

From: [Allen, Heidi](#)
To: [CWSRFWaiver](#)
Cc: [REDACTED]
Subject: AIS Project Specific Waiver Request - Mound City, IL, IEPA [REDACTED]
Date: Tuesday, November 17, 2020 3:35:50 PM
Attachments: [Message from Suppliers - Lead Time.pdf](#)
[Supplier Message.pdf](#)
[E9325A-14 PIPING PLAN.pdf](#)
[Gen311.pdf](#)
[01259582.out.pdf](#)

NOTE:
This waiver submission includes references to proprietary items and brand name products. These references have been retained in order to provide context for the waiver submission. EPA does not evaluate a waiver based on a proprietary item but reviews the performance-based specifications for the project/products. As such, any references to brand or proprietary items are reviewed on an "or equal" basis by EPA.

Items and pages may have been intentionally redacted or excluded by the EPA. Contact CWSRFWaiver@epa.gov for more information if necessary.

To Whom it May Concern,

The Illinois Environmental Protection Agency (IEPA) received a request from Mound City, IL for a project specific waiver from the American Iron and Steel Act requirements in order to use eight (8) non-domestic, plug valves which are 12-inches in diameter. According to the City's consultant, the project originally called for the use of [REDACTED], but the manufacturer of these valves is currently not scheduling delivery for this particular product due to production problems that have led to the inability to meet AWWA standards. The supplier, Utility Pipe Sales of Evansville, IN, was contacted to locate the plug valves from other U. S. manufacturers and found that similar valves are available from [REDACTED] and [REDACTED]; however, the lead time to obtain these products is 17 weeks. The long lead-time to obtain the valves from a U. S. manufacturer would result in significant project delays. Mound City is a low-income community with less than 600 residents and definitely cannot afford costly project delays.

Mound City is in the process of building a new wastewater treatment plant using an SRF loan which includes principal forgiveness. The plug valves are needed for to complete the piping of a new lagoon treatment system. Construction began in June 2020 and the valves are needed as soon as possible to meet the scheduled construction completion date of March 21, 2021. This portion of the project is known as Contract A. Contract C is involves demolition of the existing treatment system by a separate contractor that cannot begin until work on Contract A is complete.

IEPA has reviewed the waiver request; along with the attached documentation from the supplier documenting their efforts to locate replacement valves; pages from the project plan book; and other notes regarding the plug valves. We agree with Mound City that requesting a waiver from the AIS requirements is warranted as the eight plug valves are needed as soon as possible. Several manufacturers were contacted, but no compliant valves can be secured in a reasonable amount of time. The cost per valve from the original quote is [REDACTED]. Below is the original waiver request language from the City's consultant. His contact information is included.

[REDACTED]

Sincerely,

Heidi Allen
Pre-Construction Unit Manager

[REDACTED]

From: [REDACTED]

Sent: Wednesday, November 4, 2020 3:06 PM

To: 'SRF_AIS' <SRF_AIS@epa.gov>

Subject: AIS Variance Request for Plug Valves

See attached. We are requesting an AIS variance for plug valves. The valve manufacturer the contractor originally submitted on [REDACTED] is having problems in their production and cannot set a delivery date at this time. Other manufacturers have delivery dates that are [REDACTED]. This will result in significant delays in the project. If you require any additional information, please advise.

Ted R. Beggs, P.E.

J.T. Blankinship, Inc.

401 S. 17th Street

Murphysboro, IL 62966

618-687-1771 Office

618-687-1773 Fax

PART 3

GENERAL SPECIFICATIONS

SECTION 3.11 - VALVES

3.11.01 DESCRIPTION:

The valves shall be suitable for the type of application intended. The most current American Water Works Association Standards (AWWA) shall apply unless specified otherwise.

3.11.02 GENERAL:

All valves shall have the name or mark of the manufacturer, size, and working pressure cast in raised letters on the valve body. End connections for all interior or exposed valves shall be flanged. End connections for all buried valves shall be mechanical joint or push joint. All valves shall open counterclockwise unless otherwise specified. Valves shall be provided with accessories as shown on the Plans.

a. Hydrostatic Pressure Tests: Valves shall be hydrostatically tested at factory in accordance with respective AWWA requirements.

b. Factory Painting: Valves shall be shop coated prior to shipment with paint compatible to finish paint schedule. At a minimum, all parts shall be finished inside and out with two (2) coats of asphalt varnish conforming to Federal Specification TT-V-51c, and exterior steel or cast iron surfaces of each valve, except finished or bearing surfaces shall be shop painted with two (2) coats of zinc chromate conforming to Federal Specification TT-P-645, or in the case of valves for buried service, with two (2) coats of asphalt varnish conforming to Federal Specification TT-V-51c.

c. Installation of Valves: All valves shall be inspected upon delivery by Engineer. They shall be set and jointed in the manner intended.

Valves twelve inches (12") and under shall be installed in a horizontal position and be provided with a standard valve chamber consisting of a cast iron valve box so arranged that no shock will be transmitted to the valve. The box shall be centered over the operating nut and the cast iron box cover shall be set flush with the ground or pavement surface.

After installation, all valves shall be subjected to field testing. All faulty valves shall be replaced or repaired prior to placing line in service.

d. Shop Prints: Unless otherwise stated, the Contractor will be required to furnish manufacturer's drawings for approval prior to installing any valves.

e. Markings for all valves other than wafer valves shall be cast on plates with raised letters attached to the valve body. The marking shall show valve size, manufacturer, class and year of manufacture. Wafer valves shall have engraved markings.

3.11.03 GATE VALVES:

Gate valves shall conform to AWWA Standard C500-86. Valves less than 12-inches diameter shall be rated for a working pressure of 200 psi, and valves 16-inches diameter or greater, shall be rated for a working pressure of 150 psi. Valves 16-inches and larger shall have bypasses.

3.11.04 SLUICE GATES:

Sluice gates shall conform to AWWA Standard C501-92. Gates shall be provided with: cast iron bodies, frames, gear housing, gears, and other minor items; bronze seating faces and stainless steel stems and fasteners.

3.11.05 BUTTERFLY VALVES:

Butterfly valves shall conform to AWWA Standard C504-87. Valves shall be short-body flanged unless specified otherwise. Valve body and disc shall be of cast iron. Mating seats shall be 18-8 stainless steel. Rubber or synthetic seats shall be of various types and shall be of the material specified for the manufacturer for the intended application. Manufacturer shall submit data to the Engineer for approval, along with supportive documentation.

3.11.06 CHECK VALVES:

Check valves installed in wastewater treatment plants and pump stations shall be the rubber flapper swing check type. Body and cover shall be cast iron. Flapper shall be set at 45 and shall be made of Buna-N synthetic rubber with a steel disc insert and a steel bar, both vulcanized inside the flapper. No springs or mechanical means shall be utilized to seat flapper. Valves shall be Apco Series 100, or equal.

Check valves immediately following water pump stations where pump control valves are not provided, shall be silent check valves. Valves shall be glove type and be ANSI B16.1, Class 125. Valves shall be Clow Model F-636, or equal.

Check valves on air lines shall be the flat silent type. Valves shall conform to ANSI B16.1, Class 125. Valves shall be Clow F-329, or equal.

3.11.07 PLUG VALVES:

Plug valves shall be the eccentric type and be rated for 175 working pressure. Valves shall be cast iron body coated with Buna-N rubber. Seats shall be bronze. Valves shall conform to ANSI A21.16, 125 lb. for flanged ends, and ANSI A21.11, 125 lb. for mechanical joint. Valves shall be Clow Model FF-5410, or equal.

3.11.08 FLAP VALVES:

Flap valves shall be iron body and shall be fully bronze mounted with bronze hinge pin, flap ring and seat ring. Valves shall be flanged and shall be Clow Model F-3102, or equal.

3.11.09 SHEAR GATES:

Shear gates shall be of iron body suitable for attaching to flanged end as shown on the Plans. Wedges which seat the gate shall be bolted on to permit replacement. Handles shall be the length shown on the Plans. Shear gates shall be Model F-3000 or F-3002 as manufactured by Clow, or equal.

3.11.10 MUD VALVES:

Mud valves shall have iron bodies and shall have non-rising stems unless indicated otherwise on the Plans. Valves shall be Clow Models F-3075, F-3985, or F-3088, or equal.

3.11.11 PRESSURE RELIEF VALVES (FLOOR TYPE):

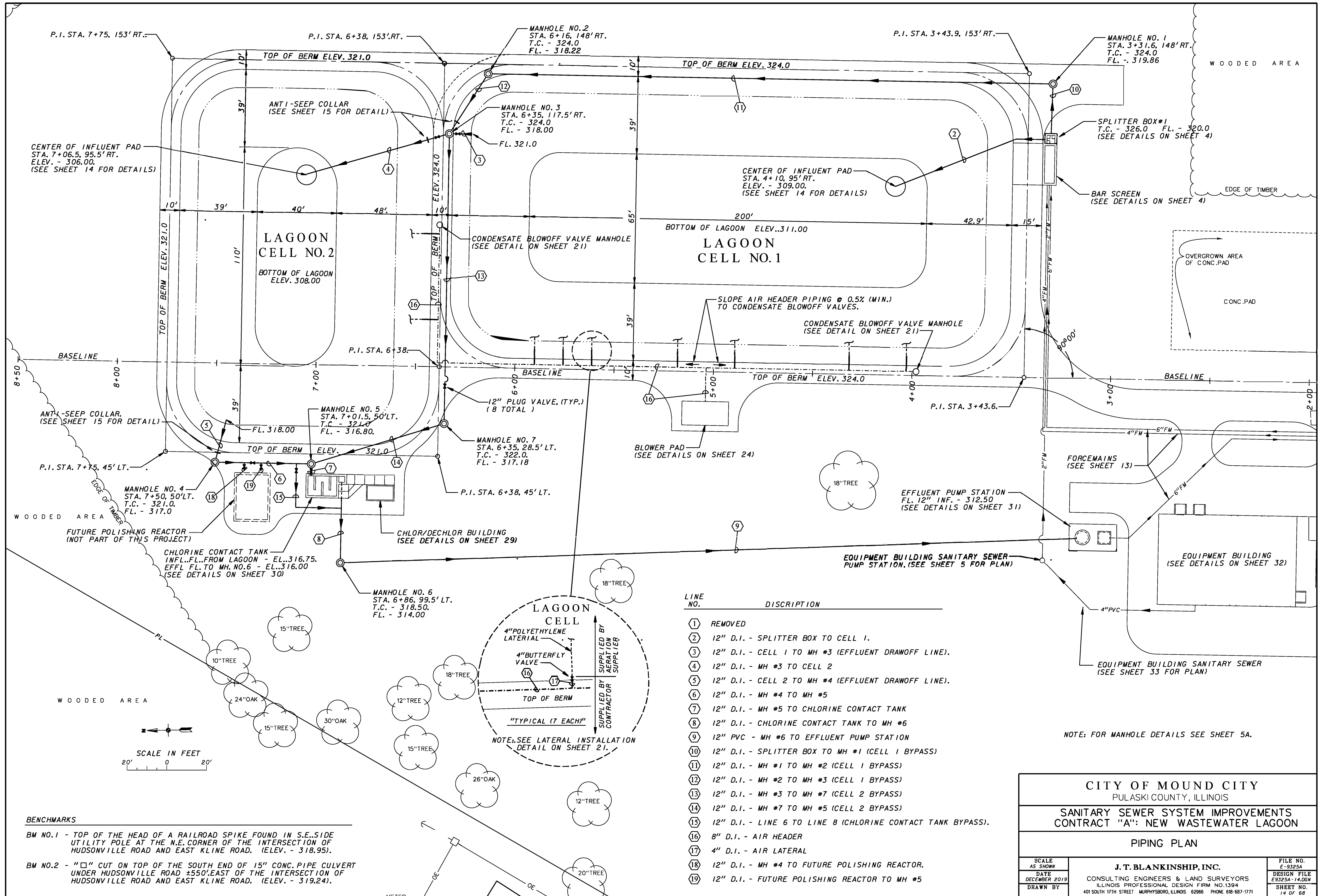
Pressure relief valves shall have iron bodies with machined lead seals. Valves shall have a body length conforming to floor thickness. Cover shall open with a head of 9" of water. Valve shall be Clow Model F-1492, or equal.

3.11.12 PRESSURE RELIEF VALVES (WALL TYPE):

Valves shall be cast iron body, bronze mounted and shall be equipped with soft rubber seat. Valve shall be Clow Model F-1494, or equal.

3.11.13 TELESCOPING VALVES:

Telescoping valves shall be a complete assembly consisting of valve stand, slip tube, stem, adjusting mechanism and companion flange. The valve dimensions shall be seamless brass drawn tubing equipped with cast bronze bail for fastening to non-rising stem. Companion flange shall be of brass with a rubber gasket seal. Valve shall be as manufactured by Keene, or equal.



LINE NO.	DISCRPTION
①	REMOVED
②	12" D.I. - SPLITTER BOX TO CELL 1.
③	12" D.I. - CELL 1 TO MH #3 (EFFLUENT DRAWOFF LINE).
④	12" D.I. - MH #3 TO CELL 2
⑤	12" D.I. - CELL 2 TO MH #4 (EFFLUENT DRAWOFF LINE).
⑥	12" D.I. - MH #4 TO MH #5
⑦	12" D.I. - MH #5 TO CHLORINE CONTACT TANK
⑧	12" D.I. - CHLORINE CONTACT TANK TO MH #6
⑨	12" PVC - MH #6 TO EFFLUENT PUMP STATION
⑩	12" D.I. - SPLITTER BOX TO MH #1 (CELL 1 BYPASS)
⑪	12" D.I. - MH #1 TO MH #2 (CELL 1 BYPASS)
⑫	12" D.I. - MH #2 TO MH #3 (CELL 1 BYPASS)
⑬	12" D.I. - MH #3 TO MH #7 (CELL 2 BYPASS)
⑭	12" D.I. - MH #7 TO MH #5 (CELL 2 BYPASS)
⑮	12" D.I. - LINE 6 TO LINE 8 (CHLORINE CONTACT TANK BYPASS).
⑯	8" D.I. - AIR HEADER
⑰	4" D.I. - AIR LATERAL
⑱	12" D.I. - MH #4 TO FUTURE POLISHING REACTOR.
⑲	12" D.I. - FUTURE POLISHING REACTOR TO MH #5

NOTE: FOR MANHOLE DETAILS SEE SHEET 5A.

CITY OF MOUND CITY PULASKI COUNTY, ILLINOIS		
SANITARY SEWER SYSTEM IMPROVEMENTS CONTRACT "A": NEW WASTEWATER LAGOON		
PIPING PLAN		
SCALE AS SHOWN	J. T. BLANKINSHIP, INC. CONSULTING ENGINEERS & LAND SURVEYORS ILLINOIS PROFESSIONAL DESIGN FIRM NO. 1394 401 SOUTH 17TH STREET MURPHYSBORO, ILLINOIS 62966 PHONE 618-687-1771	FILE NO. E-9325A
DATE DECEMBER 2019		DESIGN FILE E9325A-14.DGN
DRAWN BY		SHEET NO. 14 OF 68

BENCHMARKS

BM NO. 1 - TOP OF THE HEAD OF A RAILROAD SPIKE FOUND IN S.E. SIDE UTILITY POLE AT THE N.E. CORNER OF THE INTERSECTION OF HUDSONVILLE ROAD AND EAST KLINE ROAD. (ELEV. - 318.95).

BM NO. 2 - " " CUT ON TOP OF THE SOUTH END OF 15" CONC. PIPE CULVERT UNDER HUDSONVILLE ROAD +550' EAST OF THE INTERSECTION OF HUDSONVILLE ROAD AND EAST KLINE ROAD. (ELEV. - 319.24).

