



TECHNICAL MEMORANDUM

DATE: November 17, 2017 Project No.: 693-20-16-01.16
SENT VIA: EMAIL

TO: Stanislaus Regional Water Authority Technical Advisory Committee

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SUBJECT: Project Definition at Conclusion of Phase 1

The purpose of this Technical Memorandum (TM) is to document the first phase (Phase 1), and define the anticipated steps through operations start-up, of the Stanislaus Regional Water Authority (SRWA) Surface Water Supply Project (Project). This memorandum provides a summary and overview of the major documents produced during Phase 1, and serves to document and memorialize key decisions that will provide the foundation for subsequent phases. Phase 1 represents the early planning and pre-design phase from April 2016 through October 2017, Phase 2 describes the planning and design phase from November 2017 through July 2019 (at which time a contract with a design-build contractor is expected to be executed), and Phase 3 represents the design and construction phase from August 2019 through September 2022 (at which time the Project is anticipated to be operational). The sections in this document include:

- Project Overview
- Project Size and Phasing
- Project Components
- Property Acquisition
- Environmental and Permitting
- Capital Project Cost Estimate
- Schedule
- Funding Strategy
- Public Outreach
- Next Steps

PROJECT OVERVIEW

This Project will treat water from the Tuolumne River (River) to drinking water standards and convey the treated water through separate transmission pipelines to the cities of Turlock (Turlock) and Ceres (Ceres). This Project will provide the cities with long-term water supply reliability through the conjunctive use of surface water and groundwater resources, reduce groundwater dependence, and improve drinking water quality.

The currently planned Project includes the following regional facilities: an infiltration gallery beneath the Tuolumne River (previously constructed between 2001 and 2003 by the Turlock Irrigation District (TID)), a wet well and raw water pump station, a raw water transmission main (RWTM), water treatment plant (WTP), a finished water transmission main (FWTM) to Ceres, and a FWTM to Turlock. Local facilities for Ceres and Turlock include terminal storage tanks, pump stations, and transmission/distribution system upgrades and infrastructure modifications specific to each city which will allow the integration of this new supply source of drinking water into each distribution system.

SRWA is developing the Project in coordination with TID. TID owns the existing infiltration gallery¹, and currently owns most of the land upon which the wet well, raw water pump station, RWTM, and WTP will be constructed. However, as specified in the Water Sales Agreement between SRWA and TID, SRWA will be purchasing the WTP site from TID. TID will retain ownership of the infiltration gallery, raw water pump station and raw water transmission (excluding the raw water pipeline between the flow split vault and the WTP) to allow TID to supplement/enhance flow in the Tuolumne River, downstream of Don Pedro Reservoir to the infiltration gallery, but still allow use of this water by TID's agricultural customers. The Water Sales Agreement also sets forth the terms and conditions by which the parties will collaborate on Project design and construction, and explains the terms under which SRWA will be purchasing raw water supplies from TID for this Project. SRWA and TID will be entering into a long-term lease to confirm and provide for SRWA's shared use of the TID-owned raw water facilities.

The Project Partners, Ceres and Turlock, in cooperation with TID, have agreed on an aggressive schedule to drive this project forward, and a streamlined decision-making process has been developed to keep the Project on track. While SRWA does not intend to involve any additional Project partners in the interest of achieving its scheduled benchmarks, SRWA is interested in contracting with nearby local water agencies to which it can deliver wholesale, treated water from this Project.

In January 2016, SRWA sent letters to other local communities and agencies to identify potential other project partners. Letters were sent to Delhi County Water District, Denair Community Services District (CSD), Hickman, Hilmar County Water District, City of Hughson, Keyes CSD, Stanislaus County and TID. Of those agencies, five expressed interest in learning more about the project and potentially participating. These agencies are: Denair CSD, Hickman, Hilmar County Water District, City of Hughson, and Stanislaus County. In early May 2016, SRWA requested agencies who expressed interest to identify their potential supply needs from the Project. Only

¹ TID constructed the infiltration gallery in the riverbed of the Tuolumne River between 2001 and 2003 as part of a river channel restoration project, with the foresight that the infiltration gallery could be used as part of a future river water intake and diversion facility to serve a possible future surface water treatment facility.

Hilmar County Water District and Denair CSD responded to the May 2016 request. Hilmar responded that they did not know how much surface supply they would like from the SRWA while Denair CSD requested an average delivery amount of 0.5 million gallons per day (mgd), to be varied seasonally based on demands. The City of Hughson later expressed interest in contracting water from SRWA. To date, a response to SRWA’s request for an estimate of the amount of water needed from the Project has not been received. Prior to the selection of the Project’s capacity in August 2017, no additional local agencies had provided specific quantified requests for treated water. As local agencies approach SRWA with their quantified requests, SRWA will consider its capacity to deliver treated water to that agency.

PROJECT SIZE AND PHASING

Demand and Supply Analysis

A TM dated June 16, 2016, “Preliminary Phasing and Water Treatment Plant Sizing for the SRWA Surface Water Supply Project”², documented the preliminary phasing and WTP sizing based on the latest demand projections for each Project Partner. Based on the demand projections developed by each individual city, preliminary Phase 1 and Phase 2 WTP capacities were identified to be:

- Ceres – 10 million gallons per day (mgd) in Phase 1, increasing to 15 mgd in Phase 2 (buildout in 2035); and
- Turlock – 20 mgd in Phase 1, increasing to 30 mgd in Phase 2 (buildout in 2040).

Table 1 summarizes Ceres’ 2015 actual and projected potable water use through 2035 and summarizes Ceres’ demand to be met from groundwater and surface water, on an annual, average daily and maximum daily basis.

	2015	2020	2025	2030	2035
Annual Potable Water Use, acre-feet/yr ^(a)	6,500	9,800	12,500	15,100	17,900
Average Daily Water Use, mgd	5.8	8.8	11.1	13.5	16.0
Maximum Daily Water Use, mgd ^(b)	10.4	15.8	20.0	24.2	28.7
Minimum Daily Groundwater Use to Maintain Well Water Quality, mgd	2.0	2.0	2.0	2.0	2.0

(a) City of Ceres projections provided by Jeremy Damas, May 2016.
 (b) Maximum day demand estimated as 1.8 times average daily demand, per City of Ceres, 2011 Water Master Plan, Table 3-9.

Table 2 summarizes Turlock’s 2015 actual and projected annual potable water use through 2040 and summarizes Turlock’s demand to be met from groundwater and surface water, on an annual, average daily and maximum daily basis.

² “Preliminary Phasing and Water Treatment Plant Sizing for the SRWA Surface Water Supply Project” TM dated June 5, 2016 is posted to the SRWA website here: http://stanrwa.org/documents/docs/Technical_Memorandums/Prelim%20Phasing%20and%20Plant%20Sizing%20081116.pdf

Table 2. City of Turlock Existing and Projected Demands to be Met by Surface Water and Groundwater						
	2015	2020	2025	2030	2035	2040
Annual Water Use, acre-feet/yr ^(a)	17,400	26,000	28,800	32,000	35,600	39,500
Average Daily Water Use, mgd	15.5	23.2	25.7	28.6	31.7	35.3
Maximum Daily Water Use, mgd ^(b)	25.6	38.3	42.5	47.2	52.4	58.2
Minimum Daily Groundwater Use to Maintain Well Water Quality, mgd ^(c)	6.6	6.6	6.6	6.6	6.6	6.6
<p>(a) City of Turlock, 2015 Urban Water Management Plan, May 2016 Draft, Table 6-6. Includes landscape irrigation, industrial use and industrial cooling water uses.</p> <p>(b) Maximum day demand estimated as 1.65 times average daily demand, per City of Turlock, 2009 Water Master Plan Update, Table 4.3.</p> <p>(c) Assumes continuous operation of wells 4, 8, 20 and 30, due to a history of water quality problems.</p>						

Taking into account dry-year conditions and associated surface water delivery reductions, the June 2016 TM concluded that both Ceres and Turlock will need to maintain well capacity to provide adequate total supply capacity. Table 3 summarizes annual production estimates for surface water and groundwater for three supply reliability scenarios described in the TM.

Table 3. Annual Production of Surface Water and Groundwater for Normal and Dry Years								
Year Type and Demand	Ceres			Turlock			Total	
	SW	GW	Total	SW	GW	Total	SW	GW
2025								
Normal Year	8,700	3,700	12,400	19,700	9,100	28,800	28,400	12,800
25 Percent Reduction in Surface Water	6,500	5,900	12,400	14,800	14,000	28,800	21,300	19,900
50 Percent Reduction in Surface Water	4,400	5,500	9,900	9,900	13,100	23,000	14,300	18,600
Buildout								
Normal Year	13,400	4,500	17,900	29,200	10,300	39,500	42,600	14,800
25 Percent Reduction in Surface Water	10,100	7,800	17,900	21,900	17,600	39,500	32,000	25,400
50 Percent Reduction in Surface Water	6,700	7,600	14,300	14,600	17,000	31,600	21,300	24,600

Although the Phase 1 and 2 capacities mentioned above were adopted by the SRWA Board on August 11, 2016, the cities later elected to initially implement a smaller, “Sub-Phase 1” project, as is described in the following section.

Initial Facilities Size

In August 2017, the SRWA Board concurred with the Executive TAC and TAC to plan for an initial 15 mgd capacity WTP that will provide 10 mgd of treated surface water supply to Turlock and 5 mgd to Ceres. This initial phase of the Project is planned to be in operation in 2022.

The ultimate build-out capacity of the Project is 45 mgd. The raw water pump station will, therefore, be designed to accommodate this ultimate capacity even though its initial firm pumping capacity will be 15 mgd. The RWTM will be designed to convey the full 45 mgd, with the Ceres and Turlock FWTMs being designed to convey their respective build-out capacities: 15 mgd and 30 mgd.

Future Phases

According to the June 2016 Preliminary Phasing and Water Treatment Plant Sizing for the SRWA Surface Water Supply Project TM, Phase 1 of the WTP (30 mgd) was assumed to supply needs through 2025 and Phase 2 of the WTP (45 md) was assumed to supply needs through buildout, which is 2035 for Ceres and 2040 for Turlock. Demand projections used to estimate timing of phasing were developed from projections prepared by Ceres and Turlock for their 2015 Urban Water Management Plans. Currently, the cities anticipate lower future demands, due to lingering effects of the recent drought, and pending State water regulations that will strengthen conservation requirements, with specific requirements still under development. Due to anticipated lower demands, and to minimize Project costs, the Project has been downsized for the initial implementation phase. The timing of when future phases, including buildout, is anticipated has not yet been determined.

PROJECT COMPONENTS

Wet Well

To ensure the proper function, confirm the capacity of the infiltration gallery and gain a better understanding of the quality of water extracted from the infiltration gallery beneath the bed of the River, installed between 2001 and 2003, SRWA completed design documents for the wet well Project in October 2017. The wet well will be located adjacent to the River and will house the future raw water pumps that will ultimately divert water from the River via the infiltration gallery piping, and deliver it to the WTP. In the interim, the wet well will provide access to the infiltration gallery piping and facilitate the development and testing of the gallery piping, and will subsequently allow collection of representative raw water quality samples.

Per the 2015 Water Sales Agreement between TID and SRWA, the raw water infiltration gallery, raw water pump station, and RWTM will be considered District Delivery Facilities and, as such, will be “solely owned” by TID.

Procurement Method

At its August 25, 2016 meeting, the Board concurred with the TAC and Executive TAC’s recommendation to complete the wet well project using the traditional project delivery method of design-bid-build (DBB).

Basis of Design

A draft TM entitled “Summary of Predesign Evaluations for Raw Water Pump Station Wet Well” was issued on January 10, 2017 which highlighted basis of design details. An open wet well configuration will be used due to its relatively small size, favorable constructability and its ability to be easily inspected, cleaned, and maintained.

The wet well will be a rectangular structure with divider walls, and the footprint will be approximately 36 feet wide by 60 feet long and approximately 50 feet deep. The structure will make use of an inlet baffle wall, wet well divider wall, and pump bay divider walls in the recommended wet well configuration to promote uniform hydraulic approaches to each pump, and to provide cross bracing of the structure, which will in turn keep exterior wall thickness to a minimum.

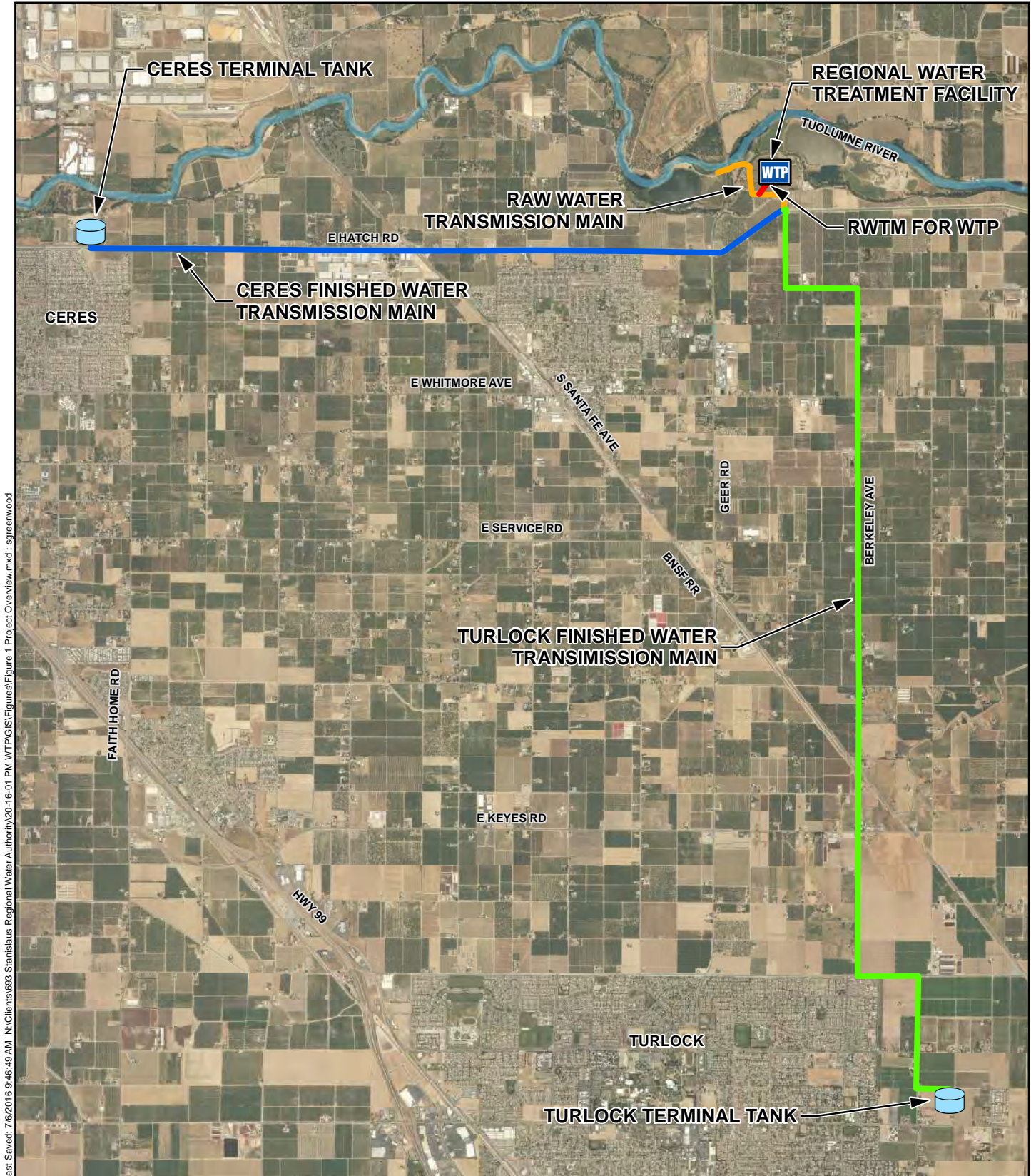
Infiltration Gallery Development and Testing

The development and testing of the infiltration gallery will be performed as part of the wet well construction contract. Under the direction of West Yost, a draft Infiltration Gallery Development and Testing Plan was prepared by SPF Water Engineering in November 2016. This document describes the recommended methodologies for developing and testing the infiltration gallery, discusses the requirements for temporary pump and compressor equipment necessary to complete the development and testing, and describes recommended facilities for discharge and settling of development and testing water. These requirements have been incorporated into the wet well Project’s contract documents.

Water generated during the development phase will be discharged into a settling basin that will be constructed on the property adjacent to the wet well site and is subject to minimum requirements associated with a Water Quality Certification under Section 401 of the Clean Water Act. Among the anticipated requirements in the certification are limitations to receiving water turbidity increases, prohibitions against suspended and settleable materials that may cause a nuisance in the receiving waters, and compliance with monthly and daily discharge limitations for priority pollutants. The construction documents will describe the requirements for the settling basin and incorporate the requirements of the Water Quality Certification by reference.







Regional Project

The Regional Project consists of all the Project facilities other than the wet well and local facilities (described in a subsequent section). Specifically, the Regional Project facilities include the raw water pump station, RWTM, WTP, Ceres FWTM, and Turlock FWTM, as shown on Figure 1.



Last Saved: 7/6/2016 9:46:49 AM N:\Clients\683 Stanislaus Regional Water Authority\20-16-01 PM WTP\GIS\Figures\Figure 1 Project Overview.mxd : sgreenwood

Symbology

-  Regional Water Treatment Facility
-  Tank
-  Raw Water Transmission Main
-  Turlock Finished Water Transmission Main
-  Ceres Finished Water Transmission Main
-  RWTM FOR WTP

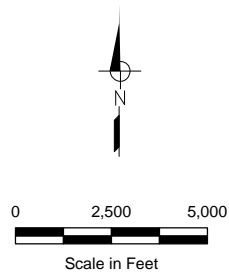


Figure 1
Project Overview

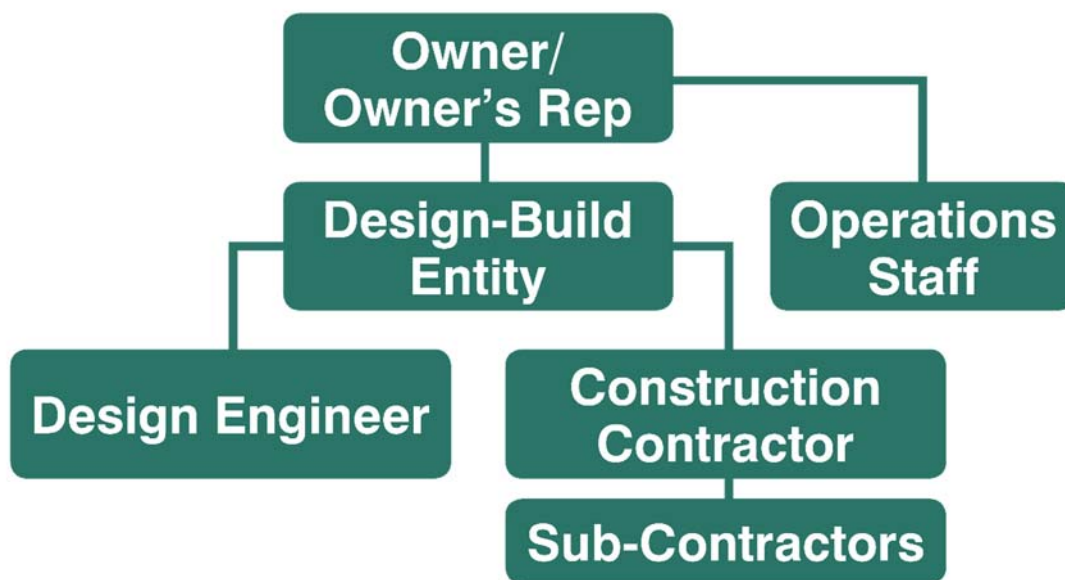
Stanislaus Regional Water Authority
Surface Water Supply Project

Procurement Method

SRWA evaluated many alternative methods for procuring and delivering different elements of the Regional Project. At its May 3, 2017 meeting, the SRWA Board decided to utilize lump sum design-build (DB) to deliver the regional intake pump station, RWTM, and WTP, with an additive bid item to include the design and construction of the FWTMs to Ceres and Turlock.

With DB, the Project will be designed to a conceptual level, and then a designer-contractor team will be selected for a lump sum price to design and construct the Project (see Figure 2 for the DB contractual relationship). The selected designer-contractor team will then work together to finalize the design. The process involves the development of detailed procurement documents, which are distinct from the plans and specifications required under the traditional DBB approach, but nevertheless constrain and direct the designer-contractor by setting minimum design and construction standards.

Figure 2. Lump Sum Design-Build Contractual Relationship



A major advantage of the DB approach is that, unlike traditional DBB, the selection of the designer-contractor team is based on best value and assures that the designer-contractor team meets the owner's goals in terms of past performance, experience, cost, project-specific design concepts and other selection criteria deemed important by SRWA. Additionally, the fact that the designer and contractor are a single entity brings the dual advantages of risk allocation to the entity most capable of controlling the risk, coupled with the absence of adversarial relations between designer and contractor that often characterize traditional DBB projects. The integration of designer and constructor, along with the risk transfer of design errors and omissions to the DB team, reduces the number of change orders and claims. Another advantage to DB is that it is possible to prepare multiple design packages on different schedules, thus allowing elements of the project to be done sequentially. Finally, the DB method often gives the designer-contractor team the opportunity to offer innovative approaches that meet the design requirements established in the procurement documents and bring cost savings to the owner.

A disadvantage of a DB approach is that this procurement method is new to the SRWA partners and deviates from typical owner involvement during the design process. To ensure that SRWA's preferences are incorporated into the design, upfront effort and time is needed to develop a robust set of procurement documents for the design-build entities to propose on. Finally, although risk allocation is a benefit of this procurement method, there is a cost associated with the transference of risk to the DB entity. Because of the cost associated with assuming risk it is important to allocate risk to the entity most capable of controlling that risk.

The DB procurement method was selected for the Project for the following reasons:

- SRWA would like to publicly operate the Project facilities because:
 - Turlock has a good track record of successfully operating its wastewater facilities.
 - Public agency staff will have the customer's best interests in mind.
 - Decisions will be based on long-term operational efficiencies.
 - Public operations are perceived to be more cost effective due to the absence of a profit motive.
- DB allows for qualifications-based selection, including selection of individual team members.
- Selection is based on evaluation of design solutions on specific project issues versus design consultant qualifications utilized in DBB procurement.
- DB provides for a collaborative 30 percent design & contract negotiation process.
- There is single-entity responsibility.
- Risk is allocated to the entity most capable of controlling the risk.
- The contractor and designer work together in a manner that should bring value to both the design and the construction.
- There is typically a reduced number of change orders and claims in DB procurements as compared with DBB procurements.

The use of DB for water resource infrastructure projects is generally not allowed per Government Code § 22161. However, Senate Bill 373, which was passed on September 30, 2017, amends the Government Code to allow the use of DB specifically for the SRWA Surface Water Supply Project.

Raw Water Pump Station

The raw water pump station will accommodate up to six vertical turbine pumps capable of providing a firm capacity of up to 65 mgd (100 cubic feet per second). The pump station will initially be equipped with enough pumps to provide a firm capacity of 15 mgd, with the expectation that additional pumps will be installed over time to accommodate an ultimate capacity of 65 mgd (to accommodate potential future TID diversions in addition to SRWA's ultimate build-out capacity of 45 mgd). The pumps will be housed inside a building located atop the wet well, and will discharge to the RWTM.

To facilitate periodic air purging of the infiltration gallery, the pump station site will include air compressors and compressed air storage tanks. Additional site features include electrical transformers and switchgear, instrumentation, motor controls, site paving, security fencing and landscaping.

The raw water pump station is considered one of the District Delivery Facilities per the 2015 Water Sales Agreement and, as such, will be owned by TID.

Raw Water Transmission Main

The RWTM, which will convey raw water from the raw water pump station near the River to the WTP and the Ceres Main Canal, will have a capacity of 65 mgd (consistent with the Project build-out capacity and potential future capacity for TID diversions) and is expected to be 60-inches (in) in diameter and approximately 3,960 feet (ft) long (0.75 mile). This pipe will be welded steel and is not anticipated to require any trenchless crossings.

The RWTM is considered one of the District Delivery Facilities per the 2015 Water Sales Agreement and, as such, will be owned by TID. A flow split vault, located within the WTP property, will provide a branch that will deliver water to the WTP. The pipeline extending north from the flow split vault will be owned by SRWA. The RWTM will continue to an outlet structure located at TID's Ceres Main Canal to allow for the future delivery of surface water from the River to TID's canal system.

The general RWTM and FWTM alignments are shown on Figure 1. Figure 3 shows the RWTM alignment between the raw water pump station and the WTP and TID outlet structure.






Water Treatment Plant

The WTP will include a conventional treatment process featuring ozone disinfection and granular media filters. The WTP initial capacity will be 15 mgd, with 5 mgd allocated to Ceres and 10 mgd allocated to Turlock. Figure 4 shows the WTP property and the TID easement through the WTP property.

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Symbology

-  Regional Water Treatment Facility
-  Pump Station
-  Flow Split Vault
-  Outlet Structure
-  TID Property Area

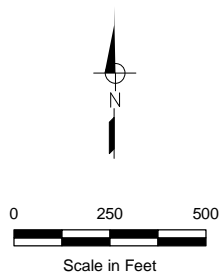
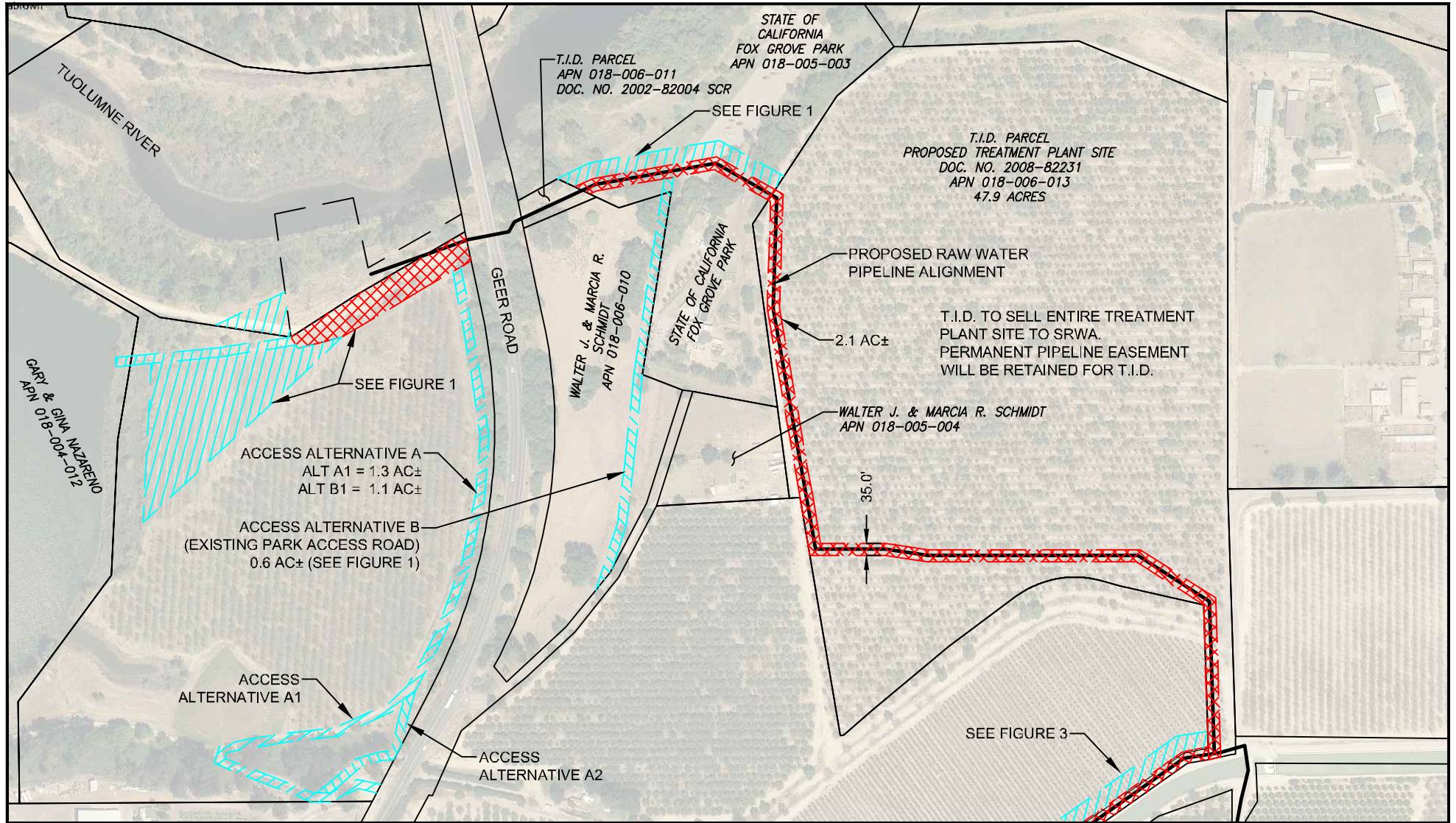







Figure 3
Raw Water Alignment

Stanislaus Regional Water Authority
Surface Water Supply Project



LEGEND

-  Permanent Easement
-  Temporary Construction Easement
-  Existing parcel line
-  Existing easement
-  Proposed Pipeline Alignment

NOTE: Easements shown are preliminary. Easement locations and areas, as well as final selection of pipeline alignment alternatives (where shown) are subject to change pending evaluation of environmental and physical constraints.

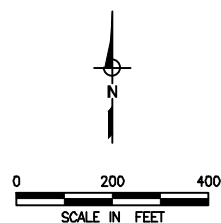


Figure 4
Easement Acquisition
Treatment Plant Site
 Stanislaus Regional Water Authority
 Surface Water Supply Project

On May 12, 2016, a workshop was held with the TAC to identify performance goals for the treatment of surface water. The results of this workshop were captured in a TM titled “Treatment Performance Goals” (Trussell, July 21, 2016)³ and presented to the SRWA Board on August 10, 2016. As presented in the TM, the performance goals include:

- **Employ a Reasonably Robust Treatment Train:** The treatment train should be robust to accommodate “normal” raw water quality variability, and to accommodate nighttime unmanned facility operations. Plant shutdown is acceptable under extreme water quality conditions, since groundwater will remain available.
- **Use Proven Processes:** Choose processes that are successfully operating at other plants. Demonstration testing will be required for membrane filtration, if selected.
- **Minimize Disinfection Byproduct (DBP) Formation:** Choose disinfection and total organic carbon (TOC) removal options that result in lower DBP concentrations. Chloramines will be considered for final disinfection, but only if upstream processes are not expected to sufficiently reduce DBP formation potential.
- **Design for Unmanned Night Operations:** Treatment process complexity and instrumentation and monitoring should be considered in meeting the goal of unmanned facility night operations.

The performance goals established a general framework for developing and evaluating a range of available treatment process alternatives.

Seven treatment train alternatives were identified and documented in the March 28, 2017 draft TM titled “Treatment Process Alternatives Technical Memorandum No. 2”. These seven alternatives were developed, in part, as a result of the water quality sampling and bench-scale testing results using water quality data from samples obtained between November 2016 and February 2017. The bench-scale tests were designed to help answer questions regarding the treatability of the source water, and to aid in the development of preliminary design doses for certain treatment chemicals. Jar tests evaluating turbidity and total organic carbon (TOC) removal were performed on River water samples collected in November 2016 and January 2017. These tests concluded that, for a conventional treatment facility, enhanced coagulation (i.e., use of a higher coagulant dose to meet regulated TOC removal) will be required some portion of the year. For a direct filtration facility or a membrane filtration facility, enhanced coagulation would not be required but significant TOC removal would, nonetheless, be required to meet the DBP maximum contaminant levels if free chlorine were used for final disinfection. Without sufficient TOC removal, chloramines would be required to meet DBP limits.

After feedback from the TAC on the seven treatment train alternatives, two treatment train alternatives were developed in detail in the Spring of 2017 for further consideration: 1) conventional treatment with pre-ozonation [Train 1], and 2) membrane filtration with ozonation [Train 6]. Options using direct filtration were eliminated from further evaluation for two reasons: 1) direct filtration would have precluded the use of enhanced coagulation for TOC and DBP control, and 2) direct filtration was found to provide relatively little in cost savings.

³ “Treatment Performance Goals” TM dated July 21, 2016 is posted to the SRWA website here: http://stanrwa.org/documents/docs/Technical_Memorandums/Treatment%20Performance%20Goals%20081116.pdf

Treatment Train 1, 2, and 6 were evaluated for estimated operation and maintenance costs and risks of exceeding regulatory limits for disinfection byproducts. Additional information was then developed that indicated that treatment Train 6 could present significant risks associated with compliance with regulatory limits for disinfection byproducts, in addition to having higher estimated operation and maintenance costs than Train 1. Figure 5 shows a table summarizing the risk assessment for each treatment train considered. After presentation and discussion of this information on May 16, 2017, the TAC and PM Team agreed that further evaluation of treatment processes should include Train 1 and Train 2 (which differs from Train 1 only in the relative sequence of ozonation in the treatment process) and variants thereof. Such evaluation will include the development of preliminary design criteria, site layouts and construction schedules; and development of refined cost estimates for operation and maintenance. In July 2017, the SRWA Board recommended further evaluation of a conventional water treatment process featuring ozonation and granular media filters, and to allow consideration of such processes by proposers for the future design and construction of the WTP.

Figure 5. Risk Assessment Summary for Treatment Trains

Treatment Train Risk Assessment							
	Train 1	Train 2	Train 3	Train 4	Train 5	Train 6	Train 7
Risk/Issue	Conv w/ Pre-O₃	Conv w/ Int O₃	Conv w/o O₃	DF with O₃	DF w/o O₃	MF with O₃	MF w/o O₃
Exceedance of DBP MCLs	Low	Low	Low-CC	Low-CC	Low-CC	Low-CC	Low-CC
			Med-FC	Med-FC	High-FC	Med-FC	High-FC
Taste & Odor^(a) Complaints and/or Inadequate Treatment of Algal Toxins^(a)	Low	Low	High	Low	High	Low	High
Inadequate Treatment of Pesticides^(a)	Low	Low	Med	Low	Med	Low	High
Inadequate Control of Manganese^(a)	Low	Med	Low	Low	Med	Med	Med
Capital Cost Difference Relative to Train No. 1, Rounded to Nearest \$M	-- 0%	-- 0%	(\$8M) -8%	(\$0M) 0%	(\$10M) -10%	(\$4M) -4%	(\$12M) -12%
a) If present b) FC = free chlorine c) CC = combined chlorine (i.e., chloramines)							

Figure 5 Abbreviation Notes:
 “Conv” = conventional treatment
 “DF” = direct filtration
 “MF” = micro filtration

Turlock Finished Water Transmission Main

The FWTM to Turlock, which will convey finished water from the WTP to the Turlock terminal tank in the northeastern corner of the City (see Figure 1), will have a capacity of 30 mgd (consistent with Turlock's portion of the Project build-out capacity) and is expected to be 42-in diameter and approximately 38,400 ft (7.3 miles) long. This pipeline will be welded steel and include one trenchless crossing at the BNSF railroad, near the Santa Fe Avenue and Berkeley Avenue intersection. It is anticipated that canal crossings will be constructed by open cut construction during non-irrigation season. This pipeline will head south on Aldrich Road, east on John Fox Road, south on Berkeley Road, east on Taylor Road, then south on North Quincy Avenue.

Figure 6 shows the proposed site for the Turlock terminal tank.

Ceres Finished Water Transmission Main

The Ceres FWTM will convey finished water from the WTP to the Ceres terminal tank at the Ceres River Bluff Regional Park (see Figure 1). This pipeline will have a capacity of 15 mgd (consistent with Ceres' portion of the Project build-out capacity) and is expected to be 30-in diameter and approximately 26,300 ft (5.0 miles) long. This pipeline will be welded steel and include one trenchless crossing at the BNSF railroad, near the intersection of Hatch Road and Santa Fe Avenue. It is anticipated that the portion of pipeline between the WTP and Geer Road and canal crossings will be constructed by open cut construction during non-irrigation season. This pipeline will extend from the WTP south along Aldrich Road parallel to the Turlock FWTM, then head west and southwest along the north edge of the Ceres Main Canal past the intersection of Hatch Road and Faith Home Road to the terminal tank.

Figure 7 shows the approximate easement for the Ceres FWTM through existing City property between Hatch Road and the proposed tank site.

Local Facilities

A Sensitivity Analysis TM dated March 16, 2017 recommended improvements for Ceres' and Turlock's local distribution systems to integrate the regional Project based on the Phase 1 and 2 WTP capacities listed above. Local facilities include terminal tanks, booster pumps, and distribution pipelines in both cities. All local facilities are anticipated to be built with a traditional design-bid-build method and will be managed and paid for by the city for whom the facility directly benefits. The following text describes the initial phase planned for implementation by 2022. Note that additional infrastructure will be required when the WTP size is increased in Phase 1 and 2, as outlined in the Sensitivity Analysis.

The local facilities in Ceres will accommodate an initial capacity from the regional Project of 5 mgd. The facilities will include a 2 million-gallon (MG) terminal tank, an associated 14 mgd booster pump station, and 5,300 ft of 24-inch diameter distribution pipeline along East Hatch Road, 700 ft of 16-inch pipeline along East Hatch Road, and 2,000 ft of 16-inch pipeline along East Hatch Road. Ceres' local facilities are shown on Figure 8.

The local facilities in Turlock will accommodate an initial capacity from the regional Project of 10 mgd. The facilities will include a 2.5 MG terminal tank, an associated 20 mgd booster pump station, and 1,200 ft of 42-inch diameter pipeline from the terminal tank to North Quincy Road, 3,900 ft of 42-inch diameter pipeline along North Quincy Road, from the terminal tank tie-in to East Tuolumne Road, 1,350 ft of 24-inch diameter pipeline along North Quincy Road from the terminal tank tie-in to Zeering Road/East Christoffersen Parkway, 1,600 ft of 24-inch diameter pipeline on East Zeering Road/East Christoffersen Parkway, west from North Quincy Road, 700 ft of 24-inch diameter pipeline on East Monte Vista Avenue, west from North Quincy Road, and 100 ft of 24-inch on East Tuolumne Road west from North Quincy Road. Turlock's local facilities are shown on Figure 9.

PROPERTY ACQUISITION

Property acquisition will be required for temporary and permanent easements for each of the project facilities as described below.

Wet Well

Easement and right-of-way acquisition for the wet well project includes the purchase of a one-acre easement and a roughly 3.25-acre temporary construction easement.

Raw Water Transmission Main

The RWTM right-of-way was partially acquired and design documents were prepared in January 2009 for the TID portion of the RWTM. Due to reconstruction of the Geer Road bridge, the alignment was modified slightly to avoid a pier associated with the new Geer Road bridge. Additional easements need to be acquired from the State of California and from one private property owner for construction of the RWTM.

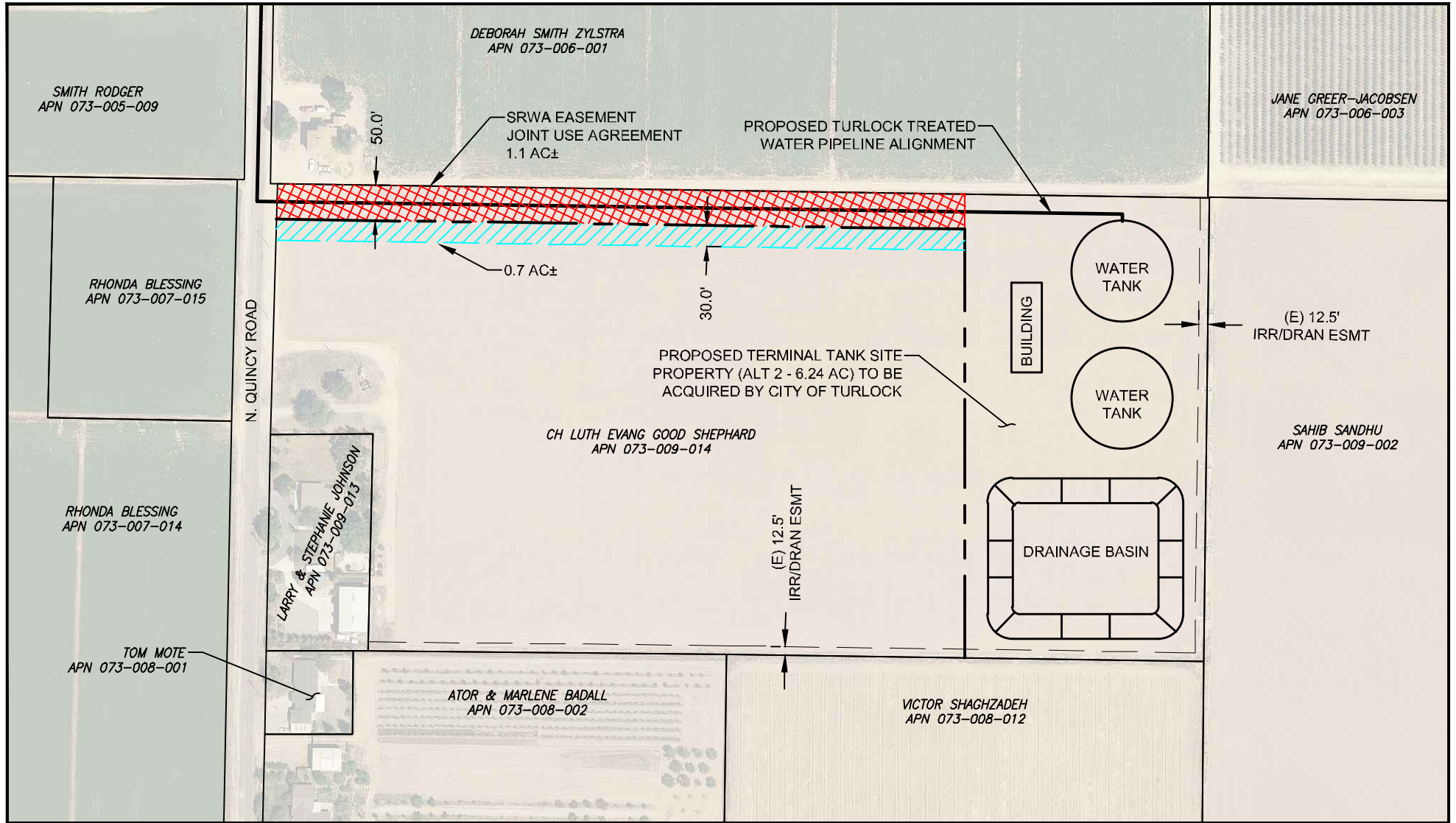
As documented in the November 2016 ROW Management Plan, during the June 16, 2016 TAC meeting, the TAC decided to make raw and finished water transmission main easements 35 ft wide.

Turlock Finished Water Transmission Main






There are a couple of easement alternatives under consideration for the Turlock FWTM crossing of Santa Fe Avenue, BNSF Railroad, and the TID canal at Berkeley Avenue. The parcel where the easement is needed is a small, unoccupied fallow parcel that would provide staging for trenchless construction under the railroad with minimal impact to traffic. Due to the nature of the parcel and the pipeline alignment, it may be most cost effective to purchase the entire parcel. If the trenchless crossing runs parallel to Berkeley Avenue, the road would need to be closed for an extended period of time.

Ceres Finished Water Transmission Main

Figure 7 shows the approximate easement for the Ceres FWTM through existing City property between Hatch Road and the proposed tank site. It is expected that the City will provide an easement to SRWA for construction and maintenance of the FWTM between Hatch Road and the tank.



LEGEND

-  Permanent Easement
-  Temporary Construction Easement
-  Existing parcel line
-  Existing easement
-  Proposed Pipeline Alignment

NOTE: Easements shown are preliminary. Easement locations and areas, as well as final selection of pipeline alignment alternatives (where shown) are subject to change pending evaluation of environmental and physical constraints.

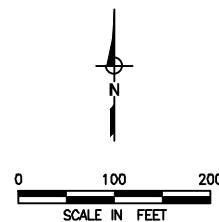
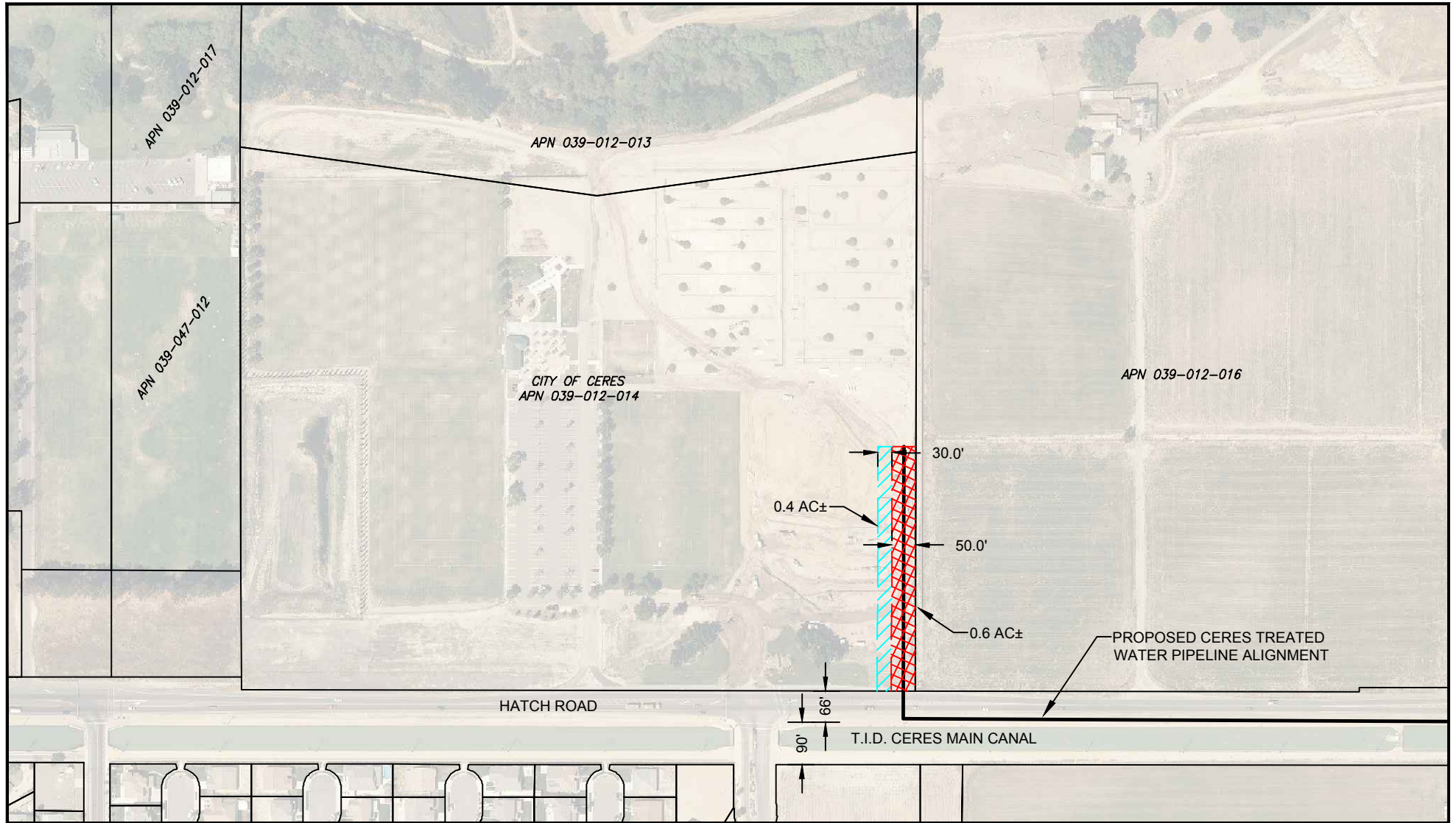







Figure 6
Easement Acquisition
Turlock Tank Site
 Stanislaus Regional Water Authority
 Surface Water Supply Project



LEGEND

-  Permanent Easement
-  Temporary Construction Easement
-  Existing parcel line
-  Existing easement
-  Proposed Pipeline Alignment

NOTE: Easements shown are preliminary. Easement locations and areas, as well as final selection of pipeline alignment alternatives (where shown) are subject to change pending evaluation of environmental and physical constraints.

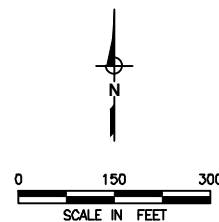
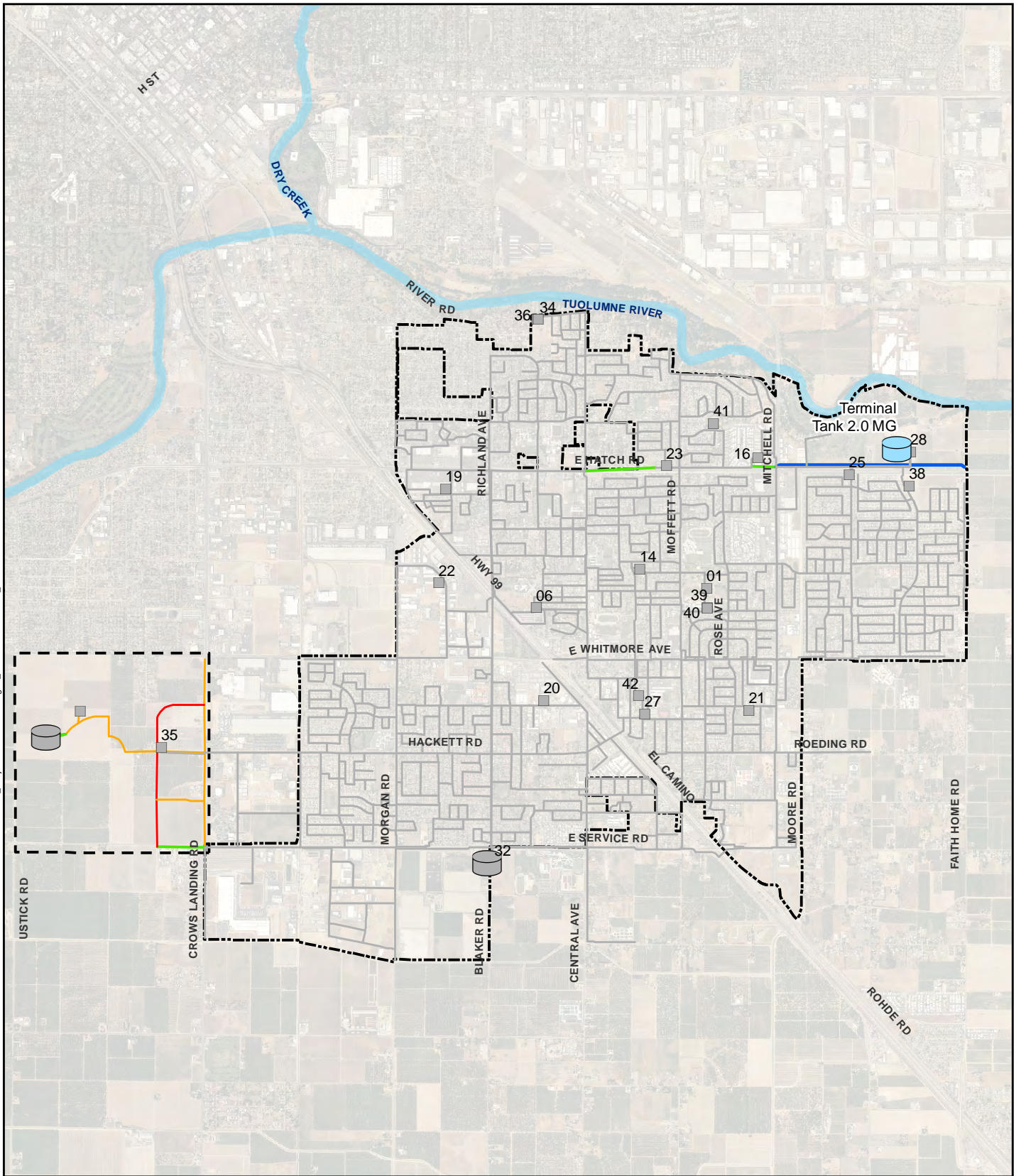






Figure 7
Easement Acquisition
Ceres Tank Site
 Stanislaus Regional Water Authority
 Surface Water Supply Project





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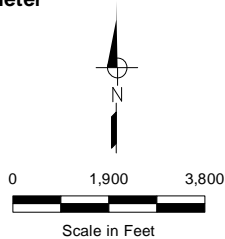
Symbology

-  Existing Tank
-  Future Tank
-  Existing Well
-  Existing Pipeline

Sub-Phase 1 Pipeline Diameter

-  8"
-  12"
-  16"
-  24"

 Infrastructure assumed to be in place. Not part of Phase 1 Surface Water Project.

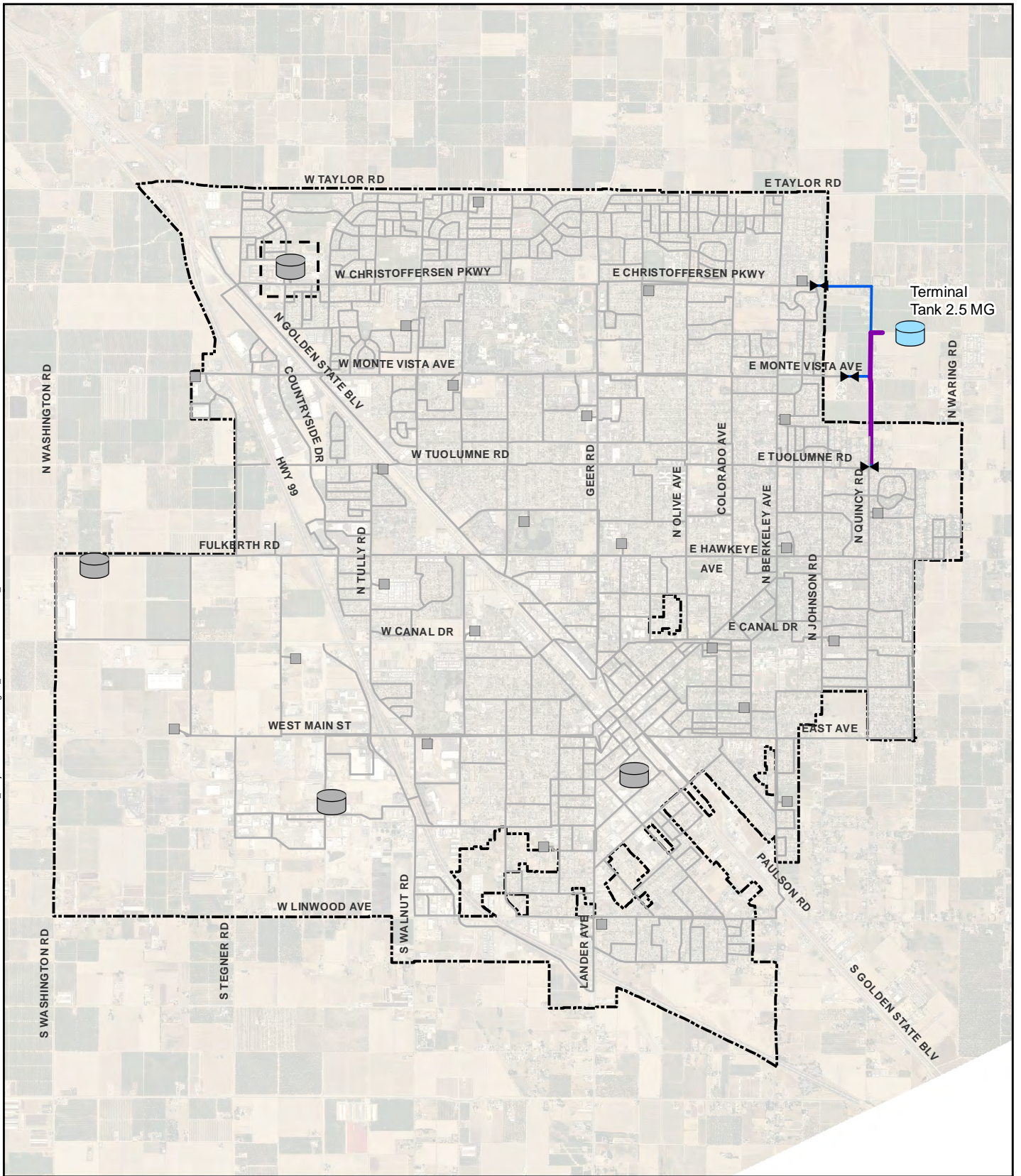


Stanislaus Regional Water Authority
Surface Water Supply Project







Figure 8

**Ceres Infrastructure
Required for Sub-Phase 1
(5 mgd) Project**

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Symbology

-  Existing Tank
-  Future Tank
-  Existing Well
-  Future Control Valve
-  Existing Pipeline
-  Infrastructure assumed to be in place. Not part of Phase 1 Surface Water Project.

Sub-Phase 1 Pipeline Diameter

-  24"
-  42"

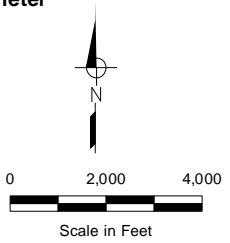


Figure 9

**Turlock Infrastructure
Required for Sub-Phase 1
(10 mgd) Project**

Stanislaus Regional Water Authority
Surface Water Supply Project

Local Facilities

Figure 6 shows the proposed site for the Turlock terminal tank. It is anticipated that Turlock will purchase the flag lot for access to and construction of the Turlock terminal tank and pump station and provide an easement to SRWA for construction and maintenance of the FWTM.

As stated above, it is expected that the City of Ceres will provide an easement to SRWA for construction and maintenance of the Ceres terminal tank.

ENVIRONMENTAL AND PERMITTING

A variety of environmental and non-environmental permits and approvals will be required to construct and operate the Project facilities. Because the wet well will be constructed in advance of the regional facilities, the wet well permitting and approvals have been separated from the regional Project permitting activities. This section is divided into the following components:

- Environmental Permits and Approvals for the Wet Well.
- Non-Environmental Permits and Approvals for the Wet Well.
- Environmental Permits and Approvals for the Regional Project (Excluding the Wet Well).
- Non-Environmental Permits and Approvals for the Regional Project (Excluding the Wet Well).

Environmental Permits and Approvals for the Wet Well

The Project has undergone prior California Environmental Quality Act (CEQA) evaluations at various stages and have been recorded in three previous CEQA compliance documents: the 2001 Mitigated Negative Declaration (MND) for the Infiltration Gallery, the 2006 Regional Surface Water Supply Project EIR, and the City of Modesto's 2010 Water System Engineer's Report EIR. Because of design changes to the Project facilities since preparation of the previous CEQA documentation, further CEQA evaluation was required. Rather than preparing a new EIR for the wet well, an Initial Study (IS)/MND was produced. Following public circulation, the Mitigation Monitoring and Reporting Program (MMRP), IS/MND adoption resolution, and Notice of Determination (NOD) were adopted at the Board meeting on September 28, 2017. No challenges were received to this IS/MND from any parties during the 30-day challenge period.

Other environmental permits required for the wet well project include:

- California Department of Fish & Wildlife (CDFW) 1602 Notification Permit,
- CDFW Section 1600 Lake and Streambed Alteration Agreement (LSAA), and
- U.S. Army Corps of Engineers 404/Regional Water Quality Control Board 401 Permit.

Non-Environmental Permits and Approvals for the Wet Well

Non-environmental permits, or approvals, that are anticipated to be needed related to the wet well project are listed in the “Wet Well Permitting Matrix” included in Attachment 1. This matrix provides a general description of each permit or approval required as well as permit start dates, responsible parties, and other details.

Environmental Permits and Approvals for the Regional Project (Excluding the Wet Well)

As mentioned above, the Project has prepared prior CEQA evaluations but because of design changes to the Project facilities, it was determined that a new EIR was required for the regional Project. Preparation of the EIR is underway and the final EIR is expected to be issued in May 2018.

Other environmental permits/approvals required for the regional Project include:

- U.S. Fish & Wildlife Service (USFWS)/National Marine Fisheries Services (NMFS)/CDFW Biological Opinion (BO),
- CDFW Section 1600 LSAA, and
- Central Valley Flood Protection Board (CVFPB) Encroachment Permit.

The Biological Assessment (BA), Individual Take Permit (ITP), and the Habitat Conservation Plan (HCP), all of which are required to be submitted to the regulatory agencies to request a BO, began to be prepared in October 2017. The BA, ITP, and HCP are scheduled for submittal in mid-December 2017 so that final documents can be submitted in January and a BO can be issued in July 2018.

The LSAA permit application and CVFPB Encroachment Permit application will be prepared in parallel in the first few months of 2018, following the Draft EIR Public Review Period. Both applications will be submitted to their respective regulatory agencies by the end of March 2018. CDFW is expected to issue a SAA permit, and CVFPB is expected to issue an Encroachment Permit, by the end of June 2018.

Non-Environmental Permits and Approvals for the Regional Project (Excluding the Wet Well)

Non-environmental permits, or approvals, that are anticipated to be needed related to the regional Project are listed on the “WTP Permitting Matrix” and “Pipeline Permitting Matrix” included as Attachments 2 and 3. These matrices provide a general description of each permit or approval required as well as permit start dates, responsible parties, and other details.

CAPITAL PROJECT COST ESTIMATE

Cost Estimate

The cost estimate of the Project has evolved over the past year as Project details have been determined and further refined.

The most recent cost information presented to the SRWA Board on August 3, 2017 incorporates the Project facility information presented above and repeated in the bullets below, for both regional and local Project facilities, with one exception. Following the Board meeting, the City of Turlock requested a reduction in the scope of the local facilities. The result was a roughly \$10 million reduction in the cost of the Turlock local facilities. The total Project capital cost presented to the Board August 3, 2017 was \$288 million. The subsequent reduction in the scope of Turlock's local facilities reduced the overall Project capital cost to \$278 million. This cost estimate is a planning-level estimate and includes all expected costs associated with the Project, such as engineering, environmental, legal, and administrative costs (cumulatively referred to as "soft cost"). The capital cost estimate assumes a mid-point of construction occurring on June 1, 2020, with a two percent annual inflation rate, and five percent construction contingency. The \$278 million Project capital cost includes the following assumptions:

- 65 mgd capacity wet well.
- 15 mgd initial raw water pumping and WTP capacity.
- 65 mgd RWTM capacity (includes capacity for both SRWA and TID).
- 15 mgd Ceres FWTM capacity.
- 30 mgd Turlock FWTM capacity.
- Conventional treatment process with ozone and granular media filters.
- Planning-level estimate for WTP and "soft costs".
- Ceres and Turlock local facilities.

The total order of magnitude (OOM) design, construction, and CM Project cost estimate breaks down into the project elements as shown in Table 6.

Table 6. Summary of Preliminary OOM Design & Construction Cost Estimates^(a), in Millions of Dollars	
Project Element	Estimated Cost
Regional Facilities	
Raw Water Pump Station – Wet Well Only	8.55
Raw Water Pump Station – Balance of Facility	10.11
RWTM	7.95
WTP	101.64
Ceres FWTM	22.90
Turlock FWTM	40.35
Subtotal ^(b)	191.49
Inflation to Construction Midpoint ^(c)	13.15
Subtotal ^(d)	204.64
Construction Contingency ^(e)	10.23
Total Regional Facility Design and Construction Costs ^(d)	214.87
Local Facilities	
Construction of Ceres Local Facilities	11.41
Construction of Turlock Local Facilities	14.62
Subtotal ^(b)	26.04
Inflation to Construction Midpoint ^(c)	1.79
Subtotal ^(d)	27.82
Construction Contingency ^(e)	1.39
Construction Subtotal ^(d)	29.22
Design of Ceres Local Facilities ^(f)	0.98
Design of Turlock Local Facilities ^(f)	1.25
CM of Ceres Local Facilities ^(e)	0.61
CM of Turlock Local Facilities ^(e)	0.78
Total Local Facility Design, Construction and CM Costs	32.83
Total Design, Construction and CM Costs	247.70
<p>(a) Includes estimating contingencies as follows: Raw water pump station (wet well only) = 30% Raw water pump station (balance of facility) = 25% RWTM = 25% WTP = 25% Ceres FWTM and Turlock FWTM = 25% Ceres and Turlock Local Distribution System Improvements = 25%</p> <p>(b) August 2016 dollars.</p> <p>(c) Assumes 2% annual inflation from August 2016 to assumed construction midpoint of June 2020.</p> <p>(d) June 2020 dollars (assumed construction midpoint).</p> <p>(e) Assumes 5% of estimated construction costs at construction midpoint.</p> <p>(f) Assumes 8% of estimated construction costs at construction midpoint.</p>	

Estimated overall Project capital costs, which include preliminary projections of the Project’s “soft costs” (SRWA administration, program management, environmental and permitting, land and right-of-way acquisition, predesign and procurement, and capital contingency) are presented in Table 7.

Table 7. Summary of Preliminary OOM Project Cost Estimates, in Millions of Dollars, June 2020^(a) Dollars				
Cost Category	Total	Project Partner ^(f)		
		Turlock	Ceres	TID
Regional Facilities				
Legal/Administration ^(b)	4.1	2.1	2.1	-
Program Management	5.1	2.6	2.6	-
Environmental and Permitting ^(c)	1.4	0.7	0.7	-
Land/ROW Acquisition	1.8	0.9	0.9	-
Predesign and Procurement	2.3	1.2	1.2	-
Construction Quality Assurance and Contract Compliance ^(d)	8.2	4.1	4.1	-
Design and Construction of Regional Facilities	214.9	137.2	71.7	6.0
Capital Contingency ^(e)	6.0	3.7	2.1	0.1
Regional Facility Total	244.2	152.7	85.5	6.1
Local Facilities				
Design and Construction of Local Facilities	32.8	18.4	14.4	-
Capital Contingency ^(e)	0.8	0.5	0.4	-
Local Facility Total	33.7	18.9	14.8	-
Total Capital Costs	277.9	171.6	100.2	6.1
<p>(a) Assumed construction midpoint. Includes the following estimating contingencies: Raw water pump station (wet well only) = 30% Raw water pump station (balance of facility) = 25% RWTM = 25% WTP = 25% Ceres FWTM and Turlock FWTM = 25% Ceres and Turlock Local Distribution System Improvements = 25%</p> <p>(b) Assumes salaried General Manager and contracted general SRWA counsel; assumes legal for specialty services (e.g., Service Contract development) included as-needed in items below.</p> <p>(c) Intended to reflect costs prior to handoff to facility designer / design-builder.</p> <p>(d) Includes oversight of construction under design-build procurement method, environmental mitigation and other costs.</p> <p>(e) Assumes 2.5% of all other capital costs.</p> <p>(f) Cost allocations based on the TM <i>Methodology for Allocation of Surface Water Supply Project Costs</i>, Nov 1, 2016.</p>				

Cost Sharing

The total capital cost of the Project described above will be allocated amongst the Project partners: Ceres, Turlock, and TID. The cost allocation percentages, for various categories of costs, recommended in the November 1, 2016 TM, “Methodology for Allocation of Surface Water Supply Project Costs”⁴, are shown in Table 8 below.

Table 8. Recommended Cost Allocation Percentages			
Category	Cost Allocation, percent		
	Ceres	Turlock	TID
Administrative/Soft Costs ^(a)	50	50	0
Regional Facilities Phase 1 Capacity Costs ^(b)	33.3	66.7	0
District Delivery Facilities Costs ^(c)	26.7	53.3	20
Ceres-Only Costs	100	0	0
Turlock-Only Costs	0	100	0

(a) Administrative/Soft Costs can be roughly summarized as follows: SRWA staff, management/communications/coordination/public outreach, engineering/technical assistance, permitting/environmental (associated with the regional facilities only), water rights, funding (for non-Ceres & Turlock-specific funding opportunities), legal/audits, and ROW acquisition (associated with the regional facilities only).

(b) The Phase 1 capacity for the Regional Facilities will be 15 mgd. It is expected that Ceres will use one third of the capacity (5 mgd), Turlock will use two thirds (10 mgd), and TID will not use any of the capacity.

(c) The shared District Delivery Facilities include the wet well project, the intake and raw water pump station, and the RWTM.

The percentages shown in Table 8 were used to approximate the allocation of the capital cost between the Project partners. The results of the capital cost allocation by Project partner are shown in Table 7. Please note that the cost allocations referenced above and included in the November 1, 2016 TM need to be adjusted for consistency with the 2015 Water Sales Agreement. This adjustment will be made during Phase 2 and will allocate a portion of the Administration/Soft Costs to TID for the work related to the District Delivery Facilities. The result to the Project Partners will be an increase in the cost to TID and a slight decrease to Ceres and Turlock.

Rate Evaluations and Customer Rate Impacts

A preliminary rate evaluation was conducted using the estimated capital Project cost, projected operation and maintenance (O&M) costs, and Ceres and Turlock capital, debt and distribution system O&M costs. In determining how the capital cost would impact water rates, it is assumed that State Revolving Fund (SRF) financing is available for this Project, except for the wet well, with a two percent interest rate for a 30-year loan. The rate evaluation was a high-level rate comparison and not a complete rate model. It was meant to provide an understanding of the rate impacts to residential customers for different Project alternatives under consideration.

⁴ “Methodology for Allocation of Surface Water Supply Project Costs” TM dated November 1, 2016 is posted to the SRWA website here: http://stanrwa.org/documents/docs/Technical_Memorandums/Allocation%20of%20Surface%20Water%20Supply%20Project%20Costs%20111016.pdf

The rate evaluation was also compared to an estimate of what a typical water bill would be if the Project were not built. This so-called “no project” alternative forecasted water rates assuming the cities upgraded their groundwater systems to meet projected water demand and water quality requirements. Figures 10 and 11 show the projected rates for Ceres and Turlock representative of the \$288 million capital Project cost that was presented to the Board on August 3, 2017. Because the City’s rate consultants are currently developing rate models for each City, the rate evaluation for the Project was not updated to reflect the adjustments to the City of Turlock local facilities and the adjusted capital Project cost of \$278 million. Proposition 218 generally limits public agencies to a five-year rate plan. However, to provide a complete picture, the rate evaluation included a 10-year rate projection for each city to better understand how water rates may be impacted once the WTP is operational.

The rate setting and Proposition 218 processes are being handled by each City individually and, assuming a successful Proposition 218 process, new rates should be in place in 2018.

Figure 10. Ceres Estimated Average Residential Customer Monthly Bill Impacts

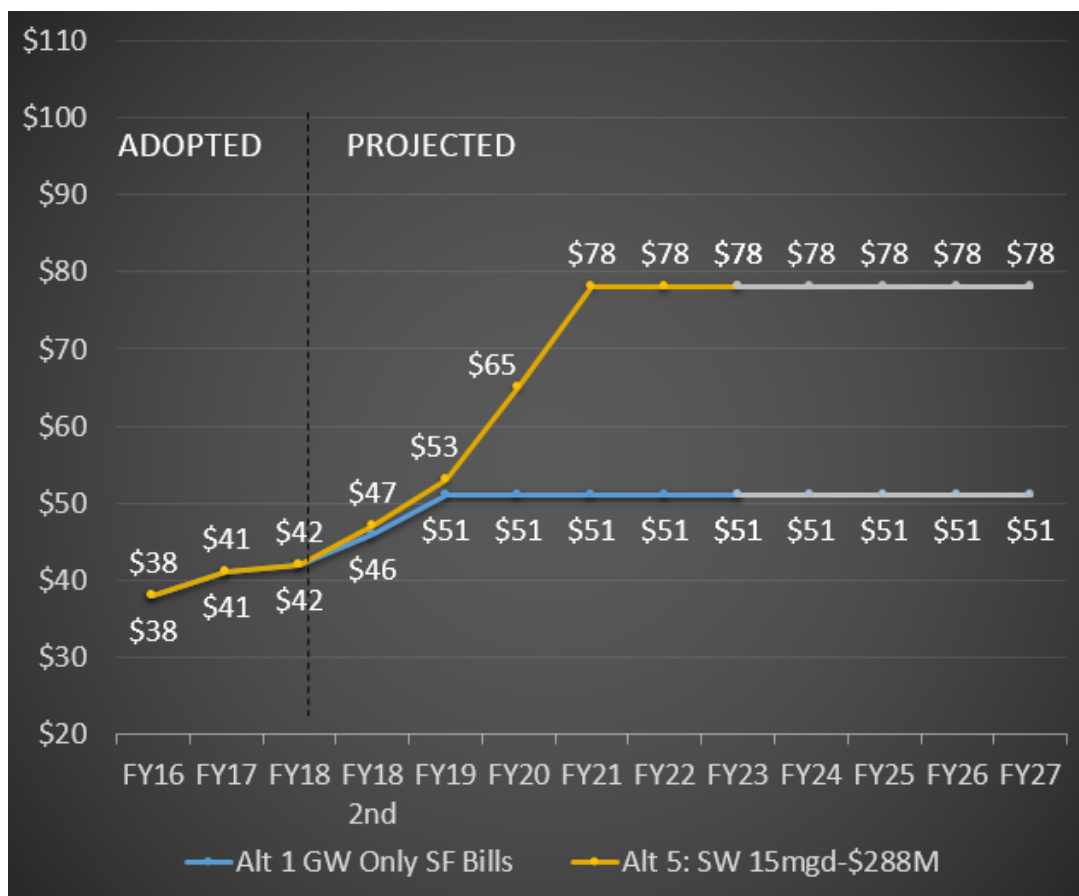
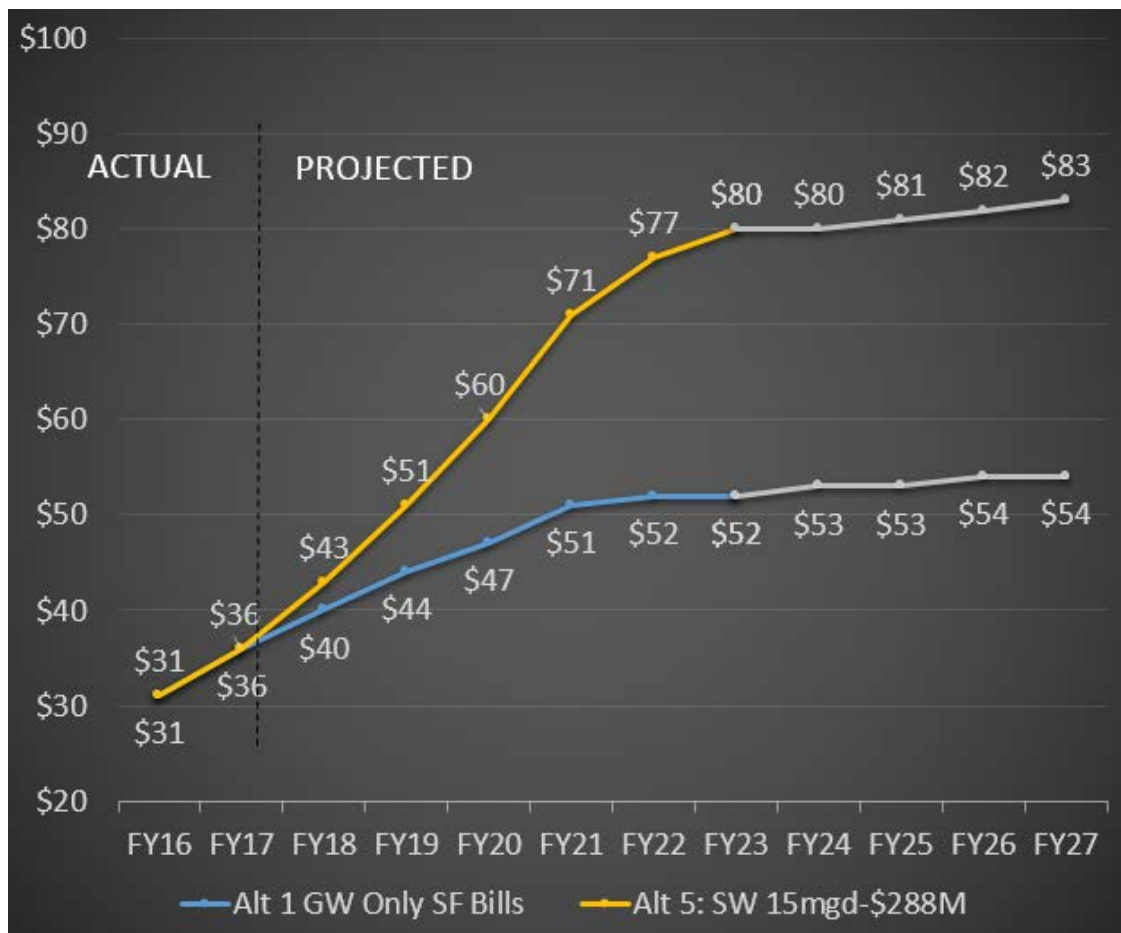


Figure 11. Turlock Estimated Average Residential Customer Monthly Bill Impacts



SCHEDULE

A draft master schedule for the Project has been developed, but revisions are still anticipated, pending the Board’s direction and decision regarding several key issues still being discussed by the Executive TAC and TAC. Based on the Board’s decision to move forward with the design and construction of the raw water pump station, WTP, and FWTMs using a Design-Build project procurement method, the estimated operations commencement date is September 2022. The draft schedule, from which the Table 9 major milestones are based, includes the following current baseline assumptions, some of which are still subject to change. If or when these baseline assumptions change, based on Board direction and decision, the master schedule will be updated:

- Project delivery methods:
 - DBB for wet well,
 - DB for other regional facilities (raw water pump station, RWTM, WTP, FWTMs), and
 - DBB for local facilities (reservoirs, pump stations, and distribution system improvements within City limits).
- Phased/separate environmental permitting for wet well project.

- Condemnation/ eminent domain of land will not be required.
- Wet well construction period is relatively dry.
- Sensitive species do not hold up construction.
- All projects, except the wet well, will utilize SRF funding.

Table 9. Project Draft Schedule Major Milestone Summary		
Milestone/Activity	Actual or Planned Start Date	Planned Completion Date
SRF Loan Application Submittal	Oct 2016	May 2019
WTP/RWTM/FWTMs Project CEQA/NEPA Process	Nov 2016	May 2018
Property Acquisition	Feb 2017	May 2018
TID Water Rights Modification	Dec 2017	Sep 2018
Wet Well Construction	May 2018	Jan 2020
Determination of Short-Listed DB Firms	Jun 2018	Jun 2018
DB Contract Award	Jul 2019	Jul 2019
WTP/RWTM/FWTMs Project Design and Construction	Aug 2019	Jun 2022
Commence Operations	Sep 2022	Sep 2022

Several items on the overall draft Project schedule are out of the SRWA’s control. Some of the key items include:

- Property acquisition,
- State Water Resources Control Board (State Board) review and approval of SRF loan application,
- USFWS/NMFS/CDFW BO, and
- State Board approval of modifications to TID’s Water Rights.

While the SRWA will do what it can to keep these items on schedule, a delay in any one of these items could impact the overall Project schedule.

A graphic of the anticipated Project schedule is shown on Figure 12.

Figure 12. Project Implementation Schedule, 2016 – 2022



FUNDING STRATEGY

The SRWA has a goal of reducing the burden on the member agencies' ratepayers through aggressively pursuing all forms of potential outside funding. A Funding Strategy TM⁵ submitted to the TAC on August 1, 2016 provides strategies for the SRWA to consider to maximize its potential of obtaining outside funding. The following strategies were recommended in the TM and subsequently received concurrence by the Board at its August 11, 2016 meeting:

1. Track funding programs and maintain a Funding Opportunities Log with key information regarding potentially applicable funding programs.
2. Utilize the SRWA's selected government relations/public affairs consulting firm to identify and work with politicians to create and support funding opportunities.
3. Package the Project in ways to make Project elements more competitive and attractive for certain funding opportunities.
4. Pursue grant funding opportunities, for which SRWA is most competitive, in parallel with SRF and I-Bank loans.
5. Consider requesting principal forgiveness on SRF loans for Ceres.
6. Pursue municipal bond financing only after, and if, SRF and I-Bank loans are determined to not fully fund the Project.

⁵ "Funding Strategy" TM dated August 1, 2016 is posted to the SRWA website here: http://stanrwa.org/documents/docs/Technical_Memorandums/Funding%20Strategy%20081116.pdf

A copy of the most recently updated Funding Opportunities Log is included in Attachment 4. The Funding Opportunities Log has been continuously updated, and will continue to be updated, until sufficient funding is secured. The log indicates the types of projects each program can fund, eligibility requirements, key highlights of the funding program, and a competitiveness rating of A, B, or C to indicate which programs are most likely to fund the Project.

The following funding programs currently have an “A” rating on the log:

- California Drinking Water SRF Loan Program
- California Infrastructure Bank
- Public Works and Economic Adjustment Assistance Grant Program
- Integrated Regional Water Management (IRWM) Implementation Grant Program
- Community Development Funds/Community Development Block Grant (CDBG) Program
- Drought Resiliency Program
- Stream Flow Enhancement Implementation Grant Program
- SB 5 California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018

A brief description of the SRF loan and grant program pursuits is provided in the following sections.

SRF Low Interest Loans

To reduce the cost burden on the Project partners’ ratepayers, SRWA is pursuing an SRF loan in parallel with grant funding opportunities. As such, SRWA submitted a General Application for Drinking Water SRF funding in December 2016 expressing its intentions to finance the costs of designing and constructing the Project, except for the wet well, with a Safe Drinking Water SRF low-interest loan. The General Application was the first of four application packages required to be considered for an SRF loan. The other three packages include the Financial, Environmental, and Technical application packages. One of the requirements of the Financial application package is the Tax Questionnaire, which is used by SRF to determine whether SRWA is eligible to receive funds from tax-exempt revenue bond sales. SRWA submitted the Tax Questionnaire on August 15, 2017 in hopes of gaining confirmation from DFA staff that SRWA will be eligible to receive SRF financing. Issues with SRWA’s eligibility are not expected, but this early submittal of the Tax Questionnaire will provide sufficient time to pursue other funding sources if SRWA is found ineligible for SRF funding. The Environmental application package will be submitted in May 2018 once the EIR is complete. The Financial and Technical application packages will be submitted once the DB procurement process has progressed to a point in which the Project cost and technical elements are fairly certain.

Grant Funding Opportunities

In addition to SRF loan funding, a variety of grant funding from various State and Federal programs are being actively tracked as is indicated by the Funding Opportunities Log in Attachment 4. SRWA is carefully monitoring the IRWM Implementation Grant Program, which may solicit applications in early 2018, and the Drought Resiliency Program. Both the Public Works and Economic Adjustment Assistance Grant Program and the CDBG Program are potential sources of funding to which the City of Ceres may be eligible to apply.

Lastly, Senate Bill 5, signed by the Governor on October 15, 2017 identifies \$30,000,000 for the “regional water supply projects within the San Joaquin River hydrologic unit that diversify local water supplies by providing local surface water to communities that are dependent on contaminated groundwater, reduce municipal groundwater pumping, and benefit agricultural and municipal water supplies.” This funding will be applicable to the Project as long as voters approve this general obligation bond measure in November 2018.

PUBLIC OUTREACH

On September 22, 2016, a Public Outreach Plan (Plan) TM⁶, dated July 29, 2016, was presented to the Board for acceptance. This document provides a public outreach strategy and the following key initial actions: Conduct stakeholder interviews, review and provide updates for the Project website, develop initial fact sheet, and continue to refine the stakeholder list. The goal of the Public Outreach Plan is to increase the public’s overall awareness of the Project, convey the need for the Project, and the benefits it will bring the communities it serves. The public outreach program will build recognition and awareness by providing factual, up-to-date information as it is happening. Below is a summary of interviews that were held with various stakeholders as well as a summary of the key messages and fact sheets developed during Phase 1.

Interviews with Key Stakeholders

To ensure that community issues and concerns are incorporated into the Project planning process, feedback from key stakeholders/community leaders was sought via one-on-one interviews. Interviews were solicited from key stakeholders in Turlock within a broad range of categories including business, education and agriculture. Interviews were conducted by Chair Soiseth, Board member Amy Bublak and TAC member Michael Cooke. Some of the key themes that emerged from the interviews include:

⁶ “SRWA Surface Water Supply Project Public Outreach Plan” TM dated July 29, 2016 is posted to the SRWA website here: http://stanrwa.org/documents/docs/Technical_Memorandums/Public%20Outreach%20Plan%20082216.pdf

Project Benefits

- The need to increase awareness of the water quality issues related to both cities continuing to rely solely on groundwater and the fact that the Project will significantly improve delivered water quality.
- The need to reinforce the positive impacts the Project will have on long-term water sustainability for the region (specifically, the benefits of a conjunctive use system for a reliable water supply and the benefits to community development that can be gained from a reliable water supply).

Potential Issues/Concerns

- Concern about the potential rate increases.
- Concern that one group of stakeholders will benefit from the Project at the expense of others.

Based on the interview feedback, it will be important to reinforce that rate increases will happen even without the Project because the maintenance and upgrades required to keep the groundwater wells delivering water that meet state water quality standards will require rate increases. It is also important to reinforce the efforts underway by SRWA to mitigate Project costs through obtaining state and federal grants and low-interest loans, and pursuing additional definition and preliminary design for several key aspects of the Project to reduce risk and costs.

Key Messages

As stated in the July 2016 Plan, outreach messages should be consistent, simple, meaningful, and have personal relevance. These high-level messages are designed to serve as the overarching narrative for general audiences. The key messages outlined in the Public Outreach Plan encompass the purpose and need for the Project and provide a high-level overview of how implementation of the Project will provide benefits for residential, municipal/industrial and agricultural customers. Some of the key messages that will be used in public outreach materials include:

- The Project will significantly improve drinking water quality and water supply reliability,
- Water rate increases will happen with or without the Project (due to the need to implement various CIP projects to keep the groundwater wells up to the state standards), and
- SRWA is taking steps to mitigate Project costs through pursuit of various state and federal grants, and consideration of life-cycle and the cost-effectiveness of various Project elements.

These messages are delivered using a variety of communications channels, including fact sheets, which are discussed in the following section.

Fact Sheets

Several fact sheets have been developed during Phase 1. In the Fall of 2016 a “Leave Behind” information flyer/fact sheet was developed which summarized the Project details, Project benefits, funding options, and schedule. This fact sheet was initially used by The Gualco Group in meetings with policy makers and funding agencies. This fact sheet was also made available to the public at City counters and provided during the stakeholder interviews. In the Summer of 2017, a two-sided, one-page Project Overview fact sheet and Project Financing fact sheet were developed and posted on the SRWA website⁷ and distributed at the major Project “roll out” at the Board meeting on August 3, 2017. The Project Overview fact sheet provides a project summary, list of benefits, explanation of why the Project is needed and project cost and schedule. The Project Financing fact sheet provides a project financing summary, summary of the Project cost, estimated cost breakdown by agency, and summary of anticipated rate increases resulting from Project implementation. The fact sheets are useful for meetings with politicians and funding agencies as well as the public.

NEXT STEPS

As stated at the beginning of this document, Phase 1 represents the early planning and pre-design phase from April 2016 through October 2017, Phase 2 describes the planning, pre-design, and procurement phase from November 2017 through July 2019 (when a contract with a DB contractor is expected to be executed), and Phase 3 represents the design and construction phase from August 2019 until September 2022 (when the Project is anticipated to be operational). This TM has summarized the activities conducted and decisions made during Phase 1. With Board approval of the next PM services contract on October 26, 2017, Phase 2 commenced on November 1, 2017. The following sections describe the next steps of the Project that will be completed in Phases 2 and 3.

Phase 2 (through DB Contract Execution)

The primary activities occurring during Phase 2 will revolve around the solicitation of a DB contractor (i.e., Project procurement). As part of this solicitation, a Request for Qualifications for DB teams will be used to identify a shortlist of qualified teams to receive a Request for Proposal in order to prepare a proposal for evaluation and selection by the SRWA. In parallel with the DB contractor solicitation, many supporting activities will occur, including:

- Solicitation of a contractor for the wet well project.
- Construction of the wet well and testing and development of the Infiltration Gallery.
- Completion of environmental permitting documents, including EIR for the regional Project.
- Ongoing pursuit of non-environmental permits and agreements.

⁷ Project Overview Fact Sheet is posted on the SRWA website here: <http://stanrwa.org/documents/docs/General%20Project%20Overview%20Summer%202017.pdf>

Project Financing Fact Sheet is posted on the SRWA website here: <http://stanrwa.org/documents/docs/Surface%20Water%20Supply%20Project%20Financing%20Fact%20Sheet.pdf>

- Ongoing tracking and support of funding opportunities.
- Preparation of an SRF application.
- Development of a project alternatives analysis to meet SRF requirements.
- Continued sampling and analysis of the Tuolumne River for water quality.
- Preliminary design of the regional Project facilities.
- Pursuit of TID's water right modifications.
- ROW Acquisition for the raw and finished water transmission mains.
- Development of a surface water/groundwater integration study.
- Discussions with potential water contactors.
- Maintenance of the Project schedule.
- Development of construction, O&M, and life-cycle cost estimates.
- Cash flow projections and tracking of actual expenses.
- Updates to the cost sharing allocations between Project partners.
- Ongoing public outreach.

Phase 3 (DB Contract Initiation through Construction/Start-up)

Phase 3 will commence upon the execution of the DB Contract for the regional Project. An executed SRF funding agreement is also expected to be in place by the beginning of Phase 3. The defining activities of Phase 3 will be the design and construction of the regional Project facilities and the local facilities in Turlock and Ceres. SRWA and the Program Management team will be involved in the oversight of the DB contract during design, construction, and commissioning. Public outreach will increase as the Project becomes more visible and nears completion. Interaction and coordination with the Division of Drinking Water for the Permit to Operate will occur during construction and be completed following a successful Project start-up.

ATTACHMENT 1

Wet Well Permitting Matrix

Stanislaus Regional Water Authority Project Permits, Government Approvals and Other Agreements - Wet Well Permitting Matrix

DRAFT - WORKING

	Federal
	State
	Regional
	Local
	Other

Updated 11/9/17

Item	AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/DESIGN/CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
CONSTRUCTION RELATED PERMITS AND AGREEMENTS:																
GOVERNMENT APPROVALS PROCURED BY AUTHORITY																
Federal Authorities																
1	Agency: U.S. Army Corps of Engineers Application: Clean Water Act Section 404 permit for dredge or fill of waters of the United States.	Section 404 requires a permit for discharge of dredge or fill material within Waters of the United States.	Triggered by discharge piping temporary fill - this is needed for the infiltration gallery testing. Letter of permission issued for previous project infiltration gallery testing. A Time Extension has been applied for.	Dylan Van Dyne	E	Design	Wet Well	50%	Horizon			NA	None			In Review by USACE
State Authorities																
2	Agency: California Department of Fish and Wildlife Nesting Bird Requirements (CEQA)	If nesting raptors are found during the focused survey, no grading or tree removal will occur within 500 feet of the active nest until the young have fledged or written authorization is received from the California Department of Fish and Wildlife. To be included in project specifications			E	Design	Wet Well		Horizon		NA	NA	None	NA	NA	Addressed in Project Specifications
3	Agency: California Department of Fish and Wildlife Agreement: Section 1600 Streambed Alteration Agreement; Incidental Take Permit	CDFW Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state and requires any person, governmental agency, or public utility proposing an activity that will divert or obstruct the natural flow or change the bed, channel or bank of any river, stream, or lake, or proposing to use any material from a streambed, must first notify CDFW of such proposed activity. CDFW will write the Streambed Alteration Agreement (SAA) with terms and conditions designed to protect and/or compensate for these resources.	1602 Notification will be prepared and submitted; CDFW may issue an agreement, or determine that none is necessary.	Linda Connolly (559) 243-4005	E	Design	Wet Well	90%	Horizon		Project Specific expiration date valid for up to 5 years.	SRWA	\$5,000	1/1/2018	12/31/2019	In Review by CDFW
4	Agency: California Department of Fish and Wildlife Agreement: Permit for Access to Fox Grove Park	A permit is required for access to Fox Grove Park		Julie Vance or John Battistoni (559) 243-4014 ext. 219	C	Design	Wet Well	90%	West Yost					9/27/2017	1/31/2020	Complete
4	Agency: California Department of Transportation Permits: Oversize/Overweight Permits	Transportation permits are required for the movement of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. This requirement is to be included in the project specifications.	Contractor to acquire permit	(916) 322-1297	D	Construction	Wet Well	50%	Contractor				\$90/permit	NA	NA	Addressed in Project Specifications
5	Agency: California Department of Transportation Application: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			C	Construction	Wet Well	Construction	Contractor				None	NA	NA	Addressed in Project Specifications
6	Agency: Cal OSHA Permits: Construction Safety Permits	Cal/OSHA and Title 8 of the California Code of Regulations was developed to ensure a safe and healthful work environment for the California workforce by setting minimum standards for workplace safety and health. All California employers and employees, including private contractors and their employees working on federal facilities in California, are subject to these regulations. Requirement to obtain these permits is to be included in the project specifications.		Eddie Miranda (209) 545-7310 (Modesto Cal/OSHA District Office)	C	Construction	Wet Well	50%	Contractor		NA	Contractor responsible for application, payment of fees, and compliance.	Contractor fees < \$300/year	NA	NA	Addressed in Project Specifications
7	Agency: Cal OSHA Permits: Permit-Required Confined Space Program	Entry permits must be provided by the contractor to allow and control entry into a permit-required confined space. Requirement to obtain these permits is to be included in the project specifications.		Eddie Miranda (209) 545-7310 (Modesto Cal/OSHA District Office)	D	Construction	Wet Well	50%	Contractor		NA	Contractor responsible for application, payment of fees, and compliance.	Contractor fees < \$300/year	NA	NA	Addressed in Project Specifications
8	Agency: Central Valley RWQCB Application: Clean Water Act Section 401 Certification or Waste Discharge Requirements	Under federal Clean Water Act (CWA) section 401 every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification (Certification) that the proposed activity will comply with state water quality standards. Most Certifications are issued in connection with U.S. Army Corps of Engineer (Corps) CWA section 404 permits for dredge and fill discharges. Starting in 2016, project applicants conducting dredge, fill, excavation or grading in waters of the state will be required to upload project information into EcoAtlas. Starting in 2017, some project applicants will be required to perform project assessments using CRAM on their project sites. If no Section 404 permit is needed, then a similar permit will be required under the state Porter-Cologne Water Quality Control Act by filing a Report of Waste Discharge and obtaining Waste Discharge Requirements.	http://www.waterboards.ca.gov/northcoast/water_issues/programs/water_quality_certification.shtml		E	Design	Wet Well		Horizon				\$720 annual discharge fee + \$11,000 application fee (300 ft pipe from wet well to pond, 830 ft pipe from pond to river, 200 ft pipe from wet well to river = 1330 ft x \$8.10/ft = \$10,773)			?
9	Agency: State Water Resources Control Board Application: General Permit for Stormwater Discharges Associated with Construction Activities	The preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) under the state-wide General Permit for Stormwater Discharges Associated with Construction Activities is required. Coverage is obtained by filing with the State WRCB a Notice of Intent to comply with the General Permit. This requirement is to be included in the project specifications.			D/C	Construction	Wet Well	50%	Contractor		Permit is renewed annually during construction period.		Approximately \$600 (based on area of 1 acre)			Addressed in Project Specifications

AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/ DESIGN/ CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
Regional Authorities															
10	Agency: Central Valley Flood Protection Board Application: Encroachment Permit	Approval by the Board is required for projects or uses which encroach into rivers, waterways, and floodways within and adjacent to federal and state authorized flood control projects and within designated floodways adopted by the Board. Board approval and encroachment permits must be obtained before construction work. Our approach will be to update the existing 2009 permit for the wet well and pipeline. Per section six of the permit, the permit shall remain in effect until revoked.	Need to submit Time Variance Requests for work during flood season	Mike Thao 916-574-0684 Mike.Thao@CVFlood.ca.gov	D	Design	Wet Well	50%	West Yost	NA	NA	None	8/15/2017	None. Work must commence within 1 year of issuance of permit.	Complete
11	Agency: San Joaquin Valley Air Pollution Control District Permit: Authority to Construct (construction phase)	Permits are required by state and federal law for any operation or equipment that has the potential to emit air contaminants. Permits are required of both small and large businesses and agencies, and are required before construction begins for a new operation; whenever a change of ownership occurs; before a modification takes place; or before equipment is replaced or relocated. Requirement to obtain these permits is to be included in the project specifications.	Contractor is responsible for complying with all air pollution control rules, regulations, ordinances and statutes during construction and operation of facilities, including permit fees and fines.	Nick Peirce, 209-557-6400	C/E	Construction	Wet Well	100%	Contractor	Vicinity map, equipment listing, short project description & process flow schematic, process parameters, control equipment/technology	Permit to Operate is renewed annually.	Contractor will be responsible for fees during the design - build process.	\$79 filing fee for each permit unit		Addressed in Project Specifications
12	Agency: San Joaquin Valley Air Pollution Control District Application: Construction Notification Form	Owner or operator of a construction project must provide written notification to the District at least 48 hours prior to commencing any earthmoving activity. Notification is required if the project involves: • A residential development construction site that is at least 1.0 acre but is less than 10.0 acres in area or • A non-residential development construction site that is at least 1.0 acre but less than 4.0 acres in area This requirement is to be included in the project specifications.			D	Construction	Wet Well	100%	Contractor	Written notification at least 48 hours prior to commencing, dust control plan		None			Addressed in Project Specifications
13	Agency: San Joaquin Valley Air Pollution Control District Application: Dust Control Plan	Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities requires the owner or operator of a construction project to submit a Dust Control Plan to the District if at anytime the project involves: • Residential developments of ten or more acres of disturbed surface area, • Non-residential developments of five or more acres of disturbed surface area, or • Moving, depositing, or relocating of more than 2,500 cubic yards per day of bulk materials on at least three days of the project. This requirement is to be included in the project specifications.	District will review and approve or disapprove Dust Control Plan within 30 days of submittal		C	Construction	Wet Well	100%	Contractor			None	NA	NA	Addressed in Project Specifications
14	Agency: Stanislaus Consolidated Fire Protection District Permit: Stanislaus Fire Marshal Review	Review and approval by the local fire marshal shall be obtained for work associated with the construction and operation of the facilities, including but not limited to fire code compliance, storage of hazardous materials, construction traffic plans, and emergency response plan. Building Departments typically route design drawings to the Fire Marshal of jurisdiction for review and approval. Requirement is to be included in the project specifications.	It is not anticipated that this will be required, but will confirm initial review process requires two weeks to complete. Typically included in Building Department permitting process.		D	Not Required	Wet Well		West Yost	http://stanislauscounty/fpl/under-standing-the-fire-marshall-plan-review-process.pdf 2 copies of plans, calculations, cut sheets, water flow test, and completed application form	NA	Usually included in Building Department Plan-Check	\$110 deposit + \$110 per hour of review		Not Required for Unoccupied Structures
15	Agency: Stanislaus County Permit: Monitoring Well/Boring Permit	Required for monitoring wells and soil/geotechnical borings. Requirement to obtain these permits is to be included in the project specifications.	http://www.stancounty.com/er/pdf/Monitoring-Well-Construction.pdf Required for soil/geotechnical borings. Total fee is a function of the number of wells and/or borings required	Stanislaus County Department of Environmental Resources 209-525-6700	D	Construction	Wet Well	100%	Contractor			\$265 + \$53/additional (up to 6) to construct Same cost to destruct			Addressed in Project Specifications
16	Agency: Stanislaus County Application: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			C	Not Required	Wet Well	Construction	Contractor			None			Addressed in Project Specifications
17	Agency: Stanislaus County Application: Well Construction/Destruction Permit	A permit is required for the construction or destruction of a well, including dewatering wells. Requirement to obtain this permit is to be included in the project specifications.		Stanislaus County Department of Environmental Resources 209-525-6774	D	Construction	Wet Well	100%	Contractor	Plot Plan		Contractor responsibility. \$578 for well construction \$310 for well destruction		Permit expires 1 year from date issued	Addressed in Project Specifications
	Agency: Stanislaus County Application: Encroachment Permit	For construction under Geer Road. Not required because Contractor will be travelling under Geer Road, but not performing work under the bridge.	No construction will be performed under the Geer Road bridge, so this permit is not needed	Stanislaus County Department of Public Works 209-525-7594	D/C	Not Required	Wet Well		Contractor			\$40			Addressed in Project Specifications

	AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/ DESIGN/ CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
18	Agency: Stanislaus County Agricultural Commissioner Application: Herbicide Use Coordination	Coordinate the use of all herbicides used for the removal of unwanted vegetation during construction activities with the Stanislaus County Agricultural Commissioner. Submit applications, training records, and pesticide use reports as required.			D/C		Wet Well	90%	Contractor				None			Addressed in Project Specifications
19	Agency: Stanislaus County on behalf of California Wildlife Conservation Board Application:	Maintain access to Fox Grove Park at all times during construction. Requirement is to be included in the project specifications.			C		Wet Well	Construction	Contractor				None			Addressed in Project Specifications
20	Agency: Stanislaus County Planning & Community Development Permit: Building Permit	Apply for building permit after obtaining use permit. Required for all new construction, additions, alterations, upgrades, rebuilding or remodeling of existing structures.	Stanislaus County Planning Commission or Board of Supervisors will either approve or deny application at advertised public hearing, 90-120 process time	Stanislaus County Department of Planning and Community Development, Building Permits Division 209-525-6557	D	Not Required	Wet Well	90%	West Yost	Site Plan, Foundation Plan, Floor Framing Plan, Exterior Elevations, Structural Calculations, Floor Plan, Roof Framing Plan, Truss Calculations, Cross Sections, Energy Calculations			\$82 + \$1.28/\$1000 of improvement valuation Assuming \$15 million for wet well construction, additional fee would be \$20,000			Not Required for Unoccupied Structures
21	Agency: Stanislaus County Planning & Community Development Permit: Grading Permit	Unclear if this is required for anything but development. Flood plain verification may be required.			D	Not Required	Wet Well	90%	West Yost				\$50 for application \$95/hr for plan check \$95/hr for field inspection \$855 deposit for level 3 permit (actual cost per hour charged)			Not Required
22	Agency: Stanislaus County Planning & Community Development Permit: Land Use Permit	The use permit must be obtained prior to submitting the building permit application.	http://www.stancounty.com/planning/documents/planning-fees.pdf	Department of Planning and Community Development 209-525-6557	D	Not Required	Wet Well	90%	West Yost	Copy of deed or legal description of the property, plot plan, elevation/drawing of any proposed new building			\$1931 to Planning \$450 to Public Works \$410 to DER \$106 to Planning Commission Clerk \$100 to General Plan \$100 to Flood Plain Admin \$55 to GIS Maintenance TOTAL \$3152 + any additional time at \$90/hour			Not Required
23	Agency: Stanislaus County Public Works and Planning Department Permit: Transportation Permit	The transportation permit's purpose is to enable the County to regulate movement of oversize loads over County bridges and roads in order to insure vehicle safety and to protect County bridges and roads. It is required when movement over County roads and bridges falls within the following criteria: • The truck, truck and trailer, vehicle, or vehicle and trailer are over the legal size defined in California Vehicle Code Division 15. • The load is over the legal size in terms of height, width, length, and/or weight as defined in California Vehicle Code Division 15.	May not be required	Stanislaus County Department of Public Works 209-525-7594	D	Construction	Wet Well	100%	Contractor	Certificate of Liability Insurance, Daily and annual blanket transportation permits	Renewed annually		\$16 daily transportation permit, \$90 annual blanket transportation permit			
24	Agency: Stanislaus County Department of Parks and Recreation Permit: Permission to use Fox Grove Regional Park areas for construction access and staging			(209) 525-6750	D	Design	Wet Well	90%	West Yost							Application in Review
Local Authorities																
25	Agency: City of Hughson Permit: Traffic Control Management Plan	A traffic control management plan shall be prepared and approved.			D	Not Required	Wet Well	90%	West Yost				None			Not Required
26	Agency: Turlock Irrigation District Application: Construction Under Overhead Powerlines	Contractor shall submit a detailed plan for the construction under and in the vicinity of Turlock Irrigation District's 115-kV overhead power lines. Turlock Irrigation District shall review and approve the plan prior to the contractor commencing work. Requirement to be included in project specifications.			C		Wet Well	50%	West Yost/Contractor				None			
Others																
27	Business Group: Stanislaus Wildlife Care Center Permit: Coordination			209-883-9414	C		Wet Well	Construction	West Yost/Contractor				None			
Local Landowner Rights of Entry, Easement Agreements, Joint Ownerships and Leasehold Tenants in Common																

ATTACHMENT 2

WTP Permit Matrix

Stanislaus Regional Water Authority Project Permits, Government Approvals and Other Agreements - Treatment Facility Permitting Matrix

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	Federal
	State
	Regional
	Local
	Other

Updated 11/9/17

ITEM	AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/ DESIGN/ CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
CONSTRUCTION RELATED PERMITS AND AGREEMENTS:																
GOVERNMENT APPROVALS PROCURED BY AUTHORITY																
Federal Authorities																
1	Agency: Environmental Protection Agency (EPA)	Requirements related to the State Revolving Fund Program (SRF): EPA funds 80% of these programs and requires states to comply with Federal Cross-cutters, the Davis-Bacon Act, American Iron and Steel Requirements, Disadvantaged Business Enterprise outreach, Single Audits, and others. Although not a "permit" per se, it's useful to track these and be aware of them during the planning and design phase of the project.			D	Design	Treatment Facility	50%				Agency				
2	Agency: FEMA Application: Conditional Letter of Map Revision (CLOMR)	A Conditional Letter of Map Revision (CLOMR) is FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA). The letter does not revise an effective NFIP map, it indicates whether the project, if built as proposed, would be recognized by FEMA. FEMA charges a fee for processing a CLOMR to recover the costs associated with the review. Building permits cannot be issued based on a CLOMR, because a CLOMR does not change the NFIP map. Once a project has been completed, the community must request a revision to the Flood Insurance Rate Map (FIRM) to reflect the project. "As-built" certification and other data must be submitted to support the revision request.	Required if in flood plain. Note: CLOMR process under review by FEMA - costs may change		D	Design	Treatment Facility		West Yost			Agency				
3	Agency: FEMA Application: Letter of Map Revision (LOMR)	A Letter of Map Revision (LOMR) is FEMA's modification to an effective Flood Insurance Rate Map (FIRM), or Flood Boundary and Floodway Map (FBFM), or both. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA). The LOMR officially revises the Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM), and sometimes the Flood Insurance Study (FIS) report, and when appropriate, includes a description of the modifications. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM, FBFM, or FIS report. All requests for changes to effective maps, other than those initiated by FEMA, must be made in writing by the Chief Executive Officer (CEO) of the community or an official designated by the CEO. Because a LOMR officially revises the effective NFIP map, it is a public record that the community must maintain. Any LOMR should be noted on the community's master flood map and filed by panel number in an accessible location.	Required if in flood plain. Note: LOMR process under review by FEMA - costs may change		D	Design	Treatment Facility		West Yost			Agency				
4	Agency: US Fish and Wildlife Service Application: Incidental Take Permit	Consultation and coordination with the US Fish and Wildlife service is required if avoidance of special status plant species is infeasible. If endangered species are encountered and cannot be avoided, a state of California Endangered Species Act Section 2081 incidental take permit must be obtained.			E	Design	Treatment Facility		Horizon							
5	Agency: US Fish and Wildlife Service Application: Section 7 Consultation/ Biological Assessment/Biological Opinion	The Federal Endangered Species Act (FESA) (16 USC 1531 et. seq.) requires formal consultation if a project involving a federal agency will result in the "taking" of a species currently listed as threatened or endangered. Under Section 7 of the FESA, the lead Federal Authority must prepare and submit to the U.S. Fish and Wildlife Service (USFWS) and/or the NMFS a Biological Assessment if a listed species could be impacted by the proposed action. A permit will be required if impacts to special species (e.g. steelhead, elderberry bushes) may result from infiltration screen cleaning and testing, Wet well construction, and/or Wet well testing.	USFWS/NMFS Consultation occurs during the 404/10 permit process. USFWS/NMFS issue biological opinion instead of a permit.		E	Design	Treatment Facility		Horizon		No given expiration date. Requirements for re-initiation of consultation with USFWS/NMFS if project has changed or new species or critical habitat is listed.					
State Authorities																
6	Agency: California Department of Fish and Wildlife Nesting Bird Requirements (CEQA)	If nesting raptors are found during the focused survey, no grading or tree removal will occur within 500 feet of the active nest until the young have fledged or written authorization is received from the California Department of Fish and Wildlife. To be included in project specifications			E	Design	Treatment Facility		Horizon				None			
7	Agency: California Department of Fish and Wildlife Approval: Section 2081 Incidental Take Permit	In order for the CDFW to issue a Consistency Determination (CD), the CDFW must determine that the conditions specified in the federal incidental take statement or the federal incidental take permit obtained during the Section 7 process, are consistent with the California Endangered Species Act (CESA). The CDFW will only be able to provide a CD until after the biological opinions are developed by USFWS and NMFS during Section 7 consultation and the Corps Section 404 permitting process.	It is assumed that this permit will be avoided DFW Issues incidental take permit consistent with the Biological Opinion		E	Design	Treatment Facility		Horizon		Project Specific expiration date valid for up to 5 years.					
8	Agency: California Department of Transportation Permits: Encroachment Permit	Encroachment permits must be obtained for any proposed activity related to the placement of encroachments within, under, or over State highway rights of way.	Probably not required.	(916) 322-1297	D	Construction	Treatment Facility		West Yost							

AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/DESIGN/CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
9 Agency: California Department of Transportation Permits: Oversize/Overweight Permits	Transportation permits are required for the movement of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. This requirement is to be included in the project specifications.	Contractor to acquire permit	(916) 322-1297	C	Construction	Treatment Facility	Construction	Contractor			Responsibility of Contractor	\$90/permit			
10 Agency: California Department of Transportation Application: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			C	Construction	Treatment Facility	Construction	West Yost				None			
11 Agency: California Office of Historic Preservation Approval: National Historic Preservation Act Section 106 Compliance	Federal and federally-sponsored programs and projects are reviewed by the Office of Historic Preservation (OHP) pursuant to Sections 106 and 110 of the National Historic Preservation Act (NHPA). Section 106 of the NHPA, as amended, requires federal agencies to consider the effects of proposed federal undertakings on historic properties.	SHPO Consultation occurs during the 404/10 permit process. SHPO issues Section 106 concurrence letter instead of a permit.		E	Design	Treatment Facility		Horizon		No given expiration date. Requirements for re-initiation of consultation with SHPO if project has changed.					
12 Agency: Cal OSHA Permits: Construction Safety Permits	Cal/OSHA and Title 8 of the California Code of Regulations was developed to ensure a safe and healthful work environment for the California workforce by setting minimum standards for workplace safety and health. All California employers and employees, including private contractors and their employees working on federal facilities in California, are subject to these regulations. Requirement to obtain these permits is to be included in the project specifications.		Eddie Miranda (209) 545-7310 (Modesto Cal/OSHA District Office)	C	Construction	Treatment Facility	Construction	Contractor		NA	Contractor responsible for application, payment of fees, and compliance.	Contractor fees < \$300/year			
13 Agency: Cal OSHA Permits: Permit-Required Confined Space Program	Entry permits must be provided by the contractor to allow and control entry into a permit-required confined space. Requirement to obtain these permits is to be included in the project specifications.		Eddie Miranda (209) 545-7310 (Modesto Cal/OSHA District Office)	C	Construction	Treatment Facility	Construction	Contractor		NA	Contractor responsible for application, payment of fees, and compliance.	Contractor fees < \$300/year			
14 Agency: Cal OSHA Permit: Underground Classification for Tunneling Operations	Under California law, all tunnels (except horizontal directional drilling, which is at District Manager's discretion), underground chambers, and excavations, and all pipejacking and boring projects 30 inches or greater in diameter, are required to be Classified by the Division prior to bidding. This requirement is provided for in California Labor Code, Section 7955 [http://leginfo.ca.gov/faces/codes_displayText.xhtml], and Title 8 of the California Code of Regulations, Section 8422 [http://www.dir.ca.gov/title8/8422.html].		Mining and Tunneling Unit, District 1 (916) 574-2540	C	Prior to bidding	Treatment Facility	Construction	Contractor			Agency must obtain a Classification of environmental hazards from the Mining and Tunneling Unit prior to bidding the project. Operators and contractors must report plans to start a tunneling or pipe-jacking operation (40" and over) prior to beginning the project. The Mining and Tunneling Unit will schedule a pre-job safety conference.				
15 Agency: Central Valley RWQCB Permit: Dewatering and Low Threat Discharges to Surface Water	Untreated water from construction dewatering operations may contain pollutants that, if discharged to a storm drainage system or natural water course, would cause the water quality standards of the water to be violated. The intent of the permit is to prevent discharges from dewatering operations from contributing to the violation of water quality standards		Joshua Palmer (916) 464-4674 jpalmer@waterboards.ca.gov	C	Design	Treatment Facility		West Yost		Permit is renewed annually during the construction period.					
16 Agency: State Water Resources Control Board Application: General Permit for Stormwater Discharges Associated with Construction Activities	The preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) under the state-wide General Permit for Stormwater Discharges Associated with Construction Activities is required. Coverage is obtained by filing with the State WRCB a Notice of Intent to comply with the General Permit. This requirement is to be included in the project specifications.			D/C	Construction	Treatment Facility		West Yost		Permit is renewed annually during the construction period.		Approximately \$600 (based on area of 1 acre)			
17 Agency: State Water Resources Control Board - Division of Drinking Water Permit: New Domestic Water Supply Permit	The Division of Drinking Water (DDW) will require that the Agency obtain a New Domestic Water Supply Permit for the Project. There are many federal and state laws and regulations that have been developed and adopted over the years to assure that public drinking water is safe for human consumption. The majority of these statutes are contained in the Safe Drinking Water Act (chapter 7 of the California Health and Safety Code). The adoption of implementing regulations and the enforcement of the drinking water laws of California are the responsibility of the California Department of Public Health. The New Domestic Water Supply Permit Application involves the following components: • The Application for Domestic Water Supply Permit form. • The Technical, Managerial, and Financial (TMF) Assessment Form and information. • The Permit Technical Report.		Bhupinder Sahota, 209-948-7696	D	Design	Treatment Facility		West Yost		The State of California Domestic Water Supply Permit issued to you by the Department or the LPA is issued on a "one-time" basis. It is not subject to expiration and does not have to be routinely renewed. The permit, however, may need to be amended from time to time if changes in the water system occur. You should be aware that none of the following changes can					

	AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/ DESIGN/ CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
18	Agency: State Water Resources Control Board - Division of Drinking Water Permit: New Domestic Water Supply Permit - Letter of Conditional Approval				C	Construction	Treatment Facility	End of construction	West Yost							
19	Agency: State Water Resources Control Board Deliverable: NPDES Permit For Drinking Water System Discharges	It is the intention of the State Water Board to regulate all mandatory low-threat-type discharges from community water systems statewide with consistent regulation. This means that with the transition from Regional Water Board permits to the statewide permit, the Regional Water Boards will no longer be regulating the mandatory low-threat-type discharges from drinking water systems that meet the criteria of the statewide permit. The new statewide permit provides coverage for unplanned and emergency discharges in addition to discharges from supply wells and distribution systems. The statewide permit also grants a regulatory exemption to water purveyors for compliance with federal water quality criteria (the California Toxic Rule), and requires minimal monitoring and reporting.		Renan Jauregui (916) 341-5505	D	Design	Treatment Facility	100%	West Yost							
20	Agency: State Water Resources Control Board Deliverable: Urban Water Management Plan	Urban Water Management Plans (UWMPs) are prepared by California's urban water suppliers to support their long-term resource planning, and ensure adequate water supplies are available to meet existing and future water demands. Every urban water supplier that either provides over 3,000 acre-feet of water annually, or serves more than 3,000 urban connections is required to assess the reliability of its water sources over a 20-year planning horizon, and report its progress on 20% reduction in per-capita urban water consumption by the year 2020, as required in the Water Conservation Bill of 2009 SBX7-7. Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Agency must adopt an urban water management plan within one year after it has become an urban water supplier	Luis Avila (559) 230-3364 luis.avila@water.ca.gov	D	After water is supplied	Treatment Facility		SRWA		every 5 years	Agency				
Regional Authorities																
21	Agency: Central Valley Flood Protection Board Permit: Encroachment Permit	Approval by the Board is required for projects or uses which encroach into rivers, waterways, and floodways within and adjacent to federal and state authorized flood control projects and within designated floodways adopted by the Board. Board approval and encroachment permits must be obtained before construction work.	No fee. CVFPB will review design. Reclamation District(s) sign-off required	(916) 574-0609	D	Design	Treatment Facility	50%	West Yost	Permits for existing structure	NA	The contractor is required to apply for, obtain, and pay for all permits required by the CVFPB.	None			
22	Agency: San Joaquin Valley Air Pollution Control District Permit: Authority to Construct (construction phase)	Permits are required by state and federal law for any operation or equipment that has the potential to emit air contaminants. Permits are required of both small and large businesses and agencies, and are required before construction begins for a new operation; whenever a change of ownership occurs; before a modification takes place; or before equipment is replaced or relocated. Requirement to obtain these permits is to be included in the project specifications.	Contractor is responsible for complying with all air pollution control rules, regulations, ordinances and statutes during construction and operation of facilities, including permit fees and fines.	Nick Peirce, 209-557-6400	C/E	Construction	Treatment Facility	50%	Contractor	Vicinity map, equipment listing, short project description & process flow schematic, process parameters, control equipment/technology	Permit to Operate is renewed annually.	Contractor will be responsible for fees during the design-build process.	\$79 filing for each permit unit			
23	Agency: San Joaquin Valley Air Pollution Control District Permit: Authority to Construct (facility operation phase)	Permits are required by state and federal law for any operation or equipment that has the potential to emit air contaminants. Permits are required of both small and large businesses and agencies, and are required before construction begins for a new operation; whenever a change of ownership occurs; before a modification takes place; or before equipment is replaced or relocated. Requirement to obtain these permits is to be included in the project specifications.	Contractor is responsible for complying with all air pollution control rules, regulations, ordinances and statutes during construction and operation of facilities, including permit fees and fines.	Nick Peirce, 209-557-6400		Construction	Treatment Facility		Contractor	Vicinity map, equipment listing, short project description & process flow schematic, process parameters, control equipment/technology	Permit to Operate is renewed annually.	Contractor will be responsible for fees during the design-build process.	\$79 filing fee for each permit unit			
24	Agency: San Joaquin Valley Air Pollution Control District Application: Construction Notification Form	Owner or operator of a construction project must provide written notification to the District at least 48 hours prior to commencing any earthmoving activity. Notification is required if the project involves: • A residential development construction site that is at least 1.0 acre but is less than 10.0 acres in area or • A non-residential development construction site that is at least 1.0 acre but less than 4.0 acres in area This requirement is to be included in the project specifications.			D	Construction	Treatment Facility	50%	Contractor	Written notification at least 48 hours prior to commencing, dust control plan			None			
25	Agency: San Joaquin Valley Air Pollution Control District Application: Dust Control Plan	Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities requires the owner or operator of a construction project to submit a Dust Control Plan to the District if at anytime the project involves: • Residential developments of ten or more acres of disturbed surface area, • Non-residential developments of five or more acres of disturbed surface area, or • Moving, depositing, or relocating of more than 2,500 cubic yards per day of bulk materials on at least three days of the project. This requirement is to be included in the project specifications.	District will review and approve or disapprove Dust Control Plan within 30 days of submittal			Construction	Treatment Facility	50%	Contractor							

AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/ DESIGN/ CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
26 Agency: San Joaquin Valley Air Pollution Control District Permit: Permit to Operate (construction phase)	Permits are required by state and federal law for any operation or equipment that has the potential to emit air contaminants. Permits are required of both small and large businesses and agencies, and are required before construction begins for a new operation; whenever a change of ownership occurs; before a modification takes place; or before equipment is replaced or relocated.	Contractor is responsible for complying with all air pollution control rules, regulations, ordinances and statutes during construction and operation of facilities, including permit fees and fines.	Nick Peirce, 209-557-6400		Construction	Treatment Facility		Contractor	Vicinity map, equipment listing, short project description & process flow schematic, process parameters, control equipment/technology	Permit to Operate is renewed annually.	Contractor will be responsible for fees during the design-build process.	\$79 filing fee for each permit unit			
27 Agency: San Joaquin Valley Air Pollution Control District Permit: Permit to Operate (facility operation phase)	Permits are required by state and federal law for any operation or equipment that has the potential to emit air contaminants. Permits are required of both small and large businesses and agencies, and are required before construction begins for a new operation; whenever a change of ownership occurs; before a modification takes place; or before equipment is replaced or relocated.	Contractor is responsible for complying with all air pollution control rules, regulations, ordinances and statutes during construction and operation of facilities, including permit fees and fines.	Nick Peirce, 209-557-6400		Construction	Treatment Facility		DB Contractor	Vicinity map, equipment listing, short project description & process flow schematic, process parameters, control equipment/technology	Permit to Operate is renewed annually.		\$79 filing fee for each permit unit			
28 Agency: Stanislaus Consolidated Fire Protection District Permit: Stanislaus Fire Marshal Review	Review and approval by the local fire marshal shall be obtained for work associated with the construction and operation of the facilities, including but not limited to fire code compliance, storage of hazardous materials, construction traffic plans, and emergency response plan. Building Departments typically route design drawings to the Fire Marshal of jurisdiction for review and approval. Requirement is to be included in the project specifications.	It is not anticipated that this will be required, but will confirm		D	Design	Treatment Facility	50%	West Yost	http://stanoes.com/pdf/fpb/understanding-the-fire-marshal-plan-review-process.pdf 3 copies of plans, calculations, cut sheets, water flow test, and completed application form	NA	Usually included in Building Department Plan Check	\$110 deposit + \$110 per hour of review			Initial review process requires two weeks to complete. Typically included in Building Department permitting process.
29 Agency: Stanislaus County Application:	Comply with County Noise Ordinance and Vibration Standards. Requirement is to be included in the project specifications.				Construction	Treatment Facility	50%	Contractor				None			
30 Agency: Stanislaus County Permit: Encroachment Permit	An Encroachment Permit is required for all construction work and proposed activities that encroach within, under, or over the County road right-of-ways.	Encroachment Engineer will approve or deny Encroachment Permit application upon determination that it is complete, time needed to review will depend on the project	Stanislaus County Department of Public Works 209-525-7594	D/C	Design	Treatment Facility		West Yost	Encroachment Permit Application,	Expires in six months.	The contractor will pay for encroachment permits.	\$40 permit cost, need liability insurance Permitting Cost Info/Encroachment Permit Additional fee-schedule.pdf			
31 Agency: Stanislaus County Permit: Monitoring Well/Boring Permit	Required for monitoring wells and soil/geotechnical borings. Requirement to obtain these permits is to be included in the project specifications.	Required for soil/geotechnical borings.	Stanislaus County Department of Environmental Resources 209-525-6700		Construction	Treatment Facility		Contractor				Total fee is a function of the number of wells and/or borings required			
32 Agency: Stanislaus County Permit: Pipeline Maintenance Agreement for Pipeline Crossing of County Right-of-Way	Complete prior to issuance of the encroachment permit for installation of a pipeline crossing a County road.		Stanislaus County Department of Public Works 209-525-7594		Design	Treatment Facility		West Yost							
33 Agency: Stanislaus County Application: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.				Construction	Treatment Facility		Contractor							
34 Agency: Stanislaus County Application: Well Construction/Destruction Permit	A permit is required for the construction or destruction of a well, including dewatering wells. Requirement to obtain this permit is to be included in the project specifications.		Stanislaus County Department of Environmental Resources 209-525-6774	D	Construction	Treatment Facility	0.5	Contractor	Plot Plan			Contractor responsibility. \$578 for well construction \$310 for well destruction.		Permit expires 1 year from date issued	
35 Agency: Stanislaus County Agricultural Commissioner Application: Herbicide Use Coordination	Coordinate the use of all herbicides used for the removal of unwanted vegetation during construction activities with the Stanislaus County Agricultural Commissioner. Submit applications, training records, and pesticide use reports as required.			D/C	Construction	Treatment Facility	90%	Contractor				None			
36 Agency: Stanislaus County Farm Bureau Activity: Coordination	The Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.	Contractor responsible to coordinate with local farmers and reclamation districts	209-522-7278		Design	Treatment Facility		West Yost		NA	No fees. Contractor coordination requirements defined for traffic during harvest periods and emergency access.				
37 Agency: Stanislaus County Farm Bureau Permit: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved. Requirement is to be included in the project specifications.				Construction	Treatment Facility		Contractor			Agency				
38 Agency: Stanislaus County on behalf of California Wildlife Conservation Board Application:	Maintain access to Fox Grove Park at all times during construction. Requirement is to be included in the project specifications.			C	Design	Treatment Facility	Construction	West Yost			No fees	None			

AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/DESIGN/CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
39 Agency: Stanislaus County Planning & Community Development Permit: Building Permit	Apply for building permit after obtainaing use permit. Required for all new construction, additions, alterations, upgrades, rebuilding or remodeling of existing structures.	Stanislaus County Planning Commission or Board of Supervisors will either approve or deny application at advertised public hearing, 90-120 process time	Stanislaus County Department of Planning and Community Development, Building Permits Division 209-525-6557	D	Design	Treatment Facility	90%	West Yost	Site Plan, Foundation Plan, Floor Framing Plan, Exterior Elevations, Structural Calculations, Floor Plan, Roof Framing Plan, Truss Calculations, Coss Sections, Energy Calculations		Agency	\$82 + \$1.28/\$1000 of improvement valuation			
40 Agency: Stanislaus County Planning & Community Development Permit: Grading Permit	Unclear if this is required for anything but development. Flood plain verification may be required.	Potentially not required		D	Design	Treatment Facility	90%	West Yost			Agency	\$50 for application \$95/hr for plan check \$95/hr for field inspection \$855 deposit for level 3 permit (actual cost per hour charged)			
41 Agency: Stanislaus County Planning & Community Development Permit: Land Use Permit	The use permit must be obtained prior to submitting the building permit application.	Potentially not required	Department of Planning and Community Development 209-525-6557	D	Design	Treatment Facility	90%	West Yost	Copy of deed or legal description of the property, plot plan, elevation/drawing of any proposed new building		Agency	\$1931 to Planning \$450 to Public Works \$410 to DER \$106 to Planning Commission Clerk \$100 to General Plan \$100 to Flood Plain Admin \$55 to GIS Maintenance TOTAL \$3152 + any additional time at \$90/hour http://www.stan-county.com/planning/documents/planning-fees.pdf			
42 Agency: Stanislaus County Public Works Permit: Transportation Permit	The transportation permit's purpose is to enable the County to regulate movement of oversize loads over County bridges and roads in order to insure vehicle safety and to protect County bridges and roads. It is required when movement over County roads and bridges falls within the following criteria: <ul style="list-style-type: none">The truck, truck and trailer, vehicle, or vehicle and trailer are over the legal size defined in California Vehicle Code Division 15.The load is over the legal size in terms of height, width, length, and/or weight as defined in California Vehicle Code Division 15.		Stanislaus County Department of Public Works 209-525-7594	D	Construction	Treatment Facility	90%	Contractor	Certificate of Liability Insurance, Daily and annual blanket transportation permits	Renewed annually	Contractor	\$16 daily transportation permit, \$90 annual blanket transportation permit			
Local Authorities															
43 Agency: Ceres Fire Marshall Agreement: Jurisdiction Approval	Review and approval by the local fire marshal shall be obtained for work associated with the construction and operation of the facilities, including but not limited to fire code compliance, storage of hazardous materials, construction traffic plans, and emergency response plan.			D	Design	Treatment Facility		West Yost							
44 Agency: Stanislaus Consolidated Fire Protection District Agreement: Jurisdiction Approval	Review and approval by the local fire marshal shall be obtained for work associated with the copnstruction and operation of the facilities, including but not limited to fire code compliance, storage of hazardous materials, construction traffic plans, and emergency response plan.			D	Design	Treatment Facility		West Yost							
45 Agency: Turlock Irrigation District Application:	Contractor shall submit a detailed plan for the construction under and in the vicinity of Turlock Irrigation District's 115-kV overhead power lines. Turlock Irrigation District shall review and approve the plan prior to the contractor commencing work. Requirement to be included in project specifications.			C	Construction	Treatment Facility	50%	West Yost/Contractor				None			
Others															
46 Business Group: Stanislaus Wildlife Care Center Permit: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and submitted to the Stanislaus Wildlife Care Center for comment.		209-883-9414	D	Design	Treatment Facility									
Local Landowner Rights of Entry, Easement Agreements, Joint Ownerships and Leasehold Tenants in Common															

ATTACHMENT 3

Pipeline Permit Matrix

Stanislaus Regional Water Authority Project Permits, Government Approvals and Other Agreements - Pipeline Permitting Matrix

DRAFT - WORKING COPY

Federal
State
Regional
Local
Other

Updated 11/9/17

ITEM	AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/DESIGN/CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
CONSTRUCTION RELATED PERMITS AND AGREEMENTS:																
GOVERNMENT APPROVALS PROCURED BY AUTHORITY																
Federal Authorities																
1	Agency: Environmental Protection Agency (EPA)	Requirements related to the State Revolving Fund Program (SRF): EPA funds 80% of these programs and requires states to comply with Federal Cross-cutters, the Davis-Bacon Act, American Iron and Steel Requirements, Disadvantaged Business Enterprise outreach, Single Audits, and others. Although not a "permit" per se, it's useful to track these and be aware of them during the planning and design phase of the project.			E	Design	Pipelines	50%	Horizon							
2	Agency: US Fish and Wildlife Service Application: Incidental Take Permit	Consultation and coordination with the US Fish and Wildlife service is required if avoidance of special status plant species is infeasible. If endangered species are encountered and cannot be avoided, a state of California Endangered Species Act Section 2081 incidental take permit must be obtained.			E	Design	Pipelines		Horizon							
3	Agency: US Fish and Wildlife Service Application: Section 7 Consultation/ Biological Assessment/Biological Opinion	The Federal Endangered Species Act (FESA) (16 USC 1531 et. seq.) requires formal consultation if a project involving a federal agency will result in the "taking" of a species currently listed as threatened or endangered. Under Section 7 of the FESA, the lead Federal Authority must prepare and submit to the U.S. Fish and Wildlife Service (USFWS) and/or the NMFS a Biological Assessment if a listed species could be impacted by the proposed action. A permit will be required if impacts to special species (e.g. steelhead, elderberry bushes) may result from infiltration screen cleaning and testing, Wet well construction, and/or Wet well testing.	USFWS/NMFS Consultation occurs during the 404/10 permit process. USFWS/NMFS issue biological opinion instead of a permit.		E	Design	Pipelines		Horizon		No given expiration date. Requirements for re-initiation of consultation with USFWS/NMFS if project has changed or new species or critical habitat is listed.					
State Authorities																
4	Agency: California Department of Fish and Wildlife Nesting Bird Requirements (CEQA)	If nesting raptors are found during the focused survey, no grading or tree removal will occur within 500 feet of the active nest until the young have fledged or written authorization is received from the California Department of Fish and Wildlife. To be included in project specifications			E	Design	Pipelines		Horizon			None				
5	Agency: California Department of Fish and Wildlife Approval: Section 2081 Incidental Take Permit	In order for the CDFW to issue a Consistency Determination (CD), the CDFW must determine that the conditions specified in the federal incidental take statement or the federal incidental take permit obtained during the Section 7 process, are consistent with the California Endangered Species Act (CESA). The CDFW will only be able to provide a CD until after the biological opinions are developed by USFWS and NMFS during Section 7 consultation and the Corps Section 404 permitting process.	It is assumed that this permit will be avoided DFW Issues incidental take permit consistent with the Biological Opinion		E	Design	Pipelines		Horizon		Project Specific expiration date valid for up to 5 years.					
6	Agency: California Department of Transportation Permits: Encroachment Permit	Encroachment permits must be obtained for any proposed activity related to the placement of encroachments within, under, or over State highway rights of way.	Probably not required.	(916) 322-1297	C	Construction	Pipelines		Contractor							
7	Agency: California Department of Transportation Permits: Oversize/Overweight Permits	Transportation permits are required for the movement of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. This requirement is to be included in the project specifications.	Contractor to acquire permit	(916) 322-1297	D	Construction	Pipelines	50%	West Yost			Contractor	\$90/permit			
8	Agency: California Department of Transportation Application: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			C	Construction	Pipelines	Construction	West Yost				None			
9	Agency: California Office of Historic Preservation Approval: National Historic Preservation Act Section 106 Compliance	Federal and federally-sponsored programs and projects are reviewed by the Office of Historic Preservation (OHP) pursuant to Sections 106 and 110 of the National Historic Preservation Act (NHPA). Section 106 of the NHPA, as amended, requires federal agencies to consider the effects of proposed federal undertakings on historic properties.	SHPO Consultation occurs during the 404/10 permit process. SHPO issues Section 106 concurrence letter instead of a permit.		E	Design	Pipelines		Horizon		No given expiration date. Requirements for re-initiation of consultation with SHPO if project has changed.					
10	Agency: Cal OSHA Permits: Construction Safety Permits	Cal/OSHA and Title 8 of the California Code of Regulations was developed to ensure a safe and healthful work environment for the California workforce by setting minimum standards for workplace safety and health. All California employers and employees, including private contractors and their employees working on federal facilities in California, are subject to these regulations. Requirement to obtain these permits is to be included in the project specifications.		Eddie Miranda (209) 545-7310 (Modesto Cal/OSHA District Office)	C	Construction	Pipelines		Contractor		NA	Contractor responsible for application, payment of fees, and compliance.	Contractor fees < \$300/year			
11	Agency: Cal OSHA Permits: Permit-Required Confined Space Program	Entry permits must be provided by the contractor to allow and control entry into a permit-required confined space. Requirement to obtain these permits is to be included in the project specifications.		Eddie Miranda (209) 545-7310 (Modesto Cal/OSHA District Office)	C	Construction	Pipelines		Contractor		NA	Contractor responsible for application, payment of fees, and compliance.	Contractor fees < \$300/year			

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12 Agency: Cal OSHA Permit: Underground Classification for Tunneling Operations	Under California law, all tunnels (except horizontal directional drilling, which is at District Manager's discretion), underground chambers, and excavations, and all pipejacking and boring projects 30 inches or greater in diameter, are required to be Classified by the Division prior to bidding. This requirement is provided for in California Labor Code, Section 7955 [http://leginfo.ca.gov/faces/codes_displayText.xhtml], and Title 8 of the California Code of Regulations, Section 8422 [http://www.dir.ca.gov/title8/8422.html].		Mining and Tunneling Unit, District 1 (916) 574-2540	C	Prior to bidding	Pipelines		Contractor			Agency must obtain a Classification of environmental hazards from the Mining and Tunneling Unit prior to bidding the project. Operators and contractors must report plans to start a tunneling or pipe-jacking operation (40" and over) prior to beginning the project. The Mining and Tunneling Unit will schedule a pre-job safety conference.				
13 Agency: Central Valley RWQCB Permit: Dewatering and Low Threat Discharges to Surface Water	Untreated water from construction dewatering operations may contain pollutants that, if discharged to a storm drainage system or natural water course, would cause the water quality standards of the water to be violated. The intent of the permit is to prevent discharges from dewatering operations from contributing to the violation of water quality standards		Joshua Palmer (916) 464-4674 jpalmer@waterboards.ca.gov	D	Design	Pipelines		West Yost		Permit is renewed annually during the construction period.					
14 Agency: State Water Resources Control Board Application: General Permit for Stormwater Discharges Associated with Construction Activities	The preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) under the state-wide General Permit for Stormwater Discharges Associated with Construction Activities is required. Coverage is obtained by filing with the State WRCB a Notice of Intent to comply with the General Permit. This requirement is to be included in the project specifications.			D/C	Construction	Pipelines		Contractor		Permit is renewed annually during the construction period.	Approximately \$600 (based on area of 1 acre)				
Regional Authorities															
15 Agency: San Joaquin Valley Air Pollution Control District Permit: Authority to Construct (construction phase)	Permits are required by state and federal law for any operation or equipment that has the potential to emit air contaminants. Permits are required of both small and large businesses and agencies, and are required before construction begins for a new operation; whenever a change of ownership occurs; before a modification takes place; or before equipment is replaced or relocated. Requirement to obtain these permits is to be included in the project specifications.	Contractor is responsible for complying with all air pollution control rules, regulations, ordinances and statutes during construction and operation of facilities, including permit fees and fines.	Nick Peirce, 209-557-6400	C/E	Construction	Pipelines		Contractor	Vicinity map, equipment listing, short project description & process flow schematic, process parameters, control equipment/technology	Permit to Operate is renewed annually.	Contractor will be responsible for fees during the design - build process.	\$79 filing for each permit unit			
16 Agency: San Joaquin Valley Air Pollution Control District Application: Construction Notification Form	Owner or operator of a construction project must provide written notification to the District at least 48 hours prior to commencing any earthmoving activity. Notification is required if the project involves: • A residential development construction site that is at least 1.0 acre but is less than 10.0 acres in area or • A non-residential development construction site that is at least 1.0 acre but less than 4.0 acres in area This requirement is to be included in the project specifications.			D	Construction	Pipelines		Contractor	Written notification at least 48 hours prior to commencing, dust control plan		None				
17 Agency: San Joaquin Valley Air Pollution Control District Application: Dust Control Plan	Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities requires the owner or operator of a construction project to submit a Dust Control Plan to the District if at anytime the project involves: • Residential developments of ten or more acres of disturbed surface area, • Non-residential developments of five or more acres of disturbed surface area, or • Moving, depositing, or relocating of more than 2,500 cubic yards per day of bulk materials on at least three days of the project. This requirement is to be included in the project specifications.	District will review and approve or disapprove Dust Control Plan within 30 days of submittal		C	Construction	Pipelines		Contractor			None				
18 Agency: San Joaquin Valley Air Pollution Control District Permit: Permit to Operate (construction phase)	Permits are required by state and federal law for any operation or equipment that has the potential to emit air contaminants. Permits are required of both small and large businesses and agencies, and are required before construction begins for a new operation; whenever a change of ownership occurs; before a modification takes place; or before equipment is replaced or relocated.	Contractor is responsible for complying with all air pollution control rules, regulations, ordinances and statutes during construction and operation of facilities, including permit fees and fines.	Nick Peirce, 209-557-6400	C	Construction	Pipelines		Contractor	Vicinity map, equipment listing, short project description & process flow schematic, process parameters, control equipment/technology	Permit to Operate is renewed annually.	Contractor will be responsible for fees during the design - build process.	\$79 filing fee for each permit unit			

AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/DESIGN/CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
19 Agency: Stanislaus Consolidated Fire Protection District Permit: Stanislaus Fire Marshal Review	Review and approval by the local fire marshal shall be obtained for work associated with the construction and operation of the facilities, including but not limited to fire code compliance, storage of hazardous materials, construction traffic plans, and emergency response plan. Building Departments typically route design drawings to the Fire Marshal of jurisdiction for review and approval. Requirement is to be included in the project specifications.	It is not anticipated that this will be required, but will confirm Initial review process requires two weeks to complete. Typically included in Building Department permitting process.		D	Design	Pipelines	50%	West Yost	http://stanoes.com/pdf/fpb/under-standing-the-fire-marshal-plan-review-process.pdf 3 copies of plans, calculations, cut sheets, water flow test, and completed application form	NA	Usually included in Building Department Plan Check	\$110 deposit + \$110 per hour of review			
20 Agency: Stanislaus County Application:	Comply with County Noise Ordinance and Vibration Standards. Requirement is to be included in the project specifications.			C	Construction	Pipelines		Contractor				None			
21 Agency: Stanislaus County Permit: Encroachment Permit	An Encroachment Permit is required for all construction work and proposed activities that encroach within, under, or over the County road right-of-ways.	Encroachment Engineer will approve or deny Encroachment Permit application upon determination that it is complete, time needed to review will depend on the project	Stanislaus County Department of Public Works 209-525-7594	D/C	Design	Pipelines		West Yost	Encroachment Permit Application,	Expires in six months.	The contractor will pay for encroachment permits.	\$40 permit cost, need liability insurance Permitting Cost Info/Encroachment Permit Additional fee-schedule.pdf			
22 Agency: Stanislaus County Permit: Monitoring Well/Boring Permit	Required for monitoring wells and soil/geotechnical borings. Requirement to obtain these permits is to be included in the project specifications.	Required for soil/geotechnical borings.	Stanislaus County Department of Environmental Resources 209-525-6700	C	Construction	Pipelines		Contractor				Total fee is a function of the number of wells and/or borings required			
23 Agency: Stanislaus County Permit: Pipeline Maintenance Agreement for Pipeline Crossing of County Right-of-Way	Complete prior to issuance of the encroachment permit for installation of a pipeline crossing a County road.		Stanislaus County Department of Public Works 209-525-7594	D	Design	Pipelines		West Yost							
24 Agency: Stanislaus County Application: Street Restoration Agreement	An agreement between the Agency and County specifying the restoration requirements for roads impacted by the project.			D	Design	Pipelines		West Yost							
25 Agency: Stanislaus County Application: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			C	Construction	Pipelines		Contractor							
26 Agency: Stanislaus County Application: Well Construction/Destruction Permit	A permit is required for the construction or destruction of a well, including dewatering wells. Requirement to obtain this permit is to be included in the project specifications.		Stanislaus County Department of Environmental Resources 209-525-6774	C	Construction	Pipelines	50%	Contractor	Plot Plan			Contractor responsibility. \$578 for well construction \$310 for well destruction.		Permit expires 1 year from date issued	
27 Agency: Stanislaus County Agricultural Commissioner Application: Herbicide Use Coordination	Coordinate the use of all herbicides used for the removal of unwanted vegetation during construction activities with the Stanislaus County Agricultural Commissioner. Submit applications, training records, and pesticide use reports as required.			D/C		Pipelines	90%	Contractor				None			
28 Agency: Stanislaus County Farm Bureau Activity: Coordination	Coordination regarding construction vehicle traffic.	Contractor responsible to coordinate with local farmers and reclamation districts	209-522-7278	D	Design	Pipelines				NA	No fees. Contractor coordination requirements defined for traffic during harvest periods and emergency access.				
29 Agency: Stanislaus County Farm Bureau Permit: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved. Requirement is to be included in the project specifications.			C	Construction	Pipelines									
30 Agency: Stanislaus County on behalf of California Wildlife Conservation Board Application:	Maintain access to Fox Grove Park at all times during construction. Requirement is to be included in the project specifications.			C	Construction	Pipelines	Construction	Contractor				None			
31 Agency: Stanislaus County Public Works Permit: Transportation Permit	The transportation permit's purpose is to enable the County to regulate movement of oversize loads over County bridges and roads in order to insure vehicle safety and to protect County bridges and roads. It is required when movement over County roads and bridges falls within the following criteria: • The truck, truck and trailer, vehicle, or vehicle and trailer are over the legal size defined in California Vehicle Code Division 15. • The load is over the legal size in terms of height, width, length, and/or weight as defined in California Vehicle Code Division 15.	May not be required	Stanislaus County Department of Public Works 209-525-7594	D	Construction	Pipelines	90%	West Yost	Certificate of Liability Insurance, Daily and annual blanket transportation permits	Renewed annually		\$16 daily transportation permit, \$90 annual blanket transportation permit			
Local Authorities															
32 Agency: City of Ceres Permit: Application for Encroachment and/or Utility Connection Permit	Permits required for excavation, construction, connection to utilities, or otherwise encroaching upon the right-of-way.	Assume Building Department Involvement at 0.1 % of construction cost, occurring throughout the design-build process. Assume 40 hours/year engineering coordination time with the contractor and Building Department	Engineering Services Department 209-538-5792	D	Design	Pipelines	50%	West Yost		Expires six months from date of issue.					
33 Agency: City of Ceres Application: Street Restoration Agreement	An agreement between the Agency and County specifying the restoration requirements for roads impacted by the project.				Design	Pipelines	50%	West Yost							
34 Agency: City of Ceres Permit: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			D/C	Design	Pipelines	50%	West Yost							
35 Agency: City of Hughson Permit: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			D/C	Design	Pipelines	50%	West Yost				None			
36 Agency: City of Modesto Permit: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			D/C	Design	Pipelines	50%	West Yost							

	AGENCY, UTILITY PERMIT, APPLICATION or AGREEMENT	GENERAL DESCRIPTION	NOTES	CONTACT NAME AND NUMBER	ENVIRONMENTAL/DESIGN/CONSTRUCTION	PROJECT PHASE	PROJECT FACILITY	APPLICATION START DATE	APPLICATION RESPONSIBILITY	REQUIRED DOCUMENTS	PERMIT EXPIRATION	PAYMENT RESPONSIBILITY	FEES	PERMIT START DATE	PERMIT EXPIRATION DATE	STATUS
37	Agency: City of Turlock Permit: Application for Encroachment and/or Utility Connection Permit	Permits required for excavation, construction, connection to utilities, or otherwise encroaching upon the right-of-way.			D/C	Design	Pipelines	50%	West Yost							
38	Agency: City of Turlock Application: Street Restoration Agreement	An agreement between the Agency and County specifying the restoration requirements for roads impacted by the project.			D/C	Design	Pipelines	50%	West Yost							
39	Agency: City of Turlock Permit: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			D/C	Design	Pipelines	50%	West Yost							
40	Agency: City of Turlock Permit: Transportation Permit	Required for movement of oversized loads in Ceres.	Contractor applies for the permit and pays fees.	Engineering Services Department 209-538-5792	C	Construction	Pipelines		Contractor		Duration of construction	The contractor will be responsible for obtaining Encroachment Permits and associated fees, Plan Check and Traffic Control review fees				
41	Agency: City of Turlock Permit: Utility Connection Permit				D	Design	Pipelines	50%	West Yost							
42	Agency: Turlock Irrigation District Application:	Contractor shall submit a detailed plan for the construction under and in the vicinity of Turlock Irrigation District's 115-kV overhead power lines. Turlock Irrigation District shall review and approve the plan prior to the contractor commencing work. Requirement to be included in project specifications.			C	Construction	Wet well, pipelines, treatment facility	50%	West Yost/Contractor			None				
	Others															
43	Business Group: Burlington Northern Santa Fe Railroad Permit: Right of Entry, Easement, and Indemnity Agreement	A permit will be required for pipelines crossing under the BNSF rail track.			D	Design	Pipelines		West Yost							
44	Business Group: Burlington Northern Santa Fe Railroad Permit: Traffic Control/Management Plan	A traffic control/management plan shall be prepared and approved.			D	Design	Pipelines		West Yost							
	Local Landowner Rights of Entry, Easement Agreements, Joint Ownerships and Leasehold Tenants in Common															
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ATTACHMENT 4

Funding Opportunity Log

SRWA Funding Opportunity Log

Revision 9/22/2017

Competitiveness Rating ^(a)	Funding Program	Project Types	Funding Agency	Due Date	Cost Share	Grant Amount	Applicant	Application Submitted	Status	Comments	Strategy	Near-term Action Items
Grants												
A	**NEW** SB 5 California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018	regional water supply projects within the San Joaquin River hydrologic unit that diversify local water supplies	TBD	TBD	TBD	TBD	SRWA			Recently approved by Legislature. If signed into law, this will be a very good fit for the SRWA project.	Monitor status.	Monitor Status.
A	Public Works and Economic Adjustment Assistance Grant	Planning, environmental, design, and construct	US Economic Development Administration	Ongoing	20-50%	\$100,000-\$3 million	Ceres, Turlock, SRWA		Exchanged messages, but have not connected yet.	Project must promote job and/or economic growth, or reduce likelihood of job loss and economic decline. SRWA is eligible to apply, as is each city. For the city pipelines, each city will likely be individual applicants.	1. Focus on this program just for design and construction portions of the project. 2. Discuss with the regional representative to determine the best course of action and verification of EDA priorities being met with project. 3. Select cities or SRWA as applicant depending on who can best show project activities linked to job growth.	1. Sheri to make first contact with EDA representative, Wilfred Marshall. P: 310-348-5386 E: wmarshall@eda.gov
A	Integrated Regional Water Management (IRWM)	Groundwater Protection/water quality/conjunctive use	Dept. of Water Resources	Summer for selected projects	25-50%	varies (\$31m available in San Joaquin Funding Area under Prop 1)	Ceres, Turlock, SRWA		Regional meetings are being attended.	25% for Disadvantaged Communities Project is included in East Stanislaus IRWMP and listed as a high priority project. East Stanislaus IRWM region must compete with 6 other RWMGs in the San Joaquin Funding Area.	1. Update project information in the IRWMP project list. 2. Actively participate in IRWM meetings regularly. 3. Advocate for a regional grant application that includes this project.	1. Update project information in the IRWMP project list to include drought resiliency. 2. Attend IRWM meetings regularly. In-Progress
A	Community Development Block Grant (CDBG)	Water Infrastructure	CA Housing and Community Development Dept.	April annually	Typically none	\$500,000 - \$1.5 million	Ceres		No Updates	Low and Moderate income cities with fewer than 50,000 population. Note: Turlock could allocate its CDBG funds received from HUD for water infrastructure.	1. Ceres to apply for a CDBG for a portion of the project. 2. Turlock to inquire with its Community Development Department regarding redirecting Community Development Funds to the project.	1. Consult with HCD representative to determine if the SRWA could apply on behalf of the City of Ceres. 2. Ceres to apply for a CDBG for an economic study. This would assist with future grants for construction of the distribution pipeline. 3. Turlock to inquire with its Community Development Department regarding redirecting Community Development Funds to the project.
A	Drought Resiliency Project	Projects to increase flexibility of water conveyance/delivery, including surface water intakes and conveyance systems	US Bureau of Reclamation	Jan./Feb annually	50%	Tier 1: \$300,000; Tier 2: \$750,000 million	Ceres, Turlock, SRWA			1. System modifications including construction to access new supplies. 2. Project scopes must be completed within 2 years for Tier 1, and 3 years for Tier 2. 3. Storing water and/or recharging groundwater supplies, including small-scale surface water storage facilities (e.g. off-stream storage ponds, water towers, and storage tanks for municipal and domestic use. 4. Injection wells to increase recharge of surplus, inactive, or reclaimed water. 5. Develop alternative sources of water supply including water treatment.	1. Depending on project status for the 2018 cycle, an application could be prepared. 2. Project should be submitted in phases to increase grant funding. For example, Phase 1 could be the treatment plant, phase 2 could be one pipeline and phase 3 could be another pipeline; or the pipelines to cities could be submitted individually with the Cities as the applicants.	1. Plan to discuss project status within the next 3 months.
A	Stream Flow Enhancement Implementation Grant	Stream flow enhancement projects, including infrastructure improvements, diversions to reshape hydrograph and support at-risk/anadromous/special status/threatened species, and provide climate change resiliency	Wildlife Conservation Board	July release, Due September	No Cost share required. Extra points for cost share	No Min. and No Max per implementation on application. Total funding per cycle is approx. \$50M. Past awards up to \$6M for implementation.	SRWA		Sufficient data regarding the streamflow benefits was not available to prepare a Phase I Implementation application for the design work.	1. California Conservation Corps consultation required. 2. Electronic application submission. 3. Disadvantaged community extra points. 4. Community Support & Stakeholder planning. 5. Needs to be consistent with state and federal plans. 6. Completion within 3 years preferred, but 5 years is statute. 7. Annual funding until 2020. 8. CEQA can be paid for with planning funds. 9. Awards announced in Feb. 2018, for Sept. 2017 grant cycle. 10. CEQA/NEPA must be completed before an award for implementation. 11. Pre-award expenditures are not eligible.	1. Submit Implementation application in 2018.	1. Obtain data/documentation on streamflow enhancement benefits.

SRWA Funding Opportunity Log

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Competitiveness Rating ^(a)	Funding Program	Project Types	Funding Agency	Due Date	Cost Share	Grant Amount	Applicant	Application Submitted	Status	Comments	Strategy	Near-term Action Items
B	Water Infrastructure Improvements for the Nation (WIIN) Act	Became a law on Dec. 16,2016	Multiple Federal agencies. Became a law on Dec. 16,2016	TBD	TBD	\$335 million for CA storage to match CA 2014 Water Bond.			Only funding released to support Title XVI Recycled Water Projects so far.	Title III, Subtitle J, of the law has both short-term and long-term provisions related to addressing the continuing drought in California. In the long-term, it invests in a number of water projects to promote water storage and supply, flood control, desalination, and water recycling. Early interpretation is most of these funds are for projects focused on water storage as it meets the 2014 CA Water Bond definition, desalination, and Central Valley Improvement Project.	1. Watch for releases for funding and review at that time.	
B	California Riparian Habitat Conservation Program	Projects to protect riparian habitats	Wildlife Conservation Board	Continuous	required, but amount unknown	unknown	SRWA		Need info on habitat improvements	Does not appear to be a competitive grant. Eligibility is determined by the program manager.		1. Determine if any project elements qualify as riparian protection and discuss with program manager.
B	Water and Energy Efficiency Grant	Water recharge, conjunctive use, renewable energy, water marketing, ecosystem improvements	US Bureau of Reclamation	Jan./Feb annually	50%	\$300,000, \$1 million	Ceres, Turlock, SRWA		No Changes	Two funding groups: Tier 1: \$300,000 Grant (most are funded here) Tier 2: \$1,000,000 Grant (must have a lot of benefits) The lack of water savings may be an issue.	1. Wait to apply for this funding until after the initial planning and pilot study have been completed.	
B	Watershed Restoration Grant Program	Implementation	Calif. Dept. of Fish and Wildlife	Summer annually	Not required	\$24 million available	SRWA			1. Projects located outside the legal Delta that benefit the State. 2. Shovel Ready project. (i.e. environmental permitting and land acquisition are complete and design is mostly complete)	1. Focus on the benefits of releasing more water into the river and improving salmonid habitat.	1. Review eligibility after project design is underway.
Loans												
A	Drinking Water SRF Loans	All project scope items.	State Water Resources Control Board	Continuous	None	Based on ability to repay	SRWA, Ceres, Turlock	12/9/2016	Pending	2016 Interest Rate 1.6% (50% of state general bond rate)	1. Begin and complete the CEQA process ASAP. 2. Conduct regular meetings with SRF loan staff a. Discuss eligibility and timing for SRF loans, b. Educate SRF staff about the Project, determine how SRWA can best position itself to receive funding, c. Review Flags Worksheet d. Involve Division of Drinking Water (DDW) Northern California Engineering Chief Richard Hinrichs and local DWW engineering staff. e. Discuss potential principal forgiveness for Ceres and possibly SRWA for the WTP.	1. Consult with Richard Hinrichs and Bhupinder Sahota (District). Completed 2. Prepare and submit an initial General Package Application. Completed 3. Obtain a funding loan number and SRF project manager (an advocate) from the DFA Completed
A	California Infrastructure Bank	All project scope items.	Governor's Office of Business and Economic Development	Continuous	None	\$25 Million per project	SRWA, Ceres, Turlock		Consultation is on hold pending SRF approval.	Interest rate depends on applicant financials	1. Pusue I-Bank loan in parallel with DWSRF loan pursuit. 2. Meet with I-Bank staff to determine eligibility and interest rates.	1. Consult I-Bank.

SRWA Funding Opportunity Log

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Competitiveness Rating ^(a)	Funding Program	Project Types	Funding Agency	Due Date	Cost Share	Grant Amount	Applicant	Application Submitted	Status	Comments	Strategy	Near-term Action Items
Funding Programs for which SRWA is Ineligible or Not Competitive												
Competitiveness Rating	Programs		Reason(s)									
C	Water Infrastructure Finance and Innovation Act (WIFIA)		SRWA was unable to respond to the 2017 Notice of Funding for water infrastructure projects because a Project Pro Forma was required to submit the Letter of Interest in April 2017 and SRWA did not have this available. No future cycles are anticipated.									
C	Water Storage Investment Program		Decision made in January 2017 not to pursue this program further as the application would be very costly and the program is likely to be very competitive.									
C	Delta Water Quality and Ecosystem Restoration Grant Program		Not part of legal Delta and no direct benefit to the Delta.									
C	Bay-Delta Restoration Program: CALFED Water Use Efficiency Grants		No water savings or direct habitat benefits.									
C	San Joaquin Conservancy		Fresno & Madera Counties only.									
C	Water Energy Grant		Must have water and energy savings.									
C	Central Valley Project Improvement Act Habitat Restoration Program		Project does not directly address program prioritized habitat concern.									
C	Prop. 1 Desalination Program		Not addressing the brackish groundwater problem.									
C	California Urban Rivers Grant Program		The location of the project is not within an urban land zone.									
C	Prop. 1 Groundwater Sustainability Program		Project does not address groundwater cleanup, prevent groundwater contamination, or treat groundwater for direct potable use.									
C	Habitat Conservation Fund, Anadromous Salmonids and Trout Habitat		Applicant must be authorized by statute to operate and manage parks or recreation areas/facilities. Project must also include public access (i.e. trails, park, etc.).									
C	Central Valley Project Improvement Act, Anadromous Fish Restoration Program		Unclear what type of projects this program funds, grant amounts, and how competitive SRWA would be. Call USFS, Pacific Southwest Region (209-334-2968) and/or work with government relations/public affairs firm to understand program and SRWA's competitiveness better.									

Note: ^(a) Competitiveness Rating is defined as follows:

A = SRWA will be competitive/action is recommended

B = SRWA is potentially competitive/continue to monitor the opportunity

C = SRWA is either not competitive or is ineligible/no further action recommended unless program significantly changes