CENTRAL ARKANSAS WATER JACK H WILSON WATER TREATMENT PLANT WILSON RENEWAL AND RESLIENCY PROJECT ADDENDUM NO. 5 JANUARY 30, 2025

This Addendum forms part of the Contract Documents and modifies the Specifications and Drawings as noted below. Acknowledge receipt of the Addendum in the space provided on the Bid Proposal. Failure to acknowledge receipt of the Addendum may subject the Bidder to disqualification.

This Addendum consists of 19 pages, including attachments.

A. SPECIFICATIONS

- 1. Section 08 33 13 ROLLING COUNTER FIRE DOOR
 - a. Remove this specification.
- 2. Section 40 71 23.13 VENTURI FLOW METERS
 - a. Remove this specification.
- 3. Section 43 11 18 MULTISTAGE CENTRIFUGAL BLOWERS
 - a. Modify Paragraph 2.01.B to the following:
 - a. The blower shall be Model 1604-ADOI with 28" impellers as manufactured by Gardner Denver, Inc.; Model ZM 8 04-412 with 29" impellers and 30" impellers as manufactured by Atlas Copco; or Model 400A.05 with 26" impellers as manufactured by Continental Blower. No substitutions shall be permitted. The model, number and type of impellers shall be verified by the blower manufacturer. Any modifications of the requirements presented herein shall be at the expense of the Contractor and shall be submitted to the Engineer for review, comment and acceptance.
 - b. Modify Paragraph 2.10.A to the following:

- a. The blower supplier shall furnish a NEMA 12 blower control panel for the new and existing blowers. Each blower control panel shall include a PLC for monitoring, displaying, and protecting the blowers, including a PLC operator interface panel with touchscreen. Blower control panels shall be suitable for wall-mounted installation by the Contractor within the blower electrical building. Each blower control panel shall contain controls for blower motor starting and stopping, surge and overload detection, alarm and emergency shutdown systems, and for the inlet throttling valve. The panel shall be supplied with a disconnect switch on the 120-volt power supply to the panel.
- c. Add Paragraph 2.10.Q to state the following:
 - a. An engraved plastic warning plate shall be securely mounted on the front of each blower panel. The plate must clearly instruct operators to "Open the blow-off valve before starting the blower in manual mode." Plates shall have white letters on a black background.

B. DRAWINGS

- Drawing M1550 EXISTING RAW WATER METER VAULT MECHANICAL –
 BOTTOM PLAN AND SECTION DEMO & NEW
 - a. Add the attached new drawing sheet M1550 EXISTING RAW
 WATER METER VAULT MECHANICAL BOTTOM PLAN AND
 SECTION DEMO & NEW.
- 2. Drawing M8001 ADMINISTRATION BUILDING MECHANICAL FIRST FLOOR AND CRAWL SPACE PLAN

- a. Replace drawing M8001 ADMINISTRATION BUILDING –
 MECHANICAL FIRST FLOOR AND CRAWL SPACE PLAN in its entirety with the one attached to this addendum.
- 3. Drawing MD2 MECHANICAL STANDARD DETAILS SHEET 2
 - a. Replace drawing MD2 MECHANICAL STANDARD DETAILS –
 SHEET 2 in its entirety with the one attached to this addendum.
- 4. Drawing MD8 MECHANICAL STANDARD DETAILS SHEET 8
 - a. Replace drawing MD8 MECHANICAL STANDARD DETAILS –
 SHEET 8 in its entirety with the one attached to this addendum.
- 5. Drawing MD10 MECHANICAL STANDARD DETAILS SHEET 10
 - a. Replace drawing MD10 MECHANICAL STANDARD DETAILS –
 SHEET 10 in its entirety with the one attached to this addendum.
- Drawing S2107 FLOCCULATION AND SEDIMENTATION BASINS –
 STRUCTURAL OVERALL PLAN CONCRETE REPAIR BASIN 1
 - a. Replace drawing S2107 FLOCCULATION AND SEDIMENTATION
 BASINS STRUCTURAL OVERALL PLAN CONCRETE
 REPAIR BASIN 1 in its entirety with the one attached to this addendum.
- 7. Drawing S2205 FLOCCULATION AND SEDIMENTATION BASINS –

 OVERALL PLAN CONCRETE REPAIR BASIN 2
 - a. Replace drawing S2205 FLOCCULATION AND SEDIMENTATION
 BASINS OVERALL PLAN CONCRETE REPAIR BASIN 2 in its entirety with the one attached to this addendum.
- 8. Drawing S2306 FLOCCULATION AND SEDIMENTATION BASINS –
 STRUCTURAL OVERALL PLAN CONCRETE REPAIR BASIN 3

- a. Replace drawing S2306 FLOCCULATION AND SEDIMENTATION
 BASINS STRUCTURAL OVERALL PLAN CONCRETE
 REPAIR BASIN 3 in its entirety with the one attached to this addendum.
- Drawing S2401 FLOCCULATION AND SEDIMENTATION BASINS –
 STRUCTURAL OVERALL PLAN CONCRETE REPAIR BASIN 4
 - a. Replace drawing S2401 FLOCCULATION AND SEDIMENTATION
 BASINS STRUCTURAL OVERALL PLAN CONCRETE
 REPAIR BASIN 4 in its entirety with the one attached to this addendum.
- 10. Drawing S3306 WASTE PIT STRUCTURAL CONCRETE REPAIRS
 - a. Add the attached new drawing sheet S3306 WASTE PIT –
 STRUCTURAL CONCRETE REPAIRS.

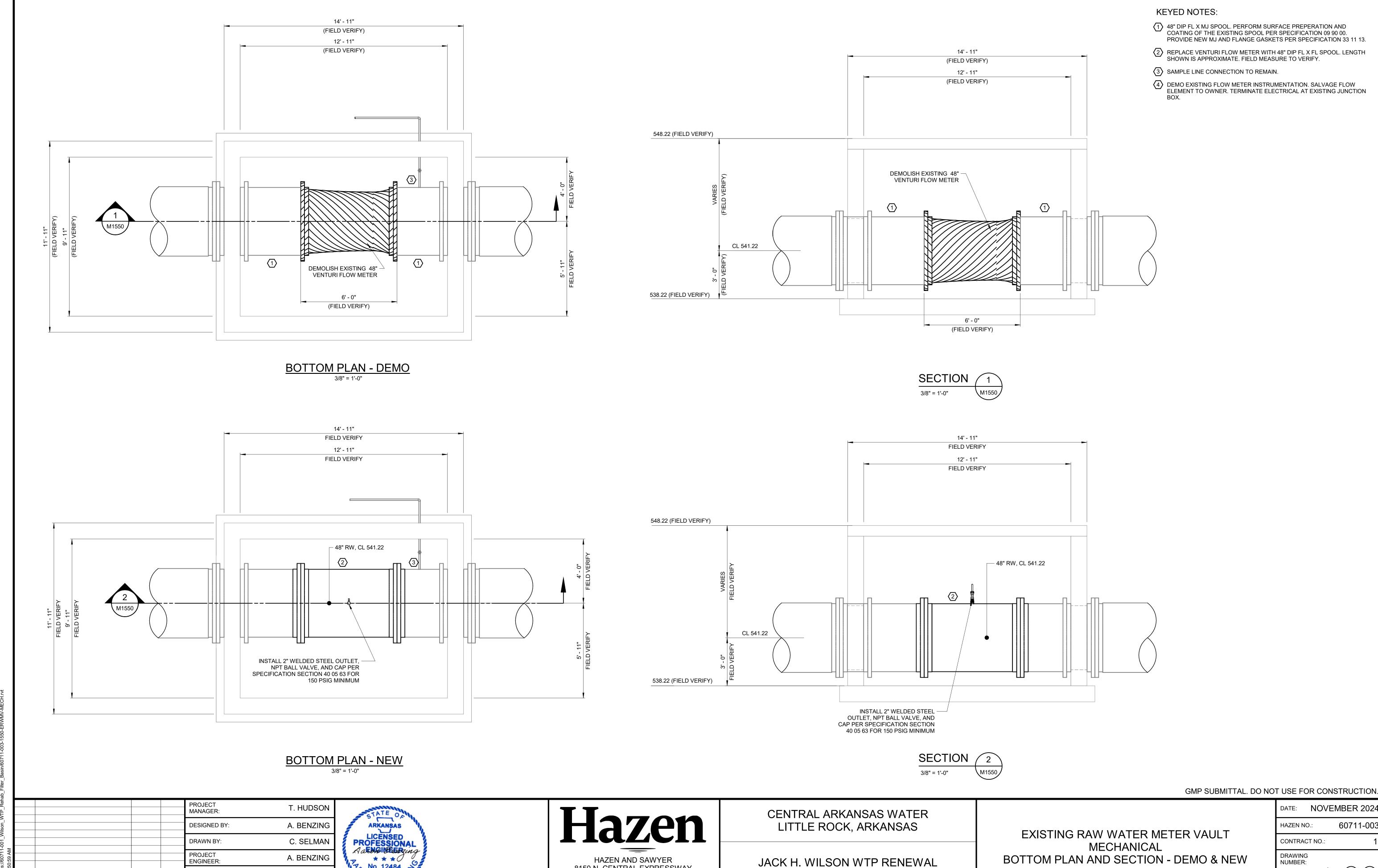
C. ATTACHMENTS

- Drawing M1550 EXISTING RAW WATER METER VAULT MECHANICAL –

 BOTTOM PLAN AND SECTION DEMO & NEW
- 2. Drawing M8001 ADMINISTRATION BUILDING MECHANICAL FIRST FLOOR AND CRAWL SPACE PLAN
- 3. Drawing MD2 MECHANICAL STANDARD DETAILS SHEET 2
- 4. Drawing MD8 MECHANICAL STANDARD DETAILS SHEET 8
- 5. Drawing MD10 MECHANICAL STANDARD DETAILS SHEET 10
- 6. Drawing S2107 FLOCCULATION AND SEDIMENTATION BASINS –
 STRUCTURAL OVERALL PLAN CONCRETE REPAIR BASIN 1
- 7. Drawing S2205 FLOCCULATION AND SEDIMENTATION BASINS OVERALL PLAN CONCRETE REPAIR BASIN 2

- 8. Drawing S2306 FLOCCULATION AND SEDIMENTATION BASINS STRUCTURAL OVERALL PLAN CONCRETE REPAIR BASIN 3
- 9. Drawing S2401 FLOCCULATION AND SEDIMENTATION BASINS –
 STRUCTURAL OVERALL PLAN CONCRETE REPAIR BASIN 4
- 10. Drawing S3306 WASTE PIT STRUCTURAL CONCRETE REPAIRS
- 11. Bidder Questions and Responses





8150 N. CENTRAL EXPRESSWAY

TOWER II - SUITE 700 DALLAS, TEXAS 75206

AND RESILIENCY PROJECT

60711-003

ADDENDUM 5

ISSUED FOR

1-30-25

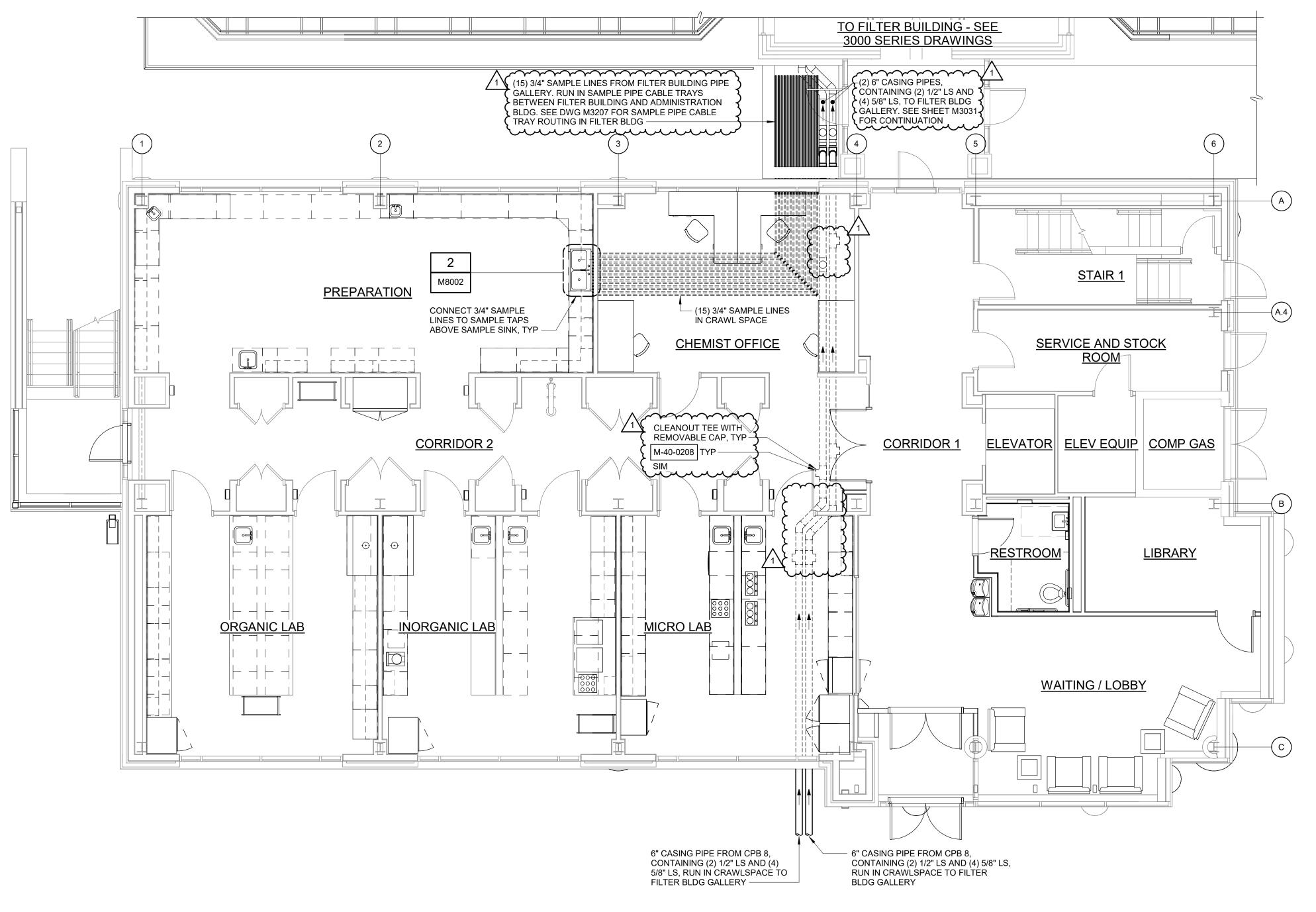
DATE BY

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

0 1/2"

NOTES:

 ALL SAMPLE PIPING RUN FROM GALLERY TO LAB SAMPLE SINK SHALL BE PEX PIPING.



FIRST FLOOR AND CRAWL SPACE PLAN

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

VTP_Ref					PROJECT MANAGER:	T. HUDSON
Wilson_V					DESIGNED BY: E. VOSBUF	RGH / H. DUBAN
-001_W					DRAWN BY:	J. LUTHMAN II
Docs://60711 3:02:28 PM					PROJECT ENGINEER:	T. HUDSON
10	1	ADDENDUM 5	01-30-25	TEH	IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING	0 1/2" 1"
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HAZEN AND SAWYER

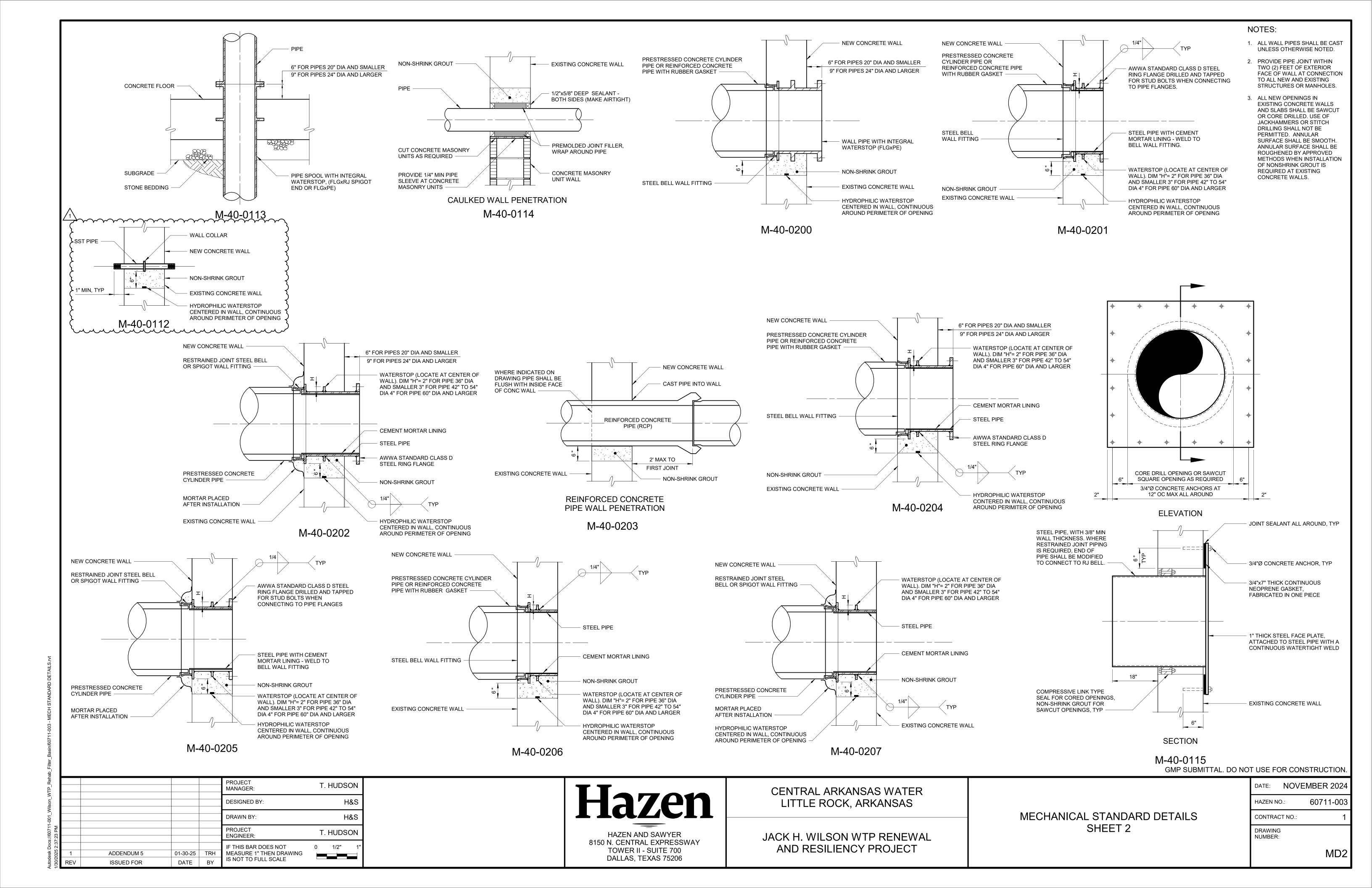
8150 N. CENTRAL EXPRESSWAY

TOWER II - SUITE 700 DALLAS, TEXAS 75206 CENTRAL ARKANSAS WATER LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

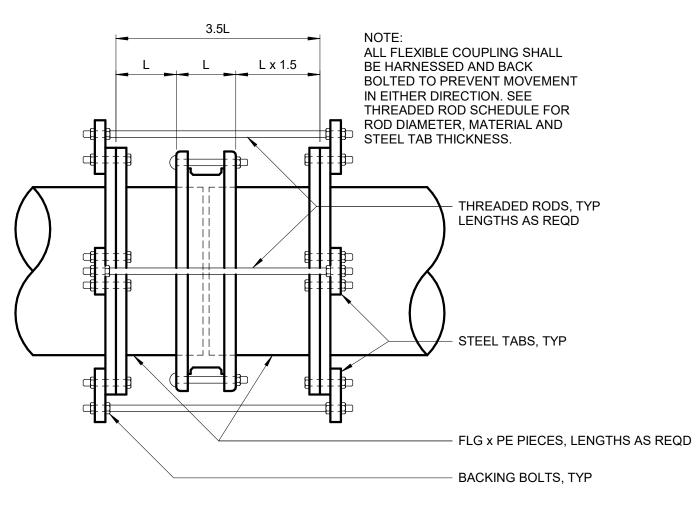
ADMINISTRATION BUILDING MECHANICAL FIRST FLOOR AND CRAWL SPACE PLAN

DATE: NO	OVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO	D.: 1
DRAWING NUMBER:	
	M8001

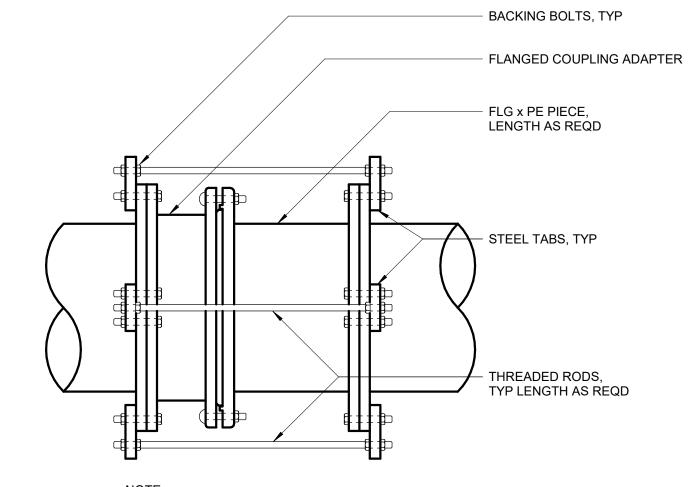


THREADED ROD SCHEDULE							
PIPE SIZE	REQUIRED TIE QUANTITY FOR DESIGN PRESSURE					THREADED ROD SIZE, INCHES	TAB THICKNESS, INCHES
	50 PSI	100 PSI	150 PSI	200 PSI	250 PSI	INCILO	INOTIES
3	2	2	2	2	2	5/8	1/2
4	2	2	2	2	2	5/8	1/2
6	2	2	2	2	2	5/8	3/4
8	2	2	2	3	3	5/8	3/4
10	2	2	2	3	3	3/4	1
12	2	2	2	3	3	7/8	1
14	2	2	2	3	3	1	1
16	2	2	2	3	4	1	1
18	2	2	3	4	5	1	1
20	2	3	4	5	6	1	1
24	2	3	5	6	9	1	1
30	2	3	5	6	9	1 1/4	1 1/4
36	3	5	7	9	12	1 1/4	1 1/4
42	3	6	9	12	16	1 1/4	1 1/4
48	3	6	8	11	15	1 1/2	1 3/4
54	4	7	10	14	18	1 1/2	1 3/4
60	5	9	13	17	23	1 1/2	1 3/4
64/66	4	8	11	15	20	1 3/4	2
72	5	9	13	18	24	1 3/4	2

- THREADED RODS FOR ALL PIPE DIAMETERS SHALL BE ASTM A193 (GRADE B7).
- ALL TABS SHALL BE ASTM A36 STEEL. ASTM A193 (GRADE B7) RODS SHALL BE LABELED AND BUNDLED SEPARATELY.
- THIS SCHEDULE SHALL APPLY FOR HARNESSED FLANGED ADAPTERS, HARNESSED FLEXIBLE COUPLINGS AND ALL MECHANICAL JOINT COUPLINGS, SLEEVES ETC. THAT ARE REQUIRED TO BE
- RODS THREADED AT ENDS (INCLUDING NUTS) SHALL BE EQUALLY SPACED AROUND PIPE BETWEEN ALL MECHANICAL JOINT FITTINGS (TEE, VALVES, BEND, PLUG, ETC.) OR AS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS. THREADED RODS SHALL BE AS SHOWN IN THE THREADED ROD SCHEDULE. SEE NOTE 6.
- RODS, NUTS, ETC., IN CONTACT WITH SOIL SHALL BE PAINTED WITH TWO COATS COAL TAR (MIN 26 DRY MIL THICKNESS) TNEMEC 46-465 HI-BUILD OR EQUAL

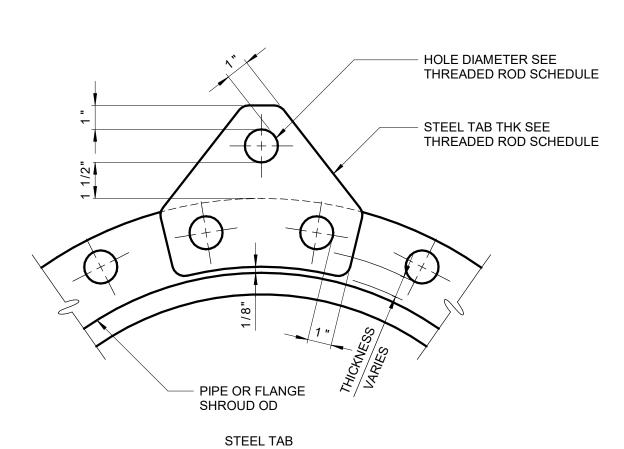


HARNESSED SLEEVE TYPE COUPLING M-40-0701



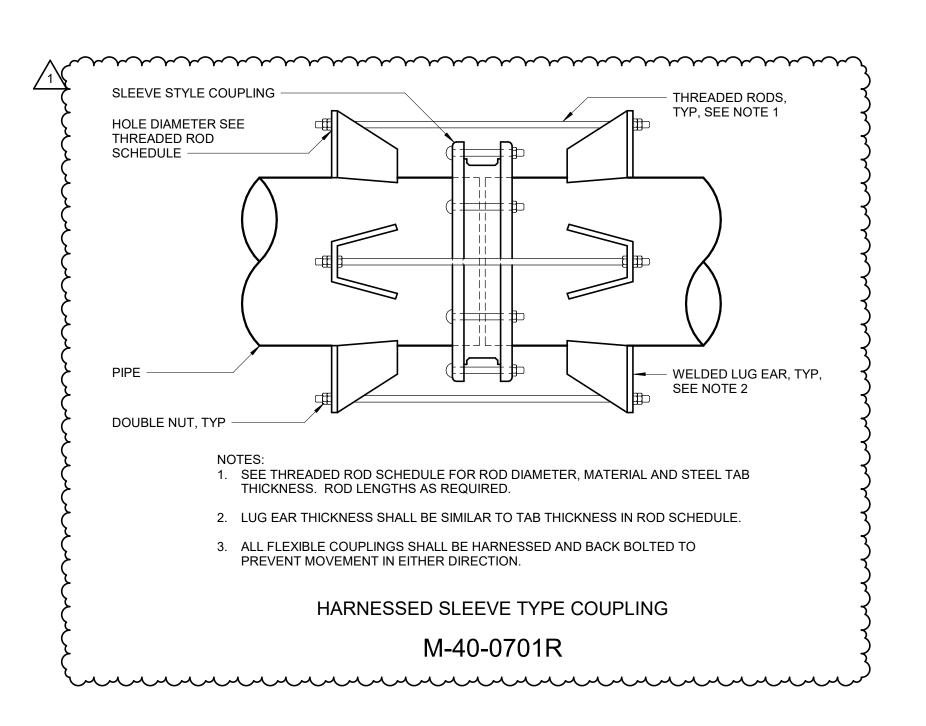
ALL FLANGED COUPLING ADAPTERS SHALL BE HARNESSED AND BACK BOLTED TO PREVENT MOVEMENT IN EITHER DIRECTION. SEE THREADED ROD SCHEDULE FOR ROD DIAMETER, MATERIAL AND STEEL TAB THICKNESS. HARNESSED FLANGED COUPLING ADAPTER

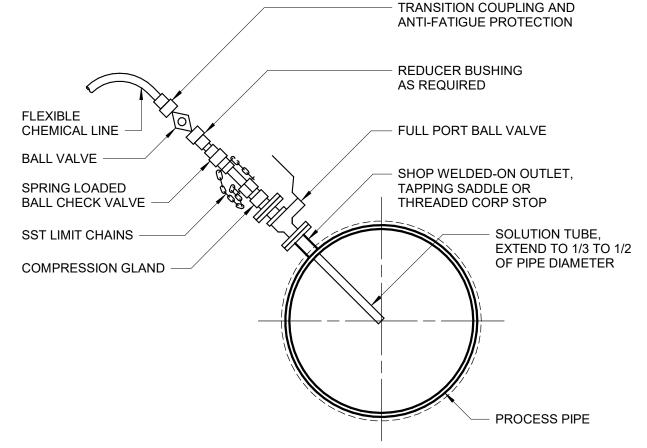
M-40-0702



M-40-0703

M-40-0780





NOTES:

- 1. CHEMICAL INJECTION QUILL SHALL BE INSTALLED IN INTERIOR SPACES OR IN A MANHOLE BUILT AROUND THE PROCESS PIPE. ORIENTATION WILL VARY TO SUIT THE INSTALLATION, TAKING INTO ACCOUNT CHEMICAL CONSIDERATIONS AND REQUIRED CLEARANCE FOR RETRACTION AND INSERTION.
- 2. ALL WETTED COMPONENTS OF INJECTION QUILL SHALL BE COMPLETELY RESISTANT TO CORROSION BY THE SPECIFIED CHEMICAL.
- 3. CHEMICAL INJECTION QUILL SHALL BE PROVIDED AS SPECIFIED IN SPECIFICATION SECTION 46 41 42.

CHEMICAL INJECTION QUILL M-46-0100

ap							
W I P_Kenab					PROJECT MANAGER:	T. HUDSON	
VVIISON_V					DESIGNED BY:	H&S	
-001					DRAWN BY:	H&S	
:://60711- 8:51 AM					PROJECT ENGINEER:	T. HUDSON	
11:58					IF THIS BAR DOES NOT	0 1/2" 1"	1
esk :025	1	ADDENDUM 5	01-30-25	TRH	MEASURE 1" THEN DRAWING		
4utodesk 1/30/2025	REV	ISSUED FOR	DATE	BY	IS NOT TO FULL SCALE		

Hazen HAZEN AND SAWYER

8150 N. CENTRAL EXPRESSWAY

TOWER II - SUITE 700

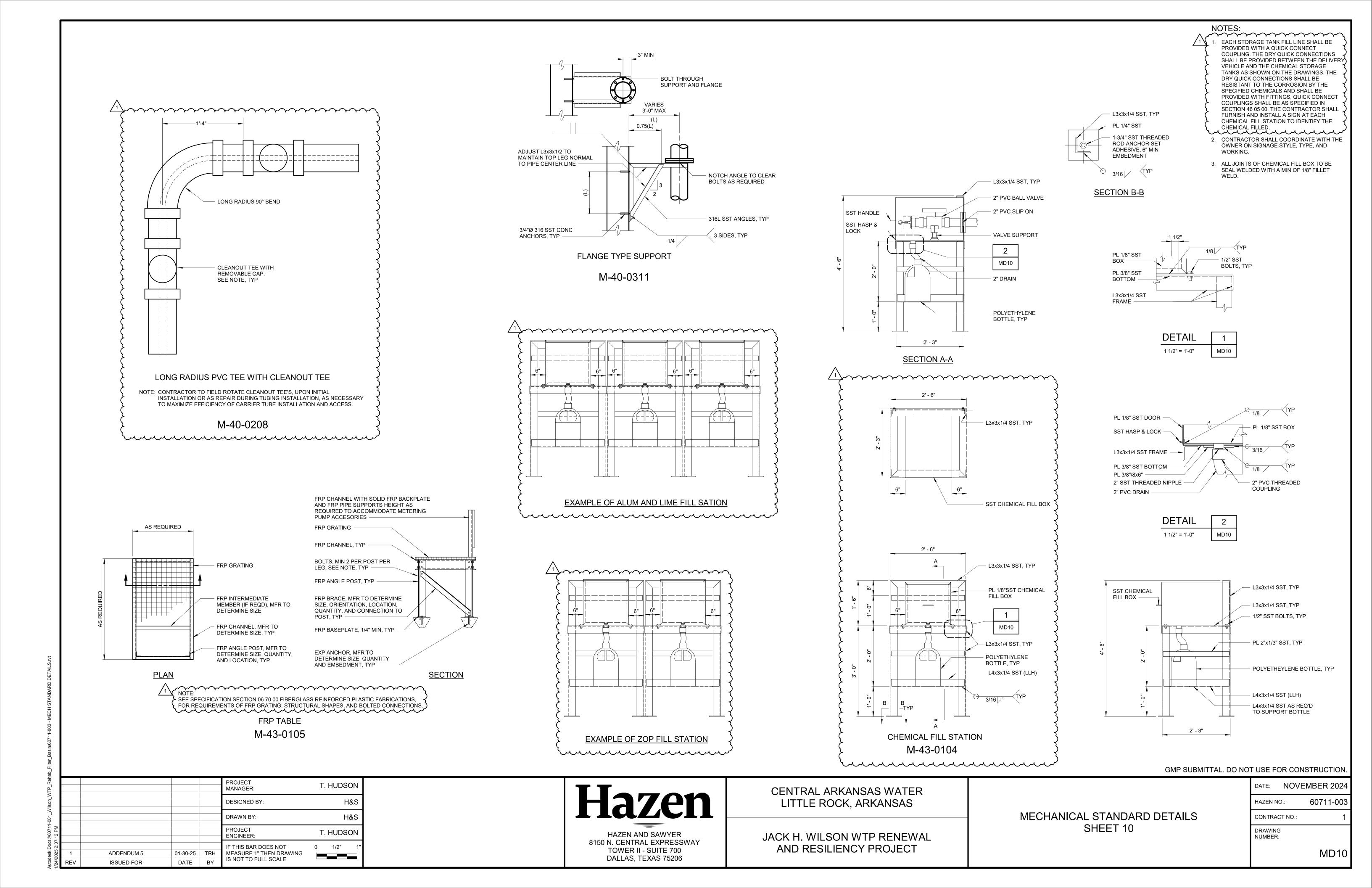
DALLAS, TEXAS 75206

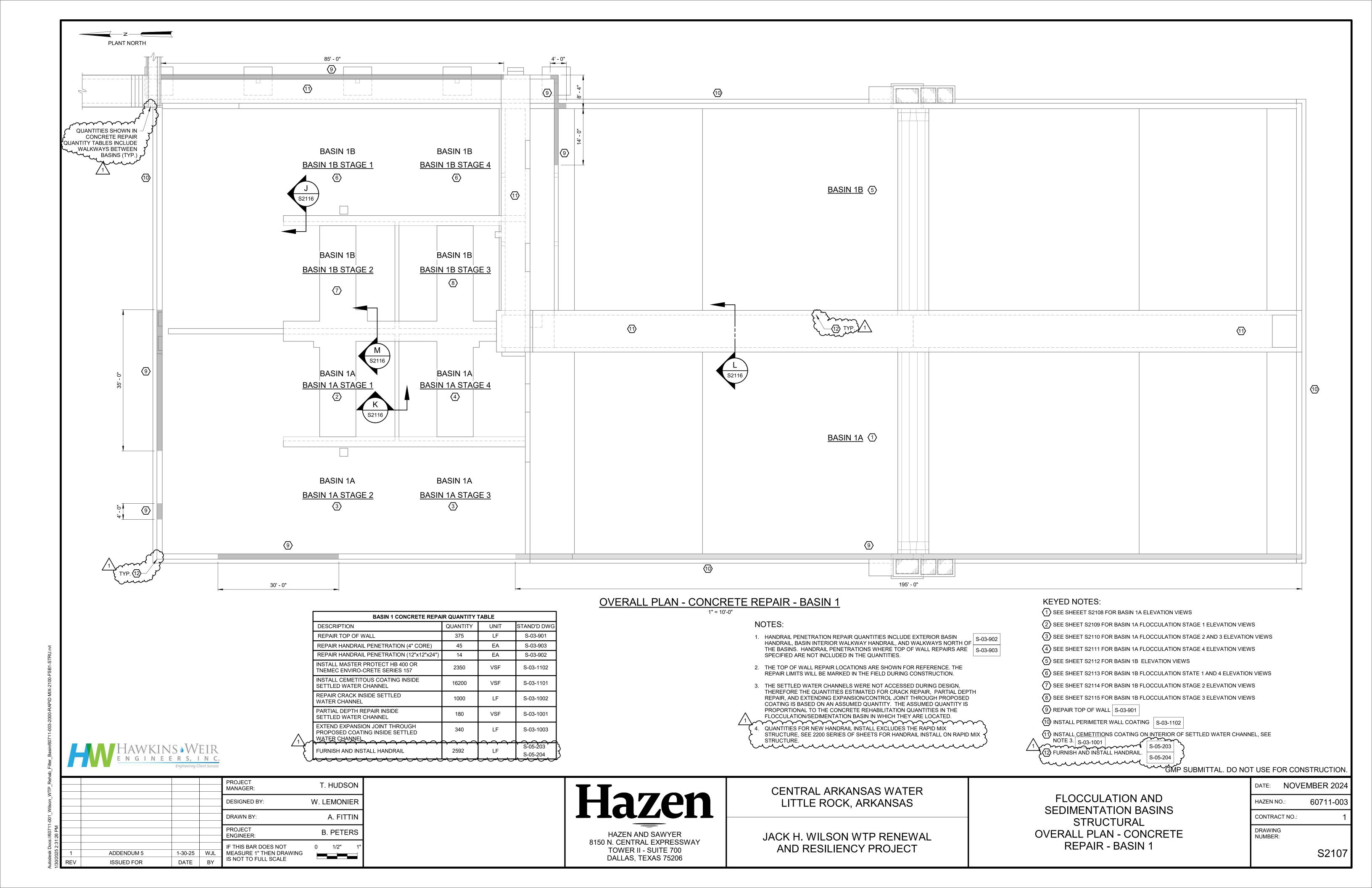
CENTRAL ARKANSAS WATER LITTLE ROCK, ARKANSAS

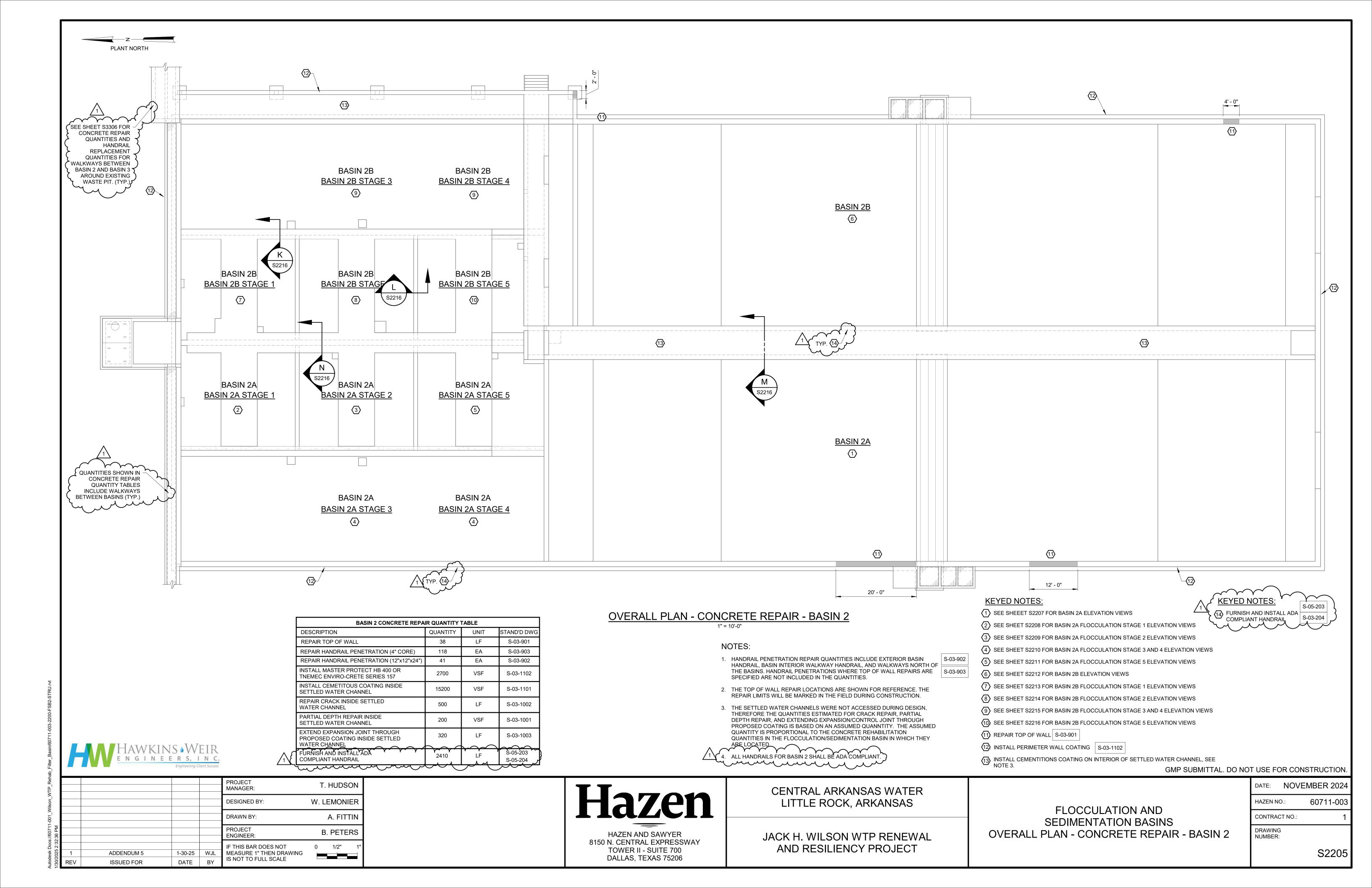
JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

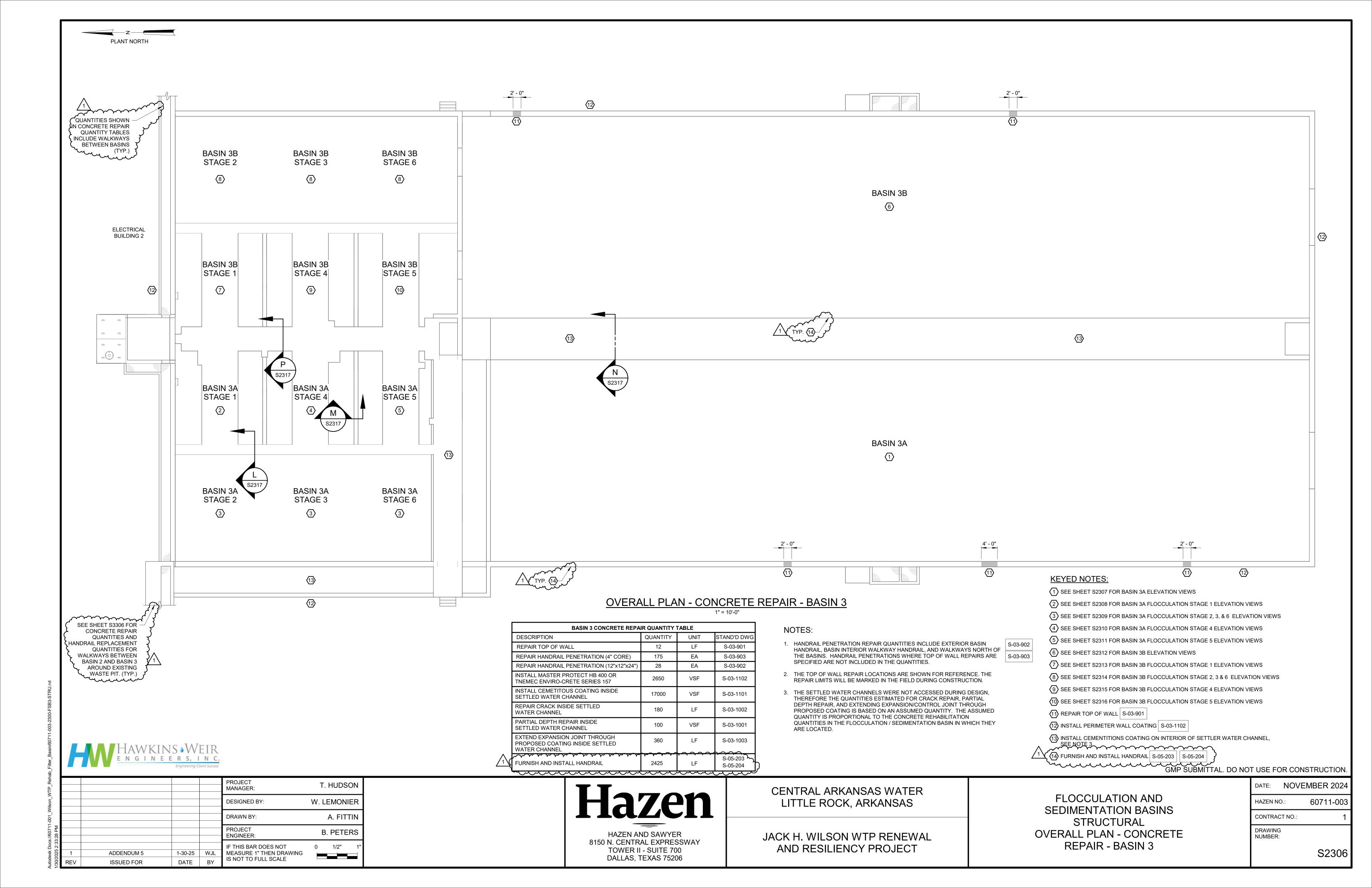
MECHANICAL STANDARD DETAILS SHEET 8

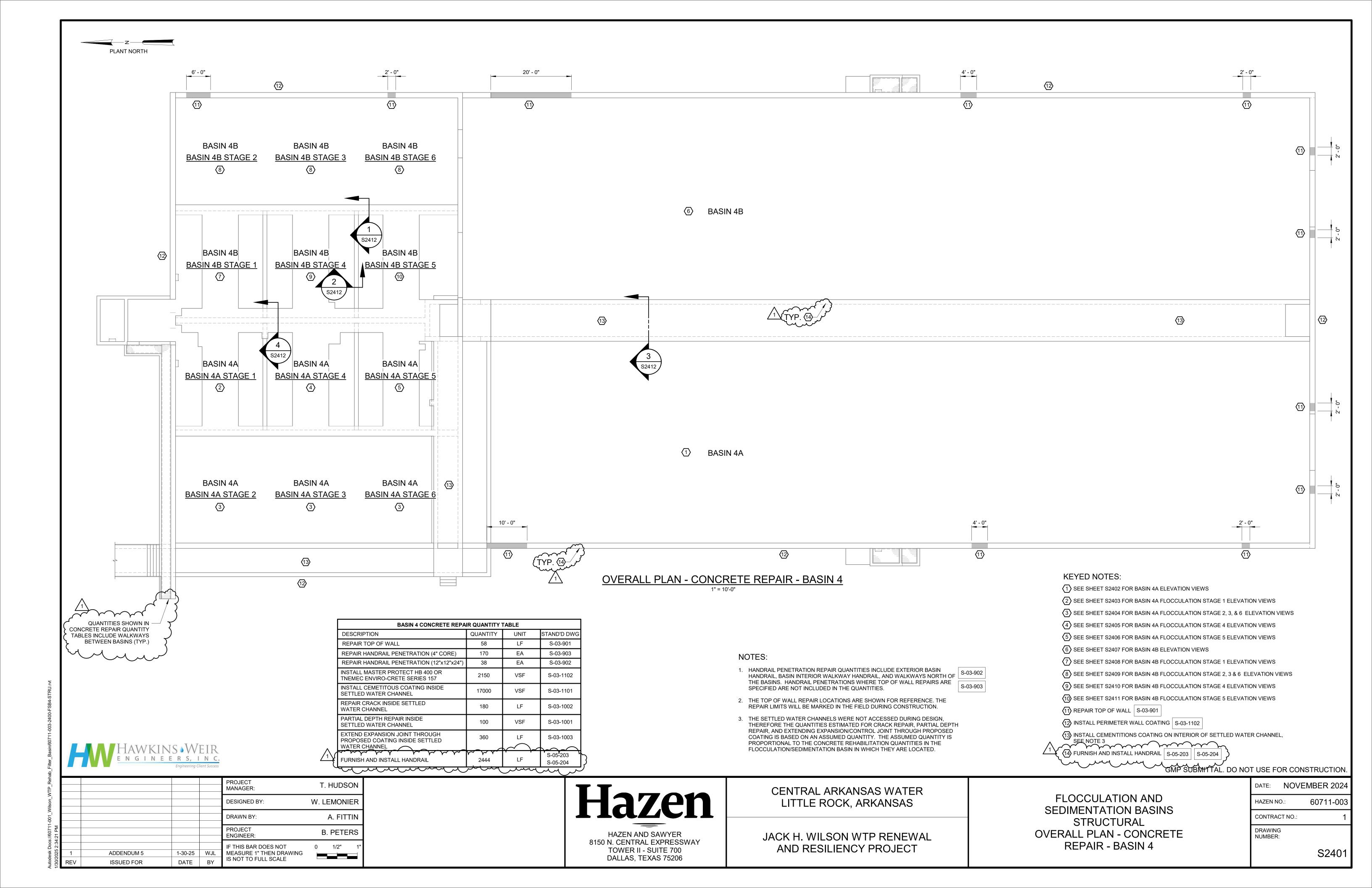
GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION DATE: NOVEMBER 2024 60711-003 HAZEN NO.: CONTRACT NO.: DRAWING NUMBER: MD8

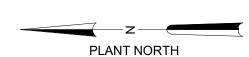


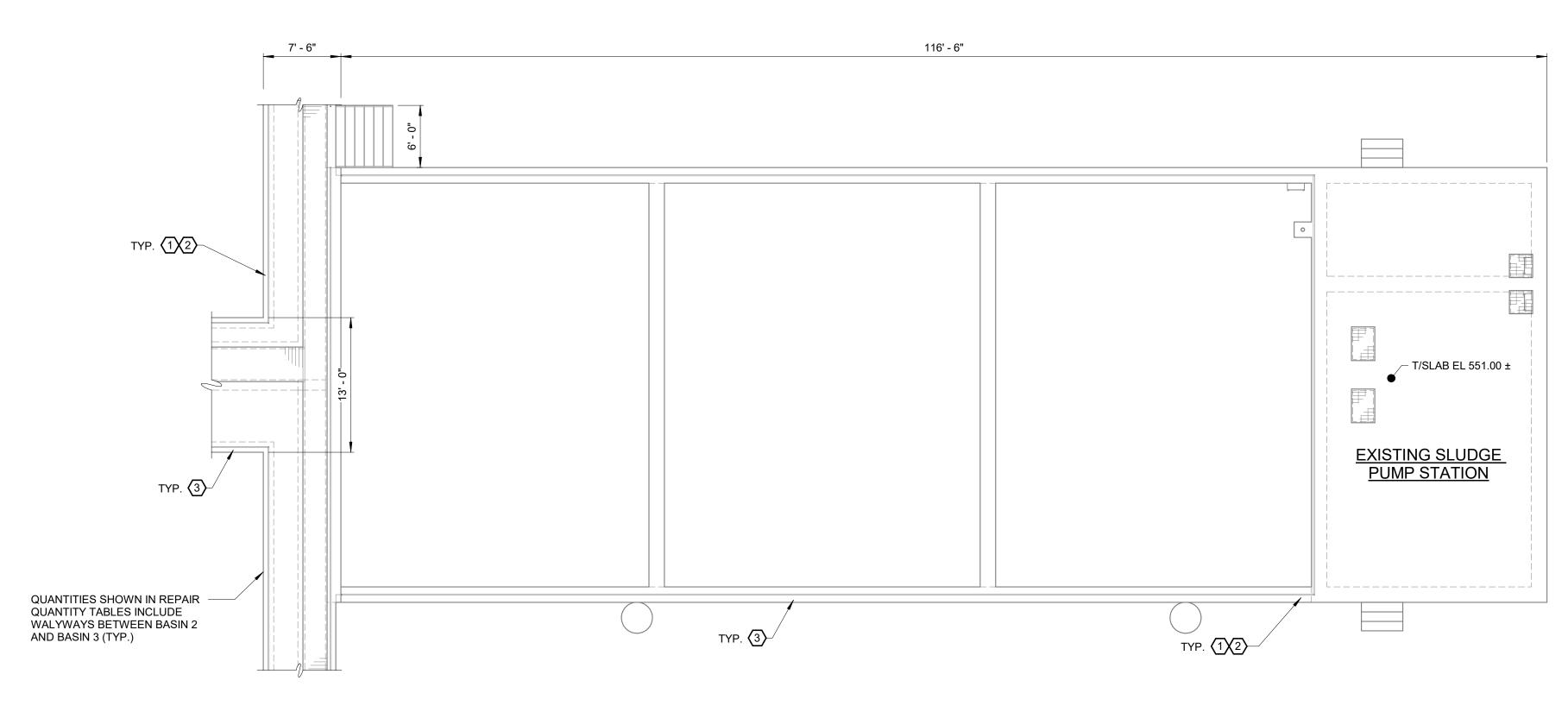












EXISTING WASTE PIT CONCRETE REPAIRS 1/8" = 1'-0"

WASTE PIT HANDRAIL REPLACEMENT QUANTITY REPAIR TABLE				
DESCRIPTION	QUANTITY	UNIT	STAND'D DWG	
REPAIR HANDRAIL PENETRATION (4" CORE)	75	EA	S-03-0903	
REPAIR HANDRAIL PENETRATION (12"x12"x24")	5	EA	S-03-0902	
REMOVE AND REPLACE HANDRAIL	370	LF	S-05-0203 S-05-0204	

NOTES:

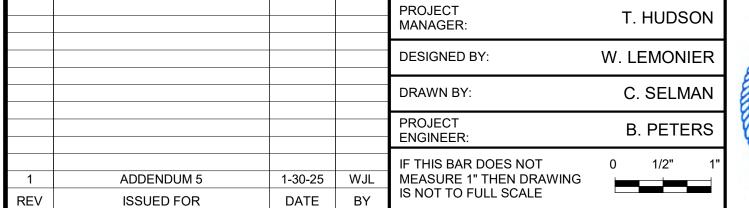
1. HANDRAIL PENETRATION REPAIR QUANTITIES INCLUDE EXTERIOR WALLS OF THE WASTE PIT AND WALKWAYS NORTH OF THE WASTE PIT, INCLUDING WALKWAYS TO SEDIMENTATION BASIN 2 AND SEDIMENTATION BASIN 3.

KEYED NOTES:

REPAIR HANDRAIL PENETRATION (4" CORE) S-03-903 REPAIR HANDRAIL PENETRATION (12"x12"x24") S-03-902

REMOVE AND REPLACE HANDRAIL S-05-203
S-05-204

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.







HAZEN AND SAWYER 8150 N. CENTRAL EXPRESSWAY TOWER II - SUITE 700 DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

WASTE PIT STRUCTURAL CONCRETE REPAIRS

DATE:	NOVEMBER 20	24
HAZEN NO	o.: 60711- 0	03
CONTRAC	CT NO.:	1
DRAWING NUMBER:		06)

<u>Number</u>	Question	Drawing/Specification Reference	<u>Response</u>
165	[MFCC] Please confirm that the 14" and 24" yard valves listed on the valve schedule for the BWR have been updated to 2ea 20" valves.	40 06 20	The 14" and 24" yard valves listed in the Valve Schedule in the Manually Operated Valve Schedule are manual butterfly valves on the BWR line and are still included. See the following sheets for reference:
			-14" BFV: M2111 (upstream of the 14" BWR mag meter) -(2) 24" BFVs: M2001 (both upstream of the Raw Water Influent Box, 1 for bypass).
			There are also (2) 20" motorized BFVs on the BWR directly downstream of each Backwash Treatment Tank effluent line. See the M4000 series drawings for reference.
166	[MFCC] We believe the intent is for all handrail to be replaced on the filters and flocc/sedimentation basins. There are interconnecting walkways and waste pit area with handrail, walk plates, etc. that are not specially called out nor detailed for removal and replacement. Please provide details and/or quantities for these areas.	İ	The intent is for all handrail to be replaced on the filters, flocc/sedimentation basins, walkways between sedimentation basins and existing waste pit area, and around the existing waste pit area. Handrail repair quantities have been added to Drawings S2107, S2205, S2306, and S2401 for the flocc/sedimentation basins and Drawing S3306 has been added to include handrail repair quantities for the waste pit area. Handrail repair quantities for the Filters were already included on the S3000 series of Drawings. See Addendum No. 5 for Drawing revisions and additions.
167	[ETEC/Continental] We plan to quote Continental Blower for the Multistage Centrifugal Blowers (Spec section 43 11 18). Please find attached requests from Continental Blower and their controls supplier, NE Controls. If you have any questions, or require additional information, please do not hesitate to contact me.	43 11 18	Continental Blower has been approved to bid. Response to Continental Blower's bid questions are below: 1.a.i. The inlet valve will be controlled by the blower control panel. 1.a.ii. The blow-off valve will be controlled by plant PLC since it is a common valve for both blowers. A warning plate shall be placed on the front of the blower panel alerting operators to open the blow-off valve before turning on the blower in manual mode. 2. NEMA 12 is sufficient for the blower control panel. 3. To limit the variety of pressure and temperature instruments across the plant, Foxboro has not been added to the spec. Quotes shall be updated based on blower changes released under Addendum No. 4. See Addendum No. 5 for additional updates to spec section 43 11 18.
168	[ETEC/Continental] When is the last day to submit questions.		7 days prior to the bid opening. No questions will be accepted after 1/31 at 2 pm CT.

<u>Number</u>	Question	Drawing/Specification Reference	<u>Response</u>
169	There is a spec for Venturi tubes, but I don't see any new tubes on the plans. If there is one required, can you please tell me what sheet it is on.	40 71 23.13	Correct, there are no new venturi flow meters being added in this project. Specification 40 71 23.13 has been removed from the specs.
171	[Victaulic] I was looking through the 90% DIP spec — section 2.04 says that all exposed ductile iron pipe shall have flanged joints. But later, in the spec under mechanical joints Victaulic Style 31 couplings are called out. I wanted to bring this to your attention to see if Hazen or Central Arkansas had any issues with using couplings on the Steel or DIP. See attached highlighted spec.	40 05 19	Refer to Specification 40 05 00 - Paragraph 2.08 regarding grooved couplings. Section A states: A. Grooved end pipe couplings shall be furnished as specified or shown on the Drawings.
172	[IPS] Will Tnemec 431 Permashield be an approved equal to P401? Attached are comparison sheets TN431 vs P401 and submittal data.	-	Yes, the Tnemec 431 Permashield is considered an equal to P-401
173	[Alessi Keyes] Please confirm that there are no Coiling Shutters per 083302 or Rolling Counter Fire Doors per 083313. We see the single Roll Up Door #3010 in the Filter Building per 083323.	08 33 02 / 08 33 13 / 08 33 23	The 083302 Coiling Shutters are used in the Cross Gallery Control Room (A3007) exterior windows and called out in Construction Note #4. The 083313 Rolling Counter Fire Doors can be disregarded/removed as there is no instance in the project.
174	[WR Meadows] I was following up to see if the attached submittal request for CEM-KOTE™ CW PLUS is acceptable. I would be more than happy to discuss this with you. Please let me know if you need anything further from me or have any questions. See attachments.	07 16 16	No substitute products can be considered prior to the GMP for this product due to inadequate review time. Products submitted as substitutes by the Contractor after the GMP is approved may be reviewed for use on this project.
175	[MFCC] Reference drawing C1208, profile 3. Is the 24" valve shown on the profile required?	C1208	Yes, the 24" BFV on the BWR line shown is directly upstream of the Rapid Mix Influent Box. This valve is additionally shown on the Valve Schedule (Manually Operated Valve Schedule) and the M2000 series drawings, such as M2001.
178	[Ideal Construction] Windows in East & West Gallery call to "Re-glaze" existing windows. Does this mean new glass or caulk only? If new glass, what kind of glass?		Reglazing is to be caulk/sealant only - existing window glass to remain in place.
179	[Ideal Construction] What do you mean by "Rock Bedding" at the Bulk Chemical Building. We intend to provide 4" of gravel drainage fill on top of your prepared building pad and go up from there. We are NOT including any undercut or construction of the building pad. Is that correct?		Correct. Max Foote Construction will prepare the building pad to within 0.1' VF of subgrade of any required rock and/or vapor barrier. The Architectural package subcontractor will be responsible for the rock and/or vapor barrier procurement and installation. Currently the drawings do not show rock beneath the slab, but my understanding is that will be updated via addendum along with any vapor barrier requirements, etc.
180	[Ideal Construction] Can we expect addendum #5 to answer the questions we still have pending? I assume it will be issued next week.		Addendum No. 5 will be issued this week. Addendum No. 6, if required, will be distributed next week. And the cutoff for questions is January 31st.
181	[Alessi Keyes] Are the appliances described in the Addendum 4 sheet A0012 to be provided as part of the architectural package or are they owner furnished and installed?	A0012	Appliances are to be contractor provided per specification, or equal.

<u>Number</u>	<u>Question</u>	Drawing/Specification Reference	<u>Response</u>
182	[Alessi Keyes] What species of wood door do we need to provide? Are these prefinished doors?		Wood doors will be white oak, wood door specification to be issued with the conformance set.
189	[Alessi Keyes] There are several questions regarding the exiting stairs from the new control room. I have attached two marked up sheets that address the following questions:		See below:
	a. Demo – need size of exterior wall to be removed.	A3003	Only exterior wall infill at removed door.
	b. Demo – I am assuming that there is an existing walkway that we are tying into. Does any of this need to be reworked for this new platform, exit stairs and 3 new gates?	A3003	yes, the existing walkway is extended to allow for required exit clearance and new railing is to be installed. See S3103 for platform and railing/gates.
	c. New Construction – what style of swing gate is required for the locations noted on A3007?	A3007	Use Public Access gate as shown on SD13 for egress path.
	d. New Construction – Is the platform that is shown at the bottom of the stairs at the same elevation as the walkway?	A3007	Yes, it should be flush with the existing walkway and extended to cantilever over basin in order to provide required width.
	e. New Construction – Is the south gate on A3007 at grade? If so, a person would walk into the elevated platform in d above.	A3007	The 3 gates are on the same level of the walkway around the basins. We are keeping the people exitting the control room fro leaving the designated path of egress while alos maintaining employee access to the basin walkways for maintenance.
	f. New Construction – Can the designer provide a section cut that would show the different elevations that this exit involves? It is possible that the platform I am asking about in d is actually a ramp. Please advise.	A3007	It is not a ramp, there are existing stairs down from door 3034 to a landing and existing walkway around the basins. In order to meet the width requirements for egress, we need the walkway extended out over the basin. The rectangular area shown with the "note 10" is not a change in elevation, it is an extent of addition (see structural sheet S3103 for buld out). Please note the new railing at this extension and gates to prevent people fro leaving the path in a panic. The path leads to a new landing, stai down from the basin walkway, and a sidewalk outside the basin wall.
	g. New Construction – Are the new stairs to be steel or concrete?	A3007	Concrete stairs and walkway.