Handout

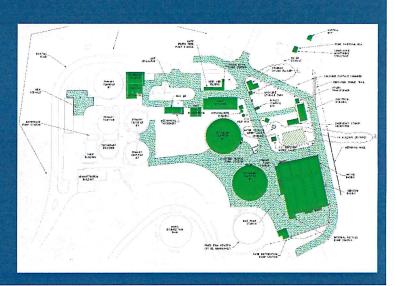
Agenda Item

Date September 5, 200



SECONDARY TREATMENT PLANT UPGRADE & RECYCLED WATER EXPANSION STATUS

BOARD MEETING DATE: 9/5/2019



Project Construction Cost:

Base Bid	\$	46,426,454
UV Alternative	\$	2,196,485
Subtotal	\$	48,622,939
Change Orders (1-7)	\$	388,084
Credit for Removal of UV Alternative		TBD
TOTAL	\$	49,011,023

Change Orders:

	Cost
Change Orders I - 4 (Reported on 5/21/2019 Update)	\$ 303,296
Change Orders 5 (A – E):	\$ 12,521
Lighting Fixture Upgrade; Add/Delete Valves	
Change Orders 6 (A – E):	\$ 34,290
Wood Box Inspection; Descanso FM ARV; Cone	
Penetration Test for Caissons; Pond Return Pump	
Station Piping, Valves and Slide Gate	
Change Order 7 - Internal Recycle Pump Station Grade	\$ 37,977
Beam and Caissons	
TOTAL (15 Items)	\$ 388,084

Potential Change Orders (PCOs):

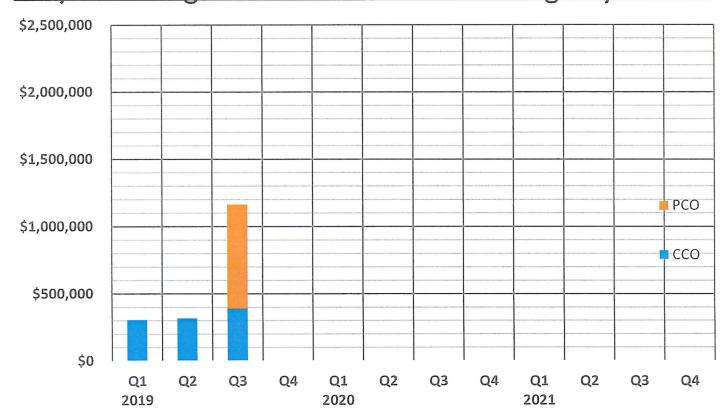
PCOs to Date	72
PCOs Resolved to COs	15
Outstanding PCOs	57
Total Amount Outstanding PCOs	\$775,040

Number of RFIs to Date	148
Number of Submittals to Date	207
Contract Duration (Calendar Days)	1060
Days Into Construction	225 (21%)

Project Change Order Allowance/Contingency:

	Cost
5% Contingency Authorized by the Board	\$ 2,430,000 (100%)
(11/15/2018)	
Approved Change Orders (1-7)	\$ 388,084 (16%)
Remaining Contingency	\$ 2,041,916 (84%)
Outstanding PCOs	\$ 775,040 (32%)
Balance	\$ 1,266,876 (52%)

Project Change Order Allowance/Contingency Status:



PG&E Relocation Allowance/Contingency:

	Cost
Phase I Design Fees (Paid to PG&E)	\$ 60,874
Phase 2 Design Fees (Paid to PG&E)	\$ 89,028
Salvage Credit from PG&E	TBD
Total Design Cost	\$ 149,902
Phase I Construction (PCO to MSC)	\$ 102,217
Phase 2 Construction (Future CO to MSC)	\$ 250,000
Approved Contingency for Phase I (12/13/2018)	\$ 200,000
Contingency for Phase 2 (To Be Approved)	\$ 300,000
Critical Path: ~94 days of potential delay	TBD

ENGINEERING & CONSTRUCTION MANAGEMENT

	Contract Amount	
AQUA Engineering (Design and Construction Engineers)	\$	3,548,003
ArcSine Engineering (Electrical Peer Review + SCADA)	\$	1,040,713
Brown & Caldwell (Treatment Process - Peer Review)	\$	560,279
DAC & Associates (Geotechnical Engineer)	\$	271,760
Kennedy Jenks (Construction Manager)	\$	3,715,820
Kleinfelder (Materials Testing)	\$	221,247
Miller Pacific Engineering Group (Interim Geotechnical Engineer)	\$	15,000
_		,
MWH Constructors (Construction Manager) – Original: \$5,503,812	\$	~1,500,000
TOTAL	\$	~10,872,822

Overall Project Cost to Date:

Construction	\$ 49,011,023
Engineering & CM	\$ 10,872,822
PG&E	\$ 500,000
SUBTOTAL	\$ 60,383,845
5% Contingency Balance	\$ 2,041,916
TOTAL	\$ 62,425,761

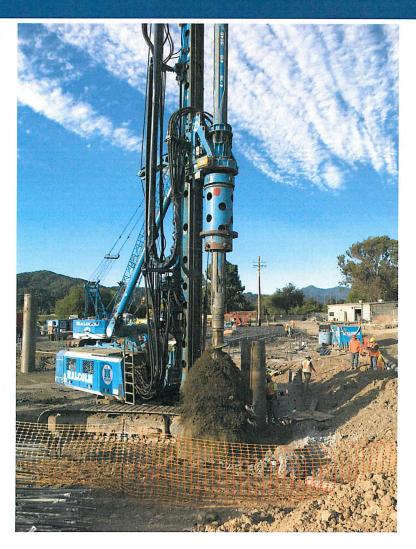
ACCOMPLISHMENTS / COMPLETED TASKS: PG&E PHASE | UNDERGROUNDING

PG&E Crews at the jobsite



ACCOMPLISHMENTS / COMPLETED TASKS: CAISSONS INSTALLATION

Malcolm Drilling



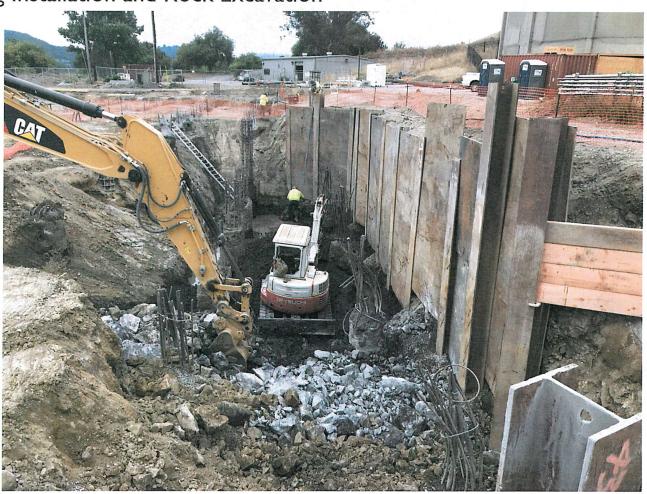
ACCOMPLISHMENTS / COMPLETED TASKS: ANOXIC AND AERATION BASINS

Grade Beam Rebar Ready for Installation



ACCOMPLISHMENTS / COMPLETED TASKS: PRIMARY PUMP STATION

Shoring Installation and Rock Excavation



ACCOMPLISHMENTS / COMPLETED TASKS: PRIMARY PUMP STATION

Foundation subgrade stabilization



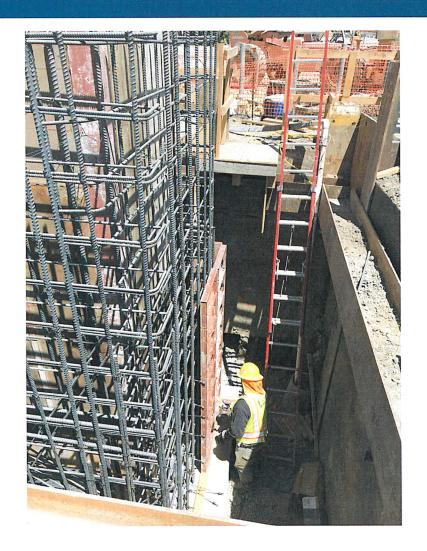
ACCOMPLISHMENTS / COMPLETED TASKS: ELECTRICAL BUILDING

Rebar Installation

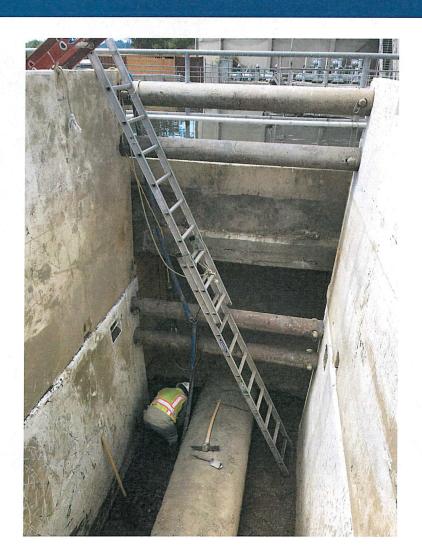


ACCOMPLISHMENTS / COMPLETED TASKS: BYPASS CONTROL BOX

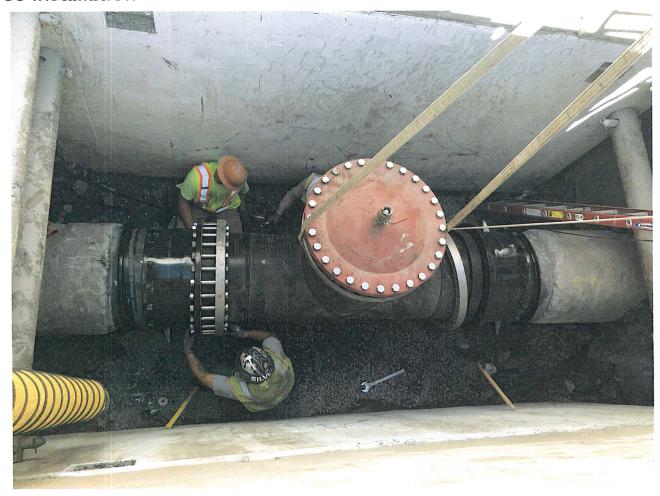
Rebar Installation



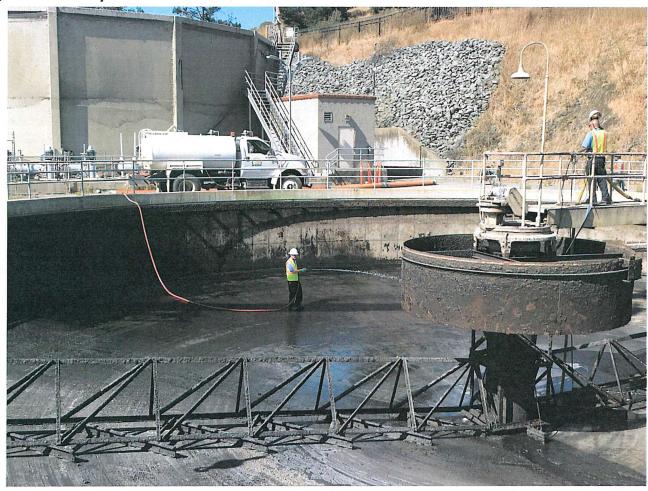
30" Tee Installation



30" Tee Installation



Cleaning Secondary Clarifier



Secondary Clarifier Bottom



PLANNED TASKS / NEXT STEPS / TO DOS

- Finish construction of the Electrical Building.
- Pour concrete slabs for the Anoxic and Aeration Basins, Primary Pump Station, and WAS Pump Station.
- Install Secondary Clarifier temporary piping.
- Pour concrete slab for Mechanical Thickener
- Prepare for PG&E Phase 2 Undergrounding.

RISKS & ISSUES

- PG&E Phase 2c Easement from State Parks/Marin County
- Slow Response from PG&E for Phase 2 Work
- UV Deletion Credit from MSC
- Caisson Installation Credit from Malcolm/MSC
- Scheduled Process Changes
- USBR Grant Deadline
- Title 22 Recycled Water for MMWD

QUESTIONS?

