Orchard Street. Said connection will require a cut-in tee detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 4

Pipeline 4 scope of work includes replacing an 840 LF (approximate) portion of an existing 4-inch diameter high pressure steel pipeline in Utica Way from Vineland Street to an existing in-line valve (as identified by District field staff). The existing pipeline in Utica Way shall be abandoned and most likely removed with the proposed pipeline to be constructed adjacent to the existing. New water services, laterals and appurtenances shall be connected to the new pipeline. The new pipeline will connect to the existing 10-inch diameter steel pipeline located in Vineland Street. Said connection will require a cut-in tee detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 5

Pipeline 5 scope of work includes replacing an aging 6-inch diameter high pressure steel pipeline in Avenida Sonrisa from Avenida San Timoteo to Avenida Miravilla, a distance of approximately 1,380 feet. The existing pipeline in Avenida Sonrisa shall be abandoned-in-place and the new main line constructed adjacent to the existing. Installation of new meter services, laterals, and appurtenances to be per District standards with individual services to each property (no split services). New fire hydrants shall be located and included as part of the design in accordance with fire department standards, coordinated with District staff, and approved by the jurisdictional agency. The new pipeline will connect to the existing 6-inch diameter steel pipeline located in Avenida San Timoteo and the existing 6-inch diameter Asbestos-Cement pipe (ACP) pipeline located approximately 700-feet east of Avenida Miravilla. Said connection will require a cut-in tee detail, as provided by the District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down.

PIPELINE 6

Pipeline 6 scope of work includes replacing an aging 6-inch diameter steel pipeline in Avenida Miravilla from the existing 6-inch tee connection located near Quail Road (Private) to the existing blowoff valve in Avenida Miravilla, a distance of approximately 300 feet. The existing pipeline in Avenida Miravilla shall be abandoned and most likely removed with the proposed pipeline to be constructed adjacent to the existing. Installation of new meter services, laterals, and appurtenances to be per District standards with individual services to each property (no split services). New fire hydrants shall be located and included as part of the design in accordance with fire department standards, coordinated with District staff, and approved by the jurisdictional agency. The new pipeline will connect to the existing 6-inch diameter ACP pipeline located near Quail Road. Said connection will require a cut-in tee detail, as provided by District staff. Coordination with property owners will be required during construction due to the existing pipeline potentially being shut down. Avenida Miravilla is a relatively narrow road and is lined with large coast oak trees, so particular attention should be paid to ensure that an alignment can be determined with no impact to trees.

2.4 Covered Roads

The Project does not propose the construction of or the improvements to MSHCP covered roads. However, Pipeline 3 will tie into a segment of pipeline under Orchard Street, a secondary MSHCP-designated covered road from Sky Lane and Star Lane.[1] Best Management Practices (BMPs), described below, would minimize indirect construction impacts.

2.5 Covered Public Access Activities

The Project does not entail the construction of, or improvements to, a Covered Public Access Facility. Pipeline 3 will tie into a segment of pipeline under Orchard Street, a secondary MSHCP-designated covered road. No MSHCP designated Covered Roads are located near Pipelines 1, 2, 4, 5, and 6. Best Management Practices (BMPs), described below, would minimize indirect construction impacts.

2.6 General Setting

The area surrounding the six Project sites includes mostly residential uses, public roads, and some agriculture uses.

PIPELINE 1&2

The areas to the north, south, east and west of Pipeline 1 and Pipeline 2 consists of single-family residential houses (R-1) and are designated medium density residential (MDR) land use. Napoleon Street is located to the west of the proposed Pipeline 1 and Pipeline 2. Pipeline 1 sits at approximately 2893 feet above mean sea level (amsl). Pipeline 2 sits at approximately 2878 feet amsl. Noble Creek is located to the west of Pipeline 1 approximately 0.25 miles away and to the west of Pipeline 2 approximately 0.28 miles away. Soils within the limits of work consist of Tujunga gravelly loamy sand, 0 to 8 percent slopes (TwC)[3] (Figure 6).

PIPELINE 3

The area to the north of Pipeline 3 is zoned for light agriculture with poultry (A-P) and R-A-5, residential agriculture and is designated very low density residential (RC-VLDR) land use. The area to the south of the pipeline is zoned for single-family residential houses (R-1) and is designated medium density residential (MDR) land use. The areas to the east and west of Pipeline 3 are zoned A-1-1, light agriculture and are designated very low density residential (RC-VLDR). Pipeline 3 sits at approximately 2752 feet amsl. Soils within the limits of work consist of Greenfield sandy loam, 2 to 8 percent slopes (GyC2), Hanford course sandy loam, 2 to 8 percent slopes (HcC), and Greenfield sandy loam, 8 to 15 percent slopes (GyD2)[3] (Figure 6).

PIPELINE 4

The areas to the north, east, south, and west of Pipeline 4 are zoned A-1-1, light agriculture and are designated very low density residential (RC-VLDR) land use. Vineland Street sits perpendicular to Utica Way, the road Pipeline 4 will be located in. Pipeline 4 sits at approximately 2740 feet amsl. Soils within the limits of work consist of Ramona sandy loam, 2 to 5 percent slopes, erorded (RaB2), Greenfield sandy loam, 8 to 15 percent slopes (GyD2), and Hanford course sandy loam, 2 to 8 percent slopes (HcC)[3] (Figure 6).

PIPELINE 5

The areas to the north, south, and east of Pipeline 5 are zoned R-A-1, residential agriculture and are designated as very low density residential (RC-VLDR) land use. The area to the northeast is zoned for light agriculture (A-1-1) and designated as very low density residential (RC-VLDR) land use. The area to the west is zoned for controlled development areas (W-2) and is designated as rural residential (R-R) land use. Noble Creek is located approximately 140 feet east to the most eastern portion of the pipeline location. Little San Gorgonia Creek is located approximately 405 feet west from the most western portion of the pipeline location. Pipeline 5 sits at approximately 2924 feet amsl. Soils within the limits of work consist of Terrace escarpments (TeG), Hanford course sandy loam, 2 to 8 percent slopes (HcC), Greenfield Sandy loam, 2 to 8 percent (GyC2) and, Tujunga loamy sand, channeled, 0 to 8 percent slopes (TvC)[3] (Figure 6).

PIPELINE 6

[3] Soil Survey Staff, Natural Resource Conservation Service (2019). United States Department of Agriculture (USDA) NCRS Web Soil Survey App, Survey Area (SSURGO). Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx Accessed: July 18, 2022

The areas to the north, west, and east of Pipeline 6 are zoned for single family residential (R-1-1) and are designated as very low density residential (RC-VLDR) land use. The area to the south of Pipeline 6 is zoned for residential agriculture (R-A-1) and is designated very low density residential (RC-VLDR) land use. Pipeline 6 sits at approximately 3,308 feet amsl. Little San Gorgonio Creek is located approximately 0.27 miles to the northwest from the pipeline location. Noble Creek is located to the east of the Project site approximately 0.2 miles to the southeast from the pipeline location. Soils within the limits of work consist of Terrace escarpments (TeG)[3] (Figure 7).

Figure 2 – Vicinity and Aerial Photograph depicts the general setting of the Project area.

3.0 Reserve Assembly Analysis

The MSHCP "is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on Conservation of species and their associated Habitats in Western Riverside County."[2] The MSHCP encompasses approximately 1.26 million acres of land that stretches from the crest of San Jacinto Mountains west to the Orange County boundary. Ultimately, the MSHCP will result in the conservation of more than 500,000 acres (347,000 acres on existing Public/Quasi-Public Lands [PQP] and 153,000-acres of Additional Reserve Lands [ARL] that focuses on the 146 species covered by the MSHCP.[2]

The Project is located in the northern region of The Pass Area Plan.[4] The target conservation acreage range for The Pass Area Plan is 22,510 – 27,895 acres; it is composed of approximately 13,970 acres of existing Public Quasi-Public Lands and 8,540 – 13,925 acres of ARL.[4] The City of Banning, City of Beaumont, and City of Calimesa sit entirely within The Pass Area Plan.[4] The Pass Area Plan is divided into three Subunits. For each Subunit, target conservation acreages are established along with a description of the Planning Species, Biological Issues and Considerations, and Criteria for each Subunit.[4]

Project Pipeline 6 is located approximately 55 feet to the north of Criteria Cell 409, Cell Group D, USGS Section 23, and Subunit 2 – Badlands/San Bernardino National Forest.[1] Conservation within this Cell Group will contribute to assembly of Existing Noncontiguous Habitat Block B. Conservation within this Cell Group will focus on woodlands and forests and chaparral. Conservation within this Cell Group will range from 5% - 15% focusing on the northern portion of the Cell Group.[4] Subunit 2: Badlands/San Bernardino National Forest target acreage for ARL within the Subunit is 1,105 – 2,195 acres. Planning species for Subunit 2 include Bell's sage sparrow (*Artemisiospiza belli*), bobcat (*lynx rufus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) and San Bernardino mountain kingsnake (*Lampropeltis zonata*).[4]

Although Project Pipeline 6 is located 55-feet to the north from Criteria Cell 409, Cell Group D, USGS Section 23, and Subunit 2 – Badlands/San Bernardino National Forest, the Project will not permanently impact the habitat in Cell 409 or have a long-term effect on the cell's conservation goals.

[4] County of Riverside Transportation and Land Management Agency (2003). Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Final MSHCP – Volumes 1 and 2. Approved June 17, 2003 (as amended), Section 3.3.10 The Pass Area Plan.

3.1 Public Quasi-Public Lands

3.1.1 Public Quasi-Public Lands in Reserve Assembly Analysis

The Project will not directly or indirectly impact Public-Quasi-public (PQP) Conserved Lands. The limits of work are adjacent to, but do not extend into PQP lands (Figure 10).

PIPELINE 1. The nearest PQP Lands were located approximately 0.5 miles to the northwest of Pipeline 1.[1]

PIPELINE 2. The nearest PQP Lands were located approximately 0.53 miles to the northwest of Pipeline 2.[1]

PIPELINE 3. The nearest PQP Lands were located approximately .0.96 miles to the east of Pipeline 3.[1]

PIPELINE 4. The nearest PQP Lands were located approximately 1.17 miles to the northeast of Pipeline 4.[1]

PIPELINE 5. The nearest PQP Lands were located approximately 350 feet to the west of Pipeline 5.[1]

PIPELINE 6. The nearest PQP Lands were located approximately 0.14 miles to the southeast of Pipeline 6.[1]

3.1.2 Project Impacts to Public Quasi-Public Lands

The proposed Project will not directly impact Public/Quasi-public lands. Construction activities have the potential to indirectly impact wildlife using this area. Best Management Practices (BMPs), described below, would minimize these indirect impacts.

4.0 Vegetation Mapping

4.1 Methods

Prior to performing the habitat assessment, a literature review was conducted of the environmental setting of the Project site. This included a review of the most recent records of the California Natural Diversity Database (CNDDB) managed by the California Department of Fish and Wildlife (CDFW 2022) and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plans of California (2022) for the Beaumont, California Unites States Geological Survey (USGS) 7.5-minute topographic quadrangle map (2021). The literature review also included the United States Department of Agriculture (USDA 1971) Soil Survey for the Project site (Figure 7). The Regional Conservation Authority MSHCP Information Map was reviewed for the Project's surrounding APNs because the Project pipelines are located under public roads and to determine if the Project falls within a required survey area for the Western Riverside County MSHCP. The results of the literature review are located in Appendix B to this report.

A Geovironment biologist reviewed current Beaumont, California USGS 7.5-minute topographical quadrangle maps and aerial photographs as a preliminary analysis of the existing conditions within the Project site and immediate vicinity. Aerial photographs that provide the most current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors were reviewed prior to the site visit.

The habitat assessment for the six pipeline replacement locations was conducted on July 21, 2022 from 7:30 a.m. – 11:00 a.m. Weather conditions during the habitat assessment were sunny, clear skies, and temperature at 75 °F. The field survey included an on-foot investigation of a 500-foot buffer surrounding the Project sites.

A brief description of the vegetation communities/land covers present on the Project is presented below. The distribution of vegetation communities and land covers on the six Project sites are depicted on Figure 5. A complete list of the flora observed on the Project is provided in Appendix C, and a complete list of the fauna observed on, above or near the Project is provided in Appendix C.

4.2 Existing Conditions and Results

The six pipeline segments proposed to be replaced are located under public road. The soils are paved over. According to the literature search, seven types of soils are found on the six project sites.[3] Based on the database review and field survey no natural communities of special concern or aquatic resources subject to the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), or CDFW jurisdictions are present in the study area.[5] The term "Critical Habitat" applies to areas designated by the USFWS to be of biological importance to Federally-listed species. No sensitive vegetation communities/habitat types occur within the Project area.

PIPELINE 1

Pipeline 1 is bordered by residential landscaping consisting of ornamental shrubs and irrigation infrastructure. The road is paved and will be repaved once construction of the pipeline replacement is completed. There are no trees on the site. The 500-foot buffer surrounding the site is largely composed of paved roadways, development, and ornamental landscaping associated with surrounding development. The 500-foot buffer area is composed of the Urban/Developed/Disturbed Land and also described below.

The vegetation community of the surrounding site consist of General Barren and was mapped Urban/Developed Disturbed land cover. The proposed Project will not remove any vegetation on site or in the surrounding area. Soils within the limits of work consisted of TwC (Figure 6).

PIPELINE 2

Pipeline 2 is bordered by residential landscaping consisting of ornamental shrubs and irrigation infrastructure. The road is paved and will be repaved once construction of the pipeline replacement is completed. There are no trees on the site. The 500-foot buffer surrounding the site is largely composed of paved roadways, development, and ornamental landscaping associated with the surrounding development. The 500-foot buffer area is composed of General Barren vegetation, also described below.

The vegetation community of the surrounding site consist of General Barren and was mapped Urban/Developed Disturbed land cover. The proposed Project will not remove any vegetation on site or in the surrounding area. Soils within the limits of work consisted of TwC (Figure 6).

[5] United States Fish and Wildlife Service (USFWS). 2022b. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Available at http://www.fws.gov/wetlands/. Accessed, June 2, 2022.

PIPELINE 3

Pipeline 3 runs through three paved public roads, Sky Lane, Star Lane, and View Drive. The roads are bordered by residential landscaping consisting of ornamental shrubs and irrigation infrastructure. The roads are paved and will be repaved once construction of the pipeline replacement is completed. There are no trees on the site. The 500-foot buffer surrounding the site is largely composed of paved roadways, development, and ornamental landscaping associated with the surrounding development. The 500-foot buffer area is composed of the General Barren vegetation and was mapped Annual Grassland, Perennial grasses and herbs land cover, also described below.

The vegetation communities of the surrounding site include Urban/Developed/Disturbed Land. The proposed Project will not remove any vegetation on site or in the surrounding area. Soils within the limits of work consist of GyC2, HcC, and GyD2 (Figure 6).

PIPELINE 4

Pipeline 4 runs through a rough graded, gravel road, in Utica Way. The segment is bordered by rural residential and agricultural use lots. The east of the pipeline segment has native shrubs incorporated in the residence landscaping, coast live oak, mountain mahogany, and manzanita. The segment was comprised of gravel, bare ground, and a sparse cover of invasive species including Russian thistle, California black mustard, and yellow starthistle. There are no trees located on the segment. The Project site is predominantly composed of Urban/Developed/Disturbed land cover type, which is described in detail below. The 500-foot buffer area surrounding the Project site is largely composed of paved roadways, residential development, non-native grass fields, and ornamental landscaping associated with the surrounding development. The 500-foot buffer area is composed of General Barren vegetation and was mapped Urban/Developed/Disturbed Land cover, also described below.

The vegetation communities of the site consist of Urban and General Barren land. The proposed Project will not remove any trees, however, will remove some vegetation on-site during excavation. Soils within the limits of work consist of RaB2, GyD2, and HcC (Figure 6).

PIPELINE 5

Pipeline 5 runs through a paved public road, Avenida Sonrisa. The pipeline segment is bordered by residential landscaping consisting of ornamental shrubs and irrigation infrastructure. The road the pipeline replacement will be under will be repaved following completion of construction. The 500-foot buffer area surrounding the Project site is largely composed of roadways, development, and ornamental landscaping associated with the surrounding development. The 500-foot buffer area is mapped to be composed of Urban, General Barren vegetation, Coastal scrub consisting of Riversidean alluvial scrub and Chamise, Coastal oak woodland, and Annual Grassland consisting of perennial grasses and herbs as well as Urban/Developed vegetation types, also described below. The proposed Project will not remove any vegetation on site.

The Project site is composed of Urban/Developed/Disturbed Land and General Barren vegetation, which is described below. Soils within the limits of work consist of TeG, HcC, GyC2, and, TvC (Figure 6).

PIPELINE 6

Pipeline 6 runs through a portion of a paved, public road, Avenida Miravilla and is bordered by coast live oaks, residential landscaping, and irrigation infrastructure. The roadway the pipeline replacement will be within, will be repaved following completion of construction. The 500-foot buffer area surrounding the Project site is largely composed of roadways, residential development, coastal oak, coastal scrub, and ornamental landscaping associated with the surrounding development. The 500-foot buffer area vegetation is composed of Coastal Oak Woodland, Coastal Scrub consisting of Chamise, and Urban/General Barren land cover, also described below. The proposed Project will not remove any vegetation on site.

The Project site is predominantly composed of Coastal Oak Woodland, which is described below Soils within the limits of work consist of TeG (Figure 7).

4.3 Urban

This category applies to landscapes that are dominated by urban structures, residential units, or other developed land use elements such as highways, city parks, cemeteries and the like. In those cases in which the managed landscapes may have a considerable vegetation component, other land use categories may be more appropriate, such as Ornamental Conifer and Hardwood mixtures within city parks. Much of the landscape in southern California has been mapped in this category.[6]

4.3.1 General Barren

Landscapes generally devoid of vegetation as seen from a high-altitude image source such as aerial photography are labeled as Barren. This category includes mappable landscape units in which surface lithology is dominant, such as exposed bedrock, cliffs, interior sandy or gypsum areas, and the like. It does not include areas considered as modified or developed, as in urban areas, but may include quarries and mine sites.[6]

4.4 Annual Grassland

Annual Grassland habitats are open grasslands composed primarily of annual plant species. Annual Grassland habitat occur mostly on flat plains to gently rolling foothills.

4.3.1 Perennial Grasses and Forbs

Pockets of perennial grasses, often native species, and herbaceous plants occur abundantly in the Coast Section and occasionally in the Mountains Section at elevations generally below 5200 ft (1586 m). This Alliance forms on seasonally moist, low-gradient slopes. It is a form of dry to moist grassland in which the species composition is a mix of perennial and some annual grasses and legumes that vary according to management practices. Native perennial grasses such as Needlegrass (Achnatherum spp.) may occur in addition to Dropseed (Sporobolus spp.), Squirreltail (Elymus elymoides), and Wildrye (Leymus spp.). Introduced perennials such as Foxtail (Alopecurus myosuroides) and Tall Fescue (Festuca arundinacea) may be present with non-native forbs such as Strawberry Clover (Trifolium fragiferum) and non-native annual grasses such as Foxtail Chess (Bromus madritensis) and Ripgut Grass (Bromus diandrus) in this type. Some native forbs such as Southern Mules Ears (Wyethia ovata) may be found in this type as well. Some of these areas are currently being used for livestock pasture where the type intergrades with the Annual Grasses and Forbs Alliance.[6]

[6] USDA - Forest Service (2009). USDA-Forest Service, Vegetation Classification & Mapping, "Vegetation Descriptions South Coast and Montane Ecological Province CALVEG Zone 7".

4.4 Coastal Scrub

Structure of the plant associations that comprise Coastal Scrub is typified by low to moderate-sized shrubs with mesophotic leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system (Harrison et al. 1971, Bakker 1972).[6]

4.4.1 Riversidean Alluvial Scrub

Alluvial fans and dry washes in xeric, interior areas of the Montane Section close to developed areas may contain a mixture of species, of which Scalebroom (Lepidospartum squamatum), California Buckwheat (Eriogonum fasciculatum), California Sagebrush (Artemisia californica), White Sage (Salvia apiana), and Encelia spp., may be prominent. Since the history of ground disturbance is a factor in the species composition of the Riversidean Alluvial Scrub Alliance, other species may also occur, including Opuntia spp., Chaparral Yucca (Yucca whipplei), Rhus spp., and California Juniper (Juniperus californica). It has been mapped as patchy areas of San Bernardino and Riverside Counties at elevations up to about 5000 ft (1524 m) on lowgradient slopes. In the Coast Section, where the alliance has also been mapped, these sites are usually sandy washes with episodic flood patterns. In species composition and geographic proximity, the Riversidean Alluvial Scrub Alliance merges with the California Buckwheat and California Sagebrush Alliances and takes its name from a type named by Robert Holland ("Holland type") in the mid-1980s.[6]

4.4.2 Chamise

Chamise (Adenostoma fasciculatum), a shade-intolerant, relatively long-lived but fire-sensitive evergreen shrub, is considered to be the most characteristic and widely distributed chaparral species in California's foothills and coastal mountains. As a dominant shrub identifying this alliance, it often develops on sites that are harsher in terms of having shallow soils, recent fire disturbance, or having more xeric or sunnier environments (e.g., south facing slopes) than the adjacent Lower Montane Mixed Chaparral Alliance. Chamise appears to be affected by extreme winter temperatures, which limits its distribution in colder climates to the north and east, its natural range being from Mendocino County to Baja California, east to the Sierra Nevada foothills and west to the Channel Islands. This type has been mapped extensively in the Coast and Mountains Sections within twenty-four subsections, occupying most aspects and slope gradients. The elevation of these sites are generally below about 4800 ft (1464 m) in the Coast Section, and somewhat higher in interior sites of the Mountains Section. It grades into the Redshank (Adenostoma sparsifolium) Alliance in the Palomar Mountains in San Diego County and areas near the San Jacinto Mountains of Riverside County and elsewhere with the California Buckwheat (Eriogonum fasciculatum) and Annual Grasses and Forbs Alliances. Very little other vegetation is found on these sites but Chaparral Yucca (Yucca whipplei) often occurs on more open sites and Coast Live Oak (Quercus agrifolia) is sometimes present in the immediate vicinity.[6]

4.5 Coastal Oak Woodland

Coastal oak woodlands are extremely variable. The overstory consists of deciduous and evergreen hardwoods (mostly oaks 4.5-21 m) 15 to 17 feet tall sometimes mixed with scattered conifers. In mesic sites, the trees are dense and form a closed canopy. In drier sites, the trees are widely spaced, forming an open woodland or savannah. The understory is equally variable. In some instances, it is composed of shrubs from adjacent chaparral or coastal scrub which forms a dense, almost impenetrable understory. More commonly, shrubs are scattered under and between trees. Coastal oak woodlands are common to mesic coastal foothills of California.[6]

Table 5. Land Covers/Vegetation

Pipeline	Vegetation Within Limits of Work	Vegetation within 500-foot Survey Buffer
1	Urban/Developed/Disturbed	Urban/Developed/Disturbed
2	Urban/Developed/Disturbed	Urban/Developed/Disturbed
3	Urban/Developed/Disturbed	Urban/Developed/Disturbed
4	Urban/Developed/Disturbed	Urban/Developed/Disturbed; Annual Grassland
5	Urban/Developed/Disturbed	Coastal Scrub – Riversidean Alluvial Scrub; Coastal Oak Woodland; Annual Grassland; Coastal Scrub - Chamise
6	Coastal Oak Woodland	Coastal Oak Woodland; Urban/Developed/Disturbed; Coastal Scrub - Chamise
Source: Regional Conservation Authority (2022a). "RCA MSHCP Information Map". Website: https://wrcrca.maps.arcgis.com/apps/webappviewer/ Accessed: July 18, 2022		

Table 6. NRCS Soils Within the Limits of Work

Pipeline	Soil Type
1	TwC - Tujunga gravelly loamy sand, 0 to 8 percent slopes
2	TwC – Tujunga gravelly loamy sand, 0 to 8 percent slopes
3	GyC2- Greenfield sandy loam, 2 to 8 percent slopes
3	HcC – Hanford course sandy loam, 2 to 8 percent slopes
3	GyD2 – Greenfield sandy loam, 8 to 15 percent slopes
4	RaB2 – Ramona sandy loam, 2 to 5 percent slopes, eroded
4	GyD2 – Greenfield sandy loam, 8 to 15 percent slopes
4	HcC – Hanford course sandy loam, 2 to 8 percent slopes
5	TeG - Terrace escarpments
5	HcC - Hanford course sandy loam, 2 to 8 percent slopes
5	GyC2 -Greenfield sandy loam, 2 to 8 percent
5	TvC – Tujunga loamy sand, channeled, 0 to 8 percent slopes
6	TeG - Terrace escarpments
Source: Soil Survey Staff, Natural Resource Conservation Service (2019). United States Department of Agriculture (USDA) NCRS Web Soil Survey App, Survey Area (SSURGO). Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx Accessed: July 18, 2022	

5.0 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

5.1 Riparian/Riverine Areas

5.1.1 Methods

Prior to conducting the habitat assessment, Geovironment biologist reviewed the Beaumont, California 7.5 Minute USGS Quadrangle, topographic maps, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), the Unites States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, and Google Earth to identify any potential natural drainage features and water bodies.

The RCA map did not indicate MSHCP riparian or riverine features as part of the information provided for each adjacent parcel to the pipeline segment.[1] An assessment of MSHCP riparian and riverine features was conducted as part of the habitat assessment.

The habitat assessment for the six pipeline replacement locations was conducted on July 21, 2022 from 7:30 a.m. – 11:00 a.m. Weather conditions during the habitat assessment were sunny, clear skies, and temperature at 75°F. The field survey included an on-foot investigation of a 500-foot buffer surrounding the Project sites. The literature search yielded no riparian or riverine features at any of the six pipeline segments, therefore a comprehensive protocol-level survey for such features was not necessary.

5.1.2 Existing Conditions and Results

The USFWS National Wetlands Inventory Map of the Project sites indicates that the Project sites contain no wetlands or other hydrological features that meet criteria as waters of the United States.[7] No hydrological features or MSHCP riparian/riverine features were observed within the proposed Project's six locations during the habitat assessment. The six pipeline replacement segments are located under roadways and the adjacent and surrounding areas are mainly residential uses.

PIPELINE 1

The vegetation community of the site consist of General Barren, Urban/Developed Disturbed land vegetation (Table 5). The proposed Project will not remove any vegetation on site or in the surrounding area. Soils within the limits of work consisted of TwC (Table 6). There are no MSHCP riparian/riverine features on the sites, or within the 500-foot buffer area of the site.

PIPELINE 2

The vegetation community of the site consist of General Barren, Urban/Developed Disturbed land vegetation (Table 5). The proposed Project will not remove any vegetation on site or in the surrounding area. Soils within the limits of work consisted of TwC (Table 6). There are no MSHCP riparian/riverine features on the sites, or within the 500-foot buffer area of the site.

PIPELINE 3

The vegetation communities of the site include Urban/Developed/Disturbed Land. The proposed Project will not remove any vegetation on site or in the surrounding area. The 500-foot buffer area is composed of the Urban vegetation and Annual Grassland, Perennial grasses, and herbs land cover (Table 5). Soils within the limits of work consist of GyC2, HcC, and GyD2 (Table 6). There are no MSHCP riparian/riverine features on the sites, or within the 500-foot buffer area of the site.

PIPELINE 4

The vegetation communities of the site consist of Urban land. The proposed Project will not remove any trees, however, will remove some vegetation on-site. The 500-foot buffer area is composed of General Barren, Urban/Developed/Disturbed Land vegetation types (Table 5). Soils within the limits of work consist of RaB2, GyD2, and HcC (Table 6). There are no MSHCP riparian/riverine features on the sites, however USFWS NWI maps indicate a riverine wetland type feature located approximately 450 feet to the west of the Project pipeline (Figure 12). The Project site is separated from the feature by rural residential development and fencing.

[7] United States Fish and Wildlife Service (USFWS). 2022a. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Available at http://www.fws.gov/wetlands/. Accessed, July 18, 2022

PIPELINE 5

The Project site is composed of Urban/Developed/Disturbed Land and General Barren vegetation. The 500-foot buffer area is composed of Urban, General Barren vegetation, Coastal scrub consisting of Riversidean alluvial scrub and Chamise, Coastal oak woodland, and Annual Grassland consisting of perennial grasses and herbs as well as Urban/Developed vegetation types (Table 5). The proposed Project will not remove any vegetation on site. Soils within the limits of work consist of TeG, HcC, GyC2, and, TvC (Table 6). There are no MSHCP riparian/riverine features on the sites, however USFWS NWI maps indicate a riverine wetland type feature located approximately 388 feet to the west of the Project pipeline western end and another approximately 225 feet to the east of the Project Pipeline eastern end (Figure 12). The Project site is separated from the feature by public roads and residential development.

PIPELINE 6

The Project site is predominantly composed of Coastal Oak Woodland. The 500-foot buffer area surrounding the Project site is largely composed of roadways, residential development, coastal oak, coastal scrub, and ornamental landscaping associated with the surrounding development. The 500-foot buffer area vegetation is composed of Coastal Oak Woodland, Coastal Scrub consisting of Chamise, and Urban/General Barren land cover (Table 5). The proposed Project will not remove any vegetation on site. Soil within the limits of work consist of TeG (Table 6). There are no MSHCP riparian/riverine features on the sites, or within the 500-foot buffer area of the site.

5.1.3 Impacts

The proposed Project will not affect jurisdiction, riparian, or riverine features as none are located on-site. Pipeline 4 and Pipeline 5 are separated from riverine features, located within their respective 500-foot survey areas, by residential development, public roads, and fencing. The scope of work included replacing six pipelines located within roadways that will be repaved following construction. The proposed Project will not directly or indirectly effect MSHCP riparian/riverine features.

5.1.4 Mitigation

The proposed Project will not affect jurisdictional, riparian, or riverine features as none are located on-site. No mitigation is required. The proposed Project shall comply with the Standard BMPs of the MSHCP (Volume I, Appendix C), located in Section 10 of this report, to avoid any potential direct or indirect riparian/riverine features surrounding the Project area.

5.2 Vernal Pools

5.2.1 Methods

As previously discussed, prior to conducting the habitat assessment, Geovironment biologist reviewed Beaumont, California 7.5 Minute USGS Quadrangle, topographic maps, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), the Unites States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, and Google Earth to identify any potential natural drainage features and water bodies, including vernal pools. Aerial photographs and digital map imagery were researched for vernal pools prior to the field survey.

The habitat assessment for the six pipeline replacement locations was conducted on July 21, 2022 from 7:30 a.m. – 11:00 a.m. Weather conditions during the habitat assessment were sunny, clear skies, and temperature at 75 F. The field survey included an on-foot investigation of a 500-foot buffer surrounding the Project sites. An assessment of potential jurisdictional features was conducted during the habitat assessment, including vernal pools.

5.2.2 Existing Conditions and Results

The USFWS National Wetlands Inventory Map of the Project sites indicates that the Project sites contain no wetlands or other hydrological features that meet criteria as waters of the United States (Figure 12). The six pipeline replacement segments are located under roadways and the surrounding lots are mainly residential uses. No hydrological features or MSHCP riparian/riverine features were observed within the proposed Project, however USFWS NWI Map indicated riverine features within the Pipeline 4 and Pipeline 5 500-foot survey buffers. No vernal pools or vernal pool indicators were observed within the proposed Project areas or overall, during the habitat assessment.

PIPELINE 1

The vegetation community of the site consist of General Barren, Urban/Developed Disturbed land vegetation (Table 5). The proposed Project will not remove any vegetation on site or in the surrounding area. Soils within the limits of work consisted of TwC (Table 6). There are no MSHCP riparian/riverine features on the sites, or within the 500-foot buffer area of the site. No vernal pools or vernal pool indicators were observed within the proposed Project areas or overall, during the habitat assessment.

PIPELINE 2

The vegetation community of the site consist of General Barren, Urban/Developed Disturbed land vegetation (Table 5). The proposed Project will not remove any vegetation on site or in the surrounding area. Soils within the limits of work consisted of TwC (Table 6). There are no MSHCP riparian/riverine features on the sites, or within the 500-foot buffer area of the site. No vernal pools or vernal pool indicators were observed within the proposed Project areas or overall, during the habitat assessment.

PIPELINE 3

The vegetation communities of the site include Urban/Developed/Disturbed Land. The proposed Project will not remove any vegetation on site or in the surrounding area. The 500-foot buffer area is composed of the Urban vegetation and Annual Grassland, Perennial grasses, and herbs land cover (Table 5). Soils within the limits of work consist of GyC2, HcC, and GyD2 (Table 6). There are no MSHCP riparian/riverine features on the sites, or within the 500-foot buffer area of the site. No vernal pools or vernal pool indicators were observed within the proposed Project areas or overall, during the habitat assessment.

PIPELINE 4

The vegetation communities of the site consist of Urban land. The proposed Project will not remove any trees, however, will remove some vegetation on-site. The 500-foot buffer area is composed of General Barren, Urban/Developed/Disturbed Land vegetation types (Table 5). Soils within the limits of work consist of RaB2, GyD2, and HcC (Table 6). There are no MSHCP riparian/riverine features on the sites, however USFWS NWI maps indicate a riverine wetland type feature located

approximately 450 feet to the west of the Project pipeline (Figure 12). The Project site is separated from the feature by rural residential development and fencing. No vernal pools or vernal pool indicators were observed within the proposed Project areas or overall, during the habitat assessment.

PIPELINE 5

The Project site is composed of Urban/Developed/Disturbed Land and General Barren vegetation. The 500-foot buffer area is composed of Urban, General Barren vegetation, Coastal scrub consisting of Riversidean alluvial scrub and Chamise, Coastal oak woodland, and Annual Grassland consisting of perennial grasses and herbs as well as Urban/Developed vegetation types (Table 5). The proposed Project will not remove any vegetation on site. Soils within the limits of work consist of TeG, HcC, GyC2, and, TvC (Table 6). There are no MSHCP riparian/riverine features on the sites, however USFWS NWI maps indicate a riverine wetland type feature located approximately 388 feet to the west of the Project pipeline western end and another approximately 225 feet to the east of the Project Pipeline eastern end (Figure 12). The Project site is separated from the feature by public roads and residential development. No vernal pools or vernal pool indicators were observed within the proposed Project areas or overall, during the habitat assessment.

PIPELINE 6

The Project site is predominantly composed of Coastal Oak Woodland. The 500-foot buffer area surrounding the Project site is largely composed of roadways, residential development, coastal oak, coastal scrub, and ornamental landscaping associated with the surrounding development. The 500-foot buffer area vegetation is composed of Coastal Oak Woodland, Coastal Scrub consisting of Chamise, and Urban/General Barren land cover (Table 5). The proposed Project will not remove any vegetation on site. Soil within the limits of work consist of TeG (Table 6). There are no MSHCP riparian/riverine features on the sites, or within the 500-foot buffer area of the site. No vernal pools or vernal pool indicators were observed within the proposed Project areas or overall, during the habitat assessment.

5.2.3 Impacts

The proposed Project will not affect vernal pools as none are located on any of the six pipeline sites.

5.2.4 Mitigation

The proposed Project will not affect vernal pools as none are located on any of the six pipeline sites. No mitigation is required. The proposed Project shall comply with the Standard BMPs of the MSHCP (Volume I, Appendix C), located in Section 10 of this report, to avoid any potential direct or indirect riparian/riverine features, surrounding the Project area.

5.3 Fairy Shrimp

5.3.1 Methods

As previously discussed, prior to conducting the habitat assessment, Geovironment biologist reviewed Beaumont, California 7.5 Minute USGS Quadrangle, topographic maps, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), the Unites States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, and Google Earth to identify any potential natural drainage features and water bodies, including vernal pools. Aerial photographs and digital map imagery were researched for vernal pools prior to the field survey.

The habitat assessment for the six pipeline replacement locations was conducted on July 21, 2022 from 7:30 a.m. – 11:00 a.m. Weather conditions during the habitat assessment were sunny, clear skies, and temperature at 75 F. The field survey included an on-foot investigation of a 500-foot buffer surrounding the Project sites. An assessment of potential jurisdictional features was conducted during the habitat assessment, including vernal pools.

5.3.2 Existing Conditions and Results

The USFWS National Wetlands Inventory Map of the Project sites indicates that the Project pipeline segment sites contain no wetlands or other hydrological features that meet criteria as waters of the United States.[7] The six pipeline replacement segments are located under roadways and the surrounding lots are mainly residential uses. No hydrological features or MSHCP riparian/riverine features were observed within the proposed Project site; however, the USFWS NWI Map indicated riverine features located within the respective 500-foot survey areas of Pipeline 4 and Pipeline 5 (Figure 11).[7]

As previously discussed, no vernal pools or vernal pool indicators were observed within the proposed Project areas or overall, during the habitat assessment. Due to a lack of vernal pool habitat on any of the six pipeline replacement sites, it was concluded that fairy shrimp cannot exist on the sites.

5.3.3 Impacts

No vernal pools, vernal pool features, or fairy shrimp exist on any of the six pipeline replacement segment sites, therefore there will be no impacts to fairy shrimp.

5.3.4 Mitigation

No vernal pools, vernal pool features, or fairy shrimp exist on any of the six pipeline replacement segment sites, therefore, will be no impacts to fairy shrimp. Mitigation is not necessary for fairy shrimp.

5.4 Riparian Birds

5.4.1 Methods

A literature search for each of the six pipeline sites was conducted prior to the habitat assessment. As part of the literature search, a Geovironment biologist compiled a list of threatened, endangered and otherwise special status species previously recorded within Project area. The Beaumont, California 7.5 Minute USGS Quadrangle, topographic maps, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), and database were reviewed to determine a list of species that could potentially located in the Project area.

The habitat assessment for the six pipeline replacement locations was conducted on July 21, 2022 from 7:30 a.m. – 11:00 a.m. Weather conditions during the habitat assessment were sunny, clear skies, and temperature at 75°F. The field survey included an on-foot investigation of a 500-foot buffer surrounding the Project sites. An assessment of potentially jurisdictional features, including riparian and riverine features, habitat assessment, and riparian birds were conducted as part of the habitat assessment. Binoculars were utilized to locate potential target species within the 500-foot survey buffer area. Target riparian species included least Bell's vireo (*Vireo bellii pusillus*),

southwestern willow flycatcher (*Empidonax traillii extimus*), or yellow-billed cuckoo (*Coccyzus americanus*).

5.4.2 Existing Conditions and Results

The vegetation community and land cover types discussed above in Section 4 of this report provide habitat for a limited number of known wildlife species in the area. The pipeline segments were each surrounded by residential uses and located under roads that will be repaved following construction.

PIPELINE 1

The vegetation communities onsite and within the 500-foot buffer include Urban/Developed/Disturbed Land, as discussed in Section 4, Vegetation Mapping, of this report. There are no riparian vegetation species on the Project site that would provide nesting, breeding, or foraging habitat for riparian birds. No riparian birds were observed on site during the field survey. No suitable habitat was present at the site.

PIPELINE 2

The vegetation communities onsite and within the 500-foot buffer include Urban/Developed/Disturbed Land, as discussed in Section 4, Vegetation Mapping, of this report. There are no riparian vegetation species on the Project site that would provide nesting, breeding, or foraging habitat for riparian birds. No riparian birds were observed on site during the field survey. No suitable habitat was present at the site.

PIPELINE 3

The vegetation communities onsite and within the 500-foot buffer include Urban/Developed/Disturbed Land and Grassland, as discussed in Section 4, Vegetation Mapping, of this report. There are no riparian vegetation species on the Project site that would provide nesting, breeding, or foraging habitat for riparian birds. No riparian birds were observed on site during the field survey. No suitable habitat was present at the site.

PIPELINE 4

The vegetation communities onsite and within the 500-foot buffer include Urban/Developed/Disturbed Land, as discussed in Section 4, Vegetation Mapping, of this report. There are no riparian vegetation species on the Project site that would provide nesting, breeding, or foraging habitat for riparian birds. There are no MSHCP riparian/riverine features on the sites, however USFWS NWI maps indicate a riverine wetland type feature located approximately 450 feet to the west of the Project pipeline (Figure 11).[7] No riparian birds were observed on site during the field survey. No suitable habitat was present at the site segment nor near the riparian feature located within the 500-foot survey buffer.

PIPELINE 5

The vegetation communities onsite and within the 500-foot buffer include Urban/Developed/Disturbed Land, Annual Grassland, Riversidean Alluvial Scrub, Coastal Sage Scrub, and Coastal Oak Woodland, as discussed in Section 4, Vegetation Mapping, of this report. There are no riparian vegetation species on the Project site itself that would provide nesting, breeding, or foraging habitat for riparian birds; however, Riversidean Alluvial scrub vegetation is located approximately 100 feet to the east and approximately 365-feet the west. There are no

MSHCP riparian/riverine features on the sites, however USFWS NWI maps indicate a riverine wetland type feature located approximately 388 feet to the west of the Project pipeline western end and another approximately 225 feet to the east of the Project Pipeline eastern end (Figure 11).[7] No riparian birds were observed on site during the field survey. No suitable habitat was present at the site segment.

PIPELINE 6

The vegetation communities onsite and within the 500-foot buffer included Oak Woodland and Urban/Developed/Disturbed Land and Coastal Scrub, as discussed in Section 4, Vegetation Mapping, of this report. There are no riparian vegetation species on the Project site that would provide nesting, breeding, or foraging habitat for riparian birds. No riparian birds were observed on site during the field survey. No suitable habitat was present at the site.

5.4.3 Impacts

The Project of six pipeline replacement sites do not contain riverine or riparian habitat, and no riparian birds were observed on any of the six sites. According to the literature search, the Project site segments do not contain habitat for or potential habitat for riparian birds. No vegetation will be removed as a part of this Project. Operation of this Project will not directly or indirectly impact riparian birds or riparian bird habitat.

5.4.4 Mitigation

The Project of six pipeline replacement sites do not contain riverine or riparian habitat, and no riparian birds were observed on any of the six sites. According to the literature search, the Project site segments do not contain habitat for or potential habitat for riparian birds. The proposed Project shall comply with the Standard BMPs of the MSHCP (Volume I, Appendix C).

6.0 Protection of Narrow Endemic Plant Species (Section 6.1.3)

6.1 Methods

A Geovironment biologist compiled a list of threatened, endangered, and otherwise special-status plant species previously recorded within the general Project vicinity. This included a review of the most recent records of the California Natural Diversity Database (CNDDB) managed by the California Department of Fish and Wildlife (CDFW 2022) and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (2022) for the Beaumont, California USGS 7.5-minute topographic quadrangle map (2021).

The habitat assessment for the six pipeline replacement locations was conducted on July 21, 2022 from 7:30 a.m. – 11:00 a.m. Weather conditions during the habitat assessment were sunny, clear skies, and temperature at 75 °F. The field survey included an on-foot investigation of a 500-foot buffer surrounding each of the Project's six sites. The RCA map indicated Yucaipa onion (*Allium marvinii*) and Many-stemmed dudleya (*Dudleya multicaulis*) as MSHCP species to have potential in the areas of Pipeline 3, Pipeline 4, Pipeline 5, and Pipeline 6.[1] A description of habitat for the RCA MSHCP designated species within the Project area is located in Table 7. The field survey focused on potential sensitive habitats or areas on-site that could potentially support special-status floral and faunal species, as well as the MSHCP species indicated on the RCA map. The general habitat, soil conditions, presence of indicator species, slope, aspect, and hydrology were investigated.

6.2 Existing Conditions and Results

As described in Section 4 of the Analysis, the Project site vegetation consisted mostly of Urban/Developed/Disturbed Land. The six pipeline segments are to be located within five paved roads and one gravel road, which will be recovered following completion of the Project. None of the Project's six pipeline segment sites, nor their 500-foot buffer consisted of suitable habitat for Yucaipa onion or Many-stemmed dudleya (Table 7).

Table 7. MSHCP Narrow Endemic Plant Species Attributes and Habitat Affinities

Species	MSHCP Habitat	Blooming Period	Habitat Suitability
Yucaipa Onion *Allium marvinii*	Openings in chaparral habitat at elevations between 760 and 1065 m. Found in clay soils.	Perennial bulb April - May	**None.** Suitable soils (clay) and vegetation are not present at any of the six sites. Residential properties separate the chaparral habitat from the Pipeline 6 replacement segment.
Many-stemmed dudleya *Dudleya multicaulis*	Clay soils in barrens, rocky places, and ridgelines as well as thinly vegetated openings in chaparral, coastal sage scrub, and southern needlegrass grasslands on clay soils.	Perennial May – June	**None.** Suitable soils (clay soils) and vegetation are not present at any of the six segment sites. Residential uses separate chaparral and coastal sage scrub located in the 500-foot buffer of Pipeline 5 and Pipeline 6 segments.
Source: County of Riverside Transportation and Land Management Agency (2003c). Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Final MSHCP – Volumes 1 and 2. Approved June 17, 2003 (as amended), Section 6.1.3, Table 6-1 Narrow Endemic and Criteria Area Survey Plant Species Attributes and Habitat Affinities.			

PIPELINE 1

Pipeline 1 was not located in an MSHCP designated area for Narrow Endemic Plant Survey area. The existing conditions on-site do not provide habitat for the MSHCP narrow endemic species in the immediate vicinity or the 500-foot buffer survey area.

PIPELINE 2

Pipeline 2 was not located in an MSHCP designated area for Narrow Endemic Plant Survey area. The existing conditions on-site do not provide habitat for the MSHCP narrow endemic species in the immediate vicinity or the 500-foot buffer survey area.

PIPELINE 3

The existing conditions on-site do not provide habitat for the MSHCP narrow endemic species identified on the bordering APN 407-110-021. APN 407-110-006, APN 407-110-031, APN 407-110-034 located in the 500-foot buffer survey area also require MSHCP narrow endemic species surveys, however none provide habitat for the MSHCP narrow endemic species. The segment is located within a paved road that will be repaved following completion of construction of pipeline replacement. It offers no suitable habitat for both special-status and MSHCP narrow endemic plant species. Vegetation surrounding the proposed pipeline segment included ornamental landscaping and irrigation infrastructure associated with residential landscaping. APN 407-110-021 to the north of Orchard Street consisted of a disturbed and non-native grassland lot consisting of non-native species such as Russian thistle, California black mustard, and yellow star thistle. Habitat for the narrow endemic plant species listed by the MSHCP does not exist on the site; therefore, focused surveys are not required. No vegetation will be removed as a result of construction of this pipeline.

PIPELINE 4

The existing conditions on-site do not provide habitat for the MSHCP narrow endemic species identified on the bordering APN 405-140-003 and APN 405-160-022. APN 405-160-021, APN 405-160-023, APN 405-160-024, APN 407-310-015, and APN 407-110-006 located in the 500-foot buffer survey area also require MSHCP narrow endemic species surveys, however none provide habitat for the MSHCP narrow endemic species. Vegetation of the site consisted of non-native grasses. The majority of the site segment was lined with California black mustard (*Brassica nigra*), a non-native invasive plant. The pipeline segment is located within a gravel road that will remove some vegetation. It offers no suitable habitat for both special-status and MSHCP narrow endemic plant species. Habitat for the narrow endemic plant species listed by the MSHCP does not exist on the site; therefore, focused surveys are not required.

PIPELINE 5

The existing conditions on-site do not provide habitat for the MSHCP narrow endemic species identified on the bordering APN 401-142-01, APN 401-131-006, and APN 401-132-013. The segment is located within a paved road that will be repaved following completion of construction of pipeline replacement. It offers no suitable habitat for both special-status and MSHCP narrow endemic plant species. Species found surrounding the site include ornamental landscaping associated with the surrounding landscape, non-native grasses, and coastal scrub. Habitat for the narrow endemic plant species listed by the MSHCP does not exist on the site; therefore, focused surveys are not required. No vegetation will be removed as a result of construction of this pipeline.

PIPELINE 6

The existing conditions on-site do not provide habitat for the MSHCP narrow endemic species identified on the bordering APN 401-170-070, APN 401-170-048, and APN 401-190-006. APN 401-170-037, APN 401-170-009, and APN 401-190-007 located in the 500-foot buffer survey area also require MSHCP narrow endemic species surveys.[1] The surrounding vegetation consisted of Coast live oak and ornamental vegetation associated with residential landscaping. Surrounding Coast live oak (*Quercus agrifolia*) species provide canopy cover over a small portion of the proposed segment. The segment is located within a paved road that will be repaved following completion of construction of pipeline replacement. It offers no suitable habitat for both special-status and MSHCP narrow endemic plant species. Habitat for the narrow endemic plant species listed by the

MSHCP does not exist on the site; therefore, focused surveys are not required. No vegetation will be removed as a result of construction of this pipeline.

The habitat assessment conducted for the MSHCP Habitat Assessment is a general survey of the site, and not a focused survey for narrow endemic species. The site was not investigated in season for these species using protocol for focused surveys of these species. The existing conditions on-site do not provide habitat for the MSHCP narrow endemic species identified in adjacent APNs. The sites are each considered disturbed land and offers no suitable habitat for both special-status plant species indicated in the CNPS query results and MSHCP narrow endemic plant species. Habitat does not exist for the MSHCP narrow endemic plant species on the six sites.

6.3 Impacts

The six segments of pipeline replacement will all be within roads. The immediate surrounding area of each segment is considered to be disturbed land and offers no suitable habitat for both special-status wildlife and plants. No sensitive, threatened, or endangered plant species were found on the site during the habitat assessment.

6.4 Mitigation

Habitat for the narrow endemic plant species listed by the MSHCP does not exist on the site. Focused surveys for the species are not required. The proposed Project shall comply with the Standard BMPs of the MSHCP (Volume I, Appendix C).

7.0 Additional Survey Needs and Procedures (Section 6.3.2)

7.1 Criteria Area Plant Species

Pipeline 1 – Pipeline 6 are not located in criteria area plant species survey area.

7.2 Amphibians

Pipeline 1 – Pipeline 6 are not located in an amphibian survey area.

7.2.1 Methods

Because Pipeline 1 – Pipeline 6 are not located in an amphibian survey area, the site was not analyzed for amphibians.

7.2.2 Existing Conditions and Results

Not applicable.

7.2.3 Impacts

Not applicable.

7.3 Burrowing Owl

7.3.1 Methods

Pipeline 1, Pipeline 2, Pipeline 5, and Pipeline 6 sites or the respective 500-foot buffers are not located within a survey area for burrowing owl.[1] Pipeline 3 segment is not located within a burrowing owl survey area; however, its 500-foot buffer consists of APN 405-060-010 located approximately 462 feet to the east, which does require a burrowing owl habitat assessment; therefore, burrowing owl habitat was analyzed during the site visit to Pipeline 3.[1] Pipeline 4

segment is not located within a burrowing owl survey area, however APN 405-160-002 and APN 405-140-003 located approximately 12.5 feet to the south required a burrowing owl habitat assessment and burrowing owl habitat was analyzed during the site visit to Pipeline 4.[1]

The burrowing owl is a California Species of Special Concern dur to their decline over the past 30 years. Burrowing owl habitat includes short-grass prairies, grasslands lowland scrub, agriculture lands (particularly rangelands), prairies, coastal dunes, and desert floors.[8] The burrowing owl may also use golf courses, cemeteries, road allowances within cities, airports, vacant lots in residential areas, university campuses, fairgrounds, abandoned buildings, and irrigation ditches.[8] They may also use pipes, culverts and nest boxes where burrows are scarce.[8]

Geovironment biologist conducted a query of Habitat Assessment was conducted on July 21, 2022 by Geovironment biologist Carmen Gardner. Appendix D: MSHCP Section 6.1.2. Assessment Conditions includes a list of information and conditions during the field survey. Pipeline 3 and Pipeline 4 were surveyed for burrowing owl using the 2006 Burrowing Owl Survey Instructions for the Western Riverside MSHCP Area. The Project sites were walked to identify if the presence of burrowing owl habitat existed on site, per Step I: Habitat Assessment of the Burrowing Owl Survey Instructions protocol.

Burrowing owls typically use burrows made by fossorial (adapted for burrowing or digging) mammals, such as California ground squirrels or badgers (*Taxidea taxus*), and they often utilize man-made structures such as earthen berms; cement culverts; cement, asphalt, rock or wood debris piles; or openings beneath cement or asphalt pavement.[8] Burrowing owls are often found within, under, or in close proximity to man-made structures.[8] Because California ground squirrel burrows were found at Pipeline 4 and Pipeline 5, the 500-foot buffer area surrounding the sites were inspected for burrowing owl habitat potential, as required by protocol.

7.3.2 Existing Conditions and Results

PIPELINE 1

Pipeline 1 or the respective 500-foot survey buffer is not located within an MSHCP-designated survey area for burrowing owl. Furthermore, the existing conditions of the site do not provide habitat or potential habitat for burrowing owl and no indicators of the presence of burrowing owl was detected on site or in the 500-foot survey buffer of the site

PIPELINE 2

Pipeline 2 or the respective 500-foot survey buffer is not located within an MSHCP-designated survey area for burrowing owl. Furthermore, the existing conditions of the site do not provide habitat or potential habitat for burrowing owl and no indicators of the presence of burrowing owl was detected on site or in the 500-foot survey buffer of the site

PIPELINE 3

The Pipeline segment was walked to identify the presence of burrowing owl habitat on the site. The pipeline segment will be located within a paved road and does not include the removal of vegetation. The site was surrounded by vegetation that consisted of residential landscaping. No burrows were observed at this site during the Step I: Habitat Assessment portion of the survey. The

[8] Regional Conservation Authority (2006). Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.

site itself was not a designated MSHCP Survey Area for burrowing owl, however the 500-foot buffer included APN 405-060-010, which requires burrowing owl survey. It was concluded that Pipeline 3 Project site's likelihood of providing even low-quality habitat for burrowing owl does not currently exist and is unlikely to exist in the future.

PIPELINE 4

The Pipeline segment was walked to identify the presence of burrowing owl habitat on the site. The pipeline segment will be located within a gravel road. The site is surrounded by residential areas and consists of compacted dirt. California ground-squirrel and their burrows were observed along the Pipeline segment. The California ground squirrel burrows were inspected for any sign of burrowing owl habitat or signs that burrowing owl area using the site or buffer area (i.e. whitewash, feathers, or castings). It was concluded that the burrows present were currently occupied by California ground squirrels only. The surrounding area was visually inspected with binoculars to assess the neighboring residential uses in the 500-foot buffer. No indicators of the presence of burrowing owls utilizing the burrows, or of burrowing owls were detected on-site.

PIPELINE 5

The Pipeline segment was walked to identify the presence of burrowing owl habitat on the site. The pipeline segment will be located within a paved road and does not include the removal of vegetation. The site was surrounded by vegetation that consisted of residential landscaping. California ground-squirrel and their burrows were observed approximately 30 feet west of the western end of the Pipeline segment. The California ground squirrel burrows were inspected for any sign of burrowing owl habitat or signs that burrowing owl area using the site or buffer area (i.e. whitewash, feathers, or castings). It was concluded that the burrows present were currently occupied by California ground squirrels only. The surrounding area was visually inspected with binoculars to assess the neighboring residential uses in the 500-foot buffer. No indicators of the presence of burrowing owls utilizing the burrows, or of burrowing owls were detected on-site.

PIPELINE 6

Pipeline 6 or the respective 500-foot survey buffer is not located within an MSHCP-designated survey area for burrowing owl. Furthermore, the existing conditions of the site do not provide habitat or potential habitat for burrowing owl and no indicators of the presence of burrowing owl was detected on site or in the 500-foot survey buffer of the site.

7.3.3 Impacts

Due to lack of habitat on site for burrowing owl, Step II of the MSHCP survey instructions (Locating Burrows and Burrowing Owls) was not conducted. However, pre-construction burrowing owl surveys are recommended at Pipeline3, Pipeline 4, and Pipeline 5 due to their locations being immediately adjacent to an MSHCP Survey Area for burrowing owl (Figure 9). The proposed Project is unlikely to have impacts to burrowing owl habitat or burrowing owls. The implementation of Mitigation Measure BIO-1 will further ensure that the species, if found on-site, are not harmed.

7.3.4 Mitigation

Pre-construction surveys for burrowing owl are recommended to further reduce any potential for impacts to burrowing owl. Pre-construction surveys for burrowing owl should be conducted not more than 30 days prior to the initiation of ground disturbance.

BIO-1 MSHCP Protocol and Preconstruction Surveys for Burrowing Owl: To minimize impacts and to adhere to the Western Riverside MSHCP mitigation requirements regarding burrowing owl, it is recommended that:

- Conduct Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (protocol dated March 29, 2006).
- No more than 30 days prior to the first ground-disturbing activities, the project applicant shall retain a qualified biologist to conduct a preconstruction survey on the project site. The survey shall establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines.
- On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership need not be surveyed. The survey shall take place near the sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. During the breeding season (February 1–August 31), surveys shall document whether burrowing owls are nesting on or directly adjacent to disturbance areas. During the non-breeding season (September 1– January 31), surveys shall document whether burrowing owls are using habitat on or directly adjacent to any disturbance area. Survey results will be valid only for the season during which the survey is conducted.
- If burrowing owls are not discovered, further mitigation is not required. If burrowing owls are observed during the pre-construction surveys, the applicant shall perform the following measures to limit the impact on the burrowing owls:
    1. Avoidance shall include establishment of a 160-foot non-disturbance buffer zone. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg laying and incubation, or that the juveniles from the occupied burrows have fledged. During the non-breeding season (September 1-January 31), the project proponent shall avoid the owls and the burrows they are using, if possible. Avoidance shall include the establishment of a 160-foot non disturbance buffer zone.
    2. If it is not possible to avoid occupied burrows, passive relocation shall be implemented. Owls shall be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation. The project area shall be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent re-occupation. Plastic tubing or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

BIO-2 Procedures if Burrowing Owl is found on-site: Focused burrow survey that includes natural burrows or suitable man-made structures needs to be conducted as described below.

- A systematic survey for burrows including burrowing owl sign should be conducted by walking through suitable habitat over the entire survey area (i.e. the project site and within 150 meters). Pedestrian survey transects need to be spaced to allow 100percent visual coverage of the ground surface.
- The distance between transect center lines should be no more than 30 meters (approximately 100 feet) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys.
- The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed should be recorded and mapped, including GPS coordinates. If the survey area contains natural or man-made structures that could potentially support burrowing owls, or owls are observed during the burrow surveys, the systematic surveys should continue as prescribed in Part B. If no potential burrows are detected, no further surveys are required. A written report including photographs of the project site, location of burrowing owl habitat surveyed, location of transects, and burrow survey methods should be prepared. If the report indicates further surveys are not required, then the report should state the reason(s) why further focused burrowing owl surveys are not necessary.
- Focused Burrowing Owl Surveys will consist of site visits on four separate days. The first one may be conducted concurrent with the Focused Burrow Survey.
    1. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors using binoculars and/or spotting scopes should scan all suitable habitat, location of mapped burrows, owl sign, and owls, including perch locations to ascertain owl presence. This is particularly important if access has not been granted for adjacent areas with suitable habitat.
    2. A survey for owls and owl sign should then be conducted by walking through suitable habitat over the entire project site and within the adjacent 150 meters (approximately 500 feet). These "pedestrian surveys" should follow transects (i.e. Survey transects that are spaced to allow 100 percent visual coverage of the ground surface. The distance between transect centerlines should be no more than 30 meters (approximately 100 feet) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys. It is important to minimize disturbance near occupied burrows during all seasons.
    3. If access is not obtained, then the area adjacent to the project site shall also be surveyed using binoculars and/or spotting scopes to determine if owls are present in areas adjacent to the project site. This 150-meter buffer zone is included to fully characterize the population. If the site is

determined not to be occupied, no further surveys are required until 30 days prior to grading (see Pre-construction Surveys below).

After completion of appropriate surveys, a final report shall be submitted to the Riverside County Environmental Programs Department and the RCA Monitoring Program Administrator, which discusses the survey methodology, transect width, duration, conditions, and results of the survey. Appropriate maps showing burrow locations shall be included.

7.4 Mammals

7.4.1 Methods

Pipeline 1 – Pipeline 6 are not located in a mammal survey area.[1]

7.4.2 Existing Conditions and Results

Not applicable.

7.4.3 Impacts

Not applicable.

8.0 Information on Other Species

8.1 Delhi Sands Flower Loving Fly

Pipeline 1 – Pipeline 6 are not located in a Delhi sands flower loving fly (*Rhaphiomidas terminates abdominalis*) survey area.[1]

8.2 Species Not Adequately Conserved

The CNDDB analysis yielded thirty-four (34) sensitive species previously recorded in the USGS *Beaumont, California* 7.5-minute quadrangle.[9] Of those species four (4) special-status species are Federally and State listed species that were evaluated for potential to occur within the study area and included in the habitat assessment. CNPS Rare Plant Inventory query results yielded eight (8) rare plants known to occur within the USGS *Beaumont, California* 7.5-minute quadrangle and it's eight adjoining quadrangles.[10] Non-listed special-status species (e.g. CDFW Watch List and California Rare Plant Rank 1, 2, 3, 4, etc.) were evaluated and determined to have no potential to occur in the study area. No habitat for rare, endangered, threatened, or narrow endemic species occurs within the Project site and its surrounding. No special-status plant or wildlife species were observed or detected within the Project area during the survey. Therefore, none of the special-status species have moderate or high potential to occur in the study area.

The wildlife species observed on or near the site during the habitat assessment were common species found in urban and rural areas within Riverside County. Wildlife activity was low during the habitat assessment. Avian activity was moderate and California ground squirrel activity was low and only observed at Pipeline 4 and Pipeline 5. Common birds observed on-site during the habitat

[9] California Department of Fish and Wildlife (CDFW). (2022). California Natural Diversity Database (CNDDB) (RareFind 5, version 5.2.14). Electronic database. Sacramento, CA. Available, https://map.dfg.ca.gov/rarefind. Accessed July 18, 2022.
[10] California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 18 August 2022].

assessment were common raven (*Corvus corax*), northern mockingbird (*Mimus polyglottos*), red-tailed hawk (*Buteo jamaicensis*), California scrub jay (*Aphelocoma californica),* black phoebe (*Sayornis nigricans*), and anna's hummingbird (*Calypte anna*).

None of the MSHCP-designated species occurs on the site, and no further analysis is required.

9.0 Guidelines pertaining to the urban/wildlands interface (Section 6.1.4)

Section 6.1.4, Guidelines Pertaining to the Urban/Wildlands Interface includes measures that are put in place to control drainage, toxics, lighting, noise, and invasives.[2] It discusses guidelines to address indirect effects associated with development in proximity to MSHCP Conservation Areas. The Urban/Wildland Interface is defined as a zone (less than 100 feet) between the Project site and the MSHCP Conservation Area. If a Project is located adjacent to a Conservation Area, avoidance measures must be implemented.

The Project site was not located within any Criteria Cell, Cell Group, or MSHCP designated linkage. The nearest Criteria Cell, Criteria Cell #409, was located approximately 55 feet south from Pipeline 6. Although the Criteria Cell is located within the 500-foot buffer of Pipeline 6, the Project will not have adverse edge effects on the targeted Additional Reserve Lands or a MSHCP Conservation Area as described in Section 3.2.2, including a bioregion, vegetation, or soils, nor is it located in or within 100 feet of a Core Area or the defined proximity to an Edge Affected Land After Completion of Reserve Assembly (MSHCP Section 3.2.2).[2] The Project will implement applicable BMPs listed in the following section.

DRAINAGE. Proposed developments in proximity to the MSHCP Conservation Area shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing conditions. Measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area.

Authorization under the California General Construction Permit will be obtained by the contractor prior to the start of construction operations.

TOXICS. Land uses proposed in proximity to the MSHCP Conservation Area that utilize chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, habitat or water quality shall incorporate measures to ensure the application of such chemicals does not result in discharge to the MSHCP Conservation Area. Measures such as those employed to address drainage issues shall be implemented.

Equipment storage: equipment maintenance; and dispensing of fuel, oil, coolant, or any other toxic substance will be sited within designated staging areas. These designated areas will be clearly marked and located in such a manner as to capture runoff.

LIGHTING. Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.

The proposed project design does not include installation of new lighting. Construction activities will be preformed during daylight hours so night lighting will not be used.

NOISE. Proposed noise-generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards.

The anticipated construction timeframe is Summer-Fall 2023.

INVASIVES. When approving landscape plans for development that is proposed adjacent to the MSHCP Conservation Area, Permittees shall consider the invasive, non-native plant species (MSHCP Table 6-2) and shall require revisions to landscape plans (subject to the limitations of their jurisdiction) to avoid the use of invasive species for the portions of development that are adjacent to the MSHCP Conservation Area. Considerations in reviewing the applicability of this list shall include proximity of planting areas to the MSHCP Conservation Areas, species considered in the planting plans, resources being protected within the MSHCP Conservation Area and their relative sensitivity to invasion, and barriers, to plant and seed dispersal, such as walls, topography, and other features.

The proposed project does not include landscaping.

BARRIERS. Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate, in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in the MSHCP Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms.

The proposed project will not increase unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Areas above existing conditions. Permanent barriers are not included as part of the proposed project.

GRADING/LAND DEVELOPMENT. Manufactured slopes associated with proposed site development shall not extend into the MSHCP Conservation Area.

No slopes will be created or re-graded as part of the proposed project.

10.0 Best Management Practices (Volume I, Appendix C)

The proposed Project shall comply with the Standard BMPs of the MSHCP (Volume I, Appendix C), as follows:

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.

2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site the extent feasible.
13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the

completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

11.0 References

California Department of Fish and Wildlife (CDFW). (2022)a. California Natural Diversity Database (CNDDB) (RareFind 5, version 5.2.14). Electronic database. Sacramento, CA. Available, https://map.dfg.ca.gov/rarefind. Accessed July 18, 2022.

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12.0 Supporting Appendices

APPENDIX A – SITE PHOTOGRAPHS

PIPELINE 1

West View of Lambert Place

East View of Lambert Place

East View in Middle of Lambert Place

630 W 7th St
San Jacinto, CA 92583
P. 951.292.5126
www.geovironment.com

PIPELINE 2

East View of Bing Place

West View of Bing Place

630 W 7th St
San Jacinto, CA 92583
P. 951.292.5126
www.geovironment.com

PIPELINE 3


South View of Star Lane


North View of Star Lane


Southwestern View - Corner of View Dr. & Star Ln.


North View of Sky Lane


East View of View Drive


South View of Sky Lane

630 W 7th St
San Jacinto, CA 92583
P. 951 .292.5126
www.geovironment.com

PIPELINE 4

North View of Utica Way

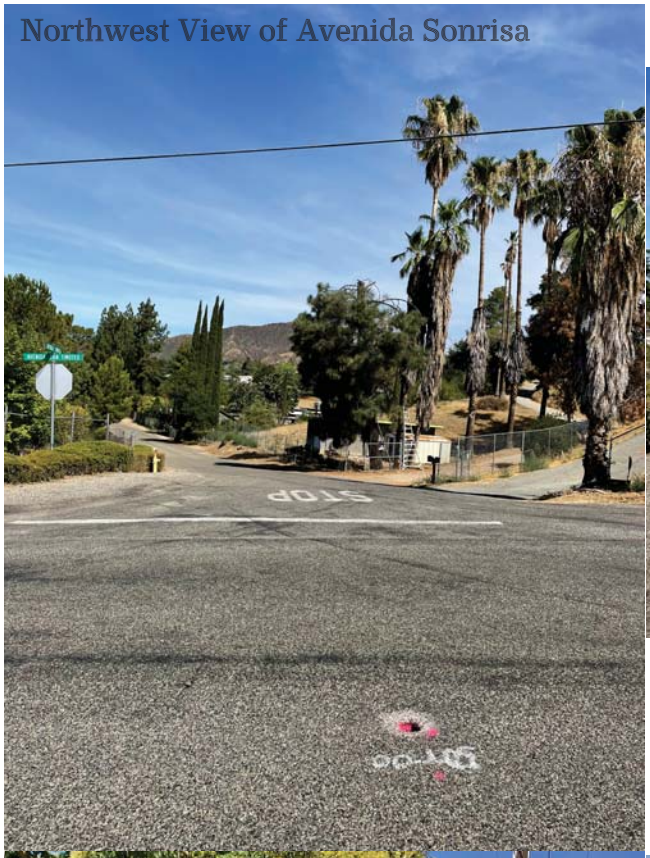
South View of Utica Way

North View of Utica Way into Residence

Northeast View of Pipeline Alignment

PIPELINE 5

Northwest View of Avenida Sonrisa



West View of Avenida Sonrisa

East View of Avenida Sonrisa

West View at West End of Pipeline 5

630 W 7th St
San Jacinto, CA 92583
P. 951.292.5126
www.geovironment.com

PIPELINE 6

South View of Avenida Miravilla

North View of Avenida Miravilla

Southwest View - South End of Pipeline 6

Southwest View of Avenida Miravilla

630 W 7th St
San Jacinto, CA 92583
• P. 951 .292.5126
@ www.geovironment.com

APPENDIX B – LITERATURE REVIEW

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Beaumont (3311688))
 AND County IS (Riverside)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
chaparral sand-verbena *Abronia villosa var. aurita*	PDNYC010P1	None	None	G5T2?	S2	1B.1
Coachella Valley milk-vetch *Astragalus lentiginosus var. coachellae*	PDFAB0FB97	Endangered	None	G5T1	S1	1B.2
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G3G4	S3S4	SSC
coastal whiptail *Aspidoscelis tigris stejnegeri*	ARACJ02143	None	None	G5T5	S3	SSC
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	None	G2	S1S2	
Dulzura pocket mouse *Chaetodipus californicus femoralis*	AMAFD05021	None	None	G5T3	S3	SSC
Horn's milk-vetch *Astragalus hornii var. hornii*	PDFAB0F421	None	None	GUT1	S1	1B.1
Jaeger's milk-vetch *Astragalus pachypus var. jaegeri*	PDFAB0F6G1	None	None	G4T1	S1	1B.1
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S2	
loggerhead shrike *Lanius ludovicianus*	ABPBR01030	None	None	G4	S4	SSC
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	AMAFD01041	None	None	G5T2	S1S2	SSC
mesa horkelia *Horkelia cuneata var. puberula*	PDROS0W045	None	None	G4T1	S1	1B.1
Mojave tarplant *Deinandra mohavensis*	PDAST4R0K0	None	Endangered	G2	S3	1B.3
narrow-leaf sandpaper-plant *Petalonyx linearis*	PDLOA04010	None	None	G4	S3?	2B.3
northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	AMAFD05031	None	None	G5T3T4	S3S4	SSC
orange-throated whiptail *Aspidoscelis hyperythra*	ARACJ02060	None	None	G5	S2S3	WL
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
Palmer's mariposa-lily *Calochortus palmeri var. palmeri*	PMLIL0D122	None	None	G3T2	S2	1B.2

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Parry's spineflower *Chorizanthe parryi var. parryi*	PDPGN040J2	None	None	G3T2	S2	1B.1
Payson's jewelflower *Caulanthus simulans*	PDBRA0M0H0	None	None	G4	S4	4.2
Plummer's mariposa-lily *Calochortus plummerae*	PMLIL0D150	None	None	G4	S4	4.2
purple martin *Progne subis*	ABPAU01010	None	None	G5	S3	SSC
San Diego desert woodrat *Neotoma lepida intermedia*	AMAFF08041	None	None	G5T3T4	S3S4	SSC
smooth tarplant *Centromadia pungens ssp. laevis*	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Southern California legless lizard *Anniella stebbinsi*	ARACC01060	None	None	G3	S3	SSC
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	ABPBX91091	None	None	G5T3	S3	WL
Southern Cottonwood Willow Riparian Forest *Southern Cottonwood Willow Riparian Forest*	CTT61330CA	None	None	G3	S3.2	
spiny-hair blazing star *Mentzelia tricuspis*	PDLOA031T0	None	None	G4	S2	2B.1
Stephens' kangaroo rat *Dipodomys stephensi*	AMAFD03100	Threatened	Threatened	G2	S2	
western spadefoot *Spea hammondii*	AAABF02020	None	None	G2G3	S3	SSC
western yellow bat *Lasiurus xanthinus*	AMACC05070	None	None	G4G5	S3	SSC
yellow warbler *Setophaga petechia*	ABPBX03010	None	None	G5	S3S4	SSC
Yucaipa onion *Allium marvinii*	PMLIL02330	None	None	G1	S1	1B.2

Record Count: 34

CNPS Rare Plant Inventory

California Native Plant Society

Search Results

8 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [**1B:2B**] Fed List is one of [**FE:FT**] **or** State List is one of [**CE:CT**] , Quad is one of [**3311688:3411711:3411618:3411617:3311781:3311687:3311771:3311678:3311677**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
Astragalus lentiginosus var. *coachellae*	Coachella Valley milk-vetch	Fabaceae	annual/perennial herb	Feb-May	FE	None	G5T1	S1	1B.2	No Photo Available
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	Chenopodiaceae	annual herb	Apr-Aug	FE	None	G4T1	S1	1B.1	 © 2008 Larry Sward
Brodiaea filifolia	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	Mar-Jun	FT	CE	G2	S2	1B.1	 © 2016 Keir Morse
Deinandra mohavensis	Mojave tarplant	Asteraceae	annual herb	(Jan-May)Jun-Oct	None	CE	G2	S3	1B.3	No Photo Available
Dodecahema leptoceras	slender-horned spineflower	Polygonaceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	No Photo Available
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	Polemoniaceae	perennial herb	Apr-Sep	FE	CE	G4T1	S1	1B.1	No Photo Available
Navarretia fossalis	spreading navarretia	Polemoniaceae	annual herb	Apr-Jun	FT	None	G2	S2	1B.1	No Photo Available
Taraxacum californicum	California dandelion	Asteraceae	perennial herb	May-Aug	FE	None	G1G2	S1S2	1B.1	No Photo Available

Showing 1 to 8 of 8 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 23 August 2022].

APPENDIX C: PLANTS AND WILDLIFE SPECIES OBSERVED

Scientific Name	Common Name	Pipeline Surrounding Location
Magnoliophyta	**Plants**	
Poaceae	**Grass Family**	
Festuca arundinacea	Tall Fescue	1; 2; 3; 5
Chenopodiaceae	**Saltbush Family**	
Salsola tragus (non-native species)	Russian thistle	4
Brassicaceae	**Mustard Family**	
Brassica nigra	Black mustard	3; 4
Fagaceae	**Beech Family**	
Quercus agrifolia	Coast Live Oak	6
Euphorbiaceae	**Spurge Family**	
Croton setiger	Turkey Mullein	4
Lamiaceae	**Sage Family**	
Salvia rosmarinus	Rosemary	5
Salvia leucantha	Mexican Bush Sage	5
Pinaceae	**Pine Family**	
Pinus lambertiana	Sugar Pine	5
Anacardiaceae	**Sumac Family**	
Malosma	Laurel Sumac	5
Cupressaceae	**Cypress Family**	
Cupressus sempevirens	Italian Cypress	5
Rosaceae	**Rose Family**	
Cercocarpus	Mountain Mahogany	4
Aves	**Birds**	
Columbidae	**Pigeons and Doves**	
Zenaida macroura	Mourning Dove	1; 2; 5
Corvidae	**Crows and Ravens**	
Corvus corax	Common Raven	1; 2; 3; 4; 5
Fringillidae	**Fringilline and Cardueline Finches and Allies**	
Haemorhous mexicanus	House Finch	4; 5; 6
Accipitridae	**Hawks, Kites Eagles, and Allies**	
Buteo jamaicensis	Red-tailed Hawk	3; 4; 5
Mimidae	**Mockingbirds and Thrashers**	
Mimus polyglottos	Northern Mockingbird	4; 5
Mammalia	**Mammals**	
Sciuridae	**Squirrels**	
Spermophilus beecheyi (burrows)	California ground squirrel	4; 5

APPENDIX D: Section 6.1.2. ASSESSMENT CONDITIONS

Date	Field Personnel	Survey Time	Temperature	Humidity	% Cloud Cover	Wind Speed	Annual Precipitation
7/21/2022	Carmen Gardner	7:00 AM – 11:00 AM	75 degrees Fahrenheit	30%	0%	6 mph	0” in the last 24 hours