

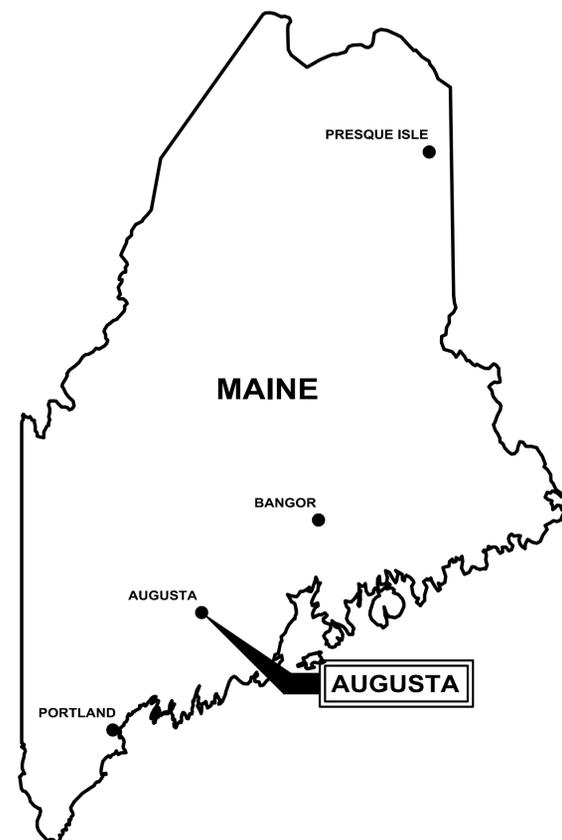
GREATER AUGUSTA UTILITY DISTRICT

AUGUSTA, ME

CONTRACT DRAWINGS FOR

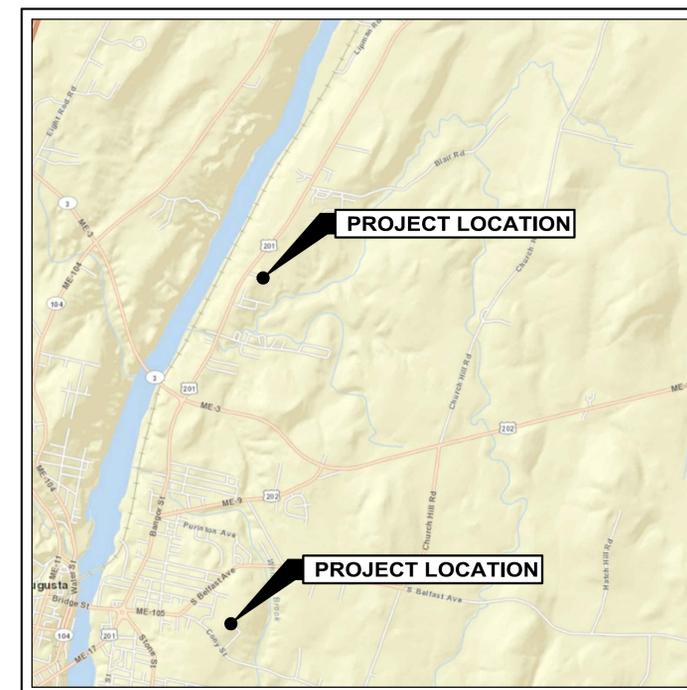
MALTA HILL WATER STORAGE TANK

MARCH 2014



DRAWING INDEX

GENERAL	
-	COVER SHEET
CIVIL	
C-1	GENERAL NOTES, LEGEND & ABBREVIATIONS
C-2	EXISTING CONDITIONS PLAN
C-3	MALTA HILL DEMOLITION
C-4	RIVERSIDE DEMOLITION
C-5	PROPOSED SITE PLAN
C-6	SITE DETAILS I
C-7	SITE DETAILS II
C-8	EROSION CONTROL
S-1	TANK DETAILS I
S-2	TANK DETAILS II
S-3	TANK DETAILS III
S-4	TANK DETAILS IV
S-5	TANK DETAILS V
S-6	TANK DETAILS VI



LOCATION PLAN
SCALE: 1"=1000'

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95% DWSRF REVIEW

FOR REVIEW 3/7/2014

FOR BIDDING _____

WP PROJECT No. 12885A

EXISTING SITE CONDITION NOTES

- 1. CONTRACTOR TO NOTE THAT, IN GENERAL, ALL EXISTING CONDITION INFORMATION ON THE DRAWINGS ARE SHOWN WITH A LIGHTER LINE WEIGHT AND WITH A SLANTED TYPE TEXT.
2. UNLESS OTHERWISE NOTED, THERE IS NO KNOWN ASBESTOS WITHIN THE AREA OF WORK...
3. BASE PLAN TAKEN FROM SURVEY COMPLETED BY E.S. COFFIN DATED FEBRUARY 12 2014.

SITE DEMOLITION NOTES

- 1. REFER TO CIVIL DRAWINGS FOR SPECIFIC INFORMATION REGARDING DEMOLITION AND REMOVAL. THESE DRAWINGS ARE FOR USE AS GENERAL GUIDANCE ONLY.
2. ALL PIPING, EQUIPMENT AND MATERIALS TO BE DEMOLISHED, RELOCATED AND/OR REMOVED FROM THE SITE SHALL BE COORDINATED WITH THE OWNER AND ENGINEER BEFORE COMMENCING THAT WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL DEMOLISHED PIPING, EQUIPMENT AND MATERIALS.

SITE GRADING NOTES

- 1. STRIPPING OF TOPSOIL (LOAM) SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02485.
2. ALL ROAD AND PARKING AREA SURFACES SHALL PITCH 1/4 INCH PER FOOT MINIMUM UNLESS OTHERWISE NOTED.
3. ALL AREAS THAT ARE EXCAVATED, FILLED, OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE LOAMED, GRADED, LIMED, FERTILIZED, SEEDED AND MULCHED, UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR SHALL PROVIDE PROPER EROSION CONTROL AND DRAINAGE MEASURES IN ALL AREAS OF WORK...
5. ALL ELEVATIONS ARE BASED ON AN ASSUMED DATUM, SEE PLANS FOR BENCH MARK LOCATION.
6. CONTRACTOR SHALL CONTROL DUST ON THE CONSTRUCTION SITE TO A REASONABLE LIMIT...
7. CONTRACTOR SHALL NOT TRACK OR SPILL EARTH, DEBRIS OR OTHER CONSTRUCTION MATERIAL ON PUBLIC OR PRIVATE STREETS.
8. ALL MANHOLES, VALVE BOXES AND OTHER BURIED FACILITIES WITH SURFACE ACCESS SHALL BE ADJUSTED TO MATCH FINAL GRADES...
9. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEBRIS AND EXCESS EXCAVATED MATERIAL FROM WITHIN THE CONSTRUCTION LIMIT OF WORK...
10. CONTRACTOR SHALL REMOVE AND REPLACE, OR REPAIR, ALL STRUCTURES, PAVEMENT AND OTHER ITEMS DAMAGED BY HIS CONSTRUCTION ACTIVITIES...

SITE LAYOUT NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED WORK IN ACCORDANCE WITH LAYOUT COORDINATES SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE LAYOUT INFORMATION THROUGHOUT THE COURSE OF CONSTRUCTION.
2. IN GENERAL, THE GIVEN STRUCTURE LOCATIONS ARE TO THE OUTSIDE FACE OF THE STRUCTURE FOUNDATION WALL, NOT FOOTINGS.
3. THE LOCATION AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED/COORDINATED WITH, AND ACCEPTABLE TO, THE OWNER AND ENGINEER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING AND RESETTling ALL EXISTING PROPERTY MONUMENTATION DISTURBED BY HIS OPERATIONS.
5. WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE DISTANCES FROM THE DRAWINGS.

PROJECT BENCHMARK

TBM #1: MAG SET 1' ABOVE GROUND IN THE SE'LY SIDE OF CMP POLE #8 ELEV. 272.23

SITE PIPING NOTES

- 1. ALL PIPE LINES SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED ON THE DRAWINGS. NO CRESTS IN PIPING WILL BE PERMITTED.
2. THE HORIZONTAL ALIGNMENT OF NEW PIPING MAY BE ADJUSTED IN THE FIELD SUBJECT TO PRIOR REVIEW AND ACCEPTANCE OF THE ENGINEER.
3. ALL PIPING INSTALLED BENEATH STRUCTURES SHALL BE ENCASED IN CONCRETE AS SHOWN ON THE DRAWINGS.
4. ALL BURIED CONNECTIONS TO STRUCTURES SHALL HAVE SLEEVE TYPE FLEXIBLE CONNECTIONS 4 FEET FROM THE STRUCTURES UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
5. PROVIDE CAST OR DUCTILE IRON WALL CASTINGS, GALVANIZED STEEL PIPE SLEEVES, FOR ALL PIPE PENETRATIONS MADE THROUGH CONCRETE FOUNDATIONSWALL AND SLABS.
6. TRENCH INSULATION SHALL BE USED WHERE DEPTH OF COVER IS LESS THAN 5'-6" FEET.
7. REFER TO SPECIFICATION SECTION 02200 FOR PIPE AND STRUCTURE BEDDING AND BACKFILL REQUIREMENTS.
8. COMPACTION TESTS WILL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02200.
9. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
10. REFER TO SECTIONS 01010 AND 01050 OF THE SPECIFICATIONS FOR INFORMATION REGARDING COORDINATION WITH OTHERS.
11. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO ANY TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED.

TANK DEMOLITION NOTES

- 1. SEE SECTION 01100, SUMMARY OF WORK FOR A SUGGESTED SEQUENCE OF WORK FOR DEMOLITION OF THE MALTA HILL TANKS.
2. RIVERSIDE TANK DEMOLITION CAN PROCEED ONLY AFTER THE NEW CONCRETE TANK IS COMMISSIONED AND PLACED IN SERVICE.
3. THE COATING SYSTEMS ON BOTH THE MALTA HILL AND RIVERSIDE TANKS CONTAIN LEAD PAINT. ALL MATERIALS SHALL BE REMOVED OFFSITE AND DISPOSED OF IN ACCORDANCE WITH SPECIFICATIONS AND STATE AND FEDERAL LAW.

LIST OF CONTACTS

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ELECTRIC
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TEL: 207-626-2421

POLICE DEPARTMENT
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AUGUSTA, MAINE, 04330
POLICE CHIEF: ROBERT GREGOIRE
TEL: 207-626-2370

ABBREVIATIONS

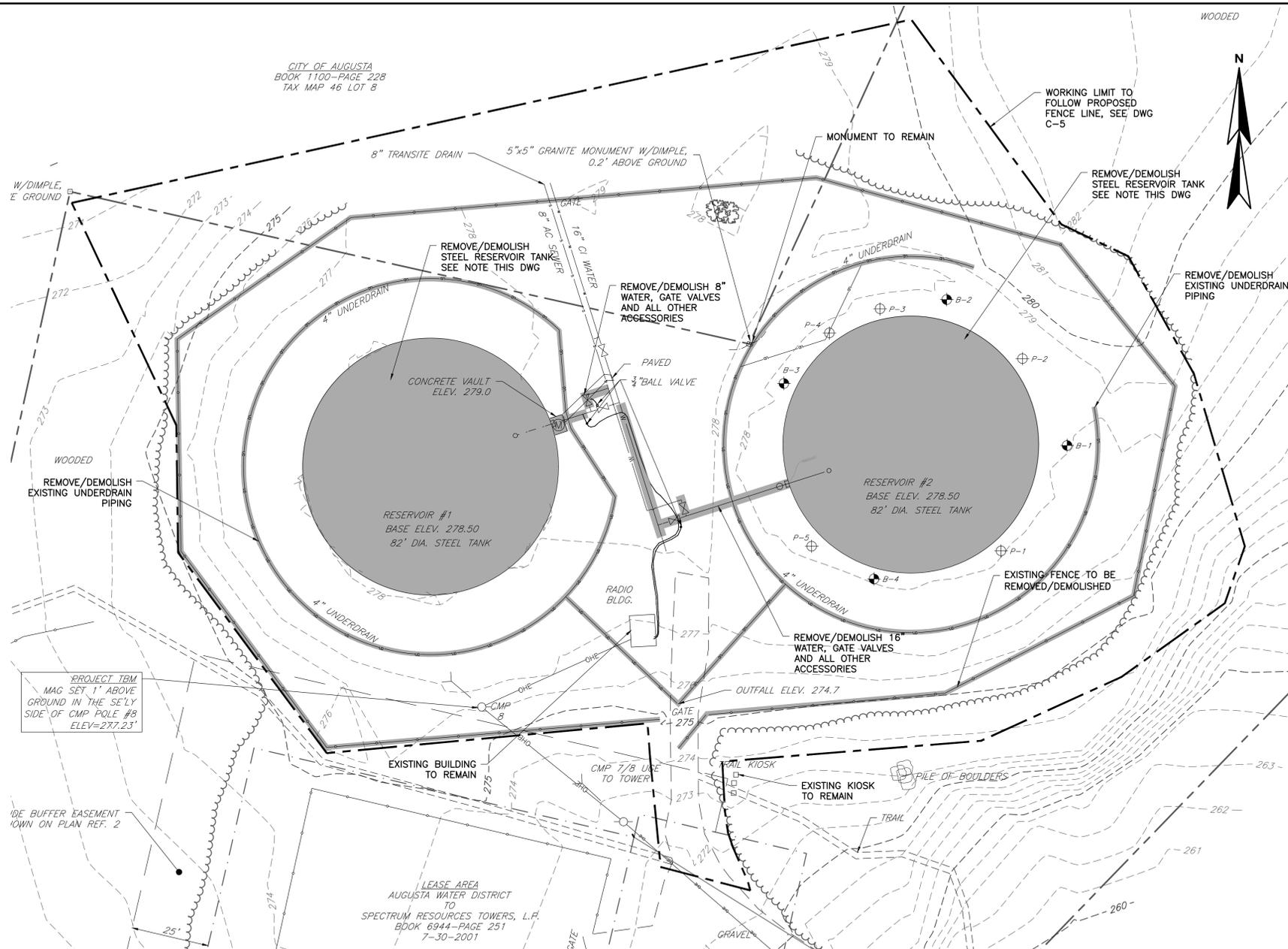
Table listing abbreviations for various items: BFV BUTTERFLY VALVE, BLDG BUILDING, CB CATCH BASIN, CI CAST IRON, CIP CAST IN PLACE, CL CENTERLINE, CMP CORRUGATED METAL PIPE, CO CLEANOUT STRUCTURE, CONC CONCRETE, CPE CORRUGATED POLYETHYLENE PIPE, CY CUBIC YARD, DEMO DEMOLITION, DI DUCTILE IRON, etc.

LEGEND

Legend table with columns for EXISTING and PROPOSED symbols. Includes symbols for PROPERTY/ROW LINE, SETBACK LINE, EASEMENT LINE, CENTERLINE, EDGE OF PAVEMENT, CURBING, EDGE OF GRAVEL, EDGE OF CONCRETE, CONTOUR, BUILDING, STONEWALL, TREELINE, CHAIN LINK FENCE, STOCKADE FENCE, BARB WIRE FENCE, RETAINING WALL, GUARDRAIL, SEWER, SEWER FORCE MAIN, GAS, WATER, STORM DRAIN, UNDERDRAIN, CULVERT, UNDERGROUND ELECTRIC, OVERHEAD ELECTRIC, IRON PIPE/REBAR, DRILLHOLE, MONUMENT, SURVEY CONTROL POINT, SPOT ELEVATION, SEWER MANHOLE, DRAINAGE MANHOLE, CATCH BASIN, ELECTRIC MANHOLE, TELEPHONE MANHOLE, SHUTOFF VALVE, WATER SERVICE SHUTOFF, HYDRANT, UTILITY POLE, UTILITY POLE W/ GUY, UTILITY POLE W/ LIGHT, LIGHT POLE, BOLLARD, CONIFEROUS TREE, DECIDUOUS TREE, SHRUB, EDGE OF WATER, STREAM, EDGE OF WETLANDS, WETLANDS, DRAINAGE FLOW, DRAINAGE SWALE, PAVEMENT MARKINGS, SIGN, MAILBOX, TEMPORARY BENCH MARK, TEST PIT, TEST BORING, TEST PROBE, MONITORING WELL, LIMIT OF WORK, SILT FENCE, RIPRAP, RAILROAD, MATCHLINE, ROCK OUTCROP, BORING.

Project title block containing: WRIGHT-PIERCE Engineering a Better Environment, Offices Throughout New England www.wright-pierce.com, 888.621.8156, DRAWING C-1, NOTES, LEGEND, ABBREVIATIONS, and a table for SUBMISSIONS/REVISIONS.

CITY OF AUGUSTA
BOOK 1100-PAGE 228
TAX MAP 46 LOT 8



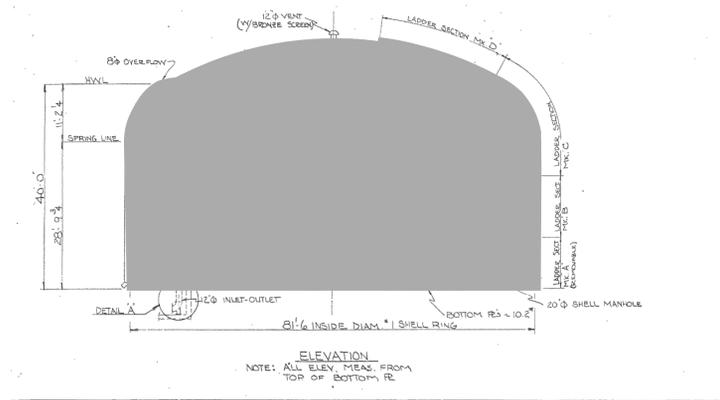
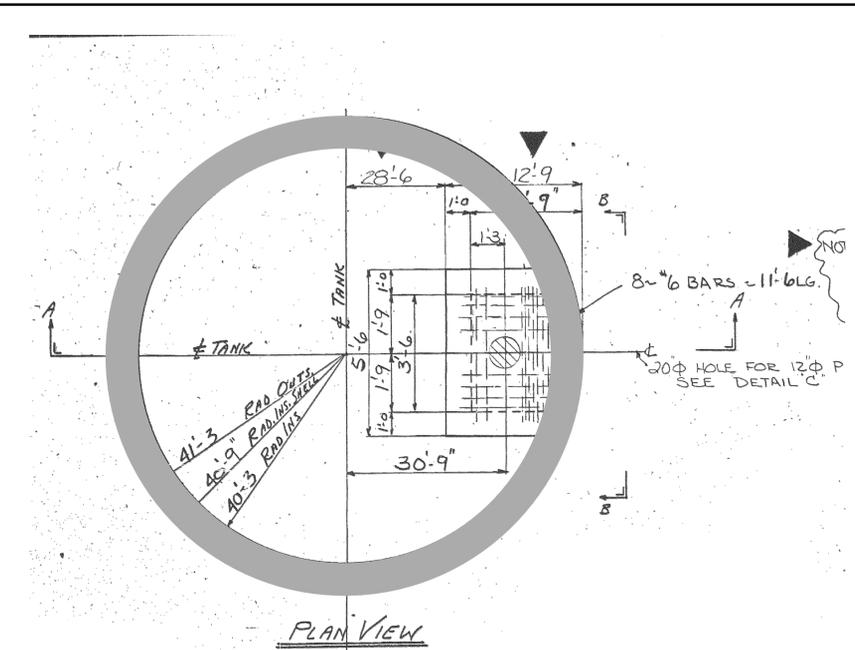
MALTA HILL DEMOLITION PLAN

SCALE: 1"=20'

■ DENOTES AREA OF DEMOLITION

NOTES:

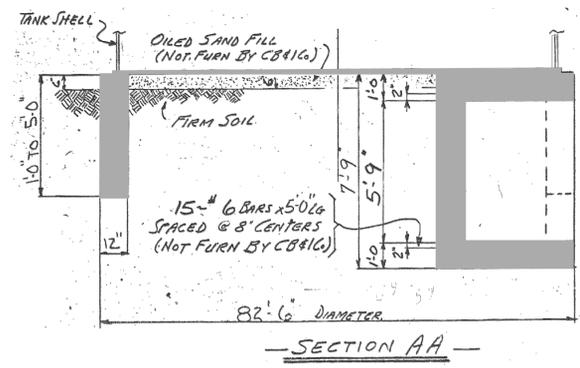
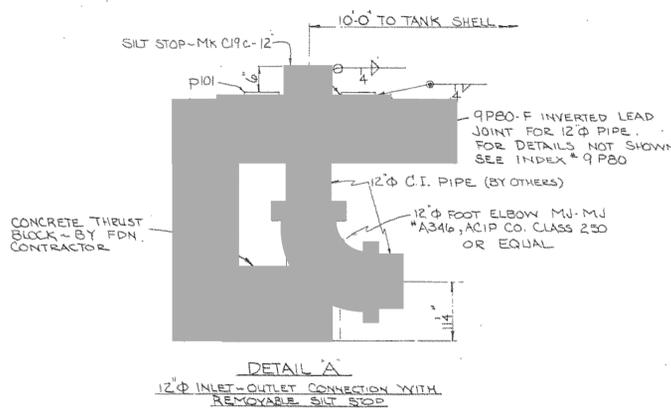
- EXISTING TANKS SHALL BE DEMOLISHED IN THEIR ENTIRETY, REFER TO SECTION 01010 FOR SEQUENCING OF WORK.
- REFER TO SPECIFICATION 02050 FOR DEMOLITION REQUIREMENTS.
- CONTRACTOR SHALL MAINTAIN ACCESS TO SPECTRUM RESOURCE TOWERS LEASE AREA DURING THE CONSTRUCTION.



EXISTING MALTA HILL TANK DETAILS

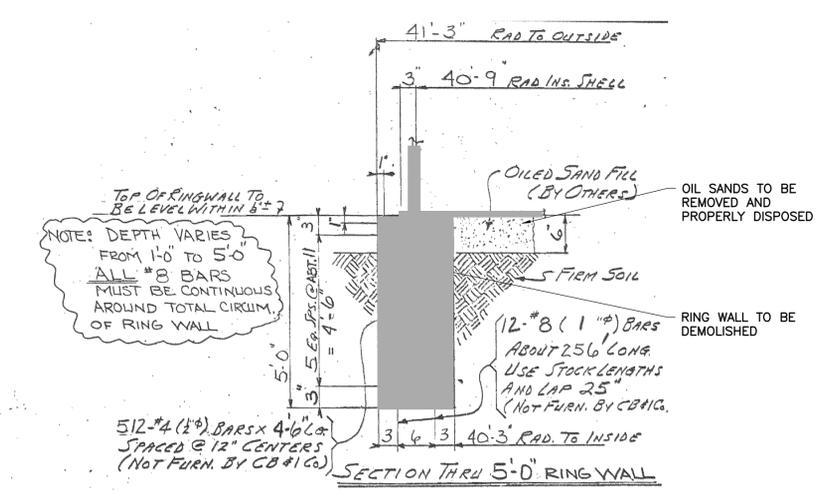
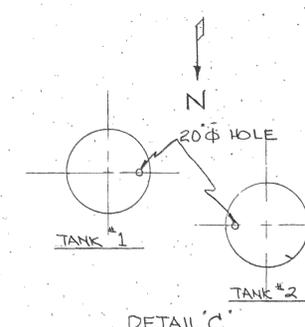
SCALE: NTS

■ DENOTES AREA OF DEMOLITION



EXISTING MALTA HILL TANK DETAILS

SCALE: NTS

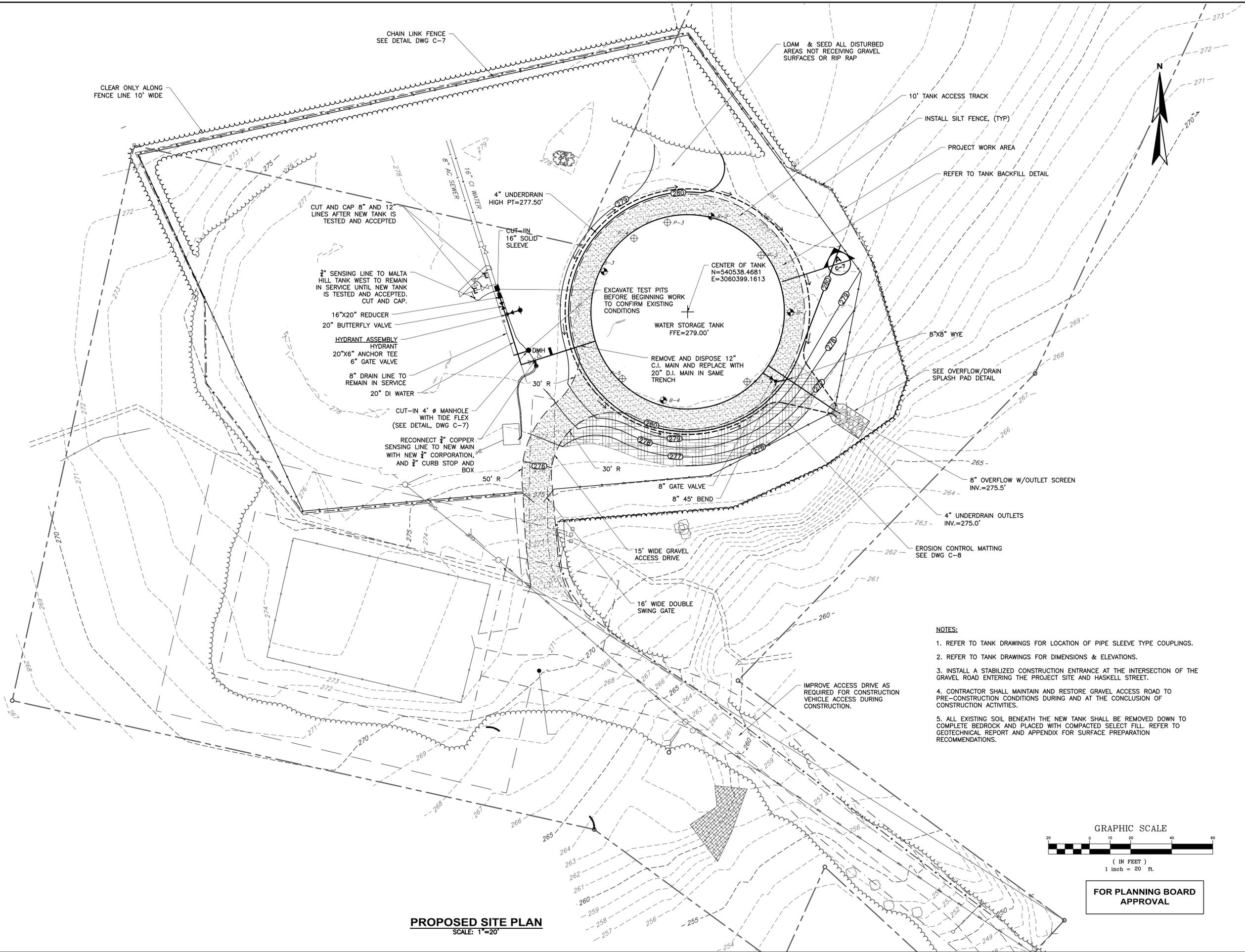


NO.	DATE	DESCRIPTION

DESIGNED BY: JAC
CAD COORD: JAC
CHECKED BY: _____
DATE: _____
APPROVED BY: _____
DATE: _____
PROJECT NO: 12885A

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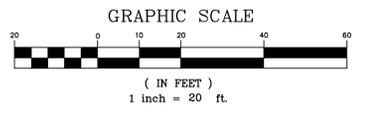
GREATER AUGUSTA UTILITY DISTRICT
AUGUSTA, MAINE
MALTA HILL WATER STORAGE TANK
MALTA HILL DEMOLITION



PROPOSED SITE PLAN
SCALE: 1"=20'

NOTES:

1. REFER TO TANK DRAWINGS FOR LOCATION OF PIPE SLEEVE TYPE COUPLINGS.
2. REFER TO TANK DRAWINGS FOR DIMENSIONS & ELEVATIONS.
3. INSTALL A STABILIZED CONSTRUCTION ENTRANCE AT THE INTERSECTION OF THE GRAVEL ROAD ENTERING THE PROJECT SITE AND HASKELL STREET.
4. CONTRACTOR SHALL MAINTAIN AND RESTORE GRAVEL ACCESS ROAD TO PRE-CONSTRUCTION CONDITIONS DURING AND AT THE CONCLUSION OF CONSTRUCTION ACTIVITIES.
5. ALL EXISTING SOIL BENEATH THE NEW TANK SHALL BE REMOVED DOWN TO COMPLETE BEDROCK AND PLACED WITH COMPACTED SELECT FILL. REFER TO GEOTECHNICAL REPORT AND APPENDIX FOR SURFACE PREPARATION RECOMMENDATIONS.



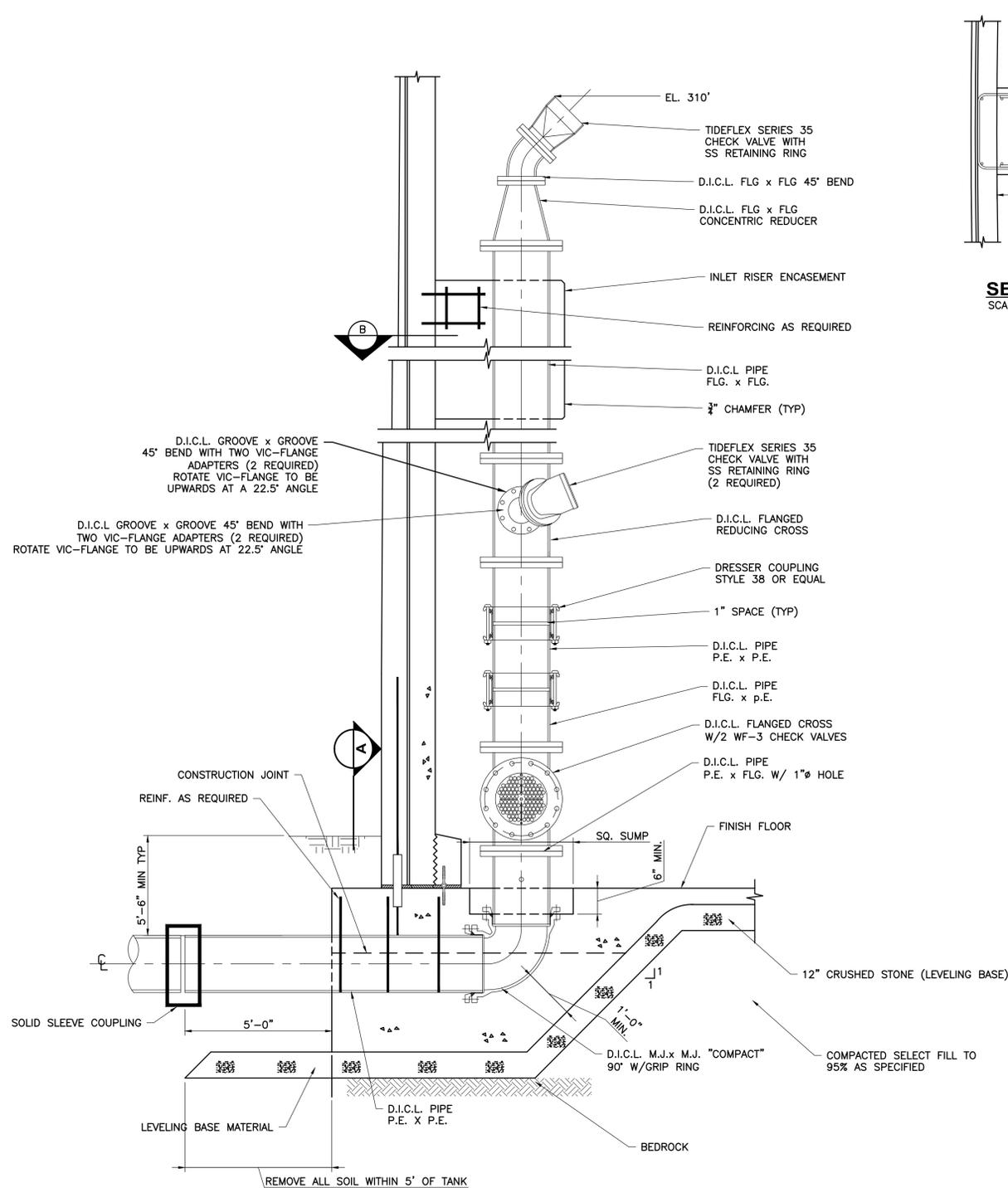
FOR PLANNING BOARD APPROVAL

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PROJECT NO: 12885A

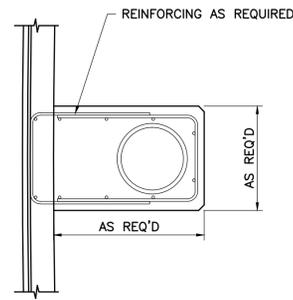
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AUGUSTA, MAINE
MALTA HILL WATER STORAGE TANK
PROPOSED SITE PLAN
DRAWING
C-5

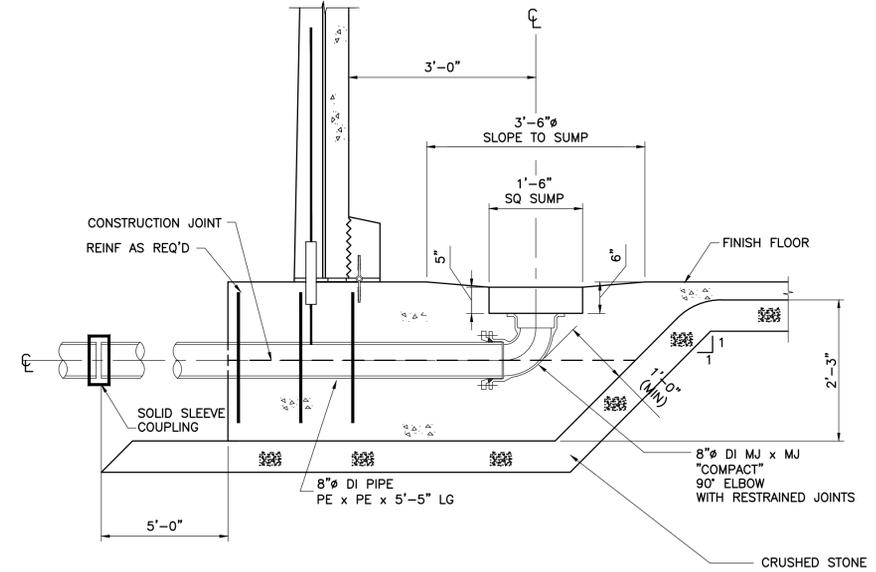


- NOTE:
1. DESIGN, SIZING, AND SPACING OF MIXING SYSTEM VALVES SHALL BE PERFORMED BY TIDEFLEX TECHNOLOGIES.
 2. MANIFOLD SIZE AS REQUIRED BY TIDEFLEX TECHNOLOGIES.
 3. MAINTAIN A MINIMUM PIPE COVER OF 5'6" OVER ALL PIPES PENETRATING THE TANK INCLUDING THE INLET/OUTLET AND OVERFLOW PIPE.
 4. FOUNDATION SOILS ARE TYPICAL FOR ALL AREAS OF THE TANK, WHETHER SHOWN OR NOT ON SPECIFICATIONS.

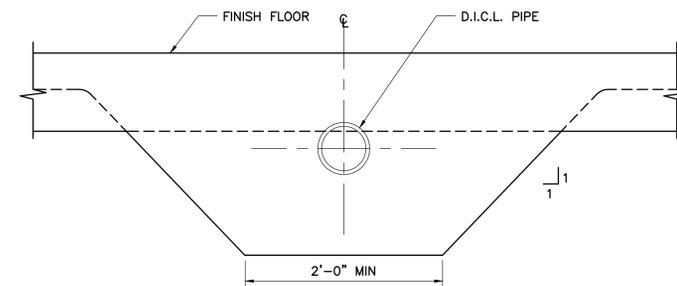
INLET/OUTLET MIXING SYSTEM (5) S-1
SCALE: NTS



SECTION B
SCALE: NTS



8\"/>



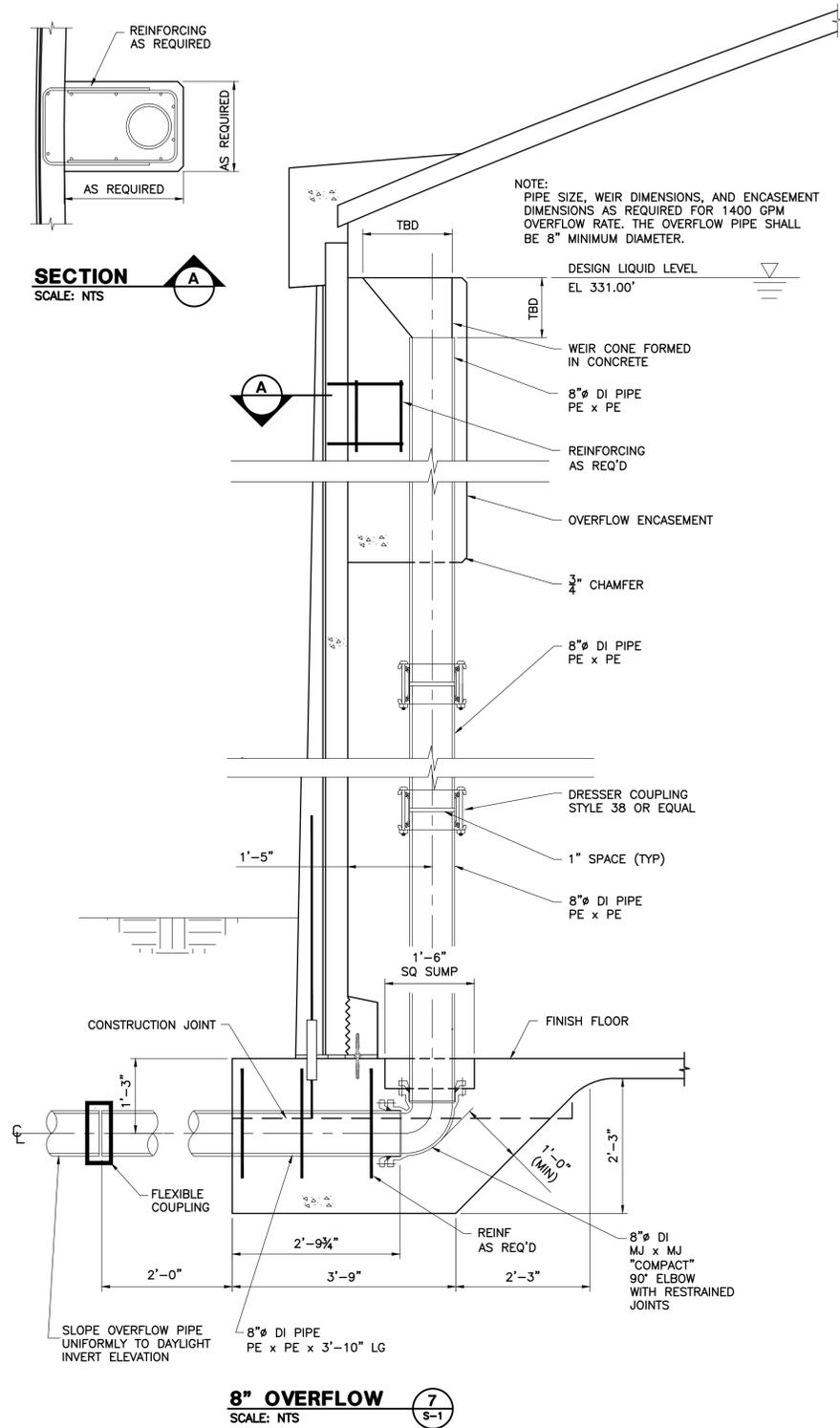
SECTION A
SCALE: NTS

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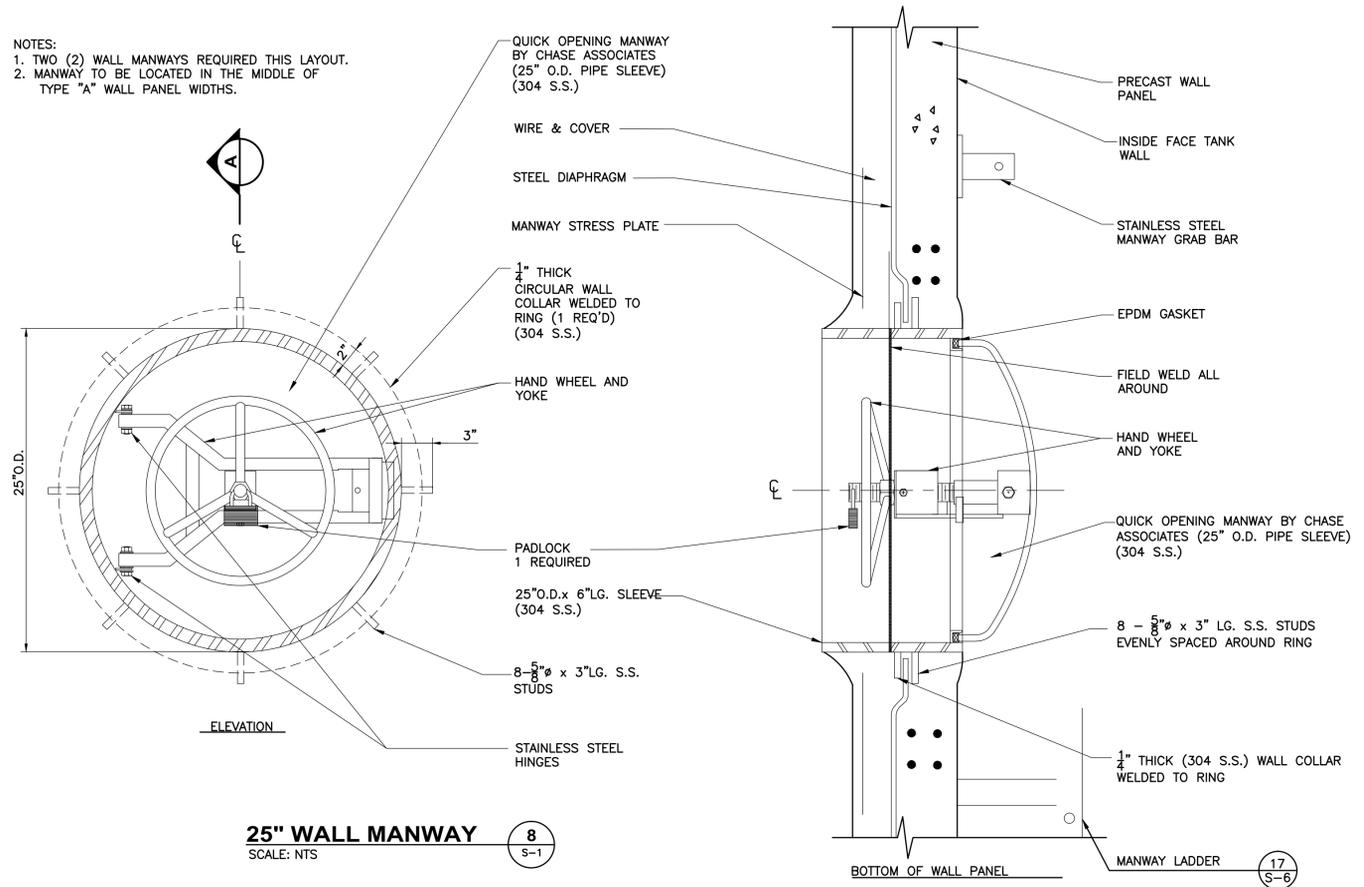
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GREATER AUGUSTA UTILITY DISTRICT
 AUGUSTA, MAINE
 MALTA HILL WATER STORAGE TANK
 TANK DETAILS III

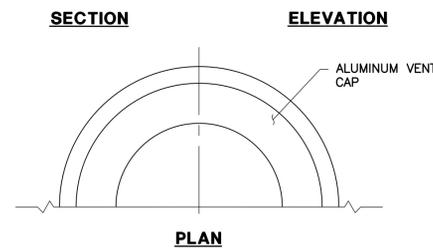
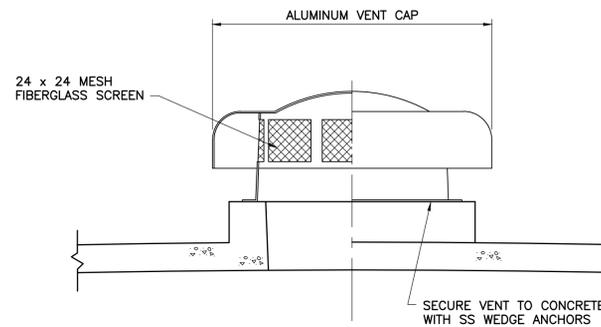


8" OVERFLOW
SCALE: NTS

NOTES:
1. TWO (2) WALL MANWAYS REQUIRED THIS LAYOUT.
2. MANWAY TO BE LOCATED IN THE MIDDLE OF TYPE "A" WALL PANEL WIDTHS.



25" WALL MANWAY
SCALE: NTS



NOTE: VENT SIZE AS REQUIRED FOR MAXIMUM TANK FILL AND WITHDRAWAL FLOW RATES.

VENT
SCALE: NTS

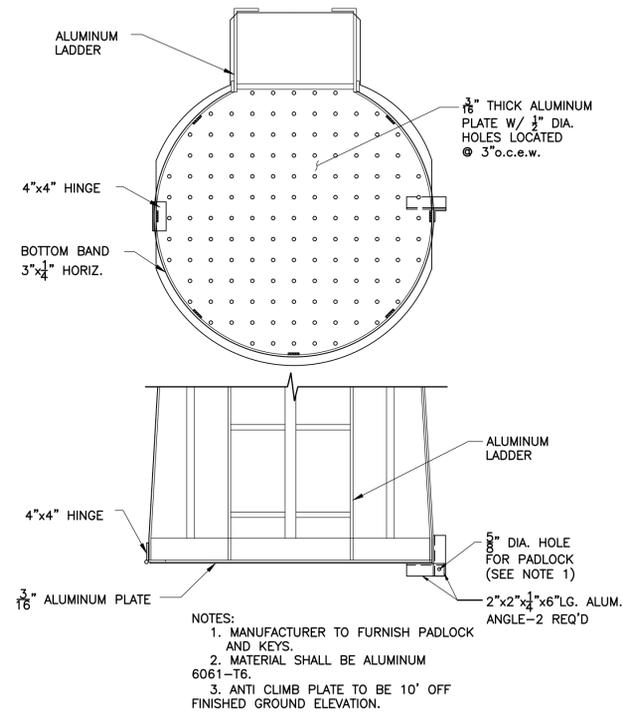
NO	DATE	APPROVED	REVISIONS

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DATE: JAC
PROJECT NO: 12885A

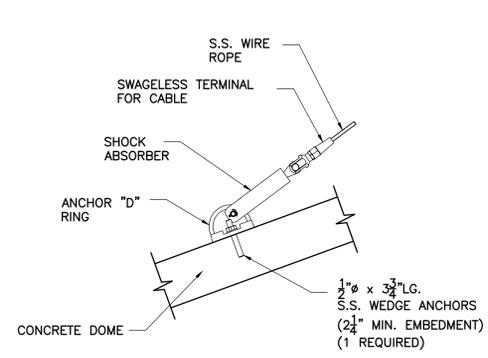
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MALTA HILL WATER STORAGE TANK

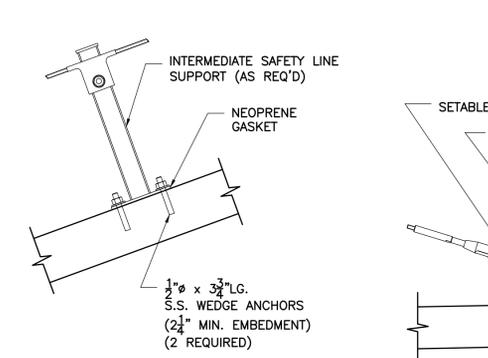
TANK DETAILS IV



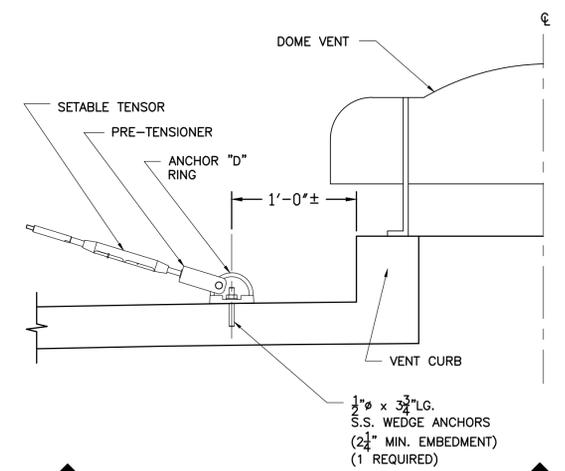
ANTI-CLIMB PLATE 14
SCALE: NTS



SECTION AT ANCHOR END
SCALE: NTS



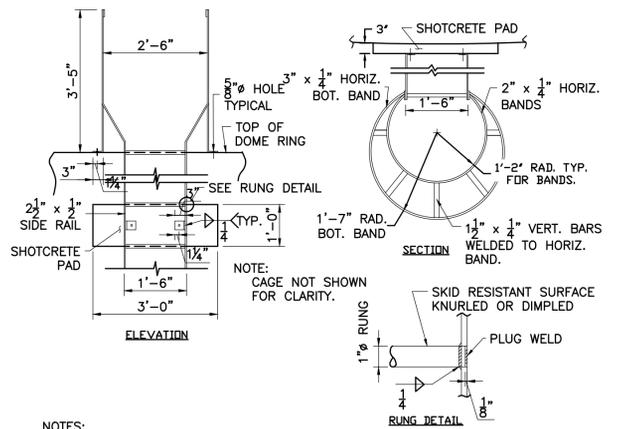
SECTION AT INTERMEDIATE SUPPORT
SCALE: NTS



SECTION AT ANCHOR END
SCALE: NTS

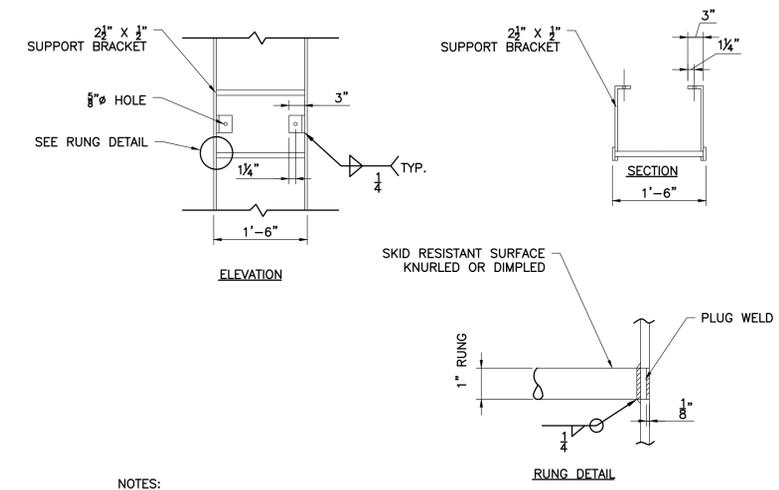
- NOTE:
1. INSTALL SAFETY RUNNERS ON CABLE AS REQUIRED BY DESIGN.
2. ONE (1) REQUIRED.

15
DOMES SAFETY LINE
SCALE: NTS



- NOTES:
1. LADDER SHALL BE 6061-T6 ALUMINUM.
2. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL RECEIVE A PVC SHIM.
3. LADDERS SHALL BE CONNECTED TO TANK USING STAINLESS STEEL WEDGE ANCHORS.
4. BASE OF LADDER SHALL BE EQUIPPED WITH ANTI-CLIMB PLATE.

EXTERIOR LADDER 16
SCALE: NTS



- NOTES:
1. LADDER SHALL BE 6061-T6 ALUMINUM.
2. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL RECEIVE A PVC SHIM.
3. LADDERS SHALL BE CONNECTED TO TANK USING STAINLESS STEEL WEDGE ANCHORS.

MANWAY LADDER 17
SCALE: NTS

NO.	DATE	APPR'D.	REVISIONS

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APPROVED BY: JAC	DATE:
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TANK DETAILS VI