Calaveras County Water District
Copper Cove, California
Bidding Documents
Copper Cove Phase 1 and 2 Tanks Project

ADDENDUM NO. 2
Issued August 3, 2023

The Drawings and Project Manual including Specifications are modified as follows. Addendum No. 2 forms a part of the Contract Documents and modifies the original documents dated June 14, 2023.

This Addendum consists of ten (10) pages and three (3) attachments:

- Attachment A: Revised drawings
- Attachment B: Precast Concrete Structures Specification
- Attachment C: Shop Drawings for B Tank

Bidder's Note: Bidder shall acknowledge receipt and examination of this addendum on the Bid form and attach a signed copy to the Bid, both as required by the Sealed Proposal.

Contract Documents - Drawings Changes:

Modify the following drawings per the instruction outlined below:

1) Replace C1, C2, C5, and C7 with the attached revised sheets in attachment A.

Contract Documents – Specifications Change:

1) Update Table of Contents to include Section 03 41 00: Precast Concrete Structures.

2) Add Section 03 41 00: Precast Concrete Structures, as written in Attachment B.

3) Revise Section 33 01 15: Pipe and Pipe Fittings: Basic Requirements, as follows:

Article 3.08 Schedules

System	Service	Notes on Size, Material, Lining, or Coating	Restrained Joint	Spec Section	System
TW	Treated Water	See System Schedule	Y	33 01 21 or 33 01 22	1
OF	Potable Water	See System Schedule	Y	33 01 21 or 33 01 22 **or 33 01 24**	1**, 2**

TP	Transmission Pipeline	See System Schedule	Y	33 01 22	1
SAM	Potable Water Sample	See System Schedule	N	33 01 24	2
SD	Storm Water	See System Schedule	N	33 01 24	2

A. Piping Specification Schedule - System 1
   1. General:
      a. Piping and Symbol service:
         1) TW - Treated Water
         2) OF - Potable Water **(above ground)**
         3) TP - Transmission Pipeline

B. Piping Specification Section - System 2
   1. Piping Symbol and Service:
      a. SD - Storm drain
      b. SAM - Potable Water Sample
      c. **OF – Potable water (below ground)**

4) Revise Section 33 16 00: Water Utility Storage Tanks, as follows:

Article 2.01 Tank Design Criteria

A. New Clearwell: Cylindrical tank with flat bottom on grade, with roof; including appurtenances.
   1. Diameter: 70 feet.
   2. Capacity: 346,000 gallons.
   3. Shell Height: 16 feet from top of foundation to top of shell.
   4. Height: 13.5 feet from top of foundation to overflow level.
   5. Structurally designed to comply with applicable building codes including:
      a. Live and dead loads.
      b. **Design snow load of 16 pounds per square foot.**
      c. Design wind speed of 110 miles per hour.
      d. Seismic movements.
         1) Site Modified Spectral Acceleration Values
            (i) S_{MS} = 0.507
            (ii) S_{M1} = 0.293
         2) Design Spectral Acceleration
            (i) S_{DS} = 0.338
            (ii) S_{D1} = 0.195
      e. Thermal movements resulting from temperature change range of 120 degrees F ambient and 180 degrees F on material surfaces.
   6. Designed to comply with ~~**NFPA 22**~~ **AWWA D100.**

Article 2.01 Tank Design Criteria, Paragraph B – 6:

A. New B Tank: Cylindrical tank with flat bottom on grade, with roof; including appurtenances.
   1. Diameter: 65 feet.
   2. Capacity: 360,000 gallons.
   3. Shell Height: 18 feet from top of foundation to top of shell.
   4. Height: 15.5 feet from top of foundation to overflow level.
   5. Structurally designed to comply with applicable building codes including:
      a. Live and dead loads.
      b. **Design snow load of 16 pounds per square foot.**
      c. Design wind speed of 110 miles per hour.
      d. Seismic movements.
         1) Site Modified Spectral Acceleration Values
            (i) S_{MS} = 0.507
            (ii) S_{M1} = 0.293
         2) Design Spectral Acceleration
            (i) S_{DS} = 0.338
            (ii) S_{D1} = 0.195
      e. Thermal movements resulting from temperature change range of 120 degrees F ambient and 180 degrees F on material surfaces.
   6. Designed to comply with ~~**NFPA 22**~~ **AWWA D100.**

Article 2.02 Steel Tanks

A. Surface Tanks: Steel plates with all seams welded, complying with AWWA D100, with overlapping rafter, single/center column-support roof.
   1. **Seal Welding: Provide seal welds for butt welds and lap joints in wet areas, including interior roof surfaces and rafter flanges.**
B. Foundations: Reinforced concrete; see Section 03 30 00.

Article 2.03 Tank Fittings

A. Inlet, Outlet, and Overflow Piping: Welded steel, ASTM A53/A53M Grade B Schedule 40, with steel butt-welded fittings, ASTM A234/A234M Grade WPB Schedule 40.
   1. **All exposed steel piping shall be epoxy lined and coated.**
   2. Expansion Joint:
      a. a. Rubber bellows style expansion joint.
         1) Tube elastomer: FDA-EPDM.
         2) Cover elastomer: EPDM
      b. Pressure rating: 70 psi at 170 degree Fahrenheit
      c. Minimum vertical displacement upward: 4 inches
      d. Minimum vertical displacement downward: 0.5 inches
      e. Minimum horizontal (radial and tangential) deflection: 2 inches
      f. Sealing gaskets: EPDM g. PROCO Style 234-L, or approved equal.

Article 3.03 Field Quality Control

B. Engage an independent testing agency to test tank seam welds and to test for leaks.
   1. Seam Welds: Test using radiographic method in accordance with AWWA D100.
   2. Leak Test: Fill with potable water and test for leaks in accordance with AWWA D100 **~~and NFPA 22~~**; water furnished by District.
   3. Repair defects and retest until no failures are encountered.
   4. Refinish repaired areas using same preparation and coating as specified for original coating.

5) Add parts C and D to Article 2.01 in Section 33 16 00.10: Water Utility Storage Tank Rehabilitation, as follows:

C. Structurally designed to comply with applicable building codes including:
   1. Live and dead loads.
   2. Design snow load of 16 pounds per square foot.
   3. Design wind speed of 110 miles per hour.
   4. Seismic movements
      a. Site Modified Spectral Acceleration Values
         1) SMS = 0.507
         2) SM1 = 0.293
      b. Design Spectral Acceleration
         1) SDS = 0.338
         2) SD1 = 0.195
   5. Thermal movements resulting from temperature change range of 120 degrees F ambient and 180 degrees F on material surfaces.
D. Design to comply with AWWA D100.

6) Add parts C and D to Article 2.02 in Section 33 16 00.10: Water Utility Storage Tank Rehabilitation, as follows:

C. Structurally designed to comply with applicable building codes including:
   1. Live and dead loads.
   2. Design snow load of 16 pounds per square foot.
   3. Design wind speed of 110 miles per hour.
   4. Seismic movements
      a. Site Modified Spectral Acceleration Values
         1) SMS = 0.507
         2) SM1 = 0.293
      b. Design Spectral Acceleration
         1) SDS = 0.338
         2) SD1 = 0.195
   5. Thermal movements resulting from temperature change range of 120 degrees F ambient and 180 degrees F on material surfaces.
D. Design to comply with AWWA D100.

7) Revise Section 33 16 00.10: Water Utility Storage Tank Rehabilitation, as follows:

Article 2.03 Steel Tanks

A. Surface Tanks: Steel plates with all seams welded, complying with AWWA D100, with overlapping rafter, column-support roof.
   1. <u>Seal Welding: Provide seal welds for butt welds and lap joints in wet areas, including interior roof surfaces and rafter flanges.</u>

Article 2.04 Tank Fittings

A. Inlet, Outlet, and Overflow Piping: Welded steel, ASTM A53/A53M Grade B Schedule 40, with steel butt-welded fittings, ASTM A234/A234M Grade WPB Schedule 40.
   1. **<u>All exposed steel piping shall be epoxy lined and coated.</u>**
   2. Expansion Joint:
      a. a. Rubber bellows style expansion joint.
         1) Tube elastomer: FDA-EPDM.
         2) Cover elastomer: EPDM
      b. Pressure rating: 70 psi at 170 degree Fahrenheit
      c. Minimum vertical displacement upward: 4 inches
      d. Minimum vertical displacement downward: 0.5 inches
      e. Minimum horizontal (radial and tangential) deflection: 2 inches
      f. Sealing gaskets: EPDM g. PROCO Style 234-L, or approved equal.

Article 3.02 Field Quality Control

C. Engage an independent testing agency to test tank seam welds and to test for leaks.
   1. Seam Welds: Test using radiographic method in accordance with AWWA D100.
   2. Leak Test: Fill with potable water and test for leaks in accordance with AWWA D100 **~~and NFPA 22~~**; water furnished by District.
   3. Repair defects and retest until no failures are encountered.
   4. Refinish repaired areas using same preparation and coating as specified for original coating.

8) Revise Bid Item No. 30 – New B Tank Subgrade & Foundation (Lump Sum), as follows:

1. The lump sum amount for constructing the subgrade and foundation at the new B Tank site as shown and specified in the Contract Documents. **<u>Basis of bid shall only assume two (2) feet of over excavation.</u>**
2. The lump sum price shall be full compensation for the preparation and installation or submittal of these materials, and for furnishing and installing all the labor, equipment, tools and incidentals to complete this item. This item shall be paid in proportion to the percentage of the Bid Item No. 30 completed. **<u>If additional over excavation beyond two (2) feet is required (up to four feet), it will be paid proportionally to the base bid assumptions.</u>**

Responses to Bidder Questions:

Question #1: Is there a snow load to consider?

Response #1: Yes, a snow load of 16 pounds per square foot should be considered. Refer to revised specification language in Section 33 16 00 and Section 33 16 00.1 herein.

Question #2: Is seal welding of the interior of roof plate junctions and rafter flanges to bottom side required?

Response #2: Yes, seal welding of the interior of roof plate junctions and rafter flanges are required. Refer to revised specification language in Section 33 16 00 and Section 33 16 00.10 herein.

Question #3: Is lining required on the overflow piping?

Response #3: Yes, all exposed steel piping for the new tanks and rehabilitated tanks shall be epoxy lined and coated. Refer to revised specification language in Section 33 16 00 and Section 33 16 00.10 herein.

Question #4: Are we to match existing structure shown on TRUSCO drawings for 70'-0"Øx12'-0" tank?

Response #4: Yes, TRUSCO drawings are provided for Bidder's reference on existing structure. Existing structure is to be modified per our plans and specifications.

Question #5: Are there shop drawings for STL B tank?

Response #5: Yes, shop drawings for the existing steel B tank are added as Attachment C of this document.

Question #6: Can we assume there isn't any "lead" or other hazardous materials to be concerned with in the coatings?

Response #6: Per Addendum 1, based on the years of construction (1982 and 1998), lead-based paint is not anticipated.

Question #7: Among other requirements, NFPA22 requires a lightning protection system. Would this be required by the district?

Response #7: No, refer to revised specification language in Section 33 16 00 Water Utility Storage Tanks herein. Tank design criteria to comply with AWWA D100.

<u>Question #8:</u> Are we to consider seismic requirements for the two tanks being rehabilitated?

Response #8: Yes, seismic requirements for the two tanks being rehabilitated should be considered. Refer to revised specification language in Section 33 16 00.10 herein.

<u>Question #9:</u> Drawing sheet E10, note 8 instructs the contractor to "relocate (E) analyzer and extend (E) conduit and wire to new location". The drawing shows the proposed new location as well as the location of the existing junction box for the analyzer panel. Should the wire be extended from this junction box to the new analyzer panel location? Please provide details on the conduit and wire size/type required for the analyzer panel.

Response #9: Intercept existing conduit and wire. Above ground Junction Box to be removed. Underground new conduit and wire to new location. Contractor to verify conduit size and wire in field.

<u>Question #10:</u> A new cathodic protection system controller is being provided at each of the four tanks per detail 1 on drawing sheet CP-5. These cathodic protection system control panels do not show up on the electrical drawings or conduit schedules. How are these controllers being powered? Please provide details on the conduit routing and wire size/type for delivering power to these panels.

Response #10: The CP system controller is passive and only requires a 9-volt battery to power the LCD screen for taking readings.

<u>Question #11:</u> Sheet E10, note 8 refers to extending existing conduit and wire to new location for the existing analyzer panel. The specification states that "No wire shall be spliced without prior approval by the Engineer." Is the expectation that new wire should be provided for the analyzer panel? If so, please detail the conduit layout and wire type for the existing conduit/wire.

Response #11: Splice new matching wire to existing cable. Extend new conduit and wire to new location.

<u>Question #12:</u> No detail is shown for the analyzer panel being relocated on sheet E10. Please provide information on the existing panel and how it should be mounted.

Response #12: The analyzer will be relocated and mounted to a new concrete pad, re-plumbing the existing equipment as currently mounted within the fiberglass shed, see revised sheet C7 in Attachment A.

<u>Question #13:</u> The Conduit & Wire Routing Schedules on sheets E10 and E20 both mention #12 VFD rated cable. Does the Owner have a preference on which

type of cable is supplied for this? Please provide a specification (make, model, etc..) for this cable.

Response #13: All VFD load side power wiring shall have rated blended composite semi-conductive, tray-cable rated, UL-type TC 90°C insulation and 100% shielding with foil tape & tinned copper braid.

Question #14: The anode specified in the drawings and plans are not manufactured by any of the Cathodic Protection suppliers for magnesium anodes. Can a substitute 2.024" Mag rode anode be used (this is the industry standard anode for tank internal Cathodic Protection).

Response #14: Yes, 2.024" mag rode anodes can be substituted, but the rheostat setting will need to be adjusted accordingly.

Question #15: Can a design life requirement be provided for the Cathodic Protection systems? Typical Cathodic Protection design life is 10-20 years for a magnesium anode system. With the current design and anode count per the drawings the systems are way over designed.

Response #15: The design of the passive CP system is for a 20-year life. The design is more conservative with additional anodes due to limited information for the specific conductance to use for all four tanks.

Question #16: Plan sheet C7 indicates 12" SD PVC for the tank drain lines, however, details 6/13 (Flapgate/outfall) and 4/16 (New Clearwell Overflow Drain Detail) indicate 18" drains. Please clarify what size these drain lines and flapgate are to be.

Response #16: Per Addendum 1, the drain lines and flapgate are to be 18" diameter.

Question #17: We cannot locate a detail for the catch basins, can a catch basin detail be provided.

Response #17: Refer to added Specification Section 03 41 00: Precast Concrete Structures herein.

Question #18: Detail 4 on sheet C13 shows an offset for the 18" overflow drain, what is the material of the existing 18" drain (i.e. C900, SDR26, Steel, etc.)?

Response #18: The material for the existing 18" drain is SDR 35 PVC.

Question #19: Bid Item 16 calls for 16" PVC piping for the B Tank site overflow line and if I'm assuming correctly, the piping schedule in the specifications has this listed as System "OF" and refers to Piping Specification Schedule – System

1. However, System 1 only allows for ductile iron pipe for buried service. Please provide a material type and specification for the 16” PVC overflow piping.

Response #19: Below-ground piping shall be PVC per specification 33 01 24. See revised language to 33 01 15 included herein.

By: _____

Charles Palmer, PE, Senior Engineer

Calaveras County Water District

ACKNOWLEDGMENT BY BIDDER,

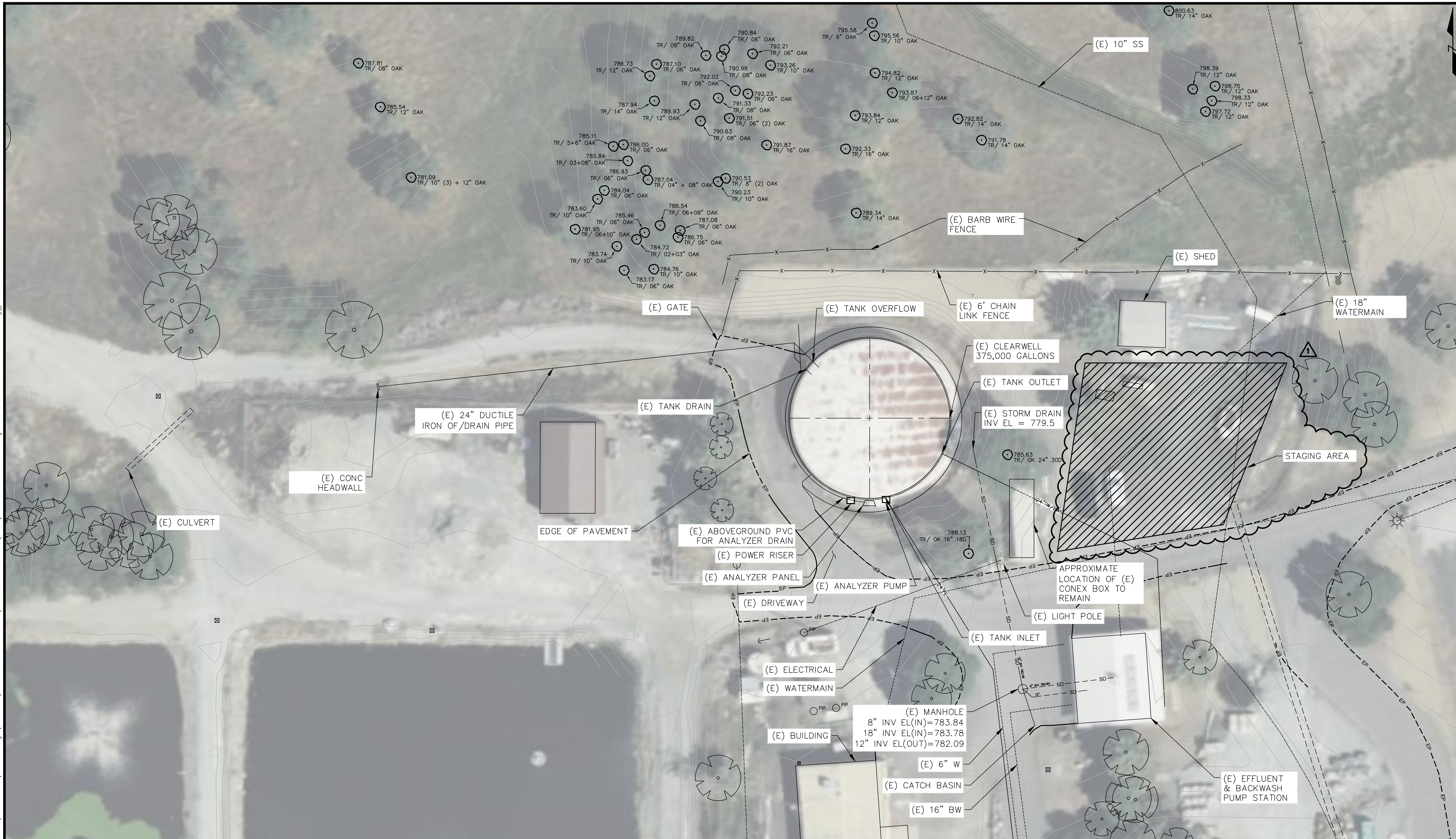
By: _____

Title: _____

(NOTE – Bidders are hereby advised that they also need to sign their acknowledgement of this Addendum on their Bid Schedule.)

-END OF ADDENDUM NO. 2

ATTACHMENT A



ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	7/10/23	TMB	ADDENDUM #2

SCALE: 1" = 20'

DATE: JUNE 2023

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED AAS
DRAWN NMVL/TMB
CHECKED KBB

CALAVERAS COUNTY WATER DISTRICT
120 TOMA COURT, SAN ANDREAS, CALIFORNIA 95249
PHONE (209) 754-3543

PETERSON . BRUSTAD . INC
ENGINEERING . CONSULTING
80 Blue Ravine Rd. Suite 280
Folsom, CA 95630
PH. 916-608-2212

REGISTERED PROFESSIONAL ENGINEER — KARL B. BRUSTAD — NO. 57869 — Exp. 6/30/24 — CIVIL — STATE OF CALIFORNIA — 6/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

EXISTING CLEARWELL SITE PLAN

DRAWING C1

SHEET 5 OF 42

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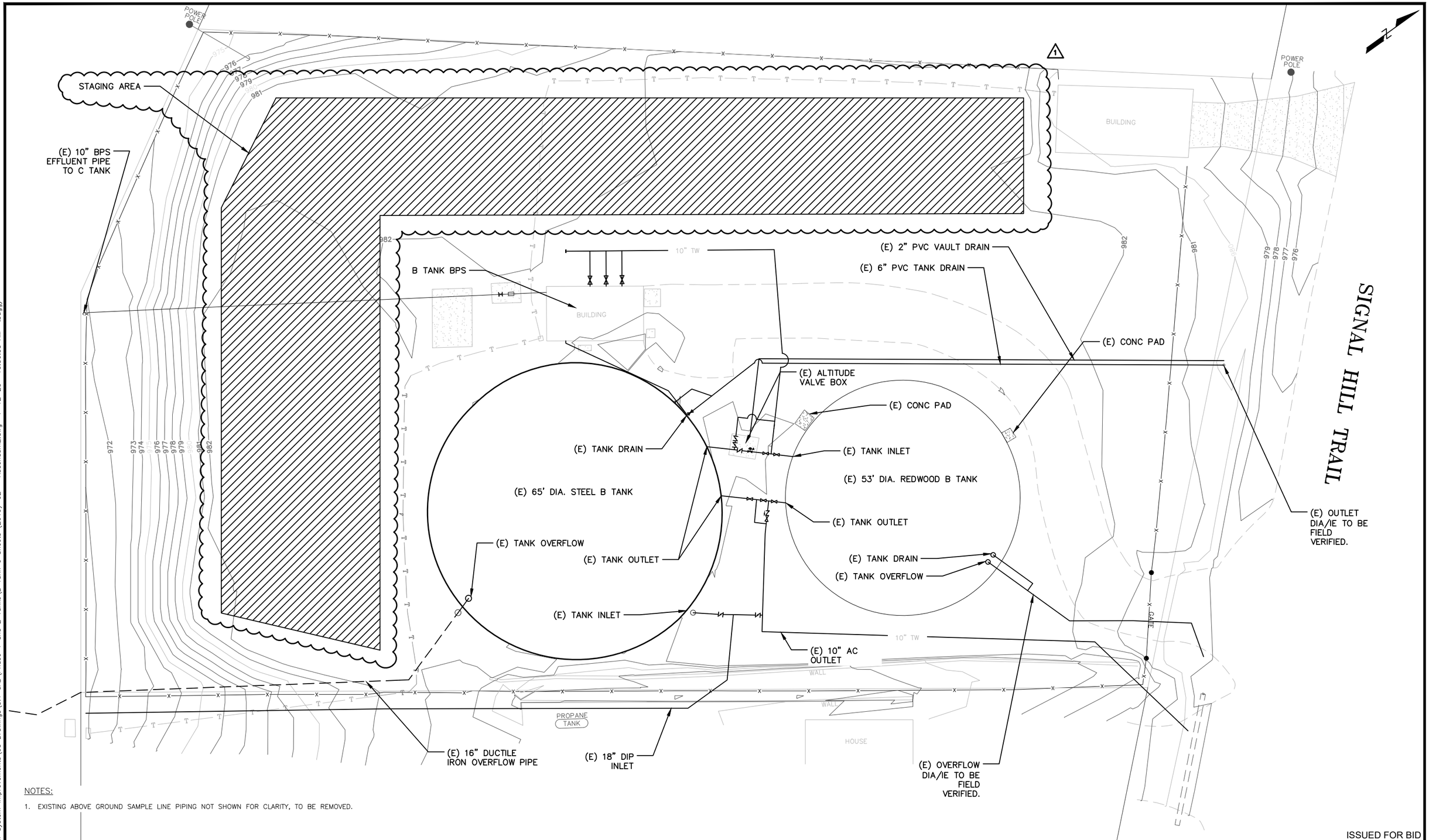

NOTES:

1. EXISTING ABOVE GROUND SAMPLE LINE PIPING NOT SHOWN FOR CLARITY, TO BE REMOVED.

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	7/10/23	TMB	ADDENDUM #2

SCALE: 1" = 10'

DATE: JUNE 2023

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COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

EXISTING B TANK SITE PLAN

DRAWING C2

SHEET 6 OF 42

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V-DITCH HIGHPOINT EL 780.0'

LIMITS OF GRADING

N: 2153507.56
E: 6528218.26

N: 2153500.94
E: 6528182.14

N: 2153496.03
E: 6528245.16

2:1 CUT SLOPE, SEE NOTE 2. (1)

N: 2153478.64
E: 6528150.35

A C13

(P) CLEARWELL TOP OF RINGWALL ELEVATION 780.7'

(P) CLEARWELL 346,000 GAL

10'

(P) CHAIN LINK FENCE 340 LF

N: 2153436.01
E: 6528133.33

(P) CLEARWELL

48" CATCH BASIN RIM EL=778.65 (1)

(E) 6' CHAIN LINK FENCE

N: 2153401.91
E: 6528347.31

N: 2153393.61
E: 6528135.52

779.43

779.32

779.40

OVERFLOW DRAIN BOX

779.27

(E) CLEARWELL TOP OF RINGWALL ELEVATION ±780.7'

(1) 48" CATCH BASIN RIM EL=778.45

779.45

B C13 INSTALL 6,350 SF OF (P) ASPHALT PER DETAIL

(E) CLEARWELL

5 C13 V-DITCH, PER DETAIL

EDGE OF PAVEMENT

779.62

4.6'

V-DITCH HIGHPOINT EL 780.06'

(E) CLEARWELL 375,000 GAL

CATCH BASIN RIM EL=781.0

CATCH BASIN RIM EL=779.6

NOTES:

1. CUT VOLUME EQUALS 2,000 CY
2. GRADED SLOPE TO BE HYDROSEEDED PER SPECIFICATIONS. CONTRACTOR SHALL MAINTAIN FIBER ROLLS AT LOCATIONS IDENTIFIED IN THE WATER POLLUTION CONTROL PLAN FOR THE DURATION OF THE ESTABLISHMENT PERIOD. (1)

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	7/21/23	TMB	ADDENDUM #2

SCALE: 1" = 20'

DATE: JUNE 2023

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

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REGISTERED PROFESSIONAL ENGINEER KARL B. BRUSTAD NO. 57869 Exp. 6/30/24 CIVIL STATE OF CALIFORNIA
6/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

CLEARWELL TANK SITE GRADING PLAN

DRAWING C5

SHEET 9 OF 42

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CONSTRUCT NEW CLEARWELL PER DETAIL 1/C9

(N) TANK INLET

VALVE 1

RIM EL=778.45
18" INV EL (IN)=774.95
18" INV EL (OUT)=774.85
12" INV EL (IN)=775.2
12" INV EL (IN)=775.2
1

VALVE 3

STORM DRAIN OVERFLOW CROSSING DETAIL 4/C13

18" INV EL (OUT)=774
INSTALL FLAPGATE PER DETAIL 6/C13

INSTALL 12" SD PVC

12" SD PVC

(E) OF/DRAIN PIPE

INSTALL TEE INV EL=771.0

INSTALL 45° ELBOW INV EL=771.0

INSTALL 11.25° ELBOW INV EL=771.2

REINSTALL WATER QUALITY ANALYZER PANEL WITH CONCRETE PAD AND NEW CHLORINE ANALYZER, SEE NOTE 4.

INSTALL 22.5° ELBOW INV EL=772.0

ANALYZER DRAIN TO DI

RIM EL=781.0
18" INV EL(IN)=775.5
18" INV EL (OUT)=775.4
12" INV EL (IN)=775.5
1

RIM EL=779.6
12" INV EL(IN)=775.7
12" INV EL (OUT)=775.6

INSTALL 22.5° ELBOW INV EL=773.0
1

2 SADDLE TAP 1" LINE TO EXISTING PUMP AND 1" LINE FROM EXISTING PUMP TO ANALYZER PANEL, SEE NOTE 6.

10'

VALVE 6
(N) TANK OUTLET
(P) 70' DIAMETER STEEL TANK
OVERFLOW DRAIN BOX
INSTALL 22.5° ELBOW INV EL=771.0
24" TW DIP
VALVE 2
VALVE 4

18" SD PVC
12" SD PVC
24" TW DIP

INSTALL 11.25° ELBOW INV EL=771.8
(E) 70' DIAMETER STEEL TANK
(N) TANK INLET
VALVE 5
VALVE 7
(E) TANK OUTLET
VALVE 8

18" SD PVC
24" TW DIP

24"TW/BWS
VALVE 9

24" TW DIP
18" SD PVC
24"FE

MIN CLEARANCE 4' (TYP)

CONNECT TO (E) 24" FE PER DETAIL 1/C13

SD 12" SD SD 6" W
6" SD SD SD
12" SD SD
18" SD
16" SW

INSTALL 20" BLIND FLANGE

MAINTAIN 10' CLEARANCE FROM (E) 10" SS

INSTALL 45° ELBOW INV EL=789.0

INSTALL 22.5° ELBOW INV EL=783.0

RIM EL=778.65
12" INV EL (OUT)=775.3

INSTALL 11.25° ELBOW INV EL=772.6

INSTALL 45° ELBOW INV EL=772.6

INSTALL 22.5° ELBOW INV EL=772.6

CONSTRUCT NEW 6' CHAIN LINK FENCE PER DETAILS ON SHEET C15

REHABILITATE (E) CLEARWELL PER DETAIL 1/C11

INSTALL 45° ELBOW INV EL=772.6

20" DIP TRANSMISSION MAIN

CONNECT TO (E) 24" TW/BWS PER DETAIL 2/C13

INSTALL 22.5° ELBOW INV EL=785.0
2
18" X 20" REDUCER DOWNSTREAM OF VALVE 9

VALVE 10

INSTALL 18" WYE WITH TWO 18" BFVS
2

REPLACE EXISTING 18" C900 PVC WITH APPROXIMATELY 60 LF OF NEW 18" DIP UP TO EXISTING COUPLING (APPROXIMATELY 5 FEET FROM THE OUTSIDE FACE OF EXISTING WALL). REPAIR ASPHALT AS NEEDED.

(E) ANALYZER PUMP

CONNECT 18" PVC TO EXISTING MANHOLE
(E) RIM EL=788.7
(E) 6" INV EL (IN)=783.84
(E) 18" INV EL (IN)=783.78
(E) 12" INV EL (IN)=UNKNOWN
(E) 12" INV EL (OUT)=782.09, SEE NOTE 5
(P) 18" INV EL (OUT)=782.0
1

N

NOTES:

1. ALL PIPE SHALL BE FULLY RESTRAINED.
2. TRENCHING SHALL BE PERFORMED IN ACCORDANCE WITH CALAVERAS COUNTY WATER DISTRICT STANDARDS.
3. PROVIDE LOCKOUT VALVE COVER TO VALVES 2, 3 AND 8, PER SPECIFICATIONS.
4. NEW CHLORINE ANALYZER TO BE ECD DC-80 OR APPROVED EQUAL, REAGENT-LESS ANALYZER.
5. PLUG EXISTING 12" STORM DRAIN WITH CONCRETE AND ABANDON PIPE IN PLACE.
1
6. 1" SCHEDULE 80 PVC CARRIER PIPE FROM EXISTING PUMP TO NEW ANALYZER POSITION TO BE INSTALLED WITH SMOOTH RADIUS BENDS TO ACCOMMODATE ½" TUBING.
2

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
2	7/31/23	TMB	ADDENDUM #2
1	7/06/23	TMB	ADDENDUM #1

SCALE: 1" = 20'

DATE: JUNE 2023

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

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STATE OF CALIFORNIA
6/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

CLEARWELL TANK SITE PIPING PLAN

DRAWING C7

SHEET 11 OF 42

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ATTACHMENT B

SECTION 03 41 00

PRECAST CONCRETE STRUCTURES

PART 1 - GENERAL

2.01 DESCRIPTION

A. Scope:
   1. Precast catch basin frames and grates.

2.02 SUBMITTALS

A. Shop Drawings:
   1. Fabrication and/or layout drawings:
      a. Include detailed diagrams of manholes showing typical components and dimensions.
      b. Indicate knockout elevations for all piping entering each structure.

PART 2 - PRODUCTS

3.01 ACCEPTABLE MANUFACTURERS

A. Precast catch basins:
   1. Oldcastle Infrastructure
   2. Jensen Precast
   3. Or approved equal

3.02 Catch Basin Frames and Grates:

A. Size as shown on plans.

B. Traffic rated grate and frame, H20 loading.

C. Oldcastle 4'X4'-CB-DIC, Jensen Drop Inlet 4848, or approved equal.

PART 3 - EXECUTION

4.01 Structure CONSTRUCTION

A. General:

B. Place precast structures on 6 inches compacted Class 2 aggregate base.

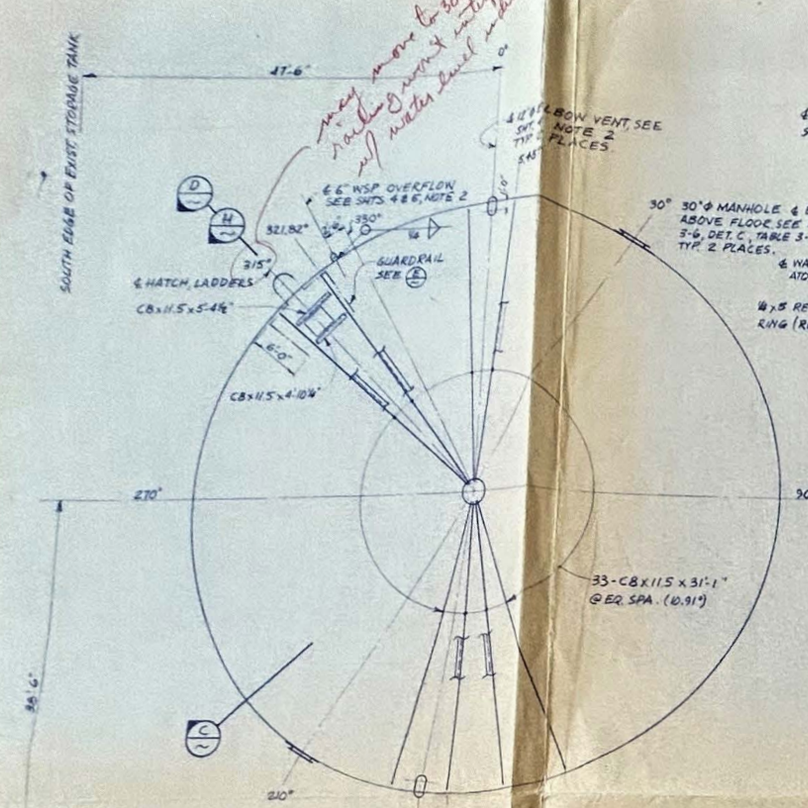
C. Build each structure to dimensions shown on plans and at such elevation that pipe sections built into wall of structure will be true extensions of line of pipe.

D. Seal all pipe penetrations in structures. Form pipe openings smooth and well shaped. After installation, seal cracks with non shrink grout. After grout cures, wire brush smooth and apply two coats emulsified fibered asphalt compound to minimum wet thickness of 1/8 inch to ensure complete seal.

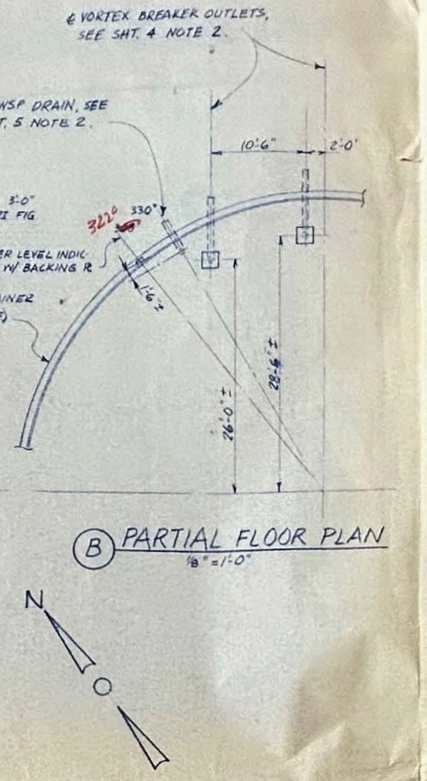
E. Set and adjust frame and cover final 6-inch (minimum) to 18-inch (maximum) to match finished pavement or finished grade elevation using precast adjuster rings.

END OF SECTION 03 41 00

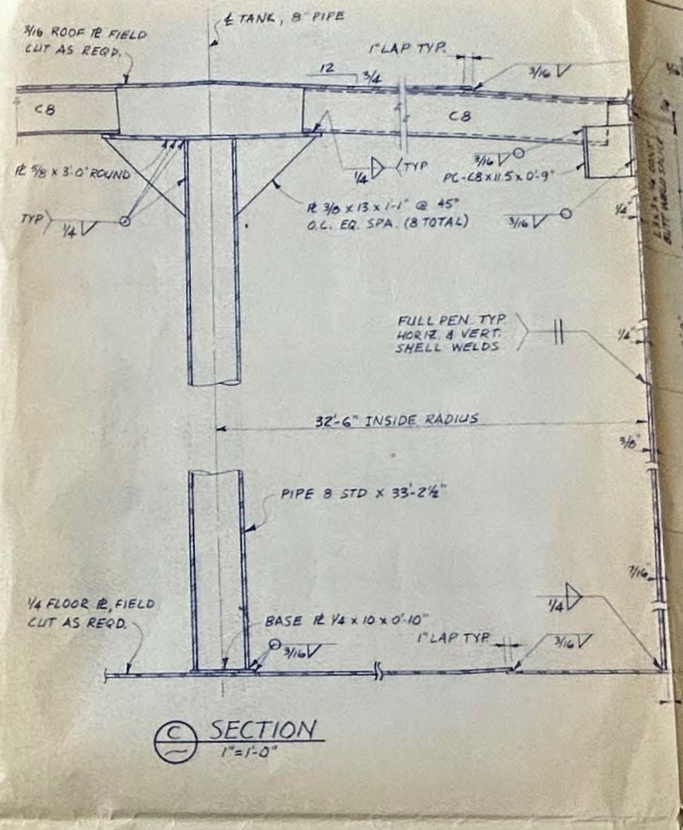
ATTACHMENT C



A ROOF FRAMING PLAN
1/8" = 1'-0"



B PARTIAL FLOOR PLAN
1/8" = 1'-0"



C SECTION
1" = 1'-0"

GENERAL NOTES

1. THIS DRAWING REFLECTS THE DESIGN OF THE 780,000 GAL WATER STORAGE TANK SUPERSTRUCTURE ONLY. ALL OTHER DESIGN ASSOCIATED WITH THIS PROJECT, INCLUDING THE TANK FOUNDATIONS, IS THE RESPONSIBILITY OF DEWANTE & STOWELL CONSULTING ENGINEERS, SACTO. CA.

2. FOR DETAILS NOT SHOWN, SEE CONTRACT DRAWINGS FOR COPPER COVE STORAGE FACILITIES BY DEWANTE & STOWELL DATED SEPT. 1981.

3. CONSTRUCTION, WELDING, INSPECTION AND TESTING SHALL CONFORM TO AWWA D100-79.

4. DESIGN LOADS:
   - LIQUID: 62.4 PCF
   - ROOF LL: 20 PSF, 1979 UBC
   - ROOF SNOW LOAD: 16 PSF
   - WIND LOAD: 20 PSF, 1979 UBC BASIC
   - LADDER, GUARD RAIL: 200 LB @ ANY POINT
   - SEISMIC CRITERIA: 13.5 % G x (DL+CONTENTS), UBC'79

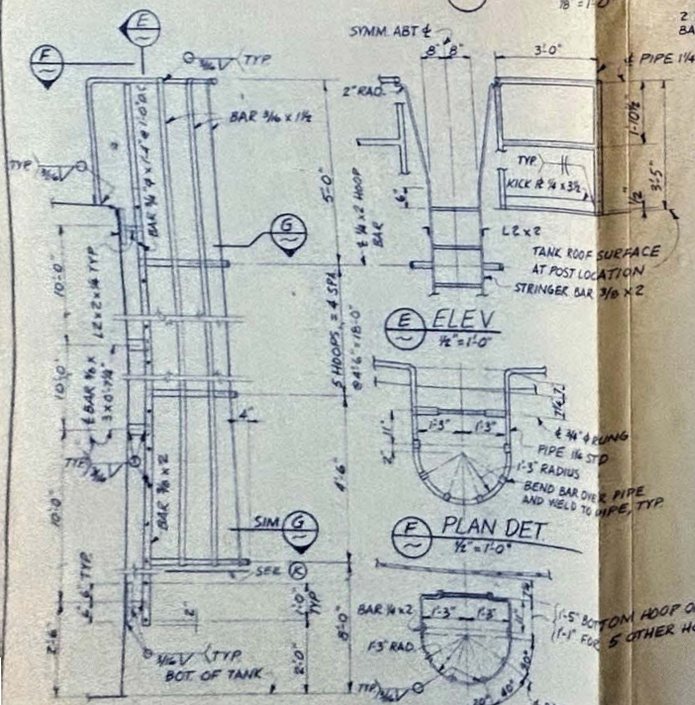
5. TANK REACTIONS

SHELL WALL		CENTER POLE	
DL	540#/'	DL	19,000#
LL	207#/'	LL	2,700#
SL	166#/'	SL	17,400#
EQ	5800#/',	EQ	0
DL+SL+EQ GOVERNS		DL+LL GOVERNS	

6. STEEL
   - PLATES, BARS, SHAPES: ASTM A 36
   - PIPE COLUMN: ASTM A-36 OR A-53 GRADE B, HYDRAULIC TESTING EXEMPTED
   - PIPE: ASTM A-53 GRADE B
   - BOLTS: ASTM A-307

7. VERTICAL WALL SHELL JOINTS SHALL BE STAGGERED.

8. PAINTING & DISINFECTION SHALL BE IN ACCORDANCE WITH SECTION 4 OF THE CONTRACT SPECIFICATIONS.

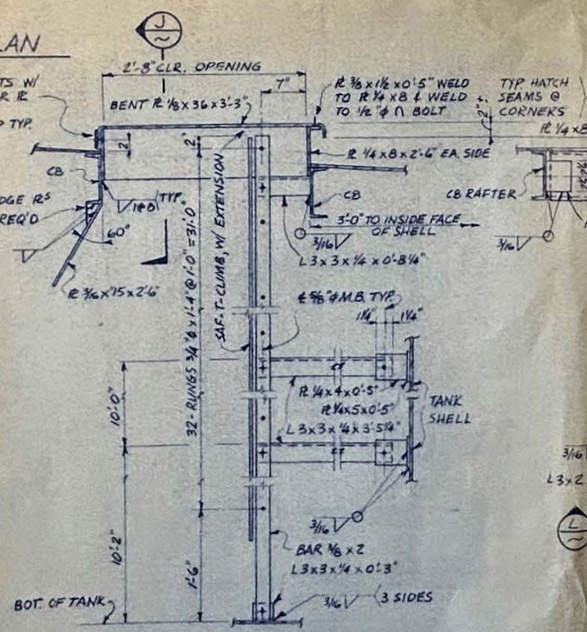


E ELEV
½" = 1'-0"

F PLAN DET
½" = 1'-0"

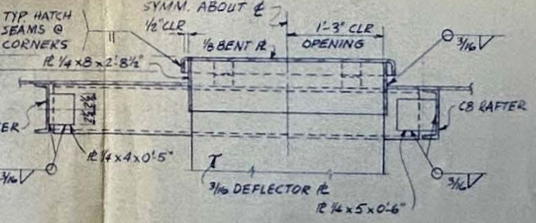
D SECTION
½" = 1'-0"

G PLAN SECTION
½" = 1'-0"

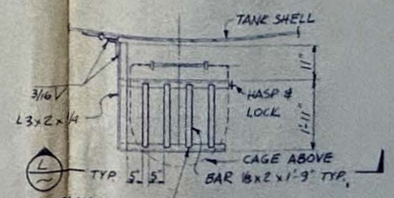


NOTE: HEADS OF BOLTS SHALL BE TURNED TOWARDS INSIDE OF STRINGER BAR ⅜ x 2.

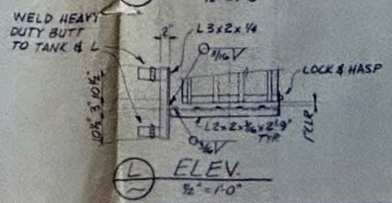
H SECTION
1" = 1'-0"



J SECTION
1" = 1'-0"



K ANTI-CLIMB DEVICE PLAN DETAIL
1½" = 1'-0"



L ELEV.
½" = 1'-0"

APPROVED
FOR GENERAL DESIGN & ARRANGEMENT ONLY
SUBJECT TO ANY NOTES SHOWN
DEWANTE & STOWELL
Date 1-14-82 By RBB

REV	DATE	COMMENT
0	1-8-82	FOR APPROVAL

CALMECO CORP
WEST COAST TANK CO.

CALAVERAS CO. WATER DISTRICT

COPPER COVE STORAGE FACILITIES
COPPER COVE, CALAVERAS COUNTY, CALIF.

780,000 GAL STORAGE TANK
PLAN & DETAILS

BY: W.K. WARNOCK JR.
DATE: JAN. 4, 1982

DWG. NO. S-1