CITY OF POUGHKEEPSIE
POUGHKEEPSIE, NEW YORK

Replacement of Two (2) Reservoir Tanks at College Hill
RFB COP 04-16-01

ADDENDUM NO. 2

July 1, 2016

This addendum contains the following:

- A complete drawing set is attached with hatched/shaded areas shown in gray scale. Sheets C200, C201 and C202 have been revised to show approximate location of major trees to be removed, additional grading at east section of proposed 20'-0" Asphalt Driveway, chain link fence relocation adjacent to arbor vitae and post and rail relocation has been revised to include new materials.
- Response to prebid questions and comments
- Bid proposal sheet has been further revised to include alternate for tree plantings. Sheet C803 includes a tree planting detail. A rock excavation item has also been added to the base bid.
- A specification for chain link fence is attached.
- Hatch door detail. This supersedes detail on C802
- Suggested Stockpile Location Plan

Prepared By:

City of Poughkeepsie
Engineering Department
62 Civic Center Plaza
Poughkeepsie, New York 12601

RESPONSE TO PREBID QUESTIONS AND COMMENTS

- Can prints of the Utility Plan C 202 be provided without the asphalt shading so that the pipe alignments are not obscured by the dark hatch?

Revised bid set with grayscale hatching is attached.

- Can you please verify the extent of tree/stump removals and clearing and grubbing as applicable?

A revised Grading Plan is included in the attached bid set. Line work has been added to show the limits tree/stump removals and clearing and grubbing.

- There is significant excavation and removal required for tank installation. It is likely that rock will be encountered. How will payment for rock removal be handled? If considered unclassified excavation, what is the approximate percentage of rock to be utilized for bid preparation?

A rock excavation item has been added to the base bid.

- Are the underlying soils suitable for tank installation as depicted on the drawings without the need for separate foundation support systems, i.e., piles, etc...

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- The bid form calls out that price includes cost of licenses, permits, etc. yet none were discussed at the pre-bid. Will you please confirm what permits are required, if any?

No City permits are required

- The general notes on drawing C801 call off the requirements for testing. Who pays for the water that will be used for flushing and testing?

The City will allow use of water, but will require that it is metered or otherwise accounted for.

- Thrust blocks are called off as restraints in the general notes. Will a schedule be provided to determine the size and configurations of these restraints? Will alternate restraint systems be considered?

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- The project bid form is set up as a lump sum. How will deviations from the plans be handled if the improvements cannot be constructed as depicted and specified, and paid for, if it involves additional materials and labor than originally specified?

Unforeseen conditions will be handled in accordance with change procedures within general conditions specification (to be included in subsequent addendum).

- Will you please indicate the area of the proposed stockpile location for excavated materials?

A suggested Stockpile Location Plan is attached.

- Please provide an accurate Engineer's Estimate/Project Budget for Contract RFB-COP-04-16-01.

It is purchasing Department's policy that Engineer's estimate are not released prior to bid opening.

- Please confirm that the project is tax exempt.

The project is tax exempt.

- Does the City of Poughkeepsie have a specific date upon which they intend to Award the contract?

No specific date is set. We antipate awarding contract within 2 weeks of bid opening.

- Does the City of Poughkeepsie have a specific date upon which they intend to issue Notice to Proceed?

No specific date is set.

- Please confirm that the specified 9 (nine) month completion time refers to Substantial Completion, not Final Completion.

The project duration has been extended to 12 months to substantial completion.

- Please confirm that the 'clock will be stopped' from November 28, 2016 through April 3, 2017 for a reasonable winter shutdown. This shutdown period shall not count against the specified 9 month Substantial Completion time.

No additional time will be allotted for a "winter shutdown". The successful contractor shall schedule their work appropriately. No compensation will be given for cold weather concrete operation. It is

the contractor's responsibility to comply with *Standard Specification for Cold Weather Concreting (306.1-90)* if they choose to proceed in cold weather conditions.

- Section 13000 WIRE OR STAND WOUND PRESTRESSED CONCRETE TANK - Paragraph 1.2 QUALITY ASSURANCE D. Design Criteria 6. Please revise the eighth sentence in this paragraph from "The dome thickness shall be no less than 4 inches." to "The dome thickness shall be no less than 4 inches for precast domes and 3 inches for cast-in-place domes."

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- Section 13000 WIRE OR STAND WOUND PRESTRESSED CONCRETE TANK - Paragraphs 2.9 EXTERIOR COATINGS & 3.12 DECORATIVE COATINGS - Paragraphs 2.9 and 3.12 specify the decorative coating system to include one coat of cementitious based damp-proofing product such as "Tamoseal" with AKKRO-7T" or equal and one coat of a non-cementitious, high build, 100% acrylic resin polymer such as "Tammscoat Smooth" or equal on the exterior dome surface. For above grade exterior wall surfaces, two coats of "Tammscoat Smooth" or equal are specified. Because Preload generally constructs the dome roof by the cast-in-place method, rather than the pre-cast method, we do not require a cementitious damp-proofing product on the dome exterior [please refer to the Ten State Standard]. We request that you approve our standard decorative coating system which consists of a two-coat finish of 100% acrylic such as Tammscoat Smooth over the entire exposed tank exterior (wall and dome).

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- Section 13000 WIRE OR STAND WOUND PRESTRESSED CONCRETE TANK - Paragraphs 2.10 APPURTENANCES - This paragraph makes no mention of an interior ladder and none is shown on Drawing C 804. Please confirm that no interior ladder is required.

No interior Ladder is required.

- Section 13000 WIRE OR STAND WOUND PRESTRESSED CONCRETE TANK - Paragraphs 2.10 APPURTENANCES - This

paragraph makes no mention of a permanent wall manway and none is shown on Drawing C 804. Please confirm that no permanent wall manway is required. Note: it is unusual to specify no interior ladder AND no permanent wall manway.

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- Section 13000 WIRE OR STAND WOUND PRESTRESSED CONCRETE TANK - Paragraphs 2.10 APPURTENANCES - This paragraph makes no mention of an exterior ladder, however, an exterior ladder is shown and detailed on Drawing C 804. Please confirm that an exterior ladder is, in fact, required.

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- Drawing C 804 – PLAN view details two 18" Outlet Pipes [at 9 o'clock and 12 o'clock] plus an 8" Drain Pipe [between 10 o'clock and 11 o'clock]. Please confirm that all these pipe penetrations are, in fact, required.

Yes

- The hatch door has three different specs depending on where you look. The spec sheet has a JD-4AL (60"x60") with 300 psf loading, the plan view shows a 42"x60" opening in the roof, and the section view labels it as a JD-2AL H20 load (48"x48"). Do you know which is correct?

Provide Model J-5ALH20 by Bilco. See attached Detail

- In order to ensure the best pricing to the city for the project, will you please consider an extension of time for the bid opening and associated submission of questions?

The bid opening will be extended to July 20, 2016.

- Specs call for Mueller H-615 MJ Sleeve, also calling for epoxy coating and AIS complaint. Mueller H-615 sleeves are not AIS Complaint nor are they epoxy coated.
  Please clarify if we are to stick with Mueller's normal sleeve or go with an AIS complaint epoxy coated sleeve.

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- The plans call for Arborvitae Trees, but do not specify a variety. Please specify what type of Arborvitae Trees are preferred.

Provide *Emerald Green* variety

- Overflow Basins- The plan sheet C202 refers to them as 4' x 4', but no Rim & Invert elevations are provided. Plan sheet C804 show a cross section of the tank overflows but does not provide Rims & Inverts. Also, it does not describe the type or size grate required. Please advise on Rim & Inverts and Type or Size Grate required.

Invert elevation is shown on C804. Rim elevation is 305.

- No bid bond forms were provided within the bid documents. Please confirm our standard bid bond forms will be acceptable for this project. (Please see attached).

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- The project completion time is listed as 9 months. With the timing of the project we suggest 12 months for final completion.

The project completion time has been extended to 12 months.

- Please confirm if any retainage is to be held on the progress payments for this project.

3% of each requisition will be retained.

- This project is stated as excise and federal transportation tax exempt. Please clarify if the project is also state, local, and county tax exempt.

The project is state, local, and county tax exempt.

- Appendix A, EFC Clauses and Requirements, This section references the EPA 6100 forms. These forms haves been suspended by the EPA as noted in the attached notice. Please clarify what is to be included with the bid relative to the MBE/WBE forms.

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- Please provide a specification for the proposed chain link fence that is to be installed.

A specification for chain link fence is attached.

- Specification Section 13000, page 17, article 2.10.A.6. states the Tank Contractor shall coordinate with other Contractor(s) and the City Engineer regarding the placement and installation of embedded items and other anchorage devices required for the securing of new Telemetry equipment. Please provide the anticipated telemetry equipment that will be installed on the tank.

The equipment will not be specified prior to bid opening.

- Specification Section 13000, page 20, article 3.4.D. references if subgrade is deemed unsuitable for the foundation removal of the unsuitable material and replacement with compacted drainage stone subbase material shall be measured separately and paid for by the unit price indicated in the bid. However there is no unit price pay item for the removal of unsuitable subgrade soil and replacement with compacted drainage stone subbase on the bid form. Please confirm that if unsuitable soils are encountered the removal and replacement of these soils will be handled via change order or add a unit price pay item to the bid form.

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- Specification section 13000, page 7, article 1.2.D.3.l.ii.5 and 1.2.D.3.l.iii.4 indicates "R" values that are based on a tank with an "unanchored and unconstrained flexible base". Please confirm it will be acceptable to use "R" values of 4.5 and 3.25 for AWWA D110-04 and ASCE 7 respectively if the tank base connection is an "anchored flexible base". This tank design will require base restraint cables and the currently specified R values are based on a tank that is designed without base restraint cables. The R values as specified will significantly increase the amount of base restraint cables required on this project. Allowing us to use the appropriate R values based on the wall/floor connection will reduce the number of cables.

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- Drawing No. C804, detail 1/S3 (18" inlet pipe) calls out an MJ x MJ compact 45 degree bend above the tank finish floor. Please confirm if a flanged 45 degree bend would be acceptable alternative to the MJ fitting.

Yes, this will be an acceptable alternative.

- Please provide the centerline elevations for the under slab piping at the two reservoirs.

We are researching this item and an answer will be forthcoming in a subsequent addendum.

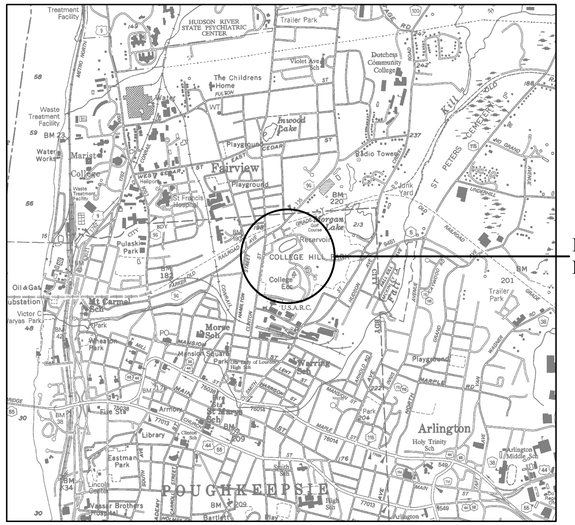
- Drawing No. C804, detail 1/S4 (Overflow) shows the catch basin with an invert elevation of 298.00 which is 2 feet below the tank foundation. Please confirm the catch basin structure can be relocated away from the tanks in order to prevent undermining the tank foundation during catch basin installation. Rip rap or a reinforced splash pad can be provided to divert the overflow discharge from the wall penetration to the catch basin.

We are researching this item and an answer will be forthcoming in a subsequent addendum.

- Please remove shading on the utility plan so we can see the layout of the vaults.

A revised drawing set is included with hatching (shading) in grey scale.

REVISED PLAN SET



PROJECT LOCATION

LOCATION MAP
NOT TO SCALE

CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT

PROPOSED TWO TANK 5.0 MG RESERVOIR

FEBRUARY 2016

COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

DRAWING INDEX

LEGEND:

- PROPOSED REMOVAL AND DISPOSAL EXISTING ASPHALT PAVEMENT
- STABILIZATION CONSTRUCTION ENTRANCE
- PROPOSED ASPHALT CONCRETE ACCESS ROAD
- PROPOSED LIGHT STONE FILL

EROSION CONTROL LEGEND:

- TEMPORARY SILT FENCE

LEGEND
EXISTING

- GAS MAIN/SERVICE
- UNDERGROUND TELECOMMUNICATIONS
- UNDERGROUND ELECTRIC
- STORM SEWER
- SANITARY SEWER
- WATER MAIN/SERVICE
- RAILING
- CHAIN LINK FENC
- DECIDUOUS TREE
- CONIFEROUS TREE
- ORNAMENTAL TREE
- DECIDUOUS SHRUB
- LANDSCAPE BOULDER
- IRON PIPE FOUND
- DECORATIVE LIGHT POLE
- LIGHT POLE
- UTILITY POLE
- MOUMENT (MON)
- SIGN
- GAS VALVE
- WATER VALVE
- GAS TEST STATION/REGULATOR
- CATCH BASIN (CB)
- CURB INLET
- ROOF DRAIN
- TELECOMMUNICATIONS MANHOLE
- ELECTRIC MANHOLE
- ELECTRIC PULL BOX
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- SOIL BORING LOCATION (SEE GEOTECHNICAL REPORT)

LEGEND
PROPOSED

- GAS MAIN/SERVICE
- UNDERGROUND ELECTRIC
- OVERHEAD WIRES
- STORM SEWER
- SANITARY SEWER
- WATER MAIN/SERVICE
- RAILING / GUARD RAIL
- CHAIN LINK FENC
- UTILITY POLE
- GUY WIRE
- MOUMENT (MON)
- SIGN
- GAS VALVE
- WATER VALVE
- CATCH BASIN (CB)
- COMBINATION CURB INLET
- SANITARY SEWER MANHOLE
- PROPOSED ARBORVITAE

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TEL (800) 274-9000
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REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION
1	2/29/16	JAM	GWB	RESPONSE TO DOH 2/12/16 COMMENTS
2	4/5/16	AJS	GWB	RESPONSE TO DOH 4/22/16 COMMENTS
3	6/10/16	JAM	GWB	ISSUED FOR BID

GREGORY W. BOLLER — STATE OF NEW YORK — 078924 — LICENSED PROFESSIONAL ENGINEER

CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT
PROPOSED TWO TANK 5.0 MG RESERVOIR
COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

DATE	DRAWN	CHECKED
12/31/15	JAM	GWB

SCALE AS NOTED

SHEET TITLE
TITLE SHEET

PROJECT NUMBER
12422.02

G
000
DRAWING NUMBER

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Date last accessed: 6/10/2016 10:50 AM Date last plotted: 6/30/2016 12:03 PM Plotted By: Jim McKeough

Drawing Name: S:\Projects\Poughkeepsie_C\Water Rehab\D Design\08 CAD\AutoCAD\Civil\C01-Reservoir Tanks\Two Tank Reservoir - design.dwg
Date last accessed: 6/30/2016 11:45 AM
Date last plotted: 6/30/2016 12:04 PM
Plotted By: Jim McKeough

PLAN
SCALE: 1" = 50'

SCALE IN FEET
0 25 50 100

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1	2/29/16	JAM	GWB	RESPONSE TO DOH 2/2/16 COMMENTS
2	4/5/16	AJS	GWB	RESPONSE TO DOH 3/24/16 COMMENTS
3	6/10/16	JAM	GWB	ISSUED FOR BID
4	6/30/16	JAM	GWB	ADDED TREE TYPES

CITY OF POUGHKEEPSIE ENGINEERING DEPARTMENT

PROPOSED TWO TANK 5.0 MG RESERVOIR

COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

DATE	DRAWN	CHECKED
2/29/16	JAM	GWB

SCALE 1" = 50'

SHEET TITLE
EXISTING CONDITION PLAN

PROJECT NUMBER
12422.02

C
200
DRAWING NUMBER

EROSION CONTROL NOTES:

1. INSTALL AND MAINTAIN SILT FENCE AROUND THE PERIMETER OF THE SITE.
2. INSTALL AND MAINTAIN ORANGE CONSTRUCTION FENCING AT FINAL GRADING LIMITS.
3. INSTALL AND MAINTAIN STABILIZED CONSTRUCTION ENTRANCE.
4. CLEAR AND GRUB AREA/TRESS AS NEEDED.
5. EXCAVATE/CONSTRUCTION ACCESS ROAD TO BINDER COURSE.
6. ALL SLOPES AT 3H :1V OR STEEPER SHALL BE STABILIZED WITH JUTE MESH.
7. ALL AREAS DESIGNATED FOR FINAL LAWN INSTALLATION SHALL BE STABILIZED WITH 14 DAYS OF REACHING FINAL DESIGN GRADES WITH TEMPORARY OR FINAL LAWN INSTALLATION.
8. EXCAVATE TANK(2) FOOTPRINT AND HAUL ALL MATERIALS OFF SITE AS NEEDED.
9. INSTALL UTILITIES (STORM, WATER) PROVIDE INLET PROTECTION ON ALL ACTIVE STORMWATER INLETS. STORMWATER RUNOFF MUST BE MANAGEMENT THROUGHOUT THE PROJECT.
10. INSTALL FINAL POST-CONSTRUCTION MANAGEMENT FEATURES (UNDERGROUND CHAMBERS) ONCE AREAS STABILIZED.
11. INSTALL ALL FINAL LANDSCAPING.
12. FLUSH ALL STORMWATER LINES, ETC. UPON FINAL STABILIZATION.
13. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO SITE DISTURBANCE.
14. THE PROJECT AND ITS CONSTRUCTION ENTRANCE SHALL MEET THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL AND PROJECT SWPPP.
15. THE CONTRACTOR SHALL DESIGNATE A MEMBER OF HIS OR HER FIRM TO BE RESPONSIBLE TO MONITOR EROSION CONTROL, EROSION CONTROL STRUCTURES, TREE PROTECTION AND PRESERVATION THROUGHOUT CONSTRUCTION.

EROSION CONTROL NOTES:

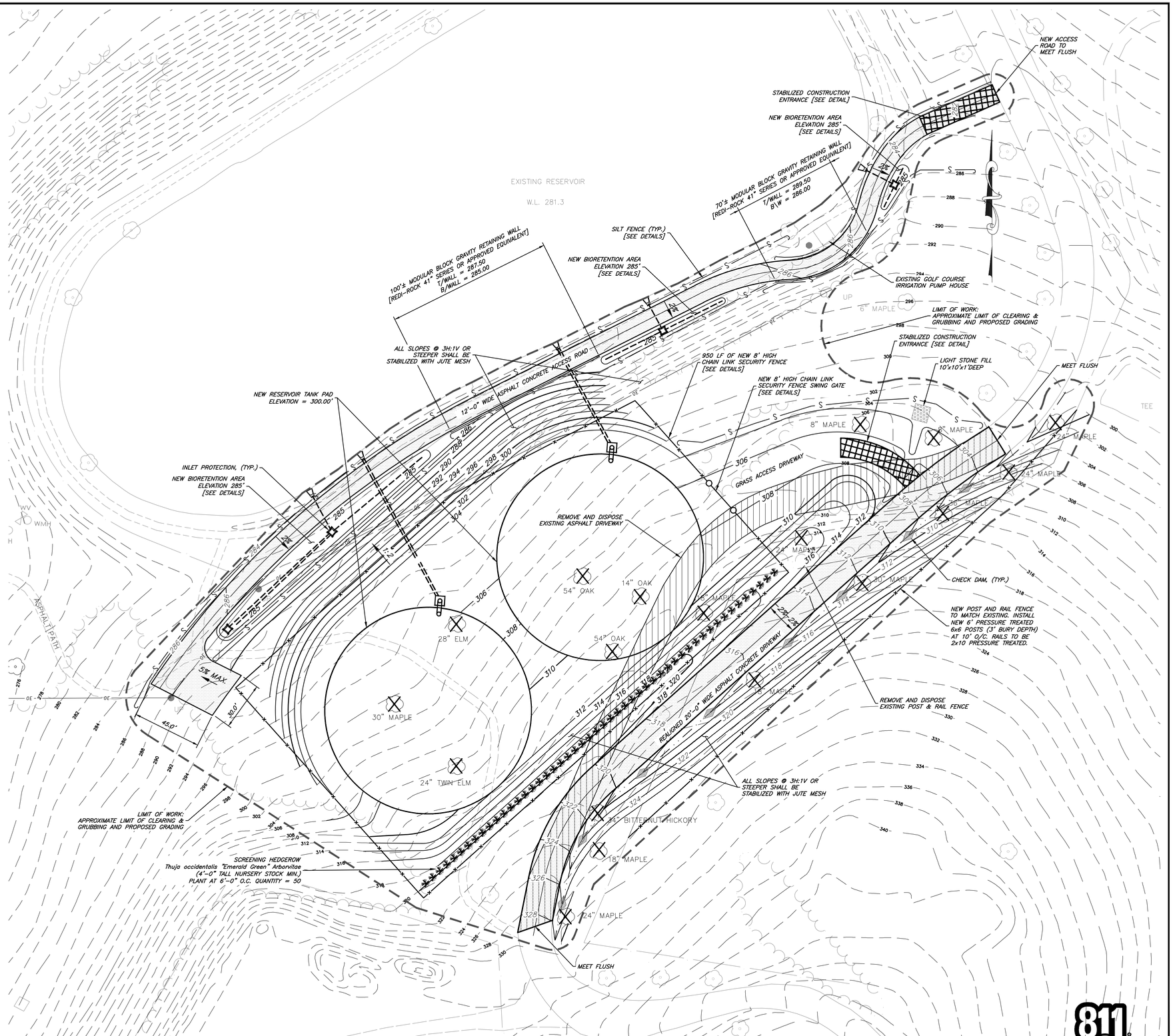
1. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.
2. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
3. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE MAINTAINED AT ALL TIMES.
4. CONSTRUCT TEMPORARY SILT FENCING ALONG BOTTOM EDGE OF ALL SLOPES AND/OR AS SHOWN BELOW & AS DESIGNATED BY ENGINEER.
5. CONSTRUCT TEMPORARY STONE ROLL CHECK DAMS ALONG DITCH LINES AS SPECIFIED AND/OR AS DESIGNATED BY ENGINEER.
6. ALL MEASURES MUST BE MAINTAINED WEEKLY AND AFTER EVERY RAIN EVENT.
7. CONTRACTOR SHALL KEEP ON FILE A RECORD OF THE REQUIRED INSPECTION REPORTS FILLED OUT TWO TIMES A WEEK OR WITHIN 24 HOURS OF A RAIN EVENT OR AS THE PERMIT REQUIRES AND PROVIDE ONE COPY OF EACH REPORT TO THE ENGINEER IN ADDITION TO OTHER AGENCIES AS THE PERMIT MAY REQUIRE. CONTRACTOR SHALL ALSO INSTALL AND MAINTAIN A RAIN GAUGE, AND KEEP DAILY RAINFALL READINGS. RAINFALL READINGS AND INSPECTION REPORTS SHALL BE KEPT IN A BINDER AT THE SITE AND MADE AVAILABLE.

VEGETATIVE STABILIZATION NOTES:

1. ALL DISTURBED AREAS AND EXPOSED SLOPES SHALL BE VEGETATED (TEMPORARY SEEDED) WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING.
2. TEMPORARY SEEDING SHALL BE SEEDED RYE GRASS AT A RATE OF FIVE (5) LBS PER ONE THOUSAND (1,000) SQUARE FEET OF STOCKPILE AREA. CONTINUALLY REAPPLY TEMPORARY SEEDING AT FIRST SIGN OF EROSION OR DETERIORATION OF THE SURFACE GRADE.
3. PERMANENT GROUND COVER SHALL BE INSTALLED ON ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

RESTORATION NOTE:

RESTORATION SHALL OCCUR DURING LOW TO MODERATE SUBSOIL MOISTURE WITH THE DISTURBED SUBSOILS RETURNED TO ROUGH GRADE. THREE INCHES OF COMPOST IS APPLIED OVER THE SUBSOIL. THE COMPOST IS THEN TILLED INTO THE SUBSOIL TO A MINIMUM DEPTH OF 12 INCHES MIXING AND CIRCULATING AIR AND THE COMPOST INTO THE SUBSOIL. ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER ARE CLEANED OFF THE SITE. APPLY 6 INCHES OF TOPSOIL AND VEGETATE AS SHOWN ON THE APPROVED PLANS.



PLAN
SCALE: 1" = 30'

SCALE IN FEET
0 15 30 60

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REVISIONS

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1	2/29/16	JAM	GWB	RESPONSE TO DOH 2/12/16 COMMENTS
2	4/5/16	AJS	GWB	RESPONSE TO DOH 4/4/16 COMMENTS
3	6/10/16	JAM	GWB	ISSUED FOR BID
4	6/30/16	JAM	GWB	TREE DEMO & LIMITS

CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT

PROPOSED TWO TANK 5.0 MG RESERVOIR
COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

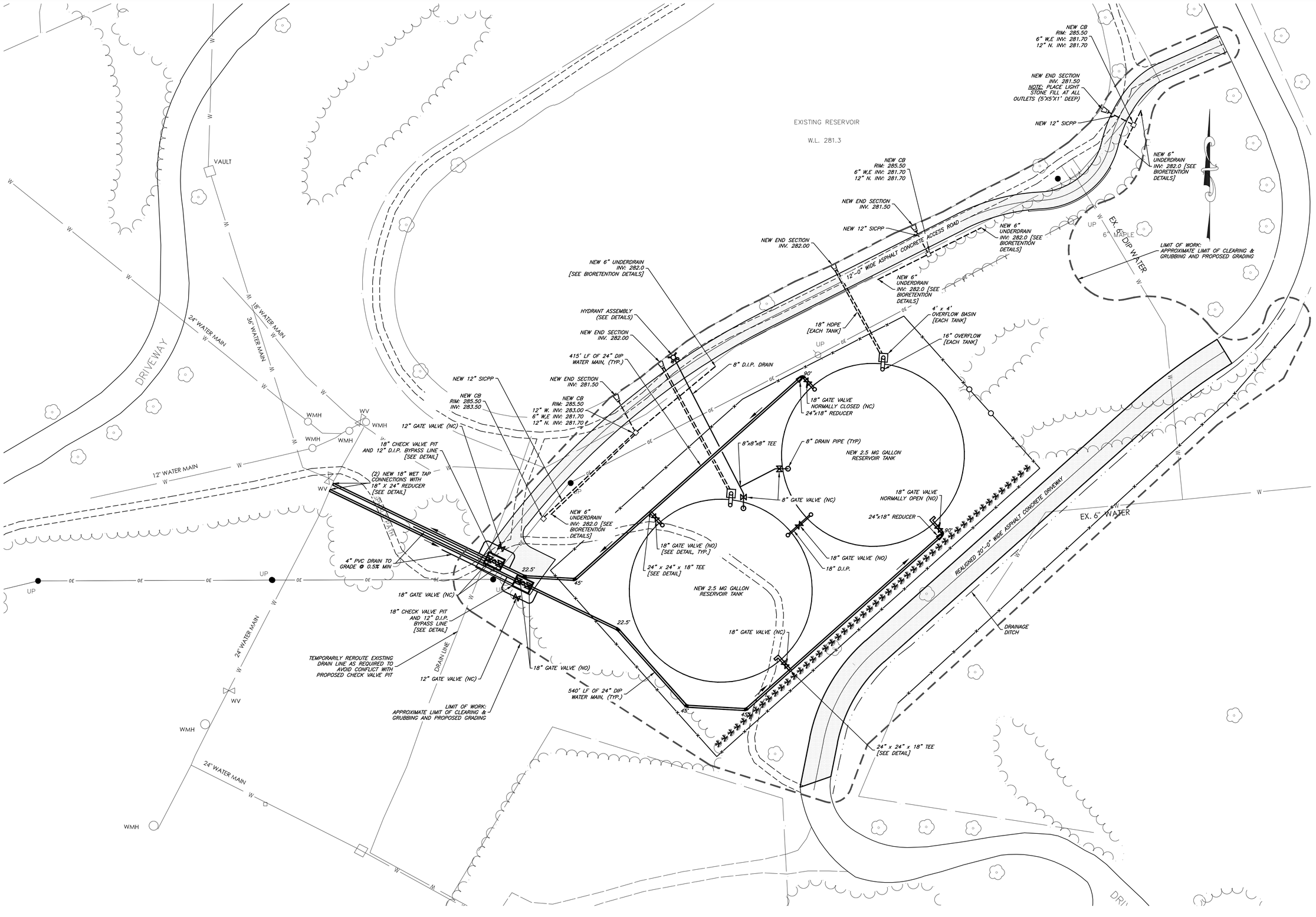
DATE	DRAWN	CHECKED
2/29/16	JAM	GWB

SCALE 1" = 30'

SHEET TITLE
SITE, GRADING AND EROSION CONTROL PLAN

PROJECT NUMBER
12422.02

C
201
DRAWING NUMBER



PLAN
SCALE: 1" = 30'

SCALE IN FEET
0 15 30 60

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REVISIONS NO.	DATE	BY	CHKED	DESCRIPTION
1	2/29/16	JAM	GWB	RESPONSE TO DOH 2/12/16 COMMENTS
2	4/5/16	AJS	GWB	RESPONSE TO DOH 3/24/16 COMMENTS
3	5/13/16	JAM	GWB	RESPONSE TO DOH 5/5/16 COMMENTS
4	6/10/16	JAM	GWB	ISSUED FOR BID

CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT

PROPOSED TWO TANK 5.0 MG RESERVOIR

COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

DATE	DRAWN	CHECKED
2/29/16	JAM	GWB

SCALE 1" = 30'

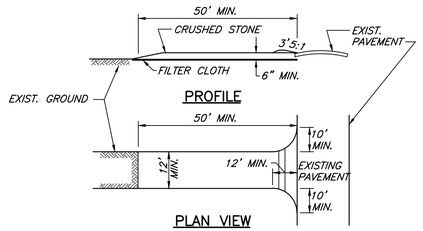
SHEET TITLE
UTILITY PLAN

PROJECT NUMBER
12422.02

C
202
DRAWING NUMBER

EROSION CONTROL NOTES:

1. PURSUANT TO SECTION 402 OF THE CLEAN WATER ACT, STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES TO WATERS OF THE UNITED STATES ARE UNLAWFUL UNLESS THEY ARE AUTHORIZED BY NEW YORK'S SPDES (STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM) GENERAL PERMIT FOR STORMWATER DISCHARGES. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SWPPP AND THE REQUIREMENTS OF THE GENERAL PERMIT.
2. THE PRIME CONTRACTOR AND ALL SUBCONTRACTORS RESPONSIBLE FOR THE DISTURBANCE OF DIRT ARE REQUIRED TO SIGN A CERTIFICATION STATEMENT PRIOR TO UNDERTAKING ANY CONSTRUCTION ACTIVITY ON SITE AND MUST AGREE TO IMPLEMENT ALL APPLICABLE PROVISIONS OF THE SWPPP. ANY PERMIT NONCOMPLIANCE CONSTITUTES A VIOLATION OF THE CLEAN WATER ACT AND THE ENVIRONMENTAL CONSERVATION LAW AND IS GROUNDS FOR AN ENFORCEMENT ACTION.
3. THE CONTRACTOR SHALL COMPLY WITH ALL GENERAL NOTES FOR THE NEW YORK STATE DEPARTMENT OF THE ENVIRONMENTAL CONSERVATION, SECTION 401 WATER QUALITY CERTIFICATION.
4. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH NYS GUIDELINES FOR EROSION AND SEDIMENT CONTROL, THE SWPPP, AND LOCAL GOVERNING SOIL AND WATER CONSERVATION AGENCY RECOMMENDATIONS AND STANDARDS. CONTRACTOR SHALL SUBMIT PROPOSED SEQUENCING OF WORK TO THE OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO START OF WORK. CONTRACT PLANS INDICATE THE SUGGESTED MINIMUM MEASURES REQUIRED.
5. THE CONTRACTOR SHALL CERTIFY THAT ALL APPROPRIATE STORMWATER CONTROLS MEASURES WILL BE IN PLACE BEFORE COMMENCEMENT OF THE CONSTRUCTION OF ANY SEGMENT OF THE PROJECT THAT REQUIRES SUCH MEASURES.
6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO STARTING EARTHWORK OPERATIONS AND SHALL REMAIN IN PLACE AND MAINTAINED BY THE CONTRACTOR UNTIL THE NEW SLOPES ARE STABILIZED BY SEEDING AND/OR SLOPE PROTECTION.
7. SEDIMENT DEPOSITS SHALL BE REMOVED FROM BEHIND SILTS FENCES WHENEVER MORE THAN 6 INCHES OF MATERIAL HAS ACCUMULATED OR IF THE FENCE HAS BEEN BREACHED OR IS BULGING AS DETERMINED BY THE OWNER'S REPRESENTATIVE.
8. SEDIMENT TRAPS AND CHECK DAMS SHALL BE CHECKED AFTER EACH STORM EVENT AND CLEANED OUT IF SEDIMENT DEPOSITS EXCEED 6 INCHES OR IF ONE-HALF THE DESIGN CAPACITY HAS BEEN EXCEEDED, WHICHEVER IS LESS.
9. ALL DISTURBED AREAS SHALL NOT BE LEFT IN AN UNPROTECTED CONDITION FOR A PERIOD OF GREATER THAN 7 DAYS. ALL AREAS SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING IF WORK IS DELAYED.
10. ANY GRADED AREAS NOT SUBJECT TO FURTHER DISTURBANCE OR CONSTRUCTION TRAFFIC SHALL BE ESTABLISHED WITH PERMANENT VEGETATIVE COVER, AS PER CONTRACT SPECIFICATIONS, WITHIN 7 DAYS OF FINAL GRADING.
11. STOCKPILED MATERIALS SHALL BE CONTAINED BY EROSION CONTROL MEASURES. STOCKPILED MATERIALS NOT MOVED WITHIN 7 DAYS SHALL BE SHAPED INTO A UNIFORM PILE AND SEEDED WITH A RAPID GERMINATING GRASS SEED MIX.
12. ALL SWALES/DITCHES SHALL BE IMMEDIATELY STABILIZED WITH STONE FILL OR SEED AS SHOWN ON THE CONSTRUCTION DRAWINGS OR IN THE SPECIFICATIONS.
13. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE TO ANY WATERS NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS, OR OTHER DEVICES BE ALLOWED TO ENTER ANY WATERS.
14. IN THE EVENT DEWATERING OPERATIONS BECOME NECESSARY, A SETTLING BASIN WILL BE REQUIRED UNLESS THE PUMP DISCHARGE IS AS CLEAR AND FREE OF SEDIMENT AS THE FLOWING STREAM.
15. THE COST OF INSTALLING, CLEANING, MAINTAINING AND REMOVING TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE INCLUDED IN THE BID PRICE.
16. THE LOCATION OF EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED IN THE CONTRACT DOCUMENTS MAY REQUIRE FIELD ADJUSTMENT DEPENDING ON THE SEQUENCE OF CONSTRUCTION ACTIVITIES, CONSTRUCTION METHODS MAY REQUIRE FIELD ADJUSTMENT DEPENDING ON THE SEQUENCE OF CONSTRUCTION ACTIVITIES, CONSTRUCTION METHODS, AND/OR ACTUAL FIELD CONDITIONS. THE CONTROL OF EROSION AND SEDIMENTATION SHALL BE A CONTINUOUS PROCESS UNDERTAKEN AS NECESSARY PRIOR TO, DURING, AND AFTER SITE PREPARATION AND CONSTRUCTION BY THE CONTRACTOR. THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED OF ANY SIGNIFICANT FIELD CHANGES TO THE EROSION AND SEDIMENT CONTROL MEASURES INDICATED IN THE CONTRACT DOCUMENTS.
17. SITE EROSION CONTROL MEASURES INCLUDE BUT ARE NOT LIMITED TO MEASURES SHOWN ON THE PLANS. CONTRACTOR SHALL IMPLEMENT OTHER MEASURES AS ORDERED BY THE OWNER'S REPRESENTATIVE NECESSARY TO CONTROL EROSION AND SEDIMENTATION ON SITE.
18. DRAINAGE SYSTEMS AND EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED AS FREQUENTLY AS NECESSARY AND REPLACED IF NECESSARY UNTIL SUCH TIME AS A SUBSTANTIAL STAND OF VEGETATION HAS DEVELOPED AND THE POTENTIAL FOR EROSION NO LONGER EXISTS.
19. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT CONTAMINATION OF ANY STREAM OR WATERWAY BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, CONCRETE LEACHATE, OR ANY OTHER POLLUTANT ASSOCIATED WITH CONSTRUCTION AND CONSTRUCTION PROCEDURES.
20. DUST CONTROL TO BE EMPLOYED AS NEEDED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
21. THE CONTRACTOR SHALL MAINTAIN SITE CONDITIONS WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR SHALL KEEP CLEAN AND FREE SIDEWALKS, STREETS, AND PAVEMENTS FROM DIRT, MUD, STONE, DEBRIS, AND OTHER HAULED MATERIALS AS A RESULT OF HIS WORK. SWEEP ADJOINING ROADWAYS IF ANY TRACKING OF SOILS ONTO OFF SITE PAVING OCCURS.
22. THE OWNER'S REPRESENTATIVE WILL INSPECT EROSION AND SEDIMENTATION CONTROL MEASURES AT LEAST EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER. THE CONDITION AND EFFECTIVENESS OF SITE EROSION AND SEDIMENT CONTROL MEASURES INSTALLED WILL BE EVALUATED AND, IF NECESSARY, REMEDIAL RECOMMENDATIONS WILL BE PROVIDED. THE CONTRACTOR IS REQUIRED TO IMPLEMENT REPAIRS AND/OR ADDITIONAL MEASURES WITHIN 2 WORKING DAYS OF RECEIVING NOTICE IN WRITING FROM THE OWNER'S REPRESENTATIVE. REPAIRS AND ADDITIONAL EROSION CONTROL MEASURES IMPLEMENTED WILL BE AT NO ADDITIONAL COST TO THE OWNER.
23. THE CONTRACTOR WILL BE REQUIRED TO FOLLOW THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) DEVELOPED FOR THE PROJECT.

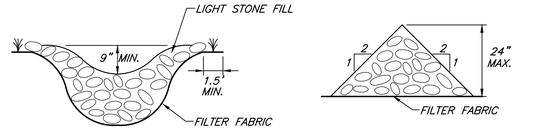


CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NO LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE/DRIVEWAY

N.T.S.

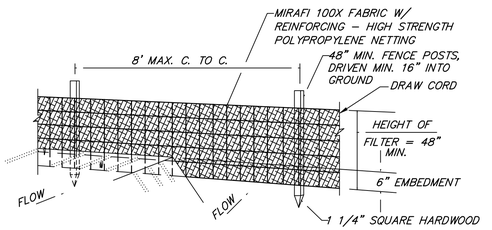


SPECIFICATIONS:

1) STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2) EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
3) PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
4) ENSURE THAT THE CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.

CHECK DAM

N.T.S.



SILT FENCE DETAIL

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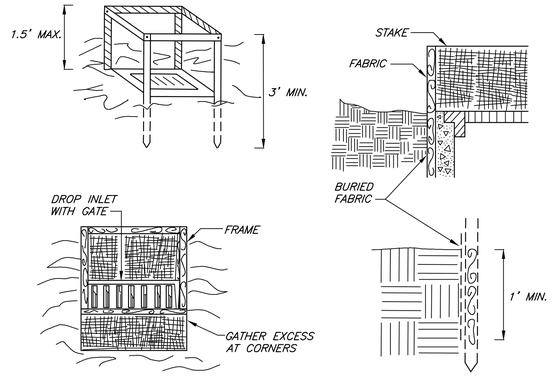


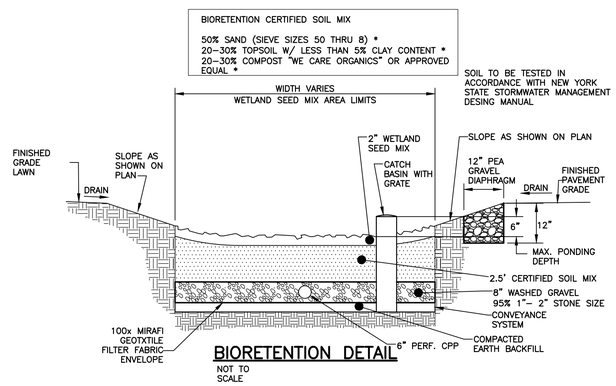
CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

*MAXIMUM DRAINAGE AREA 1 ACRE

FILTER FABRIC DROP INLET PROTECTION

N.T.S



BIORETENTION DETAIL

NOT TO SCALE

CLARK PATTERSON LEE
DESIGN PROFESSIONALS
103 EXECUTIVE DRIVE, SUITE 202
NEW WINDSOR, NEW YORK 12553
TEL (800) 274-9000
FAX (845) 567-9614
www.clarkpatterson.com

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION
1	2/29/16	JAM	GWB	RESPONSE TO DOH 2/12/16 COMMENTS
2	4/5/16	AJS	GWB	RESPONSE TO DOH 3/24/16 COMMENTS
3	6/10/16	JAM	GWB	ISSUED FOR BID

GREGORY W. BOLLER 078925 LICENSED PROFESSIONAL ENGINEER STATE OF NEW YORK

CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT

PROPOSED TWO TANK 5.0 MG RESERVOIR

COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

DATE	DRAWN	CHECKED
12/31/15	JAM	GWB

SCALE NTS

SHEET TITLE
DETAILS
(1 OF 4)

PROJECT NUMBER
12422.02

C
800
DRAWING NUMBER

WATER MAIN TESTING AND DISINFECTION NOTES:

1. WATER FOR TESTING AND FLUSHING SHALL BE OBTAINED FROM EXISTING WATER SYSTEM. ARRANGEMENTS SHALL BE MADE WITH THE CITY WATER DEPARTMENT.
2. FLUSH MAINS AND SERVICES (IF APPILCABLE) BEFORE TESTING. MINIMUM FLUSHING VELOCITY SHALL BE 2.5 FEET PER SECOND.
3. BEFORE TESTING, SECTIONS ADJACENT TO THE TEST SECTION SHALL BE FILLED WITH WATER . FURNISH ALL WATER, EQUIPMENT, CONNECTIONS, PIPING, METERS, MEASURING DEVICES, PUMPS, AND TEMPORARY ENCLOSURES NECESSARY TO PERFORM THE REQUIRED TESTS, SUBJECT TO THE REVIEW AND APPROVAL BY THE CITY WATER DEPARTMENT. TESTING SHALL BE MADE ON SECTIONS OF WATER MAIN NOT EXCEEDING 2000 FEET IN LENGTH.
4. TESTING SHALL MEET THE MINIMUM REQUIREMENTS OF AWWA C-600 SECTION 4, EXCEPT WHERE MORE RIGID REQUIREMENTS ARE ESTABLISHED BY THESE SPECIFICATIONS. BEFORE APPLYING TEST PRESSURE, ALL AIR SHALL BE EXPELLED FROM THE PIPE. AFTER THE PIPE HAS BEEN FILLED, IT SHALL BE SUBJECTED TO HYDROSTATIC PRESSURE OF 50 PSI ABOVE NORMAL LINE PRESSURE OR A MINIMUM OF 150 PSI FOR A PERIOD OF TWO HOURS.
5. A PRELIMINARY TEST OF 50 PSI ABOVE NORMAL LINE PRESSURE OR A MINIMUM OF 150 PSI SHALL BE PERFORMED BY THE CONTRACTOR. AFTER THE PRELIMINARY TEST IS SATISFACTORY, THE ENGINEER SHALL BE GIVEN 24 HOURS NOTICE AND A FINAL TEST PERFORMED.
6. LEAKAGE SHALL BE DETERMINED AT 30 MINUTE INTERVALS BY MEANS OF VOLUMETRIC MEASUREMENT OF THE WATER ADDED DURING THE TEST.
7. TEST PRESSURE SHALL BE BASED ON THE ELEVATION OF THE LOWEST POINT UNDER TEST. PRESSURE SHALL BE APPLIED BY A PUMP CONNECTED TO THE PIPE. THE PUMP, PIPE, CONNECTIONS, GAUGES, AND MEASURING DEVICES SHALL BE CALIBRATED TO THE SATISFACTION OF THE ENGINEER.
8. LEAKAGE SHALL BE DEFINED AS THE QUANTITY OF WATER SUPPLIED TO THE SECTION OF THE PIPE UNDER TEST NECESSARY TO MAINTAIN THE REQUIRED PRESSURE. SHOULD ANY TEST DISCLOSE LEAKAGE GREATER THAN THE ALLOWABLE, THE DEFECT SHALL BE LOCATED AND REPAIRED BY THE CONTRACTOR.
9. ALL WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C 651 (1999) DISINFECTING WATER MAINS, OR LATEST REVISION, ITEM 4.4.2. DELETED.
   USING THE CONTINUOUS FEED METHOD.
   USE 50 PPM INITIAL CHLORINE DOSE. DISINFECTANT SHALL REMAIN IN THE SYSTEM FOR A PERIOD OF 24 HOURS AFTER WHICH THE RESIDUAL SHALL BE AT LEAST 25 PPM. FOLLOWING DISINFECTION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE MAIN.
10. THE INTERIORS OF ALL APPURTENANCES AND SECTIONS OF WATER MAIN THAT CANNOT NORMALLY BE DISINFECTED SHALL BE SWABBED BY THE CONTRACTOR, TO THE SATISFACTION OF THE ENGINEER, WITH A CONCENTRATED CHLORINE SOLUTION CONTAINING NO LESS THAN 200 PPM OF FREE CHLORINE. THE CONTRACTOR SHALL ALSO DISINFECT ALL EXISTING WATER LINES AND APPURTENANCES WHICH WERE BROKEN, DAMAGED, CONTAMINATED, OR SUSPECTED OF BEING CONTAMINATED AS A RESULT OF WORK DONE WITH THIS PROJECT.

WATER MAIN GENERAL NOTES:

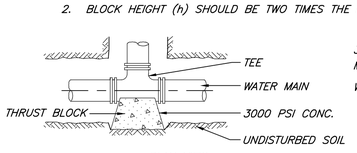
1. THE LOCATIONS, SIZES AND ELEVATIONS OF EXISTING UTILITIES ARE BASED ON INFORMATION COMPILED BY THE ENGINEER FROM DRAWINGS OF RECORDS AND INFORMATION FURNISHED BY THE VARIOUS UTILITIES, WITH FIELD CHECKING WHERE NECESSARY AND POSSIBLE. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND MAY BE APPROXIMATE ONLY.
2. THE APPROXIMATE LOCATION OF THE PROPOSED WATER MAIN IS INDICATED ON THE PLANS, HOWEVER THE ACTUAL LOCATION WILL BE GOVERNED BY THE ACTUAL LOCATION OF THE UNDERGROUND UTILITIES OR OTHER CONTROLLING FACTORS AS DETERMINED BY THE ENGINEER DURING CONSTRUCTION.
3. MINIMUM COVER ON ALL NEW WATER MAIN SHALL BE FIVE (5) FEET, MEASURED FROM FINISH GROUND SURFACE EXCEPT AS OTHERWISE NOTED.
4. WHERE THE CLEARANCE BETWEEN THE WATER MAIN AND ANY EXISTING UTILITY OR SERVICE CONNECTIONS IS LESS THAN ONE (1) FOOT, A TYPE C SELECT FILL SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
5. ALL FITTINGS SHALL BE BACKED UP WITH 3,000 PSI CONCRETE THRUST BLOCK OF SUFFICIENT SIZE.
6. SAFE AND CONTINUOUS THROUGH TRAFFIC AND INGRESS AND EGRESS FOR ADJACENT OWNER DRIVEWAYS, SERVICE ROADS AND PUBLIC STREETS SHALL BE MAINTAINED THROUGHOUT THE PERIOD OF CONSTRUCTION.
7. THE CONTRACTOR SHALL LOCATE, FLAG AND PRESERVE SURVEY MONUMENTS.
8. WHEN INSTALLING HYDRANTS OR BLOW-OFFS, SHOULD GROUND WATER BE ENCOUNTERED WITHIN 7 FEET OF THE FINISH GRADE, WEEP HOLES (DRAINS) SHALL BE PLUGGED.
9. MINIMUM VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER LINES SHALL BE 18 INCHES MEASURED FROM THE OUTSIDE OF THE PIPE AT THE POINT OF CROSSING. MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER MAINS AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES, MANHOLES OR VAULTS. ONE FULL STANDARD LAYING LENGTH OF WATER MAIN SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IN ADDITION, WHEN THE WATER MAIN PASSES UNDER THE SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECTED FILL) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF THE JOINTS AND SETTLING OF THE SEWER ON THE WATER MAIN.
10. WATER SERVICE SHALL BE MAINTAINED AT ALL TIMES, EXCEPT AS CALLED FOR ON THE PLANS.
11. COORDINATE WATER MAIN SHUT-OFFS WITH THE MUNICIPAL UTILITY DEPARTMENT.
12. FIRE HYDRANTS ARE AS APPROVED BY ENGINEER.

DUTCHESS COUNTY DEPARTMENT OF HEALTH STANDARD NOTES FOR WATER SYSTEMS:

1. THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:
   - "RECOMMENDED STANDARDS FOR WATER WORKS (TEN STATES)"
   - "RURAL WATER SUPPLY, NEW YORK STATE DEPARTMENT OF HEALTH."
   - "NEW YORK STATE DEPARTMENT OF HEALTH AND DUTCHESS COUNTY DEPARTMENT OF HEALTH POLICIES, PROCEDURES AND STANDARDS."
   - "DUTCHESS COUNTY DEPARTMENT OF HEALTH SANITARY CODE, ARTICLE XI AND ARTICLE V."
   - "DUTCHESS COUNTY DEPARTMENT OF HEALTH CERTIFICATE OF APPROVAL LETTER."
2. THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND TREATMENT AND WATER SUPPLY FACILITIES.
3. UPON COMPLETION OF THE FACILITIES, THE FINISHED WORKS SHALL BE INSPECTED, TESTED, AND CERTIFIED COMPLETE TO THE DUTCHESS COUNTY HEALTH DEPARTMENT BY THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SUPERVISING CONSTRUCTION. NO PART OF THE FACILITIES SHALL BE PLACED INTO SERVICE UNTIL ACCEPTED BY THE DUTCHESS COUNTY HEALTH DEPARTMENT.
4. APPROVAL OF ANY PLAN(S) OR AMENDMENT THERETO SHALL BE VALID FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE OF APPROVAL. FOLLOWING THE EXPIRATION OF SAID APPROVAL, THE PLAN(S) SHALL BE RE-SUBMITTED TO THE COMMISSIONER OF HEALTH FOR CONSIDERATION FOR RE-APPROVAL. RE-SUBMISSION OR REVISED SUBMISSION OF PLANS AND/OR ASSOCIATED DOCUMENTS SHALL BE SUBJECT TO COMPLIANCE WITH THE TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES IN EFFECT AT THE TIME OF THE RE-SUBMISSION.
5. THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

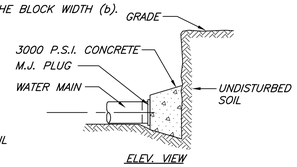
MINIMUM AREA OF BEARING FACE OF CONCRETE THRUST BLOCK (IN SQ.FT.) BLOCKS TO BE POURED AGAINST UNDISTURBED SOIL						
PIPE SIZE	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND	TEE/ T.S.&V.	PLUG
4",6"	6	3	3	3	4	5
8"	10	6	3	3	8	8
12"	19	7	4	3	10	16
16"	24	13	7	3	19	19
18"	7	13	8	4	36	36
24"	28	15.7	8	4	47	47

NOTES:
1. BLOCK HEIGHT (h) SHOULD BE EQUAL TO OR LESS THAN ONE-HALF THE TOTAL DEPTH TO THE BOTTOM OF THE BLOCK, (HT), BUT NOT LESS THAN PIPE DIAMETER (D).
2. BLOCK HEIGHT (h) SHOULD BE TWO TIMES THE BLOCK WIDTH (b).



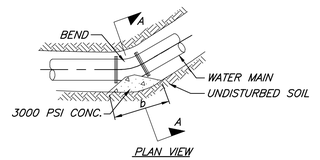
PLAN VIEW

THRUST BLOCK FOR TEE

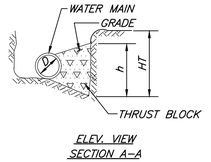


ELEV. VIEW

THRUST BLOCK FOR PLUG



PLAN VIEW



ELEV. VIEW
SECTION A-A

TYPICAL THRUST BLOCK DETAIL

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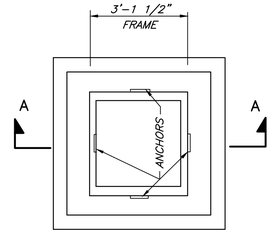
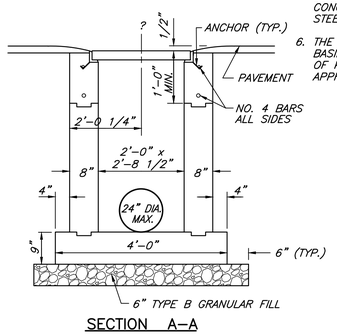


PLAN

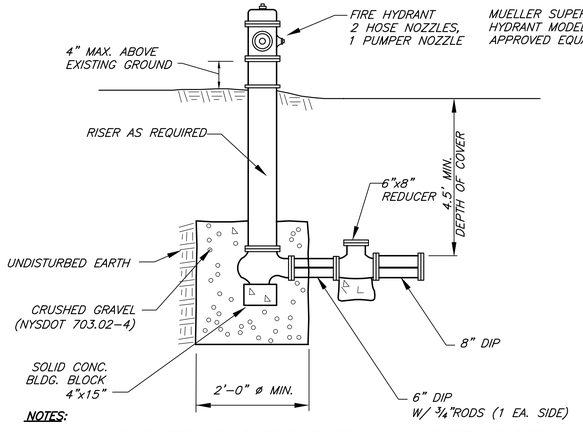


SECTION A-A

NOTES:
1. FRAME AND GRATE FRAME 2'- 4 15/16" x 3'-1 1/2" GRATE 2'- 3 11/16" x 3'- 0 1/2" RECTANGULAR FRAME AND GRATE ASSEMBLY TYPE 11 N.Y.S.D.O.T. STANDARD SHEETS 655-4R1, 655-5R1 AND 655-6R1.
2. REINFORCEMENT SHALL HAVE A COVER OF 2" UNLESS OTHERWISE SHOWN.
3. ALL CONCRETE FOR CATCH BASINS SHALL BE 4000 PSI CAST-IN-PLACE CONCRETE OR PRECAST CONCRETE.
4. FILL WITH CEMENT MORTAR AND SEAL WITH ASPHALT EMULSION TACK COAT BETWEEN FRAME AND CURB.
5. DESIGN LOADING: AASHTO H-20, AND EQUIVALENT SOIL PRESSURE OF 130 P.S.F. CONCRETE: 4000 PSI, AIR ENTRAINED 5-9% STEEL: A.S.T.M. A496-A615, GRADE 60-60 K.S.I.
6. THE INTERIOR AND EXTERIOR OF CATCH BASIN SHALL BE COATED WITH TWO COATS OF KOPPERS SUPER SERVICE BLACK OR APPROVED EQUAL.

CATCH BASIN

N.T.S.



MUELLER SUPER CENTURION FIRE HYDRANT MODEL A423 OR APPROVED EQUAL

NOTES:
1. ALL FLANGES ON FIRE HYDRANT LEG TO BE MECHANICAL JOINT RETAINING TYPE
2. WHEN HIGH GROUNDWATER IS ENCOUNTERED IN THE AREA OF THE PROPOSED HYDRANT, WEEPHOLE IS TO REMAIN PLUGGED AND APPROPRIATE SIGNAGE AFFIXED ADVISING THAT THE BARREL HAS TO BE PUMPED DRY AFTER USE DURING COLD TEMPERATURES TO PREVENT DAMAGE.

HYDRANT ASSEMBLY DETAIL

N.T.S.

CLARK PATTERSON LEE
DESIGN PROFESSIONALS
103 EXECUTIVE DRIVE, SUITE 202
NEW WINDSOR, NEW YORK 12553
TEL (800) 274-9000
FAX (845) 567-9614
www.clarkpatterson.com

REVISIONS				
NO.	DATE	BY	CHKED	DESCRIPTION
1	2/29/16	JAM	GWB	RESPONSE TO DOH 2/22/16 COMMENTS
2	4/5/16	AJS	GWB	RESPONSE TO DOH 3/24/16 COMMENTS
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CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT

PROPOSED TWO TANK 5.0 MG RESERVOIR

COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

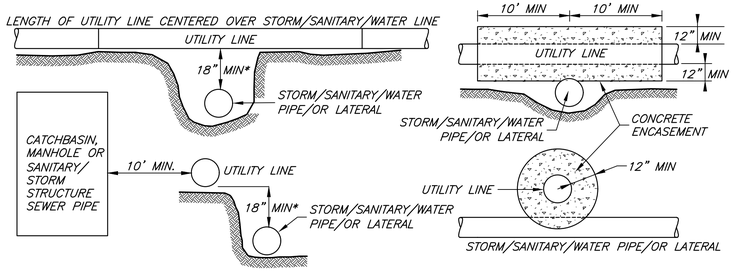
DATE	DRAWN	CHECKED
12/31/15	JAM	GWB

SCALE NTS

SHEET TITLE
DETAILS
(2 OF 4)

PROJECT NUMBER
12422.02

C
801
DRAWING NUMBER



SEPARATION REQUIREMENTS **CONCRETE ENCASEMENT**

NOTES: 1. IF SEPARATION REQUIREMENTS ARE NOT MET THE UTILITY LINE SHALL BE ENCASED IN CONCRETE AS SHOWN ABOVE.

2. THE UTILITY LINE AS REFERRED TO IN THIS DETAIL INCLUDES, AND IS NOT LIMITED TO, WATER MAINS, SANITARY LINES, STORM LINES AND GAS LINES.

UTILITY LINE CROSSING DETAIL

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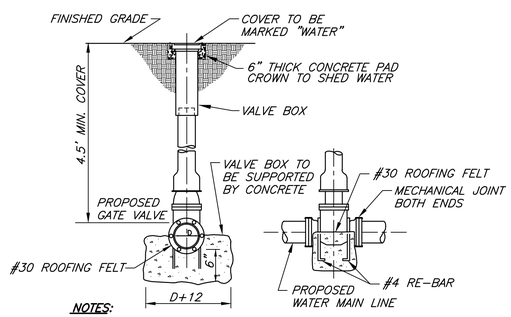
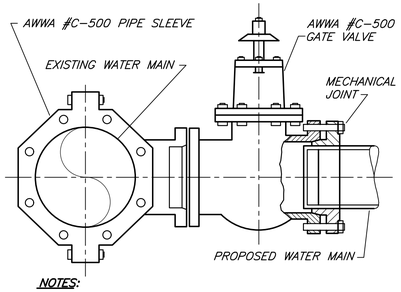


NOTES:

1. ALL JOINTS TO BE MECHANICAL JOINTS
2. USE GATE VALVE BY MUELLER MODEL # A-2360 OR APPROVED EQUAL

GATE VALVE DETAIL

N.T.S.

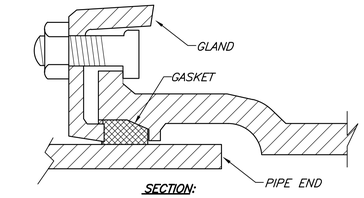


NOTES:

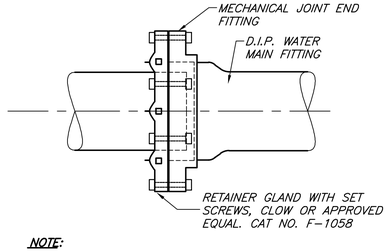
1. USE DUCTILE IRON TAPPING SLEEVE & VALVE
2. ALL JOINTS TO BE MECHANICAL JOINTS
3. USE TAPPING VALVE BY MUELLER MODEL # T-2361 OR APPROVED EQUAL
4. USE TAPPING SLEEVE BY MUELLER MODEL # H-615 OR APPROVED EQUAL

TAPPING SLEEVE & VALVE DETAIL

N.T.S.



SECTION:

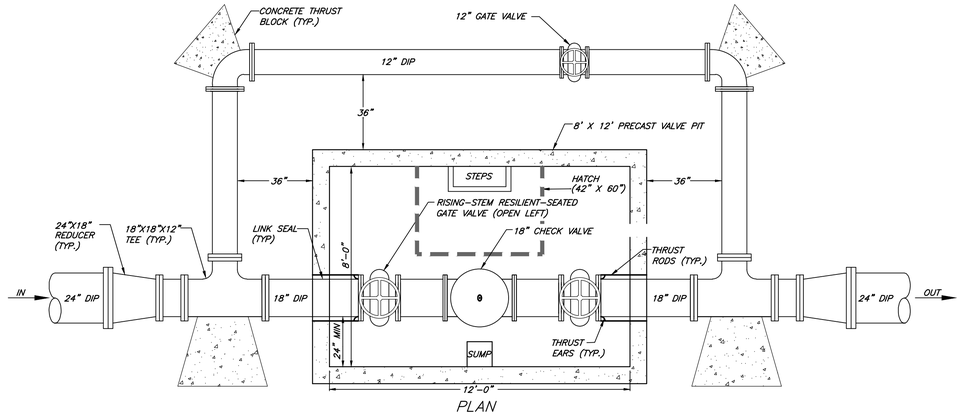


NOTE:

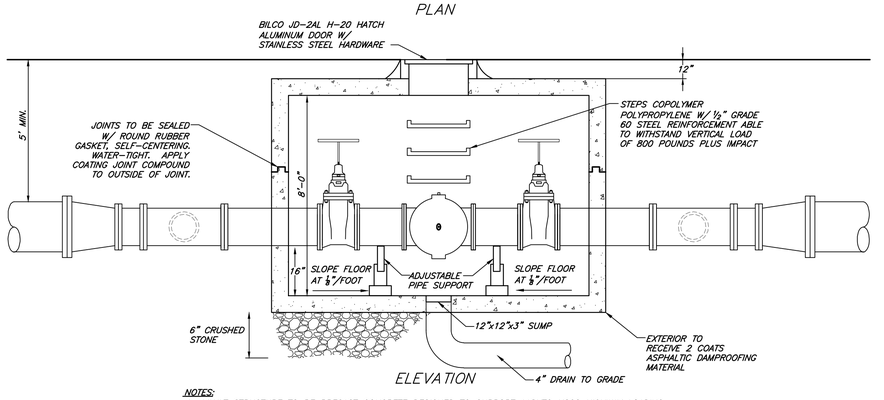
1. RETAINER GLANDS SHALL BE USED AT ALL BENDS, TEES AND FIXTURES.
2. AT 90° BENDS AND TEES, RETAINER GLANDS SHALL BE INSTALLED FOR 3 PIPE LENGTHS (JOINTS) ON EACH SIDE OF THE FIXTURE.
3. USE SERIES 1100 MEGALUG MECHANICAL JOINT RESTRAINTS BY EBAA IRON SALES INC. OR APPROVED EQUAL.
4. INSTANT JOINT RESTRAINTS WITH FIELD LOCK GASKETS SHALL BE INSTALLED AT ALL REMAINING JOINTS.

TYPICAL RETAINER GLAND DETAIL

N.T.S.



PLAN



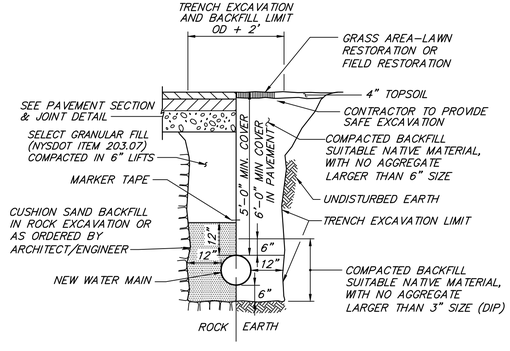
ELEVATION

NOTES:

1. VAULT STRUCTURE TO BE PRECAST CONCRETE DESIGNED TO SUPPORT AASHTO HS20 HIGHWAY LOADING.
2. OPENING TO BE BILCO J-TYPE HATCH OR APPROVED EQUIVALENT, CAPABLE OF WITHSTANDING AASHTO H20 HIGHWAY LOADING.
3. ALL JOINT CONNECTIONS OUTSIDE OF THE VAULT WITHIN 12 FEET OF THE VAULT SHALL BE MECHANICAL JOINT AND RESTRAINED USING EBBA MEGALUG OR APPROVED EQUAL WITH THRUST BLOCKS. ALL JOINTS IN THE VAULT SHALL BE FLANGED.
4. THE MAXIMUM DISTANCE PERMITTED BETWEEN THE PIPE AND THE FLOOR IS 24".
5. PROVIDE ADEQUATE SUPPORT FOR PIPE, AND VALVES.
6. ALL HARDWARE INSIDE VAULT (NUTS, BOLTS, ETC.) SHALL BE MADE OF STAINLESS STEEL.
7. PROVIDE JOINT RESTRAINT ACROSS SLIDING COUPLING USING THREADED RODS AND THRUST EARS OR APPROVED EQUIVALENT.
8. EXTERIOR BYPASS GATE VALVE TO BE RESILIENT SEATED US PIPE METROSEAL 250, MUELLER-A2360, KENNEDY KEN-SEAL II, OR CLOW RESILIENT WEDGE VALVE. VALVE MUST BE PROVIDED WITH STAINLESS STEEL BOLTS AND NUTS. A LOCKING CAP SHALL BE PROVIDED WITHIN THE INTERIOR OF THE VALVE BOX.
9. ALLPIPING INSIDE VAULT SHALL BE PAINTED.

CHECK VALVE PIT

NTS



WATER MAIN TRENCH DETAIL

N.T.S.

CLARK PATTERSON LEE
DESIGN PROFESSIONALS
103 EXECUTIVE DRIVE, SUITE 202
NEW WINDSOR, NEW YORK 12553
TEL (800) 274-9000
FAX (845) 567-9614
www.clarkpatterson.com

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION
1	2/29/16	JAM	GWB	RESPONSE TO DOH 2/23/16 COMMENTS
2	4/5/16	AJS	GWB	RESPONSE TO DOH 4/1/16 COMMENTS
3	6/10/16	JAM	GWB	ISSUED FOR BID

GLEN W. BOLMER — STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER — 078824

CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT

PROPOSED TWO TANK 5.0 MG RESERVOIR

COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

DATE	DRAWN	CHECKED
12/31/15	JAM	GWB

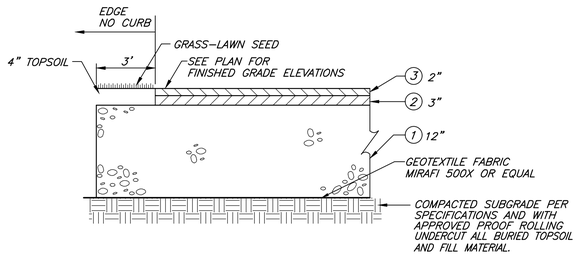
SCALE NTS

SHEET TITLE
DETAILS
(3 OF 4)

PROJECT NUMBER
12422.02

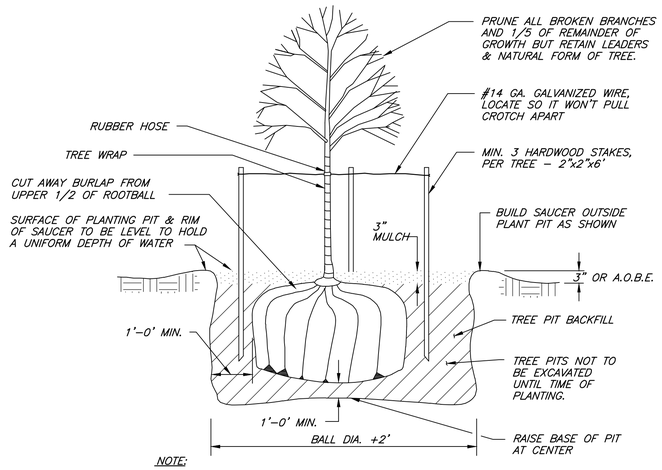
C
802
DRAWING NUMBER

ROADWAY MATERIALS LIST	
KEY	DESCRIPTION
(1)	SUBBASE COURSE, OPTIONAL TYPE (NYSDOT ITEM 304.15)
(2)	HOT MIX ASPHALT–TYPE 3, BINDER COURSE (NYSDOT ITEM 403.13)
(3)	HOT MIX ASPHALT–TYPE 7F, TOP COURSE (NYSDOT ITEM 403.18)



ASPHALT PAVEMENT SECTION

N.T.S.

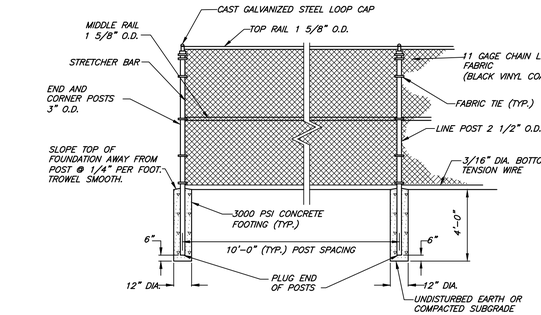


NOTE:

1. REMOVE SOIL SAUCER STAKES, WIRE & HOSE AT THE END

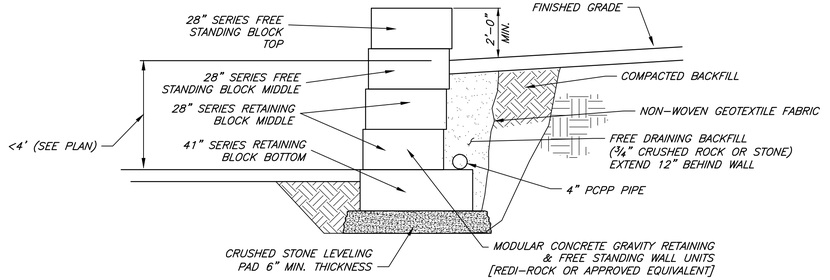
TREE PLANTING (IN LAWN AREA)

N.T.S.



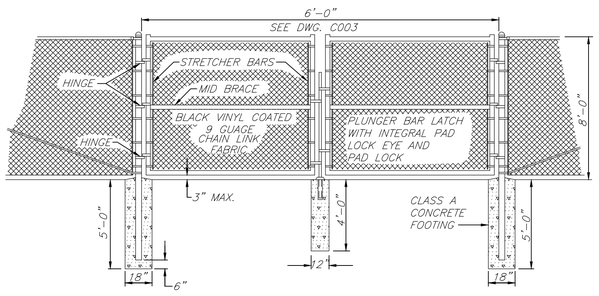
8' CHAIN LINK FENCE

N.T.S.



MODULAR BLOCK WALL – UNREINFORCED

N.T.S.



CHAIN LINK SWING GATE DETAIL

N.T.S.

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DESIGN PROFESSIONALS
103 EXECUTIVE DRIVE, SUITE 202
NEW WINDSOR, NEW YORK 12553
TEL (800) 274-9000
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REVISIONS				
NO.	DATE	BY	CHKD	DESCRIPTION
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3	6/10/16	JAM	GWB	ISSUED FOR BID

CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT

PROPOSED TWO TANK 5.0 MG RESERVOIR
COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

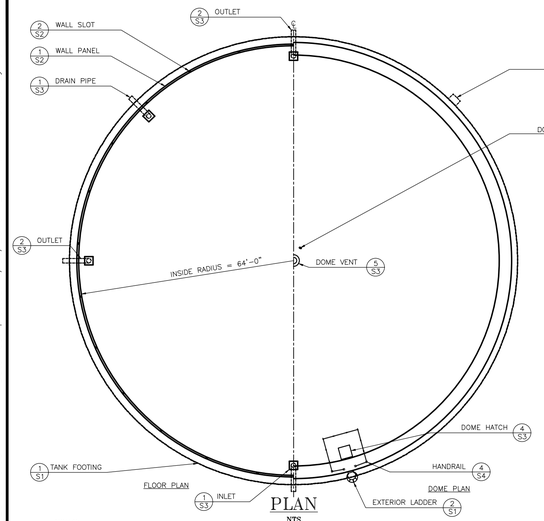
DATE	DRAWN	CHECKED
12/31/15	JAM	GWB

SCALE NTS

SHEET TITLE
DETAILS
(4 OF 4)

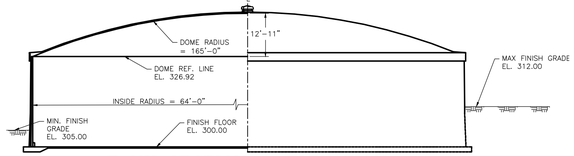
PROJECT NUMBER
12422.02

C
803
DRAWING NUMBER

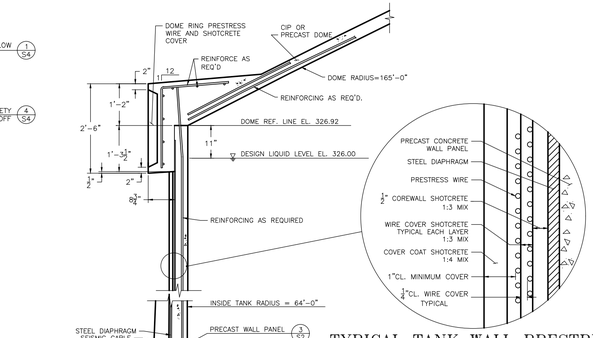


PLAN
NTS

NOTES:
1. FINAL LOCATION OF ALL PIPING AND APPURTENANCES TO BE DETERMINED BY THE ENGINEER.
2. THE EXTERIOR DOME CONCRETE SURFACES SHALL RECEIVE ONE COAT OF TAMOSEAL AND ONE COAT OF TAMMSCOAT SMOOTH. THE EXPOSED EXTERIOR WALL CONCRETE SURFACES TO ONE FOOT BELOW GRADE SHALL RECEIVE TWO COATS OF TAMMSCOAT SMOOTH. COLOR SHALL BE SELECTED BY OWNER.
3. SEE DRAWING FOR FINAL LOCATIONS OF DRAIN PIPE



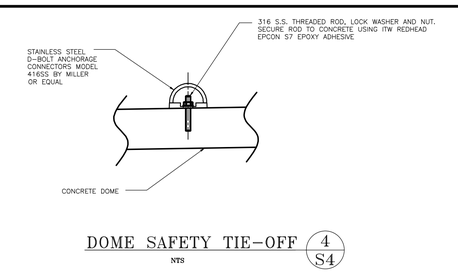
TANK SECTION & ELEVATION
NTS



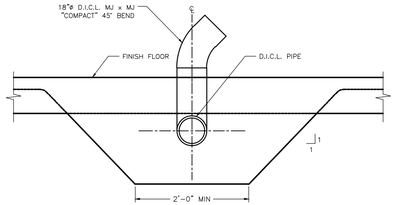
NOTES:
1. THE TANK FLOOR SLAB SHALL RECEVE A BULLFLOAT AND/OR A FRESNO FINISH.
2. THE TOP OF THE DOME RING AND DOME SLOTS SHALL RECEIVE A LIGHT BROOM FINISH.
3. FOUNDATION AND FLOOR CONCRETE, f'c = 4,000 psi.
   DOME, COVE AND WALL CONCRETE, f'c = 4,000 psi.
   COREWALL AND WIRE COVER SHOTCRETE, f'c = 4,500 psi, 1:3 MIX.
   COVERCOAT SHOTCRETE, f'c = 4,500 psi, 1:4 MIX.
   ALL REINFORCING SHALL BE GRADE 60.
4. FOOTING REINFORCING SHALL BE DETERMINED BY TANK DESIGNER.
5. REFER TO CONTRACT DOCUMENTS FOR LEVELING BASE SPECIFICATION, COMPACTION REQUIREMENTS, AND FOUNDATION PREPARATION. LEVELING BASE MATERIAL SHALL BE PROVIDED BENEATH THE TANK FLOOR, FOOTING AND BOTTOM OF PIPE ENCASEMENTS.

WALL SECTION 1 S1
NTS

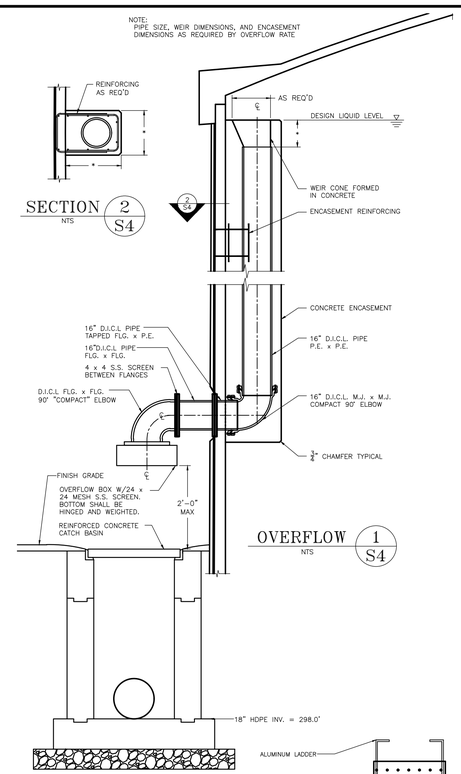
TYPICAL TANK WALL PRESTRESS SECTION DETAIL
NTS



DOME SAFETY TIE-OFF 4 S4
NTS

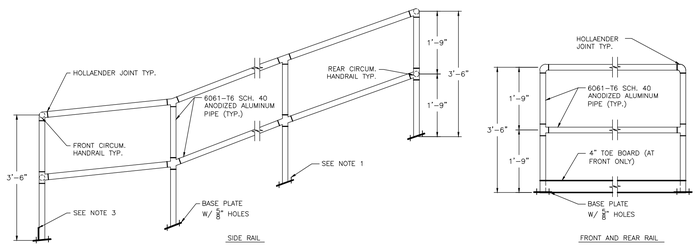


SECTION 3 S3
NTS



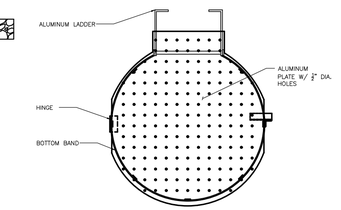
SECTION 2 S4
NTS

OVERFLOW 1 S4
NTS



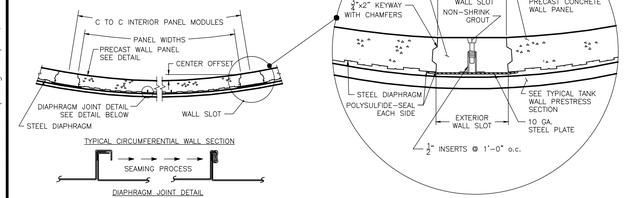
NOTES:
1. S.S. WEDGE ANCHORS TO BE USED AT EACH HANDRAIL/TANK CONNECTION.
2. ALL ALUMINUM TO BE ISOLATED FROM CONCRETE USING NEOPRENE GASKETS.
3. FOUR INCH TOE BOARD TO BE PROVIDED ON FRONT CIRCUMFERENTIAL HANDRAIL.

DOME HANDRAIL 3 S4
NTS



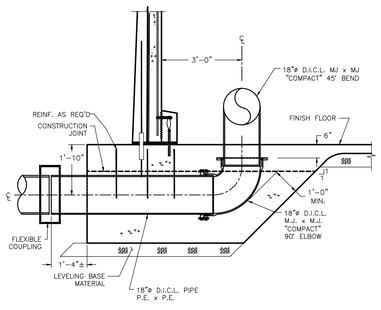
NOTES:
1. NATDUN TO FURNISH CASE HARDENED PADLOCK AND KEYS.
2. MATERIAL SHALL BE ALUMINUM 6061-T6.
3. ONE REQUIRED THIS LAYOUT.

LADDER ANTI-CLIMB PLATE

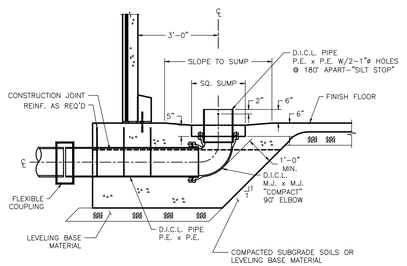


WALL PANEL AND JOINT 1 S2
NTS

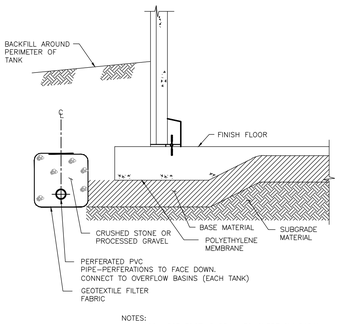
WALL SLOT DETAIL 2 S2
NTS



18"ø INLET PIPE 1 S3
NTS

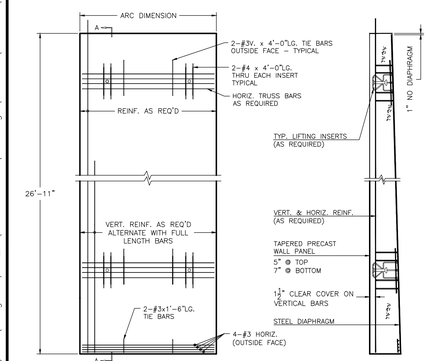


18"ø OUTLET PIPE 2 S3
NTS



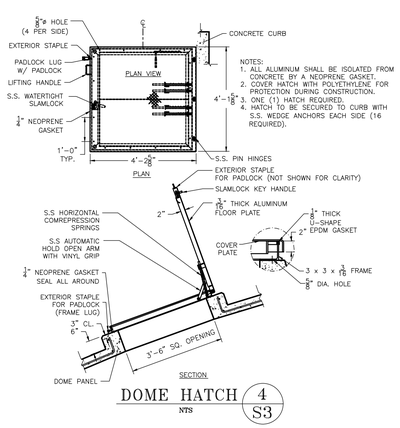
NOTES:
1. CONNECT FOOTING DRAIN TO OVERFLOW BASIN

PERIMETER DRAIN DETAIL
NTS



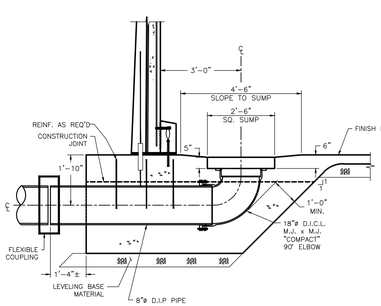
NOTE:
1. WALL PANELS SHALL RECEIVE A HORIZONTAL RAKE FINISH FOR THE BOTTOM 1'-0" OF THE PANEL AND A HORIZONTAL LIGHT BROOM FINISH FOR THE REST OF THE PANEL.

PRECAST WALL PANEL 3 S2
NTS

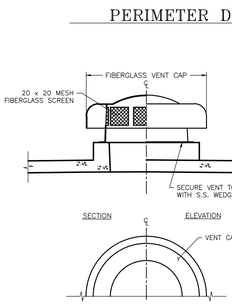


NOTES:
1. ALL ALUMINUM SHALL BE ISOLATED FROM CONCRETE BY A NEOPRENE GASKET.
2. COVER HATCH WITH POLYETHYLENE FOR PROTECTION DURING CONSTRUCTION.
3. ONE (1) HATCH REQUIRED.
4. HATCH TO BE SECURED TO CURB WITH S.S. WEDGE ANCHORS EACH SIDE (16 REQUIRED).

DOME HATCH 4 S3
NTS

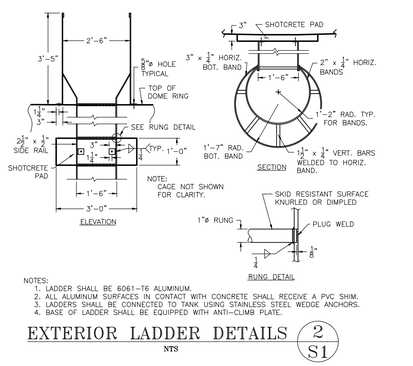


8"ø DRAIN PIPE 3 S3
NTS



NOTE: VENT SIZE AS REQUIRED BY DESIGN.

VENT 5 S3
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 DETAILS 2 S1
NTS

CLARK PATTERSON LEE
DESIGN PROFESSIONALS
103 EXECUTIVE DRIVE, SUITE 202
NEW WINDSOR, NEW YORK 12553
TEL (800) 274-9000
FAX (845) 567-9614
www.clarkpatterson.com

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION
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2	4/5/16	AJS	GWB	RESPONSE TO DOH 3/24/16 COMMENTS
3	5/13/16	JAM	GWB	RESPONSE TO DOH 5/5/16 COMMENTS
4	6/10/16	JAM	GWB	ISSUED FOR BID

GREGG W. BOLMER — NEW YORK — 076827 — LICENSED PROFESSIONAL ENGINEER

CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT
PROPOSED TWO TANK 5.0 MG RESERVOIR
COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

DATE	DRAWN	CHECKED
12/31/15	–	–

SCALE NTS

SHEET TITLE
TANK DETAILS
DN TANKS

PROJECT NUMBER
12422.02

C
804
DRAWING NUMBER

REVISED BPS

Company: _____ Signature: _____

Bid #04-16-01

Proposal Form (Revised 6/30/2016)

Bid Proposal for: **College Hill Reservoir Construction**

Base Bid:

Item No.	Item	Est. Qty.	Unit	Unit Price	Amount
1	**Two Tank 5.0 MG Reservoir**	1	LS	$ -	$ -
	This shall include all work and materials required to complete the contract: all labor, materials, applicable taxes, tools and equipment for setting up general plant, including storage areas, facilities required by State Laws and City Ordinances; the general mobilization of equipment and temporary facilities required for completion of the work shown on the Drawings,described in the specifications, or ordered by the Engineer; and, cost of licenses, permits, etc. required by governing ordinances for construction projects.				
2	**Rock Excavation**	20	CY	$ -	$ -
	As required and ordered by engineer. Quantities must be verified by Owner's representative on a daily basis if needed				
				Total: Base Bid	**$ -**

Alternate Items:

Item	Item	Qty.	Unit	Unit Price	Amount
ALT1	**Test Pit**	40	CY	$ -	$ -
	At locations as ordered by Engineer. Includes topsoil and seed restoration.				
ALT2	**6" DIP Watermain Relocation**	20	LF	$ -	$ -
	Provide and isntall new 6" DIP at locations as ordered by Engineer. Includes excataviton, pipe bedding , fittings, transition couplings, backfill and top soil and seed restoration.				
ALT3	**1 1/2" Asphalt overlay**	100	TON	$ -	$ -
	At locations as ordered by Engineer. Includes tack coat.				
ALT4	**Full Depth Asphalt replacement**	500	TON	$ -	$ -
	At locations as ordered by Engineer. Includes removal of existing asphalt, compaction of existing subase, and repalcemetn to exsiting thickness.				
ALT5	**Provide and install Red Maple (Acer rubrum)**	18	EA	$ -	$ -
	Provide and install 3" caliper red mpale per Tree Planting Detail				
				Total: Base Bid Plus Alternates	**$ -**

*The City reserves the right to remove any alternate items.

CHAIN LINK SPECIFICATION

SECTION 02821 – SITE FENCES AND GATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this section.

1.2 SUMMARY OF WORK

A. Furnish and install all framework, fabric, posts and accessories for chain link and vinyl privacy fencing.

1.3 QUALITY ASSURANCE

A. The fence installer shall supply three references for projects involving the installation of commercial quality fencing, including name and telephone number of person for each reference.

B. Installation: ANSI/ASTM F567.

C. Layout Personnel: Layout of fence line shall be performed by qualified surveyors or representatives of the fence supplier.

D. All fence and gate materials and installation shall be furnished and installed by a single firm.

1.4 DEFINITIONS

A. Corner Posts: Posts located at a change in horizontal alignment.

B. End Posts: Posts located at the beginning or end of a length of fence.

C. Gateposts: Posts that support the weight of a gate. Gateposts may function also as terminal posts but generally are sized differently.

D. Line Posts: Posts between terminal posts.

E. Pull Posts: Posts located within a length of fence at certain distances, and at changes in vertical alignment, to facilitate stretching of fabric.

F. Terminal Posts: Posts set where fence fabric terminates, and between which the fabric is stretched; a term that includes end, corner, and pull posts.

1.5 SUBMITTALS

A. Submit manufacture's catalog cuts and product data. Indicate post sizes, and materials; protective coatings (if required); fabric materials, dimensions, sizes, and characteristics; and accessories.

B. Submit color charts showing available fabric vinyl dip colors (if vinyl fabric required).

1.6 WARRANTY/GUARANTEE

A. Provide Owner with written, unlimited five (5) year warranty on all fencing installations, agreeing to replace or repair any damage to any product installed as part of the work of this Section, if the product shows defects, early wear, malfunction, or other deterioration not caused by mistreatment or normal usage.

B. Warranty period to commence on the date of substantial completion of the entire project, not necessarily the date of substantial completion of the work of this Section.

C. For vinyl-dip green or other color fence fabric coating, provide additional warranty on finish coating for a period of ten (10) years, commencing on the same date as other warranties covered by the work of this Section commence.

PART 2 - PRODUCTS

2.1 CHAIN LINK MATERIALS

A. Framework: Type I Round Post; Schedule 40 steel pipe, standard weight, one piece, without joints, galvanized.

B. Fabric: ASTM A392 Type I, galvanized.

2.2 CHAIN LINK FENCE COMPONENTS

A. Fence
1. Line Posts: 2” O.D. for fabric height less than 6 feet, 2 ½ “ for fabric height greater than or equal to 6 feet.
2. Corner, terminal and gateposts: 2 ½” O.D. for fabric height less than 6 feet, 3“ for fabric height greater than or equal to 6 feet.
3. Top, mid, bottom rail, brace rail, and gate bracing: 1 5/8" O.D. plain end, sleeve coupled steel pipe.
4. Swing Gate frame: 1 5/8" O.D. steel pipe for fittings and truss rod fabrication.
5. Fabric: 2-inch diamond mesh steel wire, interwoven, top and bottom knuckled selvage, see Contract Drawings for gage.
6. Caps: Cast steel or malleable iron, galvanized, sized to post dimension, set screw retained.
7. Fittings: Sleeves, bands, slips, rail ends, tension bars, fasteners and fittings: steel, galvanized.
8. Swing Gate hardware: Center gate stop and drop road, two 180-degree gate hinges per leaf and hardware for padlock.

2.3 CHAIN LINK FINISHES - ALL MEMBERS, FABRIC, AND ACCESSORIES

A. Galvanized as per ANSI/ASTM A123, 2-ounce/square foot, 600-gram coating.

B. If vinyl fabric is specified on the Contract Drawings, fabric and framework shall be as same as described above except also provide fence framework in manufacturer's shop-applied vinyl coating. Use a 9-gauge core with a thermally fusion bonded finish. Color to be selected by Owner.

2.4 VINYL PRIVACY FENCING

A. Six-foot tall vinyl privacy fence with a 7/8” x 6” tongue and groove picket, minimum of .055” thick vinyl. Provide all necessary posts and hardware from a single fence manufacturer. The bottom rail shall be an aluminum "I" channel.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that line of fence has been properly identified.

B. Verify that encroaching fences, structures, or other items of neighbors within the property line of this parcel have been removed by others prior to the start of the work of this Section. Notify Owner and Owner’s Representative in writing immediately if encroaching elements of neighbors have not been removed. Removal of neighbors' encroaching property is not included in the scope of work of the General Construction Contract.

C. Verify that proper grade has been established.

D. Verify location of underground utilities and structures, whether new, existing to remain, existing to be removed, or existing to be relocated or altered.

E. Begin fence construction only after adequate clearance on both sides of fence is available.

3.2 CHAIN LINK FENCE INSTALLATION

A. Fence
1. Install framework, fabric, accessories, and gates in accordance with Contract Drawings. For athletic fields, fabric shall be placed on the playfield side of framing. No bolts, ties or braces shall protrude towards playfield side.
2. Provide fence heights as shown on the plans.
3. Space line posts at intervals not exceeding 10'. Locate terminal posts at the beginning and end of each continuous length of fence, at abrupt changes in line or grade, and additionally at intervals not to exceed 500 feet, or as otherwise shown on the drawings. Install posts in proper alignment.
4. Set all posts plumb in concrete footings with top of footing flush with grade. Slope top of concrete for water runoff. Footing depth below finish grade as shown on details. Securely brace posts in proper position until concrete has cured at least 3 days above 60 degrees F. Bottom of concrete post anchors shall rest on undisturbed earth or compacted subgrade. Excavation shall be free of loose materials when placing concrete.
5. Provide top rail through line post tops and splice with 6" long rail sleeves.
6. Stretch fabric between terminal posts or at intervals of 100' maximum, whichever is less.
7. Position bottom of fabric 1" above finished grade or as shown on Contract Drawings.
8. Fasten fabric to top rail and braces with wire ties, maximum 18" on centers.
9. Fasten fabric to line posts with wire ties, maximum 12” on centers.
10. Install swing gates with fabric to match fence. Install per leaf: three hinges, latch, catches, drop bolt, and torsion spring retainer.
11. Neatly trim all ties so as to prevent sharp edges from protruding.

B. Gate Installation
1. Install gates in accordance with manufacturer's instructions, plumb, level, and secure for full opening without interference.
2. Gates shall operate freely without binding or dragging and shall be easily operable by hand.
3. Install gatekeeper and plunger bar latch on gates; lock gates and turn over keys to Owner or fasten lock chain securely to gate.

3.3 VINYL PRIVACY FENCING

A. Install vinyl fencing in accordance with manufacturer specifications..

3.4 ADJUST AND CLEAN

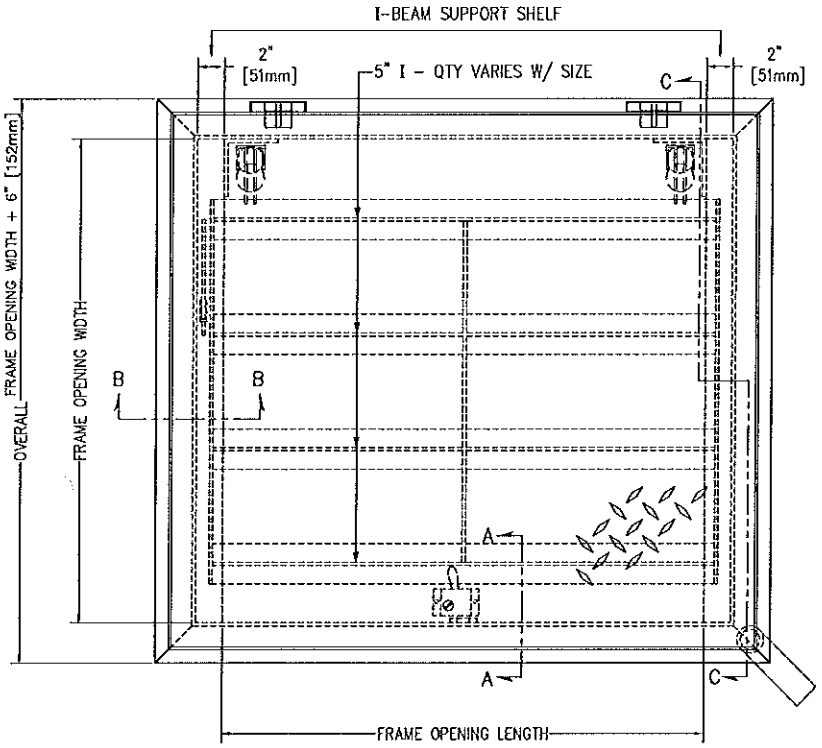
A. Adjust hardware for smooth operation and lubricate where necessary.

3.5 PROTECTION

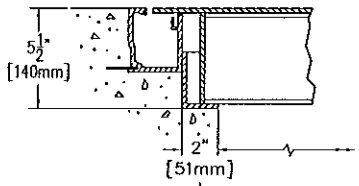
A. Protect completed work from damage. Repair or replace any damaged work. Replace items where the finish has been scratched or removed down to bare metal.

END OF SECTION 02821

HATCH DETAIL

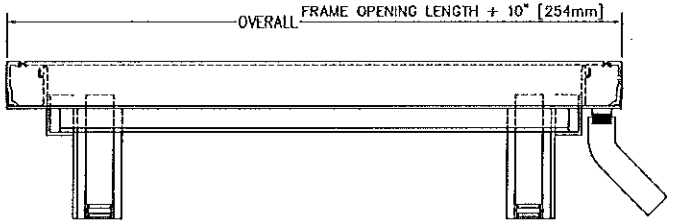


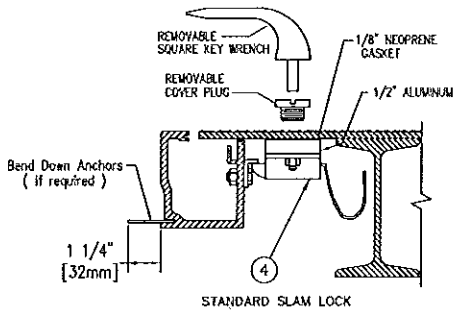
NOTE:
DESIGNED TO WITHSTAND H-20 WHEEL LOADINGS SUITABLE FOR USE IN OFF-STREET LOCATIONS WHERE NOT SUBJECTED TO HIGH DENSITY TRAFFIC



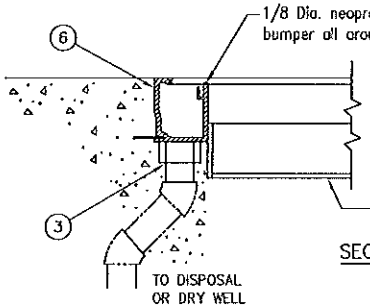
CHANNEL SUPPORT SHELF MUST BE SUPPORTED BY CONCRETE OR STEEL TO CARRY H-20 LOADING

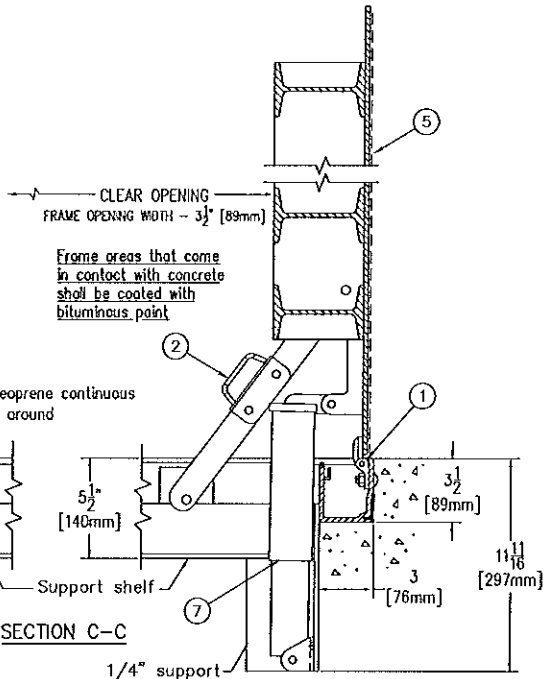
SECTION B-B





SECTION A-A





SECTION C-C

SPECIFICATIONS

1. Bilco heavy duty forged stainless steel hinges with stainless steel pins
2. Bilco automatic hold open arm
3. 1-1/2" drain coupling
4. Standard slam lock
5. 1/4" aluminum diamond pattern plate cover
6. Bilco 1/4" aluminum channel frame with recessed anchors
7. Stainless steel spring lifting mechanism

SHOP FINISH:
ALUMINUM: MILL FINISH
HARDWARE: TYPE 316 STAINLESS STEEL
(unless otherwise specified)

REINFORCED FOR H20 LOADING

INSTALLER NOTES:

A. Use caution. Cover is spring loaded. Do not remove safety shipping bolt until unit is to be installed and in normal horizontal operating position.
B. Be sure unit is set on slight pitch toward drain corner.
C. Before anchoring in place open and close door. Check to see that the door in the closed position rests on the frame all around. If not, shim under the frame at the proper corner.
D. Do not reduce 1 1/2" drain pipe to dry well or disposal system.
E. Bend down anchors if required

Customer:

P.O. N°

Job:

Sales Rep:

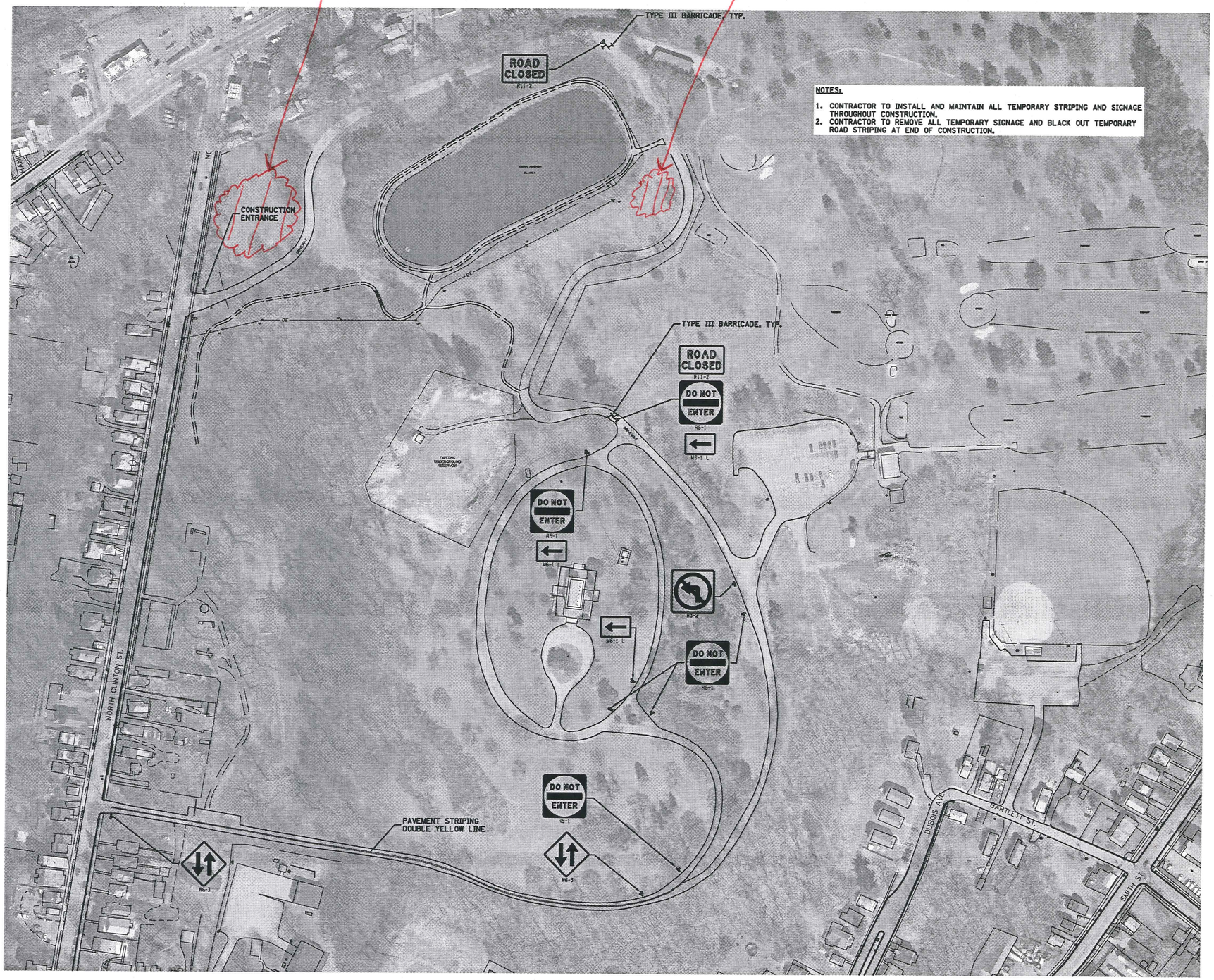
Manufacturers of Doors for Special Services
THE BILCO COMPANY
New Haven, Connecticut 06505

SINGLE LEAF ACCESS DOOR
TYPE J-ALH20 - EXTERIOR

QTY	TYPE	SIZE WIDTH x LENGTH
☐	J-1ALH20	2'-0" x 2'-0" [610mm] x [610mm]
☐	J-2ALH20	2'-6" x 2'-6" [762mm] x [762mm]
☐	J-3ALH20	3'-0" x 2'-6" [914mm] x [762mm]
☐	J-4ALH20	3'-0" x 3'-0" [914mm] x [914mm]
☒	J-5ALH20	3'-6" x 3'-6" [1065mm] x [1065mm]

SUGGESTED STOCKPILE LOCATION PLAN

SUGGESTED STOCKPILE LOCATIONS



PLAN
SCALE: 1" = 50'

SCALE IN FEET
0 25 50 100

CLARK PATTERSON LEE
DESIGN PROFESSIONALS
103 EXECUTIVE DRIVE, SUITE 202
NEW WINDSOR, NEW YORK 12553
TEL (800) 274-9000
FAX (845) 567-9614
www.clarkpatterson.com

REVISIONS				
NO.	DATE	BY	CHKD	DESCRIPTION

CITY OF POUGHKEEPSIE
ENGINEERING DEPARTMENT

PROPOSED TWO TANK 5.0 MG RESERVOIR
COLLEGE HILL PARK
CITY OF POUGHKEEPSIE, NEW YORK

DATE	DRAWN	CHECKED
2/29/16	JAM	GWB

SCALE 1" = 100'

SHEET TITLE
TRAFFIC CONTROL PLAN

PROJECT NUMBER
12422.02

TC 203
DRAWING NUMBER

Date last accessed: 6/23/2016 9:41 AM Date last plotted: 6/23/2016 10:02 AM Plotted By: Jim McKeough
Drawing Name: S:\Projects\Poughkeepsie_C\Water Rehab\D Design\08 CAD\AutoCAD\Civil\CO\01-Reservoir Tanks\Two Tank Reservoir - design.dwg