



DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

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CEQA INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, December 30, 2009

1. **Project title:** West Modesto Sewer Infrastructure Project
2. **Lead agency name and address:** Stanislaus County Planning and Community Development
1010 10th Street, Suite 3400
Modesto, CA 95354
3. **Contact person and phone number:** Miguel A. Galvez, Deputy Director
(209) 525-6330
Galvezm@Stancounty.com
4. **Project location:** City of Modesto, Stanislaus County
5. **Project sponsor's name and address:** Miguel A. Galvez, Deputy Director
Stanislaus County Planning and Community Development
1010 10th Street, Suite 3400
Modesto, CA 95354
6. **General Plan designation:** **Area 7:** Low Density Residential.
Area 9: Low Density Residential, Medium Density Residential.
Area 21: Low-Density, Medium Density Residential, Commercial, City.
7. **Zoning:** **Area 7:** R-1 (Single-Family Residential) and R-A (Rural Residential).
Area 9: R-1 (Single-Family Residential), R-2 (Medium Density Residential), R-3 (Multiple-Family Residential), C-1 (Neighborhood Commercial), and H-1 (Highway Frontage).
Area 21: R-1 (Single-Family Residential), R-2 (Medium Density Residential), R-3 (Multiple Family Residential), H-1 and (Highway Frontage).
8. **Description of project:**

Stanislaus County (County), in cooperation with the Department of Housing and Urban Development (HUD) and State Water Resources Control Board (SWRCB), proposes to install sanitary sewer mains and laterals in three separate unincorporated neighborhoods within west Modesto in Stanislaus County, California (**Figures 1, 2, and 3**). It is estimated that the project will include the installation of up to 80,000 linear feet of gravity mains and approximately 1,004 new house laterals in the Spencer/Marshall (144 services), Beverly/Waverly (527 services), and Rouse/Colorado (333 services) neighborhoods. The Spencer/Marshall neighborhood is generally located approximately 0.3 mile west of Highway 99 and is accessible from State Route 132 and Spencer Avenue.

The Beverly/Waverly neighborhood is located approximately 0.9 mile west of Highway 99 and is accessible from Paradise Road. The Rouse/Colorado neighborhood is located approximately 0.6 mile west of Highway 99 and is accessible from Tuolumne Boulevard and Roselawn Avenue (see Figures 1 through 3). The following street intersections and road segment are part of the project site: the California/Marshall Avenue intersection; Paradise Road/Pine Tree intersection; and approximately 100' east of the Lombardy Drive/Ritsch Lane intersection.

The Spencer/Marshall, Beverly/Waverly, and Rouse/Colorado neighborhoods are disadvantaged communities located in west Modesto with predominantly residential parcels that currently rely on septic tanks for the treatment of sewage. The project is proposed in response to health and safety concerns associated with failing septic systems which could lead to the degradation of groundwater quality. The project will include the installation of a new sewer system with approximately 80,000 linear feet of sewer main and street reconstruction. The completed project will allow property owners to abandon their existing septic tanks and connect to a public sewer system. The new sewer infrastructure will connect into the City of Modesto's existing public sewer system. Upon completion of the project, project ownership will be transferred to the City of Modesto for operation and maintenance.

Existing private septic systems and water services will remain active during project construction. No road closures are anticipated to occur and access to each residence will be maintained. Minor temporary detours for local traffic may take place. Temporary construction easements, utility easements, and encroachment permits may be needed on a limited basis to accommodate the installation of the proposed improvements. Construction for the Spencer/Marshall area is anticipated to last six months, for the Beverly/Waverly area eighteen months, and for the Rouse/Colorado area twelve months.

This project is federally funded with Community Development Block Grant funds administered by HUD. To fund the project's construction and final design, the County anticipates receiving grant funding from the Clean Water State Revolving Fund program administered by the State Water Resources Control Board. As such, the project requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Stanislaus County is the lead agency for CEQA purposes and the responsible entity for NEPA purposes.

- | | | |
|------------|---|--|
| 9. | Surrounding land uses and setting: | Urban Transition, City, Commercial, Industrial, Agriculture, Residential, Planned Development. |
| 10. | Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): | California State Water Board, Stanislaus Local Agency Formation Commission, and United States Department of Housing and Urban Development. |

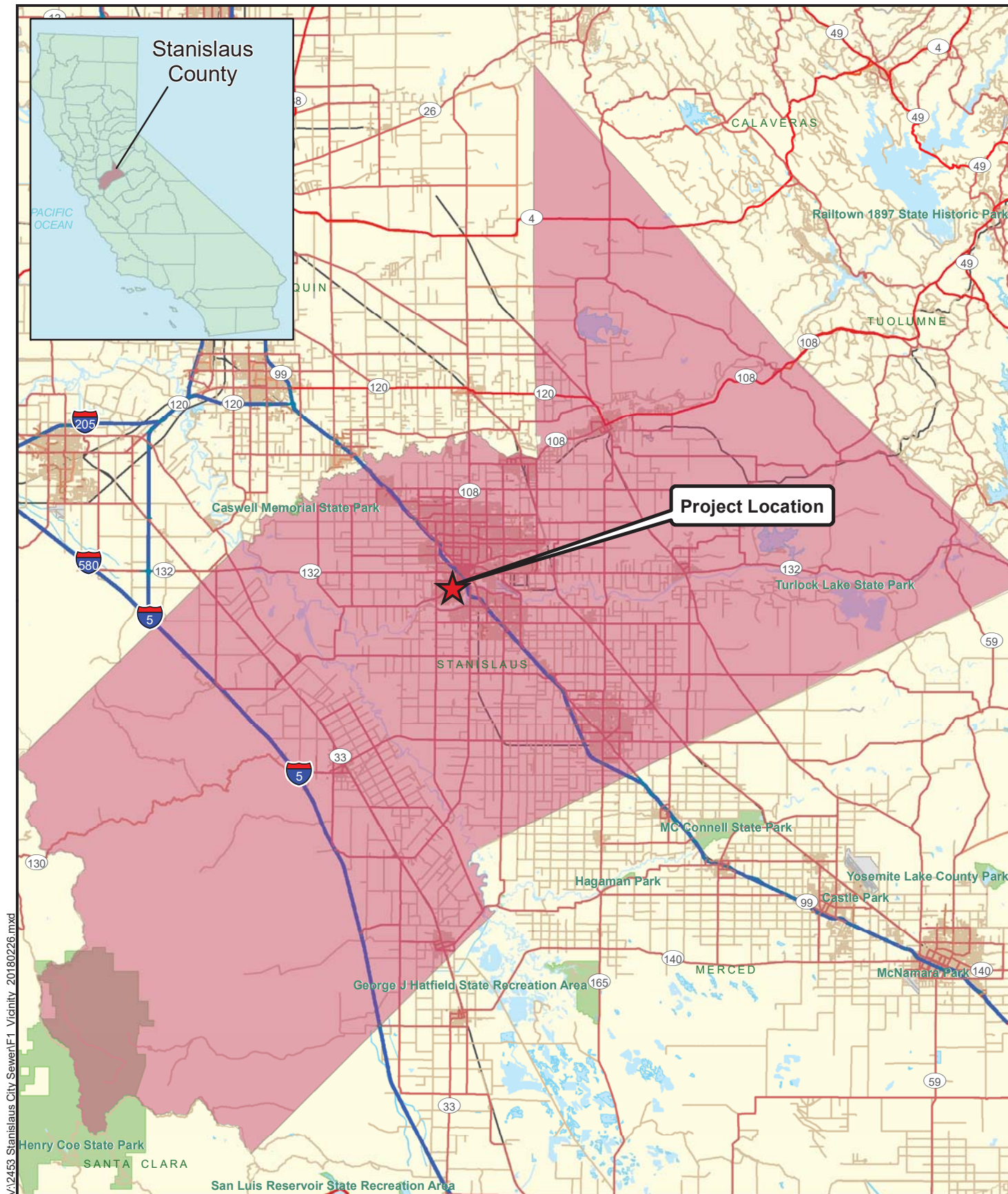


FIGURE 1
Project Vicinity

HUD Project No: B-17-UC-06-0010
West Modesto Sewer Infrastructure Project
Stanislaus County, California

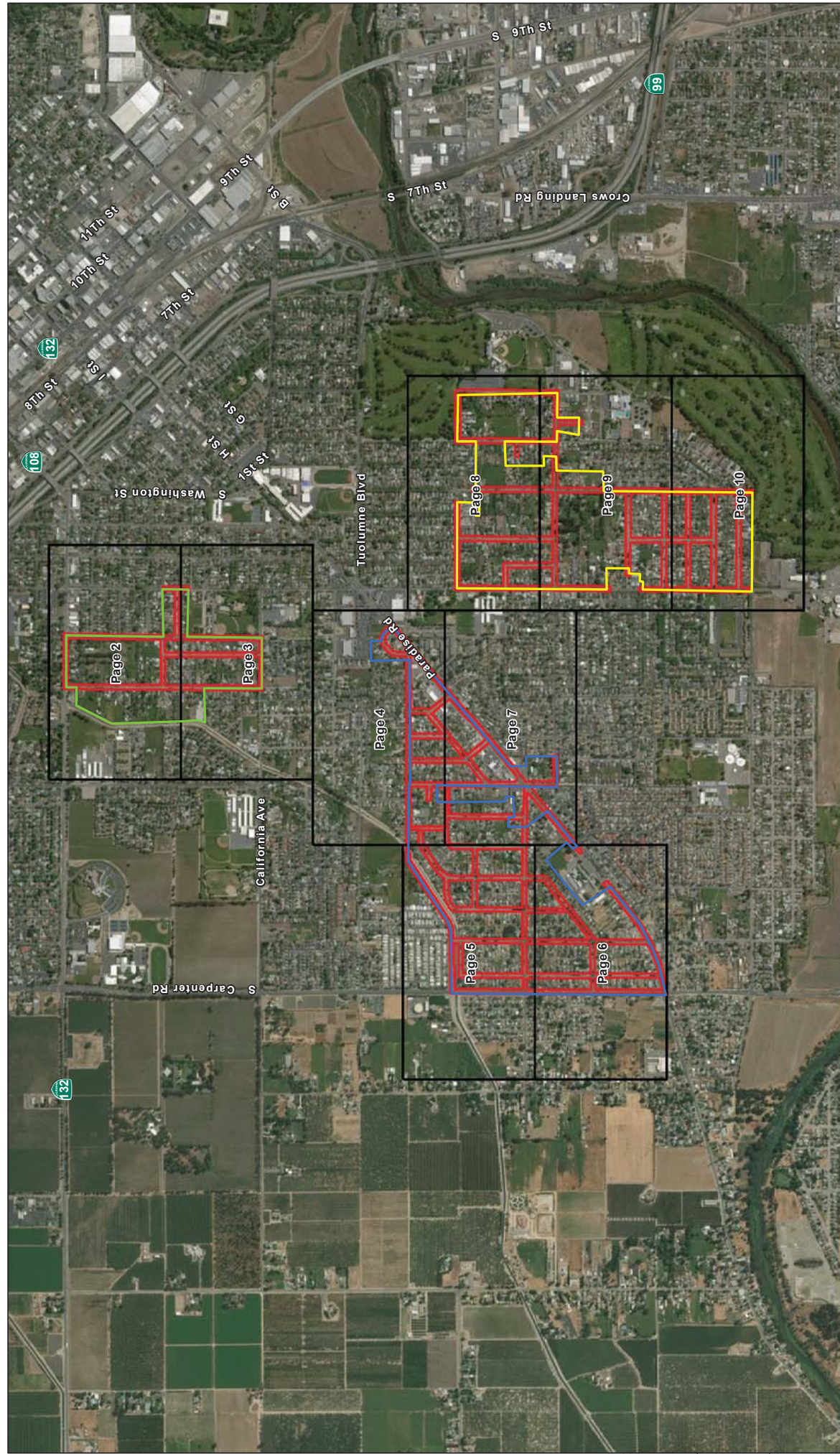
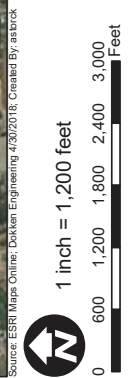


Figure 3
Project Features and Area of Potential Effects Map
Page 1 of 10
 HUD Project No.: B-17-UC-06-0010
 West Modesto Sewer Infrastructure Project
 Stanislaus County, California



Source: ESRI Maps Online; Dokken Engineering 4/20/2018; Created By: asbrook

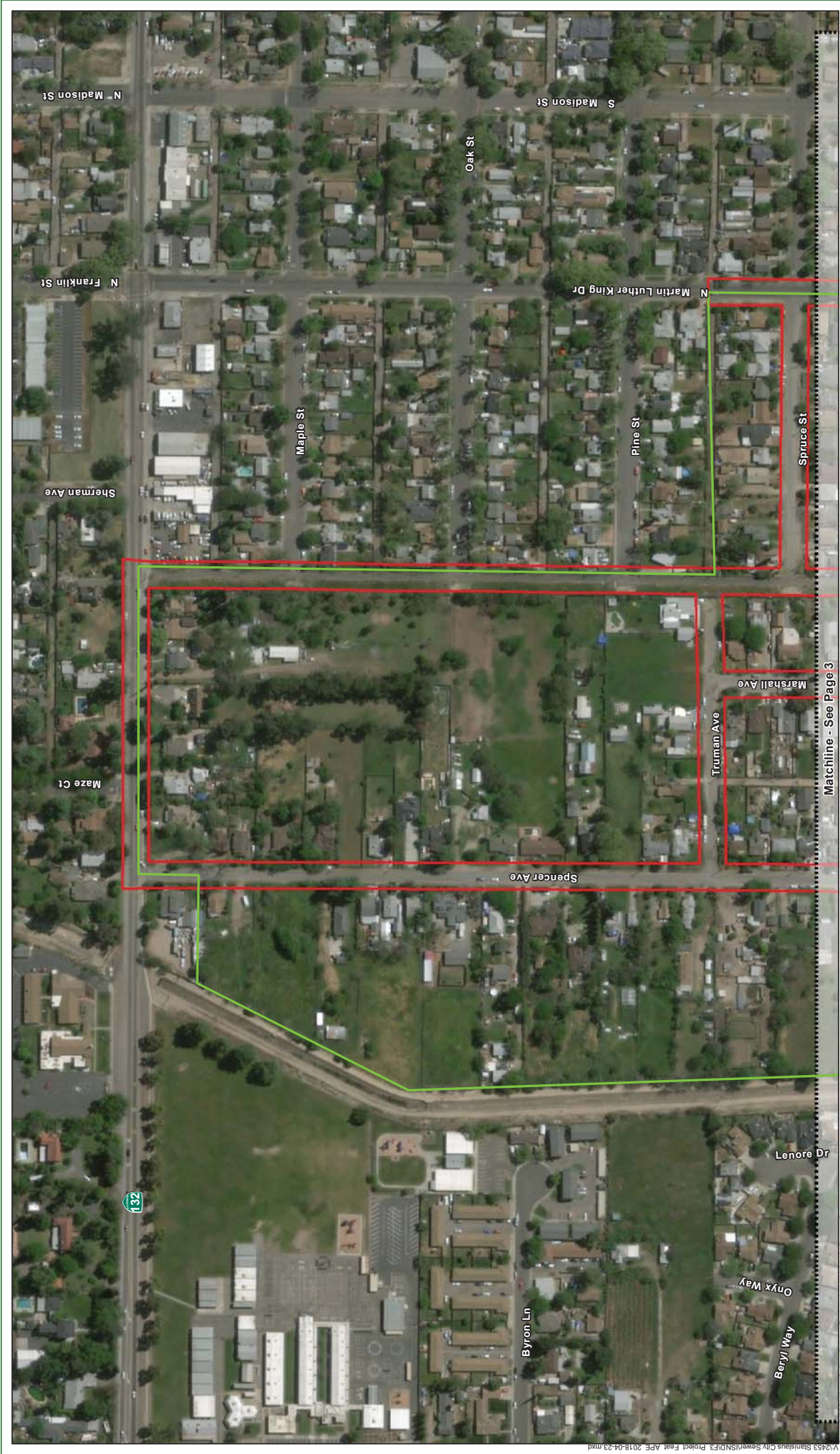


Figure 3
Project Features and Area of Potential Effects Map
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 West Modesto Sewer Infrastructure Project
 Stanislaus County, California



Project Area and Area of Potential Effects

	Area 9
	Area 21
	Area 7

Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbrook

1 inch = 200 feet

0 100 200 300 400 500 Feet

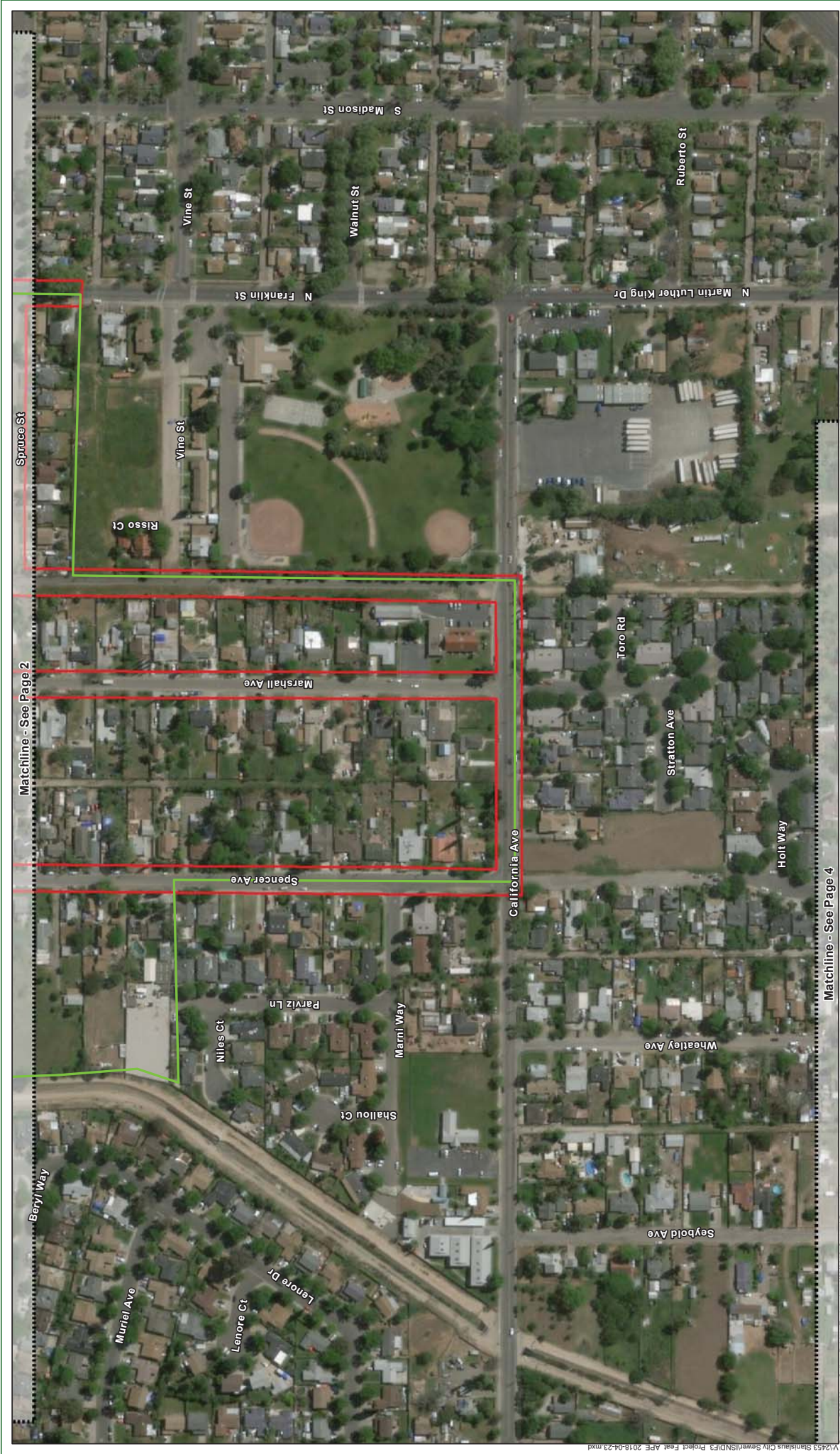
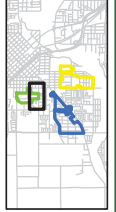


Figure 3
Project Features and Area of Potential Effects Map
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 West Modesto Sewer Infrastructure Project
 Stanislaus County, California



Project Area and Area of Potential Effects

 	Project Area
 	Area 7
 	Area 9
 	Area 21

Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbrook

1 inch = 200 feet

0 100 200 300 400 500 Feet

Matchline - See Page 4

Matchline - See Page 2

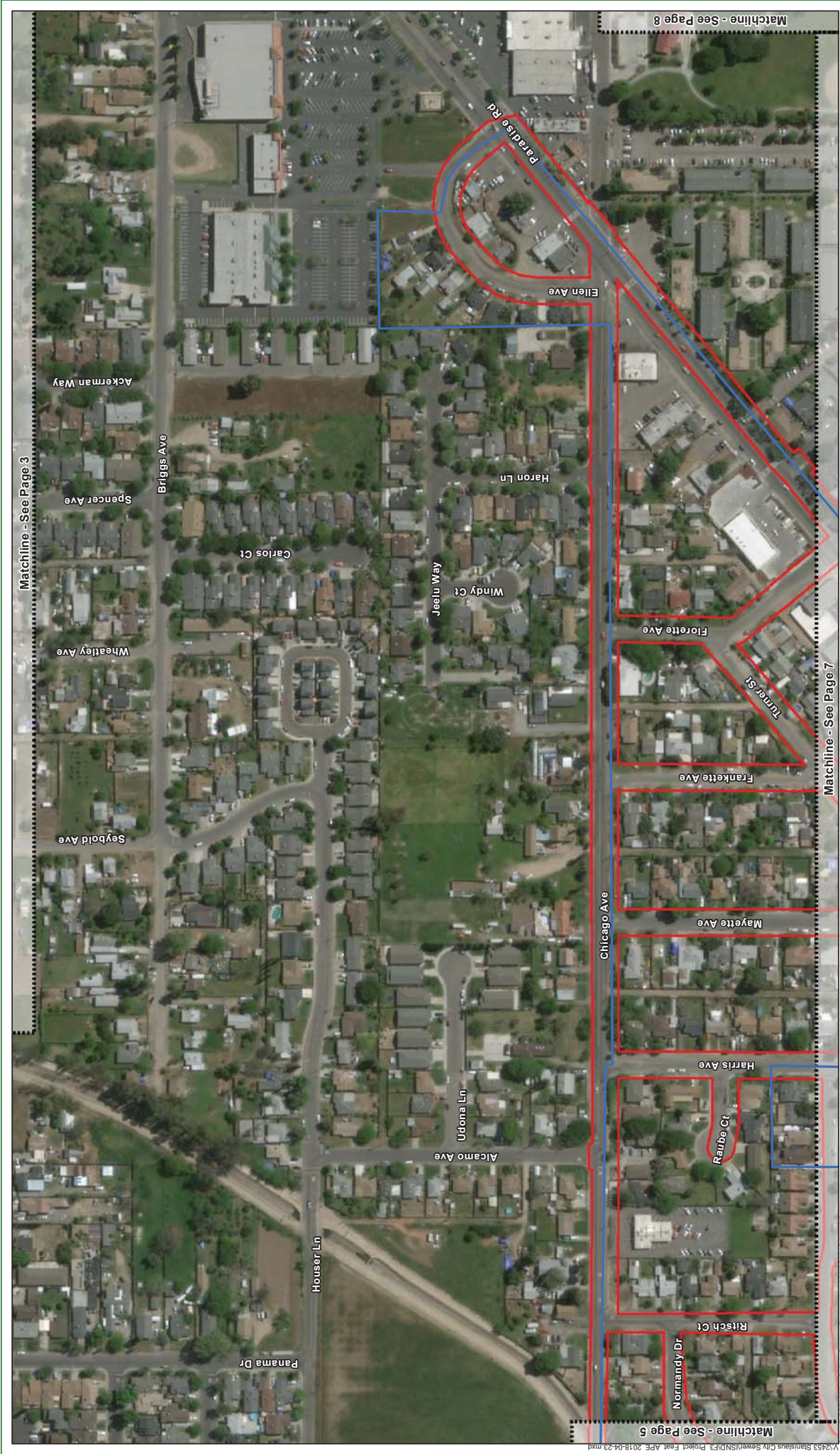


Figure 3
Project Features and Area of Potential Effects Map
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 West Modesto Sewer Infrastructure Project
 Stanislaus County, California



Legend

- Project Area
- Area of Potential Effects
- Area 9
- Area 21

Scale

1 inch = 200 feet

0 100 200 300 400 500 Feet

North Arrow

Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbck

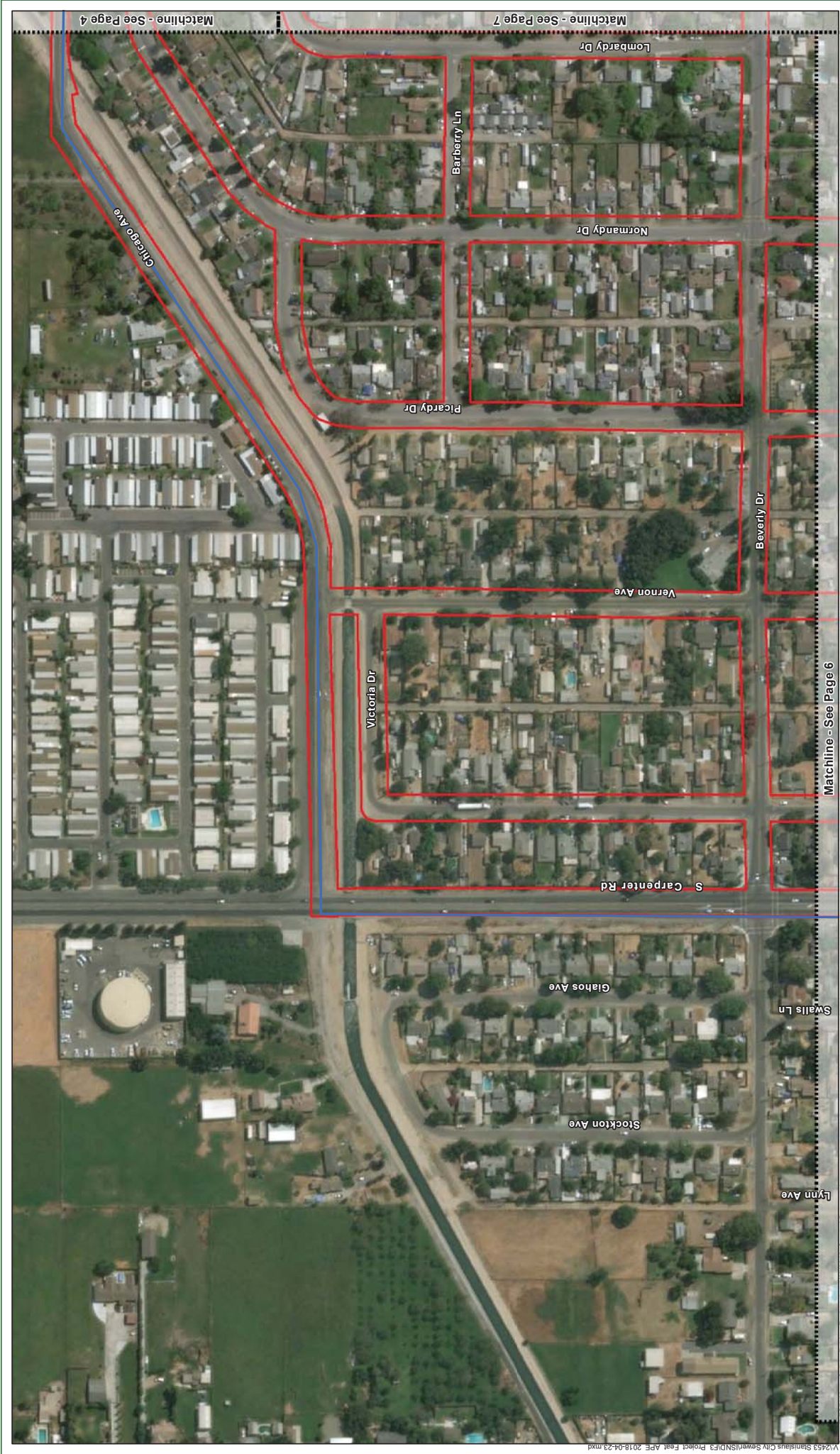


Figure 3
Project Features and Area of Potential Effects Map
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Project Area and Area of Potential Effects

 	Area 9
 	Area 21

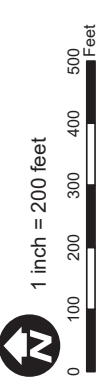
1 inch = 200 feet

0 100 200 300 400 500 Feet

Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbrook



Source: ESRI Maps Online; Dokken Engineering 4/20/2018; Created By: asbrook



- Project Area
- Area 7
- Area 9
- Area 21



Figure 3
Project Features and Area of Potential Effects Map
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 West Modesto Sewer Infrastructure Project
 Stanislaus County, California

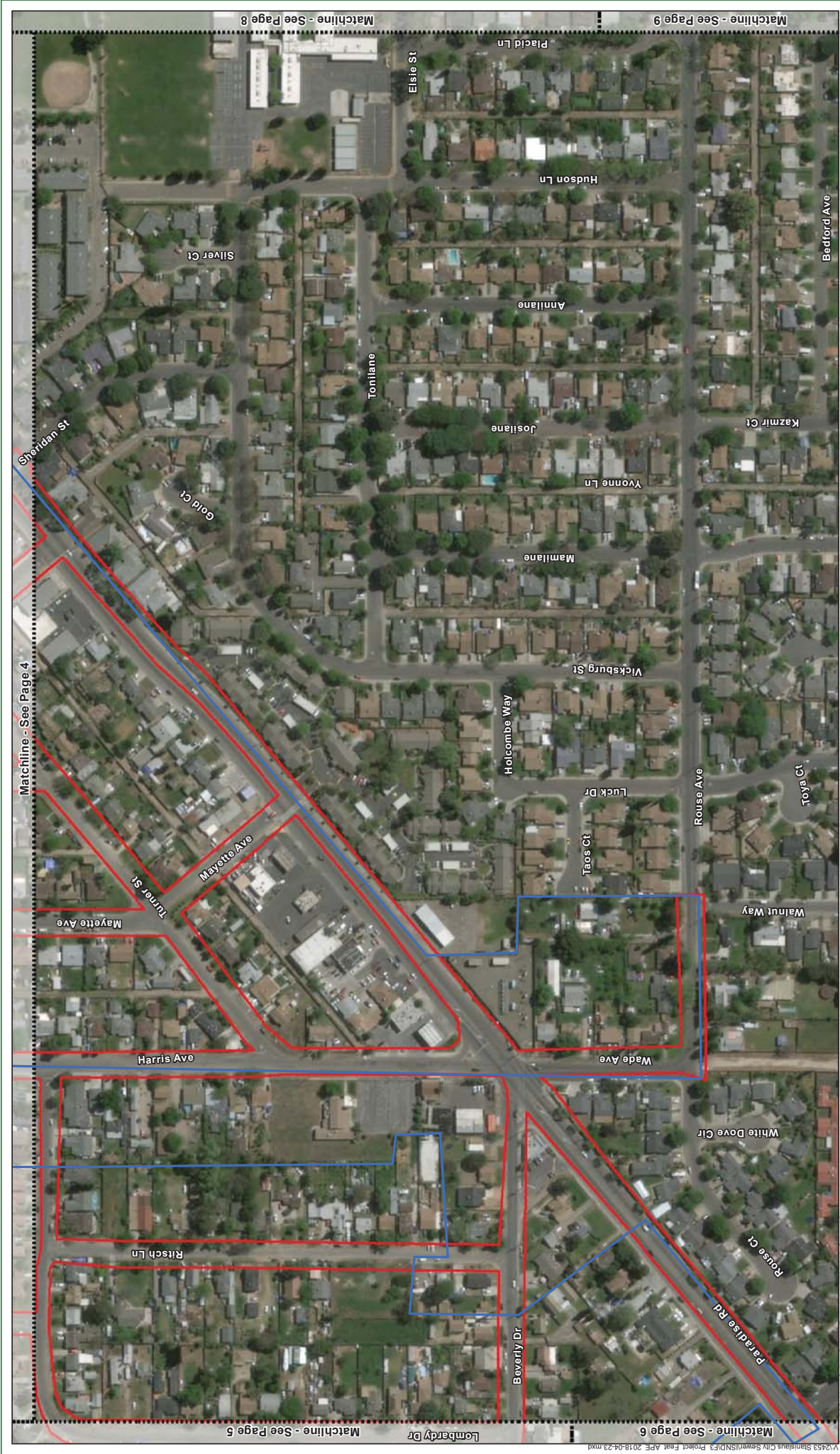


Figure 3
Project Features and Area of Potential Effects Map
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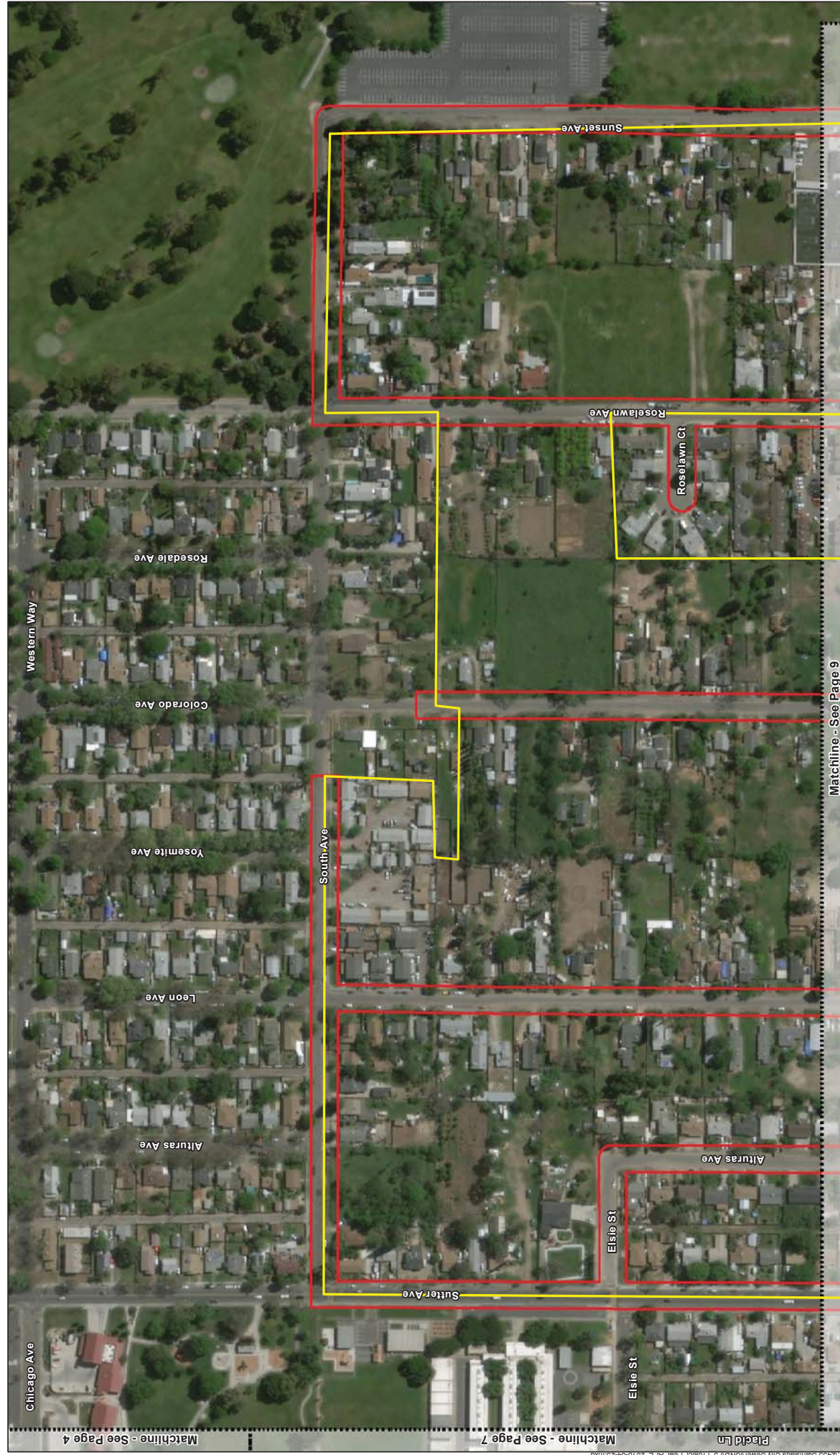
Project Area and Area of Potential Effects

 Project Area	 Area 9
 Area 7	 Area 21

1 inch = 200 feet

0 100 200 300 400 500 Feet

Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbrook




 1 inch = 200 feet
 0 100 200 300 400 500 Feet

Source: ESRI Maps Online; Dokken Engineering 4/20/2018; Created By: asbrook

Project Area and Area of Potential Effects
 Area 9 (Yellow)
 Area 21 (Blue)
 Area 7 (Green)

Figure 3
Project Features and Area of Potential Effects Map
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 West Modesto Sewer Infrastructure Project
 Stanislaus County, California

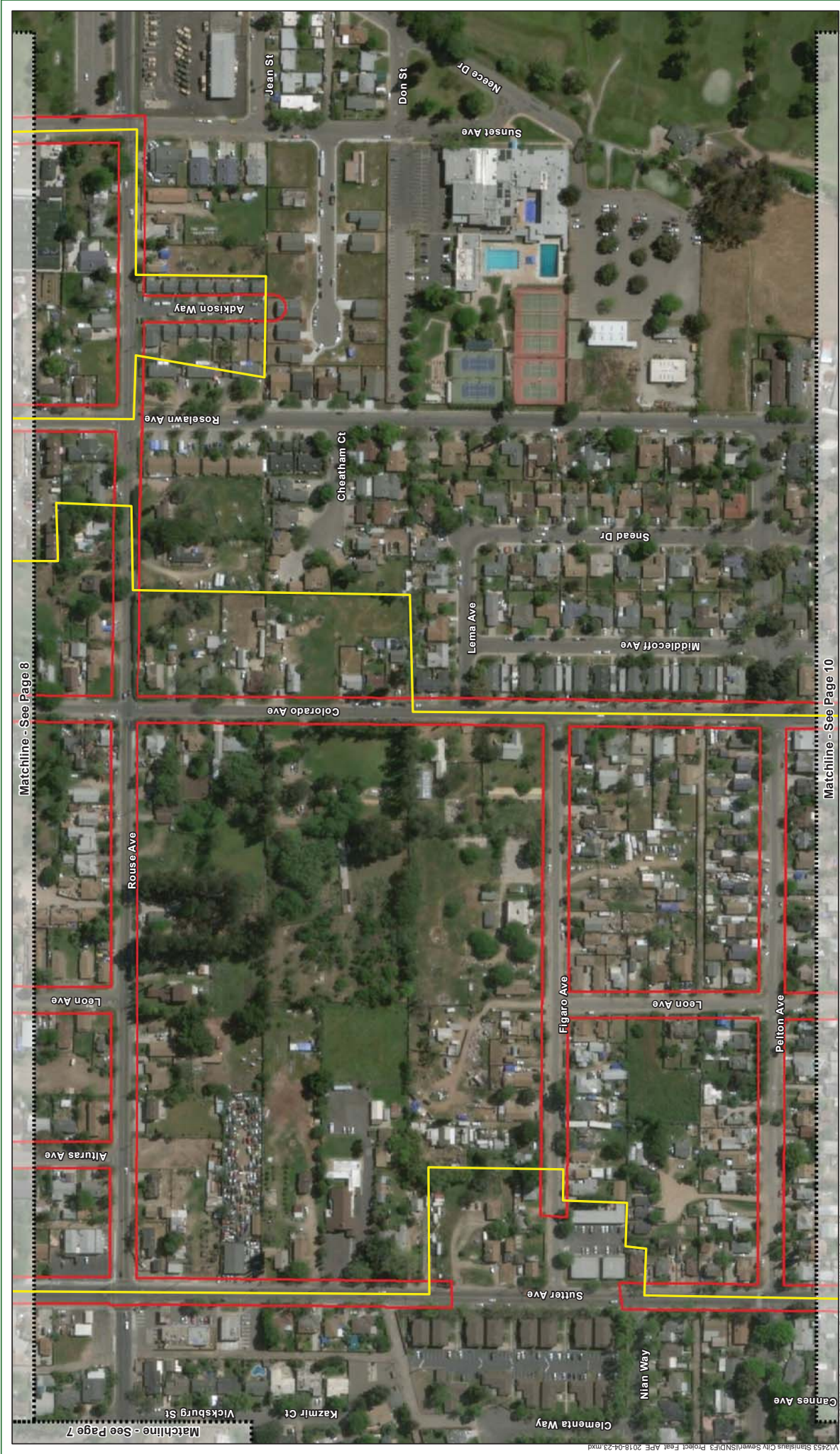


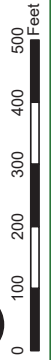
Figure 3
Project Features and Area of Potential Effects Map
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 West Modesto Sewer Infrastructure Project
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- Project Area and Area of Potential Effects
- Area 7
- Area 9
- Area 21

1 inch = 200 feet



Source: ESRI Maps Online; Dokken Engineering 4/20/2018; Created By: asbrock

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Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbck

Figure 3
Project Features and Area of Potential Effects Map
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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

Signature

Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, than the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

a) the significant criteria or threshold, if any, used to evaluate each question; and

b) the mitigation measure identified, if any, to reduce the impact to less than significant.

ISSUES:

I. AESTHETICS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

Discussion:

a) *Have a substantial adverse effect on a scenic vista?*

No impact. No designated scenic vistas are at or near the project site, nor is it a State Scenic Highway¹. There are no Wild and Scenic Rivers² within the project corridor. Therefore, no impact to a scenic vista would result from the project.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No impact. The project site is not located within a State Scenic Highway¹, nor is the site visible from a State highway, including any State highways designated as scenic highways. Therefore, no impact to scenic resources within a State Scenic Highway would result from development of the project.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

No impact. The project location and setting provide the context for determining the type of changes to the existing visual environment. The project sites (Areas 7, 9, and 21) are located along paved roadways in residential parcels within west Modesto in Stanislaus County. The landscape is characterized by an urban, built environment with landscapes, hardscapes, and paved roads. Land use within each of the three areas and adjacent to them consist of residential and commercial neighborhood activities. The visual character of the project would be compatible with the existing visual character of the three neighborhoods, as the project proposes to install sanitary sewer mains and laterals within existing, paved roadways, as well as street construction of affected road segments. New sewer systems would be installed into existing sewer mains. Construction of the project would temporarily change views experienced by drivers, pedestrians, and other people in the project area; however, these impacts would be short-term and would cease upon project completion. As work is proposed within existing roadways that would be restored to original roadway conditions, no impact to the visual character or quality of the site and its surroundings would occur as a result of the project.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

No Impact. The project would not affect light and glare. No new lighting is proposed. Construction activities would temporarily introduce equipment and vehicles to the project site; however, work would take place during daylight hours and no construction lighting is anticipated. The project would not result in additional light or glare that would adversely affect day or nighttime views in the project area; therefore, no impact to the day or nighttime views of the area would occur as a result of the project.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: ¹Caltrans (2011) National Scenic Byways Program; ²National Wild and Scenic Rivers System, Wild and Scenic Rivers

II. AGRICULTURE AND FOREST 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 Department 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 in Forest Protocols adopted by the California Air Resources Board. -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

Discussion:

- 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?*

No Impact. All three areas (7, 9, and 21) of the project site are located entirely within "Urban and Built-Up" land^{1,2}, and proposed project activities would take place within existing paved roadways. Therefore, no conversion of farmland and no impacts to farmland would occur.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. The project would not conflict with existing zoning for agriculture use, as none exists in any of the three neighborhoods, and no Williamson Act contracted land is located within the project area^{1,2}. Therefore, no impacts to farmland would occur.

- 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))?*

No Impact. There are no forests or forest resources located within the project area; therefore, the project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

- d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. There are no forests or forest resources located within the project area; therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use.

- e) *Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

No Impact. The project would have no impacts due to the location or nature of the project that would result in the additional conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: ¹Stanislaus County General Plan and Support Documentation, adopted on August 23, 2016; ²Farmland Mapping and Monitoring Program of the California Resources Agency.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?				X

Discussion:*a) Conflict with or obstruct implementation of the applicable air quality plan?*

No Impact. The project is consistent with the site land use and zoning; therefore, construction of the project would not conflict with or obstruct implementation of any air quality plan^{1,2}. The project meets regional conformity requirements established by the federal Clean Air Act and would not significantly obstruct the implementation of the applicable air quality plans for the area; therefore, impacts are considered less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation. Each Area (7, 9, and 21) have approximately one day of construction-related activities at each road within the neighborhood. Therefore, impacts to air quality standards or projected air quality are considered less than significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The project would not result in a cumulatively considerable net increase of any criteria pollutant, as each Area (7, 9, and 21) would have approximately one day of construction-related activities at each road within the neighborhood occurring within existing roadways. Project construction would include temporary, short-term impacts from trucks and equipment use at each location; however, emissions are anticipated to be minimal. Impacts to cumulative net increases in criteria pollutant are anticipated to be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. San Joaquin Valley Air Management District defines sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants or may experience adverse effects from unhealthful concentrations of air pollutants. Hospitals, clinics, schools, convalescent facilities, and residential areas are examples of sensitive receptors. The nearest sensitive receptor is located approximately 20 feet from the existing roadways in Areas 7, 9, and 21. However, increased pollutant concentrations from construction-related activities are anticipated to be short-term and intermittent in nature. Therefore, exposure of sensitive receptors to substantial pollutant concentrations are considered less than significant.

e) *Create objectionable odors affecting a substantial number of people?*

No Impact. While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public, and can generate citizen complaints to local governments and air districts. Project-related odor emissions would be limited to the times construction-related activities would require machine equipment. Emissions from equipment may be evident in the immediate surrounding area during these times; however, construction activities would be short-term and would quickly disperse after equipment utilization. Connection to the main sewer line, which is an underground, closed system, could result in temporary odors; however, it would quickly disperse after construction is complete. Therefore, due to the short-term nature of the construction activities, impacts associated with development of the project are considered less than significant.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: ¹*Stanislaus County General Plan* and Support Documentation, adopted on August 23, 2016; ²San Joaquin Valley Air Quality Management District

IV. BIOLOGICAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Discussion:

- 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?*

Less Than Significant Impact. Prior to field work, literature research was conducted through the USFWS Information for Planning and Conservation (IPaC) Species List Generator (USFWS 2016), California Department of Fish and Wildlife (CDFW) (CDFW 2016) California Natural Diversity Database (CNDDDB) (CNDDDB 2016), the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants (CNPS 2016), and National Marine Fisheries Service (NMFS) West Coast Region Species List (NMFS 2016) to identify habitats and special-status species having the potential to occur within the Project Biological Study Area (BSA)² (Figure 4). Field surveys were conducted on February 22, 2018, by Dokken Engineering biologist Courtney Owens. The purpose of the survey was to identify habitat types, map jurisdictional waters and assess habitat suitability for rare or special status species. Field methods included walking meandering transects throughout the BSAs and observing plants and wildlife, mapping soil types and mapping the extent of both jurisdictional waters of the United States and State of California.

While the aforementioned background research identified 16 special status species in the project vicinity of Areas 7, 9, and 21, the biological field survey and further research revealed that only one special status species has a low potential to occur in the project area: Swainson's hawk (State-listed as threatened). However, Swainson's hawk was not observed during the biological survey and the species is unlikely to nest or forage within the project area, as it is contained entirely within established roadway systems in an urban, built environment. Large nesting and suitable foraging habitat is located within adjacent agricultural fields and Modesto City parks; however, because there are no trees containing Swainson's hawk nests would be removed during proposed project-related activities, indirect impacts to Swainson's hawk or their habitat could

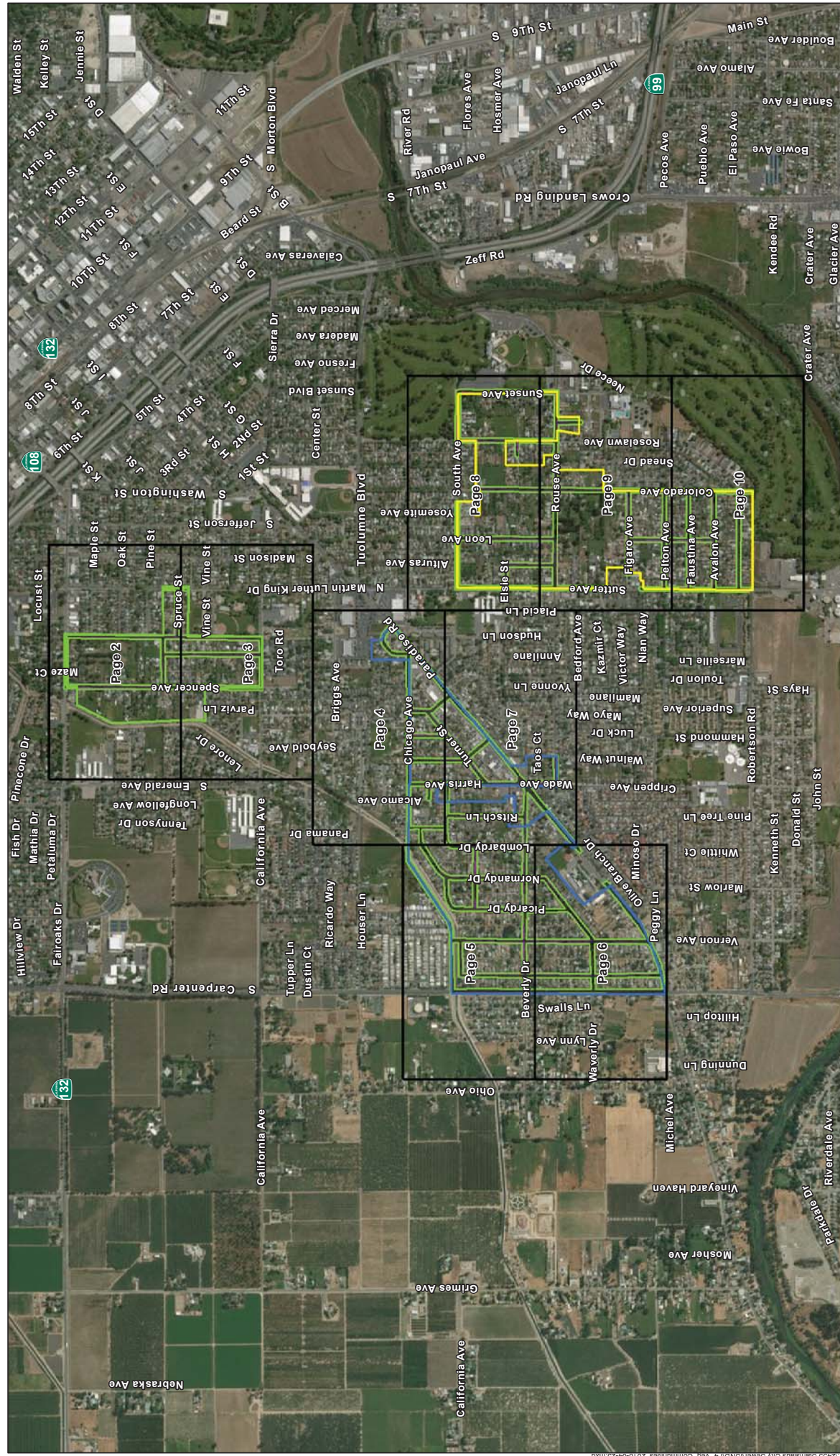


Figure 4
Vegetation Communities Within the BSA
Page 1 of 10

HUD Project # B-17-UC-06-0010
West Modesto Sewer Infrastructure Project
Stanislaus County, California

1 inch = 1,200 feet

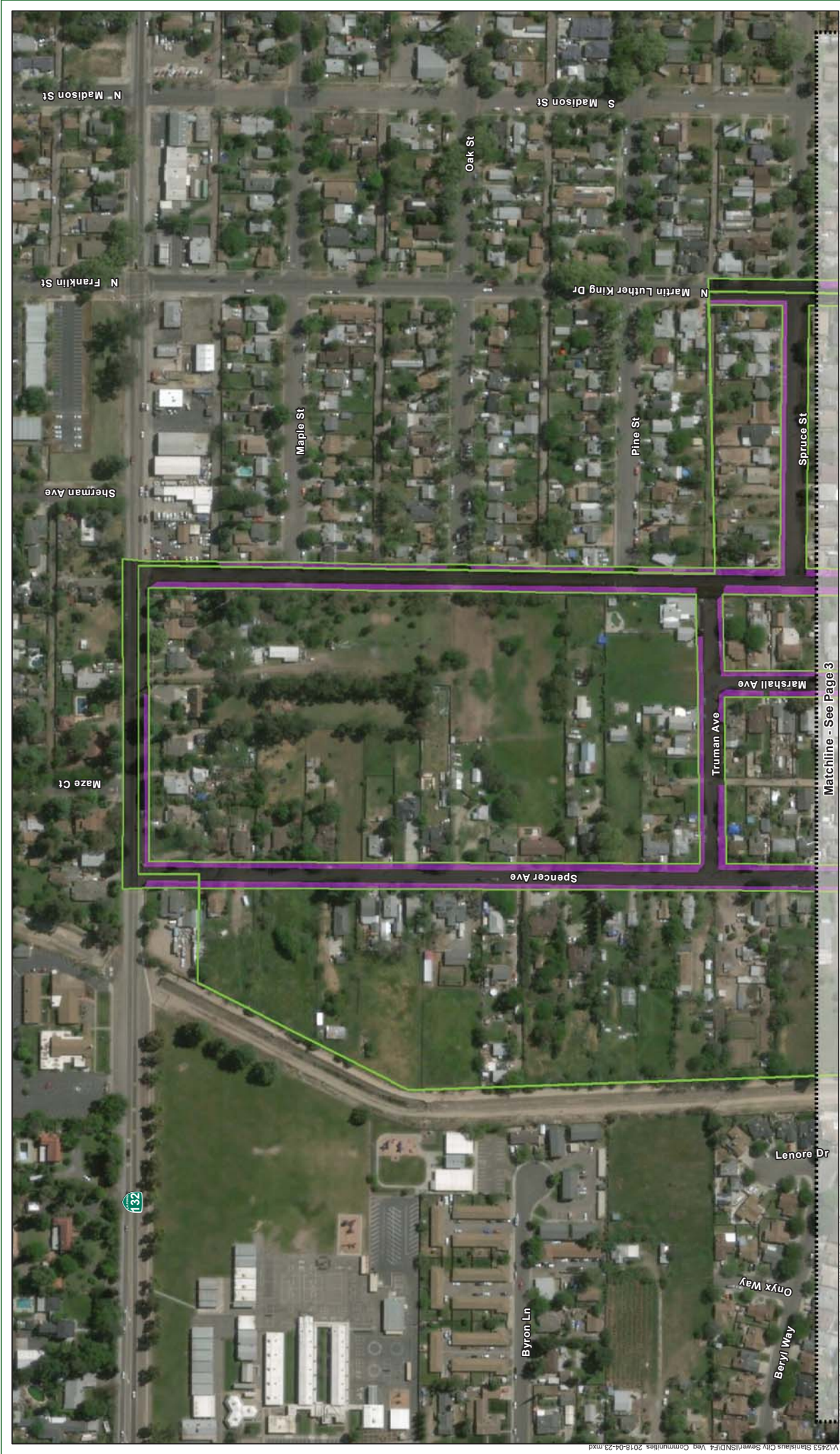
0 600 1,200 1,800 2,400 3,000 Feet

Source: ESRI Maps Online; Dokken Engineering 4/20/2018; Created By: asbck

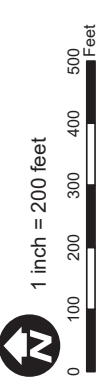
Legend

- Area 7
- Area 21
- Area 9
- Biological Study Area
- Urban/Paved
- Residential Landscaping

Inset Map



Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbrock



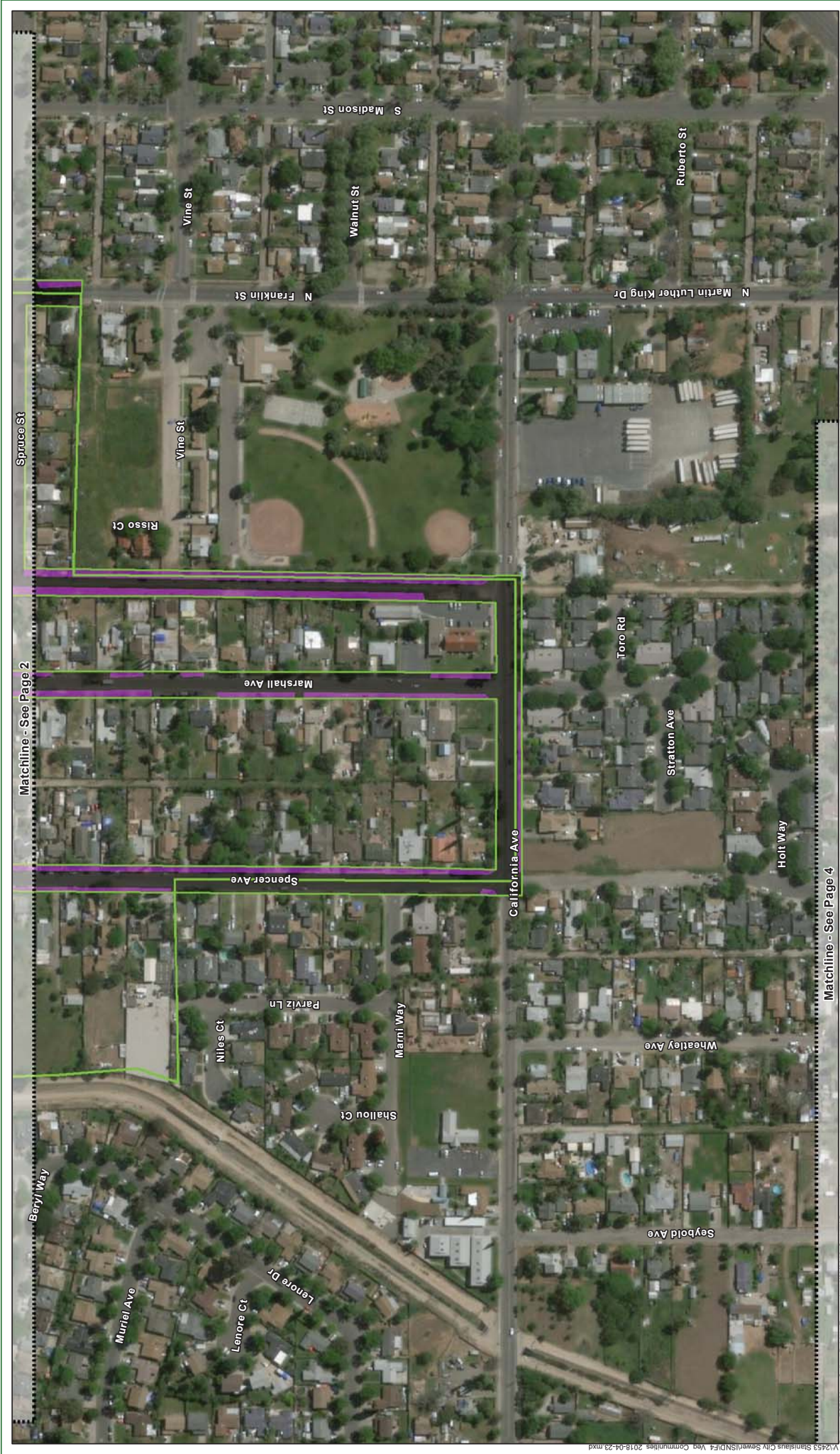


Figure 4
Vegetation Communities Within the BSA
Page 3 of 10
 HUD Project #: B-17-UC-06-0010
 West Modesto Sewer Infrastructure Project
 Stanislaus County, California

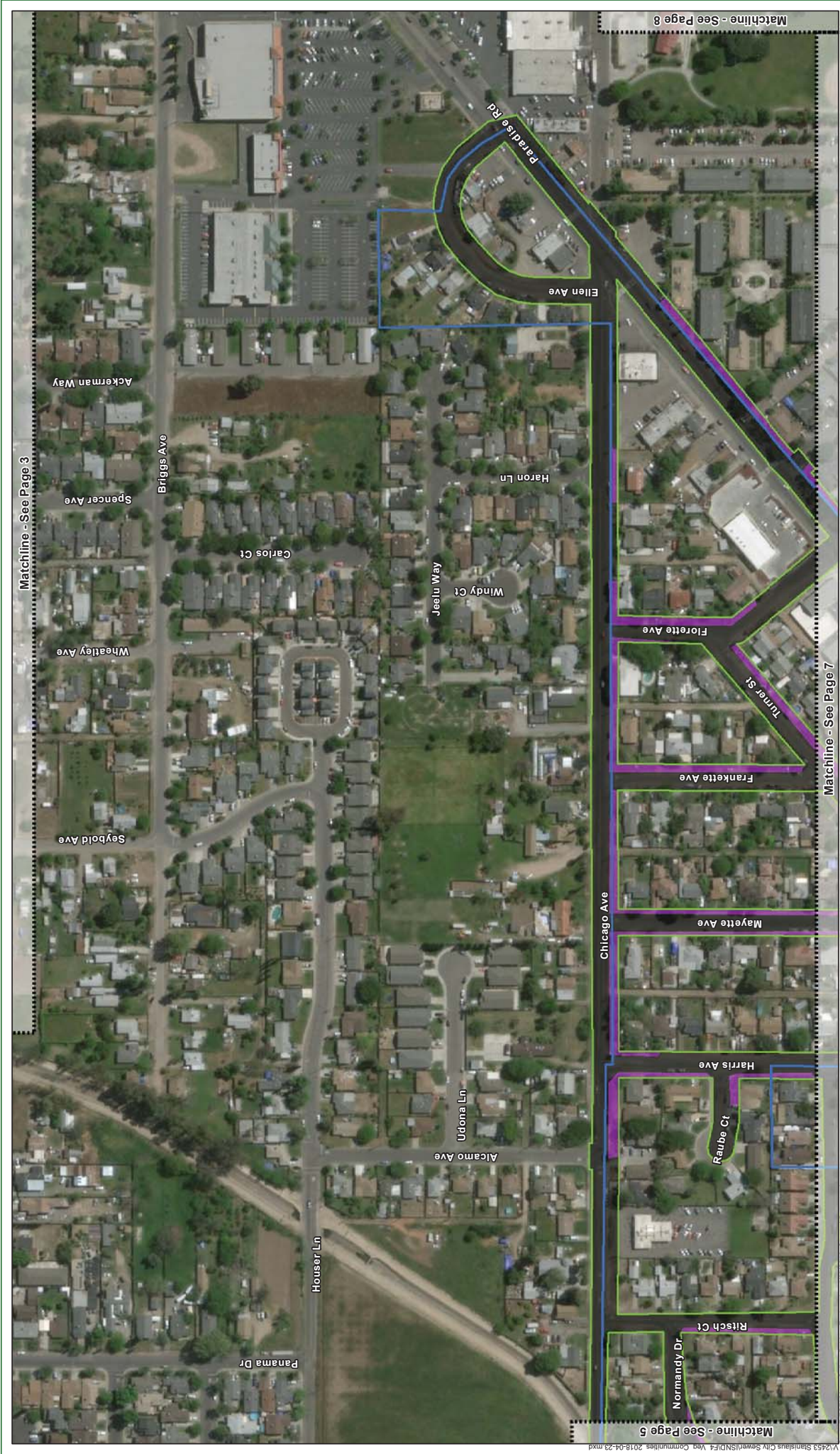


Area 7	Area 9	Area 21	Biological Study Area	Urban/Paved	Residential Landscaping

1 inch = 200 feet

0 100 200 300 400 500 Feet

Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbrook



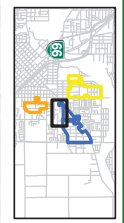
Matchline - See Page 3

Matchline - See Page 7

Matchline - See Page 8

Matchline - See Page 5

Figure 4
Vegetation Communities Within the BSA
Page 4 of 10
 HUD Project # B-17-UC-06-0010
 West Modesto Sewer Infrastructure Project
 Stanislaus County, California



	Area 7		Urban/Paved
	Area 21		Residential Landscaping
	Area 9		Biological Study Area

Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbck

1 inch = 200 feet

0 100 200 300 400 500 Feet

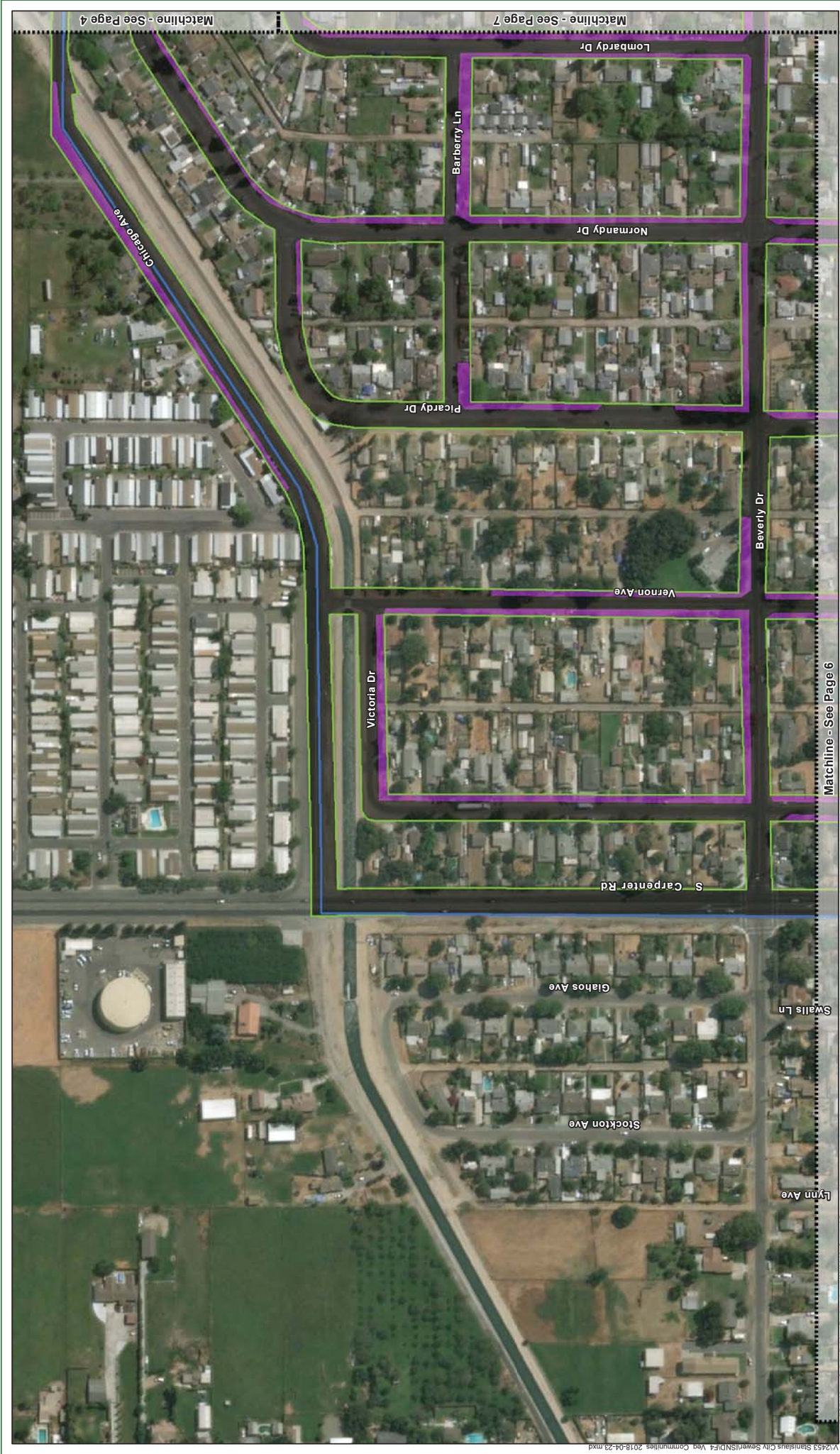


Figure 4
Vegetation Communities Within the BSA
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HUD Project #: B-17-JC-06-0010
West Modesto Sewer Infrastructure Project
Stanislaus County, California

Matchline - See Page 6

Matchline - See Page 7

Matchline - See Page 4

Area 7 (Green outline)

Area 21 (Blue outline)

Area 9 (Yellow outline)

Biological Study Area (Light Green fill)

Urban/Paved (Grey fill)

Residential Landscaping (Purple fill)

Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbrook



Source: ESRI Maps Online; Dokken Engineering 4/20/2018; Created By: asbrook

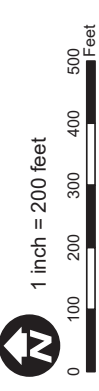


Figure 4
Vegetation Communities Within the BSA
Page 6 of 10
 HUD Project #: B-17-JC-06-0010
 West Modesto Sewer Infrastructure Project
 Stanislaus County, California

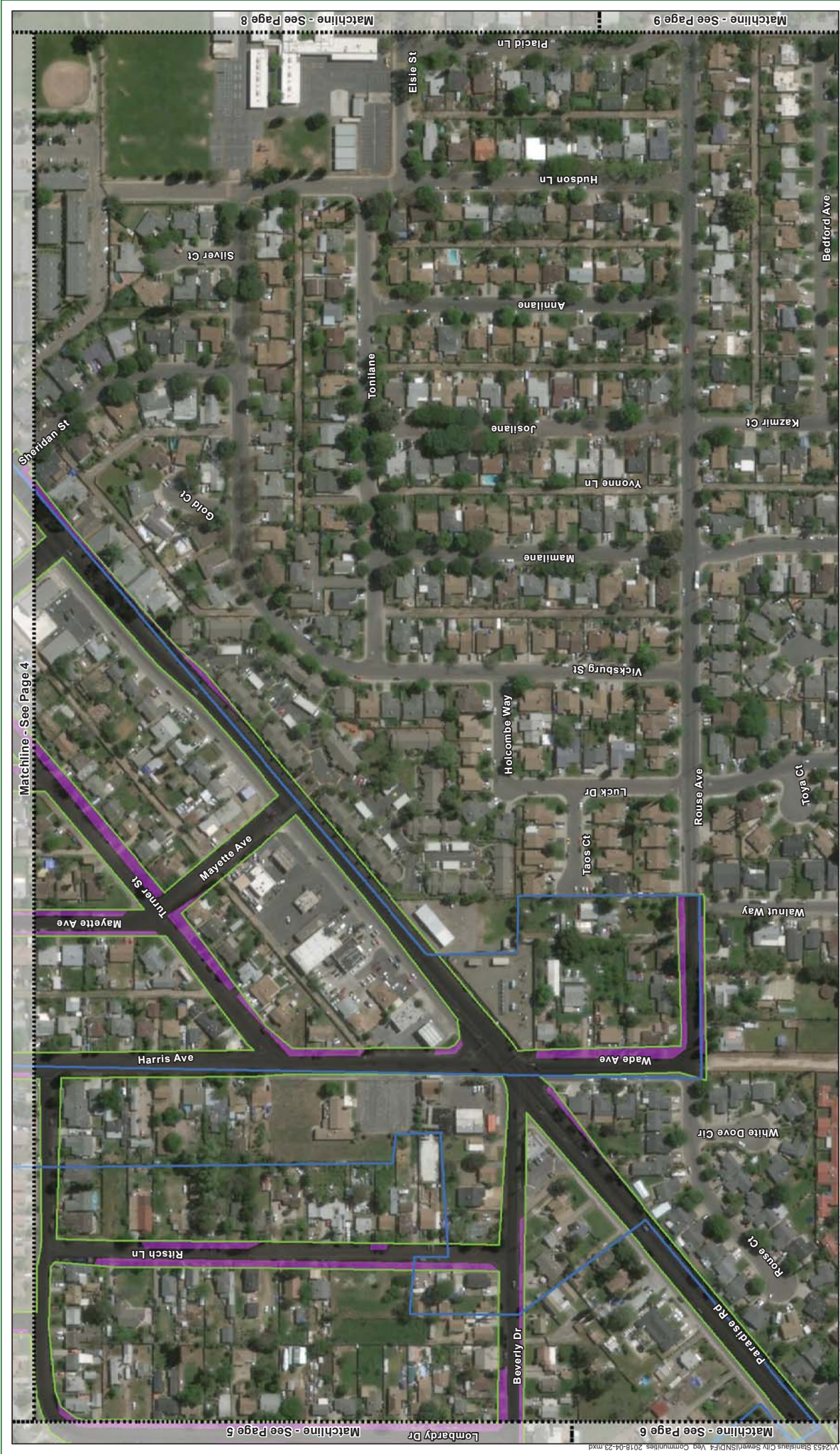


Figure 4
Vegetation Communities Within the BSA
Page 7 of 10

HUD Project # B-17-UC-06-0010
West Modesto Sewer Infrastructure Project
Stanislaus County, California

1 inch = 200 feet

0 100 200 300 400 500 Feet

Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbrook

Area 7 (Blue outline)

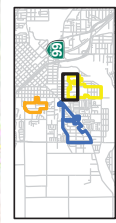
Area 9 (Green outline)

Area 21 (Yellow outline)

Biological Study Area (Purple outline)

Urban/Paved (Grey fill)

Residential Landscaping (Pink fill)



	Area 7		Area 21		Urban/Paved
	Area 9		Biological Study Area		Residential Landscaping

1 inch = 200 feet

0 100 200 300 400 500 Feet

Source: ESRI Maps Online; Dokken Engineering 4/20/2018; Created By: asbrook

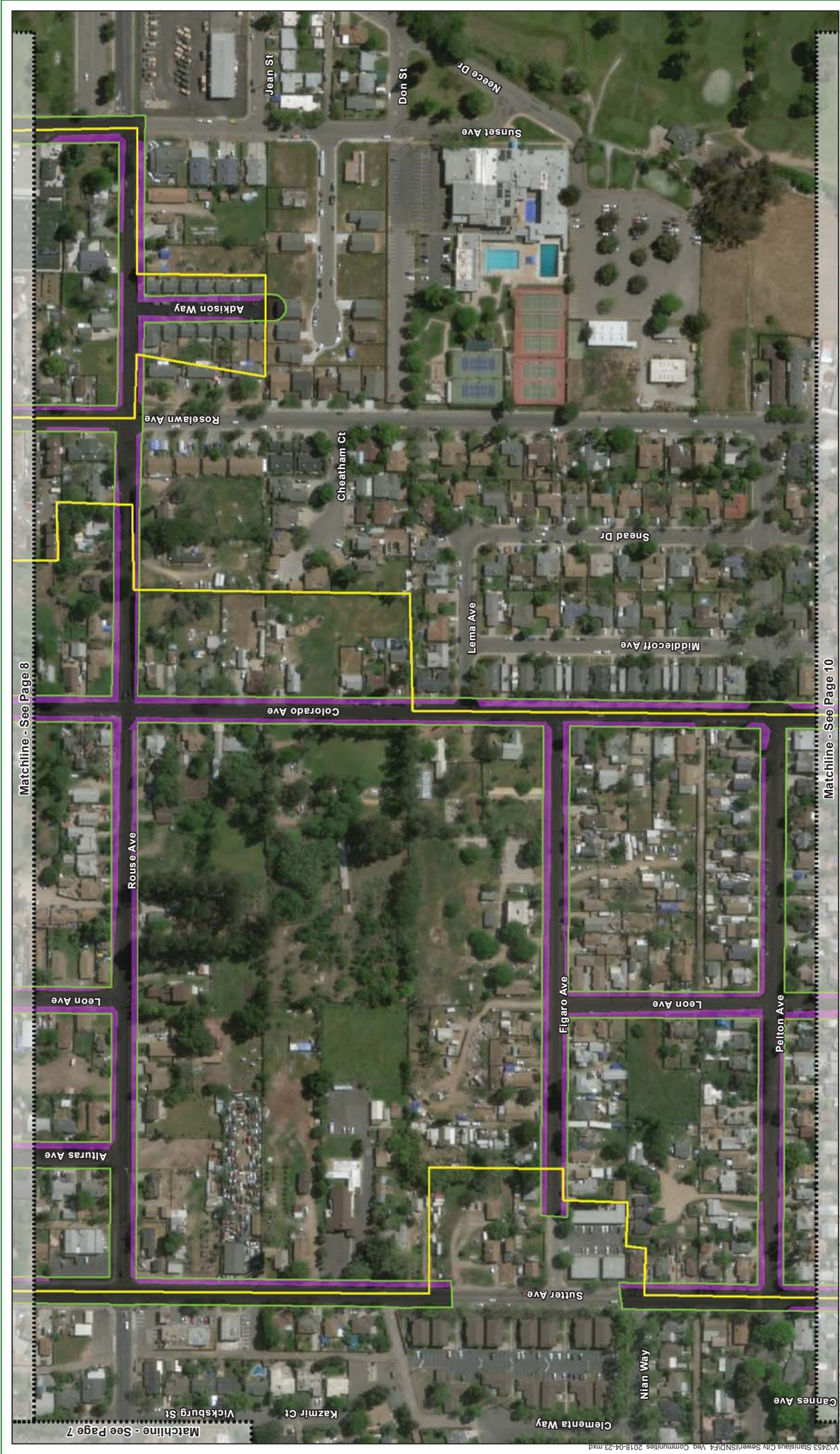
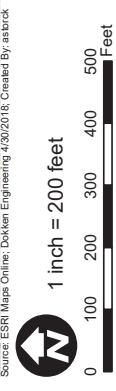
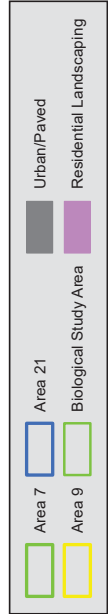
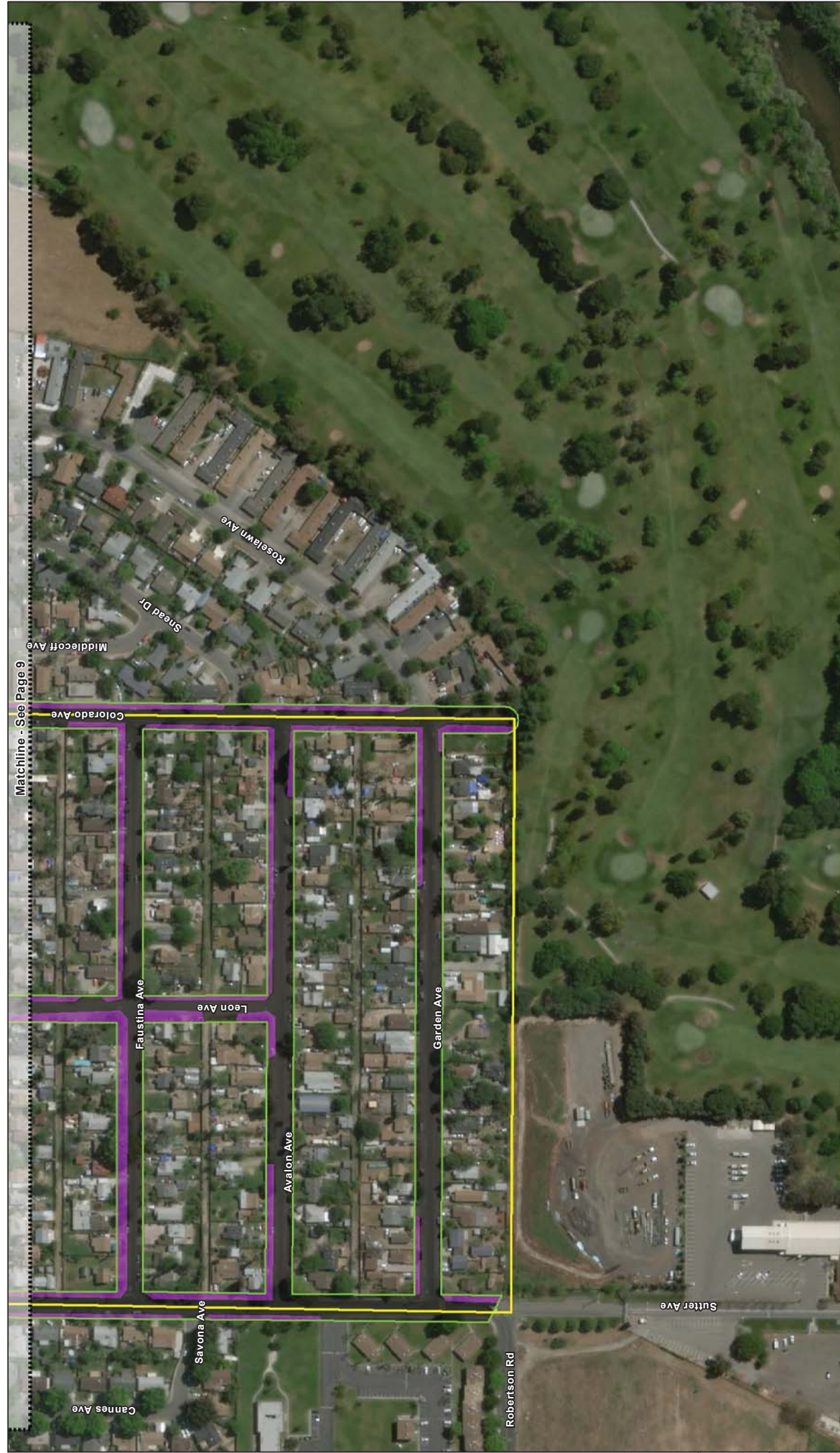


Figure 4
Vegetation Communities Within the BSA
Page 9 of 10
 HUD Project # B-17-UC-06-0010
 West Modesto Sewer Infrastructure Project
 Stanislaus County, California



Source: ESRI Maps Online; Dokken Engineering 4/20/2018; Created By: asbrook



Source: ESRI Maps Online; Dokken Engineering 4/30/2018; Created By: asbck



occur, but are not anticipated. Therefore, substantial adverse impacts, directly or indirectly, to any special status species, candidates, or sensitive species are considered less than significant.

Avoidance and minimization measures and Best Management Practices would ensure no impacts to special status species occurs. The Biological Resources Technical Report is located in Appendix A of this document.

- 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?*

No Impact. The project would install new sewer lines and connect into an existing sewer main within existing roadways throughout Areas 7, 9, and 21. The project site consists of Urban/Paved and Residential Landscaped vegetative communities²; no riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations by the California Department of Fish and Game, or US Fish and Wildlife Service exist in the project area (Area 7, 9, and 21). Therefore, no impacts to such habitats are would occur as a result of the project.

- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No Impact. The project site (Areas 7, 9, and 21) is not located in federally protected wetlands, and project-related activities would not involve the removal, filling, or hydrological interruption of waters, as work would be confined in existing roadways of residential neighborhoods. Therefore, no impacts to federally protected wetlands would occur as a result of the project.

- 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?*

No Impact. The project site (Areas 7, 9, and 21) is not located in any body of water and is entirely encompassed within existing, paved roadways of neighborhoods. Therefore, no impacts to the movement of native resident/migratory fish, or wildlife species/wildlife migratory corridors would occur as a result of the project.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No Impact. There are no local policies or ordinances that protect biological resources, including trees, in Stanislaus County¹; therefore, the project would have no impact and would not conflict to any local policies or ordinances.

- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No Impact. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans within the project area¹; therefore, the project would not conflict with any conservation plans.

Recommended Avoidance and Minimization Measures:

- In accordance with the Swainson's Hawk Technical Advisory Committee *Recommended Timing and Methodology For Swainson's Hawk Nesting Surveys in California's Central Valley* (2000), protocol level surveys would be conducted during the appropriate survey periods immediately prior to construction to determine presence/absence of the species. If Swainson's hawk nests are discovered within 1/2 mile of the Project Area, appropriate protective measures would be developed in coordination with CDFW.
- If vegetation removal is to take place during the nesting season (March 1st –September 1st), a pre-construction nesting bird survey must be conducted prior to vegetation removal. Within 2 weeks of the nesting bird survey, all vegetation cleared by the biologist must be removed by the contractor.

- A minimum 300 foot no-disturbance buffer would be established around any active nests of raptor species. A 100 foot no-disturbance buffer would be established around any active nests for other migratory birds. If an active nest is discovered during construction, the contractor must immediately stop work in the nesting area until the appropriate buffer is established. The contractor is prohibited from conducting work that could disturb the birds (as determined by the project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the project biologist and approved by CDFW.

Mitigation Measures: None.

References: ¹Stanislaus County General Plan and Support Documentation, adopted on August 23, 2016; ²Appendix A

V. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion:

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

No Impact. Dokken Engineering obtained a records search (File No. 10628N) for the Area of Potential Effects (APE) (see **Figure 3**) and a 500-foot radial study area, conducted by Central California Information Center (CCIC) personnel, located at California State University, Stanislaus on February 27, 2018. The request also included a search of the National Register of Historic Places, the California Register of Historical Resources, the *California Inventory of Historical Resources* (1976), the *California Historical Landmarks* (1996), the *California Points of Historical Interest* listing (May 1992 and updates), the Historic Property Data File (HPDF) and the Archaeological Determinations of Eligibility (ADOE), the *Survey of Surveys* (1989), and other pertinent historic data available at the CCIC for Stanislaus County and the City of Modesto¹. The size of the study was restricted to a 500-foot radius due to the extent of residential development in the vicinity and the size of the APE. In addition, the scope of the proposed project decreased the boundary to include just the roadway, as sewer line installation would only take place within the paved roadway.

The records search revealed no previously recorded cultural resources documented in the APE. A review of the historic land use indicated that the majority of the project area (Areas 7, 9, and 21) has been extensively modified as a result of agriculture and urban development. Such large-scale ground disturbances produce a low potential for the presence of buried prehistoric or historic-era cultural resources. In addition, an archaeological field survey conducted by Dokken Engineering Archaeologist Brian Marks on February 22, 2018, did not reveal any cultural resources within the APE.

The project would have no impact on historical resources as defined in §15064.5; no residential properties exist in the APE. Therefore, the findings of the field survey, records search, and historic land use indicate that no impacts to historical resources are anticipated as a result of the project.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Less Than Significant Impact. In an effort to identify archaeological resources that might be affected by the project, background research, an archaeological survey, and consultation with individuals and organizations were conducted. A records search conducted at the CCIC identified no cultural resources within the APE, and the archaeological field survey did not observe any cultural resources within the APE.

On February 23, 2018, Dokken Engineering sent a letter and a map depicting the project vicinity to the NAHC in west Modesto asking the NAHC to review the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the project. The request to the NAHC seeks to identify any Native American cultural resources within the project area or vicinity. A list of Native American governments who might have information or concerns about the project was also requested. On February 28, 2018, Ms. Sharaya Souza, NAHC Staff Services Analyst sent a response that a review of the SLF returned negative results. Appendix B of this document contains the Native American outreach log.

Tribal Cultural Resources and AB 52

On March 5, 2018, the County sent a certified initial letter initiating an invitation for Section 106 and AB 52 consultation to the following Native American contacts provided by the NAHC, as well as those provided by the Stanislaus County Tribal List:

- Calaveras Band of Mi-Wuk Indians
- Northern Valley Yokuts Tribe
- Southern Sierra Miwuk Nation
- California Valley Miwok Tribe
- Tule River Indian Tribe
- Tuolumne Band of Me-Wuk

The letter provided preliminary project details and relayed that both CEQA and NEPA compliance were required for the proposed project. The letter requested information regarding any known resources comments or concerns the Native American community might have about the project. No response from any of the Tribes was returned within 30 days of receipt and consultation under AB 52 ended.

No substantial change in the significance of an archaeological resource would occur as a result of the project, as no previously recorded archaeological or historical resources exist in the project area (Areas 7, 9, and 21). Additionally, should anything be found avoidance and minimization measures would be implemented.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. No findings of unique paleontological resources or sites, or unique geological features were identified during the records search, and cursory pedestrian survey within the project area (Areas 7, 9, and 11); therefore, no impacts to paleontological or unique geologic features would occur as a result of the project.

d) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact. With any project requiring ground disturbance, there is always the possibility that unmarked burials or human remains may be unearthed; this impact is considered potentially significant; however, avoidance and minimization measures would reduce this impact to a less-than significant level.

Recommended Avoidance and Minimization Measures:

- If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. Additional archaeological survey would be needed if project limits are extended beyond the present survey limits.
- Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within twenty-four hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.

Mitigation Measures: None.

References: ¹Central California Information Center, California State University, Stanislaus

VI. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
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.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
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?				X
d) Be located on expansive soil creating substantial risks to life or property?				X
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?				X

Discussion:

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
- I. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*
 - II. *Strong seismic ground shaking?*
 - III. *Seismic-related ground failure, including liquefaction?*
 - IV. *Landslides?*

No Impact (I-IV). The project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides. The project is not located within an Alquist Priolo Earthquake Fault Zone^{1,2}. The nearest seismic sources are the Vernalis Fault approximately 10 miles west of the project site², and the San Joaquin Fault approximately 13 miles southwest of the project site³. Therefore, no impact is anticipated from a known earthquake fault due to the distance of the nearest fault from the project area.

Landslides usually occur in locations with steep slopes and unstable soils. Stanislaus County has not yet been mapped by the Seismic Hazards Zonation Program⁴ to determine landslide potential. The majority of the project area (Areas 7, 9, and 21) is situated on flat or very gently sloping topography where the potential for slope failure is minimal to low. Seismic-related failure, including liquefaction, is not anticipated because of the flat topography of the project area and its distance from fault zones. No impact from landslides would occur with the project. The project area does not contain geologic rocks or soils that are considered unstable, or that would become unstable as a result of the project⁵. On- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse is not anticipated as a result of the project.

b) *Result in substantial soil erosion or the loss of topsoil?*

No Impact. The Natural Resources Conservation Service (NRCS)⁵ was used to map soils in the project area, which include the following: the Dinuba soil series, Hanford soil series, and Tujunga soils. The project does not include the loss of topsoil, nor would it result in substantial soil erosion, as work is being conducted beneath paved roadways in residential, urban neighborhoods (Areas 7, 9, and 21).

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?*

No Impact. Refer to discussion a). The project would not be located on soil that is known to be unstable, or would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. No impact would occur due to the project.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

No Impact. Refer to discussion a). The project would not be located on expansive soils⁶ and would not create substantial risks to life or property. No impact would occur due to the project.

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?*

No Impact. The project would not utilize septic tanks or an alternative waste water disposal system on the site. Therefore, the project would have no impact due to soils incapable of adequately supporting septic systems.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: ¹Alquist-Priolo Earthquake Fault Zoning Act Map¹; ²Division of Mines and Geology Special Publication 42; ³California Department of Conservation, Fault Activity Map of California; California Department of Conservation, ⁴CGS Information Warehouse: Regulatory Maps; ⁵United States Department of Agriculture, Natural Resources Conservation Service; ⁶Uniform Building Code (1994)

VII. GREENHOUSE GAS EMISSIONS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

Discussion:

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less Than Significant Impact. Greenhouse gas (GHG) emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. GHG emissions produced during operations are those that result from potentially increased traffic volumes or changes in automobile speeds. The project would not result in an increase in the number of automobiles in the traffic system; therefore, operational emissions are not anticipated. The project would result in a temporary increase of GHG emissions during construction activities in Areas 7, 9, and 21. However, work would be short-term in duration and is not anticipated to result in significant adverse construction GHG emissions.

- a) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

No Impact. The project includes the installation and connection of sewer lines into an existing sewer main within existing roadways in Areas 7, 9, and 21. Due to the small-scale, temporary construction methods proposed for the project, it would have a less than significant impact to GHG emissions and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions¹.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: ¹Stanislaus County General Plan and Support Documentation, adopted on August 23, 2016.

VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Discussion:

- a) *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 would involve the use of some heavy equipment for hauling soils and materials handling. The use of this equipment may require the use of fuels and other common materials that have hazardous properties (e.g., fuels are flammable). These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose a hazard to people, animals, or plants. The use of hazardous materials would be temporary and the project would not include a permanent use of source hazardous materials. Therefore, the project would not create a significant hazard to the public or environment.

- 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?*

Less Than Significant Impact. Review of the information available through Geotracker¹ and Envirostor² indicated that there are no current or historical clean-up sites or hazardous waste facilities within the project area. The closest occurrence is approximately 15 feet west of Area 9^{1,2}. There is a potential that the project could affect yellow thermoplastic pavement markings and other types or colors of street or municipal markings containing lead-based paint. Observations made during the field investigation on February 22, 2018, indicated that the roads within the project area are constructed with painted

concrete and/or asphalt, therefore standard Best Management Practices for lead-containing structures would be implemented prior to construction.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant Impact. Although project sites Areas 7 and 21 are located within 0.25 mile of Burbank Elementary School, Pearson Elementary School, and Modesto City Schools' central office, construction activities would not involve handling or transportation of hazardous materials that would impact the nearby schools. Therefore, impacts would be less than significant for exposure of contaminated soil to existing or proposed schools during construction activities.

- 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?*

No Impact. The proposed project is not on a site included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, which is also known as the Cortese List. No sites in the Cortese List are located within the project area. The nearest site is located approximately 15 feet west from Area 9.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. The project would not result in a safety hazard for people residing or working in the project area, as it is not within the vicinity of an airport land use plan or within 2 miles of a public airport or public use airport. The nearest airport land is the Modesto City-County Airport Harry Sham Field located just over 2 miles east of Area 9. Therefore, there would be no impact related to safety of the public in the project area.

- f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. The project would not result in a safety hazard for people residing or working in the project area as it is not within the vicinity of a private airstrip. Therefore, there would be no impact related to safety of the public as a result of the project.

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less than Significant Impact. The project would not alter any allowable residential density in the nearby area, and installation of the sewer lines within existing roadways would not impair or alter any existing emergency response plan or emergency evacuation plan. Short-term traffic impacts may impact emergency response vehicles; however, no road closures are anticipated to occur and access to each residence would be maintained. A traffic management plan would be implemented prior to construction (see Transportation/Traffic Section) to ensure that one lane traveling in each direction in the roadways (of Areas 7, 9, and 21) would remain open; therefore, project impacts would be less than significant.

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

No Impact. The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No wildlands are adjacent to or within the project area; therefore, no impact is anticipated.

Recommended Avoidance and Minimization Measures:

Best Management Practices Include:

- The project would affect yellow thermoplastic pavement markings and other types or colors of street or municipal markings containing lead-based paint. If such markings are affected as a result of the project, such markings would be collected, tested, and/or disposed of in accordance with applicable regulations. Therefore, to avoid impacts from

pavement striping during construction, it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with applicable local, State, and Federal laws.

Mitigation Measures: None.

References: ¹State Water Resources Control Board, GeoTracker; ²Department of Toxic Substances Control, EnviroStor

IX. HYDROLOGY AND WATER QUALITY -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X

Discussion:

a) *Violate any water quality standards or waste discharge requirements?*

Less than Significant Impact. The project would disturb greater than 1 linear acre of land, therefore a Construction Stormwater General Permit is required, consistent with Water Quality Order No. 2013-0001-DWQ, issued by the State Water Resources Control Board under the National Pollutant Discharge Elimination System (NPDES)¹ to address storm water runoff. The permit would address clearing and ground disturbances, such as stockpiling or excavation. This permit would also require the County to prepare and implement a stormwater pollution prevention plan (SWPPP) with the intent of keeping all products of erosion from moving off-site into receiving waters. The SWPPP includes BMPs to prevent construction pollutants from entering stormwater runoff.

b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?*

No Impact. The project would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. Therefore, there would be no impact related to depletion of groundwater supplies or interference with groundwater recharge.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?*

No Impact. There are no bodies of water within the proposed project area; the nearest is Tuolumne River approximately 0.25 mile south of Area 9. No substantial alterations of the existing drainage patterns would occur on-site.

- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

No Impact. There are no bodies of water within the proposed project area; the nearest is Tuolumne River approximately 0.25 mile south of Area 9. No substantial alterations of the existing drainage patterns would occur on-site, and no increase in the rate or amount of surface runoff that could cause flooding on- or off-site would occur.

- e) *Create or contribute to runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?*

No Impact. The project would not add a net impervious surface to the project area. Therefore, creation and contribution to runoff water would not occur; no impacts would occur.

- f) *Otherwise substantially degrade water quality?*

Less than Significant Impact. Impacts associated with sediment and runoff are not anticipated during construction, as project activities would include excavation and installation of new sewer lines connecting to an existing sewer main. Material would not be imported during this process and excavated soils would be kept in staged piles and redistributed into the immediate project area (Areas 7, 9, and 21). As noted above, the project is subject to NPDES regulations since these improvements would exceed 1 acre of area. Additionally, compliance with existing regulations and implementation of Best Management Practices would occur during construction.

- g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

No Impact. Area 7 contains Zone X – “Areas of Minimal Flood Hazard”; the northern half of Area 9 contains Zone X while the southern half contains “0.2 Percent Annual Chance Flood Hazard”; and Area 21 contains entirely Zone X, except for the southwest corner near the intersection of Paradise and South Carpenter Roads² (**Appendix C**). The project would not place housing within a 100-year flood hazard area, as mapped on the federal Flood Hazard Boundary or Flood Insurance Rate Map² or other flood hazard delineation map; therefore, no impact would occur.

- h) *Place within a 100-year flood hazard area structures that would impede or redirect flood flows?*

No Impact. Area 7 contains Zone X – “Areas of Minimal Flood Hazard”; the northern half of Area 9 contains Zone X while the southern half contains “0.2 Percent Annual Chance Flood Hazard”; and Area 21 contains entirely Zone X, except for the southwest corner near the intersection of Paradise and South Carpenter Roads². The project would not place structures within a 100-year flood hazard area, as mapped on the federal Flood Hazard Boundary or Flood Insurance Rate Map² or other flood hazard delineation map; therefore, no impact would occur.

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

No Impact. The project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; therefore, no impact would occur.

j) *Inundation by seiche, tsunami, or mudflow*

No Impact. The project would not create a potential situation for inundation by seiche, tsunami, or mudflow. The project is located in a dominantly flat, urban landscape, is not near the coastal waters, and the nearest body of water is the Tuolumne River approximately 0.25 mile south of Area 9; therefore, no impact would occur.

Recommended Avoidance and Minimization Measures:

Best Management Practices:

- The Construction Stormwater General Permit would ensure the County would prepare and implement a SWPPP to keep all products of erosion from moving off-site into receiving waters.
- All erosion control measures and stormwater control measures would be properly maintained until the site has returned to a pre-construction state.
- All disturbed areas would be restored to pre-construction contours.
- All construction materials would be hauled off-site after completion of construction.

Mitigation Measures: None.

References: ¹State Water Resources Control Board (2013); ²FEMA Flood Map Service Center

X. LAND USE AND PLANNING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Discussion:

a) *Physically divide an established community?*

No Impact. The project would not divide an established community. No impacts are anticipated to occur.

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

No Impact. The project does not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect¹. The project is consistent with the land use and zoning in the Stanislaus County General Plan^{1,2}. Therefore, no impacts would occur as a result of the project.

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

No Impact. The project is not within or in the proximity of any applicable habitat conservation plans or natural community conservation plans; therefore, no impacts would occur as a result of the project.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: ¹Stanislaus County General Plan and Support Documentation, adopted on August 23, 2016; ²Modesto General Plan Program (2016).

XI. MINERAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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?				X
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?				X

Discussion:

- 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 project area does not have any known mineral resources¹ that would be of value to the region and the residents of the state; therefore, the project would have no impact to known mineral resources.

- 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 project area does not have any areas that are listed as a locally-important mineral resource recovery site¹; therefore, the project would have no impact.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: ¹¹Stanislaus County General Plan and Support Documentation, adopted on August 23, 2016

XII. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Discussion:

- a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less Than Significant Impact. The overall noise goal for the County is to limit the exposure of the community to excessive noise levels¹. County Code² establishes noise standards for maximum allowable noise exposure due to transportation sources and performance standards for fixed noise sources. Transportation noise standards (60 dBA) are applied at the outdoor activity area of noise sensitive land use (residential) where it is not possible to reduce noise in outdoor activity areas to 60 dBA or less using a practical application of the best-available noise reduction measures. Fixed noise sources are not to exceed 55 dBA and 75 dBA during daytime hours (7:00 A.M. to 10:00 P.M.) and 45 dBA and 65 dBA during nighttime hours (10:00 P.M. to 7:00 A.M.) as measured at the property line of noise sensitive land uses. Construction equipment noise cannot exceed 75 dBA between the hours of 7:00 P.M. to 7:00 A.M.². The project is anticipated to comply with all local and regional regulations. Therefore, impacts would be less than significant.

- b) *Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?*

Less than Significant Impact. The project area is within residential neighborhoods in west Modesto, Stanislaus County. The project would not require pile driving or excessive ground borne vibration. The temporary construction activities within the project area are anticipated to create ground borne noise; however, this would occur during appropriate times per County noise ordinance requirements.

- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

No Impact. No long-term, operational noise impacts would occur as a result of the project. Short-term, temporary, construction-related noise would occur from the use of construction equipment and vehicles; however, ambient noise would cease once the project is complete.

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less than Significant Impact. During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction equipment is expected to generate noise levels ranging from 70 to 90 dBA at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance.

No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with applicable Federal, State, and local noise standards^{1,2}. Construction noise would be short-term, intermittent, and overshadowed by local traffic and the ambient noise level of the project site. The County's Municipal Code² specifically prohibits the operation of any construction equipment that would cause a greater sound level than 75 decibels at or beyond the property line of any property between the hours of 7:00 P.M. to 7 A.M. Therefore, impacts would be less than significant.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. The project is not located within or adjacent to an airport land use plan, or where such a plan has not been adopted, or within 2 miles of a public airport or public use airport. The nearest airport land is the Modesto City-County Airport Harry Sham Field located just over 2 miles east of Area 9. Therefore, no impact would occur.

- e) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. The project is not located within the vicinity of a private airstrip; therefore, no impact would occur.

Recommended Avoidance and Minimization Measures:

Best Management Practices:

- Do not operate construction equipment or run the equipment engines from 7:00 P.M. to 7:00 A.M. or on Sundays, with the exception that you may operate equipment within the project limits during these hours to:
 - Service traffic control facilities
 - Service construction equipment
 - Equip an internal combustion engine with the manufacturer recommended muffler.
 - Do not operate an internal combustion engine on the job site without the appropriate muffler.

Mitigation Measures: None.

References: ¹Stanislaus County General Plan and Support Documentation, adopted on August 23, 2016; ²Stanislaus County Code, 10.46.060, specific noise source standards

XIII. POPULATION AND HOUSING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Discussion:

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

No Impact. The project would install new sewer lines within Areas 7, 9, and 21 in west Modesto, Stanislaus County. The project would not induce population growth in the area, either directly or indirectly; therefore, the project would have no impact related to population growth.

- b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No Impact. The project would not displace any number of existing housing, or necessitate the construction of replacement housing, as it involves the installation of new sewer lines. Therefore, the project would not impact existing housing.

- c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. The project would not displace any number of people, as it involves the installation of new sewer lines. Therefore, the project would not impact existing housing.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: None.

XIV. PUBLIC SERVICES --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project result in the 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:			X	
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

Discussion:

- 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, police protection, schools, parks, and/or other public facilities?*

Less than Significant Impact. The project would not create an unplanned increase in demand for fire or police services, schools, or recreation facilities. Response times could be potentially temporarily affected during construction. However, a traffic management plan would be implemented prior to construction to ensure that one lane traveling in each direction in the roadways (of Areas 7, 9, and 21) would remain open. Therefore, impacts would be less than significant.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: None.

XV. RECREATION --	Potentially Significant Impact	Less Than Significant With Mitigation Included	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?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Discussion:

- 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 would not 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, as the project consists of the installation of new sewer lines. Therefore, no impacts would occur.

- 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. The project does not include other recreational facilities, nor does it require the construction or expansion of other recreational facilities; therefore, no impacts would occur.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: None.

XVI. TRANSPORTATION/TRAFFIC -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	

Discussion:

- a) *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?*

Less Than Significant Impact. The project would not conflict with an applicable plan, ordinance or policy¹ establishing measures of effectiveness for the performance of the circulation system. This takes into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrians and bicycle paths, and mass transit. No road closures are anticipated to occur and access to each residence would be maintained. A traffic management plan would be implemented prior to construction to ensure that one lane traveling in each direction in the roadways (of Areas 7, 9, and 21) would remain open. Therefore, project impacts would be less than significant.

- b) *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

Less than Significant Impact. The project would not be in conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways¹. Potential temporary congestion due to construction activities may occur; however, a traffic management plan would be implemented prior to construction (see Transportation/Traffic Section) to ensure that one lane traveling in each direction in the roadways (of Areas 7, 9, and 21) would remain open. Therefore, project impacts would be less than significant.

- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

No Impact. The nearest airport land is the Modesto City-County Airport Harry Sham Field located just over 2 miles east of Area 9. The project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; therefore, no impact would occur.

- d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

No Impact. The project would not substantially increase hazards due to a design feature or incompatible uses. Design features would comply with County standards as appropriate. The project would not increase hazards due to design features or incompatible uses; therefore, no impact would occur.

- e) *Result in inadequate emergency access?*

Less than Significant Impact. The project would temporarily result in one-lane closures within Areas 7, 9, and 21; however, a transportation management plan would be implemented prior to construction and at least one lane would remain open, traveling in each direction, for the duration of construction activities. Therefore, impacts would be less than significant.

- f) *Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

Less Than Significant Impact. The project would not conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, and performance or safety of such facilities¹. This takes into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrians and bicycle paths, and mass transit. No road closures are anticipated to occur and access to each residence would be maintained. A traffic management plan would be implemented prior to construction (see Transportation/Traffic Section) to ensure that one lane traveling in each direction in the roadways (of Areas 7, 9, and 21) would remain open. Therefore, project impacts would be less than significant.

Recommended Avoidance and Minimization Measures:

Best Management Practices:

- Temporary impacts to traffic flow as a result of construction activities would be minimized through construction phasing and signage and a traffic control plan.

Mitigation Measures: None.

References: ¹Stanislaus County General Plan and Support Documentation, adopted on August 23, 2016.

XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Discussion:

- a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

Less Than Significant Impact. The project would result in the installation of new sewer lines in Areas 7, 9, and 21 of west Modesto, Stanislaus County, and would result in additional wastewater that would need to be treated. However, wastewater treatment requirements of the Central Valley Regional Water Quality Control Board requirements and thresholds would not be exceeded. Therefore, impacts would be less than significant.

- b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less Than Significant Impact. The project would result in the installation of new sewer lines in Areas 7, 9, and 21 of west Modesto, Stanislaus County, and would result in additional wastewater that would need to be treated. However, wastewater treatment requirements of the Central Valley Regional Water Quality Control Board requirements and thresholds would not be exceeded. Therefore, impacts would be less than significant.

- c) *Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No Impact. The project would result in the installation of new sewer lines in Areas 7, 9, and 21 of west Modesto, Stanislaus County, and would not include the construction of any new stormwater drainage facilities. No increase in impervious surface areas would occur as the result of the project. No new construction of stormwater drainage facilities would occur as a result of the project. Therefore, no impact to stormwater drainage facilities would occur.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

No Impact. The project would not result in the need for new or expanded water supplies. No Impact would result from development of the project.

- e) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less Than Significant Impact. The project would result in the installation of new sewer lines in Areas 7, 9, and 21 of west Modesto, Stanislaus County, and would result in additional wastewater that would need to be treated. The County received a determination from the City of Modesto's Utility Director, William Wong, the waste water treatment provider for the City of Modesto, on January 12, 2018, verifying that the facility has adequate capacity to serve the additional wastewater that would be generated from Areas 7, 9, and 21. All neighborhoods where sewer mains are proposed to be installed were previously studied in the City's Wastewater Master Plan and identified to be incorporated into the City's wastewater system. The proposed project's connection to the City of Modesto's sewer system is subject to an out-of-boundary service agreement approved by LAFCO.

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

Less Than Significant Impact. The project would not generate substantial solid waste during operation. Solid waste may be generated during construction; however, the amount would not exceed landfill capacities. This would not affect landfill capacity because the amounts would not be substantial and would occur only during the construction period. Therefore, impacts associated with development of solid waste would be considered less than significant.

- g) *Comply with federal, state, and local statutes and regulations related to solid waste?*

Less Than Significant Impact. The project would comply with Federal, State, and local statutes and regulations¹ related to solid waste; therefore, impacts associated with compliance with federal, state, and local statutes and regulations related to solid waste would be considered less than significant.

Recommended Avoidance and Minimization Measures: None.

Mitigation Measures: None.

References: ¹Stanislaus County General Plan and Support Documentation, adopted on August 23, 2016; ²State of California Central Valley Regional Water Quality Control Board.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
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.)				X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Discussion:

- a) *Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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 Impact. The project would utilize measures listed within **Section IV and V** to minimize and avoid potential impacts to Swainson's hawk and cultural resources. Construction would not have a cumulatively considerable contribution to the decline of Swainson's hawk in the region. There are no known historic resources within the project area. Additionally, there are no other planned projects within 2 miles of the project site; therefore, no cumulative impacts to biological or cultural resources would occur, and impacts are considered 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)?*

No impact. The project would not have significant environmental impacts. Past projects in the project vicinity have been cleared through the CEQA process and potentially significant impacts from those previous projects would have already been mitigated. No cumulative effects are anticipated because no resources would be adversely affected by the project, or the project impacts would be localized and of limited extent. Therefore, there would be no impact.

- a) *Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less than Significant Impact. The project would not cause significant adverse effects to human beings, either directly or indirectly. Therefore, impacts are considered less than significant.

Appendix A: USFWS Species List

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Stanislaus County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

¹ are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

The following species are potentially affected by activities in this location:

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered

species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see maps of where birders and the general public have sighted birds in and around your project area, visit E-bird tools such as the [E-bird data mapping tool](#) (search for the name of a bird on your list to see specific locations where that bird has been reported to occur within your project area over a certain timeframe) and the [E-bird Explore Data Tool](#) (perform a query to see a list of all birds sighted in your county or region and within a certain timeframe). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS INDICATED

FOR A BIRD ON YOUR LIST, THE
BIRD MAY BREED IN YOUR
PROJECT AREA SOMETIME WITHIN
THE TIMEFRAME SPECIFIED,
WHICH IS A VERY LIBERAL
ESTIMATE OF THE DATES INSIDE
WHICH THE BIRD BREEDS ACROSS
ITS ENTIRE RANGE. "BREEDS
ELSEWHERE" INDICATES THAT THE
BIRD DOES NOT LIKELY BREED IN
YOUR PROJECT AREA.)

Allen's Hummingbird *Selasphorus sasin*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9637>

Breeds Feb 1 to Jul 15

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

Black Swift *Cypseloides niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8878>

Breeds Jun 15 to Sep 10

Burrowing Owl *Athene cunicularia*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9737>

Breeds Mar 15 to Aug 31

California Thrasher *Toxostoma redivivum*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

Clark's Grebe *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Dec 31

Costa's Hummingbird *Calypte costae*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9470>

Breeds Jan 15 to Jun 10

Golden Eagle *Aquila chrysaetos*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Breeds Jan 1 to Aug 31

Lawrence's Goldfinch *Carduelis lawrencei*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

Breeds Mar 20 to Sep 20

Lewis's Woodpecker *Melanerpes lewis*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

Breeds Apr 20 to Sep 30

Long-billed Curlew *Numenius americanus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/5511>

Breeds elsewhere

Marbled Godwit *Limosa fedoa*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

Breeds elsewhere

Nuttall's Woodpecker *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

Oak Titmouse *Baeolophus inornatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

Breeds Mar 15 to Jul 15

Rufous Hummingbird *Selasphorus rufus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Breeds elsewhere

Short-billed Dowitcher *Limnodromus griseus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

Breeds elsewhere

Tricolored Blackbird *Agelaius tricolor*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

Whimbrel *Numenius phaeopus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9483>

Willet *Tringa semipalmata*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-billed Magpie *Pica nuttalli*

Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9726>

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the counties which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird entry on your migratory bird species list indicates a breeding season, it is probable that the bird breeds in your project's counties at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the BGEPA should such impacts occur.

Facilities

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix B: CNDDB Species List



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
cackling (=Aleutian Canada) goose <i>Branta hutchinsii leucopareia</i>	ABNJB05035	Delisted	None	G5T3	S3	
California tiger salamander <i>Ambystoma californiense</i>	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Crotch bumble bee <i>Bombus crotchii</i>	IIHYM24480	None	None	G3G4	S1S2	
great blue heron <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
hardhead <i>Mylopharodon conocephalus</i>	AFCJB25010	None	None	G3	S3	SSC
heartscale <i>Atriplex cordulata</i> var. <i>cordulata</i>	PDCHE040B0	None	None	G3T2	S2	1B.2
moestan blister beetle <i>Lytta moesta</i>	IICOL4C020	None	None	G2	S2	
northern California legless lizard <i>Anniella pulchra</i>	ARACC01020	None	None	G3	S3	SSC
obscure bumble bee <i>Bombus caliginosus</i>	IIHYM24380	None	None	G4?	S1S2	
prairie wedge grass <i>Sphenopholis obtusata</i>	PMPOA5T030	None	None	G5	S2	2B.2
snowy egret <i>Egretta thula</i>	ABNGA06030	None	None	G5	S4	
steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i> pop. 11	AFCHA0209K	Threatened	None	G5T2Q	S2	
subtle orache <i>Atriplex subtilis</i>	PDCHE042T0	None	None	G1	S1	1B.2
Swainson's hawk <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G3G4	S2	SSC
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T2	S2	
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp <i>Lepidurus packardii</i>	ICBRA10010	Endangered	None	G4	S3S4	

Record Count: 20

Appendix C: CNPS Species List

Plant List

Inventory of Rare and Endangered Plants

3 matches found. *Click on scientific name for details*

Search Criteria

Found in Stanislaus County, Found in Quads 3712161, 3712068 3712151 and 3712058;

[Modify Search Criteria](#)
[Export to Excel](#)
[Modify Columns](#)
[Modify Sort](#)
[Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Atriplex cordulata var. cordulata	heartscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G3T2
Atriplex subtilis	subtle orache	Chenopodiaceae	annual herb	Jun, Aug, Sep (Oct)	1B.2	S1	G1
Sphenopholis obtusata	prairie wedge grass	Poaceae	perennial herb	Apr-Jul	2B.2	S2	G5

Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 27 February 2018].

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Contributors

[The Calflora Database](#)

[The California Lichen Society](#)

[California Natural Diversity Database](#)

[The Jepson Flora Project](#)

[The Consortium of California Herbaria](#)

[CalPhotos](#)

Questions and Comments

rareplants@cnps.org

Appendix D: List of Species Observed

Animal Species Observed within the BSA

Common Name	Scientific Name	Native (N)/ Non-native (X)
Avian		
American crow	<i>Corvus brachyrhynchos</i>	N
Anna's hummingbird	<i>Calypte anna</i>	N
Black phoebe	<i>Sayornis nigricans</i>	N
Bushtit	<i>Psaltiriparus minimus</i>	N
California scrub-jay	<i>Apelocoma californica</i>	N
Domestic chicken	<i>Gallus gallus domesticus</i>	X
Goose spp.	<i>Branta spp.</i>	N
Great-tailed grackle	<i>Quiscalus mexicanus</i>	N
Gull spp.	<i>Laridae Family</i>	N
House finch	<i>Haemorhous mexicanus</i>	N
Mourning dove	<i>Zenaida macroura</i>	N
Red-shouldered hawk	<i>Buteo lineatus</i>	N
Red-tailed hawk	<i>Buteo jamaicensis</i>	N
Rock pigeon	<i>Columba livia</i>	N
White crowned sparrow	<i>Zonotrichia leucophrys</i>	N
Mammals		
Domestic cat	<i>Felis catus</i>	X
Domestic Dog	<i>Canis lupus familiaris</i>	X

Appendix B – Native American Outreach Log

Native American Consultation Log
West Modesto Sewer Infrastructure Project, Stanislaus County, California

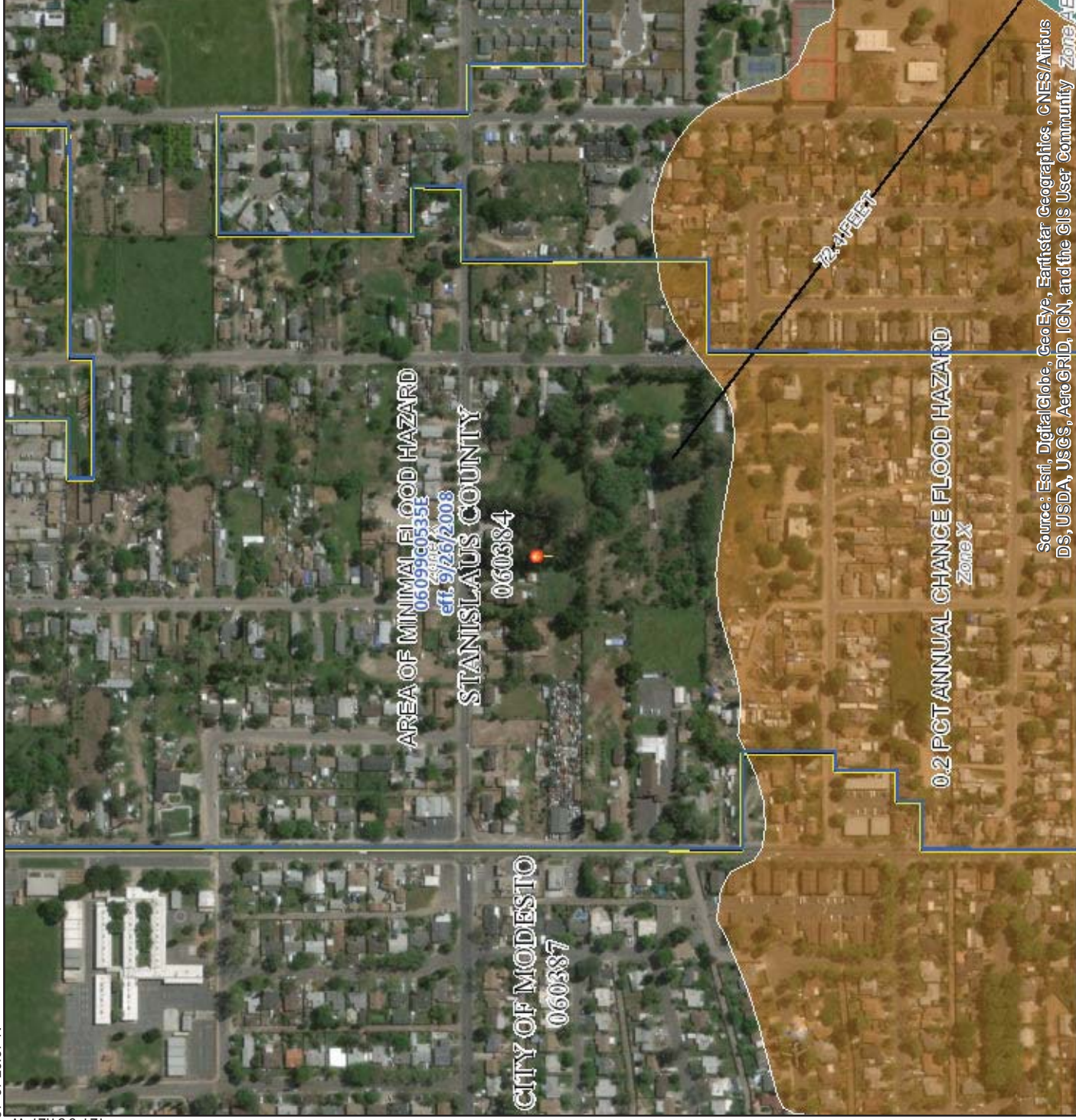
Affiliation	Name	Contact Date	Contact Type	Response
Native American Heritage Commission (NAHC)	Sharaya Souza	2018 Feb 28	Letter	Ms. Sharaya Souza replied via email with a letter stating that a review of the Sacred Lands File failed to indicate the presence of Native American cultural resources in the APE. The letter also provided a list of Native American contacts for the proposed project.
California Valley Miwok Tribe	None	2018 March 5	Letter	An initial letter was sent via certified mail initiating AB 52 and Section 106 consultation.
		2018 April 16	Phone	A follow-up phone call was placed at 11:30am regarding the initial letter. A voicemail was left.
		2018 April 16	Phone	Mr. Tiger Paulk returned the voicemail later that day indicating that the Tribe had no comments or requests for consults; however, if cultural material and/or human remains are found during project-related activities to inform the Tribe. It is also the Tribe's preference that anything found be repatriated and reburied onsite or near the location.
Calaveras Band of Mi-Wuk Indians	Debra Grimes, Cultural Resources Specialist	2018 March 5	Letter	An initial letter was sent via certified mail initiating AB 52 and Section 106 consultation.
		2018 April 16	Phone	Ms. Grimes stated that the APE is located outside of traditional Tribal land and that the Tribe had no comment or requests for consultation on the proposed project.
North Valley Yokuts Tribe	Katherine Erolinda Perez	2018 March 5	Letter	An initial letter was sent via certified mail initiating AB 52 and Section 106 consultation.
		2018 April 16	Phone/Email	A follow-up phone call was placed regarding the initial letter, and a voicemail was left. An email was also sent on the same day. No response has been returned.
Tule River Indian Tribe	Neil Pevron, Chairperson	2018 March 5	Letter	An initial letter was sent via certified mail initiating AB 52 and Section 106 consultation.
		2018 April 16	Phone	A follow-up phone call and email were sent on April 16, 2018 with no response; however, a secretary stated that Ryan Garfield no longer worked at the office and that Neil Pevron was to be the primary point of contact. A voicemail was left. No response has been returned.
Tuolumne Band of Me-Wuk	Kevin Day, Mary Camp, Stanley Cox, Reba Fuller, and Robert Cox	2018 March 5	Letter	An initial letter was sent via certified mail initiating AB 52 and Section 106 consultation.
		2018 April 16	Phone	A follow-up phone call was placed on April 16, 2018, and Mr. Robert Cox (Cultural Resources Director) stated that the Tribe would like to be notified only if cultural materials and/or human remains were uncovered during the proposed project activities. Further consultation is required at this time; however, if cultural materials are uncovered then the Tribe will be notified.
Southern Sierra Miwuk Nation	Bill Leonard, Chairperson	2018 March 5	Letter	An initial letter was sent via certified mail initiating AB 52 and Section 106 consultation.
		2018 April 16	Phone	A follow-up phone call was placed on April 16, 2018 and a voice message was left. No response has been received.

Appendix C – FEMA FIRMette Maps (Areas 7, 9, and 21)

National Flood Hazard Layer FIRMette



37°37'26.37"N



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Zone AE

0 250 500 1,000 1,500 2,000 Feet 1:6,000

37°36'57.87"N

121°0'13.81"W

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS



OTHER AREAS OF FLOOD HAZARD



OTHER AREAS



GENERAL STRUCTURES



OTHER FEATURES



MAP PANELS



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/18/2018 at 1:30:00 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

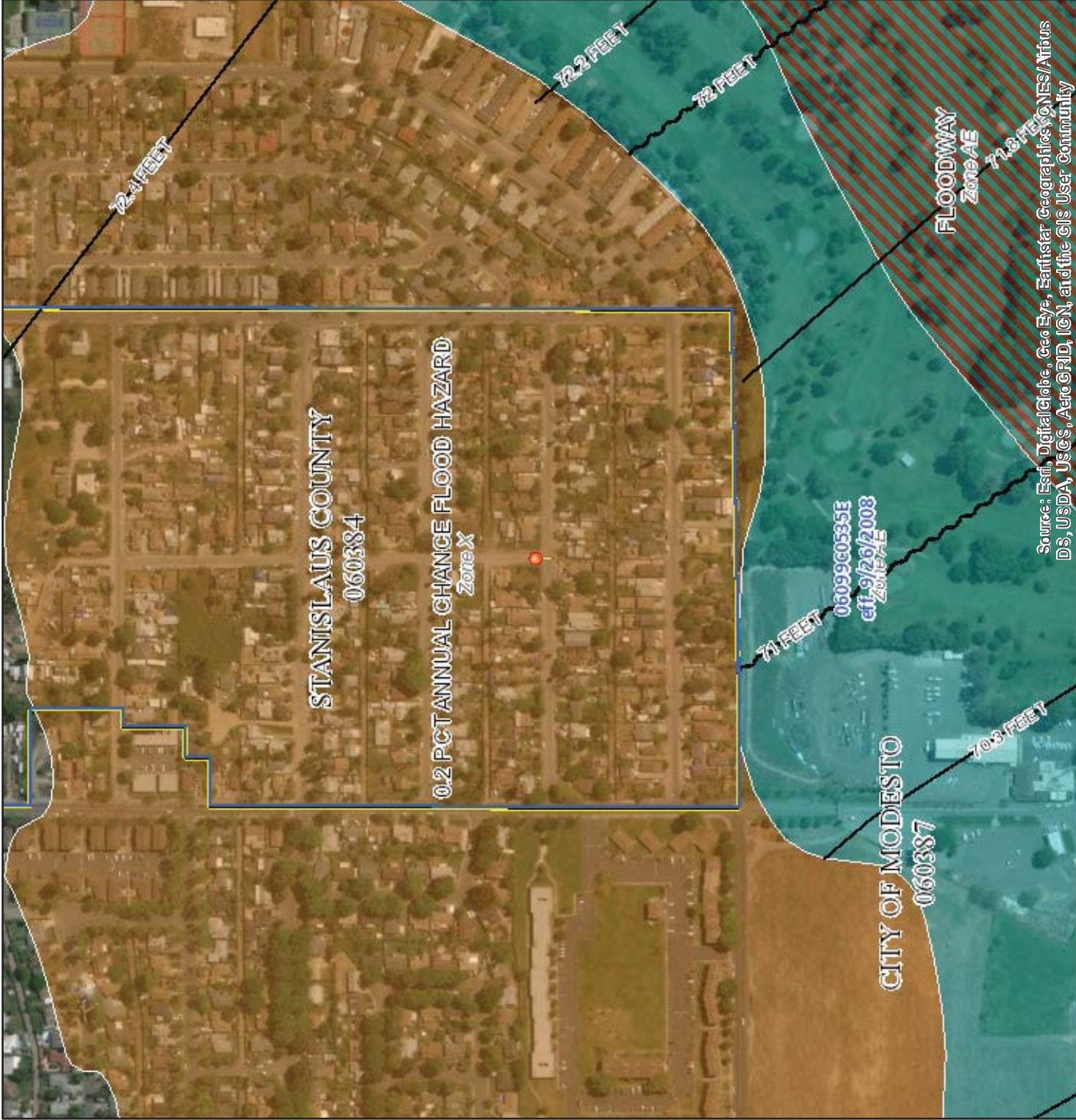
This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette



37°37'7.53"N

121°0'52.81"W



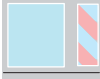
121°0'15.35"W

37°36'39.03"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS



0.2% Annual Chance Flood Hazard, Areas of 1% annual chance Flood with average depth less than one foot or with drainage areas of less than one square mile Zone X



Future Conditions 1% Annual Chance Flood Hazard Zone X



Area with Reduced Flood Risk due to Levee, See Notes, Zone X



Area with Flood Risk due to Levee Zone D



OTHER AREAS OF FLOOD HAZARD



Area of Minimal Flood Hazard Zone X

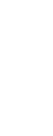
Area of Undetermined Flood Hazard Zone D

OTHER AREAS

Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall

GENERAL STRUCTURES

Cross Sections with 1% Annual Chance Water Surface Elevation



Coastal Transect



Base Flood Elevation Line (BFE)



Limit of Study



Jurisdiction Boundary



Coastal Transect Baseline



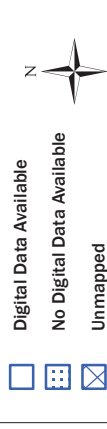
Profile Baseline



Hydrographic Feature



OTHER FEATURES



MAP PANELS

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards

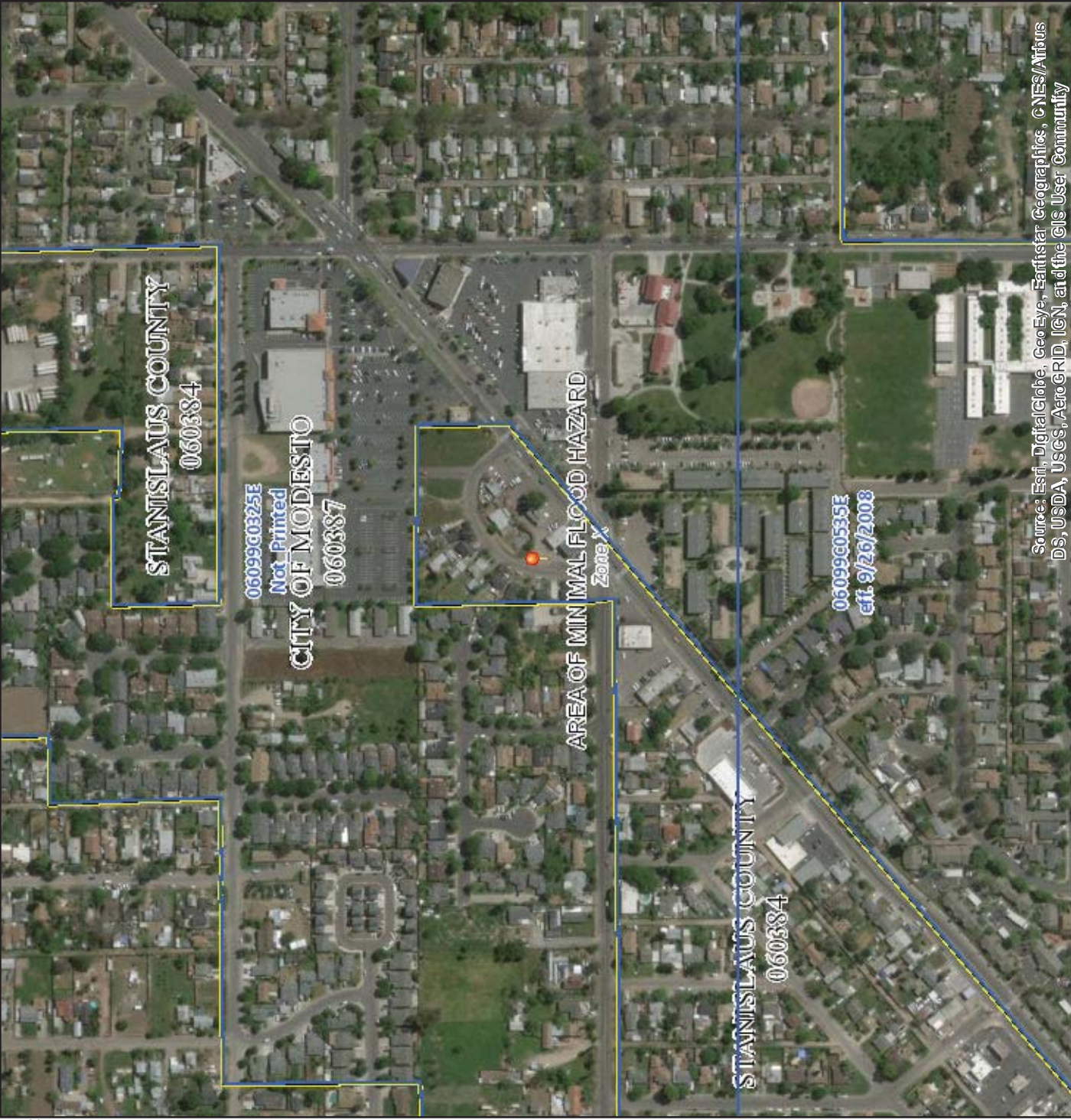
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This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette



37°37'49.62"N



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

0 250 500 1,000 1,500 2,000 Feet 1:6,000

37°37'21.13"N

121°0'34.20"W

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Without Base Flood Elevation (BFE)
Zone A, V, A99

With BFE or Depth

Regulatory Floodway *Zone AE, AO, AH, VE, AR*

SPECIAL FLOOD HAZARD AREAS

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*

Future Conditions 1% Annual Chance Flood Hazard *Zone X*

Area with Reduced Flood Risk due to Levee, See Notes. *Zone X*

Area with Flood Risk due to Levee *Zone D*

OTHER AREAS OF FLOOD HAZARD

NO SCREEN

Effective LOMRs

Area of Minimal Flood Hazard *Zone X*

Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

OTHER FEATURES

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

MAP PANELS

Digital Data Available

No Digital Data Available

Unmapped

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **4/18/2018 at 1:41:03 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

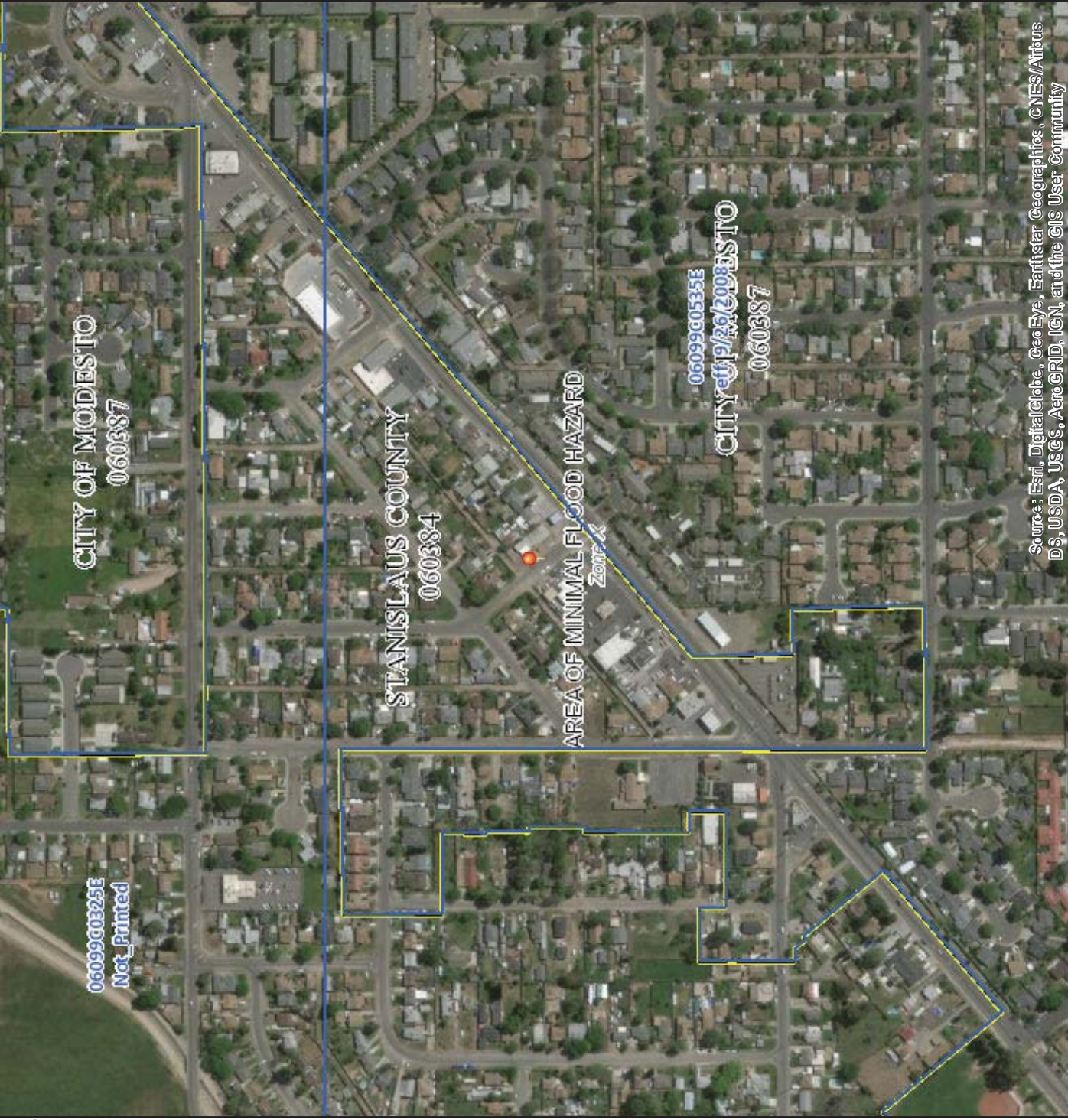
This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette



37°37'38.73"N

121°12'57"W



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

0 250 500 1,000 1,500 2,000 Feet 1:6,000

37°37'10.23"N

121°0'50.12"W

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS



0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X



OTHER AREAS OF FLOOD HAZARD



OTHER AREAS

GENERAL STRUCTURES



Cross Sections with 1% Annual Chance



OTHER FEATURES



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/18/2018 at 1:42:14 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, AE, AH, VE, AR
- Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile

- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Flood Risk due to Levee, See Notes.
- Area with Flood Risk due to Levee

OTHER AREAS OF FLOOD HAZARD

- Area of Minimal Flood Hazard
- Effective LOMRs
- Area of Undetermined Flood Hazard

OTHER AREAS

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

GENERAL STRUCTURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

OTHER FEATURES

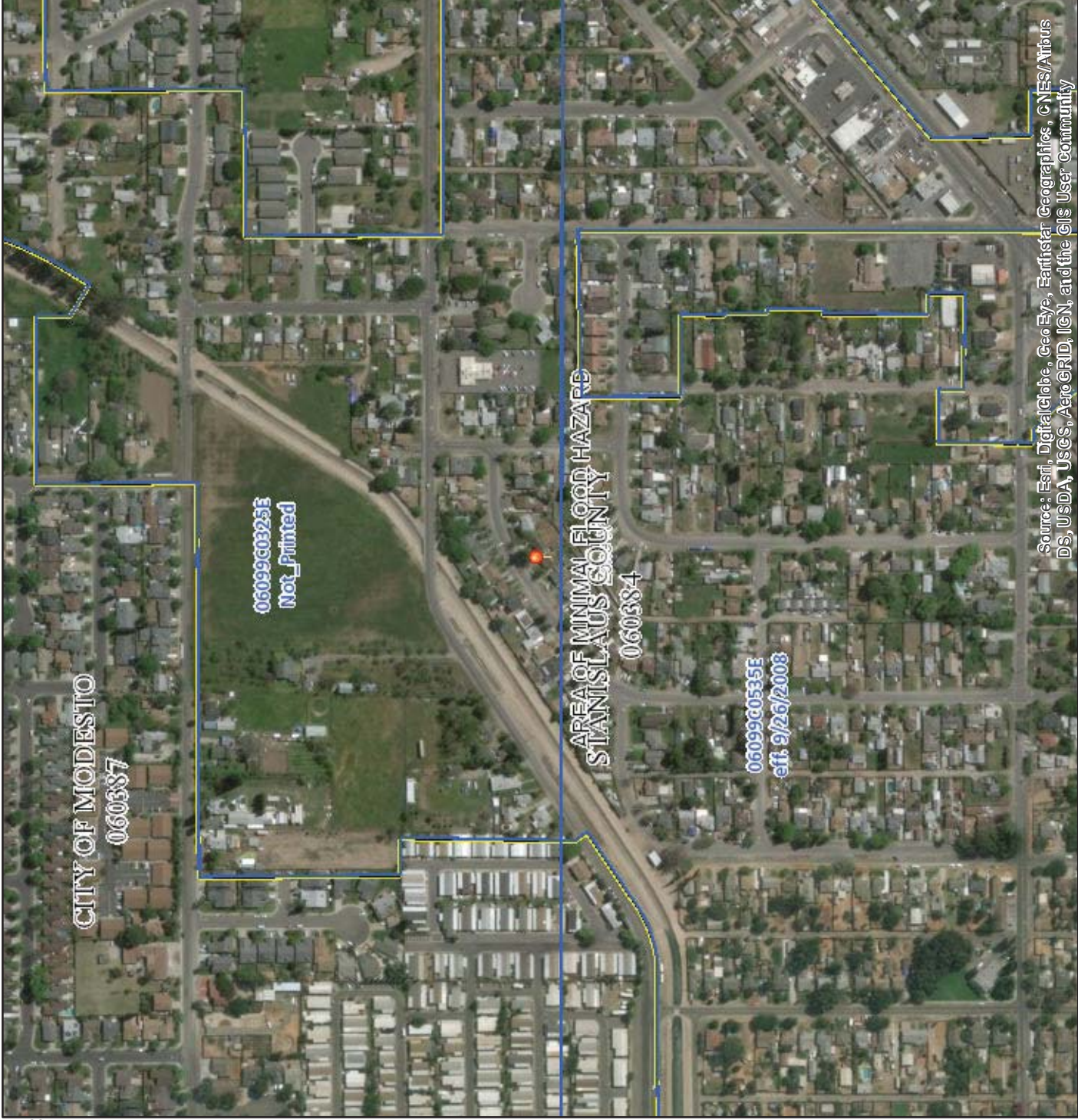
- Digital Data Available
- No Digital Data Available
- Unmapped

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/18/2018 at 1:45:52 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

121°17.42'W



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

0 250 500 1,000 1,500 2,000 Feet 1:6,000

37°37'16.35"N

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS



0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
Zone X



OTHER AREAS OF FLOOD HAZARD



OTHER AREAS



GENERAL STRUCTURES



OTHER FEATURES



MAP PANELS

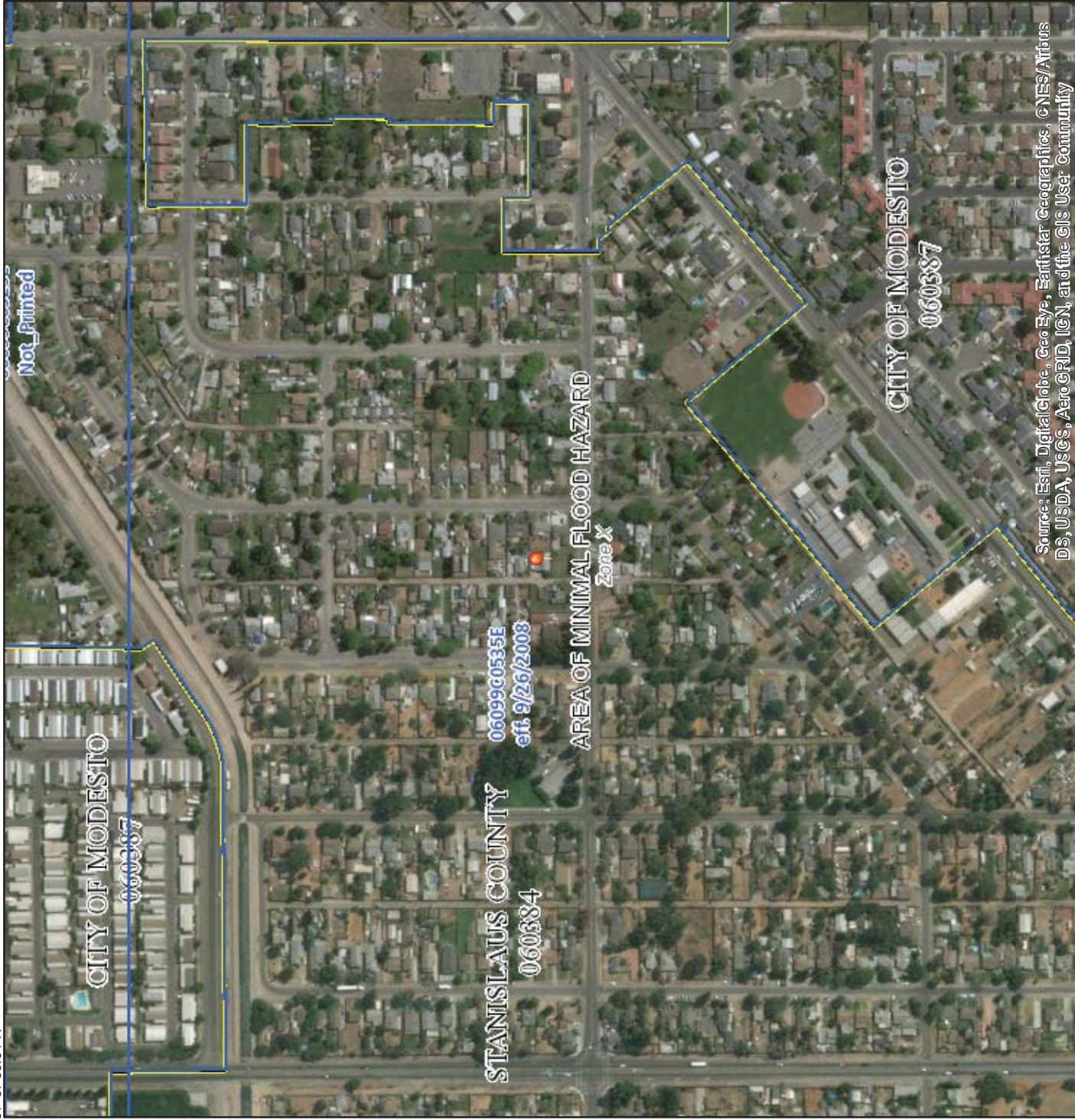


This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards.

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This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

121°1'13.91"W



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Feet 1:6,000

2,000

1,500

1,000

500

250

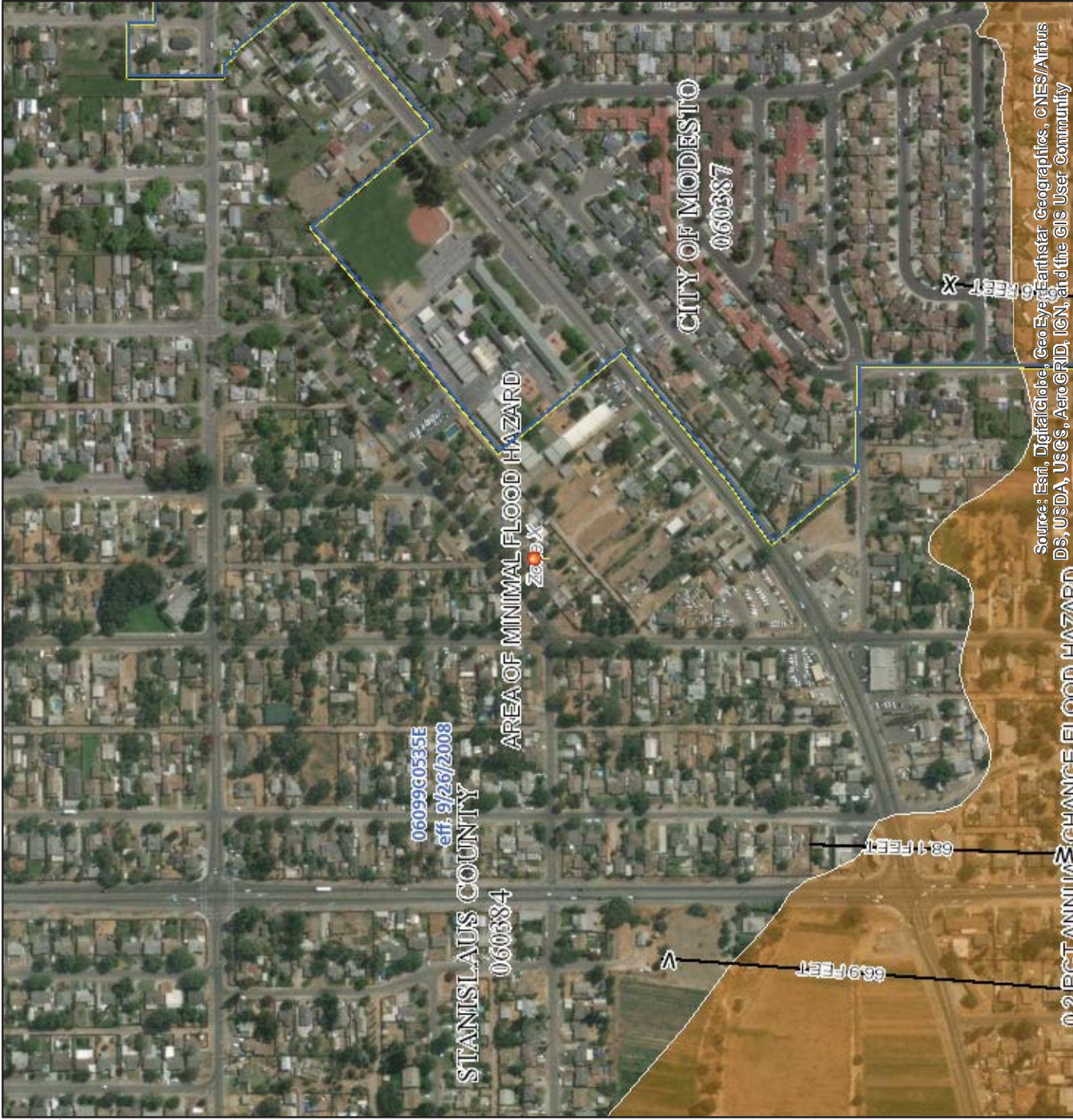
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37°37'4.85"N

National Flood Hazard Layer FIRMette



37°37'23.43"N



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



37°36'54.94"N

121°1'19.78"W

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS



0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile **Zone X**



Future Conditions 1% Annual Chance Flood Hazard **Zone X**



Area with Reduced Flood Risk due to Levee, See Notes, **Zone X**



Area with Flood Risk due to Levee **Zone D**



Area of Minimal Flood Hazard **Zone X**



Effective LOMRs



Area of Undetermined Flood Hazard **Zone D**



Channel, Culvert, or Storm Sewer



Levee, Dike, or Floodwall



Cross Sections with 1% Annual Chance Water Surface Elevation



Coastal Transect



Base Flood Elevation Line (BFE)



Limit of Study



Jurisdiction Boundary



Coastal Transect Baseline



Profile Baseline



Hydrographic Feature



Digital Data Available



No Digital Data Available



Unmapped



Map Panels



Digital Data Available



No Digital Data Available



Unmapped



Map Panels



Digital Data Available



No Digital Data Available



Unmapped

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards.

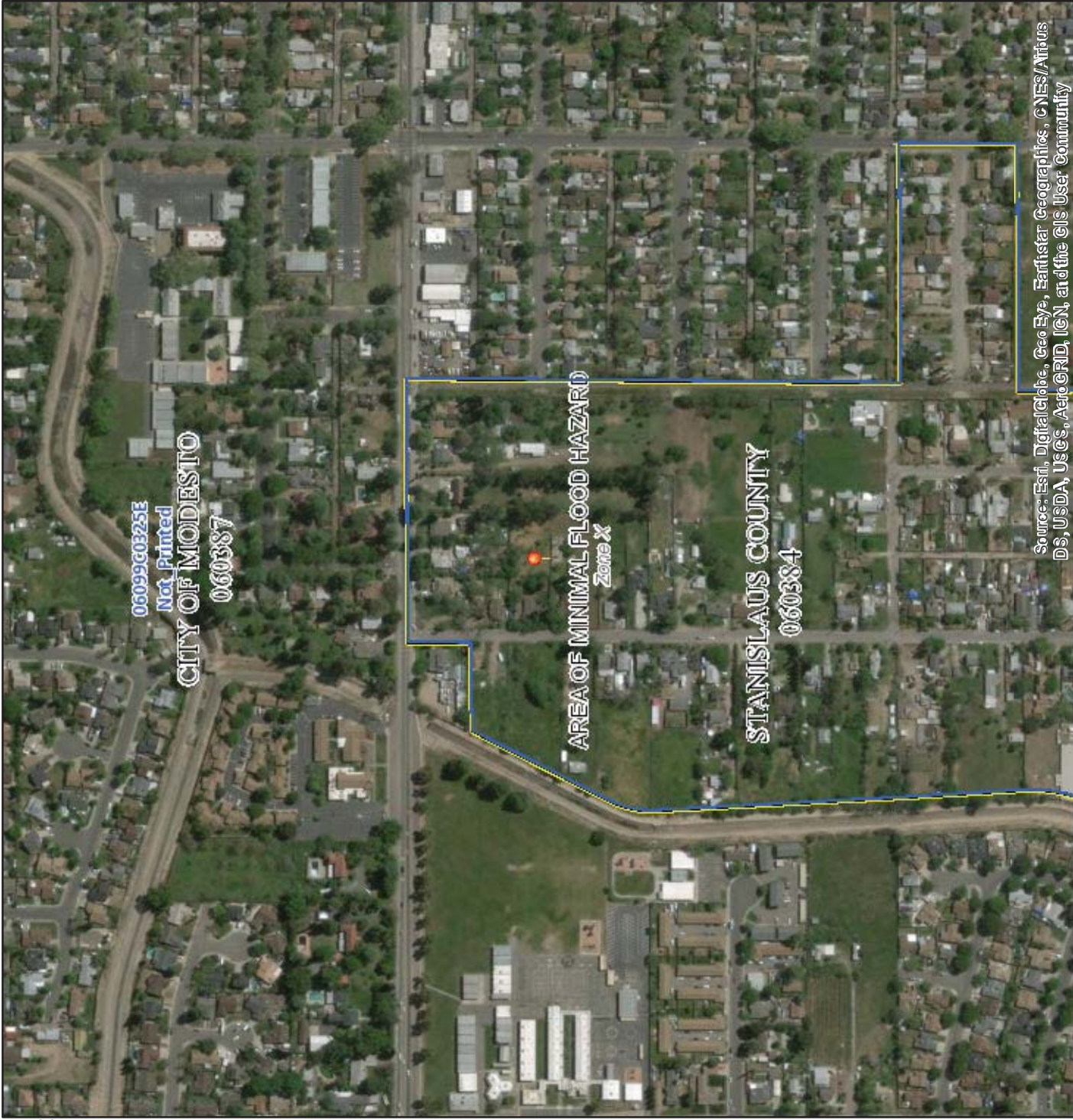
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **4/18/2018 at 1:50:00 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette



37°38'29.87"N



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



37°38'1.38"N

121°0'37.91"W

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS



Without Base Flood Elevation (BFE)
Zone A, V, A99
Regulatory Floodway
Zone AE, AO, AH, VE, AR

OTHER AREAS OF FLOOD HAZARD



0.2% Annual Chance Flood Hazard, Areas of 1% annual chance Flood with average depth less than one foot or with drainage areas of less than one square mile
Zone X
Future Conditions 1% Annual Chance Flood Hazard
Zone X
Area with Reduced Flood Risk due to Levee, See Notes, Zone X
Area with Flood Risk due to Levee
Zone D

OTHER AREAS



Area of Minimal Flood Hazard
Zone X
Effective LOMRs
Area of Undetermined Flood Hazard
Zone D

GENERAL STRUCTURES



Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

OTHER FEATURES



Cross Sections with 1% Annual Chance Water Surface Elevation
Coastal Transect
Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline
Profile Baseline
Hydrographic Feature

MAP PANELS



Digital Data Available
No Digital Data Available
Unmapped

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards

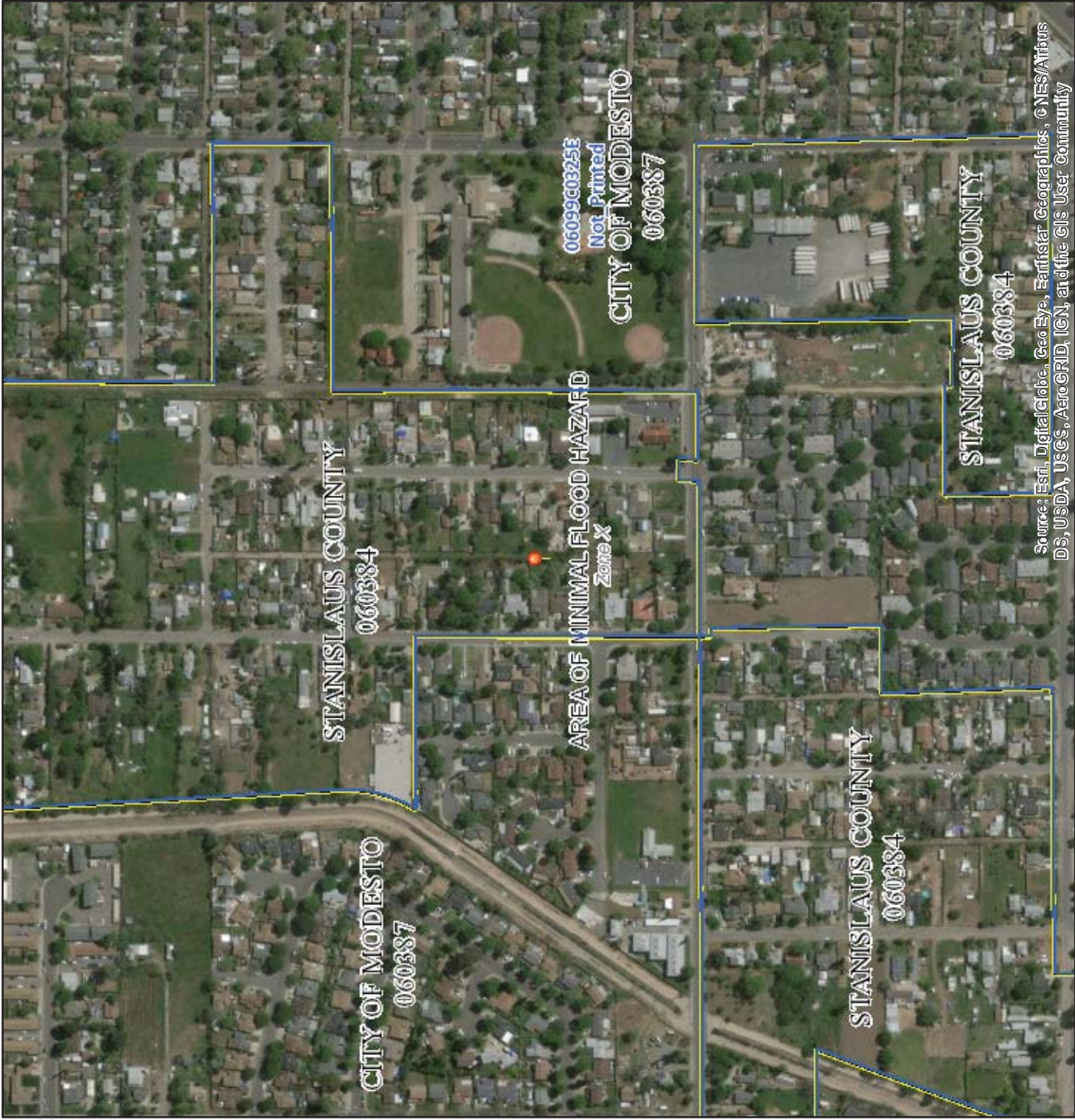
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **4/18/2018 at 1:35:11 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette



37°38'11.64"N



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



37°37'43.15"N

121°0'37.91"W

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Without Base Flood Elevation (BFE)
Zone A, V, AE, AH, AO, AR

With BFE or Depth

Regulatory Floodway

Zone AE, AO, AH, VE, AR

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile

Zone X

Future Conditions 1% Annual Chance Flood Hazard

Zone X

Area with Reduced Flood Risk due to Levee. See Notes.

Zone X

Area with Flood Risk due to Levee

Zone D

NO SCREEN

Effective LOMRs

Area of Minimal Flood Hazard

Area of Undetermined Flood Hazard

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

Digital Data Available

No Digital Data Available

Unmapped

MAP PANELS

Digital Data Available

No Digital Data Available

Unmapped

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **4/18/2018 at 1:36:08 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Without Base Flood Elevation (BFE)
Zone A, V, AE

With BFE or Depth

Regulatory Floodway
Zone AE, AO, AH, VE, AR

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
Zone X

Future Conditions 1% Annual Chance Flood Hazard
Zone X

Area with Reduced Flood Risk due to Levee, See Notes.
Zone X

Area with Flood Risk due to Levee
Zone D

NO SCREEN

Area of Minimal Flood Hazard
Zone X

Effective LOMRs

Area of Undetermined Flood Hazard
Zone D

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

Digital Data Available

No Digital Data Available

Unmapped

Special Flood Hazard Areas

Other Areas of Flood Hazard

Other Features

Map Panels

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **4/18/2018 at 1:25:30 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

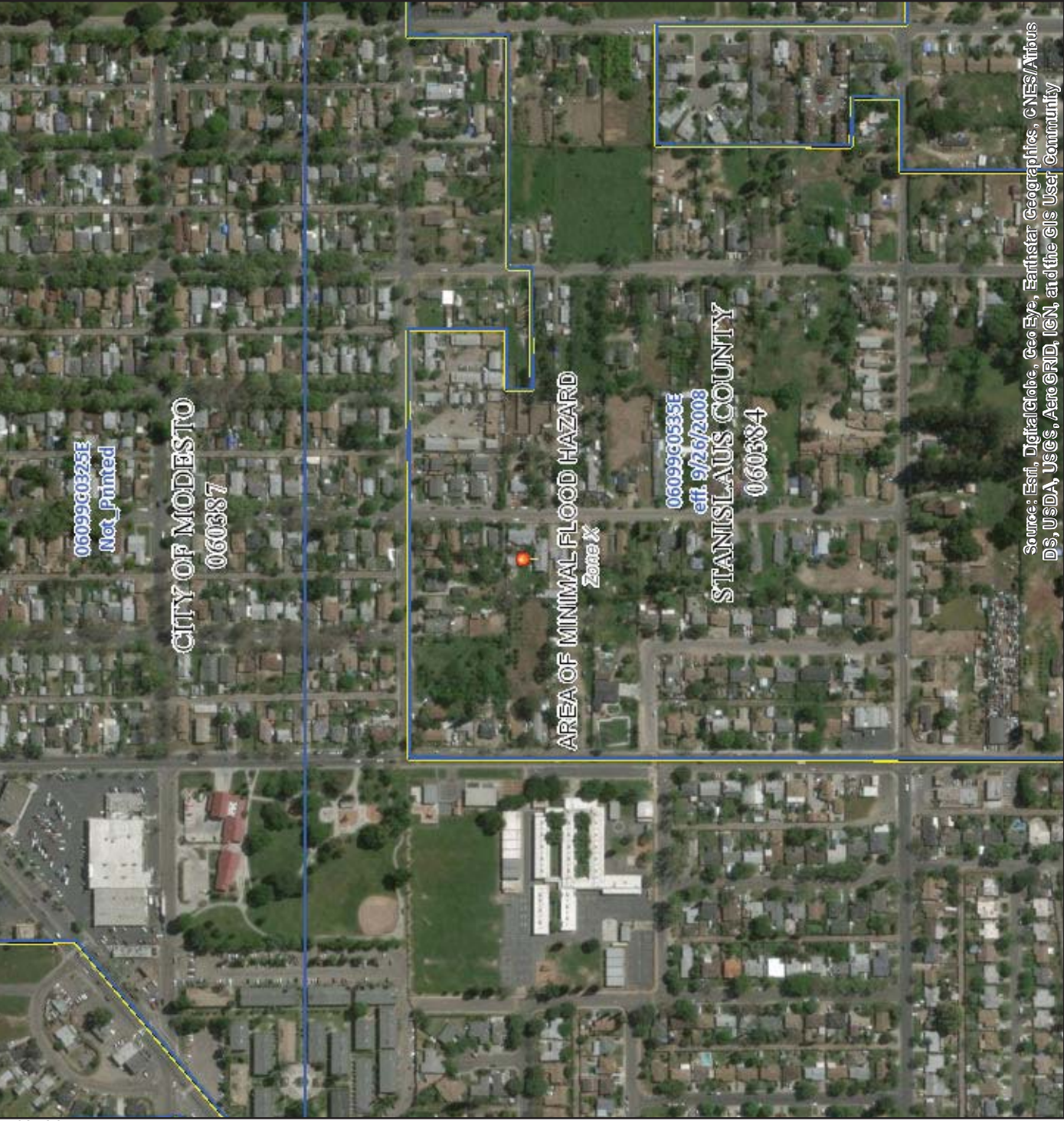
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Feet 1:6,000

2,000

1,500

1,000

500

250

0

SPECIAL FLOOD HAZARD AREAS



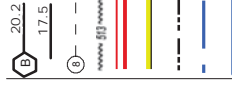
OTHER AREAS OF FLOOD HAZARD



OTHER AREAS



OTHER FEATURES



MAP PANELS



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/18/2018 at 1:31:44 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

121°0'16.90"W

37°37'9.87"N

