

PUBLIC REVIEW DRAFT

Initial Study/ Mitigated Negative Declaration

City of Arvin Sanitary Sewer Master Plan

June 2020

Prepared for:



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Table of Contents

Acronyms and Abbreviations	v
Document Overview	vii
Section 1 Project Description	1
1.1 Project Overview	1
1.2 Project Location and Environmental Setting.....	5
1.3 Project Background	5
1.4 Project Construction	5
1.5 Surrounding Land Uses.....	5
1.6 Regulatory Requirements, Permits, and Approvals.....	6
1.6.1 Consultation	6
Section 2 Initial Study Checklist	47
2.1 Project Information	47
2.2 Environmental Factors Potentially Affected.....	49
2.3 Lead Agency Determination	50
2.4 Evaluation of Environmental Impacts	51
2.4.1 Aesthetics.....	52
2.4.2 Agriculture and Forestry Resources	55
2.4.3 Air Quality.....	57
2.4.4 Biological Resources	65
2.4.5 Cultural Resources.....	139
2.4.6 Energy	142
2.4.7 Geology and Soils.....	144
2.4.8 Greenhouse Gas Emissions.....	149
2.4.9 Hazards and Hazardous Materials	152
2.4.10 Hydrology and Water Quality.....	157
2.4.11 Land Use and Planning.....	162
2.4.12 Mineral Resources	163
2.4.13 Noise	164
2.4.14 Population and Housing.....	167
2.4.15 Public Services.....	168
2.4.16 Recreation	170
2.4.17 Transportation	171
2.4.18 Tribal Cultural Resources	173
2.4.19 Utilities and Service Systems.....	175
2.4.20 Wildfire.....	178
2.4.21 Mandatory Findings of Significance.....	180

Section 3	List of Preparers	183
3.1	Lead Agency.....	183
3.2	Consultants.....	183

Section 4	References	185
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Figures

Figure 1.	Regional Location	9
Figure 2.	Project Site Overview	11
Figure 2a.	A Street CIP	13
Figure 2b.	Campus Drive Alley CIP	15
Figure 2c.	Comanche Drive CIP	17
Figure 2d.	East Di Giorgio Park CIP	19
Figure 2e.	Haven Drive CIP	21
Figure 2f.	Langford Avenue CIP	23
Figure 2g.	Meyer Street CIP	25
Figure 2h.	Millux Road Pipeline and Pump Station CIP	27
Figure 2i.	Plumtree Drive Alleys CIP	29
Figure 2j.	Potato-Sycamore CIP	31
Figure 2k.	Small Pipeline Replacement CIP	33
Figure 2l.	Small Spot Repair CIP	35
Figure 2m.	Southeast Kovacevich Park CIP	37
Figure 2n.	Southwest Kovacevich Park CIP	39
Figure 2o.	Stand-Alone Manhole Repair and Replacement CIP	41
Figure 2p.	West Di Giorgio Park CIP	43
Figure 2q.	West Smothermon Park CIP	45
Figure 3.	Vegetation Communities Overview	75
Figure 3a.	Campus Drive Alley CIP	77
Figure 3b.	Comanche Drive CIP	79
Figure 3c.	Haven Drive CIP	81
Figure 3d.	Millux Road Pipeline and Pump Station CIP	83
Figure 3e.	Plumtree Drive Alleys CIP	85
Figure 3f.	Potato-Sycamore CIP	87
Figure 3g.	Small Pipeline Replacement CIP	89
Figure 3h.	Small Spot Repair CIP	91
Figure 3i.	Southeast Kovacevich Park CIP	93
Figure 3j.	Stand-Alone Manhole Repair and Replacement CIP	95
Figure 3k.	West Smothermon Park CIP	97
Figure 4.	Impacts to Vegetation Communities – Index	99
Figure 4a.	Impacts to Vegetation Communities Campus Drive Alley	101

Figure 4b. Impacts to Vegetation Communities Small Spot Repair	103
Figure 4c. Impacts to Vegetation Communities Potato-Sycamore	105
Figure 4d. Impacts to Vegetation Communities Potato-Sycamore	107
Figure 4e. Impacts to Vegetation Communities Comanche Drive	109
Figure 4f. Impacts to Vegetation Communities Comanche Drive and Millux Road Pipeline and Pump Station.....	111
Figure 4g. Impacts to Vegetation Communities Millux Road Pipeline and Pump Station	113
Figure 4h. Impacts to Vegetation Communities Millux Road Pipeline and Pump Station	115
Figure 4i. Impacts to Vegetation Communities Millux Road Pipeline and Pump Station	117
Figure 4j. Impacts to Vegetation Communities Millux Road Pipeline and Pump Station	119
Figure 4k. Impacts to Vegetation Communities Millux Road Pipeline and Pump Station	121
Figure 4l. Impacts to Vegetation Communities Millux Road Pipeline and Pump Station	123
Figure 4m. Impacts to Vegetation Communities Millux Road Pipeline and Pump Station	125
Figure 4n. Impacts to Vegetation Communities Millux Road Pipeline and Pump Station	127
Figure 5. Aquatic Resources – Index.....	129
Figure 5a. Aquatic Resources.....	131
Figure 5b. Aquatic Resources.....	133
Figure 5c. Aquatic Resources.....	135
Figure 5d. Aquatic Resources.....	137

Tables

Table 1. Capital Improvement Projects Details.....	1
Table 2. Anticipated Project Approvals and Permits.....	6
Table 3. Ambient Background Concentrations at Monitoring Station (ppm unless otherwise indicated).....	59
Table 4. Air Quality Thresholds of Significance for Criteria Pollutants During Construction	60
Table 5. Worst-Case Maximum Annual Air Pollutant Emissions (tons/year)	61
Table 6. Direct and Indirect Impacts to Special-Status Wildlife Species.....	68
Table 7. Worst-Case Annual Construction Greenhouse Gas Emissions	150

Appendices

- Appendix A. Biological Resources Letter Report
- Appendix B. Air Quality/Greenhouse Gas Model Outputs
- Appendix C. Cultural Resources Study

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Acronyms and Abbreviations

µg/m ³	micrograms per cubic meter of
AB	Assembly Bill
Alquist-Priolo	Alquist-Priolo Earthquake Fault Zoning Act
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIP	capital improvement project
City	City of Arvin
CO	carbon monoxide
CO	carbon monoxide
CO _{2e}	carbon dioxide equivalent
County	Kern County
EIR	Environmental Impact Report
GHG	greenhouse gas
IS	Initial Study
LOS	level of service
MND	Mitigated Negative Declaration
MT	metric ton
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O ₃	ozone
PM ₁₀	particulate matter measuring no more than 10 microns in diameter
PM _{2.5}	fine particulate matter measuring no more than 2.5 microns in diameter
ppm	parts per million
project	City of Arvin Sanitary Sewer Master Plan
RACT	Reasonably Available Control Technology
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO _x	sulfur oxide
SWPPP	Stormwater Pollutant Prevention Plan
TAC	toxic air contaminant
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency

USFWS
VFHCP

U.S. Fish and Wildlife Services
Valley Floor Habitat Conservation Plan

Document Overview

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with California Environmental Quality Act (CEQA) and the CEQA Guidelines for the proposed City of Arvin Sanitary Sewer Master Plan (project). This IS/MND incorporates information and analysis presented in the City's General Plan Master Environmental Impact Report and the City's General Plan Update MND (Kern Council of Governments 1988; City of Arvin 2011). The intent of this IS/MND is to (1) determine whether project implementation would result in potentially significant impacts to the environment, and (2) incorporate project design features (PDFs) and mitigation measures into the project design as necessary to eliminate or reduce the project's potentially significant impacts to less than significant levels.

In accordance with CEQA, projects that have the potential to result in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment must undergo analysis to disclose potential significant effects. The provisions of CEQA apply to California governmental agencies at all levels, including local agencies, regional agencies, state agencies, boards, commissions, and special districts. CEQA requires preparation of an IS for a discretionary project to determine the range of potential environmental impacts of that project and to define the scope of the environment review document. As specified in Section 15064(f) of the CEQA Guidelines, the lead agency may prepare an MND if, in the course of the IS analysis, it is recognized that the project may have a significant impact on the environment but that implementation of specific PDFs and mitigation measures would reduce potentially significant impacts to less than significant levels. As the lead agency for the project, the City of Arvin (City) has the principal responsibility for conducting the CEQA environmental review to analyze the potential environmental effects associated with project implementation. During the review process, it was determined that potential impacts would be reduced to less than significant levels with the implementation of PDFs and mitigation measures. The City has incorporated PDFs and mitigation measures to reduce or eliminate any potentially significant project-related impacts. Therefore, an IS/MND has been prepared for the project.

Note: The project has not been approved or denied. It is being reviewed for environmental impacts only. Approval of the project can take place only after the MND has been adopted.

This IS/MND is organized as follows:

- **Section 1: Project Description.** This section introduces the document and discusses the project description, including location, setting, and specifics of the lead agency and contacts.
- **Section 2: Initial Study Checklist.** This section discusses the CEQA environmental topics and checklist questions, identifies the potential for impacts, and proposes PDFs and mitigation measures to avoid these impacts.

- **Section 3: List of Preparers.** This section lists the organizations and individuals who were consulted or prepared this IS/MND.
- **Section 4: References.** This section presents a list of reference materials consulted during preparation of this IS/MND.

Public Review

The IS/MND will be circulated for a 30-day public review period from June 11, 2020, to July 10, 2020.

Comments regarding this IS/MND must be made in writing and submitted to Mitzy Cuxum, Senior Planner, at City of Arvin, Community Development Department, 141 Plumtree Drive, Arvin, California 93203, or by email at mcuxum@arvin.org.

Section 1 Project Description

1.1 Project Overview

The City proposes the development of the project set forth in the City's General Plan Update (2012) and implementation of a comprehensive capital improvement plan for its wastewater collection system. The purpose of the project is to apply the level of service (LOS) standards in the capital improvement plan to provide continuous sewer service to ratepayers in the City and to ensure construction and operation of the sanitary sewer system minimize the possibility of overflow and environmental impact. The project involves improvements to the existing sanitary sewer infrastructure, including the replacement, upgrade, and installation of sanitary sewer pipeline within the City boundary as defined by the City's General Plan. Additional information regarding the project is detailed below.

The project includes improvements to approximately 54,771 linear feet of sanitary sewer pipeline and 257 manholes throughout the City and comprises 17 individual capital improvement projects (CIPs) (Figure 1, Regional Location, and Figure 2 series, Project Site). The 17 CIP sites make up the project site (collectively referred to as the "project site" throughout this IS/MND). The 17 CIPs are outlined in Table 1, Capital Improvement Projects Details, and described further in the sections below.

Table 1. Capital Improvement Projects Details

CIP	Linear Feet of Sanitary Sewer Pipeline	Number of Manholes
A Street	4,306	14
Campus Drive Alley	1,967	7
Comanche Drive	1,110	8
East Di Giorgio Park	3,303	9
Haven Drive	2,797	12
Langford Avenue	2,007	10
Meyer Street	3,706	14
Millux Road Pipeline and Pump Station	6,700	0
Plum Tree Drive Alleys	3,878	14
Potato-Sycamore	1,320	5
Small Pipeline Replacement	1,080	13
Small Spot Repair	303	3
Southeast Kovacevich Park	5,669	16
Southwest Kovacevich Park	6,961	21
Stand-Alone Manhole Repair and Replacement	0	86
West Di Giorgio Park	3,651	7
West Smothermon Park	6,013	18
Total	54,771	257

Notes: CIP = capital improvement project

The improvements to the existing sanitary sewer infrastructure, including replacement, upgrade, and installation of sanitary sewer pipeline, proposed by the project are primarily in existing City rights-of-way but are also in undeveloped and vacant parcels throughout the City (Figure 2 series). In addition, one segment of pipeline proposed to be installed is outside of the City boundary (Assessor's Parcel Number 18935217). This parcel is proposed for annexation by the City to construct and maintain this portion of the sanitary sewer system.

Descriptions of Capital Improvement Projects

A Street

The A Street CIP is in three alleys east of A Street generally bounded by Tucker Street to the north, Derby Street to the east, A Street to the west, and Haven Drive to the south (Figure 2 series). This CIP includes replacing 2,611 feet of existing 8-inch pipe with new 8-inch pipe, replacing 321 feet of existing 10-inch pipe with new 10-inch pipe, lining 1,268 feet of existing pipe, performing spot repair on 106 feet of existing pipe, and replacing 14 manholes.

Campus Drive Alley

The Campus Drive Alley CIP is in the alley west of Campus Drive between Varsity Avenue and Bear Mountain Boulevard (Figure 2 series). The CIP includes replacing 1,634 feet of existing 8-inch pipe with new 8-inch pipe, lining 198 feet of existing pipe, performing spot repair on 135 feet of existing pipe, and replacing seven manholes.

Comanche Drive

The Comanche Drive CIP is generally located in Comanche Drive between Sycamore Road and El Camino Real and includes replacing 1,110 feet of existing 18-inch pipe with new 18-inch pipe and replacing eight manholes (Figure 2 series).

East Di Giorgio Park

The East Di Giorgio Park CIP is east of Di Giorgio Park and is generally bounded by Holden Street to the north, A Street to the east, Hill Street to the west, and Langford Avenue to the south and includes a pipeline that crosses Di Giorgio Park (Figure 2 series). This CIP includes replacing 2,059 feet of existing 6-inch pipe with new 8-inch pipe, replacing 899 feet of existing 8-inch pipe with new 8-inch pipe, lining 345 feet of existing pipe, and replacing nine manholes.

Haven Drive

The Haven Drive CIP is within Haven Drive, Monroe Street, Santa Rosa Street, and Walnut Drive (Figure 2 series). The CIP includes replacing 563 feet of existing 6-inch pipe with new 8-inch pipe, replacing 1,899 feet of existing 8-inch pipe with new 8-inch pipe, replacing 335 feet of existing 15-inch pipe with new 15-inch pipe, and replacing 12 manholes.

Langford Avenue

The Langford Avenue CIP is in Langford Avenue between Stockton Avenue and A Street and is generally bounded by Franklin Street to the north, Stockton Avenue to the east, A Street to the west, and Fallbrook Avenue to the south (Figure 2 series). This CIP includes replacing 945 feet of existing 8-inch pipe with new 8-inch pipe, lining 977 feet of existing pipe, performing spot repair on 85 feet of existing pipe, replacing seven manholes, and repairing three manholes.

Meyer Street

The Meyer Street CIP is generally bounded by Bear Mountain Boulevard to the north, Acala Street to the east, Meyer Street to the west, and Haven Drive to the south (Figure 2 series). This CIP includes replacing 1,952 feet of existing 6-inch pipe with new 8-inch pipe, replacing 1,808 feet of existing 12-inch pipe with new 12-inch pipe, and replacing 14 manholes.

Millux Road Pipeline and Pump Station

The Millux Road Pipeline and Pump Station CIP is generally located in Millux Road between Malovich Road and Comanche Road (Figure 2 series). The CIP includes installing 6,700 feet of new 15-inch pipe between the intersection of A Street and El Camino Real and the intersection of Millux Road and Comanche Drive. In addition, the CIP includes constructing a 0.06-acre fenced pump station in the vicinity of the intersection of Millux Road and Comanche Drive. A 6-inch force main would be installed in Comanche Drive between Millux Road and El Camino Real.

Plumtree Drive Alleys

The Plumtree Drive Alleys CIP is generally located in the alleys east and west of Plumtree Drive between Orchard Drive and 4th Avenue (Figure 2 series). The CIP includes replacing 641 feet of existing 8-inch pipe with new 8-inch pipe, lining 2,987 feet of existing pipe, performing spot repair on 250 feet of existing pipe, replacing nine manholes, and repairing five manholes.

Potato-Sycamore

The Potato-Sycamore CIP is in Sycamore Road between Walnut Drive and Comanche Drive (Figure 2 series). The CIP includes replacing approximately 1,320 feet of existing 15-inch sewer in Sycamore Road between Walnut Drive and Comanche Drive with new 24-inch pipe and installing five new manholes in the alignment. This CIP also includes the future development of industrial land uses northeast of the intersection of Derby Street and Sycamore Road.

Small Pipeline Replacement

The Small Pipeline Replacement CIP includes six small replacement projects throughout the City (Figure 2 series). This CIP includes replacing 1,080 feet of existing 8-inch pipe with new 8-inch pipe and replacing 13 manholes.

Small Spot Repair

The Small Spot Repair CIP includes 10 small spot repair projects throughout the City (Figure 2 series). This CIP includes repairing 303 feet of existing pipe and repairing three manholes.

Southeast Kovacevich Park

The Southeast Kovacevich Park CIP is southeast of Kovacevich Park; generally bounded by 5th Avenue to the north, Derby Street to the east, B Street to the west, and the alley south of Bear Mountain Boulevard to the south; and includes an additional pipe in 5th Avenue east of Derby Street (Figure 2 series). This CIP includes replacing 2,438 feet of existing 8-inch pipe with new 8-inch pipe, lining 3,070 feet of existing pipe, performing spot repair on 161 feet of existing pipe, replacing 13 manholes, and repairing 3 manholes.

Southwest Kovacevich Park

The South Kovacevich Park CIP is southwest of Kovacevich Park and generally bounded by 5th Avenue to the north, B Street to the east, Hill Street to the west, and Bear Mountain Boulevard to the south, with some additional pipes in and around Bear Mountain Boulevard west of Hill Street (Figure 2 series). The CIP includes replacing 227 feet of existing 6-inch pipe with new 8-inch pipe, replacing 4,361 feet of existing 8-inch pipe with new 8-inch pipe, replacing 335 feet of existing 10-inch pipe with new 10-inch pipe, lining 226 feet of existing 12-inch pipe, lining 1,729 feet of existing 8-inch pipe, performing spot repair on 83 feet of existing pipe, and replacing 21 manholes.

Stand-Alone Manhole Repair and Replacement

The Stand-Alone Manhole Repair and Replacement CIP includes repairing 62 manholes and replacing 24 manholes throughout the City (Figure 2 series).

West Di Giorgio Park

The West Di Giorgio Park CIP is west of Di Giorgio Park and generally bounded by Haven Drive to the north, Meyer Street to the east, Walnut Drive to the west, and Franklin Street to the south (Figure 2 series). This CIP includes replacing 938 feet of existing 8-inch pipe with new 8-inch pipe, lining 2,656 feet of existing pipe, performing spot repair on 57 feet of existing pipe, and replacing seven manholes.

West Smothermon Park

The West Smothermon Park CIP is west of Smothermon Park and generally bounded by Mark Street to the north, Walnut Drive to the east, Comanche Drive to the west, and the alley parallel to and south of Durham Street to the south, with some additional pipelines in and around Bush Street east of Walnut Drive (Figure 2 series). This CIP includes replacing 4,004 feet of existing 6-inch

pipe with new 8-inch pipe, replacing 1,976 feet of existing 8-inch pipe with new 8-inch pipe, performing spot repair on 33 feet of existing pipe, replacing 17 manholes, and repairing 1 manhole.

1.2 Project Location and Environmental Setting

The project site is within the boundary of the City, which is situated in the southern-most portion of California's Central Valley (Figure 1). The City, located in Kern County (County), is approximately 5 square miles (approximately 3,200 acres) in size and is surrounded by farmland (Figure 2 series). Elevation on the project site ranges from 384 to 465 feet above mean sea level.

The majority of the project site is made up of developed land. Vegetation on the project site is dominated by agriculture, non-native grassland, and disturbed land (Figure 3 series, Vegetation Communities) (Appendix A, Biological Resources Letter Report). Extensive agricultural activity, homeless encampments, and abandoned industrial properties exist around the periphery of the project site and include areas of disturbed or bare ground with accumulated trash and human-made debris.

1.3 Project Background

As described in Section 1.1, Project Overview, the project includes implementation of the City's Sanitary Sewer Master Plan and associated CIPs as set forth in the City's General Plan Land Use Element. Of the approximately 3,020 acres planned for development in the City, as outlined in the City's General Plan, approximately 1,064 acres are currently developed and being served by the sanitary sewer system. The remaining 1,956 acres of land in the City is planned for future development and would require expansion of the current sanitary sewer system to provide adequate capacity for the increase in population and activity.

1.4 Project Construction

The extent of construction activities associated with the project's sanitary sewer pipeline improvements and installations would remain within a 25-foot-wide construction activity zone. In the construction activity zone, 5-foot-wide trenches would be excavated in the roadway or ground surface directly over the pipelines to provide access to the pipelines. For manhole improvements, construction would remain within a 15-foot-wide construction activity zone. Construction staging areas would be in developed areas in the City's rights-of-way. Upon completion of the project, the roadway and ground surface disturbed during construction would be restored to their previous condition and function.

1.5 Surrounding Land Uses

The project site encompasses much of the City and includes rights-of-way, undeveloped, and vacant parcels. In the City, the project site is surrounded primarily by lands designated in the City's General Plan as low-density residential and light and heavy industrial, but is also bordered by lands

designated as medium- and high-density residential, estate residential, residential reserve, general commercial, agricultural, public facilities, schools, and parks (City of Arvin 2012).

Portions of the project on the edge of the City also border lands in unincorporated Kern County. These areas are designated in the County's General Plan (2009) as intensive agriculture and mineral and petroleum extraction zones.

1.6 Regulatory Requirements, Permits, and Approvals

This IS/MND is an informational document intended to inform public agency decision makers and the public of the significant environmental effects of the project and to identify ways to minimize the significant effects.

The City is the lead agency for the project under CEQA since it is the agency with primary authority over the project's discretionary approvals. Other agencies, identified as trustee and responsible agencies, will also use this IS/MND for their consideration of approvals or permits under their respective authorities. For the purpose of CEQA, the term "trustee agency" means a state agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of California. The term "responsible agency" includes public agencies other than the lead agency that may have discretionary actions associated with the implementation of the project or an aspect of subsequent implementation of the project. Accordingly, the approvals anticipated to be required from a lead agency or responsible agency are identified in Table 2.

Table 2. Anticipated Project Approvals and Permits

Permit/Action Required	Approving Agency	Lead/ Responsible Agency Designation
Site Plan	City	Lead Agency
Landscape Plan	City	Lead Agency
MND	City	Lead Agency
Waste Discharge Permit	RWQCB	Responsible Agency
Statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activity – SWPPP ¹	RWQCB	Responsible Agency
Construction Permit and Encroachment Permit	City/Caltrans	Lead Agency/Responsible Agency

Note: Caltrans = California Department of Transportation; City = City of Arvin; MND = Mitigated Negative Declaration; NPDES = National Pollutant Discharge Elimination System; RWQCB = Regional Water Quality Control Board; SWPPP = stormwater pollutant prevention plan

¹ The required SWPPP would be prepared to the satisfaction of the City Water Quality Engineer in accordance with the City's Grading Ordinance, the City's Water Quality Ordinance, and the latest NPDES General Permit.

1.6.1 Consultation

1.6.1.1 Federal Agencies

U.S. Army Corps of Engineers (USACE). Two disturbed potential aquatic resources with associated riparian vegetation and three open water ponds were documented on the project site. The project

has been designed to avoid direct impacts to potential aquatic resources and riparian vegetation. However, should the project result in direct or indirect impacts to jurisdictional aquatic resources and riparian vegetation, the USACE would be consulted and coordinated with to reduce these impacts (see Section 2.4.4, Biological Resources, for additional information).

U.S. Fish and Wildlife Service (USFWS). Special-status plant and wildlife species covered under the federal Endangered Species Act as administered by the USFWS have the potential to exist on the project site. PDFs and mitigation measures (described in Section 2.4.4) would reduce the project's potential impacts to special-status plant and wildlife species. However, should the project result in direct or indirect impacts to federally listed plant or wildlife species, the USFWS would be consulted and coordinated with to reduce these impacts (see Section 2.4.4 for additional information).

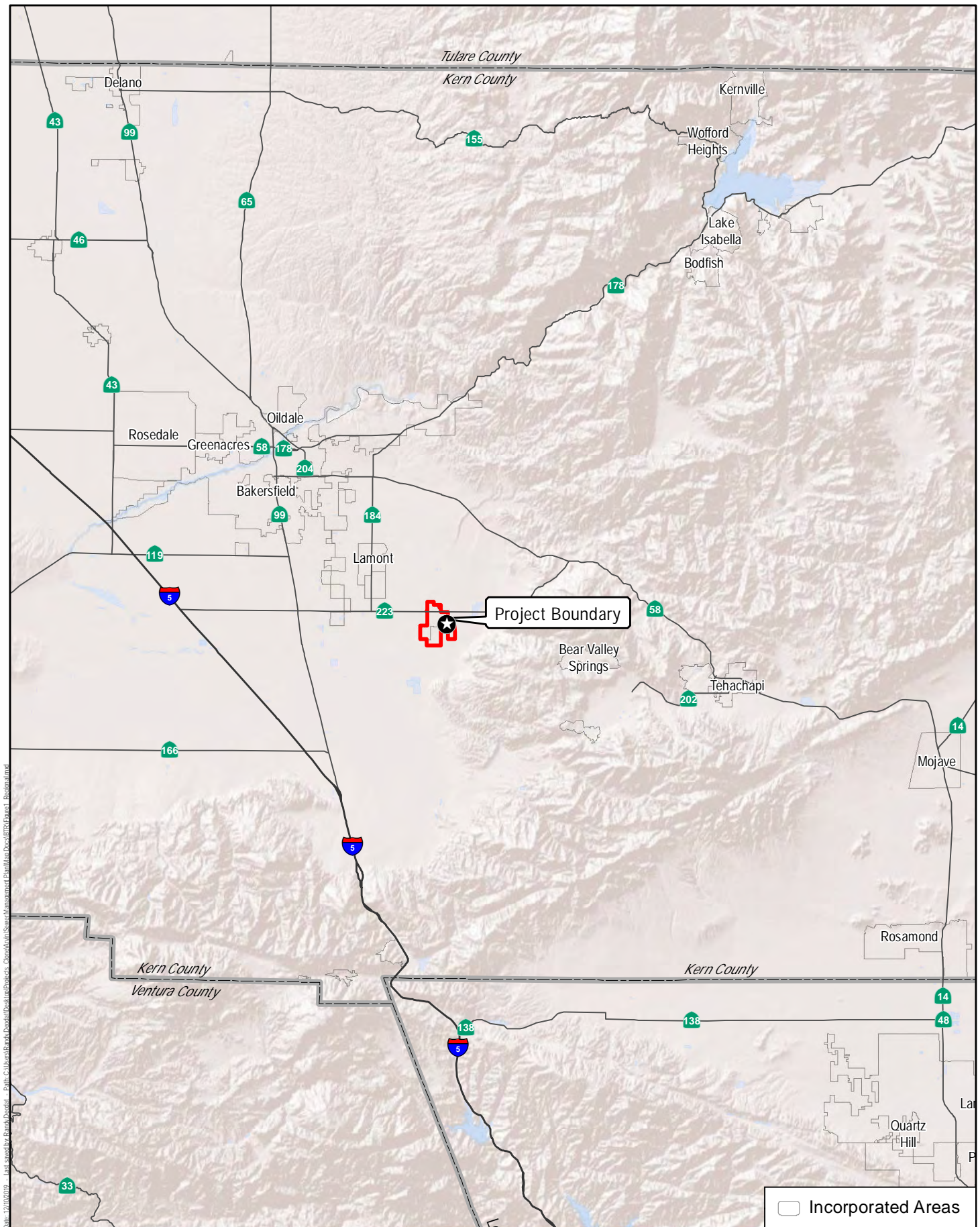
1.6.1.2 State Agencies

Assembly Bill (AB) 52. AB 52 (Chapter 532, Statutes of 2014) establishes a formal consultation process for California Native American tribes as part of CEQA and equates significant impacts on tribal cultural resources with significant environmental impacts (California Public Resources Code, Section 21084.2). Under AB 52, formal consultation with tribes is required by a lead agency prior to determining the level of environmental document if a tribe has requested to be informed by the lead agency of projects and if the tribe, upon receiving notice of the project, accepts the opportunity to consult within 30 days of receipt of the notice. AB 52 also requires that consultation, if initiated, addresses project alternatives and mitigation measures for significant effects if specifically requested by the tribe. The City is currently undertaking coordination efforts to ensure that the project is in conformance with the AB 52 notification and consultation requirements.

California Department of Fish and Wildlife (CDFW). State of California plant and wildlife species listed under the California Endangered Species Act as administered by the CDFW have the potential to exist on the project site. PDFs and mitigation measures (described in Section 2.4.4) would reduce the project's potential impacts to special-status plant and wildlife species. However, should the project result in direct or indirect impacts to special-status plant or wildlife species, the CDFW would be consulted and coordinated with to reduce these impacts (see Section 2.4.4 for additional information).

Regional Water Quality Control Board (RWQCB). Two disturbed potential aquatic resources with associated riparian vegetation and three open water ponds were documented on the project site. The project has been designed to avoid direct impacts to potential aquatic resources and riparian vegetation. However, should the project result in direct or indirect impacts to jurisdictional potential aquatic resources and riparian vegetation, the RWQCB would be consulted and coordinated with to reduce these impacts (see Section 2.4.4 for additional information). Furthermore, the project has been designed to avoid indirect water quality impacts with the implementation of a required stormwater-quality management plan, including proposed stormwater control best management practices (BMPs).

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Source: ESRI 2019.

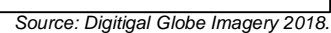


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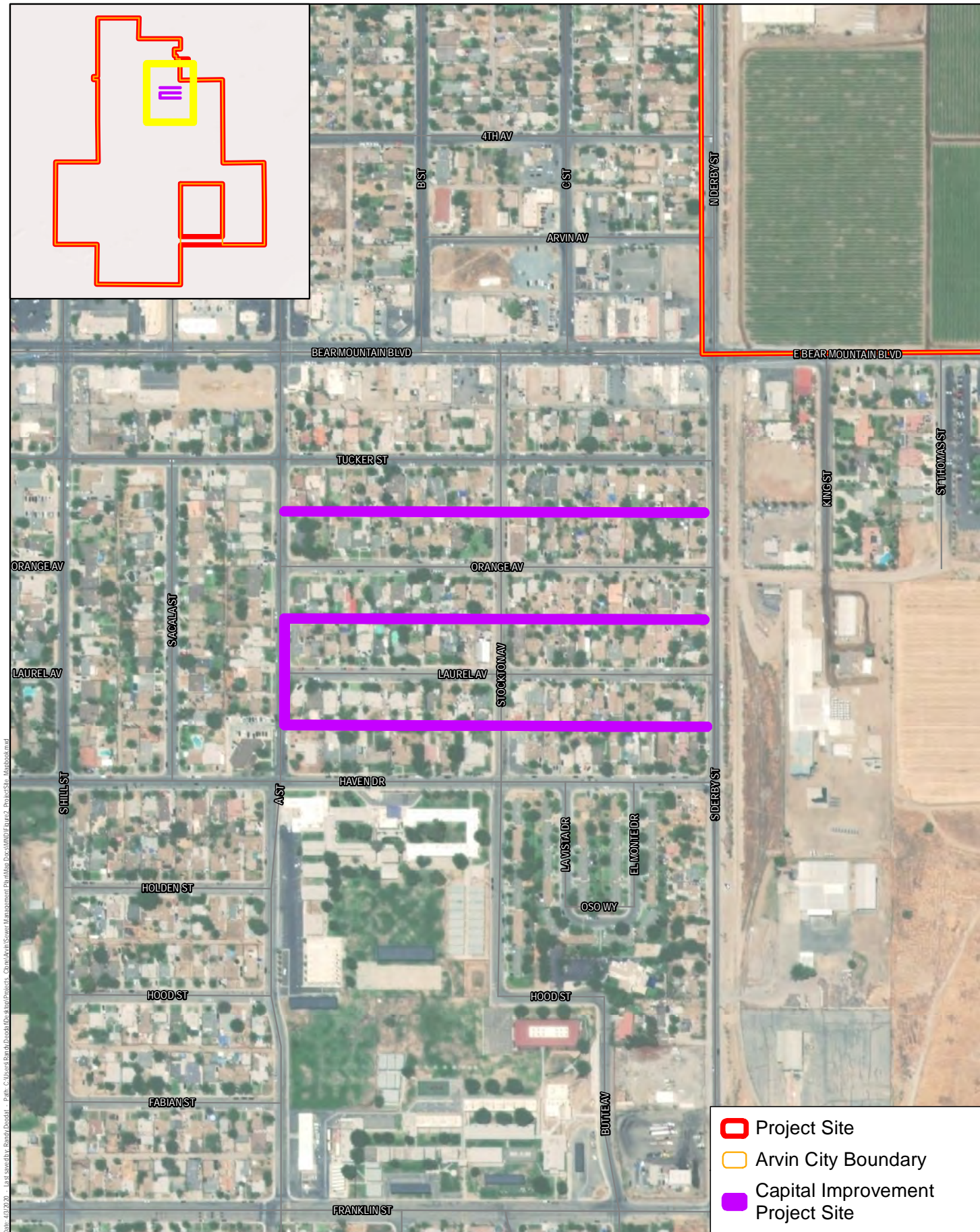


Figure 1
Regional Location

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Source: Digital Globe Imagery 2018.



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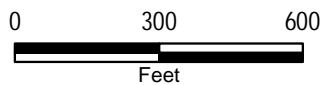
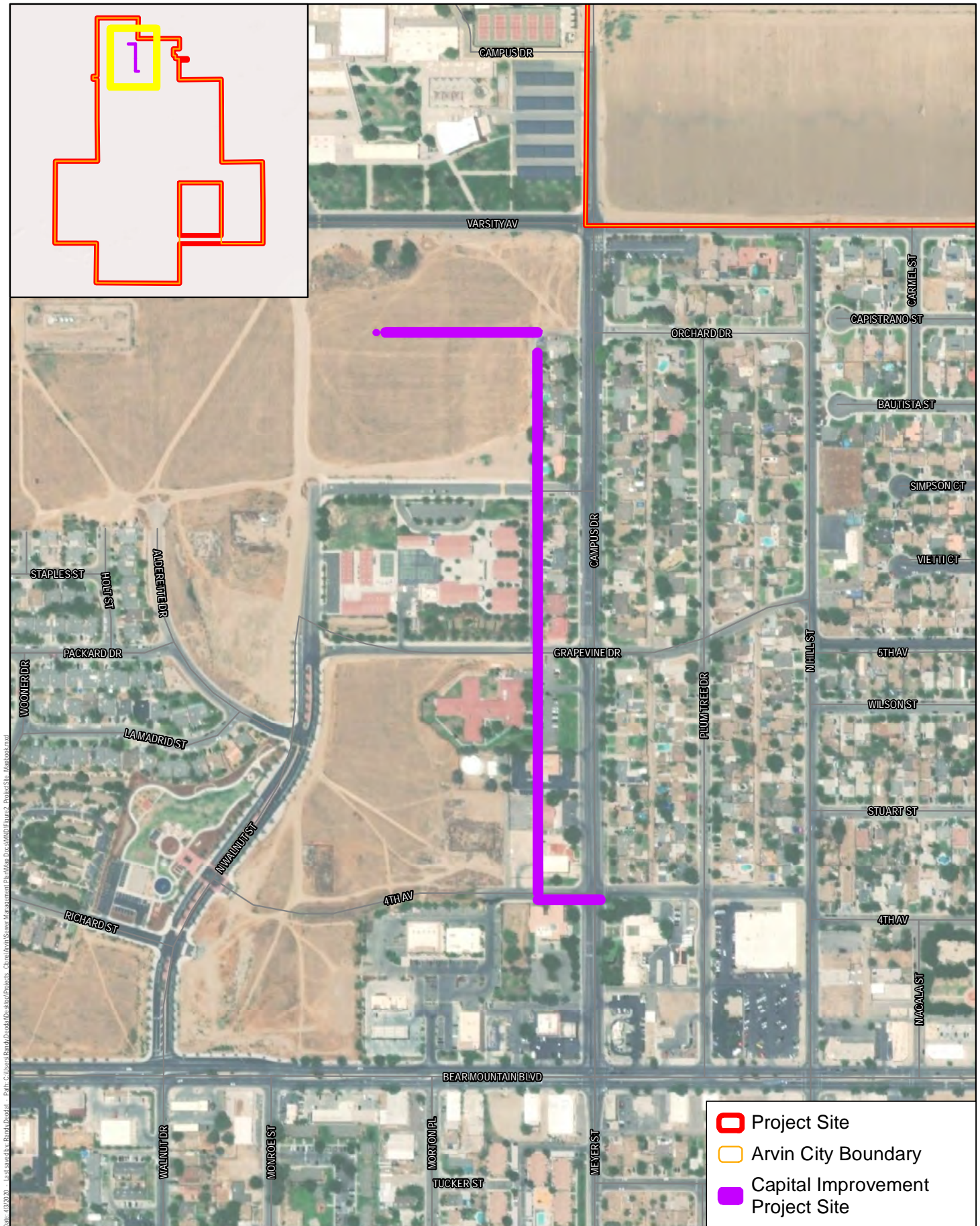


Figure 2a

A Street CIP

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Source: Digital Globe Imagery 2018.



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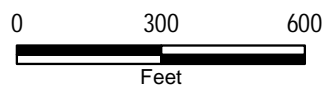
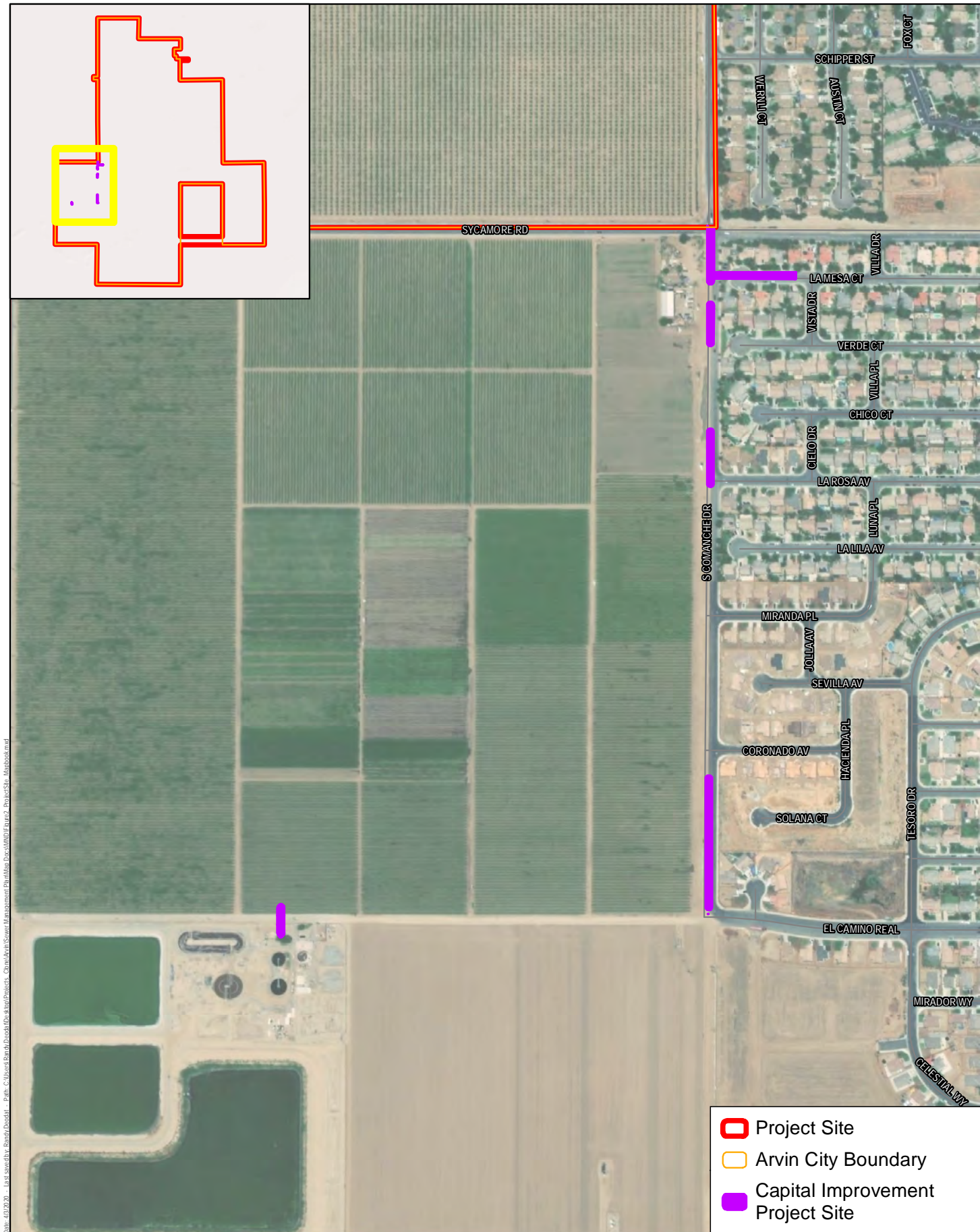


Figure 2b

Campus Drive Alley CIP

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- Project Site
- Arvin City Boundary
- Capital Improvement Project Site

Source: Digital Globe Imagery 2018.



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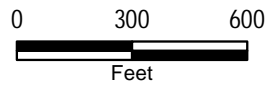
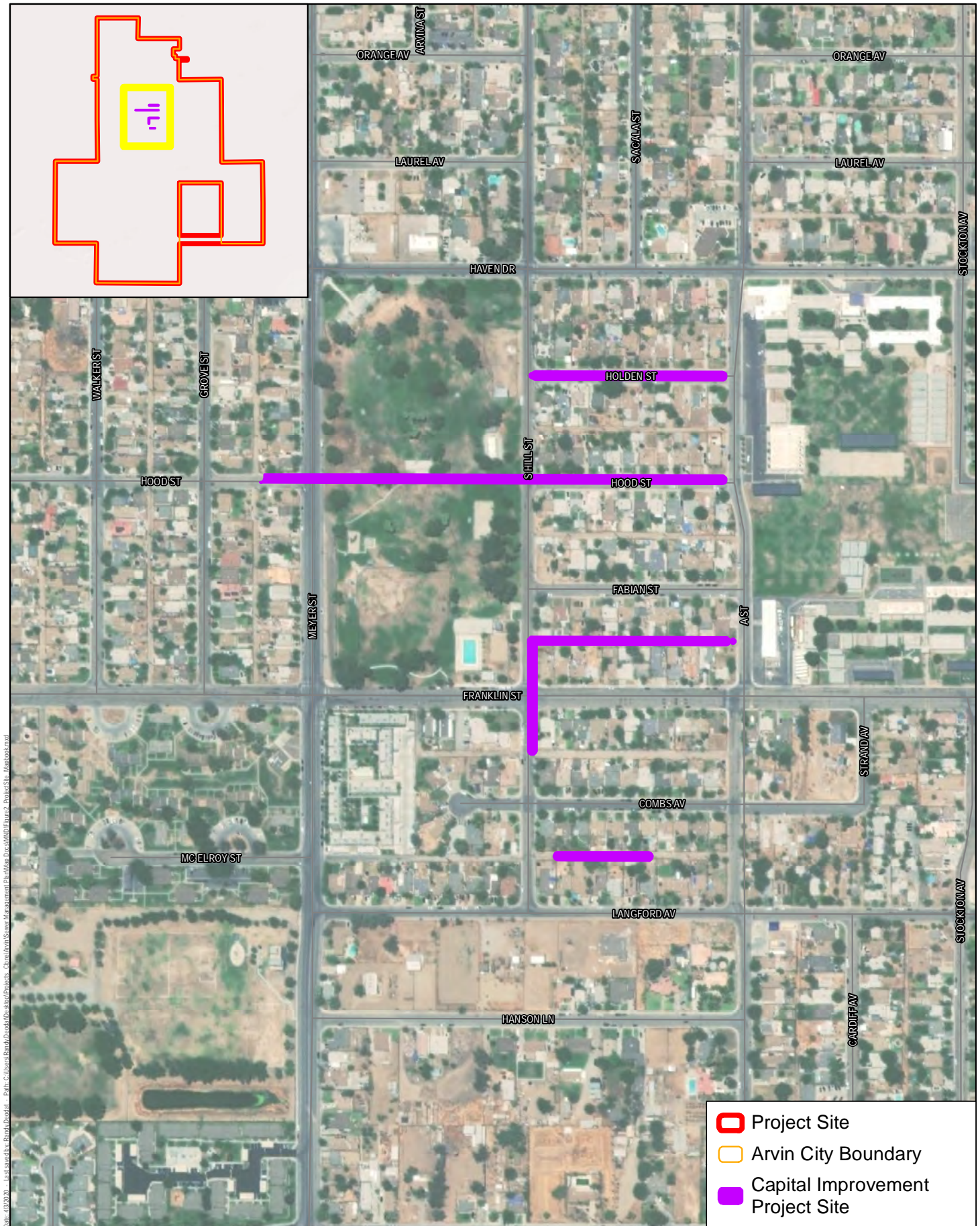


Figure 2c
Comanche Drive CIP

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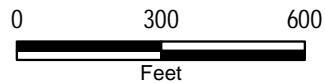
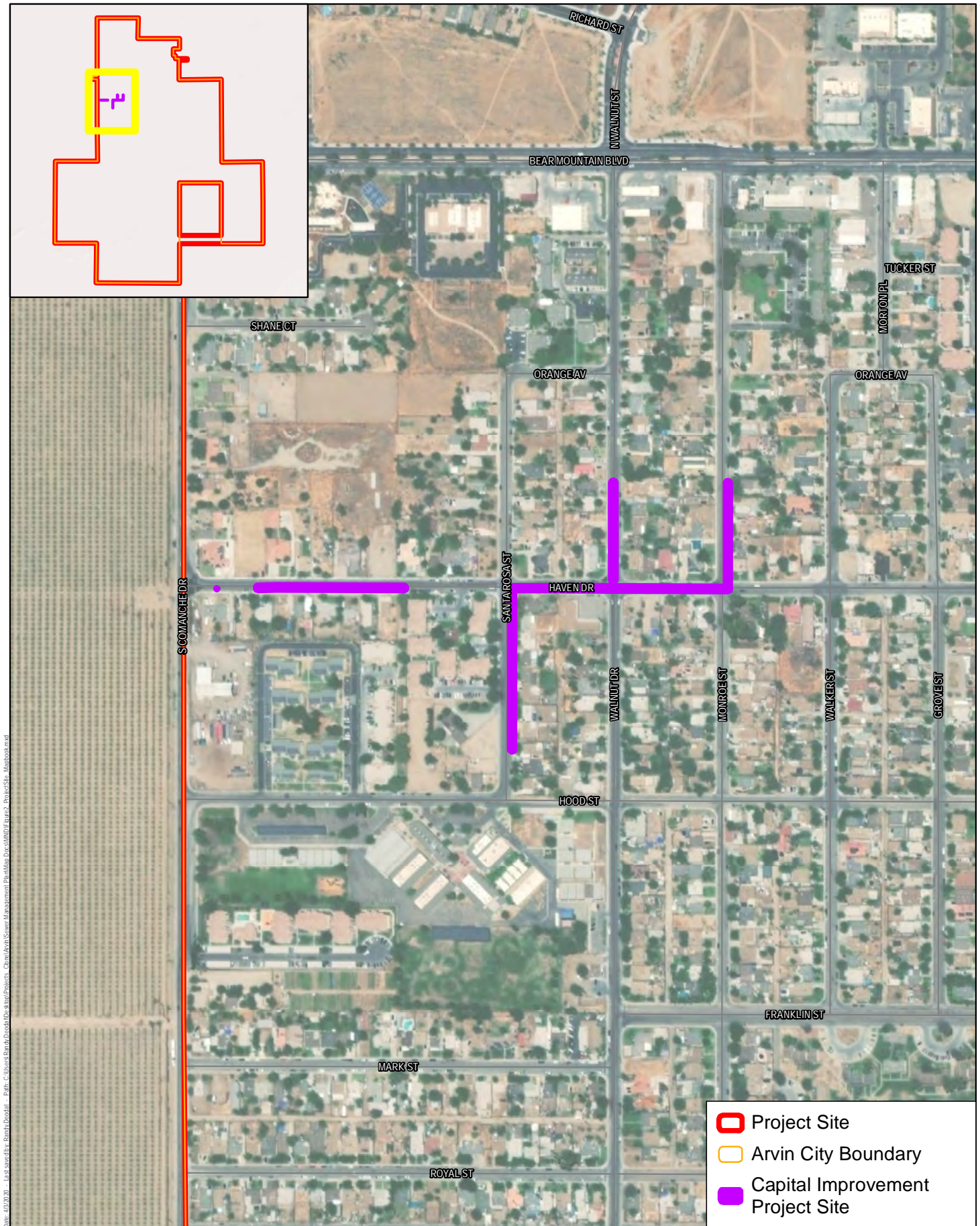


Figure 2d

East Di Giorgio Park CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

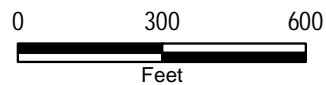
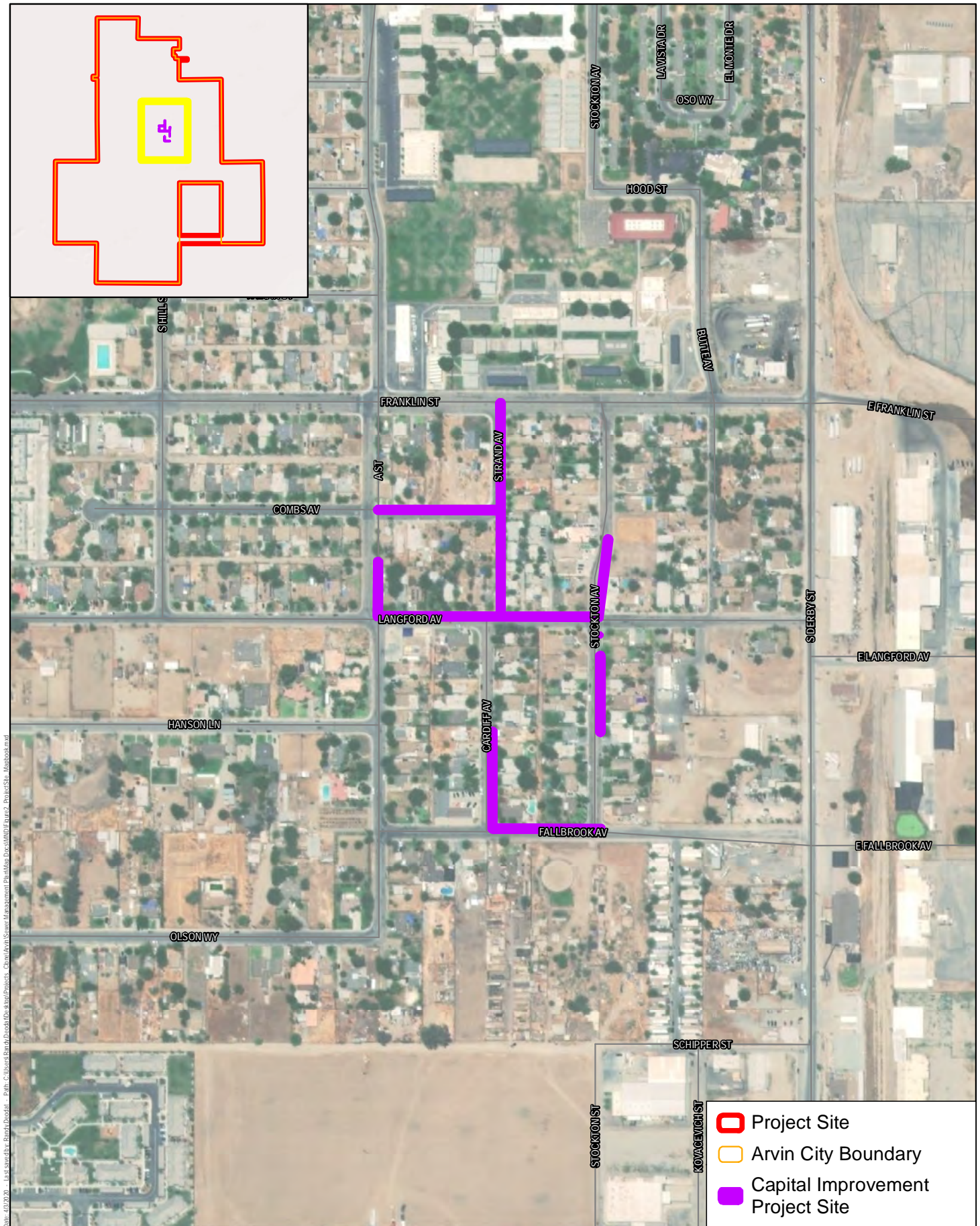


Figure 2e
Haven Drive CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

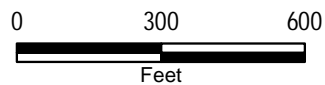
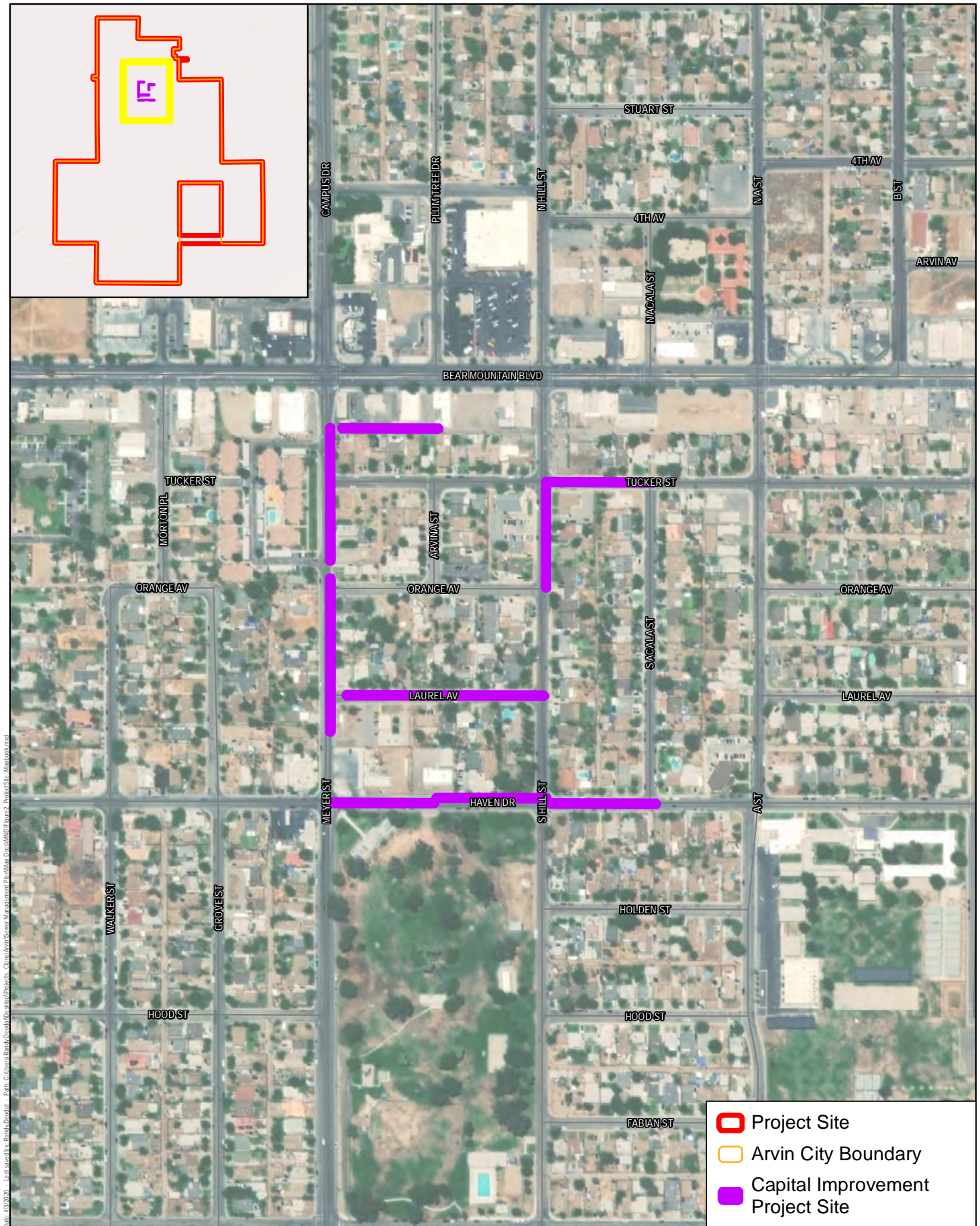


Figure 2f

Langford Avenue CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

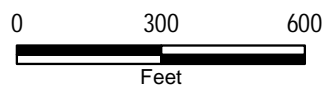
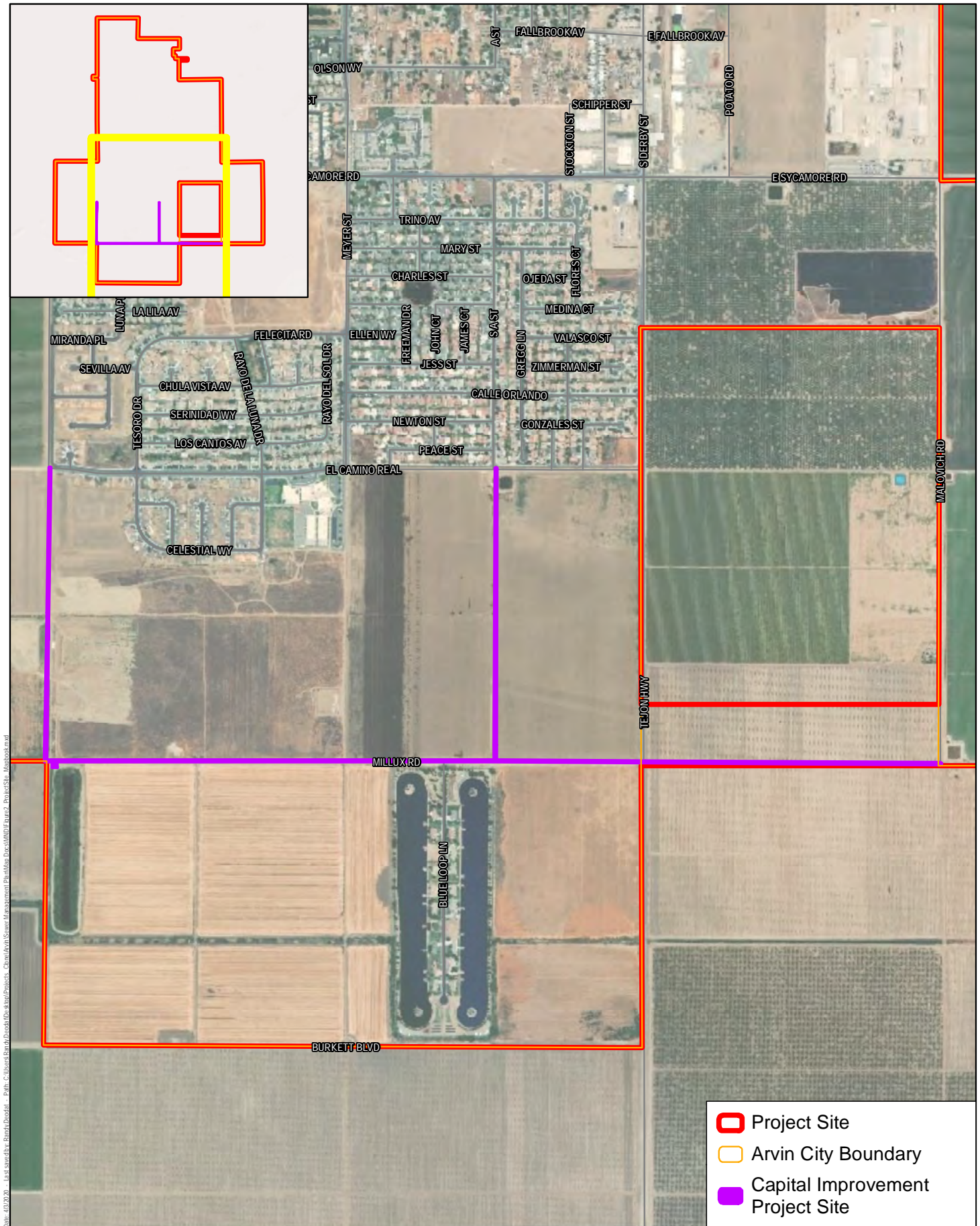


Figure 2g

Meyer Street CIP

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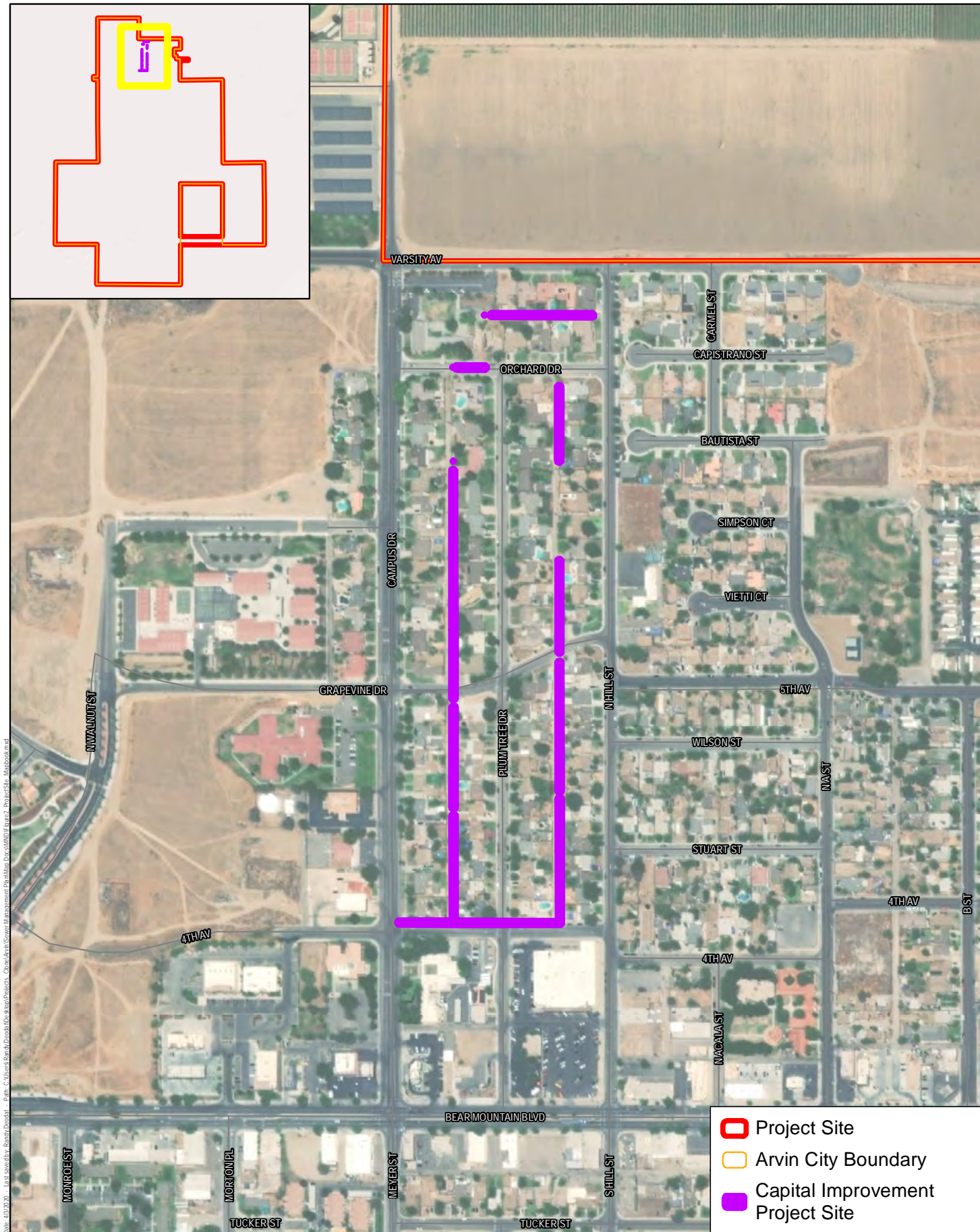


Source: Digital Globe Imagery 2018.

Figure 2h

Millux Road Pipeline and Pump Station CIP

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Source: Digital Globe Imagery 2018.



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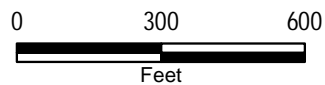


Figure 2i

Plumtree Drive Alleys CIP

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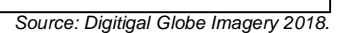
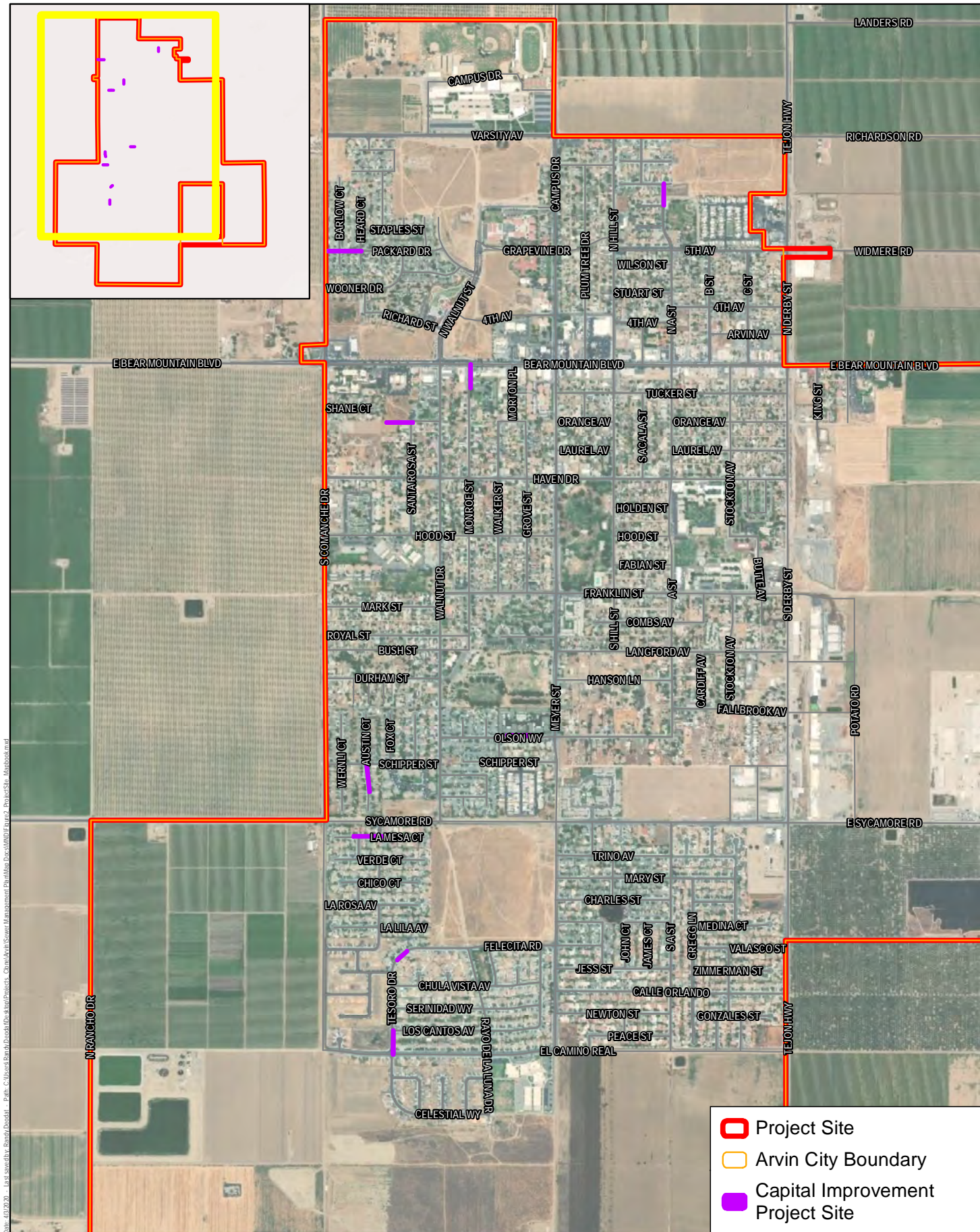


Figure 2j

Potato-Sycamore CIP

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Harris & Associates

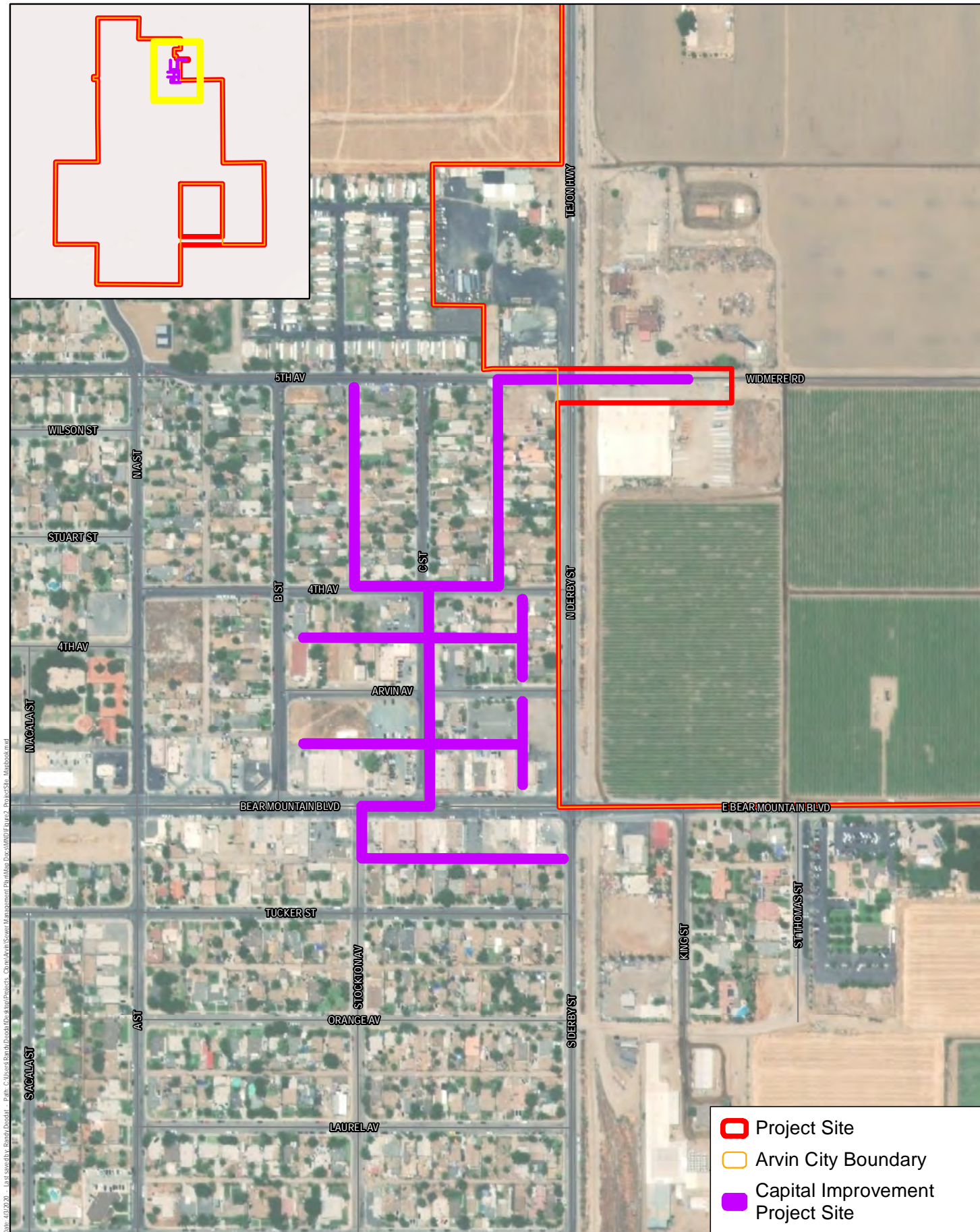


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Feet

Figure 2I

Small Spot Repair CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

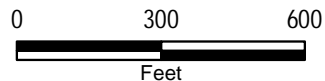
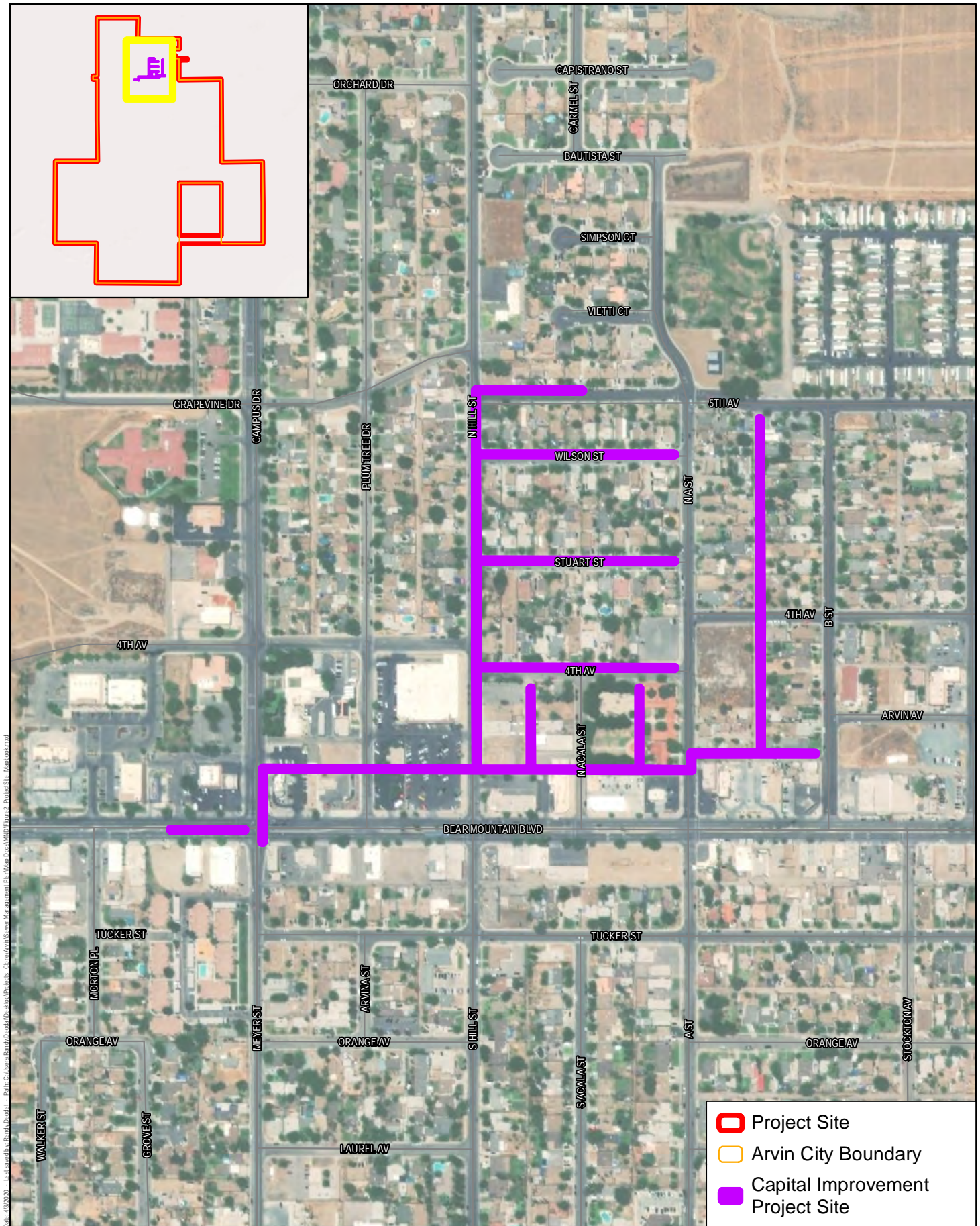


Figure 2m

Southeast Kovacevich Park CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

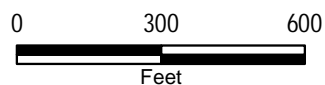
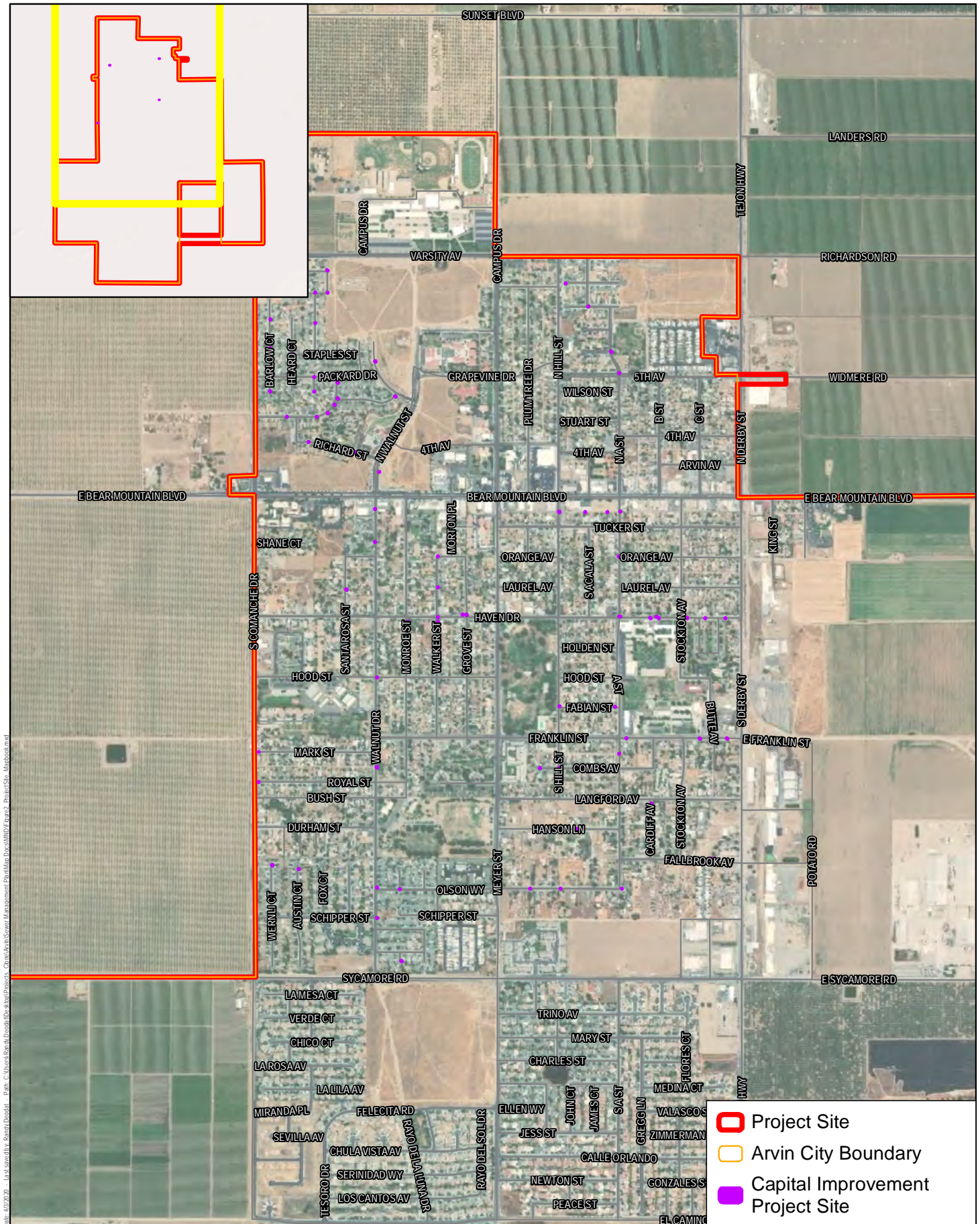


Figure 2n

Southwest Kovacevich Park CIP

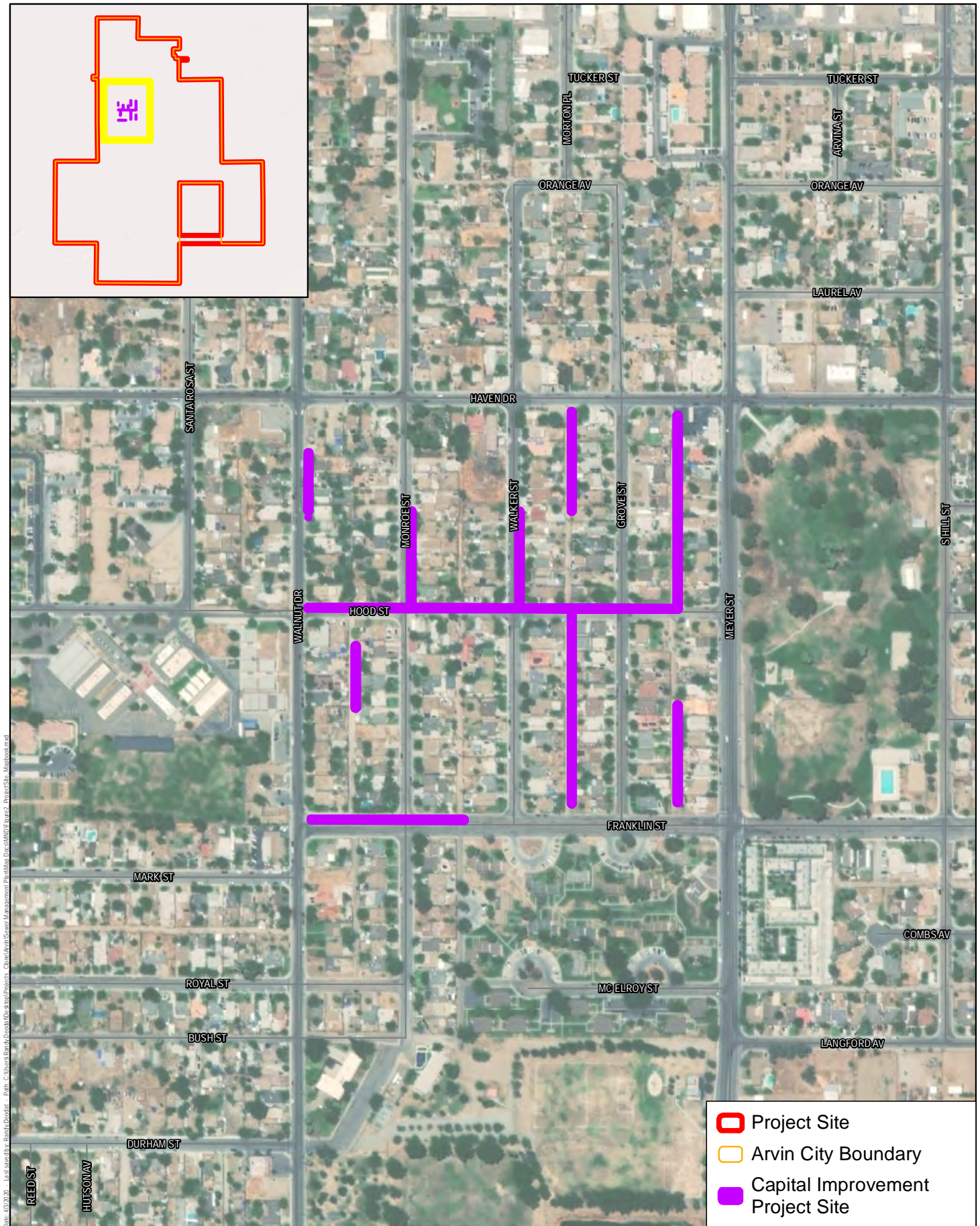
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Date: 4/17/2020 Last saved by: Randy Boudart Path: C:\Users\Randy Boudart\Desktop\Projects - Chavinda\Arvin Sewer Management Plan\Map Documents\CIP Figure 2 Project Site Mapbook.mxd



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Source: Digital Globe Imagery 2018.



Harris & Associates

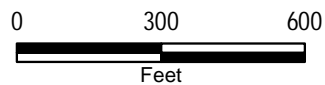
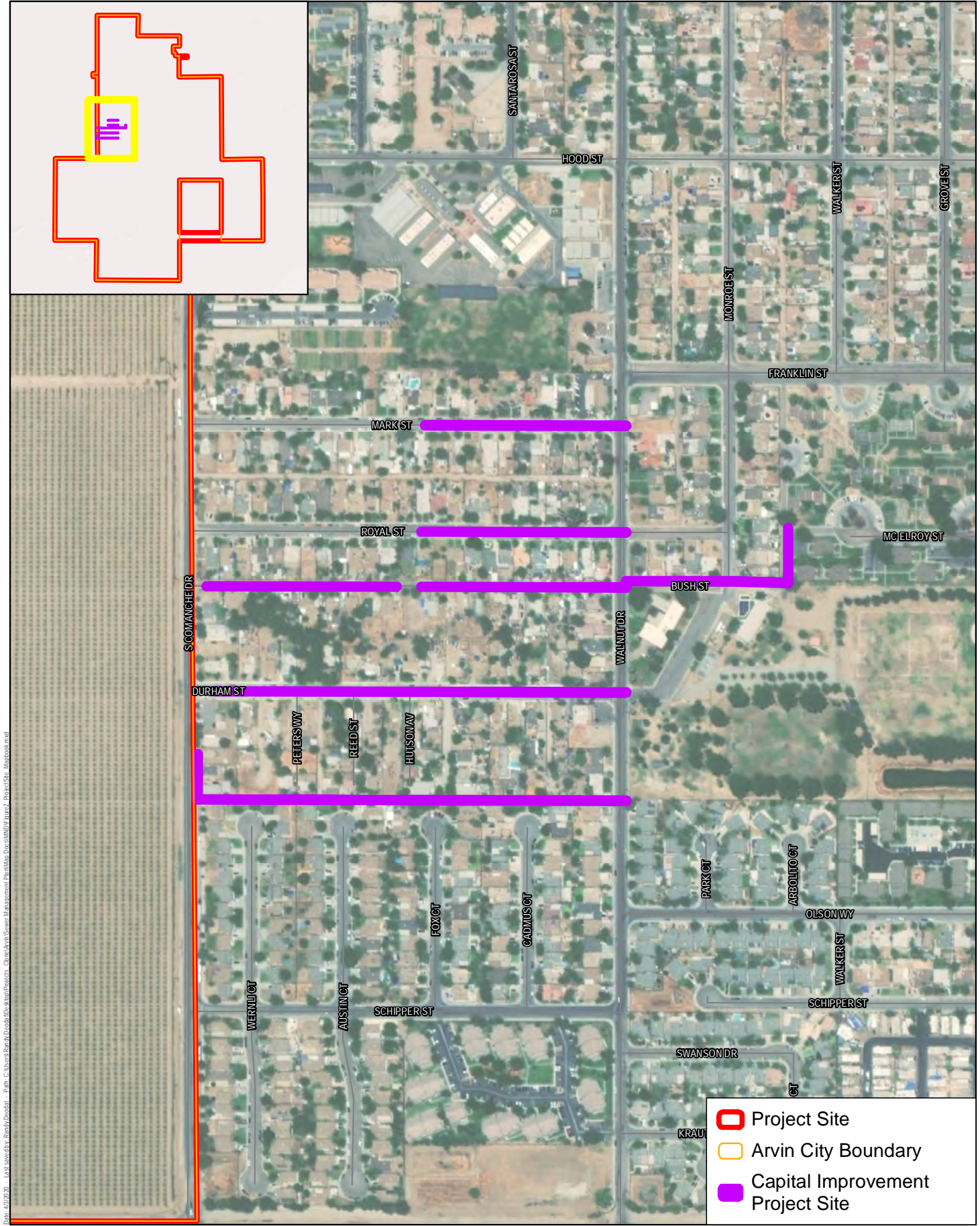


Figure 2p

West Di Giorgio Park CIP

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Harris & Associates

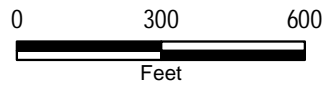


Figure 2q
West Smothermon Park CIP

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Section 2 Initial Study Checklist

The following discussion of potential environmental effects was completed in accordance with Section 15063 of the CEQA Guidelines to determine if the project may have a significant effect on the environment.

2.1 Project Information

1. **Project title:** City of Arvin Sanitary Sewer Master Plan
2. **Lead agency name and address:** City of Arvin
200 Campus Drive
P.O. Box 548
Arvin, California 93203
3. **Contact person name, address, and phone number:** Mitzy Cuxum, Senior Planner
Community Development Department
City of Arvin
141 Plumtree Drive
Arvin, California 93203
(661) 606-6066
4. **Project location:** City of Arvin
5. **Project sponsor's name and address:** Kristin Blackson, Senior Project Manager
Harris & Associates
600 B Street, Suite 2000
San Diego, California 92101
6. **General Plan designation:** Light Industrial; Heavy Industrial; Low-Density Residential; Medium-Density Residential; High-Density Residential; Estate Residential; Residential Reserve; General Commercial; Agricultural; Public Facilities: Schools; Parks.
7. **Zoning:** Light Industrial (LI); Heavy Industrial (HI); Low-Density Residential (LDR); Medium-Density Residential (MDR); High-Density Residential (HDR); Estate Residential (ER); Residential Reserve (RR); General Commercial (GC); Agricultural (AG); Public Facilities (PF); Schools (S); Parks (P).

- | | |
|--|---|
| 8. Description of project: | Refer to Section 1, Project Description, of this IS/MND. |
| 9. Surrounding land uses and setting: | Refer to Section 1 of this IS/MND. |
| 10. Other public agencies whose approval is required: | Refer to Section 1.6, Regulatory Requirements, Permits, and Approvals, of this IS/MND |
| 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? | No consultation has been requested. Refer to Section 2.4.18, Tribal Cultural Resources, of this IS/MND for details. |

Summary of Project Design Features

- PDF-AQ-1: PM₁₀ Emissions Reduction Best Management Practices
- PDF-NOI-1: Project Construction Activity Schedule

Summary of Required Mitigation Measures

- BIO-1: Weed Control
- BIO-2: Qualified Biologist
- BIO-3: Flagging, Fencing, and Demarcation
- BIO-4: Rare Plant Surveys
- BIO-5: Temporary Impacts to Non-Native Grassland
- BIO-6: Preconstruction Surveys
- BIO-7: U.S. Fish and Wildlife Service and California Department of Fish and Wildlife Permitting
- BIO-8: General Nest Surveys
- CR-1: Discovery of Tribal Cultural Resources
- CR-2: Human Remains
- HAZ-1: Health and Safety Plan
- HYDRO-1: Stormwater Pollution Prevention Plan
- HYDRO-2: Best Management Practices
- NOI-1: Construction Noise

2.2 Environmental Factors Potentially Affected

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

- | | | |
|---|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

2.3 Lead Agency 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 (state), including implementation of the mitigation measures identified herein. 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

Mitzy Cuxum, Senior Planner, City of Arvin

Date

2.4 Evaluation of Environmental Impacts

This section documents the screening process used to identify and focus on environmental impacts that could result from the project. The checklist portion of the IS begins below and includes explanations of each CEQA issue topic. CEQA requires that an explanation of all answers be provided, including a discussion of ways to mitigate any significant effects identified, along with this checklist. The following terminology is used to describe the potential level of significance of impacts:

- **No Impact.** The analysis concludes that the project would not affect the particular resource in any way.
- **Less than Significant.** The analysis concludes that the project would not cause substantial adverse change to the environment without the incorporation of mitigation.
- **Less than Significant with Mitigation Incorporated.** The analysis concludes that it would not cause substantial adverse change to the environment with the inclusion of mitigation agreed upon by the applicant.
- **Potentially Significant.** The analysis concludes that the project could result a substantial adverse effect or significant effect on the environment, even if mitigation is incorporated. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.

2.4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

a. Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact. A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. In addition, some scenic vistas are officially designated by public agencies or informally designated by tourist guides. A substantial adverse effect to a scenic vista would be to degrade the view from such a designated viewshed. The project site is primarily in urbanized areas of the City. Surrounding land uses are generally industrial, agricultural, commercial, and residential in nature, with State Route 223, a minor east–west highway, running through the northern portion of the project site.

Construction of the project would affect the visual environment during trenching, pipeline removal and installation, and on-site storage of equipment and materials. However, although views may be altered, construction would be short term and temporary. Temporary visual impacts could include views of large construction equipment, storage areas, and any potential signage. Construction equipment would be removed from the project site upon completion of the project, and the proposed pipelines would be placed underground and would not be visible. The only aboveground components of the project are the 257 manholes proposed for repairs and replacements and the 0.06-acre pump station proposed as a part of the Millux Road Pipeline and Pump Station CIP (Figure 2 series). The manhole repairs and replacements would not introduce new visual features to the project site. The pump station proposed at the southwestern corner of Millux Road and Comanche Drive would be

constructed in a previously disturbed area and would replace the existing pump station at the corner of El Camino Real and A Street. The project would not introduce new visual features that would impact a scenic vista or views in the surrounding area. Therefore, the project would not adversely affect a scenic vista, and impacts would be less than significant.

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less than Significant Impact. There are no officially designated or eligible state scenic highways in or surrounding the City (Caltrans 2020). The project would not cause substantial long-term damage to scenic resources or historic buildings because the majority of the sanitary sewer infrastructure being replaced or installed would be placed underground and would not be visible after construction. The pipeline alignments would primarily occur in the developed rights-of-way and urban and disturbed areas throughout the project site. As discussed previously in Section 2.4.1(a), the manhole repairs and replacements would not introduce new visual features to the project site. The pump station proposed at the southwestern corner of Millux Road and Comanche Drive would be constructed in a previously disturbed area and would replace the existing pump station at the corner of El Camino Real and A Street. The project would not introduce new visual features that would impact a scenic resource in the surrounding area. The project, to the extent feasible, would avoid impacts to trees and sensitive biological resources, and impacts to these biological resources would be mitigated to less than significant levels (see Section 2.4.4). Therefore, the project would not adversely affect a scenic resource, including natural or historic structures or a state scenic highway, and impacts would be less than significant.

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. As discussed in Sections 2.4.1(a) and 2.4.1(b), the project components would be primarily in the developed rights-of-way and urban and disturbed areas throughout the City. After construction, the majority of the sanitary sewer infrastructure would be underground, where it would not be visible or conflict with existing zoning or land uses. As discussed previously in Sections 2.4.1(a) and 2.4.1(b), the manhole repairs and replacements would not introduce new visual features to the project site. The pump station proposed at the southwestern corner of Millux Road and Comanche Drive would be constructed in a previously disturbed area and would replace the existing pump station at the corner of El Camino Real and A Street. The project would not introduce new visual features that would impact the visual character or quality of the surrounding area. Therefore, the project would not conflict with applicable zoning or other regulations governing scenic quality, and impacts would be less than significant.

d. Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

No Impact. As discussed in Sections 2.4.1(a) through 2.4.1(c), the majority of the project components would be underground and not visible once construction is complete. The project does not propose the use or construction of a light source. Temporary construction activities would occur during daytime hours, and no temporary nighttime lighting is anticipated during construction. Therefore, no significant impact related to creation of new sources of light or glare would result with development of the project.

2.4.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

- 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?**

Less than Significant Impact. Based on a review of the California Department of Conservation's Farmland Mapping and Monitoring Program maps, the majority of the project site is classified as Urban and Built-Up Land and Vacant or Disturbed Land. The southern portion of the project site and the lands surrounding the project site are classified as Prime Farmland and Grazing Land.

None of the land on or directly surrounding the project site is classified as Farmland of Statewide Importance. The project would temporarily impact land classified as Prime Farmland or Grazing Land. However, as discussed in Section 1.4, Project Construction, once construction is complete, the areas disturbed by project construction activity would be restored to their previous condition and function and, thus, would not result in the conversion of Prime or Unique Farmland or Farmland of Statewide Importance. Therefore, impacts would be less than significant.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site is not under a Williamson Act contract, and there are no known properties on the project site under this type of contract (DOC 2017). Therefore, construction of the project would not create conflicts with existing zoning for agricultural use or property under a Williamson Act contract, and no impact would result.

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 project site does not contain any forest lands and is not zoned for forest land, timberland, or timberland zoned Timberland Production (City of Arvin 2012). Therefore, development of the project would not result in the conversion of forest land to non-forest use, and no impact would result.

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As discussed in Section 2.4.2(c), the project site does not contain any forestland and is not zoned for forest land (City of Arvin 2012). Therefore, implementation of the project would not result in the loss or conversion of forest land to non-forest use, and no impact would result.

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?

Less than Significant Impact. As discussed in Section 2.4.2(a), although the project would temporarily impact land classified as Prime Farmland or Grazing Land, once construction is complete, the areas disturbed by the construction activity during pipeline or manhole improvements or installations would be restored to their previous condition and function and would not result in the conversion of farmland to non-agricultural use. The project site does not contain forest lands. Therefore, impacts regarding converting farmland or forest land to non-agricultural or non-forest use, respectively, would be less than significant.

2.4.3 Air Quality

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

The following discussion is based on a technical analysis completed by Harris & Associates for the proposed project. Model outputs are included as Appendix B.

Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The proposed project is in the San Joaquin Valley Air Basin. The San Joaquin Valley Air Pollution Control District (SJVAPCD) is the designated air quality control agency for the San Joaquin Valley Air Basin. California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (USEPA) are responsible for mobile sources (such as locomotives and motor vehicles) and other specified statewide sources (such as consumer products). Air districts adopt and enforce rules and regulations to ensure that emissions comply with national, state, and local emission standards and that emissions will not interfere with the attainment and maintenance of the state and federal ambient air quality standards.

At the federal level, the SJVAPCD is designated as extreme nonattainment for the 8-hour ozone standard, attainment for particulate matter measuring no more than 10 microns in diameter (PM₁₀) and carbon monoxide (CO), and nonattainment for fine particulate matter measuring no more than 2.5 microns in diameter (PM_{2.5}). At the state level, the SJVAPCD is designated as nonattainment for the 8-hour ozone, PM₁₀, and PM_{2.5} standards. Although the federal 1-hour ozone standard was revoked in 2005, areas must still attain this standard, and the SJVAPCD requested a California Environmental Protection Agency finding that the San Joaquin Valley has attained the standard based on 2011–2013 data.

The SJVAPCD has developed plans to attain state and federal standards for 1-hour ozone, 8-hour ozone, and PM_{2.5} and PM₁₀. These plans include the 2018 Plan for 1997, 2006, and 2012 PM_{2.5} Standards; 2016 Moderate Area Plan for the 2012 PM_{2.5} Standard; 2015 Plan for the 1997 PM_{2.5} Standard; 2012 PM_{2.5} Plan; 2008 PM_{2.5} Plan; 2007 PM₁₀ Maintenance Plan; 2016 Plan for the 2008 8-Hour Ozone Standard; 2014 Reasonably Available Control Technology (RACT) Demonstration for the 8-Hour Ozone State Implementation Plan (SIP); 2013 Plan for the Revoked 1-Hour Ozone Standard; 2009 RACT Demonstration for SIPs; 2007 Ozone Plan; 2004 Extreme Ozone Attainment Demonstration Plan; and the 2004 Revisions to the Carbon Monoxide Maintenance Plan. The SJVAPCD's air quality plans include emissions inventories to identify the sources and quantities of air pollutants, evaluate how well different control methods have worked, and demonstrate how air pollution will be reduced. The plans also use computer modeling to estimate future levels of pollution and ensure that the San Joaquin Valley Air Basin will meet air quality goals. The SJVAPCD's attainment plans are a regional component of the SIP.

The major sources of concern in the SJVAPCD are stationary sources and mobile sources such as those from heavy-duty trucks and passenger vehicles. These sources are subject to some of the toughest regulatory requirements in the nation. Emission reductions achieved through implementation of the SJVAPCD offset requirements are a major component of the SJVAPCD's air quality plans. The SJVAPCD's attainment plans demonstrate that project-specific emissions below the SJVAPCD's offset thresholds will have a less than significant impact on air quality. The SJVAPCD has determined to use offset thresholds as the SJVAPCD thresholds of significance for criteria pollutants for both stationary and mobile emission sources. The SJVAPCD's thresholds of significance for criteria pollutants are applied to evaluate regional impacts of project-specific emissions of air pollutants. Regional impacts of a project can be characterized in terms of total annual emissions of criteria pollutants and their impact on the SJVAPCD's ability to reach attainment. Thus, projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict or obstruct implementation of the SJVAPCD's air quality plan. The project proposes replacing and improving existing sewer infrastructure. The proposed new infrastructure would serve but not support growth beyond planned development. The proposed project would not result in a net increase in emissions from any source of concern. Operation of the proposed project would be similar to existing conditions, and no net increase in criteria pollutant emissions is anticipated. Therefore, the project would not conflict with or obstruct implementation of the SJVAPCD's air quality plans and would not result in a significant 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.

Existing Air Quality Levels

The SJVAPCD operates a network of ambient air quality monitoring stations throughout the San Joaquin Valley. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California Ambient Air Quality Standards and the National Ambient Air Quality Standards. The closest monitoring station to the project site is the Arvin – Di Giorgio Monitoring Station approximately 2.7 miles northeast of the City limits. Because data were not available for PM₁₀ and PM_{2.5} for this monitoring station, data were taken from the next closest monitoring station, the Bakersfield-California Monitoring Station, approximately 15.6 miles northwest of the City. Concentrations of pollutants from these stations over the last 3 years (2016–2018) are presented in Table 3.

**Table 3. Ambient Background Concentrations at Monitoring Station
(ppm unless otherwise indicated)**

Pollutant	Averaging Time	2016	2017	2018	CAAQS Threshold	NAAQS Threshold
Ozone (O ₃)	1 hour	0.108	0.107	0.111	0.09	n/a
	8 hour	0.091	0.088	0.100	0.070	0.070
PM ₁₀ (µg/m ³)	State maximum 24-hour concentration	92.2	143.6	142.0	50	n/a
	Federal maximum 24-hour concentration	90.9	138.0	136.1	n/a	150
PM _{2.5} (µg/m ³)	Maximum 24-hour concentration	66.4	101.8	98.5	n/a	35
	Annual average concentration	16.0	15.9	15.7	12	12.0

Source: CARB 2020.

Notes: CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; O₃ = ozone; PM₁₀ = particulate matter measuring no more than 10 microns in diameter; PM_{2.5} = fine particulate matter measuring no more than 2.5 microns in diameter; ppm = parts per million; µg/m³ = micrograms per cubic meter of air

As shown in Table 3, concentrations of 1-hour ozone (O₃), 8-hour O₃, PM₁₀, and PM_{2.5} exceeded both the California Ambient Air Quality Standards and National Ambient Air Quality Standards in 2016, 2017, and 2018.

Criteria Thresholds and Analysis Methodology

CEQA Guidelines, Appendix G, states that significance criteria established by the applicable air quality management or air pollution control district may be relied on to make determinations of impact. By its very nature, air pollution is largely a cumulative impact. Consequently, the SJVAPCD thresholds of significance for criteria pollutants are relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality (SJVAPCD 2015). The City uses the current SJVAPCD-adopted thresholds of significance for criteria pollutant emissions to determine whether project-level emissions would be cumulatively considerable. The relevant screening thresholds are listed in Table 4.

**Table 4. Air Quality Thresholds of Significance for
Criteria Pollutants During Construction**

Pollutant	Emissions (tons/year)
PM ₁₀	15
PM _{2.5}	15
NO _x	10
SO _x	27
CO	100
ROG	10

Notes: CO = carbon monoxide; NO_x = oxides of nitrogen; PM₁₀ = particulate matter measuring no more than 10 microns in diameter; PM_{2.5} = fine particulate matter measuring no more than 2.5 microns in diameter; ROG = reactive organic gas; SO_x = sulfur oxide

The thresholds listed in Table 4 represent screening-level thresholds that can be used to evaluate whether project-related construction emissions would have the potential to be cumulatively considerable. Emissions below the screening-level thresholds would not cause a significant impact.

Construction and Operation Emission Impacts

Construction of the individual CIPs involved in the project would take place over 20 years. The details and specifications of construction of individual CIPs are unknown at this time. Worst-case estimated criteria pollutant emissions were calculated using California Emissions Estimator Model (CalEEMod), Version 2016.3.2, and represent the anticipated maximum construction to occur in a single construction year. A maximum installation of 8,930 linear feet of pipeline may occur in a single year, including projects to support existing conditions and development-driven projects. This estimate is conservative for the remaining construction years because the worst-case scenario includes approximately 20 percent of all pipeline installation. It is assumed that all pipeline under the worst-case scenario would be installed using trenching. Trenches are anticipated to be approximately 3 feet wide and 8 feet deep, resulting in approximately 7,938 cubic yards of excavated material. The worst-case scenario also includes the replacement of two manholes and the demolition and replacement of the existing pump station. Manhole replacements are anticipated to require approximately 45 cubic yards of excavated material each for a total excavation of 8,027 cubic yards during the worst-case construction year for manhole and pipeline projects (approximately 20 percent of total excavation for all CIPs). It is assumed that approximately 50 percent of excavated material would be exported and the equivalent amount of fill would be imported. Demolition of the existing pump station is assumed to be 5,000 square feet, and the future pump station would be similarly sized. Emissions associated with the construction of the proposed project are shown in Table 5.

Table 5. Worst-Case Maximum Annual Air Pollutant Emissions (tons/year)

Construction Phase	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Pipeline Installation and Manhole Replacement	<1	1	1	<1	<1	<1
Pump Station Demolition and Replacement	<1	1	1	<1	<1	<1
Maximum Annual Emissions	<1	2	2	<1	<1	<1
SJVAPCD Threshold	10	10	100	27	15	15
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.

Notes: CO = carbon monoxide; NO_x = oxides of nitrogen; PM₁₀ = particulate matter measuring no more than 10 microns in diameter; PM_{2.5} = fine particulate matter measuring no more than 2.5 microns in diameter; ROG = reactive organic gas; SO_x = sulfur oxide

Emission quantities are rounded to the nearest whole number. Exact values are provided in Appendix B. Bold indicates threshold exceedance.

As shown in Table 5, construction of the CIPs would result in emission levels below the SJVAPCD thresholds. In addition, these project emissions are conservative and do not take into account compliance with District Regulation VIII, Fugitive PM₁₀ Prohibition. Emissions of PM₁₀ would further be reduced through incorporation of PDF-AQ-1, PM₁₀ Emissions Reduction Best Management Practices, as follows:

PDF-AQ-1: PM₁₀ Emissions Reduction Best Management Practices.

- Apply water to unpaved surfaces and areas
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas
- Limit or reduce vehicle speed on unpaved roads and traffic areas
- Maintain areas in a stabilized condition by restricting vehicle access
- Install wind barriers
- During high winds, cease outdoor activities that disturb soil
- Keep bulk materials sufficiently wet when handling
- Store and handle materials in a three-sided structure
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp
- Do not overload haul trucks; overloaded trucks are likely to spill bulk materials
- Cover haul trucks with a tarp or other suitable cover, or wet the tops of the load enough to limit visible dust emissions
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site
- Prevent trackout by installing a trackout device
- Clean up trackout at least once per day; if the trackout is along a busy road or highway, clean it up immediately
- Monitor dust-generating activities and implement appropriate measures for maximum dust control

Therefore, with the incorporation of PDF-AQ-1, air emissions associated with construction of the CIPs would be less than significant.

Following construction, no net increase in vehicular emissions is anticipated as a result of the proposed project. No net increase in maintenance trips would be required as a result of CIP implementation. The CIPs do not propose any components that would result in new sources of criteria pollutant emissions. Therefore, no increase in criteria pollutant emissions would occur during operation. Operational impacts would be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Some people are considered more sensitive to air pollutants than others, including those with pre-existing health problems, those who are close to an emissions source, and those who are exposed to air pollutants for long periods of time. The SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts defines "sensitive receptors" as those that are more susceptible to the effects of air pollution than the population at large and include "facilities that house or attract children, the elderly, and people with illnesses, hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors" (SJVAPCD 2015). Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be the most sensitive because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential areas are also considered sensitive to poor air quality because people in residential areas are often at home for extended periods.

Impacts to sensitive receptors are typically analyzed for operational-period CO hotspots and exposure to toxic air contaminants (TACs). An analysis of the project's potential to expose sensitive receptors to these pollutants is provided.

Carbon Monoxide Hotspots

A CO hotspot is an area of localized CO pollution caused by high vehicle intensity, such as congested intersections and parking garages. If a project increases average delay at signalized intersections operating at LOS E or F or causes an intersection that would operate at LOS D or better without the project to operate at LOS E or F with the project, a quantitative screening is required (SJVAPCD 2015).

The project consists of individual CIPs that include improvements to the existing sanitary sewer infrastructure, including replacement, upgrade, and installation of pipeline segments throughout the City. As stated previously, the details and specification of construction of these individual CIPs is unknown at this time. However, due to the anticipated short-term duration of each CIP, construction trips are not anticipated to add a significant amount of trips to the existing circulation system. Following construction, no net increase in vehicular emissions is anticipated as a result of

the proposed project, and no net increase in maintenance trips would be required as a result of CIP implementation. Therefore, there would be no potential for a CO hotspot or exposure of sensitive receptors to substantial, project-generated, local CO emissions. Impacts related to CO hotspots would be less than significant.

Toxic Air Contaminants

A TAC is defined by California law as an air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health. High-volume TAC generators listed as potential health risk sources include the operation of commercial diesel engines and truck stops, landfills and incinerators, and chemical manufacturers (CARB 2005). Construction activities would result in short-term project-generated emissions of diesel particulate matter from the exhaust of off-road, heavy-duty diesel equipment. CARB identified diesel particulate matter as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer time period. According to the California Environmental Protection Agency Office of Environmental Health Hazard Assessment, Health Risk Assessments (CalEPA 2001), which determine the exposure of sensitive receptors to TAC emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period or duration of activities associated with the project.

Relatively few pieces of off-road, heavy-duty diesel equipment would be used during construction of the CIPs, and each individual CIP construction period would be short term in duration. As shown in Table 5, maximum particulate matter emissions during construction would be below the SJVAPCD threshold. Diesel particulate matter would disperse beyond the construction area, and CIPs would be throughout the City so that individual receptors would only be exposed to limited emissions for a short duration. Combined with additional reductions in exhaust emissions from improved equipment, construction-related emissions would not expose sensitive receptors to substantial emissions of TACs. Impacts from construction emissions would be less than significant. In addition, following construction, no net increase in vehicle trips beyond existing maintenance trips would occur. As such, the proposed project would not have the potential to expose sensitive receptors to TACs from mobile sources to an extent that health risks could result. Impacts related to TACs would be less than significant.

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. During construction of the proposed project, diesel equipment operating at the site and asphalt during repaving of the roadways could generate nuisance odors at

adjacent properties. Though overall construction would last approximately 20 years, the individual CIPs would not occur simultaneously and would be developed over time. Each CIP construction period would be temporary and short term. During pipe and manhole replacements, there may be a very temporary exposure to sewage odors. Due to the temporary and short-term nature of construction for each CIP, odors associated with project construction would be less than significant.

According to the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts (2015), common types of facilities that are known to produce odors include wastewater treatment facilities, sanitary landfills transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing, fiberglass manufacturing, painting/coating operations, food processing facilities, feed lots/dairies, and rendering plants. The project proposes improvements to and replacement of the existing sanitary sewer infrastructure. The proposed improvements would require an increase in capacity through an upgrade of the current sanitary sewer system, which may result in new odors. However, these new pipelines would be enclosed and situated underground; therefore, new odors from operation of the sewer system would not be expected. Future operations would be similar to existing conditions without any anticipated new sources of objectionable odors that would affect a substantial number of people. Therefore, odor impacts associated with project operation would be less than significant.

2.4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any applicable policies protecting biological resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As discussed in Appendix A, a survey of the project site was conducted by City-approved biologists on October 14 and 15, 2019. The area surveyed included the 17 CIP sites plus a 500-foot buffer (survey area). Vegetation communities and land cover types were mapped in the survey area. The survey was conducted on CIP sites that were in or adjacent to undeveloped areas by walking meandering transects throughout the survey area and documenting plant and wildlife species and evaluating the potential for occurrence of special-status plant and wildlife species. The City-approved biologists identified the vegetation communities in the survey area by documenting visually observed habitat features present along the meandering transects, including existing plant species, structural characteristics, and general habitat quality (Figure 3 series). Refer to Appendix A for detailed results of the biological resources survey. As discussed in Section 1, the project site is defined by the limits of the 25-foot-wide construction activity zone. While the surveys and vegetation mapping documented the existing conditions within the 500-foot wide survey area,

potential impacts would be limited to the project site. Potential impacts to biological resources resulting from implementation of the project are discussed below.

Impact Analysis

- 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.

Special-Status Plant Species

The project has the potential to result in direct and indirect impacts to special-status plant species, including the federally endangered and California Rare Plant Rank listed 1B.1 species San Joaquin woollythreads (*Monolopia congdonii*) (CDFW 2020; CNPS 2020). In total, 0.98 acre of suitable grassland habitat for San Joaquin woollythreads exists on the Campus Drive Alley and Potato-Sycamore CIP sites. However, the non-native grasslands on the Campus Drive Alley and Potato-Sycamore CIP sites are dominated by non-native grasses and forbs like bromes and wild oat, potentially reducing the likelihood of the presence of this native sensitive species. Because the survey was not conducted during the blooming period for this and other special-status plant species, the presence of this sensitive plant species may not have been identified if it were dormant or difficult to identify. Therefore, if this species was present but went undetected before construction activities commenced, significant direct and indirect impacts would result.

In addition, potential indirect impacts to San Joaquin woollythreads could result from the introduction of invasive weed species and soil erosion and sedimentation during construction in the 0.98 acre of suitable non-native grassland habitat on the Campus Drive Alley and Potato-Sycamore CIP sites.

Potential direct and indirect impacts to 0.98 acre of non-native grassland habitat during construction of the Campus Drive Alley and Potato-Sycamore CIPs could represent a significant impact to special-status plant species, and avoidance, minimization, or mitigation measures would be required. Implementation of standard erosion-control measures and stormwater-quality BMPs (required through the construction permit process) during construction would reduce potential indirect impacts to special-status plant species from soil erosion and sedimentation to less than significant. As a condition of approval, implementation of Mitigation Measures BIO-1 through BIO-5 for the 0.28 acre of non-native grassland habitat impacted during construction of the Campus Drive Alley CIP and 0.70 acre of non-native grassland habitat impacted by the Potato-Sycamore CIP would reduce direct and indirect impacts to special-status plant species to less than significant.

Special-Status Wildlife Species

The project has the potential to result in direct and indirect impacts to special-status wildlife species, including the state species of special concern burrowing owl (*Athene cunicularia*), the state species of special concern northern harrier (*Circus hudsonius*), the state critically threatened Swainson's hawk (*Buteo swainsoni*), the federally endangered and state threatened San Joaquin kit fox (*Vulpes macrotis mutica*), and the federally endangered and state endangered blunt-nosed leopard lizard (*Gambelia sila*) (CDFW 2020; USFWS 2020). Approximately 0.98 acre of non-native grassland and 6.40 acres of disturbed areas with patches of bare ground and numerous mammal burrows that burrowing owl could use for nesting exist on the project sites for the Campus Drive Alley, Comanche Drive, Millux Road Pipeline and Pump Station, Potato-Sycamore, and Small Spot Repair CIPs. These habitats are also suitable for San Joaquin kit fox and blunt-nosed leopard lizard to use for burrowing and foraging. Large, mature trees adjacent to non-native grassland, disturbed areas, and agricultural lands occur throughout the survey area and are suitable for nesting by northern harrier and Swainson's hawk. The Campus Drive Alley, Comanche Drive, Millux Road Pipeline and Pump Station, Potato-Sycamore, and Small Spot Repair CIP sites include 0.98 acre of non-native grassland, 2.35 acres of agricultural fields, and 6.40 acres of disturbed areas for burrowing owl, northern harrier, and Swainson's hawk to use for foraging. Construction activities associated with these CIPs occurring in the habitats that could support northern harrier, burrowing owl, San Joaquin kit fox, Swainson's hawk, and blunt-nosed leopard lizard could result in significant direct and indirect impacts to these special-status wildlife species.

The potential impacts to 0.98 acre of non-native grassland, 2.35 acres of agricultural fields, and 6.40 acres of disturbed land resulting from construction of the Campus Drive Alley, Comanche Drive, Millux Road Pipeline and Pump Station, Potato-Sycamore, and Small Spot Repair CIPs could represent a significant impact to special-status wildlife species, and avoidance, minimization, or mitigation measures would be required. Table 6, Direct and Indirect Impacts to Special-Status Wildlife Species, summarizes the CIPs that have the potential to result in direct or indirect impacts to special-status wildlife species.

Table 6. Direct and Indirect Impacts to Special-Status Wildlife Species

Species	Campus Drive Alley CIP	Comanche Drive CIP	Millux Road Pipeline and Pump Station CIP	Potato-Sycamore CIP	Stand-Alone Manhole Replacement CIP
Northern harrier	Direct and indirect	Indirect only	Direct and indirect	Direct and indirect	Indirect only
Blunt-nosed leopard lizard	Direct and indirect	Indirect only	Direct and indirect	Direct and indirect	Indirect only
Burrowing owl	Direct and indirect	Indirect only	Direct and indirect	Direct and indirect	Indirect only
San Joaquin kit fox	Direct and indirect	No impacts	Direct and indirect	Direct and indirect	No impacts
Swainson's hawk	Direct and indirect	Indirect only	Direct and indirect	Direct and indirect	Indirect only

Note: Only CIPs that may result in direct or indirect impacts to special-status wildlife species are listed. All other CIPs would not likely result in direct or indirect impacts to special-status wildlife species.

As a condition of approval, implementation of Mitigation Measures BIO-2, BIO-3, and BIO-6 through BIO-8 for the 0.28 acre of non-native grassland habitat on the Campus Drive Alley CIP site, 0.02 acre of agricultural land and 0.32 acre of disturbed land on the Comanche Drive CIP site, 1.73 acres of agricultural land and 6 acres of disturbed land on the Millux Road Pipeline and Pump Station CIP site, 0.70 acre of non-native grassland on the Potato-Sycamore CIP site, and 0.08 acre of agricultural land on the Small Spot Repair CIP site would reduce direct and indirect impacts to special-status wildlife species to less than significant.

Implementation of the 17 CIPs has the potential to impact bird species that are protected under the Migratory Bird Treaty Act and California Fish and Game Code, Section 3504. If construction is conducted during the bird-breeding season (January 1 through August 31), temporary direct impacts from disturbance and displacement of nesting birds during vegetation removal could result in significant direct impacts to bird species protected under the Migratory Bird Treaty Act. Indirect impacts from construction noise and vibration during clearing, grubbing, and trenching activities, if conducted during the bird-breeding season, could result in significant indirect impacts to bird species protected under the Migratory Bird Treaty Act. As a condition of approval, implementation of Mitigation Measure BIO-8 for the 17 CIPs would reduce potential direct and indirect impacts to nesting birds to less than significant.

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 Impact with Mitigation Incorporated. While no southern willow scrub riparian habitat would be directly impacted during project construction, potential indirect impacts could result from the introduction of invasive weed species and soil erosion and sedimentation during

construction of the Millux Road Pipeline and Pump Station CIP adjacent to the southern willow scrub habitat (Figure 4 series, Impacts to Vegetation Communities). Construction activities associated with the Campus Drive Alley and Potato-Sycamore CIPs would result in temporary direct impacts to approximately 0.98 acre of non-native grassland on these CIP sites (Figure 4 series). In addition, potential indirect impacts to non-native grassland could result from the introduction of invasive weed species and soil erosion and sedimentation during construction in the 0.98 acre of non-native grassland on the Campus Drive Alley and Potato-Sycamore CIP sites. The temporary direct and indirect impacts to non-native grassland during construction of the Campus Drive Alley and Potato-Sycamore CIPs would be significant and would require mitigation.

Upon completion of the Campus Drive Alley and Potato-Sycamore CIPs, the 0.98 acre of non-native grassland disturbed during construction would be restored to its previous condition and function. Implementation of standard erosion-control measures and stormwater-quality BMPs (required through the construction permit process) during construction of the Millux Road Pipeline and Pump Station CIP would reduce potential indirect impacts to southern willow scrub and non-native grassland from soil erosion and sedimentation to less than significant. As a condition of approval, implementation of Mitigation Measures BIO-1 and BIO-5 for the 0.28 acre of non-native grassland habitat impacted during construction of the Campus Drive Alley CIP and the 0.70 acre of non-native grassland habitat impacted by the Potato-Sycamore CIP would reduce direct and indirect impacts to non-native grassland habitat to less than significant.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impacts with Mitigation Incorporated. Two disturbed potential aquatic resources with associated riparian vegetation were documented in the survey area during the survey conducted on October 14 and 15, 2019 (Figure 5 series, Aquatic Resources). Three open water ponds, one in the southwestern portion of the survey area and two in the eastern portion, were documented. The open water pond in the southwestern portion of the survey area is surrounded by southern willow scrub. The two open water ponds in the eastern portion of the survey area have no associated vegetation surrounding them. All three of these open water ponds appear to be used as stock or irrigation ponds by the surrounding agricultural industry. Two additional open water ponds were mapped in the southeastern portion of the survey area. However, these ponds were artificially created for a residential development and are surrounded by associated ornamental vegetation. None of the aquatic resources documented in the survey area are on the project site and are not expected to be impacted by project construction activity.

An aquatic resources delineation was not completed for the 0.80 acre of disturbed potential aquatic resources or 5.77 acres of open water. However, standing water and hydrophytic vegetation were observed in and around the aquatic areas and one of the open water ponds in the southwestern

portion of the survey area. The vegetation observed included narrowleaf cattail (*Typha angustifolia*), saltcedar (*Tamarix ramosissima*), California mugwort (*Artemisia douglasiana*), and sedges (*Carex* spp.).

While impacts to aquatic resources are not expected from implementation of the project, indirect impacts could result from the introduction of invasive weed species and soil erosion and sedimentation during construction of the Millux Road Pipeline and Pump Station, Potato-Sycamore, and Small Spot Repair CIPs adjacent to the aquatic resources. Implementation of Mitigation Measure BIO-1 and standard erosion-control measures and stormwater-quality BMPs (required through the construction permit process) during construction of the Millux Road Pipeline and Pump Station, Potato-Sycamore, and Small Spot Repair CIPs would reduce potential indirect impacts to aquatic resources from invasive plant species and soil erosion and sedimentation to less than significant. As discussed previously, direct impacts to potential state or federal jurisdictional aquatic resources adjacent to the project site are not anticipated to occur as a result of project construction. Therefore, impacts to state or federally protected aquatic resources would be less than significant.

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 Impact. The County's Draft Valley Floor Habitat Conservation Plan (VFHCP) includes the City (Kern County 2006). The Draft VFHCP Program Area encompasses 3,110 square miles (approximately 1,990,400 acres) and generally includes most of the San Joaquin Valley Floor portion of the County up to an elevation of 2,000 feet. The Draft VFHCP covered species include plants and wildlife with both state- and federally listed status as threatened or endangered and California species of special concern status. Fourteen plant species and 11 wildlife species known to occur in the Draft VFHCP Program Area are addressed by the Draft VFHCP. The Draft VFHCP is intended to provide adequate conservation of sensitive vegetation communities, including non-native grassland, valley sink saltbrush, and valley sink scrub, in the Draft VFHCP Program Area. Because the Draft VFHCP has not yet been approved, the City is not a signatory for the plan. However, the City complies with policies protecting biological resources identified in the Conservation and Open Space Element of the City's General Plan Update and the County's General Plan Land Use, Open Space, and Conservation Element, which include similar goals and policies outlined in the Draft VFHCP (Appendix A).

The Draft VFHCP does not identify any areas in or surrounding the survey area as functioning as official or potential wildlife migration corridors or habitat linkages. Due to the agricultural and urban land uses present throughout most of the County, potential wildlife corridors and habitat connectors in the Draft VFHCP can include cultivated lands, such as canals, ditches, roads, and utility rights-of-way, and culverts under roadways. The County is within the major bird migration

corridor of the western United States, the Pacific Flyway. Wildlife refuges in the County, such as the Kern National Wildlife Refuge, have been designated to provide rest stops along the annual migration routes for migratory bird species. Because the survey area is within the Pacific Flyway migratory corridor, the survey area has the potential to provide habitat for migratory birds traveling between their nesting and wintering areas.

The survey area is not likely to be used as a wildlife movement corridor or nursery site because it lacks native vegetation communities; is surrounded by agricultural and urban land uses, including State Route 223; and is not connected to any other open space areas. Furthermore, no critical habitat is present in the survey area. Therefore, impacts related to wildlife corridors or nursery sites resulting from project implementation would be less than significant.

e. Would the project conflict with any applicable policies protecting biological resources?

No Impact. As discussed previously in Section 2.4.4(d), projects within the City comply with policies protecting biological resources identified in the Conservation and Open Space Element of the City's General Plan Update and the County's General Plan Land Use, Open Space, and Conservation Element (Appendix A). Therefore, no impacts related to conflicts with applicable policies or ordinances protecting biological resources would result from implementation of the project.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?

No Impact. As discussed previously in Section 2.4.4(e), the City complies with the conservation policies identified in the City's and County's General Plans. Therefore, no impacts to local conservation plans would result from the implementation of the project.

Mitigation Measures

The following mitigation is required as part of the project to ensure that potential impacts to biological resources are mitigated to levels that are less than significant:

BIO-1: Weed Control. The project proponent(s) shall implement the following weed control methods to minimize the establishment and spread of non-native and invasive weed species on the project site during construction activities:

1. Seeds and plant materials used for revegetation shall be certified weed free.
2. Straw materials such as those used for erosion control shall be certified weed free.
3. Temporarily disturbed non-native grassland areas shall be revegetated with local native plant species as soon as construction is complete to reduce erosion and to inhibit the establishment of non-native and invasive weeds.

BIO-2: Qualified Biologist. Prior to the start of construction, the project proponent(s) shall submit written documentation to the City of Arvin Community Development Department Senior

Planner for approval, stating that a qualified biologist(s) has been retained to implement the project mitigation measures in areas designated as biologically sensitive in the Biological Resources Letter Report. The qualified biologist(s) shall be responsible for implementing project mitigation measures, coordinating and communicating requirements to the project proponent(s) and the City of Arvin Community Development Department Senior Planner, and facilitating consultation with the wildlife and resource agencies as required.

- BIO-3: Flagging, Fencing, and Demarcation.** The project proponent(s), in consultation with the qualified biologist(s), shall designate the limits of the construction area, where accessible, within the City of Arvin rights-of-way using fencing, signage, or stakes in the field and shall review the placement of fencing, signage, or stakes with the contractor in accordance with the construction plans. Aquatic resources and riparian areas within 50 feet of the construction area, where accessible and feasible, shall also be demarcated in the field and avoided by construction personnel and activity.

Rare Plants

- BIO-4: Rare Plant Surveys.** During the spring (April 1 through June 30) and prior to construction, the qualified biologist shall conduct a preconstruction rare plant survey in the 0.98-acre non-native grassland potential impact area.

In the event a rare or listed plant species is observed, the project proponent(s) shall consult with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to establish avoidance, minimization, and mitigation measures. If the wildlife agencies require the measures, species-specific protocol surveys shall be conducted by the qualified biologist pursuant to the agreed-upon terms.

Upland Habitat

- BIO-5: Temporary Impacts to Non-Native Grassland.** Temporary impacts to 0.98 acre of non-native grassland shall be mitigated by the project proponent(s) through revegetation of the areas impacted during project construction using a weed-free native plant seed palette.

Special-Status Wildlife Species

- BIO-6 Preconstruction Surveys.** Prior to the start of construction, a preconstruction survey shall be completed by the qualified biologist(s) checking suitable non-native grassland and disturbed land on the project site for presence or sign of burrowing owl (*Athene cunicularia*), San Joaquin kit fox (*Vulpes macrotis mutica*), Swainson's hawk (*Buteo swainsoni*), blunt-nosed leopard lizard (*Gambelia sila*), and any other sensitive wildlife species. If sensitive wildlife species are observed during the preconstruction survey or

during construction activities, the qualified biologist(s), in coordination with the City of Arvin Community Development Department Senior Planner, shall designate the limits (including appropriate buffers) of the occupied habitat using fencing, signage, or stakes for avoidance by construction personnel and activity.

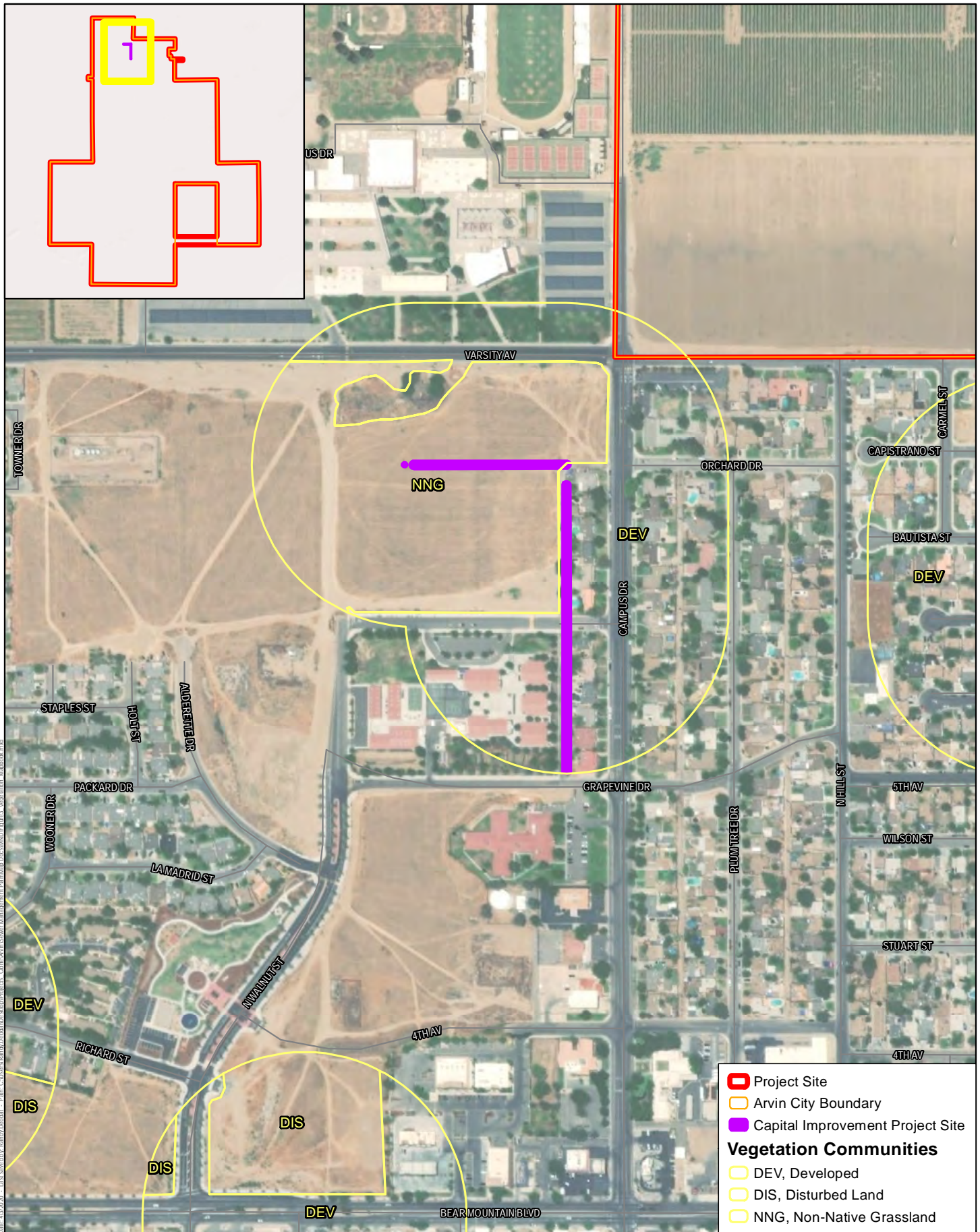
- BIO-7: U.S. Fish and Wildlife Service and California Department of Fish and Wildlife Permitting.** If impacts to the special-status species including burrowing owl (*Athene cunicularia*), San Joaquin kit fox (*Vulpes macrotis mutica*), Swainson's hawk (*Buteo swainsoni*), and blunt-nosed leopard lizard (*Gambelia sila*) cannot be avoided, the qualified biologist(s), on behalf of the project proponent(s), shall consult with the U.S. Fish and Wildlife and California Department of Fish and Wildlife for authorization through the context of an incidental take permit.

Nesting Birds

- BIO-8: General Nest Surveys.** No grubbing, trimming, or clearing of vegetation, primarily non-native grassland species and a few shrubs, from the project site shall occur during the general bird-breeding season (January 1 through August 31). If grubbing, trimming, or clearing of vegetation cannot feasibly occur outside of the general bird-breeding season, the qualified biologist(s) shall perform a preconstruction nesting bird survey no more than 72 hours prior to the start of vegetation grubbing, trimming, or clearing to determine if active bird nests are present in the affected areas. Should an active migratory bird nest be located, the qualified biologist(s) shall direct vegetation clearing away from the nest until the project biologist has determined that the young have fledged or the nest has failed. If there are no nesting birds (including nest building or other breeding or nesting behavior) on the project site, grubbing, trimming, or clearing shall proceed.

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Source: Digital Globe Imagery 2018.



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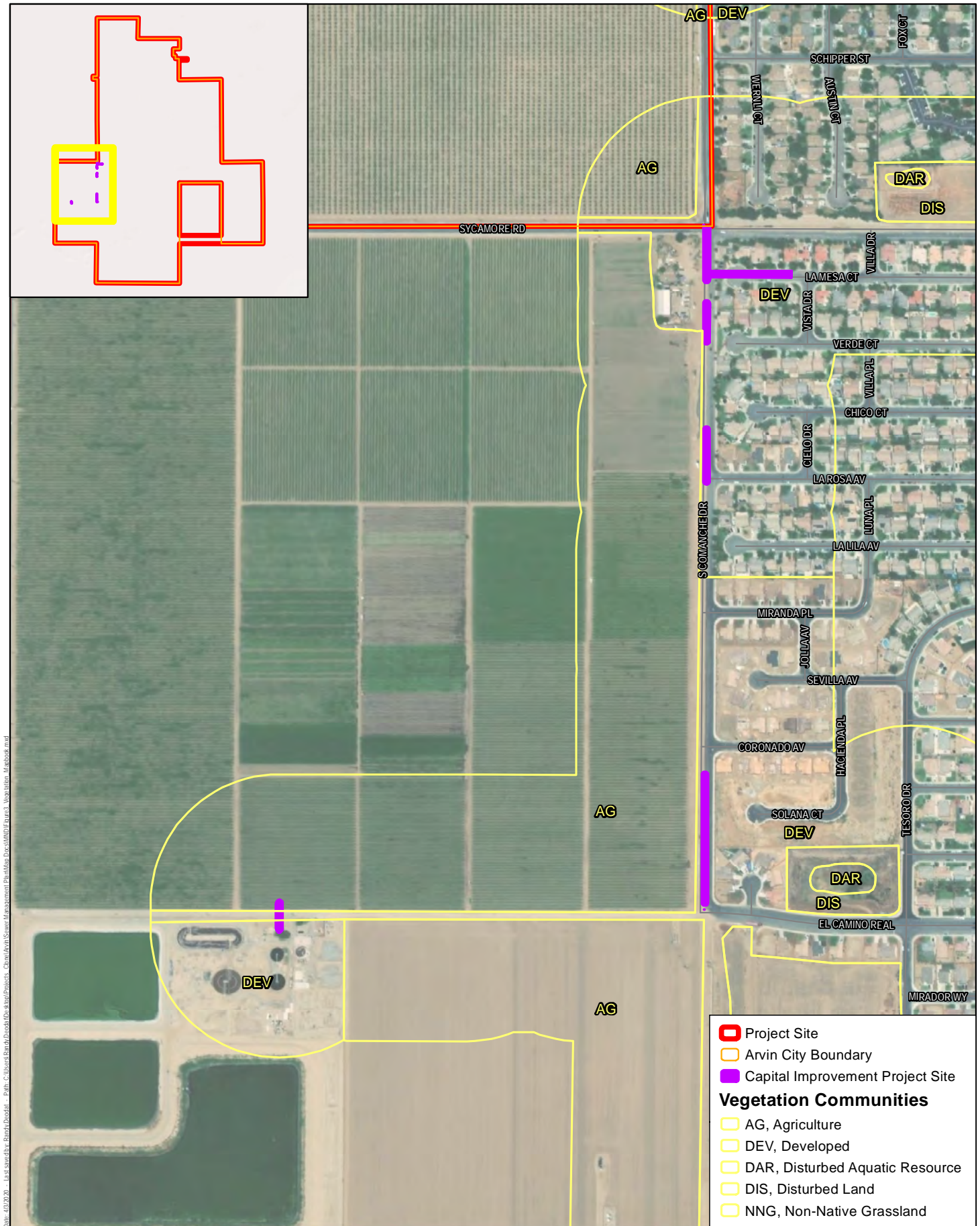


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Feet

Figure 3a

Campus Drive Alley CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

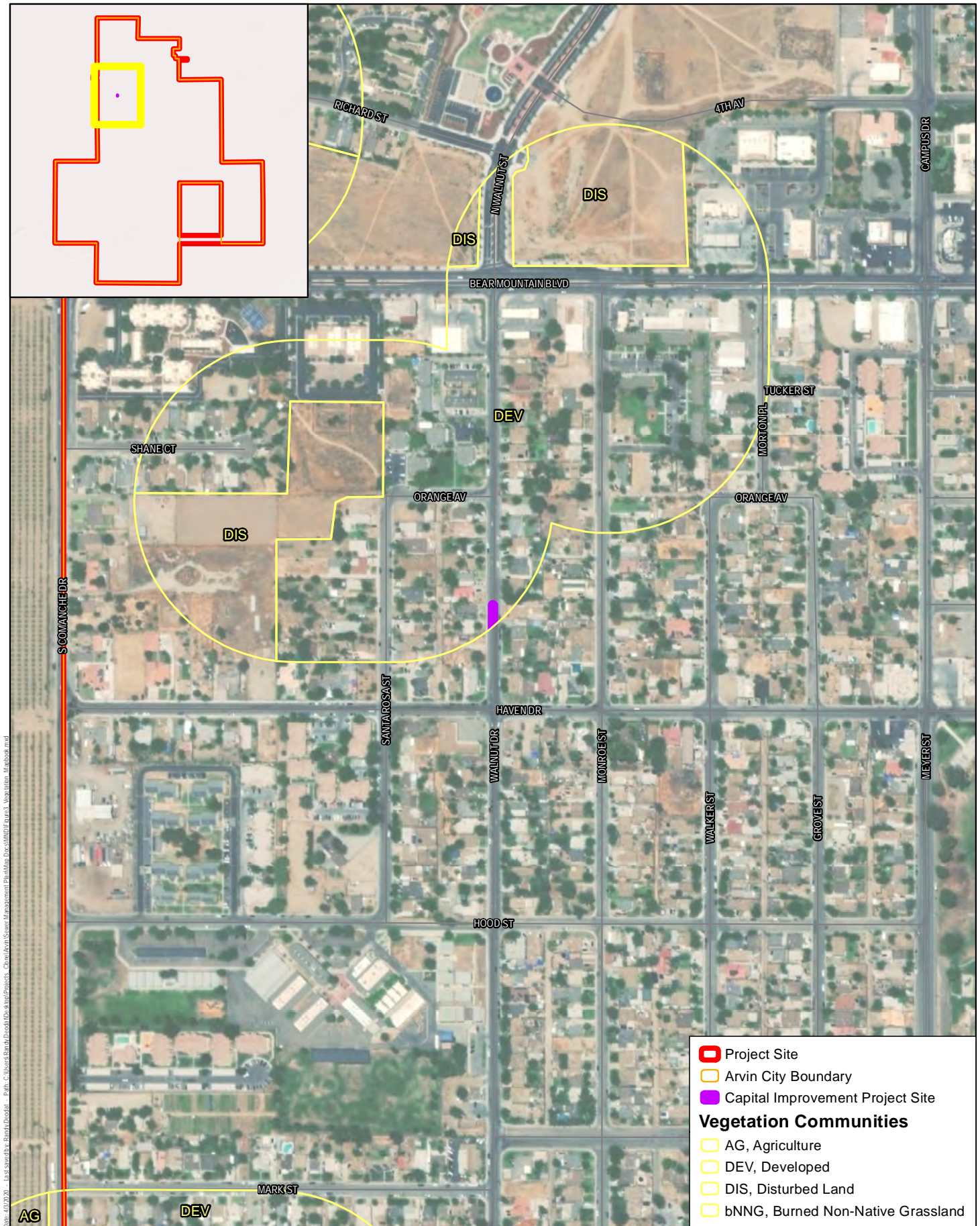


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Figure 3b

Comanche Drive CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

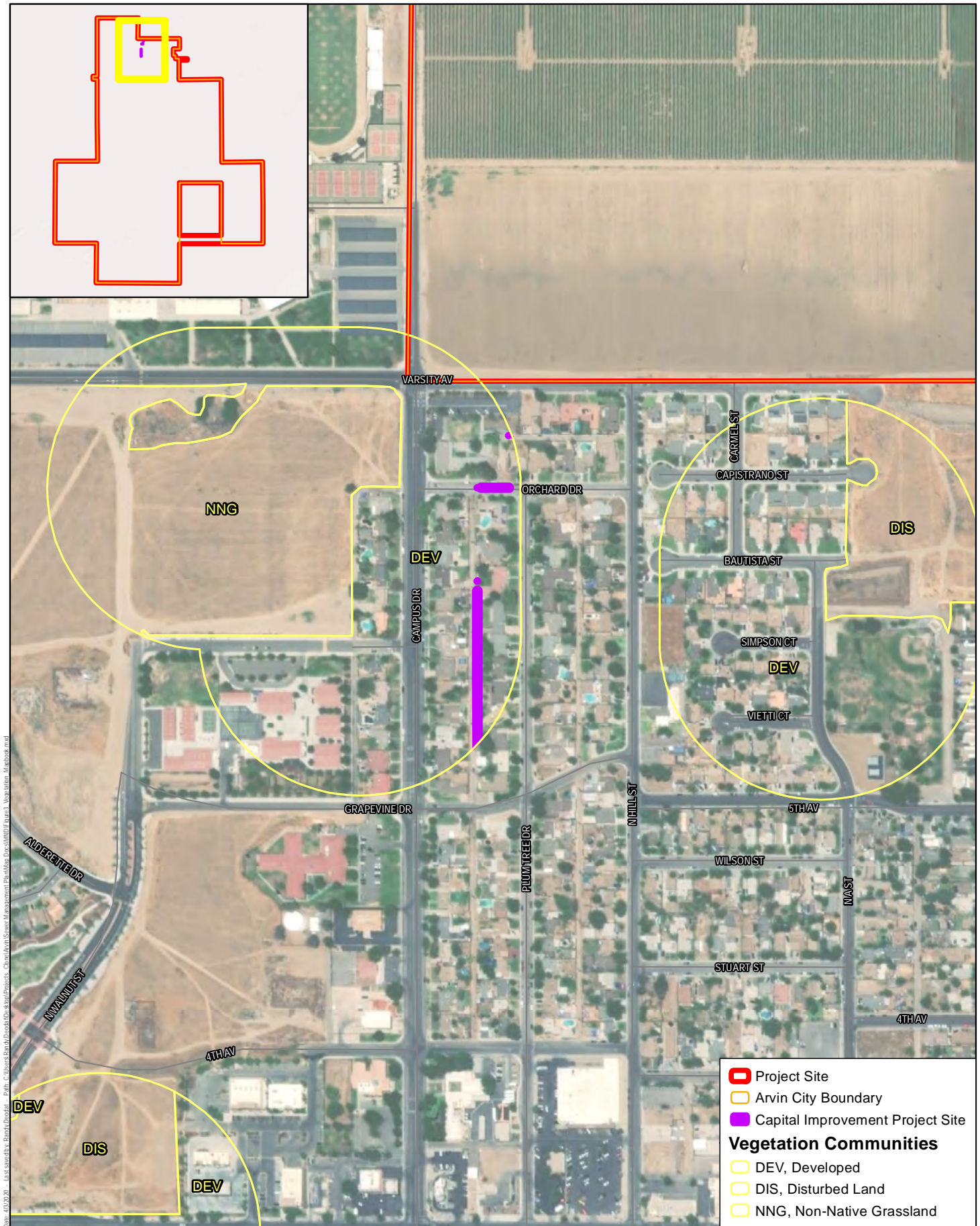


Figure 3c
Haven Drive CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

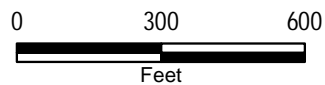
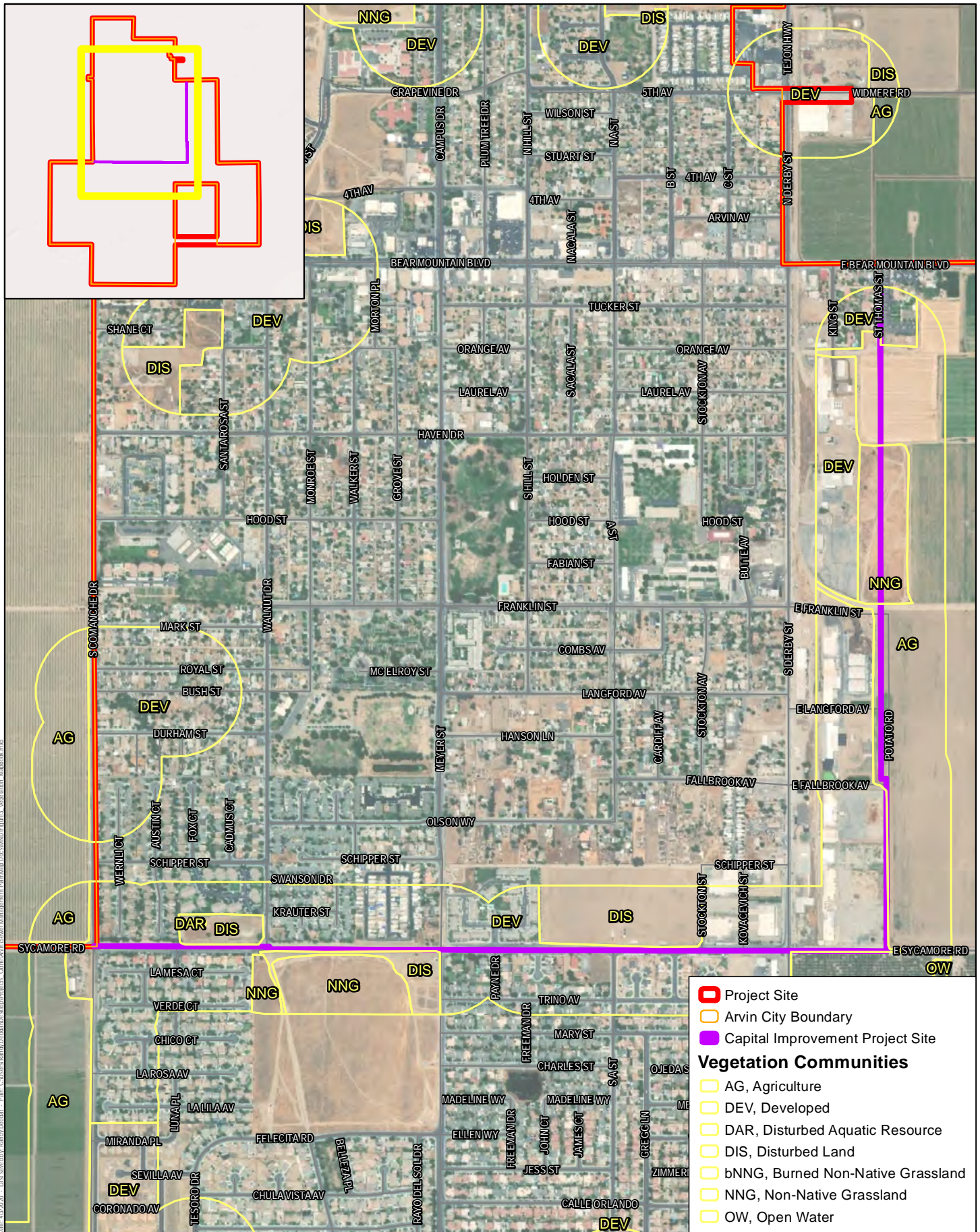


Figure 3e

Plumtree Drive Alleys CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

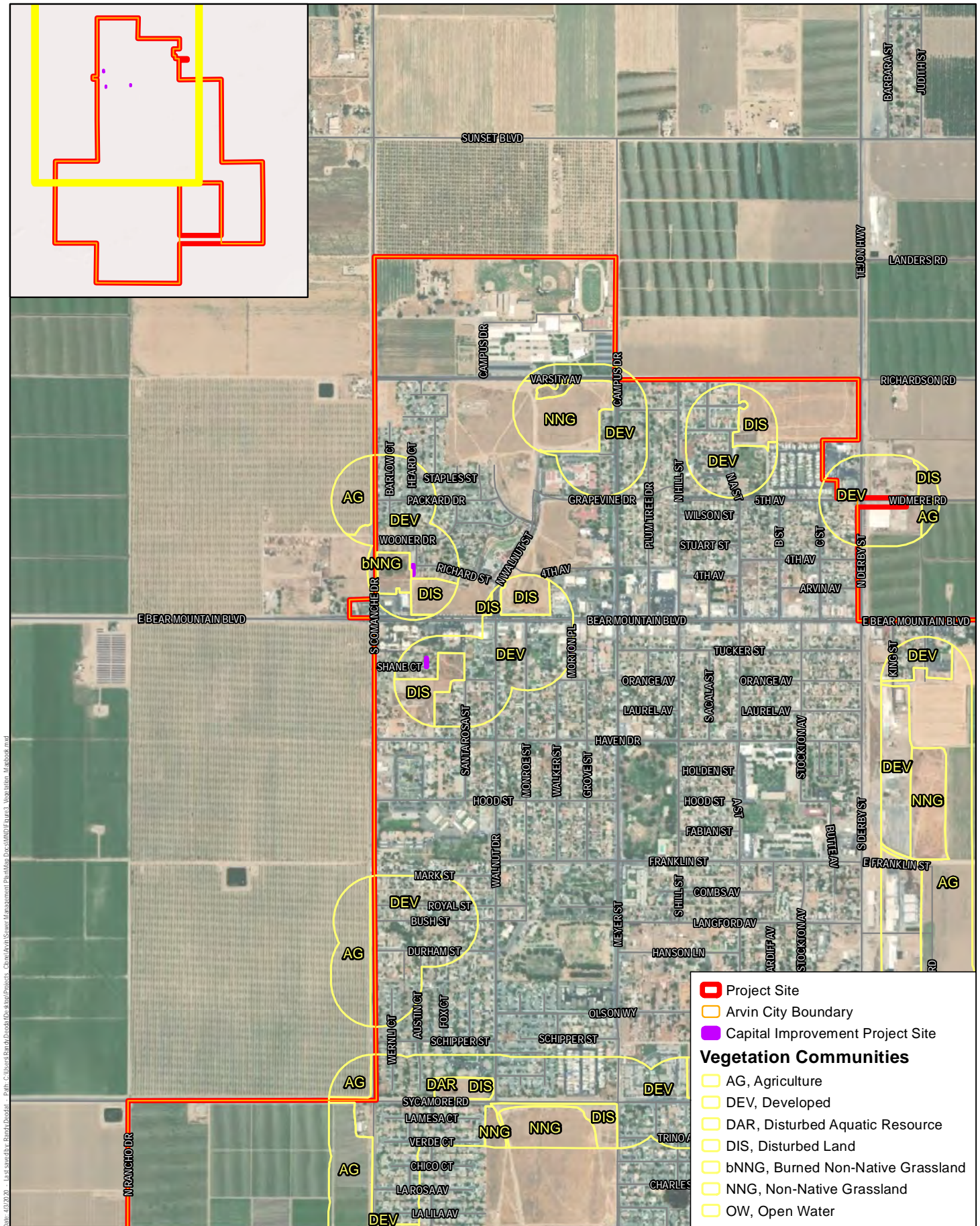


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Figure 3f

Potato-Sycamore CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

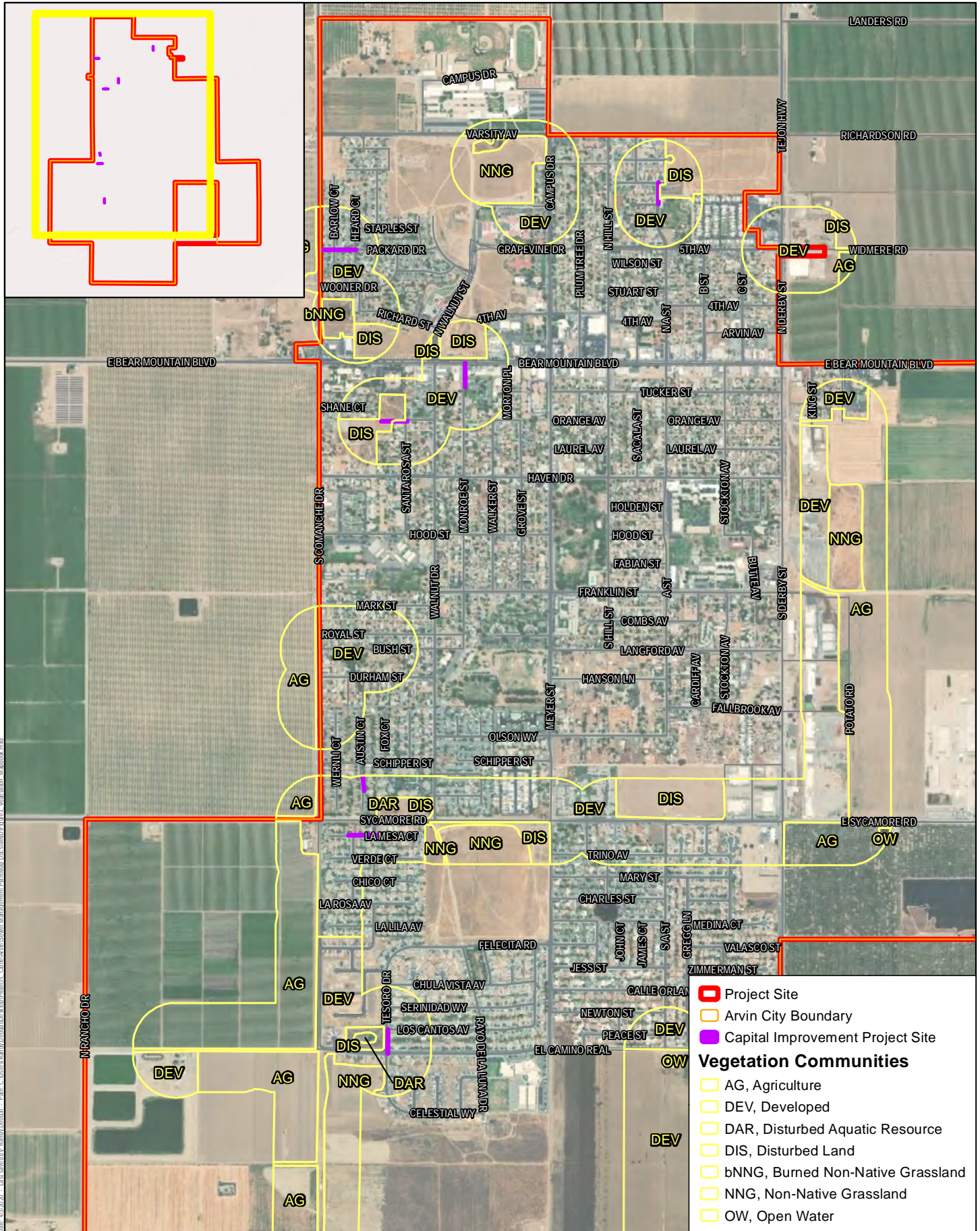


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Figure 3g

Small Pipeline Replacement CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

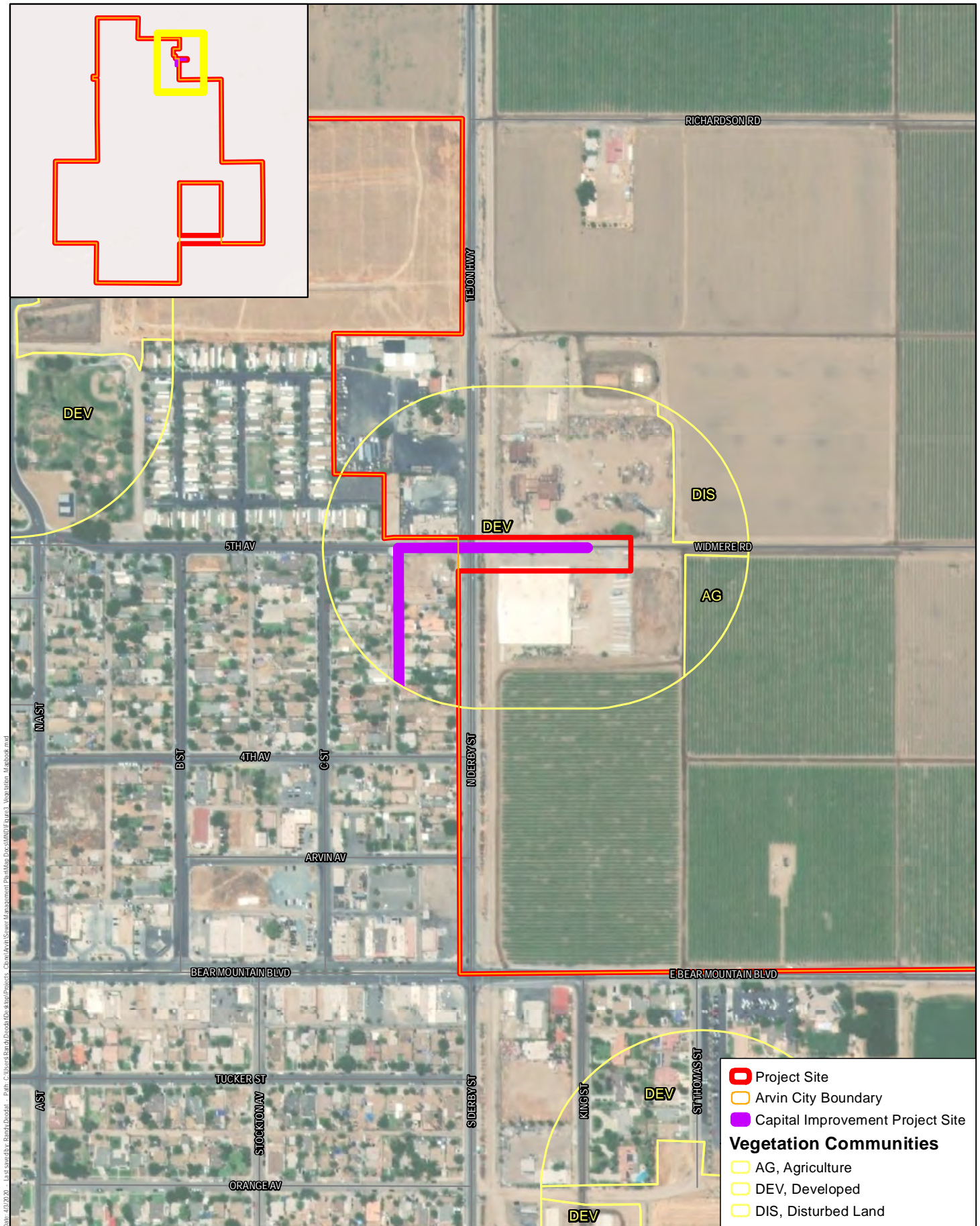


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Figure 3h

Small Spot Repair CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

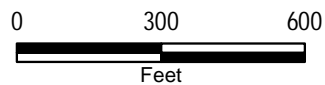
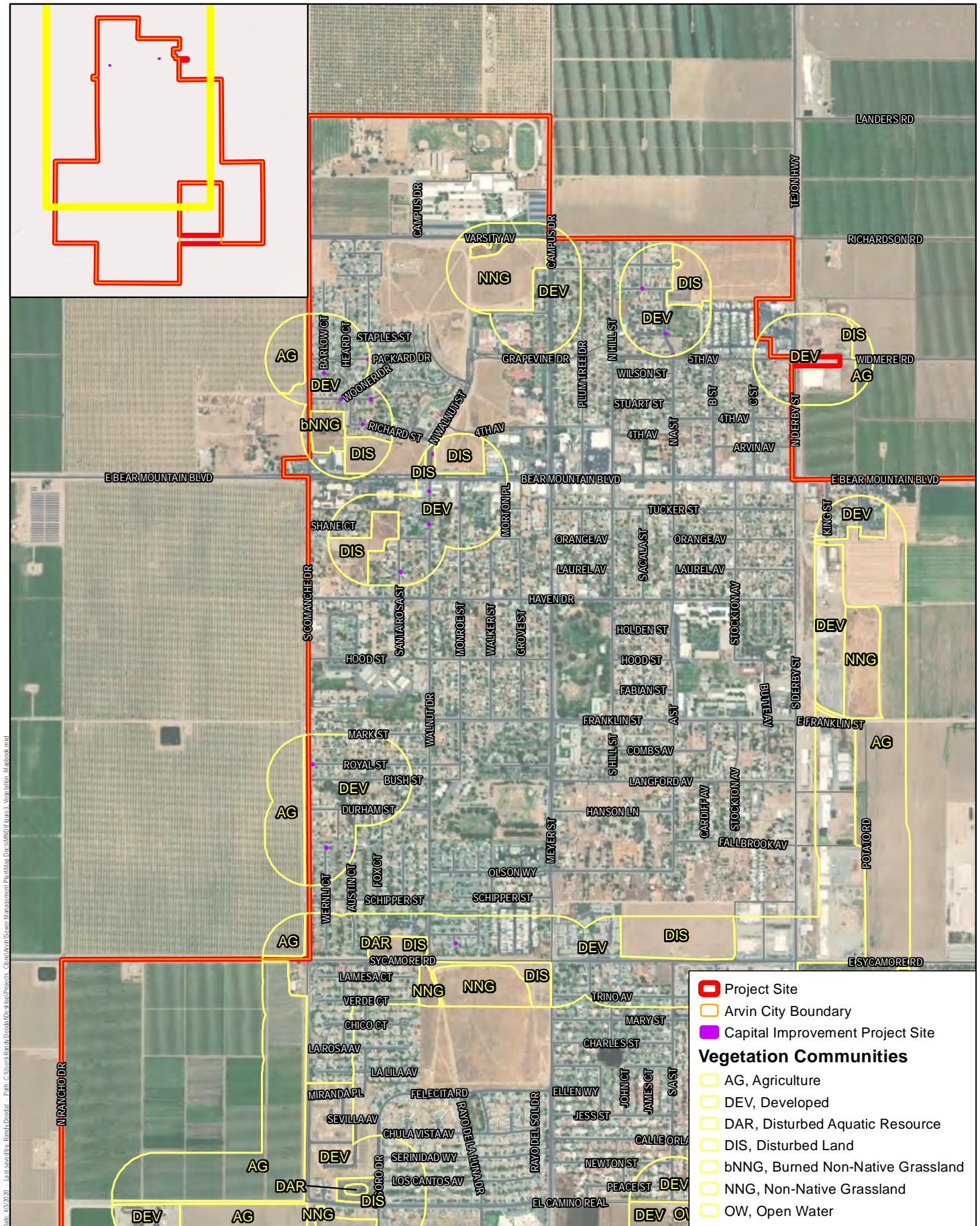


Figure 3i

Southeast Kovacevich Park CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

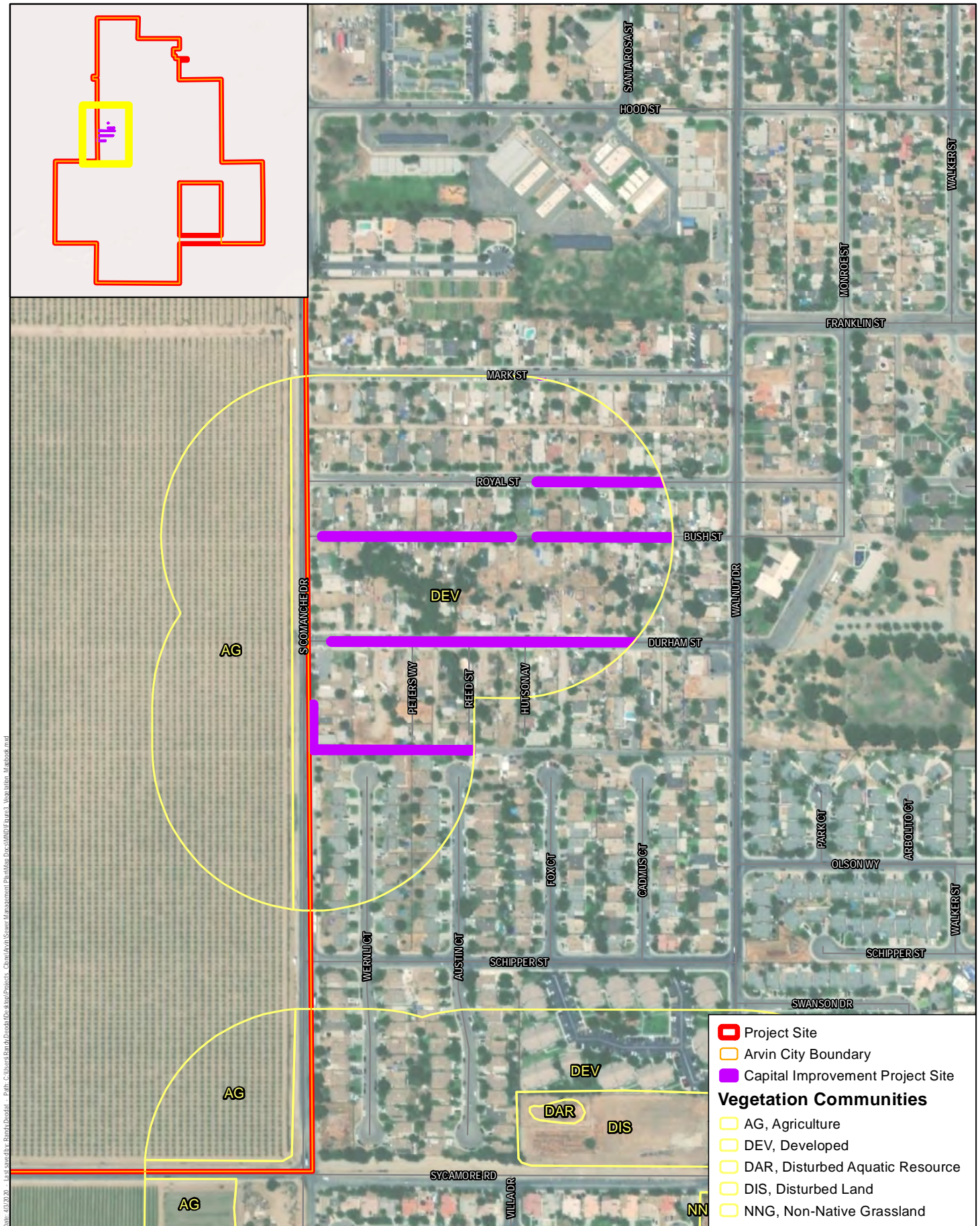


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Figure 3j

Stand-Alone Manhole Repair and Replacement CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates



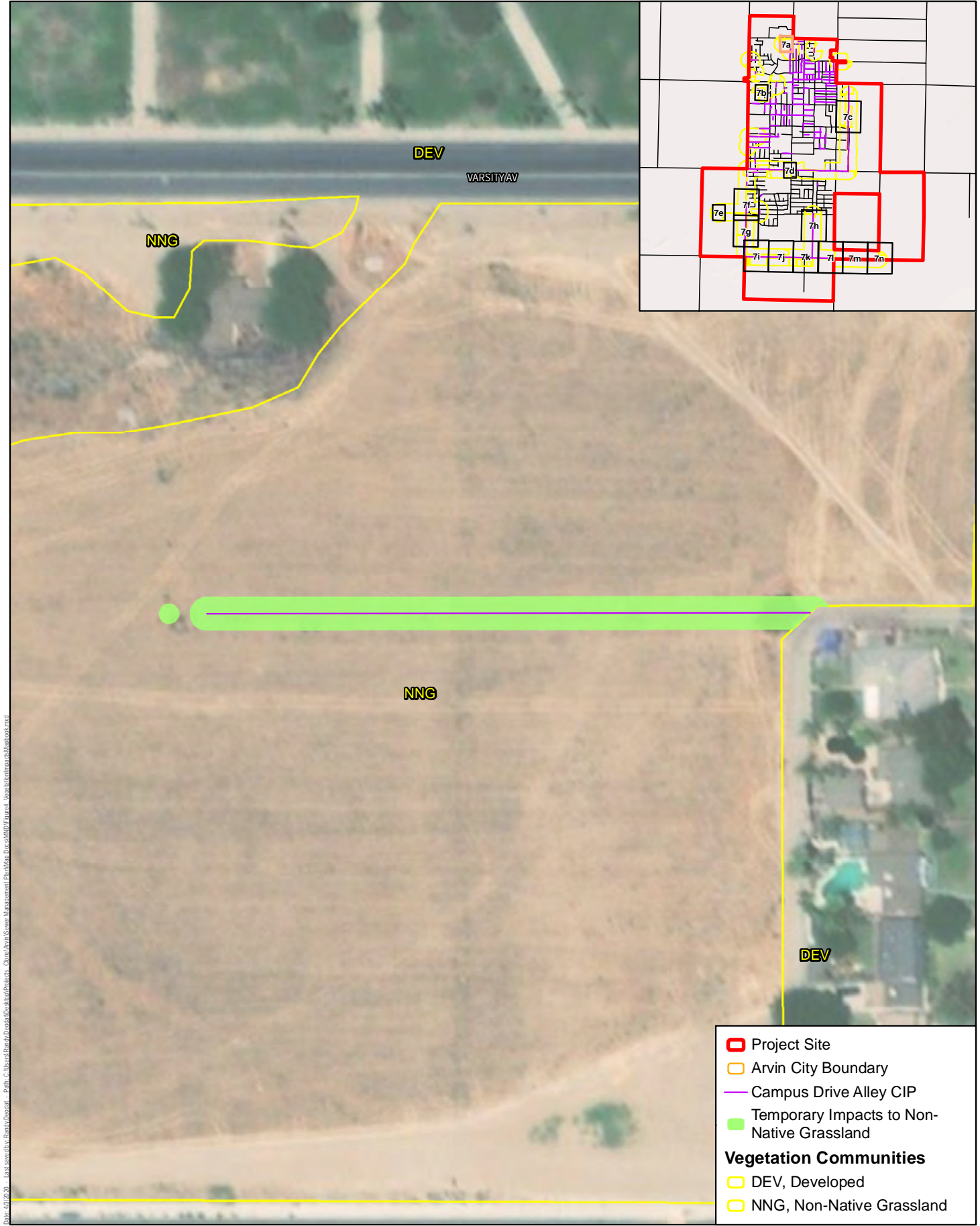
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Figure 3k

West Smothermon Park CIP

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Source: Digital Globe Imagery 2018.



Harris & Associates

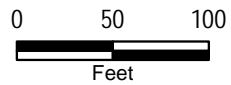
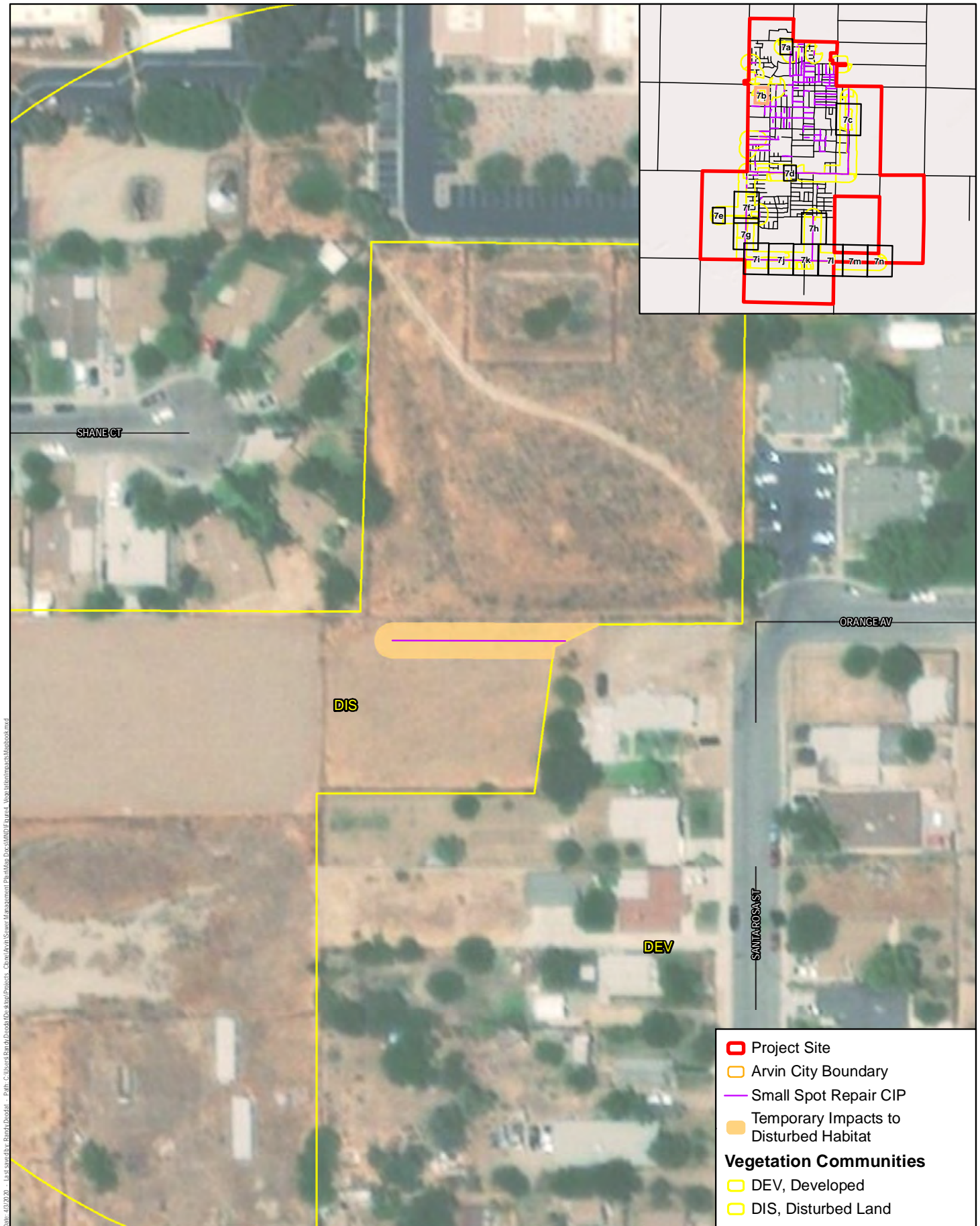


Figure 4a

Impacts to Vegetation Communities
Campus Drive Alley

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Source: Digital Globe Imagery 2018.



Harris & Associates

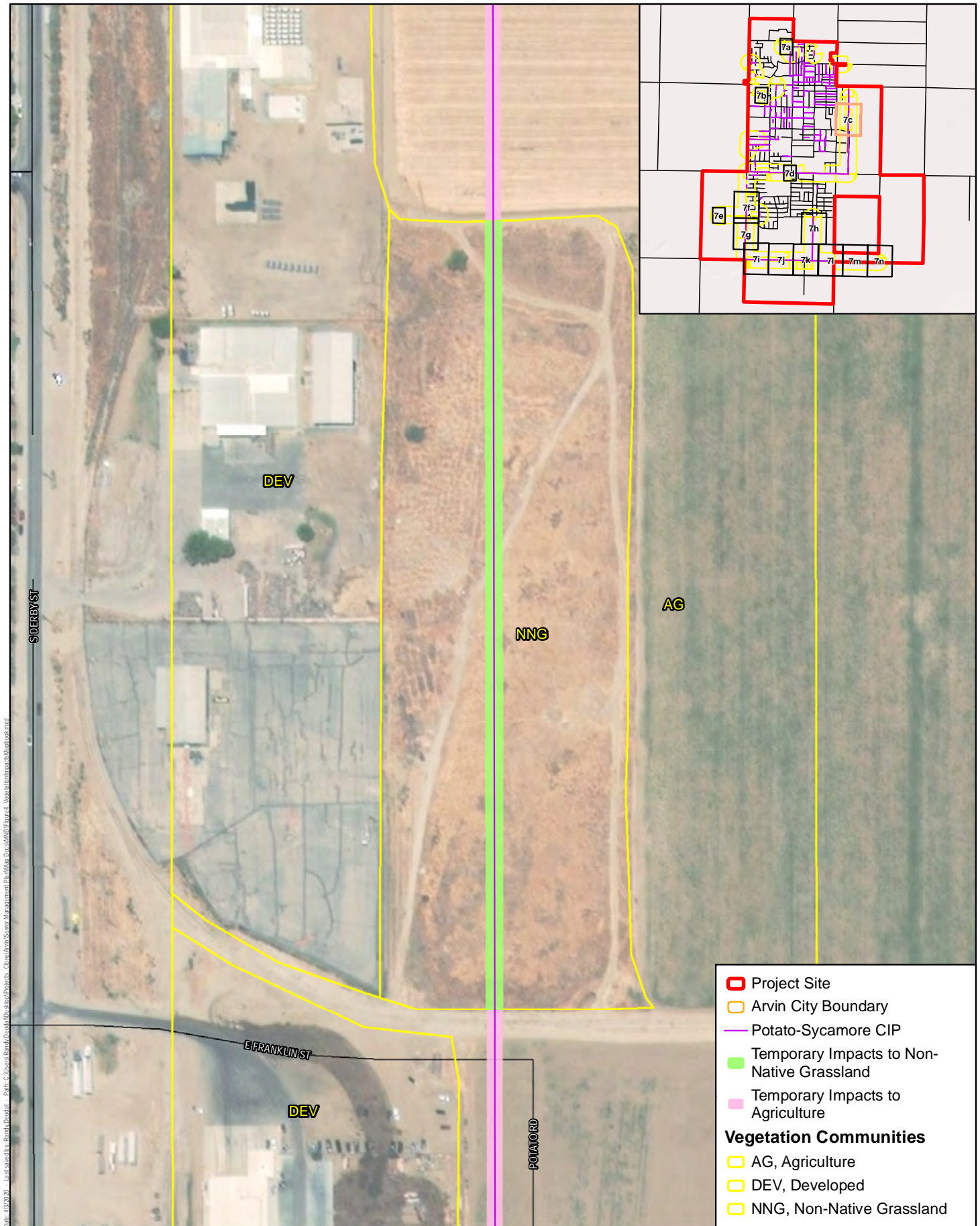


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Figure 4b

Impacts to Vegetation Communities
Small Spot Repair

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Source: Digital Globe Imagery 2018.



Harris & Associates

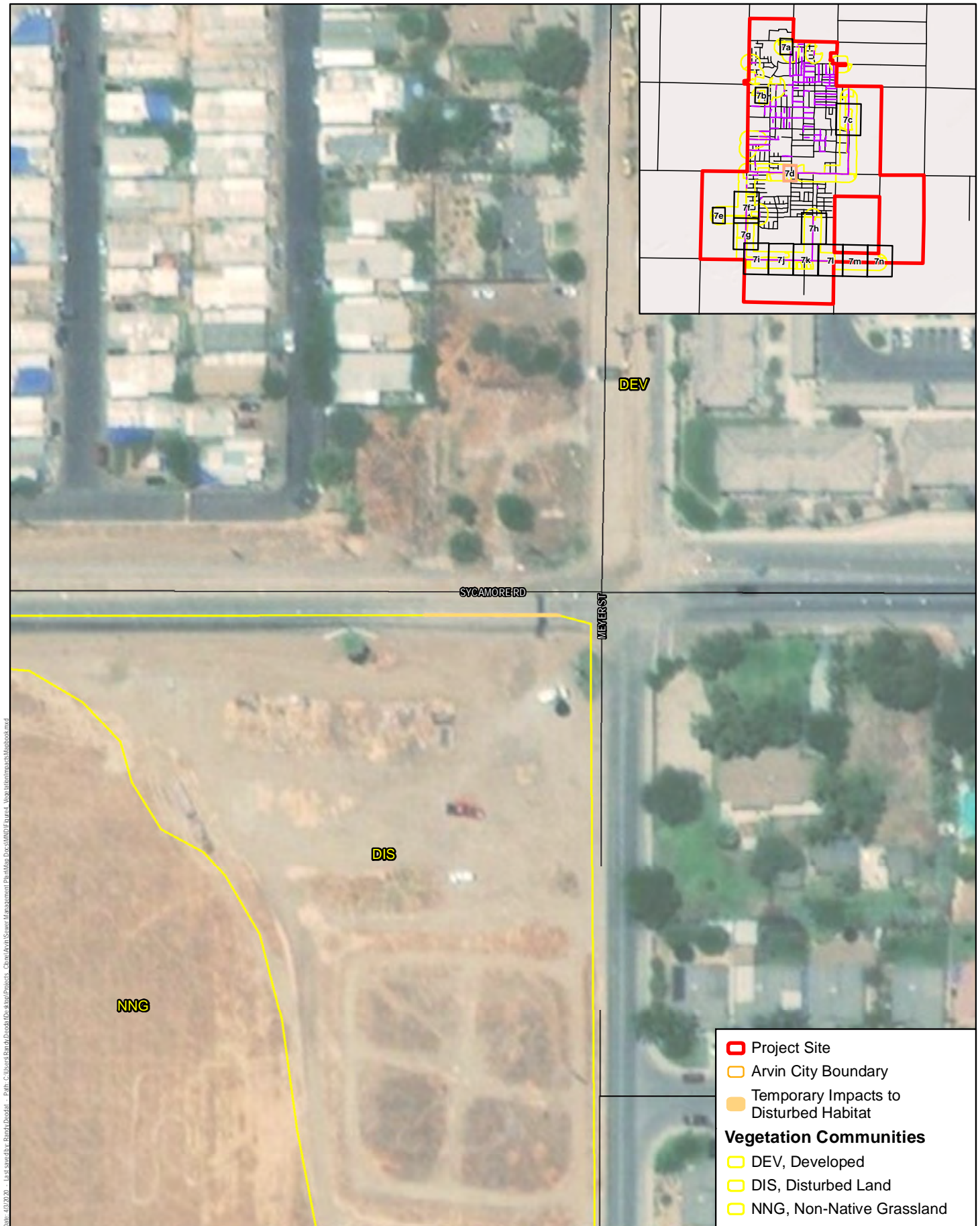


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Figure 4c

Impacts to Vegetation Communities
Potato-Sycamore

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Source: Digital Globe Imagery 2018.



Harris & Associates

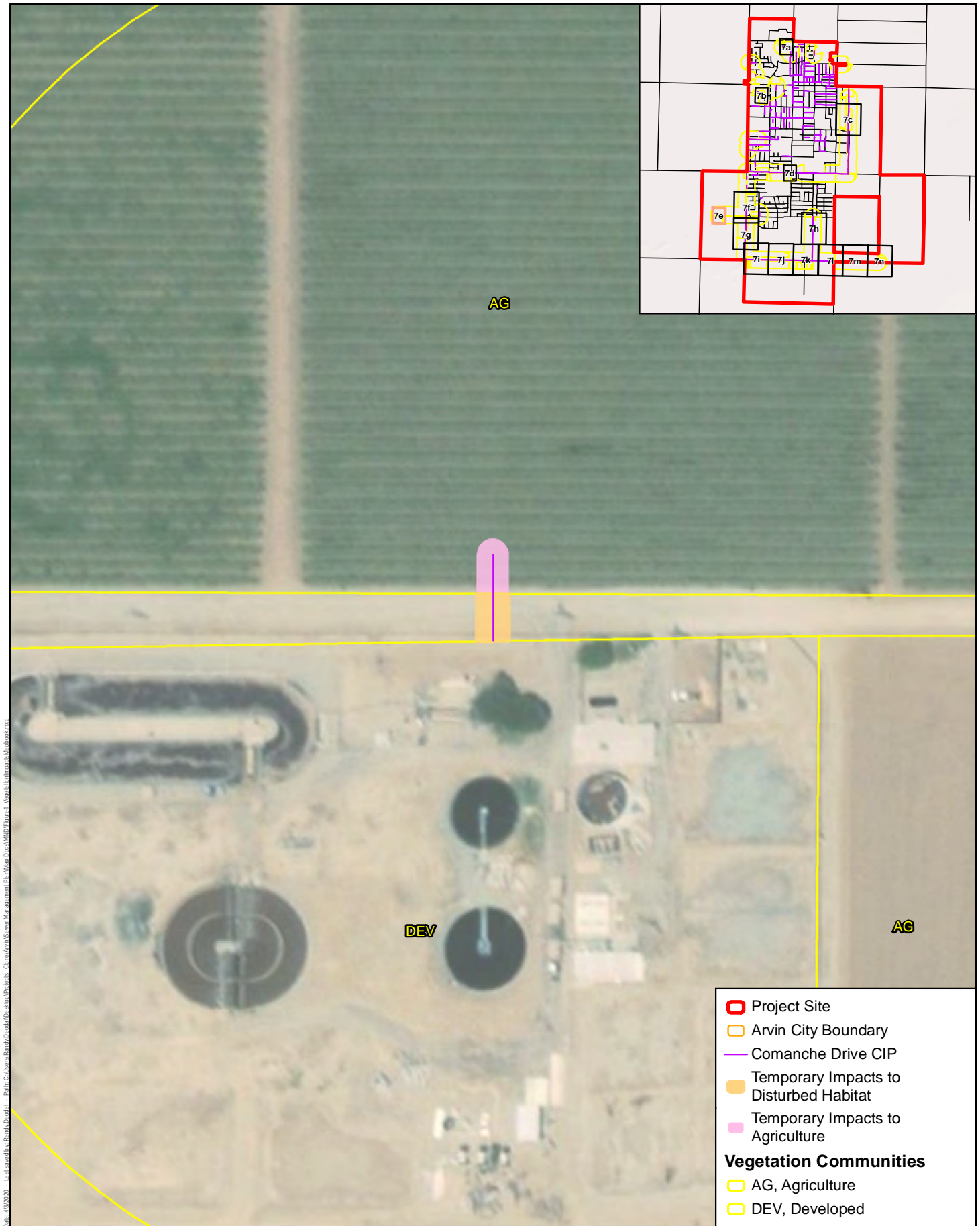


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Figure 4d

Impacts to Vegetation Communities
Potato-Sycamore

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Source: Digital Globe Imagery 2018.



Harris & Associates

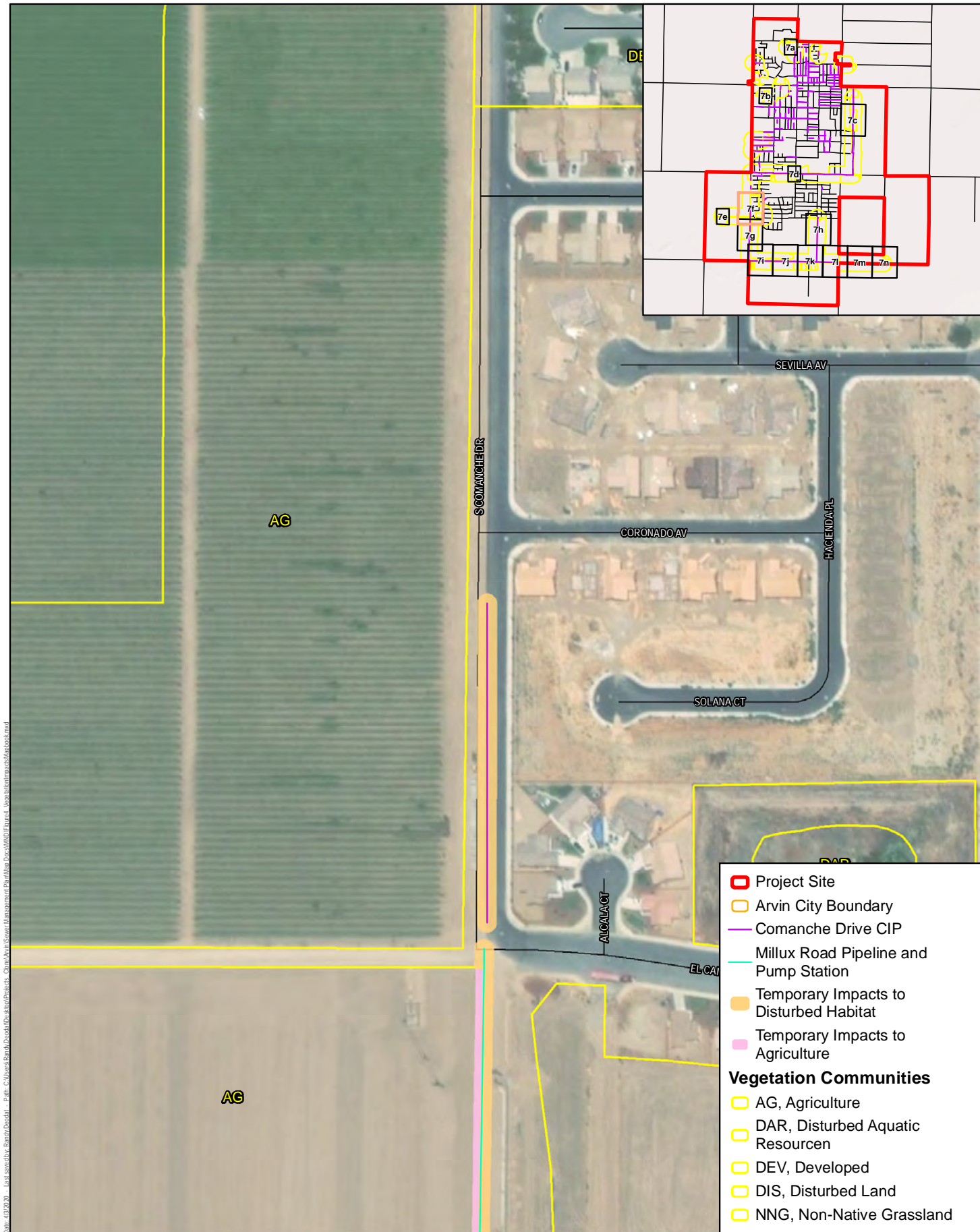


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Figure 4e

Impacts to Vegetation Communities
Comanche Drive

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Source: Digital Globe Imagery 2018.



Harris & Associates

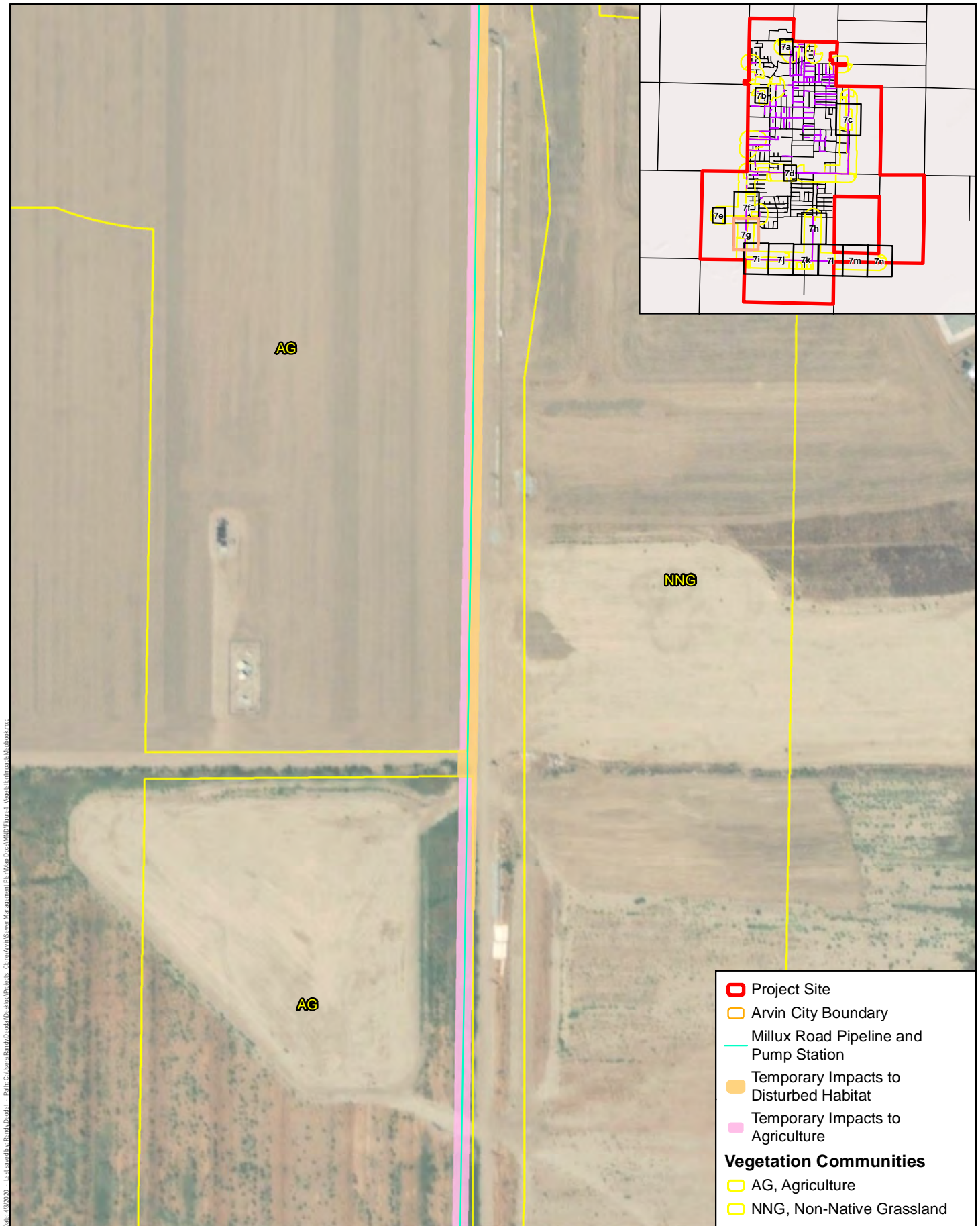


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Figure 4f

Impacts to Vegetation Communities
Comanche Drive and Millux Road Pipeline and Pump Station

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Source: Digital Globe Imagery 2018.



Harris & Associates

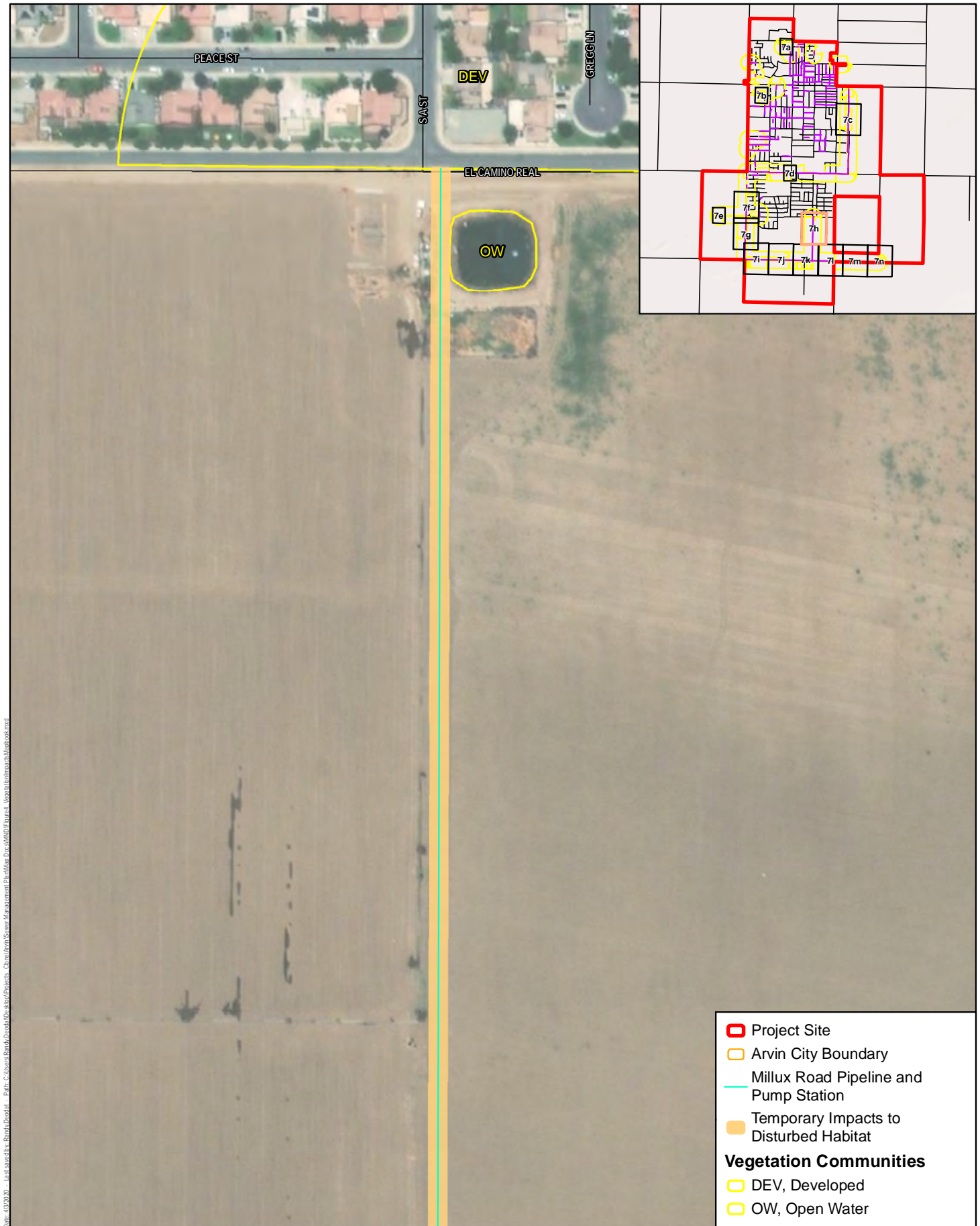


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Figure 4g

Impacts to Vegetation Communities
Milllux Road Pipeline and Pump Station

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Source: Digital Globe Imagery 2018.



Harris & Associates

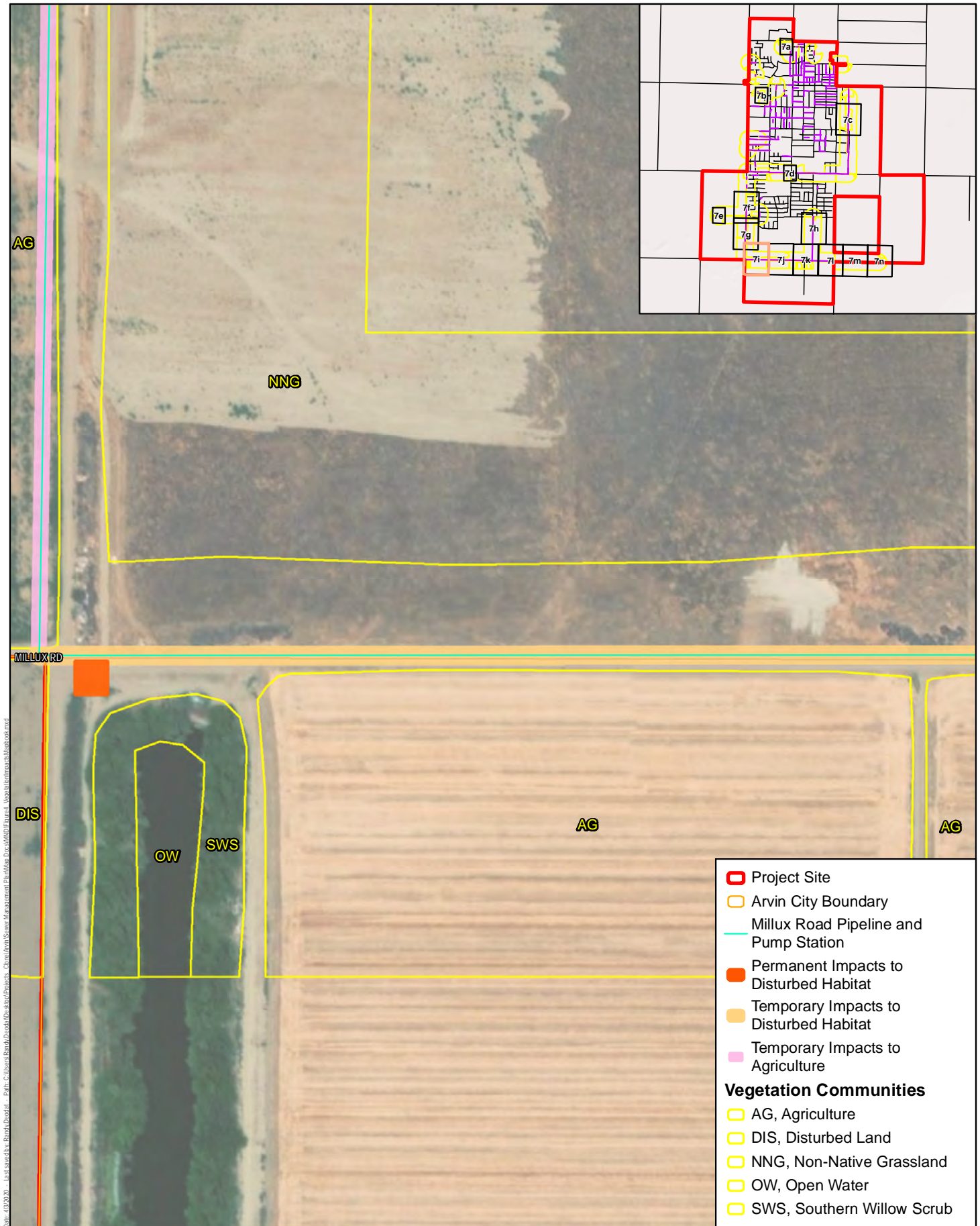


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Figure 4h

Impacts to Vegetation Communities
Milllux Road Pipeline and Pump Station

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Source: Digital Globe Imagery 2018.



Harris & Associates

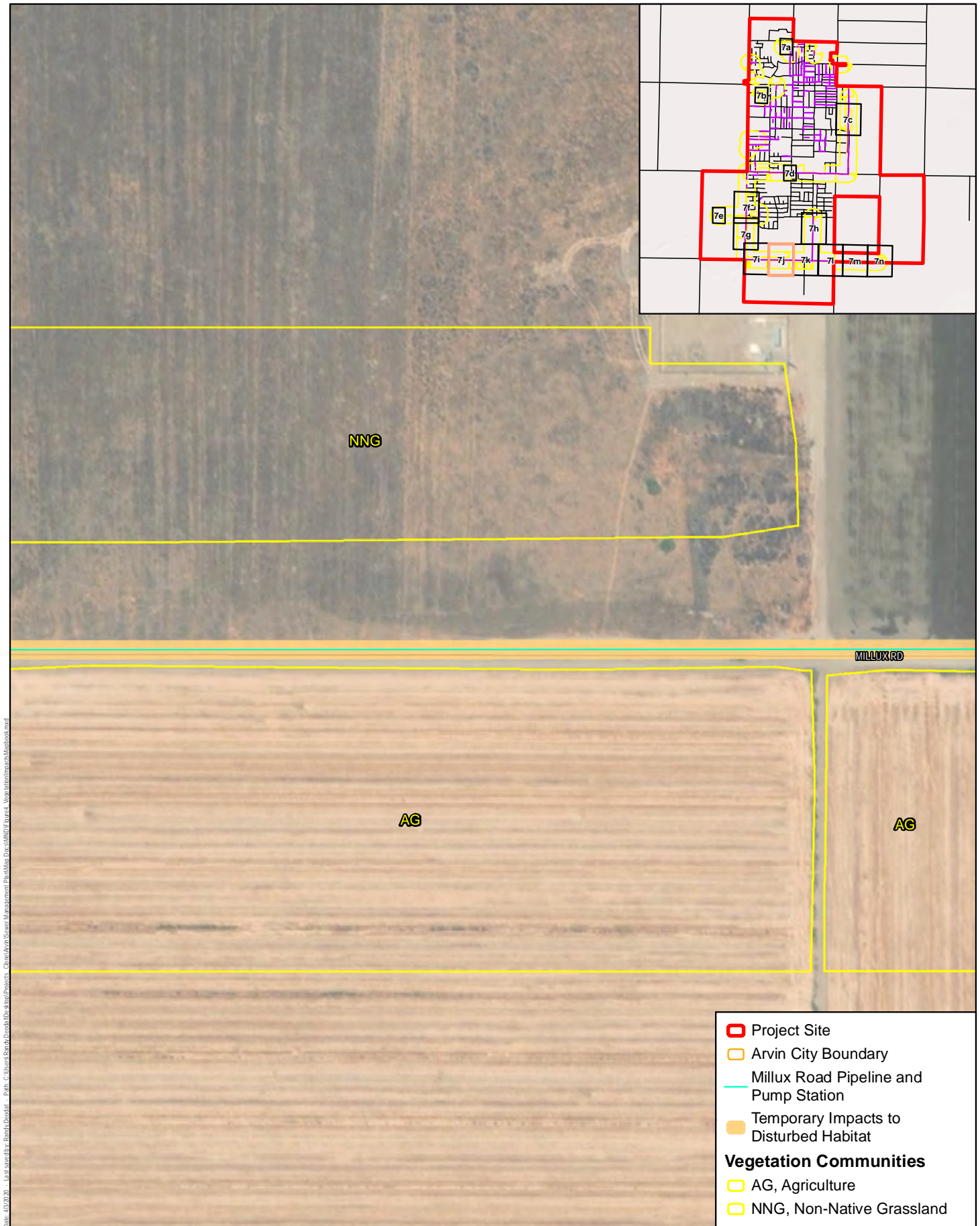


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Figure 4i

Impacts to Vegetation Communities
Millux Road Pipeline and Pump Station

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Source: Digital Globe Imagery 2018.



Harris & Associates

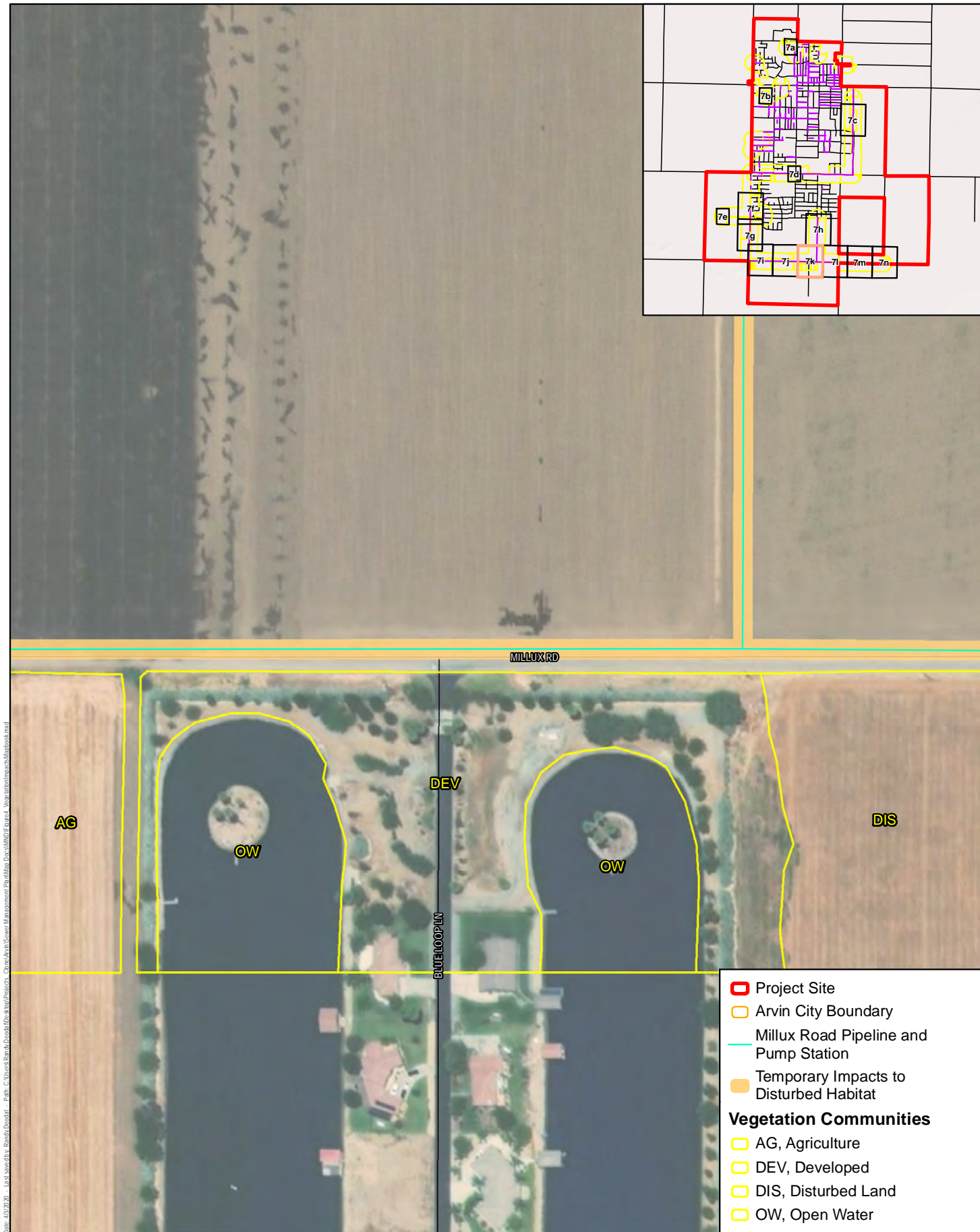


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Figure 4j

Impacts to Vegetation Communities
Millux Road Pipeline and Pump Station

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Source: Digital Globe Imagery 2018.



Harris & Associates

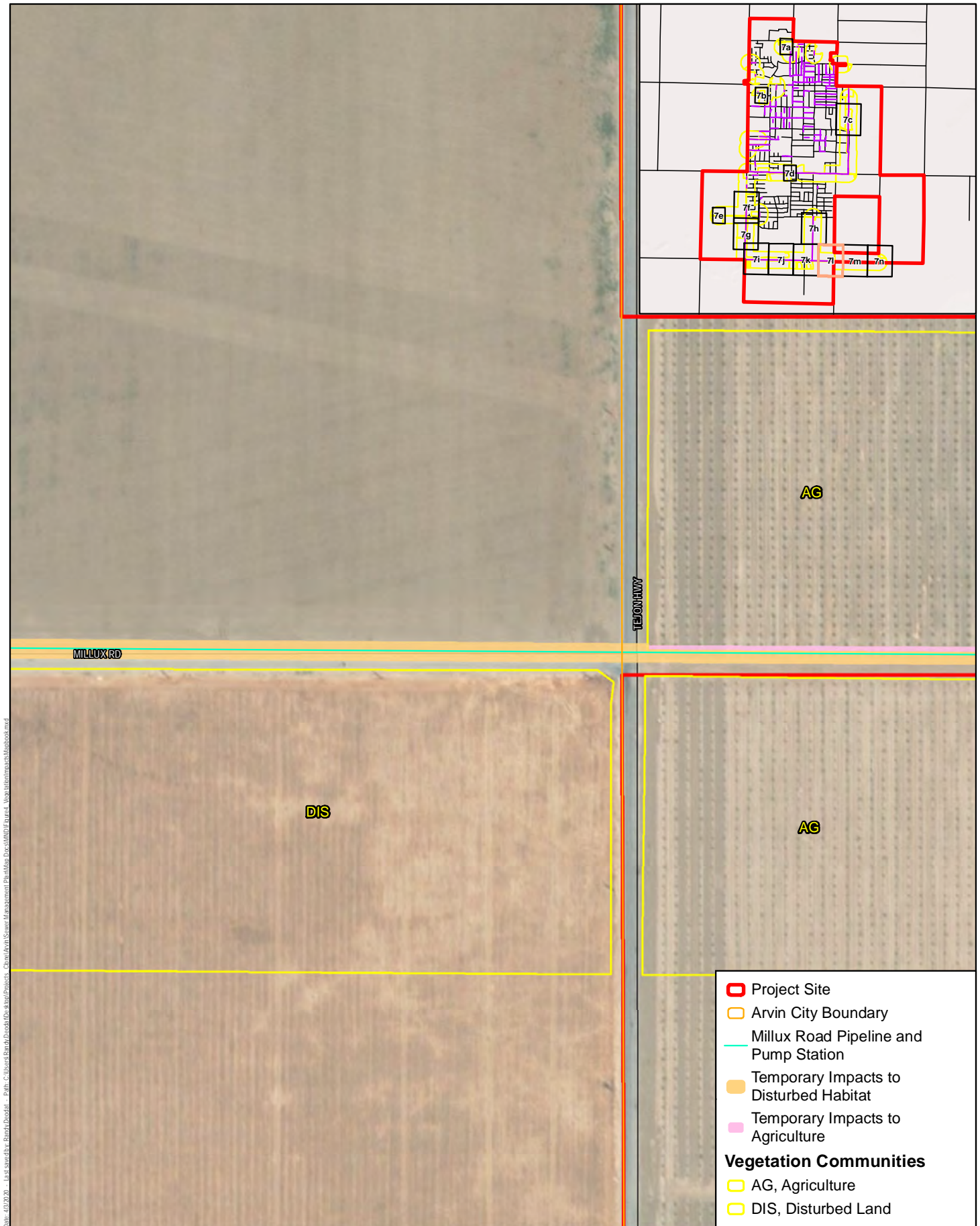


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Figure 4k

Impacts to Vegetation Communities
Milllux Road Pipeline and Pump Station

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Source: Digital Globe Imagery 2018.



Harris & Associates

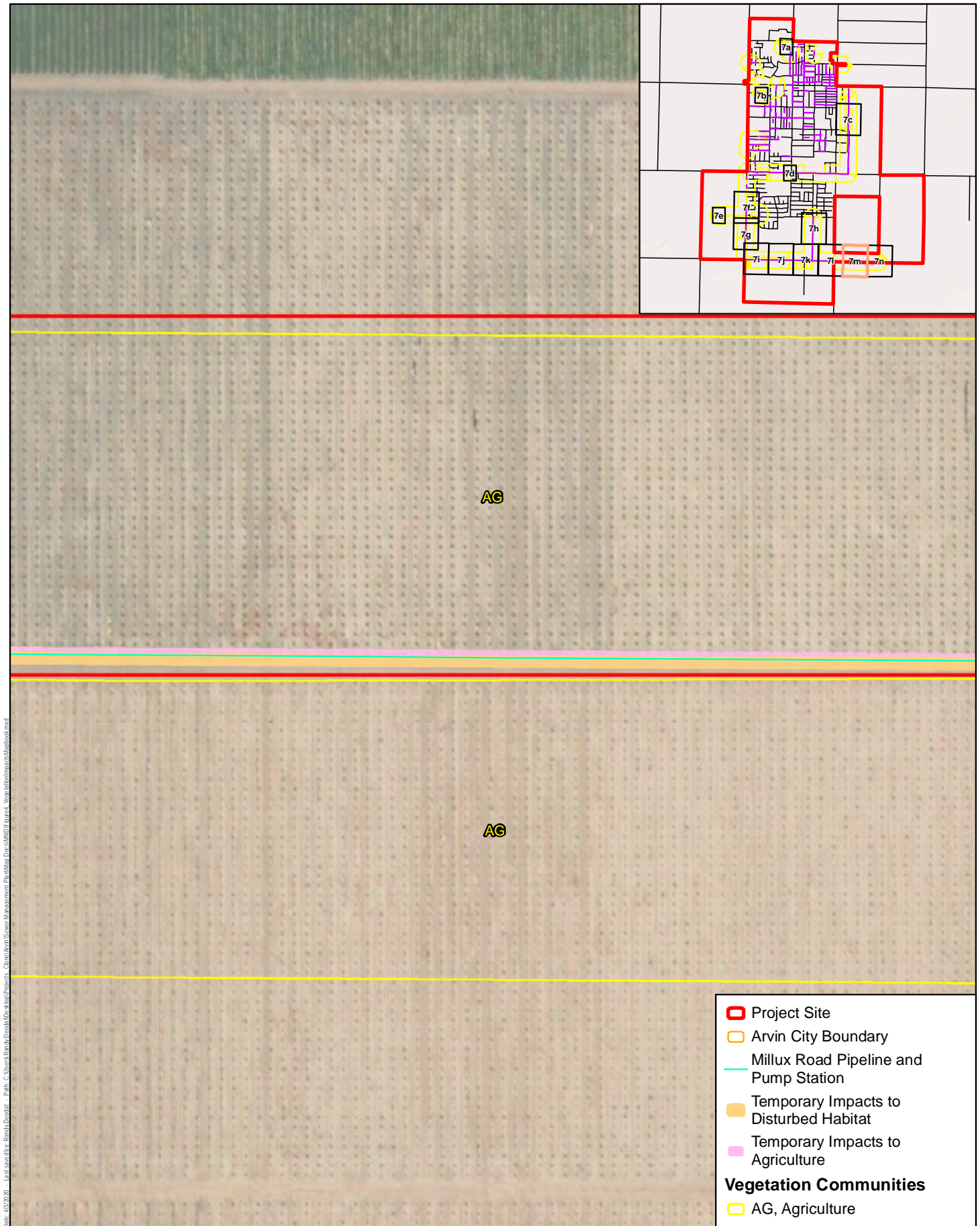


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Figure 4I

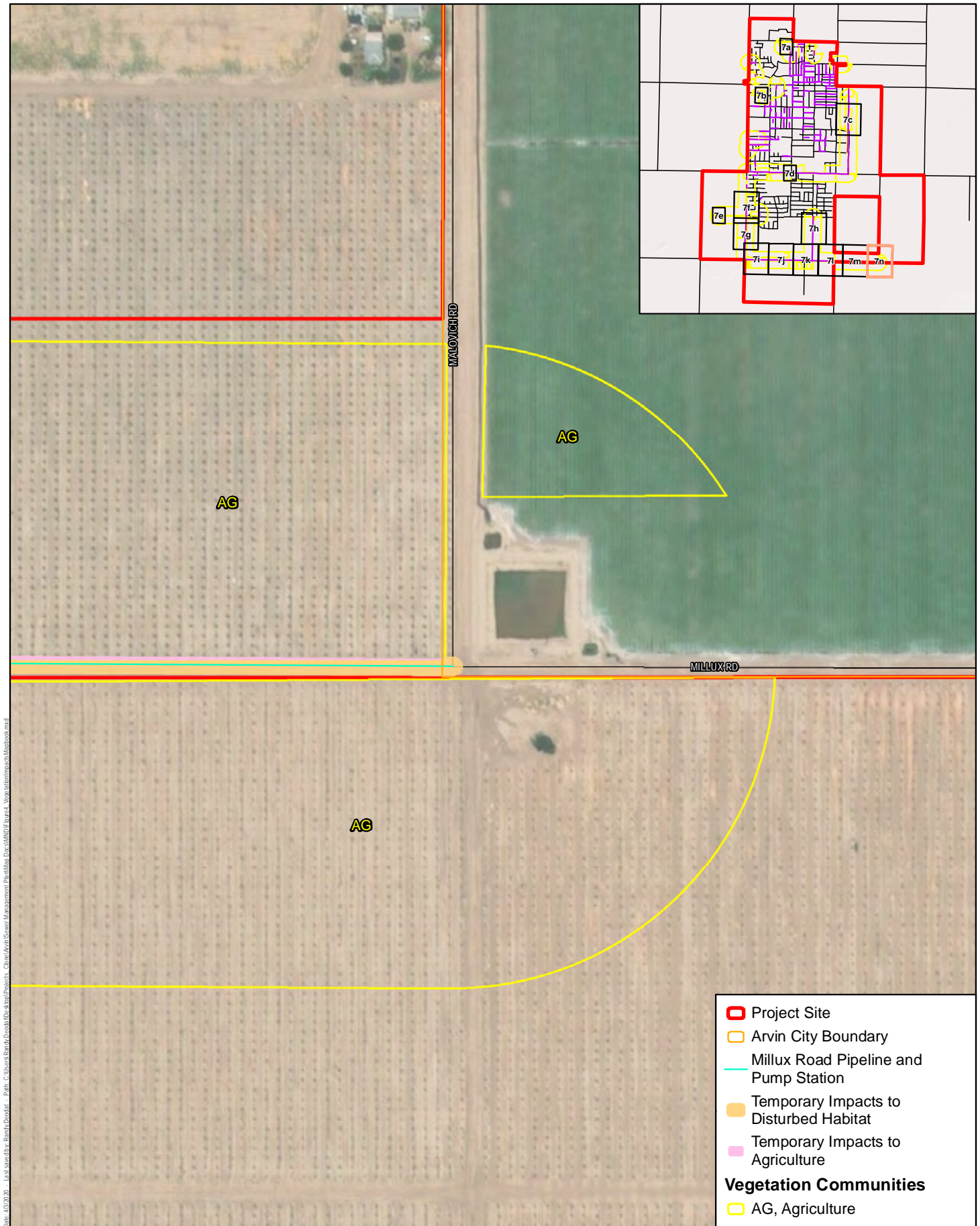
Impacts to Vegetation Communities
Millux Road Pipeline and Pump Station

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Source: Digital Globe Imagery 2018.



Harris & Associates

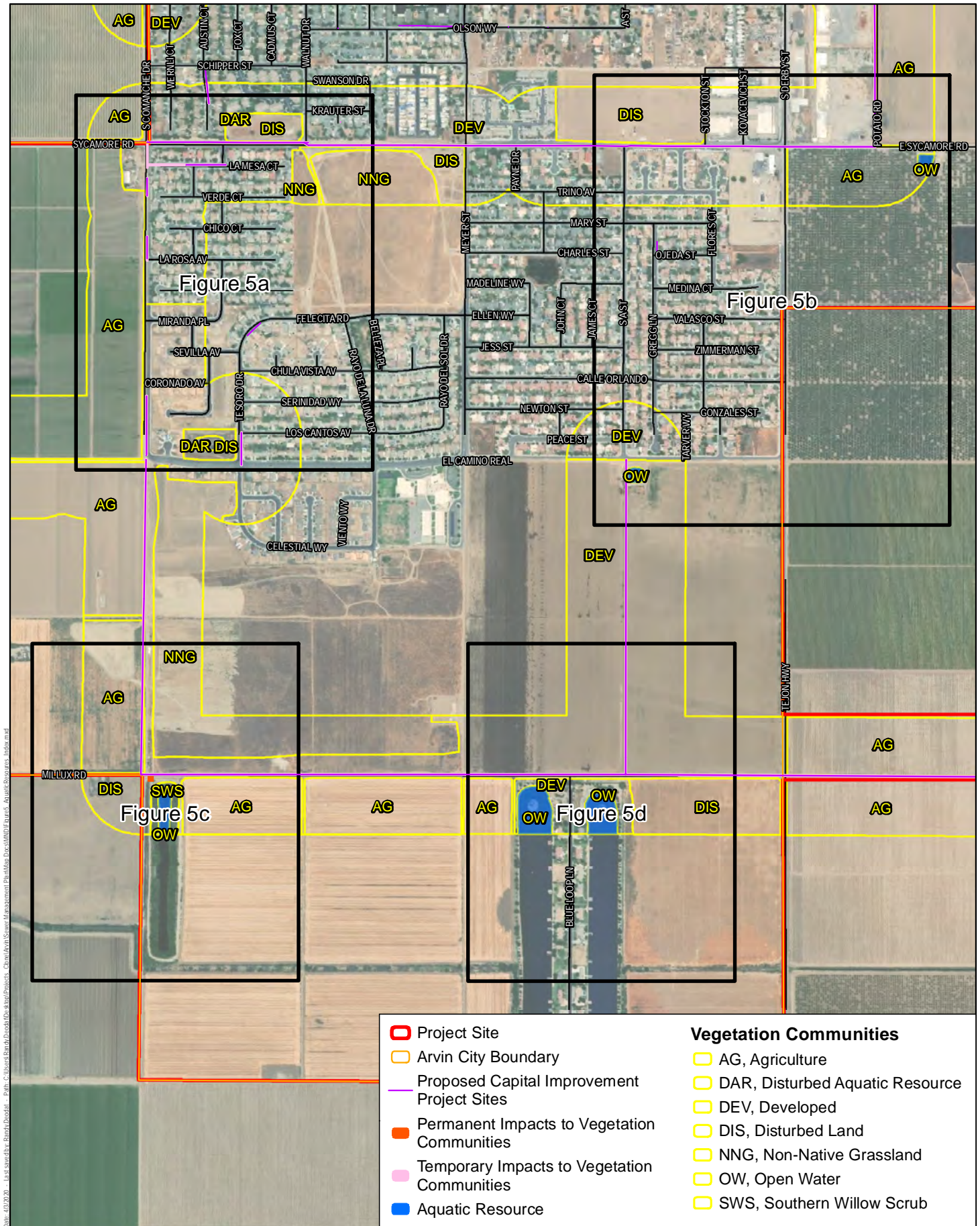


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Figure 4n

Impacts to Vegetation Communities
Milllux Road Pipeline and Pump Station

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Source: Digital Globe Imagery 2018.



Harris & Associates

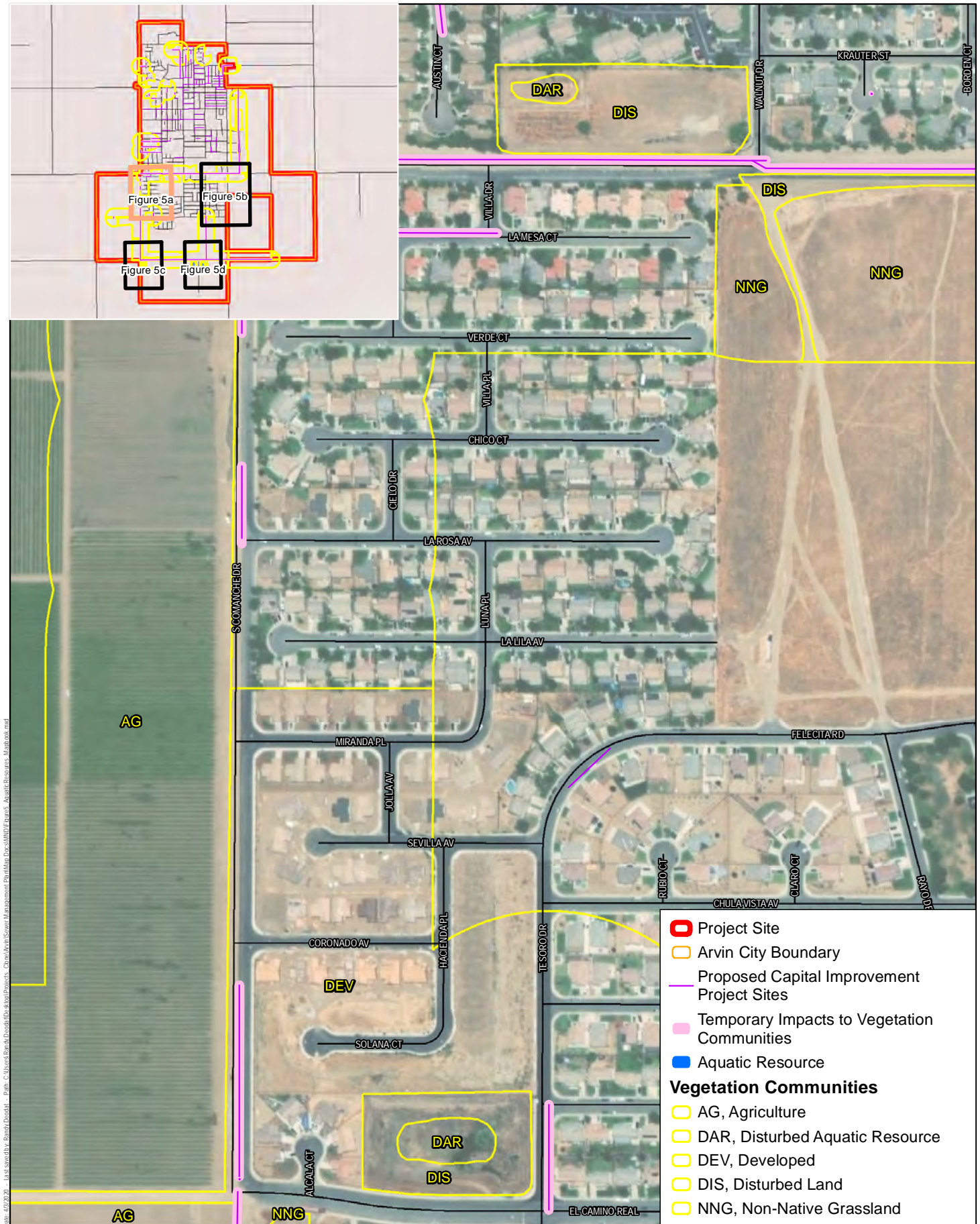


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Figure 5

Aquatic Resources - Index

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Source: Digital Globe Imagery 2018.



Harris & Associates

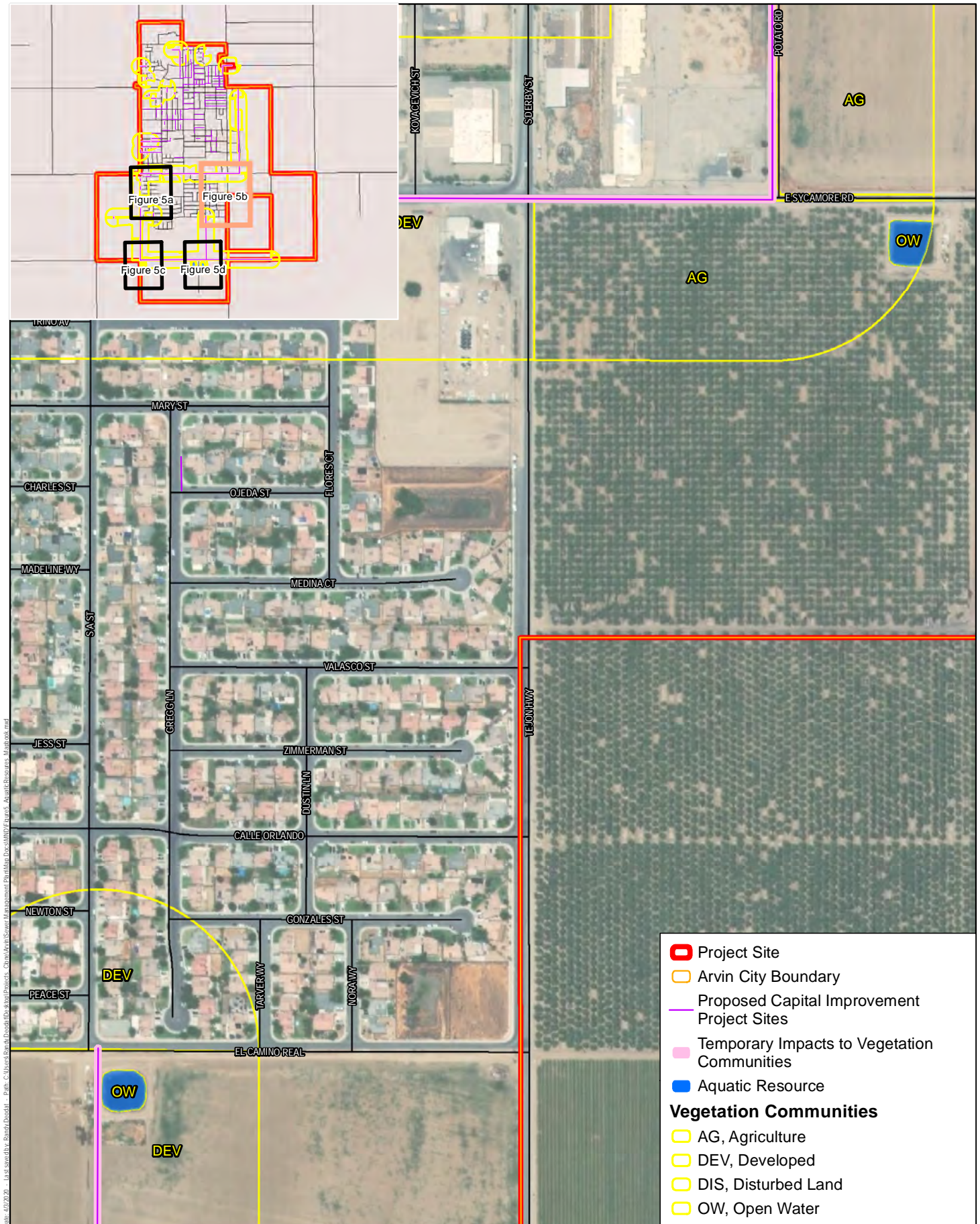


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Figure 5a

Aquatic Resources

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Source: Digital Globe Imagery 2018.



Harris & Associates

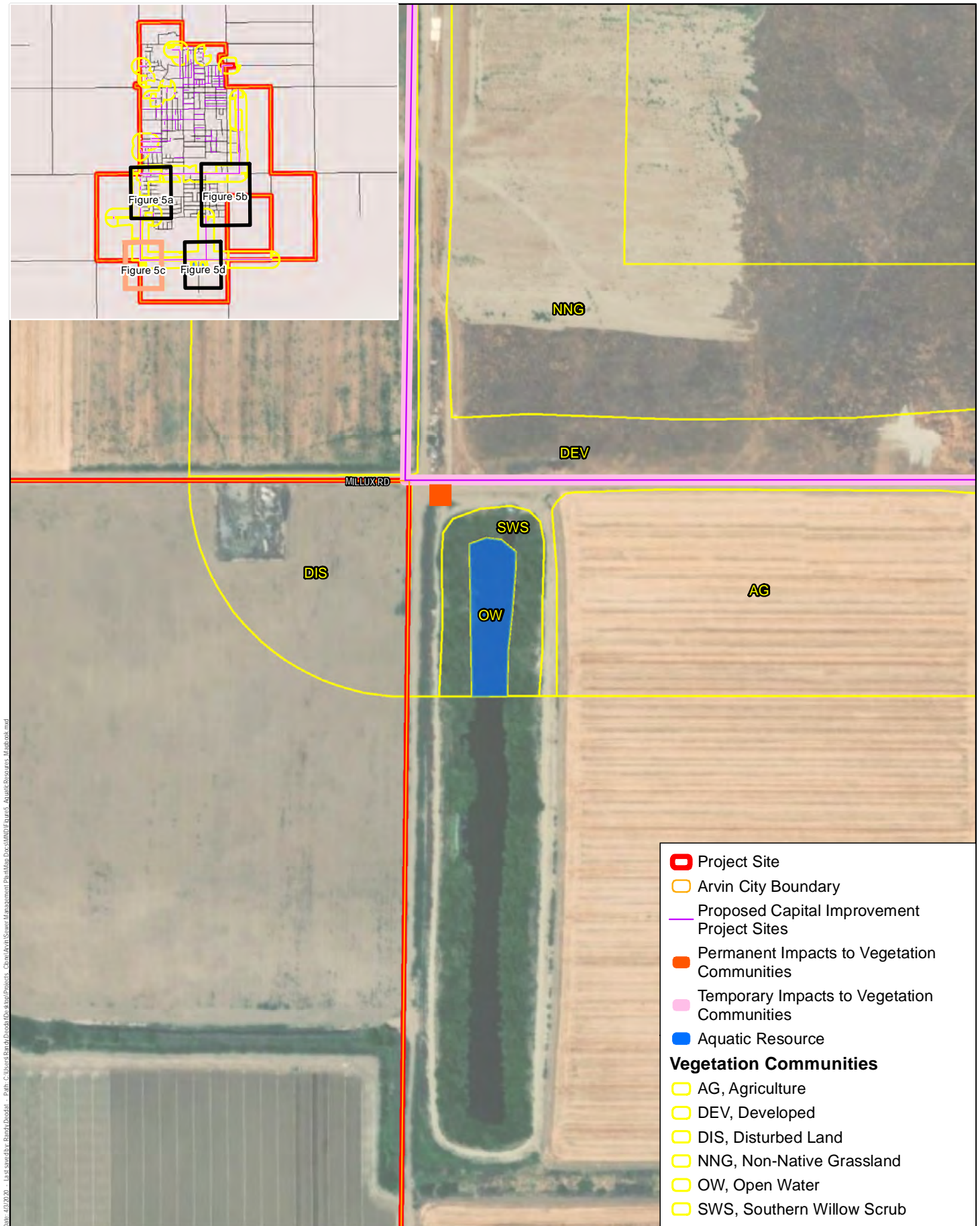


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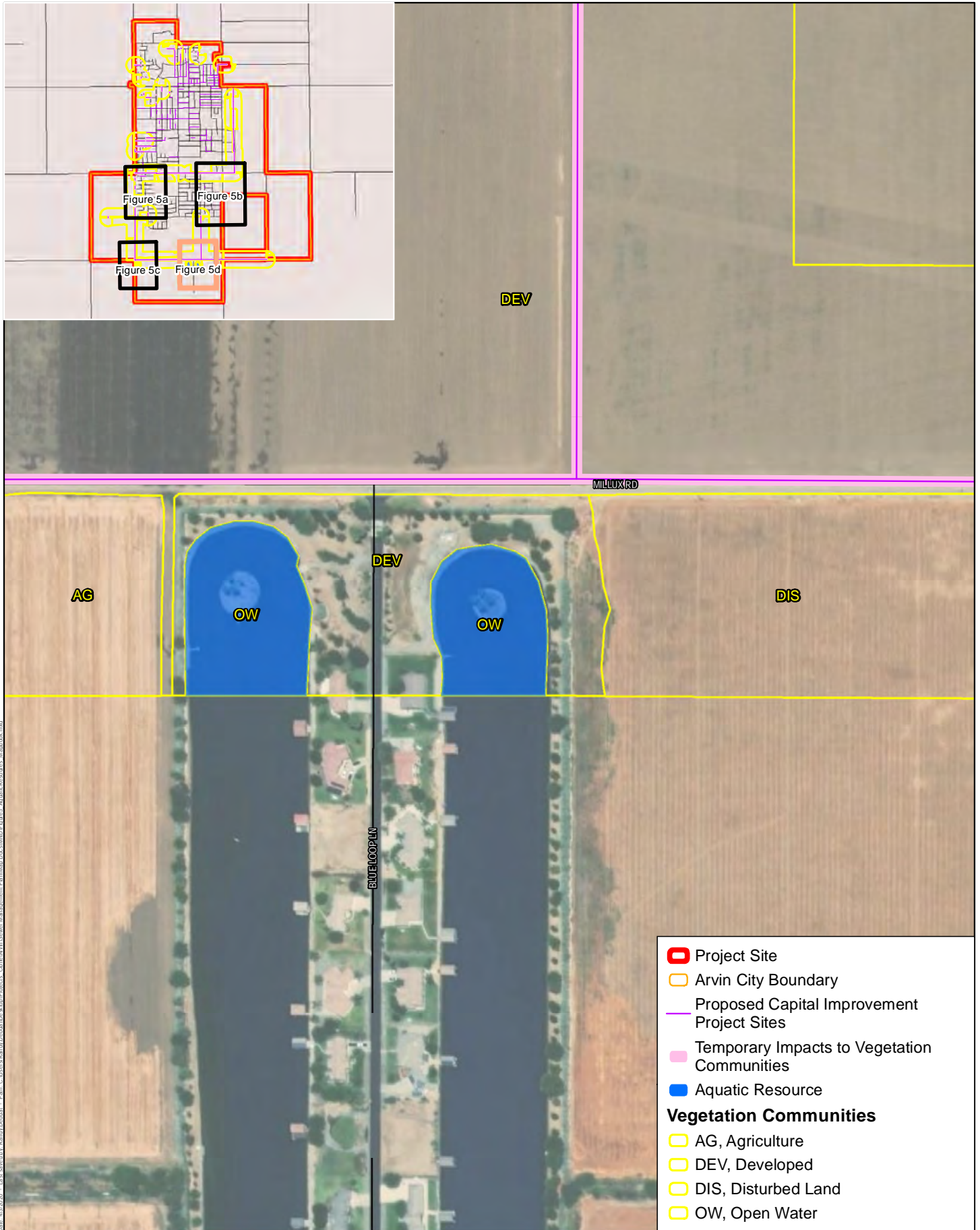
Figure 5b

Aquatic Resources

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Source: Digital Globe Imagery 2018.



Harris & Associates

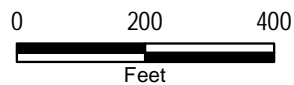


Figure 5d

Aquatic Resources

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2.4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix C, Cultural Resources Survey Report, details the results of the cultural resources study conducted for the project. The study consisted of the following tasks: a review of relevant site records and reports on file with the South San Joaquin Valley Information Center of the California Historical Resources Information System held at California State University, Bakersfield, within a half-mile search radius; a pedestrian survey of the proposed sewer pipeline alignments and manholes identified as requiring replacement and the proposed route for new sanitary sewer infrastructure in the project site conducted by an archaeologist on October 22 and 23, 2019; a review of the Sacred Lands File held by the Native American Heritage Commission (NAHC); and historical research including examination of historical maps and aerial imagery. Refer to Appendix C for detailed results of the cultural resources survey. Potential impacts to cultural resources resulting from implementation of the project are discussed below.

Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less than Significant Impact. The records search at the South San Joaquin Valley Information Center resulted in six previously recorded historic resources being identified within a half-mile radius of the project site. Two previously recorded cultural resources were identified on the project site. One consists of a former wagon road currently in use as a segment of Tejon Highway along the eastern boundary of the project site, and the other is a historic-era multiple-family residence at the intersection of Haven Drive and Stockton Avenue. The historic-era multiple-family residence was determined to be ineligible for inclusion in the National Register of Historic Places, in the California Register of Historical Resources, and for local designation.

The pedestrian survey did not identify any previously unrecorded historic resources on the project site. In addition, the probability of intact subsurface resources in the proposed alignment was determined to be low. Tejon Highway, on the project site only, was revisited during the survey

effort to determine its significance as a historic resource. Tejon Highway is in use as a paved road and experiences moderate traffic from commercial and agricultural equipment. This portion of Tejon Highway was recommended by the archaeologist as not eligible for listing in the California Register of Historical Resources and as not significant under CEQA. The cultural resources study did not identify any historic resources with the potential to be adversely impacted by the project, and no further archaeological work was recommended. Therefore, impacts related to a substantial adverse change in the significance of a historic resource pursuant to Section 15064.5 of the CEQA Guidelines as a result of project implementation would be less than significant.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than Significant Impact with Mitigation Incorporated. The review of the Sacred Lands File by the NAHC was negative. As discussed in Section 2.4.5(a), the results of the records search and pedestrian survey did not identify any previously unrecorded historic or archaeological resources on the project site. In addition, the project archaeologist determined that the probability of intact subsurface resources on the project site is low. Information request letters were sent to 16 Native American contacts provided by the NAHC. To date, two responses have been received from the San Manuel Band of Mission Indians and Tejon Indian Tribe. The San Manuel Band of Mission Indians reported that the project site is outside of the Serrano ancestral territory and that they will not be requesting consultation. The Tejon Indian Tribe noted that previously disturbed agricultural fields may contain extant subsurface tribal cultural resources or ancestral human remains that are occasionally inadvertently discovered during project implementation. The Tejon Indian Tribe requested that the City contact their tribal representative upon inadvertent discovery of tribal cultural resources or human remains. Implementation of Mitigation Measures CR-1 and CR-2 would ensure notification and communication with the Tejon Indian Tribe upon inadvertent discovery of tribal cultural resources or human remains and would reduce significant adverse impacts to an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines to less than significant levels.

c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact with Mitigation Incorporated. There are no records indicating that the project site has been used as a formal cemetery; therefore, it is unlikely to contain any known human remains. Due to the previous construction and disturbance throughout the project site, it is unlikely that unknown human remains would be discovered during project construction. However, it is possible that construction activity could unearth previously unknown vestiges, which would be considered a potentially significant impact. Implementation of Mitigation Measure CR-2 would ensure that human remains are treated with dignity and as specified by law and would reduce significant adverse impacts to less than significant levels.

Mitigation Measures

The following mitigation is required as part of the project to ensure that potential cultural resources impacts are mitigated to levels that are less than significant:

- CR-1: Discovery of Tribal Cultural Resources.** In the event of the discovery of archaeological or tribal cultural resources during ground-disturbing activities, the project proponent(s) shall divert, direct, or temporarily halt ground-disturbing activities in the area of discovery and contact a City of Arvin Community Development Department Senior Planner-approved archaeologist and the Tejon Indian Tribe representative (Colin Rambo, colin.rambo@tehonindiantribe-nsn.gov, (661) 834-8566) to allow for preliminary evaluation of potentially significant archaeological and tribal cultural resources. The significance of the discovered resources shall be determined by the approved archaeologist and Tejon Indian Tribe representative as appropriate. The project proponent(s) must be notified with the results of the evaluation and additional mitigation measures as required and determined by the approved archaeologist and Tejon Indian Tribe representative before ground-disturbing activities can resume.
- CR-2: Human Remains.** As specified by the California Health and Safety Code, Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or their authorized representative, shall immediately notify the Kern County Coroner's office by telephone. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains (as determined by the qualified archaeologist and the Native American monitor) shall occur until the Kern County Coroner has made the necessary findings as to origin and disposition pursuant to California Public Resources Code, Section 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected, and consultation and treatment could occur as prescribed by law. By law, the Kern County Coroner shall determine if the remains are subject to their authority within 2 working days of being notified. If the Kern County Coroner recognizes the remains to be Native American, they shall contact the Native American Heritage Commission and notify the Tejon Indian Tribe representative (Colin Rambo, colin.rambo@tehonindiantribe-nsn.gov, (661) 834-8566) within 24 hours. The Native American Heritage Commission shall make a determination as to the most likely descendent. If Native American remains are discovered, the remains shall be kept in situ, or in a secure location in proximity to where they were found, and the analysis of the remains shall only occur on site in the presence of a Native American monitor.

2.4.6 Energy

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

- 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.

Construction Energy Use

During construction, the project would result in a short-term, temporary increase in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment and the use of electricity for temporary buildings, lighting, and other sources. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, trenching, pipe removal and replacement, and site restoration. The types of equipment could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, front-end loaders, and excavation equipment. Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment, such as pumps and other tools.

Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California regulations (13 CCR 2449[d][3], 2485) limit idling from both on-road and off-road diesel-powered equipment and are enforced by CARB. Also, given the high cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. Therefore, construction of the project would not result in a significant impact associated with the wasteful, inefficient, and unnecessary consumption of energy.

Operational Energy Use

Operation of the project sewer pipelines would not require the use of energy greater than the existing conditions for City infrastructure operation. Future maintenance operations would be similar to construction energy use discussed previously and would not result in the need for

additional maintenance. Operation of the project would not result in wasteful, inefficient, or unnecessary use of energy resources and would be less than significant.

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. As discussed in Section 2.4.6(a), energy consumption during construction of the project would result in a short-term, temporary increase in consumption of fossil fuels from construction-related equipment. The project sewer pipelines would not require the use of energy greater than the existing conditions for City infrastructure operation, with the only operational emissions related to ongoing maintenance that would be similar to existing conditions in the area. Adherence to reductions of fossil-fuel use and energy efficiency regulations during both construction and operation, as noted previously, would ensure that the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the project would not result in a policy conflict that would result in a significant impact on the environment.

2.4.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

- 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.

No Impact. The purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to mitigate the hazard of surface faulting by preventing the construction of buildings used for human occupancy over an area with known faults. Unlike damage from ground shaking, which can occur at great distances from the fault, impacts from fault rupture are limited to the immediate area of the fault zone where the fault breaks along the ground's surface. The project site neither contains nor is directly adjacent to an Alquist-Priolo earthquake fault zone (DOC 2000). Additionally, no residential development is proposed, and impacts to people or structures would not result. Therefore, impacts from fault rupture are not expected to occur on the project site, and no impacts would result from project implementation.

ii. Strong seismic ground shaking?

Less than Significant Impact. The project site, like most of central California, is subject to strong ground shaking from seismic events. Consequently, the project site may expose people and structures to potential impacts associated with seismic ground shaking. The ground motion characteristics of any future earthquakes in the region would depend on the characteristics of the generating fault, distance to the epicenter, magnitude of the earthquake, and site-specific geologic conditions. Major faults in the region could be a source of a strong seismic-related movement at the project site. The nearest known active fault is the White Wolf fault zone, approximately 3 miles southeast of the project site (DOC 2000). As discussed in the City's General Plan Master EIR (Kern Council of Governments 1988), any residential, commercial, or industrial structures on the project site and in the surrounding area would most likely be affected by ground shaking in a seismic event. In addition, the project site is mapped as an earthquake fault zone by the California Geologic Atlas (DOC 2020a). While the project site could be subjected to severe ground shaking in the event of an earthquake, the site does not have a greater risk than that of surrounding properties. To reduce the risk of potential adverse effects from the accidental release of hazardous materials during a seismic event, the City requires that projects comply with the adopted operations and maintenance standards set forth in the 2014 Sewer System Management Plan and the 2016 California Building Code and the City-specific amendments to the code (City of Arvin 2014, 2019a). The project would comply with these City standards and requirements to avoid potential adverse effects from the accidental release of hazardous materials during construction and operation in the event of seismic ground shaking. Additionally, no residential or commercial development is proposed. Therefore, impacts to people or structures would not result. Impacts resulting from strong seismic ground shaking would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction is a phenomenon in which a saturated cohesionless soil causes a temporary transformation of the soil to a fluid mass, resulting in a loss of support. Ground failure associated with liquefaction can result in severe damage to structures. The geologic conditions for increased susceptibility to liquefaction are shallow groundwater (less than 50 feet in depth), the presence of unconsolidated sandy alluvium, and strong ground shaking. All three of

these conditions must be present for liquefaction to occur. As discussed in the City's General Plan Master EIR (Kern Council of Governments 1988), the project site and surrounding area are not subject to seismic hazards such as ground failure or liquefaction because the local water table averages approximately 210 feet below the soil surface. Further, the project site is not mapped as a liquefaction zone (DOC 2020a). Additionally, no residential or commercial development is proposed. Therefore, impacts to people or structures involving ground failure or liquefaction would not result. Impacts resulting from seismic-related ground failure or liquefaction would be less than significant.

iv. Landslides?

Less than Significant Impact. A landslide is defined as the movement of a mass of rock, debris, or earth down a slope (USGS 2020). Landslides are a type of “mass wasting,” which denotes any downslope movement of soil and rock under the direct influence of gravity. The term “landslide” encompasses five modes of slope movement: falls, topples, slides, spreads, and flows. These are further subdivided by the type of geologic material (bedrock, debris, or earth). Debris flows (commonly referred to as “mudflows” or “mudslides”) and rock falls are examples of common landslide types (USGS 2020). As discussed in the City's General Plan Master EIR (Kern Council of Governments 1988), the project site and surrounding area are not subject to seismic hazards such as landslides because of its overall gently sloping topography. Further, the project site is not mapped as a landslide zone (DOC 2020a). Additionally, no residential or commercial development is proposed by the project. Therefore, impacts to people or structures involving landslides would not result. Impacts resulting from landslides would be less than significant.

b. Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Construction of the project would not cause substantial on-site or off-site soil erosion. Before construction begins, the project applicant or contractor would be required to implement standard erosion-control measures and stormwater construction BMPs (through the construction permit process), which would reduce impacts from soil erosion during construction to below a level of significance. Refer to Section 2.4.10, Hydrology and Water Quality, for an additional discussion of potential impacts from erosion. Upon completion of project construction, the operation of the underground sanitary sewer pipelines would be passive and not result in soil erosion or loss of topsoil.

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. Refer to Sections 2.4.7(a) and 2.4.7(b). As previously discussed, no active earthquake faults are identified as occurring on or directly adjacent to the project site. The nearest known active fault is the White Wolf fault zone, approximately 3 miles southeast of the

project site. Additionally, the project does not propose the development of buildings or structures and, therefore, would not expose people or structures to impacts related to seismic ground shaking or be on an unstable geologic unit. Additionally, as discussed in the City's General Plan Master EIR (Kern Council of Governments 1988), the project site is not in an area of high liquefaction potential or a landslide hazard area. Impacts related to on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be less than significant.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than Significant Impact. As indicated in Table 18-1-B of the Uniform Building Code, soils with an expansion potential of 50 or less represent low expansion potential (International Conference of Building Officials 1994). The project site contains soils with little or no swelling clay and, therefore, has a low expansion potential (USGS 1989). The project would not be on expansive soils that would create a substantial risk to life or property (USDA 2020). Therefore, impacts related to expansive soil creating substantial direct or indirect risks to life or property would be less than significant.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The project involves improvements to existing underground sanitary sewer pipeline infrastructure within the project site. The project does not propose the use of septic tanks or alternative wastewater disposal systems. Therefore, impacts related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems would not result from implementation of the project.

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact. Paleontological resources are the evidence of once-living organisms as preserved in the rock record. They include both the fossilized remains of ancient plants and wildlife and the traces thereof (trackways, imprints, burrows). In general, fossils are considered to be greater than 5,000 years old (older than Middle Holocene) and are typically preserved in sedimentary rocks. The probability of discovering paleontological resources depends on the geologic formation being excavated and the depth and volume of the excavation. Sedimentary rocks, such as those found in coastal areas, usually contain fossils. Granite rocks, such as those found in inland areas, usually would not contain fossils.

According to published geologic maps, the project site is underlain by Quaternary alluvial fan deposits (DOC 1975). Quaternary alluvial fan deposits are characteristic of unconsolidated boulders, cobbles, gravel, sand, and silt deposited where a river or stream has emerged from a

confined valley or canyon where sediment is typically deposited in a fan-shaped cone (DOC 2010). Gravelly sediment is generally more dominant than sandy sediment in Quaternary alluvial fan deposits. The Quaternary alluvium fan deposits mapped on the project site have a low potential to contain intact paleontological resources because they are typically too young (forming in the last 11,700 years, the epoch known as the “late Holocene”) to contain fossilized remains (Society of Vertebrate Paleontology 2010). However, the project involves the improvements to existing sanitary sewer pipeline infrastructure within the City rights-of-way, the majority of which have been previously disturbed by the construction of the original pipelines or related underground municipal infrastructure. During implementation of the trenching construction methods used to access existing pipelines and install new pipelines, there would be little potential for disturbance of previously undiscovered paleontological or geological resources. Therefore, impacts related to the destruction of paleontological or geological resources would be less than significant.

2.4.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The discussion below is based on a greenhouse gas (GHG) technical analysis completed by Harris & Associates for the proposed project. Model outputs are included as Appendix B.

Impact Analysis

- a. **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than Significant.

Significance Threshold

In December 2017, in response to Senate Bill (SB) 32, CARB adopted an updated 2017 Scoping Plan (CARB 2017), which identifies GHG reductions by emissions sector to achieve a statewide emissions level consistent with SB 32. SB 32 extends the statewide emissions reductions goals of AB 32 by requiring the state to further reduce GHGs to 40 percent below 1990 levels by 2030. The 2017 Scoping Plan (CARB 2017) recognizes that achieving no net increase in ongoing operational GHG emissions compared to existing conditions would demonstrate that a project is not contributing to climate change impacts and is a recommended objective for land use development projects that are able to feasibly achieve this goal. Therefore, the project would not result in a significant impact on the environment if GHG emissions would result in zero net additional GHG emissions compared to the existing conditions baseline. The project site does not currently generate GHG emissions beyond occasional maintenance trips. An impact would result if the project would generate new ongoing sources of GHG emissions.

The SJVAPCD has adopted guidance documents for assessing and mitigating GHG impacts on global climate change, including the Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA (SJVAPCD 2009). Rather than establishing specific numeric thresholds of significance (as in the case of criteria pollutant emissions), the SJVAPCD guidance uses a tiered approach to assess cumulative impacts on global climate change. First, a project can demonstrate compliance with an approved GHG emissions reduction program

(such as CARB’s statewide GHG Cap-and-Trade Program). Second, a project can demonstrate implementation of BMPs to reduce GHG emissions. Finally, a project can demonstrate achievement of a 29 percent reduction in GHG emissions from business-as-usual. However, available measures to reduce GHG emissions would generally not apply to the project because the project would be limited to construction of the sewer infrastructure.

Neither the City nor County has developed a quantitative threshold of significance for GHG emissions, but a project found to contribute to no net increase in GHG emissions and found to be consistent with the implementation of the CARB 2017 Scoping Plan is presumed to have a less than significant GHG emissions impact. Therefore, the significance of the proposed project’s construction GHG emissions is based on consistency with the 2017 Scoping Plan goals and would result in zero net additional GHG emissions compared to the existing conditions baseline.

Analysis

As described in Section 2.4.3, Air Quality, estimated construction emissions represent the worst-case single-year emissions. Table 7 summarizes the worst-case annual GHG emissions from project construction. The maximum emissions that would occur in a single year of project implementation would be approximately 457 metric tons of carbon dioxide equivalent (MT CO₂e). The worst-case scenario represents approximately 20 percent of total pipeline and manhole construction that would occur over a 20-year period. Therefore, estimated GHG emissions for the worst-case scenario represent approximately 20 percent of total pipeline and manhole-related GHG emissions that would occur with project implementation. Total GHG emissions from pipeline and manhole projects over the 20-year period would be approximately 1,380 MT CO₂e. With the addition of one-time emissions of 181 MT CO₂e from pump station demolition and replacement, total GHG emissions over the 20-year plan implementation would be approximately 1,561 MT CO₂e. Actual total GHG emissions would likely be less because this estimate does not account for trenchless pipeline installation, which would result in fewer haul trips.

Table 7. Worst-Case Annual Construction Greenhouse Gas Emissions

Construction Phase	Emissions (MT CO ₂ e)
Pipeline Installation and Manhole Replacement	276
Pump Station Demolition and Replacement	181
Total	457

Source: CalEEMod Version 2016.3.2. Emission quantities are rounded to the nearest whole number. Exact values are provided in Appendix B.

For comparison, in 2012, the SJVAPCD prepared a Countywide GHG inventory and estimated GHG emissions at approximately 27 million MT CO₂e for a calendar year (Kern County 2017). Proposed project construction would result in a total of approximately 1,561 MT CO₂e over 20 years, which equates to an approximate one-time contribution of 0.006 percent of annual regional

GHG emissions. As such, construction of the CIPs would result in a nominal one-time contribution to regional GHG emissions.

Following construction, no net increase in vehicle or utility use is anticipated as a result of the project. The Millux Road Pipeline and Pump Station CIP would include two 15-horsepower pumps to replace the existing pump station with two 10-horsepower pumps. However, an increase in energy use is not anticipated to result because the location of the proposed new pump station would be sited at an elevation where more gravity may be used for flow than that at the existing pump station. Therefore, no net increase in GHG emissions would result following construction, and impacts would be less than significant.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant. The plan, policy, or regulation adopted to reduce GHG emissions that is applicable to the proposed project is the 2017 Scoping Plan. As stated previously, SB 32 extended the statewide emissions reductions goals of AB 32 by requiring the state to further reduce GHGs to 40 percent below 1990 levels by 2030. According to the most recent data included in the 2017 Scoping Plan, the state is on track to achieve the 2030 target (CARB 2017). As discussed In Section 2.4.8(a), the proposed project would result in nominal construction emissions and would not result in an increase in ongoing annual GHG emissions, which is consistent with the recommendations in the 2017 Scoping Plan.

Following construction, the proposed project sewer infrastructure would not generate new operational GHG emissions. The proposed sewer infrastructure would serve but would not support growth beyond planned development. The proposed project does not propose changes to the existing land uses. As a result, the proposed project would not exceed growth projections in the City's General Plan Update (2012) and would not result in annual GHG emissions that would interfere with the City's ability to achieve GHG reduction targets. Additional consistency analysis is not applicable to the proposed CIPs because no new commercial or residential structures that would be subject to recommended GHG reduction measures or ongoing sources of GHG emissions are proposed. The proposed new pump station is not anticipated to require additional energy than the existing pump station. Therefore, the project would be consistent with the 2017 Scoping Plan, and the impact would be less than significant.

2.4.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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, result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

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. The project involves improvements to the existing underground sanitary sewer infrastructure on the project site. The project would not routinely use or dispose of hazardous substances. However, the project would involve the routine transport of potentially hazardous sewage materials in its operation as a component of the sanitary sewer system for the City. As discussed in Section 2.4.7, Geology and Soils, the City requires that projects comply with the adopted operations and maintenance standards set forth in the 2014 Sewer System Management Plan and the 2016 California Building Code and the City-specific amendments to the code to reduce the risk of hazard to the public from projects that routinely transport hazardous materials (City of Arvin 2014; Arvin, California, Ordinance 437). The project would comply with these City

standards and requirements to avoid potential hazard to the public from the routine transport of hazardous materials during construction and operation in the event of seismic ground shaking. Therefore, implementation of the project would not expose the public or environment in the surrounding community to any health hazards from the routine transport, use, or disposal of hazardous materials, and no impacts would result.

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. As discussed in Sections 2.4.7 and 2.4.9(a), the project would not involve the generation, storage, or disposal of hazardous materials. Potential impacts from the routine transport of hazardous sewer materials during operation of the project would be reduced through compliance with the City operations and maintenance standards.

Equipment that would be used during construction has the potential to release oils, greases, solvents, and other finishing materials through accidental spills. Spill or upset of these materials could have the potential to impact surrounding land uses; however, federal, state, and local regulations are in place to reduce the effects of such potential hazardous materials spills. The Kern County Fire Department provides the City with emergency services and enforces city, state, and federal hazardous materials regulations (City of Arvin 2020). City regulations include securing of hazardous materials containers to prevent spills and spill containment and mitigation. In addition, the state fire marshal enforces oil and gas pipeline safety regulations, and the federal government enforces hazardous materials transport pursuant to its interstate commerce regulation authority (State Fire Marshal 2020). As standard permitting conditions, compliance with these requirements is mandatory and would minimize the potential for the accidental release or upset of hazardous materials, ensuring public safety. Therefore, the project would comply with the previously referenced requirements and would not result in the creation of significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, impacts would be less than significant.

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?

No Impact. The project is within one-quarter mile from several schools operating in the City, including Arvin High School, Haven Drive Middle School, Bear Mountain Elementary School, El Camino Real Elementary School, Sierra Vista Elementary School, Grimmway Academy, and Bear Mountain School. As discussed in Section 2.4.9(a) and 2.4.9(b), while the project is within one-quarter mile of these schools, the project would not generate, store, dispose of, or transport hazardous substances. Therefore, no impacts to an existing or proposed school would result from implementation of the project.

- 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?**

Less than Significant with Mitigation Incorporated. California Government Code, Section 65962.5, details the requirements of the California Department of Toxic Substances Control to compile and maintain a list of hazardous waste facilities, lands designated as hazardous, underground storage tanks, and others subject to corrective action pursuant to the California Health and Safety Code (CalEPA 2020). This list, referred to as the “Cortese List,” is found in the California Department of Toxic Substances Control’s Envirostor database (DTSC 2020). The Envirostor database search resulted in four listed sites on the project site: one USEPA Superfund cleanup site, one voluntary cleanup site, and two school investigation sites. The two school investigation sites are determined closed with no further action as of October 2005.

The USEPA Superfund cleanup site is an approximately 4.7-acre industrial facility northeast of the intersection at Tejon Highway and Franklin Street. The facility was owned by Brown and Bryant starting in 1960 for the storage and sale of liquid fertilizer, insecticides, herbicides, fumigants, and defoliants. This site was listed by the USEPA in 1988 due to waste disposal practices, operational spillage, and poor housekeeping of pesticides, herbicides, fumigants, and defoliant that contributed to the contamination. The site has since been closed and fenced, and public access is restricted. Cleanup activities are underway and include the installation of a cap and monitoring wells (DTSC 2020).

The voluntary cleanup site is approximately 300 acres of vacant land extending southwest from the corner of Varsity Avenue and Campus Drive, south to Nectarine Court and Alderete Drive, and is bounded by the residential neighborhood to the west. The site was referred to the State Water Resources Control Board for agency oversight after a Phase 1 Environmental Site Assessment was performed in July 2018 for future proposed Kern Community College District development. The Phase 1 Environmental Site Assessment found agricultural chemical residue, petroleum hydrocarbons, and metals in the soils. The report also details the existing oil wells, pump jacks, petroleum pipeline, and aboveground storage tanks. There are also records for a potential underground storage tank of unknown capacity and leaded paint and asbestos-containing building materials present at the location (DTSC 2020).

Other databases were searched through the State Water Resources Control Board’s GeoTracker website, and the only active remediation site listed on the project site is the USEPA Superfund cleanup site that was also listed in the Envirostor database and described previously (SWRCB 2020).

The project has the potential to encounter hazardous materials during construction that would result in a significant hazard to the public or the environment if released. If any hazardous materials from the two hazardous materials sites described previously or any unknown sites are discovered

during project construction, implementation of Mitigation Measure HAZ-1 would ensure that handling or discovery of hazardous materials during construction activities would not create a hazard to the public or the environment. Therefore, impacts would be less than significant with mitigation incorporated.

- e. Would the project, if 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, result in a safety hazard or excessive noise for people residing or working in the project area?**

No Impact. The project site is covered by the County's Airport Land Use Compatibility Plan (Kern County 2012). The project site is not within 2 miles of a public airport or public use airport or included in any public airport influence areas identified in the County's Airport Land Use Compatibility Plan (Kern County 2012). Therefore, the project would not result in a safety hazard or excessive noise for people residing or working on the project site, and no impact would result.

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Less than Significant Impact. The Kern County Fire Department provides the project site with emergency services and maintains an emergency operations plan for the County (Kern County Fire Department 2020). Construction-related activities may require temporary partial lane or road closures or detours during construction. However, it is unlikely construction of multiple CIPs would happen concurrently and interfere with an emergency response plan or emergency evacuation plan. Therefore, the project would not impair or physically impact any adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

- 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 outside of the Fire Hazard Severity Zones designated by California Department of Forestry and Fire Protection Office of the state fire marshal (CAL FIRE 2007). Further, the project site is surrounded primarily by urban developed, agricultural, and industrial land uses and is not likely to be at risk of wildland fires. The project includes improvements to the existing underground sanitary sewer infrastructure and does not propose to alter existing buildings or construct new buildings or roads. Therefore, the project would not expose people or structures to a significantly greater risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

Mitigation Measures

The following mitigation is required as part of the project to ensure that potential hazards and hazardous materials impacts are mitigated to levels that are less than significant:

HAZ-1: Health and Safety Plan. The project proponent(s), in consultation with the City of Arvin, shall develop a health and safety plan to address potential hazardous materials associated with agricultural and petroleum industry activities on and surrounding the project site. The project health and safety plan shall include emergency procedures for responding to hazardous materials releases for materials that would be brought onto or discovered on the site as part of construction activities. If evidence of contaminated soils or groundwater is discovered during construction, work in the vicinity of the contaminated area shall cease until the wastes are characterized or remediated. Remediation of the site shall be coordinated with appropriate regulatory authorities to ensure that applicable remediation standards are met. The emergency procedures for hazardous materials releases shall include the necessary personal protective equipment, spill containment procedures, and training of workers to respond to accidental spills or releases. The project proponents shall be required to have on hand at all times during construction the adequate absorbent materials and containment booms to handle a spill equivalent to the largest container of fuels or oil in use.

2.4.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

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 with Mitigation Incorporated. A number of federal and state laws have been established to ensure adequate planning, implementation, management, and enforcement of water quality control efforts. Federal water quality legislation includes the Clean Water Act and the National Environmental Policy Act. California statutes and administrative laws that are applicable to water quality include but are not limited to the California Water Code, CEQA, California Code of Regulations, and other codes such as the California Health and Safety Code, California Fish and Game Code, and California Public Resources Code. The USACE and the RWQCB implements

federal and state laws pertaining to water quality in the area. The primary issues addressed by the RWQCB include leaking fuel storage tanks, illegal discharges of human or wildlife waste, and the dumping of waste oils and other hazardous liquids into ground- and surface water.

The City is required to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES). NPDES is a part of the federal Clean Water Act amendments of 1992 and requires local government agencies and major private industries to take practical measures to reduce pollution discharges into water bodies. Compliance with the requirements of the NPDES would ensure that water quality would not be degraded by the project.

The project includes improvements to the City's underground sanitary sewer infrastructure. As discussed in Section 1.4, the extent of construction activities associated with the sanitary sewer pipeline improvements and installations would remain within a 25-foot-wide construction activity zone. In the construction activity zone, 5-foot-wide trenches would be excavated in the roadway or ground surface directly over the pipelines to provide access to the pipelines. For manhole improvements, construction would remain within a 15-foot-wide construction activity zone. Construction staging areas would be in developed areas in the City's rights-of-way. Upon completion of the project, the roadway and ground surface areas disturbed during construction would be restored to their previous condition and function.

Construction activities associated with the project are not expected to violate any water quality standards or waste discharge requirements. During construction, gasoline, diesel fuel, lubricating oil, grease, and solvents may be used on the project site. Although only small amounts necessary to maintain the construction equipment would be on site at any one time, accidental spills of these materials during construction could potentially result in surface water and groundwater quality impacts. In addition, soil loosened during trenching or miscellaneous construction materials or debris could also degrade water quality if mobilized and transported off site by water flow. Because construction activities may occur during the rainy season or during a storm event, construction of the project could result in impacts to water quality without implementation of appropriate BMPs. Due to the potential for impacts to water quality during construction, Mitigation Measures HYDRO-1 and HYDRO-2 would be implemented to reduce impacts related to construction activities to less than significant levels.

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?

Less than Significant Impact. Construction activities associated with the project would not require dewatering or use well or groundwater sources. Therefore, construction activities are not expected to affect groundwater supplies. Additionally, the project is not expected to encounter groundwater during trenching activities and would not involve permanent pumping of groundwater because no

construction or operational phase of the project would require the direct use of groundwater supplies. Therefore, the project would not substantially deplete groundwater supplies or directly result in a net deficit in aquifer volume. Should groundwater be encountered during grading operations, further environmental review would be required to assess potential impacts. Impacts to groundwater supplies as a result of project implementation would be less than significant.

c. Would the project 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 substantial erosion or siltation on- or off-site?

Less than Significant Impact with Mitigation Incorporated. The project includes improvements to the City's underground sanitary sewer infrastructure. As discussed previously in Section 1.4, the extent of construction activities associated with the sanitary sewer pipeline improvements and installations would remain within a 25-foot-wide construction activity zone. Upon completion of the project, the roadway and ground surface areas disturbed during construction would be restored to their previous condition and function. There are no streams or rivers that occur on the project site, and no alterations to water bodies would result with implementation of the project. Furthermore, there would be no change in the on-site drainage patterns following construction. Short-term erosion impacts during construction of the project would be prevented through implementation of Mitigation Measures HYDRO-1 and HYDRO-2. Fill material would be used to backfill trenched areas. The soils in the non-native grassland areas would then be hydro-seeded with a native plant seed mix, as required in Mitigation Measure BIO-5 (see Section 2.4.4), to further prevent erosion or siltation post-construction. Therefore, the project would result in less than significant impacts related to on- or off-site erosion or siltation.

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. As discussed in Section 2.4.10(c)(i), implementation of Mitigation Measure HYDRO-1 would prevent erosion and surface runoff during construction. Once project construction is complete, roadway and ground surface areas disturbed during construction would be restored to their previous condition and function, avoiding any increases in surface runoff that may result in on- or off-site flooding. Additionally, non-native grassland areas temporarily disturbed during construction would be reseeded with native plant seeds to avoid increases in surface runoff, as outlined in Mitigation Measure BIO-5. Therefore, project impacts related to increases in surface runoff and on- and off-site flooding risk would be less than significant.

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. As discussed in Sections 2.4.10(a) and 2.4.10(c)(ii), the project would not result in significant impacts related to runoff or the discharge of polluted runoff with implementation of Mitigation Measures HYDRO-1, HYDRO-2, and BIO-5. Therefore, impacts related to runoff exceeding the stormwater drainage capacity or discharging polluted runoff as a result of project implementation would be less than significant.

iv. Impede or redirect flood flows?

No Impact. The project includes improvements to the City's underground sanitary sewer infrastructure and does not propose the construction of any aboveground structures that would impede or redirect flood flows. Therefore, no impact related to impeding or redirecting flood flows would result from implementation of the project.

d. Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. The project site is mapped in the Federal Emergency Management Agency 100-year floodplain as a regulatory floodway (FEMA 2020). The project includes improvements to the City's underground sanitary sewer infrastructure and does not propose the construction of any aboveground structures that would release pollutants due to inundation from flood, tsunami, or seiche. Furthermore, the project site is approximately 100 miles west of the Pacific Ocean and approximately 37 miles southwest from the nearest body of water, Lake Isabella and, thus, is unlikely to be impacted from tsunami or seiche events. Therefore, project impacts related to the release of pollutants due to project inundation during flood, tsunami, or seiche would be less than significant.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact with Mitigation Incorporated. As discussed previously in Section 2.4.10(a), implementation of Mitigation Measures HYDRO-1 and HYDRO-2 would reduce any potential impacts related to water quality from project construction activities to less than significant levels and, therefore, would not conflict with or obstruct implementation of a water quality control plan. As discussed in Section 2.4.10(b), the project would not result in significant impacts to groundwater or groundwater recharge, and therefore, the project would not conflict or obstruct with a sustainable groundwater management plan. Impacts related to conflict or obstruction with a water quality control plan or sustainable groundwater management plan as a result of project implementation would be less than significant.

Mitigation Measures

The following mitigation is required as part of the project to ensure that potential hydrology and water quality impacts are mitigated to levels that are less than significant:

HYDRO-1: Stormwater Pollution Prevention Plan. In conformance with the Clean Water Act, project proponents, in consultation with the City of Arvin, shall prepare a stormwater pollution prevention plan. The stormwater pollution prevention plan shall address the potential sources and locations of stormwater contamination, characteristics and impacts of specific contaminants, and temporary and permanent erosion-control practices and include water sampling data, construction practices that minimize stormwater contamination, coordination of best management practices with planned construction activities, and compliance with the City of Arvin, Kern County, state, and federal regulations.

HYDRO-2: Best Management Practices. Best management practices shall be incorporated into the final construction and design plans and shall include but not be limited to the following:

- Construction vehicles shall be adequately maintained and equipped to minimize/eliminate fuel spillage. Equipment maintenance work shall occur off site or in the designated construction staging areas.
- Any construction materials that need to be temporarily stockpiled or equipment and supplies that need to be stored on site shall be kept in the construction staging areas and shall be covered when not in use.

2.4.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

a. Would the project physically divide an established community?

No Impact. The project includes improvements to the underground sanitary sewer infrastructure throughout the City, primarily in rights-of-way and vacant, undeveloped lands. The project would not introduce new permanent aboveground structures or roadways that would act as barriers to an established community. Temporary work areas would be restored to preconstruction conditions. The majority of the underground sanitary sewer infrastructure would not be visible following construction. As previously discussed in Section 2.4.1(a), the only aboveground components of the project are the 257 manholes proposed for repairs and replacements, as well as the 0.06-acre pump station proposed as a part of the Millux Road Pipeline and Pump Station CIP (Figure 2 series). The manhole repairs and replacements would not introduce new aboveground features to the project site. The pump station proposed at the southwestern corner of Millux Road and Comanche Drive would be constructed in a previously disturbed area and would replace the existing pump station at the corner of El Camino Real and A Street. The project would not introduce aboveground features that are not already present on the project site. As a result, construction of the project would not physically divide an established community, and no impacts would result.

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. As discussed in Section 2.4.11(a), the project includes improvements to the City's underground sanitary sewer infrastructure and would not introduce permanent aboveground structures that would change or conflict with the current land use or zoning designation. Additionally, the project would not conflict with the intended use of the properties or surrounding land uses. The project would comply with the City's General Plan Update Land Use Element and the County's General Plan Land Use, Open Space, and Conservation Element. As discussed in Section 2.4.4, the project complies with policies protecting biological resources identified in the City's General Plan Update Conservation and Open Space Element and the County's General Plan Land Use, Open Space, and Conservation Element. Therefore, the project would not conflict with any land use plan, policy, or regulation of an agency with jurisdiction over the project site, and no impact would result.

2.4.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The California Department of Conservation’s Division of Mine Reclamation and the California Geological Survey do not identify the project site as an area with high potential for aggregate or mineral resources (DOC 2020b; CGS 2018). In addition, the project site is primarily within and in proximity to residential and commercial land uses in the City and would not likely be mined for mineral resources. Therefore, the project would not result in the loss of availability of a known mineral resource valuable to the region and the state, and no impact would result.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The County’s General Plan Land Use, Open Space, and Conservation Element identifies areas north and south of the project site as containing productive or potentially productive petroleum fields, natural gas, geothermal resources, and mineral deposits of regional and statewide significance. However, the City’s General Plan Update Land Use Element does not identify the project site as a locally important mineral resource recovery site (City of Arvin 2012). The City’s General Plan Update zones the northern portion of the City for schools and residential development and the southern portion of the City for residential and commercial development (City of Arvin 2012). Although the County’s General Plan identifies areas north and south of the City as potentially containing mineral resources, extraction of mineral resources in these areas would conflict with the adopted City’s General Plan and pose potential public health and safety impacts (Kern County 2009). Thus, it would be unlikely to result. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would result.

2.4.13 Noise

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or 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, expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

- 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 with Mitigation Incorporated. Noise associated with the project would include short-term construction noise and may temporarily impact nearby sensitive receptors. During construction, noise generated by construction equipment would occur with varying intensities and durations. Construction activity would comply with the City's allowable hours for construction between the hours of 7:00 a.m. and 9:00 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 10:00 p.m., Saturday and Sunday (City of Arvin 2019b). To minimize potential nighttime and weekend noise impacts to the surrounding land uses, PDF-NOI-1 would be incorporated as follows:

PDF-NOI-1: Project Construction Activity Schedule. Project construction activities would be limited to standard working hours of 8:00 a.m. to 5:00 p.m., Monday through Friday.

The temporary increase in ambient noise levels in the project vicinity would have the potential to exceed the maximum acceptable noise threshold of 65 decibels for outdoor activity areas set by the County's General Plan Noise Element (Kern County 2009). To ensure impacts from a temporary increase in ambient noise levels would be less than significant, Mitigation Measure NOI-1 shall be implemented.

The existing noise environment at the project site is typical of a city with residential, commercial, agricultural, and industrial land uses, with sources of noise including roadway noise and periodic noise increases from heavy agricultural and industrial machinery and vehicles when they are in use. Noise-sensitive receptors (i.e., land uses associated with indoor and outdoor activities that may be subject to stress or significant interference from noise) in and around the project site include residential uses and educational and municipal facilities. Project construction activities would be short term in nature, and with the implementation of Mitigation Measure NOI-1, noise levels during construction would comply with the noise thresholds in the City's Noise Ordinance or County's General Plan Noise Element. Moreover, upon completion of construction activities, no new sources of noise would result because no operational component of the project would generate new sources of noise. Therefore, project impacts related to the generation of a temporary increase in noise levels would be less than significant with mitigation incorporated.

The project would not introduce a noise-sensitive land use into an area with excessive ambient noise levels. Further, the project would not generate new, permanent sources of operational noise as the underground sanitary sewer infrastructure improvements would be passive and not generate noise. The project is not anticipated to cause a significant permanent increase in ambient noise levels because operation of the project would be identical to existing conditions and would not generate new sources of operational or vehicular noise. Therefore, project impacts related to the generation of a permanent increase in noise levels would be less than significant.

b. Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact with Mitigation Incorporated. Groundborne vibration is typically attenuated over short distances. Various types of heavy equipment would be used during the construction of the project. Trenching and excavation could result in perceptible groundborne vibrations or groundborne noise. Neither the City's nor the County's General Plan includes thresholds for vibration levels. However, potential vibration impacts from the project would be temporary during construction activities, and the project would comply with the City's Noise Ordinance for acceptable hours for construction activity, as discussed in Section 2.4.13(a). Implementation of Mitigation Measure NOI-1 would also reduce potential impacts from groundborne vibration and associated noise levels. Therefore, project impacts related to the generation of groundborne vibration would be less than significant.

Operation of the project would not involve activities that generally generate groundborne vibrations because operation of the underground sanitary sewer infrastructure would be passive. As such, the project would not generate an excessive, significant level of operational groundborne vibration or noise.

- c. **Would the project, for a project located within the vicinity of a private airstrip or 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, expose people residing or working in the project area to excessive noise levels?**

No Impact. As discussed in Section 2.4.9(e), the project site is not within 2 miles of a public airport or public use airport or included in any public airport influence areas identified in the County's Airport Land Use Compatibility Plan (Kern County 2012). Therefore, the project would not expose people residing or working on the project site to excessive noise levels, and no impact would result.

Mitigation Measures

The following mitigation is required as part of the project to ensure that potential noise impacts are mitigated to levels that are less than significant:

NOI-1: Construction Noise. Prior to grading activities, the City shall ensure the following:

- Construction equipment, fixed or mobile, shall be outfitted with properly operating and maintained mufflers.
- Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and using electric air compressors and similar power tools rather than diesel equipment shall be used where feasible.
- During construction, stationary construction equipment shall be located so that emitted noise is directed away from or shielded from sensitive noise receivers.
- During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise-sensitive receptors.
- Construction shall not occur outside the hours of 7:00 a.m. and 9:00 p.m., Monday through Friday, or outside the hours of 8:00 a.m. and 10:00 p.m., Saturday and Sunday. Construction is prohibited on federal holidays.

2.4.14 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

- a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Less than Significant Impact. The project includes improvements to the City's underground sanitary sewer infrastructure. The purpose of the project is to increase capacity of the City's sanitary sewer system to support both existing and planned population and development growth as set out in the City's General Plan Update Land Use Element (City of Arvin 2012). Therefore, the project would not directly or indirectly induce substantial unplanned population growth in the City, and impacts would be less than significant.

- b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

No Impact. The project includes improvements to the City's underground sanitary sewer infrastructure and would not displace existing housing or people, demolish any existing housing, or necessitate the need for the construction of replacement housing. Therefore, no impacts related to displacing existing people or housing or the construction of replacement housing would result.

2.4.15 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

- a. **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

Fire protection?

No Impact. The project includes improvements to the City's underground sanitary sewer infrastructure. Operation of the project would be passive and would not place increasing demands on the local fire protection services. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to fire protection services would result from implementation of the project.

Police protection?

No Impact. The project includes improvements to the City's underground sanitary sewer infrastructure. Operation of the project would be passive and would not place increasing demands on the local police protection services. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to police protection services would result from implementation of the project.

Schools?

No Impact. The project includes improvements to the City's underground sanitary sewer infrastructure. Operation of the project would be passive and would not place increasing demands on the local schools or educational facilities. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to schools would result from implementation of the project.

Parks?

No Impact. The project includes improvements to the City's underground sanitary sewer infrastructure. Operation of the project would be passive and would not place increasing demands on the local parks or recreation facilities. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to parks would result from implementation of the project.

Other public facilities?

No Impact. The project includes improvements to the City's underground sanitary sewer infrastructure. Operation of the project would be passive and would not place increasing demands on the local public facilities. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to public facilities would result from implementation of the project.

2.4.16 Recreation

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

- 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 includes improvements to the City's underground sanitary sewer infrastructure. As discussed in Section 2.4.15, Public Services, operation of the project would be passive and would not place increasing demands on the existing neighborhood and regional parks or other recreational facilities. The project does not involve the construction of new homes or buildings that would introduce additional park and recreational facilities users. Therefore, no impacts to existing neighborhood and regional parks or other recreational facilities would result from implementation of the project.

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

No Impact. As discussed in Section 2.4.16(a), the project would not result in an increase in population that would result in increased use of or need to expand existing recreational facilities. Furthermore, the project does not include construction or expansion of recreational facilities. Therefore, no impacts related to the use or construction of recreational facilities would result from implementation of the project.

2.4.17 Transportation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. The construction and operation of the project would not conflict with any programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Construction-related activities may require temporary partial lane or road closures or detours during construction that may disrupt circulation systems including transit, roadway, bicycle, and pedestrian facilities. As discussed in Section 2.4.9(f), a traffic control plan would be implemented to avoid significant impacts to the circulation system during construction. Impacts during project construction would be less than significant. Operation of the project's underground sanitary sewer infrastructure would be passive and would not conflict with circulation ordinances or policies set out by the City or County.

b. Would the project or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact. The project includes improvements to the City's underground sanitary sewer infrastructure. Construction and operation of the project would not result in a permanent increase to the vehicle miles traveled in the area and, therefore, would be consistent with CEQA Guidelines, Section 15064.3(b). No impacts related to an increase in vehicle miles traveled or inconsistency with CEQA Guidelines, Section 15064.3(b), would result from implementation of the project.

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 includes improvements to the City's underground sanitary sewer infrastructure and would not introduce geometric design features or incompatible uses that would

increase or create traffic hazards. Therefore, no impacts related to increases in hazards due to a geometric design feature or incompatible uses would result from implementation of the project.

d. Would the project result in inadequate emergency access?

Less than Significant Impact. As discussed in Section 2.4.9(f), project construction-related activities may require temporary partial lane or road closures or detours during construction that would interfere with emergency access. As discussed in Section 2.4.9(f), PDF-HAZ-1 would be incorporated into the project design to avoid impaired emergency access during construction. Therefore, the project would not result in inadequate emergency access, and impacts would be less than significant.

2.4.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

- 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**

Less than Significant Impact with Mitigation Incorporated. As discussed in Sections 2.4.5(a) and 2.4.5(b), the review of the Sacred Lands File by the NAHC was negative. Further, the results of the records search and pedestrian survey did not identify any historic, archaeological, or tribal cultural resources on the project site. The project archaeologist determined the probability of intact subsurface resources on the project site to be low due to previous disturbance and current activity on the project site. Information request letters were sent to 16 Native American contacts provided by the NAHC. The San Manuel Band of Mission Indians and Tejon Indian Tribe responded to the NAHC outreach letters. The San Manuel Band of Mission Indians reported that the project site is outside of the Serrano ancestral territory and that no consultation would be requested. The Tejon Indian Tribe requested notification upon inadvertent discovery of tribal cultural resources or

human remains during project implementation. Implementation of Mitigation Measures CR-1 and CR-2 would ensure notification and communication with the Tejon Indian Tribe upon inadvertent discovery of tribal cultural resources or human remains and would reduce significant adverse impacts related to a tribal cultural resource listed or eligible for listing in the California or local register to less than significant levels.

- 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Less than Significant Impact with Mitigation Incorporated. As discussed in Sections 2.4.5, Cultural Resources, and 2.4.18(a), there were no historic, archaeological, or tribal cultural resources recorded or observed in the project site, and the probability for unknown resources to occur on the project site is low. The NAHC tribal outreach did not result in claims of cultural significance of any resources on the project site by California Native American tribes. However, as discussed in Section 2.4.5(c), it is possible that construction activity could unearth previously unknown tribal cultural resources or human remains, which would be considered a potentially significant impact. Implementation of Mitigation Measures CR-1 and CR-2 would ensure that previously unknown tribal cultural resources or human remains are treated with dignity and as specified by law and would reduce potentially significant impacts to less than significant levels. Therefore, impacts related to a substantial adverse change in the significance of a tribal cultural resource determined to be significant to a California Native American tribe as a result of project implementation would be less than significant with mitigation incorporated.

Mitigation Measures

Mitigation Measures CR-1 and CR-2, as described in Section 2.4.5, are required as part of the project to ensure that potential tribal cultural resources impacts are mitigated to levels that are less than significant.

2.4.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

- 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 with Mitigation Incorporated. The project includes improvements to the City's underground sanitary sewer infrastructure. As discussed in Section 2.4.14(a), the purpose of the project is to increase capacity of the City's sanitary sewer system to support both existing and planned population and development as set in the City's General Plan Update Land Use Element (City of Arvin 2012). As discussed throughout this IS/MND, temporary construction impacts related to biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, and tribal cultural resources have been mitigated below a level of significance by implementing Mitigation Measures BIO-1 through BIO-8, CR-1, CR-2, HAZ-1, HYDRO-1, HYDRO-2, and NOI-1. Therefore, impacts related to construction of new or expanded wastewater infrastructure as a result of project implementation would be less than significant with mitigation incorporated.

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 includes improvements to the City's underground sanitary sewer infrastructure and would not require water supplies greater than what is currently being used by the existing system. Therefore, no impacts to available water supplies would result from implementation of the project.

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. The project includes improvements to the City's underground sanitary sewer infrastructure. As discussed previously in Section 2.4.14(a) and Section 2.4.19(a), the purpose of the project is to increase capacity of the City's sanitary sewer system to support both existing and planned population and development as set out in the City's General Plan Update Land Use Element (City of Arvin 2012). Therefore, the project would not result in the wastewater treatment provider having inadequate capacity for the project, and no impact would result.

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 goals?

Less than Significant Impact. The project includes improvements to the City's underground sanitary sewer infrastructure and would not generate solid waste in excess of typical construction and pipeline replacement projects. The solid waste generated by project construction would be recycled to the extent feasible and disposed of in accordance with City and County construction and demolition waste ordinances and requirements (City of Arvin 2015; Kern County 2020). Conformance with City and County solid waste generation requirements would ensure that the project would not impair the attainment of solid waste reduction goals. Operation of the project would not result in the generation of solid waste. Therefore, impacts from generation of solid waste in excess of state or local standards as a result of project implementation would be less than significant.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. As discussed in Section 2.4.19(d), the project would not generate solid waste in excess of typical construction and pipeline replacement projects. The project would comply with applicable federal, state, and local construction and demolition waste management and reduction regulations by recycling to the extent feasible and disposing of construction solid waste in approved landfills (USEPA 2020; CalRecycle 2020; City of Arvin 2015; Kern County 2020). Therefore, the project would comply with federal, state, and local solid waste generation and reduction requirements, and impacts would be less than significant.

Mitigation Measures

Mitigation Measures BIO-1 through BIO-8, CR-1, CR-2, HAZ-1, HYDRO-1, HYDRO-2, and NOI-1, as previously described in Sections 2.4.4, 2.4.5, 2.4.9, 2.4.10, and 2.4.13, are required as part of the project to ensure that potential impacts to biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, noise, and tribal cultural resources are mitigated to levels that are less than significant.

2.4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. As discussed in Section 2.4.9(f), the project would implement a traffic control plan to avoid impacts to the County's emergency response and emergency evacuation plans during project construction. Operation of the project's underground sanitary sewer infrastructure would be passive and would not impair an adopted emergency response plan or emergency evacuation plan. Therefore, the project would not impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

b. 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 Impact. As discussed in Section 2.4.9(g), the project site is outside of the Fire Hazard Severity Zones designated by the California Department of Forestry and Fire Protection, Office of the state fire marshal (CAL FIRE 2007). Further, the project site is surrounded primarily by urban developed, agricultural, and industrial land uses and is not likely to be at risk of wildfire. The project includes improvements to the existing underground sanitary sewer infrastructure and does not propose to alter existing buildings or construct new buildings that would expose occupants to pollutant concentrations from a wildfire or spread of wildfire. Therefore, impacts

related to exacerbating wildfire risks or exposure of project occupants to wildfire risk as a result of project implementation would be less than significant.

- c. 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?**

Less than Significant Impact. As discussed throughout this document, the project includes improvements to the City's underground sanitary sewer infrastructure and would not require the installation or maintenance of associated infrastructure that would exacerbate fire risk or environmental impacts. Temporary impacts to the environment related to construction of the project have been analyzed throughout this document and determined to be less than significant or mitigated below a level of significance. Therefore, impacts related to increased fire risk or environmental impacts from installation or maintenance of associated infrastructure as a result of project implementation would be less than significant.

- d. 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. As discussed in Section 2.4.10, the project would not alter existing drainage patterns or contribute to increased runoff or flooding downstream, including those in post-fire conditions. Therefore, impacts related to exposure of people or structures to significant risks from runoff, post-fire slope instability, and drainage changes as a result of project implementation would be less than significant.

2.4.21 Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino, (1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

Impact Analysis

- a. **Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Less than Significant with Mitigation Incorporated. As discussed in Section 2.4.4, the project has the potential to result in significant impacts to special-status plant and wildlife species, migratory bird species, a sensitive vegetation community, and aquatic resources. However, with implementation of Mitigation Measures BIO-1 through BIO-8, these impacts would be reduced to less than significant levels. Therefore, impacts from the degradation of the quality of the environment related to the reduction of habitat and range of plants and wildlife species resulting from project implementation would be less than significant.

As discussed in Sections 2.4.5 and 2.4.18, there were no historic, archaeological, or tribal cultural resources recorded or observed on the project site, and the probability for unknown resources to occur on the project site is low. However, implementation of Mitigation Measures CR-1 and CR-2 would avoid potential impacts to previously undocumented cultural or tribal cultural resources or human remains from being disturbed during construction. Further, the NAHC tribal outreach did not result in claims by California Native American tribes of cultural significance of any resources on the project site. Therefore, impacts related to impacts from the degradation of the quality of the environment related to the elimination of important examples of California history or prehistory resulting from project implementation would be less than significant.

- 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. Implementation of the project would not result in individually limited but cumulatively considerable significant impacts. Resource topics associated with implementation of the project have been analyzed in accordance with CEQA and the CEQA Guidelines and were found to pose no impacts, less than significant impacts, or less than significant impacts with mitigation incorporated. In addition, taken in sum with other current or future projects in the area, the scale of the project is relatively minor, and impacts to any environmental resource or issue areas would be temporary and would not be cumulatively considerable.

- c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less than Significant with Mitigation Incorporated. Implementation of Mitigation Measure NOI-1 would reduce temporary construction noise impacts to nearby residences to less than significant levels. Operation of the project would be passive and not consist of any uses or activities that would negatively affect any human beings in the vicinity, such as the nearby residences. Therefore, with the incorporation of mitigation measures, the project would result in less than significant environmental effects that could cause substantial adverse effects on human beings directly or indirectly.

Mitigation Measures

Mitigation Measures BIO-1 through BIO-8, CR-1, CR-2, and NOI-1 (previously discussed in Sections 2.4.4, 2.4.5, and 2.4.13) are required as part of the project to ensure that potential biological resources, cultural and tribal cultural resources, and noise impacts are mitigated to levels that are less than significant.

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Appendix A. Biological Resources Letter Report

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Appendix B. Air Quality/Greenhouse Gas Model Outputs

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Appendix C. Cultural Resources Study

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