



July 30, 2019

Waiver Request—Revised 7-30-19

Availability Waiver of AIS requirements for the City of Douglas, Douglas Ga.

Project Specific Product waiver: 16" Plug Valves

Reasons:

1. Availability of plug valves
2. Individual unit specifications for AIS and non-AIS appear to be equal and internal coating is the same per contract documents

The City of Douglas contracted with L&L Utilities for upgrades to the Douglas Wastewater Treatment Facility. The City issued a Notice to Proceed to L&L Utilities on March 14, 2019 with the 210-day construction period set to begin on May 1st, 2019 and run through November 27, 2019. A large percentage of the upgrade work is focused around the installation of a new lift station and forcemain to send wastewater flows from the south side of the City to the head of the treatment plant. The remainder of the project consists of belt press and traveling bridge filter rehabilitation.

Both 12" and 16" plug valves were specified as part of the lift station and forcemain work. The 12" plug valves are to be installed above ground on the pump discharge lines from the station. Three (3) 16" plug valves are called for along the 16" forcemain alignment – one at the beginning of the line and two near the end to direct flow to either the headworks or directly into the aeration basins. See attached plan sheets C1.0-C1.4 showing the lift station and forcemain.

Plug valve suppliers were selected based on the specification, past history of supply, and furnishing required documentation for AIS compliance. Both 12" and 16" DeZurik plug valves were approved by the engineer in May and ordered through Dublin Winwater on June 4, 2019. Notice of a delivery delay was received after the order was placed by Dublin

Winwater. The anticipated delivery date of 9/2/19 for the 12" plug valves, while delayed, is acceptable for the needed work activity per the project schedule. Unfortunately, the three (3) 16" plug valves have a delayed delivery of November 10th, only 17 days prior to the November 27th end date of the contract period. The 16" plug valves are an integral part of forcemain construction, which was slated for June - August 2019 per the attached project schedule. The wetwell for the lift station was set in early July, however, forcemain completion has been and will continue to be delayed due to the un-availability of AIS-compliant plug valves.

To date, DeZurik is still providing an estimated lead time of 14-16 weeks after receipt of order; representing a mid-November delivery. In lieu of domestic valves, 16" non-AIS plug valves by Kennedy are on the shelf and can be provided with only a 2-week lead time, thus helping to keep the project on schedule. The Kennedy valves are full-ported and epoxy coated meeting the other specification requirements.

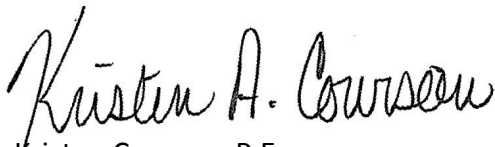
If the City is required to wait until November for delivery of the 16" plug valves, the project will be pushed back a minimum of 8 weeks/60 days for the forcemain and plug valves to be installed and tested. This will also push the changeover from the old to new lift station into the rainy season of the year. Ideally, changeover to the new lift station and plugging of the sewer line into the old lift station would occur in October or early November when rainfall is typically low.

Other piping suppliers contacted by L&L Utilities for purchase of three AIS compliant 16" plug valves have also found the same problem with delivery. Suppliers contacted include:

- Dublin Winwater (Proposed Supplier) - 509 Airport Rd. Dublin, Ga 31021 — No availability until November
- Consolidated Pipe — No availability
- ISCO — No availability
- TIMSCO, Inc. – No availability until November
- Macon Supply — No availability until November

The City of Douglas respectfully requests the use of non-domestic 16" plug valves be allowed in this instance to keep the project from running significantly beyond the estimated completion date. Supporting information may be found in the attachment including: lift station/forcemain plan sheets, Notice to Proceed, project schedule, Dublin Winwater 16" plug valve options with quoted lead times, AIS Requirement specifications, plug valve specifications, original DeZurik Plug Valve submittal, and proposed Kennedy plug valve information.

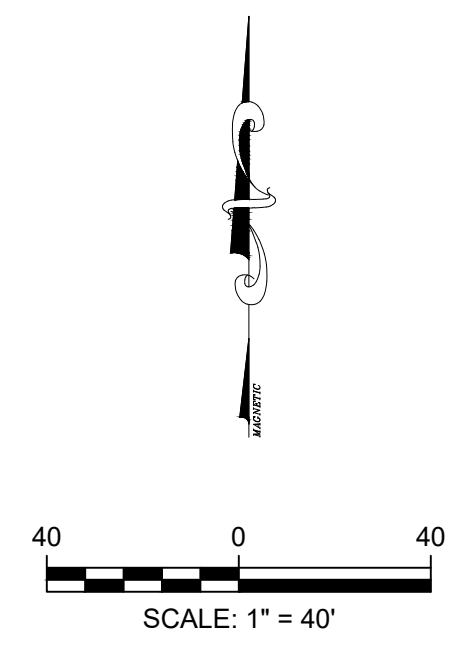
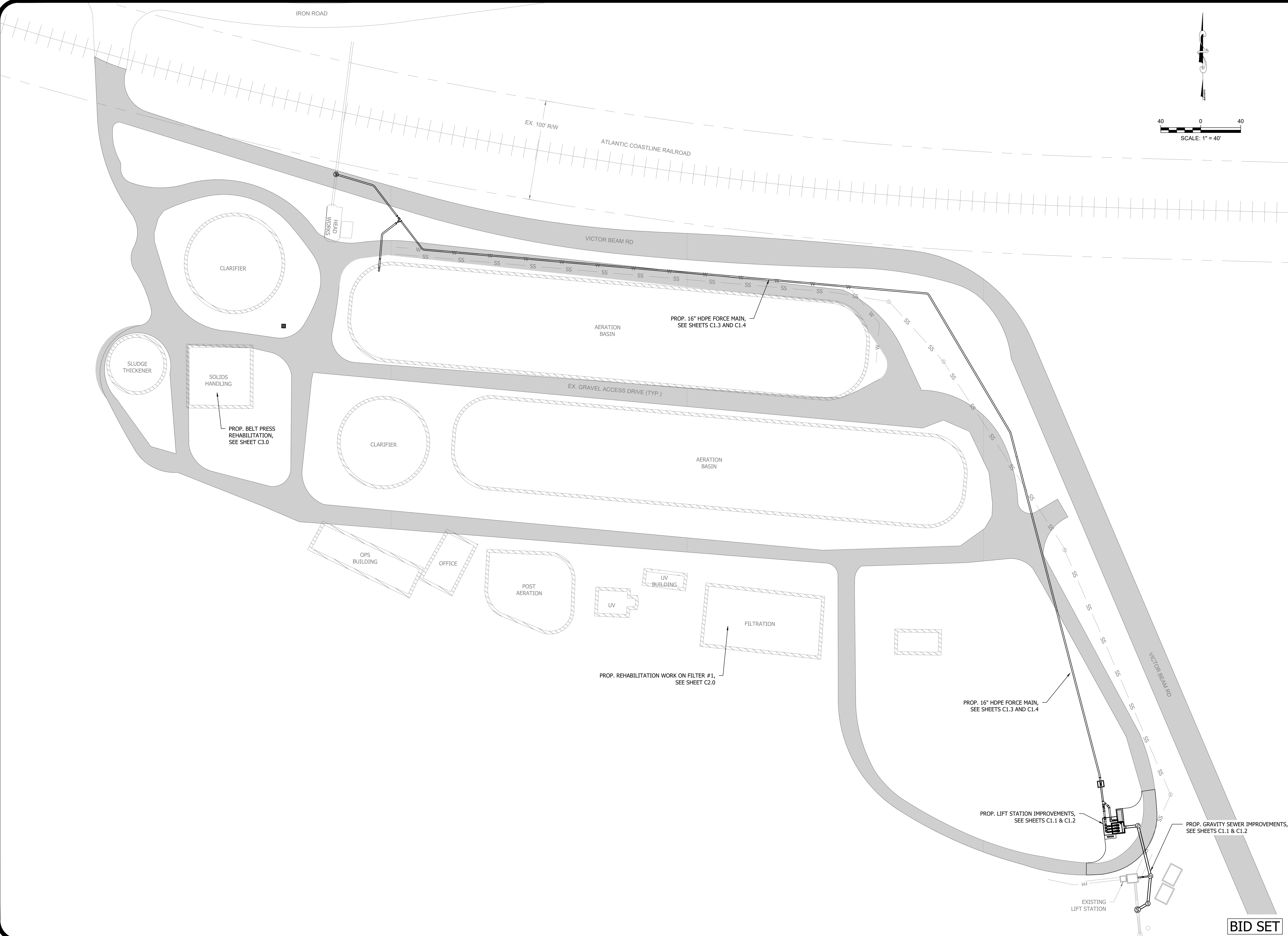
Sincerely,

A handwritten signature in black ink that reads "Kristen A. Courson". The signature is written in a cursive style with a large initial 'K'.

Kristen Courson, P.E.
ESG Engineering, Inc.

Lift Station Plans

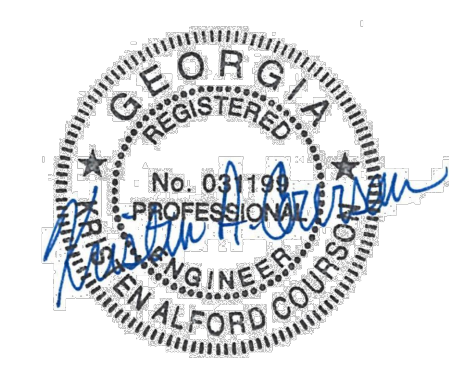
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Drawing Path: Z:\D2000 - DOUGLAS, CITY OF\D2000.101 Back Lift Station\CAD\FIX 12.17.18A - Cover and Gravity Sewer Sheets.dwg



6400 Peake Rd
Macon, GA 31210
Ph: (478) 474-6996
Fax: (478) 474-5045

**FY 2019 SOUTHEAST
WWTP IMPROVEMENTS**
FOR THE
CITY OF DOUGLAS

REVISIONS NO.	DESCRIPTION	DATE

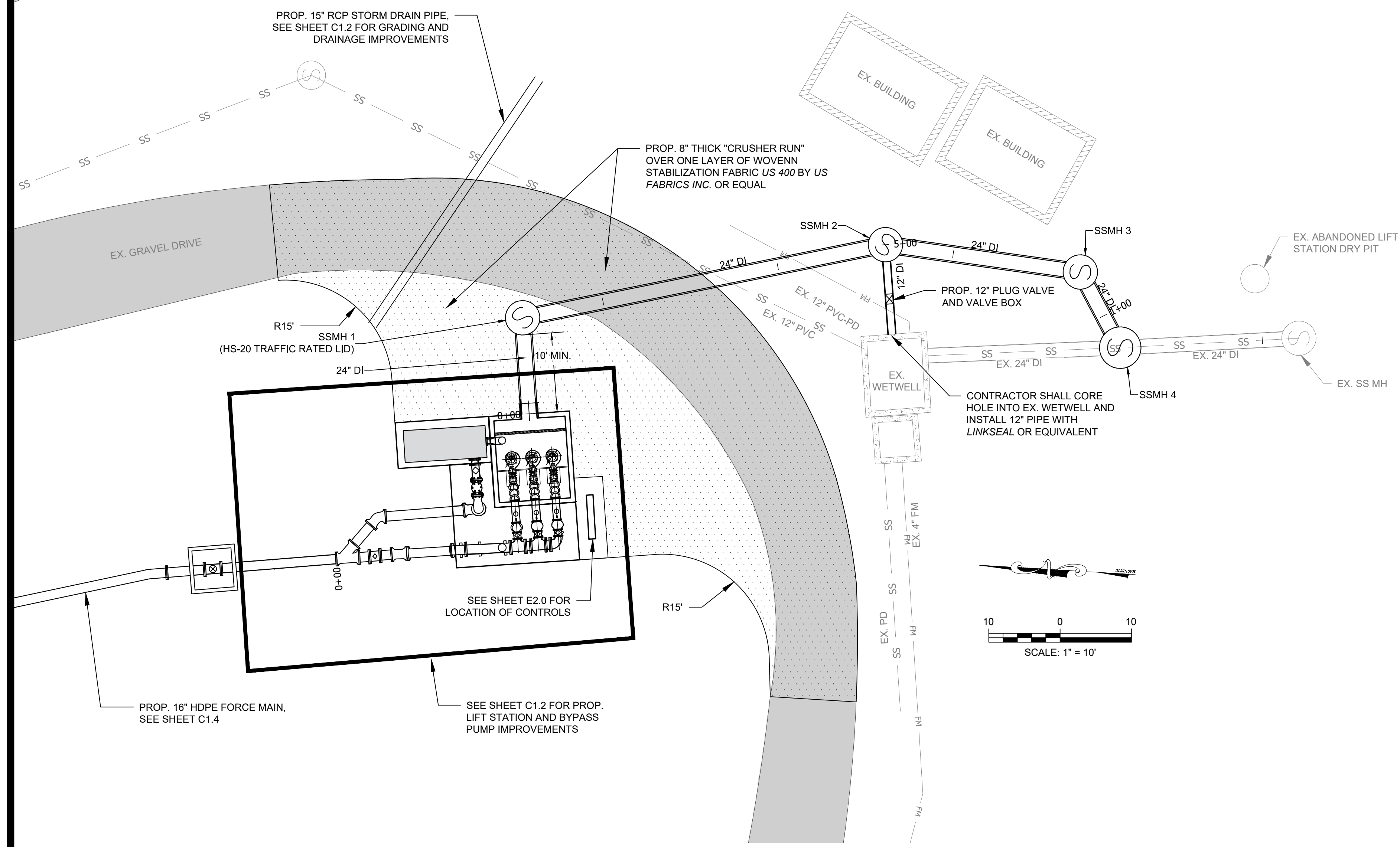


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DATE: DEC. 2018
SCALE: 1"=40'

CONTENT:
GENERAL LAYOUT

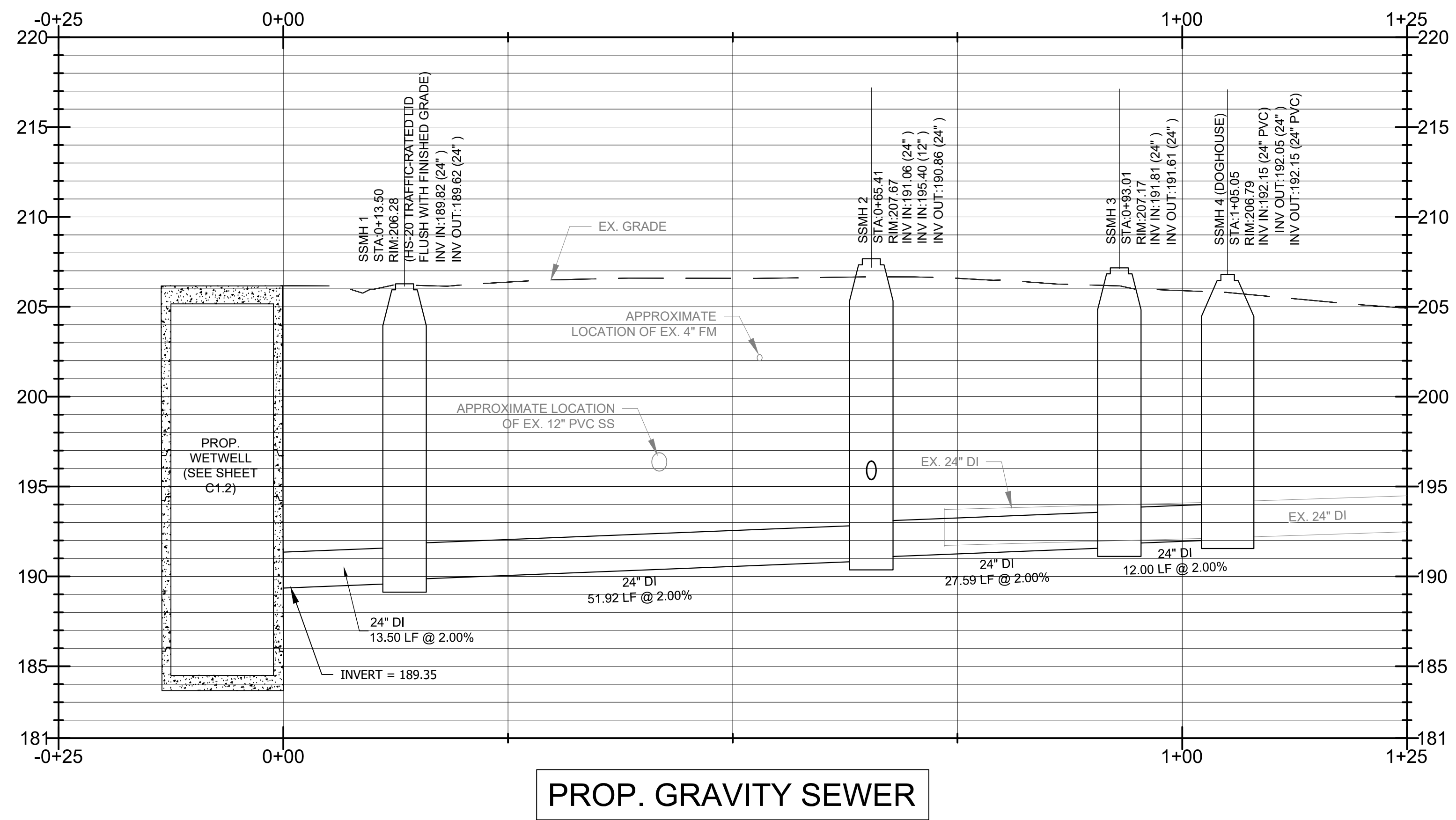
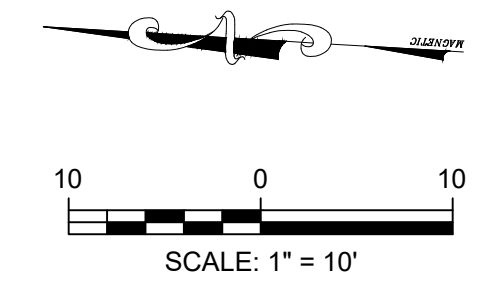
SHEET NO:
C1.0

BID SET



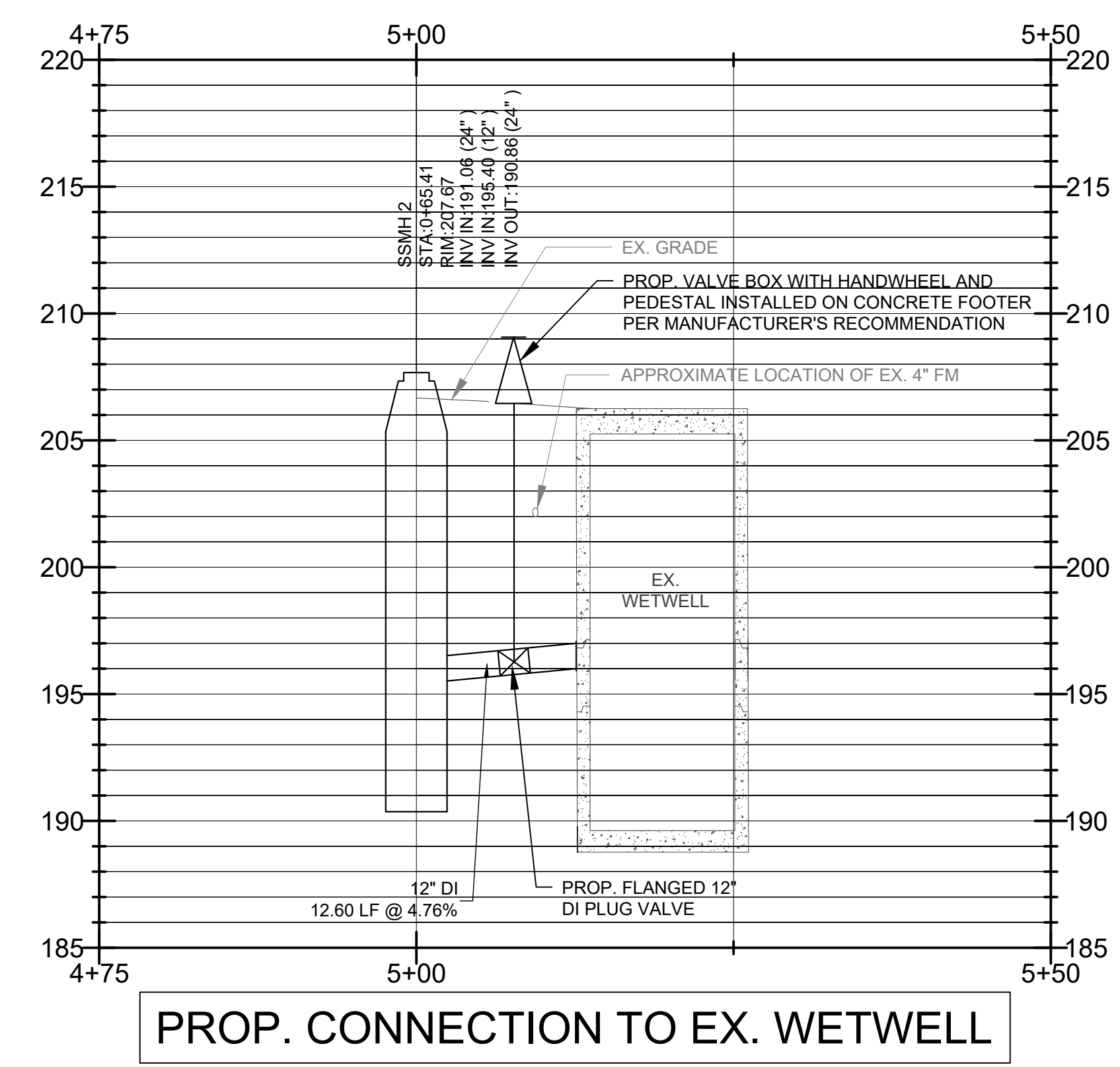
NOTES:

1. CONTRACTOR SHALL BE AWARE THAT THE EXISTING WATER TABLE IS HIGH AND DEWATERING IS TO BE EXPECTED FOR CONSTRUCTION OF PROPOSED WETWELL AND GRAVITY SEWER. SEE SPECIFICATION SECTION 02400 AND GEOTECHNICAL REPORT.
2. THE EXISTING BACK LIFT STATION SHALL REMAIN IN OPERATION DURING ALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL ENSURE HISHER CONSTRUCTION STAGING AND BYPASS INSTALLATION WILL MAINTAIN CONSTANT SERVICE FROM THE BACK LIFT STATION AND ALL CONTRIBUTING FLOWS. ALL COSTS (INCLUDING INSTALLATION OF UPSIZED DOGHOUSE MANHOLE AT SSMH 4 OR ANY OTHER CHANGES) ASSOCIATED WITH THE CONTRACTOR'S METHODS FOR BYPASS PUMPING SHALL BE INCLUDED IN THE BID PRICE PROVIDED.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PRESENCE OF ALL EXISTING UTILITIES THAT MAY AFFECT THE PROPOSED 24\"/>



PROP. GRAVITY SEWER

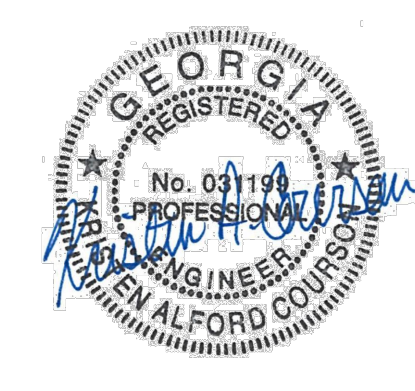
HORIZ.: 1" = 10'
VERT.: 1" = 5'



PROP. CONNECTION TO EX. WETWELL

HORIZ.: 1" = 10'
VERT.: 1" = 5'

NO.	DESCRIPTION	DATE



DRAWN BY: WLN
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DATE: DEC. 2018
SCALE: HOR: 1"=10'
VER: 1"=5'

CONTENT:
GRAVITY SEWER
PLAN & PROFILE

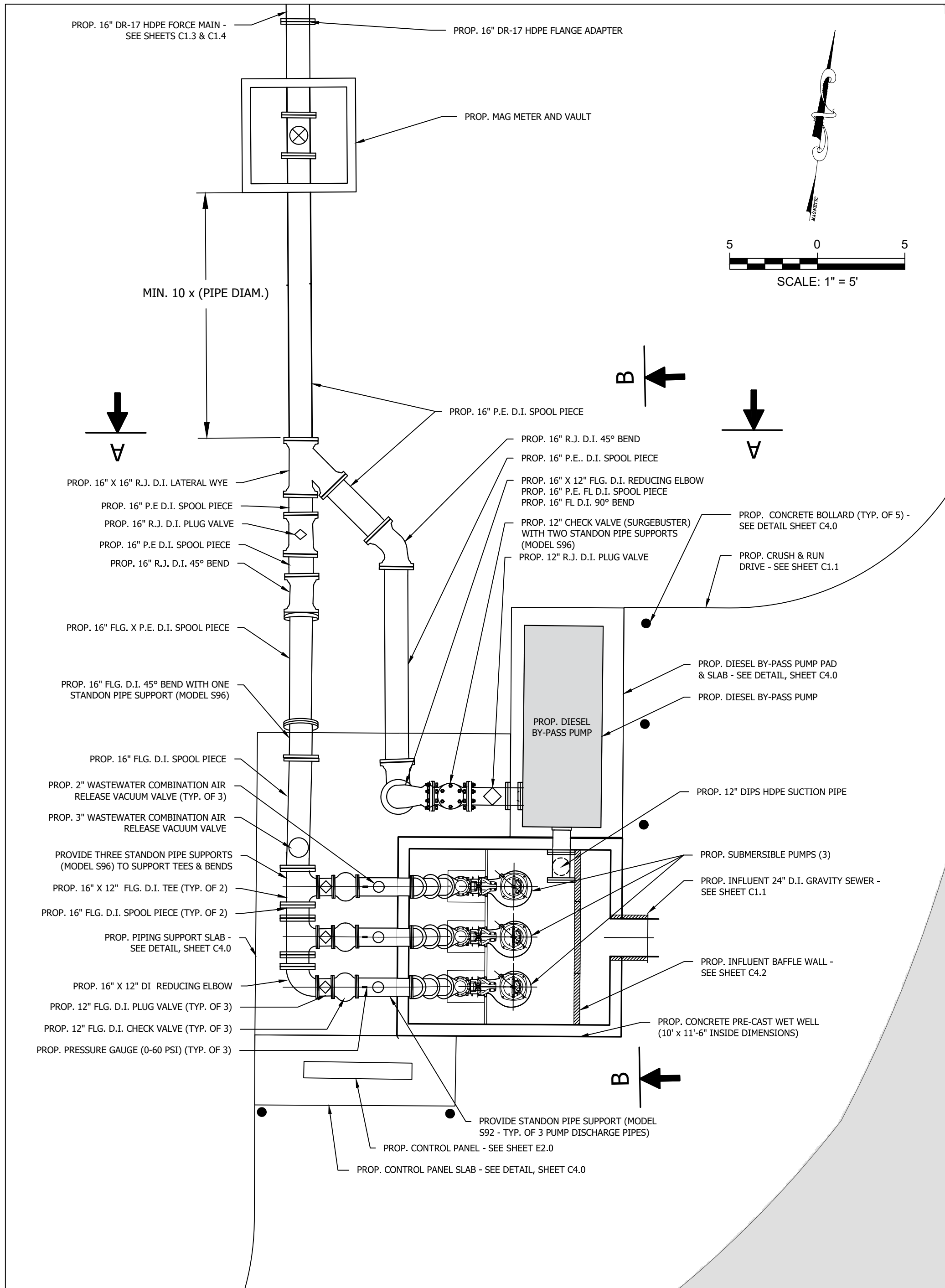
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BID SET

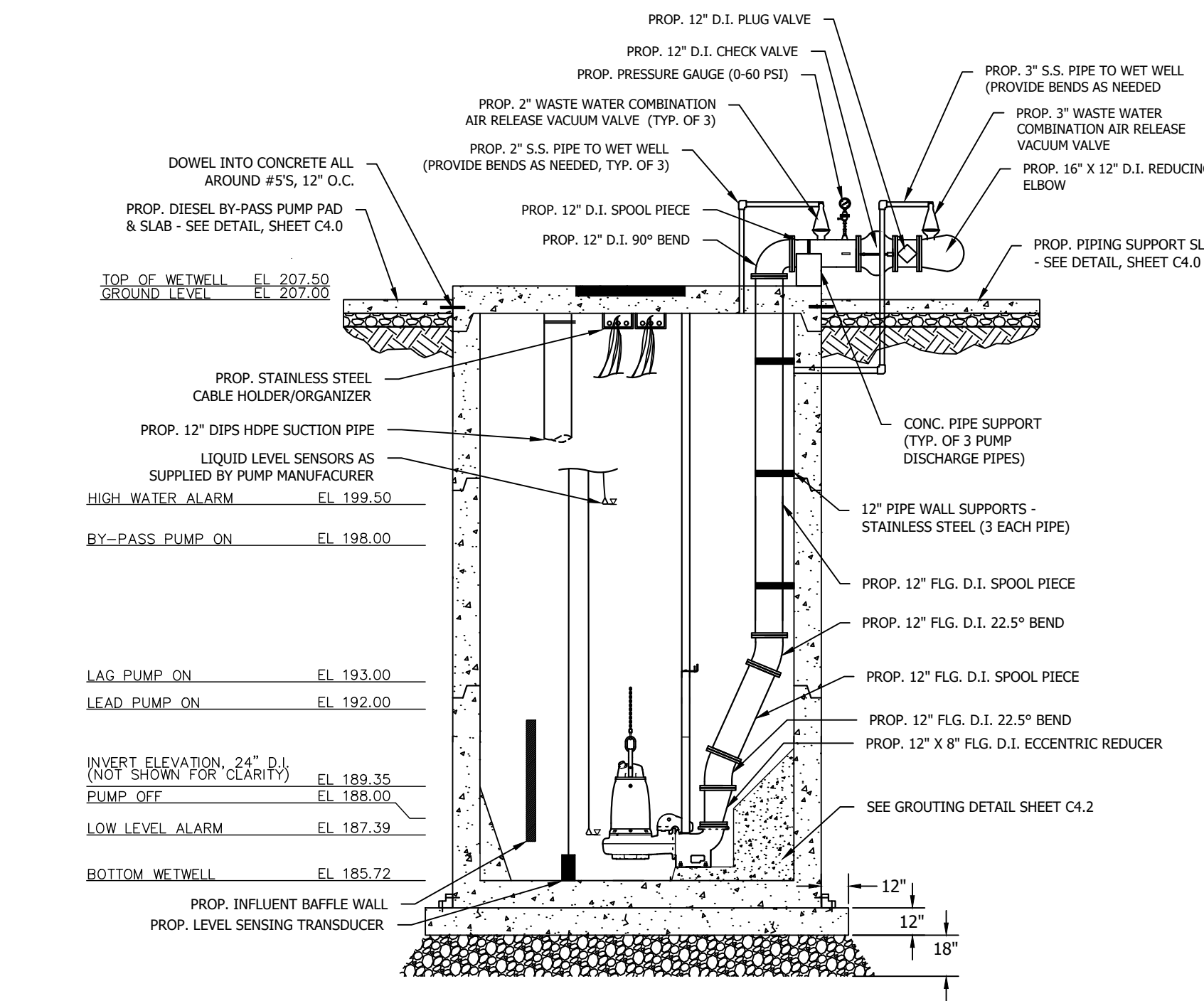
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NOTES

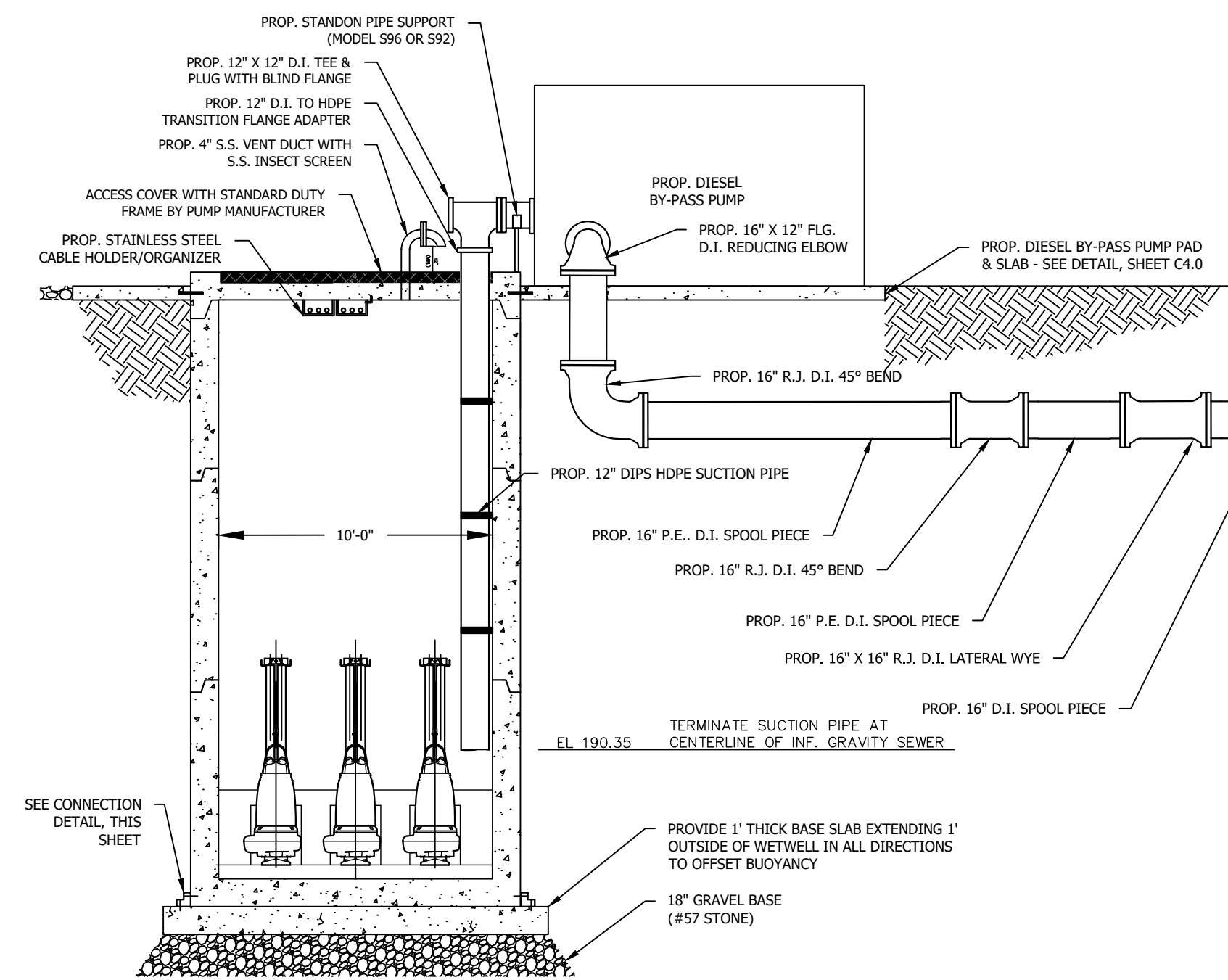
1. CONTRACTOR SHALL NOTE HIGH GROUND WATER IN WETWELL AREA PER GEOTECHNICAL REPORT INCLUDED IN THE SPECIFICATIONS. DE-WATERING FOR PRECAST WETWELL INSTALLATION SHOULD BE ANTICIPATED.
2. CONTRACTOR SHALL EVALUATE AREA FOR PRESENCE OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICTS WITH THE PROPOSED IMPROVEMENTS.
3. AFTER PLACEMENT OF PRE-CAST WETWELL, CONTRACTOR SHALL PLACE BACKFILL MATERIALS IN LAYERS NOT MORE THAN 6" IN LOOSE DEPTH AND COMPACT BY HAND-OPERATED TAMPERS. CONTRACTOR SHALL BACKFILL EVENLY AROUND STRUCTURE. EACH LIFT SHALL BE COMPACTED TO A MINIMUM OF 95% OF SOIL'S MODIFIED MAXIMUM DRY DENSITY.
4. THE WET WELL STRUCTURE SHALL BE LINED WITH TNEC EPXY SYSTEM ACCORDING TO THE SPECIFICATION. THE LINER SHALL BE APPLIED TO ALL SURFACES (TOP AND SIDES) OF ALL CONCRETE AND GROUT FROM 1' BELOW THE LOW WATER LEVEL TO THE TOP OF SIDES AND INCLUDING THE TOP.



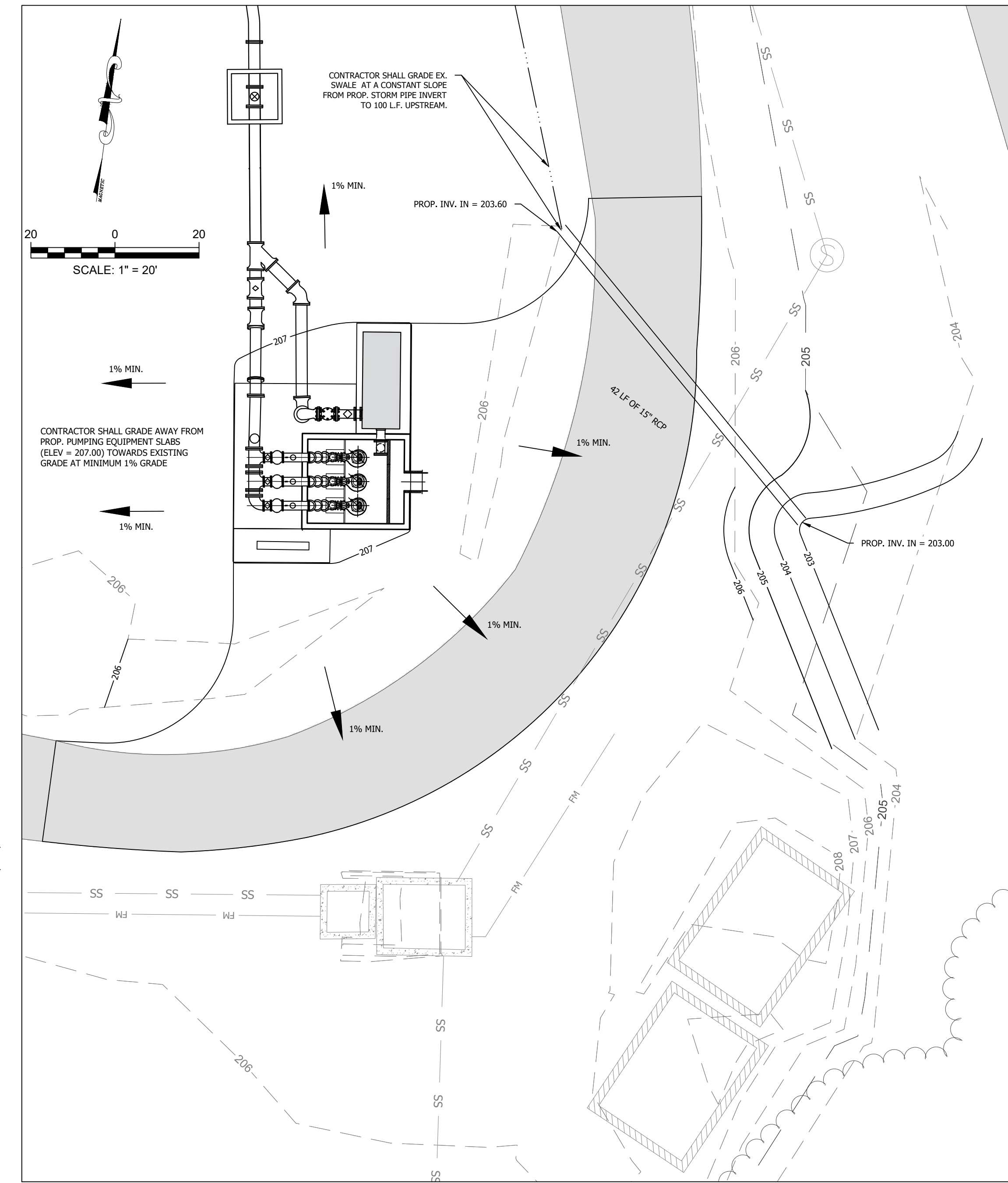
PUMPING PLAN VIEW
SCALE: 1" = 5'



SECTION
SCALE: 1" = 5'



SECTION
SCALE: 1" = 5'



GRADING PLAN
SCALE: 1" = 10'

NO.	REVISIONS	DESCRIPTION	DATE



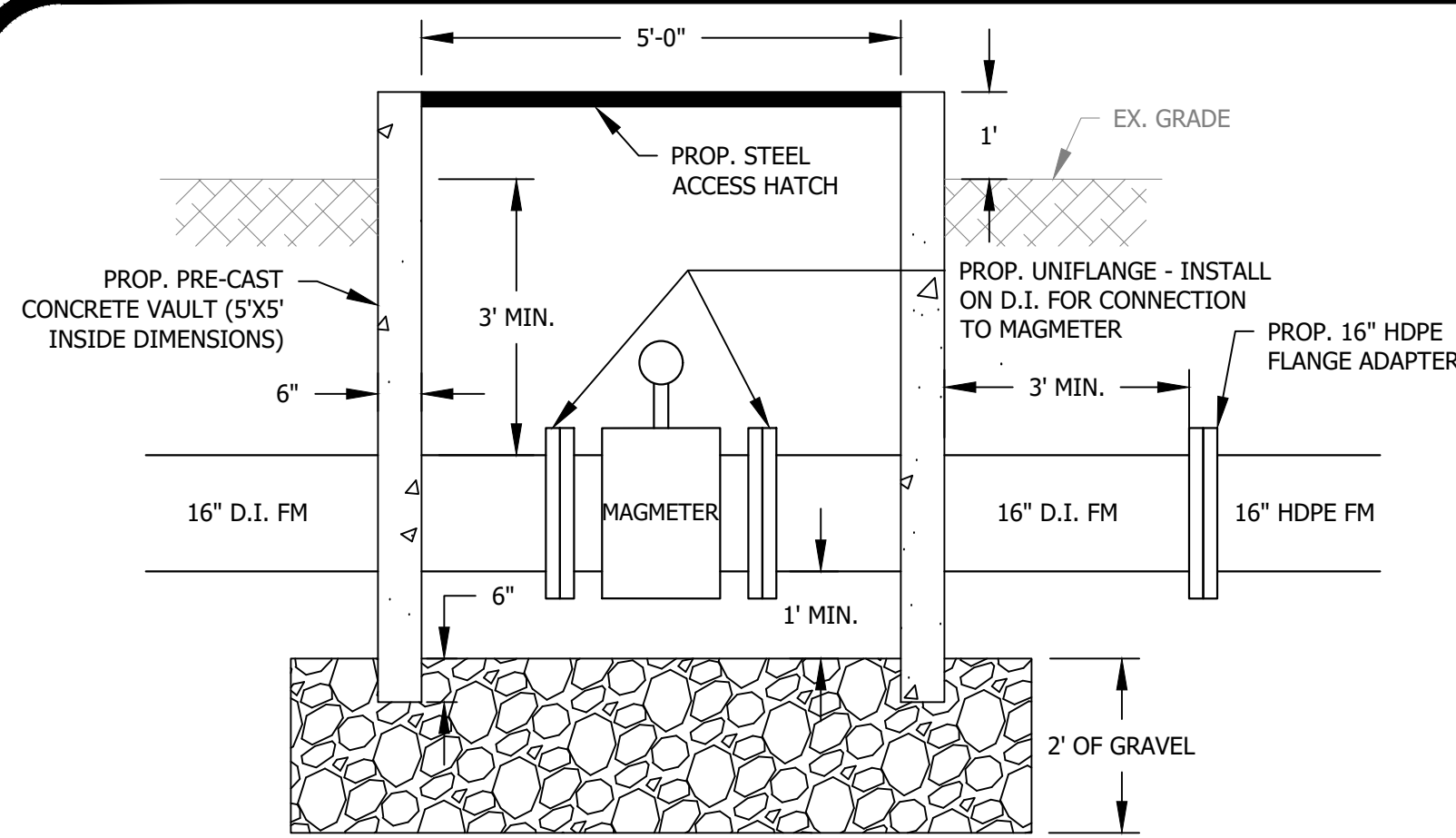
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DATE: DEC. 2018
SCALE: AS NOTED

CONTENT:
PUMPING PLAN
& SECTIONS

SHEET NO:

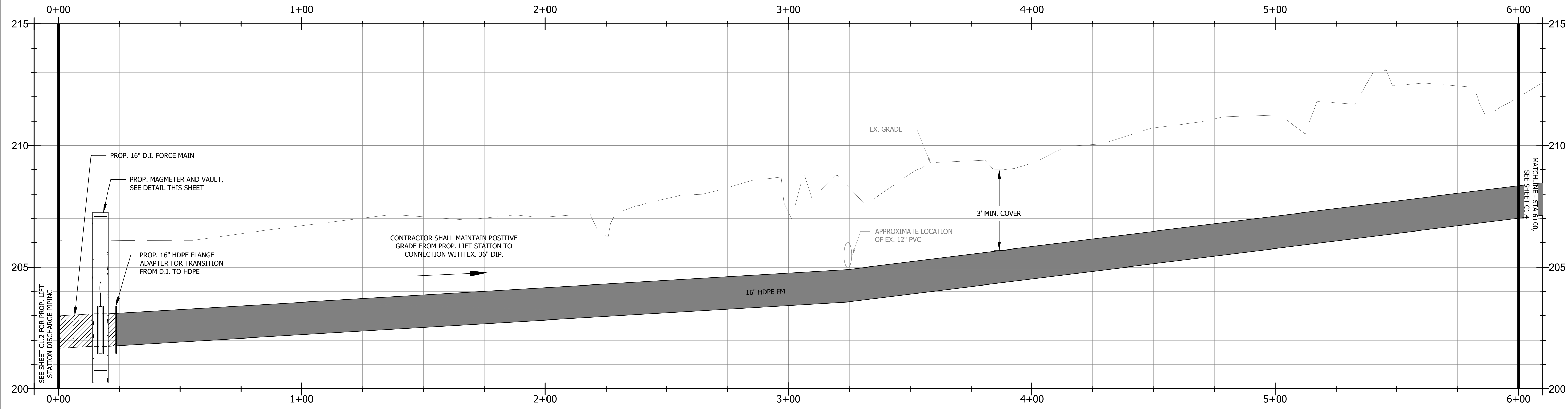
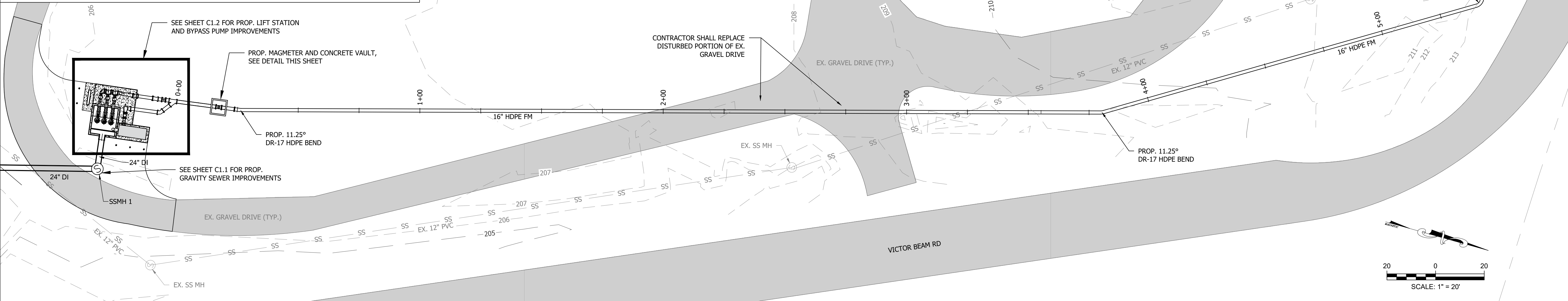
C1.2

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- NOTES:**
- MAGMETER SHALL BE 16" ULTRA MAGMETER BY MCCROMETER RATED FOR SUBMERGENCE.
 - PROP. ACCESS HATCH SHALL BE 5'X5' DOUBLE-LEAF STAINLESS STEEL BY HALLIDAY.
 - ALL REINFORCEMENT FOR SUPPORT OF STRUCTURE SHALL BE PROVIDED BY CONTRACTOR OR MANUFACTURER.

MAGMETER AND VAULT
NTS

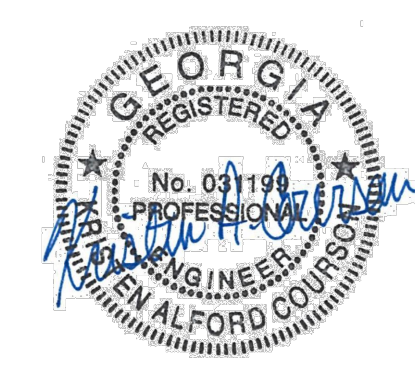


PROP. FORCE MAIN (STA. 0+00 - 6+00)

HORIZ.: 1" = 20'
VERT.: 1" = 2'

BID SET

NO.	DESCRIPTION	DATE



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CHECKED BY: KAC
DATE: DEC. 2018
SCALE: 1" = 20'

CONTENT:
FORCE MAIN
PLAN AND PROFILE

SHEET NO:

C1.3

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NO.	REVISIONS	DATE

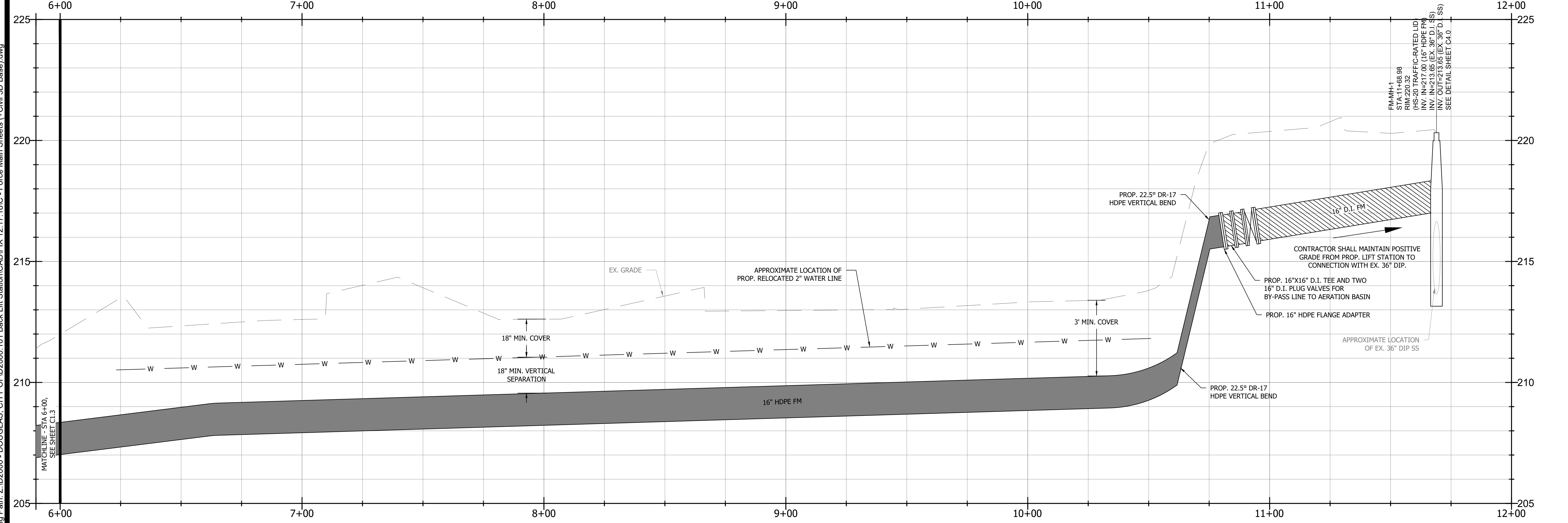
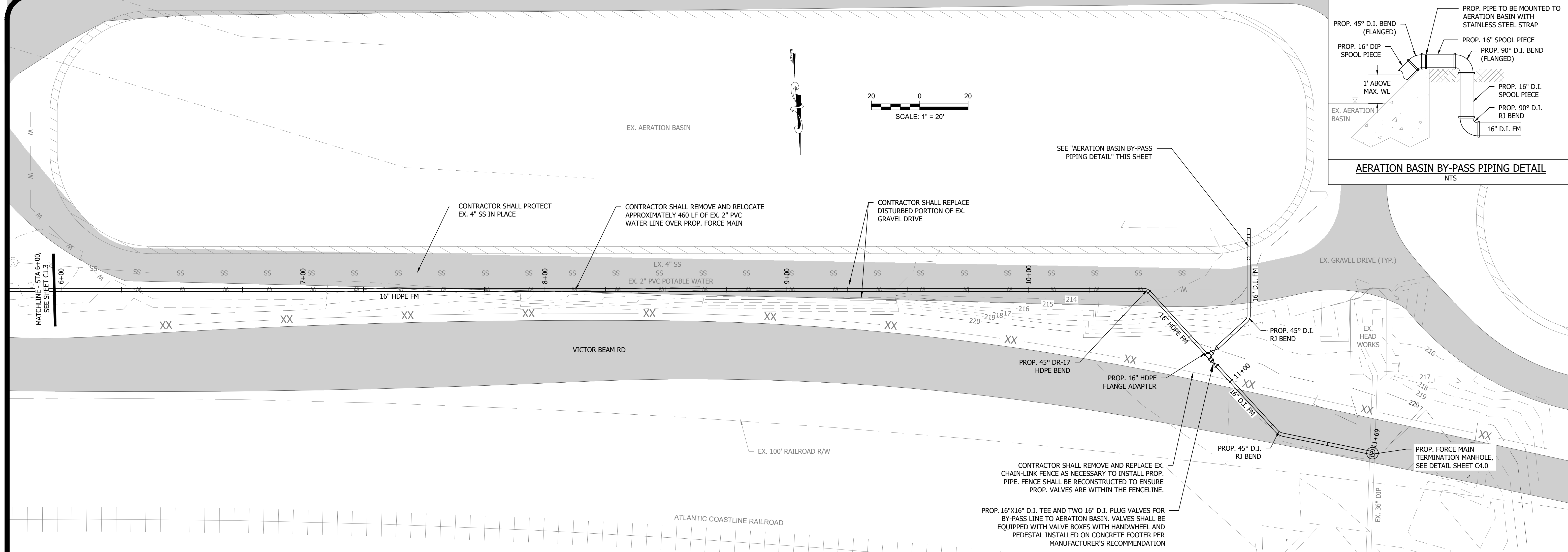
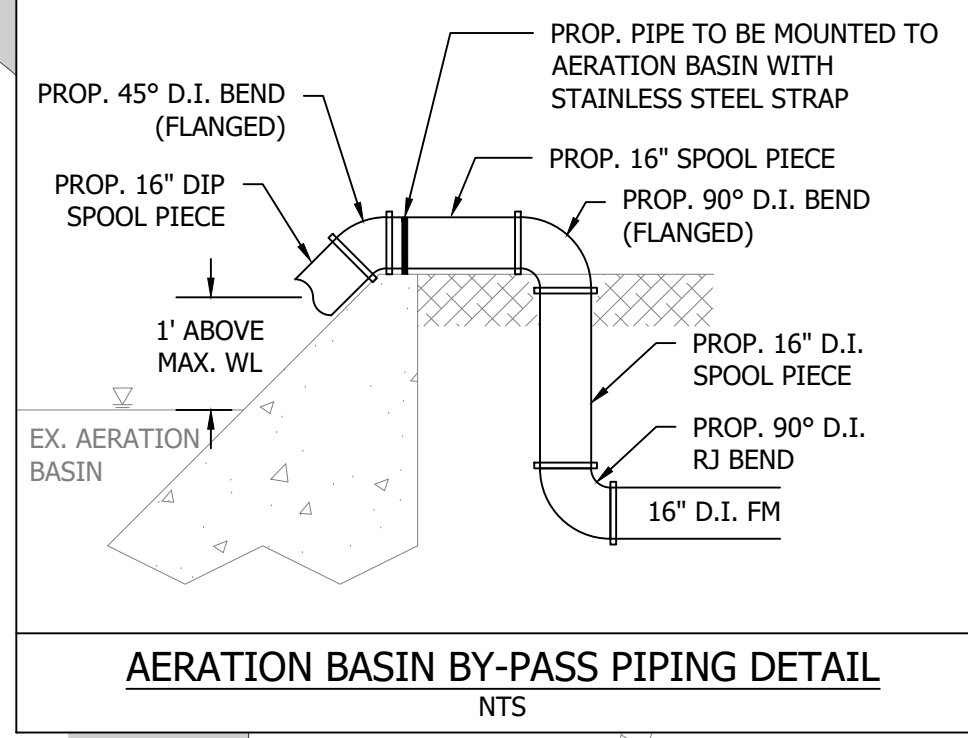


DRAWN BY: WLN
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DATE: DEC. 2018
SCALE: 1"=20'

CONTENT:
FORCE MAIN
PLAN AND PROFILE
(CONT.)

SHEET NO:

C1.4



PROP. FORCE MAIN (STA. 6+00 - 11+69)

HORIZ.: 1" = 20'
VERT.: 1" = 2'

BID SET

Last Saved By: Andrew Swicegood Plotted: 12/28/2018 4:43 PM
Drawing Path: Z:\D2000 - DOUGLAS, CITY OF\DWG\101 Back Lift Station\CAD\FIX 12.17.18\C - Force Main Sheets (-Civil 3D Base).dwg

Project Schedule – Notice to Proceed

SECTION 00622
NOTICE TO PROCEED

To: L&L Utilities, Inc.

Date:

March 14, 2019

746 Robert Webb Rd

Project:

FY2019 Southeast WWTP

Dublin, GA 31027

Improvements

You are hereby notified to commence WORK in accordance with the Agreement dated January 21, 2019 on or before May 1st, 2019, and you are to complete the WORK within 210 consecutive calendar days thereafter. The date of completion of all WORK is therefore November 27, 2019.

City of Douglas

OWNER

By 

Title: Utilities Director

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE
TO PROCEED is hereby
acknowledged by

L&L Utilities, Inc.

this the _____ day of _____, 20__

By 

Title VP

Project Schedule

L & L Utilities, Inc.

Project: FY 2019 Southeast WWTP Imps - City of Douglas, GA

Tentative Work / Draw Schedule

Item	DESCRIPTION	Quantity	Units	Unit Price	Total	2019							
						May	June	July	Aug	Sept	Oct	Nov	
1	Mobilization	1.0	JOB										
2	Pumping Station	1.0	JOB										
3	Sanitary Sewer	1.0	JOB										
4	Manholes - Gravity	1.0	JOB										
5	16-IN Force Main & 16-IN MJ Plug Valves	1.0	JOB										
6	Force Main Dog House - Tie In	1.0	JOB										
7	Emergency Diesel Pump	1.0	JOB										
8	Bridge Filter Rehab	1.0	JOB										
9	Belt Press Rehab	1.0	JOB										
10	Electrical	1.0	JOB										
11	Clean up and Grass	1.0	JOB										
12	General allowance	1.0	JOB										
13	Testing allowance	1.0	JOB										
Total													
						Draw 1	Draw 2	Draw 3	Draw 4	Draw 5	Draw 6	Draw 7	

Dublin Winwater Plug Valve Options



509 Airport Road
Dublin, GA 31021
Tel: (478) 272-2026
Fax: (478) 275-2522

FY2019 Southeast WWTP Improvements Douglas, GA Plug Valve Availability

Option 1: DeZurik Valves (AIS Compliant-Approved Submittal)
Order Date: 06/04/19
Estimated Ship Date: 12" - week of 09/02/19
16" - week of 11/10/19

Option 2: Kennedy Valves (Globally Sourced- Submittal Attached)
Order Date: Not Ordered
Estimated Ship Date: 12" Flanged (68 in stock-2 week lead)
12" Mechanical Joint (26 in stock-2 week lead)
16" Mechanical Joint (3 in stock- 2 week lead)

Description: 12" Flanged Eccentric Plug Valve (Qty needed: 4)
Body: Ductile Iron AWWA C517 Bi-Directional
Plug: Buna Encapsulated Ductile Iron
Port Size: 100% Full Flow
Paint: NSF61 Two-Part Epoxy
Hardware: Stainless Steel
Gear: AWWA C517 Worm Gear w/stainless steel pinion shaft
Operator: Handwheel

Description: 12" Mechanical Joint Eccentric Plug Valve (Qty needed: 1)
16" Mechanical Joint Eccentric Plug Valve (Qty needed: 3)
Body: Ductile Iron AWWA C517 Bi-Directional
Plug: Buna Encapsulated Ductile Iron
Port Size: 100% Full Flow
Paint: NSF61 Two-Part Epoxy
Hardware: Stainless Steel
Gear: AWWA C517 Worm Gear w/stainless steel pinion shaft
Operator: 2" OP Nut

Specification Excerpt – AIS Requirements

GENERAL REQUIREMENTS

These Special Conditions are based on guidance provided by the United States Environmental Protection Agency (EPA). Public Law 113-76, the Consolidated Appropriations Act, 2014 (Act), includes an "American Iron and Steel" (AIS) requirement that requires State Revolving Loan Fund (SRF) assistance recipients to use iron and steel products that are produced in the United States for projects in this project. A copy of Section 436 of the Act is found in Appendix 3.

The products and materials subject to these requirements will be defined in Appendix 1 of these special conditions.

The Owner must maintain documentation of compliance with the AIS requirements. The documentation that the Owner maintains will be subject to review and audit by representatives of the state of Georgia, the EPA, the EPA Office of the Inspector General, and other federal authorities.

The Prime Contractor must provide certifications of compliance for all products subject to AIS requirements to the Owner prior to requesting payments for those products. The Owner or the Engineer may require certifications of compliance with submittals and shop drawings for these products as part of the submittal review process.

All manufacturing processes for a covered iron or steel product, as further defined in Appendix 1, must take place in the United States. If a covered product is taken out of the US for any part of the manufacturing process, it becomes foreign source material.

The EPA recommends the use of a step certification process to document the locations of the manufacturing processes involved with the production of steel and iron materials. A step certification is a process under which each handler (supplier, fabricator, manufacturer, processor, etc.) of the iron and steel products certifies that its step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin. A certification should include the name of the manufacturer, the location of the manufacturing facility where the product or process took place (not its headquarters), a description of the product or item being delivered, and a signature by a manufacturer's responsible party. Attached in Appendix 2 is a sample step certification.

Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes for the product and for its iron and steel components occurred in the United States. The EPA states that additional documentation may be needed if the certification lacks important information and recommends step certification as the best practice. A sample final manufacturer certification is attached in Appendix 2.

The Prime Contractor may document that incidental and generally low cost components, as defined in Appendix 1, are compliant with AIS requirements under the De Minimis Waiver issued by the EPA. For these items, the Contractor must provide the Owner with documentation of costs for these items, including invoices, and a report of types and categories of materials to which the waiver is applied, the total cost of incidental components covered by the waiver for each category, and the calculations by which the total cost of materials incorporated into the project was determined. A sample De Minimis report is attached in Appendix 2.

Contractor, supplier, and manufacturer records are subject to review and audit by the EPA, its Inspector General, and other federal authorities.

Failure to comply with these requirements may delay, limit, or prevent the disbursement of SRF funds to the Owner. Violations of AIS requirements will require correction by the Contractor as determined by the Owner and Engineer, including replacement of deficient products with compliant products and compensation for costs and other damages that may result. Violations may also subject the Owner, the Contractor, and suppliers to other enforcement actions within the discretion of the EPA and other federal authorities.

The Act permits EPA to issue waivers for a case or category of cases in which EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the US in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the US will increase the cost of the overall project by more than 25 percent. The Contractor should notify the Owner and Engineer immediately if it finds that a waiver may be required.

By submitting a bid for this project and by executing this construction contract, the Contractor acknowledges to and for the benefit of the Owner and the state of Georgia that it understands that the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund or the Drinking Water State Revolving Fund and that Federal law authorizing these Funds contains provisions commonly known as "American Iron and Steel" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner and the state of Georgia that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Owner or the state of Georgia. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner or the state of Georgia to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Owner or the state of Georgia resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the state of Georgia or any damages owed to the state of Georgia by the Owner). The Owner and the Contractor agree that the state of Georgia, as a lender to the Owner for the funding of its project, is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the state of Georgia.

Appendix 1 – Definitions

For purposes of the Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the project:

Lined or unlined pipes or fittings;
Manhole Covers;
Municipal Castings (defined in more detail below);
Hydrants;
Tanks;
Flanges;
Pipe clamps and restraints;
Valves;
Structural steel (defined in more detail below);
Reinforced precast concrete (defined in more detail below); and
Construction materials (defined in more detail below).

Product primarily of iron or steel: The product must be made of greater than 50% iron or steel, measured by cost. If one of the listed products is not made primarily of iron or steel, United States (US) provenance is not required, except as required for reinforced precast concrete. If a product is composed of more than 50% iron or steel, but is not listed in Section 436 (a) (2) of the Act, it is not required to be produced in the US. Alternatively, the iron or steel in such a product can be sourced from outside the US.

Steel: An alloy that includes at least 50 percent iron and between 0.02 and 2 percent carbon and may include other elements. Other alloys of iron are not required to be produced in the US.

Produced in the United States: Production in the US of the iron or steel products used in the project requires that all manufacturing processes, including application of coatings, must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives. All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating and coating. Further, if a domestic iron and steel product is taken out of the US for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin.

Municipal Castings: Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel. Examples of municipal castings include access hatches, ballast screen, benches, bollards, cast bases, cast iron hinged hatches, cast iron riser rings, catch basin inlets, cleanout/monument boxes, construction covers and frames, curb and corner guards, curb openings, detectable warning plates, downspout shoes, drainage grates, frames & curb inlets, inlets, junction boxes, lampposts, manhole covers, rings & frames, risers, meter boxes, steel hinged hatches, steel riser rings, trash receptacles, tree grates, tree guards, trench grates, and valve boxes.

Structural Steel: Structural steel is rolled flanged shapes, having at least one dimension of their cross-section 3 inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

Specification Excerpt – Plug Valves

2.04 PLUG VALVES

- A. Plug valves shall be 100% Port Eccentric Plug Valves designed to meet the following standards:
 - AWWA C517-05 Resilient-Seated Cast-Iron Eccentric Plug Valve, quarter-turn
 - ANSI flange drilled conforms to ANSI B16.1, Class 125. MJ joint end connections conform to ANSI/AWWA C11 1/A21.11.
- B. Plug valve shall have a direct pressure, weatherproof nut actuator for buried use or chairwheel/chain where specified. Non-buried valves shall be handwheel or lever operated as space requires.
- C. Valve bodies and covers shall be constructed of ASTM A126 Class B cast iron for working pressures up to 175 psig and ASTM A536 Grade 65-45-12 for working pressures up to 250 psig.
- D. Plugs shall be made of one-piece construction and made of ASTM A126 Class B cast iron or ASTM A536 Grade 65-45-12 ductile iron and fully encapsulated with resilient facing per ASTM D2000-BG and ANSI/AWWA C517 requirements.
- E. Interior and exterior of the valve shall be coated with an ANSI/NSF 61 approved fusion bonded epoxy. Color of finish coat shall match pipe.
- F. Plug valves shall be series #5600R or #5700R manufactured by Val-matic or approved equal.

2.05 VALVE BOXES

- A. All buried valves shall have cast iron two or three piece valve boxes with cast iron covers. Valve boxes shall be provided with suitable heavy bonnets and to extend to such elevation at or slightly above the finished grade surface as directed by the Engineer. The barrel shall be one or two-piece, screw type, having 5-1/4-inch shaft. Covers shall have "WATER" cast into the top for all water mains and "DRAIN" cast into the top of all drain line. All valves shall have actuating nuts extended to within six inches of the top of valve box cover.
- B. Valve boxes shall be provided with concrete base and valve nameplate with suitable anchors for casting in concrete. Nameplate shall be 3-inch diameter bronze disk with raised lettering 1/8-inch high as shown on the Drawings and manufactured by Shiedow Bronze Corporation, Kingwood, W. VA; or equal.

2.06 FLANGED ADAPTORS

Original Plug Valve Submittal – DeZurik (AIS Compliant)

Submittal Cover Sheet

Project Name: Douglas WWTP Improvements
Date: 4-22-2019
Name of Contractor: L & L Utilities, Inc.
746 Robert Webb Road
Dublin, GA. 31027
Name of Supplier: Dublin Winwater
509 Airport Rd.
Dublin Ga. 31021
Product: Piping
Submittal No: 4
Specification Section Section 2530
For Approval: X **For Resubmittal:**

Contractor: L & L Utilities Inc.
Approval Date: 4-22-2019
Approved By: Kirk Lewis

SHOP DRAWING / SUBMITTAL REVIEW	
<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/>
<input type="checkbox"/> REVISE AND RESUBMIT	<input type="checkbox"/>
SUBMITTAL WAS REVIEWED FOR GENERAL CONFORMANCE TO CONTRACT DOCUMENTS AND ONLY THE CONTRACT DOCUMENTS SHALL BE REFERENCED FOR TOLERANCE, CONSTRUCTION PROCESSES AND TECHNICAL COORDINATION OF THIS SHOP WITH THE FULL COMPLIANCE WITH CONTRACT DOCUMENTS.	
By: <u>Kirk Lewis</u> (BA)	Date: <u>4-22-2019</u>
L & L Utilities, Inc. 746 Robert Webb Road, Dublin, GA 31027-1574	

SUBMITTAL REVIEW

- APPROVED
- APPROVED, EXCEPTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- FOR INFORMATION ONLY

BY: JA Courson DATE: 5/9/19



TABLE OF CONTENTS

A Data Sheet is included for each line item on the purchase order.
Document numbers are listed at the bottom of the Data Sheet.
Any one drawing may apply to more than one item number.
All documents are assembled in alpha/numeric order within each section

- DATA SHEETS
- INSTALLATION DRAWINGS

*Note quantity change from
1 to 3 on Item # 3*



Submittal Data Sheet

Date: 03/05/2019

ALL BIDDING DISTRIBUTORS
USA

QUOTE NUMBER 137950
REV

PROJ. DOUGLAS WWTP

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION
1		4	PEF,12,F1,CI,NBR,CR,AIS-L41LS1*GS-6A-HD12
3 submersible pump discharge lines 1 by-pass pump discharge line			
Style		PEF ✓	DeZURIK 100% Area Rectangular Port Eccentric Plug Valve (AWWA C517)
Size		12 ✓	12 Inch (300mm), Type 316 Stainless Steel Bearings - ASTM A743 Grade CF8M, Welded-In Nickel Seat
End Connection		F1 ✓	Flanged, Drilled to ASME B16.1 Class 125/150
Body Material		CI ✓	Cast Iron, ASTM A126, Class B
Packing		NBR	Acrylonitrile-Butadiene Reinforced, Multiple V-Ring with External Adjustment, -20 to 180 Degree F. (-29 to 83 Degree C.)
Plug Facing		CR ✓	Ductile Iron - ASTM A536 with Chloroprene Face; -20 to 180°F (-29 to 83°C)
Coating or Paint		L41LS1 ✓	12 mils minimum (non-stainless steel parts) of Blue Fusion Bonded Epoxy on Interior and SP5 surface prep AND 12 Mils Fusion Bonded Epoxy on Exterior of Valve, 4Mils Epoxy on GS-6A/12A manual actuator, 8 Mils Epoxy on DR/DRL-55/85 or PR/PRL, 3 Mils Enamel on any other actuator of Blue Fusion Bonded Epoxy on Exterior and SP5 surface prep
Option		AIS ✓	USA Iron & Steel
Actuator Type		GS-6A-HD12 ✓	G-Series Worm Gear with Handwheel Operator



Submittal Data Sheet

Date: 03/05/2019

ALL BIDDING DISTRIBUTORS
USA

QUOTE NUMBER 137950
REV

PROJ. DOUGLAS WWTP

By-pass line from old wetwell

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION
2		1	PEF,12,MJ,CI,NBR,CR,AIS-L41LS1*GB-6A-N
Style		PEF ✓	DeZURIK 100% Area Rectangular Port Eccentric Plug Valve (AWWA C517)
Size		12 ✓	12 Inch (300mm), Type 316 Stainless Steel Bearings - ASTM A743 Grade CF8M, Welded-In Nickel Seat
End Connection		MJ ✓	Mechanical Joint, Conforms to ASME/AWWA C111/A21.11
Body Material		CI ✓	Cast Iron, ASTM A126, Class B
Packing		NBR	Acrylonitrile-Butadiene Reinforced, Multiple V-Ring with External Adjustment, -20 to 180 Degree F, (-29 to 83 Degree C.)
Plug Facing		CR	Ductile Iron - ASTM A536 with Chloroprene Face; -20 to 180°F (-29 to 83°C)
Coating or Paint		L41LS1 ✓	12 mils minimum (non-stainless steel parts) of Blue Fusion Bonded Epoxy on Interior and SP5 surface prep AND 12 Mils Fusion Bonded Epoxy on Exterior of Valve, 4Mils Epoxy on GS-6A/12A manual actuator, 8 Mils Epoxy on DR/DRL-55/85 or PR/PRL, 3 Mils Enamel on any other actuator of Blue Fusion Bonded Epoxy on Exterior and SP5 surface prep
Option		AIS ✓	USA Iron & Steel
Actuator Type		GB-6A-N ✓	G-Series Buriable Worm Gear with 2 Inch Square Nut Operator



Submittal Data Sheet

Date: 03/05/2019

ALL BIDDING DISTRIBUTORS
USA

QUOTE NUMBER 137950
REV

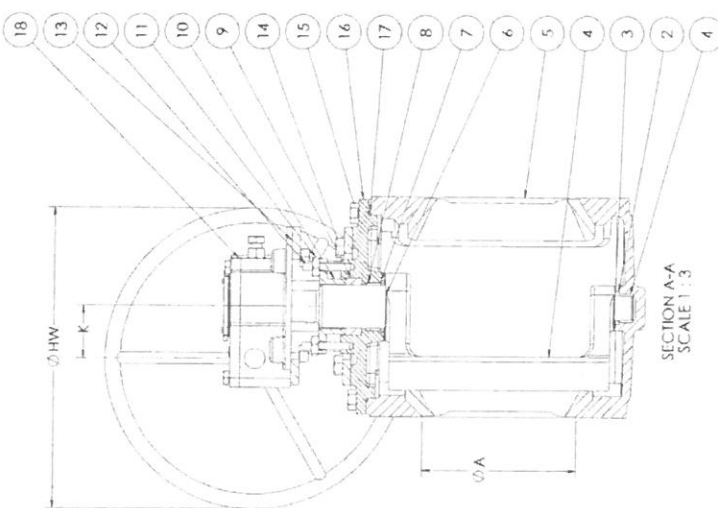
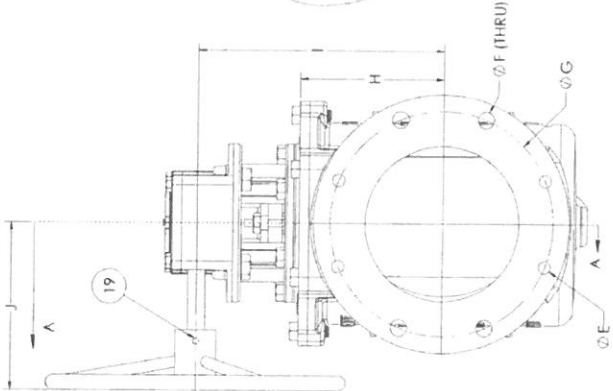
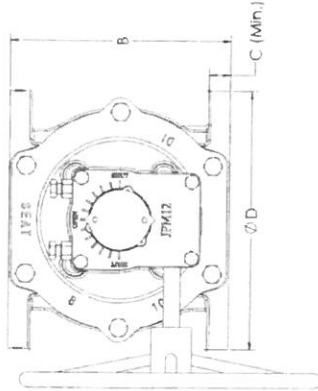
PROJ. DOUGLAS WWTP

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION
3		<i>+ 3</i>	PEF,16,MJ,CI,NBR,CR,AIS-L41LS1*GB-12A-N
Style		PEF	DeZURIK 100% Area Rectangular Port Eccentric Plug Valve (AWWA C517)
Size		16	16 Inch (400mm), Type 316 Stainless Steel Bearings - ASTM A743 Grade CF8M, Welded-In Nickel Seat
End Connection		MJ	Mechanical Joint, Conforms to ASME/AWWA C111/A21.11
Body Material		CI	Cast Iron, ASTM A126, Class B
Packing		NBR	Acrylonitrile-Butadiene Reinforced, Multiple V-Ring with External Adjustment, -20 to 180 Degree F. (-29 to 83 Degree C.)
Plug Facing		CR	Ductile Iron - ASTM A536 with Chloroprene Face; -20 to 180°F (-29 to 83°C)
Coating or Paint		L41LS1	12 mils minimum (non-stainless steel parts) of Blue Fusion Bonded Epoxy on Interior and SP5 surface prep AND 12 Mils Fusion Bonded Epoxy on Exterior of Valve, 4Mils Epoxy on GS-6A/12A manual actuator, 8 Mils Epoxy on DR/DRL-55/85 or PR/PRL, 3 Mils Enamel on any other actuator of Blue Fusion Bonded Epoxy on Exterior and SP5 surface prep
Option		AIS	USA Iron & Steel
Actuator Type		GB-12A-N	G-Series Buriable Worm Gear with 2 Inch Square Nut Operator

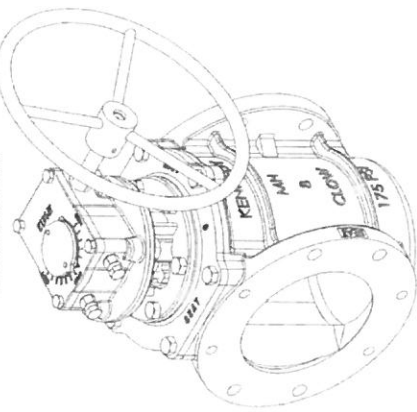
*1 @ P.S. Effluent Header
2 @ By-pass to Aeration Pond
near headworks*

Proposed Plug Valve – Kennedy (Non-AIS Compliant)

REV	DESCRIPTION	DATE
1	ISSUED	8/10/2017
2	1-CAPPER	8/10/2017
3	1-CAPPER	9/20/2017
4	1-CAPPER	9/22/2017
5	1-CAPPER	9/22/2017
6	1-CAPPER	9/22/2017
7	1-CAPPER	9/22/2017
8	1-CAPPER	9/22/2017
9	1-CAPPER	9/22/2017
10	1-CAPPER	9/22/2017
11	1-CAPPER	9/22/2017
12	1-CAPPER	9/22/2017
13	1-CAPPER	9/22/2017
14	1-CAPPER	9/22/2017
15	1-CAPPER	9/22/2017
16	1-CAPPER	9/22/2017
17	1-CAPPER	9/22/2017
18	1-CAPPER	9/22/2017
19	1-CAPPER	9/22/2017



8 INCH SHOWN



ITEM#	PART NAME	ASIM/ DESIGNATION	QTY.
1	LOWER SLEEVE BEARING	SINTERED ALLOY SS316	11
2	LOWER GRIT SEAL	NBR	1
3	LOWER THRUST WASHER/PTE	ASTM A536 65-45-12 OR 70-50-05 +NBR	1
4	PLUG	ASTM A536 65-45-12 OR 70-50-05 +NBR	1
5	BODY	ASTM A536 65-45-12 OR 70-50-05	1
6	UPPER THRUST WASHER / PTFE	PTFE	1
7	UPPER GRIT SEAL	NBR	1
8	UPPER SLEEVE BEARING	SINTERED ALLOY SS316	1
9	V-PACKING	NBR	1
10	FOLLOWER GLAND	ASTM A536 65-45-12 OR 70-50-05	1
11	HEX NUTS	STAINLESS STEEL ASTM A276.1316	2
12	STUDS	STAINLESS STEEL ASTM A276.1316	2
13	ADAPTER	ASTM A536 65-45-12 OR 70-50-05	1
14	ADAPTER BOLTS	STAINLESS STEEL ASTM A276.1316	6
15	COVER BOLTS	STAINLESS STEEL ASTM A276.1316	4
16	COVER	ASTM A536 65-45-12 OR 70-50-05	1
17	COVER O-RING	NBR	1
18	JPM GEAR w/ HW	ASTM A29 1566	1
19	SLOT TYPE SPRING PIN	ASTM A29 1566	1

NOTE:
1. BODY CASTINGS ARE TRI-MARKED WITH "CLOW," "KENNEDY," AND "M&HT"

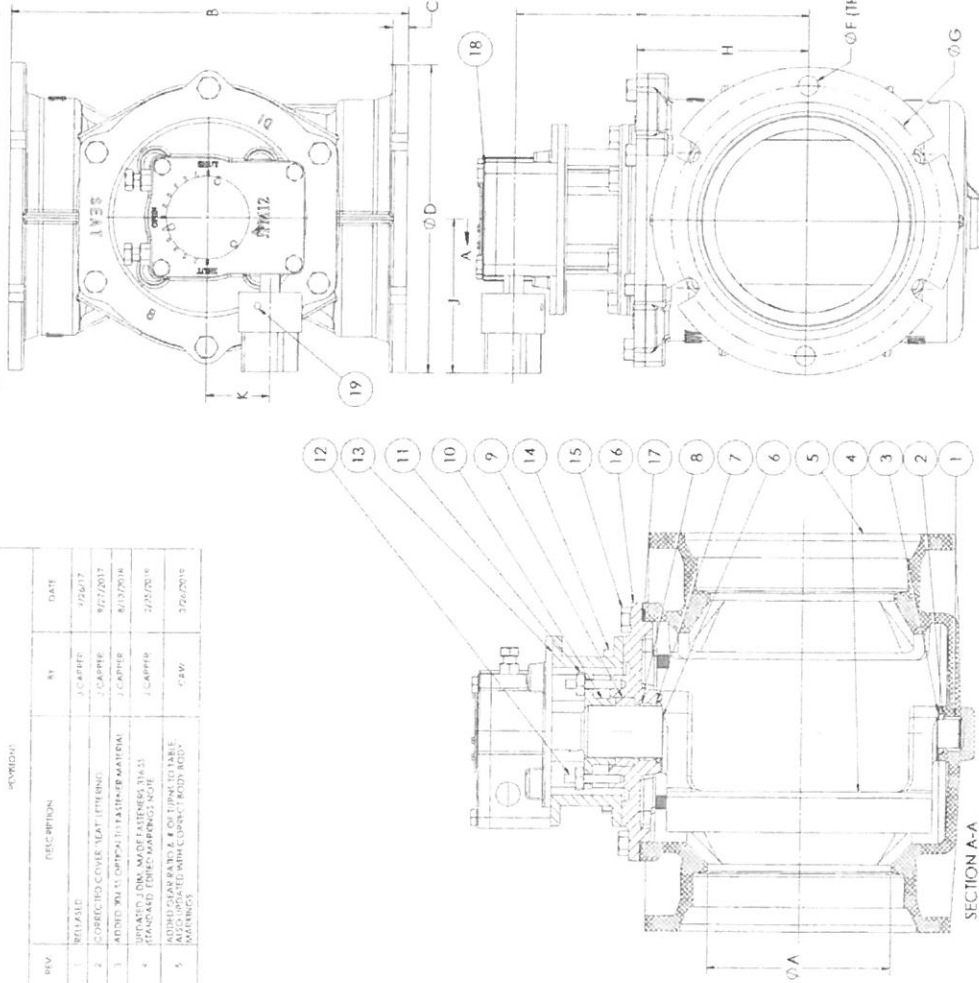
A (VALVE SIZE)	B	C	D	E	F	G	H	I	J	K	WEIGHT (LBS.)	JPM GEAR	GEAR RATIO	# OF TURNS TO OPEN (APPROX.)	Ø HW (in)
3	8.00	.75	7.50	4 x 5/8-11	79	6.00	3.76	7.50	8.8	2.8	75 LBS	JPM12A	40	10	8
4	9.00	.94	9.00	4 x 5/8-11	79	7.50	4.65	8.28	8.8	2.8	100 LBS	JPM12A	40	10	8
6	10.50	1.02	11.00	4 x 3/4-10	79	9.50	5.78	10.30	8.8	2.8	165 LBS	JPM12FA	40	10	12
8	11.50	1.13	13.50	4 x 3/4-10	79	11.75	7.48	12.54	8.8	2.8	230 LBS	JPM12FA	40	10	16
10	13.00	1.19	16.00	8 x 7/8-9	79	14.25	8.88	14.02	11.3	3.9	340 LBS	JPM14A	53	13	20
12	14.00	1.26	19.00	8 x 7/8-9	79	17.00	11.00	16.38	12.1	3.9	480 LBS	JPM14A	53	13	24
14	17.00	1.38	21.00	8 x 1-8 UNS	1.54	18.75	12.88	18.00	14.9	4.9	720 LBS	JPM15A	68	17	30
16	17.17	1.44	23.50	8 x 1-8 UNS	1.06	21.25	14.69	22.50	14.9	4.9	850 LBS	JPM15A	68	17	30

KENNEDY VALVE
Division of McWane, Inc.
100 WEST WYOMING STREET, CLEVELAND, OH 44115
TEL: (216) 771-1000
FAX: (216) 771-1001
WWW.MCWANE.COM

3"-16" FULL FLOW FIC FV
6412FF w/ JPM GEAR - HW

SHEET NO. **D**
SUB 89 10399T
REV. 7

REV	DESCRIPTION	BY	DATE
1	RELEASED	J.CARTER	6/26/07
2	CORRECTED COVER LEAK (FITTING)	J.CARTER	9/27/2017
3	ADDED 30.0 (DIFFERENTIAL) BEARING MATERIAL	J.CARTER	8/13/2018
4	UPDATED DIM. MATOF FASTENERS 316-316 (STANDARD) (DIM. MARKING) NOTE	J.CARTER	2/25/2019
5	ADDED DIMENSIONS & # OF JPM12 TABLE MATINGS (CHECK WITH COMPANY PRODUCT MGMT)	C.S.W.	3/26/2019



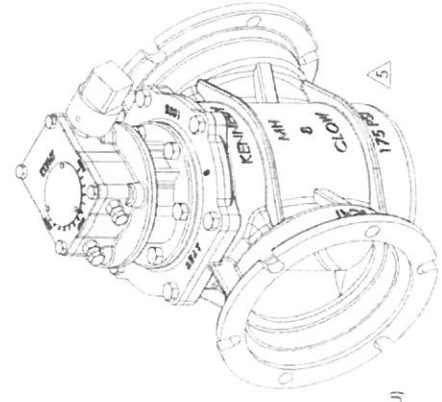
SECTION A-A
SCALE 1:2.5

[VALVE SIZE]	A	B	C	D	F	G	H	I	J	K	WEIGHT [LBS]	JPM GEAR	GEAR RATIO	* OF TURNS TO OPEN [APPROX]
3	11.50	58	7.62	4 x 7.5 THRU	7.50	9.01	2.8	75 LBS	JPM12R	40	10			
4	14.25	60	9.06	4 x 8.88 THRU	8.28	9.01	2.8	100 LBS	JPM12B	40	10			
6	15.75	63	11.06	6 x 8.88 THRU	10.30	9.41	2.8	165 LBS	JPM12FB	40	10			
8	17.36	66	13.39	6 x 8.88 THRU	12.54	9.41	2.8	230 LBS	JPM12FB	40	10			
10	19.37	70	15.62	8 x 8.88 THRU	14.02	10.08	3.9	340 LBS	JPM12FB	53	13			
12	20.75	73	17.88	8 x 8.88 THRU	16.38	10.08	3.9	480 LBS	JPM14B	53	13			
14	24.50	79	20.25	10 x 8.88 THRU	18.00	10.71	4.9	720 LBS	JPM15B	68	17			
16	27.25	85	22.50	12 x 8.88 THRU	22.50	10.71	4.9	850 LBS	JPM15B	68	17			

VALVE SIZE RANGE	WATER WORKING PRESSURE (PSI)	HYDROSTATIC TEST (PSI)	ITEM#	PART NAME	ASTM/ DESIGNATION	QTY.
3-12"	175	350	1	LOWER SLEEVE BEARING	SINTERED ALLOY SS316	11
14-16"	150	300	2	LOWER GRIT SEAL	NBR	1
			3	LOWER THRUST WASHER	PTFE	1
			4	PLUG	ASTM A536 GR. 65-45-12 or 70-50-05 NBR	1
			5	BODY	ASTM A536 GR. 65-45-12 or 70-50-05	1
			6	UPPER THRUST WASHER	PTFE	1
			7	UPPER GRIT SEAL	NBR	1
			8	UPPER SLEEVE BEARING	SINTERED ALLOY SS316	1
			9	V-PACKING	NBR	1
			10	FOLLOWER GLAND	ASTM A536 GR. 65-45-12 or 70-50-05	1
			11	HEX NUTS	STAINLESS STEEL ASTM A276,1316	2
			12	STUDS	STAINLESS STEEL ASTM A276,1316	2
			13	ADAPTER	ASTM A536 GR. 65-45-12 or 70-50-05	1
			14	ADAPTER BOLTS	STAINLESS STEEL ASTM A276,1316	6
			15	COVER BOLTS	STAINLESS STEEL ASTM A276,1316	4
			16	COVER	ASTM A536 GR. 65-45-12 or 70-50-05	1
			17	COVER O-RING	NBR	1
			18	JPM GEAR w/ OP NUT		1
			19	SLOT TYPE SPRING PIN	ASTM A29 1566	1

NOTE:
1. BODY CASTINGS ARE TRI-MARKED WITH "CLOW," "KENNEDY," AND "M&H" Δ

8 INCH SHOWN



DESIGN	DATE	BY	REV
CHECKED	DATE	BY	REV
APPROVED	DATE	BY	REV
KENNEDY VALVE Division of McWane Inc. 10000 McWane Drive, Detroit, MI 48226-1500			
TITLE: 3"-16" FULL FLOW VALVE 6412JEF-W/ JPM Gear - OP NUT			
PART NUMBER: SUB 910444T		REV: 3	



KENNEDY VALVE

Plant and Industrial Group

1021 East Water Street
Elmira, New York 14901
Telephone (607) 734-2211
Fax (607) 734-3288

November 6, 2018

SUBJECT: 2-Part Epoxy Coating Requirements on Plug Valves

TO WHOM IT MAY CONCERN:

The following describes the general coating procedure and material to be used for Plug Valves requiring 2-Part Epoxy Coating.

Casting Preparation: Prior to any machining and/or coating operations being performed, castings shall be cleaned via shot blasting to a near/white condition per the requirements of SSPC SP10 for interior surfaces and SSPC SP6 for exterior surfaces.

Machining and Pre-coating Preparation: Remove all burrs and sharp edges resulting from machining operations. Surfaces that are exposed to possible contaminants (chips, dust, etc.) shall be cleaned utilizing compressed (dry) shop air and in accordance with accepted safety methods and equipment.

Epoxy Material: PPG - Amerlock 2 or Amerlock 400 (NSF 61 Certified Material preferred)

Application Equipment Epoxy shall be applied using conventional air spray equipment and brushes as necessary.

Coating Procedure:

- Visually inspect casting components to assure that no foreign materials exist
- Apply compressed (dry) shop air to all surfaces
- Mask off any areas that are not required or intended/specified to be Epoxy Coated (I.e. threaded components, seating surfaces, etc.).
- In pockets and recesses where it may be difficult to achieve a uniform coating, it may be necessary to apply additional coating using a clean/fresh brush (smooth out any sags or runs) and then follow up with a standard spray application.
- Spray material using even, parallel passes, with approximately 50% overlap to avoid holidays, bare areas, pinholes and sags (runs).
- Store in such a manner to verify the coating quality and allow coating to cure sufficiently for subsequent coats per the paint (usually 8-12 hours).
- Verify the DFT in open as well as confined areas (check DFT requirement)
- If subsequent coats are required, this procedure shall be repeated until the desired final DFT requirement of 12 mils are achieved.
- Visual inspection the final coated castings shall show no signs of blisters, cracks, disbondment or lack of coating.

Coating Requirements (DFT):

- Interior and Exterior "as-cast" ferrous surfaces = **6-8** mils.
- Machined or Bearing surfaces = **2-3** mils. (I.e. Flange faces – enough to provide corrosion protection)

Daniel Burczynski

Engineering – Plant Industrial Valve Group