Logan Office
2100 N. Main Street, North Logan, Utah 84341 | **Tel:** 435.563.3734

NORTH LOGAN CITY
4.0 MG TANK DISTRIBUTION AND SUPPLY PIPELINES PROJECT
ADDENDUM #2

May 6, 2025

PLANHOLDER:

This Addendum #2 shall become part of the plans, specifications, and contract documents of the above-mentioned project, and all provisions of the contract shall apply hereto.

Bidders shall acknowledge receipt of all addenda by number in the space provided in the bid documents.

This Addendum #2 covers the following items:

- Engineers Estimate
- Removal of Rammed Aggregate Piers for soil foundation improvement.
- Addressing questions that have been received throughout the bidding process thus far (as of 05/5/25 @ 5:00 PM).

The bids must be submitted at the North Logan City Offices located at 2525 N 600 E, North Logan, UT 84321 on May 8th at 2:00 pm. These are updated times.

Engineers Opinion of Probable Costs

Engineers Opinion of Probable Cost for the Rattlesnake Hill 4.0 MG tank Project is $6,500,000

Engineers Opinion of Cost for the 4.0 MG Tank Distribution & Supply Pipeline Project is $2,300,000

Removal of Rammed Aggregate Piers

As the soil conditions for the tank site have been further evaluated by Sunrise Engineering, Ninyo & Moore, and Keller it has been determined that the Rammed Aggregate Piers initially selected for the stabilization of the soil beneath the tank are not the proper solution to the settling concerns. Therefore, it has been determined that the Rammed Aggregate Piers will be removed from the project scope and the

Tank Contractors do not need to plan on their involvement and reserve time in your construction schedules. In place of the Rammed Aggregate Piers, we will be addressing the settlement concerns in the following manner:

1) The concrete floor of the tank will be increased to 6" thick and additional reinforcement both traditional rebar and cable reinforcement has been added. Steve Hansen, the Structural Engineer, has provided the following updated structural sheets to make the alterations needed for the tank.
2) The tank will be lowered approximately 6' to both increase clearance for the power lines and to get to high naturally consolidated earth. The structural fill to be placed will be 3' thick at the center of the tank and will tapper out to 16" thick at the edge of the tank wall to accommodate the 2% slope from the center of the tank. The new elevations of the tank are as follows:
    - Bottom of Excavation: 4990
    - Top of Structural Fill beneath tank at center of tank: 4993
    - Top of Concrete Floor at Center of Tank: 4993.5
    - Bottom of Concrete Lid at Center of Tank: 5023.5
    - Top of Concrete Lid at Center of Tank: 5024.17
    - Top of Earthen Backfill on Top of Tank at Center of Tank: 5025.17
3) The valve bunker will also be lowered to accommodate the lowering of the tank. The valve bunker will be lowered 3'. The new elevations of the valve bunker are as follows:
    - Finished Floor Elevation: 4987
    - Bottom of Concrete Roof: 4995.33
    - Top of Concrete Roof at Center Line: 4997.10
    - Elevation of 18" Flow Line Penetration: 4988.25
4) The site grading will be adjusted to accommodate these new elevations. The grading will look similar in nature as the current design just lower.
5) Volumes of excess excavation will be provided with the last addendum to be issued later today
6) Excess soil will be wasted onsite and will be available to the Pipe Contractor.
7) Due to the shift in the tanks elevation, it is not projected that the total excavation volume is 44,600 cubic yards
8) The distance from the bottom of excavation to the newest known point for the power lines is 57.5 feet. Rocky Mountain Power has been contacted and they are working on raising them further.

<u>Questions and Answers</u>

Below are the following questions that have been submitted with their corresponding answers:

Q: I've called all the ductile iron fitting suppliers, and none of them currently have a 10x3 Flanged tee that is cement lined and tar coated. There is one of the companies that makes a tee that is cement lined and prime coated. Otherwise, we would have to do a 10x4 flanged tee with a 4x3 flanged reducer to have the tar coating. Please let me know what you would like. This is in reference to the PRV station.

A: For the 10" x 10" x 3" tees located in the PRV vault they are to be Blue Enamel Painted and Drinking Water Approved per the notes on sheet PRV1. If a 10" x 10" x 3" tee can not be located, a 10" x 10" x 4" tee and a 4" x 3" reducer may be used.

Q: Two more questions on the vault. What pressure transducer would you like? There is no call out for a model of any kind. Also, can blue bolts be used in place of stainless steel bolts inside the vault? Blue bolts don't have the problem of galling or stretching like stainless bolts do and are corrosion resistant.

A: Stainless steel bolts will be required as called out. If a contractor wishes to requested the Blue Bolts are to be considered an approved equal this is to be handled in the submittal process.

The pressure transducer is to be in accordance with Specification 17310.

Q: Can you share the budgets for the projects?

A: The Engineers Opinion of Cost for the Rattlesnake Hill 4.0 MG tank Project is $6,500,000

The Engineers Opinion of Cost for the 4.0 MG Tank Distribution & Supply Pipeline Project is $2,300,000

Q: Please specify the quality of backfill required that was answered in addendum 1. Where in section 02105 does it specify the trench backfill material required and the material required for bid item 25? Can both be the same material?

A: In Addendum #1, section 02105 and APWA Section 02320 were referenced and followed. The requirements on quality are found in both and more specifically in APWA Section 2320.

For the use of native material as backfill material, the immediate area surrounding pipes and concrete structures (2' buffer) is to be free of rock larger than 4".

Rock larger than 4" but smaller than 8" can be used in the backfill surrounding pipes outside of the 2' buffer.

Rock larger than 4" but smaller than 12" can be used in the backfill surrounding the tank, valve bunker, and PRV vault outside of the 2' buffer.

Rocks larger than 12" are not to be used as backfill material but can be used as riprap as identified on the plans.

Q: Clearing and grubbing question – 02015.3.2.1 discusses Grub the area between the limits of the excavation and embankment slope stakes to a depth of two (2) feet below natural ground level which areas do you want dug out 2 feet?

A: As described in this section, this will be determined by future elevation and minimum bury depth of the pipe. If the finished elevation is 2' or more above the natural grade then "stumps cut less than 6 inches above natural ground, together with roots and other non-perishable obstructions, may remain in place." All other locations require the grubbing.

Q: When we strip topsoil can we leave it in stockpile throughout the property? Or do we need to respread it? Or Haul it away?

A: Topsoil is to be stripped from the tank site and stock piled during the construction of the tank. The topsoil is to be spread across the site at the completion of the project and prior to reseeding efforts.

Q: Items 19-24 call for pipe bedding 0'-5' deep etc. Actual pipe bedding needed around the pipe does not change? You are just referencing that the pipe bedding will occur in deeper watermain areas correct?

A: Bedding amounts will change based on pipe sizes but not due to depth. Installation of the pipe bedding may become more difficult with increased depth. The attempt of these bid items is to help account for both increased amounts due to pipe sizes and the difficult of placement.

Q: On item 25 are we paid by the cubic yard to import place and compact backfill? Or we paid here just for the import? Also, Items 26 and 27 Are we paid under these 2 items to cut and compact our fills including the cost to compact the fills that we import under item 25?

A: Item 25 is the payment for the imported backfill material needed to reach the design profile. This item covers the purchase of and the delivery of the backfill material only.

The labor to place the backfill is covered under line Item 26 and Item 27. The Prep Pipe Installation Earthwork items are intended to pay for the effort to perform the earth work outside of a normal pipe installation effort as described in Details B, C, & D on sheet D1. Item 26 and Item 27 is also to account for the labor to install the backfill spanning the larger width above the pipe installation. Item 25 is only to purchase and deliver additional material needed beyond the native material available.

Q: You gave quantities for the cut and fill along the 12" line are you going to give cut to fill quantities for the 16" line?

A: Please refer to Sheet PP15 and PP16 for site quantities for the 16" pipe earth work. Please note that on Sheet PP15 it is supposed to read as "Cut", not "Fill".

Q: My question concerns the interior wall, ceiling and floor finishes for the Valve Bunker. Specification Section 09910.3.3, Finish Schedule indicates that interior floors, walls and ceiling be finished. On similar projects they were left exposed or treated with a clear concrete sealer. Could you please verify if the interior walls ceiling and floors of the valve bunker gets painted. If they are to be painted - what is the service environment? Mild or Severe. Also, is the exposed exterior concrete of the Valve Bunker to be treated with Anit-Graffiti?

A: The interior of the valve bunker will not be painted or treated and is to be left untreated. The exterior is to be treated with anti-graffiti clear coating.

Q: Can you give an estimate for the cubic yards to be moved to achieve the 5' min cover 30' wide over the pipe?

A: Refer to Addendum #1.

Q: Will the HDPE pipe require internal debeading of the fused joints?

A: The 16" HDPE pipe is to be debeaded and the internal diameter of the pipe joints are to be cut smooth from the melting process.

Q: I have a coatings contractor looking at providing the waterproofing for the tank and is wondering if this ECOBASe waterproofing would be approved.

A: If the intent of this product is to replace the Xypex requirements, this is not approved. Typically all product requests to substitute a required element with a proposed alternative are dealt with during the submittal process.

Q: Can all the Material excavated for the water tank be wasted onsite or does it have to be hauled off?

A: The material excavated from the tank, other than the organic material, will be used on site for the backfill of the tank. Excess material will be spread on site or used to fill "low" areas of the pipe network. The material will need to be stored on site.

Q: It states that all the backfill material has to be 4 inch minus. Is that required around the water tank do we have to process all the native material to be 4" minus around the water tank?

A: The native material does not need to be processed for placement on the tank site. Rocks larger than 4" should not be placed immediately around the concrete structures and rocks larger than 12' should be used for riprap. However, on site processing will not be required and this requirement will be a general consideration to be observed during backfill.

Q: In previous VSL tanks, Xypex was not required. Can you verify this?

A: Xypex is required for this tank.

Q: Allowing more contract time would be beneficial and probably provide a better price for the Owner. As I stated in the prebid meeting, it would be best not to try to pour concrete in that valley on the tank during the winter months.

A: The contract time is to be in accordance with Addendum #1.

Q: Can we please email our bids?

A: Bids are required to be delivered physically to North Logan by the bid date and time.

Q: In the specifications and what is to be included with the bid, are any of the SRF requirements still valid and do any of the forms in that section need to still be turned in with the bid?

A: All SRF requirements in the bid documents are to be meet with the modifications made in Addendum #1.

Q: Please verify that Owner provided testing includes the maturity probes/meters

A: The maturity probes/ meters are to be installed during construction and will be installed by the contractor. However, these probes/ meters will be provided by the Owner through their selected testing company. The Owner will be providing material testing services and if material is needed to be provided by the testing firm, it will be done so at the Owners expense.

Q: Please confirm if only one of the two hatches is required to have the ladder in it.

A: Only one hatch has a ladder in it.

Q: Piping inside the vault is called out on sheet VB2 note 6 is calling out for Welded Steel Pipe AND DIP to be epoxy coated inside and out. I can see this on the WSP but not the interior of the DIP as this has a concrete lining…please clarify.

A: Ductile Iron Pipe is to be epoxy coated or blue enamel painted on the exterior. The interior of DIP is not to be epoxy coated. The interior and exterior of welded steal pipe is to be epoxy coated.

Q. Can you confirm you want the pre-fabricated steel pipe and ductile iron fittings and spools epoxy coated inside and out? See Tank inlet, outlet, and overflow details (B, C, D, sheet TD1)

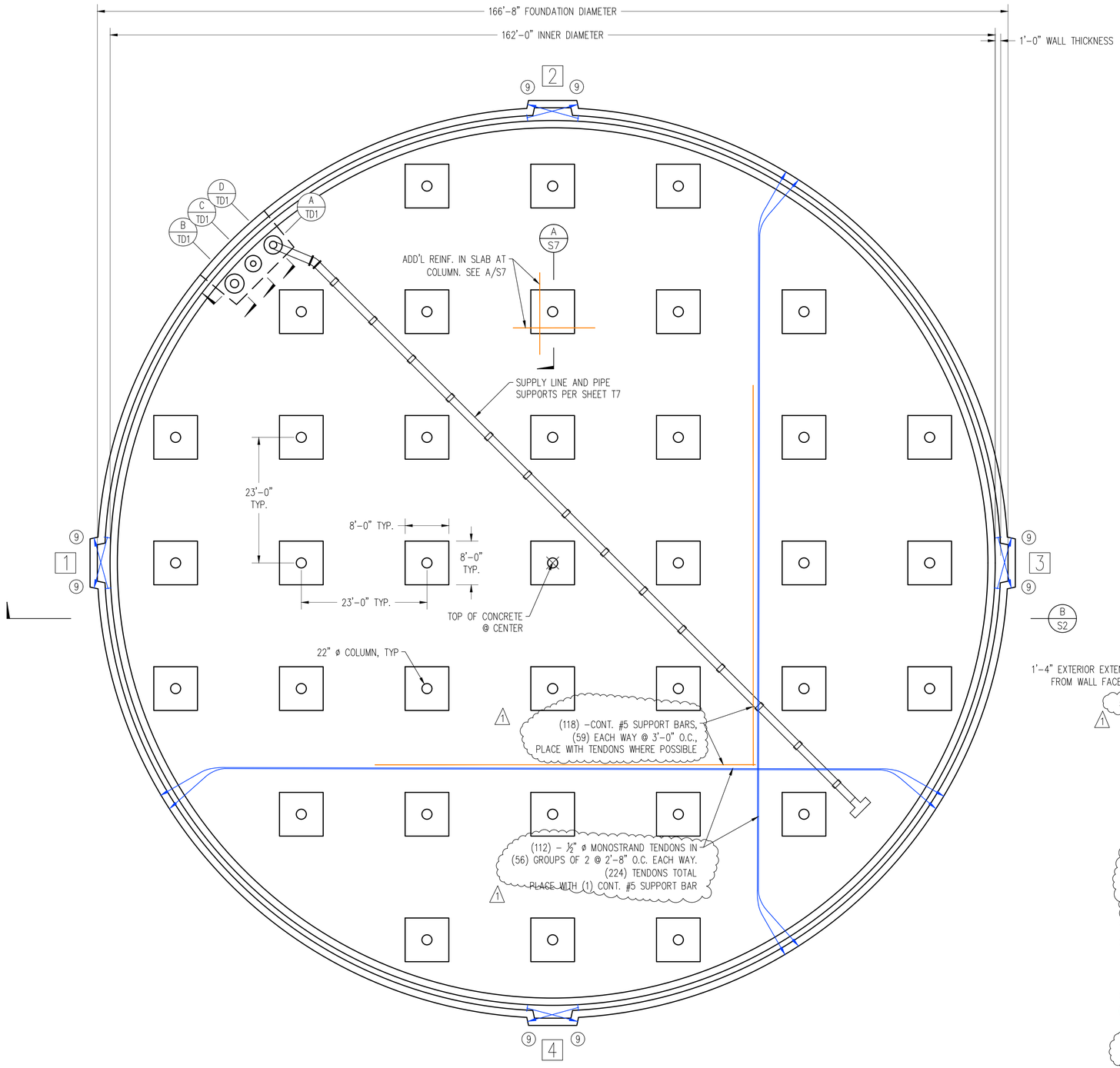
A: Please refer to previous note on Ductile Itron Pipe considerations. For the pre-fabricated steel pipes used in the penetrations of the tank, these are to be epoxy coated both inside and outside.

Q: One more question regarding the concrete on the project with the NSF approvals. Any new required approvals for these materials will take 6 months to obtain. I don't believe there is time in the schedule for these approvals, has there been any consideration for the requirements for these approvals?

A: The concrete will not be required for NSF approval. The additives placed in the concrete (such as Xypex) are required to have NSF approval.

Sincerely,

Steven Wood, PE
Sunrise Engineering



A
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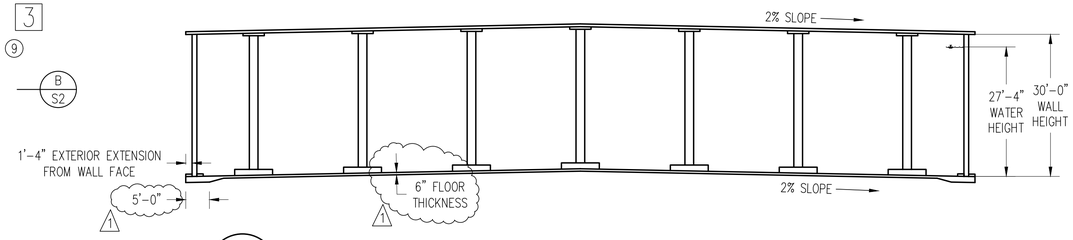
FOUNDATION PLAN
SCALE: 3/32" = 1'-0" (22x34)

FOUNDATION PLAN CONSTRUCTION NOTES

1. USE NEAREST STANDARD 90°, 60°, & 45° POCKET FORMERS OR VARIABLE ANGLE BLOCKOUTS TO KEEP TENDON ALIGNMENT AS STRAIGHT AS POSSIBLE AT STRESSING ENDS (TYP).
2. DEFLECT TENDONS AT ENDS, IF REQ'D, TO AVOID OVERLAPPING ANCHORAGES.
3. COMBINE ORTHOGONAL P.T. & REINF. BARS IN GROUPS @ INDICATED SPACING.
4. USE 3"X3"X2" HIGH, 4000 PSI CONC. BLOCKS (DOBIES), TO SUPPORT THE FLOOR SLAB REINFORCEMENT. THE LOWER LAYER OF POST-TENSIONING AND BARS SHALL BE DIRECTLY SUPPORTED AT EVERY CROSSING WITH THE PERPENDICULAR BARS AND STRANDS.
5. CIRCUMFERENTIAL AND ORTHOGONAL TENDONS GREATER THAN 100'-0" IN LENGTH SHALL BE TWO-END STRESSED.
6. SEE CIVIL DRAWINGS FOR PIPE LOCATIONS & DETAILS & FLOOR SLAB ELEVATION.
7. BOTH FIELD-CURED CYLINDERS AND MATURITY METERS ARE REQ'D FOR FLOOR CONCRETE TO DETERMINE IN-SITU STRENGTH PRIOR TO POST-TENSIONING.

FOUNDATION PLAN LEGEND & SYMBOLS

- 1/2" ø POST-TENSIONING TENDONS
- REINFORCING BARS AS SHOWN ON PLANS
- (#) NUMBER OF POST TENSIONING TENDONS
- [#] PILASTER NUMBER



B
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TANK SECTION VIEW
SCALE: 1/16" = 1'-0" (22x34)

1 NOTE REMOVED

811 Know what's below. Call before you dig. 1-800-662-4111

REV NO.	COMMENT	DATE
1	SLAB REVISIONS	5/05/25

PROFESSIONAL STRUCTURAL ENGINEER
No. 5048199-2203
STEVEN M. HANSEN
5/5/2025
STATE OF UTAH

SUNRISE ENGINEERING
2100 NORTH MAIN STREET
NORTH LOGAN, UTAH 84341
TEL 435.563.3734
www.sunrise-eng.com

NORTH LOGAN CITY

RATTLESNAKE HILL 4.0 MG TANK PROJECT
TANK STRUCTURAL DESIGN
STRUCTURAL SPECS & REQUIREMENTS

SEI NO.	DESIGNED	DRAWN	CHECKED	SHEET NO.	
10635	EL	EL	SH	17 of 000	S2

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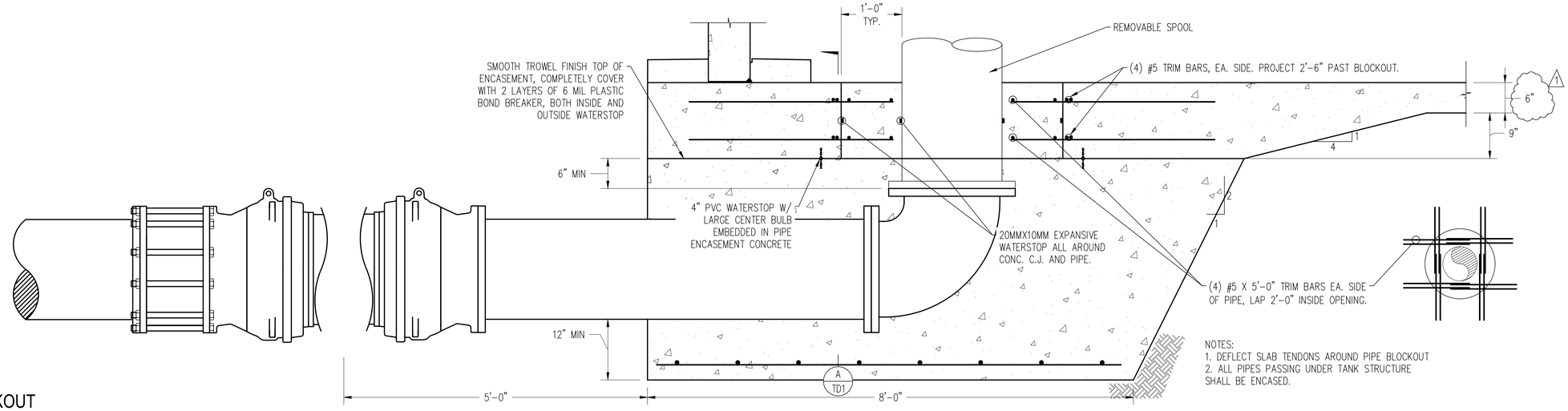
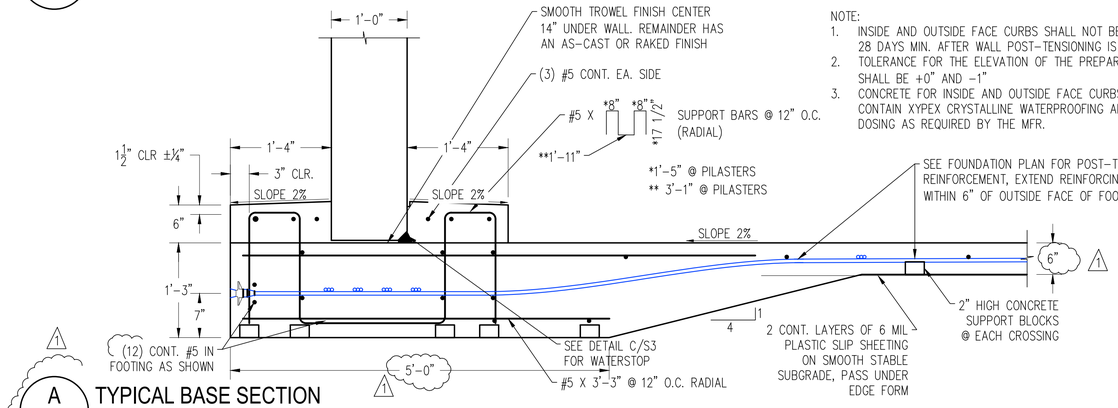


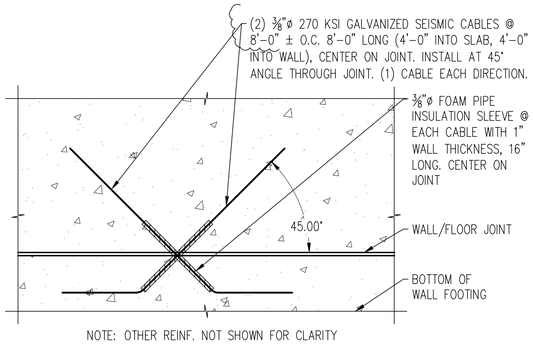
NOTES:
1. DEFLECT SLAB TENDONS AROUND PIPE BLOCKOUT
2. ALL PIPES PASSING UNDER TANK STRUCTURE SHALL BE ENCASED.

B SLAB BLOCKOUT
NTS



NOTE:
1. INSIDE AND OUTSIDE FACE CURBS SHALL NOT BE PLACED UNTIL 28 DAYS MIN. AFTER WALL POST-TENSIONING IS COMPLETE.
2. TOLERANCE FOR THE ELEVATION OF THE PREPARED SUBGRADE SHALL BE +0" AND -1"
3. CONCRETE FOR INSIDE AND OUTSIDE FACE CURBS SHALL CONTAIN XYPEX CRYSTALLINE WATERPROOFING ADMIXTURE DOSING AS REQUIRED BY THE MFR.

A TYPICAL BASE SECTION
NTS

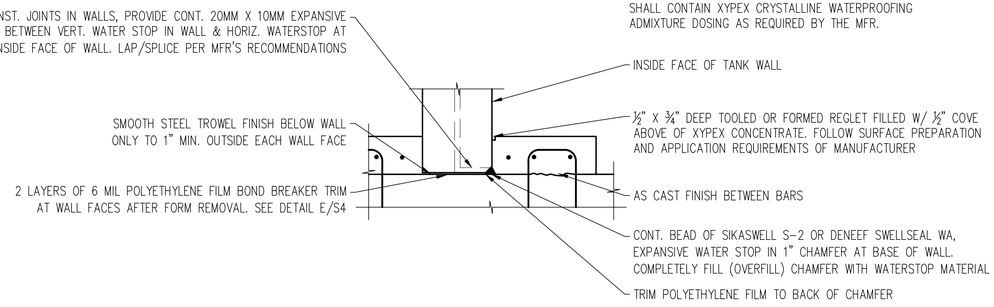


NOTE: OTHER REINF. NOT SHOWN FOR CLARITY

D SEISMIC CABLES AT WALL/FLOOR INTERFACE
NTS

AT VERT. CONST. JOINTS IN WALLS, PROVIDE CONT. 20MM X 10MM EXPANSIVE WATER STOP BETWEEN VERT. WATER STOP IN WALL & HORIZ. WATERSTOP AT BASE OF INSIDE FACE OF WALL. LAP/SPLICE PER MFR'S RECOMMENDATIONS

NOTE: CONCRETE FOR INSIDE AND OUTSIDE FACE CURBS SHALL CONTAIN XYPEX CRYSTALLINE WATERPROOFING ADMIXTURE DOSING AS REQUIRED BY THE MFR.



C WATERSTOP (TYP.)
NTS

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NORTH LOGAN CITY

RATTLESNAKE HILL 4.0 MG TANK PROJECT
TANK STRUCTURAL DESIGN
TANK FLOOR DETAILS

SEI NO.	DESIGNED	DRAWN	CHECKED	SHEET NO.
10635	EL	EL	SH	19 of 000

S3

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