CITY OF BATON ROUGE PARISH OF EAST BATON ROUGE DEPARTMENT OF ENVIRONMENTAL SERVICES

October 20, 2025

ADDENDUM NO. 1R

TO: ALL BIDDERS

SUBJECT: PS 299 REGIONAL PUMP STATION

CITY-PARISH PROJECT NO. 20-PS-IF-0109R

The following revisions shall be incorporated in and take precedence over any conflicting part of the original contract document:

ORIGINAL BID DATE: Thursday, October 23, 2025 at 2:00 P.M. CURRENT BID DATE: Thursday, October 30, 2025 at 2:00 P.M.

PART 1 – UNIFORM CONSTRUCTION BID FORMS:

- 1. For paper sealed bidders, with reference to page UCBF 1 of 4 of Part 1, Uniform Construction Bid Forms, the Bidder shall indicate the receipt of this addendum in the space provided. For online Central Bidding bidders, an acknowledgement of this addendum will be prompted by the electronic bidding program prior to formally submitting the bid. Failure to indicate the receipt of this addendum shall be cause for the bid to be rejected.
- Replace the Unit Price Form with the attached Unit Price Form (dated 10/20/2025).
 This revised Unit Price Form MUST be used by all Bidders on this project. The UCBF on Central Bidding has been updated to reflect the changes on the attached UCBF. Failure to submit on the revised Unit Price Form shall cause for the bid to be rejected.
- Acting in accordance with Louisiana Revised Statutes 38:2212, (C) (1), the bid opening date is postponed by seven (7) calendar days. Bids will be opened at 2:00 PM Thursday, October 30, 2025 in Room 806 of City Hall, in lieu of October 23, 2025.

PART 2 – SPECIAL PROVISIONS AND CONTRACT DOCUMENTS:

- 1. For paper sealed bidders, with reference to page UCBF 1 of 4 of Part 1, Uniform Construction Bid Forms, the Bidder shall indicate the receipt of this addendum in the space provided. For online Central Bidding bidders, an acknowledgement of this addendum will be prompted by the electronic bidding program prior to formally submitting the bid. Failure to indicate the receipt of this addendum shall be cause for the bid to be rejected.
- 2. Replace the Unit Price Form with the attached Unit Price Form (dated 10/20/2025).

This revised Unit Price Form MUST be used by all Bidders on this project. The UCBF on Central Bidding has been updated to reflect the changes on the attached UCBF. Failure to submit on the revised Unit Price Form shall cause for the bid to be rejected.

3. Acting in accordance with Louisiana Revised Statutes 38:2212, (C) (1), the bid opening date is postponed by seven (7) calendar days. **Bids will be opened at 2:00 PM Thursday, October 30, 2025 in Room 806 of City Hall**, in lieu of October 23, 2025.

SPECIAL PROVISIONS

1. Section 01 14 00:

Remove this section in its entirety and replace with the revised version attached to this addendum.

2. Section 01 45 00:

Remove this section in its entirety and replace with the revised version attached to this addendum.

3. Section 01 64 00:

Remove the last sentence from Section 1.02, Note A.2 and replace it with "This will include the generator for PS 299."

4. Section 01 77 00:

Remove this section in its entirety and replace with the revised version attached to this addendum.

5. Section 02 45 30:

Remove this section in its entirety and replace with the revised version attached to this addendum.

6. Section 02 48 20:

Remove the reference to "ADDENDUM 01" in the footer of this section.

Remove the word "Florida" in Section 1.02, Note D.1 and change to "Louisiana".

Remove the word "Florida" in Section 1.03, Note A.1 and change to "Louisiana".

7. Section 40 90 10:

Remove the reference to "ADDENDUM 01" in the footer of this section.

DRAWINGS

- 1. Sheet C-1: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).
- 2. Sheet C-3R: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).
- 3. Sheet C-5R: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).
- 4. Sheet C-9R: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).
- 5. Sheet C-15R: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).
- 6. Sheet C-17: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).
- 7. Sheet C-18R: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).
- 8. Sheet M-4: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).
- 9. Sheet M-5R: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).
- 10. Sheet M-6R: Remove this sheet in its entirety and replaced with the revised version attached to this addendum (revision dated 10/17/25 for Addendum 1R).

QUESTIONS:

1. In the past, Baton Rouge has purchased and used the standard ZABOCS unit with isolation/backdraft dampeners. The unit specified for this project is calling out motorized dampeners. Are motorized dampeners required for this project?

Motorized dampeners are not required.

2. Is a Multi-Component Polymer lining system approved for the interior protective coatings on this project?

No, Multi-Component Polymer lining system will not be approved for the interior protective coatings on this project.

3. Please confirm the amperage ratings for the Pump Control Panel "PCP-05-1" main circuit breaker and the automatic transfer switch. Although the Facility Load Calculation shows a total calculated load of 289 amps (plan sheet E-5R), the calculation omits loads for the Dry Weather Pump No. 2, Wet Weather Pump No. 2, all pump discharge valve operators, Odor Control Blower No. 2, and all slide gates. It is our understanding that the main circuit breaker and automatic transfer switch should be rated for all loads within the Pump Control Panel, plus 25% of the largest load. With the addition of the loads that show as zero in the Facility Load

Calculation, the ratings that are shown for the main circuit breaker and automatic transfer switch may be insufficient.

The amperage ratings for the equipment are acceptable. The worst case scenario is that one Dry Weather Pump and one Wet Weather Pump would run at the same time. The hardware and software controls are designed to prevent both Dry Weather Pumps or both Wet Weather Pumps from running simultaneously. The station design is such that none of valves should be operated while the pumps are running. The wet weather slide gate G-05-1-2 may operate while the wet weather pumps are running, but at 0.75HP, the load presented is insignificant. Finally, the load calculation includes the odor control blower running. No changes required.

4. Could you send me the current plan holders list or anyone else you know that's bidding the job? Just want to make sure we get our ready-mix pricing in front of the right folks.

The plan holders list can be accessed from Central Bidding.

5. Could you provide a copy of the pre-bid sign in sheet?

Pre-Bid Sign in sheet has been attached to this addendum for reference.

6. Which is the applicable required "Bid Bond Form" to be used on this project as there are (2) different templates within the specifications.

Follow the instructions for submitting bids as found on the Part 1 Cover, and Section 2-8.

7. Will the Pre-Bid Meeting Minutes and Sign-In Sheet be released in a forthcoming Addenda?

The Pre-Bid sign in sheet has been attached to this addendum for reference.

8. Section 805 – Submersible WW Pump Station Specification shows footer of pages as "Addendum #1" for 1-51. No addenda's have been issued as of today.

Remove the verbiage of "Addendum 1" in referenced footers.

9. Section 01 14 00 – Page Footers show Addenda #1 for 1-9. No addenda's have been issued as of today.

See question 8.

10. Section 02 45 30 – Page Footers show Addenda #1 for 1-10. No addenda's have been issued as of today.

See question 8.

11. Section 02 48 20 – Page Footers show Addenda #1 for 1-12. No addenda's have been issued as of today.

See question 8.

12. Section 40 90 10 – Page Footers show Addenda #1 for 1-5. No addenda's have been issued as of today.

See question 8.

13. Per SP 3-8 Affidavit: States "Prior to bid, the contractor shall file with the

Purchasing an affidavit, as per LA RS 38:224 on form provided by the Purchasing Director". This document is part of the Part 1A documents and is also referenced in SP 2-8.1 that states Part 1A documents can be included in their sealed bid or uploaded electronically via Central bidding if submitting bid electronically. Please clarify if these documents can be submitted/included at time of bid submission or in accordance with SP 3-8.

The affidavit noted in SP 3-8 must be submitted prior to the <u>opening</u> of bids. Part 1A documents can be submitted in a separate envelope, included in the sealed bid envelope or uploaded electronically via the Central Bidding software.

14. Are you anticipating the need for dewatering?

If required, de-watering shall be performed in accordance with section 801-6.2 Dewatering, Drainage, and Flotation of the specifications, and shall be at no direct cost to the owner.

15. What is the predicted flow rate?

Reference sheet 34 and 35 of the project plans for pump station information.

16. What is the "peak flow"/"wet weather max flow" and what is Mersino is expected to bypass?

Reference sheet 34 and 35 of the project plans for pump station information.

17. Is bypass payment included in the specifications. If not, what format will be used?

If required, bypass shall be done at no direct cost to the owner.

18. Specification section 805, paragraph 805-3 (a) states "Owner furnished equipment shall meet the requirements of Specification 01800." What items are Owner furnished?

This project only includes the generator as the owner furnished item.

19. Specification section 805-28.1, paragraph 6 states "Cooperate with Owner's generator supplier with startup and testing." Is the contractor responsible for any fees to the Owner's generator supplier to perform the specified testing?

Contractor is not responsible for any fees to the supplier.

20. Is the Automatic Transfer Switch included with the Owner furnished generator at no cost to the Contractor?

The Automatic Transfer Switch is provided by the Owner at no cost to the Contractor.

21. Please provide the specific permits that the contractor is required to obtain.

The contractor is required to obtain the following permits:

- LPDES Construction Stormwater permit for stormwater and erosion control plan
- LPDES for Temporary Dewatering & bypass discharge
- Building permit.
- Right-of-Way Permit

Maintenance of Traffic Permit

Please note this list may not be all inclusive and if other permit requirements become known, it will be the Contractor's responsibility to ensure that they are in place prior to performing the work.

22. Referencing specification section 01 41 60, please confirm that the Owner will furnish and pay for all required special inspections, both continuous and periodic.

The Owner will pay for all special inspections, both continuous and periodic.

23. Referencing specification section 01 45 00, please confirm that the Owner will furnish and pay for all required inspection and testing.

The Owner will pay for all required inspections. However, testing shall be paid by the Contractor. The following specifications and sections have been revised.

- 01 45 00 (1.04 & 1.05)
- 24. Specification section 01 64 00, paragraph 1.02 A mentions a generator for PS 777. Please clarify.

This will be updated to PS299.

25. Specification section 01 77 00, paragraph 1.8 A states "The contractor shall provide a Public Construction Bond to guarantee performance of the provisions contained in Paragraph "Maintenance and Guarantee" above, and Section 00200, Sub-section R, of the CONTRACT." Please provide Section 00200, Sub-section R and Article 6 of the Contract so we can review the Public Construction Bond requirements.

Paragraph 1.8A has been revised to state: "The contractor shall provide a Performance and Payment Bond to guarantee performance of the provisions contained in Paragraph "Maintenance and Guarantee" and pages SP-1 and SP-6 of the Contract. Furthermore, paragraph 1.7A has been revised to reference the Performance and Payment Bond and it's associated 1-year warranty.

26. Specification section 02 45 30, paragraph 3.01 B mentions placing settlement monitoring points evenly spaced every 10 feet on Third Ave North from the Collier County Coastal Control Setback line on drawing C-102 to the north side of the private property located in 215 Gulf Shore Blvd. Please clarify so we can determine the number of settlement monitoring points.

See revised paragraph 3.01B.

27. Specification section 02 48 20 references a Professional Engineer registered in Florida. (Please note that the Florida PE appears in other specifications sections). Please clarify.

These references have been revised to "PE licensed in LA".

28. Specification section 02 48 20, paragraph 1.05 A (2) states "Noise thresholds (dBA; a the nearest sensitive receptor/property line), measured at a distance of

25-feet from the source shall not exceed 85 dBA." Please clarify if the noise levee is to be measured at the sensitive receptor/property line or 25' from the source (driving equipment).

The noise level is to be measured at a distance of 25' from the source. Please note that construction related activities shall be limited to 7am to Sunset on Weekdays and Saturdays.

29. Is the Engineers intent to use the silent piler, press in system for the sheet pile required on this project? Standard sheet pile driving/pulling equipment exceeds the 85 dBA max limit when measured from a distance of 25' from the hammer.

The Contractor shall utilize a pile installation method that meets applicable vibration and noise limits due to the close proximity of the hospital and adjacent facilities.

30. Reviewing the suggested sequence of construction provided on drawing C-1 as it relates to bypass pumping at the new station while completing the new station, is there a specific date that the existing PS 299 needs to be decommissioned by?

There is no specific date to have it decommissioned by.

31. Please confirm that the suggested sequence of construction provided on drawing C-1 is conceptual and not a required sequence.

It is indeed a "suggested sequence". The contractor is required to submit their own sequence of construction plan for review and approval. However, the NTP-1 and NTP-2 milestones shall be met within their respective contract duration as stated in 01 14 00, paragraph 1.08.C.

32. Please confirm that the stationing limits listed in phase 2 of the suggested sequence of construction on drawing C-1 is not a requirement and that portions of these lines can be structured in other phases.

These lines can be constructed during other phases. However, no utility work (installation, excavation, and backfill) shall occur prior to completion of the embankment installation and settlement period. See Geotech report (Appendix B), milestone section of 01 14 00, and revised notes in sheet C-1.

33. Is the contractor required to remove the existing concrete pavement and curbing across the abandoned gas station within the sewer servitude?

This is not a requirement. It is shown in case the excavation work impacts the existing curb and asphalt.

- 34. Is the contractor required to replace any existing concrete pavement and curbing across the abandoned gas station that is removed for construction?
 - No. The contractor is not required to remove the curbing across the abandoned gas station, but incase there's impacts during construction this will have to be replaced as a part of contract.
- 35. Please confirm that LADOTD certified DBE's do not count towards the 21% goal established for this project.

LADOTD certified DBE vendors do count towards the goal.

36. Please confirm that the onsite Safety Manager can have other duties and does not need to be a standalone, separate individual.

The onsite safety manager does not need to be a standalone, separate individual.

37. Please confirm that the QC Manager can have other duties and does not need to be a standalone, separate individual.

The QC manager does not need to be a standalone, separate individual.

38. In reference to Keynote "E" on drawings 13 and 14, is the contractor required to remove and replace the existing asphalt pavement within the 20' temporary construction servitude? Or, is restoration only required if the existing pavement is damaged by the required work?

Keynote E requires the Contractor to only replace damaged asphalt within the 20' temporary construction servitude.

39. Please confirm that the "16" Plug Valve" callout on Drawing 17 is By Others.

The 16" plug valve has been moved to the portion of the proposed FM work and will not be done by Others.

40. Please confirm that the "2 - 4" PVC pipes required for installation of future utilities see roadway plans" callout on Drawing 17 is By Others.

Confirmed that this is not under the contractor's scope and will be Installed by others. The annotation will be removed from the drawing to avoid confusion.

41. Is there any cost to the contractor for the 2" water meter or 2" tap connection to the existing water main using a 2" x 8" branch connection to be performed by BR Water?

The 2" tapping is to be installed by the PS299 contractor, see detail C-619 (sheet 11). BR Water will install the future watermain and procure/deliver the water meter to the Contractor for installation.

42. Please confirm the 16" WW SFM and 12" Gravity Sewer tie in points shown on drawing 25. Drawing 17 shows the tie in points at different locations.

The tie in points for both the Gravity Sewer and the SFM will be fixed on Drawing 25.

43. Please confirm the quantity of 18" Gravity Sewer. Drawing 26 shows approximately 830 LF that is to be paid under the associated unit items per note 4, but the unit items total to more quantity.

The total quantity for the 18" Gravity sewer is 872 LF, the Bid Form has been corrected.

44. Are both Air Release valves shown on drawing 28 measured and paid under item 8049001 "Air Release/Vacuum Valve (1")"?

Yes. Both of the 1" ARVs on the SFM can be paid under this item. Unit Price Form has been revised.

45. Please confirm the quantities of unrestrained joint and restrained joint 8" DW SFM. The lengths shown on drawing 28 differ from the unit quantities.

The unrestrained joint 8" DW SFM is 443 LF long, and the restrained joint 8" SFM is 397 LF long.

46. Please confirm the lengths of gravity sewer and force main shown on sheet 25.

The total lengths of the gravity lines are as follows:

12" Gravity Line = 184 LF 18" Gravity Line = 872 LF

24" Gravity Line = 16 LF

The total lengths of the 8" DW SFM are as follows:

8" DW SFM (unrestrained) = 443 LF

8" DW SFM (restrained) = 397 LF

The total lengths of the 16" WW SFM are as follows:

16" WW SFM (unrestrained) = 105 LF

16" WW SFM (restrained) = 145 LF

47. Will the contractor be allowed to clear and build the surcharge during the assembly period without being charged time on the project?

No. Contract time will begin with issuance of Notice to Proceed (NTP-1). The surcharge activity shall be performed within 160 days of NTP-1, in accordance with Specification 01 14 00, Paragraph 1.08.C.

48. Drawing 29 shows the tie in of the new 16" WW SFM to the existing 16" WW SFM at STA 502+44.12. The profile calls out restrained joints between STA 502+30 to 502+60. Is the contract required to expose the previously installed 16" WW SFM past the proposed tie-in point back to STA 502+60 to restrain the existing pipe?

No, the FM under Constanin Blvd is being restrained as part of the roadway project. This contract is only to restrain the joints on the proposed 16" WW SFM up to station 502+45. The callout will be updated on the drawing.

49. Can you please confirm that nothing changed in terms of the project not being tax exempt?

Confirmed, this project is NOT tax exempt.

50. Can you confirm the existing chain-link fence that runs parallel to the parking lot where the force main pipe will be installed does not need to be reinstalled?

The chain link fence which runs parallel to the parking lot will replaced as required. Only fencing damaged or removed for construction shall be replaced. The keynote will be adjusted.

REVIEWED:

Sparkle D.W. Noble, P.E.

Obie E. Watts, III, P.E.

APPROVED:

Adam M. Smith, P.E.

LOUISIANA UNIFORM PUBLIC WORK BID FORM <u>UNIT PRICE FORM</u>

UNIT PRICES	PARISH OF EAST BATON DEPARTMENT OF EAST BATON DEPARTMENT OF EAST BATON DEPARTMENT OF EAST BATON ROUGE, LOUISIAN This form shall be used for any a	ROOM 826 7 HALL NA 70802	BID FOR: Bidding Documents and described as unit prices. Amounts shall be sta	CITY PARISH PROJECT NUMBER 20-PS-IF-0109R ated in figures and only in figures.
DESCRIPTION:	_X_ Base Bid orAlt.#	PVC Sewer Pipe (12.1 - 16	Feet) (12")	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
802104E	184	Linear Foot		
DESCRIPTION:	_X_ Base Bid orAlt.#	_ PVC Sewer Pipe (12.1 - 16	Feet) (18")	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
802104I	448	Linear Foot		
DESCRIPTION:	_X_ Base Bid orAlt.#	_ PVC Sewer Pipe (16.1 - 20		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
802105I	407	Linear Foot		
DESCRIPTION:	_X_ Base Bid orAlt.#	PVC Sewer Pipe (20.1 - 24	Feet) (18")	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
802106I	17	Linear Foot		
		1		
DESCRIPTION:	_X_ Base Bid orAlt.#	PVC Sewer Pipe (20.1 - 24	Feet) (24")	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
802106L	16	Linear Foot		
DESCRIPTION:	_X_ Base Bid orAlt.#	60" Sewer Manhole (12.1 -	, I	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
8031604	1	Each		
DESCRIPTION:	_X_ Base Bid orAlt.#	_ 60" Sewer Manhole (16.1 -	20 Feet)	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
8031605	4	Each		
		<u> </u>		
DESCRIPTION:	_X_ Base Bid orAlt.#	_ 60" Sewer Manhole (20.1	24 Feet)	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
8031606	1	Each		

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

LOUISIANA UNIFORM PUBLIC WORK BID FORM <u>UNIT PRICE FORM</u>

TO:	CITY OF BATON ROUGE		BID FOR:	PS 299 REGIONAL PUMP STATION	
	PARISH OF EAST BATON R				
	PURCHASING DIVISION, RO			CITY PARISH PROJECT NUMBER 20-PS-IF-0109R	
	222 SAINT LOUIS ST, CITY				
	BATON ROUGE, LOUISIAN	A 70802			
UNIT PRICES	3: This form shall be used for any an	d all work required by the	Bidding Documents and described as unit prices. Amounts shall be sta	ated in figures and only in figures.	
DESCRIPTION:	_X_ Base Bid orAlt.#	Unrestrained Joint Ductile	fron Sewer Force Main (8")		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
804010C	443	Linear Foot			
DEGGRUPTION	V D DII 11.11	**			
DESCRIPTION:	_X_ Base Bid orAlt.#		Iron Sewer Force Main (16")		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
804010H	105	Linear Foot			
DESCRIPTION:	X Base Bid or Alt.#	Restrained Joint Ductile Iro	on Sewer Force Main (8")		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
804041C	397	Linear Foot			
		1			
DESCRIPTION:	_X_ Base Bid orAlt.#	Restrained Joint Ductile Iro	on Sewer Force Main (16")		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
804041H	145	Linear Foot			
DESCRIPTION:	_X_ Base Bid orAlt.#	Fittings			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
8045000	5600	Pounds			
DEGGRUPTION	V D D'I 11 //	A' D.I. W. W.I.	(11)		
DESCRIPTION:	_X_ Base Bid orAlt.#	Air Release/Vacuum Valve	T		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
8049001	2	Each			
DESCRIPTION:	X Base Bid orAlt.#	Submersible Wastewater P	ump Station (PS299)		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
8050201	1	Lump Sum			
		1			
DESCRIPTION:	_X_ Base Bid orAlt.#	Demolition & Restoration	of Pump Station (PS No. 299)		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
8200299	1	Lump Sum			

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

LOUISIANA UNIFORM PUBLIC WORK BID FORM <u>UNIT PRICE FORM</u>

TO:	CITY OF BATON ROUGE		BID FOR:	PS 299 REGIONAL PUMP STATION	
	PARISH OF EAST BATON R				
	PURCHASING DIVISION, RO			CITY PARISH PROJECT NUMBER 20-PS-IF-0109R	
	222 SAINT LOUIS ST, CITY I BATON ROUGE, LOUISIANA				
UNIT PRICES	: This form shall be used for any an	nd all work required by the	Bidding Documents and described as unit prices. Amounts shall be sta	tted in figures and only in figures.	
DESCRIPTION:	_X_ Base Bid orAlt.#	Miscellaneous Work and C	leanup		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
8211101	1	Lump Sum			
DESCRIPTION:	X Base Bid or Alt.#	Storm Water Pollution Prev	vention Plan		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	: Unit Price)
9031600	1	Lump Sum		Agent only it is	,
		1			
DESCRIPTION:	_X_ Base Bid orAlt.#	Mobilization			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
9090100	1	Lump Sum			
DESCRIPTION:	_X_ Base Bid orAlt.#	Utility Relocation Allocatio	n (Fixed Amount of \$100,000)		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
9999991	1	Lump Sum	\$100,000.00	\$100,000.00	
DESCRIPTION:	_X_ Base Bid orAlt.#	NOT USED			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	: Unit Price)
NOT USED	NOT USED	NOT USED			
		•			
DESCRIPTION:	_X_ Base Bid orAlt.#	NOT USED			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
NOT USED	NOT USED	NOT USED			
DESCRIPTION:	_X_ Base Bid orAlt.#	NOT USED			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	Unit Price)
NOT USED	NOT USED	NOT USED			
DESCRIPTION:	X Base Bid or Alt.#	NOT USED			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times	. Unit Duiga
NOT USED	NOT USED	NOT USED	UNITARIOE	ONLI FRICE EATENSION (Quantity times	Onu i rice)
NOT USED	NOT USED	NOT USED			

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

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NON-MANDATORY PRE-BID MEETING ATTENDANCE RECORD

PS 299 Regional Pump Station City-Parish Project No. 20-PS-IF-0109R

DATE: **October 8, 2025**

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NAME	BUSINESS CONTRACTOR'S LIC NO OR SUPPLIER	PHONE NO.	E-MAIL ADDRESS (Please print legibly)
Shawwar Richard	Better Pungs	215-987-1303	S Richard @ Betterpumps.com
Austin Knower	BHK Construction	985-626-1866	austin apkconst.com
Keo3n Boothe	63345 KUC LCC	985-264-0471	Kieke RVC wtilities - com
Oustin Bones	295 95	226-752-0325	Pastin @ Boone Servics. com
Joey Danehower	Mersine water solutions	775'505'0000	July. danshows e grand. com
Bradley Crestinski	command construction Industries, LLC	504-887-8795	michelle O command industries. com
Ban Bruhl	NCMC-LIC 8999	985-320-8510	benæncmc-11c.com
KEN HARRELL	NCMC-LLC 8999	352-427-9586	LENGNEME-LIC.COM
Brian Sun	Box Construction Company, LLC	985-626-1866	Dannebleconet.com
Bruce Duhon	B+12 const	985-626-1866	bruce epk const. com
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SECTION 01 14 00 - CONSTRUCTION AND SCHEDULE CONSTRAINTS

PART 1 -- GENERAL

1.1 THE SUMMARY

- A. Work shall be scheduled, sequenced, and performed in a manner which minimizes disruption to the public and to the operation and maintenance of existing pump station facilities and facilities along the pipeline alignment.
- B. The Contractor shall incorporate the construction and schedule constraints of this
 Section in preparing the construction schedules required under Section 01 32 16
 Construction Progress Schedule.

1.00 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

C. Reference Specifications

01 32 00	Construction Scheduling
01 50 00	Protection of Existing Facilities

1.01 THE REQUIREMENT

A. WORK shall be scheduled, sequenced, and performed in a manner which minimizes disruption to the operation and maintenance of existing facilities. The CONTRACTOR shall incorporate the construction and schedule constraints of this Section in preparing the construction schedules required under Section 01 32 00 – Construction Scheduling.

1.02 EXISTING FACILITIES

- A. The WORK shall be executed while the existing pump station PS299 is in operation, Operation of the existing pump stations shall not be jeopardized nor shall the efficiency of wastewater pumping be reduced as a result of the execution of the WORK.
- B. Continuous operation of Owner's facilities is of critical importance. Schedule and conduct activities to connect new DW and WW force mains connecting to their points of connections in coordination with the OWNER and adjacent Contractor. The WW FM will connect to the Constantin Blvd roadway project and will need to tie-in to it's final location, after the Constantin FM has been Certified and approved be put in use by the Owner and adjacent Contractor. This should be fully coordinated with the ENGINEER before beginning work. Additionally, coordination will be necessary to ensure that materials storage, facility access, and tie-in activities are not disruptive to the ongoing plant activities.

- C. Unless indicated otherwise, temporary pumping, piping, power, lighting, controls, instrumentation, alarms, security devices, and safety devices shall be provided by the CONTRACTOR whenever its activity or interruption due to its activity affects the existing facility and adjacent parking lot.
- D. CONTRACTOR shall ensure the construction activities do not adversely flood adjacent properties and areas. Contractor shall implement temporary drainage measures necessary to:
 - 1. Maintain all runoff within project limits.
 - 2. Dewater runoff as required to keep working areas and adjacent areas dry.
 - 3. Implement a bypass system capable of bypassing stormwater through existing 42-inch RCP during replacement of this pipe.
- E. Contractor shall not disrupt operations or access of adjacent hospital (General Health System). Contractor shall provide temporary lighting to match existing photometrics, and provide temporary power as required to provide temporary lighting. Project areas shall be fenced and screened from adjacent Hospital at all times.
- F. Access Control During non-work hours, all trenches shall be backfilled or covered with suitable steel plates and protected from the public. No equipment, construction material or excavated material that will interfere with traffic shall be stored on Bluebonnet Blvd or other lots, roadways, or maintenance roads of site at any time without agreement with facility Owner, agency Owner and Contract

 Manager.
- G. All existing utility poles and light poles shall be protected and remain operational throughout construction. The Contractor shall brace, support, stabilize, and maintain operation all poles adjacent to deep excavations. This work shall be coordinated with the responsible Utility companies.
- H. Furthermore, the existing communications tower and associated structures adjacent to the new PS 299 site shall be protected, braced, supported, and stabilized in coordination with the necessary utility company prior to any work adjacent to it.
- I. Contractor shall perform GPR and soft digs as necessary to field locate all existing utilities on site prior to construction.
- J. Contractor shall implement a vibration monitoring system and program to ensure adjacent structures are not impacted by excavation activities or sheeting work.
- K. Contractor shall meet local noise ordinance Section 12, chapter 2,-Code of Ordinances of the City of Baton Rouge, Louisiana and East Baton Rouge Parish, Louisiana for noise level restrictions. All construction related activities to be restricted from 7.00am to sunset on weekdays

and Saturdays with noise levels restricted to a maximum of 85dB measured at a distance of 25 feet from the source.

If required, Contractor shall provide noise reports indicating noise levels are maintained within an acceptable threshold.

- L. Contractor shall meet the Vibration and Noise Monitoring requirements specified in Specification 02 48 20 and 02 45 30
- M. The construction constraints in this Section do not include every item affecting the completion of the WORK but are intended to describe the sequence of critical events necessary to minimize disruption to the ongoing pump station operations and to ensure compliance with NPDES Permit requirements. It shall be understood and agreed by the CONTRACTOR that the critical events described are not inclusive and that additional items of WORK not included may be required to minimize disruption and ensure compliance. Deviation from or modification of these suggested sequences is permitted if techniques and methods known to the CONTRACTOR will result in reducing disruption to the facility operation and maintaining treatment efficiency, and if deviation is approved in advance by the ENGINEER.
- N. Contractor to ensure that all construction activities and staging areas are to be restricted within the construction servitudes as indicated on plans.

1.03 OPERATION OF PUMP STATION EQUIPMENT

A. Operational functions of the existing pump stations required to facilitate CONTRACTOR's operation will be done by the OWNER's personnel only.

1.04 BYPASSING

- A. Bypassing of untreated or partially treated sewage to surface waters or drainage courses is prohibited during construction. In the event accidental bypassing is caused by the CONTRACTOR's operations, the OWNER shall immediately be entitled to employ others to stop the bypassing and costs incurred therefore will be deducted from the CONTRACTOR's construction progress payments.
- B. Contractor shall also implement a bypass system capable of bypassing stormwater through existing 42-inch RCP during replacement of this pipe.

1.05 OUTAGE REQUESTS

A. It is not foreseen that modifications to existing facilities, the construction of new facilities, and the connection of new to existing facilities may require the temporary outage of existing treatment processes or facilities. However, should CONTRACTOR's utility location indicate conflicts with existing pipes, the Contractor shall coordinate Work with the Engineer as described below. The Contractor shall submit a detailed outage plan and time schedule for

construction activities which will make it necessary to remove a tank, pipeline, channel, electrical circuit, equipment, structure, road, or other facilities from service.

- The outage plans shall be submitted to the Engineer for acceptance a
 minimum of 10 working days in advance of the time that such outages are
 required. The outage plans shall be coordinated with the construction
 schedule and shall meet the restrictions and conditions of this Section.
 Costs for preparing and implementing the outage plans shall be the
 responsibility of the Contractor as part of the Work.
- B. The outage plan shall, at a minimum, shall identify:
 - 1. The Contractor's method for preventing bypassing of other treatment units.
 - 2. Any necessary temporary power, controls, instrumentation, or alarms required to maintain control, monitoring, and alarms for the treatment plant processes
 - 3. The date and time when each activity will occur.
 - 4. What equipment will be present including standby equipment.
 - 5. What assistance will be required by Owner's operating personnel.
 - 6. An emergency backup plan identifying what action will be taken if Work cannot be completed within the allotted time; and
 - 7. What individual and contact information for the individual in charge of the activity.
 - 8. Submit Work Plan 10 days prior to the scheduled activity

1.06 TEMPORARY CONNECTIONS

- A. Making connections to existing facilities or other operations that interfere with the operation of the existing equipment shall be thoroughly planned in advance, and required equipment, materials, and labor shall be on hand at the time of undertaking the connections. WORK shall be completed as quickly as possible and with as little delay as possible and shall proceed continuously (24 hours a day and seven days a week) if necessary to complete modifications and/or connections in the minimum time.
- B. The cost of any temporary facilities and night, weekend, or holiday activity and overtime payments required during process interruptions shall be included in the WORK.
- C. Temporary facilities and piping shall be located to minimize interference with CONTRACTOR's construction facilities and OWNER's operation and maintenance of the pump stations. Unless otherwise indicated, each temporary pipeline shall be of the same size as its connection to the existing

- or permanent facility at the downstream end of the pipeline. Piping materials shall be suitable for the material being conveyed and shall be as required in the Contract Specifications.
- D. When temporary electrical power, controls, instrumentation, or alarms are required for routine continuous operations of existing or new equipment, the CONTRACTOR shall provide the necessary equipment and appurtenances. Prior to installing said equipment and appurtenances, CONTRACTOR shall furnish a submittal on the proposed components and installation for ENGINEER's review and approval.
- E. A plan showing the size and location of the temporary facilities and piping shall be submitted to the ENGINEER at the same time as the outage plan required under this Section. Costs for design, provision, operation, and removal of temporary facilities and piping shall be part of the WORK.

1.07 SPECIFIC PROJECT AND SCHEDULE CONSTRAINTS

The following constraints shall be applied to and adhered to for this project:

- A. A suggested Sequence of Construction is provided in the Contract Documents; this is considered a conceptual recommendation and the Contractor is required to prepare their own sequence and submit to the district for review and approval
- B. The Contractor shall coordinate its WORK with other adjacent contractors, Entergy, property Owners, DES, and other utility agencies, with special attention to safety and access to the Public.
- C. Contractor shall ensure temporary power is in place prior to mobilization.
- D. Contractor shall coordinate with Entergy and ensure permanent power will be in place prior to startup of the new PS 299.
- E. The PS 299 work shall be sequenced in a manner that allows the new PS 299 to be connected to the new sewer FM and gravity line built as part of the Constantin Blvd. roadway project. The referenced project includes a new WW FM and gravity sewer system with connection points for the new PS 299 WW FM and influent gravity sewer system. The Constantin Blvd. WW FM and gravity sewer system shall be completed and operational before the new PS 299 can become operational.
- F. The Contractor shall monitor settling conditions of new embankment fill over the course of 60 days or after settling has ended per a licensed Geotechnical engineer. The WORK shall include over-excavation, sacrificial fill, temporary settlement plates and monitoring devices, Geotechnical services by a professional licensed geotechnical engineer, and all other requirements listed in the Contract. Begin construction of the new PS 299 after settlement period has ended.

- G. Protection and bracing of existing structures, previously stated, adjacent to deep excavation. This shall require shoring and sheeting as required to protect and keep existing structures in operation. Protection measures shall be submitted as a shop drawing with signed and sealed calculations by a Professional engineer in the State of Louisiana.
- H. Contractor shall meet the required milestones listed herein within the timeframe stipulated.
- I. Contractor shall perform testing of new gravity mains, sewer DW and WW FMs in a manner that does not delay the project. Separate Certifications of each system shall be obtained prior to putting new sewer infrastructure into operation. Contractor must obtain necessary Certifications prior to using new sewer infrastructure for temporary sewer bypassing.
- J. Contractor shall implement necessary temporary stormwater systems as required to avoid any flooding on adjacent properties or areas outside the project limits. Contractor shall also implement a bypass pumping system for work on 42-inch stormwater pipe.
- K. Long lead materials and equipment shall be included as part of the final construction schedule. This includes, but is not limited, to the control panel, VFDs, pumps, odor control unit, and Owner Furnished generator. The Contractor's schedule shall incorporate long lead times in manner that meets each project milestone within its duration.
- L. The Contractor shall include all materials needed to transport, and install the Owner Furnished Generator into the new walled PS 299 site. In the event the generator arrives at the end of construction, the Contractor will be responsible for installing the generator and restoring the site as required within the milestone's duration.

1.08 CONSTRUCTION SEQUENCING

A. Construction activities shall be scheduled and sequenced to ensure continuous operation of the existing wastewater pumping facilities. The CONTRACTOR's scheduling shall develop construction sequencing so that the WORK will not adversely impact operations. The CONTRACTOR shall be responsible for development of the construction sequencing. In implementing the construction sequencing, the CONTRACTOR shall maintain the existing facilities in service until new facilities are constructed and are operational. When new facilities are operational, the existing facilities may be taken out of service. The following

general guidelines shall be used by the CONTRACTOR in planning the sequence of construction.

- Safe working conditions for personnel shall be maintained during construction, modification, and demolition WORK. The foregoing includes at least proper trench excavation, the provision of temporary equipment guards, supports, warning signs, walkways, covers over openings, handrailing, and protection of electrical equipment and power supply.
- 2. Temporary facilities shall be constructed in accordance with applicable codes and regulations to operate safely and properly.
- 3. Valves to be temporarily shut off during the WORK shall be tagged as such and shall be wired shut with a crimped lead seal and padlocked.
- 4. Electrical and mechanical equipment shall be similarly shut down.
- 5. See Section 1.07 herein for additional sequencing constraints.
- B. Notice of Award (NOA) and Notice to Proceed (NTP)

A "Notice of Award" date, and one Notice to Proceed (NTP) Date will be issued by the Owner.

Notice of Award – CONTRACTOR shall obtain all required permits and submit all required long lead shop drawings within 60 days of Notice of Award (NOA) as required by the Agreement.

C. Interim Milestones

Failure to meet any of these Interim Sub-Project Completion Dates, individually or collectively, will result in assessment of liquidated damages for each event. Liquidated damages amount shall be stipulated in the Agreement and shall apply to the time durations established for each project milestone as well as to the Contract Time for the Project. Liquidated damages shall be both additive and cumulative.

Interim Sub-Project Completion Dates for each Milestone must be met in order to satisfactorily deliver the Work under the terms and conditions of this contract. The following milestones below are required to be met by the Contractor.

Milestone	Duration	Description
NOA	60 days	CONTRACTOR shall obtain, administer, and submit all required permits, and long lead shop drawings to the COE and Engineer within the initial 60 days.

NTP-1	160 days	Contractor shall complete the following items: Installation of embankment and settlement monitoring system. This shall include geotechnical engineer recommendation for initial settlement period. Installation of new DW & WW FMs, new gravity sewer system. Pre-commissioning, Commissioning, Commissioning, testing and certification of new sewer FMs and gravity system to allow for temporary bypass of existing PS 299. Utility installation, including excavation and backfill within PS site shall occur after embankment and settlement work is completed. Partial construction of new PS 299, including: Wet well construction Stormwater pipe replacement Construction of all underground utilities within the new PS 299 site. Backfill and preliminary grading of new PS 299 site. Contractor shall complete the following
NTP-2	90 days	items: • Bypass of existing PS 299.

		Modification of existing PS 299
		 Finalize construction of new PS 299.
		 Pre-commissioning, Commissioning, startup and Certification of new PS 299 and remaining associated conveyance pipes.
		 Put new PS 299 and conveyance pipes into operation.
		 Substantial completion of project.
Final Completion	30 days	Contractor shall finalize all remaining punch list items and closeout project with OWNER and all permitting agencies.

A total Contract duration of 340 days is established for this project.

1.09 SCHEDULE CONSTRAINTS

It is the CONTRACTOR's responsibility to coordinate and plan the construction activities to integrate each schedule constraint into performance of the overall WORK.

PART 2 -- PRODUCTS (NOT USED)

PART 3 -- EXECUTION (NOT USED)

- END OF SECTION -

SECTION 01 45 00 - QUALITY CONTROL

PART 1 -- GENERAL

1.00 REFERENCES SPECIFICATIONS, CODES AND STANDARDS

- A. The following is a list of standards which may be referenced in this Section:
 - 1. ASTM International (ASTM):
 - a. D3740, Evaluation of Agencies Engaged in the Testing and/or Inspection of Soil
 - b. E329, Use in the Evaluation of Testing and Inspection Agencies as Used in Construction.

B. References

01 33 00	Submittals
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1.01 DEFINITIONS

- A. Specific quality control requirements for the WORK are indicated throughout the Contract Documents. The requirements of this Section are primarily related to performance of the WORK beyond furnishing of manufactured products. The term "Quality Control" includes inspection, sampling and testing, and associated requirements.
- B. Contractor Quality Control (CQC): The means by which CONTRACTOR ensures that the construction, to include that performed by SUBCONTRACTORs and suppliers, complies with the requirements of the Contract.

1.02 INSPECTION AT PLACE OF MANUFACTURE

- A. Unless otherwise indicated, all products, materials, and equipment shall be subject to inspection by the ENGINEER at the place of manufacture.
- B. The presence of the ENGINEER at the place of manufacture, however, shall not relieve the CONTRACTOR of the responsibility for providing products, materials, and equipment which comply with all requirements of the Contract Documents. Compliance is a duty of the CONTRACTOR, and said duty shall not be avoided by any act or omission on the part of the ENGINEER.

1.03 OWNER'S QUALITY ASSURANCE

- A. WORK is subject to OWNER's quality assurance inspection and testing at all locations and at all reasonable times before acceptance to ensure strict compliance with the terms of the Contract Documents.
- B. OWNER's quality assurance inspections and tests are for sole benefit of OWNER and do not:

- 1. Relieve CONTRACTOR of responsibility for providing adequate quality control measures;
- 2. Relieve CONTRACTOR of responsibility for damage to or loss of the material before acceptance;
- 3. Constitute or imply acceptance; or
- 4. Affect continuing rights of OWNER after acceptance of completed WORK.
- C. The presence or absence of a quality assurance inspector does not relieve CONTRACTOR from any Contract requirement.
- D. Promptly furnish facilities, labor, and material needed for performing such safe and convenient inspections and tests as may be required by ENGINEER.
- E. OWNER may charge CONTRACTOR for any additional cost of inspection or test when WORK is not ready at the time specified by CONTRACTOR for inspection or test, or when prior rejection makes re-inspection or retest necessary. Quality assurance inspections and tests will be performed in a manner that will not unnecessarily delay the WORK.

1.04 SAMPLING AND TESTING

- A. Unless otherwise indicated, all sampling and testing will be in accordance with the methods prescribed in the current standards of the ASTM, as applicable to the class and nature of the article or materials considered; however, the OWNER reserves the right to use any generally-accepted system of sampling and testing which, in the opinion of the ENGINEER will assure the OWNER that the quality of the workmanship is in full accord with the Contract Documents.
- B. Any waiver by the OWNER of any specific testing or other quality assurance measures, whether or not such waiver is accompanied by a guarantee of substantial performance as a relief from the testing or other quality assurance requirements originally indicated, and whether or not such guarantee is accompanied by a performance bond to ensure execution of any necessary corrective or remedial WORK, shall not be construed as a waiver of any requirements of the Contract Documents.
- B. Waiver of testing or inspection by the OWNER shall not relieve the CONTRACTOR of responsibility for compliance with all specified requirements. Any waiver of testing—whether or not accompanied by performance guarantees or bonds—shall not be construed as a waiver of the CONTRACTOR's obligation to provide materials and workmanship conforming to the Contract Documents.
- C. Notwithstanding the existence of such waiver, the ENGINEER reserves the right to make independent investigations and tests, and failure of any portion of the WORK to meet any of the requirements of the Contract Documents, shall be reasonable cause for the ENGINEER to require the removal or correction and reconstruction of any such WORK in accordance with the General Conditions.

1.05 INSPECTION AND TESTING SERVICE

A. Inspection and testing laboratory service shall comply with the following:

- Unless indicated otherwise by the Technical Specifications, the OWNER CONTRACTOR will appoint, employ, and pay for services of an independent firm to perform inspection and testing or will perform inspection and testing itself.
- 2. The OWNER or independent firm will perform inspections, testings, and other services as required by the ENGINEER under Paragraph 1.3C above.
- 3. Reports of testing, regardless of whether the testing was the OWNER'S or the CONTRACTOR'S responsibility, will be submitted to the ENGINEER in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
- 4. The CONTRACTOR shall cooperate with the OWNER or independent firm and furnish samples of materials, design mix, equipment, tools, storage, and assistance as requested.
- 5. The CONTRACTOR shall notify ENGINEER 48 hours prior to the expected time for operations requiring inspection and laboratory testing services.
- 6. Retesting required because of non-conformance to requirements shall be performed by the same independent firm on instructions by the ENGINEER. The CONTRACTOR shall bear all costs from such retesting.
- 7. For samples and tests required for CONTRACTOR'S use, the CONTRACTOR shall make arrangements with an independent firm for payment and scheduling of testing. The cost of sampling and testing for the CONTRACTOR'S use shall be the CONTRACTOR'S responsibility.

1.7 SUBMITTALS

- B. Informational Submittals:
 - 1. CQC Plan: Submit, not later than 30 days after receipt of Notice to Proceed.
 - 2. CQC Report: Submit, weekly, an original and one copy in report form.

PART 2 -- PRODUCTS (NOT USED)

PART 3 -- EXECUTION

3.01 GENERAL

- A. Maintain an adequate inspection system and perform such inspections as will ensure that the WORK conforms to the Contract Documents.
- B. Maintain complete inspection records and make them available at all times to OWNER and ENGINEER.
- C. Quality control system shall consist of plans, procedures, and organization necessary to produce an end product that complies with the Contract Documents. System shall cover construction and demolition operations, both onsite and offsite, including WORK by SUBCONTRACTORs, fabricators, suppliers and purchasing agents, and shall be keyed to proposed construction sequence.

3.02 COORDINATION MEETING

- A. After Preconstruction Conference, but before start of construction, and prior to acceptance of CQC Plan, schedule meeting with ENGINEER and OWNER to discuss quality control system.
 - B. Develop mutual understanding of system details, including forms for recording CQC operations, control activities, testing, administration of system for both onsite and offsite WORK, and interrelationship of CONTRACTOR's management and control with OWNER's quality assurance.
 - C. There may be occasions when subsequent conferences may be called by either party to reconfirm mutual understandings and/or address deficiencies in CQC system or procedures that may require corrective action by CONTRACTOR.

3.2 QUALITY CONTROL ORGANIZATION

- A. CQC System Manager:
- Designate individual within CONTRACTOR's organization who will be responsible for overall management of CQC and have the authority to act in CQC matters for CONTRACTOR.
- 2. May perform other duties on Project.
- 3. Experienced construction person, with a minimum of 3 years construction experience on similar type WORK.
- 4. Report to CONTRACTOR's project manager or someone higher in the organization.

 Project manager in this context shall mean the individual with
 responsibility for the overall quality and production management of the
 WORK.
- 5. Onsite during construction; periods of absence may not exceed 2 weeks at any one time
- Identify alternate for CQC System Manager to serve with full authority during System
 Manager's absence. Requirements for the alternate will be the same as
 for designated CQC System Manager.
 - B. CQC Staff:
- Designate a CQC staff, available at the Site at all times during progress, with complete authority to take any action necessary to ensure compliance with the Contract. CQC staff members shall be subject to acceptance by ENGINEER.
- 2. CQC staff shall take direction from CQC System Manager in matters pertaining to QC.
- 3. CQC staff must be of sufficient size to ensure adequate QC coverage of WORK phases, work shifts, and work crews involved in the construction. These personnel may perform other duties, but must be fully qualified by experience and technical training to perform their assigned QC responsibilities and must be allowed sufficient time to carry out these responsibilities.

- 4. The actual strength of the CQC staff may vary during any specific WORK period to cover the needs of the Project. Add additional staff when necessary for a proper CQC organization.
 - C. Organizational Changes: Obtain ENGINEER's acceptance before replacing any member of the CQC staff. Requests for changes shall include name, qualifications, duties, and responsibilities of the proposed replacement.

3.3 QUALITY CONTROL PHASING

- A. CQC shall include at least three phases of control to be conducted by CQC System Manager for all definable features of WORK, as follows:
 - 1. Preparatory Phase:
 - a. Notify OWNER at least 48 hours in advance of beginning any of the required action of the preparatory phase.
 - b. Include meeting conducted by CQC System Manager and attended by superintendent, other CQC personnel (as applicable), and foreman responsible for the definable feature. CQC System Manager shall instruct applicable CQC staff as to acceptable level of workmanship required in order to meet Contract requirements.
 - c. Document results of preparatory phase meeting by separate minutes prepared by CQC System Manager and attached to QC report.
 - d. Perform prior to beginning WORK on each definable feature of WORK:
 - 1) Review applicable Contract Specifications.
 - 2) Review applicable Contract Drawings.
 - 3) Verify materials and/or equipment have been tested, submitted, and approved.
 - 4) Verify provisions have been made to provide required control inspection and testing.
 - 5) Examine the WORK area to verify that all required preliminary WORK has been completed and is in compliance with the Contract.
 - 6) Perform physical examination of required materials, equipment, and sample WORK to verify that they are on hand, conform to approved Shop Drawing or submitted data, and are properly stored.
 - 7) Review appropriate activity hazard analysis to verify safety requirements are met.
 - 8) Review procedures for constructing the WORK, including repetitive deficiencies.
 - 9) Document construction tolerances and workmanship standards for that phase of the WORK.

10) Verify plan for the WORK to be performed, if so required, has been accepted by ENGINEER.

2. Initial Phase:

- a. Accomplish at the beginning of a definable feature of WORK:
 - 1) Notify OWNER at least 48 hours in advance of beginning the initial phase.
 - 2) Perform prior to beginning WORK on each definable feature of WORK:
 - a) Review minutes of the preparatory meeting.
 - b) Check preliminary WORK to verify compliance with Contract requirements.
 - c) Verify required control inspection and testing.
 - d) Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Comparison with sample panels is appropriate.
 - e) Resolve differences.
 - f) Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
 - 3) Separate minutes of this phase shall be prepared by CQC System Manager and attached to QC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
 - 4) Initial phase should be repeated for each new crew to work onsite or any time acceptable specified quality standards are not being met.

3. Follow-up Phase:

- Perform daily checks to verify continuing compliance with Contract requirements, including control testing, until completion of the particular feature of WORK.
- b. Daily checks shall be made a matter of record in the CQC documentation and shall document specific results of inspections for all features of WORK for the day or shift.
- c. Conduct final follow-up checks and correct all deficiencies prior to the start of additional features of WORK that will be affected by the deficient WORK. Constructing upon or concealing nonconforming WORK will not be allowed.
- 4. Additional Preparatory and Initial Phases: Additional preparatory and initial phases may be conducted on the same definable features of WORK as determined by OWNER if the quality of ongoing WORK is unacceptable; or if there are changes in the applicable QC staff or in the onsite production supervision or work crew; or if

work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

3.4 CONTRACTOR QUALITY CONTROL PLAN

A. General:

- 1. Plan shall identify personnel, procedures, control, instructions, test, records, and forms to be used.
- 2. An interim plan for the first 30 days of operation will be considered.
- Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of WORK to be started.
- 4. WORK outside of the features of WORK included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of WORK to be started.

B. Content:

- 1. Plan shall cover the intended CQC organization for the entire Contract and shall include the following, as a minimum:
 - a. Organization: Description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff will implement the three-phase control system (see Paragraph 1.8 QC Phasing) for all aspects of the WORK specified.
 - b. CQC Staff: The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a QC function.
 - c. Letters of Authority: A copy of a letter to the CQC System Manager signed by an authorized official of the firm, describing the responsibilities and delegating sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop WORK which is not in compliance with the Contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities and responsibilities. Copies of these letters will also be furnished to OWNER.
 - d. Submittals: Procedures for scheduling, reviewing, certifying, and managing submittals, including those of SUBCONTRACTORs, offsite fabricators, suppliers and purchasing agents.
 - e. Testing: Control, verification and acceptance testing procedures for each specific test to include the test name, frequency, specification paragraph containing the test requirements, the personnel and laboratory responsible for each type of test, and an estimate of the number of tests required.
 - f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests, including documentation.

- g. Procedures for tracking deficiencies from identification through acceptable corrective action. These procedures will establish verification that identified deficiencies have been corrected.
- h. Reporting procedures, including proposed reporting formats; include a copy of the CQC report form.
- C. Acceptance of Plans: Acceptance of CONTRACTOR's basic and addendum CQC plan is required prior to start of construction. Acceptance is conditional and will be predicated on satisfactory performance during construction. OWNER reserves right to require CONTRACTOR to make changes in CQC plan and operations including removal of personnel, as necessary, to obtain quality specified.
- D. Notification of Changes: After acceptance of CQC plan, CONTRACTOR shall notify ENGINEER, in writing, a minimum of seven (7) calendar days prior to any proposed change. Proposed changes are subject to acceptance by ENGINEER.

3.5 CONTRACTOR QUALITY CONTROL REPORT

- A. As a minimum, prepare a CQC report for every seven (7) calendar days. Account for all days throughout the life of the Contract. Reports shall be signed and dated by CQC System Manager. Include copies of test reports and copies of reports prepared by QC staff.
- B. Maintain current records of quality control operations, activities, and tests performed, including the WORK of SUBCONTRACTORs and suppliers.
- C. Records shall be on an acceptable form and shall be a complete description of inspections, the results of inspections, daily activities, tests, and other items, including but not limited to the following:
 - 1. CONTRACTOR/SUBCONTRACTOR and their areas of responsibility.
 - 2. Operating plant/equipment with hours worked, idle, or down for repair.
 - 3. WORK performed today, giving location, description, and by whom. When a network schedule is used, identify each phase of WORK performed each day by activity number.
 - 4. Test and/or control activities performed with results and references to specifications/plan requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
 - 5. Material received with statement as to its acceptability and storage.
 - 6. Identify submittals reviewed, with Contract reference, by whom, and action taken.
 - 7. Offsite surveillance activities, including actions taken.
 - 8. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
 - 9. List instructions given/received and conflicts in Drawings and/or Specifications.

- 10. CONTRACTOR's verification statement.
- 11. Indicate a description of trades working on the Project; the number of personnel working; weather conditions encountered; and any delays encountered.
- 12. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in file work and workmanship comply with the Contract.

3.6 SUBMITTAL QUALITY CONTROL

A. Submittals shall be as specified in Section 01 33 00 – Submittals. The CQC organization shall be responsible for certifying that submittals are in compliance with Contract requirements. OWNER will furnish copies of test report forms upon request by CONTRACTOR. CONTRACTOR may use other forms as approved.

3.7 TESTING AND SAMPLING QUALITY CONTROL

A. Testing Procedure:

- Perform tests specified or required to verify that control measures are adequate to provide a product which conforms to Contract requirements. Procure services of a licensed testing laboratory. Perform the following activities and record the following data:
 - a. Verify testing procedures comply with contract requirements.
 - b. Verify facilities and testing equipment are available and comply with testing standards.
 - c. Check test instrument calibration data against certified standards.
 - d. Verify recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.

e. Documentation:

- a) Record results of all tests taken, both passing and failing, on the CQC report for the date taken.
- b) Include specification paragraph reference, location where tests were taken, and the sequential control number identifying the test.
- c) Actual test reports may be submitted later, if approved by ENGINEER, with a reference to the test number and date taken.
- d) Provide directly to ENGINEER an information copy of tests performed by an offsite or commercial test facility. Test results shall be signed by an ENGINEER registered in the state where the tests are performed.
- e) Failure to submit timely test reports, as stated, may result in nonpayment for related WORK performed and disapproval of the test facility for this Contract.

B. Testing Laboratories: Laboratory facilities, including personnel and equipment, utilized for testing soils, concrete, asphalt and steel shall meet criteria detailed in ASTM D3740 and ASTM E329, and be accredited by the American Association of Laboratory Accreditation (AALA), National Institute of Standards and Technology (NIST), National Voluntary Laboratory Accreditation Program (NVLAP), the American Association of State Highway and Transportation Officials (AASHTO), or other approved national accreditation authority. Personnel performing concrete testing shall be certified by the American Concrete Institute (ACI).

a. COMPLETION INSPECTION

A. CQC System Manager shall conduct an inspection of the WORK at completion of the WORK or milestone established by a completion time stated in the Contract.

B. Punchlist:

- 1. CQC System Manager shall develop a punchlist of items which do not conform to the Contract requirements.
- 2. Include punchlist in CQC report, indicating estimated date by which the deficiencies will be corrected.
- CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected and so notify the OWNER.
- 4. Inspections and deficiency corrections required will be accomplished within the time stated for completion of the entire WORK or any particular increment thereof if Project is divided into increments by separate completion dates.

- END OF SECTION -

SECTION 01 77 00 - PROJECT CLOSEOUT

PART 1 - GENERAL

- 1.0 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS:
 - A. Referenced Specification Sections
 - 1. 01 33 00 -Submittals
- 1.1 FINAL CLEANUP

At the completion of work and immediately prior to final inspection, cleaning of the entire project shall be accomplished according to the following provisions:

- A. The CONTRACTOR shall thoroughly clean, sweep, wash, and polish all work and equipment provided under the Contract, including finishes. The cleaning shall leave the structures and site in a complete and finished condition to the satisfaction of the ENGINEER.
- B. All subcontractors shall similarly perform, at the same time, an equivalent thorough cleaning of all work and equipment provided under their Contracts.
- C. The CONTRACTOR shall remove all temporary structures and all debris, including all dirt, sand, gravel, rubbish and waste material.
- D. Should the CONTRACTOR not remove rubbish or debris or not clean the structures and site as specified, the ENGINEER reserves the right to have the cleaning done at the expense of the CONTRACTOR.
- E. Only experienced workers, or professional cleaners, shall be employed for final cleaning.
- F. Only cleaning materials recommended by the manufacturer of surface to be cleaned shall be used.
- G. Cleaning materials shall be used only on surfaces recommended by the cleaning material manufacturers.
- H. In preparation for substantial completion or occupancy, a final inspection of sight-exposed interior and exterior surfaces, and of concealed spaces, shall be conducted.
- Grease, dust, dirt, stains, labels, and other foreign materials shall be removed from sightexposed interior and exterior finished surfaces. Polish surfaces so designated to shine finish.
- J. Marred surfaces shall be repaired, patched, and touched up to specified finish, to match adjacent surfaces.
- K. All temporary utility drops, fencing, and water supply outlets shall be removed.
- L. All identification signs, barricades, tools, rubbish collection receptacles and other such items shall be removed by the CONTRACTOR.

- M. All remaining earthen stockpiles of excess excavated material shall be graded to provide gentle slopes to prevent erosion as directed by the ENGINEER.
- N. The CONTRACTOR shall promptly remove from the vicinity of the completed WORK, all rubbish, unused materials, concrete forms, construction equipment, and temporary structures and facilities used during construction. Final acceptance of the WORK by the OWNER will be withheld until the CONTRACTOR has satisfactorily performed the final cleanup of the Site.

1.2 FINAL INSPECTION

Following final cleanup, the CONTRACTOR shall request an inspection by the ENGINEER of the Work. If the ENGINEER accepts the Work as being complete then Final Acceptance shall be given to the CONTRACTOR in accordance with Contract.

1.3 CLOSEOUT TIMETABLE

A. The CONTRACTOR shall establish dates for equipment testing, acceptance periods, and on-site instructional periods (as required under the Contract). Such dates shall be established not less than one week prior to beginning any of the foregoing items, to allow the OWNER, the ENGINEER, and their authorized representatives sufficient time to schedule attendance at such activities.

1.4 TECHNICAL MANUAL SUBMITTAL

A. The CONTRACTOR's attention is directed to the condition that [one] percent of the Contract Price will be retained from any monies due the CONTRACTOR as progress payments, if at the Substantial Completion point, the approved Technical Manual complying with Section 01 33 00 – Submittals has not been submitted. The aforementioned amount will be retained by the OWNER as the agreed, estimated value of the approved Technical Manual. Any such retention of money for failure to submit the approved Technical Manual on or before the Substantial Completion point shall be in addition to the retention of any payments due to the CONTRACTOR under Article 5 of THE CONTRACT.

1.5 FINAL SUBMITTALS

- A. The CONTRACTOR, prior to requesting final payment, shall obtain and submit the following items to the ENGINEER for transmittal to the OWNER:
 - 1. Approval from agency having jurisdiction.
 - 2. A completed punchlist, signed by CONTRACTOR, ENGINEER, and OWNER.
 - 3. Pump Manufacturer's Certification of Proper Installation
 - 4. Vacated Temporary Construction Servitude.
 - 5. Absolute Bill of Sale
 - 6. FPL Account Transfer
 - 7. Written guarantees, where required.

- 8. Warranties, where required, including but limited to the pump, control panel, valves, pipes, wet well coating, electrical equipments, etc.
- Technical Manuals and instructions.
- 10. New permanent cylinders and key blanks for all locks.
- 11. Maintenance stock items; spare parts; special tools.
- 12. Pump spare parts as required.
- 13. Executed Project Closeout Checklist.
- 14. Completed As-builts, signed and sealed by Louisiana Surveyor.
- 15. Certificates of inspection and acceptance by local governing agencies having jurisdiction.
- 16. Releases from all parties who are entitled to claims against the subject project, property, or improvement pursuant to the provisions of law.
- 17. Releases from all sub-contractor and vendors in contract with the CONTRACTOR.

1.6 FINAL ACCEPTANCE

Following successful final inspection, the ENGINEER shall approve the Work as being complete and provide final acceptance of the Work in accordance with the Contract.

- 1.7 MAINTENANCE AND GUARANTEE
 - A. The CONTRACTOR shall comply with the maintenance and guarantee requirements contained in Article 6 of THE CONTRACT.
 - A. **WARRANTY**: By signing the Contract and providing a Payment and Performance Bond, the Contractor guarantees all materials and workmanship provided under the contract for a period of 1 year after final acceptance.

Upon written notification the Contractor shall promptly correct all work found to be defective during the 1-year period. If the Contractor does not promptly comply with such instructions, or where delay would cause a risk of serious loss of injury, the City-Parish may have the defective work corrected, and all costs thereof shall be borne by the Contractor or the Contractor's Surety under the Performance Bond.

- B. Replacement of earth fill or backfill, where it has settled below the required finish elevations, shall be considered as a part of such required repair work, and any repair or resurfacing constructed by the CONTRACTOR which becomes necessary by reason of such settlement shall likewise be considered as a part of such required repair work unless the CONTRACTOR shall have obtained a statement in writing from the affected private owner or public agency releasing the OWNER from further responsibility in connection with such repair or resurfacing.
- C. The CONTRACTOR shall make all repairs and replacements promptly upon receipt of written order from the OWNER or ENGINEER. If the CONTRACTOR fails to make such repairs or replacements promptly, the OWNER reserves the right to do the WORK and the CONTRACTOR and its surety shall be liable to the OWNER for the cost thereof.

1.8 PUBLIC CONSTRUCTION PERFORMANCE & PAYMENT BOND

A. The CONTRACTOR shall provide a Performance and Payment Public Construction Bond to guarantee performance of the provisions contained in pages SP 1 and SP 6 Paragraph "Maintenance and Guarantee" above, and Section 00200, Sub-section R, of the CONTRACT.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 02 45 30 GEOTECHNICAL INSTRUMENTATION AND MONITORING

PART 1 - GENERAL

1.01 SUMMARY

A. This Section specifies requirements for furnishing, installing, monitoring, reading, recording, maintaining, protecting, and removing or abandoning geotechnical instrumentation. Geotechnical instrumentation consists of settlement monitoring points, and optical survey targets. Requirements for removal are also described in this Section.

B. Related Sections:

- 1. Section, Sheet Piling Installation
- 2. Section 02 48 20 Noise and Vibration Monitoring

C. Definitions:

- 1. Geotechnical Instrumentation: Devices measuring surface and subsurface movement, and movement of existing infrastructure.
- 2. Monuments: A locking steel enclosure case installed to provide protection for instrumentation from vandalism, traffic, and/or debris.
- 3. Settlement Deformation Monitoring Point (SDMP): A system for monitoring vertical deformation (settlement or heave) at or near the ground surface using optical survey techniques.
- 4. Optical Survey Target (OST): Target established to monitor by optical survey methods the occurrence and amount of vertical and horizontal displacements.
- D. Design Criteria: Contractor shall subcontract services of a registered geotechnical engineer and submit a design plan for furnishing, installing, monitoring, reading, recording maintaining, protecting, and removing or abandoning geotechnical instrumentation. Plan shall be approved by engineer prior to beginning of any excavation activities near the south right of way of Third Avenue North.
- E. Performance Requirements: The objective is to avoid and control movements or deflection by implementing appropriate construction procedures. See Table 1 for allowable movement levels.

Table 1- Threshold Value, Contractor's Response Value, and Maximum Allowable Movement Levels

Type of Instrumentation (direction of movement)	Threshold Value (Contractor Action Required)	Contractor's Response Value	Shutdown Value
Deep Settlement Monitoring Point near excavation site	0.5 in	0.75 in	1 in
Optical Survey Targets	0.25 in	0.35 in	0.5 in
Optical Survey Target	0.25 in	0.35 in	0.5 in

Tolerances:

- a. General: Install within 1 ft of theoretical location specified or indicated to avoid obstacles or utilities, except:
 - 1. Where otherwise approved by the Engineer.
- b. Survey Control: Achieve a level circuit closure with closure error no less accurate than third order closure.
- c. Survey Reference Point Readings:

1. Elevation: Within 0.05 in.

2. Position: Within 0.1 in.

- 2. When the instruments indicate movement equal to 50 percent of the maximum allowable has occurred, the Threshold Value is said to have been reached. At this time, the Contractor shall meet with the Engineer to discuss his construction means and methods to determine what changes, if any, shall be made to better control ground movement. Instrument readings shall be taken by the Contractor at double the typical frequency until five (5) consecutive working days of readings below the threshold value are observed or until movement has stabilized, as determined by the Engineer.
- 3. When the instruments indicate movement equal to 75 percent of the maximum allowable value has occurred, the Contractor Response Value is said to have been reached. At this time, the Contractor shall actively control ground movement in accordance with the approved plan to prevent reaching the Shutdown Value. Instrument readings shall be taken by the Contractor at double the typical frequency until five (5) consecutive working days of readings below the Threshold Value are observed or until movement has

- stabilized, as determined by the Engineer, or more often as specified elsewhere in this Section. Contractor shall work continuously to stabilize movement until movement stops.
- 4. When the instruments indicate movement equal to 100 percent of the maximum allowable value, the Shutdown Value is said to have been reached. At this time, the Engineer may direct the Contractor to stop all work immediately, and the Contractor shall meet with the Engineer to develop a plan of action before Work can be resumed. No standby time shall, or any other compensation shall be paid to the Contractor if work is shut down because the Shutdown Value is reached. The Contractor will continue to take instrument readings at double the typical frequency if the shutdown value is reached.
- 5. In the event that any optical survey target located on the adjacent structures (including radio tower). or the deep settlement point near the sheet piling or support wall shows movement of one inch or greater, a structural engineer registered in the State of Louisiana will be required to submit a structural evaluation of the residence walls and any required repair to the related structures. The Contractor shall engage this structural engineer at no additional cost to the Owner. Restoration shall be performed as required in accordance with item 6 below. The Owner reserves the right to perform an assessment of the sheet piling or support wall as well.
- 6. Restoration: Restore damage to existing facilities caused by constructionrelated settlement in excess of allowable maximum values at no additional cost to the owner. Obtain prior approval from the owner for any proposed repairs to roadways or private properties.

1.02 SUBMITTALS

A. General

- 1. Make submittals in accordance with Section 01 33 00, Submittals.
- 2. All instrumentation readings shall be reported in imperial units.
- B. Product Data: Two sets of manufacturers' catalogs, specifications, and installation, operating, and maintenance instructions for each type of data acquisition and management system, instrumentation component, and monitoring device shall be submitted at least 30 days prior to installing instruments.
- C. Shop Drawings: (Not Used)
- D. Working Drawings and Methods Statements:
 - 1. Indicate and describe instrumentation types, locations, and layouts in conjunction with a detailed plan of existing surface and subsurface utilities at a scale no less than 1 in equal to 40 ft. Include identification number or label with elevation, station and offset, and coordinates as applicable for each instrumentation location.

- a. Provide proposed optical survey target layout, soil deformation and monitoring point layout in accordance with this specification.
- Submit a utility protection or relocation plan for the storm drain line and overhead power line in accordance with these specifications and the requirements of the utility owner. Plans should include but are not limited to plans for location, plans for hand exposure, and plans for movement monitoring.
- 3. Methods statements for installing, monitoring, maintaining, protecting, replacing damaged, and removing or abandoning instrumentation.
- 4. Monitoring schedule.
- Corrective measures when Threshold Value, Contractor Response Value, and Shutdown Value are reached for instrumentation within the Third Avenue North area and Gulf Shore Blvd.
- E. A daily report including a summary of all monitoring data collected the previous day. Provide the data electronically and with a hard copy in a format acceptable to the Engineer.

F. Quality Control Plan

- 1. Identify how the quality of materials and installation will be controlled (e.g. measurements, inspections, testing, etc.), including:
 - a. Proposed methods for identifying instrumentation.
 - b. Proposed format for presenting raw data readings. Include the date, time, and name of personnel taking measurements or performing monitoring.
 - c. Methods for assuring the quality of data readings.
 - d. Methods for protecting instrumentation and if damaged, assuring their timely repair or replacement before work continues.
- G. Workforce Qualifications: Submit verification that the workforce is qualified to complete the work of this Section (licenses, certifications, etc.) and that the work has been effectively supervised (manager, foreman, etc.). Submit verification of the following:
 - 1. Installation and Monitoring Personnel: At least three (3) years of experience installing and reading instrumentation of the type specified.
 - 2. Surveyor: Registered Louisiana Land Surveyor with at least three (3) years of experience in surveying of structure or surface deformations.
- H. Certifications:

- 1. Calibration certificates by manufacturer for each sensor, probe, readout device and data logger.
- 2. Initial readings for each instrument within 1 working day of taking readings.
- 3. Required permit(s) for settlement monitoring points and boreholes.

I. Record Drawing Data:

- 1. Legible Surveyor's notes from instrumentation installation within one (1) working day following installation.
- 2. Record drawing of instrumentation type and location accurate to within 1 in vertical and horizontal and at a scale no less than 1 in equal to 40 ft within three (3) working day of installing required instrumentation. Include identification numbers with elevations, stations and offsets, and coordinates as applicable for each type of instrumentation.
- 3. Record drawing details of each instrument, including depth, lengths, elevations, materials used, and dimensions of key elements.
- 4. Procedures and sequence used for installation of each instrument.

1.03 REFERENCES

A. Standards:

- 1. American Society for Testing and Materials (ASTM):
 - a. ASTM A53, Standard Specification for Pipe. Steel, Black and Hot- Dipped Zinc-Coated (Galvanized), Welded and Seamless.
- 2. Other standards as may be required by the Contractor and instrumentation manufacturer.

1.04 JOB CONDITIONS

- A. The anticipated ground conditions are set forth in the Geotechnical Report.
- B. Procurement, installation, and monitoring of the instrumentation shall be performed by the Contractor.

1.05 NOTIFICATIONS

- A. Notify the Engineer as described below:
 - 1. Three (3) working days' notice prior to intended instrument installation.
 - 2. Immediately upon discovering damaged or malfunctioning instrumentation.
 - 3. Immediately for any reading exceeding specified levels or limits.

4. Immediately for any reading exceeding the Threshold Value Levels specified in Table 1

1.06 SEQUENCING AND SCHEDULING

A. Ensure that instrumentation is installed, fully functional, that the first set of readings are taken, and that the instrumentation is ready for monitoring no later than seven (7) days prior to commencement of excavation or another underground construction activity within 200 ft in plan of the designated instrumentation location.

1.07 PRODUCT DELIVERY, STORAGE AND HANDLING

A. As recommended by instrument manufacturers.

1.08 WARRANTY

- A. Equipment warranty as provided by the manufacturer.
- B. Installation warranty shall be for the period of construction and post-construction instrumentation monitoring as specified herein.

PART 2 - GENERAL

2.01 GENERAL

- A. Ensure that all instrumentation components are on hand and approved by the Engineer before excavation begins.
- B. Upon delivery, check all instrumentation components for completeness and damage.

2.02 SETTLEMENT MONITORING POINTS (SMP)

- A. Approximate locations as shown on drawings.
- B. Exact locations proposed by the Contractor to accurately monitor settlement caused by all construction and excavation activities.

2.03 OPTICAL SURVEY TARGETS (OST)

A. Surveyor's prisms or reflectors compatible with the survey equipment used and capable of providing measurements within the specified tolerances.

2.04 GUARD CASING WITH ACCESS COVER

A. Furnish monuments with access cover and install at the ground surface to protect installed utility monitoring points. Use steel of sufficient strength to withstand AASHTO truck loadings where traffic rated covers are required. Provide a traffic rated, minimum 8" ID, watertight access cover.

- B. Inside each monument, install a hardened domed head nail embedded into concrete to serve as a leveling point.
- C. Grout monuments in place and paint with a bright orange paint. In areas where instrumentation is subject to damage by construction operation, install suitable barriers or guard posts as necessary to protect the monuments.

D. UTILITY MONITORING POINTS

- 1. Use black steel pipe and threaded couplings, ASTM A53, welded, standard weight, for inner bench marks monitoring pipes and outer casing.
- 2. Provide monitoring pipes and casing of lengths required for each monitoring location as described in this specification.
- 3. Use ball fabricated read points made of stainless steel.
- 4. Use centering devices for placement between the inner benchmark and outer casing that is suitable for use in deep settlement markers.

PART 3 - EXECUTION

3.01 INSTALLATION

A. General:

 Install instrumentation as shown on Drawings and as approved by the Engineer. Install in accordance with the manufacturer's printed instructions and as specified in this Section. Install within the accuracy limits specified by the manufacturer

B. Settlement Monitoring Point:

- 1. Furnish and install settlement monitoring points as specified herein and as approved by the Engineer.
- 2. Place a minimum of one settlement monitoring point evenly spaced every 10 25 feet near the proposed embankment fill locations, beginning at station 39+00 to 42_50. of the south right of way on Third Avenue North from the Collier County Coastal Control Setback line, as shown in drawings C-102, to the existing benchmark iron pin at N: 660776.157 E:391371.760 for measurement of settlement and heave in front of the north side of the private property located on 215 Gulf Shore Blvd. The Contractor shall also install two settlement monitoring points adjacent to the sheet piling area. The locations of the settlement deformation monitoring points and settlement deformation monitoring point plan are to be approved by the Engineer.
- 3. Place a minimum of three settlement monitoring points, evenly spaced along the adjacent property to the southeast, from station 34+80 to 36+50 (along

the easterly 15-ft sewer servitude); and two settlement monitoring points, evenly spaced, on the east side of the existing building structure from station 102+00 to 102+50 (along the northeasterly 15-ft sewer servitude). north right of way side on Third Avenue North.

- 4. Place a minimum of one deep settlement monitoring point along the south right of way alignment within 3 feet of the sheet piling or support wall. Deep settlement monitoring point shall be capable of measuring settlement 5 feet below the ground surface.
- C. Grout monuments in place and paint with a bright orange paint. In areas where instrumentation is subject to damage by construction operation, install suitable barriers or guard posts as necessary to protect the monuments.

D. Optical Survey Targets:

- A total of 5 optical survey targets are to be securely attached to the sheet piling or support wall along the structures of interest. Optical survey targets will be spaced evenly over the support structure facing the excavation site to capture any movement caused by the excavation and construction activities. Optical survey targets shall be spaced as required to cover the entire support structure.
- 2. Place a minimum of 5 optical survey targets on the adjacent structures of interest. Install optical survey targets on the walls closest to and facing the right of way. Submit the survey target layout for approval by the engineer.

3.02 SURVEYS AND INITIAL READINGS

- A. After installation, survey the location of the top of each instrument or its marker point to a horizontal accuracy of 1 in. and elevation accuracy of 0.1 in. Submit location information to the Engineer.
- B. After completion of each instrument installation, take 3 sets of verification data readings for each instrument to demonstrate the adequacy of the installation, to demonstrate the proper operation of the instrument, and to establish an initial value. Submit the initial readings to the Engineer.

3.03 MONITORING

- A. General: The Contractor shall monitor all instruments during construction. Upon request, provide such assistance, labor and equipment necessary to set up instrumentation and monitor instruments. Cooperate with the Engineer as needed to allow the required monitoring data to be obtained.
- B. The following are minimum requirements when measurements are within specified limits:

- 1. Take additional, immediate measurements where measured values indicate excessive variability, as determined by the Engineer.
- C. Coordinate with such instrumentation monitoring activities as follows:
 - 1. Make probes, sensors, and readout devices available as required.
 - 2. Schedule employees' and subcontractors' activities to minimize interference.
 - 3. Remove obstructions from lines of sight when requested.
- D. Temporarily cease activities that create hazards to instrument monitoring or surveying personnel.
- E. Be available to discuss the interpretation of instrumentation data as used in evaluating sheet piling or support wall performance and controlling settlements to prevent damage to structures, facilities, and utilities.
- F. Monitoring frequency: Monitoring personnel shall be present during the following construction activities:
 - 1. Excavation and rock removal;
 - 2. Driving of any type of sheeting and shoring system;
 - 3. Compaction of backfill and pavement materials;
 - 4. Any other activity that causes ground vibration.

3.04 INSTRUMENT PROTECTION, MAINTENANCE AND RESTORATION

- A. Protect and maintain instruments throughout the duration of monitoring. Drain water or flush debris from under traffic covers. Keep traffic covers secured.
- B. Provide substantial protective barriers around instruments in construction areas that are suitable for protecting instruments from damage due to construction activities.
- C. Maintain instrumentation in accordance with manufacturer recommendations.
- D. Repair or replace damaged or missing instrumentation in accordance with manufacturer recommendations. Repair or replace damaged or missing instrument components or entire instrument within 48 hours or as approved by Engineer. All repairs and replacements will occur at no additional cost to the Owner.
- E. If any instruments deemed by the Engineer to be critical are damaged, the Contractor will be instructed to cease Work until the damaged instrument is replaced and readings re-established. The Contractor will not be entitled to additional time or compensation resulting from this delay or the cost of materials, labor and equipment to install the replacement.

F. For replacement instrumentation, take initial readings and correlate with previous readings.

3.05 REMOVAL OR ABANDONMENT

A. Removal:

- 1. Verify with Engineer that instrumentation is no longer required, only then, instruments and monitoring activities shall be concluded.
- 2. Remove instrumentation prior to substantial completion of the work, unless otherwise indicated
- Remove all instrumentation per requirements and methods of the applicable regulatory agency. Backfill holes with grout mix approved by the applicable regulatory agency and restore surfaces to conditions existing before installation.
- 4. Fill holes drilled in masonry or concrete surfaces with cement mortar to present an appearance matching the surrounding surface.
- B. Abandonment of Soil Deformation Monitoring Points
 - 1. Soil Deformation Monitoring Points shall be extracted. Voids shall be grouted in place using an approved grout mix. Concrete and steel covers shall be removed and replaced with appropriate backfill materials, and the surface compacted and properly restored to match existing conditions.

3.06 FIELD QUALITY CONTROL

- A. Products: Submit verification that the installed products are authentic (delivery receipts, bill of lading, etc.).
- B. Execution: Submit verification that the work was installed correctly (inspection records, Record Drawings, etc.).
 - 1. Provide survey coordinates for all buried products.
 - 2. Provide photographs for all buried products.
- C. Testing and Inspection
 - 1. The Contractor shall be responsible for the performance of all inspection and testing.
 - 2. The Contractor shall provide free access to the Engineer upon request for additional inspection and testing.

END OF SECTION

CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION. 2. THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL DEBRIS FROM DEMOLITION AT CONTRACTORS EXPENSE.

3. ALL BUILDING COORDINATES ARE TO OUTSIDE CORNER OF COLUMN OR BUILDING.

4. THE CONTRACTOR SHALL DISPOSE OF ALL NON-ORGANIC WASTES SUCH AS OLD GUNITE, PIPING, ROCK RUBBLE, SLUDGE, ETC... AT AN APPROVED LANDFILL OR, OTHER SUITABLE DISPOSAL SITES AT THE CONTRACTOR'S EXPENSE.

5. CONTRACTOR SHALL RESTORE ALL SURVEY MONUMENTS THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION.

6. CONTRACTOR SHALL PERFORM ALL OF THE WORK WITHIN THE PERMANENT OR TEMPORARY CONSTRUCTION SERVITUDE

7. ALL PAVEMENT ELEVATIONS SHALL BE MATCHED AFTER RESTORATION.

8. GEOTECHNICAL REPORT PROVIDES SOIL INFORMATION IN THE VICINITY OF THE PROJECT. METHOD OF EXCAVATION AND STABILIZATION OF DEEP HOLES ARE MEANS AND METHODS OF THE CONTRACTOR, WITH SHEET PILING TO BE THE PREFERABLE OPTION, HOWEVER, IF CONTRACTOR CHOOSES TO EXCAVATE WITHOUT STABILIZING THROUGH THE USE OF SHEET PILES IT IS DONE AT THEIR OWN DISCRETION WITHOUT ANY ADDITIONAL COMPENSATION.

9. CONTRACTOR TO HAVE EXTREME CAUTION WORKING AROUND GAS LINE. GAS LINE IS TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION. ANY POTENTIAL CONFLICTS SHALL BE IDENTIFIED AND DIRECTED TO EOR, PSIP, AND UTILITY COMPANY

10. CONTRACTOR SHALL MAINTAIN FUNCTION OF SEWAGE PUMPING DURING CONSTRUCTION BY UTILIZING BYPASS PUMPING SYSTEM, FITTING AND VALVES AS REQUIRED. CONTRACTOR SHALL SUBMIT A PLAN OUTLINING SEWAGE "BY PASS" PROCEDURE TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.

11.CONTRACTOR SHALL PERFORM ALL WORK WITHIN LEGAL PROPERTY AND EASEMENTS, AND SHALL NOT DISTURB ADJACENT PROPERTY WITHOUT EXPLICIT PERMISSION FROM THE ADJACENT PROPERTY OWNER. CONTRACTOR SHALL INCLUDE NECESSARY CUTTING PATCHING AND RESTORATION OF ALL EX. SURFACES TO MATCH THE SURROUNDING

12.CONTRACTOR SHALL COMPLY WITH THE LOCAL APPROVED SWPP PLAN FOR THIS AREA. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST FEDERAL, STATE AND LOCAL AGENCY'S REGULATIONS AND STANDARDS.

1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE ALL EX. UTILITIES IN AND AROUND THE AREAS OF NEW CONSTRUCTION. THE CONTRACTOR SHALL POTHOLE FOR EX. UTILITIES PRIOR TO SUBMITTAL OF SHOP DRAWINGS, FOR POINTS OF CONNECTIONS.

2. THE CONTRACTOR SHALL PROTECT ALL REMAINING EX. UTILITIES.

3. LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS WERE OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL VERIFY ALL LOCATIONS AND ELEVATIONS AND SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT UTILITY LINES WHETHER SHOWN OR NOT SHOWN.

4. PRIOR TO ANY CONNECTION TO AN EX. UTILITY, THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER. PRIOR TO ANY EXCAVATION IN THE VICINITY OF ANY EX. UNDERGROUND FACILITIES, INCLUDING ALL WATER, SEWER, STORM DRAIN, GAS, PETROLEUM PRODUCTS, OR OTHER PIPELINES; ALL BURIED ELECTRIC POWER, COMMUNICATIONS, OR TELEVISION CABLES; ALL TRAFFIC SIGNAL AND STREET LIGHTING FACILITIES; AND ALL ROADWAY, STATE HIGHWAY, AND RAILROAD RIGHTS-OF-WAY, THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE AUTHORITIES REPRESENTING THE OWNERS OR AGENCIES RESPONSIBLE FOR SUCH FACILITIES NOT LESS THAN 3 DAYS NOR MORE THAN 7 DAYS PRIOR TO EXCAVATION SO THAT A REPRESENTATIVE OF SAID OWNERS OR AGENCIES CAN BE PRESENT DURING SUCH WORK IF THEY SO DESIRE. IN THE CASE OF THE UNDERGROUND UTILITY SERVICE ALERT CENTER, THIS NOTICE WILL GIVE THEM TIME TO MARK THE LOCATION OF THE UTILITIES. THE CONTRACTOR SHALL ALSO NOTIFY THE REGIONAL OR LOCAL UNDERGROUND SERVICE ALERT COMPANY AT LEAST 3 DAYS, BUT NO MORE THAN 7 DAYS, PRIOR TO SUCH EXCAVATION.

UTILITY INSTALLATION, INCLUDING EXCAVATION AND BACKFILL WITHIN PS SITE SHALL OCCUR AFTER EMBANKMENT AND SETTLEMENT WORK IS COMPLETED. THE CONTRACTOR SHALL COMPLY WITH THE STATE DEPARTMENT OF HEALTH SERVICES CRITERIA FOR THE SEPARATION OF WATER MAINS AND SANITARY SEWERS.

3. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 36 INCHES OF COVER ON ALL PIPELINES UNLESS OTHERWISE SHOWN OR

4. STRAIGHT SLOPES SHALL BE MAINTAINED BETWEEN INVERT ELEVATIONS SHOWN OR SPECIFIED.

5. THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES, PULL BOXES AND MANHOLES TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR SPECIFIED. MANHOLES IN OPEN FIELDS SHALL BE SET ONE FOOT ABOVE GRADE. APPROXIMATE RIM ELEVATIONS ARE SHOWN ON DRAWINGS.

6. ALL PIPE TRENCHING AND BACKFILL SHALL BE IN ACCORDANCE WITH DETAIL C-602 FOR RIGID PIPE AND C-601 FOR FLEXIBLE PIPE. THE PIPING SHOWN ON THESE PLANS SHALL BE RESTRAINED JOINT DESIGN AT ALL SLEEVE TYPE COUPLINGS.

7. THE CONTRACTOR SHALL PROVIDE TWO FLEXIBLE SLEEVE TYPE COUPLINGS WITH RESTRAINED JOINTS FOR EACH PIPE PENETRATING A STRUCTURE. THE COUPLINGS AND FLEXIBLE JOINTS SHALL BE 3-FEET AND 8-FEET AWAY FROM THE STRUCTURE. ALL PIPING SHALL BE RESTRAINED JOINT DESIGN UNLESS INDICATED OTHERWISE. COUPLINGS AND RESTRAINED JOINTS SHALL BE PROVIDED WHETHER SHOWN ON THE DRAWINGS OR NOT. STEEL PIPE RESTRAINED HARNESS SETS SHALL BE PROVIDED IN ACCORDANCE WITH AWWA M-11. ALL OTHER PIPES, COUPLINGS AND RESTRAINED JOINTS SHALL BE APPROVED BY THE ENGINEER. ALL RESTRAINED JOINTS SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURERS' RECOMMENDATIONS.

EROSION CONTROL

1. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN FOR WORK DURING THE CONSTRUCTION, SIGNED AND STAMPED BY A REGISTERED CIVIL ENGINEER PRIOR TO THE START OF CONSTRUCTION.

a. ALL SLOPES SHALL BE PROTECTED FROM EROSION DURING ROUGH GRADING OPERATIONS AND THEREAFTER, UNTIL INSTALLATION OF FINAL GROUNDCOVER.

b. ALL SLOPE PROTECTION SWALES SHALL BE CONSTRUCTED AT THE SAME TIME AS BANKS ARE GRADED.

c. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF EROSION CONTROL MEASURES CONTAINED WITHIN THE CONTRACT SPECIFICATIONS OR AS REQUIRED BY THE CITY, DISTRICT, OR OTHER REGULATORY AUTHORITY. THE CONTRACTOR SHALL ALSO PROVIDE ANY ADDITIONAL EROSION CONTROL MEASURES (E.G. HYDROSEEDING, MULCHING OF STRAW, SAND BAGGING, DIVERSION DITCHES, ETC.) DICTATED BY FIELD CONDITIONS TO PREVENT EROSION OR THE INTRODUCTION OF DIRT, MUD, OR DEBRIS INTO EX. PUBLIC STREETS, WATERWAYS, OR ONTO ADJACENT PROPERTIES DURING ANY PHASE OF CONSTRUCTION OPERATIONS.

2. EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

3. PROTECT MATERIAL STOCKPILES FROM CONTRIBUTING TO SEDIMENT

4. ANY SOIL, MUD, OR DEBRIS WASHED, TRACKED OR DEPOSITED ONTO PAVED SURFACES SHALL BE REMOVED PRIOR TO THE END OF EACH WORK DAY.

5. CONTRACTOR SHALL MAINTAIN EROSION AND SEDIMENT CONTROL UNTIL PROJECT COMPLETION.

6. THE CONTRACTOR SHALL PRACTICE GOOD HOUSEKEEPING BY INSTITUTING A CLEAN, ORDERLY CONSTRUCTION SITE. THE FOLLOWING CONTROLS SHALL BE IMPLEMENTED TO FURTHER REDUCE POLLUTION AT THE PROTECTED SITE:

a. DISCHARGE OF MATERIALS TO SURFACE WATERS.

NO CONSTRUCTION MATERIAL SHALL BE DISCHARGED TO WATERS OF THE WATER OF THE U.S. A SECTION 404 PERMIT IS A FEDERAL PERMIT FOR WATERS THAT CONVEY DRAINAGE AND COVERS ALL STATES. A SECTION 404 PERMIT AND/OR A STATE OF LOUISIANA **ENVIRONMENTAL RESOURCE PERMIT. ALL CONSTRUCTION DEBRIS** SHALL BE DISPOSED OF IN AN APPROVED UPLAND LOCATION. BUILDING MATERIAL SHALL NOT BE DISPOSED OF IN WETLANDS OR BURIED ON-SITE.

b. OFF-SITE VEHICLE TRACKING AND DUST CONTROL.

- THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE THE CLEANUP OF SEDIMENTS THAT HAVE BEEN TRACKED BY VEHICLES OR HAVE BEEN TRANSPORTED BY WIND OR STORMWATER ABOUT THE SITE OR ONTO NEARBY ROADWAYS.

- STABILIZED CONSTRUCTION ENTRANCES AND CONSTRUCTION ROADS, IF APPROPRIATE, SHALL BE IMPLEMENTED IN ORDER TO REDUCE OFFSITE TRACKING.

- LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPAULIN.

c. CONCRETE TRUCKS SHALL NOT BE WASHED OUT AT SITE. CONTRACTOR SHALL INDICATE IN WRITING TO THE ENGINEER THE LOCATION AT WHICH CONCRETE TRUCKS WILL BE WASHED OUT.

SPILL KIT MUST BE PROVIDED ON SITE DURING ENTIRE DURATION OF PROJECT OR UNTIL REMOVAL IS APPROVED BY CITY. SPILL KIT MUST BE APPROPRIATE FOR SCOPE OF WORK & EQUIPMENT ONSITE.

9. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE EROSION CONTROL MEASURES TO PREVENT CLOGGING OF EX. DRAINAGE STRUCTURES AND SEDIMENT INTRUSION INTO WATERWAYS DURING CONSTRUCTION. THESE MEASURES SHALL BE APPROVED BY THE ENGINEER AND CONFORM WITH CURRENT EDITION OF THE FDOT DESIGN STANDARDS FOR EROSION CONTROL (100 SERIES).

10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL OF STORM WATER FROM ROADWAYS UTILIZED FOR MAINTAINING TRAFFIC IN A MANNER APPROVED BY THE ENGINEER. COST OF REMOVING THE WATER SHALL BE INCLUDED IN PAY RELATED BID ITEM.

11. CONTRACTOR SHALL CLEAN EX. DRAINAGE SYSTEM IN ITS ENTIRETY WITHIN THE VICINITY OF THE PROJECT PRIOR TO FINAL SITE APPROVAL. CLEANING SHALL INCLUDE:

11.1. VACUUM OF ALL STRUCTURES WITHIN CONSTRUCTION LIMIT 11.2. JET CLEANING OF CONNECTING DRAINAGE PIPES 11.3. CCTV OF DRAINAGE PIPES AND PROVIDE CDS TO SUNRISE CDD AND CITY AT END OF CONSTRUCTION

12. SURVEY CONTROL VERTICAL CONTROL: NAVD 1988 HORIZONTAL CONTROL: NAD 1983

THE FOLLOWING SEQUENCE IS A CONCEPTUAL RECOMMENDATION. THE CONTRACTOR SHALL PREPARE THEIR OWN SEQUENCE AND SUBMIT TO THE OWNER AND ENGINEER OF RECORD FOR REVIEW AND APPROVAL. SEE SPECIFICATION SECTION 01 14 00 FOR ADDITIONAL REQUIREMENTS AND RESTRICTIONS.

PHASE 1

1. COORDINATE WITH ENTERGY AND ESTABLISH SCHEDULE FOR TEMPORARY AND PERMANENT POWER. COORDINATE WORK WITH CONSTANTIN BLVD CONTRACTOR TO ENSURE NEW PS 299 DRIVEWAY, WW FM STUB-OUT, AND SEWER GRAVITY STUB-OUT ARE AVAILABLE FOR TIE-IN AND USE.

2. MOBILIZE TO NEW PS 299 SITE, SETUP STAGING AREAS, AND PERFORM UTILITY INVESTIGATION AS REQUIRED.

INSTALL ALL EROSION CONTROL DEVICES, CONSTRUCTION SIGNAGE, TEMPORARY FENCING, AND TEMPORARY TRAFFIC CONTROL DEVICES.

PREPARE SITE AS REQUIRED INCLUDING CLEARING/GRUBBING, STRIPPING OF EXISTING GROUND, STABILIZATION OF ALL STRUCTURES IN PROXIMITY OF WORK, REMOVAL OF ANY STRUCTURES IN CONFLICT WITH THE WORK, AND ESTABLISH TEMPORARY ROADS AS REQUIRED.

PREPARE EXPOSED SUBGRADE AS REQUIRED, AND INSTALL RAISED EMBANKMENT. MONITOR AND ALLOW FOR SETTLEMENT OF EMBANKMENT.

UTILITY INSTALLATION. INCLUDING EXCAVATION AND BACKFILL WITHIN PS SITE SHALL OCCUR AFTER EMBANKMENT AND SETTLEMENT WORK IS COMPLETED PREPARE SITE FOR INSTALLATION OF NEW FM AND GRAVITY SEWER SYSTEM. INCLUDES CLEARING/GRUBBING, PROTECTION & STABILIZATION OF ALL EXISTING STRUCTURES ALONG ALIGNMENT OF THE WORK.

CONSTRUCT GRAVITY SEWER SYSTEM FROM EX. PS 299 TO STATION 107+00. PERFORM TESTING AND CERTIFICATION FOR THIS SEGMENT OF THE WORK.

CONSTRUCT NEW DW FM FROM EX. PS 299 TO STATION 407+00. PERFORM TESTING AND CERTIFICATION FOR THIS SEGMENT OF THE WORK.

5. RESTORE SITE AS REQUIRED ALONG THIS PORTION OF THE WORK.

PHASE 3

1. AFTER THE SETTLEMENT PERIOD HAS ENDED, RE-MOBILIZE TO THE NEW PS 299 SITE.

2. PREPARE & IMPLEMENT BYPASS SYSTEM FOR STORMWATER WORK. REMOVE EX. STORMWATER AND INSTALL NEW STORMWATER STRUCTURES AND PIPE. BACKFILL THIS AREA AS REQUIRED.

PREPARE SITE FOR DEEP EXCAVATION OF WET WELL. INSTALL COFFERDAM AS REQUIRED FOR INSTALLATION OF WET WELL. DEWATER AS REQUIRED.

4. CONSTRUCT WET WELL, REMOVE SHEETING AS REQUIRED, AND BACKFILL THIS AREA AS REQUIRED.

5. FINISH CONSTRUCTION OF GRAVITY SEWER SYSTEM WITHIN THE NEW PS 299 SITE.

CONSTRUCT UNDERGROUND UTILITIES WITHIN NEW PS 299 SITE AS SHOWN ON PLANS, INCLUDING NEW DW & WW FM, WATER SERVICE, AND ALL OTHER MISC. PIPING.

CONSTRUCT NEW GRAVITY SEWER SYSTEM, WATER SERVICE, AND WW FM ALONG NEW DRIVEWAY UP TO EXISTING CONSTANTIN BLVD. SEWER STUB-OUTS. AYOUT ELECTRICAL EQUIPMENT, INSTALL ELECTRICAL CONDUITS AS REQUIRED.

NSTALL MISC. DRAINAGE FOR SITE. 9. TEST AND CERTIFY NEW DW, WW FM, AND GRAVITY SEWER SYSTEM CONSTRUCTED

10. SETUP TEMPORARY STUB-OUTS OF WW & DW FM FOR TEMPORARY SEWER BYPASS.

1. SETUP SEWER BYPASS SYSTEM AND CONNECT TO NEW DW & WW FM. PLUG EX. PS 299 WET WELL AS NEEDED TO FACILITATE BYPASS PUMPING.

2. DECOMMISSION EX. PS 299.

3. MODIFY EX. PS 299 INTO A GRAVITY SEWER MH AS SHOWN ON PLANS.

4. RESTORE EX. PS 299 SITE AS REQUIRED.

1. PREPARE NEW PS 299 SITE FOR RECEIPT OF LONG LEAD EQUIPMENT.

2. FINALIZE ELECTRICAL AND ENTERGY INSTALLATIONS AND INSTALL EQUIPMENT PADS. ENSURE NEW ENTERGY FACILITIES ARE ENERGIZED AND OPERATIONAL.

3. INSTALL PERIMETER WALL FOOTING AND BOTTOM OF WALL. BACKFILL, GRADE, AND PREPARE SITE FOR FINAL SLABS ON GRADE.

4. INSTALL SITE CONCRETE AREAS AND AS SHOWN ON PLANS.

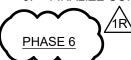
5. INSTALL MECHANICAL PIPING, VALVES, FLOW METERS, AND ASSOCIATED APPURTENANCES AS REQUIRED.

6. INSTALL LONG LEAD EQUIPMENT AND ASSOCIATED WIRING.

7. PERFORM STARTUP OF NEW PS 299 AND CERTIFY STATION.

8. REMOVE SEWER BYPASS SYSTEM AFTER TESTING PERIOD OF NEW PS 299 HAS BEEN COMPLETED.

9. FINALIZE CONSTRUCTION OF PERIMETER WALL.



PREPARE NEW DRIVEWAY ROAD AND ENTRANCE AREA, CONSTRUCT NEW BASE, AND GRADE AS REQUIRED.

2. RESTORE ALL SITES AS REQUIRED.

APPLY FOR SUBSTANTIAL COMPLETION AND FACILITATE PUNCHLIST VISIT.

4. FINALIZE GRADING AT ALL LOCATIONS. PREPARE SITE FOR FINAL LANDSCAPING.

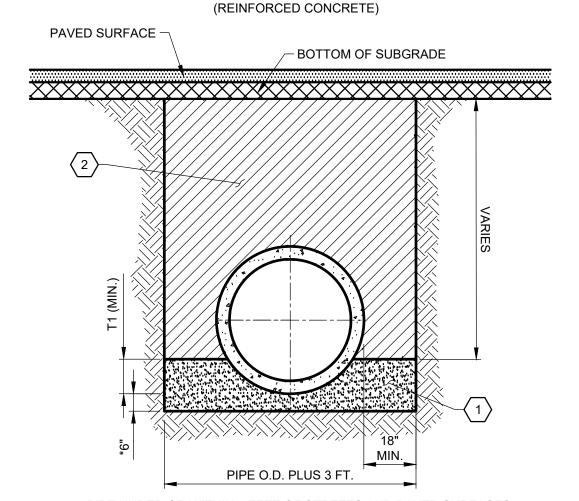
INSTALL GENERATOR UPON RECEIPT. INCLUDES CRANE RENTAL AND RESTORATION OF NEW SITE AS NEEDED. PERFORM STARTUP OF NEW GENERATOR AND PLACE INTO OPERATION.

6. CLOSEOUT PROJECT AND APPLY FOR FINAL COMPLETION.



60 0 5 20 | ェ CITY

C-1



RIGID PIPE

PIPE UNDER OR WITHIN 5 FEET OF STREETS AND PAVED SURFACES.

* BEDDING UNDER PIPE SHALL BE 6" UNLESS OTHERWISE SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS.

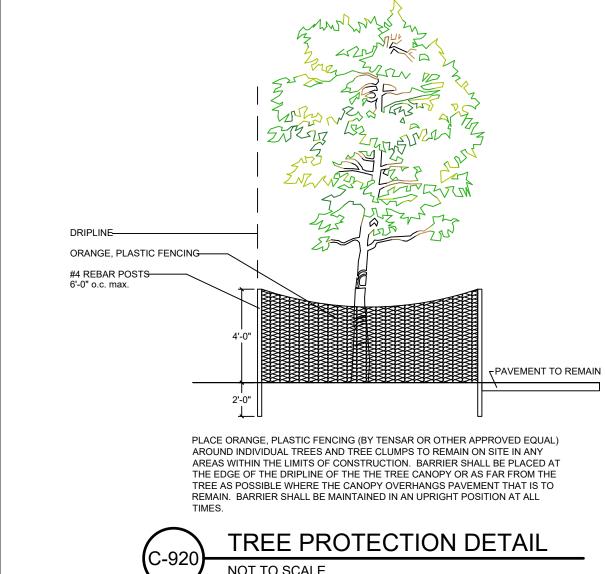
GENERAL NOTES

ALL MATERIALS AND WORK SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF BATON ROUGE AND PARISH OF EAST BATON ROUGE-"STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".

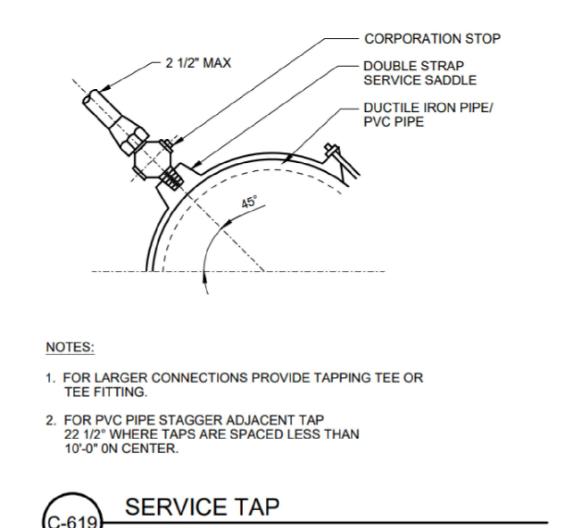
LEGENDS

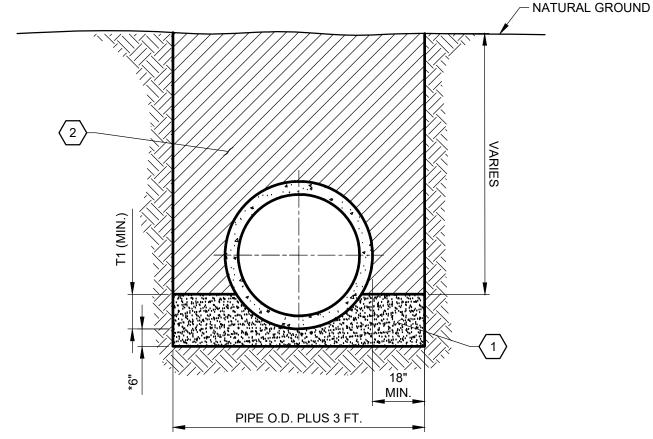
- 1. BEDDING MATERIAL COMPACTED TO 95% STANDARD
- PROCTOR DENSITY. (SEE SPECIFICATION SECTION 801-3 FOR DETAILS).
- 2. BACKFILL MATERIAL (SEE STRUCTURAL FILL AS SPECIFIED IN SPECIFICATIONS APPENDIX B GEOTECHNICAL REPORT)
- a. REUSÉD SITE SOIL:
- 1. LEAN CLAYEY SOIL FREE OF DELETERIOUS MATERIALS 2. LIQUID LIMIT < 50, PLASTICITY INDEX > 10 AND <30
- b. IMPORTED BACKFILL
- 1. LEAN CLAY/CLAYEY SAND (CL, SC) WITH LIQUID LIMIT < 45, PLASTICITY INDEX > 10 AND < 25 2. SAND (SP, SP-SM) WITH PARTICLE SIZE CLASSIFICATION OF LESS THAN 10% PASSING NO. 200 SIEVE.
- 1. 9" OR LESS IN LOOSE THICKNESS WHEN HEAVY, SELF-PROPELLED COMPACTION EQUIPMENT USED.
- 2. 4"-6" IN LOOSE THICKNESS WHEN HAND GUIDED EQUIPMENT IS USED.
- d. MINIMUM COMPACTION REQUIREMENTS: 1. 95% OF MAX. DENSITY BELOW FOUNDATIONS, FLOOR SLABS, AND FINISHED PAVEMENT SUBGRADE.
- e. WATER CONTENT RANGE: 1. LOW PLASTICITY COHESIVE: -2% TO +3% OF OPTIMUM
- 2. HIGH PLASTICITY COHESIVE: 0 TO +4% OF OPTIMUM
- 3. GRANULAR: -3% TO +3% OF OPTIMUM
- 4. AGGREGATE BASE: -2% TO +2% OF OPTIMUM.

PIPE BEDDING SCHEDULE (RIGID PIPE)		
PIPE SIZE T1 (MIN.)		
12"-30"	6"	
36"-60"	12"	
66"-96"	18"	



NOT TO SCALE



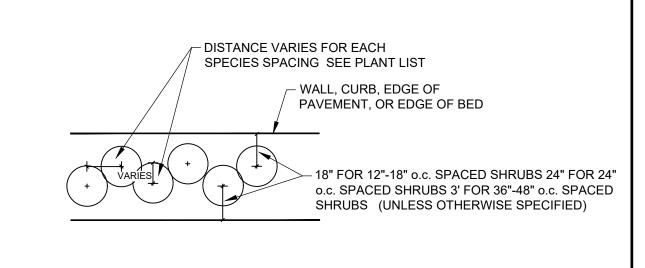


OPEN GROUND OUTSIDE LIMITS OF STREETS AND PAVED SURFACES



TRENCHING DETAILS FOR STORM PIPE

NOT TO SCALE





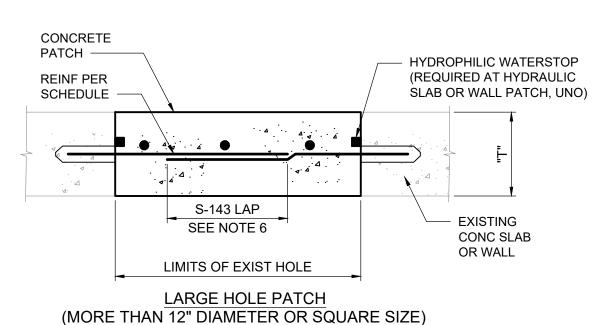
SHRUB SPACING DIAGRAM

NUMBER

ST

CONCRETE HYDROPHILIC WATERSTOP (REQUIRED AT HYDRAULIC PATCH -SLAB OR WALL PATCH, UNO) 4 . 4 . 4 - EXISTING LIMITS OF CONC SLAB **EXIST HOLE** OR WALL SMALL HOLE PATCH

(LESS THAN 12" DIAMETER OR SQUARE SIZE)



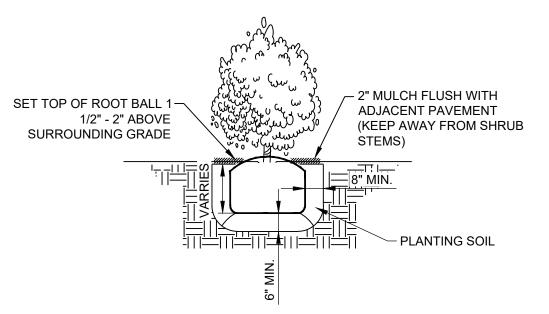
- 1. ROUGHEN EXISTING CONCRETE SURFACE FOLLOWING SPECIFICATION SECTION 03 01 00 REQUIREMENTS PRIOR TO PROCEEDING WITH CONCRETE PATCH WORK.
- 2. CLEAN ANY EXISTING EXPOSED REINFORCEMENT AND PROVIDE CORROSION INHIBITOR PRIOR TO CONCRETE PATCH.
- 3. WHERE REQUIRED BY PATCH TYPE, INSTALL NEW REINFORCEMENT BY DOWELING INTO EXISTING CONCRETE WITH APPROVED EPOXY ADHESIVE ANCHORING SYSTEM AS REQUIRED BY SPECIFICATION SECTION 03 60 00 BASED ON APPLICATION TYPE (HYDRAULIC OR NON-HYDRAULIC PATCH).
- CONTINUE REPAIR PROCEDURE FOLLOWING SECTION 03 01 00 REQUIREMENTS.
- FLOAT-FINISH THE REPAIRED SURFACE USING WOOD OR SPONGE FLOATS, ENSURING EACH SIDE OF PATCH IS FLUSH WITH SURROUNDING SURFACE.
- WHEN HOLE PATCH IS LESS THAN REQUIRED LAP PLUS MINIMUM EMBEDMENT LENGTH, THE CONTRACTOR MAY REDUCE LAP LENGTH TO ACCOMMODATE HOLE SIZE.

REINFORCING SCHEDULE			
"T"	REINFORCING	EMBEDMENT	
≤ 8"	#5@12" EW CENTERED	13"	
> 8" TO ≤ 12"	#4@8" EW EF	10"	
> 12" TO ≤ 18"	#5@8" EW EF	13"	
> 18"	#6@12" EW EF	15"	



HOLE PATCH

(CONCRETE SLAB OR WALL)



NOTES:

1. INSTALL MATURE 7-GALLON, 10-FT TALL VIBURNUM SPECIES SHRUBS SPACED 4-FT O.C



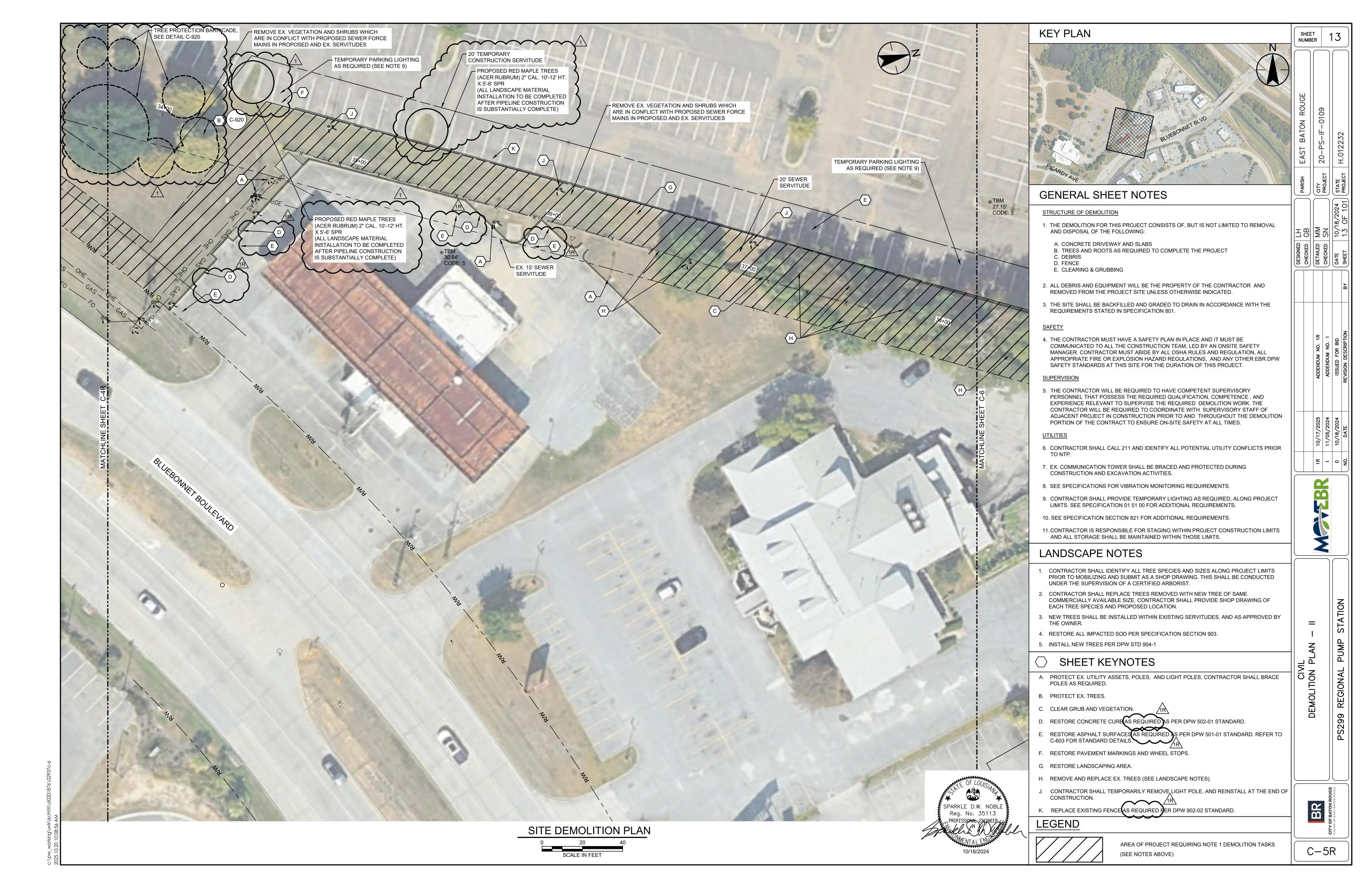
SHRUB INSTALLATION DETAIL

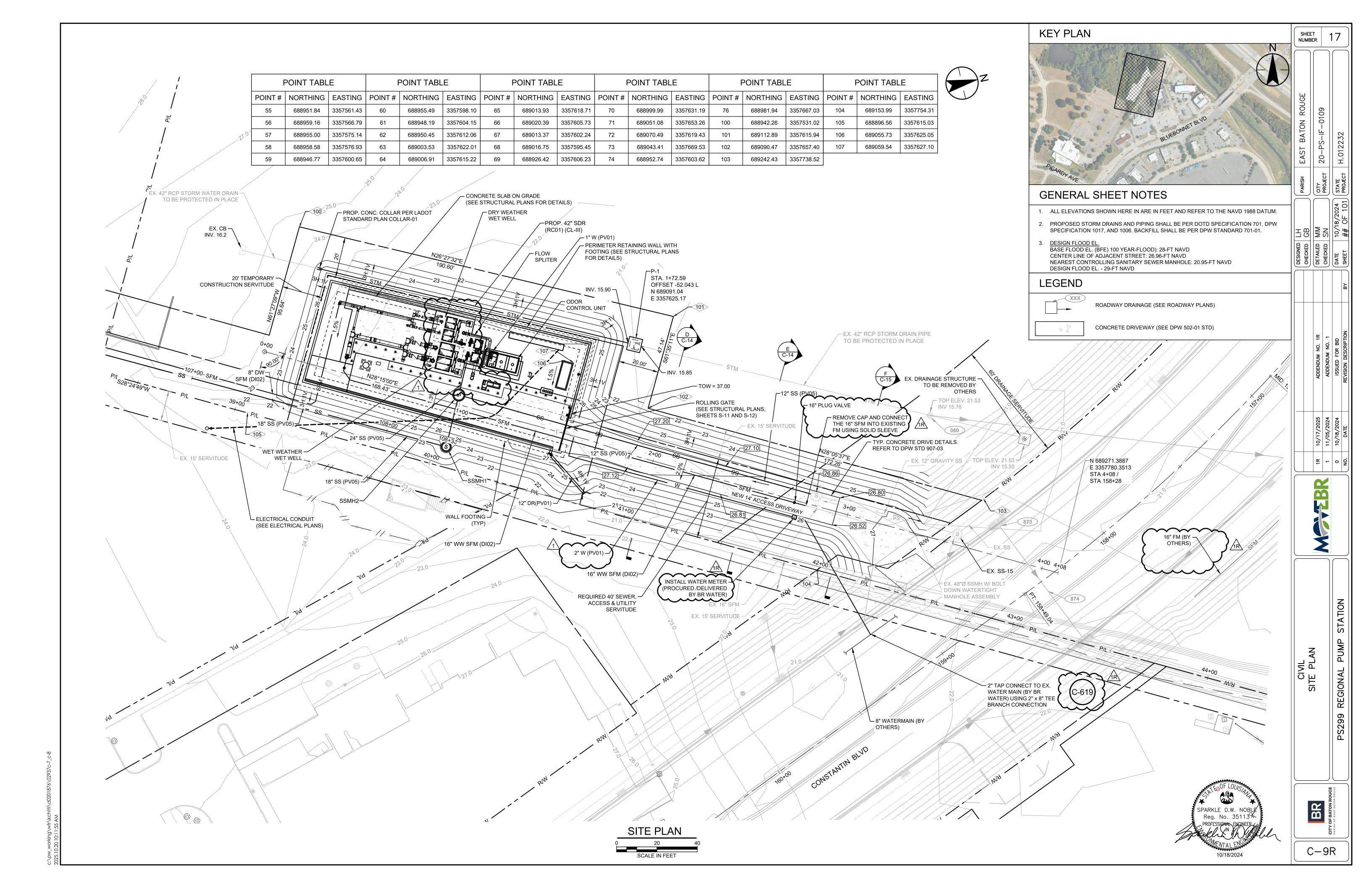
NOT TO SCALE

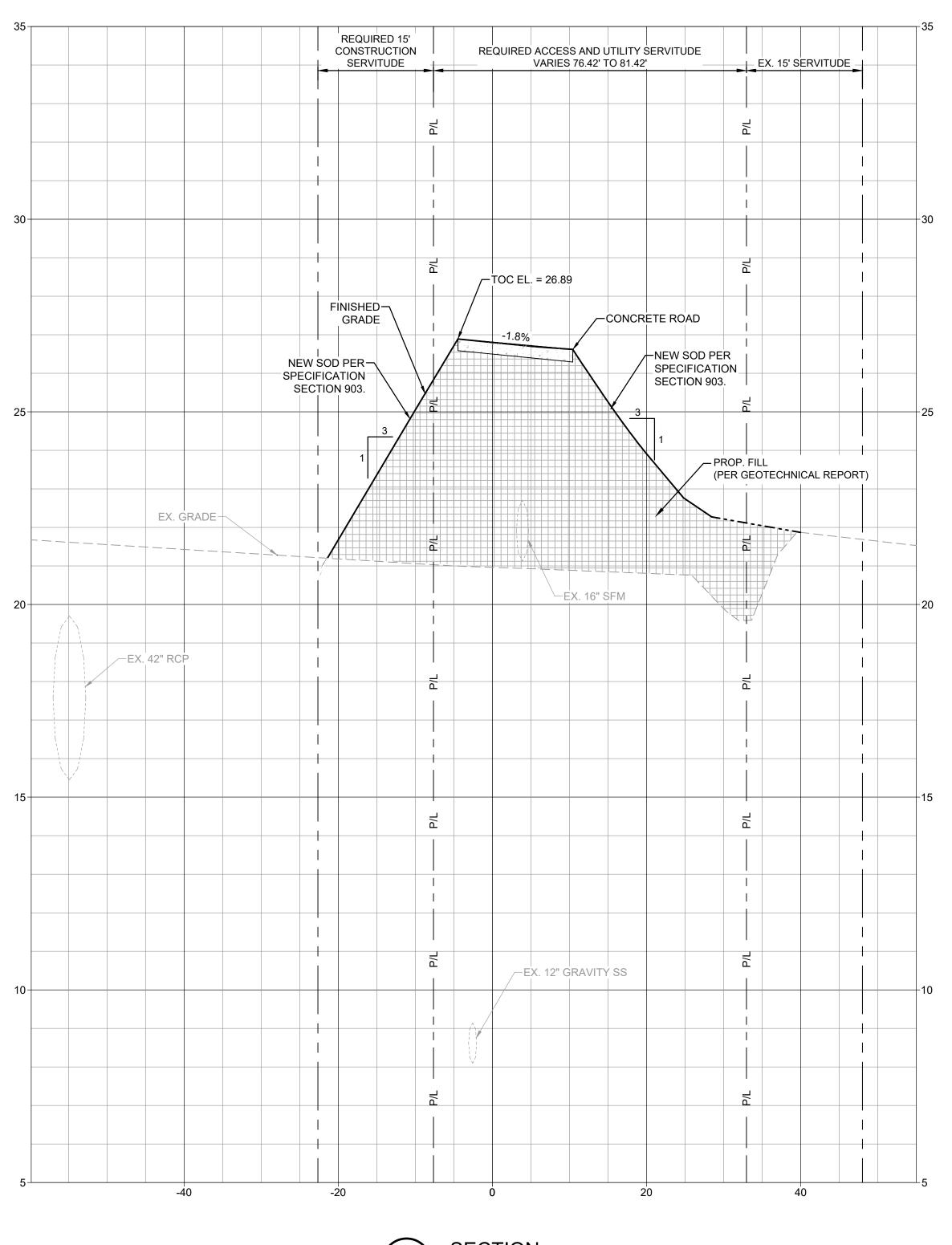




C-3R



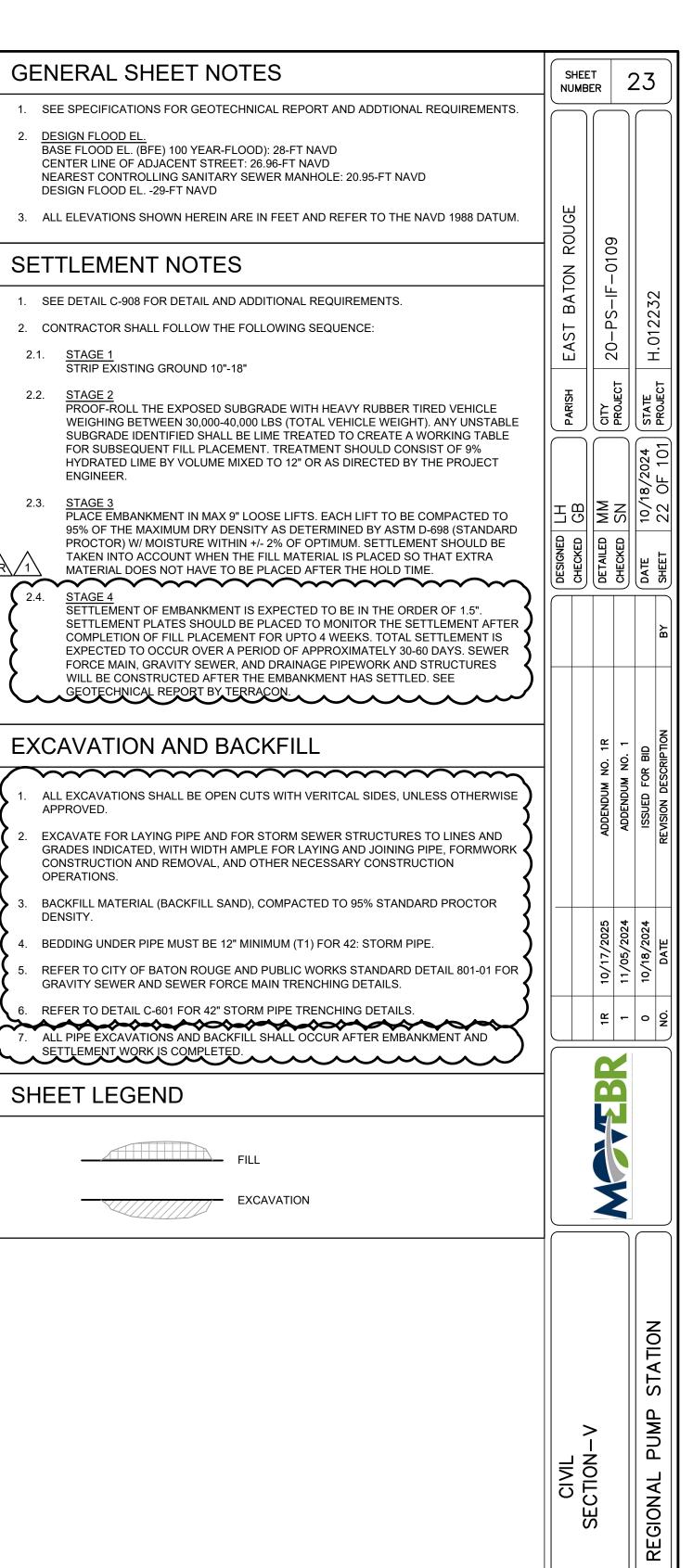




F SECTION

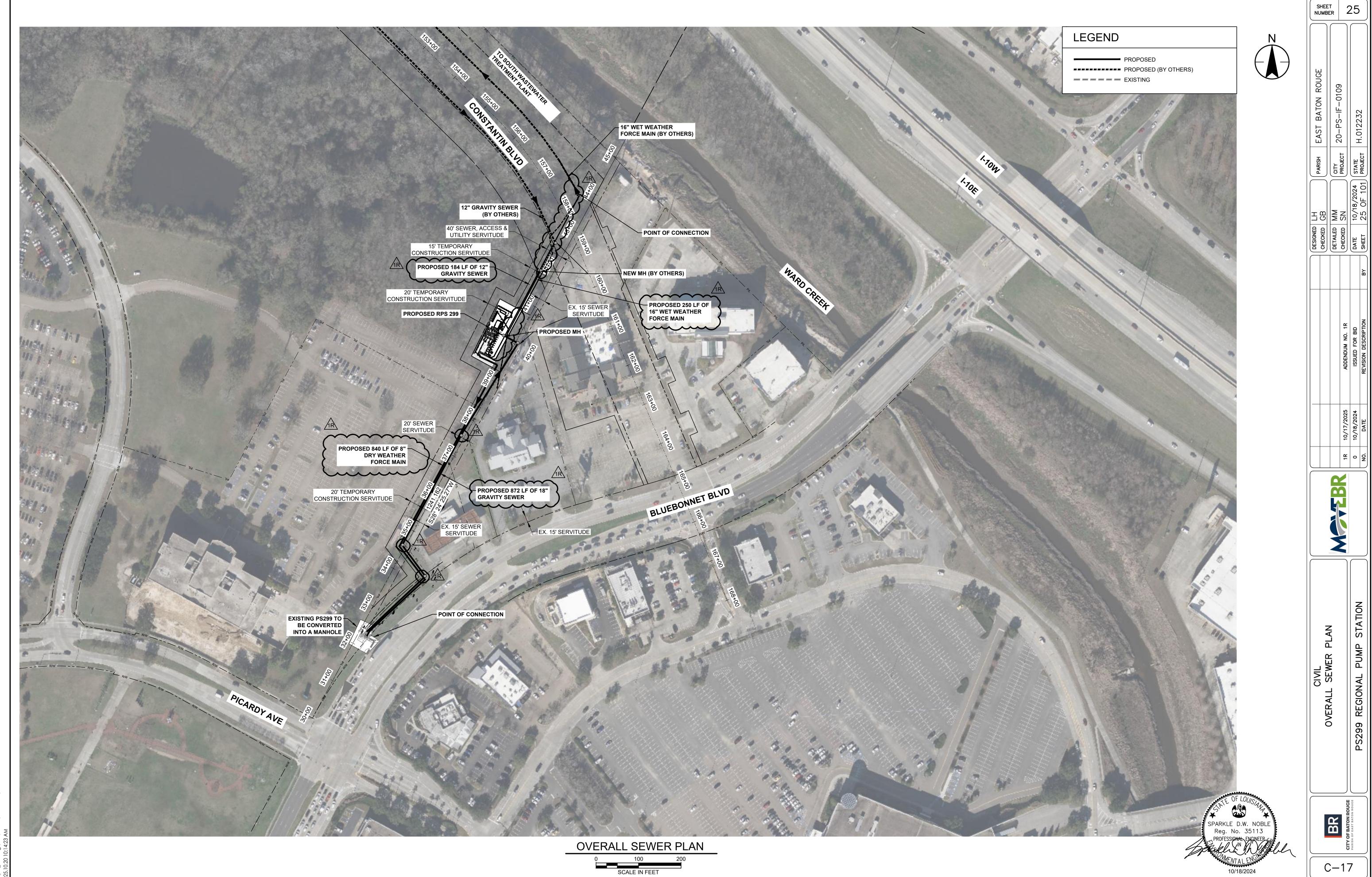
C-9 HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2'



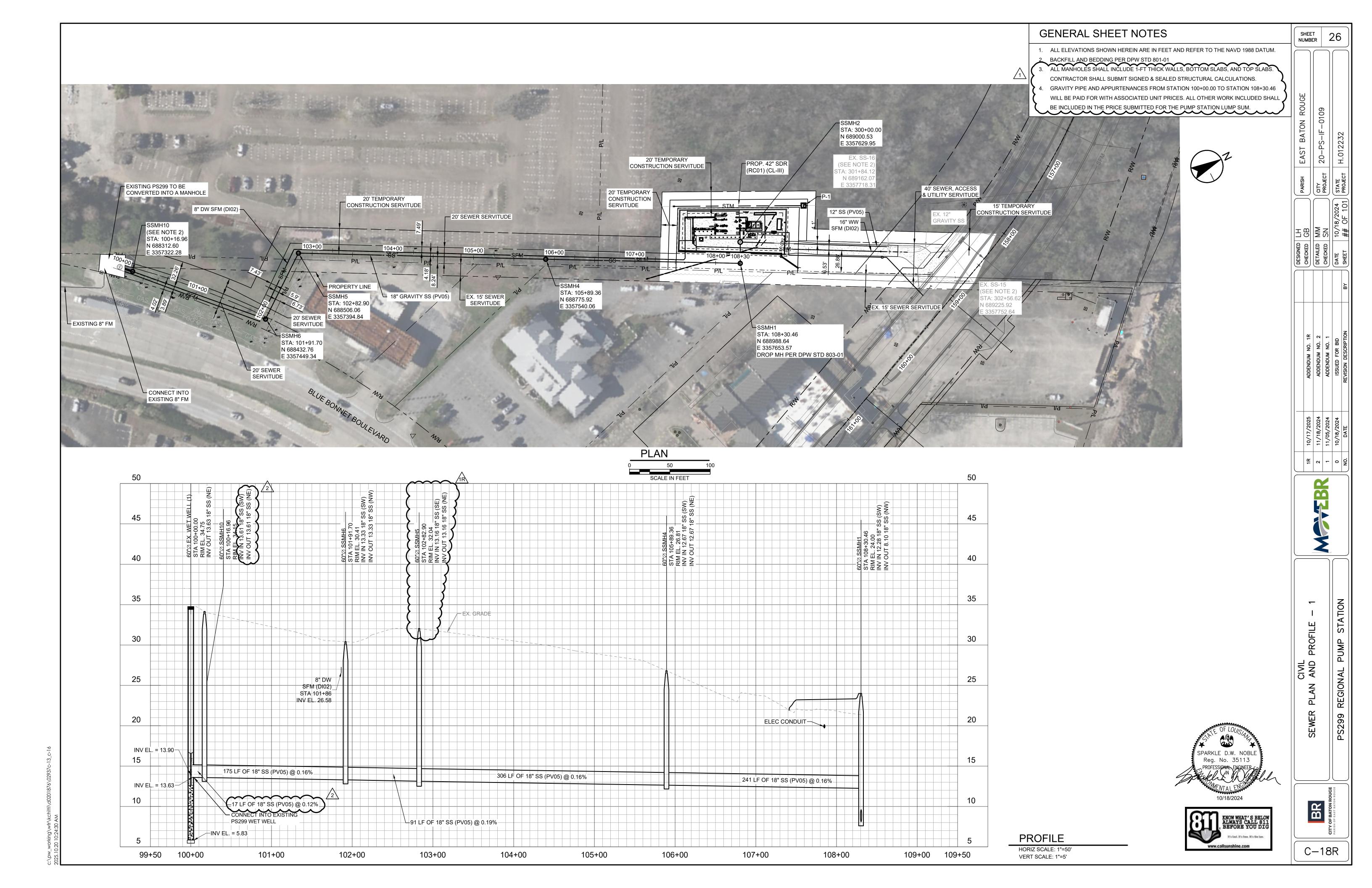


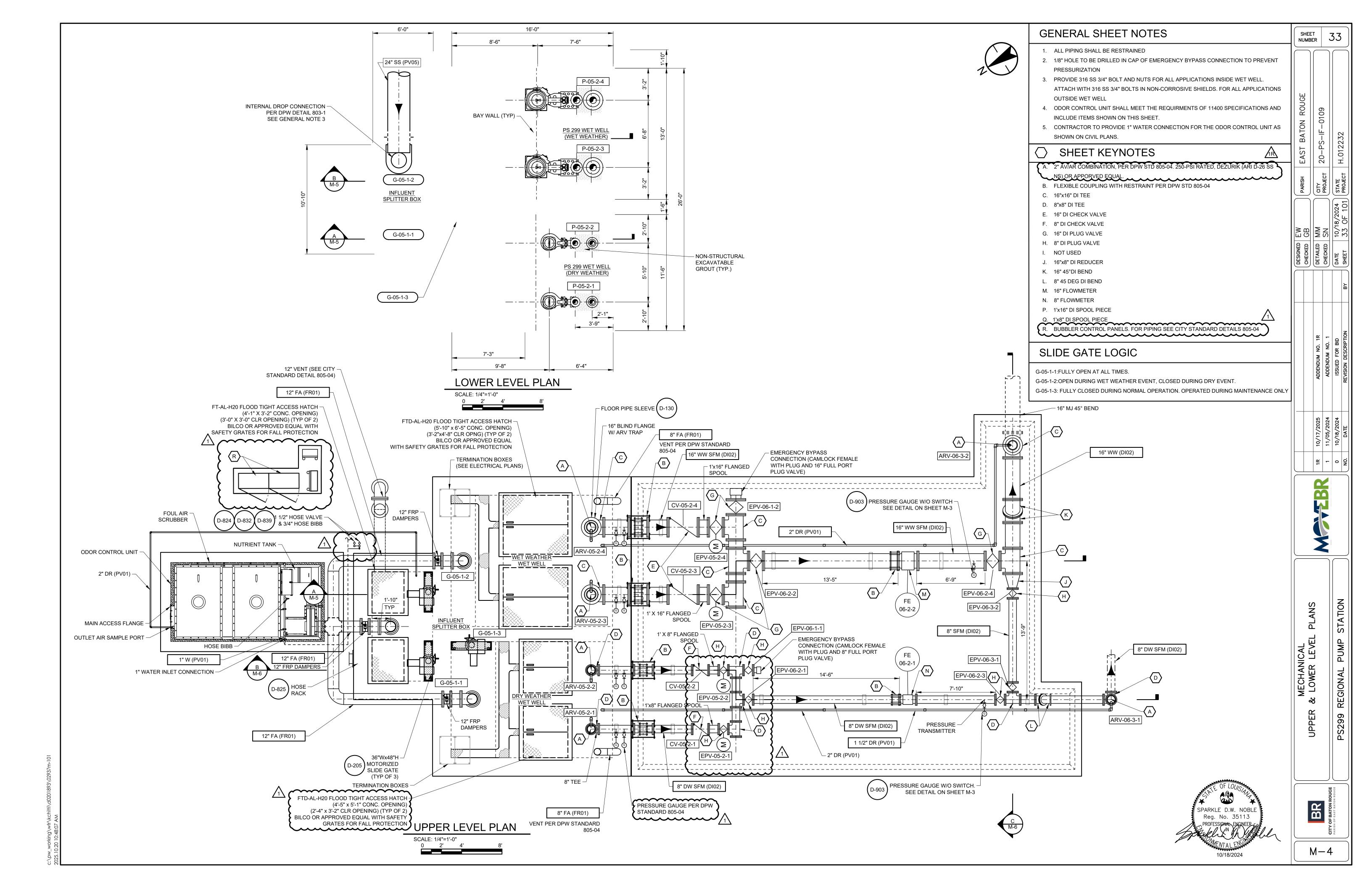


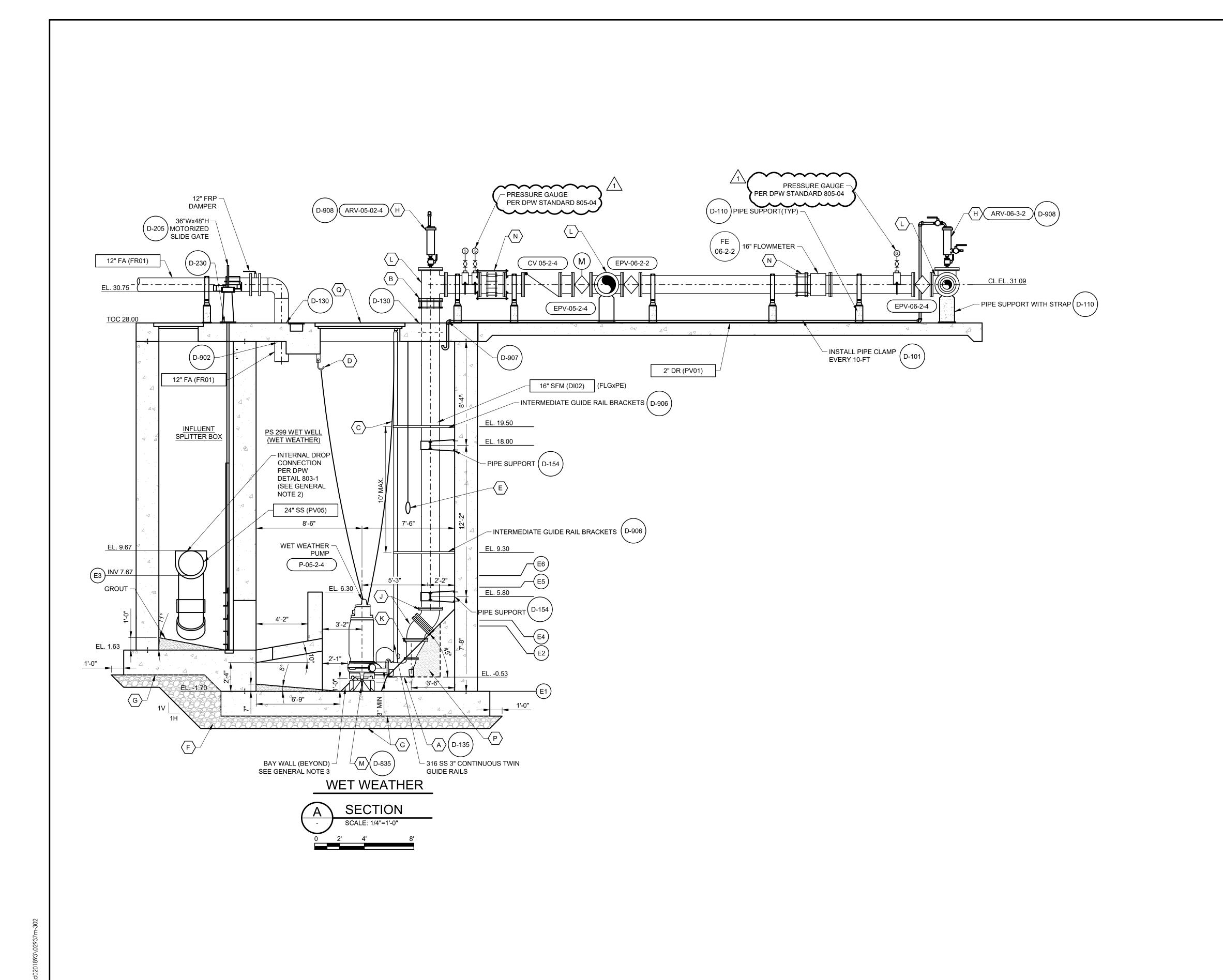
BATON B



hw_working\wtr\kchitti\d0201876\0293







GENERAL SHEET NOTES

1. ALL ELEVATIONS SHOWN HEREIN ARE IN FEET AND REFER TO THE NAVD 1988 DATUM.

SHEET NUMBER

0

20-

- 2. PROVIDE 316 SS 3/4" BOLT AND NUTS FOR ALL APPLICATIONS INSIDE WET WELL. ATTACH WITH 316 SS 3/4" BOLTS IN NON-CORROSIVE SHIELDS. FOR ALL APPLICATIONS OUTSIDE WET WELL
- 3. PUMP BAY WALL SHALL BE 4" HIGHER THAN FINAL PUMP SUCTION INLET

SHEET KEYNOTES

- A. PUMP BASE ELBOW ON EQUIPMENT BASE, SEE STRUCTURAL PLANS.
- B. FLANGED COUPLING ADAPTER.
- C. 316 SS CHAIN WITH SS "D" LIFT RINGS AT 10' INTERVALS.
- D. 316 SS HOOKS SHALL BE 3/8" MIN. DIA.
- E. BACKUP ALARM FLOATS.
- F. 12" MINIMUM BEDDING MATERIAL (57 LIMESTONE).

G. GEOTEXTILE FABRIC (MIRAFI 600X OR APPROVED EQUAL).

H. 2" COMBINATION AV/AR, PER DPW STD 805-04. 250-PSI RATED, DEZURIK (ARI D-26 SS NS) OR APPROVED EQUAL

J. 16" 45 DEG DI BEND (FLGxFLG)

- K. 8"x16" DI ECCENTRIC REDUCER (FLGxFLG)
- L. 16"x16" DI TEE (FLGxFLG)
- M. 4-VANE INLET CONE (316 SS, PER MANUFACTURER)
- N. FLEXIBLE COUPLING WITH RESTRAINT PER DPW STD 805-04
- P. NON-STRUCTURAL EXCAVATABLE GROUT
- Q. ACCESS HATCH WITH SAFETY GRATES FOR FALL PROTECTION
- R. 316 SS 3" CONTINUOUS TWIN GUIDE RAILS

FLUID	WASTEWATER						
INSTALLATION LOCATION	PS299 (WET WEATHER)				- 18	NO.	8
PUMP TYPE	CENTRIFUGAL SUBMERSIBLE PUMP (DUPLEX)		EX)		NO.	5	1 ×
			1 PUMP		ADDENDUM	ADDENDUM	ISSUED
	С	APACITY, GPM	2443	ADD		Ā	š
RATED POINT	TDH, FEET		116				
	EFFICIENCY, %		79.4%				
	SHUT OFF HEAD, FT		150				
RUNOUT	FLOW, GPM		4320		25	24	24
	HEAD, FEET		70		/2025	20/	1/20
CONTINUOUS OPERATING	NPSHR, FT		10.4		10/17	11/05/2024	10/18/2024
RANGE	PUMP EFFICIENCY	AT B.E.P., %	79.9%	9%			\vdash
		MIN. @ RUNOUT, %	55%		본	-	0
VFD			YES				<u></u>
	CASING CAST IRON						

440mm (17.3")

1185

XYLEM (FLYGT) NP 3231/716 ~ 680 MANUFACTURERS & MODELS MOTOR

PUMP CONTROL ELEVATIONS

IMPELLER

SUCTION, INCHES DISCHARGE, INCHES RATED HP

RPM VOLTS/PHASE/Hz

WET WEATHER FLOW PUMPS				
E6	HIGH WATER LEVEL. (FLOAT SWITCH)	7.86		
E5	HIGH FLOW PUMP 1 ON	7.36		
E4	HIGH FLOW PUMP 1 OFF	4.05		
E3	INVERT OF INFLUENT PIPE	7.86		
E2	LOW WATER LEVEL	2.80		

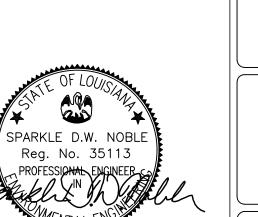
VERTICAL DATUM: NAVD 88 (GEOID12A)

E1

INVERT OF WET WELL

PUMP CONSTRUCTION

ELECTRIC MOTOR



-1.70



STATION

M-5R

