



Harvest Water Contractor Outreach Meeting

Thursday, May 11, 2023

Harvest Water brought to you by Regional San 💧 regionalsan.com/harvest-water

Agenda

- 💧 Overview of Harvest Water Program
- 💧 Harvest Water Project Details
- 💧 Traffic Control and Pavement Restoration
- 💧 Environmental Permit Compliance
- 💧 Upcoming Regional San Projects
- 💧 Contractor Questions/Input

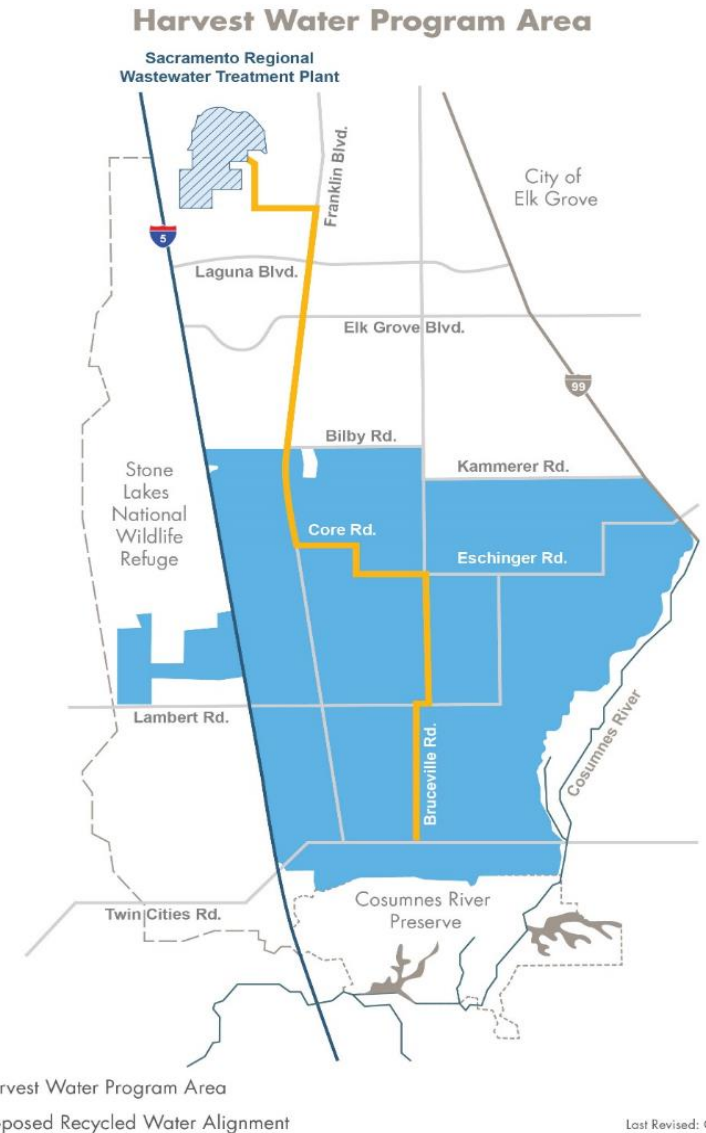


Harvest Water Program Overview



Harvest Water Overview

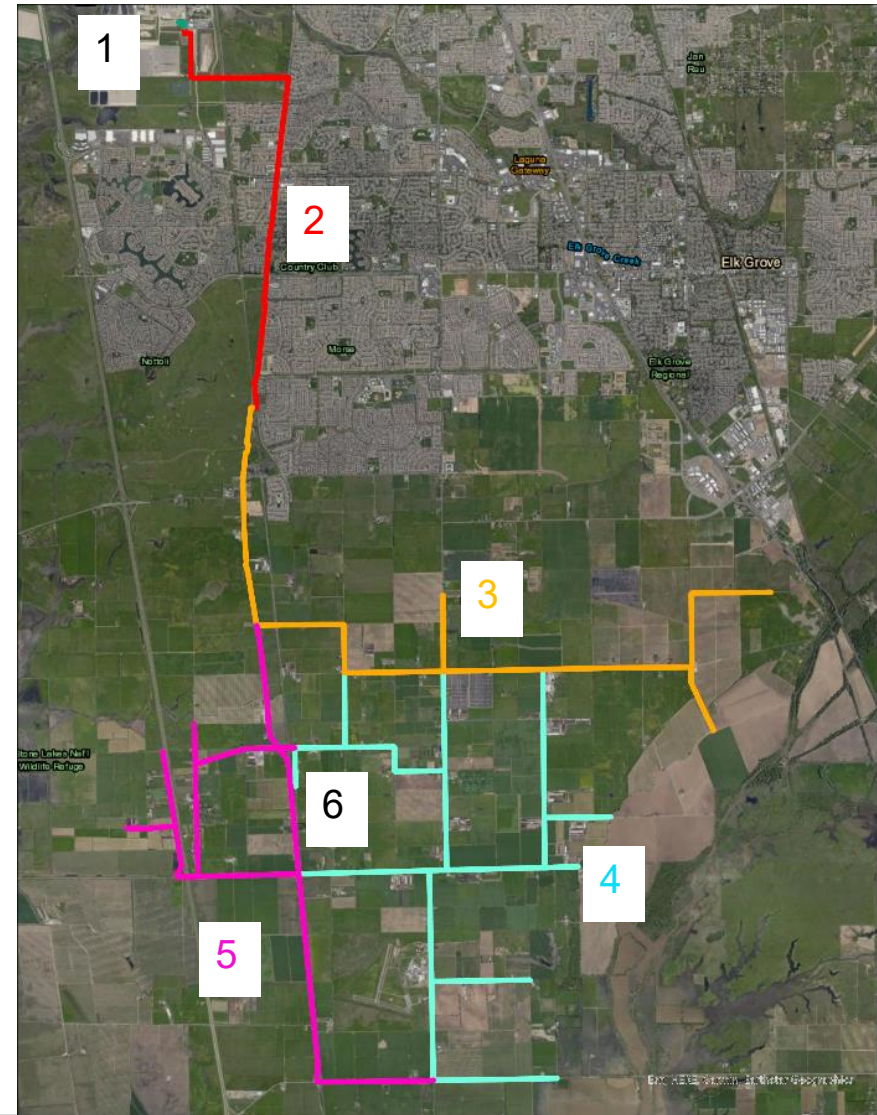
- Delivers up to 50,000 AFY of recycled water to 16,000 acres
 - Agricultural irrigation
 - Wintertime application
- Produces multiple public benefits
 - Groundwater restoration
 - Ecosystem improvements
 - Water quality improvements
 - Conjunctive use
 - Climate Resiliency
- Consistent with objectives of Prop 1 & Water Storage Investment Program (WSIP)
- Awarded \$291.8M Prop1 plus \$30M from US Bureau of Reclamation



Last Revised: October 13, 2020

Harvest Water Capital Projects

1. Harvest Water Pumping Station
2. Elk Grove Transmission Pipeline
3. Franklin/Eschinger Pipelines
4. Central/South Pipelines
5. West Pipelines
6. On-Farm Connection Assemblies



Harvest Water Pumping Station



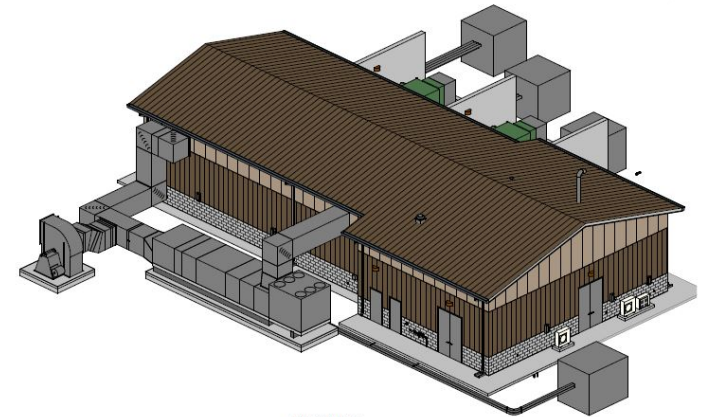
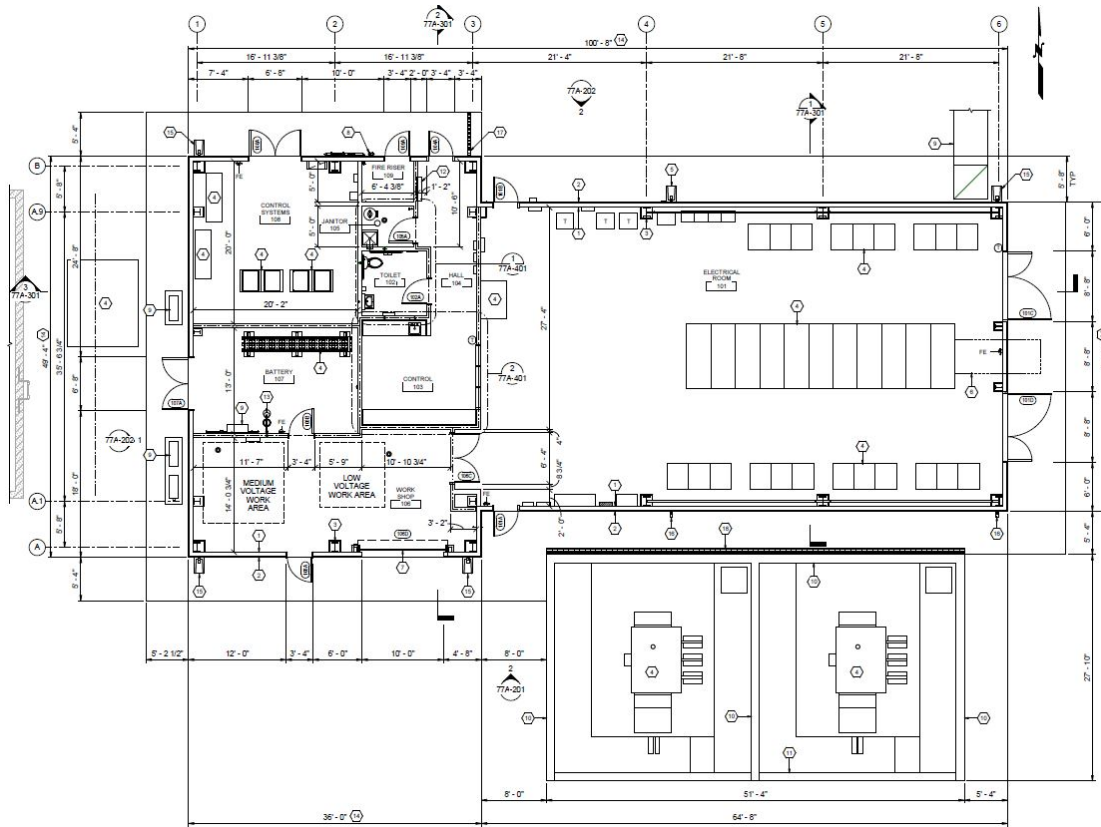
Harvest Water Pumping Station

- Located at SRWTP
- Total of 6 (+1 Future), 700 hp, 17.5 mgd/pump
- Total Flow: 105 mgd
- Designer: HDR
- Estimated Construction Cost: \$46.9M
- Bid Advertisement: July 2023
- Bid Opening: August 2023
- Contractor NTP: November 2023

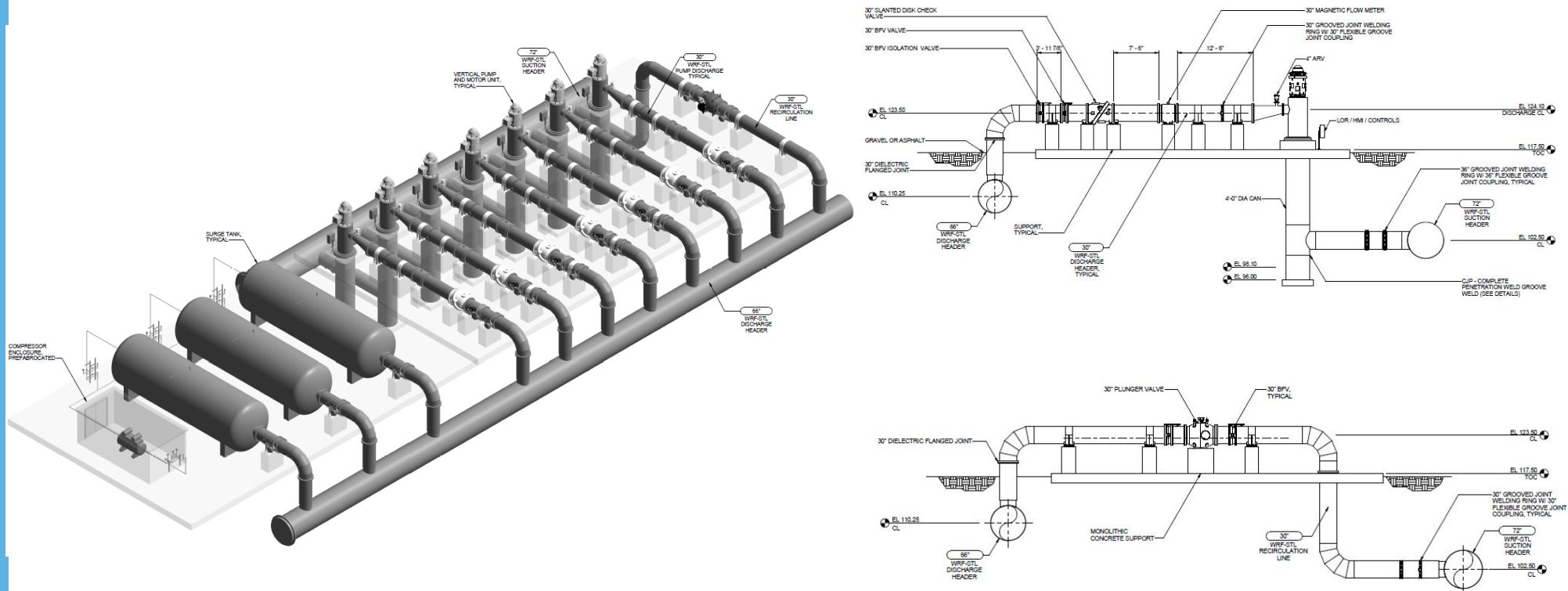
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Harvest Water Pumping Station – Substation Building



Harvest Water Pumping Station



Elk Grove Transmission Pipeline

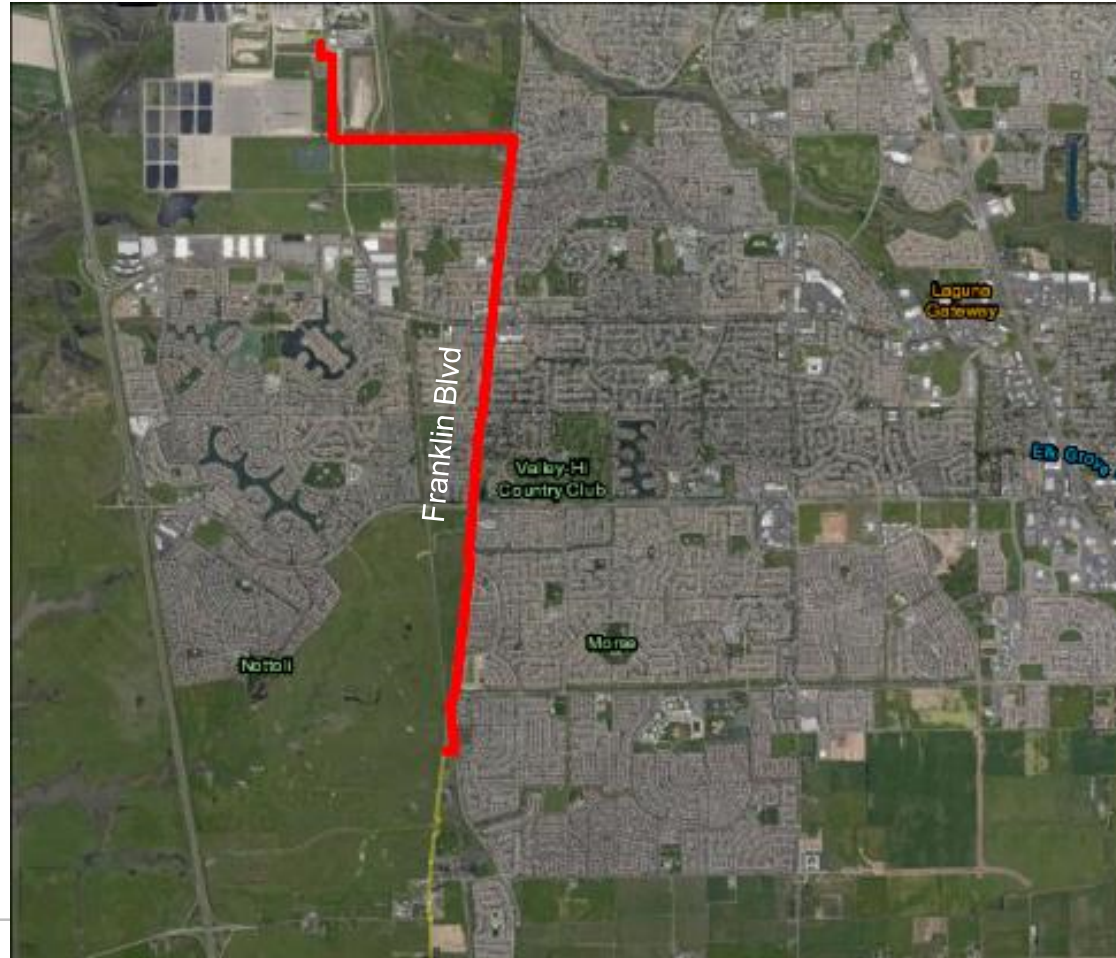


Elk Grove Transmission Pipeline

- Completely within SRWTP and City of Elk Grove
- Five miles of 66" steel pipeline
- Six trenchless crossings; microtunneling, 200-500ft
 - ▣ 2 UPRR crossings
 - ▣ 2 major intersection crossings
 - ▣ 2 waterway crossings
- Designer: Stantec
- Estimated Construction Cost: \$100M
- Bid Advertisement: October 2023
- Bid Opening: December 2023
- Contractor NTP: February 2024

Location	Length, ft	Length, mi
SRWTP	8,600	1.6
Elk Grove	21,200	4.0

Elk Grove Transmission Pipeline



Franklin/Eschinger Pipelines



Franklin/Eschinger Pipelines

- 💧 Ten Miles of 16" - 66" Pipeline in unincorporated Sacramento County
 - ❑ HDPE – 16" to 30" (Approx 8,300 LF)
 - ❑ Steel – 30" to 66" (Approx 45,000 LF)
- 💧 Two Trenchless Crossings
 - ❑ 350 LF & 187 LF Microtunneling (78" Steel Casings)
- 💧 Designer: Stantec
- 💧 Estimated Construction Cost: \$96M
- 💧 Bid Advertisement: May 2023
- 💧 Bid Opening: June 2023
- 💧 Contractor NTP: September 2023

Franklin/Eschinger Pipelines



Central/South Pipelines



Central/South Pipelines

- 15 miles of 14" - 36" pipeline
 - HDPE – 14" to 30"
 - Steel – 36"
- Open trench construction
- Three Trenchless Crossings
 - Pipe ram or auger bore
- Designer: Jacobs
- Estimated Construction Cost: \$40.2M
- Bid Advertisement: September 2023
- Bid Opening: October 2023
- Contractor NTP: January 2024

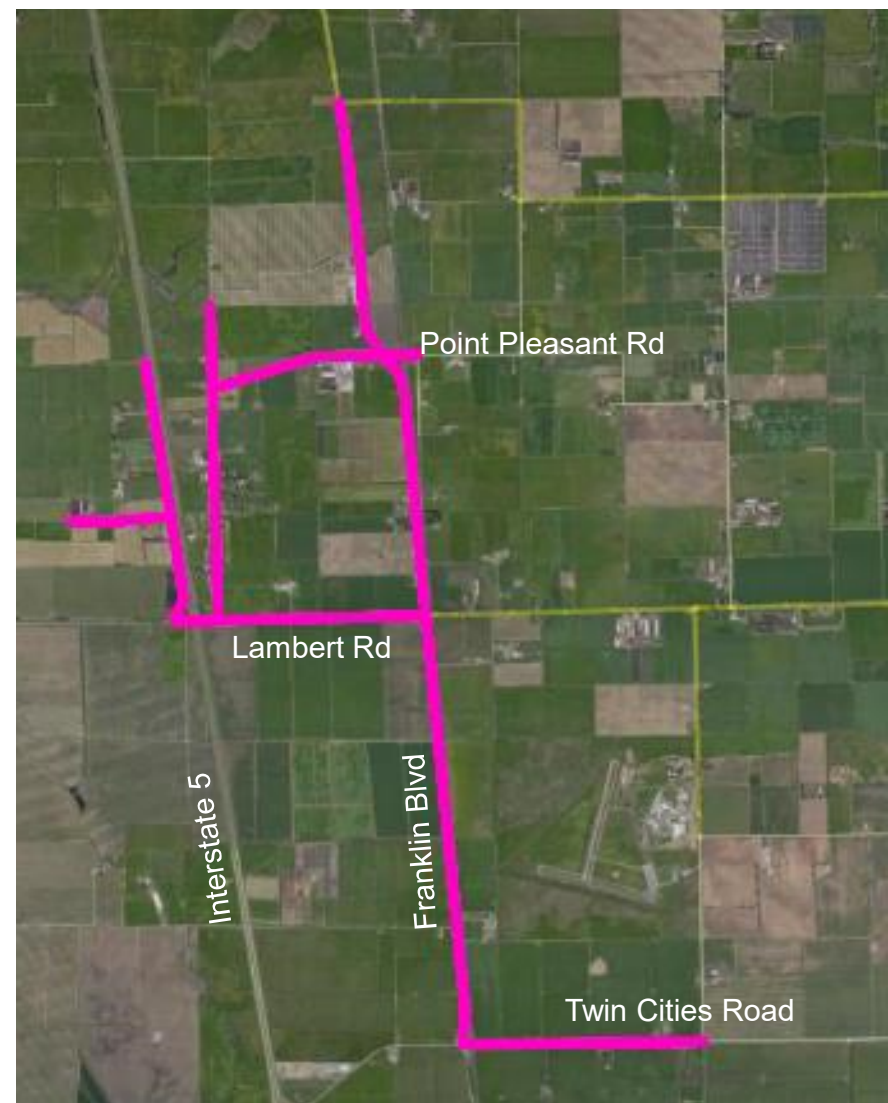


West Pipelines



West Pipelines

- 💧 12 miles of 14" to 48" pipeline
 - ❑ HDPE – 14" to 26"
 - ❑ Steel – 42" to 48"
- 💧 Nine trenchless crossings
 - ❑ 3 Auger bore (Railroad crossing)
 - ❑ 6 Pipe ram or auger bore (contractor choice)
- 💧 Designer: Jacobs
- 💧 Estimated Construction Cost: \$40M
- 💧 Bid Advertisement: July 2023
- 💧 Bid Opening: August 2023
- 💧 Contractor NTP: November 2023



On Farm Connection Assemblies



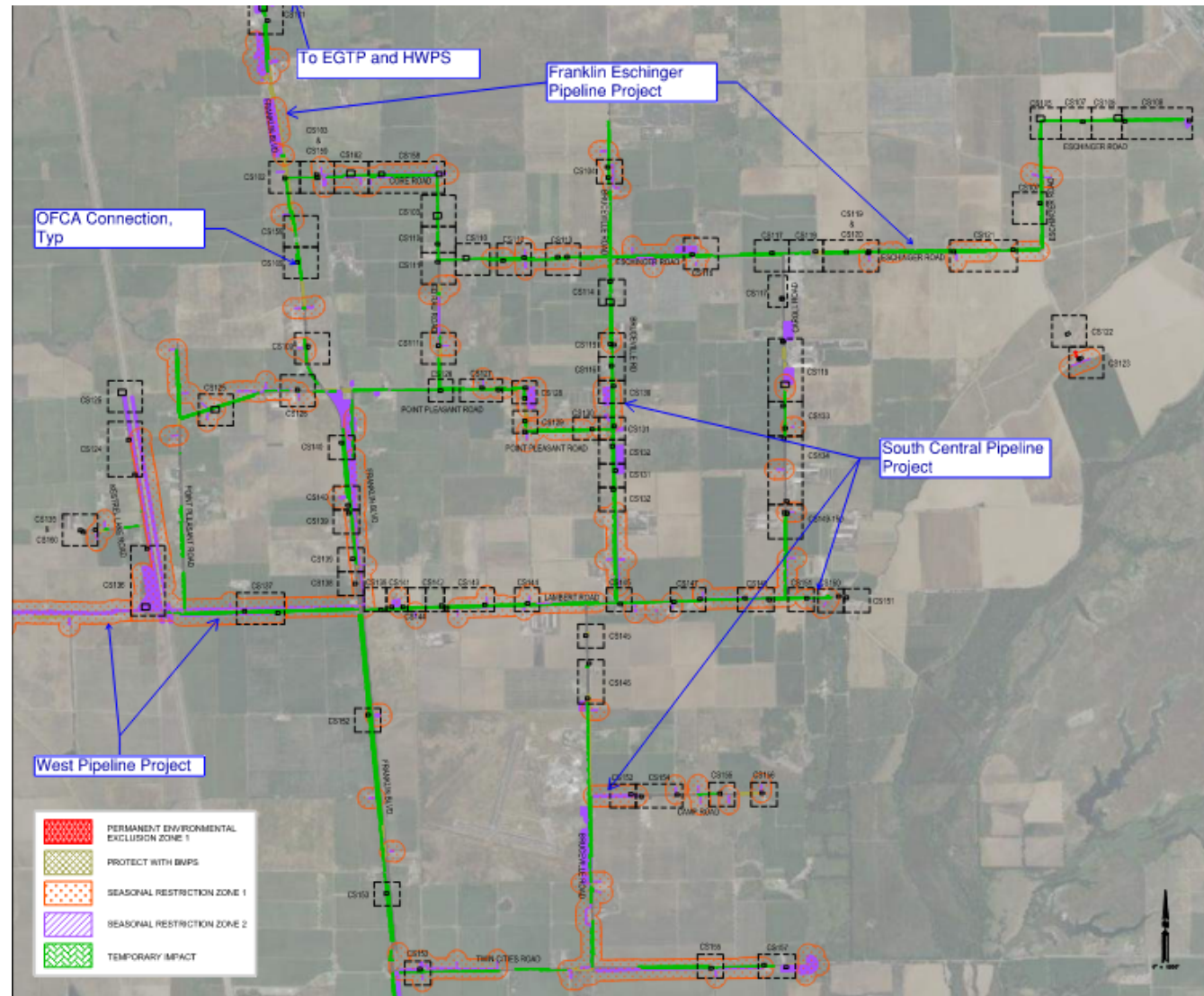
On Farm Connections Assemblies (OFCA) Project

- 💧 Providing connections at each grower location for delivering recycled water
- 💧 Up to 130 connections
- 💧 Designer: Kjelden Sinnock Neudeck
- 💧 Estimated Construction Cost: \$35.8M
- 💧 Bid Advertisement: January 2024
- 💧 Bid Opening: March 2024
- 💧 Construction NTP: June 2024

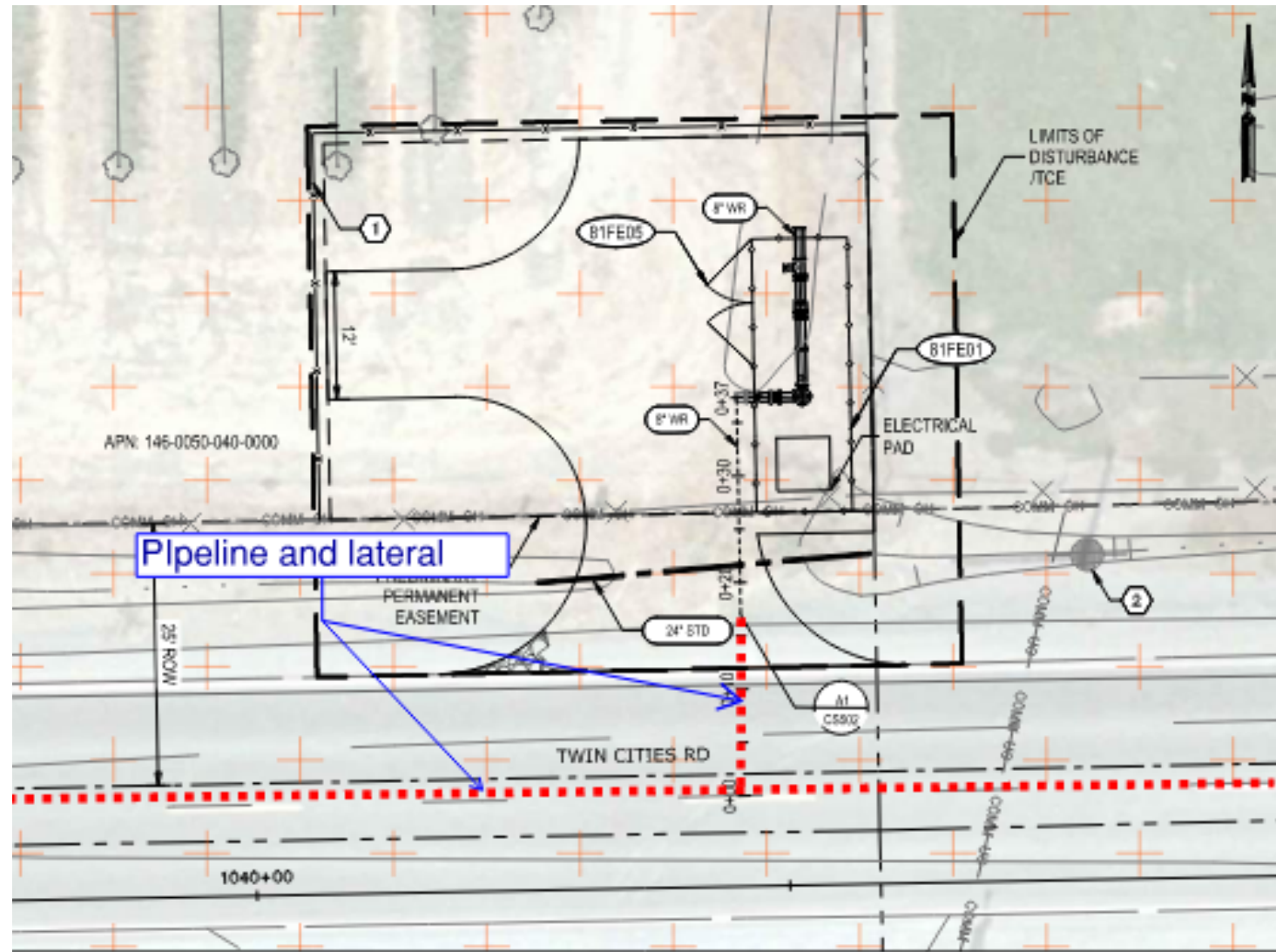
OFCA Locations

OFCA connections associated with three of the pipeline projects

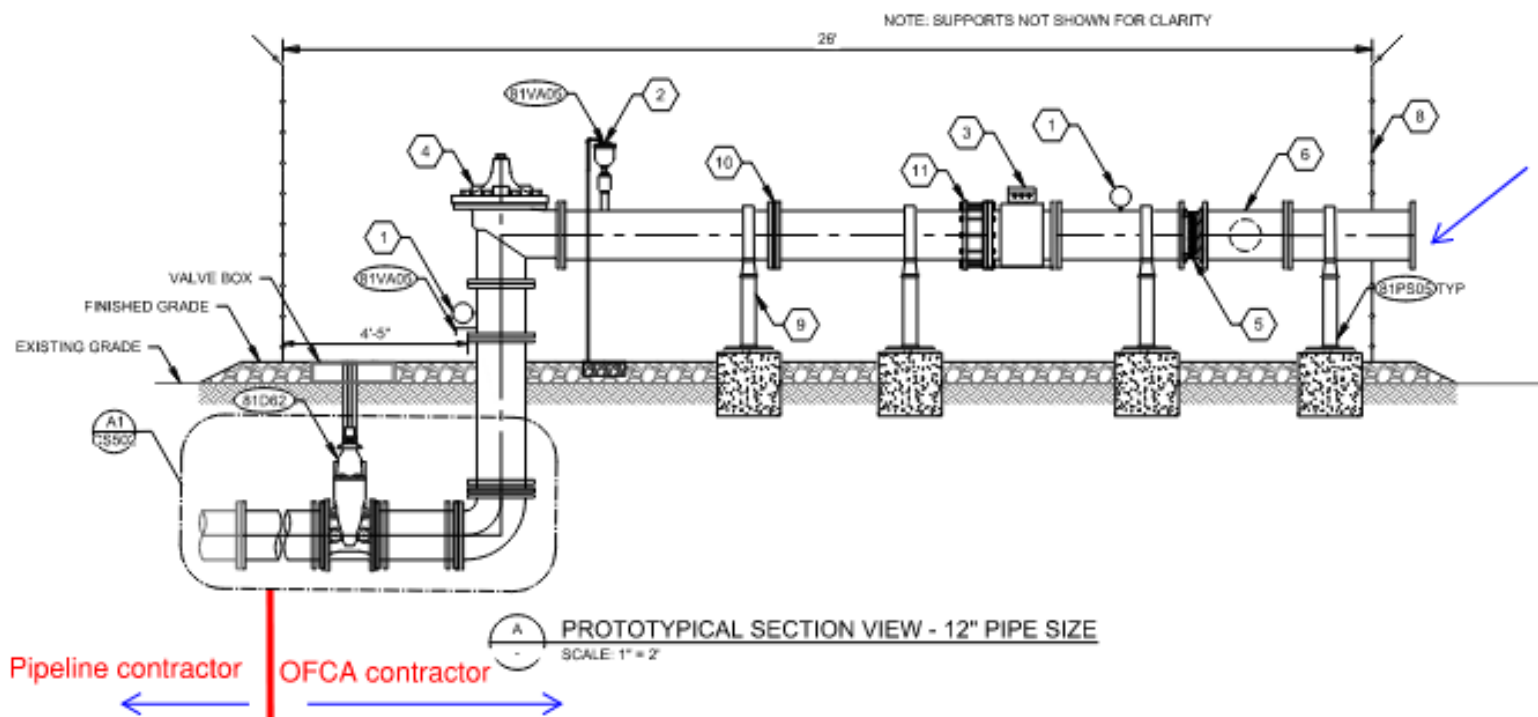
- FEP
- WEP
- CSP



Typical Site



Typical OFCA Assembly



1. PRESSURE GAGE
2. AIR RELEASE VALVE
3. MAGNETIC FLOWMETER
4. COMBINATION RATE OF FLOW AND PRESSURE REDUCING VALVE
5. CHECK VALVE
6. TEE
7. CORP STOP
8. SECURITY FENCE
9. ADJUSTABLE PIPE SUPPORT
10. ORIFICE PLATE
11. DISMANTLING JOINT OR SPLIT COUPLING
12. 5' x 5' ELECTRICAL PAD
13. 12' X 12' X 6" DEEP RETENTION BASIN

Connection size ranging from 4" to 16"

Traffic Control and Pavement Restoration



Traffic Control Considerations

- 💧 Within Elk Grove City Limits
 - ❑ Full lane closure – staggering traffic
- 💧 Within County
 - ❑ Open to full road closures, but working on specifics

Pavement Replacement Considerations

- 💧 Within Elk Grove City Limits
 - 📦 Full overlay
- 💧 Within County
 - 📦 Varies from trench repair to Full-Depth Reclamation (FDR) replacement

Environmental Permit Compliance



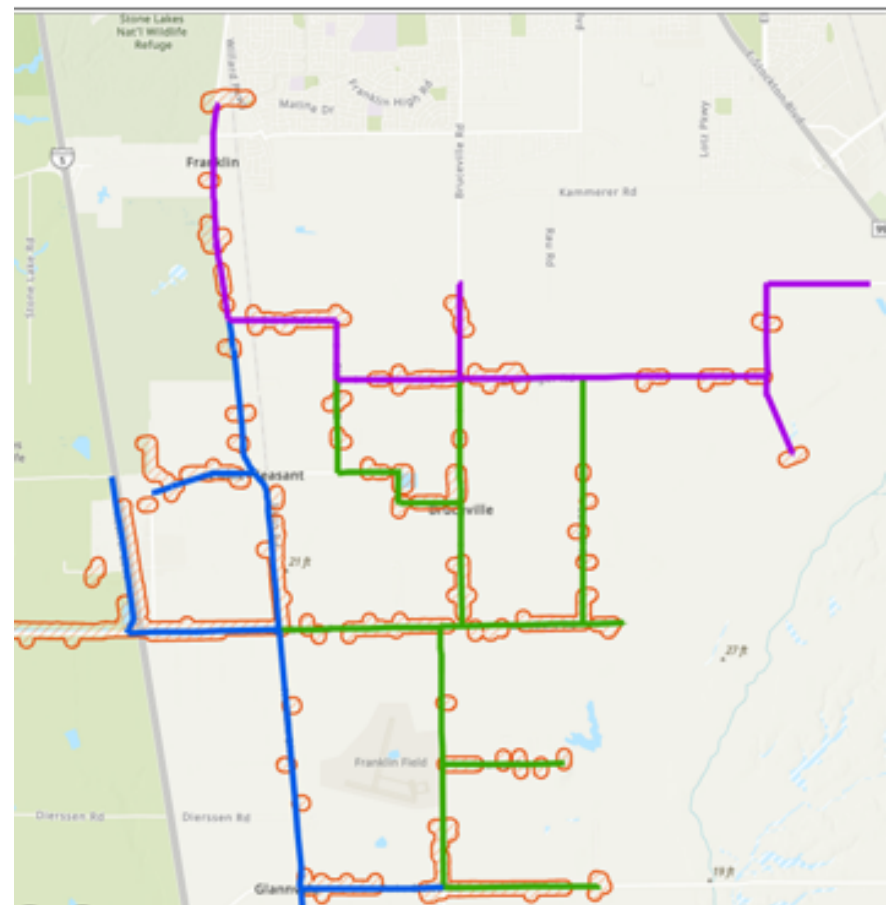
South Sacramento Habitat Conservation Plan (SSHCP)

- The SSHCP is the primary mechanism for project environmental permit compliance.
- Provides protection to 28 species of wildlife and their associated habitat. Fourteen (14) of these species occur within the HW project area. These include Giant Garter Snake, Western Pond Turtle, Sandhill Crane, and nesting raptors.



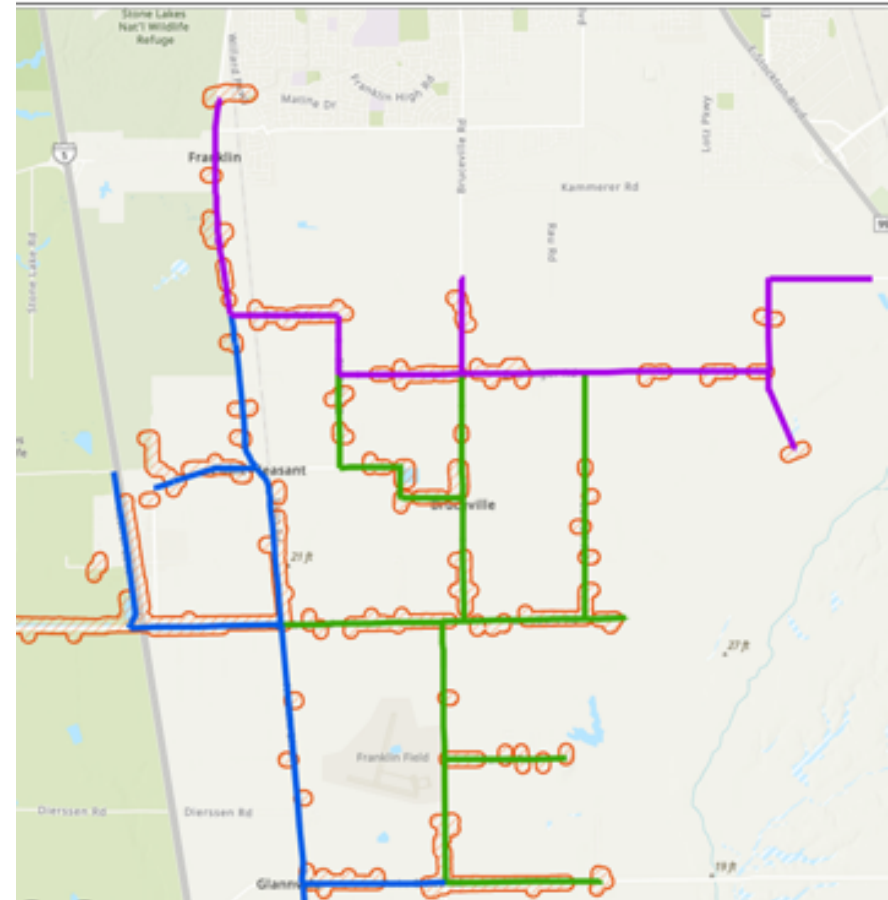
Avoidance and Minimization Measures (AMM)

- ♦ All project areas overlap potential habitat for protected species
- ♦ Regional San will provide qualified biologists to conduct surveys ahead of construction activity and monitor sensitive species when required.
- ♦ Each project plan and specifications outline seasonal fencing and work restrictions for species protection.



Avoidance and Minimization Measures

- All workers are required to attend a Worker Environmental Awareness Training prior to participating in field construction activities.
- AMMs will be reviewed in greater detail at the pre-bid meeting for each project package.



Regional San Engineering Projects



Regional San Engineering Projects (2023)

Project	Estimated Bid Advertisement	Estimated Construction Cost
SST 5, 6, 9 Rehab	5/2023	\$3,000,000
Primary Deck Rehab IV	5/2023	\$1,500,000
Digester 9 Rehab	7/2023	\$3,000,000
LSG Valve Replacement	8/2023	\$300,000
MS Tank 2 Rehab	8/2023	\$150,000
I/E Fire Alarm Upgrade	10/2023	\$600,000
I/E Locker Room Expansion	12/2023	\$572,000

Regional San Engineering Projects (2024)

Project	Est. Bid Advertisement	Est. Construction Cost
Sump 55 Connection	2023-24	\$500,000
Sump 55 VFD Replacement	2023-24	\$400,000
Ferric Chloride System Rehab	1/2024	\$3,980,000
X09 Low Voltage SWGR	1/2024	\$1,300,000
Dry Creek Capacity Relief	1/2024	\$22,000,000
New I-Pump	4/2024	\$8,000,000
Chiller Replacement	5/2024	\$13,300,000
Central Interceptor Rehab (CIPP)	6/2024	99,000,000
Primary ORT Rehab	7/2024	\$6,800,000

Questions/Input

