City of Firebaugh

Mitigated Negative Declaration

and

Initial Environmental Study

for

HUD Tank Project

Prepared for

CITY OF FIREBAUGH

Prepared by

Collins & Schoettler PLANNING CONSULTANTS

ENVIRONMENTAL REVIEW

GENERAL INFORMATION

What is being proposed?

The City of Firebaugh is proposing to replace an existing 750,000-gallon HUD (water) tank, 3.0 MGD booster pump station, and the transmission line from the tank site to the north side of the Delta-Mendota Canal along Washoe Avenue. The major features of the project include:

- Demolition/abandoning/disposal of the existing facilities
- Installing temporary pump station
- 750,000 gal water storage tank
- 3.0 MGD pump station in CMU (concrete masonry unit) building
- Standby generator
- Electrical and controls with SCADA (supervisory control and data acquisition) integration
- Site piping and valving
- Electromagnetic flowmeters
- Site fencing and gates
- Site lighting
- 12-inch transmission line from HUD tank to North side of Delta-Mendota Canal
- Pipe crossings at Washoe Ave and Outside Canal

What is this document?

The attached document is the review of potential environmental impacts that may occur if the City approves the proposed project.

Why is this document being prepared?

The California Environmental Quality Act of 1970 requires government agencies to analyze how development projects may impact the environment - before considering and approving or denying the project. Once the document is prepared, it must be made available to the public and circulated for review to potentially affected public agencies for a period of 20 days.

Will this study result in any changes to the project?

An environmental study may recommend measures to reduce or eliminate environmental impacts. These measures (called mitigation measures) may include actions to be taken during project construction (such as watering soils to keep down dust) or may include changes to the design of the project itself.

How do I comment on this study?

Send written comments to the City's planning consultant: Greg Collins, Collins & Schoettler Planning Consultants, 1002 W. Main Street, Visalia, CA 93291.

How does the City review this project?

Following review by City staff, this particular project may require public hearings before the Firebaugh City Council. If you are interested in knowing the time and date for these meetings, please contact the Firebaugh City Clerk at (559) 696-1070

Who do I contact for more information?

Ben Gallegos, City Manager City of Firebaugh 1133 P. Street Firebaugh, CA 93622 (559) 696-1070

Greg Collins Collins & Schoettler, Planning Consultants 1002 West Main Street Visalia, Ca. 93291 (559) 734-8737

CITY OF FIREBAUGH HUD TANK PROJECT MITIGATED NEGATIVE DECLARATION

FIREBAUGH PLANNING DEPARTMENT

1133 P. STREET

FIREBAUGH, CA 93622

(559) 659-2043

Project Title: City of Firebaugh: HUD Tank Project

Lead Agency Name and Address:

City of Firebaugh

1133 P Street

Firebaugh, Ca. 93622

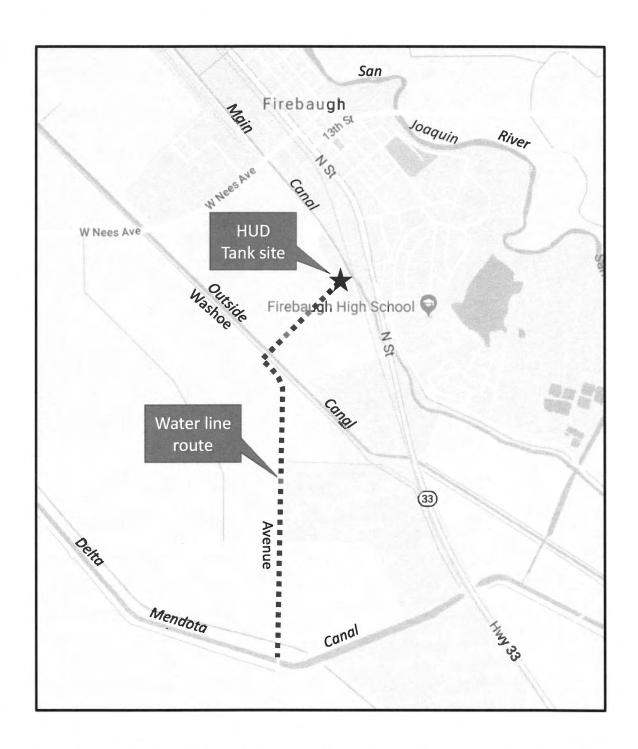
Contact Name and Phone Number:

Greg Collins, Contract City Planner

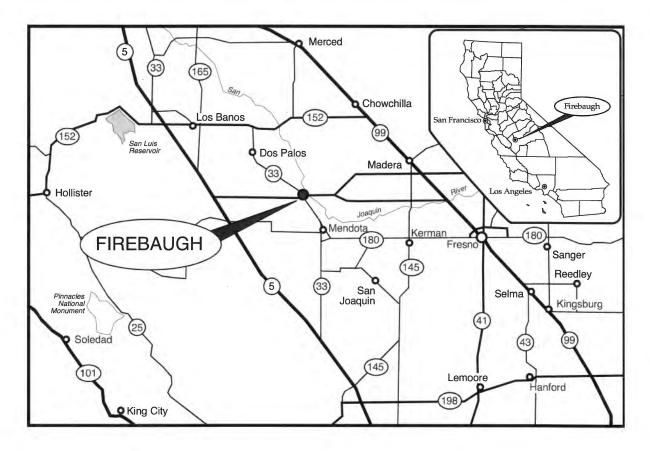
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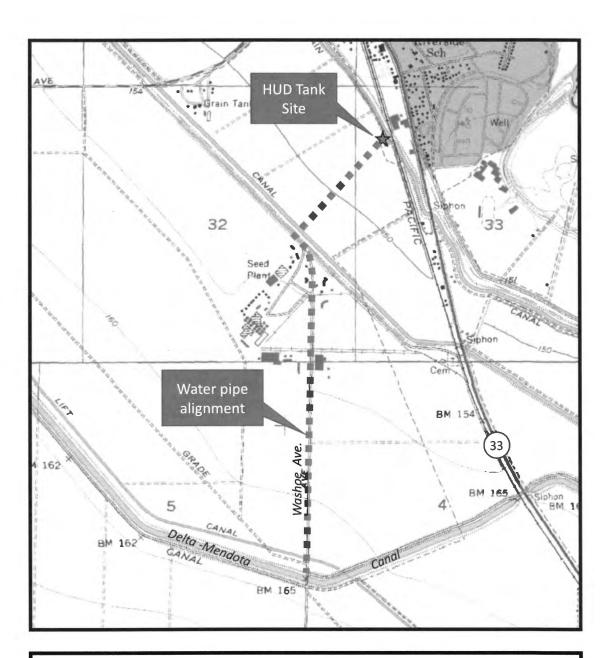
Project Location: The proposed HUD Tank Project, the "project", is generally located on the south side of the City of Firebaugh, in Fresno County. More specifically, the HUD Tank project area is situated west of State Highway 33 south of West Nees Avenue in Firebaugh (see Exhibit 1: Project Location).



Firebaugh is located on State Highway 33 in western Fresno County, 40 miles west of the city of Fresno. It is situated just east of State Highway 33, about 18 miles east of Interstate 5. The nearest city to Firebaugh is Mendota, about 10 miles to the southeast (see Exhibit 2: Regional Location).



The proposed HUD Tank site is located in the southeast quarter of Section 33, Township 12 South, Range 14 East (see Exhibit 3: USGS Map).



HUD Tank Project Topography Map



<u>Project Sponsor's Name and Address</u>: City of Firebaugh 1133 P. Street Firebaugh, Ca. 93622

General Plan Designation and Zoning: The HUD Tank site is designated "public/quasi-public" on the Land Use Map of the 2030 Firebaugh General Plan. According to the General Plan, this land use designation is intended for "open space uses that may include riparian woodland, parks, public facilities, and water storage and collection basins."

The site is currently zoned M-1 (light industrial) by the City of Firebaugh. This zone classification is consistent with General Plan's land use designation of "public/quasi public".

Project Description:

This document is an analysis of the potential environmental impacts that could be caused by the replacement of an existing 750,000-gallon HUD (water) tank, 3.0 MGD booster pump station and the transmission line from the tank site to the north side of the Delta-Mendota Canal along Washoe Avenue. The major portions/equipment of the project include:

- Demolition/abandoning/disposal of the existing facilities
- Installing temporary pump station
- 750,000 gal water storage tank
- 3.0 MGD pump station in a concrete masonry building
- Standby generator
- Electrical and controls with SCADA integration
- Site piping and valving
- Electromagnetic flowmeters
- Site fencing and gates
- Site lighting
- 12-inch transmission line from HUD tank to North side of DMC
- Pipe crossings at Washoe Avenue and Outside Canal

Purpose of Project

This project is necessary to maintain water quality delivered to the Community of Las Deltas within regulatory standards, while providing adequate water supplies to prevent risk to public health and welfare. According to California Water Works Standards, Article 8, Section 64602, "Each distribution system shall be operated in a manner to assure that the operating pressure in the water main at the user service line connection throughout the distribution system is not less than 20 pounds per square inch at all times."

The water distribution system serving the community of Las Deltas is aging and deteriorated. Pipeline leaks, breaks and system down time have caused the system to at times have zero to

negative pressures. The water system has also suffered outages periodically. A water pressure logger placed on the system in August 2010 recorded readings below 15 pounds per square inch (psi) on multiple occasions. This demonstrates that the Las Deltas water system is currently not in compliance with the California Water Works Standards, posing a potential health hazard to residents. Further, significant water quantity problems caused by inadequate water delivery capability of the distribution system results in insufficient water to meet the current demand of customers. Consequently, the CDPH has placed Las Deltas as Category "E" on the Drinking Water State Revolving Fund Priority List.

The reasons advanced above point to the need for the Las Deltas water system to be brought in compliance with the California Water Works Standards as soon as possible to protect the health of the residents.

Design criteria are required to guide the planning and design of new water system infrastructure. A set of criteria was developed for the Las Deltas' water system, based on the City of Firebaugh's 2008 Improvement Standards, which are consistent with industry standards (including California Department of Public Health Guidelines such as Title 22, Chapter 16 of the California Water Works Standards). These criteria include water supply, fire flow and pipeline sizing requirements.

Sufficient water system pumping capacity, in conjunction with available storage, must be provided to meet the Maximum Fire Flow concurrent with the Maximum Day Demand or Peak Hour Demand of the City. It should be assumed that the largest pump in the water system is in standby mode.

Many Fire Departments in California use the California Fire Code (CFC) to assist them in establishing minimum fire flows and durations for individual structures. The City of Firebaugh's Improvement Standards require fire flows of 2,000 gpm for low density residential development. This fire flow needs to be available for a minimum of 2 hours. Key standards include:

Distribution pipelines are generally smaller than 12 inches in diameter and are sized based on the criteria described below for average day, maximum day plus fire flow, and peak hour demand conditions.

- Service pressures should be maintained at a minimum of 40 psi. This limit represents design criteria that will protect the integrity of the system and improve system reliability.
- Fire flows are assumed to be concurrent with maximum day demand. Fire flow at fire hydrants should be at least 2,000 gpm with a minimum pressure of 20 psi at the flowing fire hydrant.
- Service pressures should be maintained at a minimum of 40 psi during Peak Hour Demand periods to ensure system reliability.

Benefits of the Project

The project will benefit the community by:

- providing safe drinking water that meets federal and state drinking water standards,
- providing adequate source capacity for drinking and fire suppression that meets the requirements of the State of California, Department of Health Services, and
- assist the City with its efforts to provide affordable water for the residents of Las Deltas by minimizing the cost of water facility operations.

Surrounding land uses and setting

<u>North</u>: field crops; <u>East</u>: industrial and residential uses and raiload; <u>South</u>: school and single family dwellings; <u>West</u>: field crops

Other Public agencies whose approval is required (e.g. permits, financing approval or participation agreement): California Regional Water Quality Control Board

MITIGATION MEASURES:

BIOLOGICAL MITIGATION MEASURES:

1.1.1.1. GENERAL CONSERVATION MEASURES

- 1. Each non-agricultural vegetated area outside of the project footprint would be delineated as an Environmentally Sensitive Area (ESA) and depicted as such on design plans. All parties in conjunction with this operation would strictly avoid these areas. No construction activities, materials, or equipment would be permitted in the ESA(s). The boundaries of the ESA(s) would be fenced with orange plastic snow fencing. Construction work areas would be clearly marked in the field and confirmed by the biologist prior to habitat clearing, and all fenced boundaries would be maintained throughout the construction period. The ESA fencing would be promptly removed at the conclusion of construction activities (assumed to be before the removal of BMP fencing).
- 2. The City would designate a Service-approved biologist who would be responsible for overseeing monitoring and compliance with protective measures for the biological resources. The biologist should be familiar with the life history and ecology of the flora and fauna potentially present within the Project site, including the giant garter snake and

the San Joaquin kit fox. The biologist should be familiar with field techniques, to include handling of species, as well as construction techniques relative to the project types proposed. A section 10(a)(1)(A) permit could be necessary for the handling of federally listed species. The biologist would maintain communications with the appropriate personnel (i.e., project manager) to ensure that issues relating to biological resources are appropriately and lawfully managed. The biologist would also be present to ensure compliance with all conservation measures. The monitoring biologist should submit reports that document compliance with these measures to the Service upon request or, at a minimum, included in the end of the year report. The applicant would submit the biologist's name, address, telephone number, and work schedule for the project to the Service at least 15 days prior to initiating project impacts. The Service will review all submitted information within 15 days of being received. If the Service has not responded within 15 days, concurrence can be assumed. In addition, the biologist should perform the following duties:

- a. Be onsite during all vegetation clearing/grubbing and weekly during project construction in upland/riparian habitat to be impacted.
- b. Inspect the fencing and erosion control measures of all project areas (including preservation/restoration/creation sites) a minimum of once per week. Particular attention should be made immediately before and after rain events to ensure that any breaks in the fence or erosion control measures are repaired.
- c. Train all contractors and construction personnel on the biological resources associated with this project and ensure that training is implemented by construction personnel. At a minimum, training would include (1) the purpose for resource protection; (2) a description of the sensitive species and their habitats; (3) the conservation measures in the biological opinion that should be implemented during project construction, including strictly limiting activities, vehicles, equipment, and construction materials to the fenced project footprint to avoid sensitive resource areas in the field (i.e., avoided areas delineated on maps or on the project site by fencing); (4) environmentally responsible construction practices; (5) the protocol to resolve conflicts that may arise at any time during the construction process; and (6) the general provisions of the FESA and CESA, the need to adhere to the provisions of the FESA and CESA, and the penalties associated with violating the FESA and CESA.
- d. Ensure that any measures developed in coordination with the Service to avoid all impacts to all encountered sensitive species as well as other nesting birds are

- implemented.
- e. Halt work, if necessary, and confer with the Service and/or CDFW to ensure the proper implementation of species and habitat protection measures. The biologist would report any breech of the conservation measures within this assessment to the Service and/or CDFW within 24 hours of its occurrence.
- f. A final yearly report would be prepared and submitted to the Service and would include as-built construction drawings with an overlay of habitat that was impacted and avoided; a summary of compliance with conservation measures, reasonable and prudent measures, and term and conditions; a summary or accounting of the acreages and applicable habitat types impacted; photographs; and other relevant summary information documenting that authorized impacts were not exceeded and that general compliance with all conditions of this biological opinion was achieved.
- 3. Dewatering may be required for work in wetlands. If dewatering is conducted, either a pump would move water to an upland disposal site, or a sediment basin or other structure would be used to collect and treat the water. If applicable, a National Pollutant Discharge Elimination System permit could be required. If not applicable, the water returned to the waterway should be equivalent in basic parameters (e.g., turbidity, total suspended solids) as that in the wetland during normal conditions.
- 4. Project-related vehicles will observe a 15 mph speed limit in all project areas, except on City and County roads and State highways.
- 5. Tightly woven fiber netting or similar material shall be used for erosion control or other purposes at the Project. This limitation will be communicated to any contractors through use of Special Provisions included in the bid solicitation package. Plastic monofilament netting (erosion control matting) or similar material shall not be used in construction areas because small animals, including special-status species may become entangled or trapped in it.
- 6. The applicant would ensure that all temporary irrigation is for the shortest duration possible, and that no permanent irrigation is used for landscape or habitat creation/restoration/enhancement.
- 7. Appropriate BMPs would be used to control dust, erosion, and sedimentation. Sediment or debris would not be allowed to enter the waterways unless approval is granted from the appropriate regulating agencies.
- 8. BMPs to address erosion and excess sedimentation would be incorporated into the project

- plans. Measures that would be implemented during construction include portable concrete washouts, temporary fencing, drainage inlet protection, fiber rolls, gravel bags, temporary construction entrances, and any other procedures deemed appropriate by Caltrans.
- 9. The changing of oil, refueling, and other actions that could result in a release of a hazardous substance would be restricted to designated areas that are a minimum of 100 feet from wetlands or drainages. Such designated areas would be surrounded with berms, sandbags, or other barriers to further prevent accidental spill of fuel, oil, or chemicals. Any accidental spills would be immediately contained, cleaned up, and properly disposed.
- 10. All debris from bridge decks or columns would be caught using tarps or other measures, so that debris does not fall into the ESAs or waterways.
- 11. Any night lighting needed for any activities associated with a project would be selectively placed, shielded, and directed away from all ESAs.
- 12. Any vegetation requiring pruning and not removal would be pruned to accomplish the necessary task and an effort would be made to promote the maximum amount of resprouting. All areas where vegetation would be removed would be revegetated with native species similar to those removed.
- 13. To avoid attracting predators, the Project site would be kept as clean of debris as possible. All food-related trash items would be placed in sealed containers and regularly removed from the site.
- 14. Pets or firearms would not be allowed on the Project site.
- 15. Any impacts to canals or irrigation ditches with emergent or aquatic vegetation shall implement the following measures to avoid potential impacts to giant garter snake (USFWS 1997) and western pond turtle:
 - a. A pre-construction survey for giant garter snake and western pond turtle will be conducted 24 hours prior to construction and if there is a lapse of 14 days the survey should be re-conducted.
 - b. If a giant garter snake is detected during the pre-construction survey, no construction will take place within suitable habitat. The City will contact USFWS and no work within suitable habitat will take place without authorization from USFWS.
 - c. If a western pond turtle is detected during the pre-construction survey, no

- construction will take place until the turtle has left the work area on its own volition. If the turtle does not leave the work area within 48 hours, it may be relocated by a biologist approved by CDFW.
- d. Any dewatered areas will remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling the area.
- e. Construction activities in suitable giant garter snake habitat will be limited to their active season to avoid injuring them (May 1 through October 1), to the extent feasible.
- f. Emergent vegetation will be manually removed, and if feasible, all construction should be conducted outside a 200 feet buffer from potential habitat.

Conservation Measures for Permanent Impacts

The following apply as offsetting conservation measures for permanent impacts.

- 1. Wetland habitat would be offset at a 3:1 ratio with any combination of offsite preservation, creation, or restoration of native habitat.
- 2. All Federal waters would be offset following the requirements of the Regional Water Quality Control Board and US Army Corps of Engineers (Corps).
- 3. Nonnative grassland habitat would be offset at a 0.5:1 ratio with any combination of offsite preservation, creation, or restoration of native habitat.
- 4. If offsetting measures for <u>permanent</u> impacts include enhancement, restoration, or creation of habitat (unless mitigation is proposed within a Service approved mitigation site), a plan outlining the details and implementation schedule of all enhancement, restoration, and creation to offset <u>permanent</u> impacts to vegetation would be prepared. The plan should be submitted to the Service for review and approval at least 90 days prior to planting. All enhancement, restoration, and creation activities to offset permanent vegetation impacts should commence the first late-summer/fall/winter season prior to or concurrently with the start of the work. The latest any offsetting enhancement, restoration, or creation activities could occur would be the first late-summer/fall/winter immediately after project activities have been initiated. The plan should include:
 - A five-year maintenance and monitoring program that would be implemented for the created, enhanced, and/or restored habitats.
 - b. If established performance criteria are not met, the proponent would prepare an analysis of the cause(s) of failure and, if deemed necessary by the Service, propose remedial actions. If any of the enhanced/restored/created habitats have not met a

- performance criterion during the initial five-year period, the work proponent's maintenance and monitoring obligations would continue until the Service deemed the enhancement/restoration successful or contingency measures were implemented.
- c. Reports that assess both the attainment of yearly success criteria and progress toward the final success criteria would be included in the yearly project reporting document.
- 5. The following measures would be implemented at all offsite enhancement, restoration, and creation sites to avoid and minimize effects to listed species and migratory birds during the five-year restoration period:
 - a. Any construction-related activities would avoid the breeding/mating season (February 1–September 30).
 - b. If maintenance and monitoring activities are conducted between February 1 and September 30, a qualified biologist would conduct a habitat assessment and any necessary subsequent protocol surveys to determine the presence or absence of listed species and migratory birds prior to the start of proposed activities.
 - i. If nesting birds are onsite, no maintenance activities would be conducted within 100 feet of a nest (buffer zone). If workers need to encroach into the 100-foot buffer zone, then the City and the Service would be notified immediately. Prior to maintenance workers accessing the 100-foot buffer zone, the City and the Service would determine the most appropriate timing and methods to avoid causing harm to the nest and/or the nesting pair.
 - ii. If listed species are onsite, the Service and CDFW, as appropriate, should be contacted to determine the benefit of continuing the maintenance and monitoring activities during the breeding/mating season.
 - c. An education program would be implemented by the project proponent to ensure that all enhancement, restoration, and creation site maintenance workers understand the work restrictions and are aware of the above described conservation measures.
 - 6. Some of the drainage ditches and irrigation canals, and associated wetlands, in the Study Area are potentially regulated by the Corps as wetlands or other waters of the United States under Section 404 of the Clean Water Act. The extent of federally protected wetlands or waters in the APE is not known at this time. If avoidance of wetlands is not possible, prior to the implementation of the proposed project, a formal wetland delineation shall be conducted in the Project area to determine the extent of jurisdictional

- wetlands and other waters that may be impacted by the proposed project. Ditches and irrigation canals in the Project area should be considered on a case by case basis to determine their jurisdictional status.
- 7. Work within areas defined as waters of the U.S. that includes placement of fill will require a Clean Water Act Section 404 permit from the Corps. All work proposed in jurisdictional waters of the U.S. will be authorized by permits from the Corps. In areas where project activities are temporary in nature, jurisdictional wetland and other waters of the U.S. will be restored to their condition prior to disturbance. In areas where permanent disturbance to jurisdictional waters or wetlands will occur, the City will identify if potential mitigation sites are present within close proximity to the area of disturbance and will construct new or restore degraded wetlands. If waters or wetlands cannot be restored on-site or in the immediate vicinity of the disturbance location, replacement at a nearby off-site location will be provided. The replacement of waters or wetlands will be equivalent to the nature of the habitat lost and will be provided at a suitable ratio to ensure that, at a minimum, there is no net loss of habitat acreage or value. The replacement habitat will be set aside in perpetuity for habitat use. Mitigation ratios to achieve the "no net loss" standard will be determined in consultation with the Corps.
- 8. The City would ensure that long-term management of all offsite enhancement, restoration, and creation sites occurs. Within three months of the acquisition of any parcel or easement, a draft management plan would be developed in coordination with the Service. The plan should be finalized within six months and implemented immediately following final signoff. If the conservation sites are transferred to a third party for long-term management, then an endowment with sufficient funds (determined using the PAR system or a PAR-like system) would be established subject to availability of funds, unless otherwise negotiated with the receiving party.
- 9. All habitats to be restored, enhanced, created and/or preserved outside of the right-of-way, as stated above, would be managed and preserved in perpetuity. The project proponent would ensure there is a perpetual biological conservation easement over all properties used to offset impacts addressed in this Assessment and these lands would be managed according to a Service-approved Long-Term Management Plan. The perpetual conservation easement and Long-Term Management Plan would be submitted to the Service prior to the start of any restoration, enhancement, or creation activities.

Conservation Measures for Temporary Vegetation Impacts

The following apply as offsetting conservation measures for temporary impacts.

10. Any planting stock to be brought onto the project site for habitat creation/restoration/enhancement shall certified as weed-free.

Giant Garter Snake Conservation Measures

GGS1 Implement Standard Avoidance and Minimization Measures During Construction Activities in Giant Garter Snake (Thamnophis gigas) Habitat. (Appendix C).

San Joaquin Kit Fox Conservation Measures

SJKF1 Implement the Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or during Ground Disturbance (Service 2011; Appendix F).

Western Pond Turtle Conservation Measures

- a. WPT1 A qualified biologist shall be on call during all activities, including groundbreaking, earthmoving, and construction activities that could result in the mortality or injury of western pond turtles.
- b. If at any time a pond turtle is discovered in the construction area by the on-call biologist or anyone else, the on-call biologist shall move the animal to a safe location in suitable aquatic habitat outside of the impact area. The biologist shall monitor translocated animals until safe from induced exposure to predators or other dangers.
- c. Because pond turtles may take refuge within and under cavity-like and den-like structures, such as pipes, and may enter stored pipes and become trapped, all construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the on-call biologist and/or the construction foreman/manager for these animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a pond turtle is discovered inside or under a pipe by the on-call biologist or anyone else, the on-call biologist shall translocate the animal as previously described.
- d. To prevent inadvertent entrapment of pond turtles during construction, the on-call biologist and/or construction foreman/manager shall ensure that all excavated, steep-walled holes or trenches more than one-foot deep are completely covered at the close of each working day by plywood or similar materials or provided with one

or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the on-call biologist and/or construction foreman/manager. If at any time the on-call biologist or anyone else discovers a trapped turtle, the on-call biologist shall translocate the turtle as previously described.

- e. To eliminate an attraction for the predators of pond turtles, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in solid, closed containers (trash cans) and removed at the end of each working day from the entire construction site.
- f. If a pond turtle or any turtle that construction personnel believe may be a pond turtle is encountered during project construction, the all work that could cause harm to the turtle shall be halted until the turtle moves, of its own volition, out of the work area and out of harm's way. Alternatively, the qualified biologist may relocate the turtle out of harm's way and into suitable aquatic habitat, as allowed by CDFW.
- g. The on-call biologist shall translocate the turtle as previously described.

Swainson's Hawk Conservation Measures

- SWHA1 Following the methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000 [Appendix D]), a qualified ornithologist shall conduct surveys during the Swainson's hawk breeding season (i.e., March through August) to determine the locations of active Swainson's hawk nests within a 10-mile radius of the project site. If a potentially active Swainson's hawk nest is present, the biologist will recommend the following:
 - A qualified biologist knowledgeable in the biology of the Swainson's hawk shall give a class on the general ecology of the species, covering these topics: current status, general description, breeding biology, habitat use, and what to do if species is encountered. Information cards will be passed out to work crew and crew is required to sign an attendance roster.
 - o If a Swainson's hawk nest is known to be within 0.25 mile of a planned activity, a qualified biologist will evaluate any potential effects of the activity. If the biologist determines that the activity would disrupt nesting, a 1000-foot buffer and limited operation period during the nesting season (March 15–June 30) will be implemented. Evaluations will be performed in consultation with the local CDFW representative.

- SWHA2 Under CDFW mitigation guidelines, loss of suitable foraging habitat within 10 miles of a Swainson's hawk nest site should be mitigated by protecting or creating equally suitable foraging habitat elsewhere within the territory's 10-mile radius (CDFG 1994 [Appendix E]). The acreage of Habitat Management (HM) lands provided would be derived from the following recommendations included in the 1994 CDFG staff report:
 - If the project is determined to be within one mile of an active nest tree, the project proponent shall provide one acre of HM land (at least 10 percent of the HM land requirements shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90 percent of the HM lands protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk) for each acre of development authorized (1:1 ratio); or
 - One-half acre of HM land (all of the HM land requirements shall be met by fee title acquisition or a conservation easement (acceptable to CDFW) which allows for the active management of the habitat for prey production on the HM lands) for each acre of development authorized (0.5:1 ratio).
 - If the project is determined to be within five miles of an active nest tree but greater than one mile from the nest tree, the project proponent shall provide 0.75 acre of HM land for each acre of urban development authorized (0.75:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or conservation easement (acceptable to CDFW) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawks.
 - If the project is determined to be within 10 miles of an active nest tree but greater than one mile from the nest tree, the project proponent shall provide 0.5 acre of HM land for each acre of urban development authorized (0.5:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or conservation easement (acceptable to the CDFG) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawks.
 - Management Authorization holders/project sponsors shall provide for the longterm management of the HM lands by funding a management endowment (the interest on which shall be used for managing the HM lands).

Special-Status Bat Species Conservation Measures

SSBS1 Potential roosting areas on the existing water tank or medium or larger (≥12-inch diameter) trees or snags that are selected for trimming or removal will be inspected by a qualified wildlife biologist for presence of potential dens (cavities, entrance holes) suitable for pallid bat or western mastiff bat. Cavities suitable as special-status bat roosts will be examined for roosting bats using a portable camera probe or similar technology. If present, special-status bat roosts (including day and night roosts, hibernacula, and maternity colonies) will be flagged, and construction activities will be avoided within a minimum of 300 feet surrounding each occupied roost.

If the site is being used as a winter roost, the action will not take place during the period of hibernation (November 1 to March 1). If the site is being used as a maternity colony, the action will not occur during the maternity roost season (April 1 to August 31). If a non-maternity bat roost is found within the Project Area, the roosting bats will be safely evicted under the direction of a qualified biologist (as determined by a Memorandum of Understanding with CDFW). The qualified biologist will facilitate the removal of roosting bats by:

- Opening the roosting area to allow airflow through the cavity or building (air flow disturbance).
- Waiting a minimum of one night for roosting bats to respond to air flow disturbance, thereby allowing bats to leave during nighttime hours when predation risk is relatively low and chances of finding a new roost is greater than in the daytime.
- Disturbing roosts at dusk just prior to roost removal the same evening to allow bats to escape during nighttime hours.

1.1.2. Impacts

Since the exact location and dimensions are not known at this time, precise impact calculations cannot be determined at this time. Therefore, impacts are discussed qualitatively rather than quantitatively in this BA.

1.1.2.1. PERMANENT IMPACTS

Permanent adverse impacts that may occur with project implementation are considered irreversible losses of biological resources. Permanent impacts can result from the clearing or grading of biological resources for construction activities. Where Project features are developed

(e.g., water tank, standby generator), the feature may permanently replace any vegetation community and plant species that occurred at that location, the extent of which depending on the amount of overlap between new features and existing features.

Wildlife may also be killed directly during construction activities or may die as a result of permanent loss of habitat or territory. Construction could potentially result in direct harm of giant garter snake or western pond turtle if these species are present in the wetlands near the existing HUD tank or irrigation canals. San Joaquin kit fox could be injured as a result of crushing or strikes by Project equipment or vehicles. Swainson's hawks could be adversely affected by a loss of foraging habitat. Nesting birds, including Swainson's hawk, could be disturbed by Project construction activities, which could result in mortality to individual hatchlings or complete nest failure.

Specific to the Project activities, permanent direct impacts from the proposed Action will be avoided or minimized through the implementation of the Conservation Measures identified in Section 1.1.1. However, the proposed Action has the potential to result in direct, permanent impacts to wetland and upland habitats.

The proposed project could permanently impact federally protected wetlands or waters. However, as previously discussed, the precise impacts cannot be calculated at this time. Impacts will be determined during Project implementation. However, permanent impacts to wetland habitats, should they occur, would be mitigated at a 3:1 ratio.

Since the majority of the activities proposed for coverage under this BA will be to replace existing structures and facilities, an adverse increase in indirect impacts is not expected. Permanent indirect impacts can include elevated noise from increased human activity after the implementation of the proposed Project, increased erosion, or other types of effects not directly resulting from implementation of a project.

1.1.2.2. TEMPORARY IMPACTS

Temporary impacts are associated with each of the construction activities being proposed. The majority of impacts from each of the activities will be temporary, direct impacts resulting from trench excavation for pipeline installation and grading for access and staging areas during implementation of the proposed Action. All wetlands temporarily disturbed during construction will be revegetated with native species as needed to compensate for temporary impacts. All temporary impacts to wetlands will be mitigated at a 1:1 ratio.

1.1.2.3. CUMULATIVE IMPACTS

There is a potential for the proposed Project to contribute to cumulative effects on certain species described in this report through incremental habitat conversion and degradation. Future projects resulting in adverse impacts to sensitive resources will be addressed in future NEPA and CEQA documentation and regulatory permitting, including Section 7 consultation with the Service. The City will be required to mitigate any unavoidable impacts associated with future development projects.

CULTURAL MITIGATION MEASURES:

There are no mitigation measures for cultural resources.

FINDINGS OF NO SIGNIFICANCE:

- The project does not 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.
- 2. The project does not have the potential to achieve short-term economic gain, to the disadvantage of long-term environmental goals.
- 3. The project does not have the potential to have impacts that are individually limited but cumulatively considerable.
- 4. The project will not cause substantial adverse effects on people, either directly or indirectly.

DETERMINATION:

On the basis of an initial environmental assessment and the findings mentioned above, the City of Firebaugh determines that the project will not have a significant impact on the environment with the incorporation of the mitigation measures outlined above.

City Planner	Date Adopted