



**ST. TAMMANY PARISH**

MICHAEL B. COOPER  
PARISH PRESIDENT

**NOTICE TO BIDDERS**

**ST. TAMMANY PARISH**

Sealed bids will be received by the Department of Procurement, until 2:00 p.m., **Wednesday, April 3, 2024**, and then opened and read publicly at that time by the Procurement Staff for the following project:

**Bid # 23-52-2 - S. Military Rd US 190 & Rue Esplanade Water Main**

Each paper bid must be submitted in a sealed envelope. The outside of the envelope shall show the Name and Address of the Bidder, the State Contractor's License Number of the Bidder (if the work is estimated at \$50k or more), the Bid Name and the Bid Number.

**The project classification is:**

**Municipal & Public Work Construction**

This bid package is available online at [www.bidexpress.com](http://www.bidexpress.com) or LaPAC <https://wwwcfprd.doa.louisiana.gov/osp/lapac/pubmain.cfm>. It is the Vendor's responsibility to check Bid Express, or LaPAC frequently for any possible addenda that may be issued. The Parish is not responsible for a Vendor's failure to download any addenda documents required to complete a submission.

Bids will be received at 21454 Koop Dr., Suite 2F, Mandeville, LA 70471 from each bidder or his agent and given a written receipt, by certified mail with return receipt requested, or electronically at [www.bidexpress.com](http://www.bidexpress.com).

**The Non-Mandatory pre-bid meeting will be held at St. Tammany Parish Government Office Complex, Building "B" 21454 Koop Dr. Mandeville, LA 70471, 3<sup>rd</sup> Floor Staff Conference Room on Thursday, March 14, 2024, from 2:00 PM to 4:00 PM. Attendance is strongly encouraged.**

Procurement Department

# **BID PROPOSAL**

ST. TAMMANY PARISH  
GOVERNMENT



BID PACKAGE FOR

## **S. Military Rd US 190 & Rue Esplanade Water Main**

BID NO.: 23-52-2

October 10, 2023

Engineers Estimate: \$4,722,690.00

## Section 01

### Table of Contents

Section 01	Table of Contents
Section 02	Instructions to Bidders
Section 03	Summary of Work
Section 04	LA Uniform Public Work Bid Form/ Unit Price Form
Section 05	Affidavits, Louisiana (Pursuant to LSA-R.S. 38:2224, 38:2227 and 38:2212.10)
Section 06	Insurance Requirements
Section 07	Project Sign
Section 08	General Conditions
Section 09	Sample Corporate Resolution
Section 10	Sample Certificate of Insurance
Section 11	Sample Contract
Section 12	Federal Clauses
Section 13	Plans
Section 14	Technical Specifications

## Section 02

### Instructions to Bidders

Bidders are urged to promptly review the requirements of this specification and submit questions for resolution as early as possible during the bid period. Questions or concerns must be submitted in writing to the Procurement Department no later than 2:00 CST seven (7) working days prior to the bid opening date. Otherwise, this will be construed as acceptance by the bidders that the intent of the specifications is clear and that competitive bids may be obtained as specified herein. Protests with regard to the specification documents will not be considered after bids are opened.

1. Bid security is required. Be sure that your bid includes such security as is necessary to meet Parish requirements and is properly signed. The bid must be fully completed. All applicable Louisiana license numbers must be affixed.
2. The Owner is the St. Tammany Parish Government (the "Parish").
3. The terms "he/his" and "it/its" may be used interchangeably.
4. The terms "Owner," the "Parish," and "St. Tammany Parish" may be used interchangeably.
5. The successful Bidder understands the limited contract time in the contract is **360 (calendar days)**, and shall submit any request for an extension of time in accordance with the General and Supplementary Conditions. Said request will reflect the days requested and the reason for same. No extension request is guaranteed or absolute.
6. Bidder specifically understands that acknowledgment of the General Conditions is required. Bidder specifically understands that signature of receipt of the General Conditions is mandated. **The Bidder's signature on the "Louisiana Uniform Public Work Bid Form" will serve as acknowledgment of the Bidder's receipt and understanding of the General Conditions as well as any Supplementary Conditions.**
7. ***If any additional work is performed by the contractor without written approval by owner, the cost of the work will be borne by the contractor and will not be reimbursed by the Parish.***
8. **Only** the Louisiana Uniform Public Bid Form, the Unit Price Form (if necessary), the bid security, and written evidence of authority of person signing the bid shall be submitted on or before the bid opening time and date provided for in the Bid Documents. Necessary copies of the Louisiana Uniform Public Work Forms and Unit Price Forms (if necessary) will be furnished for Bidding. Bound sets of the Contract Documents are for Bidder's information and should not be used in submitting Bids.
9. All other documents and information required are to be submitted by the low Bidder within ten (10) days after the opening of the bids, and at the same time of day and location as given for the opening of the bids in the Bid Documents.
10. Each Bid must be submitted in a sealed envelope, unless submitted electronically. The outside of the envelope shall show the name and address of the Bidder, the State Contractor's License Number of the Bidder (if work requires contractor's license), and the Project name and the Bid number. In the case of an electronic bid proposal, a contractor may submit an authentic digital signature on the electronic bid proposal accompanied by the contractor's license number, Project name and the Bid number.
11. The price quoted for the Work shall be stated in words and figures on the Bid Form, and in figures only on the Unit Price Form. The price in the Bid shall include all costs necessary for the complete performance of the Work in full conformity with the conditions of the Contract Documents, and shall include all applicable Federal, State, Parish, Municipal or other taxes. The price bid for the items listed on the Unit Price Form will include the cost of all related items not listed, but which are normally required to do the type of Work bid.
12. The Bid shall be signed by the Bidder. The information required on the Louisiana Uniform Public Work Bid Form must be provided. Evidence of agency, corporate, or partnership authority is required and shall be provided in conformance with LSA-R.S. 38:2212(B).

13. Only a Contractor licensed by the State to do the type of Work as indicated on the Notice to Bidders can submit a Bid. The Bidder's signature on the Bid Form certifies that he holds an active license under the provisions of Chapter 24 of Louisiana Revised Statutes Title 37. Failure to be properly licensed constitutes authority for the Owner to reject the Bid.
14. Bidders shall not attach any conditions or provisions to the Bid. Any conditions or provisions so attached may, at the sole option of the Owner, cause rejection of the Bid.
15. A Bid Guarantee of five percent (5%) of the amount of the total Bid, including Alternates, must accompany the Proposal and, at the option of the Bidder, may be a cashier's check, certified check or a satisfactory Bid Bond. The Bid Guarantee must be attached to the Louisiana Uniform Public Work Bid Form. No Bid will be considered unless it is so guaranteed. Cashier's check or certified check must be made payable to the order of the Owner. Cash deposits will not be accepted. The Owner reserves the right to cash or deposit the cashier's check or certified check. Such guarantees shall be made payable to the Parish of St. Tammany. In accordance with LSA-R.S. 38:2218(C), if a bid bond is used, it shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide or by an insurance company in good standing licensed to write bid bonds which is either domiciled in Louisiana or owned by Louisiana residents. It is **not** required to be on any AIA form.
16. Bid securities of the three (3) lowest Bidders will be retained by the Owner until the Contract is executed or until final disposition is made of the Bids submitted. Bid securities of all other Bidders will be returned promptly after the canvas of Bids. Bids shall remain binding for forty-five (45) days after the date set for Bid Opening. The Parish shall act within the forty-five (45) days to award the contract to the lowest responsible bidder or reject all bids. However, the Parish and the lowest responsible bidder, by mutual written consent, may agree to extend the deadline for award by one or more extensions of thirty (30) calendar days. In the event the Owner issued the Letter of Award during this period, or any extension thereof, the Bid accepted shall continue to remain binding until the execution of the Contract.
17. A Proposal may be withdrawn at any time prior to the scheduled closing time for receipt of Bids, provided the request is in writing, executed by the Bidder or its duly authorized representative and is filed with the Owner prior to that time. When such a request is received, the Proposal will be returned to the Bidder unopened. A bid withdrawn under the provisions of LSA-R.S. 38:2214(C) cannot be resubmitted.
18. Written communications, over the signature of the Bidder, to modify Proposals will be accepted and the Proposal corrected in accordance therewith if received by the Owner prior to the scheduled closing time for receipt of Bids. Oral, telephonic or telegraphic Modifications will not be considered.
19. No oral interpretation obligating the Owner will be made to any Bidder as to the meaning of the Drawings, Specifications and Contract Documents. Every request for such an interpretation shall be made in writing and addressed and forwarded to the Owner. Inquiries received within seven (7) days prior to the day fixed for opening of the Bids may not be given consideration. Every interpretation made to the Bidder shall be in the form of an addendum to the Specifications. All such Addenda shall become part of the Contract Documents. Failure of the Owner to send or failure of Bidder to receive any such interpretation shall not relieve any Bidder from any obligation under this Bid as submitted without Modification. All Addenda shall be issued in accordance with the Public Bid Law, LSA-R.S. 38:2212(O).
20. The Owner reserves the right to reject any or all Bids for just cause in accordance with the Public Bid Law, LSA-R.S. 38:2214(B). Incomplete, informal, illegible, or unbalanced Bids may be rejected. Reasonable grounds for belief that any one Bidder is concerned directly or indirectly with more than one Bid will cause rejection of all Bids wherein such Bidder is concerned. If required, a Bidder shall furnish satisfactory evidence of its competence and ability to perform the Work stipulated in its Proposal. Incompetence will constitute cause

for rejection. If the Parish determines that the bidder is not responsive or responsible for any reason whatsoever, the bid may be rejected in accordance with State law.

21. Contractor shall be liable without limitation to the Parish for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors.
22. Upon notice of any claim, demand, suit, or cause of action against the Parish, alleged to arise out of or be related to this Contract, Contractor shall investigate, handle, respond to, provide defense for, and defend at its sole expense, even if the claim, demand, suit, or cause of action is groundless, false, or fraudulent. The Parish may, but is not required to, consult with or assist the Contractor, but this assistance shall not affect the Contractor's obligations, duties, and responsibilities under this section. Contractor shall obtain the Parish's written consent before entering into any settlement or dismissal.
23. It is understood and agreed that neither party can foresee the exigencies beyond the control of each party which arise by reason of an Act of God or force majeure; therefore, neither party shall be liable for any delay or failure in performance beyond its control resulting from an Act of God or force majeure. The Parish shall determine whether a delay or failure results from an Act of God or force majeure based on its review of all facts and circumstances. The parties shall use reasonable efforts, including but not limited to, use of continuation of operations plans (COOP), business continuity plans, and disaster recovery plans, to eliminate or minimize the effect of such events upon the performance of their respective duties under this Contract.
24. Contractor shall fully indemnify and hold harmless the Parish, without limitation, for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors. The Contractor shall not indemnify for the portion of any loss or damage arising from the Parish's act or failure to act.
25. Contractor shall fully indemnify and hold harmless the Parish, without limitation, from and against damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities in any action for infringement of any intellectual property right, including but not limited to, trademark, trade-secret, copyright, and patent rights.

When a dispute or claim arises relative to a real or anticipated infringement, the Contractor, at its sole expense, shall submit information and documentation, including formal patent attorney opinions, as required by the Parish.

If the use of the product, material, service, or any component thereof is enjoined for any reason or if the Contractor believes that it may be enjoined, Contractor, while ensuring appropriate migration and implementation, data integrity, and minimal delays of performance, shall at its sole expense and in the following order of precedence: (i) obtain for the Parish the right to continue using such product, material, service, or component thereof; (ii) modify the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; (iii) replace the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; or, (iv) provide the Parish monetary compensation for all payments made under the Contract related to the infringing product, material, service, or component, plus for all costs incurred to procure and implement a non-infringing product, material, or service of at least equal quality and performance. Until this obligation has been satisfied, the Contractor remains in default.

The Contractor shall not be obligated to indemnify that portion of a claim or dispute based upon the Parish's unauthorized: i) modification or alteration of the product, material or service; ii) use of the product, material or service in combination with other products not furnished by Contractor; or, iii) use of the product, material or service in other than the specified operating conditions and environment.

26. Bidders shall familiarize themselves with and shall comply with all applicable Federal and State Laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over construction of the Project, which may directly or indirectly affect the Work or its prosecution. These laws and/or ordinances will be deemed to be included in the Contract, as though herein written in full.
27. Each Bidder shall visit the site of the proposed Work and fully acquaint itself with all surface and subsurface conditions as they may exist so that it may fully understand this Contract. Bidder shall also thoroughly examine and be familiar with drawings, Specifications and Contract Documents. The failure or omission of any Bidder to receive or examine any form, instrument, Drawing or document or to visit the site and acquaint itself with existing conditions shall in no way relieve any Bidder from any obligation with respect to its Bid and the responsibility in the premises.
28. The standard contract form enclosed with the Proposal documents is a prototype. It is enclosed with the Contract Documents for the guidance of the Owner and the Contractor. It has important legal consequences in all respects and consultation with an attorney is encouraged. Contractor shall be presumed to have consulted with its own independent legal counsel.
29. When one set of Contract plans show the Work to be performed by two or more prime Contractors, it is the responsibility of each Bidder to become knowledgeable of the Work to be performed by the other where the Work upon which this bid is submitted is shown to come into close proximity or in conflict with the Work of the other. In avoiding conflicts, pressure pipe lines must be installed to avoid conflict with gravity pipe lines and the Bidder of the smaller gravity pipe line in conflict with the larger gravity pipe line must include in his Bid the cost of a conflict box at these locations. The location of and a solution to the conflicts do not have to be specifically noted as such on the plans.
30. Bidder shall execute affidavit(s) attesting compliance with LSA-R.S. 38:2212.10, 38:2224, 38:2227, each as amended, and other affidavits as required by law, prior to execution of the contract.
31. In accordance with Louisiana Law, all Corporations (See LA R.S. 12:26.1) and Limited Liability Companies (See LA R.S. 12:1308.2) must be registered and in good standing with the Louisiana Secretary of State in order to hold a contract.
32. Sealed Bids shall be delivered to St. Tammany Parish Government at the office of **St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471**, and a receipt given, until the time and date denoted in Notice to Bidders, at which time and place the Bids shall be publicly opened and read aloud to those present. In accordance with LSA-R.S. 38:2212(H), the designer's final estimated cost of construction shall be read aloud upon opening bids. Sealed Bids may also be mailed by certified mail to **St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471**, and must be received before the bid opening. Bids may also be submitted electronically. Information concerning links for electronic bidding is contained in the Notice to Bidders. It is the responsibility of the Bidders to ensure that bids are delivered in a timely fashion. **Late bids, regardless of reason, will not be considered, and will be returned to bidder.**
33. Paper bids shall be placed in a sealed envelope, marked plainly and prominently as indicated in the Notice to Bidders, and these Instructions, and addressed:

**St. Tammany Parish Government  
Department of Procurement  
21454 Koop Drive, Suite 2-F  
Mandeville, LA 70471**
34. See Notice to Bidders for availability of Drawings, Specifications and Contract Documents via electronic methods.
35. The successful Bidder shall be required to post in each direction a public information sign, 4' x 4' in size, at the location of the project containing information required by the Owner. The Owner shall supply this information.

36. The award of the Contract, if it is awarded, will be to the lowest responsible Bidder, in accordance with State Law. No award will be made until the Owner has concluded such investigations as it deems necessary to establish the responsibility and qualifications of the Bidder to do the Work in accordance with the Contract Documents to the satisfaction of the Owner within the time prescribed as established by the Department based upon the amount of work to be performed and the conditions of same. The written contract and bond shall be issued in conformance with LSA-R.S. 38:2216. If the Contract is awarded, the Owner shall give the successful Bidder written notice of the award within forty-five (45) calendar days after the opening of the Bids in conformance with LSA-R.S. 38:2215(A), or any extension as authorized thereunder.
37. At least three days prior to the execution of the Contract, the Contractor shall deliver to the Owner the required Bonds.
38. Failure of the successful Bidder to execute the Contract and deliver the required Bonds within ten (10) days of the Notice of the Award shall be just cause for the Owner to annul the award and declare the Bid and any guarantee thereof forfeited. Award may then be made to the next lowest responsible bidder.
39. In order to ensure the faithful performance of each and every condition, stipulation and requirement of the Contract and to indemnify and hold harmless the Owner from any and all damages, either directly or indirectly arising out of any failure to perform same, the successful Bidder to whom the Contract is awarded shall furnish a Performance and Payment Bond in an amount of at least equal to one hundred percent (100%) of the Contract Price. The Contract shall not be in force or binding upon the Owner until such satisfactory Bond has been provided to and approved by the Parish. The cost of the Bond shall be paid for by the Contractor unless otherwise stipulated in the Special Provisions.
40. No surety Company will be accepted as a bondsman which has no permanent agent or representative in the State upon whom notices referred to in the General Conditions of these Specifications may be served. Service of said notice on said agent or representative in the State shall be equal to service of notice on the President of the Surety Company, or such other officer as may be concerned.
41. In conformance with LSA-R.S. 38:2219(A)(1)(a), (b), and (c):
- Any surety bond written for a public works project shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide, to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide or by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds.
- For any public works project, no surety or insurance company shall write a bond which is in excess of the amount indicated as approved by the U.S. Department of the Treasury Financial Management Service list or by a Louisiana domiciled insurance company with an A- rating by A.M. Best up to a limit of ten percent of policyholders' surplus as shown by A.M. Best; companies authorized by this Paragraph who are not on the treasury list shall not write a bond when the penalty exceeds fifteen percent of its capital and surplus, such capital and surplus being the amount by which the company's assets exceed its liabilities as reflected by the most recent financial statements filed by the company with the Department of Insurance.
- In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed to do business in the state of Louisiana. All contractors must comply with any other applicable provisions of LSA-R.S. 38:2219.
42. Should the Contractor's Surety, even though approved and accepted by the Owner, subsequently remove its agency or representative from the State or become insolvent, bankrupt, or otherwise fail, the Contractor shall immediately furnish a new Bond in another company approved by the Owner, at no cost to the Owner. The new Bond shall be executed under the same terms and conditions as the original Bond. The new bond shall be submitted within thirty (30) days of such time as the Owner notifies Contractor or from the time



Contractor learns or has reason to know that the original surety is no longer financially viable or acceptable to the Parish, whichever occurs first. In the event that Contractor fails or refuses to timely secure additional surety, then the Owner may secure such surety and thereafter deduct such cost or expense from any sum due, or to become due to Contractor.

43. The Contractor's bondsman shall obligate itself to all the terms and covenants of these Specifications and of contracts covering the Work executed hereunder. The Owner reserves the right to do Extra Work or make changes by altering, adding to deducting from the Work under the conditions and in the manner herein before described without notice to the Contractor's surety and without in any manner affecting the liability of bondsman or releasing it from any of its obligations hereunder.
44. The Bond shall also secure for the Owner the faithful performance of the Contract in strict accordance with plans, specifications, and other Contract Documents. It shall protect the Owner against all lien laws of the State and shall provide for payment of reasonable attorney's fees for enforcement of Contract and institution or concursus proceedings, if such proceedings become necessary. Likewise, it shall provide for all additional expenses of the Owner occurring through failure of the Contractor to perform.
45. The surety of the Contractor shall be and does hereby declare and acknowledge itself by acceptance to be bound to the Owner as a guarantor, jointly and in solido, with the Contractor, for fulfillment of terms of the Contract.
46. The performance Bond and Labor and Material Bond forming part of this Contract shall be continued by Contractor and its Surety for a period of one (1) year from date of acceptance of the Work/Project by Owner to assure prompt removal and replacement of all defective material, equipment, components thereof, workmanship, etc., and to assure payment of any damage to property of Owner or others as a result of such defective materials, equipment, workmanship, etc.
47. Contractor authorizes Parish to deduct from any payment due herein costs and service fees for recordation of this Contract in full or an excerpt hereof, or any revisions or modifications thereof as required by law. Contractor agrees to execute an excerpt or extract of this agreement for recordation purposes. If Contractor fails to execute such an excerpt, then the Parish shall file and record the entire Contract and all attachments at the expense of Contractor and Parish is hereby authorized to deduct all related costs from any proceeds due to the Contractor.
48. Contractor shall secure and maintain at its expense such insurance that will protect it and the Parish from claims for injuries to persons or damages to property which may arise from or in connection with the performance of Services or Work hereunder by the Contractor, his agents, representatives, employees, and/or subcontractors. The cost of such insurance shall be included in Contractor's bid.
49. The Contractor shall not commence work until it has obtained all insurance as required for the Parish Project. If the Contractor fails to furnish the Parish with the insurance protection required and begins work without first furnishing Parish with a currently dated certificate of insurance, the Parish has the right to obtain the insurance protection required and deduct the cost of insurance from the first payment due the Contractor. Further deductions are permitted from future payments as are needed to protect the interests of the Parish including, but not limited to, renewals of all policies.
50. Payment of Premiums: The insurance companies issuing the policy or policies shall have no recourse against the Parish of St. Tammany for payment of any premiums or for assessments under any form of policy.
51. Deductibles: Any and all deductibles in the described insurance policies shall be assumed by and be at the sole risk of the Contractor.
52. Authorization of Insurance Company(ies) and Rating: All insurance companies must be authorized to do business in the State of Louisiana and shall have an A.M. Best rating of no less than A-, Category VII.
53. Policy coverages and limits must be evidenced by Certificates of Insurance issued by Contractor's carrier to the Parish and shall reflect:

Date of Issue: Certificate must have current date.

Named Insured: The legal name of Contractor under contract with the Parish and its principal place of business shall be shown as the named insured on all Certificates of Liability Insurance.

Name of Certificate Holder: St. Tammany Parish Government, Office of Risk Management, P. O. Box 628, Covington, LA 70434

Project Description: A brief project description, including Project Name, Project Number and/or Contract Number, and Location.

Endorsements and Certificate Reference: All policies must be endorsed to provide, and certificates of insurance must evidence the following:

Waiver of Subrogation: The Contractor's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance. *Policy endorsements required for all coverages.*

Additional Insured: The Parish of St. Tammany shall be named as additional named insured with respect to general liability, marine liability, pollution/environmental liability, automobile liability and excess liability coverages. *Policy endorsements required.*

Hold Harmless: Contractor's liability insurers shall evidence their cognizance of the Hold Harmless and Indemnification in favor of St. Tammany Parish Government by referencing same on the face of the Certificate(s) of Insurance.

Cancellation Notice: Producer shall provide thirty (30) days prior written notice to the Parish of policy cancellation or substantive policy change.

54. The types of insurance coverage the Contractor is required to obtain and maintain throughout the duration of the Contract shall be designated by a separate document issued by the Office of Risk Management.
55. It is the intent of these instructions that they are in conformance with State Bid Laws. Should there be any discrepancy or ambiguity in these provisions, the applicable State Bid Law shall apply.
56. The letting of any public contract in connection with funds that are granted or advanced by the United States of America shall be subject to the effect, if any, of related laws of said United States and valid rules and regulations of federal agencies in charge, or governing use and payment of such federal funds.
57. Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial proposals must be filed with and received by the Procurement Department BEFORE these times. Any other protest shall be filed no later than ten (10) calendar days after: the opening of the bid; the basis of the protest is known; or the basis of the protest should have been known (whichever is earlier).
58. It is the Parish's policy to provide a method to protest exclusion from a competition or from the award of a contract, or to challenge an alleged solicitation irregularity. It is always better to seek a resolution within the Parish system before resorting to outside agencies and/or litigation to resolve differences. All protests must be made in writing, and shall be concise and logically presented to facilitate review by the Parish. The written protest shall include:

The protester's name, address, and fax and telephone numbers and the solicitation, bid, or contract number;

A detailed statement of its legal and factual grounds, including a description of the resulting prejudice to the protester;

Copies of relevant documents;

All information establishing that the protester is an interested party and that the protest is timely; and

A request for a ruling by the agency; and a statement of the form of relief requested.

The protest shall be addressed to St. Tammany Parish Government Department of Procurement, P.O. Box 628, Covington, LA 70434

The protest review shall be conducted by the Parish Legal Department.

Only protests from interested parties will be allowed. Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial proposals, must be filed with and received by the Department of Procurement BEFORE those deadlines.

Any other protest shall be filed no later than ten (10) calendar days after the basis of the protest is known, or should have been known (whichever is earlier).

The Parish will use its best efforts to resolve the protest within thirty (30) days of the date that it is received by the Parish. The written response will be sent to the protestor via mail and fax, if a fax number has been provided by the protestor. The protester can request additional methods of notification.

59. The last day to submit questions and/or verification on comparable products will be no later than 2:00 pm CST, seven (7) working days prior to the opening date of the bid/proposal due date. Further, any questions or inquires must be submitted via fax to 985-898-5227, or via email to [Procurement@stpgov.org](mailto:Procurement@stpgov.org). Any questions or inquiries received after the required deadline to submit questions or inquiries will not be answered.
60. St. Tammany Parish Government contracts to be awarded are dependent on the available funding and/or approval by members designated and/or acknowledged by St. Tammany Parish Government. At any time, St. Tammany Parish Government reserves the right to cancel the award of a contract if either or both of these factors is deficient.
61. Any action by the Parish to disqualify any Bidder on the grounds that they are not a responsible Bidder shall be conducted in accordance with LSA-R.S. 38:2212(X).
62. Failure to complete or deliver within the time specified or to provide the services as specified in the bid or response will constitute a default and may cause cancellation of the contract. Where the Parish has determined the contractor to be in default. The Parish reserves the right to purchase any or all products or services covered by the contract on the open market and to charge the contractor with the cost in excess of the contract price. Until such assessed charges have been paid, no subsequent bid or response from the defaulting contractor will be considered.
63. If any part of the provisions contained herein and/or in the Specifications and Contract for the Work shall for any reason be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement or attachment, but it shall be construed as if such invalid, illegal, or unenforceable provision or part of a provision had never been contained herein.

## Section 03

### **Summary of Work**

**I. Work to Include:**

This project includes the installation of PVC (6", 8", and 10") and HDPE (8", 10", and 12") water mains utilizing open cut and directional drilling methods. Also included is the installation of 2" and 1" PE water service lines, Fire Hydrants, Insertion Valves, Tapping Sleeves, Gate Valves, Air Release Valves, Sample Stations, Automatic Flushing Station, Water main tie-ins, Driveway removal and replacement, Drainage removal and replacement, Sodding, Hydroseeding, and other work incidental to the installation of the water main.

**II. Location of Work:**

Along Rue Royal, Rue Esplanade, Military Road and US190 located in Slidell, Louisiana.

**III. Documents: Bid Documents dated October 10, 2023, and entitled:**

**S. Military Rd US190 & Rue Esplanade Water Main**

**Bid No.: 23-52-2**

**IV. OTHER REQUIREMENTS (as applicable)**

**When not otherwise specified herein, all work and materials shall conform to the requirements of the Louisiana Department of Transportation and Development hereafter called LDOTD (2016 Edition of Louisiana Standard Specifications for Roads and Bridges).**

Section 04

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: St. Tammany Parish Government
21454 Koop Dr., Suite 2F
Mandeville, La 70471

(Owner to provide name and address of owner)

BID FOR: S. Military Rd. US190 and Rue
Esplanade Water Main

BID NO: 23-52-2

(Owner to provide name of project and other identifying information.)

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Richard C. Lambert Consultants (RCLC) and dated: October 10, 2023.

(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following ADDENDA: (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging)

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" \* but not alternates) the sum of:

Dollars (\$ )

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

N/A Dollars (\$ )

Alternate No. 2 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

N/A Dollars (\$ )

Alternate No. 3 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

N/A Dollars (\$ )

NAME OF BIDDER:

ADDRESS OF BIDDER:

LOUISIANA CONTRACTOR'S LICENSE NUMBER:

NAME OF AUTHORIZED SIGNATORY OF BIDDER:

TITLE OF AUTHORIZED SIGNATORY OF BIDDER:

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER \*\*:

DATE:

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

\* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

\*\* A CORPORATE RESOLUTION OR WRITTEN EVIDENCE of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

# LOUISIANA UNIFORM PUBLIC WORK BID FORM UNIT PRICE FORM

**TO:**

St. Tammany Parish Government  
 21454 Koop Drive, Suite 2F  
 Mandeville, LA. 70471  
(OWNER TO PROVIDE NAME AND ADDRESS OF OWNER)

**BID FOR:**

S. Military Rd. US 190 & Rue Esplanade  
 Water Main  
 Bid No.: 23-52-2  
(OWNER TO PROVIDE PROJECT NAME & OTHER IDENTIFYING INFO)

**UNIT PRICES: This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.**

	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID		<input type="checkbox"/> OR		<input type="checkbox"/> ALT #			
REF NO.:	Description:	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)				
1		15	LIN. FT.				6" C900 PVC DR-18 WATER SERVICE LINE		
2		1,083	LIN. FT.				8" C900 PVC DR-18 WATER MAIN		
3		302	LIN. FT.				10" C900 PVC DR-18 WATER MAIN		
4		183	LIN. FT.				8" DIPS HDPE DR-11 WATER SERVICE LINE		

**Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.**  
Version 2017 Q2

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b>		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	10" DIPS HDPE DR-11 WATER MAIN	
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
5		1,944		LIN. FT.		
<b>Description:</b>		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	12" DIPS HDPE DR-11 WATER MAIN	
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
6		9,725		LIN. FT.		
<b>Description:</b>		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	8" GATE VALVE WITH VALVE BOX, CONC. PAD AND TRACER WIRE BOX	
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
7		5		EACH		
<b>Description:</b>		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	10" GATE VALVE WITH VALVE BOX, CONC. PAD AND TRACER WIRE BOX	
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
8		18		EACH		
<b>Description:</b>		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	WATER MAIN TIE-IN AT STATION 100+00 RUE ROYAL	
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
9		1		EACH		
<b>Description:</b>		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	WATER MAIN TIE-IN AT STATION 200+00 MILITARY RD (CROSS CREEK)	
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
10		1		EACH		

Version 2017 Q2

**Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.**

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	WATER SERVICE TERMINATION 6" C900 PVC DR-18				
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)			
11		4		EACH					
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	WATER MAIN TERMINATION 8" C900 PVC DR-18				
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)			
12		10		EACH					
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	WATER MAIN TERMINATION 10" C900 PVC DR-18				
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)			
13		2		EACH					
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	6" TO 8" INSERTION VALVE				
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)			
14		1		EACH					
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	10" TO 12" INSERTION VALVE				
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)			
15		1		EACH					
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	6" TO 8" TAPPING SLEEVE AND VALVE ASSEMBLY				
<b>REF NO.:</b>		<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)			
16		1		EACH					

Version 2017 Q2

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.



**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>REF NO.:</b>	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)
17					EACH		
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #			
					1" SINGLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF		
18					EACH		
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #			
					1" SINGLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF		
19					EACH		
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #			
					1" DOUBLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF		
20					EACH		
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #			
					1" DOUBLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF		
21					EACH		
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #			
					1" WATER SERVICE EXTENSION		
22					LIN. FT.		
	<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #			
					1" WATER SERVICE EXTENSION		

Version 2017 Q2

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	2" SINGLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF					
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)				
23	8		EACH						
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	2" SINGLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF					
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)				
24	1		EACH						
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	2" DOUBLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF					
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)				
25	5		EACH						
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	2" DOUBLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF					
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)				
26	9		EACH						
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	2" WATER SERVICE EXTENSION					
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)				
27	65		LIN. FT.						
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	SAMPLING STATION					
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)				
28	11		EACH						

Version 2017 Q2

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	FIRE HYDRANT WITH GATE VALVE			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
29	23		EACH				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	AIR RELEASE VALVE WITH SIGN			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
30	5		EACH				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	AUTOMATIC FLUSHING STATION			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
31	1		EACH				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	TRAFFIC REGULATION			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
32	1		LUMP SUM				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	CLEARING AND GRUBBING			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
33	1		LUMP SUM				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVAL OF STRUCTURES & OBSTRUCTIONS			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
34	1		LUMP SUM				

Version 2017 Q2

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	HYDROSEEDING	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
35		3.11		ACRE		
Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	SODDING	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
36		1,400		SQ. YD.		
Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	CONSTRUCTION LAYOUT	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
37		1		LUMP SUM		
Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	EXPLORATORY EXCAVATION	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
38		50		CU. YD.		
Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	SITE CONDITION AND AUDIO/VIDEO SURVEY	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
39		1		LUMP SUM		
Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT)	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
40		100		CU. YD.		

Version 2017 Q2

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVE AND REPLACE ASPHALT PAVEMENT			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
41	50		SQ. YD.				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVE AND REPLACE AGGREGATE DRIVEWAY			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
42	50		SQ. YD.				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVE AND REPLACE CONCRETE DRIVEWAY			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
43	77.1		SQ. YD.				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	SAW CUT ASPHALT AND/OR CONCRETE PAVEMENT (FULL DEPTH)			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
44	151		LIN. FT.				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVE AND REPLACE DRAIN LINES 15" RCP			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
45	43		LIN. FT.				
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVE AND REPLACE SEPTIC OUTFALLS			
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION</b> (Quantity times unit price)		
46	40		LIN. FT.				

Version 2017 Q2

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	BOLLARDS	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
47		48		EACH		
Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	UTILITY RELOCATION COORDINATION	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
48		1		LUMP SUM		
Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	ENVIRONMENTAL PROTECTION	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
49		1		LUMP SUM		
Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	NO. 57 CRUSHED LIMESTONE BEDDING FOR WATERLINES	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
50		175		CU. YD.		
Description:		<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	MOBILIZATION AND DEMOBILIZATION	
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)
51		1		LUMP SUM		
Description:		<input type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #		
REF NO.:		QUANTITY		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times unit price)

Section 05

**AFFIDAVIT PURSUANT TO LSA-R.S. 38:2224 and 38:2227  
FOR BIDDERS FOR PUBLIC WORKS CONTRACTS**

STATE OF \_\_\_\_\_

PARISH/COUNTY OF \_\_\_\_\_

**BEFORE ME**, the undersigned authority, in and for the above stated State and Parish (or County), personally came and appeared:

\_\_\_\_\_

Print Name

who, after first being duly sworn, did depose and state:

1. That affiant is appearing on behalf of \_\_\_\_\_, who is seeking a public contract with St. Tammany Parish Government.
  
2. That affiant employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for affiant; and
  
3. That no part of the contract price received by affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for affiant.
  
4. If affiant is a sole proprietor, that after July 2, 2010, he/she has not been convicted of, or has not entered a plea of guilty or *nolo contendere* to any of the crimes or equivalent federal crimes listed in LSA-R.S. 38:2227(B).
  
5. If affiant is executing this affidavit on behalf of a juridical entity such as a partnership, corporation, or LLC, etc., that no individual partner, incorporator, director, manager, officer, organizer, or member, who has a minimum of a ten percent ownership in the bidding entity, has been convicted of, or has entered a plea of guilty or *nolo contendere* to any

of the crimes or equivalent federal crimes listed in LSA-R.S. 38:2227(B).

6. If affiant is a sole proprietor, that neither affiant, nor his/her immediate family is a public servant of St. Tammany Parish Government or the Contract is not under the supervision or jurisdiction of the public servant's agency.
  
7. If affiant is executing this affidavit on behalf of a juridical entity such as a partnership, corporation, or LLC, etc., that no public servant of St. Tammany Parish Government, or his/her immediate family, either individually or collectively, has more than a 25% ownership interest in the entity seeking the Contract with St. Tammany Parish Government if the Contract will be under the supervision or jurisdiction of the public servant's agency.

\_\_\_\_\_  
**Printed Name:** \_\_\_\_\_  
**Title:** \_\_\_\_\_  
**Entity name:** \_\_\_\_\_

**THUS SWORN TO AND SUBSCRIBED BEFORE ME,**  
**THIS \_\_\_\_\_, DAY OF \_\_\_\_\_, 202\_\_.**

\_\_\_\_\_  
**Notary Public**  
**Print Name:** \_\_\_\_\_  
**Notary I.D./Bar No.:** \_\_\_\_\_  
**My commission expires:** \_\_\_\_\_



**AFFIDAVIT PURSUANT TO LSA-R.S. 38:2212.10 CONFIRMING  
REGISTRATION AND PARTICIPATION IN A STATUS VERIFICATION  
SYSTEM**

STATE OF \_\_\_\_\_

PARISH/COUNTY OF \_\_\_\_\_

**BEFORE ME**, the undersigned authority, in and for the above stated State and Parish (or County), personally came and appeared:

\_\_\_\_\_

Print Name

who, after first being duly sworn, did depose and state:

1. That affiant is appearing on behalf of \_\_\_\_\_, a private employer seeking a bid or a contract with St. Tammany Parish Government for the physical performance of services within the State of Louisiana.
  
2. That affiant is registered and participates in a status verification system to verify that all employees in the state of Louisiana are legal citizens of the United States or are legal aliens; and
  
3. That affiant shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.
  
4. That affiant shall require all subcontractors to submit to the affiant a sworn affidavit verifying compliance with this law.

\_\_\_\_\_

**Printed Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Name of Entity:** \_\_\_\_\_

**THUS SWORN TO AND SUBSCRIBED BEFORE ME,  
THIS \_\_\_\_\_, DAY OF \_\_\_\_\_, 202\_\_.**

\_\_\_\_\_

**Notary Public**

**Print Name:** \_\_\_\_\_

**Notary I.D./Bar No.:** \_\_\_\_\_

**My commission expires:** \_\_\_\_\_

## Section 06



### INSURANCE REQUIREMENTS\*

Construction Project: S. Military Rd US 190 & Rue Esplanade Water Main  
Project/Quote/Bid#: 23-52-2

#### **\*\*\*IMPORTANT – PLEASE READ\*\*\***

**Prior to submitting your quote or bid, it is recommended that you review these insurance requirements with your insurance broker/agent.**

*These requirements modify portions of the insurance language found in the General Conditions and/or Supplementary General Conditions; however, there is no intention to remove all sections pertaining to insurance requirements and limits set forth in the General Conditions and/or Supplementary General Conditions, only to amend and specify those items particular for this Project.*

- A. The Provider shall secure and maintain at its expense such insurance that will protect it and St. Tammany Parish Government (the "Parish") from claims for bodily injury, death or property damage as well as from claims under the Workers' Compensation Acts that may arise from the performance of services under this agreement. All certificates of insurance shall be furnished to the Parish and provide thirty (30) days prior notice of cancellation to the Parish, in writing, on all of the required coverage.
- B. All policies shall provide for and certificates of insurance shall indicate the following:
1. Waiver of Subrogation: The Provider's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance.
  2. Additional Insured: St. Tammany Parish Government shall be named as Additional Insured with respect to general liability, automobile liability and excess liability coverages, as well as marine liability and pollution/environmental liability, when those coverages are required or necessary.
  3. Payment of Premiums: The insurance companies issuing the policy or policies will have no recourse against St. Tammany Parish Government for payment of any premiums or for assessments under any form of policy.
  4. Project Reference: The project(s) and location(s) shall be referenced in the Comment or Description of Operations section of the Certificate of Insurance (Project ##-###, or Bid # if applicable, Type of Work, Location).
- C. Coverage must be issued by insurance companies authorized to do business in the State of Louisiana. Companies must have an A.M. Best rating of no less than A-, Category VII. St. Tammany Parish Risk Management Department may waive this requirement only for Workers Compensation coverage at their discretion.

Provider shall secure and present proof of insurance on forms acceptable to St. Tammany Parish Government, Office of Risk Management no later than the time of submission of the Contract to the Parish. However, should any work performed under this Contract by or on behalf of Provider include exposures that are not covered by those insurance coverages, Provider is not relieved of its obligation to maintain appropriate levels and types of insurance necessary to protect itself, its agents and employees, its subcontractors, St. Tammany Parish Government (Owner), and all other interested third parties, from any and all claims for damage or injury in connection with the services performed or provided throughout the duration of this Project, as well as for any subsequent periods required under this Contract.

The insurance coverages checked (✓) below are those required for this Contract.

- 1. **Commercial General Liability\*** insurance – **Occurrence Form** - with a Combined Single Limit for bodily injury and property damage of at least \$2,000,000 per Occurrence / \$4,000,000 General Aggregate and \$4,000,000 Products-Completed Operations. Contracts over \$1,000,000 may require higher limits. The insurance shall provide for and the certificate(s) of insurance shall indicate the following coverages:
  - a) Premises - operations;
  - b) Broad form contractual liability;
  - c) Products and completed operations;
  - d) Personal/Advertising Injury;
  - e) Broad form property damage (for Projects involving work on Parish property);
  - f) Explosion, Collapse and Damage to underground property.
  - g) Additional Insured forms CG 2010 and CG 2037 in most current edition are required.
  
- 2. **Business Automobile Liability\*** insurance with a Combined Single Limit of \$1,000,000 per Occurrence for bodily injury and property damage, and shall include coverage for the following:
  - a) Any auto;
  - or**
  - b) Owned autos; **and**
  - c) Hired autos; **and**
  - d) Non-owned autos.
  
- 3. **Workers' Compensation/Employers Liability insurance\*** - Workers' Compensation coverage as required by State law. Employers' liability limits shall be a minimum of \$1,000,000 each accident, \$1,000,000 each disease, \$1,000,000 disease policy aggregate. When water activities are expected to be performed in connection with this project, coverage under the USL&H Act, Jones Act and/or Maritime Employers Liability (MEL) must be included. **Coverage for owners, officers and/or partners in any way engaged in the Project shall be included in the policy.** The names of any excluded individual must be shown in the Description of Operations/Comments section of the Certificate.
  
- 4. **Pollution Liability and Environmental Liability\*** insurance in the minimum amount of \$1,000,000 per occurrence / \$2,000,000 aggregate including full contractual liability and third party claims for bodily injury and/or property damage, for all such hazardous waste, pollutants and/or environmental exposures that may be affected by this project stemming from pollution/environmental incidents as a result of Contractor's operations.

If coverage is provided on a claims-made basis, the following conditions apply:

- 1) the retroactive date must be prior to or coinciding with the effective date of the Contract, or prior to the commencement of any services provided by the Contractor on behalf of the Parish, whichever is earlier; AND
- 2) continuous coverage must be provided to the Parish with the same retro date for 24 months following acceptance or termination of the Project by the Parish either by
  - a) continued renewal certificates **OR**
  - b) a 24 month Extended Reporting Period

\*The Certificate must indicate whether the policy is written on an occurrence or claims-made basis and, if claims-made, the applicable retro date must be stated.

5. **Contractor's Professional Liability/Errors and Omissions\*** insurance in the sum of at least \$1,000,000 per claim / \$2,000,000 aggregate is required when work performed by Contractor or on behalf of Contractor includes professional or technical services including, but not limited to, construction administration and/or management, engineering services such as design, surveying, and/or inspection, technical services such as testing and laboratory analysis, and/or environmental assessments. An occurrence basis policy is preferred.

If coverage is provided on a claims-made basis, the following conditions apply:

- 1) the retroactive date must be prior to or coinciding with the effective date of the Contract, or prior to the commencement of any services provided by the Contractor on behalf of the Parish, whichever is earlier; AND
- 2) continuous coverage must be provided to the Parish with the same retro date for 24 months following acceptance or termination of the Project by the Parish either by
  - a) continued renewal certificates **OR**
  - b) a 24 month Extended Reporting Period

\*The Certificate must indicate whether the policy is written on an occurrence or claims-made basis and, if claims-made, the applicable retro date must be stated.

6. **Marine Liability/Protection and Indemnity\*** insurance is required for any and all vessel and/or marine operations in the minimum limits of \$1,000,000 per occurrence / \$2,000,000 per project general aggregate. The coverage shall include, but is not limited to, the basic coverages found in the Commercial General Liability insurance and coverage for third party liability

**\*Excess/Umbrella Liability** insurance may be provided to meet the limit requirements for any Liability coverage. For example: if the General Liability requirement is \$3,000,000 per occurrence, but the policy is only \$1,000,000 per occurrence, then the excess policy should be at least \$2,000,000 per occurrence thereby providing a combined per occurrence limit of \$3,000,000.)

7. **Owners Protective Liability (OPL)** shall be furnished by the Contractor and shall provide coverage in the minimum amount of \$3,000,000 CSL each occurrence / \$3,000,000 aggregate. **St. Tammany Parish Government, ATTN: Risk Management Department, P. O. Box 628, Covington, LA 70434 shall be the first named insured on the policy.**

8. **Builder's Risk Insurance** written on an "all-risk" policy form shall be furnished by Contractor for 100% of the contract cost. Any contract modifications increasing the contract cost will require an increase in the limit of the Builder's Risk policy. Deductibles should not exceed \$5,000 and Contractor shall be responsible for all policy deductibles. This insurance shall cover materials at the site, stored off the site, and in transit. The Builder's Risk Insurance shall include the interests of the Owner, Contractor and Subcontractors and shall terminate only when the Project is accepted in writing. **St. Tammany Parish Government, ATTN: Risk Management Department, P. O. Box 628, Covington, LA 70434 shall be the first named insured on the policy.**

9. **Installation Floater Insurance**, on an "all-risk" form, shall be furnished by Contractor and carried for the full value of the materials, machinery, equipment and labor for each location. The Contractor shall be responsible for all policy deductibles. The Installation Floater Insurance shall provide coverage for property owned by others and include the interests of the Owner, Contractor and Subcontractors and shall terminate only when the Project is accepted in writing. **St. Tammany Parish Government, ATTN: Risk Management Department, P. O. Box 628, Covington, LA 70434 shall be the first named insured on the policy.**

- D. All policies of insurance shall meet the requirements of the Parish prior to the commencing of any work. The Parish has the right, but not the duty, to approve all insurance coverages prior to commencement of work. If any of the required policies are or become unsatisfactory to the Parish as to form or substance; or if a company issuing any policy is or becomes unsatisfactory to the Parish, the Provider shall promptly obtain a new policy, timely submit same to the Parish for approval, and submit a certificate thereof as provided above. The Parish agrees not to unreasonably withhold approval of any insurance carrier selected by Provider. In the event that Parish cannot agree or otherwise authorize a carrier, Provider shall have the option of selecting and submitting a new insurance carrier within 30 days of said notice by the Parish. In the event that the second submission is insufficient or is not approved, then the Parish shall have the unilateral opportunity to thereafter select a responsive and responsible insurance carrier all at the cost of Provider and thereafter deduct from Provider's fee the cost of such insurance.
- E. Upon failure of Provider to furnish, deliver and/or maintain such insurance as above provided, this contract, at the election of the Parish, may be declared suspended, discontinued or terminated. Failure of the Provider to maintain insurance shall not relieve the Provider from any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligation of the Provider concerning indemnification.
- F. Provider shall maintain a current copy of all annual insurance policies and agrees to provide a certificate of insurance to the Parish on an annual basis or as may be reasonably requested for the term of the contract or any required Extended Reporting Period. Provider further shall ensure that all insurance policies are maintained in full force and effect throughout the duration of the Project and shall provide the Parish with annual renewal certificates of insurance evidencing continued coverage, without any prompting by the Parish.
- G. It shall be the responsibility of Provider to require that these insurance requirements are met by all contractors and sub-contractors performing work for and on behalf of Provider. Provider shall further ensure the Parish is named as an additional insured on all insurance policies provided by said contractor and/or sub-contractor throughout the duration of the project.
- H. Certificates of Insurance shall be issued as follows:

**St. Tammany Parish Government  
Attn: Risk Management  
P O Box 628  
Covington, LA 70434**

To avoid contract processing delays, be certain the project name/number is included on all correspondence including Certificates of Insurance.

**\*NOTICE: St. Tammany Parish Government reserves the rights to remove, replace, make additions to and/or modify any and all of the insurance requirements at any time.**

**Any inquiry regarding these insurance requirements should be addressed to:**

**St. Tammany Parish Government  
Office of Risk Management  
P O Box 628  
Covington, LA 70434  
Telephone: 985-898-5226  
Email: riskman@stpgov.org**

## Section 07

### **Project Signs**

#### **1. General**

- a. Work to include providing and installing project sign(s) at the beginning of the project. Some projects may require multiple signs. Should more than one sign be required, it will be reflected in the bidding documents.

#### **2. Materials**


- a. The printed project sign(s) shall be 3/8" primed Medium Density Overlay (MDO) **OR** 3-millimeter corrugated plastic secured to exterior plywood (4' x 4').
- b. Contractor shall not use previously provided templates and/or fonts.

#### **3. Execution**

- a. The sign(s) shall be printed on a project-by-project basis in black and white, using the template and font provided to the Contractor by the St. Tammany Parish Government Project Manager.
- b. All signage proofed and approved by State Tammany Parish Government before project sign(s) are to be produced by the Contractor.
- c. Exact placement of the project sign(s) must be coordinated with, and approved by, the St. Tammany Parish Government Project Manager prior to sign installation.
- d. The sign(s) is to be installed such that the bottom of the sign is a minimum of 5' above the existing ground elevation.
- e. Sign(s) is to be maintained throughout the period of construction. If sign(s) is damaged or destroyed, repair and/or replacement of sign(s) will be at Contractor's expense.
- f. Contractor is responsible for the removal of all project signs upon issuance of final acceptance by the St. Tammany Parish Government Project Manager at no direct pay.
- g. Cost to be included in "Temporary Signs and Barricades"

**Blank Template of Parish Project Sign:**

# PROGRESS



**MICHAEL B. COOPER**  
Parish President

---

Councilmember Name  
Council District X

Total Dollar \$  
amount specified here

**\$XXX,XXX.XX**

**Project Name**

Description of  
Project Work

Name of Street, Bridge,  
Subdivision, etc. stated here

Short Description of Project stated here  
(if deemed applicable by the Parish)

Example of a Completed Parish Project Sign:

# PROGRESS



**MICHAEL B. COOPER**  
Parish President

---

**RYKERT O. TOLEDANO, JR**  
Council District 5

**\$514,444.40**

**Dove Park  
Subdivision Drainage**  
Drainage Improvements along  
Swallow St., Sparrow St.,  
Partridge St. and Egret St.

Section 08

**General Conditions for St. Tammany Parish Government**

**This index is for illustrative purposes only and is not intended to be complete nor exhaustive.**

**All bidders/contractors are presumed to have read and understood the entire document. Some information contained in these conditions may not be applicable to all projects.**



## GENERAL CONDITIONS INDEX

A.A.S.H.T.O	01.01
A.C.I.	01.02
ADDENDA	01.03, 01.05, 01.12, 02.13, 02.13, 06.02, 06.03
ADVERTISEMENT	01.04, 01.12, 02.21, 02.22, 02.23
AGREEMENT	01.05, 01.11, 01.12, 01.14, 01.15, 01.19, 03.02, 03.03, 03.04, 06.01, 06.02, 10.01, 11.03, 12.01, 14.02, 29.06, 32.01, 32.02, 33.06, 33.07
APPLICATION FOR PAYMENT	01.06, 29.07
A.S.T.M.	01.07
AWARD	03.00, 03.01, 03.04, 03.05
BID	01.08, 01.12, 01.26, 02.02, 02.04, 02.08, 02.09, 02.10, 02.13, 02.14, 02.17, 02.19, 02.21, 03.01, 03.04, 04.02, 14.03, 22.01, 23.01, 28.08
BIDDER	01.04, 01.08, 01.09, 01.26, 01.28, 02.02, 02.04, 02.06, 02.08, 02.09, 02.10, 02.12, 03.13, 02.14, 02.16, 02.17, 02.19, 02.20, 02.21, 02.24, 03.01, 03.04, 03.05, 23.01
BONDS	01.10, 01.12, 02.02, 02.09, 03.00, 03.03, 03.04, 03.05, 03.07, 03.08, 03.10, 03.12, 03.13, 27.06
CHANGE ORDER	01.11, 01.19, 04.01, 09.04, 11.07, 16.02, 16.06, 16.07, 21.06, 21.08, 21.10, 21.11, 29.06, 33.07
CLAIMS	02.15, 04.05, 09.05, 14.01, 16.04, 16.05, 21.16, 24.01
CLOSING ROADS COMMENCE WORK	16.06, 16.07, 16.15 04.04, 07.04, 09.02, 11.02, 14.02, 16.13, 24.02
COMPLETION OF WORK OR PROJECT	01.14, 02.15, 08.03, 09.01, 09.04, 11.00, 11.03, 12.01, 13.01, 13.11, 20.01, 25.01, 28.02, 29.04
CONDITIONS AT JOB SITE	16.17
CONTRACT DOCUMENTS	01.03, 01.03, 01.10, 01.12, 01.13, 01.16, 01.17, 01.18, 01.19, 01.29, 01.22, 01.25, 01.30, 01.33, 02.02, 02.05, 02.13, 02.17, 02.18, 02.23, 03.01, 03.02, 04.01, 04.02, 04.03, 04.04, 04.05, 06.00, 06.01, 06.02, 06.03, 07.02, 07.03, 07.05, 08.01, 10.06, 11.03, 13.01, 13.02, 21.01, 21.09, 21.10, 21.11, 28.01, 28.04, 33.01
CONTRACT PRICE	01.11, 01.13, 03.05, 04.01, 12.01, 14.02, 21.06, 21.10, 21.11, 27.05, 28.01, 28.02, 28.03, 28.08

CONTRACT TIME	01.11, 01.14, 01.22, 10.06, 11.01, 21.06, 29.04
CONTRACTOR - (Defined)	01.15
DAMAGE	02.15, 03.05, 03.12, 04.05, 09.05, 11.09, 13.11, 14.01, 14.02, 16.01, 16.02, 16.03, 16.04, 16.05, 19.01, 19.03, 20.01, 20.08, 23.03, 24.01, 24.07, 24.12, 26.03, 28.05, 28.01, 28.10, 33.07
DEFECTIVE WORK	01.16, 10.03, 21.00, 21.01, 21.07, 21.08, 21.09, 21.10, 28.03
DELAYS	07.02, 11.05, 11.09, 12.01, 16.07, 18.02, 19.01, 28.04
DRAWINGS	01.12, 01.17, 02.13, 02.17, 02.23, 06.01, 06.02, 06.03, 13.15, 22.02, 01.27, 01.33, 03.12, 04.01, 06.02, 09.01, 10.01, 10.02, 11.07, 13.00, 13.01, 13.03, 13.05, 13.11, 13.12, 13.15, 14.02, 14.07, 14.08, 14.09, 16.09, 16.13, 21.01, 21.06, 21.07, 21.14, 24.07, 27.05, 27.07, 28.01, 28.05, 28.10, 29.03, 13.00, 13.11
ENGINEER STATUS (NOT APPLICABLE)	15.00
EXTRA WORK	03.09, 14.00, 14.03, 14.04, 14.05, 14.08, 14.09, 14.10, 14.11, 14.12, 16.01, 22.02
FAILURE OF CONTRACTOR	03.10, 04.05, 06.02, 09.05, 10.01, 10.03, 13.10, 16.03, 20.01, 24.09, 27.02, 28.10
FAILURE OF OWNER	02.13
FAILURE OF SUCCESSFUL BIDDER	02.13, 02.17, 03.04
FIELD ORDER	01.18
FORCE ACCOUNT	14.04, 14.05, 14.11, 14.12
FUNDING	33.09
INDEMNIFY / HOLD HARMLESS	02.15, 03.05, 04.05, 13.11, 16.04, 16.05, 20.02, 24.06, 24.09
INDEMNIFYING INFRINGEMENT CLAUSE	02.15
INJURIES	16.00, 16.01, 16.02, 19.01, 19.03, 20.01, 24.02, 24.07
INSPECTION FEES	13.12
INSPECTIONS, GENERALLY	01.16, 13.05, 16.13, 21.00, 21.03, 21.04, 21.05, 21.06, 21.14, 21.15, 28.04, 29.02, 29.03
INSURANCE	01.05, 14.05, 16.13, 24.00 - 12, 27.07, 28.05
INTENTION OF CONTRACT DOCUMENTS	06.00, 06.01
INTENTION OF GENERAL CONDITIONS	31.00

LABOR	01.33, 03.12, 09.01, 13.00, 13.01, 13.02, 13.08, 13.10, 13.11, 13.12, 14.05, 16.06, 16.07, 21.06, 21.07, 21.15, 27.01, 28.10, 29.03
LAWS	01.10, 01.20, 02.06, 02.13, 02.14, 02.16, 02.20, 03.01, 03.10, 13.12, 16.06, 16.07, 20.02, 21.02, 21.09, 27.01, 29.06, 33.00, 33.01, 33.08
LIQUIDATED DAMAGES	11.03, 12.00, 12.01, 29.04
MATERIALS	01.33, 03.12, 04.01, 06.02, 07.01, 09.01, 10.01, 10.02, 13.00, 13.01, 13.03, 13.04, 13.05, 13.12, 13.13, 13.15, 14.01, 14.11, 20.01, 12.01, 21.07, 21.14, 21.15, 23.03, 27.01, 27.05, 27.07, 28.01, 28.05, 28.07, 28.08, 28.10
MODIFICATIONS	01.12, 01.19, 02.12, 02.13, 06.01, 06.02, 24.07, 32.02
NOTICE OF AWARD	01.20, 03.01, 03.04, 04.01
NOTICE OF DEFAULT	12.01, 33.08
NOTICE TO BIDDER	2.21
NOTICE TO CONTRACTOR	01.12, 01.21, 21.11, 30.01
NOTICE TO OWNER	13.07, 24.06, 27.07
NOTICE TO PROCEED	01.22, 09.02, 11.01, 11.03
OBSTRUCTIONS	16.09, 16.11, 16.15, 23.00, 23.01, 23.02
OCCUPANCY	25.00
ORAL INTERPRETATIONS	02.13
OWNER - (Defined)	01.23
PAYMENT	01.30, 03.10, 03.12, 03.13, 04.12, 09.03, 11.04, 11.09, 14.04, 14.12, 16.02, 16.16, 19.02, 21.07, 21.08, 21.09, 21.10, 21.11, 21.16, 24.02, 24.03, 24.12, 27.01, 27.07, 28.00, 28.01, 28.02, 28.03, 28.04, 28.05, 28.06, 28.08, 28.09, 28.10, 29.00, 29.03, 29.05, 29.07
PERMITS	13.00, 13.12, 16.13, 28.08
PRICE	02.05, 14.02, 14.03, 14.04, 14.05, 22.01
PROGRESS PAYMENT	01.06, 28.06
PROGRESS SCHEDULE	09.03, 09.05, 21.11
PROGRESS OF WORK	09.00, 11.09, 13.07, 16.01, 16.12, 21.11, 21.12, 22.02, 27.02
PROJECT	01.24, 01.29, 01.30, 02.04, 03.07, 06.01, 07.03, 10.02, 11.04, 11.06, 13.08, 13.13, 14.08, 14.11, 16.15, 24.07, 24.11, 28.07, 29.03, 29.07

PROJECT REPRESENTATIVE	01.23, 21.16
PROPERTY	16.00, 16.01, 16.02, 16.03, 16.12, 16.13, 16.17, 18.01, 19.00, 19.01, 19.02, 19.03, 23.03, 24.01, 24.07, 26.03, 28.10, 29.08, 33.05
PROPOSAL	01.26, 02.00, 02.01, 02.03, 02.05, 02.06, 02.07, 02.08, 02.09, 02.10, 02.11, 02.12, 02.14, 02.18, 02.21, 02.22, 11.03, 12.01, 14.01, 14.02, 14.03, 19.02, 23.02, 28.08
PROTESTS	33.10
PUNCH LIST	29.03, 29.04
QUANTITIES OF ESTIMATES	14.00, 14.01, 14.02, 14.04
RAILROADS	16.13, 19.01
RECORD DRAWINGS	08.00, 18.01, 18.02, 18.03
RECORDATION OF DOCUMENTS	03.13, 28.03, 29.05, 29.06
REJECTION OF BIDS	02.03, 02.07, 02.08, 02.10, 02.14, 03.01
RENTAL OF EQUIPMENT	14.07, 14.09
RIGHTS OF WAY	18.00
SAFETY	16.01, 16.07, 16.14, 16.17
SANITARY PROVISIONS	13.01, 17.00
SCHEDULE OF WORK	09.03, 09.04, 9.05, 11.06, 13.09
SEVERABILITY	32.01, 32.02
SHOP DRAWINGS	01.27, 06.03, 07.00, 07.01, 07.02, 07.03, 07.04, 07.05
SITE	02.17, 7.04, 13.05, 13.07, 13.11, 14.06, 16.09, 21.08, 21.09, 21.12, 22.02, 23.01, 24.07
SOLICITATION OF EMPLOYMENT	13.14
SPECIFICATIONS	01.01, 01.02, 01.05, 01.07, 01.12, 01.28, 02.13, 02.17, 02.23, 03.06, 03.09, 03.10, 03.13, 06.01, 06.02, 06.03, 07.04, 07.05, 11.03, 13.05, 13.15, 20.01, 21.12, 22.02, 28.01, 28.04, 32.01
SUBCONTRACTOR	01.27, 01.29, 04.01, 04.02, 04.03, 04.04, 04.05, 16.02, 16.04, 16.05, 20.01, 20.02, 21.07, 24.01, 24.07, 27.01, 28.07
SUBCONTRACTS	04.00, 13.09
SUBSURFACE CONDITIONS	02.17, 22.00, 22.01, 22.02
SUBSTANTIAL COMPLETION	01.30, 11.04, 21.09, 28.04, 29.01, 29.02, 29.03, 29.04, 29.06
SUPERINTENDENT	01.21, 01.31, 13.07, 14.05

SUPERVISION	13.01, 13.06
SURETY	01.05, 01.10, 02.09, 03.05, 03.06, 03.07, 03.08, 03.09, 03.11, 03.12, 04.05, 05.01, 14.03, 27.03, 27.05
SURVEY	13.02, 26.00, 26.01
TAXES	02.05, 13.00, 13.12, 13.13, 14.05, 28.07, 28.08, 28.10
TERMINATION OF CONTRACT	13.10, 24.09, 27.00, 27.01, 27.02, 27.03, 27.04, 27.05, 27.06, 27.07
TESTS, GENERALLY	21.00, 21.02, 21.03, 21.04, 21.05, 21.06
TIME	01.32
TRAFFIC	16.06, 16.07, 16.10, 16.15, 16.16
TRAFFIC HAZARDS	16.16
TREES AND SHRUBS	19.02
VERBAL INSTRUCTIONS	21.16
WAIVERS	24.06, 29.03, 33.08
WARNING DEVICES	16.13, 16.14, 16.15
WARRANTY	21.01, 21.08, 21.09, 33.04, 33.06
WORK	01.31, 20.01
WORK BY OTHERS	10.03, 10.04, 10.05
WORK BY OWNER	10.02, 10.04, 10.05
WORK FOR OTHER, RESTRICTIONS	16.12
WORK ORDER	28.01

## 01.00 DEFINITIONS OF TERMS

Whenever used in these General Conditions or in other Contract Documents, the following terms shall have the meanings indicated, and these shall be applicable to both the singular and plural thereof.

- 01.01 A.A.S.H.T.O American Association of State Highway and Transportation Officials. When A.A.S.H.T.O. is referred to in these Specifications it takes the meaning of the specification for materials and methods of testing specified by this association and the specification stated is considered to be a part of the Specifications as if written herein in full.
- 01.02 A.C.I American Concrete Institute. When A.C.I. is referred to in these Specifications it takes the meaning of the specification for materials and methods of testing specified by this institute and the specification stated is considered to be a part of the Specifications as if written herein in full.
- 01.03 Addenda Written or graphic instruments issued prior to the opening of bids which clarify, correct, modify or change the bidding or Contract Documents.
- 01.04 Advertisement The written instrument issued by the Owner at the request of the Owner used to notify the prospective bidder of the nature of the Work. It becomes part of the Contract Documents.
- 01.05 Agreement The written agreement or contract between the Owner and the Contractor covering the Work to be performed and the price that the Owner will pay. Other documents, including the Proposal, Addenda, Specifications, plans, surety, insurance, etc., are made a part thereof.
- 01.06 Application for Payment The form furnished by the Owner which is to be used by the Contractor in requesting incremental (progress) payments and which is to include information required by Section 28.01 and an affidavit of the Contractor. The affidavit shall stipulate that progress payments theretofore received from the Owner on account of the Work have been applied by Contractor to discharge in full of all Contractor's obligations reflected in prior applications for payment.
- 01.07 A.S.T.M. American Society of Testing Materials. When A.S.T.M. is referred to in these Specifications it takes the meaning of the specification for materials and methods of testing specified by this society and the specification stated is considered to be a part of the Specifications as if written herein in full.
- 01.08 Bid The offer or Proposal of the Bidder submitted on the prescribed form setting forth all the prices for the Work to be performed.
- 01.09 Bidder Any person, partnership, firm or corporation submitting a Bid for the Work.
- 01.10 Bonds Bid, performance and payment bonds and other instruments of security, furnished by the Contractor and its surety in accordance with the Contract Documents and Louisiana law.
- 01.11 Change Order A written order to the Contractor signed by the Owner authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time after execution of the Agreement.
- 01.12 Contract Documents The Agreement, Addenda, Contractor's Bid and any documentation accompanying or post-bid documentation when attached as an exhibit, the Bonds, these General Conditions, the Advertisement for Bid, Notice to Contractor, all supplementary conditions, the Specifications, the Drawings, together with all Modifications issued after the execution of the Agreement.
- 01.13 Contract Price The total monies payable to the Contractor under the Contract Documents.

- 01.14 Contract Time The number of consecutive calendar days stated in the Agreement for the completion of the Work.
- 01.15 Contractor The person, firm, corporation or provider with whom the Owner has executed the Agreement.
- 01.16 Defective Work When work which is unsatisfactory, faulty or deficient for any reason whatsoever, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to the Owner's recommendation or acceptance.
- 01.17 Drawings The Drawings and plans which show the character and scope of the Work to be performed and which have been prepared or approved by the Owner and are referred to in the Contract Documents.
- 01.18 Field Order A written order issued by the Owner or his agent which clarifies or interprets the Contract Documents.
- 01.19 Modification (a) A written amendment of the Contract Documents signed by both parties, (b) A Change Order, (c) A written clarification or interpretation issued by the Owner or his agent. Modification may only be issued after execution of the Agreement.
- 01.20 Notice of Award The written notice by Owner to the lowest responsible Bidder stating that upon compliance of the conditions enumerated in the Notice of Award, or enumerated in the Bid documents, the Owner will deliver the Contract Documents for signature. The time for the delivery of the Contract Documents can be extended in conformance with Louisiana Law.
- 01.21 Notice to Contractor Instructions, written or oral given by Owner to Contractor and deemed served if given to the Contractor's superintendent, foreman or mailed to Contractor at his last known place of business.
- 01.22 Notice to Proceed A written notice given by the Owner fixing the date on which the Contract Time will commence, and on which date the Contractor shall start to perform his obligation under the Contract Documents. Upon mutual consent by both parties, the Notice to Proceed may be extended.
- 01.23 Owner St. Tammany Parish Government, acting herein through its duly constituted and authorized representative, including but not limited to the Office of the Parish President or its designee, its Chief Administrative Officer, and/or Legal Counsel. St. Tammany Parish Government (hereinafter, the "Parish") and Owner may be used interchangeably.
- 01.24 Project The entire construction to be performed as provided in the Contract Documents.
- 01.25 Project Representative The authorized representative of the Owner who is assigned to the Project or any parts thereof.
- 01.26 Proposal The Bid submitted by the Bidder to the Owner on the Proposal form setting forth the Work to be done and the price for which the Bidder agrees to perform the Work.
- 01.27 Shop Drawings All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, Subcontractor, Manufacturer, Supplier or Distributor and which illustrate the equipment, material or some portion of the Work.
- 01.28 Specifications The Instructions to Bidders, these General Conditions, the Special Conditions and the Technical Provisions. All of the documents listed in the "Table of Contents."
- 01.29 Subcontractor An individual, firm or corporation having a direct Contract with the Contractor or with any other Subcontractor for the performance of a part of the Project Work.
- 01.30 Substantial Completion The date as certified by the Owner or its agent when the construction of the Project or a specified part thereof is sufficiently complete in accordance with the Contract Documents so that the Project or specified part can be utilized for the

purposes for which it was intended; or if there is no such certification, the date when final payment is due in accordance with Section 28.

- 01.31 Superintendent Contractor's site representative. The person on the site who is in full and complete charge of the Work.
- 01.32 Time Unless specifically stated otherwise, all time delays shall be calculated in calendar days.
- 01.33 Work Any and all obligations, duties and responsibilities necessary to the successful completion of the Project assigned to or undertaken by the Contractor under the Contract Documents, usually including the furnishing of all labor, materials, equipment and other incidentals.
- 01.34 The terms "he/himself" may be used interchangeably with "it/itself."

## 02.00 PROPOSAL

- 02.01 All papers bound with or attached to the Proposal Form are a necessary part thereof and must not be detached.
- 02.02 For submitting Bids, the only forms allowed shall be the "Louisiana Uniform Public Work Bid Form", "Louisiana Uniform Public Works Bid Form Unit Price Form" (if necessary), the Bid Bond, and written evidence of authority of person signing the bid. Necessary copies of the Louisiana Uniform Public Work Forms will be furnished for Bidding. Bound sets of the Contract Documents are for Bidder's information and should not be used in submitting Bids.
- 02.03 Proposal forms must be printed in ink or typed, unless submitted electronically. Illegibility or ambiguity therein may constitute justification for rejection of the Bid.
- 02.04 Each Bid must be submitted in a sealed envelope, unless submitted electronically. The outside of the envelope shall show the name and address of the Bidder, the State Contractor's License Number of the Bidder (if work requires contractor's license), and the Project name and number for which the Bid is submitted, along with the Bid number.
- 02.05 The price quoted for the Work shall be stated in words and figures on the Bid Form, and in numbers only on the Unit Price Form. The price in the Proposal shall include all costs necessary for the complete performance of the Work in full conformity with the conditions of the Contract Documents, and shall include all applicable Federal, State, Parish, Municipal or other taxes. The price bid for the items listed on the Unit Price Form will include the cost of all related items not listed, but which are normally required to do the type of Work bid.
- 02.06 The Bid shall be signed by the Bidder. The information required on the Louisiana Uniform Public Work Bid Form must be provided. Evidence of agency, corporate, or partnership authority is required and shall be provided in conformance with LSA-R.S. 38:2212(B).
- 02.07 Only the Contractors licensed by the State to do the type of Work involved can submit a Proposal for the Work. The envelope containing the Proposal shall have the Contractor's license number on it. Failure to be properly licensed constitutes authority by the Owner for rejection of Bid.
- 02.08 Bidders shall not attach any conditions or provisions to the Proposal. Any conditions or provisions so attached may, at the sole option of the Owner, cause rejection of the Bid or Proposal.
- 02.09 A Bid Guarantee of five percent (5%) of the amount of the total Bid, including Alternates, must accompany the Proposal and, at the option of the Bidder, may be a cashier's check, certified check or a satisfactory Bid Bond. The Bid Guarantee must be attached to the Louisiana Uniform Public Work Bid Form. No Bid will be considered unless it is so guaranteed. Cashier's check or certified check must be made payable to the order of the Owner. Cash deposits will not be accepted. The Owner reserves the right to cash or deposit the cashier's check or certified check. Such guarantees shall be made payable to the Parish



of St. Tammany. In accordance with LSA-R.S. 38:2218(C), if a bid bond is used, it shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide, or by an insurance company in good standing licensed to write bid bonds which is either domiciled in Louisiana or owned by Louisiana residents. It is **not** required to be on any AIA form.

- 02.10 Bid securities of the three (3) lowest Bidders will be retained by the Owner until the Contract is executed or until final disposition is made of the Bids submitted. Bid securities of all other Bidders will be returned promptly after the canvas of Bids. Bids shall remain binding for forty-five (45) days after the date set for Bid Opening. The Parish shall act within the forty-five (45) days to award the contract to the lowest responsible bidder or reject all bids as permitted by Public Bid Law. However, the Parish and the lowest responsible bidder, by mutual written consent, may agree to extend the deadline for award by one or more extensions of thirty (30) calendar days. In the event the Owner issued the Letter of Award during this period, or any extension thereof, the Bid accepted shall continue to remain binding until the Execution of the Contract.
- 02.11 A Proposal may be withdrawn at any time prior to the scheduled closing time for receipt of Bids, provided the request is in writing, executed by the Bidder or its duly authorized representative and is filed with the Owner prior to that time. When such a request is received, the Proposal will be returned to the Bidder unopened.
- 02.12 Written communications, over the signature of the Bidder, to modify Proposals will be accepted and the Proposal corrected in accordance therewith if received by the Owner prior to the scheduled closing time for receipt of Bids. Oral, telephonic or telegraphic Modifications will not be considered.
- 02.13 No oral interpretation obligating the Owner will be made to any Bidder as to the meaning of the Drawings, Specifications and Contract Documents. Every request for such an interpretation shall be made in writing and addressed and forwarded to the Owner. No inquiry received within seven (7) days prior to the day fixed for opening of the Bids shall be given consideration. Every interpretation made to the Bidder shall be in the form of an addendum to the Specifications. All such Addenda shall become part of the Contract Documents. Failure of Bidder to receive any such interpretation shall not relieve any Bidder from any obligation under this Bid. All Addenda shall be issued in accordance with the Public Bid Law, LSA-R.S. 38:2212(O)(2)(a) and (b).
- 02.14 The Owner reserves the right to reject any or all Bids for just cause in accordance with the Public Bid Law, LSA-R.S. 38:2214(B). Incomplete, informal or unbalanced Bids may be rejected. Reasonable grounds for belief that any one Bidder is concerned directly or indirectly with more than one Bid will cause rejection of all Bids wherein such Bidder is concerned. If required, a Bidder shall furnish satisfactory evidence of its competence and ability to perform the Work stipulated in its Proposal. Incompetence will constitute cause for rejection. If the Parish determines that the bidder is not responsive or responsible for any reason whatsoever, the bid may be rejected in accordance with State law.
- 02.15 The Contractor shall indemnify and hold harmless the Owner from any and all suits, costs, penalties or claims for infringement by reason of use or installation of any patented design, device, material or process, or any trademark and copyright in connection with the Work agreed to be performed under this Contract, and shall indemnify and hold harmless the Owner for any costs, expenses and damages which it may be obliged to pay by reason of any such infringement at any time during the prosecution or after completion of the Work.
- 02.16 Bidders shall familiarize themselves with and shall comply with all applicable Federal and State Laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over construction of the Project, which may directly or indirectly affect the Work or its prosecution. These laws and/or ordinances will be deemed to be included in the Contract, as though herein written in full.
- 02.17 Each Bidder shall visit the site of the proposed Work and fully acquaint itself with all surface and subsurface conditions as they may exist so that it may fully understand this

Contract. Bidder shall also thoroughly examine and be familiar with drawings, Specifications and Contract Documents. The failure or omission of any Bidder to receive or examine any form instrument, Drawing or document or to visit the site and acquaint itself with existing conditions, shall in no way relieve any Bidder from any obligation with respect to its Bid and the responsibility in the premises.

- 02.18 The standard contract form enclosed with the Proposal documents is a prototype. It is enclosed with the Contract Documents for the guidance of the Owner and the Contractor. It has important legal consequences in all respects and consultation with an attorney is encouraged. Contractor shall be presumed to have consulted with its own independent legal counsel.
- 02.19 When one set of Contract plans show the Work to be performed by two or more prime Contractors, it is the responsibility of each Bidder to become knowledgeable of the Work to be performed by the other where the Work upon which this bid is submitted is shown to come into close proximity or into conflict with the Work of the other. In avoiding conflicts, pressure pipe lines must be installed to avoid conflict with gravity pipe lines and the Bidder of the smaller gravity pipe line in conflict with the larger gravity pipe line must include in his Bid the cost of a conflict box at these locations. The location of and a solution to the conflicts do not have to be specifically noted as such on the plans.
- 02.20 Bidder shall execute affidavit(s) attesting compliance with LSA-R.S. 38:2212.10, 38:2224, 38:2227, each as amended, and other affidavits as required by law, prior to execution of the contract.
- 02.21 Sealed Proposals (Bid) shall be received by St. Tammany Parish Government at the office of St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471, until the time and date denoted in Notice to Bidders, at which time and place the Proposals (Bids), shall be publicly opened and read aloud to those present. In accordance with LSA-R.S. 38-2212(A)(3)(c)(i), the designer's final estimated cost of construction shall be read aloud upon opening bids. Sealed Proposals (Bids) may also be mailed by certified mail to St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471, and must be received before the bid opening. Bids may also be submitted electronically. Information concerning links for electronic bidding is contained in the Notice to Bidders.
- 02.22 Proposals (Bids) shall be executed on Forms furnished and placed in a sealed envelope, marked plainly and prominently as indicated in the Notice to Bidders, and these General Conditions, and addressed:

St. Tammany Parish Government  
Department of Procurement  
21454 Koop Drive, Suite 2-F  
Mandeville, LA 70471

- 02.23 Complete sets of Drawings, Specifications, and Contract Documents may be secured at the Office of the Owner. See Notice to Bidders for deposit schedule.
- 02.24 The successful bidder shall be required to post in each direction a public information sign, 4' x 8' in size, at the location of the project containing information required by the Owner. The Owner shall supply this information.

03.00 AWARD, EXECUTION OF DOCUMENTS, BONDS, ETC.

- 03.01 The award of the Contract, if it is awarded, will be to the lowest responsible Bidder, in accordance with State Law. No award will be made until the Owner has concluded such investigations as it deems necessary to establish the responsibility, qualifications and financial ability and stability of the Bidder to do the Work in accordance with the Contract Documents to the satisfaction of the Owner within the time prescribed as established by the Department based upon the amount of work to be performed and the conditions of same. The written contract and bond shall be issued in conformance with LSA-R.S. 38:2216. The Owner reserves the right to reject the Bid of any Bidder in accordance with the Public Bid Law, LSA-R.S. 38:2214. If the Contract is awarded, the Owner shall give the successful Bidder written notice of the award within forty-five (45) calendar days after

the opening of the Bids in conformance with LSA-R.S. 38:2215(A), or any extension as authorized thereunder.

- 03.02 At least three counterparts of the Agreement and of such other Contract Documents as practicable shall be signed by the Owner and the Contractor. The Owner shall identify those portions of the Contract Documents not so signed and such identification shall be binding on both parties. The Owner and the Contractor shall each receive an executed counterpart of the Contract Documents.
- 03.03 Prior to the execution of the Agreement, the Contractor shall deliver to the Owner the required Bonds.
- 03.04 Failure of the successful Bidder to execute the Agreement and deliver the required Bonds within twenty (20) days of the Notice of the Award shall be just cause for the Owner to annul the award and declare the Bid and any guarantee thereof forfeited.
- 03.05 In order to ensure the faithful performance of each and every condition, stipulation and requirement of the Contract and to indemnify and save harmless the Owner from any and all damages, either directly or indirectly arising out of any failure to perform same, the successful Bidder to whom the Contract is awarded shall furnish a surety Bond in an amount of at least equal to one hundred percent (100%) of the Contract Price. The Contract shall not be in force or binding upon the Owner until such satisfactory Bond has been provided to and approved by the Parish. The cost of the Bond shall be paid for by the Contractor unless otherwise stipulated in the Special Provisions.
- 03.06 No surety Company will be accepted as a bondsman who has no permanent agent or representative in the State upon whom notices referred to in the General Conditions of these Specifications may be served. Services of said notice on said agent or representative in the State shall be equal to service of notice on the President of the Surety Company, or such other officer as may be concerned.
- 03.07 In conformance with LSA-R.S. 38:2219(A)(1)(a), (b), and (c):

Any surety bond written for a public works project shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide, to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide or by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds.

For any public works project, no surety or insurance company shall write a bond which is in excess of the amount indicated as approved by the U.S. Department of the Treasury Financial Management Service list or by a Louisiana domiciled insurance company with an A- rating by A.M. Best up to a limit of ten percent of policyholders' surplus as shown by A.M. Best; companies authorized by this Paragraph who are not on the treasury list shall not write a bond when the penalty exceeds fifteen percent of its capital and surplus, such capital and surplus being the amount by which the company's assets exceed its liabilities as reflected by the most recent financial statements filed by the company with the Department of Insurance.

In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed to do business in the state of Louisiana. All contractors must comply with any other applicable provisions of LSA-R.S. 38:2219.

- 03.08 Should the Contractor's Surety, even though approved and accepted by the Owner, subsequently remove its agency or representative from the State or become insolvent, bankrupt, or otherwise fail, the Contractor shall immediately furnish a new Bond in another company approved by the Owner, at no cost to the Owner. The new Bond shall be executed under the same terms and conditions as the original Bond. The new bond shall be submitted within thirty (30) days of such time as the Owner notifies Contractor or from the time Contractor learns or has reason to know that the original surety is no longer financially viable or acceptable to the Parish, whichever occurs first. In the event that Contractor fails

or refuses to timely secure additional surety, then the Owner may secure such surety and thereafter deduct such cost or expense from any sum due or to become due Contractor.

- 03.09 The Contractor's bondsman shall obligate itself to all the terms and covenants of these Specifications and of contracts covering the Work executed hereunder. The Owner reserves the right to do Extra Work or make changes by altering, adding to deducting from the Work under the conditions and in the manner herein before described without notice to the Contractor's surety and without in any manner affecting the liability of bondsman or releasing it from any of its obligations hereunder.
- 03.10 The Bond shall also secure for the Owner the faithful performance of the Contract in strict accordance with plans and Specifications. It shall protect the Owner against all lien laws of the State and shall provide for payment of reasonable attorney fees for enforcement of Contract and institution or concursus proceedings, if such proceedings become necessary. Likewise, it shall provide for all additional expenses of the Owner occurring through failure of the Contractor to perform.
- 03.11 The surety of the Contractor shall be and does hereby declare and acknowledge itself by acceptance to be bound to the Owner as a guarantor, jointly and in solido, with the Contractor, for fulfillment of terms of Section 03.00.
- 03.12 The performance Bond and Labor and Material Bond forming part of this Contract shall be continued by Contractor and its Surety for a period of one (1) year from date of acceptance of this Contract by Owner to assure prompt removal and replacement of all defective material, equipment, components thereof, workmanship, etc., and to assure payment of any damage to property of Owner or others as a result of such defective materials, equipment, workmanship, etc.
- 03.13 Contractor shall pay for the cost of recording the Contract and Bond and the cost of canceling same. Contractor shall also secure and pay for all Clear Lien and Privilege Certificates (together with any updates) which will be required before any final payment is made, and that may be required before any payment, at the request of the Owner, its representative, agent, architect, engineer and the like. All recordation and Clear Lien and Privilege Certificate requirements shall be in accordance with those requirements noted herein before in contract Specifications.

#### 04.00 SUBCONTRACTS

- 04.01 Contractor shall be fully responsible for all acts and omissions of its Subcontractors and of persons and organizations for whose acts any of them may be liable to the same extent that it is responsible for the acts and omissions of persons directly employed by it. Nothing in the Contract Documents shall create any contractual relationship between Owner and any Subcontractor or other person or organization having a direct Contract with Contractor, nor shall it create any obligation on the part of the Owner to pay or to see to the payment of any monies due any Subcontractor.
- 04.02 Nothing in the Contract Documents shall be construed to control the Contractor in dividing the Work among approved Subcontractors or delineating the Work to be performed by any trade.
- 04.03 The Contractor agrees to specifically bind every Subcontractor to all of the applicable terms and conditions of the Contract Documents prior to commencing Work. Every Subcontractor, by undertaking to perform any of the Work, shall thereby automatically be deemed bound by such terms and conditions.
- 04.04 The Contractor shall indemnify and hold harmless the Owner and their agents and employees from and against all claims, damages, losses and expenses including Attorney's fees arising out of or resulting from the Contractor's failure to bind every Subcontractor and Contractor's surety to all of the applicable terms and conditions of the Contract Documents.

## 05.00 ASSIGNMENT

05.01 Neither party to this Contract shall assign or sublet its interest in this Contract without prior written consent of the other, nor shall the Contractor assign any monies due or to become due to it under this Contract without previous written consent of the Owner, nor without the consent of the surety unless the surety has waived its right to notice of assignment.

## 06.00 CORRELATION, INTERPRETATION AND INTENT OF CONTRACT DOCUMENTS.

06.01 It is the intent of the Specifications and Drawings to describe a complete Project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Agreement between Owner and Contractor. Alterations, modifications and amendments shall only be in writing between these parties.

06.02 The Contract Documents are intended to be complimentary and to be read *in pari materii*, and what is called for by one is as binding as if called for by all. If Contractor finds a conflict, error or discrepancy in the Contract Documents, it shall call it to the Owner's attention, in writing, at once and before proceeding with the Work affected thereby; however, it shall be liable to Owner for its failure to discover any conflict, error or discrepancy in the Specifications or Drawings. In resolving such conflicts, errors and discrepancies, the documents shall be given precedence in the following order: Agreement, Modifications, Addenda, Special Conditions, General Conditions, Construction Specifications and Drawings. The general notes on the plans shall be considered special provisions. Figure dimensions on Drawings shall govern over scale dimensions and detail Drawings shall govern over general Drawings. Where sewer connections are shown to fall on a lot line between two lots, the Contractor shall determine this location by measurement not by scale. Any Work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials or equipment described herein which so applied to this Project are covered by a well-known technical meaning or specification shall be deemed to be governed by such recognized standards unless specifically excluded.

06.03 Unless otherwise provided in the Contract Documents, the Owner will furnish to the Contractor (free of charge not to exceed ten (10) copies) Drawings and Specifications for the execution of Work. The Drawings and Specifications are the property of the Owner and are to be returned to it when the purpose for which they are intended have been served. The Contractor shall keep one copy of all Drawings and Specifications, including revisions, Addenda, details, Shop Drawings, etc. on the Work in good order and available to the Owner or the regulatory agency of the governmental body having jurisdiction in the area of the Work.

## 07.00 SHOP DRAWINGS, BROCHURES AND SAMPLES

07.01 After checking and verifying all field measurements, Contractor shall submit to Owner for approval, five copies (or at Owner's option, one reproducible copy) of all Shop Drawings, which shall have been checked by and stamped with the approval of Contractor and identified as Owner may require. The data shown on the Shop Drawings will be complete with respect to dimensions, design criteria, materials of construction and the like to enable Owner to review the information as required.

07.02 Contractor shall also submit to Owner, for review with such promptness as to cause no delay in Work, all samples as required by the Contract Documents. All samples will have been checked by and stamped with the approval of Contractor identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended. At the time of each submission, Contractor shall in writing call Owner's attention to any deviations that the Shop Drawings or samples may have from the requirements of the Contract Documents.

07.03 Owner will review with reasonable promptness Shop Drawings and samples, but its review shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The review of a separate item as such will not indicate approval of the assembly in which the item functions. Contractor shall make any corrections required by Owner and shall return the required number of

corrected copies of Shop Drawings and resubmit new samples for review. Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections called for by Owner on previous submissions. Contractor's stamp of approval on any Shop Drawing or sample shall constitute a representation to Owner that Contractor has determined and verified all quantities, dimensions, field construction criteria, materials catalog numbers and similar data and thereafter assumes full responsibility for doing so, and that it has reviewed or coordinated each Shop Drawing or sample with the requirements of the Work and the Contract Documents.

07.04 Where a Shop Drawing or sample submission is required by the Specifications, no related Work shall be commenced until the submission has been reviewed by Owner. A copy of each reviewed shop Drawing and each inspected sample shall be kept in good order by Contractor at the site and shall be available to Owner.

07.05 Owner's review of Shop Drawings or samples shall not relieve Contractor from its responsibility for any deviations from the requirements of the Contract Documents unless Contractor has in writing called Owner's attention to such deviation at the time of submission and Owner has given written approval to the specific deviation, nor shall any review by Owner relieve Contractor from responsibility for errors or omissions in the Shop Drawings. The mere submittal of shop drawings which contain deviations from the requirements of plans, specifications and/or previous submittals in itself does not satisfy this requirement.

#### 08.00 RECORD DRAWINGS

08.01 The Contractor shall keep an accurate record in a manner approved by the Owner of all changes in the Contract Documents during construction. In Work concerning underground utilities, the Contractor shall keep an accurate record in a manner approved by the Owner of all valves, fittings, etc. Before the Work is accepted by the Owner, and said acceptance is recorded, the Contractor shall furnish the Owner a copy of this record.

08.02 Contractor shall keep an accurate drawing measured in the field to the nearest 0.1' of the location of all sewer house connections. The location shown shall be the end of the connection at the property line measured along the main line of pipe from a manhole.

08.03 Contractor shall keep an accurate drawing of the storm water drainage collection system. Inverts to the nearest 0.01' and top of castings shall be shown as well as location of all structures to the nearest 0.1'. Upon completion of the Work, the plan will be given to the Owner.

#### 09.00 PROGRESS OF WORK

09.01 Contractor shall conduct the Work in such a professional manner and with sufficient materials, equipment and labor as is considered necessary to ensure its completion within the time limit specified.

09.02 The Owner shall issue a Notice to Proceed to the Contractor within twenty (20) calendar days from the date of execution of the Contract. Upon mutual consent by both parties, the Notice to Proceed may be extended. The Contractor is to commence Work under the Contract within ten (10) calendar days from the date the Notice to Proceed is issued by the Owner.

09.03 The Contractor, immediately after being awarded the Contract, shall prepare and submit for the Owner's approval an estimated progress schedule for the work to be performed, as well as a construction signing layout for all roads within the project area. The Contractor shall not start work or request partial payment until the work schedule has been submitted to the Owner for approval.

09.04 Revisions to the original schedule will be made based on extension of days granted for inclement weather or change orders issued under the contract. No other revision shall be made which affects the original completion or updated completion date, whichever is applicable.

09.05 Failure of the Contractor to submit an estimated progress schedule or to complete timely and on schedule the Work shown on the progress schedule negates any and all causes or claims by the Contractor for accelerated completion damages. These accelerated damage claims shall be deemed forfeited.

09.06 Meetings will be held as often as necessary to expedite the progress of the job. Meetings will be held during normal working hours at the jobsite and shall be mandatory for the Contractor and all Sub-Contractors working on the project. Meetings may be requested by the Owner at any time and at the discretion of the Owner.

#### 10.00 OWNER'S RIGHT TO PROCEED WITH PORTIONS OF THE WORK

10.01 Upon failure of the Contractor to comply with any notice given in accordance with the provisions hereof, the Owner shall have the alternative right, instead of assuming charge of the entire Work, to place additional forces, tools, equipment and materials on parts of the Work. The cost incurred by the Owner in carrying on such parts of the Work shall be payable by the Contractor. Such Work shall be deemed to be carried on by the Owner on account of the Contractor. The Owner may retain all amounts of the cost of such Work from any sum due Contractor or those funds that may become due to Contractor under this Agreement.

10.02 Owner may perform additional Work related to the Project by itself or it may let any other direct contract which may contain similar General Conditions. Contractor shall afford the other contractors who are parties to such different contracts (or Owner, if it is performing the additional Work itself) reasonable opportunity for the introduction and storage of materials and equipment and the execution of Work, and shall properly connect and coordinate its Work with the subsequent work.

10.03 If any part of Contractor's Work depends upon proper execution or results upon the Work of any such other contractor (or Owner), Contractor shall inspect and promptly report to Owner in writing any defects or deficiencies in such Work that render it unsuitable for such proper execution and results. Failure to so report shall constitute an acceptance of the other Work as fit and proper for the relationship of its Work except as to defects and deficiencies which may appear in the other Work after the execution of its Work.

10.04 Whatever Work is being done by the Owner, other Contractors or by this Contractor, the parties shall respect the various interests of the other parties at all times. The Owner may, at its sole discretion, establish additional rules and regulations concerning such orderly respect of the rights of various interests.

10.05 Contractor shall do all cutting, fitting and patching of its Work that may be required to integrate its several parts properly and fit to receive or be received by such other Work. Contractor shall not endanger any Work of others by cutting, excavating or otherwise altering Work and will only alter Work with the written consent of Owner and of the other contractors whose Work will be affected.

10.06 If the performance of additional Work by other contractors or Owner is not noted in the Contract Documents, written notice thereof shall be given to Contractor prior to starting any such additional Work. If Contractor believes that the performance of such additional Work by Owner or others may cause additional expense or entitles an extension of the Contract Time, the Contractor may make a claim therefor. The claim must be in writing to the Owner within thirty (30) calendar days of receipt of notice from the Owner of the planned additional Work by others.

#### 11.00 TIME OF COMPLETION

11.01 The Notice to Proceed will stipulate the date on which the Contractor shall begin work. That date shall be the beginning of the Contract Time charges.

11.02 Contractor shall notify the Owner through its duly authorized representative, in advance, of where Contractor's work shall commence each day. A daily log shall be maintained by Contractor to establish dates, times, persons contacted, and location of work. Specific notice shall be made to the Owner if the Contractor plans to work on Saturday, Sunday, or

a Parish approved holiday. If notice is not received, no consideration will be given for inclement weather and same shall be considered a valid work day.

- 11.03 The Work covered by the Plans, Specifications and Contract Documents must be completed sufficiently for acceptance within the number of calendar days specified in the Proposal and/or the Contract, commencing from the date specified in the Notice to Proceed. It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the time of completion is an essential condition of this Contract, and it is further mutually understood and agreed that if the Contractor shall neglect, fail or refuse to complete the Work within the time specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as partial consideration for the awarding of this Contract, to pay the Owner \$1,500.00 per day as specified in the Contract, not as a penalty, but as liquidated damages for such breach of contract for each and every calendar day that the Contractor shall be in default after the time stipulated in the Contract for completing the Work. It is specifically understood that the Owner shall also be entitled to receive a reasonable attorney fee and all costs in the event that Contractor fails to adhere to this agreement and this contract is referred to counsel for any reason whatsoever. Reasonable attorney fees shall be the prevailing hourly rate of the private sector, and in no event shall the hourly rate be less than \$175.00 per hour. All attorney fees shall be paid to the operating budget of the Office of the Parish President.
- 11.04 Prior to final payment, the Contractor may, in writing to the Owner, certify that the entire Project is substantially complete and request that the Owner or its agent issue a certificate of Substantial Completion. See Section 29.00.
- 11.05 The Owner may grant an extension(s) of time to the Contractor for unusual circumstances which are beyond the control of the Contractor and could not reasonably be foreseen by the Contractor prior to Bidding. Any such request must be made in writing to the Owner within seven (7) calendar days following the event occasioning the delay. The Owner shall have the exclusive and unilateral authority to determine, grant, and/or deny the validity of any such claim.
- 11.06 Extensions of time for inclement weather shall be processed as follows:

Commencing on the start date of each job, the Parish Inspector assigned to same shall keep a weekly log, indicating on each day whether inclement weather has prohibited the Contractor from working on any project within the specific job, based upon the following:

1. Should the Contractor prepare to begin work on any day in which inclement weather, or the conditions resulting from the weather, prevent work from beginning at the usual starting time, and the crew is dismissed as a result, the Contractor will not be charged for a working day whether or not conditions change during the day and the rest of the day becomes suitable for work.
2. If weather conditions on the previous day prevent Contractor from performing work scheduled, provided that no other work can be performed on any project within the package. The Parish Inspector shall determine if it is financially reasonable to require the Contractor to deviate from the schedule and relocate to another location.
3. If the Contractor is unable to work at least 60% of the normal work day due to inclement weather, provided that a normal working force is engaged on the job.

Any dispute of weather conditions as related to a specific job shall be settled by records of the National Weather Service.

- 11.07 Extensions of time for change orders

When a change order is issued, the Owner and Contractor will agree on a reasonable time extension, if any, to implement such change. Consideration shall be given for, but not limited to, the following:



1. If material has to be ordered;
2. Remobilization and or relocation of equipment to perform task; and
3. Reasonable time frame to complete additional work.

Time extensions for change orders shall be reflected on the official document signed by the Owner and Contractor.

- 11.08 At the end of each month, the Owner or its agent will furnish to the Contractor a monthly statement which reflects the number of approved days added to the contract. The Contractor will be allowed fourteen (14) calendar days in which to file a written protest setting forth in what respect the monthly statement is incorrect; otherwise, the statement shall be considered accepted by the Contractor as correct.
- 11.09 Apart from extension of time for unavoidable delays, no payment or allowance of any kind shall be made to the Contractor as compensation for damages because of hindrance or delay for any cause in the progress of the Work, whether such delay be avoidable or unavoidable.

## 12.00 LIQUIDATED DAMAGES

- 12.01 In case the Work is not completed in every respect within the time that may be extended, it is understood and agreed that per diem deductions of the sum of \$1,500.00 for liquidated damages, as stipulated in the Proposal and/or Contract, shall be made from the total Contract Price for each and every calendar day after and exclusive of the day on which completion was required, and up to the completion of the Work and acceptance thereof by the Owner. It is understood and agreed that time is of the essence to this Contract, and the above sum being specifically herein agreed upon in advance as the measure of damages to the Owner on account of such delay in the completion of the Work. It is further agreed that the expiration of the term herein assigned or as may be extended for performing the Work shall, *ipso facto*, constitute a putting in default, the Contractor hereby waiving any and all notice of default. The Contractor agrees and consents that the Contract Price, reduced by the aggregate of the entire damages so deducted, shall be accepted in full satisfaction of all Work executed under this Contract. It is further understood and agreed that Contractor shall be liable for a reasonable attorney fee and all costs associated with any breach of this agreement, including but not limited to this subsection. In the event that any dispute or breach herein causes referrals to counsel, then Contractor agrees to pay a reasonable attorney fee at the prevailing hourly rate of the private sector. In no event shall the hourly rate be less than \$175.00 per hour.

## 13.00 LABOR, MATERIALS, EQUIPMENT, SUPERVISION, PERMITS AND TAXES

- 13.01 The Contractor shall provide and pay for all labor, materials, equipment, supervision, subcontracting, transportation, tools, fuel, power, water, sanitary facilities and all incidentals necessary for the completion of the Work in substantial conformance with the Contract Documents.
- 13.02 The Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. It shall at all times maintain good discipline and order at the site.
- 13.03 Unless otherwise specifically provided for in the Specifications, all workmanship, equipment, materials, and articles incorporated in the Work covered by this Contract are to be new and of the best grade of their respective kinds for the purpose intended. Samples of materials furnished under this Contract shall be submitted for approval to the Owner when and as directed.
- 13.04 Whenever a material or article required is specified or shown on the plans by using the name of a proprietary product or of a particular manufacturer or vendor, any material or article which shall perform adequately the duties imposed by the general design will be considered equal, and satisfactory, providing the material or article so proposed is of equal substance and function and that all technical data concerning the proposed substitution be approved by the Owner prior to the Bidding. The Owner shall have the exclusive and unilateral discretion to determine quality and suitability in accordance with LSA-R.S. 38:2212(T)(2).

- 13.05 Materials shall be properly and securely stored so as to ensure the preservation of quality and fitness for the Work, and in a manner that leaves the material accessible to inspection. Materials or equipment may not be stored on the site in a manner such that it will interfere with the continued operation of streets and driveways or other contractors working on the site.
- 13.06 The Contractor, by entering into the Contract for this Work, sets itself forth as an expert in the field of construction and it shall supervise and direct the Work efficiently and with its best skill and attention. It shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.
- 13.07 Contractor shall keep on the Work, at all times during its progress, a competent resident Superintendent, who shall not be replaced without written Notice to Owner except under extraordinary circumstances. The Superintendent will be Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given to the Superintendent shall be as binding as if given to the Contractor. Owner specifically reserves the right to approve and/or disapprove the retention of a new superintendent, all to not be unreasonably withheld.
- 13.08 Any foreman or workman employed on this Project who disregards orders or instructions, does not perform his Work in a proper and skillful manner, or is otherwise objectionable, shall, at the written request of the Owner, be removed from the Work and shall be replaced by a suitable foreman or workman.
- 13.09 The Contractor and/or its assigned representative shall personally ensure that all subcontracts and divisions of the Work are executed in a proper and workmanlike manner, on scheduled time, and with due and proper cooperation.
- 13.10 Failure of the Contractor to keep the necessary qualified personnel on the Work shall be considered cause for termination of the Contract by the Owner.
- 13.11 Only equipment in good working order and suitable for the type of Work involved shall be brought onto the job and used by the Contractor. The Contractor is solely responsible for the proper maintenance and use of its equipment and shall hold the Owner harmless from any damages or suits for damages arising out of the improper selection or use of equipment. No piece of equipment necessary for the completion of the Work shall be removed from the job site without approval of the Owner.
- 13.12 All Federal, State and local taxes due or payable during the time of Contract on materials, equipment, labor or transportation, in connection with this Work, must be included in the amount bid by the Contractor and shall be paid to proper authorities before acceptance. The Contractor shall furnish all necessary permits and certificates and comply with all laws and ordinances applicable to the locality of the Work. The cost of all inspection fees levied by any governmental entity whatsoever shall be paid for by the Contractor.
- 13.13 In accordance with St. Tammany Police Jury Resolution 86-2672, as amended, the Contractor must provide in a form suitable to the Owner an affidavit stating that all applicable sales taxes for materials used on this project have been paid.
- 13.14 During the period that this Contract is in force, neither party to the Contract shall solicit for employment or employ an employee of the other.
- 13.15 All materials or equipment shown on the Drawings or included in these specifications shall be furnished unless written approval of a substitute is obtained from the Designer, or Owner if no separate designer.
- 13.16 If a potential supplier wishes to submit for prior approval a particular product other than a product specified in the contract documents, he shall do so no later than seven working days prior to the opening of bids. Within three days, exclusive of holidays and weekends, after such submission, the prime design professional shall furnish to both the public entity and the potential supplier written approval or denial of the product submitted. The burden of proof of the equality of the proposed substitute is upon the proposer and only that information formally submitted shall be used by the Designer in making its decision.

13.17 The decision of the Designer/Owner shall be given in good faith and shall be final.

14.00 QUANTITIES OF ESTIMATE, CHANGES IN QUANTITIES, EXTRA WORK

14.01 Whenever the estimated quantities of Work to be done and materials to be furnished under this Contract are shown in any of the documents, including the Proposal, such are given for use in comparing Bids and the right is especially reserved, except as herein otherwise specifically limited, to increase or diminish same not to exceed twenty-five percent (25%) by the Owner to complete the Work contemplated by this Contract. Such increase or diminution shall in no way vitiate this Contract, nor shall such increase or diminution give cause for claims or liability for damages.

14.02 The Owner shall have the right to make alterations in the line, grade, plans, form or dimensions of the Work herein contemplated, provided such alterations do not change the total cost of the Project, based on the originally estimated quantities, and the unit prices bid by more than twenty-five percent (25%) and provided further that such alterations do not change the total cost of any major item, based on the originally estimated quantities and the unit price bid by more than twenty-five (25%). (A major item shall be construed to be any item, the total cost of which is equal to or greater than ten percent (10%) of the total Contract Price, computed on the basis of the Proposal quantity and the Contract unit price). Should it become necessary, for the best interest of the Owner, to make changes in excess of that herein specified, the same shall be covered by supplemental agreement either before or after the commencement of the Work and without notice to the sureties. If such alterations diminish the quantity of Work to be done, such shall not constitute a claim for damages for anticipated profits for the Work dispensed with, but when the reduction in amount is a material part of the Work contemplated, the Contractor shall be entitled to only reasonable compensation as determined by the Owner for overhead and equipment charges which it may have incurred in expectation of the quantity of Work originally estimated, unless specifically otherwise provided herein; if the alterations increase the amount of Work, the increase shall be paid according to the quantity of Work actually done and at the price established for such Work under this Contract except where, in the opinion of the Owner, the Contractor is clearly entitled to extra compensation.

14.03 Without invalidating the Contract, the Owner may order Extra Work or make changes by altering, adding to, or deducting from the Work, the Contract sum being adjusted accordingly. The consent of the surety must first be obtained when necessary or desirable, all at the exclusive discretion of the Owner. All the Work of the kind bid upon shall be paid for at the price stipulated in the Proposal, and no claims for any Extra Work or material shall be allowed unless the Work is ordered in writing by the Owner.

14.04 Extra Work for which there is no price or quantity included in the Contract shall be paid for at a unit price or lump sum to be agreed upon in advance in writing by the Owner and Contractor. Where such price and sum cannot be agreed upon by both parties, or where this method of payment is impracticable, the Owner may, at its exclusive and unilateral discretion, order the Contractor to do such Work on a Force Account Basis.

14.05 In computing the price of Extra Work on a Force Account Basis, the Contractor shall be paid for all foremen and labor actually engaged on the specific Work at the current local rate of wage for each and every hour that said foremen and labor are engaged in such Work, plus ten percent (10%) of the total for superintendence, use of tools, overhead, direct & indirect costs/expenses, pro-rata applicable payroll taxes, pro-rata applicable workman compensation benefits, pro-rata insurance premiums and pro-rata reasonable profit. The Contractor shall furnish satisfactory evidence of the rate or rates of such insurance and tax. The Contractor will not be able to collect any contribution to any retirement plans or programs.

14.06 For all material used, the Contractor shall receive the actual cost of such material delivered at the site of the Work, as shown by original receipted bill, to which shall be added five percent (5%). There will be absolutely no additional surcharges or additional fees attached hereto with respect to this subsection.

14.07 For any equipment used that is owned by the Contractor, the Contractor shall be allowed a rental based upon the latest prevailing rental price, but not to exceed a rental price as determined by the Associated Equipment Distributors (A.E.D. Green Book).

- 14.08 The Contractor shall also be paid the actual costs of transportation for any equipment which it owns and which it has to transport to the Project for the Extra Work. There will be absolutely no additional surcharges or additional fees attached hereto with respect to this subsection.
- 14.09 If the Contractor is required to rent equipment for Extra Work, but not required for Contract items, it will be paid the actual cost of rental and transportation of such equipment to which no percent shall be added. The basis upon which rental cost are to be charged shall be agreed upon in writing before the Work is started. Actual rental and transportation costs shall be obtained from receipted invoices and freight bills.
- 14.10 No compensation for expenses, fees or costs incurred in executing Extra Work, other than herein specifically mentioned herein above, will be allowed.
- 14.11 A record of Extra Work on Force Account basis shall be submitted to the Owner on the day following the execution of the Work, and no less than three copies of such record shall be made on suitable forms and signed by both the Owner or his representative on the Project and the Contractor. All bids for materials used on extra Work shall be submitted to the Owner by the Contractor upon certified statements to which will be attached original bills covering the costs of such materials.
- 14.12 Payment for Extra Work of any kind will not be allowed unless the same has been ordered in writing by the Owner.

15.00 STATUS OF THE ENGINEER (NOT APPLICABLE)

16.00 INJURIES TO PERSONS AND PROPERTY

- 16.01 The Contractor shall be held solely and exclusively responsible for all injuries to persons and for all damages to the property of the Owner or others caused by or resulting from the negligence of itself, its employees or its agents, during the progress of or in connection with the Work, whether within the limits of the Work or elsewhere under the Contract proper or as Extra Work. This requirement will apply continuously and not be limited to normal working hours or days. The Owner's construction review is for the purpose of checking the Work product produced and does not include review of the methods employed by the Contractor or to the Contractor's compliance with safety measures of any nature whatsoever. The Contractor agrees to pay a reasonable attorney fee and other reasonable attendant costs of the Owner in the event it becomes necessary for the Owner to employ an attorney to enforce this section or to protect itself against suit over the Contractor's responsibilities. Attorney fees shall be at the prevailing hourly rate of the private sector. The attorney fee hourly rate shall not be less than \$175.00 per hour. All attorney fees collected shall be paid to the operating budget of the Office of the Parish President.
- 16.02 The Contractor must protect and support all utility infrastructures or other properties which are liable to be damaged during the execution of its Work. It shall take all reasonable and proper precautions to protect persons, animals and vehicles or the public from the injury, and wherever necessary, shall erect and maintain a fence or railing around any excavation, and place a sufficient number of lights about the Work and keep same burning from twilight until sunrise, and shall employ one or more watchmen as an additional security whenever needed. The Contractor understands and agrees that the Owner may request that security be placed on the premises to ensure and secure same. The Owner shall have exclusive authority to request placement of such security. Contractor agrees to retain and place security as requested, all at the sole expense of Contractor. Additional security shall not be considered a change order or reason for additional payment by the Owner. The Contractor must, as far as practicable and consistent with good construction, permit access to private and public property and leave fire hydrants, catch basins, streets, etc., free from encumbrances. The Contractor must restore at its own expense all injured or damaged property caused by any negligent act of omission or commission on its part or on the part of its employees or subcontractors, including, but not limited to, sidewalks, curbing, sodding, pipes conduits, sewers, buildings, fences, bridges, retaining walls, tanks, power lines, levees or any other building or property whatsoever to a like condition as existed prior to such damage or injury.

- 16.03 In case of failure on the part of the Contractor to restore such property or make good such damage, the Owner may upon forty-eight (48) hours' notice proceed to repair or otherwise restore such property as may be deemed necessary, and the cost thereof will be deducted from any monies due or which may become due under its Contract.
- 16.04 Contractor agrees to protect, defend, indemnify, save, and hold harmless St. Tammany Parish Government, its elected and appointed officials, departments, agencies, boards and commissions, their officers, agents servants, employees, including volunteers, from and against any and all claims, demands, expense and liability arising out of injury or death to any person or the damage, loss or destruction of any property to the extent caused by any negligent act or omission or willful misconduct of Contractor, its agents, servants, employees, and subcontractors, or any and all costs, expense and/or attorney fees incurred by St. Tammany Parish Government as a result of any claim, demands, and/or causes of action that results from the negligent performance or non-performance by Contractor, its agents, servants, employees, and subcontractors of this contract. Contractor agrees to investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at its sole expense and agrees to bear all other costs and expenses related thereto caused by any negligent act or omission or willful misconduct of Contractor, its agents, servants, employees, and subcontractors.
- 16.05 As to any and all claims against Owner, its agents, assigns, representatives or employees by any employee of Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts as may be liable, the indemnification obligation under Paragraph 16.04 shall not be limited in any way or by any limitation on the amount or type of damages, compensation or benefits payable by or for Contractor or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefit acts.
- 16.06 No road shall be closed by the Contractor to the public except by written permission of the Owner. If so closed, the Contractor shall maintain traffic over, through and around the Work included in his Contract, with the maximum practical convenience, for the full twenty-four hours of each day of the Contract, whether or not Work has ceased temporarily. The Contractor shall notify the Owner at the earliest possible date after the Contract has been executed and, in any case, before commencement of any construction that might in any way inconvenience or endanger traffic, in order that necessary and suitable arrangements may be determined. Any and all security, maintenance, labor or costs associated with traffic control herein shall be at the sole expense of Contractor. This expense shall be paid directly by the Contractor. This expense shall not be considered as a change order nor shall it allow the Contractor any additional cost reimbursement whatsoever. All traffic deviations herein shall be coordinated with the appropriate law enforcement officials of this Parish.
- 16.07 The convenience of the general public and residents along the Works shall be provided for in a reasonable, adequate and satisfactory manner. Where existing roads are not available as detours, and unless otherwise provided, all traffic shall be permitted to pass through the Work. In all such cases, the public shall have precedence over Contractor's vehicles insofar as the traveling public's vehicles shall not be unduly delayed for the convenience of the Contractor. In order that all unnecessary delay to the traveling public may be avoided, the Contractor shall provide and station competent flagmen whose sole duties shall consist of directing and controlling the movement of public traffic either through or around the Work. Any and all security, maintenance, labor or costs associated with traffic control herein shall be at the sole expense of Contractor. This expense shall be paid directly by the Contractor. This expense shall not be considered as a change order nor shall it allow the Contractor any additional cost reimbursement whatsoever. All traffic deviations herein shall be coordinated with the appropriate law enforcement officials of this Parish.
- 16.08 The Contractor shall arrange its Work so that no undue or prolonged blocking of business establishments will occur.
- 16.09 Material and equipment stored on the right of way or work site shall be so placed and the Work at times shall be so conducted as to ensure minimum danger and obstruction to the traveling public.
- 16.10 During grading operations when traffic is being permitted to pass through construction, the Contractor shall provide a smooth, even surface that will provide a satisfactory passageway

for use of traffic. The road bed shall be sprinkled with water if necessary to prevent a dust nuisance, provided the dust nuisance is a result of the Work.

- 16.11 Fire hydrants shall be accessible at all times to the Fire Department. No material or other obstructions shall be placed closer to a fire hydrant than permitted by ordinances, rules or regulations or within fifteen (15) feet of a fire hydrant, in the absence of such ordinance, rules or regulations.
- 16.12 The Contractor shall not, without the written permission of the Owner, do Work for a resident or property owner abutting the Work at the time that this Work is in progress.
- 16.13 No Work of any character shall be commenced on railroad right-of-way until the Railroad Company has issued a permit to the Owner and has been duly notified by the Contractor in writing (with a copy forwarded to the Owner) of the date it proposes to begin Work, and until an authorized representative of the Railroad Company is present, unless the Railroad Company waives such requirements. All Work performed by the Contractor within the right-of-way limits of the railroad shall be subject to the inspection and approval of the chief engineer of the Railroad Company or its authorized representative. Any precautions considered necessary by said chief engineer to safeguard the property, equipment, employees and passengers of the Railroad Company shall be taken by the Contractor without extra compensation. The Contractor shall, without extra compensation, take such precautions and erect and maintain such tell-tale or warning devices as the Railroad Company considers necessary to safeguard the operation of its trains. The temporary vertical and horizontal clearance specified by the chief engineer of the Railroad Company in approving these shall be maintained at all times. No steel, brick, pipe or any loose material shall be left on the ground in the immediate vicinity of the railway track. Before any Work is done within Railroad right of way, the Contractor shall provide and pay all costs of any special insurance requirements of the Railroad.
- 16.14 The Contractor, shall, without extra compensation, provide, erect, paint and maintain all necessary barricades. Also, without extra compensation, the Contractor shall provide suitable and sufficient lights, torches, reflectors or other warning or danger signals and signs, provide a sufficient number of watchmen and flagmen and take all the necessary precautions for the protection of the Work and safety of the Public.
- 16.15 The Contractor shall erect warning signs beyond the limits of the Project, in advance of any place on the Project where operations interfere with the use of the road by traffic, including all intermediate points where the new Work crosses or coincides with the existing road. All barricades and obstructions shall be kept well painted and suitable warning signs shall be placed thereon. All barricades and obstructions shall be illuminated at night and all lights or devices for this purpose shall be kept burning from sunset to sunrise.
- 16.16 Whenever traffic is maintained through or over any part of the Project, the Contractor shall clearly mark all traffic hazards. No direct payment will be made for barricades, signs and illumination therefore or for watchmen or flagmen.
- 16.17 The Contractor will be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of the Work. This requirement will apply continuously and not be limited to normal working hours. The duty of the Owner to conduct construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's safety measures, in, or near the construction site.

#### 17.00 SANITARY PROVISIONS

- 17.01 The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of its employees as may be necessary to comply with the rules and regulations of the State Health Agency or of the other authorities having jurisdiction and shall permit no public nuisance.

#### 18.00 RIGHTS OF WAY

18.01 The Owner will furnish the Contractor with all necessary rights-of-way for the prosecution of the Work. The rights of way herein referred to shall be taken to mean only permission to use or pass through the locations or space in any street, highway, public or private property in which the Contractor is to prosecute the Work.

18.02 It is possible that all lands and rights of way may not be obtained as herein contemplated before construction begins, in which event the Contractor shall begin its Work upon such land and rights of way as the Owner may have previously acquired. Any delay in furnishing these lands by the Owner can be deemed proper cause for adjustment in the Contract amount and/or in the time of completion.

#### 19.00 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

19.01 The Contractor shall not enter upon private property for any purpose without first obtaining permission from the Owner, as well as the private property owner and/or and private property Lessees. The Contractor shall use every precaution necessary for the preservation of all public and private property, monuments, highway signs, telephone lines, other utilities, etc., along and adjacent to the Work; the Contractor shall use every precaution necessary to prevent damage to pipes, conduits, and other underground structures; and shall protect carefully from disturbance or damage all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed. The street and highway signs and markers that are to be affected by the Work shall be carefully removed when the Work begins and stored in a manner to keep them clean and dry. The Contractor must obtain all necessary information in regard to existing utilities and shall give notice in writing to the owners or the proper authorities in charge of streets, gas, water, pipes, electric, sewers and other underground structures, including conduits, railways, poles and pole lines, manholes, catch basins, fixtures, appurtenances, and all other property that may be affected by the Contractor's operations, at least forty-eight (48) hours before its operations will affect such property. The Contractor shall not hinder or interfere with any person in the protection of such Work or with the operation of utilities at any time. When property, the operation of railways, or other public utilities are endangered, the Contractor shall at its own expense, maintain flagmen or watchmen and any other necessary precautions to avoid interruption of service or damage to life or property, and it shall promptly repair, restore, or make good any injury or damage caused by its negligent operations in an acceptable manner. The Contractor must also obtain all necessary information in regard to the installation of new cables, conduits, and transformers, and make proper provisions and give proper notifications, in order that same can be installed at the proper time without delay to the Contractor or unnecessary inconvenience to the Owner.

19.02 The Contractor shall not remove, cut or destroy trees, shrubs, plants, or grass that are to remain in the streets or those which are privately owned, without the proper authority. Unless otherwise provided in the Special Provisions or the Proposal, the Contractor shall replace and replant all plants, shrubs, grass and restore the grounds back to its original good condition to the satisfaction of the Owner and/or the property owner. The Contractor shall assume the responsibility of replanting and guarantees that plants, shrubs, grass will be watered, fertilized and cultivated until they are in a growing condition. No direct payment will be made for removing and replanting of trees, shrubs, plants or grass unless such items are set forth in the Proposal.

19.03 When or where direct damage or injury is done to public or private property by or on account of any negligent act, omission, neglect or otherwise of the Contractor, it shall make good such damage or injury in an acceptable manner.

#### 20.00 CONTRACTORS RESPONSIBILITY FOR WORK

20.01 Until final acceptance of the Work by the Owner as evidence by approval of the final estimate, the Work shall be in the custody and under the charge and care of the Contractor and it shall take every necessary precaution against injury or damage to any part thereof by the action of the elements or from the non-execution of the Work; unless otherwise provided for elsewhere in the Specifications or Contract. The Contractor shall rebuild, repair, restore and make good, without extra compensation, all injuries or damages to any portion of the Work occasioned by any of the above causes before its completion and

acceptance, and shall bear the expenses thereof. In case of suspension of the Work from any cause whatever, the Contractor shall be responsible for all materials and shall properly and securely store same, and if necessary, shall provide suitable shelter from damage and shall erect temporary structures where necessary. If in the exclusive discretion of the Owner, any Work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of its Subcontractors to so protect the Work, such materials shall be removed and replaced at the sole expense of the Contractor. Such amount shall be deducted from any sum due or to be due Contractor.

20.02 The Contractor shall give all notice and comply with all Federal, State, and local laws, ordinances, and regulations in any manner affecting the conduct of the Work, and all such orders and decrees as exist, or may be enacted by bodies or tribunals having any jurisdiction or authority over the Work, and shall indemnify and hold harmless the Owner against any claim or liability arising from, or based on, the violation of any such law, ordinance, regulation, order or decree, whether by itself, its employees or Subcontractors.

#### 21.00 TESTS AND INSPECTIONS CORRECTION & REMOVAL OF DEFECTIVE WORK

21.01 Contractor warrants and guarantees to Owner that all materials and equipment will be new unless otherwise specified and that all Work will be of good quality and free from faults or defects and in accordance with the requirements of the Contract Documents. All unsatisfactory Work, all faulty or Defective Work and all Work not conforming to the requirements of the Contract Documents at the time of acceptance shall be considered Defective. Prompt and reasonable notice of all defects shall be given to the Contractor.

21.02 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to specifically be inspected, tested or approved by some public body, Contractor shall assume full responsibility therefor, pay all costs in connection therewith and furnish Owner the required certificates of inspection, testing or approval. All other inspections, tests and approval required by the Contract Documents shall be performed by organizations acceptable to Owner and Contractor and the costs thereof shall be borne by the Contractor unless otherwise specified.

21.03 Contractor shall give Owner timely notice of readiness of the Work for all inspections, tests or approvals. If any such Work required to be inspected, tested or approved is covered without written approval of Owner, it must, if requested by Owner, be uncovered for observation, and such uncovering shall be at Contractor's expense unless Contractor has given Owner timely notice of its intention to cover such Work and Owner has not acted with reasonable promptness in response to such notice.

21.04 Neither observations by Owner nor inspections, tests or approvals shall relieve Contractor from its obligations to perform the Work in accordance with the requirements of the Contract Document.

21.05 Owner and its representatives will at reasonable times have access to the Work. Contractor shall provide proper and safe facilities for such access and observation of the Work and also for any inspection or testing thereof by others.

21.06 If any Work is covered contrary to the written request of Owner, it must, be uncovered for Owner's observation and replaced at Contractor's expense. If any Work has been covered which Owner has not specifically requested to observe prior to its being covered, or if Owner considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at Owner's request, shall uncover, expose or otherwise make available for observations, inspections or testing as Owner may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is Defective, Contractor shall bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order shall be issued. If, however, such Work is not found to be Defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.



- 21.07 If the Work is Defective, or Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, or if the Contractor fails to make prompt payments to Subcontractors or for labor, materials or equipment, Owner may order Contractor to stop the Work, or any portion thereof, until the cause of such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor or any other party.
- 21.08 Prior to approval of final payment, Contractor shall promptly, without cost to Owner and as specified by Owner, either correct any Defective Work, whether or not fabricated, installed or completed, or if the Work has been rejected by Owner, remove it from the site and replace it with non-defective Work. If Contractor does not correct such Defective Work or remove and replace such rejected Work within a reasonable time, all as specified in a written notice from Owner, Owner may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement including compensation for additional professional services shall be paid by Contractor, and an appropriate deductive Change Order shall be issued. Contractor shall also bear the expense of making good all Work of others destroyed or damaged by its correction, removal or replacement of its Defective Work.
- 21.09 If, after the approval of final payment and prior to the expiration of one year after the date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be Defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, either correct such Defective Work or if it has been rejected by Owner, remove it from the site and replace it with non-defective Work. If Contractor does not promptly comply with the terms of such instructions, Owner may have the Defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be paid by Contractor. The Contractor agrees to pay a reasonable attorney fee and other reasonable attendant costs of the Owner in the event it becomes necessary for the Owner to employ an attorney to enforce this section or to protect itself against suit over the Contractor's responsibilities. Attorney fees shall be at the prevailing hourly rate of the private sector. The attorney fee hourly rate shall not be less than \$175.00 per hour. All attorney fees collected shall be paid to the operating budget of the Office of the Parish President.
- 21.10 If, instead of requiring correction or removal and replacement of Defective Work, Owner (and prior to approval of final payment) prefers to accept it, the Owner may do so. In such case, if acceptance occurs prior to approval of final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including appropriate reduction in the Contract Price, or, if the acceptance occurs after approval of final payment, an appropriate amount shall be paid by Contractor to Owner.
- 21.11 If Contractor should fail to progress the Work in accordance with the Contract Documents, including any requirements of the Progress Schedule, Owner, after seven (7) days written Notice to Contractor, may, without prejudice to any other remedy Owner may have, make good such deficiencies and the cost thereof including compensation for additional professional services shall be charged against Contractor. In such cases, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents including an appropriate reduction in the Contract Price. If the payments then or thereafter due Contractor are not sufficient to cover such amount, Contractor shall pay the difference to Owner.
- 21.12 The Owner may appoint representatives to make periodic visits to the site and observe the progress and quality of the executed Work. These representatives shall be governed by the same restrictions placed on the Owner by these Specifications. The governing body of the Federal, State or local government exercising authority in the area of the Work may appoint representatives to observe the progress and quality of the Work. Contractor shall cooperate with and assist these representatives in the performance of their duties.
- 21.13 The Contractor shall be responsible for the faithful execution of its Contract and the presence or absence of the Owner's or Government's Representative is in no way or manner to be presumed or assumed to relieve in any degree the responsibility or obligation of the Contractor.

- 21.14 The Contractor shall notify the Owner and the Governmental Agency having jurisdiction as to the exact time at which it is proposed to begin Work so the Owner may provide for inspection of all materials, foundations, excavations, equipment, etc., and all or any part of the Work and to the preparation or manufacture of materials to be used whether within the limits of the Work or at any other place.
- 21.15 The Owner or its representatives shall have free access to all parts of the Work and to all places where any part of the materials to be used are procured, manufactured or prepared. The Contractor shall furnish the Owner all information relating to the Work and the material therefor, which may be deemed necessary or pertinent, and with such samples of materials as may be required. The Contractor, at its own expense, shall supply such labor and assistance as may be necessary in the handling of materials for proper inspection or for inspection of any Work done by it.
- 21.16 No verbal instructions given to the Contractor by the Owner, Project Representative or any of their agents shall change or modify the written Contract. Contractors shall make no claims for additional payments or time based upon verbal instructions.

## 22.00 SUBSURFACE CONDITIONS

- 22.01 It is understood and agreed that the Contractor is familiar with the subsurface conditions that will be encountered and its price bid for the Work includes all of the costs involved for Work in these conditions and it is furthermore agreed that it has taken into consideration, prior to its Bid and acceptance by Owner, all of the subsurface conditions normal or unusual that might be encountered in the location of the Work.
- 22.02 Should the Contractor encounter during the progress of the Work subsurface conditions at the site materially differing from those shown on the Drawings or indicated in the Specifications, the attention of the Owner shall be directed to such conditions before the conditions are disturbed. If the Owner finds that the conditions materially differ from those shown on the Drawings or indicated in the Specifications, it shall at once make such changes in the Drawings or Specifications as it may find necessary, and any increase or decrease in cost or extension of time resulting from such changes shall be adjusted in the same manner as provided for changes for Extra Work. The Contractor shall submit breakdowns of all costs in a manner as instructed and approved by the Owner.

## 23.00 REMOVAL AND DISPOSAL OF STRUCTURES AND OBSTRUCTIONS

- 23.01 Bidder shall thoroughly examine the site of the Work and shall include in its Bid the cost of removing all structures and obstructions in the way of the Work.
- 23.02 The Contractor shall remove any existing structures or part of structures, fence, building or other encumbrances or obstructions that interfere in any way with the Work. Compensations for the removal of any structure shall be made only if the item(s) to be removed was/were listed as pay item(s) on the Proposal.
- 23.03 If called for in the Special Conditions, all privately and publicly owned materials and structures removed shall be salvaged without damage and shall be piled neatly and in an acceptable manner upon the premises if it belongs to an abutting property owner, otherwise at accessible points along the improvements. Materials in structures which is the property of the Owner or property of any public body, private body or individual which is fit for use elsewhere, shall remain property of the original Owner. It shall be carefully removed without damage, in sections which may be readily transported; same shall be stored on or beyond the right of way. The Contractor will be held responsible for the care and preservation for a period of ten (10) days following the day the last or final portion of the materials stored at a particular location are placed thereon. When privately owned materials are stored beyond the right of way, the Contractor will be held responsible for such care and preservation for a period of ten (10) days responsibility period for care and preservation of the materials begins. The Contractor must furnish the Owner with evidence satisfactory that the proper owner of the materials has been duly notified by the Contractor that the said owner must assume responsibility for its materials on the date following the Contractor's ten (10) day responsibility.

24.00 INSURANCE

- 24.01 Contractor shall secure and maintain at its expense such insurance that will protect it and the Parish from claims for injuries to persons or damages to property which may arise from or in connection with the performance of Services or Work hereunder by the Contractor, his agents, representatives, employees, and/or subcontractors. The cost of such insurance shall be included in Contractor's bid.
- 24.02 The Contractor shall not commence work until it has obtained all insurance as required for the Parish Project. If the Contractor fails to furnish the Parish with the insurance protection required and begins work without first furnishing Parish with a currently dated certificate of insurance, the Parish has the right to obtain the insurance protection required and deduct the cost of insurance from the first payment due the Contractor. Further deductions are permitted from future payments as are needed to protect the interests of the Parish including, but not limited to, renewals of all policies.
- 24.03 Payment of Premiums: The insurance companies issuing the policy or policies shall have no recourse against the Parish of St. Tammany for payment of any premiums or for assessments under any form of policy.
- 24.04 Deductibles: Any and all deductibles in the described insurance policies shall be assumed by and be at the sole risk of the Contractor.
- 24.05 Authorization of Insurance Company(ies) and Rating: All insurance companies must be authorized to do business in the State of Louisiana and shall have an A.M. Best rating of no less than A-, Category VII.
- 24.06 Policy coverages and limits must be evidenced by Certificates of Insurance issued by Contractor's carrier to the Parish and shall reflect:

Date of Issue: Certificate must have current date.

Named Insured: The legal name of Contractor under contract with the Parish and its principal place of business shall be shown as the named insured on all Certificates of Liability Insurance.

Name of Certificate Holder: St. Tammany Parish Government, Office of Risk Management, P. O. Box 628, Covington, LA 70434

Project Description: A brief project description, including Project Name, Project Number and/or Contract Number, and Location.

Endorsements and Certificate Reference: All policies must be endorsed to provide, and certificates of insurance must evidence the following:

Waiver of Subrogation: The Contractor's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance. *Policy endorsements required for all coverages.*

Additional Insured: The Parish of St. Tammany shall be named as additional named insured with respect to general liability, marine liability, pollution/environmental liability, automobile liability and excess liability coverages. *Policy endorsements required.*

Hold Harmless: Contractor's liability insurers shall evidence their cognizance of the Hold Harmless and Indemnification in favor of St. Tammany Parish Government by referencing same on the face of the Certificate(s) of Insurance.

Cancellation Notice: Producer shall provide thirty (30) days prior written notice to the Parish of policy cancellation or substantive policy change.

24.07 The types of insurance coverage the Contractor is required to obtain and maintain throughout the duration of the Contract, include, but is not limited to:

1. Commercial General Liability insurance with a Combined Single Limit for bodily injury and property damage of at least \$1,000,000 per Occurrence/\$3,000,000 General Aggregate/Products-Completed Operations Per Project. The insurance shall provide for and the certificate(s) of insurance shall indicate the following coverages:
  - a) Premises - operations;
  - b) Broad form contractual liability;
  - c) Products and completed operations;
  - d) Personal Injury;
  - e) Broad form property damage;
  - f) Explosion and collapse.
2. Marine Liability/Protection and Indemnity insurance is required for any and all vessel and/or marine operations in the minimum limits of \$1,000,000 per occurrence/\$2,000,000 per project general aggregate. The coverage shall include, but is not limited to, the basic coverages found in the Commercial General Liability insurance and coverage for third party liability.
3. Contractors' Pollution Liability and Environmental Liability insurance in the minimum amount of \$1,000,000 per occurrence, \$2,000,000 general aggregate and include coverage for full contractual liability and for all such environmental and/or hazardous waste exposures affected by this project.
4. Business Automobile Liability insurance with a Combined Single Limit of \$1,000,000 per Occurrence for bodily injury and property damage, and shall include coverage for the following:
  - a) Any automobiles;
  - b) Owned automobiles;
  - c) Hired automobiles;
  - d) Non-owned automobiles;
  - e) Uninsured motorist.
5. Workers' Compensation/Employers Liability insurance: worker's compensation insurance coverage and limits as statutorily required; Employers' Liability Coverage shall be not less than \$1,000,000 each accident, \$1,000,000 each disease, \$1,000,000 disease policy aggregate, except when projects include exposures covered under the United States Longshoremen and Harbor Workers Act, Maritime and/or Jones Act and/or Maritime Employers Liability (MEL) limits shall be not less than \$1,000,000/\$1,000,000/\$1,000,000. *Coverage for owners, officers and/or partners shall be included in the policy and a statement of such shall be made by the insuring producer on the face of the certificate.*
6. Owners Protective Liability (OPL) (formerly Owners and Contractors Protective Liability (OCP) Insurance) shall be furnished by the Contractor naming St. Tammany Parish Government as the Named Insured and shall provide coverage in the minimum amount of \$1,000,000 combined single limit (CSL) each occurrence, \$2,000,000 aggregate. Any project valued in excess of \$3,000,000 shall be set by the Office of Risk Management. The policy and all endorsements shall be addressed to St. Tammany Parish Government, Office of Risk Management, P. O. Box 628, Covington, LA 70434.
7. Builder's Risk Insurance shall be required on buildings, sewage treatment plants and drainage pumping stations, and shall be written on an "all-risk" or equivalent policy form in the amount of the full value of the initial Contract sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising 100% total value for the entire project including foundations. Deductibles should not exceed \$5,000 and Contractor shall be responsible for any and all policy deductibles. This insurance shall cover portions of the work stored off the site, and also portions of the work in transit. In addition, Installation Floater

Insurance, on an “all-risk” form, will be carried on all pumps, motors, machinery and equipment on the site or installed. Both the Builder’s Risk Insurance and the Installation Floater Insurance shall include the interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors and shall terminate only when the Project has been accepted. St. Tammany Parish Government, P. O. Box 628, Covington, LA 70434 shall be the first named insured on the Builder’s Risk and Installation Floater Insurance.

8. Professional Liability (errors and omissions) insurance in the sum of at least One Million Dollars (\$1,000,000) per claim with Two Million Dollars (\$2,000,000) annual aggregate.
  9. An umbrella policy or excess policy may be required and/or allowed to meet minimum coverage limits, subject to the review and approval by St. Tammany Parish Government, Office of Risk Management.
- 24.08 All policies of insurance shall meet the requirements of the Parish of St. Tammany prior to the commencing of any work. The Parish of St. Tammany has the right, but not the duty, to approve all insurance policies prior to commencing of any work. If at any time, it becomes known that any of the said policies shall be or becomes unsatisfactory to the Parish of St. Tammany as to form or substance; or if a company issuing any such policy shall be or become unsatisfactory to the Parish of St. Tammany, the Contractor shall promptly obtain a new policy, timely submit same to the Parish of St. Tammany for approval and submit a certificate thereof as provided above. The Parish agrees to not unreasonably withhold approval of any insurance carrier selected by Contractor. In the event that Parish cannot agree or otherwise authorize said carrier, Contractor shall have the option of selecting and submitting new insurance carrier within 30 days of said notice by the Parish. In the event that the second submission is insufficient or is not approved, then the Parish shall have the unilateral opportunity to thereafter select a responsive and responsible insurance carrier all at the cost of Contractor and thereafter deduct from Contractor's fee the cost of such insurance.
- 24.09 Upon failure of Contractor to furnish, deliver and/or maintain such insurance as above provided, the contract, at the election of the Parish of St. Tammany, may be forthwith declared suspended, discontinued or terminated. Failure of the Contractor to maintain insurance shall not relieve the Contractor from any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligation of the Contractor concerning indemnification.
- 24.10 Contractor shall maintain a current copy of all annual insurance policies and provide same to the Parish of St. Tammany as may be reasonably requested.
- 24.11 It shall be the responsibility of Contractor to require that these insurance requirements are met by all contractors and sub-contractors performing work for and on behalf of Contractor. Contractor shall further ensure the Parish is named as additional insured on all insurance policies provided by said contractor and/or sub-contractor throughout the duration of the project, and that renewal certificates for any policies expiring prior to the Parish’s final acceptance of the project shall be furnished to St. Tammany Parish Government, Department of Legal, Office of Risk Management, without prompting.

**NOTICE:**

*These are only an indication of the coverages that are generally required. Additional coverages and/or limits may be required for projects identified as having additional risks or exposures. Please note that some requirements listed may not necessarily apply to your specific services. St. Tammany Parish Government reserves the right to remove, replace, make additions to and/or modify any and all of the insurance requirement language upon review of the final scope of services presented to Office of Risk Management prior to execution of a contract for services.*

**For inquiries regarding insurance requirements, please contact:**

**St. Tammany Parish Government  
Office of Risk Management  
P. O. Box 628  
Covington, LA 70434  
Telephone: 985-898-5226  
Email: [riskman@stpgov.org](mailto:riskman@stpgov.org)**

24.12 Nothing contained in these insurance requirements is to be construed as limiting the extent of the Contractor's Responsibility for payment of damages resulting from its operations under this Contract.

**25.00 OWNER'S RIGHT TO OCCUPANCY**

25.01 The Owner shall have the right to use, at any time, any and all portions of the Work that have reached such a stage of completion as to permit such occupancy, provided such occupancy does not hamper the Contractor or prevent its efficient completion of the Contract or be construed as constituting an acceptance of any part of the Work.

25.02 The Owner shall have the right to start the construction of houses, structures or any other building concurrent with the Contractor's Work.

**26.00 SURVEY HORIZONTAL AND VERTICAL CONTROL**

26.01 The Owner shall provide surveys for construction to establish reference points which in its judgment are necessary to enable Contractor to layout and proceed with its Work. Contractor shall be responsible for surveying and laying out the Work and shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of the Owner. Contractor shall report to Owner whenever any reference point is lost or destroyed and the Owner shall decide if the reference point shall be replaced by its or the Contractor's forces.

26.02 The Contractor shall establish lines and grades with its own forces in sufficient number and location for the proper execution of the Work.

26.03 If the Contractor, during the construction, damages the established property corners and/or other markers and thereafter requests the Owner to re-stake same in order to complete the project, this expense will be borne solely by the Contractor.

**27.00 TERMINATION OF THE CONTRACT, OWNER'S AND CONTRACTORS RIGHT TO STOP WORK.**

27.01 If the Contractor should be adjudged bankrupt (voluntarily or involuntarily) or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or if it should persistently or repeatedly refuse or should fail (except in cases for which extension of time is provided) to supply enough properly skilled workmen or proper materials, or if it should fail to make prompt payment to Subcontractors or for material or labor, or persistently disregard laws, ordinances or the instructions of the Owner, or otherwise be guilty of a substantial violation of any provision of the Contract, then the Owner, upon the certificate of the Owner that, in its unilateral

discretion and judgment, believes sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor ten (10) calendar days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools and appliances thereon and finish the Work by whatever method the Owner may deem expedient.

- 27.02 Failure of the Contractor to start the Work within the time limit specified herein or substantial evidence that the progress being made by the Contractor is sufficient to complete the Work within the specified time shall be grounds for termination of the Contract by the Owner.
- 27.03 Before the Contract is terminated, the Contractor and its surety will first be notified in writing by the Owner of the conditions which make termination of the Contract imminent. When after ten (10) calendar days' notice is given and if satisfactory effort has not been made by the Contractor or its surety to correct the conditions, the Owner may declare, in its exclusive discretion, that the Contract is terminated and so notify the Contractor and its surety accordingly.
- 27.04 Upon receipt of notice from the Owner that the Contract has been terminated, the Contractor shall immediately discontinue all operations. The Owner may then proceed with the Work in any lawful manner that it may elect until Work is finally completed.
- 27.05 The exclusive right is reserved to the Owner to take possession of any machinery, implements, tools or materials of any description that shall be found upon the Work, to account for said equipment and materials, and to use same to complete the Project. When the Work is finally completed, the total cost of same will be computed. If the total cost is less than the Contract Price, the difference will not be paid to the Contractor or its surety.
- 27.06 In case of termination, all expenses incident to ascertaining and collecting losses under the Bond, including legal services, shall be assessed against the Bond.
- 27.07 If the Work should be stopped under any order of any court or public authority for period of sixty (60) calendar days, through no act or fault of the Contractor or anyone employed by it, or if the Owner shall fail to pay the Contractor within a reasonable time any sum certified by the Owner, then the Contractor may, upon ten (10) calendar days written notice to the Owner, stop Work or terminate this Contract and recover from the Owner payment for all Work properly and professionally executed in a workmanlike manner. This loss specifically includes actual cost of materials and equipment, together with all wages inclusive of all federal, state, and local tax obligations. This loss specifically includes reimbursement of all insurances on a pro-rata basis from the date of termination to date of policy period. This loss excludes and specifically does not include recovery by the Contractor for lost profit, indirect & direct expenses, overhead, and the like.

## 28.00 PAYMENTS TO THE CONTRACTOR

- 28.01 Monthly certificates for partial payment, in a form approved by the Owner, shall be transmitted to the Owner upon receipt from the Contractor and acceptance by the Owner. In accordance with LSA-R.S. 38:2248(A), when the Contract Price is less than five hundred thousand dollars, these certificates shall be equal to ninety percent (90%) of both the Work performed and materials stored at the site; and when the Contract Price is five hundred thousand dollars or more, these certificates shall be equal to ninety-five percent (95%) of both the Work performed and materials stored at the site. Partial payment certificates shall include only Work, materials and equipment that are included in official Work Order and which meet the requirements of plans, Specifications and Contract Documents. These monthly estimates shall show the amount of the original estimate for each item, the amount due on each item, the gross total, the retained percentage, the amount previously paid and the net amount of payment due.
- 28.02 After final completion and acceptance by the Owner of the entire Work, and when the Contract Price is less than five hundred thousand dollars, the Owner shall issue to the Contractor Certificate of Payment in sum sufficient to increase total payments to ninety percent (90%) of the Contract Price. After final completion and acceptance by the Owner of the entire Work, and when the Contract Price is five hundred thousand dollars or more,

the Owner shall issue to the Contractor Certificate of Payment in sum sufficient to increase total payments to ninety-five percent (95%) of the Contract Price.

- 28.03 When the Contract Price is less than five hundred thousand dollars, the final payment certificate of the remaining ten percent (10%) of the Contract Price, minus any deduction for deficient or Defective Work or other applicable deductions, will be issued by the Owner forty-five (45) days after filing acceptance in the Mortgage Office of the Parish and a Clear Liens and Privilege Certificate has been secured. When the Contract Price is five hundred thousand dollars or more, the final payment certificate of the remaining five percent (5%) of the Contract Price, minus any deduction for deficient or Defective Work or other applicable deductions, will be issued by the Owner forty-five (45) days after filing acceptance in the Mortgage Office of the Parish and a Clear Liens and Privilege Certificate has been secured. Before issuance of the final payment certificate, the Contractor shall deposit with the Owner a certificate from the Clerk of Court and Ex-Officio Recorder of Mortgages from the Parish in which the Work is performed to the effect that no liens have been registered against Contract Work.
- 28.04 When, in the opinion of the Contractor, the Work provided for and contemplated by the Contract Documents has been substantially completed, the Contractor shall notify the Owner in writing that the Work is substantially complete and request a final inspection. The Owner shall proceed to perform such final inspection accompanied by the Contractor. Any and all Work found by this inspection to be Defective or otherwise not in accordance with the plans and Specifications shall be corrected to the entire satisfaction of the Owner and at the sole expense of the Contractor. If the Contract is found to be incomplete in any of its details, the Contractor shall at once remedy such defects, and payments shall be withheld and formal acceptance delayed until such Work has been satisfactorily completed.
- 28.05 If payment is requested on the basis of materials and equipment not incorporated in the Work, but delivered and suitably stored and protected from damage and theft at the site, the Request for Payment shall also be accompanied by such data, satisfactory to the Owner, as will establish Owner's title to the material and equipment and protect its interest therein, including applicable insurance.
- 28.06 Each subsequent Request for Payment shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied to discharge in full all of Contractor's obligations reflected in prior Request for Payment.
- 28.07 Each subsequent request for payment shall include an affidavit by Contractor that Contractor, all subcontractors, agents, material suppliers and all other persons supplying material to the project upon which State of Louisiana and/or St. Tammany sales taxes are lawfully due have paid these taxes and that all supplies and materials purchased for this project and for which Contractor has been paid have had all lawfully due State and/or St. Tammany sales taxes paid.
- 28.08 The Bid Proposal, unless otherwise modified in writing, and the Contract constitute the complete Project. The Contract Prices constitute the total compensation payable to Contractor and the cost of all of the Work and materials, taxes, permits and incidentals must be included into the Bid submitted by the Contractor and included into those items listed on the Proposal.
- 28.09 Any additional supporting data required by the Owner in order to substantiate Contractor's request for payment shall be furnished by Contractor at no cost to the Owner.
- 28.10 Owner may withhold from payment to Contractor as may be necessary to protect itself from loss on account of:
- (1) Defective and/or inferior work;
  - (2) Damage to the property of Owner or others caused by Contractor;
  - (3) Failure by Contractor to make payments properly to sub-contractors or to pay for labor, materials or equipment used on this project;
  - (4) Failure by Contractor to pay taxes due on materials used on this project;
  - (5) Damage by Contractor to another Contractor;
  - (6) Insolvency;
  - (7) Bankruptcy, voluntary or involuntary;
  - (8) Revocation of corporate status;



- (9) Failure to follow corporate formalities;
- (10) Unprofessional activities;
- (11) Unworkmanlike performance;
- (12) Fraud and/or misrepresentation of any kind.

## 29.00 ACCEPTANCE AND FINAL PAYMENT(S)

- 29.01 Upon receipt of written notice from Contractor that the work is substantially complete and usable by Owner or the Public in suitable manner, the Owner and the Contractor shall jointly inspect the work.
- 29.02 If the Owner by inspection determines that the work is not substantially complete in a suitable manner for use by the Owner or the Public, then the Owner shall so notify the Contractor in writing stating such reason. All reasons need not be disclosed unless actually known. The Owner is afforded an opportunity to amend said notices as are reasonably possible.
- 29.03 If the Owner by its inspection determines that the work is substantially complete, it shall prepare a list of all items not satisfactorily completed and shall notify the Contractor and Owner in writing that the work is substantially complete and subject to satisfactory resolution of those items on the list (punch list). Punch lists may be amended from time to time by Owner in the event that additional deficiencies are discovered. In accordance with LSA-R.S. 38:2248(B), any punch list generated during a construction project shall include the cost estimates for the particular items of work the design professional has developed based on the mobilization, labor, material, and equipment costs of correcting each punch list item. The design professional shall retain his working papers used to determine the punch list items cost estimates should the matter be disputed later. The contract agency shall not withhold from payment more than the value of the punch list. Punch list items completed shall be paid upon the expiration of the forty-five (45) day lien period. The provisions of this Section shall not be subject to waiver.
- 29.04 Upon determination of substantial completeness with the punch list, the Contract Time is interrupted and the Contractor is given a reasonable time not to exceed thirty (30) consecutive calendar days to effect final completion by correcting or completing all of those items listed on the punch list. If the items on the punch list are not completed in a satisfactory manner within the thirty day period, then the Contract Time will begin to run again and will include for purposes of determining liquidated damages the thirty day period the grace period being withdrawn.
- 29.05 Upon receipt by Owner of written determination that all work embraced by the contract has been completed in a satisfactory manner, the Owner shall provide a written acceptance to Contractor who shall record Owner's written acceptance with the recorder of Mortgages, St. Tammany Parish. The Contractor shall properly prepare, submit and pay for all costs associated with said Acceptance. The Contractor is also responsible for preparation, re-submission and payment of any and all updated certificates.
- 29.06 Retainage monies, minus those funds deducted in accordance to the requirements of this agreement including but not limited to Paragraph 28.10, shall be due Contractor not earlier than forty-six (46) calendar days after recordation of certificate of Owner's acceptance provided the following:
- (1) Contractor shall prepare, secure, pay for and submit clear lien and privilege certificate, signed and sealed by Clerk of Court or Recorder of Mortgages, Parish of St. Tammany and dated at least forty-six (46) days after recordation of certificate of acceptance;
  - (2) Ensure that the official representative of the Owner has accepted as per LSA-R.S. 38:2241.1, *et seq.* and that all following sub-sections have been properly satisfied as per law;
  - (3) Ensure that all signatures are affixed and that there exists the requisite authority for all signatures;
  - (4) Ensure accurate and proper legal descriptions;

- (5) Properly identify all parties and/or signatories;
- (6) Properly identify all mailing addresses;
- (7) Correctly set for the amount of the contract, together with all change orders;
- (8) Set out a brief description of the work performed;
- (9) Reference to any previously recorded contract, lien or judgment inscription that may affect the property;
- (10) Certification that substantial completion has occurred, together with any applicable date(s);
- (11) Certification that no party is in default and/or that the project has been abandoned.

29.07 After securing the clear lien and privilege certificate the Contractor shall prepare its final application for payment and submit to Owner. The Owner shall approve application for payment, or state its objections in writing and forward to Contractor for resolution.

### 30.00 NOTICE AND SERVICE THEREOF

30.01 Any Notice to Contractor from the Owner relative to any part of this Contract shall be in writing and shall be considered delivered and the service thereof completed when said notice is posted; by certified mail, return receipt requested to the said Contractor at its last given address, or delivered in person to said Contractor or its authorized representative on the Work.

### 31.00 INTENTION OF THESE GENERAL CONDITIONS

31.01 These General Conditions shall be applicable to all contracts entered into by and between the Owner and Contractors, except as may be altered or amended with the consent of the Owner, and/or provided for in the Special Conditions of each contract. Contractor shall be presumed to have full knowledge of these General Conditions which shall be applicable to all contracts containing these General Conditions, whether Contractor has obtained a copy thereof or not.

### 32.00 SEVERABILITY

32.01 If any one or more or part of any of the provisions contained herein and/or in the Specifications and Contract for the Work shall for any reason be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement or attachment, but it shall be construed as if such invalid, illegal, or unenforceable provision or part of a provision had never been contained herein.

32.02 CHANGING THESE CONDITIONS: Owner reserves the right to change or modify these General Conditions as it deems best, or as required by law. The General Conditions may also be modified for a particular project by the use of Special Conditions prior to the issuance of the Advertisement for Bid. However, once an advertisement for bid is made for any specific project, any changes to the General Conditions as they affect that specific project must be made in writing and issued via an addendum in accordance with State Law.

### 33.00 LAW OF THE STATE OF LOUISIANA

33.01 The Contract Documents shall be governed by the Law of the State of Louisiana.

33.02 The Contractor agrees to pay reasonable attorney's fees and other reasonable attendant costs, in the event that it becomes necessary for the Owner to employ an attorney in order to enforce compliance with or any remedy relating to any covenants, obligations, or

conditions imposed upon the Contractor by this Agreement. Attorney fees shall be based upon the prevailing hourly rate of attorney rates in the private sector. In no case shall the hourly rate be less than \$175.00 per hour. All attorney fees collected shall be paid the operating budget of the Office of the Parish President.

- 33.03 The jurisdiction and venue provisions shall apply to all contractors, sureties, and subcontractors. The 22nd Judicial District for the Parish of St. Tammany shall be the court of exclusive jurisdiction and venue for any dispute arising from these General Conditions and/or any contract executed in conjunction with these General Conditions. All parties specifically waive any rights they have or may have for removal of any disputes to Federal Court, or transfers to different State District Court.
- 33.04 Contractor warrants that it has and/or had received a copy of these General Conditions at all times material hereto; Contractor further agrees that it has read and fully and completely understands each and every condition herein.
- 33.05 The property description will be more fully set out by an attached exhibit.
- 33.06 The Contractor warrants that it has the requisite authority to sign and enter this agreement.
- 33.07 It is specifically understood and agreed that in the event Contractor seeks contribution from the Parish or pursues its legal remedies for any alleged breach of this agreement by the Parish, then the following list of damages SHALL NOT BE RECOVERABLE BY CONTRACTOR. This list includes, but is not limited to:

1. indirect costs and/or expenses;
2. direct costs and/or expenses;
3. time-related costs and/or expenses;
4. award of extra days;
5. costs of salaries or other compensation of Contractor's personnel at Contractor's principal office and branch offices;
6. expenses of Contractor's principal, branch and/or field offices;
7. any part of Contractor's capital expenses, including any interest on Contractor's capital employed for the work;
8. any other charges related to change orders;
9. overhead and general expenses of any kind or the cost of any item not specifically and expressly included in Cost of Work.

33.08 DEFAULT AND WAIVERS

It is understood that time is of the essence. It is specifically understood between the parties that Contractor waives any and all notice to be placed in default by the Owner. This subsection shall supersede and prime any other subsection herein above that is in conflict. The Owner specifically reserves its right and specifically does not waive the requirement to be placed in default by the Contractor as per law.

- 33.09 St. Tammany Parish Government contracts to be awarded are dependent on the available funding and/or approval by members designated and/or acknowledged by St. Tammany Parish Government. At any time St. Tammany Parish Government reserves the right to cancel the award of a contract if either or both of these factors is deficient.
- 33.10 It is the Parish's policy to provide a method to protest exclusion from a competition or from the award of a contract, or to challenge an alleged solicitation irregularity. It is always better to seek a resolution within the Parish system before resorting to outside agencies and/or litigation to resolve differences. All protests must be made in writing, and shall be concise and logically presented to facilitate review by the Parish. The written protest shall include:
1. The protester's name, address, and fax and telephone numbers and the solicitation, bid, or contract number;
  2. A detailed statement of its legal and factual grounds, including a description of the resulting prejudice to the protester;
  3. Copies of relevant documents;

4. All information establishing that the protester is an interested party and that the protest is timely; and
5. A request for a ruling by the agency; and a statement of the form of relief requested.

The protest shall be addressed to Director of Procurement, St. Tammany Parish Government, P.O. Box 628, Covington, LA 70434.

The protest review shall be conducted by the Parish Procurement Department.

Only protests from interested parties will be allowed. Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial proposals must be filed with and received by the Procurement Department BEFORE those deadlines.

Any other protest shall be filed no later than ten (10) calendar days after the basis of the protest is known, or should have been known (whichever is earlier).

The Parish will use its best efforts to resolve the protest within thirty (30) days of the date that it is received by the Parish. The written response will be sent to the protestor via mail and, fax, if a fax number has been provided by the protestor. The protester can request additional methods of notification.

Last day to submit questions and/or verification on comparable products will be no later than 2:00 pm CST, seven (7) working days prior to the opening date of the bid/proposal due date. Further any questions or inquires must be submitted via fax to 985-898-5227, or via email to [Procurement@stpgov.org](mailto:Procurement@stpgov.org). Any questions or inquires received after the required deadline to submit questions or inquires will not be answered.

Section 09

CORPORATE RESOLUTION

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF INCORPORATED.

AT THE MEETING OF DIRECTORS OF \_\_\_\_\_ INCORPORATED, DULY NOTICED AND HELD ON \_\_\_\_\_, A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT WAS:

RESOLVED THAT \_\_\_\_\_, BE AND IS HEREBY APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS AND TRANSACTIONS WITH THE PARISH OF ST. TAMMANY OR ANY OF ITS AGENCIES, DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES, CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-FACT.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE AND CORRECT COPY OF AN EXCERPT OF THE MINUTES OF THE ABOVE DATED MEETING OF THE BOARD OF DIRECTORS OF SAID CORPORATION, AND THE SAME HAS NOT BEEN REVOKED OR RESCINDED.

SECRETARY-TREASURER

\_\_\_\_\_

DATE

\_\_\_\_\_

## Section 10

### Certificate of Insurance Instructions

The below information is intended to guide Contractors on what information is needed to be listed on the Certificate of Insurance. All Insurance limit requirements can be found in Attachment D.

- **Certificate Holder** – STPG must be listed as the certificate holder, and it must include our address of: P.O. Box 628, Covington, LA 70434
  - Reason: the certificate holder is where cancellations of coverage, or updated certificates are mailed. If a vendor terminates a policy, we will be notified.
- **Additional Insured** – We must be named as an additional insured so that if there is a lawsuit against the vendor for a project, their coverage will cover STPG as well if we are named in the lawsuit.
  - We must be named in the Description of Operations box – reason: there could be other additional insureds, and we want to have no doubt that we are one of the additional insureds.
  - We must be named as additional insured on the following coverages: General liability, Auto Liability, Umbrella/Excess Liability, Environmental/Pollution Liability.
  - Professional Liability policies do not allow for an additional insured by most carriers.
- **Project Name & Contract #** - We need this listed in the Description of Operations, again so that if there is a lawsuit, we have proof that coverage was active for that project.
- **Waiver of Subrogation** – This can either be listed in the Description of Operations or checked off in the appropriate columns.

From the Insurance Requirement form:

*Waiver of Subrogation: The Provider's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance.*

- **Owners Protective Liability (OPL) or (OCP)** – Certificate of Insurance for OCP names St. Tammany Parish Government as the Insured and the Certificate Holder.
- Sample of Certificate of Insurance (COI) can be found on page 2.
- Please refer to this section in the package labeled “Insurance Requirements” for limits required for this project

Any questions regarding insurance requirements please contact the Risk Department at 985-898-5226 or email [riskman@stpgov.org](mailto:riskman@stpgov.org)



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:		
	PHONE (A/C, No. Ext):	FAX (A/C, No):	
	E-MAIL ADDRESS:		
	INSURER(S) AFFORDING COVERAGE		NAIC #
INSURED	INSURER A :		
	INSURER B :		
	INSURER C :		
	INSURER D :		
	INSURER E :		
	INSURER F :		

**COVERAGES**

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	<b>GENERAL LIABILITY</b>						EACH OCCURRENCE	\$
	<input type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$
	<input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR						MED EXP (Any one person)	\$
							PERSONAL & ADV INJURY	\$
							GENERAL AGGREGATE	\$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	\$
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC							\$
	<b>AUTOMOBILE LIABILITY</b>						COMBINED SINGLE LIMIT (Ea accident)	\$
	<input type="checkbox"/> ANY AUTO						BODILY INJURY (Per person)	\$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/>	<input type="checkbox"/>				BODILY INJURY (Per accident)	\$
	<input type="checkbox"/> HIRED AUTOS	<input type="checkbox"/>	<input type="checkbox"/>				PROPERTY DAMAGE (Per accident)	\$
								\$
	<b>UMBRELLA LIAB</b>						EACH OCCURRENCE	\$
	<input type="checkbox"/> EXCESS LIAB						AGGREGATE	\$
	<input type="checkbox"/> OCCUR							\$
	<input type="checkbox"/> CLAIMS-MADE							\$
	DED							\$
	RETENTION \$							\$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>						WC STATUTORY LIMITS	OTHER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)						E.L. EACH ACCIDENT	\$
	If yes, describe under DESCRIPTION OF OPERATIONS below	<input type="checkbox"/> Y / N	<input type="checkbox"/> N / A				E.L. DISEASE - EA EMPLOYEE	\$
							E.L. DISEASE - POLICY LIMIT	\$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project Name:  
Contract #:

(Name St. Tammany Parish Government as an additional insured).

**CERTIFICATE HOLDER****CANCELLATION**St. Tammany Parish Government  
P.O. Box 628  
Covington, LA 70434

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

# Section 11

Bond No.: \_\_\_\_\_

## CONTRACT AGREEMENT BETWEEN PARISH AND CONTRACTOR

**BY: ST. TAMMANY PARISH GOVERNMENT**

**UNITED STATES OF  
AMERICA**

**WITH:**

**STATE OF LOUISIANA  
ST. TAMMANY PARISH**

This agreement is entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between: «txtREQCompanyName», hereinafter called the "Contractor", whose business address is «txtREQAddress», «txtREQCity», «txtREQState» «txtREQZip» and the St. Tammany Parish Government, hereinafter called the "Parish", whose business address is P.O. Box 628, Covington, LA 70434 (collectively, the "Parties") for «txtPROJECTNAME» project. Witnessed that the Contractor and the Parish, in consideration of premises and the mutual covenants, consideration and agreement herein contained, agree as follows:



## 1. SCOPE OF SERVICES

The Contractor shall furnish all labor and materials and perform all of the work required to build, construct and/or complete in a thorough and workmanlike manner:

«txtScopeSummary»

## 2. CONSTRUCTION DOCUMENTS

It is recognized by the Parties herein that said Construction Documents, including by way of example and not of limitation, the plans and Specifications, General Conditions, Supplementary General Conditions, any addenda thereto, the drawings (if any), and the bid, quote or other procurement documents impose duties and obligations upon the Parties herein, and said Parties thereby agree that they shall be bound by said duties and obligations. For these purposes, all of the provisions contained in the aforementioned Construction Documents are incorporated herein by reference with the same force and effect as though said Construction Documents were herein set out in full. Copies of the aforementioned Construction Documents are in the possession of both the Contractor and the Parish for reference.

**3. TIME FOR COMPLETION**

The work shall be commenced on a date to be specified in a written order of the Parish and shall be completed within «intCompletionTime» calendar days from and after said date.

**4. COMPENSATION TO BE PAID TO THE CONTRACTOR**

The Parish will pay and the Contractor will accept in full consideration for the performance of the Contract the sum of «curREQGrandTotal» dollars.

**5. PERFORMANCE AND PAYMENT BOND**

To these presents personally came and intervened \_\_\_\_\_,  
(Name of Attorney in Fact)  
herein acting for \_\_\_\_\_, a corporation organized  
(Surety)  
and existing under the laws of the State of \_\_\_\_\_, and duly authorized to transact business in the State of Louisiana, as surety, who declared that having taken cognizance of this Contract and of the Construction Documents mentioned herein, he hereby in his capacity as its Attorney in Fact obligates his company, as surety for the said Contractor, unto the said Parish, up to the sum of «curREQGrandTotal». The condition of this performance and payment bond

shall be that should the Contractor herein not perform the Contract in accordance with the terms and conditions hereof, or should said Contractor not fully indemnify and save harmless the Parish from all costs and damages which he may suffer by said Contractor's non-performance or should said Contractor not pay all persons who have fulfilled obligations to perform labor and/or furnish materials in the prosecution of the work provided for herein, including by way of example, workmen, laborers, mechanics, and furnishers of materials, machinery, equipment and fixtures, then said surety agrees and is bound to so perform the Contract and make said payment(s).

Contractor and Parish specifically agree to and recognize (1) the statutory employer relationship existing between the Parish and any employees performing work under this Contract as employees of the Contractor or employees of the "Sub-Contractor", and (2) that the work performed by the employees of the Contractor and the employees of the "Sub-Contractor" is part of the Parish's business, occupation or trade and is essential to the ability of the Parish to generate their products or services, all of which is in accordance with LSA-R.S. 23:1061, and as may be amended.

## 6. LIABILITY AND INDEMNIFICATION

### A. Duty to Defend

Upon notice of any claim, demand, suit, or cause of action against the Parish, alleged to arise out of or be related to this Contract, Contractor shall investigate, handle, respond to, provide defense for, and defend at its sole expense, even if the claim, demand, suit, or cause of action is groundless, false, or fraudulent. The Parish may, but is not required to, consult with or assist the Contractor, but this assistance shall not affect the Contractor's obligations, duties, and responsibilities under this section. Contractor shall obtain the Parish's written consent before entering into any settlement or dismissal.

### B. Contractor Liability

Contractor shall be liable without limitation to the Parish for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors.

**C. Force Majeure**

It is understood and agreed that neither party can foresee the exigencies beyond the control of each party which arise by reason of an Act of God or force majeure; therefore, neither party shall be liable for any delay or failure in performance beyond its control resulting from an Act of God or force majeure. The Parish shall determine whether a delay or failure results from an Act of God or force majeure based on its review of all facts and circumstances. The parties shall use reasonable efforts, including but not limited to, use of continuation of operations plans (COOP), business continuity plans, and disaster recovery plans, to eliminate or minimize the effect of such events upon the performance of their respective duties under this Contract.

**D. Indemnification**

Contractor shall fully indemnify and hold harmless the Parish, without limitation, for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its

owners, agents, employees, partners or subcontractors. The Contractor shall not indemnify for the portion of any loss or damage arising from the Parish's act or failure to act.

**E. Intellectual Property Indemnification**

Contractor shall fully indemnify and hold harmless the Parish, without limitation, from and against damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities in any action for infringement of any intellectual property right, including but not limited to, trademark, trade-secret, copyright, and patent rights.

When a dispute or claim arises relative to a real or anticipated infringement, the Contractor, at its sole expense, shall submit information and documentation, including formal patent attorney opinions, as required by the Parish.

If the use of the product, material, service, or any component thereof is enjoined for any reason or if the Contractor believes that it may be enjoined, Contractor, while ensuring appropriate migration and implementation, data integrity, and

minimal delays of performance, shall at its sole expense and in the following order of precedence: (i) obtain for the Parish the right to continue using such product, material, service, or component thereof; (ii) modify the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; (iii) replace the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; or, (iv) provide the Parish monetary compensation for all payments made under the Contract related to the infringing product, material, service, or component, plus for all costs incurred to procure and implement a non-infringing product, material, or service of at least equal quality and performance. Until this obligation has been satisfied, the Contractor remains in default.

The Contractor shall not be obligated to indemnify that portion of a claim or dispute based upon the Parish's unauthorized: i) modification or alteration of the product, material or service; ii) use of the product, material or service in combination with other products not furnished by Contractor; or, iii) use of the

product, material or service in other than the specified operating conditions and environment.

## **7. MODIFICATION OF CONTRACT TERMS**

Provided that any alterations which may be made in the terms of the Contract or in the work to be done under it, or the giving by the Parish of any extensions of time for the performance of the Contract, or any other forbearance on the part of either the Parish or the Contractor to the other shall not in any way release the Contractor or the Surety from their liability hereunder, notice to the Surety of any such alterations, extensions or other forbearance being hereby waived.

## **8. TERMINATION, CANCELLATION, AND SUSPENSION**

### **A. Termination**

The term of this Contract shall be binding upon the Parties hereto until the work has been completed by the Provider and accepted by the Parish, and all payments required to be made to the Provider have been made. But, this Contract may be terminated upon thirty (30) days written notice under any or all of the following conditions:



- 1) By mutual agreement and consent of the Parties hereto;
- 2) By the Parish as a consequence of the failure of the Provider to comply with the terms, progress, or quality of the work in a satisfactory manner, proper allowances being made for circumstances beyond the control of the Provider;
- 3) By either party upon failure of the other party to fulfill its obligations as set forth in this Contract;
- 4) By the Parish with less than thirty (30) days' notice due to budgetary reductions and changes in funding priorities by the Parish;
- 5) In the event of the abandonment of the project by the Parish.

Upon termination, the Provider shall be paid for actual work performed prior to the Notice of Termination, either based upon the established hourly rate for services actually performed, or on a pro-rata share of the basic fee based upon the phase or percentage of work actually completed, depending on the type of compensation previously established under this Contract.

Upon Termination, the Provider shall deliver to the Parish all original documents, notes, drawings, tracings, computer files, and other files pertaining to this Contract or the Work performed, except for the Provider's personal and administrative files.

**B. Cancellation**

The continuation of this Contract is contingent upon the appropriation of funds to fulfill the requirements of the Contract by the Parish. If the Parish fails to appropriate sufficient monies to provide for the continuation of this or any other Contract, or if such appropriation is reduced by the veto of Parish President by any means provided in the appropriations Ordinance to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the Contract, the Contract shall terminate on the date of the beginning of the first fiscal year for which funds are not appropriated. It is understood and agreed that paragraph (9)(C) below may preempt this paragraph, all at the exclusive and unilateral option of the Parish.

**C. Suspension**

Should the Parish desire to suspend the work, but not definitely terminate the Contract, the Parish shall supply the Provider with thirty (30) days' notice. The Parish will also

supply Provider thirty (30) days' notice that the work is to be reinstated and resumed in full force. Provider shall receive no additional compensation during the suspension period. The Parties may revisit the terms of this Contract during the suspension period. The suspension shall not exceed six (6) months, unless mutually agreed upon between the Parties.

- D.** Failure to complete or deliver within the time specified or to provide the services as specified in the bid or response will constitute a default and may cause cancellation of the contract. Where the Parish has determined the contractor to be in default. The Parish reserves the right to purchase any or all products or services covered by the contract on the open market and to charge the contractor with the cost in excess of the contract price. Until such assessed charges have been paid, no subsequent bid or response from the defaulting contractor will be considered.
- E.** In the event of a default and/or breach of this agreement and this matter is forwarded to legal counsel, then the prevailing party may be entitled to collect a reasonable attorney fees and all costs associated therewith whether or not litigation is initiated. Attorney fees shall be based upon the current, reasonable prevailing rate for counsel in the private

sector. The Parties agree to be responsible for such attorney fees, together for all with legal interest from date of agreement breach, plus all costs of collection.

- F.** Termination or cancellation of this agreement will not affect any rights or duties arising under any term or condition herein.
- G.** As to the filing of voluntary or involuntary bankruptcy by Provider, Provider agrees that if any execution or legal process is levied upon its interest in this Contract, or if any liens or privileges are filed against its interest, or if a petition in bankruptcy is filed against it, or if it is adjudicated bankrupt in involuntary proceedings, or if it should breach this Contract in any material respect, the Parish shall have the right, at its unilateral option, to immediately cancel and terminate this Contract. In the event that Provider is placed in any chapter of bankruptcy, voluntarily or involuntarily, or otherwise triggers any provision of the preceding sentence herein, it is understood and agreed that all materials, goods and/or services provided shall be and remain the property of the Parish. All rights of Provider as to goods, wares, products, services, materials and the like supplied to Parish shall be deemed forfeited.

## **9. RECORDATION OF CONTRACT**

Contractor authorizes Parish to deduct from any payment due herein costs and service fees for recordation of this Contract in full or an excerpt hereof, or any revisions or modifications thereof as required by law.

## **10. AUTHORITY TO ENTER CONTRACT**

The undersigned representative of Contractor warrants and personally guarantees that he/she has the requisite and necessary authority to enter and sign this Contract on behalf of the corporate entity, partnership, etc. The undersigned Parties warrant and represent that they each have the respective authority and permission to enter this Contract. In the event that Contractor is a member of a corporation, partnership, L.L.C., L.L.P., or any other juridical entity, the Parish requires, as an additional provision, that Contractor supply a certified copy of a corporate resolution authorizing the undersigned to enter and sign this Contract. Another option to fulfill this additional provision he/she can supply Louisiana Secretary of State Business filings confirming that he/she is a managing member of a

corporation, partnership, L.L.C., L.L.P., or any other juridical entity which authorizes the undersigned to enter and sign this Contract.

In Witness thereof, the Parties hereto on the day and year first above written have executed this Contract in One (1) counterparts, each of which shall, without proof or accountancy for the other counterparts, be deemed an original thereof.

**WITNESSES:**

**CONTRACTOR:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

Bond No.: \_\_\_\_\_

**WITNESSES:**

**ST. TAMMANY PARISH  
GOVERNMENT:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
**Michael B. Cooper**  
**Parish President**

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

**APPROVED BY:**

\_\_\_\_\_  
**Assistant District Attorney- Civil** (Surety)  
**Division**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

## Section 12

**Department of the Treasury (DOT) & American Rescue Plan Act (ARPA)**  
**Federal Contract Clauses**  
**WATER SECTOR PROGRAM**  
**31 CFR Part 35 Subpart A**

### **1. EQUAL EMPLOYMENT OPPORTUNITY**

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:



Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States. The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon

contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

**2. DAVIS-BACON ACT**, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

### **3. COMPLIANCE WITH THE CONTRACT WORK HOURS AND SAFETY STANDARDS ACT.**

(1) *Overtime requirements.* No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less

than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) *Withholding for unpaid wages and liquidated damages.* The Parish shall upon its own action or upon written request of an authorized representative of the Department of Labor or U.S. Treasury withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

#### **4. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT**

If the Federal award meets the definition of "funding agreement" under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

#### **5. CLEAN AIR ACT**

(1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 *et seq.*

(2) The Contractor agrees to report each violation to the Parish and understands and agrees that the Parish will, in turn, report each violation as required to assure notification to the federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.

(3) The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by ARPA.

#### **6. FEDERAL WATER POLLUTION CONTROL ACT**

(1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 7401 *et seq.*

(2) The Contractor agrees to report each violation to the Parish and understands and agrees that the Parish will, in turn, report each violation as required to assure notification to the Federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.

(3) The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by ARPA.

## **7. SUSPENSION AND DEBARMENT**

(1) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) This certification is a material representation of fact relied upon by the Parish. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the Parish, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

## **8. BYRD ANTI-LOBBYING ACT**

The Contractor will be expected to comply with Federal statutes required in the Anti-Lobbying Act. Contractors who apply or bid for an award of more than \$100,000 shall file the required certification. Each tier certifies to the tier above that it will not and has not used federally appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the federal awarding agency.

## **9. PROCUREMENT OF RECOVERED MATERIALS**

In the performance of this Contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—

- i. Competitively within a timeframe providing for compliance with the Contract performance schedule;
- ii. Meeting Contract performance requirements; or
- iii. At a reasonable price.

Information about this requirement, along with the list of EPA-designate items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

## **10. PROHIBITION ON CONTRACTING FOR COVERED TELECOMMUNICATIONS EQUIPMENT OR SERVICES.**

(a) *Definitions.* As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in Public Law 115-232, section 889, Prohibitions on Expending ARPA Award Funds for Covered Telecommunications Equipment or Services (Interim), as used in this clause—

(b) *Prohibitions.*

(1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug. 13, 2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.

(2) Unless an exception in paragraph (c) of this clause applies, the contractor and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from a federal Agency to:

- (i) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
- (ii) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
- (iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system as described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities). (a) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities). (b) Telecommunications or video surveillance services provided by such entities or using such equipment. (c) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country;
- (iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(3) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

(4) See Public Law 115-232, section 889 for additional information.

(5) See also § 200.471.

(c) *Exceptions.*

(1) This clause does not prohibit contractors from providing—

- (i) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (ii) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) By necessary implication and regulation, the prohibitions also do not apply to:

- (i) Covered telecommunications equipment or services that:
  - i. Are *not used* as a substantial or essential component of any system; *and*
  - ii. Are *not used* as critical technology of any system.
- (ii) Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

(d) *Reporting requirement.*

(1) In the event the contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the information in paragraph (d)(2) of this clause to the recipient or subrecipient, unless elsewhere in this contract are established procedures for reporting the information.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments.

## **11. DOMESTIC PREFERENCES FOR PROCUREMENTS.**

As appropriate, and to the extent consistent with law, the contractor should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products.

For purposes of this clause:

*Produced in the United States* means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

*Manufactured products* mean items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

## **12. COMPLIANCE WITH FEDERAL EXECUTIVE ORDERS**

This is an acknowledgement that American Rescue Plan Act will be used to fund the Contract only. The Contractor will comply with all applicable federal law, regulations, executive orders, policies, procedures, and directives.

## **13. NO OBLIGATION BY THE FEDERAL GOVERNMENT**

The Federal Government is not a party to this Contract and is not subject to any obligations or liabilities to the non-Federal entity, Contractor, or any other party pertaining to any matter resulting from the Contract.

## **14. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS**

The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

## **15. CONTRACTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS.**

(a) Any party to this contract must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. These steps are also required for the hiring of any subcontractors under this contract.

(b) Affirmative steps must include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

- (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
- (5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

#### **16. COPYRIGHT AND DATA RIGHTS**

The Contractor grants to the Parish, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this contract to reproduce, publish, or otherwise use, including prepare derivative works, distribute copies to the public, and perform publicly and display publicly such data. For data required by the contract but not first produced in the performance of this contract, the Contractor will identify such data and grant to the Parish or acquires on its behalf a license of the same scope as for data first produced in the performance of this contract. Data, as used herein, shall include any work subject to copyright under 17 U.S.C. § 102, for example, any written reports or literary works, software and/or source code, music, choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this contract, the Contractor will deliver to the Parish data first produced in the performance of this contract and data required by the contract but not first produced in the performance of this contract in formats acceptable by the Parish.

**Note:**

**Davis-Bacon Act is NOT applicable to this project.**

# S. MILITARY RD US 190 & RUE ESPLANADE WATER MAIN

SLIDELL, ST. TAMMANY PARISH, LOUISIANA  
BID No.:

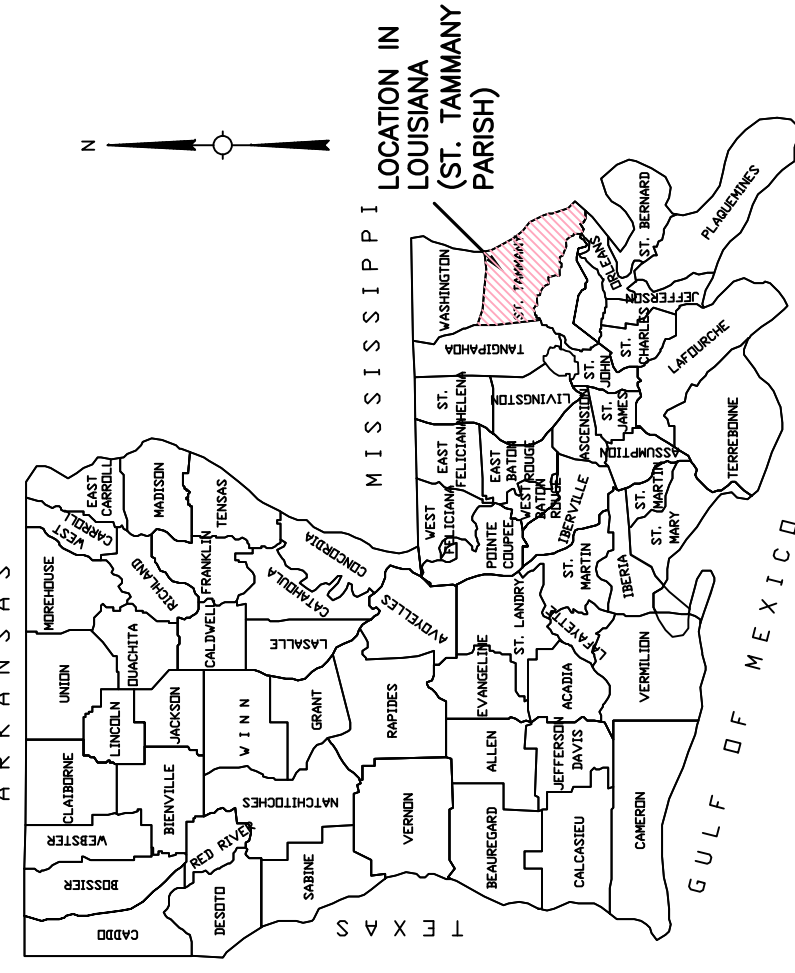
## INDEX OF SHEETS

- |         |   |
|---------|---|
| 1       | TITLE SHEET   |
| 2       | GENERAL NOTES                                       |
| 2a      | WATER NOTES   |
| 2b      | WATER DETAILS                                       |
| 2c      | TRENCH AND ARV DETAILS                              |
| 2d      | FLUSHING STATION DETAIL                             |
| 2e      | SAMPLING STATION AND TRACER WIRE DETAIL             |
| 2f      | THRUST BLOCKS DETAIL                                |
| 2g      | WATER SERVICE AND TERMINATION DETAILS               |
| 2h      | TIE-IN AND CROSSING DETAILS                         |
| 2i      | DEPARTMENT OF UTILITIES APPROVED FITTINGS           |
| 3       | SUMMARY OF ESTIMATED QUANTITIES                     |
| 4       | WATER LINE MASTER PLAN                              |
| 5-10    | PLAN AND PROFILE SHEETS RUE ROYAL AND RUE ESPLANADE |
| 11-31   | PLAN AND PROFILE SHEETS MILITARY ROAD AND US190     |
| 401-414 | CROSS SECTIONS                                      |



LOCATION MAP

(1" = 1000')



VICINITY MAP

LDH PERMIT #  
60004425

ESTIMATED LF OF WATERMAIN  
 6" PVC C900: 15'  
 8" PVC C900: 1083'  
 10" PVC C900: 302'  
 8" HDPE: 183'  
 10" HDPE: 1944'  
 12" HDPE: 9725'

CLASSIFICATION:  
MUNICIPAL AND PUBLIC WORKS CONSTRUCTION

NOTE: THE 2016 EDITION OF THE LOUISIANA DOTD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES AND LATEST REVISIONS SHALL GOVERN THIS PROJECT EXCEPT AS AMENDED BY SPECIAL PROVISION AND/OR SUPPLEMENTAL SPECIFICATIONS DESIGN

WATER SYSTEM  
ST. TAMMANY PARISH DEPARTMENT  
OF UTILITIES: # LAL103053 CROSS  
GATES SD WATER SYSTEMS  
OPERATOR: FERNANDO DAVIS #53652

CONSTRUCTION TYPE:  
CONSTRUCT NEW WATER MAIN AND  
TIE-IN TO EXISTING WATER MAIN  
USING OPEN-CUT AND TRENCHLESS  
METHODS.

DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



RICHARD C. LAMBERT CONSULTANTS  
FRANZ J. ZEMMER, P.E.  
DATE: 10/10/2023  
APPROVED BY: Christopher Tissue  
ST. TAMMANY PARISH GOVERNMENT  
DEPARTMENT OF UTILITIES  
CHRISTOPHER P. TISSUE, P.E., DIRECTOR

S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN

TITLE SHEET

SHEET NO.  
1

# Section 13

PLANS PREPARED BY AND RECOMMEND FOR APPROVAL:

**SURVEY AND LOCATE DATA:**

- ALL ELEVATIONS ARE BASED ON NAVD 88, DATUM AND SHOWN IN FEET. COORDINATE SYSTEM UTILIZES LOUISIANA STATE PLANE SOUTH COORDINATE SYSTEM.
- LOCATION OF EXISTING UTILITIES OBTAINED BY LA ONE CALL LOCATES AND AS-BUILT PLANS.
- EXISTING WATER AND SEWER LINES ARE SHOWN AS PER FIELD LOCATES AND SUBDIVISION AS-BUILT PLANS.
- ALL PIPE LENGTHS SHOWN ON PLAN AND PROFILES ARE FROM CENTER TO CENTER OF MANHOLES, CATCH BASINS, INLETS ETC. OR ALONG THE CENTER LINE OF FORCE MAINS AND WATER MAINS.
- INVERT ELEVATIONS SHOWN ON DRAWINGS REFER TO THE CENTERLINE OF MANHOLES, UNLESS OTHERWISE INDICATED.
- THE LOCATION OF ALL EXISTING SEWER AND WATER SERVICE LINES MAY NOT BE INDICATED THESE PLANS. THE LOCATION OF NEW SERVICES SHALL BE VERIFIED IN THE FIELD.

**PERMIT REQUIREMENTS (NOT ALL INCLUSIVE):**

- CONTRACTOR TO OBTAIN ALL REQUIRED RIGHT-OF-WAY PERMITS.
- THE CONTRACTOR SHALL NOT OPEN CUT STREETS IN THE PROJECT AREA.
- THE DEPARTMENT OF TRANSPORTATION AND ST. TAMMANY PARISH ARE TO BE NOTIFIED IN ADVANCE OF CONSTRUCTION PER THEIR RESPECTIVE PERMIT CONDITIONS.
- ALL WORK SHALL BE IN ACCORDANCE WITH BID DOCUMENTS, WATER AND SEWER STANDARDS DETAILS AND MATERIALS MANUAL, AND ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- THE CONTRACTOR SHALL NOTIFY APPLICABLE UTILITY CONTACT PERSONNEL NOT LESS THAN ONE WEEK PRIOR TO CONSTRUCTION OF FACILITIES IN THEIR RESPECTIVE AREAS.
- TREE PROTECTION SHALL BE IN ACCORDANCE WITH ST. TAMMANY PARISH ORDINANCE AND/OR AS DETAILED ON SPECIFIC PLAN SHEETS. NO TRIMMING OF OVERHANGING TREE LIMBS WILL BE ALLOWED. USE SMALLER EQUIPMENT IF NECESSARY.
- CONTRACTOR TO COORDINATE WORK WITH OTHER UTILITIES DURING CONSTRUCTION.

**EXISTING UTILITY PROTECTION:**

- IN ORDER TO REDUCE THE DISRUPTION AND COST OF UTILITY DAMAGES OCCURRING IN THE RIGHT-OF-WAY AND EASEMENTS, THE CONTRACTOR SHALL PREVENT DAMAGES TO EXISTING UTILITIES CAUSED BY HIS WORK THROUGH FIELD VERIFICATION OF THE LOCATION OF THE EXISTING UTILITIES. IN THE CASE OF OPEN EXCAVATION, VERIFICATION MAY BE PERFORMED DURING THE CONTRACTORS WORK. IN THE CASE OF DIRECTIONAL DRILLING, VERIFICATION SHALL TAKE PLACE PRIOR TO MOBILIZATION OF THE DRILLING EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES AS NEEDED TO AVOID CONTACT. EXISTING UTILITIES SHALL BE EXPOSED USING DETECTION EQUIPMENT OR OTHER ACCEPTABLE MEANS, SUCH METHODS MAY INCLUDE BUT SHALL NOT BE LIMITED TO "SOFT DIG" EQUIPMENT AND GROUND PENETRATING RADAR(GPR). THE EXCAVATOR SHALL BE HELD LIABLE FOR DAMAGES CAUSED TO THE CITY'S INFRASTRUCTURE AND THE EXISTING FACILITIES OR OTHER UTILITY COMPANIES.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES. OTHER STRUCTURES AND OBSTRUCTIONS BOTH ABOVE AND BELOW GROUND SURFACE. ALL DAMAGE RESULTING FROM THE CONTRACTORS OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL CALL LA ONE CALL AT 811 4 DAYS PRIOR TO ANY EXCAVATION.

- AT&T – GENERAL NUMBER (STEPHEN BERGERON)-----800-288-2020, SB0708@ATT.COM
- ATMOS ENERGY-----800-286-6700
- LOUISIANA ONE CALL -----811
- LOUISIANA DEPARTMENT OF HEALTH LDH (THOMAS GRIGGS)-----225-342-8285
- LADOTD (ERNE MATHERNE)-----985-375-0100
- CLECO – (TAYLOR CREECH) -----985-867-4635
- ST. TAMMANY PARISH – DEPARTMENT OF UTILITIES-----985-893-1717
- UNITY FIBER (ANDREW LOMBARDINO)-----ANDREW.LOMBARDINO@UNITI.COM
- CHARTER (KEVIN DAVID)-----KEVIN.DAVID@CHARTER.COM
- ENERGY (DE'ANGELA STRIPE)-----DVARNER@ENERGY.COM
- WEST (JOHNNY BRUHL)-----JBRUHL@WSTE.COOP

**RESTORATION NOTES:**

- THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR, REGISTERED IN THE STATE OF LOUISIANA, TO REFERENCE AND RESTORE PROPERTY CORNERS AND LANDMARKS WHICH MAY BE DISTURBED BY CONSTRUCTION.
- THE CONTRACTOR SHALL RESTORE/REPLACE ALL CULVERTS, HEADWALLS AND STORM DRAIN INLETS REMOVED OR DISTURBED BY THE CONSTRUCTION OPERATION.
- TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION IN ACCORDANCE WITH LOCAL AND STATE REQUIREMENTS.
- SIDEWALKS, DRIVEWAYS AND CURBING DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH ST. TAMMANY PARISH SPECIFICATIONS. SIDEWALKS REMOVED AND REPLACED IN CURB AND GUTTER AREAS AT INTERSECTIONS SHALL HAVE HANDICAP RAMPS INSTALLED. DRIVEWAYS AND SIDEWALKS SHALL BE SAW-CUT ALONG THE RIGHT-OF-WAY LINE OR NEAREST JOINT AND REMOVED AND REPLACED TO THE EDGE OF STREET.
- GRASS SOD OR HYDROSEED SHALL BE FURNISHED AND PLACED IN THE AREAS DISTURBED OR DAMAGED BY THE CONSTRUCTION OPERATION.
- ALL PAVEMENT REPAIR SHALL BE IN ACCORDANCE WITH THE ST. TAMMANY PARISH/LADOTD/ STANDARD DETAILS AND SPECIFICATIONS LATEST EDITION.
- CONTRACTOR MUST MAINTAIN AND PRESERVE NEWLY GRADED AREAS AND REPAIR AREAS WHERE SETTLING AND EROSION HAVE OCCURRED.

**UTILITY NOTES:**

- ALL UTILITY/ELECTRICAL/CONDUIT RUNS ARE SCHEMATIC ONLY.
- PRIVATE UTILITY CONNECTIONS SHOWN ARE SCHEMATIC ONLY. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO BID.
- THESE PLANS ARE SUBJECT TO REVIEW AND APPROVAL BY JURISDICTIONAL ENTITIES.
- WARNING THERE ARE FIBER OPTIC AS WELL AS OTHER UTILITY LINES WITHIN THE PUBLIC RIGHT-OF-WAY. PLEASE COORDINATE PRIOR TO CONSTRUCTION WITH ALL OF THE UTILITY COMPANIES.
- ALL NEWLY INSTALLED WATER LINES SHALL BE INSPECTED BY THE ST. TAMMANY PARISH DEPARTMENT OF UTILITIES PRIOR TO BACKFILLING THE TRENCH.
- NEWLY INSTALLED WATER MAIN SHALL NOT BE PERMANENTLY CONNECTED TO THE EXISTING WATER SYSTEM UNTIL A BACTERIA SAMPLE HAS BEEN CLEARED BY LDH (985-646-6448). THE CONTRACTOR WILL PROVIDE A TEMPORARY CONNECTION FOR ALL NEWLY INSTALLED WATER MAINS WHICH SHALL BE A 2" BACK FLOW DEVICE FOR CHARGING AND TEST PURPOSES ONLY.
- CONTRACTOR TO INSTALL NEW WATER MAIN WITHIN 4 FEET OF PARISH WATER SYSTEM. ONCE BACTERIA SAMPLE HAS BEEN CLEARED. THE PARISH WILL REMOVE BACKFLOW DEVICE AND PERMIT THE CONTRACTOR TO CONNECT TO WATER SYSTEM.
- THE CONTRACTOR SHALL NOT OPERATE WATER OR WASTEWATER VALVES WITHIN PARISH SYSTEM.
- CONTACT THE ST. TAMMANY PARISH DEPARTMENT OF UTILITIES IN ORDER TO INSPECT ALL UTILITIES WITHIN THE PUBLIC RIGHT OF WAY. A ST. TAMMANY PARISH DEPARTMENT OF UTILITIES REPRESENTATIVE WILL OBSERVE PRESSURE TEST ON THE WATER LINE AND EXFILTRATION TESTS AND LAMP TESTS ON SEWER LINES. NOTIFICATION OF TESTING SHALL BE AT LEAST 24 HOURS IN ADVANCE OF TESTING.
- WATERLINES SHALL BE STERILIZED IN ACCORDANCE WITH STATE SANITARY CODE LAC 51:XII.353A. AND RECEIVE APPROVAL FROM THE LOUISIANA STATE BOARD OF HEALTH LDH BEFORE CONNECTING TO THE CITY WATER SYSTEM.
- WATER MAIN SHALL BE TESTED FOR 150 PSI FOR NOT LESS THAN FOUR (4) HOURS. LEAKAGE SHALL NOT EXCEED TEN(10) GALLONS PER INCH OF DIAMETER PER MILE PER DAY IN ACCORDANCE WITH AWWA STANDARDS.

**GENERAL NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE WORK AND VERIFYING ALL MEASUREMENTS AND GRADES PRIOR TO BEGINNING OF CONSTRUCTION. PROJECT VERTICAL AND HORIZONTAL CONTROLS HAVE BEEN INDICATED ON THE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH BASE LINE AND ADDITIONAL T.B.M.'S SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE RESPECTIVE UTILITY COMPANIES FOR ADJUSTMENT, REMOVAL OR RELOCATION OF THE EXISTING UTILITIES WHICH INTERFERE WITH THE WORK. ALL PRIVATELY OWNED UTILITY MANHOLES SHALL BE ADJUSTED BY THE UTILITY COMPANIES. THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR PRIVATE UTILITY COMPANIES TO PERFORM THEIR WORK.
- ALL STATIONS, LENGTHS, WIDTHS AND LOCATIONS OF THE REQUIRED CONSTRUCTION MAY BE ADJUSTED IN THE FIELD AS DEEMED NECESSARY BY THE PROJECT ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR THE NOTICE OF INTENT, SWPPP, AND MUST PROVIDE THE AGENCY INTEREST NUMBER FROM THE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ). THIS WILL BE AT NO DIRECT PAY.
- CONTRACTOR IS RESPONSIBLE FOR PERMITS AND APPROVALS FROM AGENCIES GOVERNING THE CONSTRUCTION OF THIS WORK AND SHALL BE SECURED PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OR DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE UTILITIES, PAVEMENT, CURB, FENCING, ETC., REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS. NO DIRECT PAY FOR THIS WORK.
- CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES AND SHALL BE CONSTRUCTED TO THE SAME.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- NOISE CONTROL-CONTRACTOR SHALL TAKE REASONABLE MEASURES TO AVOID UNNECESSARY NOISE APPROPRIATE FOR THE AMBIENT SOUND LEVELS IN THE AREA DURING WORKING HOURS. ALL CONSTRUCTION MACHINERY AND VEHICLES SHALL BE EQUIPPED WITH PRACTICAL SOUND MUFFLING DEVICES AND OPERATED IN A MANNER TO CAUSE THE LEAST NOISE CONSISTENT WITH EFFICIENT PERFORMANCE.
- DUST CONTROL-CONTRACTOR SHALL TAKE REASONABLE MEASURES TO PREVENT ANY UNNECESSARY DUST. EACH SURFACE SUBJECT TO DUSTING SHALL BE KEPT MOIST WITH WATER OR BY APPLICATION OF CHEMICAL DUST SUPPRESSANT. DUSTY MATERIAL IN STOCK PILES OR IN TRANSIT SHALL BE COVERED TO PREVENT BLOWING.
- THE CONTRACTOR, AT HIS OWN EXPENSE, MAY MAKE ADDITIONAL SURVEYS AND SOIL INVESTIGATIONS AS HE DEEMS NECESSARY TO DETERMINE CONDITIONS THAT WILL AFFECT THE PERFORMANCE OF THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY TRAFFIC CONTROL MEASURES. TRAFFIC CONTROL PLANS MUST BE APPROVED BY THE ST. TAMMANY PARISH ENGINEERING PRIOR TO CONSTRUCTION. TEMPORARY TRAFFIC CONTROL SIGNS, BARRICADES, WARNING LIGHTS, DEVICES AND METHODS SHALL COMPLY WITH THE LOUISIANA DOTD TEMPORARY TRAFFIC CONTROL PLANS.
- ALL EXCAVATED MATERIAL NOT USED OR NOT USABLE FOR CONSTRUCTION ELSEWHERE ON THIS JOB SITE SHALL BECOME PROPERTY OF THE CONTRACTOR, AND IS TO BE HAULED OFF SITE AND DISPOSED OF IN A LEGAL AND LAWFUL MANNER.
- CONTRACTOR SHALL MAINTAIN ACCESS FOR TRASH/RECYCLING PICKUPS, MAILBOXES AND OTHER MAIL DELIVERIES. IF CONSTRUCTION REQUIRES TEMPORARY REMOVAL OF MAILBOX, CONTRACTOR SHALL BE REQUIRED TO REMOVE AND TEMPORARILY INSTALL MAILBOX TO MAINTAIN UNDISTURBED MAIL DELIVERIES. UPON COMPLETION OF CONSTRUCTION OPERATIONS AT LOCATION, CONTRACTOR SHALL REINSTALL MAILBOX IN ORIGINAL LOCATION. ALL WORK ASSOCIATED WITH THIS WILL BE PAID UNDER REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

**INSTALLATION NOTES:**

- CONTRACTOR TO RENEW, REHABILITATE, REPLACE OR REINSTALL AS APPLICABLE ALL SERVICE LATERALS TO R.O.W. LINE.
- WHEN THE DISTANCE BETWEEN A POWER POLE AND THE TRENCH IS LESS THAN THE TRENCH DEPTH, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ELECTRICAL PERSONAL TO SECURE POWER POLES. A MINIMUM OF TWO (2) WORKING DAYS NOTICE IS REQUIRED FOR AN OUTSIDE MEETING WITH ELECTRICAL COMPANIES TO DISCUSS THE REQUIRED WORK. ADDITIONAL TIME WILL BE REQUIRED BY ELECTRICAL COMPANIES FOR ANY REQUIRED WORK TO BE ACCOMPLISHED.
- THE DESIGN FOR THE PROJECT IS BASED UPON THE "OPEN-CUT" AND DIRECTIONAL DRILL METHOD OF CONSTRUCTION. IF USING ALTERNATE MEANS OR METHODS, THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE STANDARDS FOR THAT MEANS OR METHOD.
- THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AT SERVICE CONNECTIONS. THE MEANS AND METHODS SHALL BE LEFT TO THE DISCRETION OF THE CONTRACTOR SUBJECT TO THE REQUIREMENTS OF THE CONTRACT SPECIFICATION. NO EXISTING ACTIVE SERVICE SHALL BE LEFT INTERRUPTED AT THE END OF THE WORK DAY.
- CONTRACTOR SHALL PROVIDE ADDITIONAL CORPORATION STOPS FOR FILLING AND DRAINING PURPOSES DURING CONSTRUCTION AS NEEDED. CORPORATION STOPS ARE TO BE PLUGGED AND LEFT IN PLACE. INDICATE CORPORATION STOP LOCATIONS ON RECORD DRAWINGS (AS-BUILTS).
- PRIOR TO COMMENCING ANY EXCAVATION OR GRADING, THE CONTRACTOR SHALL OBTAIN ALL GEOTECHNICAL AND TOPOGRAPHIC SURVEY DATA AND LOCATIONS OF ABOVE GROUND AND UNDERGROUND UTILITIES. SHOULD THE CONTRACTOR DISCOVER ANY INACCURACIES, ERRORS OR OMISSIONS IN THE SURVEY DATA, HE SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER IN ORDER THAT PROPER ADJUSTMENTS CAN BE ANTICIPATED AND ORDERED.
- ALL TRENCHES SHALL BE IN CONFORMANCE WITH OSHA REQUIREMENTS.

5. MILITARY RD US 190 & RUE ESPLANADE WATER MAIN

GENERAL NOTES

SHEET NO.

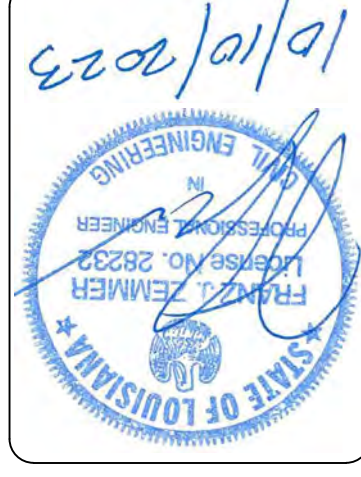
2



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

NO.	DATE:	DESCRIPTION OF REVISION

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



10/10/2023



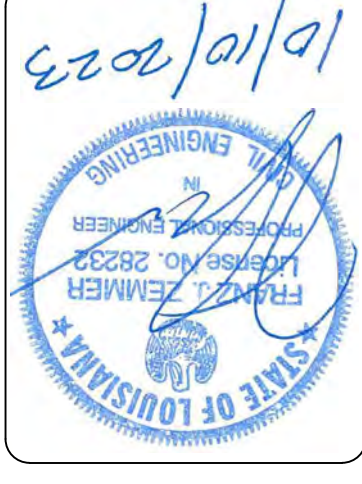
WATER NOTES



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

DATE	DESCRIPTION OF REVISION	NO

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	RGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CP1
SHEET SIZE:	ANSI D
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
WATER NOTES

SHEET NO.  
2a

CONNECTIONS. FIRE HYDRANTS SHALL BE PAINTED CHROME YELLOW.  
2. ALL FIRE HYDRANTS SHALL HAVE A MINIMUM OF 24 INCHES OF CLEARANCE BETWEEN FINISHED GRADE AND THE BOTTOM OF THE 2 1/2 INCH OUTLET. IF THE FIRE HYDRANT BECOMES BURIED OR THE CLEARANCE IS LESS THAN THE REQUIRED 24", THE CONTRACTOR SHALL RAISE THE FIRE HYDRANT TO ACHIEVE THE MINIMUM REQUIRED CLEARANCE. THE DEPARTMENT OF UTILITIES SHALL NOT ACCEPT THE PROJECT UNTIL ALL FIRE HYDRANTS HAVE THE REQUIRED GROUND CLEARANCE.

3. FIRE HYDRANTS SHALL HAVE A 6" DIAMETER DUCTILE IRON LEAD WITH 6" MUELLER GATE VALVE FOR ISOLATION FROM THE WATER MAIN.  
4. THE LOCATION OF EACH FIRE HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR ON THE ROADWAY PAVEMENT. BLUE REFLECTOR SHALL BE PLACED IN THE CENTER OF THE TRAVEL LANE CLOSEST TO THE FIRE HYDRANT.

5. FIRE HYDRANTS SHALL BE LOCATED AT LEAST SIX FEET OR GREATER, AS NECESSARY BY REGULATORY REQUIREMENT, FROM THE EDGE OF ROADWAY PAVEMENT ALONG RUE ROYAL AND RUE ESPLANADE, AND LOCATED AT ROW ALONG U.S. 190 (MILITARY ROAD AND SHORCUT HIGHWAY).

6. THE MAXIMUM SPACING BETWEEN FIRE HYDRANTS SHALL BE 500 FEET.

7. A MINIMUM OF THREE FIRE HYDRANTS IN THE DEVELOPMENT SHALL BE TESTED TO VERIFY ACTUAL FIRE FLOW AND TO CLASSIFY THE FIRE HYDRANTS BY OBSERVED FLOW RATES. THE NUMBER AND SELECTION OF HYDRANTS SHALL BE DETERMINED BY THE LOCAL FIRE PROTECTION DISTRICT. A REPRESENTATIVE OF THE DEPARTMENT OF UTILITIES AND THE LOCAL FIRE PROTECTION DISTRICT SHALL BE PRESENT TO OBSERVE FIRE FLOW TESTING AND RESULTS.

8. AFTER FIRE FLOW TESTING, THE CONTRACTOR SHALL PAINT THE TOP AND THE THREE OUTLET CAPS OF EACH FIRE HYDRANT IN ACCORDANCE WITH THE NFPA COLOR CODING SYSTEM TO CLASSIFY EACH HYDRANT BY FIRE FLOW.

- a. RED: TO BE USED ON ALL FIRE HYDRANTS WITH FIRE FLOW LESS THAN 500 GALLONS PER MINUTE
- b. ORANGE: TO BE USED ON ALL FIRE HYDRANTS WITH FIRE FLOW BETWEEN 500 AND 1,000 GALLONS PER MINUTE
- c. GREEN: TO BE USED ON ALL FIRE HYDRANTS WITH FIRE FLOW BETWEEN 1,000 AND 1,500 GALLONS PER MINUTE
- d. BLUE: TO BE USED ON ALL FIRE HYDRANTS WITH FIRE FLOW GREATER THAN 1,500 GALLONS PER MINUTE

**WATER FITTINGS AND VALVES NOTES**

1. WATER VALVES THREE INCHES (3") OR LARGER SHALL BE AWWA C-509 RESILIENT-SEATED GATE VALVE FOR POTABLE WATER SUPPLY SERVICE. WATER VALVES SHALL BE FUSION BONDED EPOXY AND LINED PER AWWA C-550. VALVES SHALL BE MUELLER SERIES 2360 OR THE DEPARTMENT OF UTILITIES APPROVED EQUAL. WATER VALVES SHALL BE RESTRAINED JOINT WITH MEGALUG AND TEFLON COATED CORE-TEN BOLTS AND NUTS.

2. BURIED VALVES, INCLUDING TWO INCH (2") VALVES, SHALL HAVE A 3-PIECE CAST IRON BOX INSTALLED AND ADJUSTED TO FINISHED GRADE. BURIED VALVES SHALL HAVE AN AWWA OPERATING NUT AND A COVER LABELED "WATER". EACH VALVE BOX SHALL HAVE A CAST-IN-PLACE CONCRETE VALVE PAD MEASURING AT LEAST 4" THICK BY 24" BY 24" SQUARE.

3. MANHOLE AND VALVE COVERS SHALL HAVE DIAMOND TREAD PATTERN AND HAVE WORD "WATER" CAST ON THE COVER.

4. IN GENERAL, WATER MAINS AND VALVES SHALL BE LOCATED BETWEEN THE RIGHT-OF-WAY LINE AND TOP OF DITCH OR SUBSURFACE DRAINAGE FEATURE. A HORIZONTAL CLEARANCE OF MINIMUM THREE FEET (3') SHALL BE MAINTAINED BETWEEN THE TOP OF DITCH (OR SUBSURFACE DRAINAGE FEATURE) AND EDGE OF THE MAIN AND/OR VALVE. IF THE CLEARANCE REQUIREMENT CANNOT BE MET DUE TO FIELD CONDITIONS, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO DETERMINE AN ACCEPTABLE LOCATION OF THE MAIN AND/OR THE VALVE, ALL AT NO ADDITIONAL COST TO THE PROJECT. UNDER NO CIRCUMSTANCES VALVES AND THEIR ACCESS BE CONSTRUCTED IN DITCHES OR UNDER SUBSURFACE DRAINAGE FEATURES ARE ACCEPTABLE. ENGINEER'S DECISION SHALL BE FINAL.

5. IN GENERAL FOR OPEN CUT INSTALLATION, WATER MAINS AND VALVES SHALL BE AT LEAST THREE FEET (3') BELOW FINISHED GRADE AND GENERALLY NO DEEPER THAN FIVE FEET (5') BELOW FINISHED GRADE. IF THE DEPTH OF THE WATER VALVE IS LESS THAN 3' OR GREATER THAN 5', THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO DETERMINE IF THE DEPTH OF THE WATER VALVE IS ACCEPTABLE. THE WATER VALVE SHALL BE MOVED AT NO ADDITIONAL COST TO THE PROJECT. ENGINEER'S DECISION SHALL BE FINAL.

6. FITTINGS SHALL BE RESTRAINED JOINT DUCTILE IRON USING MEGALUGS AND TEFLON COATED CORE-TEN BOLTS AND NUTS. FITTINGS SHALL CONFORM TO ALL APPLICABLE AWWA/ANSI SPECIFICATIONS REGARDING USE IN POTABLE WATER SYSTEMS.

7. BRASS FITTINGS SHALL BE LEAD FREE. BRASS FITTINGS SHALL BE MUELLER, FORD METER BOX COMPANY, OR TAMMANY UTILITIES APPROVED EQUAL. REFER TO WATER DETAILS FOR APPROVED MODELS FROM MUELLER AND FORD METER BOX COMPANY.

8. CONNECTIONS TO EXISTING WATERLINES SHALL BE MADE USING MUELLER STAINLESS STEEL TAPPING SLEEVE AND VALVE, MODEL NO. H-304SS. CONNECTION TO EXISTING WATERLINES USING OTHER TAPPING SLEEVES AND VALVES OTHER THAN MUELLER H-304SS SHALL BE APPROVED BY THE DEPARTMENT OF UTILITIES PRIOR TO USE.

9. WATER SERVICE CONNECTIONS SHALL HAVE A BRASS TAPPING SADDLE, BRASS CORPORATION STOP, AND A MINIMUM 1" CONNECTION SIZE. SERVICE CONNECTION PIPING SHALL BE AWWA C901 POLYETHYLENE TUBING, PE3408 DR9. WATER SERVICE CONNECTION SHALL HAVE MAXIMUM COVER OF 2'. A U-BRANCH SHALL BE INSTALLED ON WATER SERVICE CONNECTION WHIP. THE LOCATION OF THE WATER SERVICE CONNECTIONS SHALL BE STAMPED IN THE CURB FACE OR ROAD SURFACE (WHEN NEW ROADS ARE CONSTRUCTED) USING THE "W" SYMBOL, AND THE LETTERING SHALL BE AT LEAST 4" BY 8".

10. ALL WATER SERVICE CONNECTIONS SHALL BE LOCATED AT THE LOT LINE. WATER SERVICE CONNECTIONS SHALL NOT BE LOCATED WITHIN THE DRIVEWAY.

11. SAMPLE STATIONS SHALL BE INSTALLED IN LOCATIONS INDICATED ON PLANS.

12. ALL NEW SAMPLE STATIONS SHALL BE KUPFERLE FOUNDRY COMPANY BRAND - MODEL # 88-SS.

13. HDPE TO PVC ADAPTERS/HARVEY ADAPTERS/HDPE ADAPTERS SHALL BE AT NO DIRECT PAY. ALL COSTS ASSOCIATED WITH THESE FITTINGS SHALL BE INCLUDED IN RELATED PAY ITEMS.

**FIRE HYDRANT NOTES**

1. FIRE HYDRANTS SHALL BE MUELLER SUPER CENTURION 250 HS WITH BUILT-IN CHECK VALVE AND SHALL COMPLY WITH AWWA C-502. OTHER MODEL FIRE HYDRANTS SHALL BE SUBMITTED TO AND APPROVED BY THE DEPARTMENT OF UTILITIES PRIOR TO PURCHASING AND INSTALLING. ALL FIRE HYDRANTS SHALL COMPLY AWWA C-502 AND/OR C-503. FIRE HYDRANTS SHALL HAVE AT LEAST THREE OUTLETS PER HYDRANT, AND ALL OUTLETS SHALL HAVE NATIONAL STANDARD THREADS. ONE OUTLET SHALL BE A 5 1/2 INCH PUMPER CONNECTION, AND TWO OUTLETS SHALL BE 2 1/2 INCH HOSE

**WATER MAIN NOTES**

1. NEW WATER MAINS SHALL BE NO SMALLER THAN 8" INSIDE DIAMETER.

2. NEW WATER MAINS BETWEEN 8" AND 30" DIAMETER SHALL BE AWWA C900 POLYVINYL CHLORIDE (PVC) PIPE AND SHALL HAVE A PRESSURE CLASS OF 235 PSI (DR18). NEW WATER MAINS SHALL BE THE COLOR BLUE AND LABELED AS "WATER". CONNECTIONS TO OTHER WATER MAINS, INCLUDING THOSE OF DIFFERENT MATERIAL, SHALL BE MADE USING THE APPROPRIATE ADAPTERS AND FITTINGS.

3. NEW WATER MAINS INSTALLED USING AN OPEN CUT/TRENCH METHOD SHALL BE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO AWWA C900. NEW WATER MAINS BETWEEN 8" AND 48" DIAMETER SHALL HAVE A PRESSURE CLASS OF 235 PSI (DR18). CONNECTIONS BETWEEN PIPE LENGTHS SHALL BE OF AN INTEGRATED "BELL AND SPIGOT" PUSH-ON DESIGN WITH A RUBBER GASKET SEAL. RUBBER SEAL SHALL CONFORM TO AWWA C111. NEW WATER MAINS SHALL BE BLUE AND LABELED AS "WATER".

4. TRACER WIRE AND IDENTIFICATION TAPE SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF THE WATER MAIN FOR ALL LINES INSTALLED USING THE OPEN CUT METHOD. THE TRACER WIRE AND IDENTIFICATION TAPE SHALL BE INSTALLED SIMULTANEOUSLY WITH THE WATER MAIN.

5. TRACER WIRE SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF WATER MAIN FOR ALL LINES INSTALLED USING DIRECTIONAL DRILLING.

6. JOINT RESTRAINTS FOR PVC PIPE BELL JOINTS SHALL BE RESTRAINED WITH A SERIES 1900 SERRATED RESTRAINT HARNESS MANUFACTURED BY EBBA, INC. OR APPROVED EQUAL.

7. ALL APPLICABLE WATER MAIN JOINTS SHALL BE RESTRAINED IN ACCORDANCE WITH THE PROVIDED DETAIL. THE MINIMUM RESTRAINT LENGTH FOR PVC PIPE JOINTS SHALL BE IN ACCORDANCE WITH THE PROVIDED DETAIL.

8. NEW WATER MAINS INSTALLED USING HORIZONTAL DIRECTIONAL DRILLING (HDD) METHODS SHALL BE HIGH-DENSITY POLYETHYLENE (HDPE) PIPE CONFORMING TO AWWA C906, ASTM D3035 AND ASTM F714. NEW WATER MAINS BETWEEN 8" AND 48" DIAMETER SHALL HAVE A PRESSURE CLASS OF 200 PSI (DR11) AND CONFORM TO DUCTILE IRON PIPE SIZES (DIPS). CONNECTIONS BETWEEN PIPE LENGTHS SHALL BE FUSED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS. NEW HDPE WATER MAINS SHALL BE THE COLOR BLACK WITH A BLUE STRIPE. CONNECTIONS TO OTHER WATER MAINS, INCLUDING THOSE OF DIFFERENT MATERIAL, SHALL BE MADE USING THE APPROPRIATE ADAPTERS AND FITTINGS.

9. UPON COMPLETION OF WATER MAIN CONSTRUCTION, THE DRILLING LOGS FOR ALL HDD INSTALLED WATER MAINS SHALL BE PROVIDED WITH THE RECORD DRAWINGS/AS-BUILT PLANS. THE DRILLING LOGS SHALL CONTAIN, AT MINIMUM, THE SIZE OF THE WATER MAIN, THE DEPTH OF INSTALLATION, AND THE LENGTH OF THE SEGMENT.

10. NEW WATER MAIN FITTINGS SHALL BE DUCTILE IRON FITTINGS CONFORMING TO AWWA C110/A21.10 WITH FITTING JOINTS CONFORMING TO AWWA C111/A21.11. THE DUCTILE IRON FITTING SHALL BE EPOXY COATED INSIDE AND OUT. BURIED FITTINGS SHALL BE MECHANICAL JOINT (MJ) FITTINGS. THE CONNECTION BETWEEN THE PVC WATER MAIN AND THE FITTING SHALL BE RESTRAINED WITH A 2000PV OR 2000SV MEGA-LUG MECHANICAL JOINT THRUST RESTRAINT MANUFACTURED BY EBBA, INC. OR AN APPROVED EQUAL. THE NUTS AND BOLTS SHALL BE TEFLON COATED COR-TEN FASTENERS. ABOVE GROUND FITTINGS SHALL BE FLANGED, AND FASTENERS SHALL BE STAINLESS STEEL.

11. THE CONTRACTOR SHALL INSTALL IDENTIFICATION TAPE ALONG THE ENTIRE LENGTH OF THE NEW WATER MAIN. IDENTIFICATION TAPE SHALL BE INSTALLED BY THE CONTRACTORS ONCE THE BACKFILL HAS BEEN PLACED AND COMPACTED TO AT LEAST 12" ABOVE THE TOP OF THE PIPE AND NOT MORE THAN 18" ABOVE THE CONNECTION.

12. ALL NEW WATER MAINS SHALL UNDERGO HYDROSTATIC TESTING TO VERIFY LEAK TIGHTNESS. NEW WATER MAINS SHALL TESTED A 125 PSI FOR 2 HOURS. THERE SHALL BE NO PRESSURE DROPS DURING THE TEST. IN THE EVENT THE WATER MAIN FAILS THE TEST, THE WATER MAIN PIPES SHALL BE CHECKED AND REPAIRED ACCORDINGLY. THE WATER MAIN SHALL BE RE-TESTED.

13. AFTER SUCCESSFUL PRESSURE TESTING, NEW, CLEANED AND REPAIRED WATERLINES AND WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C-651 (DISINFECTING WATER MAINS). DISINFECTED LINES SHALL BE TESTED AND APPROVED BY THE LOUISIANA DEPARTMENT OF HEALTH BEFORE BEING PLACED INTO SERVICE. ALL LOUISIANA DEPARTMENT OF HEALTH TEST SAMPLES SHALL BE COLLECTED FROM AN INSTALLED KUPFERLE FOUNDRY COMPANY MODEL # 88 SAMPLE STATION.

14. ALL HDPE PIPE SHALL BE INSTALLED BY DIRECTIONAL DRILL ONLY. ALL COSTS FOR INSTALLATION TO BE INCLUDED IN LINEAR FOOT COST OF PIPE.

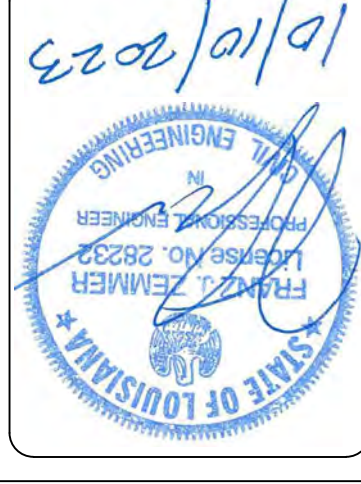
15. WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND OUTSIDE OF THE SEWER. WATER MAINS SHALL BE LAID AT LEAST 6 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED GRAVITY SANITARY OR STORM SEWER, SEPTIC TANK, OR SUBSOIL TREATMENT SYSTEM. THIS DISTANCE SHALL BE MEASURED EDGE TO EDGE.



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

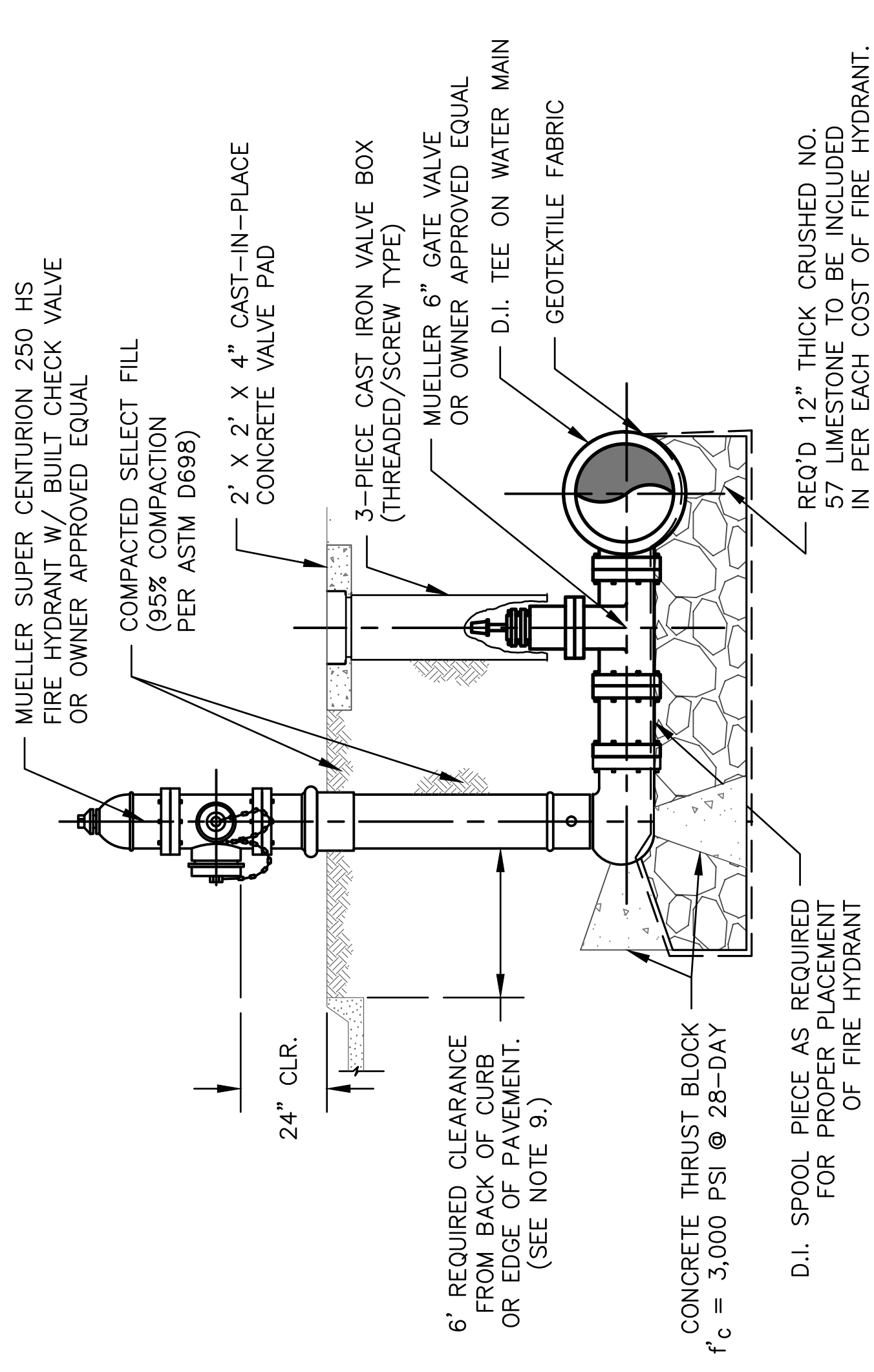
NO.	DATE:	DESCRIPTION OF REVISION

DESIGNED BY:	FJZ
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
WATER DETAILS

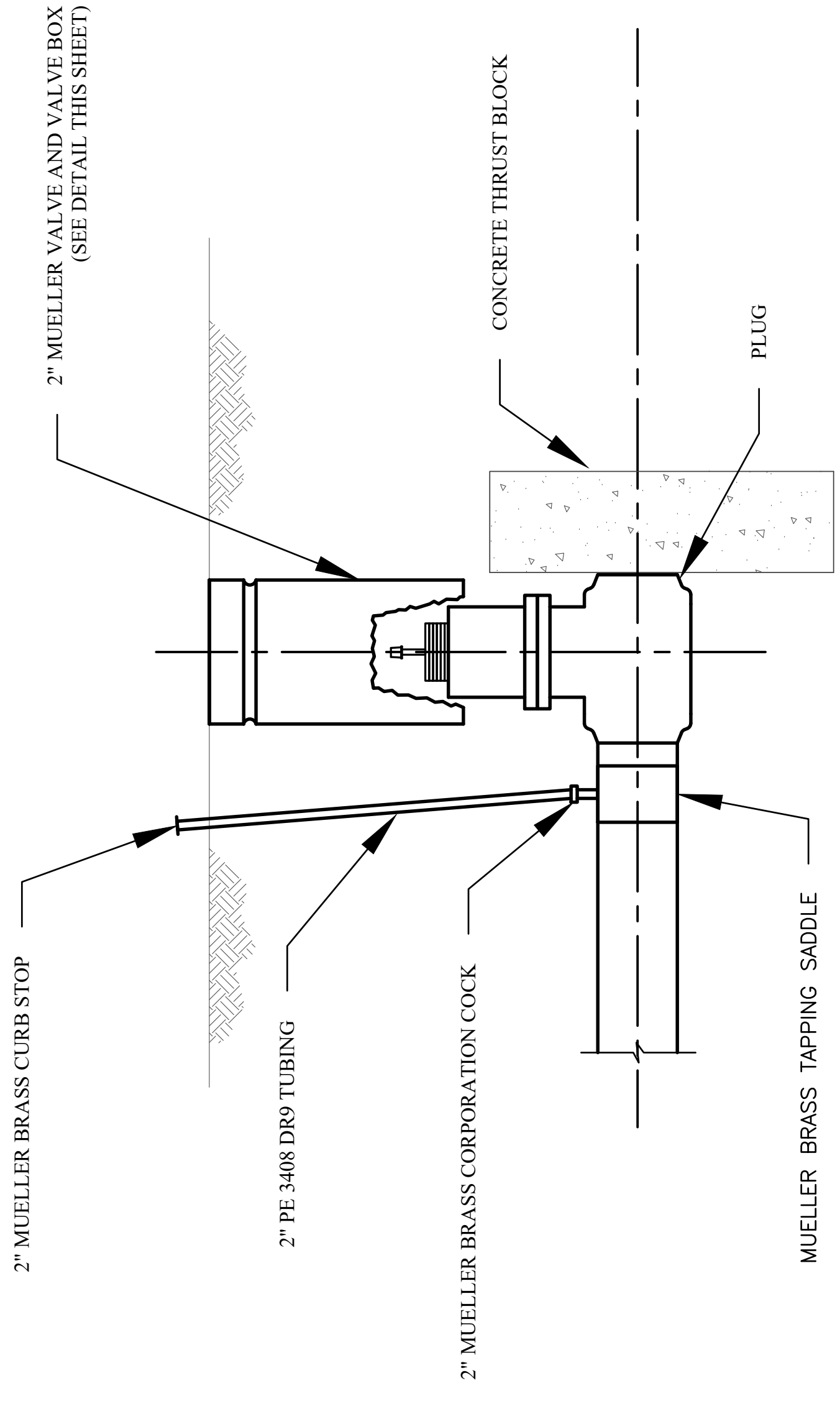
SHEET NO.  
2b



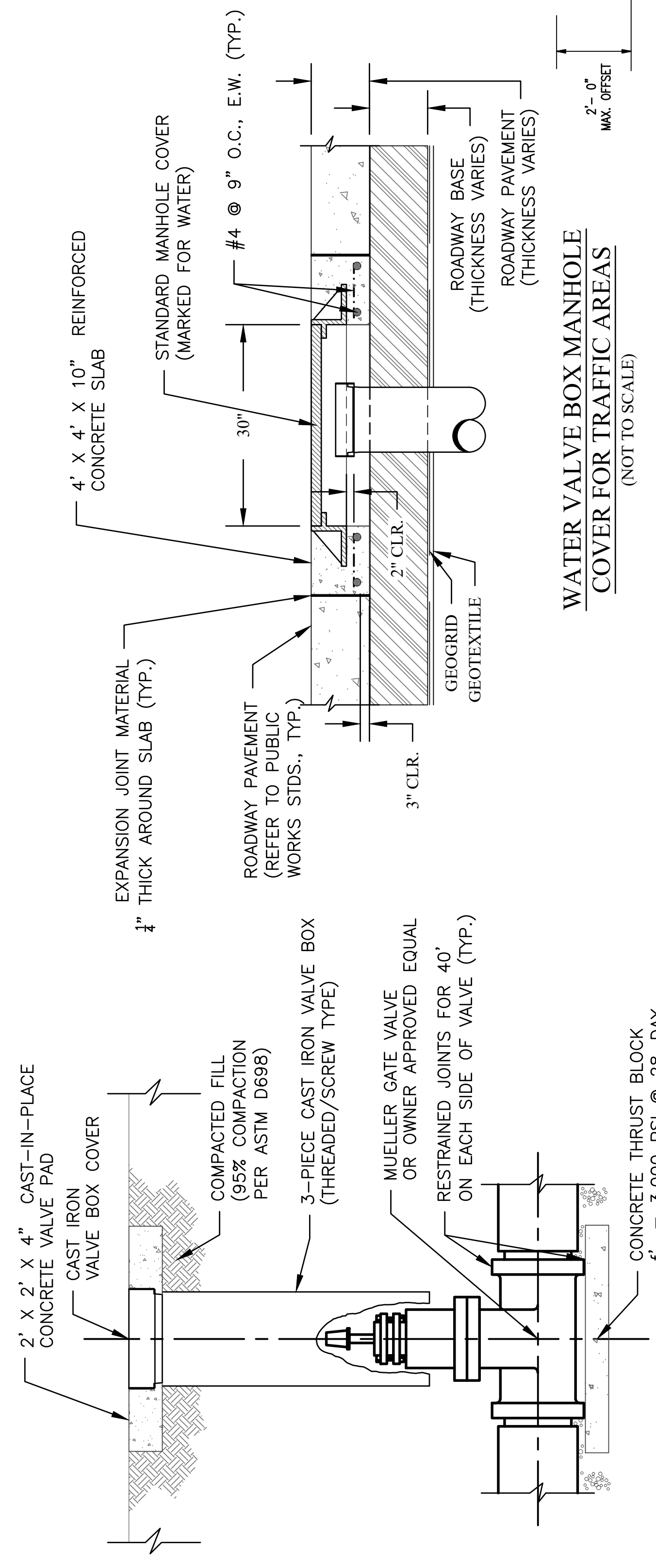
**FIRE HYDRANT DETAIL**  
(NOT TO SCALE)

**FIRE HYDRANT & GATE VALVE NOTES:**

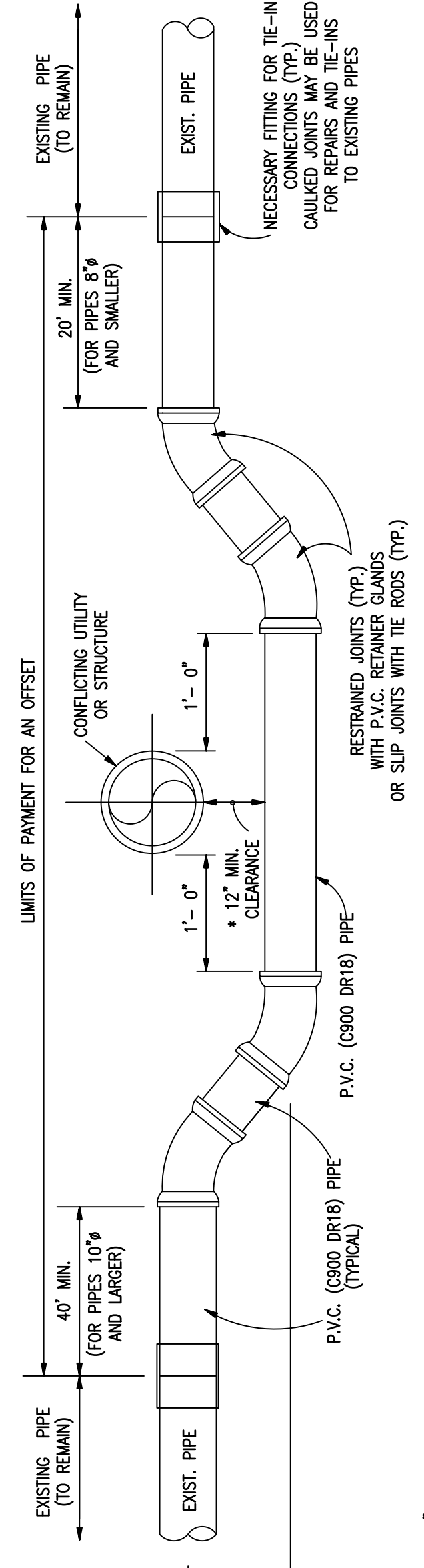
- FIRE HYDRANTS SHALL BE MUELLER SUPER CENTURION 250 HS WITH BUILT-IN CHECK VALVE MEETING AWWA C-502.
- SELECT FILL SHALL BE A SILTY OR CLAYEY SAND COMPLYING WITH AASHTO GROUP CLASSIFICATION A-2-4. IN-SITU SOILS USED AS SELECT FILL SHALL MEET AASHTO GROUP CLASSIFICATION A-2-4 AND SHALL BE FREE OF LARGE DEBRIS, LARGE ROCKS, ROOTS, AND OTHER DELETERIOUS MATERIALS. SELECT FILL SHALL HAVE MINIMUM COMPACTION OF 95% OF THE MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY ASTM D698.
- FIRE HYDRANT AND ASSOCIATED GATE VALVE AND TEE AT PIPE CONNECTION SHALL BE SET ON A CRUSHED STONE BEDDING. BEDDING MATERIAL SHALL BE CRUSHED NO. 57 LIMESTONE COMPACTED TO 90% OF THE MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY ASTM D4253. BEDDING MATERIALS AND BACKFILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING A THICKNESS OF EIGHT INCHES (8") PER LIFT. GRANULAR BACKFILL SHALL HAVE MINIMUM COMPACTION OF 95% OF THE MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY ASTM D698.
- THE PLACEMENT OF GEOGRID SHALL BE AS SHOWN ON THE TRENCH DETAILS. ALL GEOGRID SHALL BE A BIAXIAL GEOGRID SUCH AS TENSAR BX1200, SYNTEC SBX12 OR APPROVED EQUAL. TRANSVERSE AND LONGITUDINAL OVERLAP SHALL BE A MINIMUM OF 24 INCHES.
- THE PLACEMENT OF GEOTEXTILE FABRIC SHALL BE AS SHOWN ON THE TRENCH DETAILS. GEOTEXTILE FABRIC SHALL BE MIRAFI 500X, PROPEX GEOTEXT 200ST OR APPROVED EQUAL. TRANSVERSE AND LONGITUDINAL OVERLAP SHALL BE A MINIMUM OF 24 INCHES.
- CONCRETE THRUST BLOCK SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
- CONCRETE PAD AROUND VALVE BOX COVER SHALL BE CAST-IN-PLACE WITH DIMENSIONS OF 2'X2'X4" THICK. PRE-CAST VALVE CONCRETE PADS SHALL NOT BE USED AND WILL NOT BE ACCEPTED.
- ALL GATE VALVES SHALL BE IDENTIFIED BY MARKER POST (COLOR: BLUE).
- FIRE HYDRANTS WITHIN LADDT RIGHT-OF-WAY SHALL BE SET AT RIGHT-OF-WAY LINE.



**BLOW VALVE DETAIL**  
(NOT TO SCALE)



**VALVE BOX FOR  
NON-TRAFFIC AREAS**  
(NOT TO SCALE)



**VERTICAL OR HORIZONTAL WATER MAIN OFFSET DETAIL**

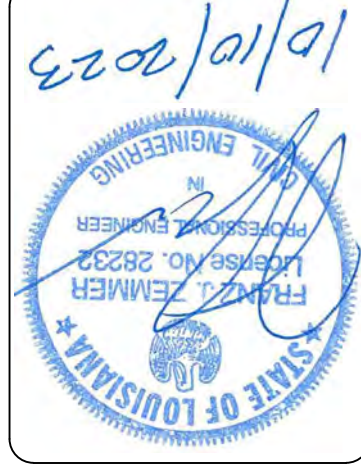
**WATER VALVE BOX MANHOLE  
COVER FOR TRAFFIC AREAS**  
(NOT TO SCALE)



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

DATE:	DESCRIPTION OF REVISION	NO.

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RJLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	

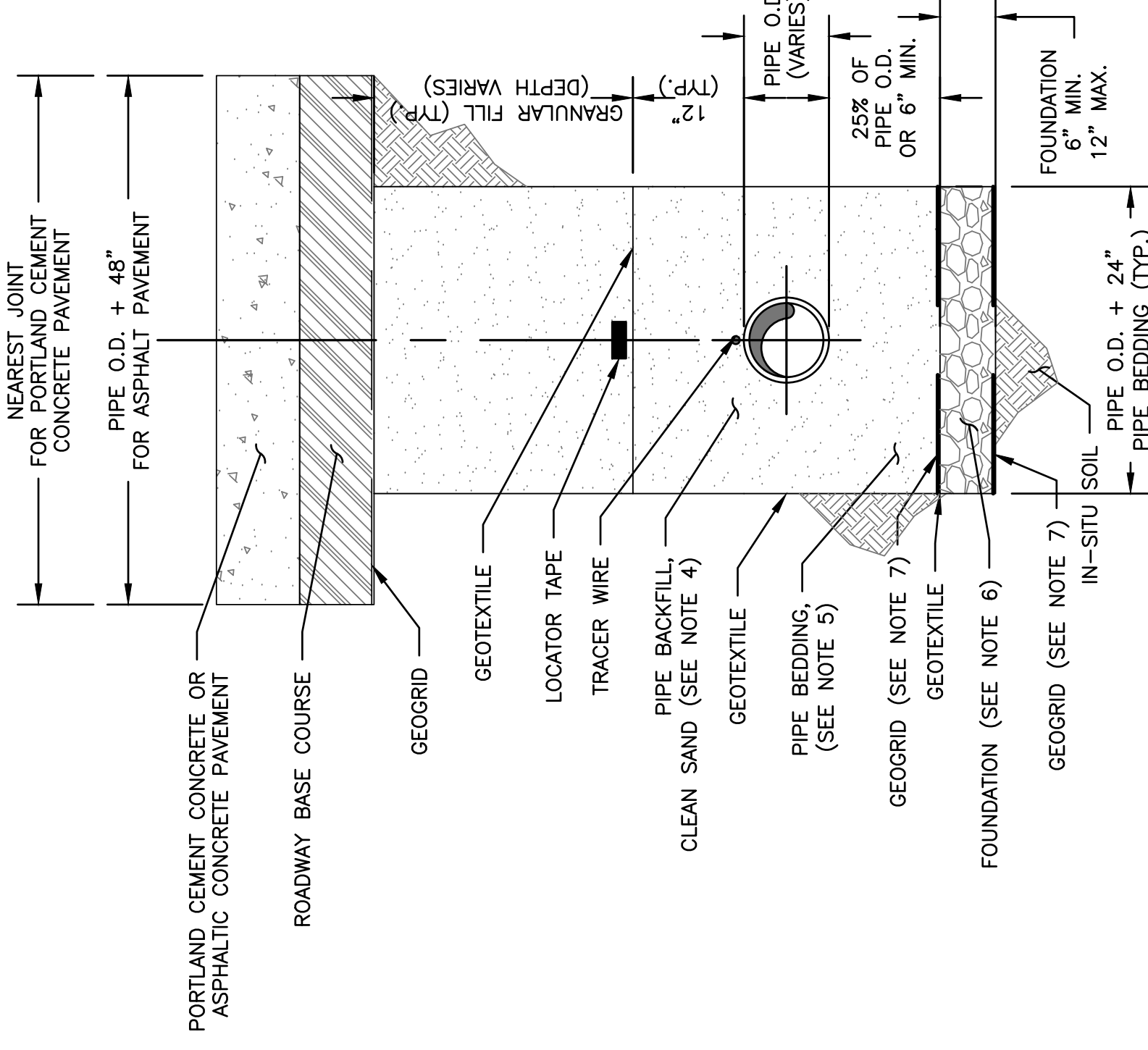


S. MILITARY RD US 190 &  
TRENCH & ARV DETAILS

SHEET NO.  
2C

**UNDER PAVEMENT TRENCH DETAIL NOTES:**

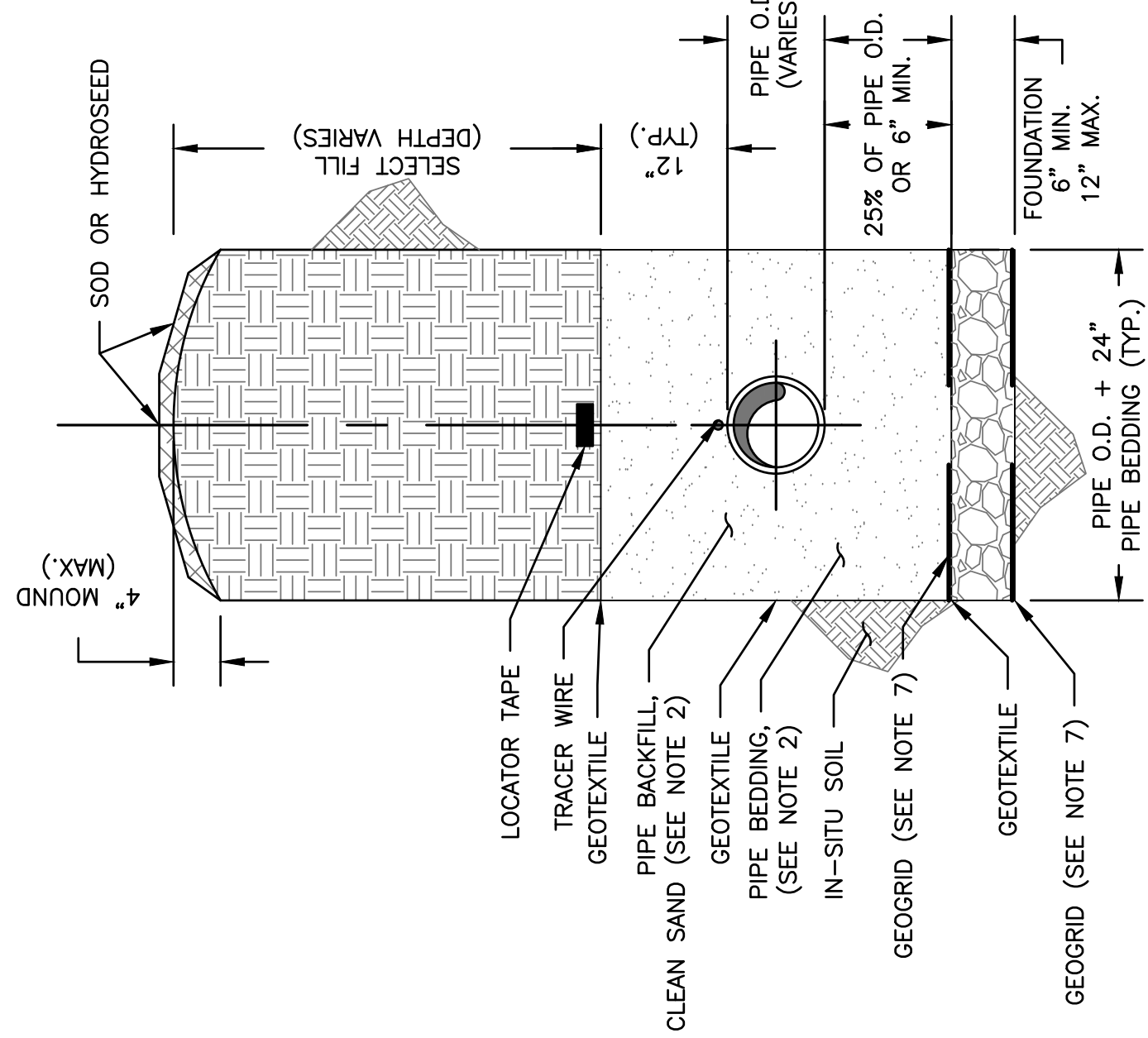
- ROADS, CURBS, DRIVEWAY APRONS AND SIDEWALKS TO BE IMPACTED BY EXCAVATION FOR SEWER OR WATER LINE REPAIRS SHALL BE REMOVED AND REPAIRED TO ORIGINAL CONDITION. WHEN THE SEWER OR WATER LINE WILL BE REPAIRED UNDER ASPHALT PAVEMENT, THE ASPHALTIC CONCRETE PAVEMENT SHALL BE SAW CUT BEFORE TEARING OUT PAVEMENT.
- ASPHALTIC CONCRETE PAVEMENT, BASE COURSE AND PORTLAND CEMENT CONCRETE PAVEMENT SHALL COMPLY WITH THE MOST RECENT VERSION OF THE STANDARD PLANS AND SPECIFICATIONS PROMULGATED BY THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT.
- PORTLAND CEMENT CONCRETE PAVEMENT USED FOR ROADWAYS SHALL BE LADOTD TYPE B MIX MODIFIED TO PROVIDE A MINIMUM 3-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- GRANULAR BACKFILL SHALL BE CLEAN SAND COMPLYING WITH AASHTO GROUP CLASSIFICATION A-3. GRANULAR BACKFILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING A THICKNESS OF EIGHT INCHES (8") PER LIFT. GRANULAR BACKFILL SHALL HAVE MINIMUM COMPACTION OF 95% OF THE MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY ASTM D698.
- BEDDING MATERIALS FOR WATER LINES SHALL BE A CLEAN SAND COMPLYING WITH AASHTO GROUP CLASSIFICATION A-3. ALL BEDDING MATERIALS SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING A THICKNESS OF EIGHT INCHES (8") PER LIFT. SANDY BEDDING MATERIALS SHALL HAVE MINIMUM COMPACTION OF 95% OF THE MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY ASTM D698.
- A CRUSHED No. 57 LIMESTONE FOUNDATION SHALL BE USED TO STABILIZE SOFT AND/OR WET BOTTOM OF EXCAVATION UPON APPROVAL OF ENGINEER. A MINIMUM OF 6 INCHES OF SOFT AND/OR WET NATIVE MATERIAL SHALL BE REMOVED PRIOR TO PLACING THE CRUSHED LIMESTONE FOUNDATION. CRUSHED No. 57 LIMESTONE SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING A THICKNESS OF EIGHT INCHES (8") PER LIFT. CRUSHED LIMESTONE FOUNDATION SHALL HAVE MINIMUM COMPACTION OF 90% OF THE MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY ASTM D4253.
- THE PLACEMENT OF GEOGRID SHALL BE AS SHOWN ON THE DETAIL. GEOGRID IS TO BE INSTALLED BELOW THE LIMESTONE FOUNDATION WHEN A LIMESTONE FOUNDATION IS NECESSARY. GEOGRID SHALL BE PLACED BELOW SAND BASE AND ON TOP OF GEOTEXTILE FABRIC WHEN THE LIMESTONE FOUNDATION IS NOT REQUIRED. ALL GEOGRID SHALL BE A BIAXIAL GEOGRID SUCH AS TENSAR BX1200, SYNTEC SBX12 OR APPROVED EQUAL. TRANSVERSE AND LONGITUDINAL OVERLAP SHALL BE A MINIMUM OF 24 INCHES.
- THE PLACEMENT OF GEOTEXTILE FABRIC SHALL BE AS SHOWN ON THE DETAIL. GEOTEXTILE FABRIC SHALL BE NON-WOVEN PER LADOTD CLASS B, C OR D. TRANSVERSE AND LONGITUDINAL OVERLAP SHALL BE A MINIMUM OF 24 INCHES.
- CONCRETE THRUST BLOCK SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.



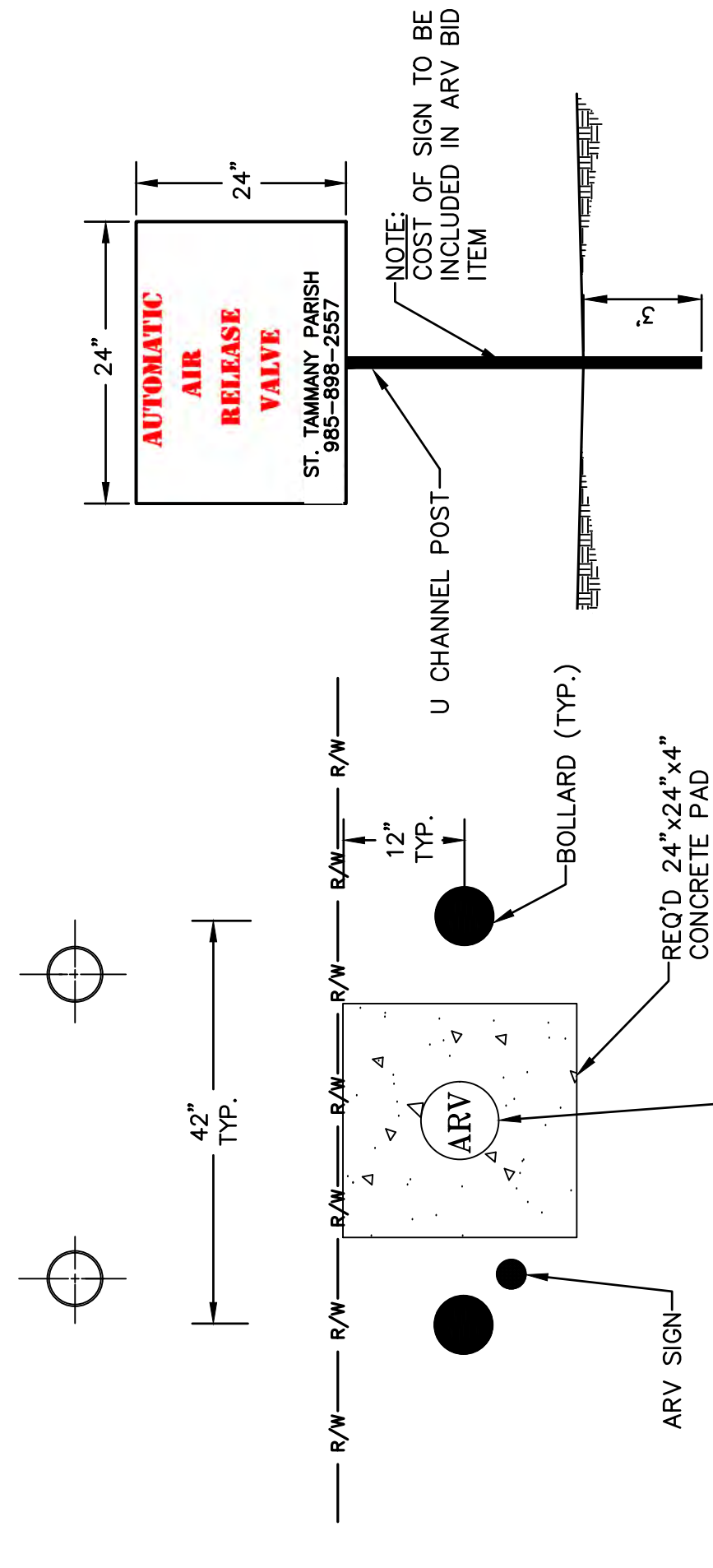
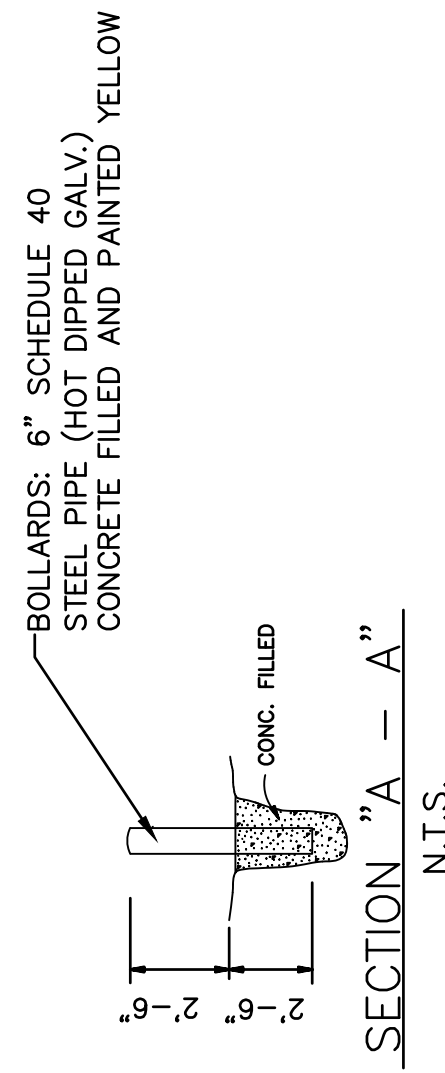
**TRENCH DETAIL**  
(NOT TO SCALE)

**TRENCH DETAIL NOTES:**

- SELECT FILL SHALL BE A SILTY OR CLAYEY SAND COMPLYING WITH AASHTO GROUP CLASSIFICATION A-2-4. IN-SITU SOILS USED AS SELECT FILL SHALL MEET AASHTO GROUP CLASSIFICATION A-2-4 AND SHALL BE FREE OF LARGE DEBRIS, LARGE ROCKS, ROOTS, AND OTHER DELETERIOUS MATERIALS. SELECT FILL SHALL HAVE MINIMUM COMPACTION OF 95% OF THE MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY ASTM D698.
- BEDDING AND BACKFILL MATERIALS FOR WATER LINES SHALL BE A CLEAN SAND COMPLYING WITH AASHTO GROUP CLASSIFICATION A-3. ALL BEDDING MATERIALS SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING A THICKNESS OF EIGHT INCHES (8") PER LIFT. SANDY BEDDING MATERIALS SHALL HAVE MINIMUM COMPACTION OF 95% OF THE MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY ASTM D698.
- A CRUSHED No. 57 LIMESTONE FOUNDATION SHALL BE USED TO STABILIZE SOFT AND/OR WET BOTTOM OF EXCAVATION UPON APPROVAL OF ENGINEER. A MINIMUM OF 6 INCHES OF SOFT AND/OR WET NATIVE MATERIAL SHALL BE REMOVED PRIOR TO PLACING THE CRUSHED LIMESTONE FOUNDATION. CRUSHED No. 57 LIMESTONE SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING A THICKNESS OF EIGHT INCHES (8") PER LIFT. CRUSHED LIMESTONE FOUNDATION SHALL HAVE MINIMUM COMPACTION OF 90% OF THE MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY ASTM D4253.
- THE PLACEMENT OF GEOGRID SHALL BE AS SHOWN ON THE DETAIL. GEOGRID IS TO BE INSTALLED BELOW THE LIMESTONE FOUNDATION WHEN A LIMESTONE FOUNDATION IS NECESSARY. GEOGRID SHALL BE PLACED BELOW SAND BASE AND ON TOP OF GEOTEXTILE FABRIC WHEN THE LIMESTONE FOUNDATION IS NOT REQUIRED. ALL GEOGRID SHALL BE A BIAXIAL GEOGRID SUCH AS TENSAR BX1200, SYNTEC SBX12 OR APPROVED EQUAL. TRANSVERSE AND LONGITUDINAL OVERLAP SHALL BE A MINIMUM OF 24 INCHES.
- THE PLACEMENT OF GEOTEXTILE FABRIC SHALL BE AS SHOWN ON THE DETAIL. GEOTEXTILE FABRIC SHALL BE NON-WOVEN PER LADOTD CLASS B, C OR D. TRANSVERSE AND LONGITUDINAL OVERLAP SHALL BE A MINIMUM OF 24 INCHES.
- CONCRETE THRUST BLOCK SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.

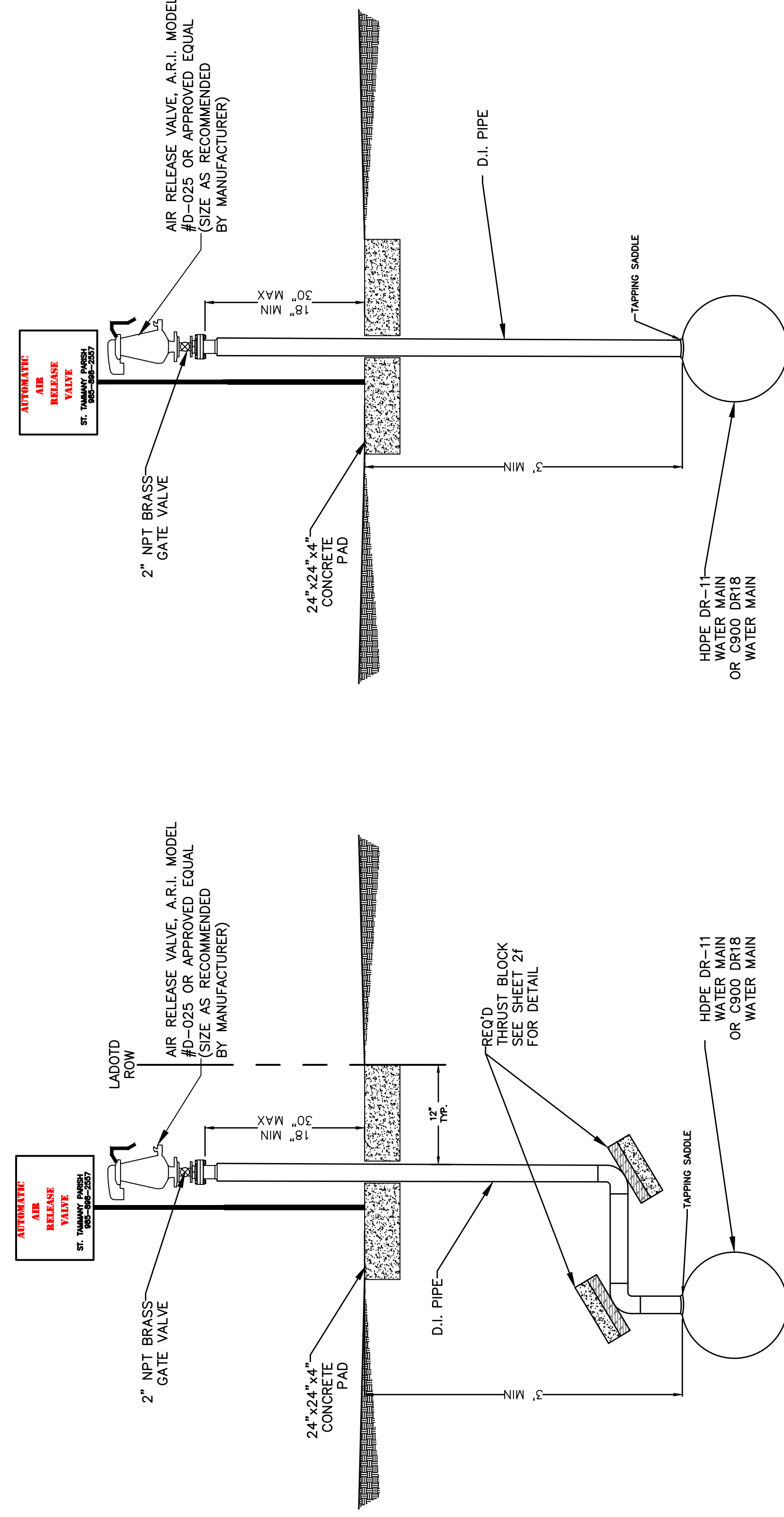


**TRENCH DETAIL OUTSIDE OF PAVEMENT**  
(NOT TO SCALE)



**BOLLARDS FOR ARV/ FIRE HYDRANT & SAMPLING STATIONS**

N.T.S.  
NOTE: CONTRACTOR SHALL COORDINATE BOLLARDS LAYOUT WITH OWNER PRIOR TO SETTING LOCATIONS



**AIR RELEASE VALVE DETAIL**

**AIR RELEASE VALVE DETAIL**

N.T.S.

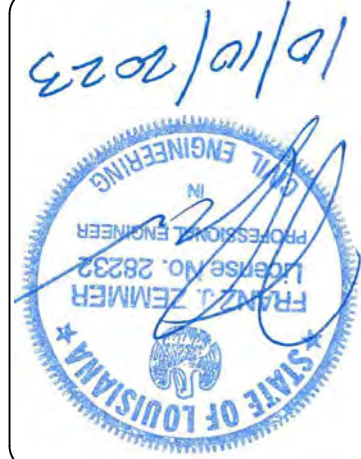
N.T.S.



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

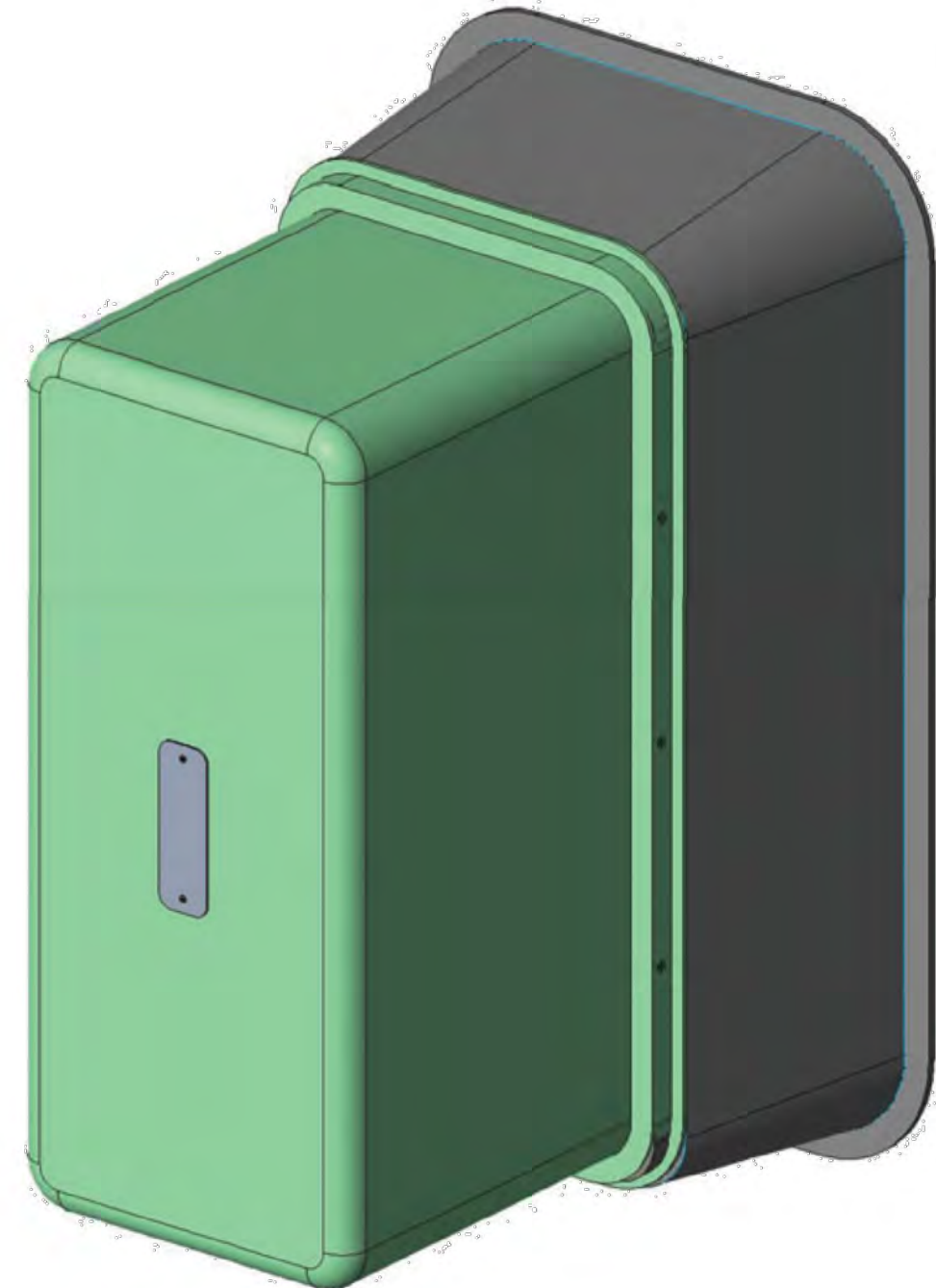
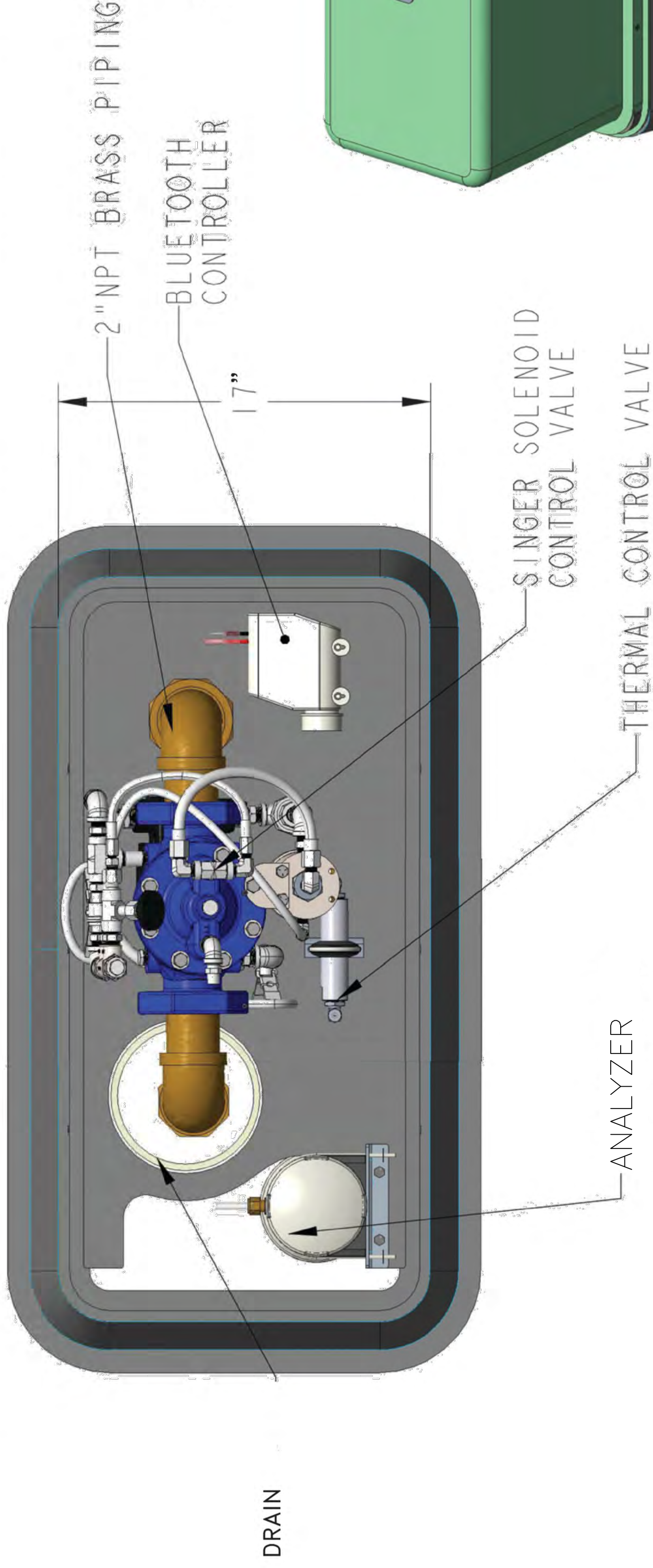
DESIGNED BY: FJZ
DRAWN BY: ENK
CHECKED BY: AKGE
SUBMITTED BY: RCLC
PROJECT No.: 301-023-002
ISSUE DATE: 10.10.2023
APPROVED BY: CPT
SHEET SIZE: ANSI D
SCALE:



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
FLUSHING STATION DETAIL

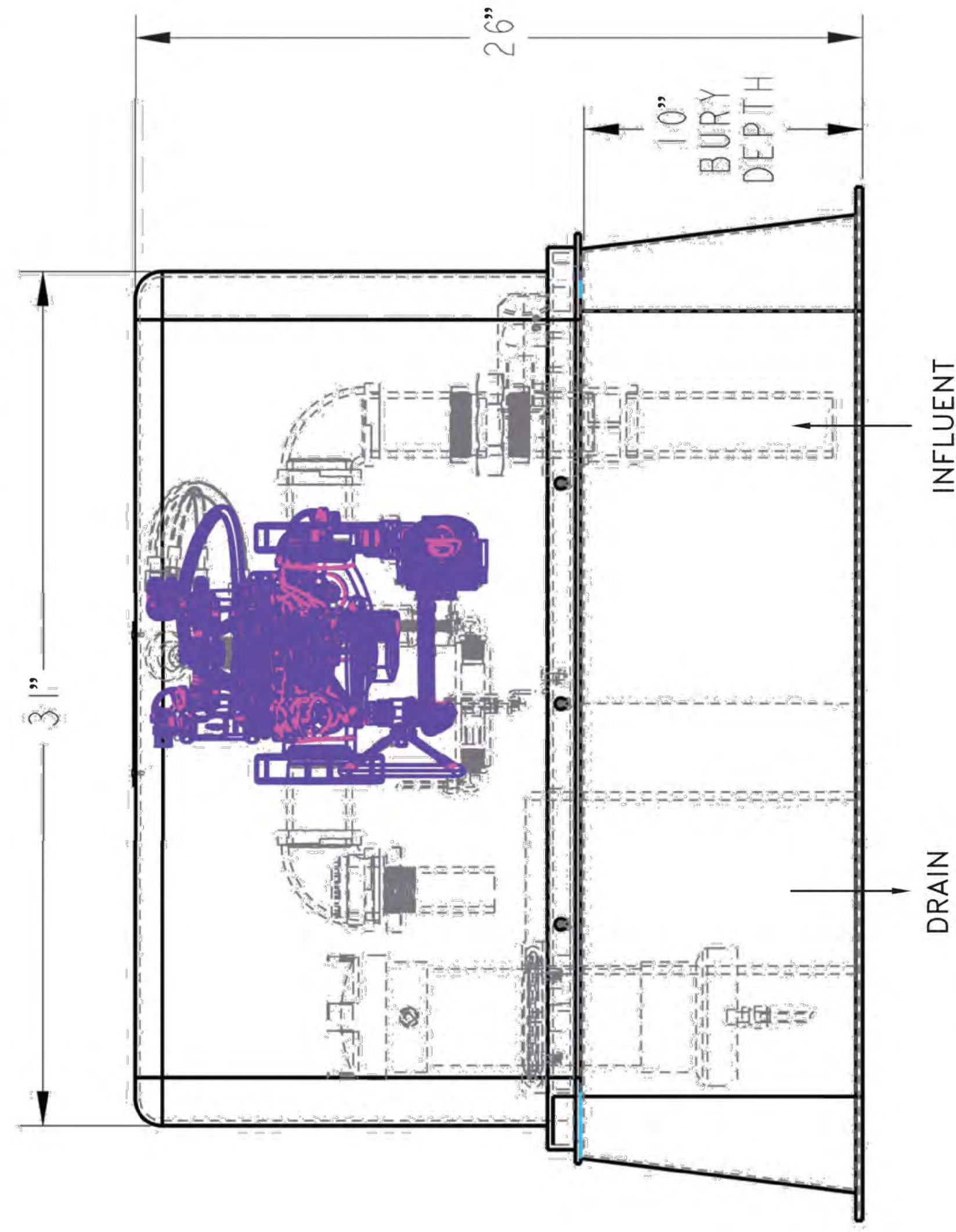
SHEET NO.  
2d

- NOTES:**
1. AUTOMATIC FLUSHING STATION SHALL BE A MUELLER HYDRO-GAURD HG-2 SERIES FLUSHING STATION WITH PROTECTIVE ENCLOSURE OR OWNER APPROVED EQUAL.
  2. BACKFLOW PREVENTION (BFP) DEVICE SHALL BE INSTALLED BETWEEN THE AUTOMATIC FLUSHING STATION AND THE EXISTING WATER MAIN. THE BFP DEVICE SHALL BE A WATTS SERIES 009 REDUCED PRESSURE ZONE BACKFLOW PREVENTION DEVICE OR APPROVED EQUAL.
  3. A GATE VALVE SHALL BE INSTALLED UPSTREAM OF THE BFP DEVICE. GATE VALVES SHALL BE MUELLER OR APPROVED EQUAL.
  4. THE AUTOMATIC FLUSHING STATION DRAIN SHALL BE PIPED TO ADJACENT DRAINAGE STRUCTURE. MINIMUM DRAIN LINE SIZE SHALL BE 6" PVC. MINIMUM SLOPE OF THE DRAIN LINE SHALL BE 1" OF FALL PER 100' OF RUN.
  5. INTEGRAL DE-CHLORINATION SYSTEM SHALL NOT BE REQUIRED.
  6. THE 2" WATER SERVICE TO FLUSHING DEVICE SHALL BE INCLUDED IN COST OF FLUSHING DEVICE. WATER SERVICE PIPING SHALL BE AT NDP AND BE HDPE DR-9 PER THE STANDARD NOTES AND DETAILS.



SCALE 0.100

- SINGER FEATURES:**
1. SOLENOID CONTROL
  2. SPEED CONTROL
  3. PRESSURE SUSTAINING
  4. STAINLESS STEEL FITTINGS
  5. NORMALLY CLOSED



DRAIN

INFLUENT

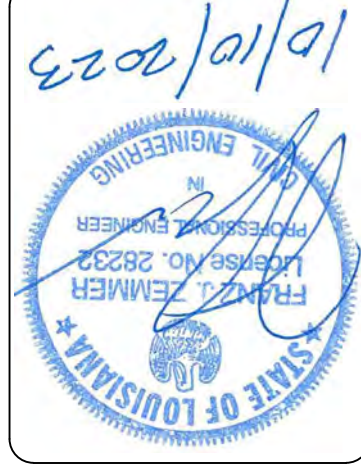
DRAIN



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

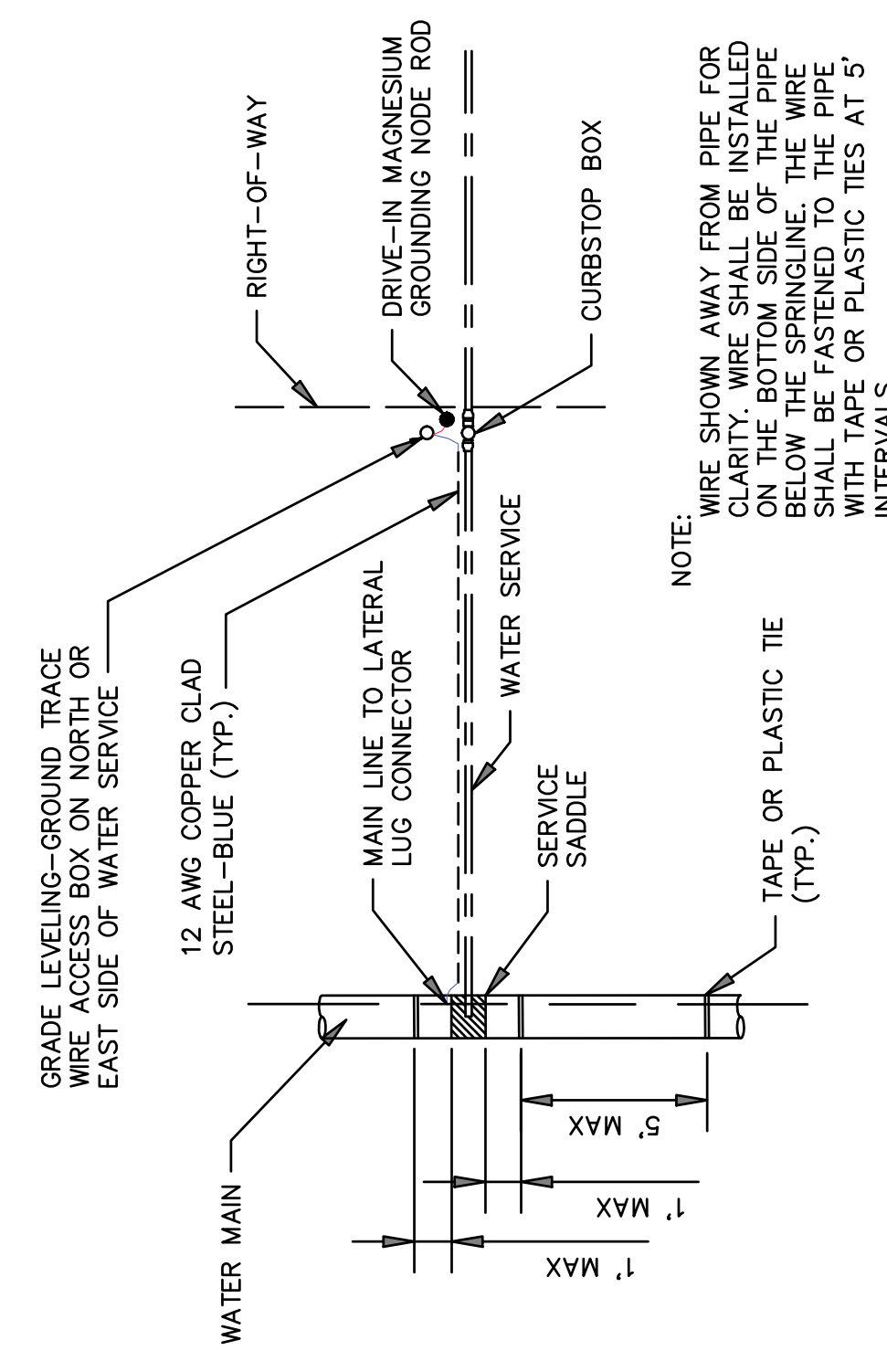
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: EJK	DRAWN BY: RLC	PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT	SHEET SIZE: ANSI D	SCALE:
------------------	-----------------	---------------	--------------------------	------------------------	------------------	--------------------	--------



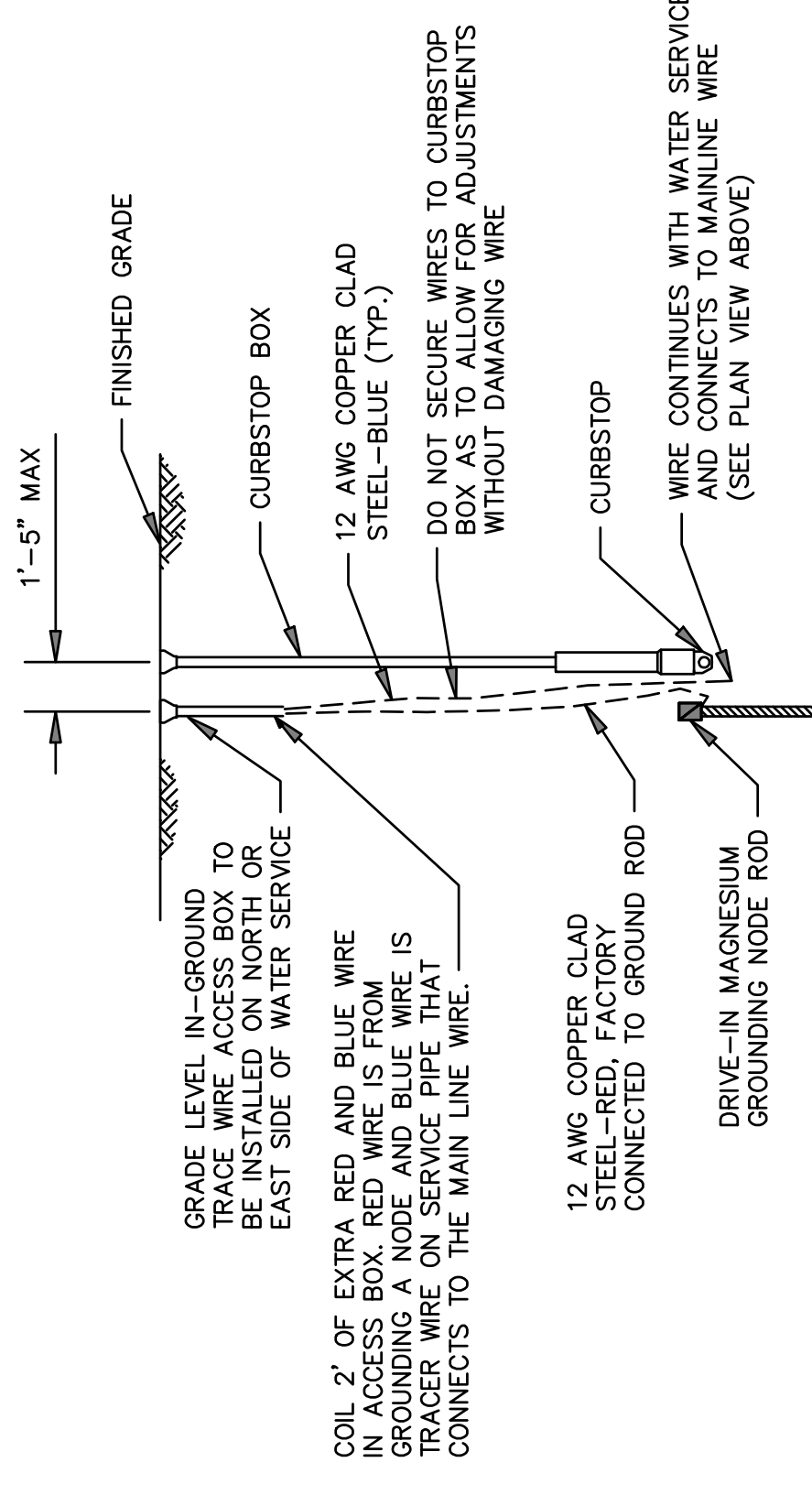
S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
TRACER  
SAMPLING STATION AND  
WIRE DETAIL

SHEET NO.  
2e

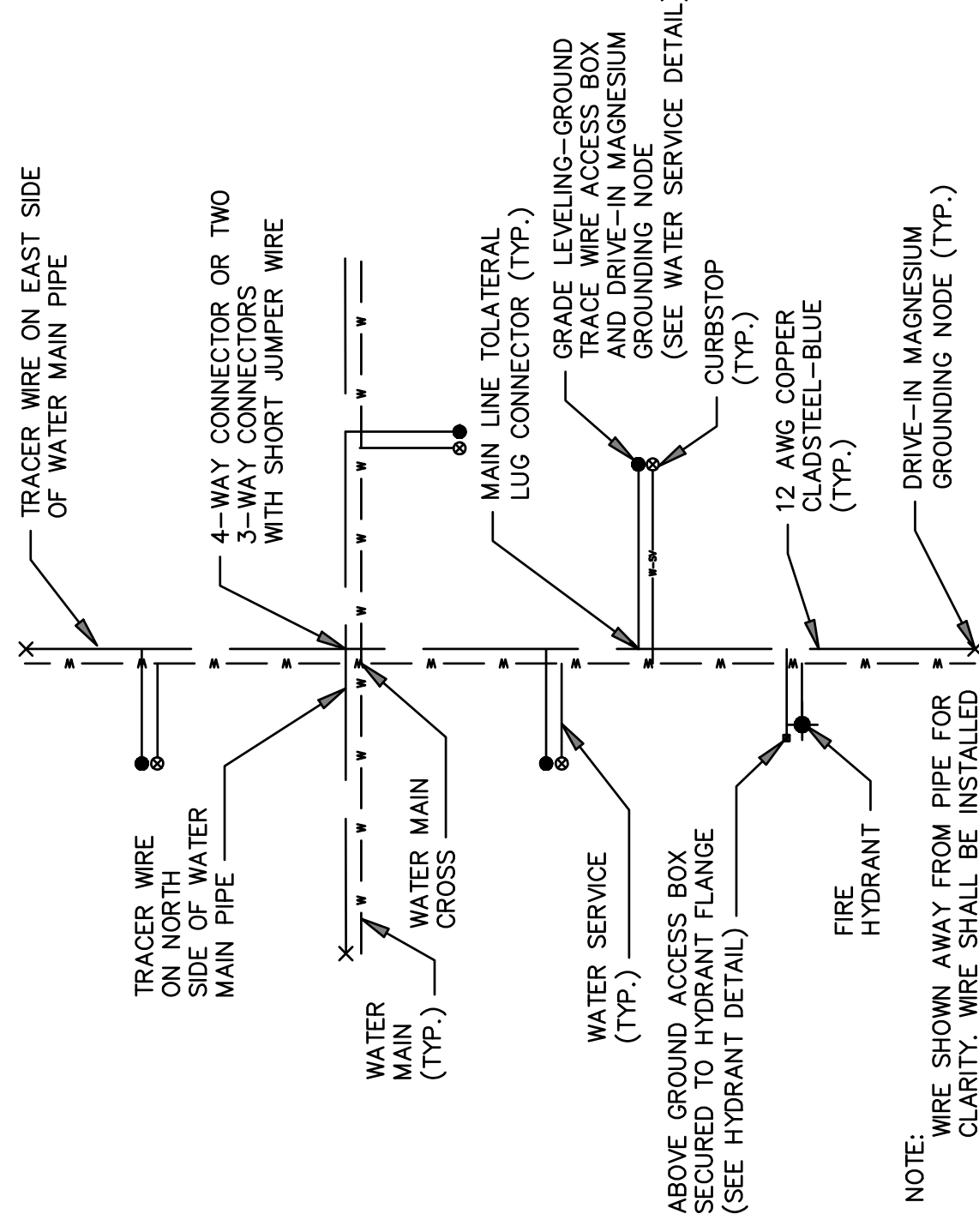


NOTE: WIRE SHOWN AWAY FROM PIPE FOR CLARITY. WIRE SHALL BE INSTALLED ON THE BOTTOM SIDE OF THE PIPE BELOW THE SPRINGLINE. THE WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5' INTERVALS.

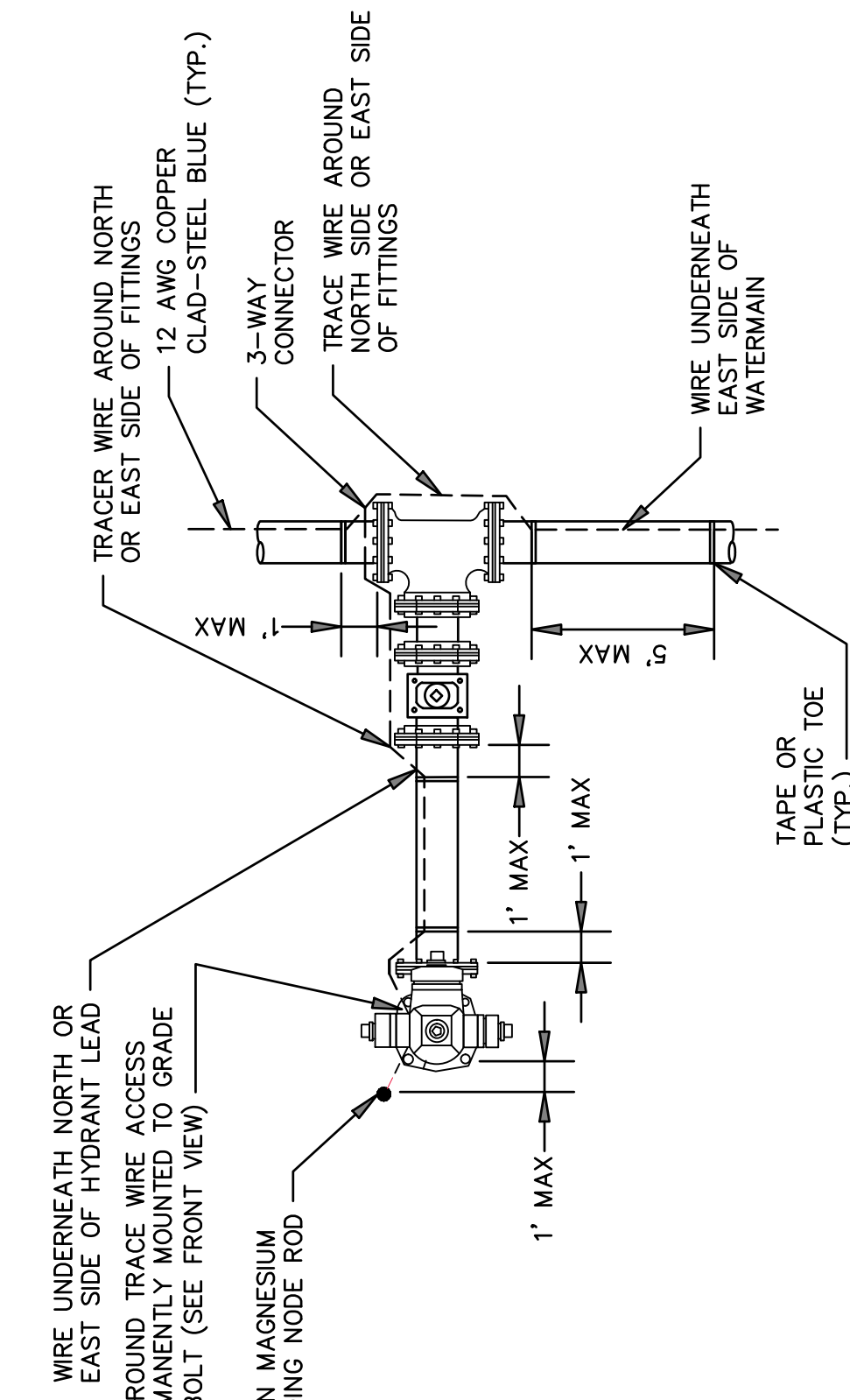
TRACER WIRE WATER SERVICE - PLAN VIEW  
N.T.S.



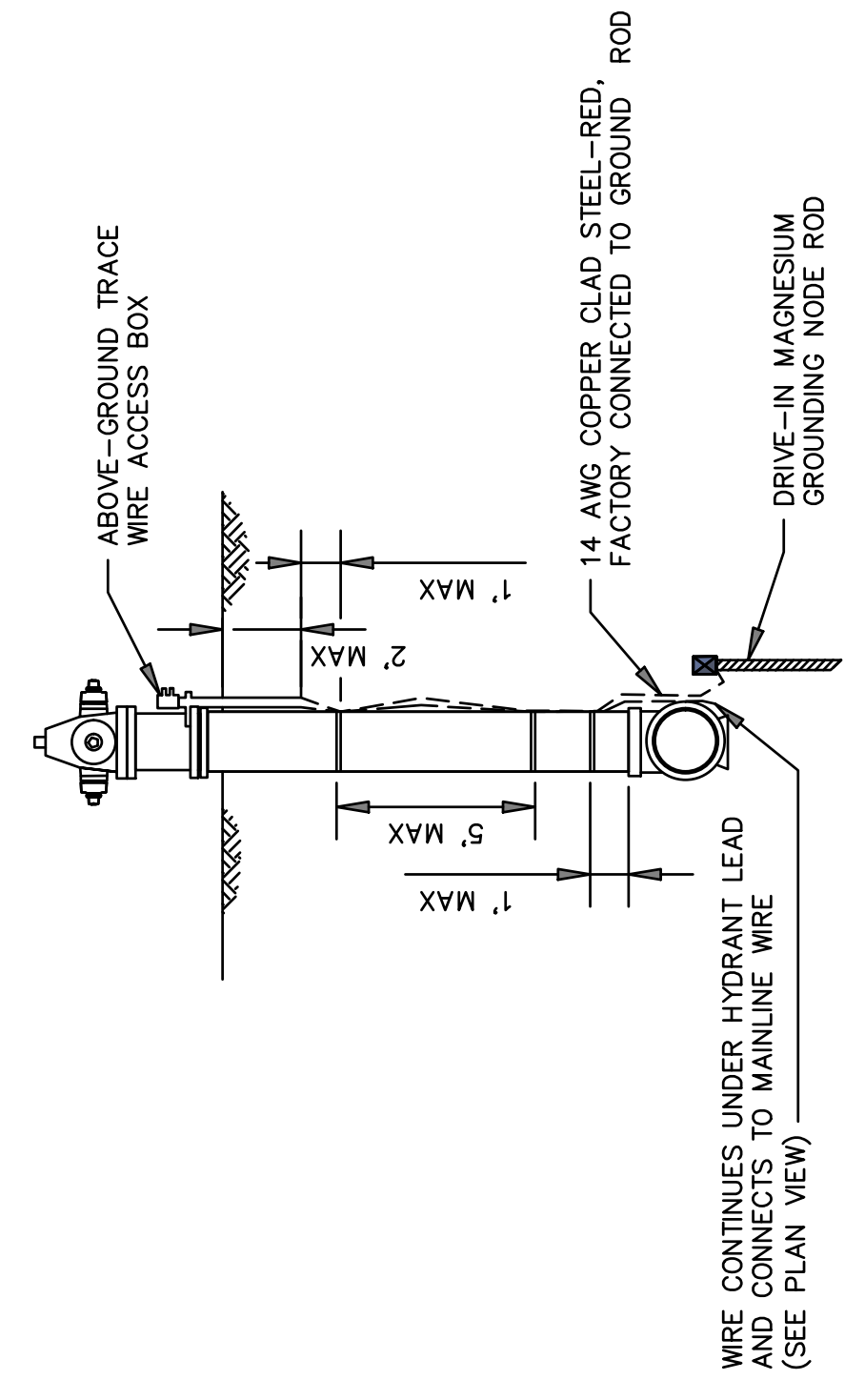
TRACER WIRE WATER SERVICE - SECTION VIEW  
N.T.S.



TRACE WIRE PLAN (WATER)  
N.T.S.



TRACER WIRE HYDRANT- PLAN VIEW  
N.T.S.

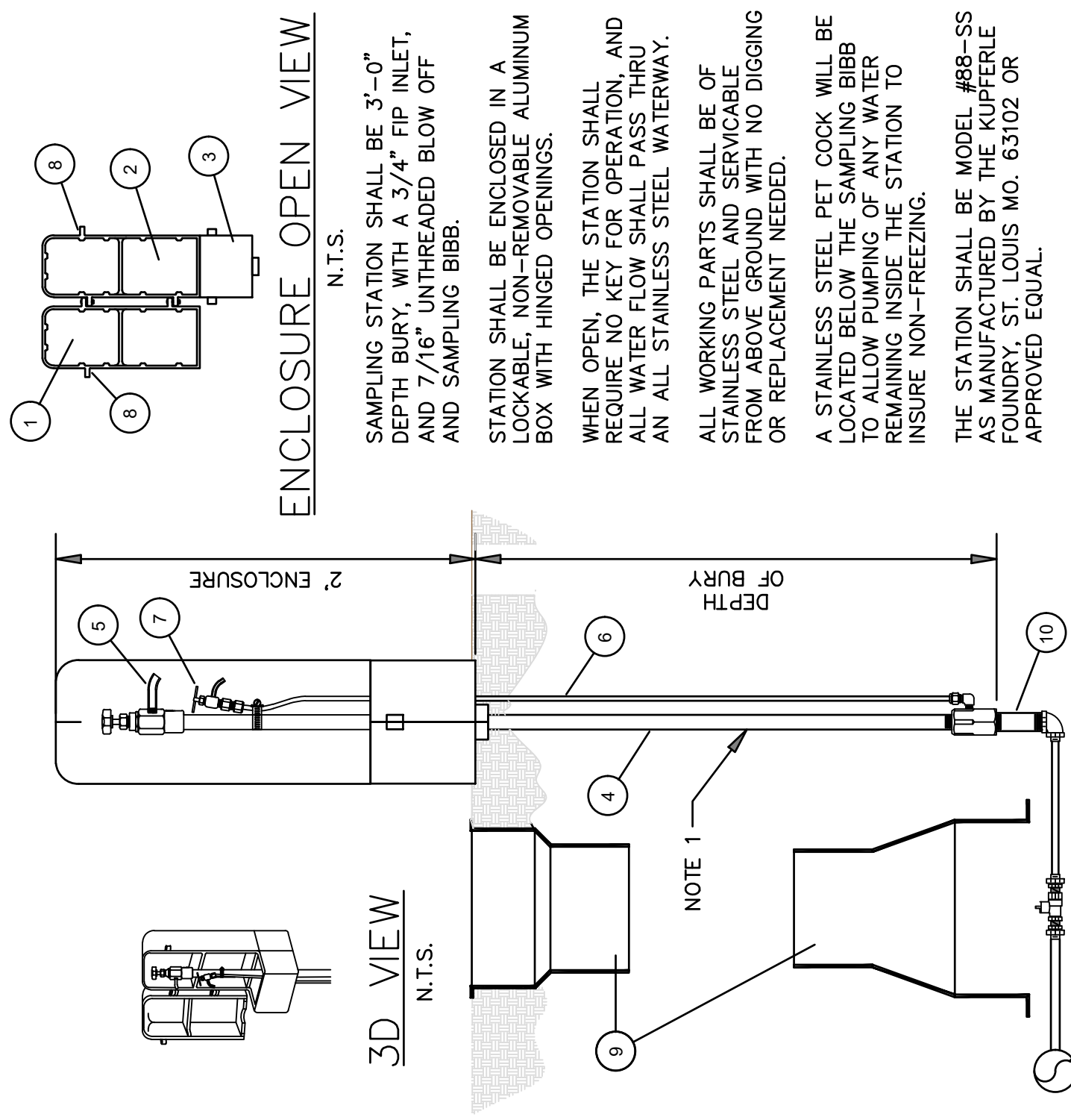
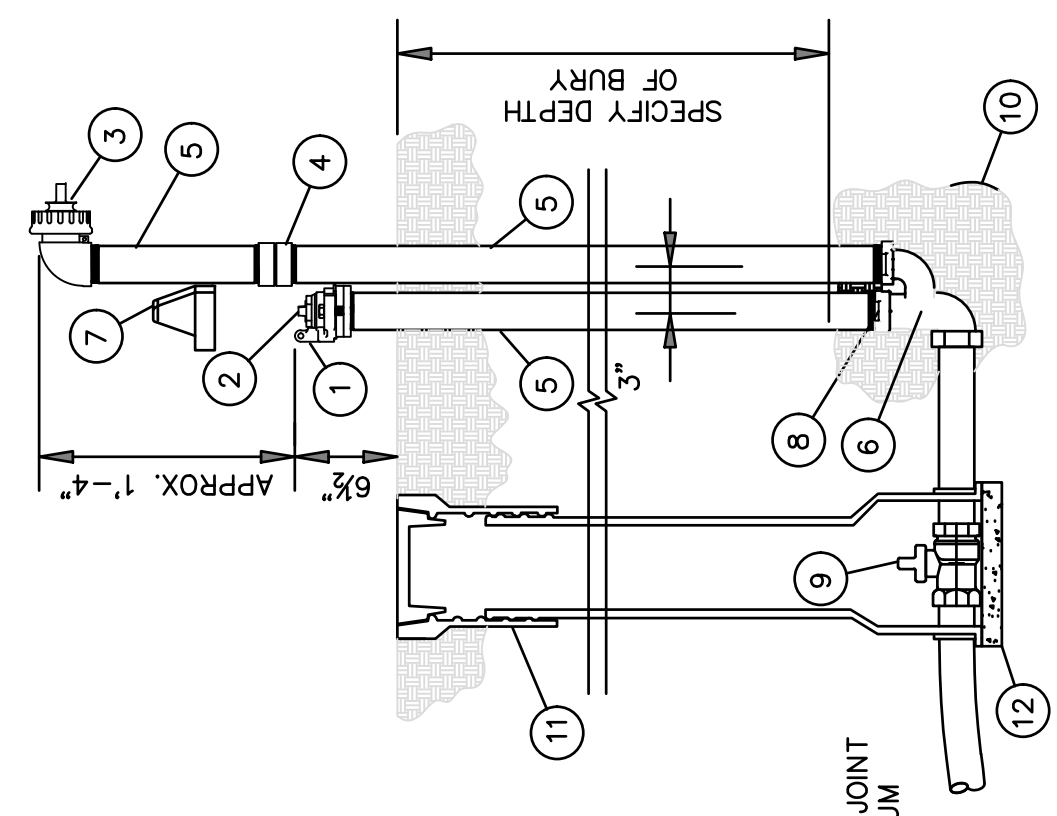


TRACER WIRE HYDRANT- SECTION VIEW  
N.T.S.

MAINGUARD #77 BLOW-OFF HYDRANT SHALL BE SELF-DRAINING, NON-FREEZING TYPE WITH A 3' DEPTH OF BURY. HYDRANT SHALL BE FURNISHED WITH A 2" FIP HORIZONTAL SIDE INLET CONNECTION, A NON-TURNING OPERATING ROD AND SHALL OPEN TO THE LEFT. OUTLET SHALL BE 2-1/2" NST OR SMALLER (MUST SPECIFY ON ORDER) WITH CAP AND EXTEND A MINIMUM OF 12" ABOVE THE GROUND. ALL WATER FLOW SHALL PASS THRU A 2" STEEL PIPE AND WATERWAY. THE OPERATING DRIVE MECHANISM SHALL RAISE AND LOWER A PLUNGER TO CONTROL THE FLOW OF WATER AND SHALL BE SERVICEABLE FROM ABOVE GROUND WITH NO DIGGING. WITH ALL WORKING PARTS BEING BRASS, GALVANIZED STEEL OR PVC. SAID OPERATING DRIVE SHALL OPERATE WITH A STANDARD UNIVERSAL SLOTTED VALVE WRENCH WHEN OPEN AND THE DRIVE WHOLE SHALL BE COVERED. HYDRANT SHALL BE SET IN 4 CUBIC FEET OF CRUSHED STONE TO ALLOW FOR PROPER DRAINAGE OF HYDRANT. RECOMMENDATION OF THE AWWA SHOULD BE FOLLOWED WHEN INSTALLING THE HYDRANT. THE MAINGUARD #77 BLOW-OFF HYDRANT AS MANUFACTURED BY THE KUPFERLE FOUNDRY, ST. LOUIS MO. 63102 OR APPROVED EQUAL.

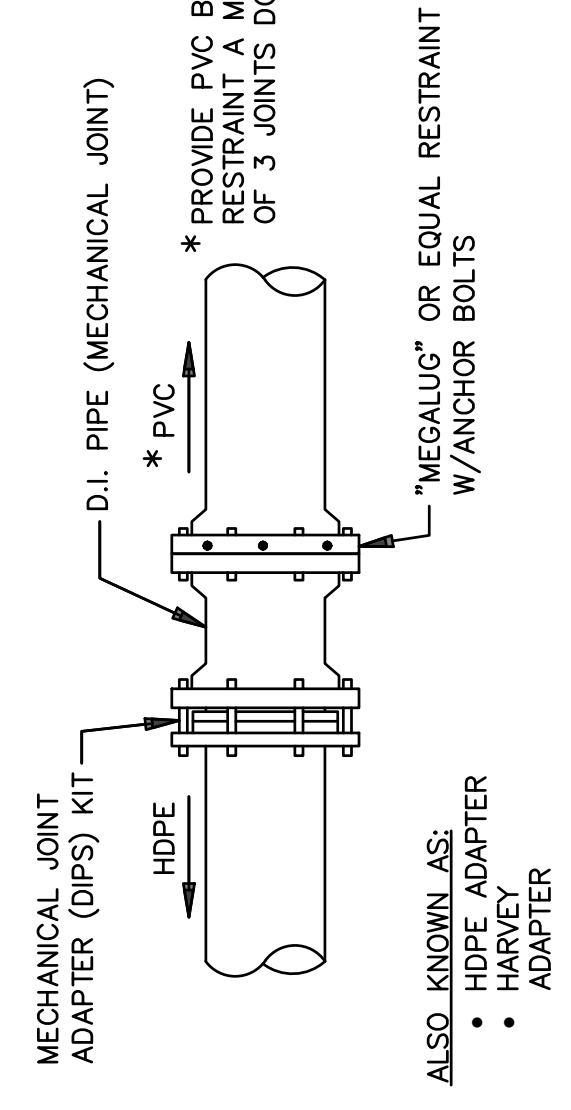
ITEM	ITEM/DESCRIPTION	NOTES	SHOWN W/ CAP
1	TOP CAP		
2	SLOTTED OPERATING NUT		
3	2-1/2" NST OUTLET		
4	2" COUPLING		
5	2" STEEL PIPE		
6	INLET VALVE BODY		
7	LOCKING COVER		
8	DRAIN HOLE		
9	HYDRANT SHUT-OFF VALVE		
10	CRUSHED ROCK		
11	VALVE BOX		
12	SOLID CONCRETE BLOCK		

FLUSHING HYDRANT ASSEMBLY  
N.T.S.



ITEM	ITEM/DESCRIPTION	NOTES
1	88 FRONT DOOR (COVER A)	
2	88 REAR DOOR (COVER B)	
3	BB BASE	2 PIECES
4	1/2" S.S. WATERWAY	
5	BLOW OFF & SAMPLING BIBB	
6	1/4" S.S. TUBING	
7	PET COCK	
8	LOCKING HOLE	
9	VALVE BOX	
10	3/4" S.S. NIPPLE	

TYPICAL SAMPLING STATION  
N.T.S.



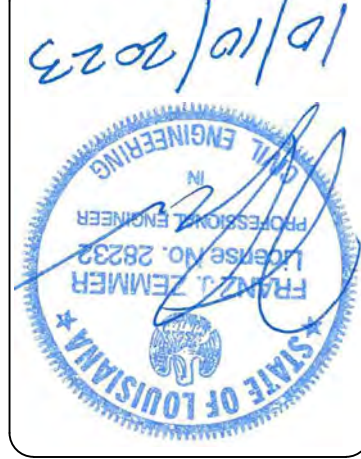
HDPE TO PVC CONNECTION  
N.T.S.  
(NO DIRECT PAY ITEM)



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

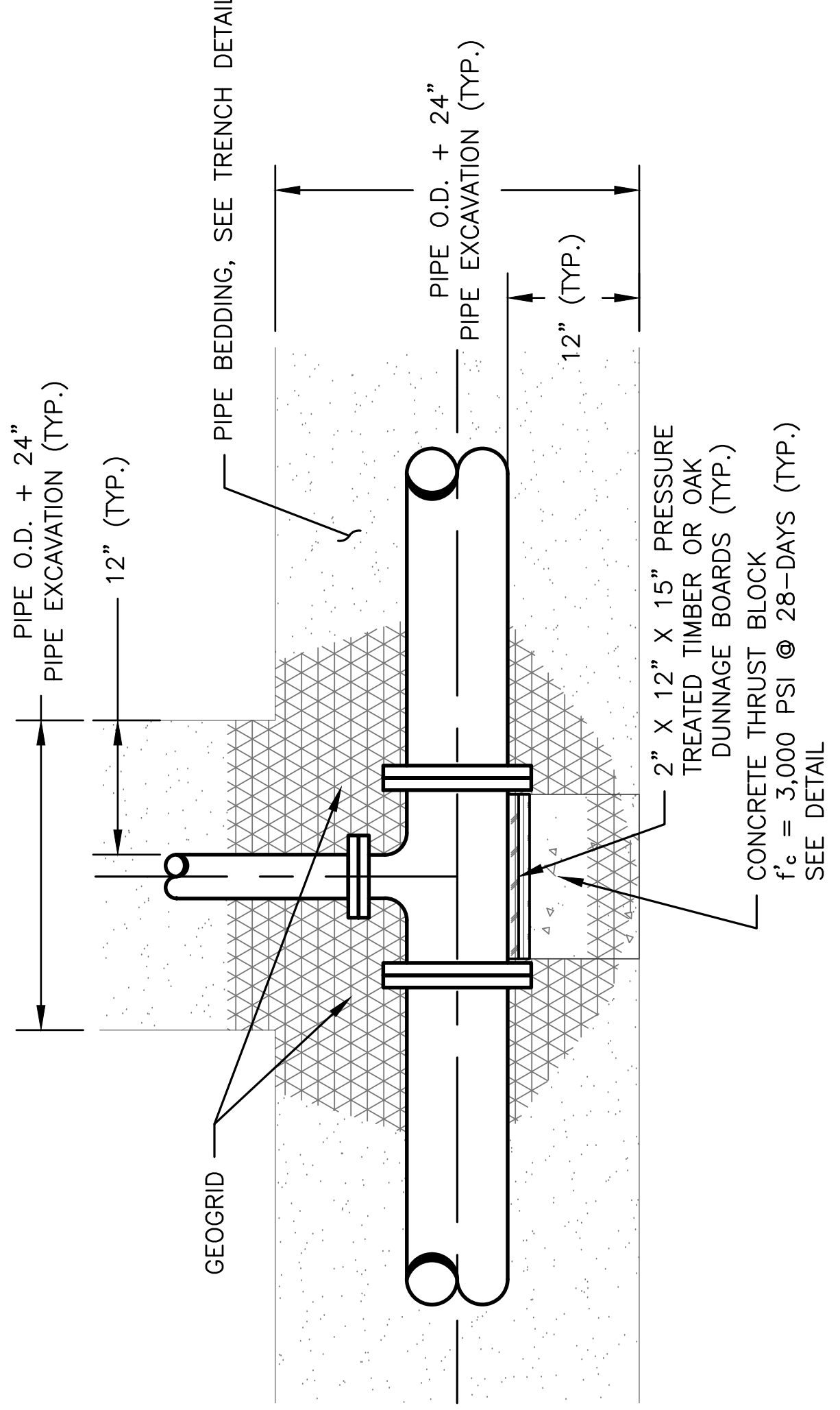
NO.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: ENK
DRAWN BY: AKGE	SUBMITTED BY: RCLC
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023
APPROVED BY: CPT	SHEET SIZE: ANSI D
SCALE:	

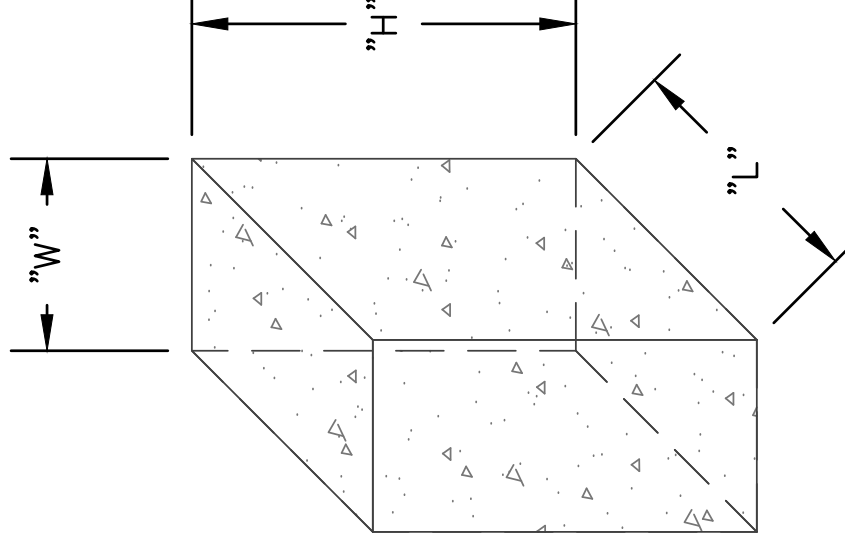


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
THRUST BLOCKS DETAIL

SHEET NO.  
2f



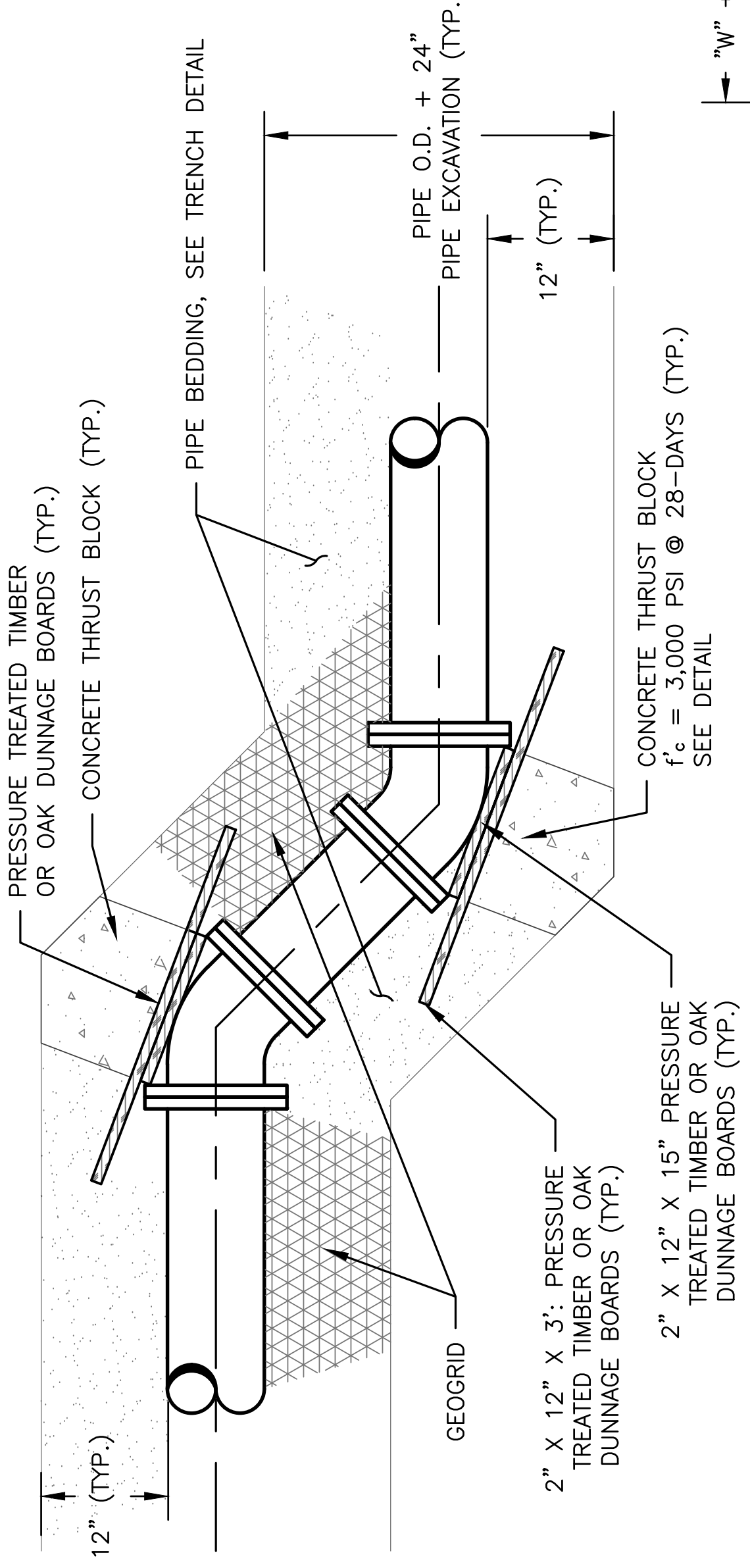
**THRUST BLOCK DETAILS FOR TEES**  
(NOT TO SCALE)



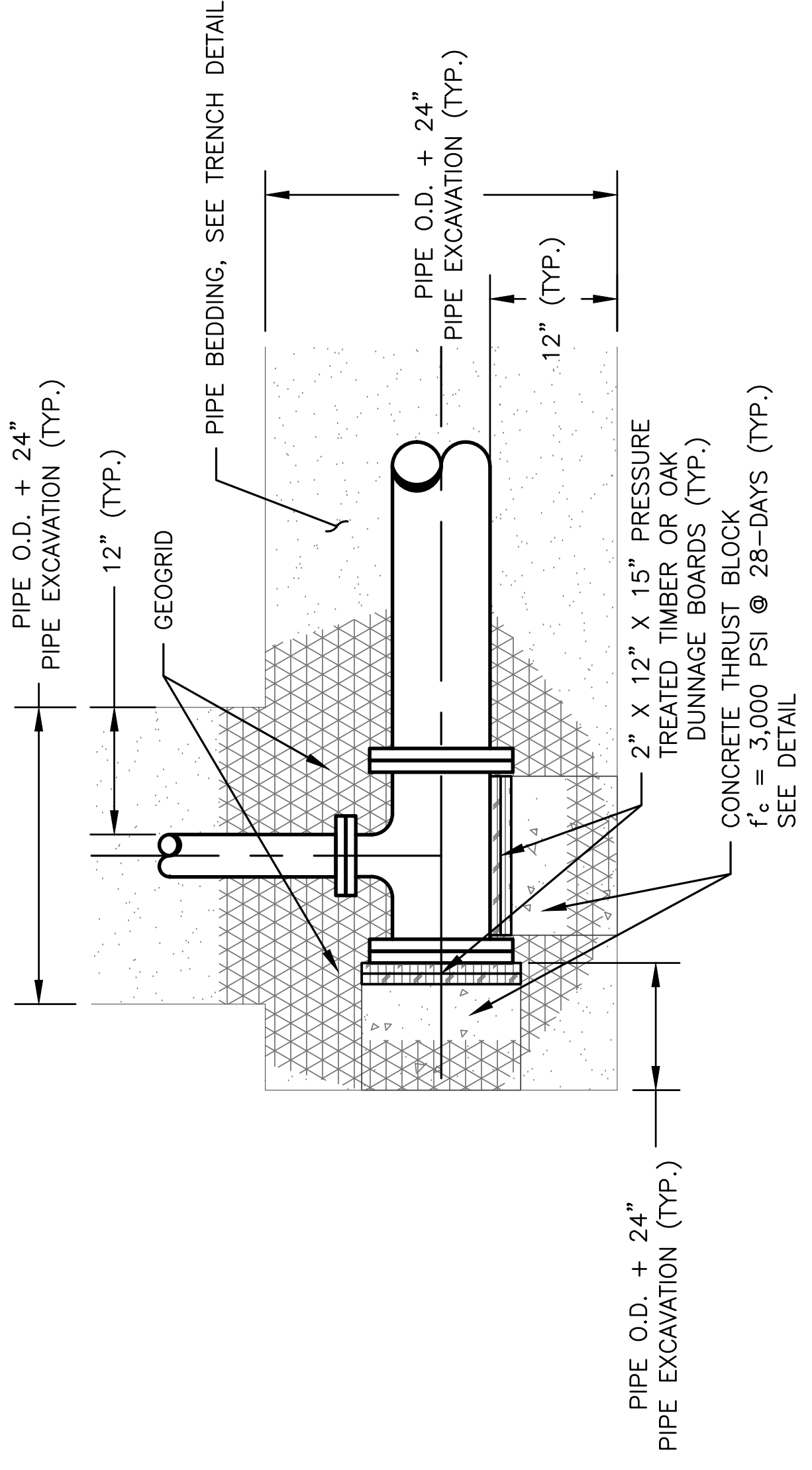
**MINIMUM THRUST BLOCK SIZES BY FITTING TYPE**

FITTING TYPE	DIMENSION "W"	DIMENSION "H"	DIMENSION "L"
11.25"	6" MIN. OR 3 "D" / 2	2 "D" + PIPE O.D.	"D" MIN.
22.5"	6" MIN. OR 3 "D" / 2	2 "D" + PIPE O.D.	"D" MIN.
45"	6" MIN. OR 3 "D" / 2	2 "D" + PIPE O.D.	2 "D" MIN.
90"	6" + 2 "D"	2 "D" + PIPE O.D.	3 "D" MIN.
TEE	6" MIN. OR 3 "D" / 2	2 "D" + PIPE O.D.	2 "D" MIN.
WYE	6" MIN. OR 3 "D" / 2	2 "D" + PIPE O.D.	2 "D" MIN.
PLUG	6" MIN. OR 3 "D" / 2	3 "D"	3 "D"

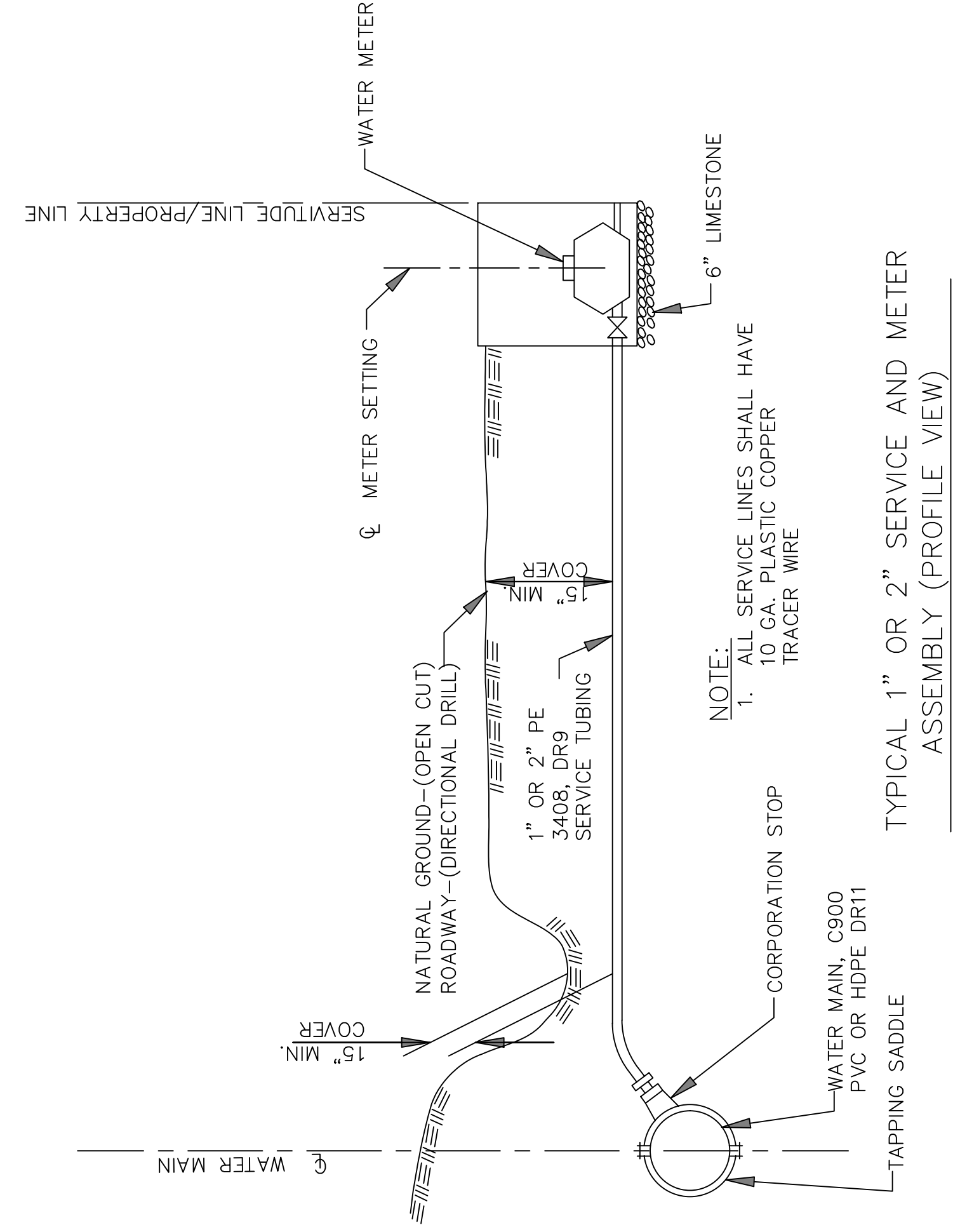
NOTE:  
D = NOMINAL PIPE DIAMETER



**THRUST BLOCK DETAILS FOR BENDS**  
(NOT TO SCALE)



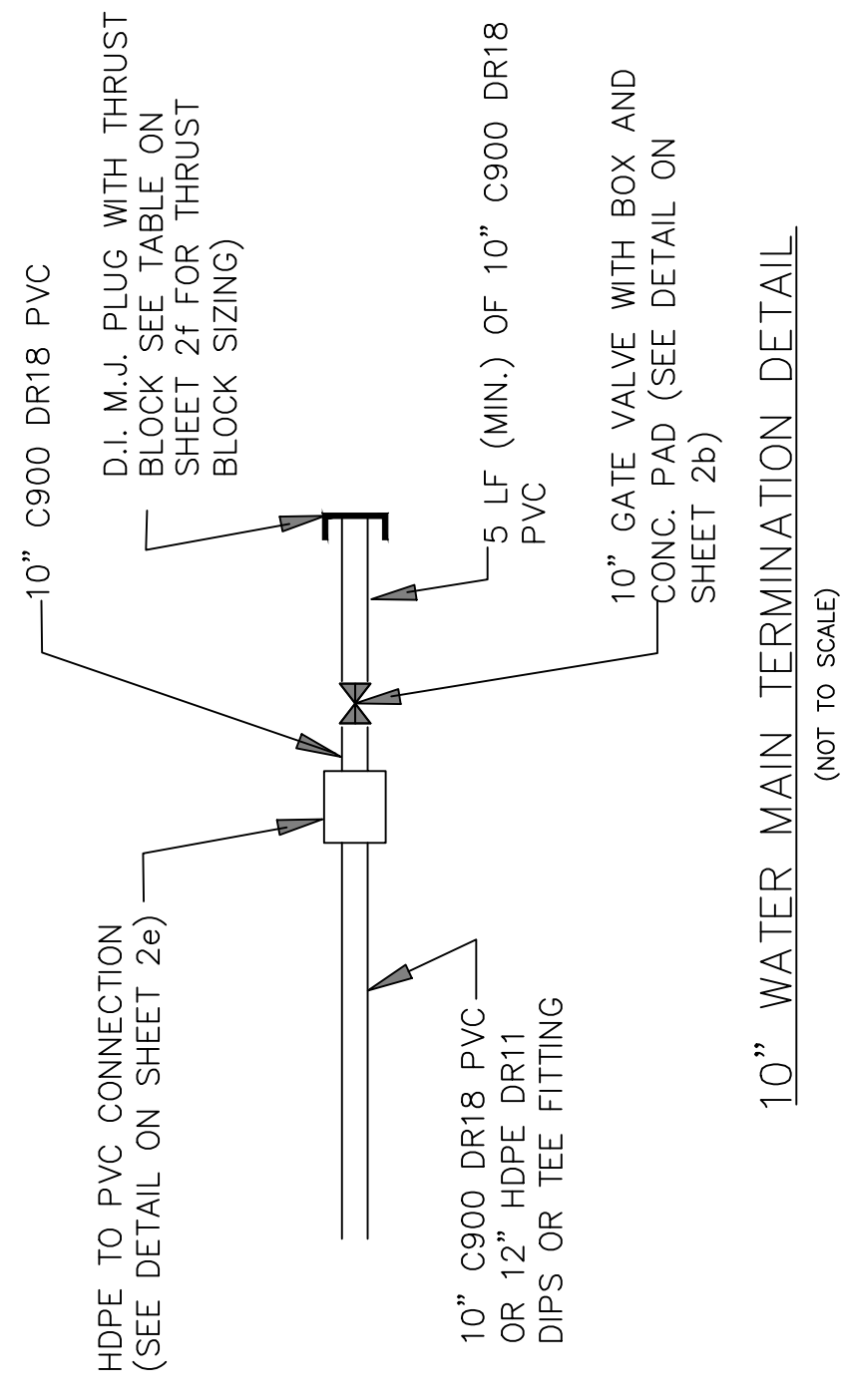
**THRUST BLOCK DETAILS FOR TEES AND PLUGS**  
(NOT TO SCALE)



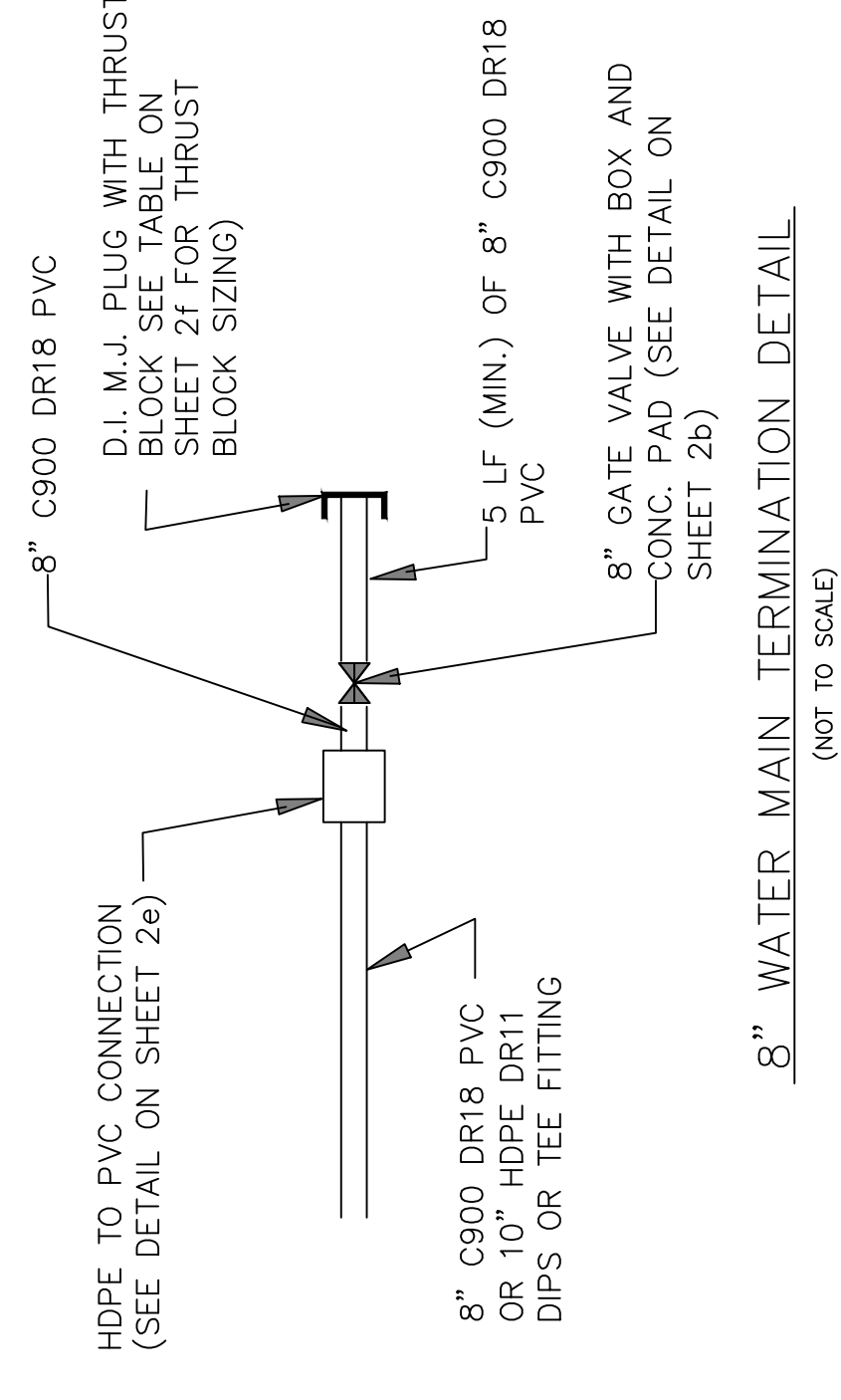
TYPICAL 1" OR 2" SERVICE AND METER ASSEMBLY (PROFILE VIEW)  
(NOT TO SCALE)

**NOTES:**

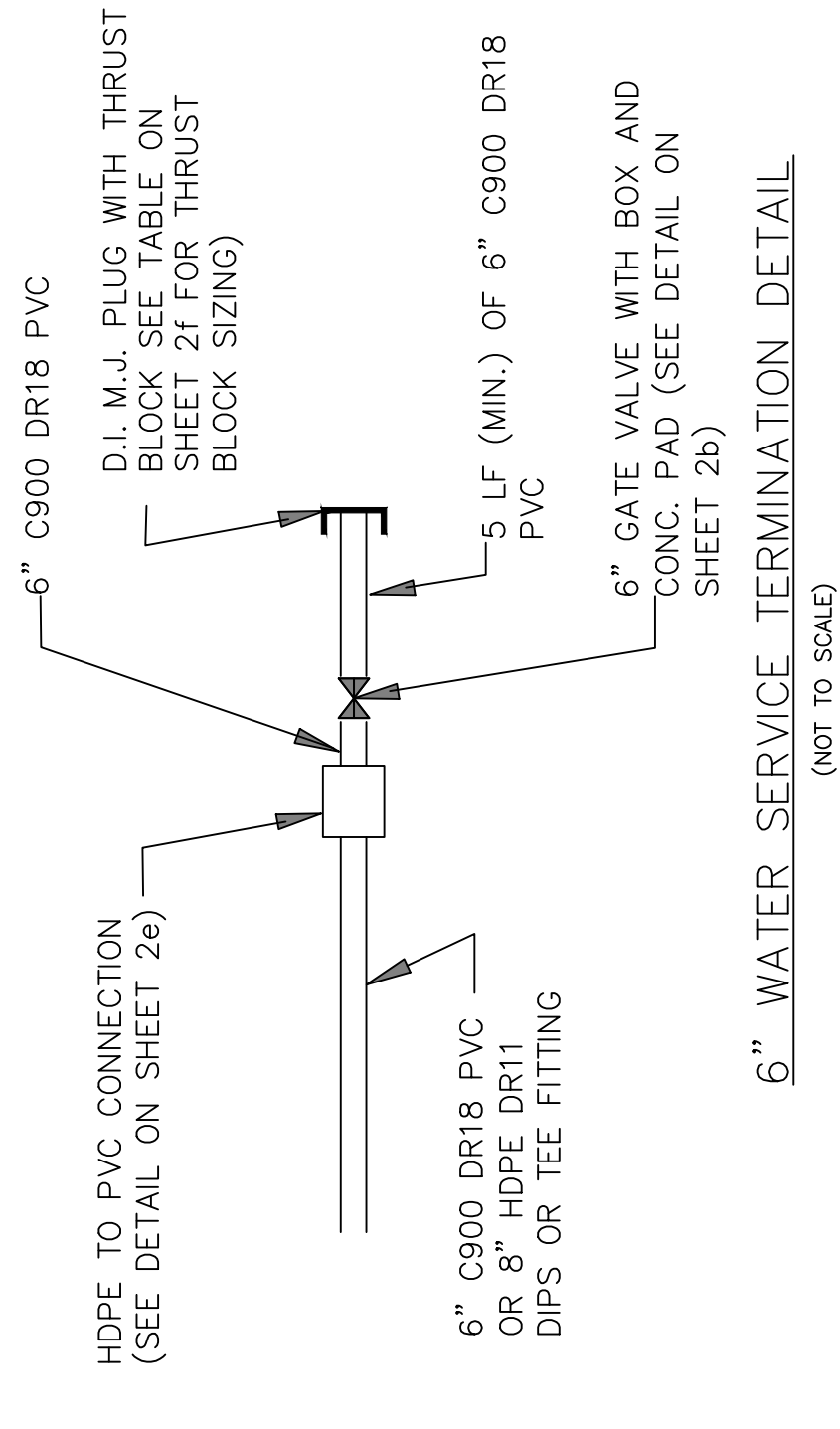
- CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY FITTINGS AND ADAPTERS WHICH SHALL BE MUELLER BRASS WITH COMPRESSIONS/PACK JOINT TYPE CONNECTIONS WITH ALL COSTS INCLUDED IN RELATED ITEMS OF WORK.
- NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
- ALL WATER SERVICES SHALL BE LOCATED INSIDE THE STREET RIGHT-OF-WAY LINE OR SERVITUDE.
- U-BRANCHES SHALL BE MUELLER BRAND OR FORD METER BOX CO. BRAND.
- CORPORATION STOPS AND U-BRANCHES SHALL BE INSTALLED AT THE END OF ALL WATER SERVICES.
- METER BOXES SHALL BE NDS JUMBO BOX, MODEL NO. D1500-DIRB OR APPROVED EQUAL WHICH ARE TO BE PRODUCED BY CONTRACTOR AND DELIVERED TO NEAREST STP-DU STORAGE YARD WITH ALL COSTS INCLUDED IN THE PER EACH PRICE OF SERVICE LINE ITEMS.
- WATER METERS SHALL BE PROCURED BY CONTRACTOR AND DELIVERED TO NEAREST STP-DU STORAGE YARD WITH ALL COSTS INCLUDED IN THE PER EACH PRICE OF SERVICE LINE ITEMS.
- PE SERVICE LINES SHALL BE POLYETHYLENE 3408, DR9 TUBING.
- ALL ITEMS OF WORK SHOWN IN EACH DETAIL SHALL BE INCLUDED IN PER EACH COST OF SINGLE OR DOUBLE SERVICE LINES OR WATER TERMINATION ITEMS.



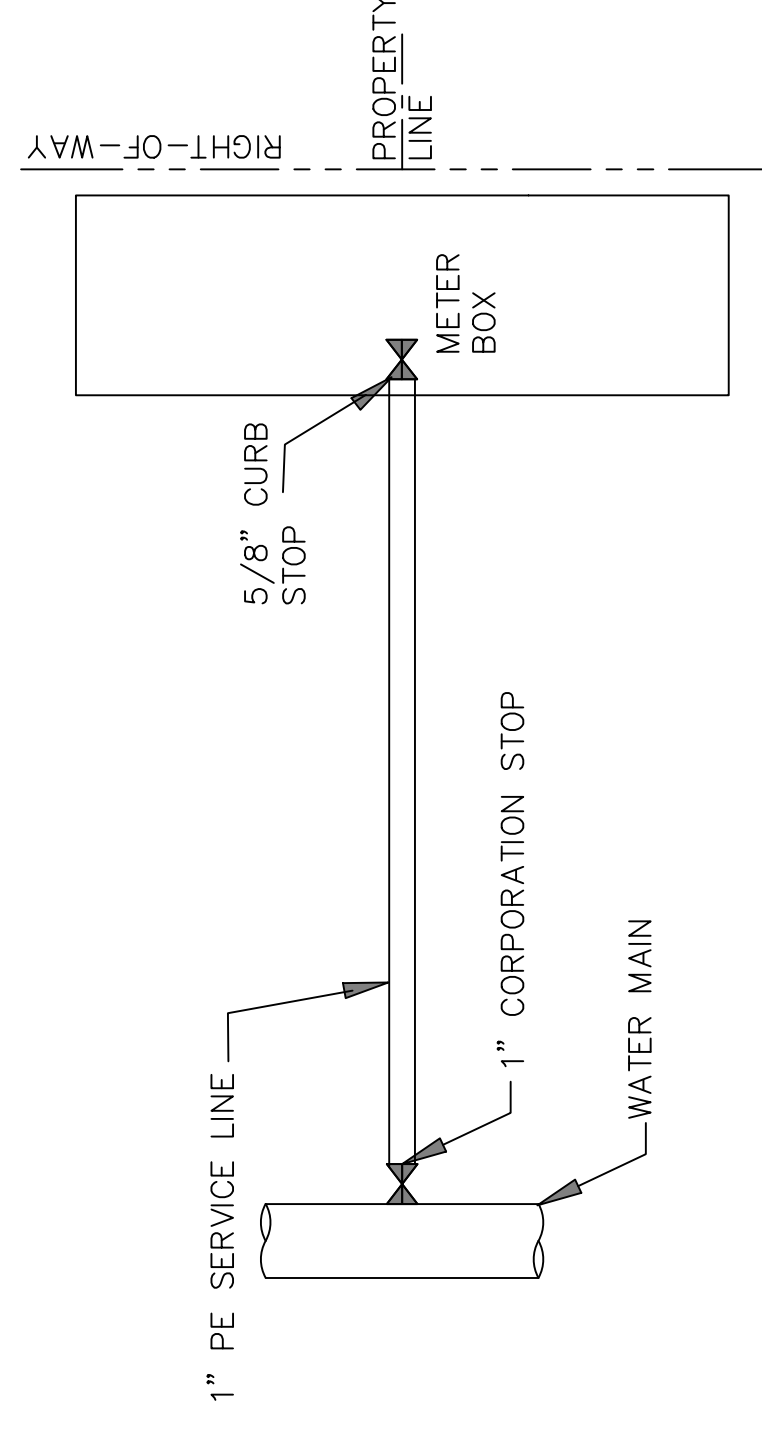
10" WATER MAIN TERMINATION DETAIL  
(NOT TO SCALE)



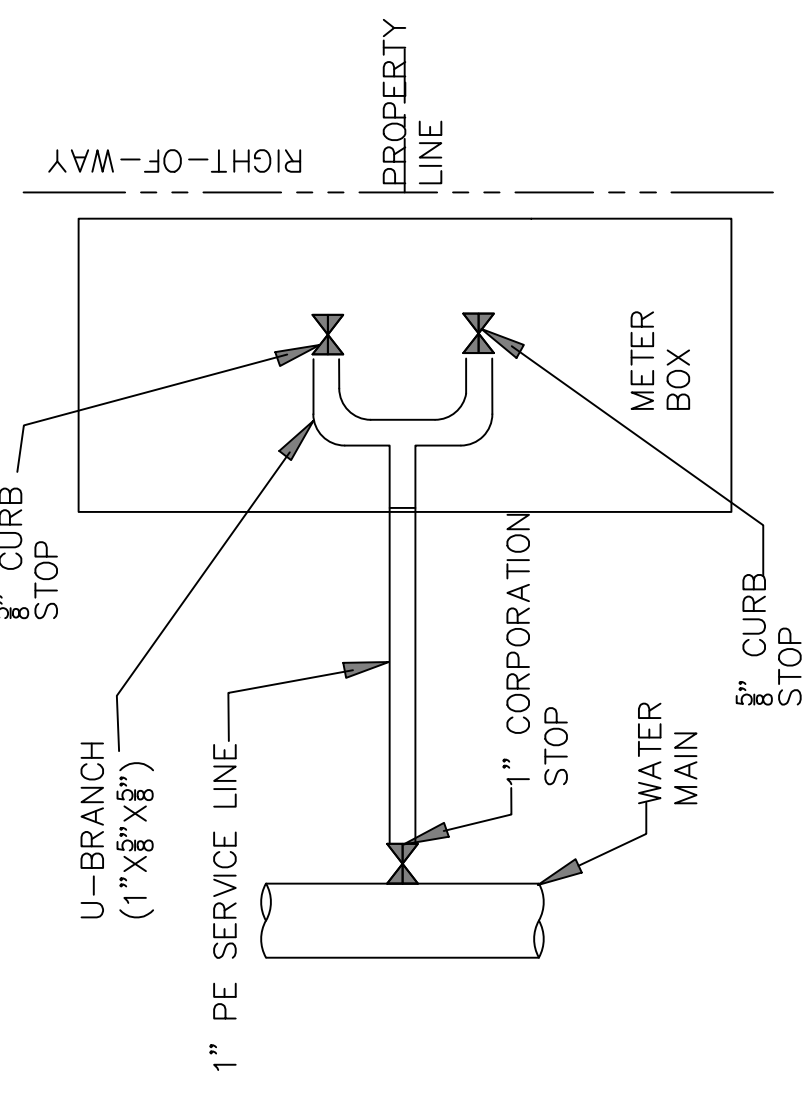
8" WATER MAIN TERMINATION DETAIL  
(NOT TO SCALE)



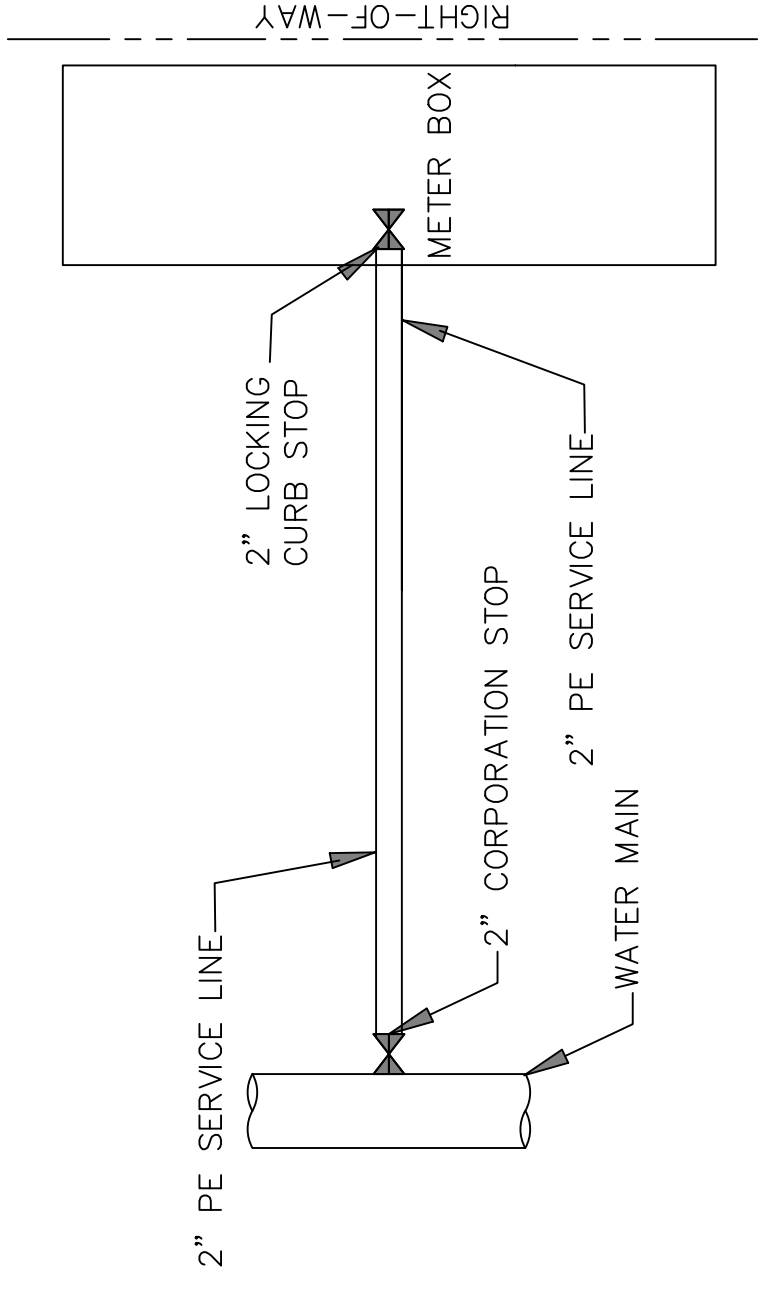
6" WATER SERVICE TERMINATION DETAIL  
(NOT TO SCALE)



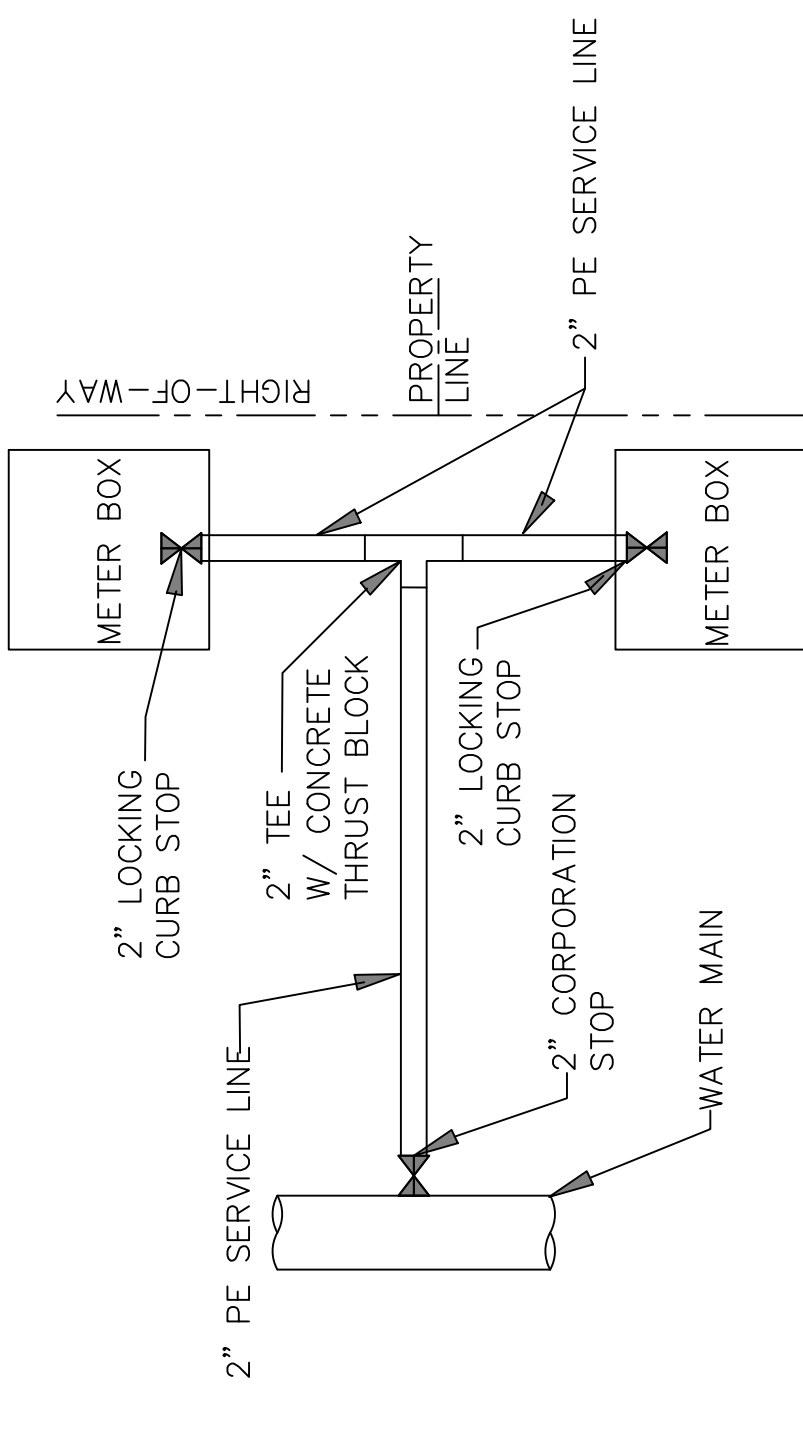
1" SINGLE SERVICE LINE ASSEMBLY  
(NOT TO SCALE)



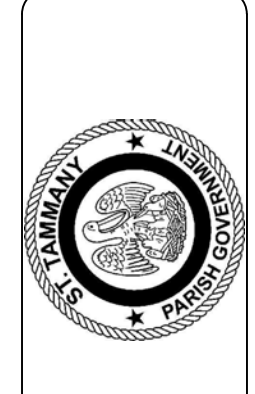
1" DOUBLE SERVICE LINE ASSEMBLY  
(NOT TO SCALE)



2" SINGLE SERVICE LINE ASSEMBLY  
(NOT TO SCALE)



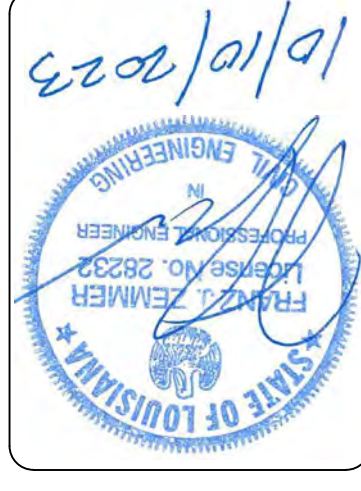
2" DOUBLE SERVICE LINE ASSEMBLY  
(NOT TO SCALE)



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE	DRAWN BY: ENK	PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT	SHEET SIZE: ANSI D	SCALE:
------------------	------------------	---------------	--------------------------	------------------------	------------------	--------------------	--------



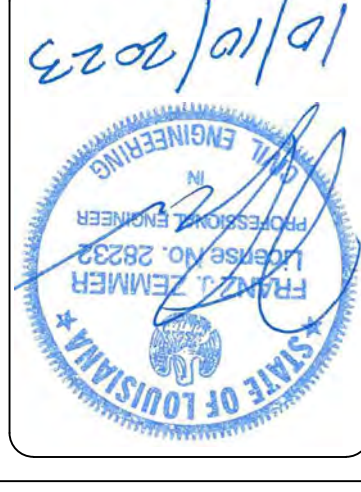
S. MILITARY RD US 190 &  
TERMINATION DETAILS  
WATER SERVICE &  
TERMINATION DETAILS



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

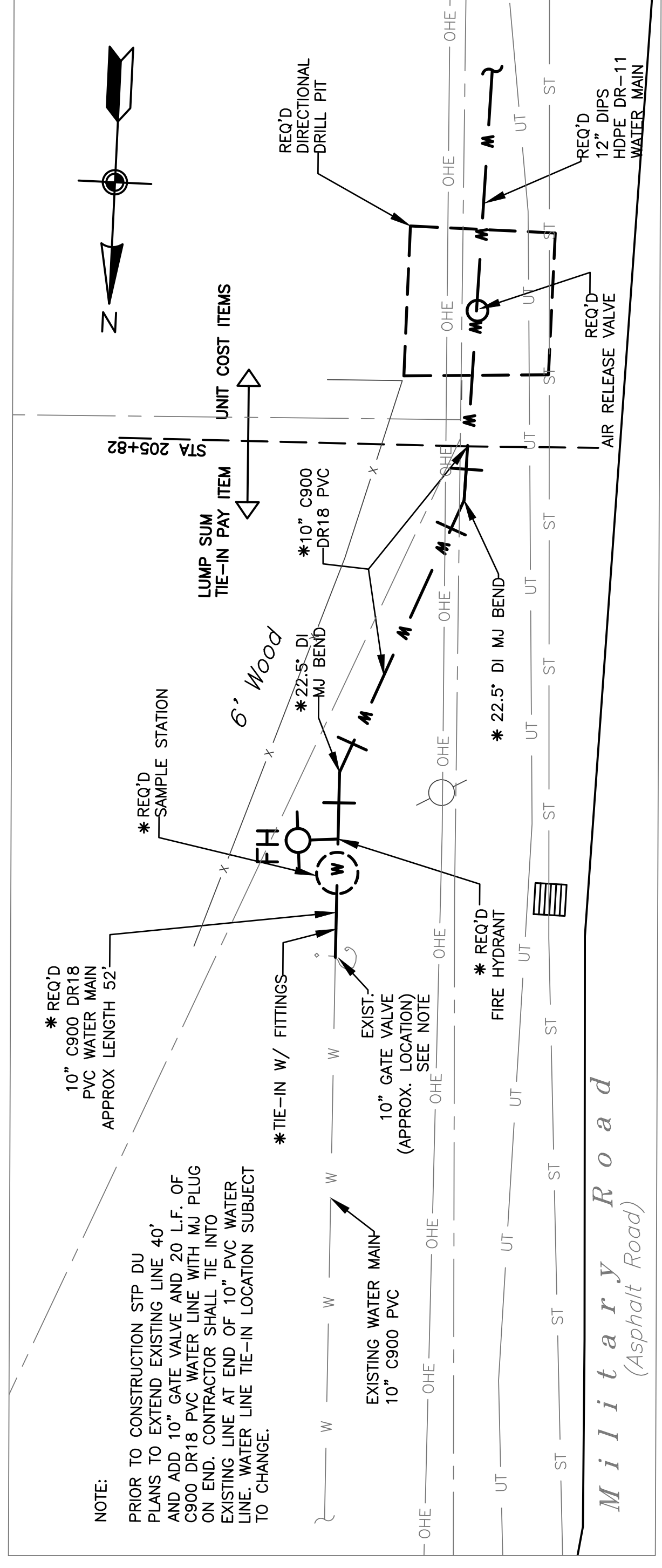
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



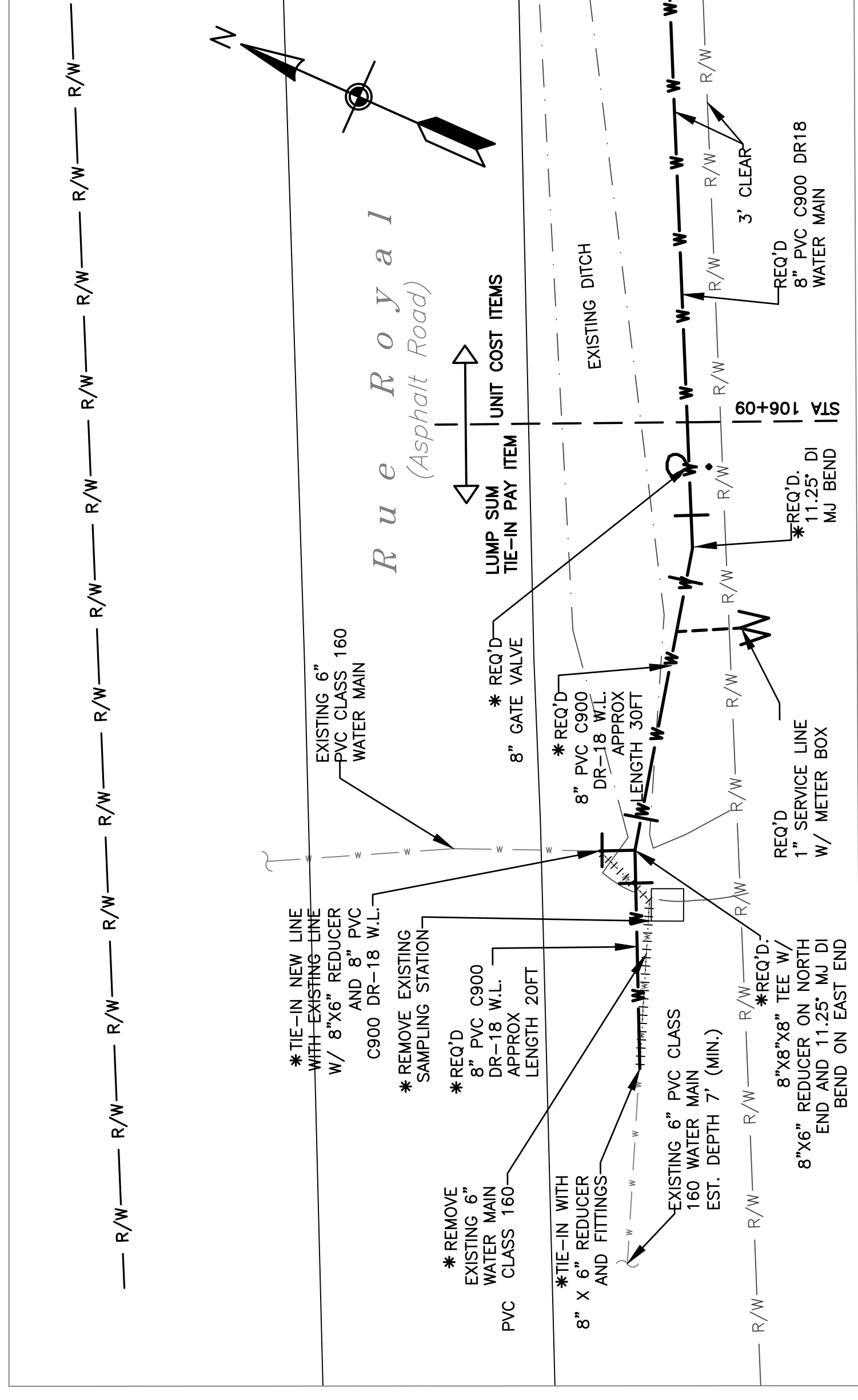
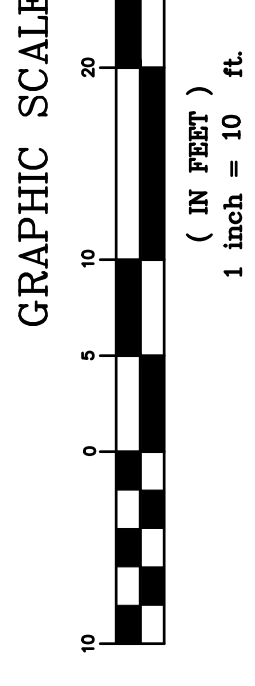
S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
TIE-IN AND CROSSING DETAILS

SHEET NO. 2h



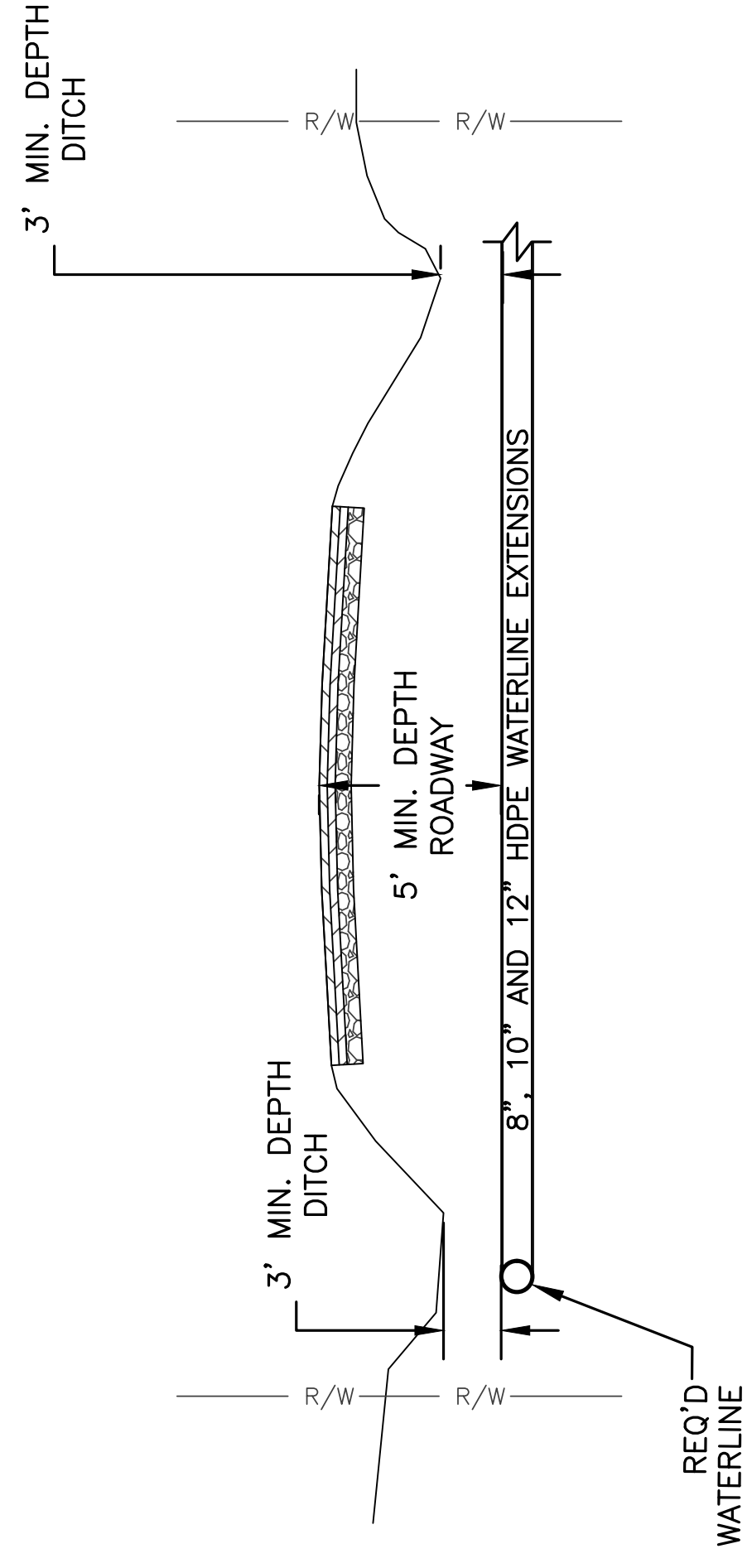
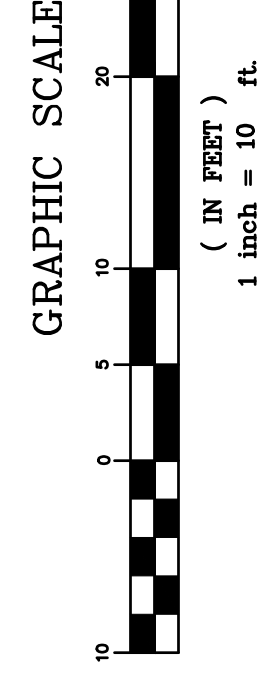
**PAY ITEM: MILITARY ROAD TIE-IN STA 200+00**

\* ITEMS TO BE INCLUDED IN LUMP SUM COST OF TIE-IN

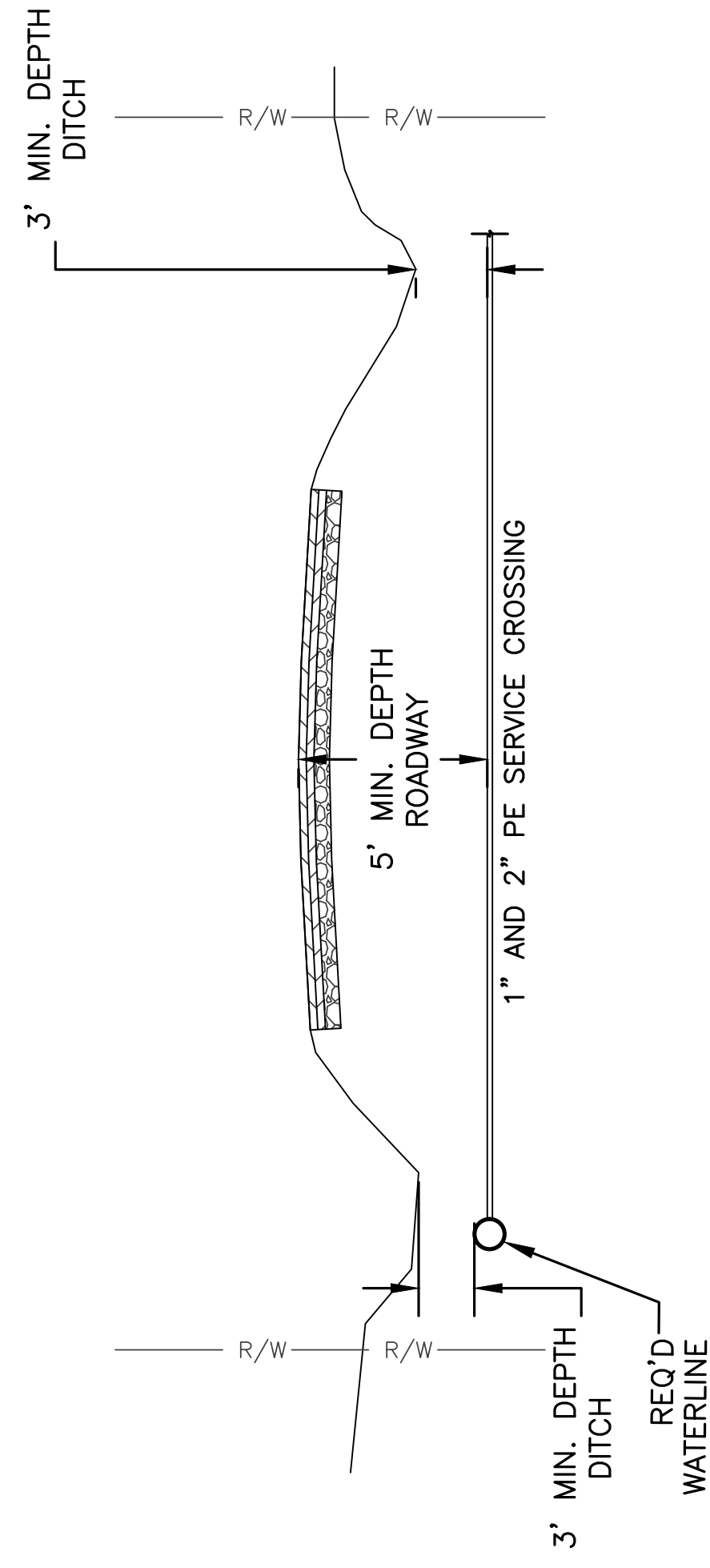


**PAY ITEM: RUE ROYAL TIE-IN STA 100+00**

\* ITEMS TO BE INCLUDED IN LUMP SUM COST OF TIE-IN  
\* 1" SERVICE LINE W/METER BOX NOT INCLUDED IN LUMP SUM COST



**NOTE:**  
THIS DETAIL SHALL APPLY TO ALL ROADWAY CROSSINGS.



**NOTE:**  
THIS DETAIL SHALL APPLY TO ALL ROADWAY CROSSINGS.



ST. TAMMANY PARISH DEPARTMENT OF UTILITIES APPROVED FITTINGS FOR WATER			
CATEGORY	ITEM	APPROVED MANUFACTURER/ OR PRIOR APPROVED EQUAL	MODEL/PART No.
COMPRESSION FITTING	1" X 3/4" 7.5" U-BRANCH	MUELLER	MHI1460NGFWD
COMPRESSION FITTING	2" CORP STOP IPT THREAD	MUELLER	MHI15023NK
COMPRESSION FITTING	1" CC X CTS COMP CORP STOP	FORD METER BOX CO.	FBI1007NL
COMPRESSION FITTING	2" MIP X CTS CORP STOP	MUELLER	MHI15008NG
COMPRESSION FITTING	3/4" CC X CTS COMP CORP STOP	FORD METER BOX CO.	FFI10004NL
MISC. FITTING - BRASS	2" FIP X FIP BY W/LS CURB STOP	MUELLER	MHI15023NK
MISC. FITTING - BRASS	1" X 3/4" 7.5" CTS X ORISEAL U-BRANCH	FORD METER BOX CO.	FFB11007NL
TAPPING SLEEVES & SADDLES	2" X 1" CC BRZ SADDLE F/IP PVC	MUELLER	MHI1460NGFWD
TAPPING SLEEVES & SADDLES	3" X 1" BRZ SADDLE F/IP PVC	FORD METER BOX CO.	FS70204
TAPPING SLEEVES & SADDLES	3" X 1" CC BRZ SADDLE F/CTS	MUELLER	MHI13425G
TAPPING SLEEVES & SADDLES	4" X 1" CC BRZ SADDLE F/CTS HDPE	FORD METER BOX CO.	FS70304
TAPPING SLEEVES & SADDLES	4" X 1" CC BRZ SADDLE F/IP PVC	MUELLER	NOT APPLICABLE
TAPPING SLEEVES & SADDLES	4" X 2" BRZ SADDLE F/IP PVC	FORD METER BOX CO.	FS70407
TAPPING SLEEVES & SADDLES	4" X 2" CC BRZ SADDLE F/CTS	MUELLER	NOT APPLICABLE
TAPPING SLEEVES & SADDLES	6" X 1" BRZ SADDLE F/IP PVC	FORD METER BOX CO.	MHI13431G
TAPPING SLEEVES & SADDLES	6" X 2" BRZ SADDLE F/IP PVC	MUELLER	FS70604
TAPPING SLEEVES & SADDLES	8" X 1" BRZ SADDLE F/IP PVC	FORD METER BOX CO.	MHI13491K
TAPPING SLEEVES & SADDLES	8" X 2" CC BRZ SADDLE F/IP PVC	MUELLER	FS71607
TAPPING SLEEVES & SADDLES	10" X 2" CC BRZ SADDLE CTS HDPE	FORD METER BOX CO.	MHI13433G
TAPPING SLEEVES & SADDLES	10" X 2" CC BRZ SADDLE F/IP PVC	MUELLER	FS71804
TAPPING SLEEVES & SADDLES	12" X 1" CC BRZ SADDLE CTS HDPE	FORD METER BOX CO.	MHI13433K
TAPPING SLEEVES & SADDLES	12" X 2" CC BRZ SADDLE F/IP PVC	MUELLER	FS70807
TAPPING SLEEVES & SADDLES	10" X 1" TAPPING SADDLE C-900	MUELLER	NOT APPLICABLE
TAPPING SLEEVES & SADDLES	10" X 2" BRASS SADDLE-CC THREAD	MUELLER	MHI13443K
TAPPING SLEEVES & SADDLES	12" X 2" C-900 SADDLE	FORD METER BOX CO.	FS701007
TAPPING SLEEVES & SADDLES	3" X 2" BRASS SADDLE-CC THREAD	MUELLER	NOT APPLICABLE
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	MHI13444K
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	FS7001207
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	H13443-10X1
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	S90-1004
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	MHI13443K
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	FS901007
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	H13444-12X2
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	S70-S90-1207
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	NOT APPLICABLE
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	NOT APPLICABLE

ST. TAMMANY PARISH DEPARTMENT OF UTILITIES APPROVED FITTINGS FOR WATER			
CATEGORY	ITEM	APPROVED MANUFACTURER/ OR PRIOR APPROVED EQUAL	MODEL/PART No.
TAPPING SLEEVES & SADDLES	3" X 2" TAPPING SADDLE C-900	MUELLER	NOT APPLICABLE
TAPPING SLEEVES & SADDLES	4" X 1" TAPPING SADDLE C-900	FORD METER BOX CO.	NOT APPLICABLE
TAPPING SLEEVES & SADDLES	4" X 2" TAPPING SADDLE C-900	MUELLER	S13440
TAPPING SLEEVES & SADDLES	6" X 1" TAPPING SADDLE C-900	FORD METER BOX CO.	S90-404
TAPPING SLEEVES & SADDLES	6" X 2" TAPPING SADDLE C-900	MUELLER	H13440-4X2
TAPPING SLEEVES & SADDLES	8" X 1" TAPPING SADDLE C-900	FORD METER BOX CO.	S90-407
TAPPING SLEEVES & SADDLES	8" X 2" TAPPING SADDLE C-900	MUELLER	S13441-6X1
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	S90-604
TAPPING SLEEVES & SADDLES		MUELLER	H13441-6X2
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	S90-607
TAPPING SLEEVES & SADDLES		MUELLER	S13442-8X1
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	FS70604
TAPPING SLEEVES & SADDLES		MUELLER	MHI13491K
TAPPING SLEEVES & SADDLES		FORD METER BOX CO.	FS71607

**NOTES:**

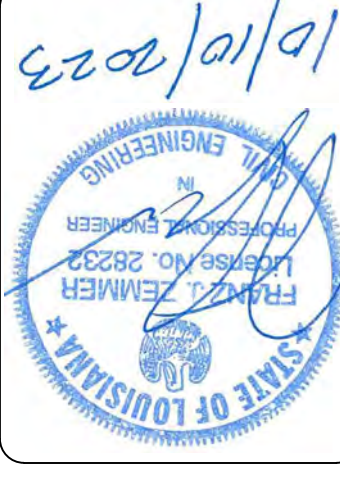
THE PROVIDED LIST IS NOT ALL INCLUSIVE. CONTRACTOR SHALL UTILIZE THE REQUIREMENTS DETAILED IN THE PLANS AND SPECIFICATIONS FOR ALL OTHER REQUIRED FITTINGS.



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

DATE	DESCRIPTION OF REVISION	No.

DESIGNED BY: FJZ	CHECKED BY: AKGE	PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT	SHEET SIZE: ANSI D	SCALE:
DRAWN BY: ENK	SUBMITTED BY: RCLC					



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
ST. TAMMANY PARISH  
DEPARTMENT OF UTILITIES  
APPROVED FITTINGS



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

NO.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	EJK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
SUMMARY OF ESTIMATED QUANTITIES

SHEET NO.  
3

# PAY ITEM NOTES

- CONTINGENCY ITEMS TO BE USED ONLY AS NECESSARY AND PER DIRECTION FROM PROJECT ENGINEER. CONTINGENCY ITEMS INCLUDE: EXPLORATORY EXCAVATION, INSERTION VALVES, TAPPING SLEEVE AND VALVE ASSEMBLY, REMOVE AND REPLACE AGGREGATE, ASPHALT DRIVEWAY AND REMOVE AND REPLACE SEPTIC OUTFALLS, AND NO. 57 CRUSHED LIME STONE BEDDING FOR WATERLINES.
- BOLLARD LOCATIONS TO BE FIELD VERIFIED AND APPROVED BY PROJECT ENGINEER PRIOR TO INSTALLATION.
- THERE SHALL BE NO DIRECT PAYMENT FOR WATERING AND FERTILIZING OF SODDED AND HYDROSEEDED AREAS.
- EXISTING MATERIAL OBTAINED ON SITE MAY BE USED AS FILL AND BACKFILL PROVIDED IT MEETS LADOTD SPECIFICATIONS FOR THAT TYPE OF MATERIAL. CONTRACTOR SHALL SUBMIT TEST REPORTS FROM CERTIFIED LABORATORY TO ENGINEER FOR APPROVAL PRIOR TO INCORPORATION OF MATERIAL.
- ALL ITEMS WITHOUT A DESIGNATED PAY ITEM THAT ARE SHOWN TO BE REMOVED OR FOUND TO BE IN CONFLICT WITH REQUIRED WORK BETWEEN ROADWAY AND DITCH SHALL BE REMOVED UPON APPROVAL OF PROJECT ENGINEER UNDER "REMOVAL OF STRUCTURES AND OBSTRUCTIONS".
- ALL TREES, VEGETATION, AND DEBRIS WITHIN THE PROJECT LIMITS AND IN CONFLICT WITH PROPOSED CONSTRUCTION SHALL BE REMOVED UNDER ITEM "CLEARING AND GRUBBING" PER LUMP SUM. BEFORE BEGINNING WORK ON REMOVAL OF ANY TREE, THE CONTRACTOR SHALL NOTIFY AND REVIEW THE TREE REMOVAL WITH THE PROJECT ENGINEER AND PARISH ARBORIST.
- ALL ROADWAY SIGNS THAT ARE IN CONFLICT WITH WORK AND ARE REQUIRED TO BE TEMPORARILY REMOVED, STORED, COVERED AND REPLACED AT END OF CONSTRUCTION SHALL BE PAID UNDER ITEM "REMOVAL OF STRUCTURES AND OBSTRUCTIONS".
- CONTRACTOR IS RESPONSIBLE FOR CALCULATION OF QUANTITIES FOR ALL LUMP SUM BID ITEMS.
- THE LINES AND GRADES SHOWN ON THE PLANS MAY BE MODIFIED BY THE PROJECT ENGINEER IF FIELD CONDITIONS JUSTIFY SUCH A VARIATION. THE CONTRACTOR SHALL NOT BE ENTITLED TO EXTRA PAYMENT OTHER THAN WHATEVER INCREASE IN CONTRACT QUANTITIES ARE INVOLVED.
- ANY REQUIRED PRIVATE UTILITY MAIN RELOCATION SHALL BE BY OTHERS AND COORDINATED BY CONTRACTOR. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES TEN WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING FENCES WHETHER DAMAGE IS NECESSARY FOR CONSTRUCTION OPERATIONS, ACCESS, OR TO TEMPORARILY ALLEVIATE A CONFLICT. FENCE REPLACEMENT MATERIAL SHALL BE WITH MATERIAL EQUAL TO OR BETTER THAN EXISTED PRIOR. NO DIRECT PAY FOR THIS WORK.
- EXPLORATORY EXCAVATIONS ARE TO BE A CONTINGENCY ITEM AND TO BE PERFORMED AT DISCRETION OF ENGINEER. PAYMENT WILL BE PER CUBIC YARD.
- WATERMAIN LENGTHS INSTALLED BY DIRECTIONAL DRILLING ARE TO BE MEASURED AND PAID AS THE HORIZONTAL LENGTHS MEASURED ALONG FINAL GRADE OF GROUND. NO EXTRA COMPENSATION WILL BE GIVEN FOR ADDITIONAL VERTICAL LENGTHS REQUIRED TO MEET DEPTHS SHOWN ON PLANS OR BY FIELD CHANGES TO DEPTHS MADE BY PROJECT ENGINEER.
- CONTRACTOR SHALL MAINTAIN ACCESS FOR RESIDENTS AND MAINTAIN ACCESS TO ALL TRASH RECEPTACLES AND MAILBOXES. THE CONTRACTOR SHALL UTILIZE TRAFFIC MAINTENANCE AGGREGATE AS REQUIRED TO MEET THESE REQUIREMENTS; PAID UNDER ITEM "TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT)".
- THERE SHALL BE NO OPEN CUT OF ROADWAYS. ALL ROADWAY UTILITY CROSSINGS SHALL BE INSTALLED BY DIRECTIONAL DRILL.
- ALL SERVICE CONNECTIONS, METER BOXES, VALVES, FIRE HYDRANTS, AND ARV'S SHALL BE LOCATED WITH GPS COORDINATES AND IN STATE PLANE COORDINATES AND PROVIDED TO S.T.P.D.U. WITH AS-BUILTS.
- CONTRACTOR TO COORDINATE ALL SERVICE CONNECTIONS WITH S.T.P.D.U. TO FIELD VERIFY LOCATIONS PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SURVEY THROUGHOUT THE DURATION OF CONSTRUCTION SHOWING THE PRECISE LOCATION OF THE INSTALLED WATER LINES AND ANY OTHER UTILITIES ENCOUNTERED OR RELOCATED.
- THE CONTRACTOR SHALL AT ALL TIMES PROVIDE AND MAINTAIN INSTRUMENTATION WHICH WILL ACCURATELY LOCATE THE PILOT HOLE (BOTH HORIZONTAL AND VERTICAL DISPLACEMENT POINTS), MEASURE DRILL STRING AXIAL AND TORSIONAL LOADS, AND MEASURE DRILLING FLUID DISCHARGE RATE AND PRESSURE. A WIRE LINE AND WIRE LINE SPECIALIST SHALL BE USED TO ACCURATELY LOCATE THE HORIZONTAL AND VERTICAL POSITION OF THE PILOT HOLE. THE ENGINEER WILL HAVE ACCESS TO THESE INSTRUMENTS AND THEIR READINGS AT ALL TIMES DURING THE DRILLING AND PULL BACK OPERATIONS. A FINAL "AS-BUILT" PLAN AND PROFILE SHALL BE SUBMITTED TO THE ENGINEER WITHIN TEN (10) DAYS AFTER COMPLETING THE PULL BACK. THE CONTRACTOR SHALL ALSO FURNISH A COPY OF THE DRILLING AT THIS TIME.
- PRIVATE SEPTIC OUTFALL PIPES THAT NEED TO BE REMOVED AND REPLACED SHALL BE PAID UNDER ITEM REMOVE AND REPLACE SEPTIC OUTFALLS. SEPTIC OUTFALL PIPES SHALL BE REMOVED TO PROPERTY LINE AND REPLACED TO PROVIDE POSITIVE DISCHARGE.
- WATER MAIN INSTALLATION WITH 5 L.F. (MIN.) STUB-OUT FOR FUTURE EXPANSION SHALL BE PAID IN THE PER EACH COST OF WATER MAIN TERMINATION. COST FOR GATE VALVES, ADAPTERS, FITTINGS, D.I. M.J. PLUGS AND THRUST BLOCKS REQUIRED FOR WATER MAIN TERMINATION SHALL ALL BE INCLUDED IN THE PER EACH UNIT PRICE FOR ASSOCIATED "WATER MAIN TERMINATION".
- DRAIN LINES DAMAGED BY CONTRACTOR DURING EITHER DIRECTIONAL DRILLING OR OPEN CUT SHALL BE REPLACED BY CONTRACTOR AT NO DIRECT PAY, UNLESS DIRECTLY NOTED ON PLAN SHEETS AS REMOVE AND REPLACE.
- 1" AND 2" WATER SERVICE LINES SHALL BE PAID PER EACH, THIS INCLUDES LENGTHS UP TO 20' FOR OPEN CUT AND 80' FOR DIRECTIONAL DRILL. ANY ADDITIONAL LENGTHS REQUIRED FOR WATER SERVICE LINES THAT ARE BEYOND THE PER EACH LENGTH (20' OPEN CUT AND 80' DIRECTIONAL DRILL) WILL BE PAID PER ADDITIONAL LINEAR FOOT. UNDER 1" OR 2" WATER SERVICE EXTENSION. COST OF U-BRANCH, TAPPING SADDLE, GATE VALVES WITH CAST-IN-PLACE CONCRETE PAUS, TEES, POLYETHYLENE TUBING, CORPORATION STOPS, CURB STOPS, METERS AND METER BOXES SHALL BE INCLUDED IN THE UNIT PRICE PER EACH. WATER METERS FOR SINGLE AND DOUBLE WATER SERVICE LINES SHALL BE PROCURED BY THE CONTRACTOR AND DELIVERED TO SITE FOR INSTALLATION BY SITEPDU AT A LATER DATE.
- WHEN APPROVED BY PROJECT ENGINEER IN FIELD, NO. 57 CRUSHED LIMESTONE BEDDING MATERIAL FOR WATERLINES SHALL BE USED AS ADDITIONAL BEDDING MATERIAL WHEN SOFT AND/OR WET BOTTOMS OF EXCAVATION ARE ENCOUNTERED.

# SUMMARY OF ESTIMATED QUANTITIES

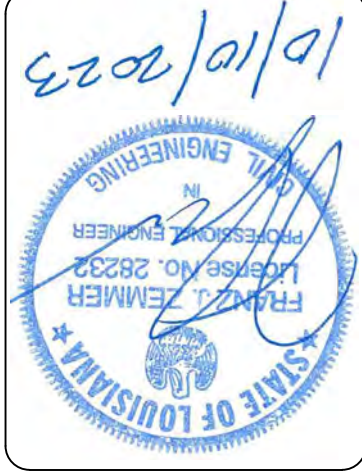
ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY
1	6" C900 PVC DR-18 WATER SERVICE LINE	LIN. FT.	15
2	8" C900 PVC DR-18 WATER MAIN	LIN. FT.	1083
3	10" C900 PVC DR-18 WATER MAIN	LIN. FT.	302
4	8" DIPS HDPE DR-11 WATER SERVICE LINE	LIN. FT.	183
5	10" DIPS HDPE DR-11 WATER MAIN	LIN. FT.	1944
6	12" DIPS HDPE DR-11 WATER MAIN	LIN. FT.	9725
7	8" GATE VALVE WITH VALVE BOX, CONC. PAD AND TRACER WIRE BOX	EACH	5
8	10" GATE VALVE WITH VALVE BOX, CONC. PAD AND TRACER WIRE BOX	EACH	18
9	WATER MAIN TIE-IN AT STATION 100+00 RUE ROYAL	EACH	1
10	WATER MAIN TIE-IN AT STATION 200+00 MILITARY ROAD (GROSS CREEK)	EACH	1
11	WATER SERVICE TERMINATION 6" C900 PVC DR-18	EACH	4
12	WATER MAIN TERMINATION 8" C900 PVC DR-18	EACH	10
13	WATER MAIN TERMINATION 10" C900 PVC DR-18	EACH	2
14	6" TO 8" INSERTION VALVE	EACH	1
15	10" TO 12" INSERTION VALVE	EACH	1
16	6" TO 8" TAPPING SLEEVE AND VALVE ASSEMBLY	EACH	1
17	10" TO 12" TAPPING SLEEVE AND VALVE ASSEMBLY	EACH	1
18	1" SINGLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF	EACH	4
19	1" SINGLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF	EACH	1
20	1" DOUBLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF	EACH	4
21	1" DOUBLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF	EACH	2
22	1" WATER SERVICE EXTENSION	LIN. FT.	20
23	2" SINGLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF	EACH	8
24	2" SINGLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF	EACH	1
25	2" DOUBLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF	EACH	5
26	2" DOUBLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF	EACH	9
27	2" WATER SERVICE EXTENSION	LIN. FT.	65
28	SAMPLING STATION	EACH	11
29	FIRE HYDRANT WITH GATE VALVE	EACH	23
30	AIR RELEASE VALVE WITH SIGN	EACH	5
31	AUTOMATIC FLUSHING STATION	EACH	1
32	TRAFFIC REGULATION	LUMP SUM	1
33	CLEARING AND GRUBBING	LUMP SUM	1
34	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	1
35	HYDROSEEDING	ACRE	3.11
36	SODDING	SQ. YD.	1400
37	CONSTRUCTION LAYOUT	LUMP SUM	1
38	EXPLORATORY EXCAVATION	CU.YD.	50
39	SITE CONDITION AND AUDIO/VIDEO SURVEY	LUMP SUM	1
40	TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT)	CU.YD.	100
41	REMOVE AND REPLACE ASPHALT PAVEMENT	SQ.YD.	50
42	REMOVE AND REPLACE AGGREGATE DRIVEWAY	SQ.YD.	50
43	REMOVE AND REPLACE CONCRETE DRIVEWAY	SQ.YD.	77.1
44	SAW CUT ASPHALT AND/OR CONCRETE PAVEMENT (FULL DEPTH)	LIN. FT.	151
45	REMOVE AND REPLACE DRAIN LINES 15" RCP	LIN. FT.	43
46	REMOVE AND REPLACE SEPTIC OUTFALLS	LIN. FT.	40
47	BOLLARDS	EACH	48
48	UTILITY RELOCATION COORDINATION	LUMP SUM	1
49	ENVIRONMENTAL PROTECTION	LUMP SUM	1
50	NO. 57 CRUSHED LIMESTONE BEDDING FOR WATERLINES	CU. YD.	175
51	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	1



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE	DRAWN BY: ENK
PROJECT No.: 301-023-002	APPROVED BY: CPT	ANSI D
ISSUE DATE: 10.10.2023	SHEET SIZE:	SCALE:



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
WATER LINE MASTER PLAN

SHEET NO.  
4

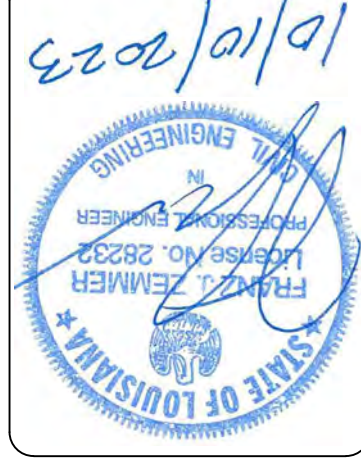




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
820 N. TYLER STREET  
COVINGTON, LA 70433

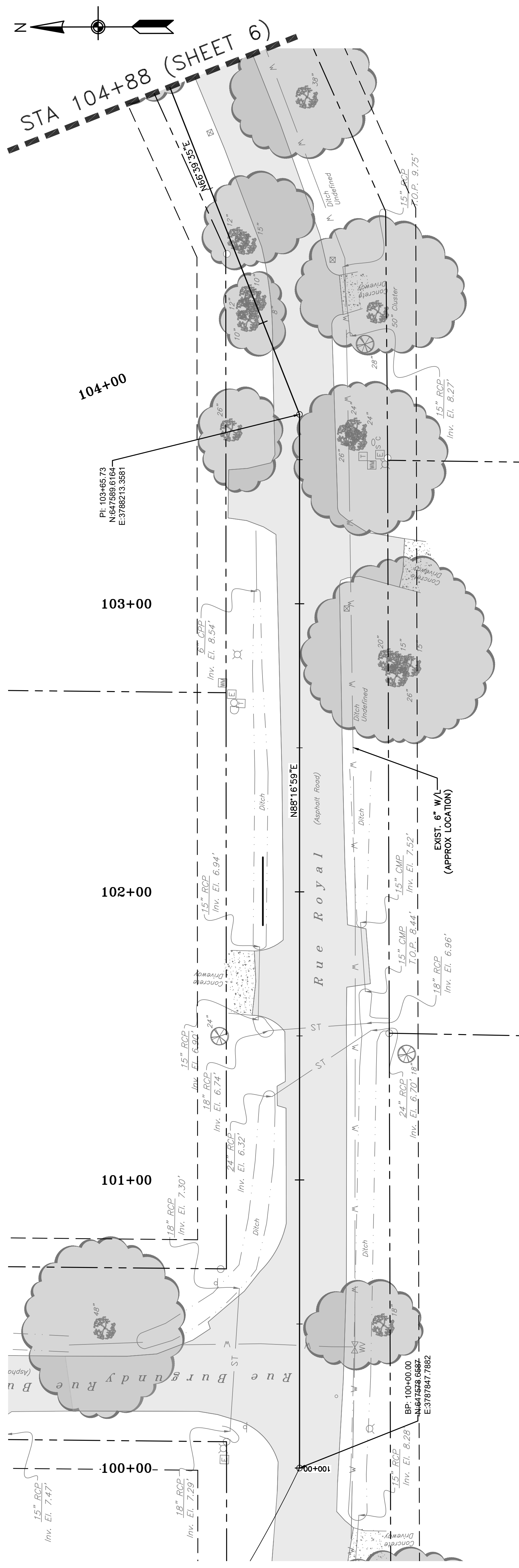
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



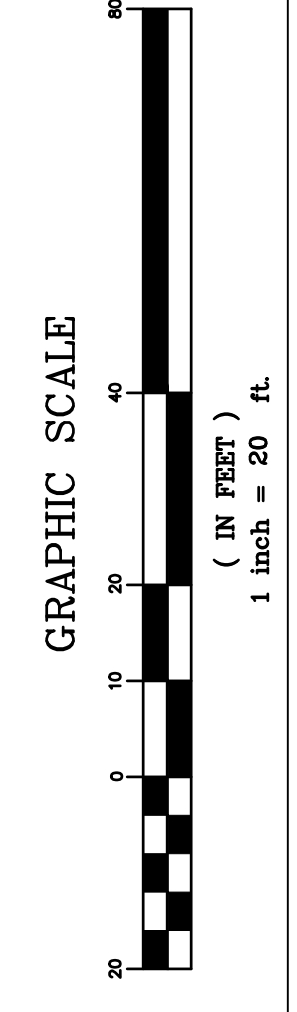
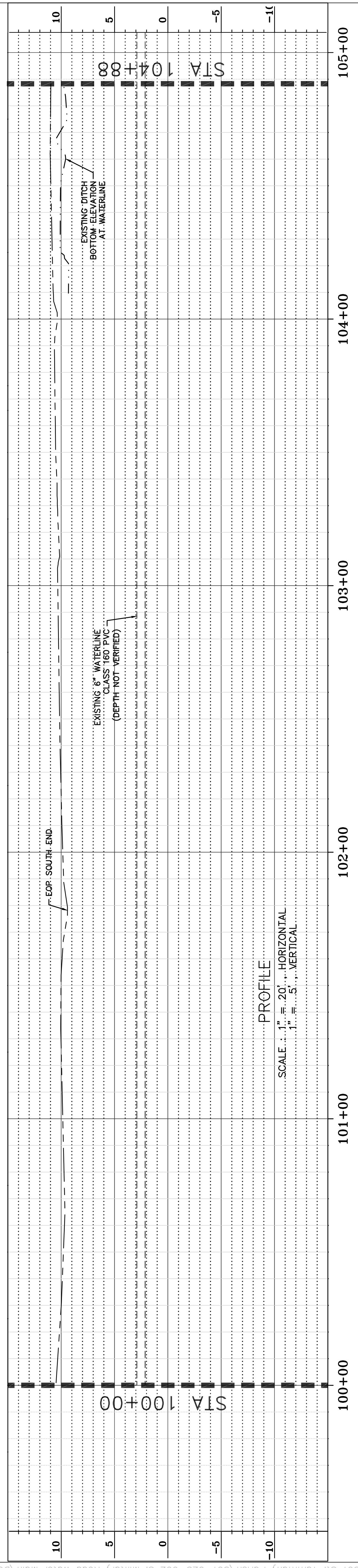
S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO.  
5



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.

NOTE: NO REQUIRED WORK ON THIS SHEET.





DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

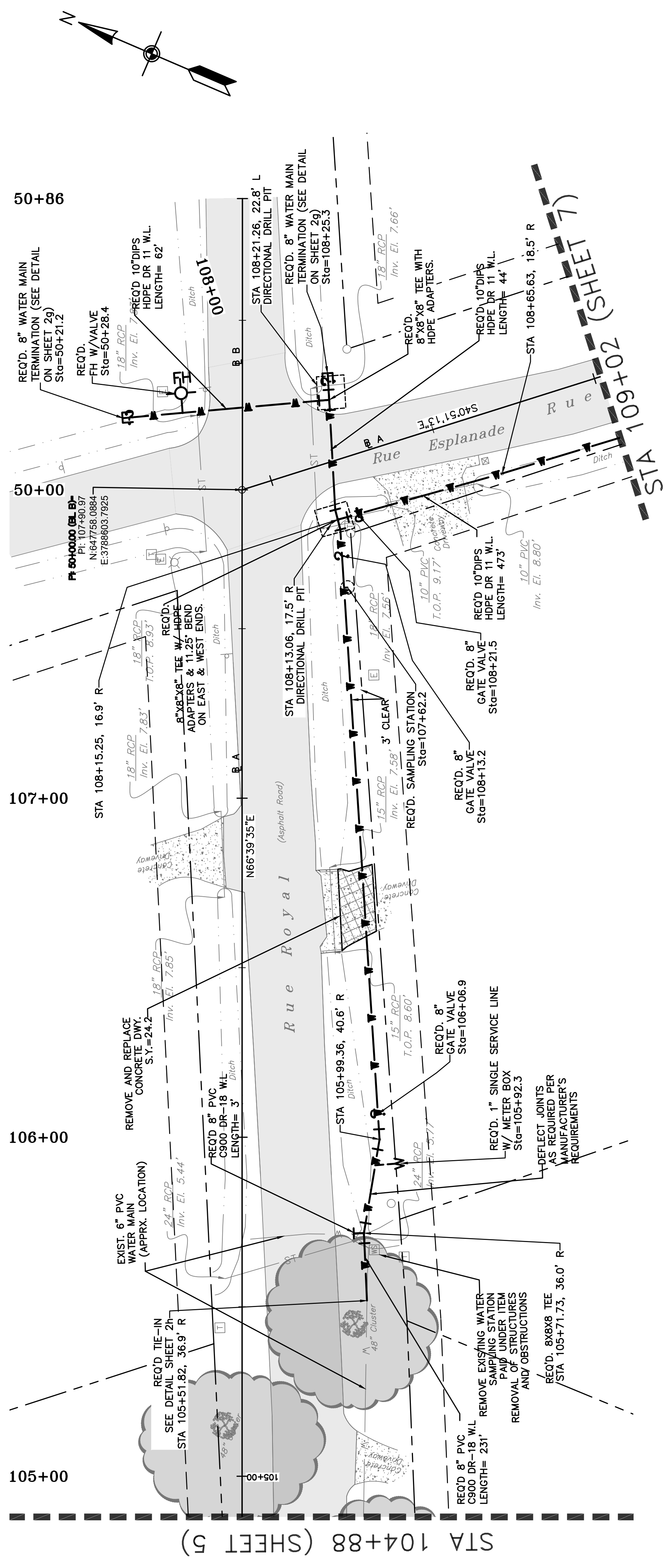
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: ENK
DRAWN BY: AKGE	SUBMITTED BY: RCLC
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023
APPROVED BY: CPT	SHEET SIZE: ANSI D
SCALE:	

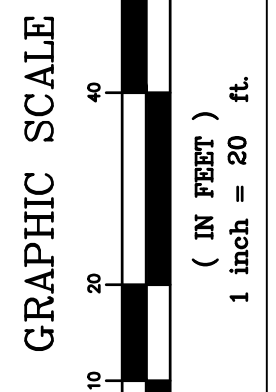
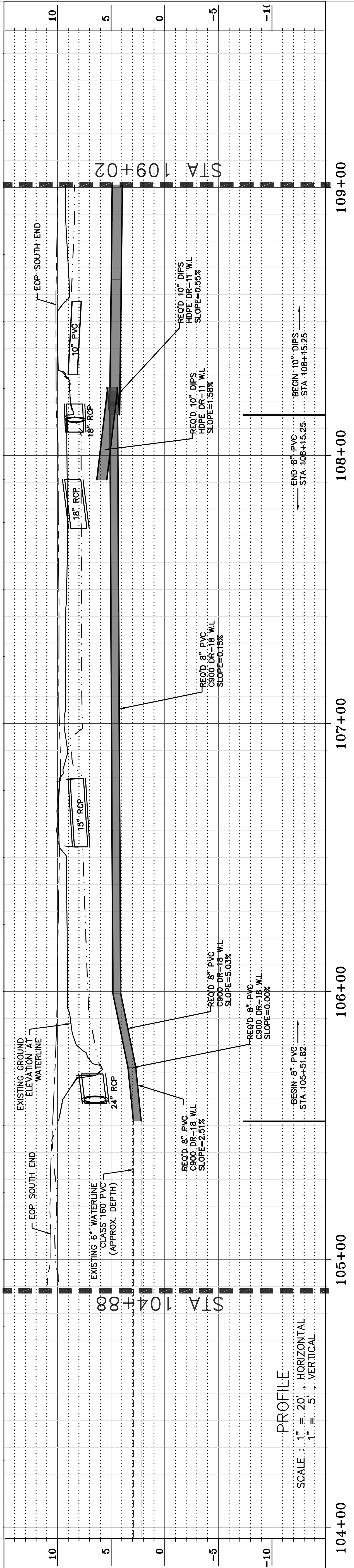


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 6



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



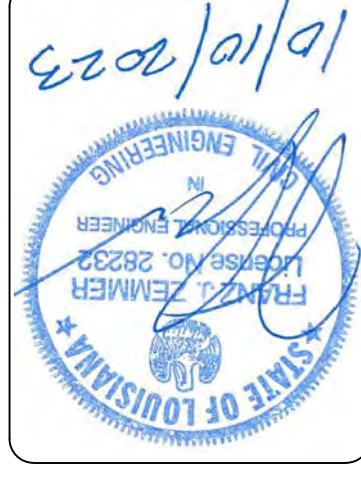
PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

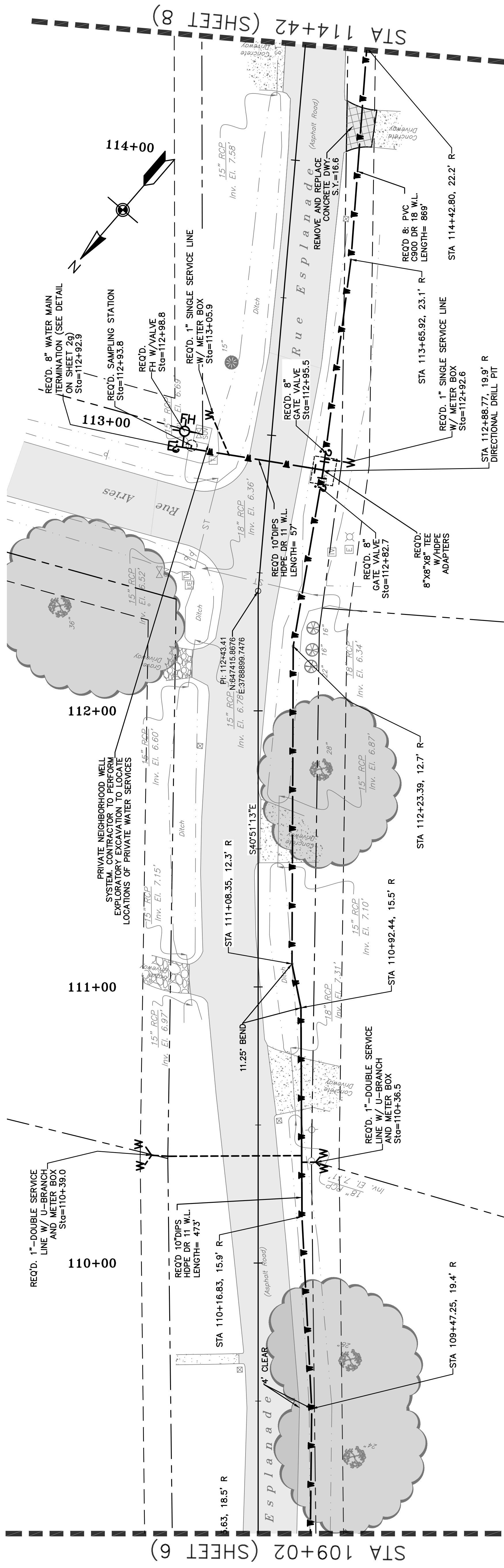
DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



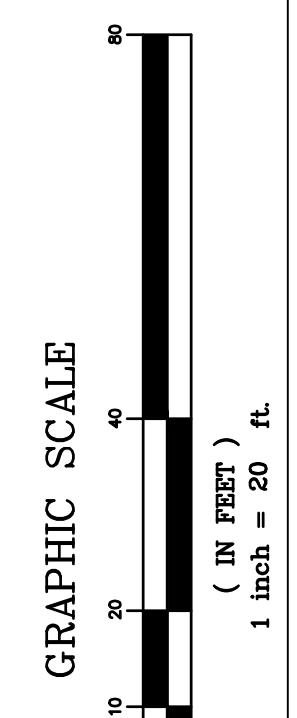
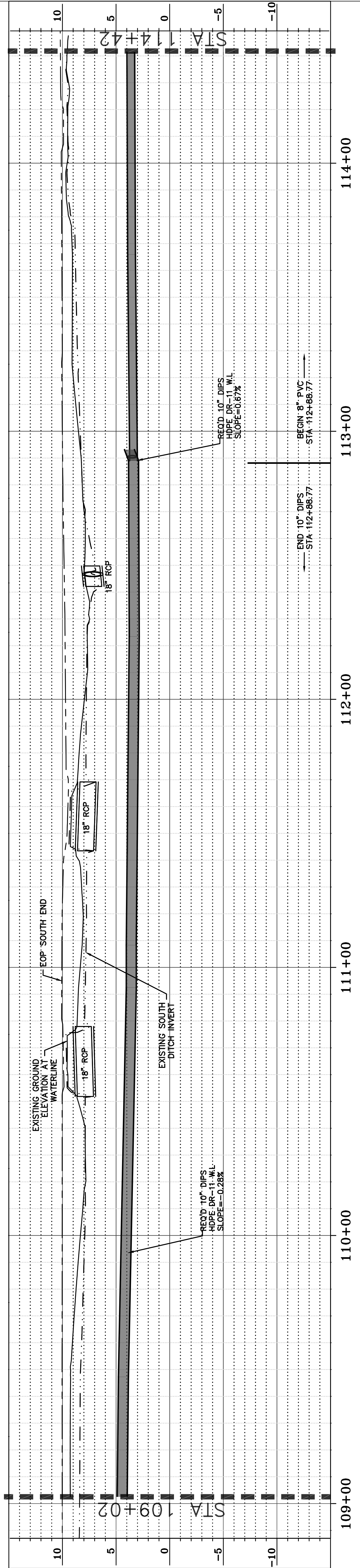
S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO.

7



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



PROFILE  
 SCALE : 1" = 20' , HORIZONTAL  
 1" = 5' , VERTICAL



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

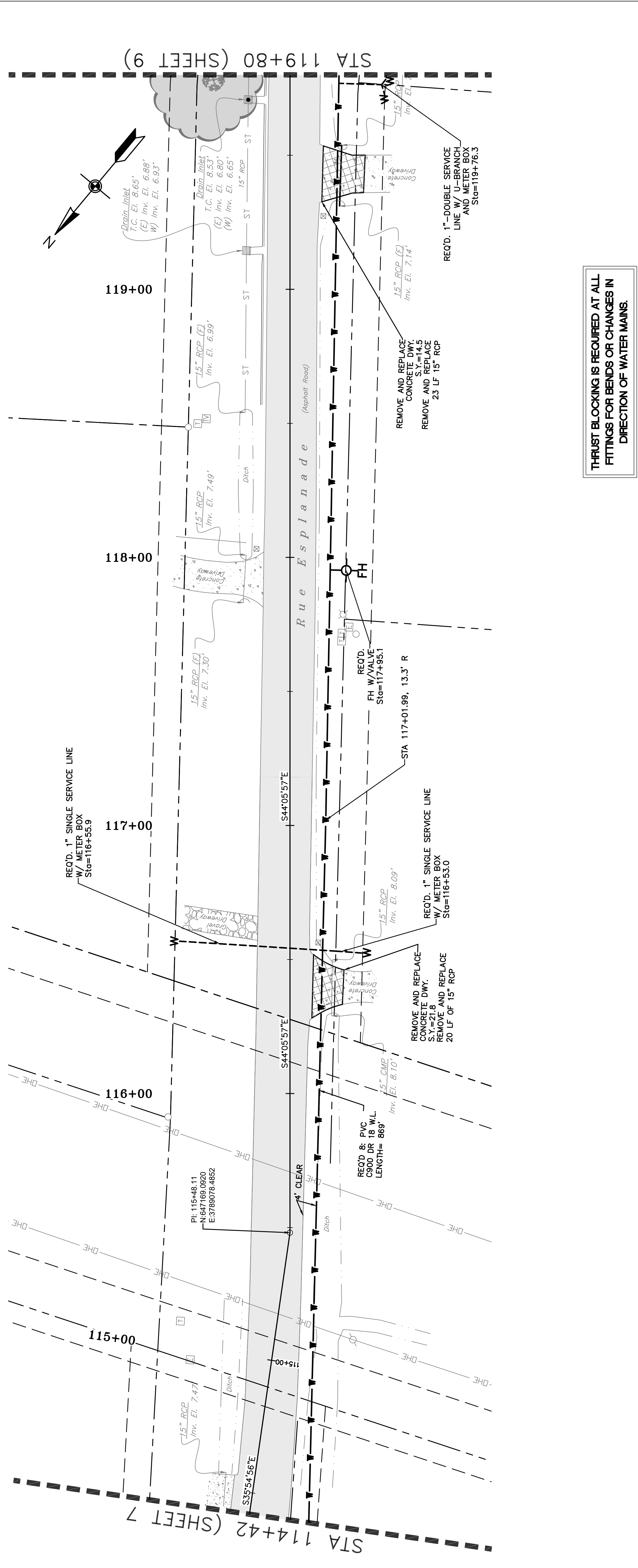
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE	DRAWN BY: ENK
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT
SHEET SIZE: ANSI D	SCALE:	

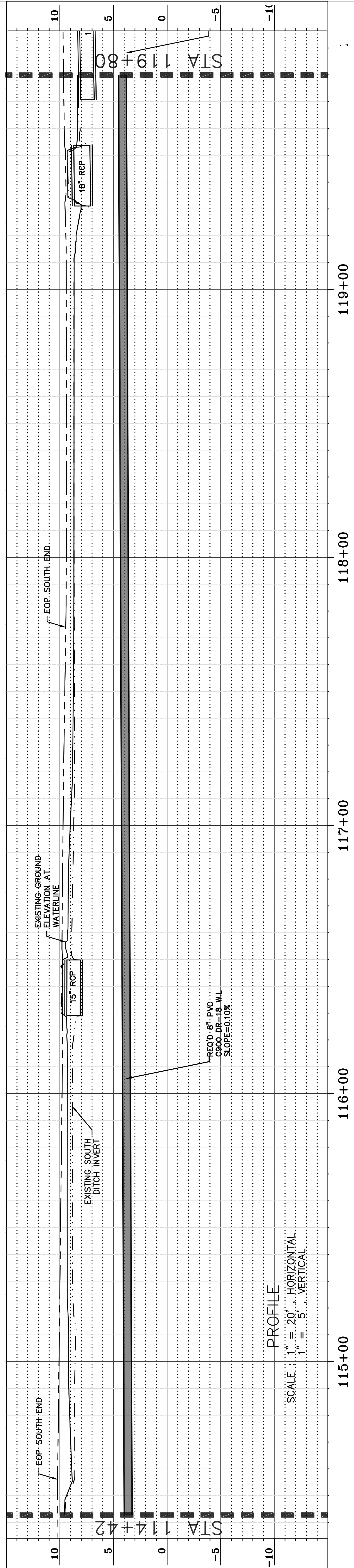


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

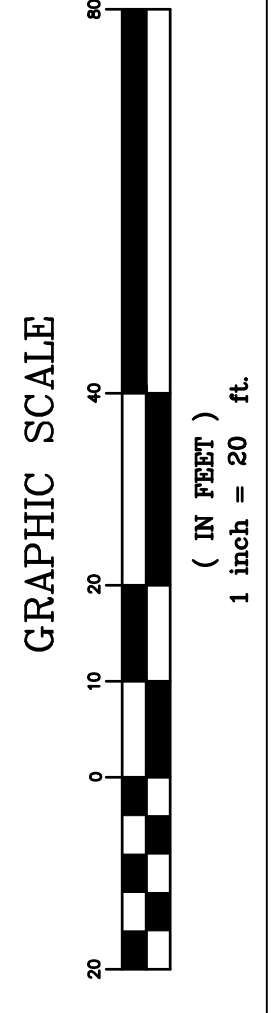
SHEET NO. 8



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL

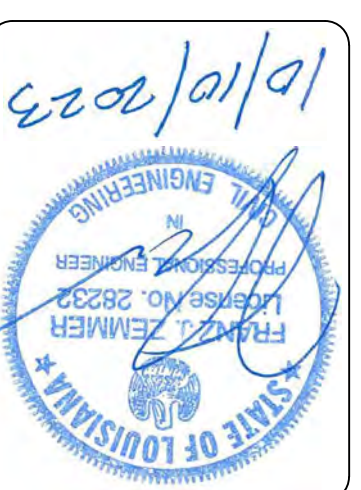




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

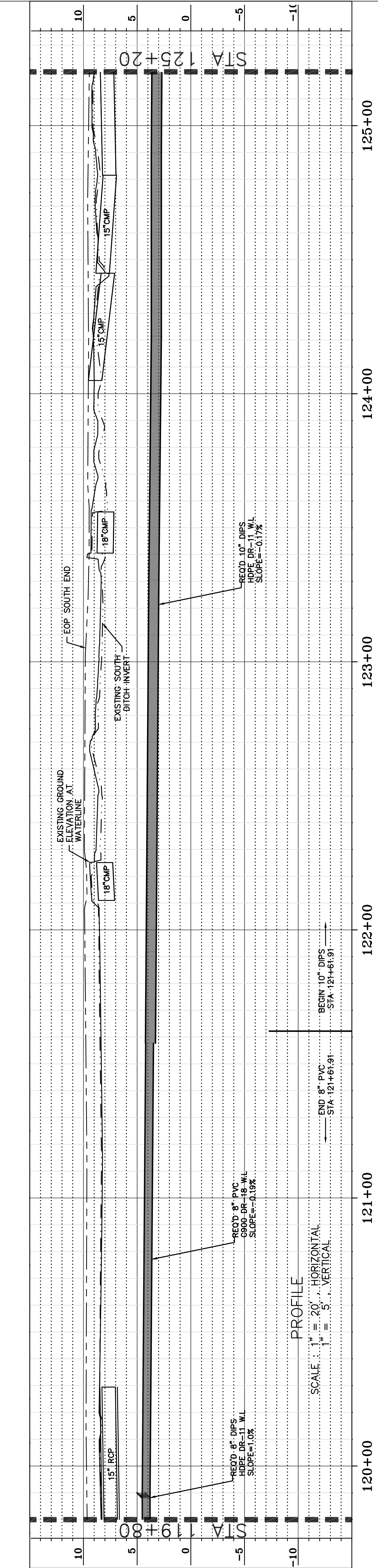
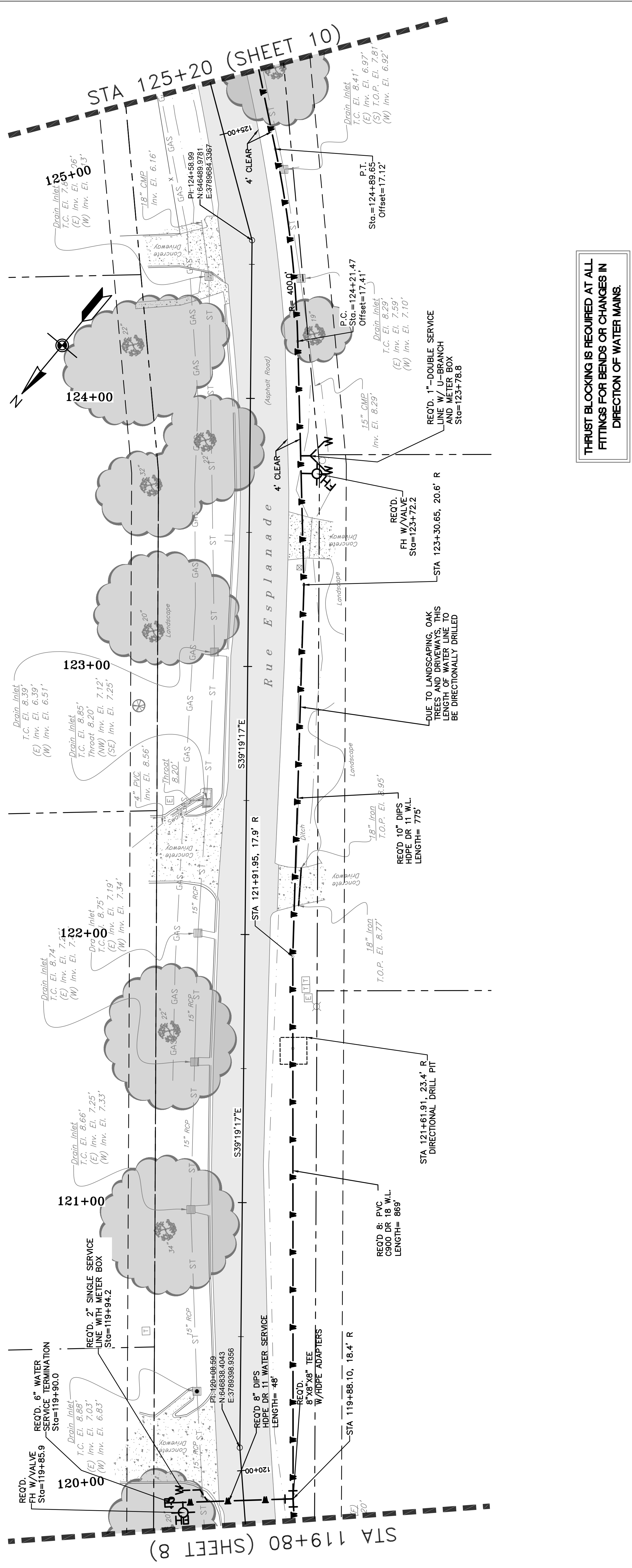
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE	DRAWN BY: ENK
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT
SHEET SIZE: ANSI D	SCALE:	

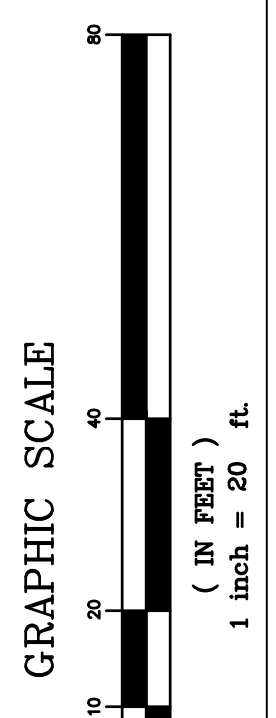


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 9



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



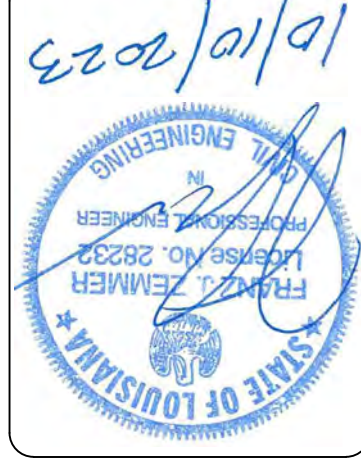




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

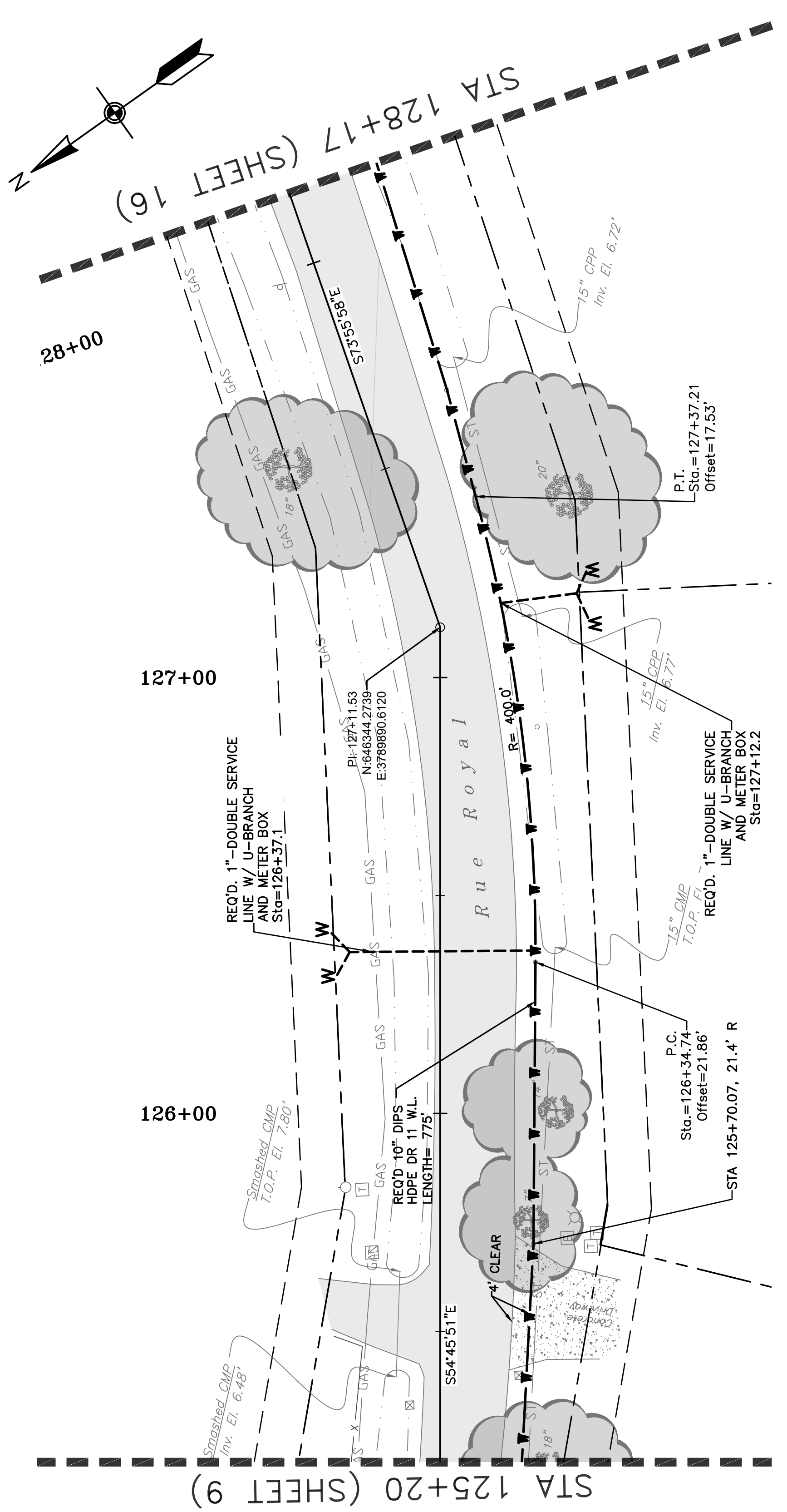
DESIGNED BY: FJZ	CHECKED BY: ENK
DRAWN BY: AKGE	CHECKED BY: AKGE
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023
APPROVED BY: CPT	SHEET SIZE: ANSI D
SCALE:	



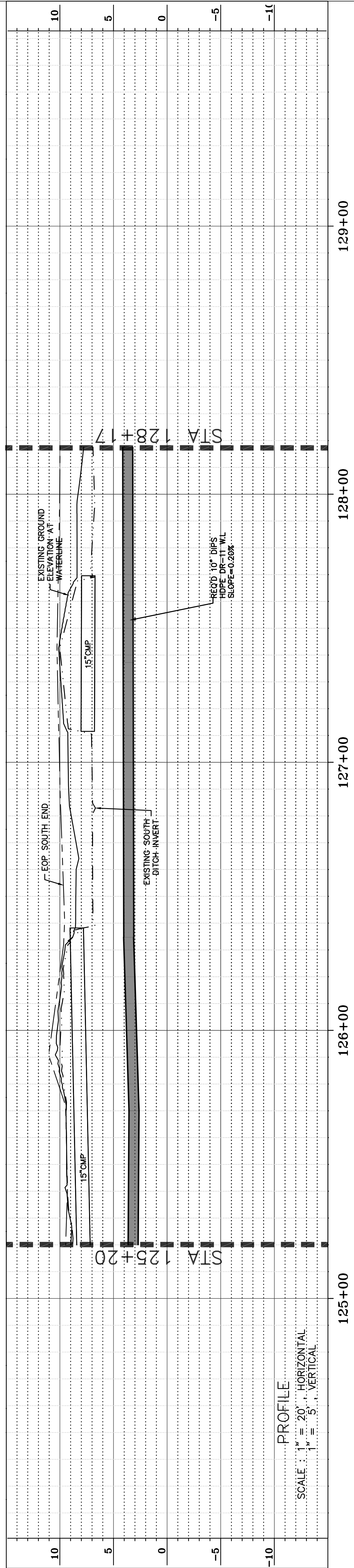
**S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN**

**PLAN AND PROFILE**

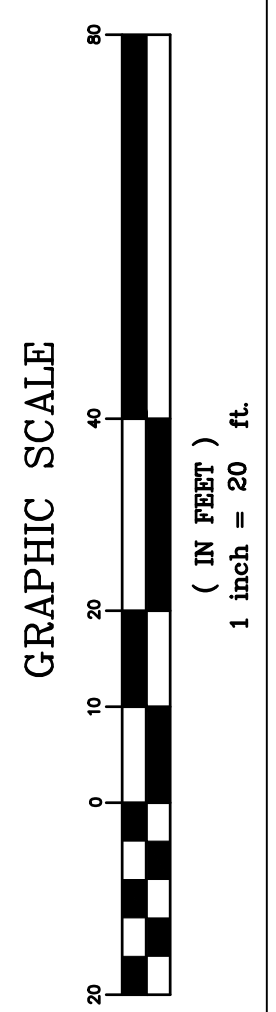
SHEET NO. **10**



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



**PROFILE**  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL

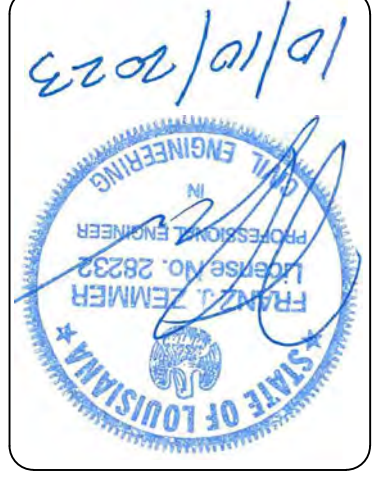




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

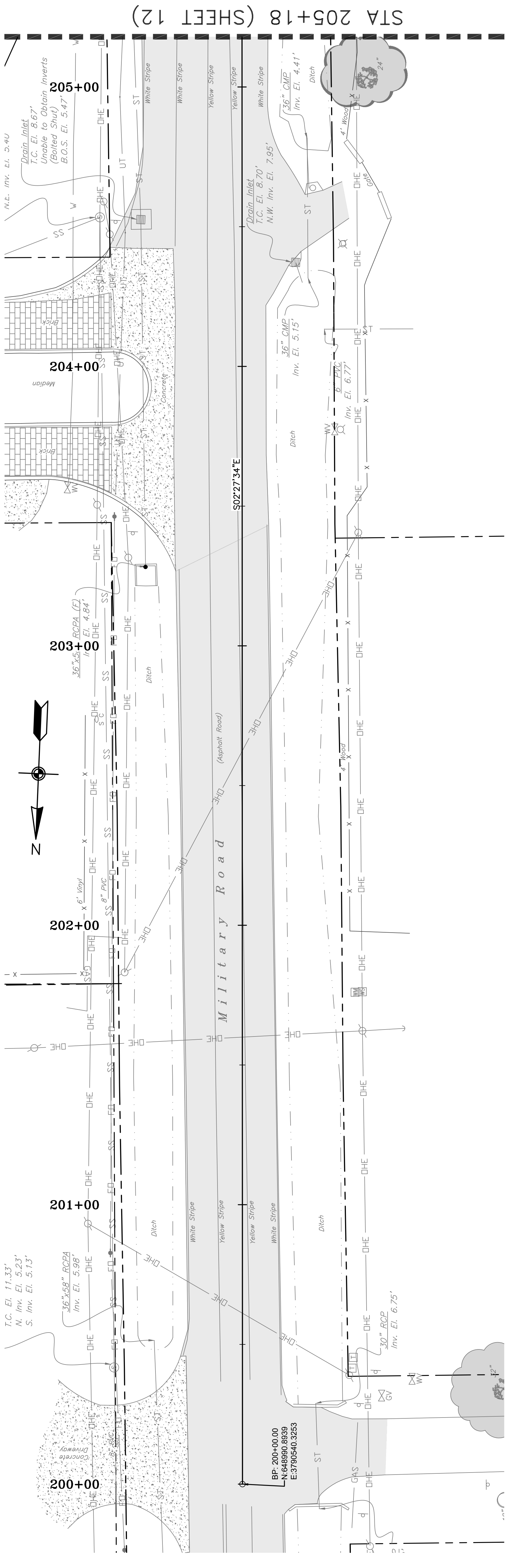
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
SUBMITTED BY: RCLC	APPROVED BY: CPT
SCALE: ANSI D	



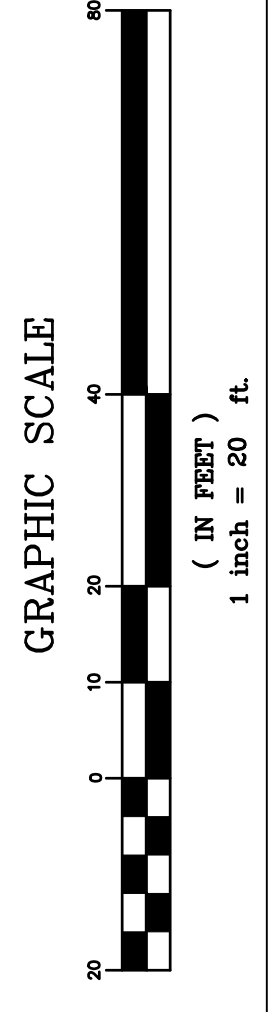
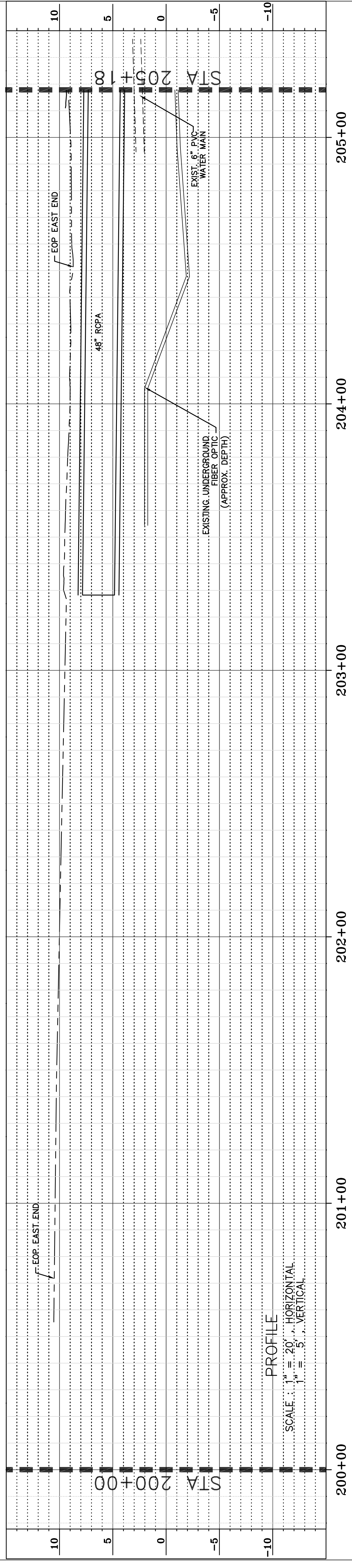
S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 11



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.

NOTE: NO REQUIRED WORK ON THIS SHEET.



PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL



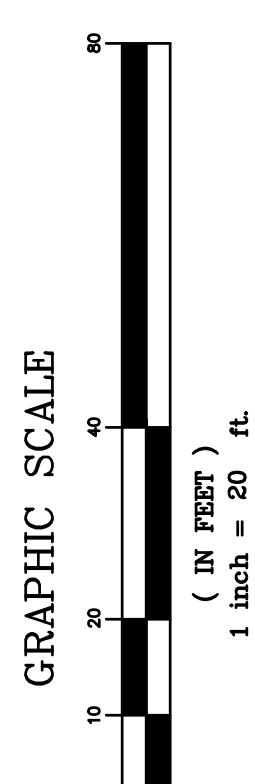
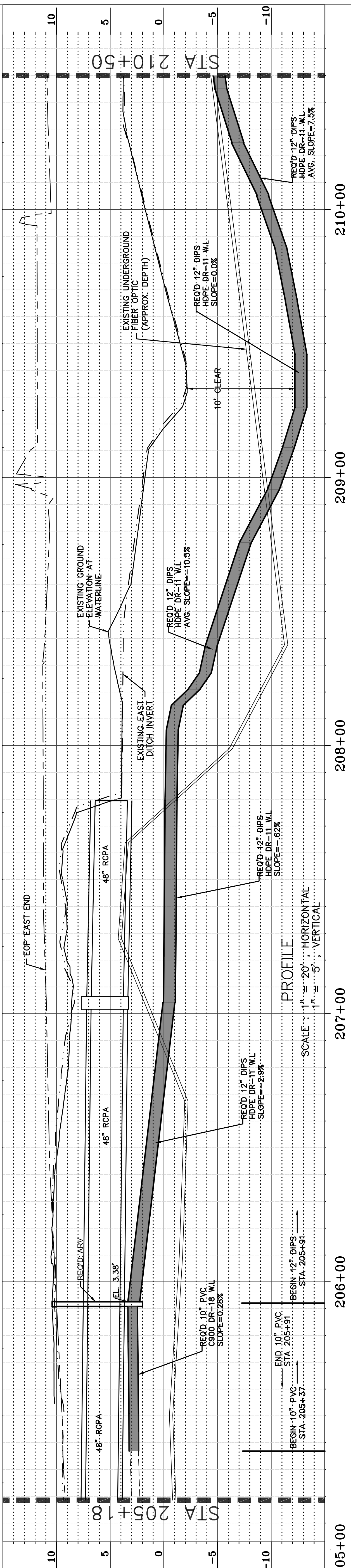
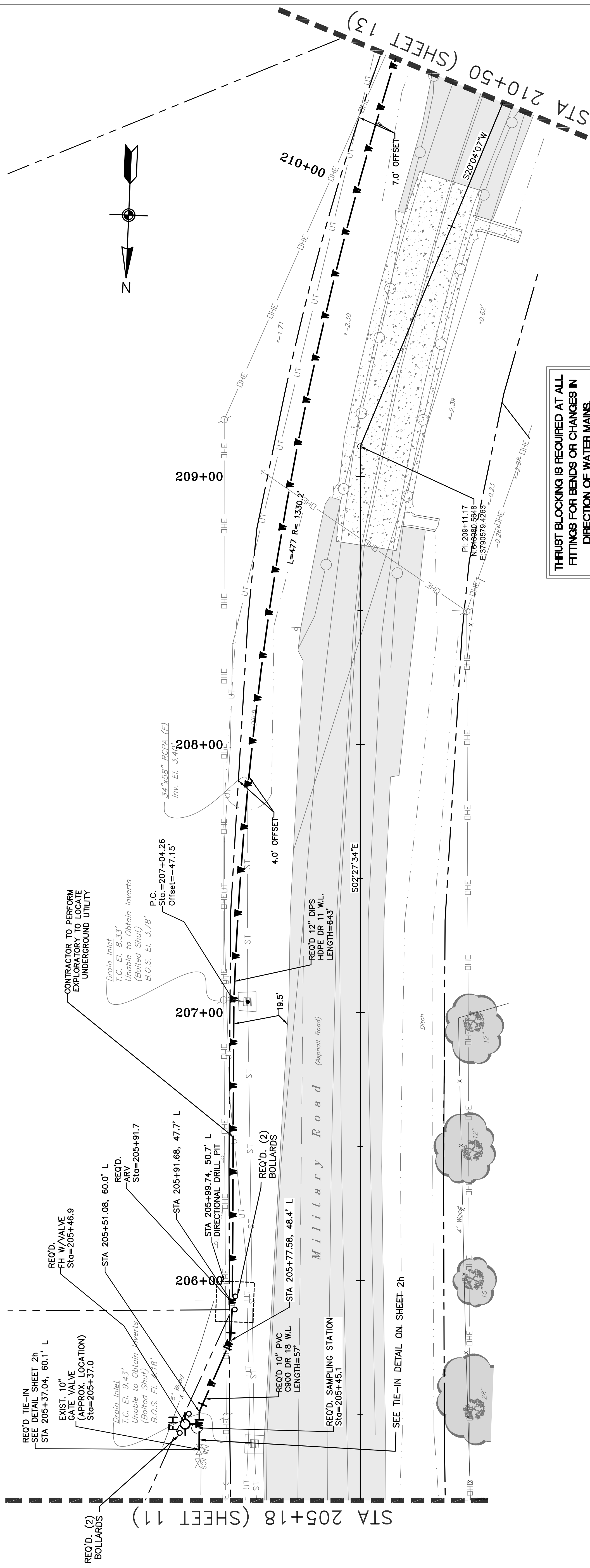
DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

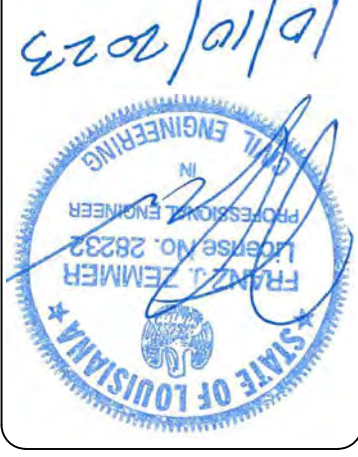




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

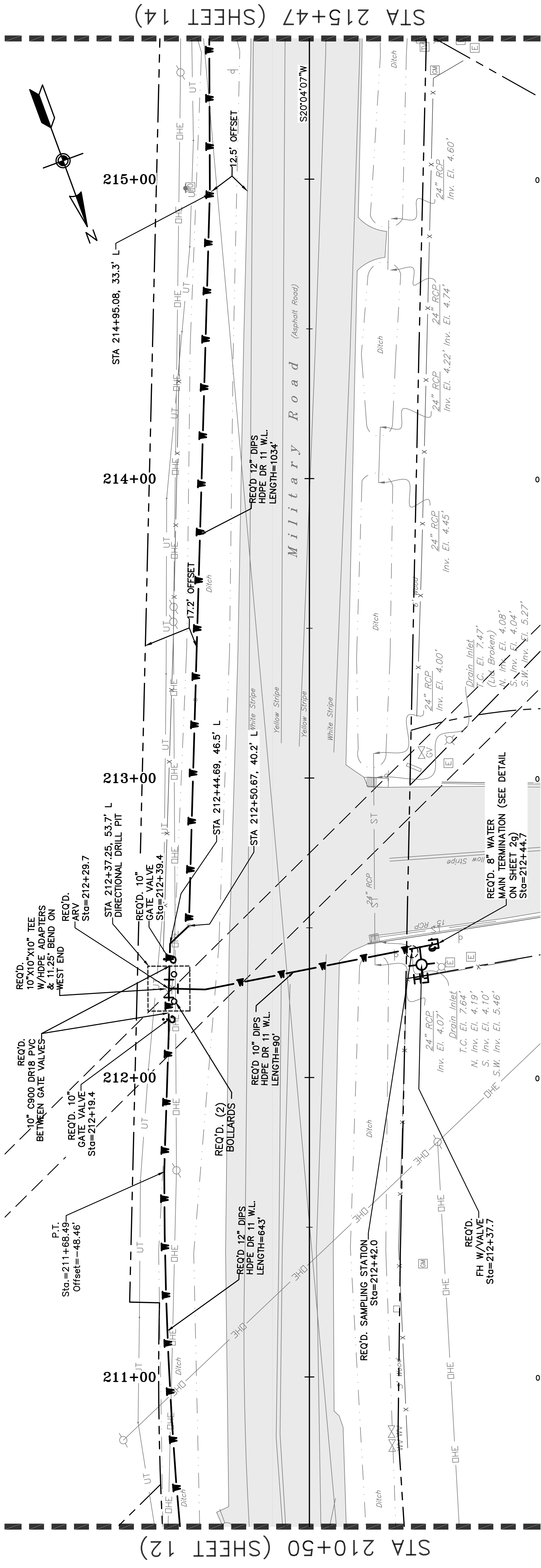
DESIGNED BY: FJZ	CHECKED BY: AKGE	DRAWN BY: ENK
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT
SHEET SIZE: ANSI D	SCALE:	



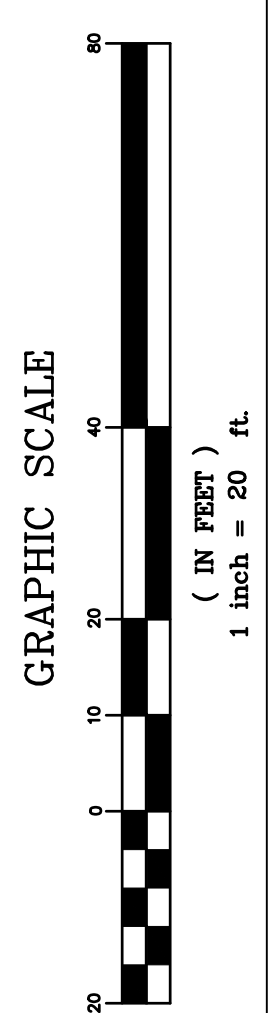
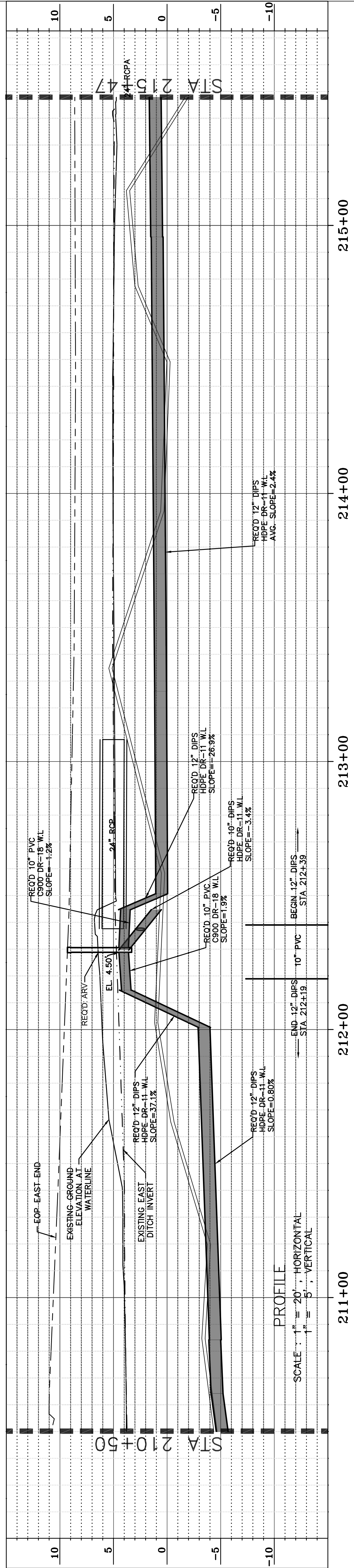
S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO.

13



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.

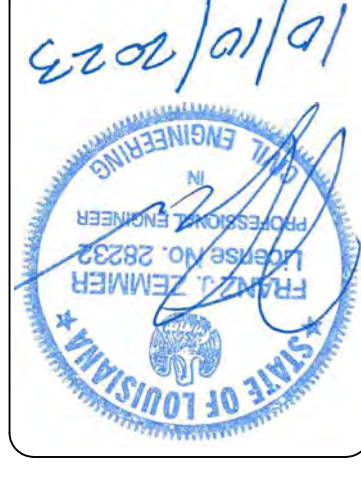




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

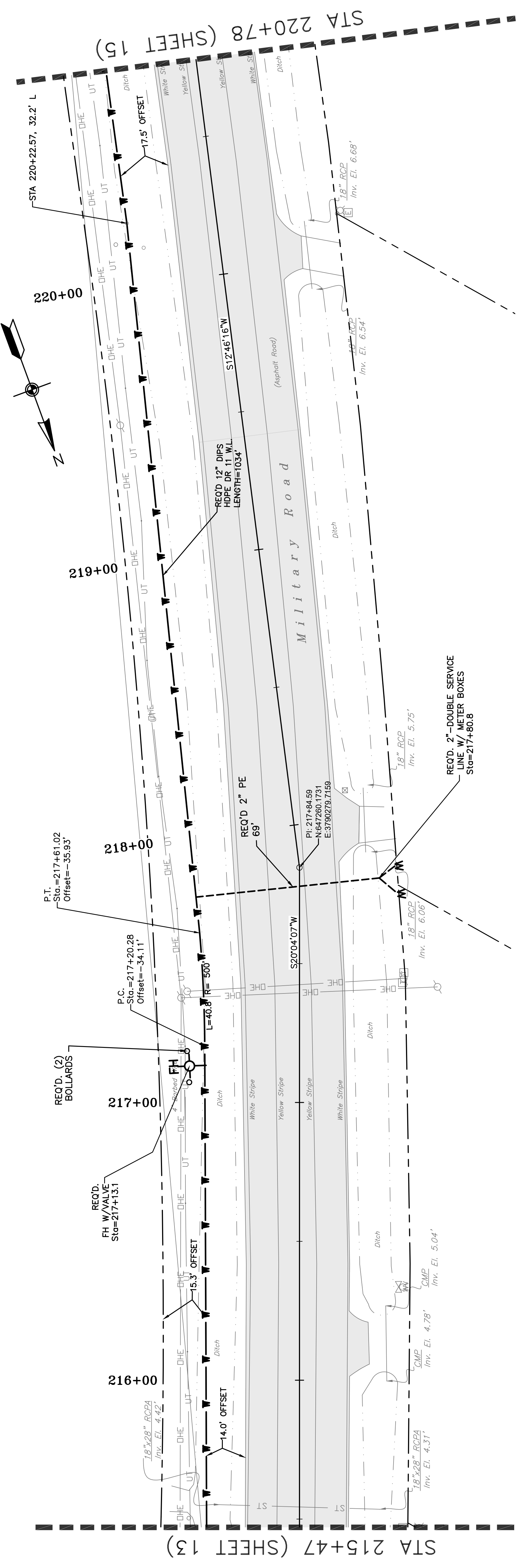
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	

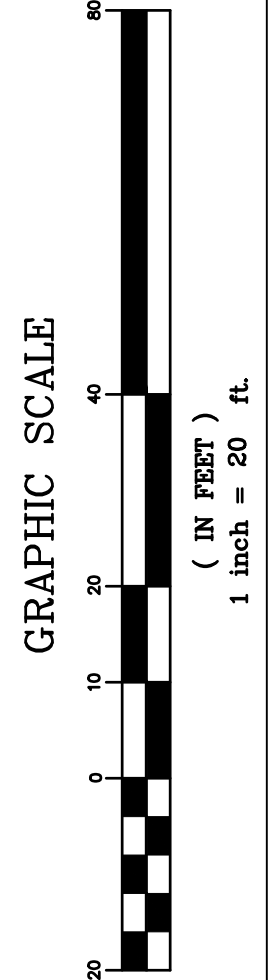
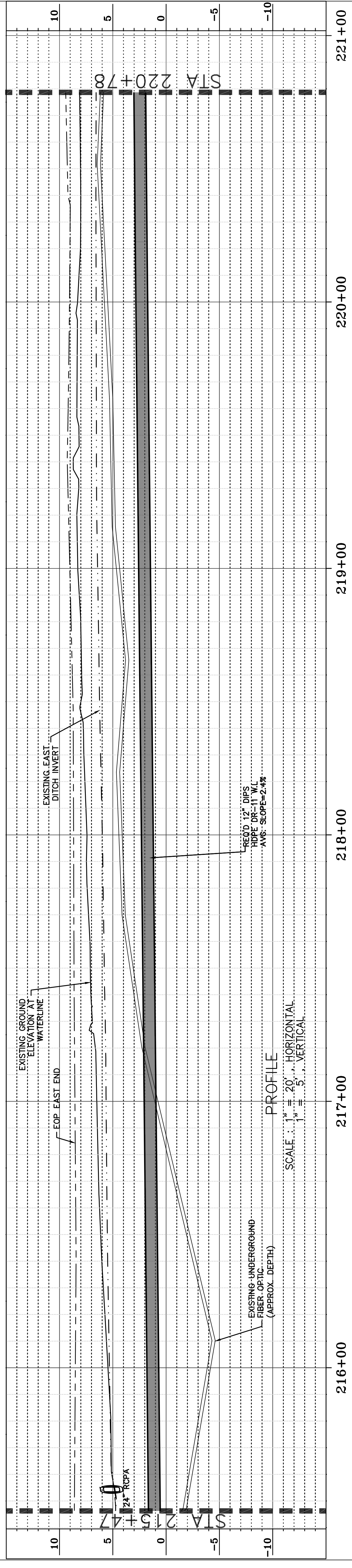


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO.  
14



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.

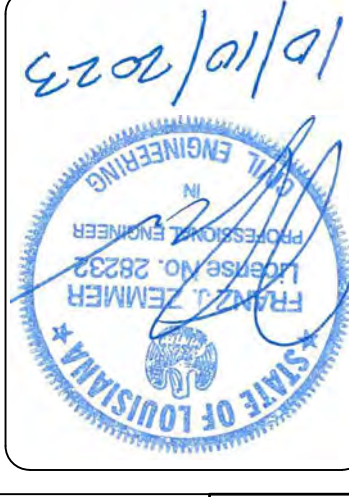




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

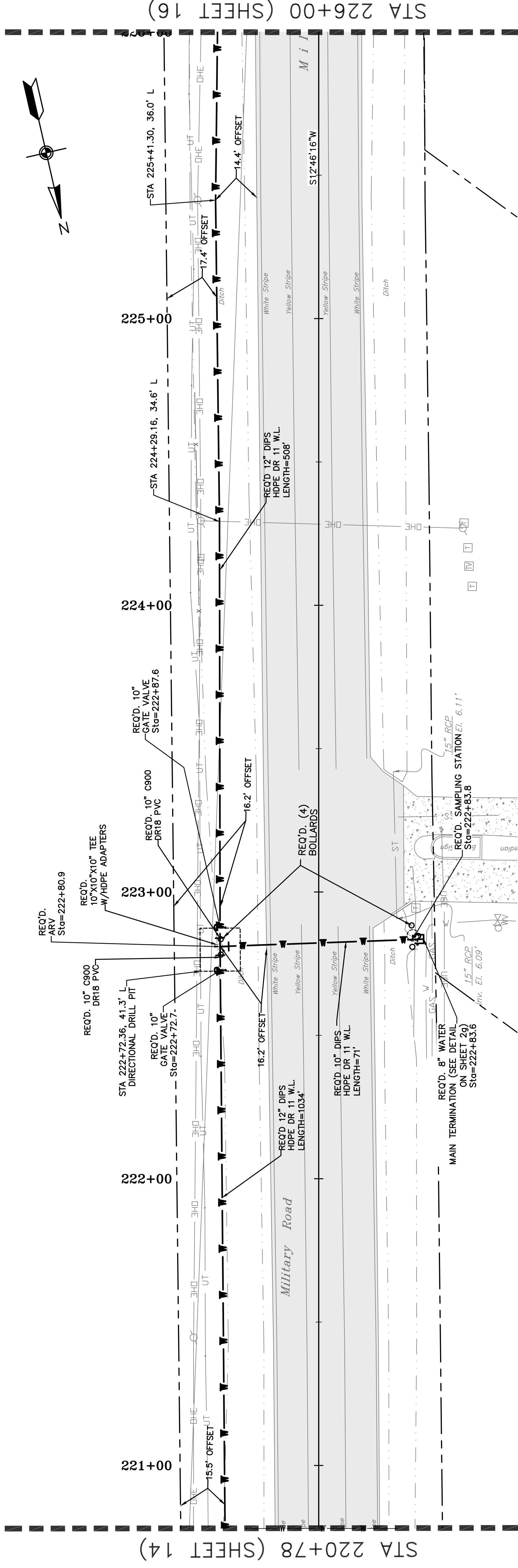
DESIGNED BY: FJZ
DRAWN BY: ENK
CHECKED BY: AKGE
SUBMITTED BY: RCLC
PROJECT No.: 301-023-002
ISSUE DATE: 10.10.2023
APPROVED BY: CPT
SHEET SIZE: ANSI D
SCALE:



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO.

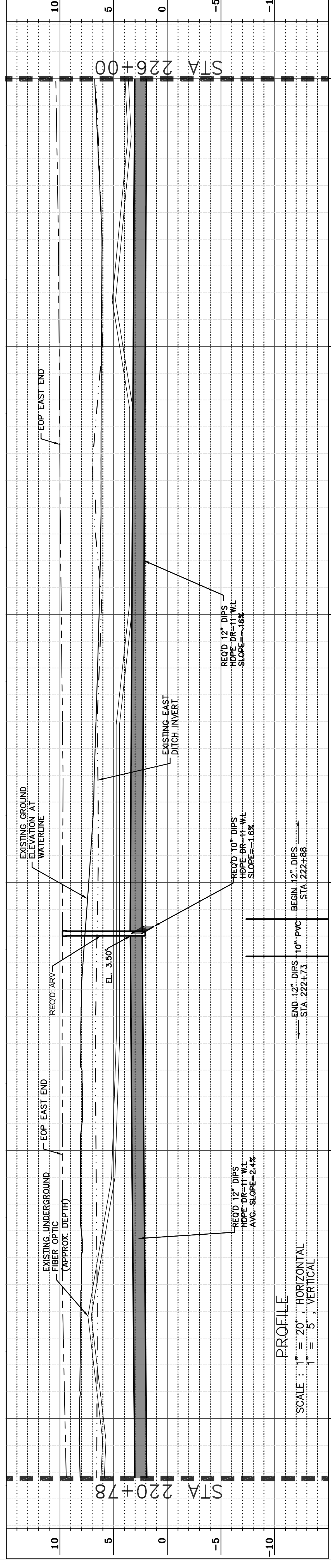
15



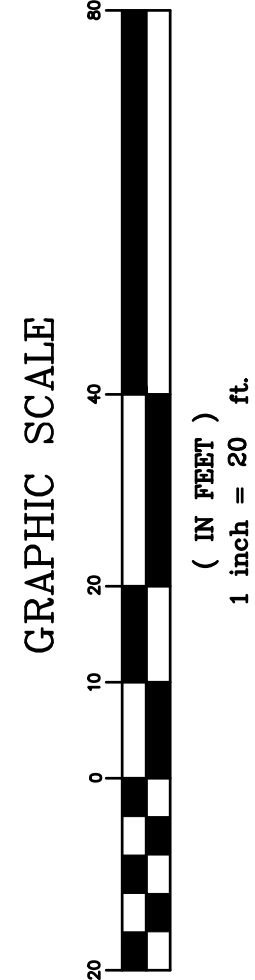
STA 220+78 (SHEET 14)

STA 226+00 (SHEET 16)

THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



PROFILE  
SCALE : 1" = 20' HORIZONTAL  
1" = 5' VERTICAL

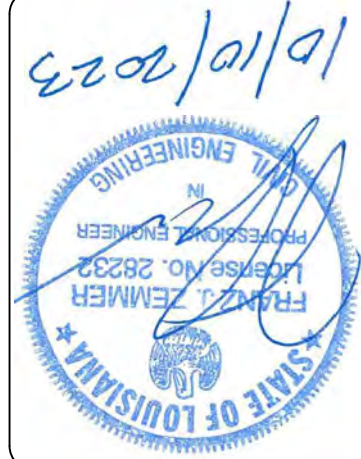




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

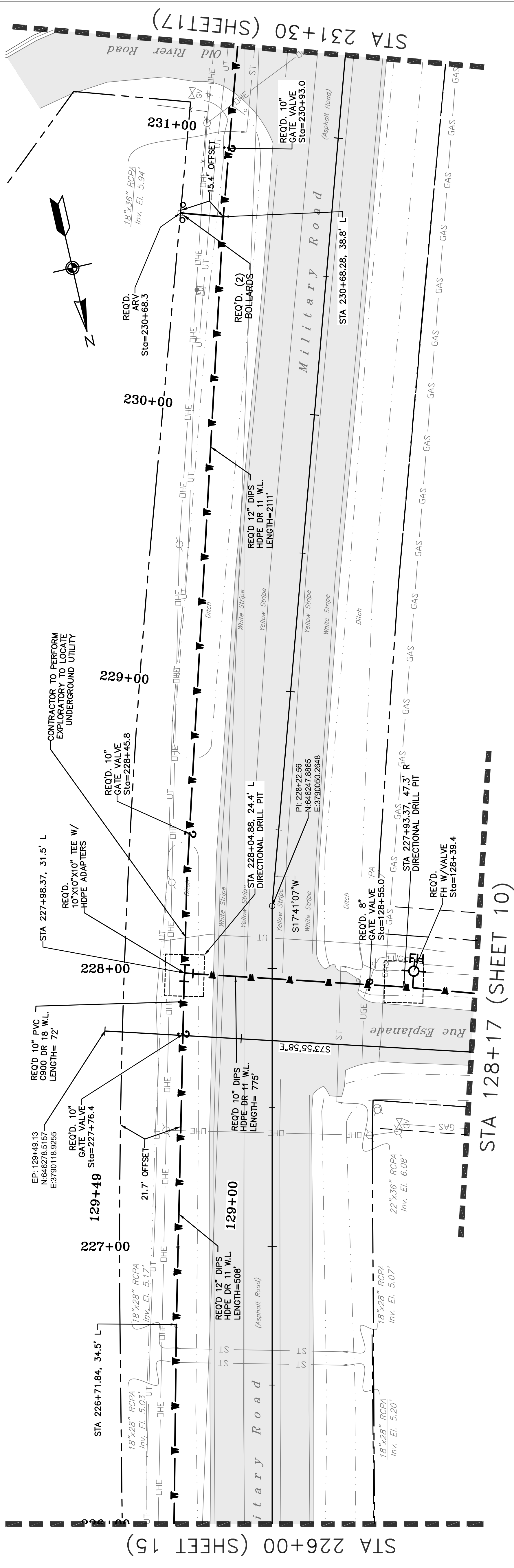
NO.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
DRAWN BY: ENK	APPROVED BY: CPT
SUBMITTED BY: RCLC	SHEET SIZE: ANSI D
SCALE:	

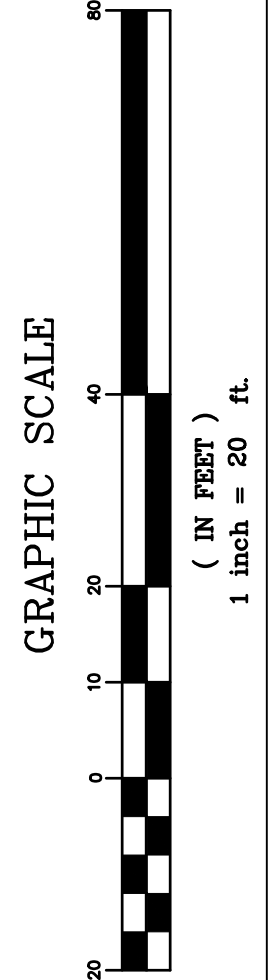
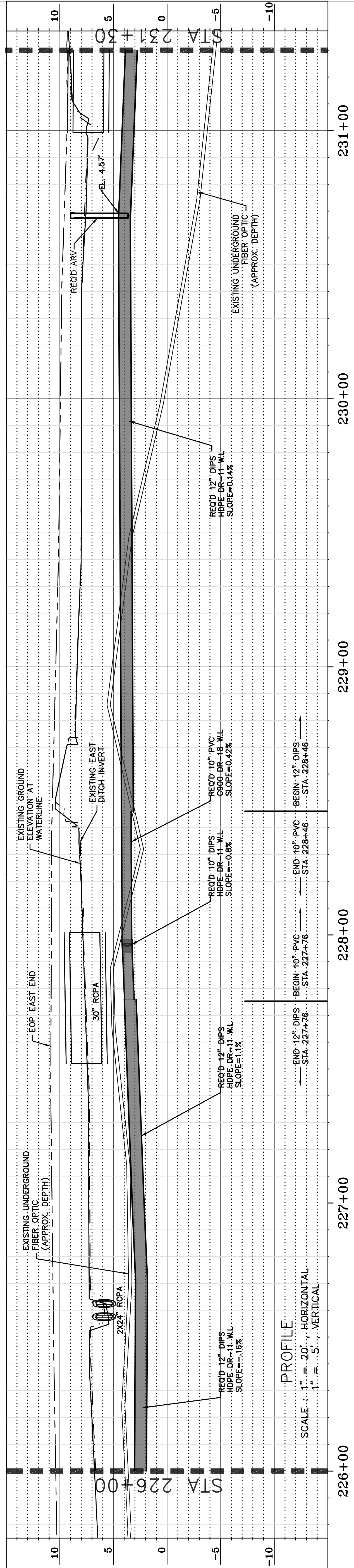


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 16



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



STA 226+00 (SHEET 15)

STA 128+17 (SHEET 10)

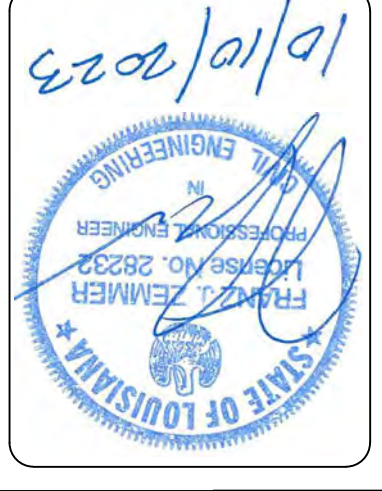
PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

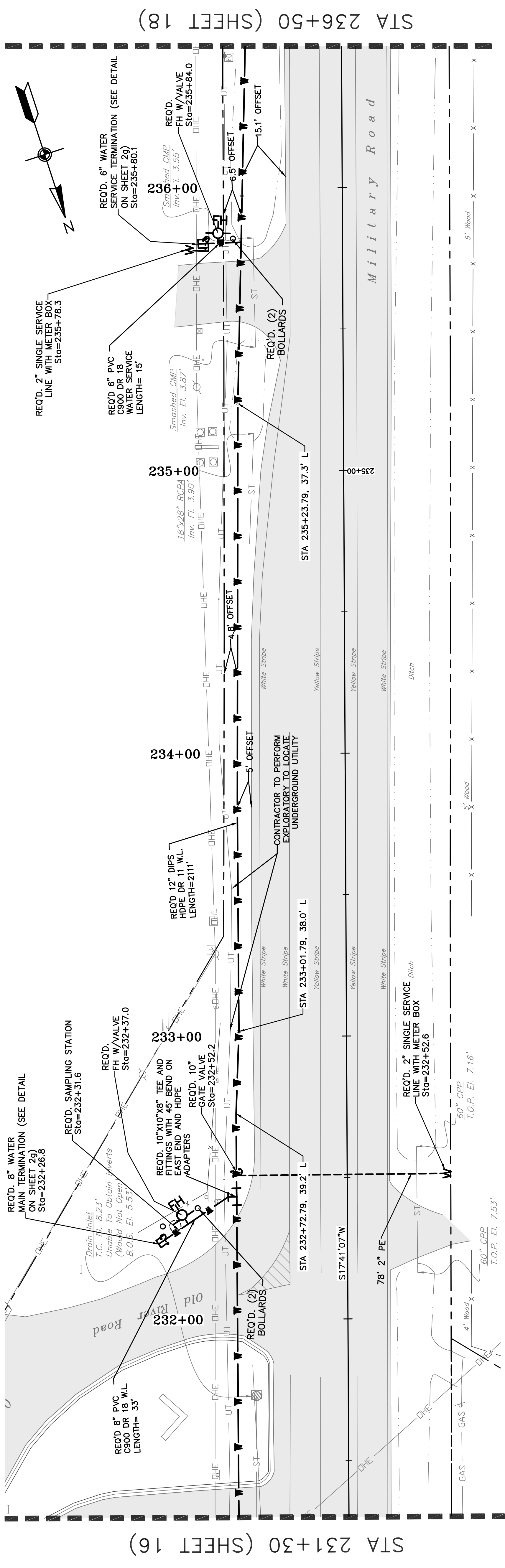
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE	DRAWN BY: ENK	PROJECT No.: 301-023-002	ISSUE DATE: 10/10/2023	APPROVED BY: CPT	SHEET SIZE: ANSI D	SCALE:
SUBMITTED BY: RCLC							



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

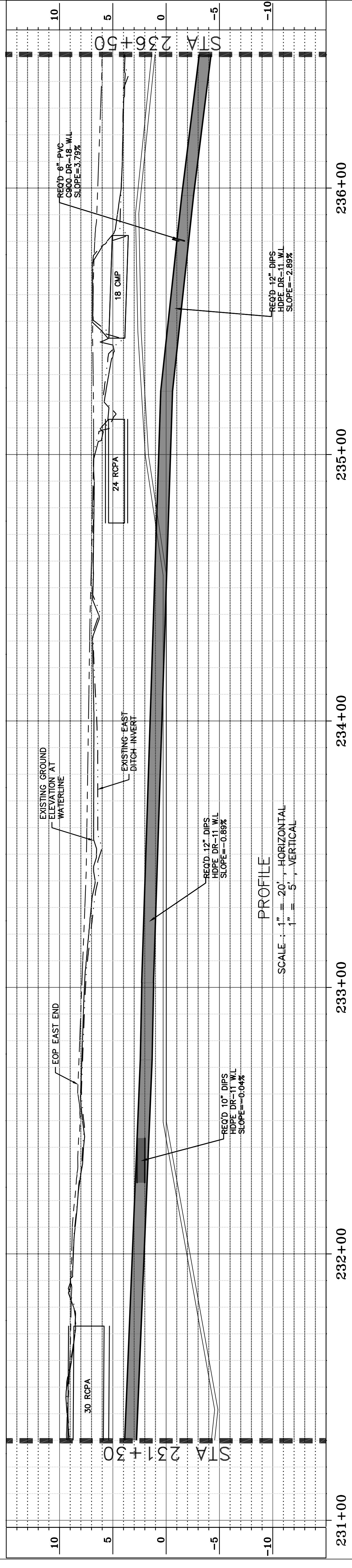
SHEET NO. 17



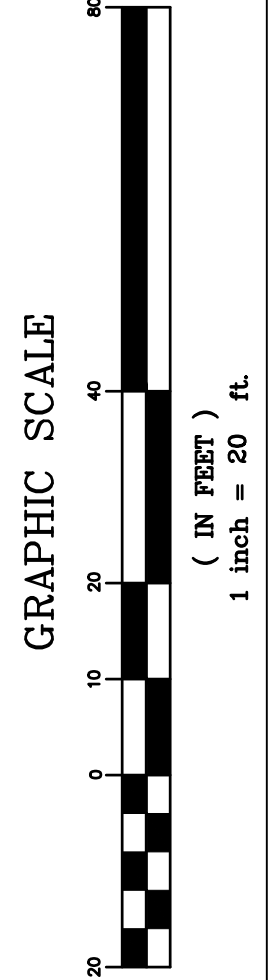
STA 231+30 (SHEET 16)

STA 236+50 (SHEET 18)

THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



PROFILE  
SCALE: 1" = 20', HORIZONTAL  
1" = 5', VERTICAL







DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

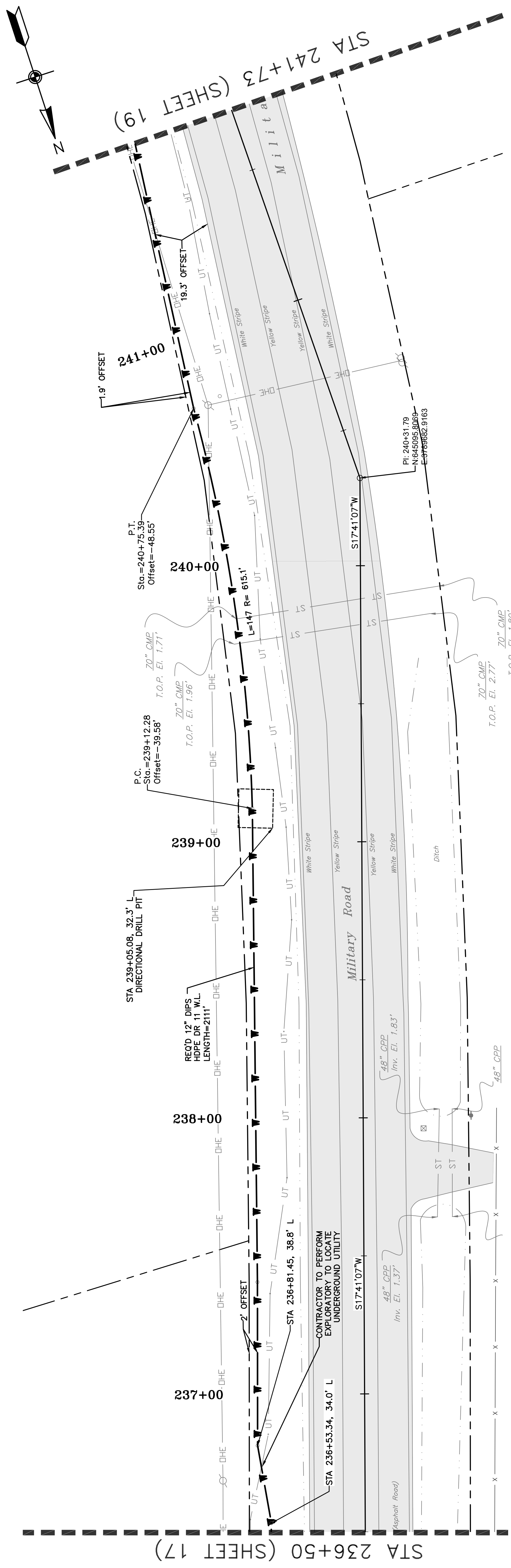
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: ENK
DRAWN BY: AKGE	SUBMITTED BY: RCLC
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023
APPROVED BY: CPT	SHEET SIZE: ANSI D
SCALE:	

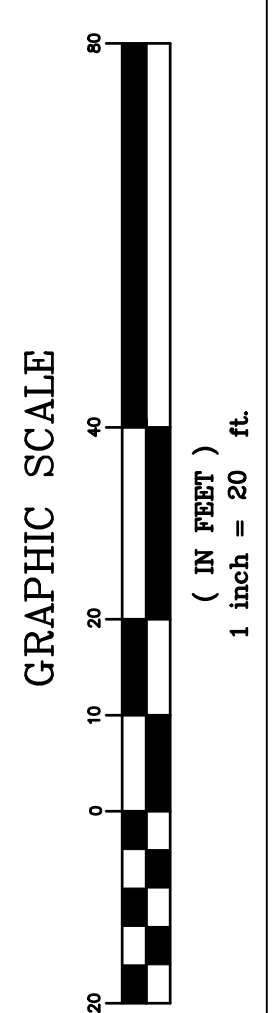
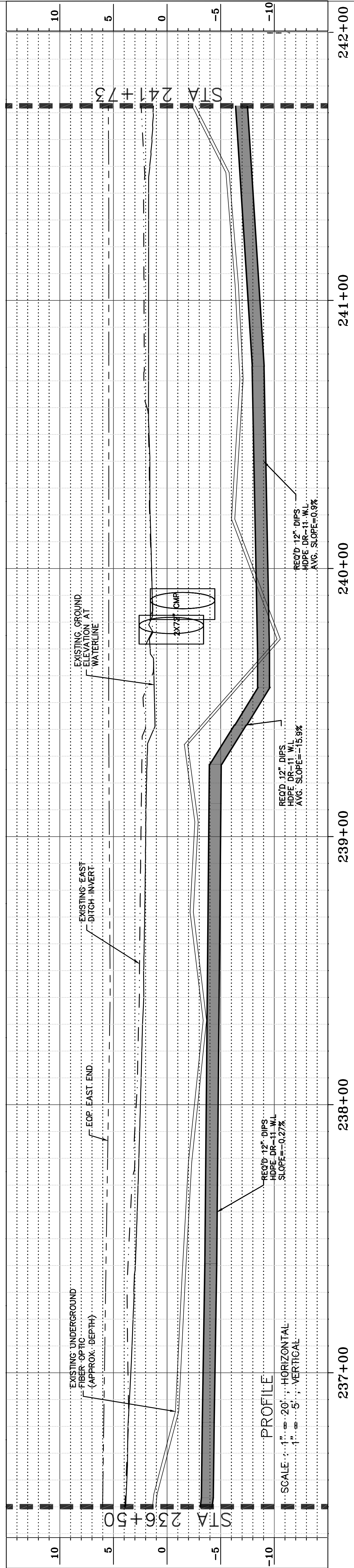


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 18



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.

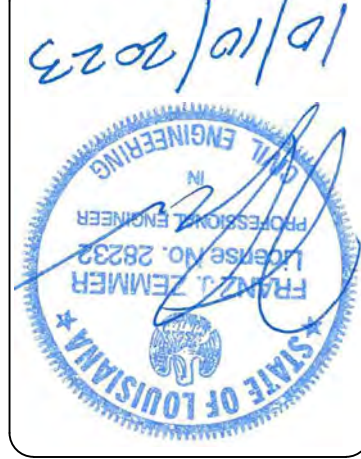




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

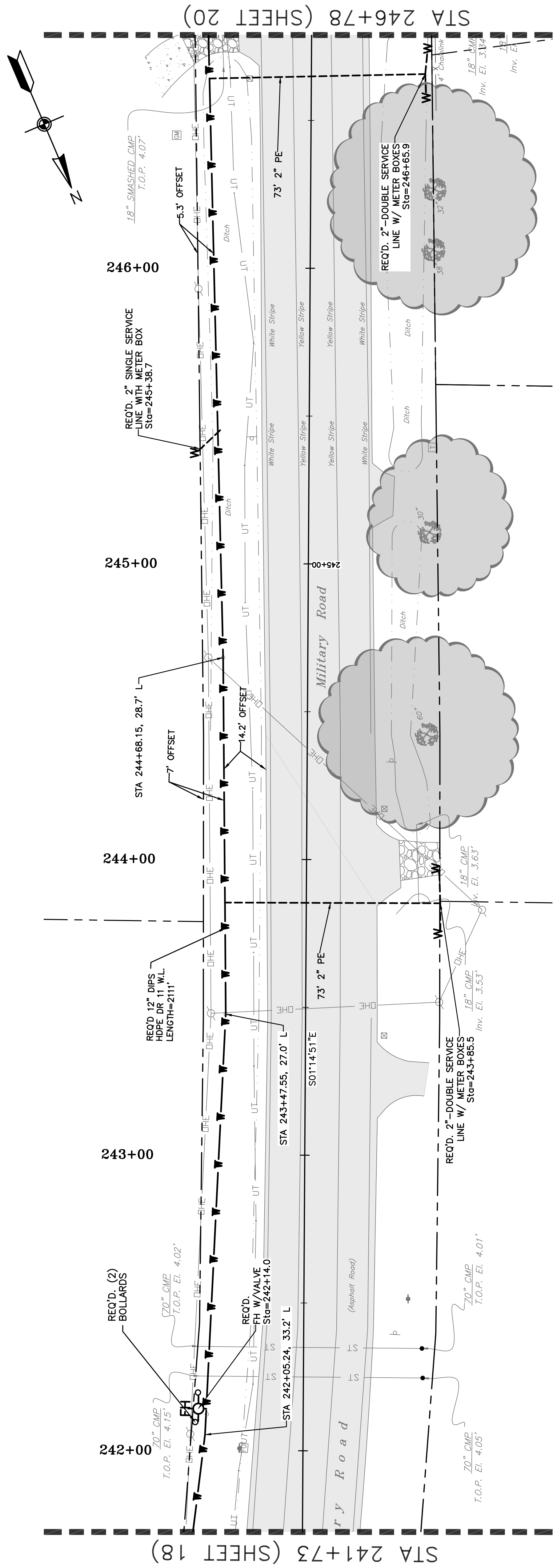
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: ENK
DRAWN BY: AKGE	SUBMITTED BY: RCLC
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023
APPROVED BY: CPT	SHEET SIZE: ANSI D
SCALE:	

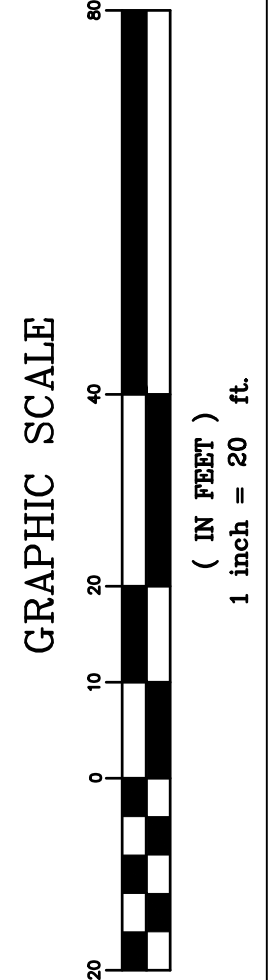
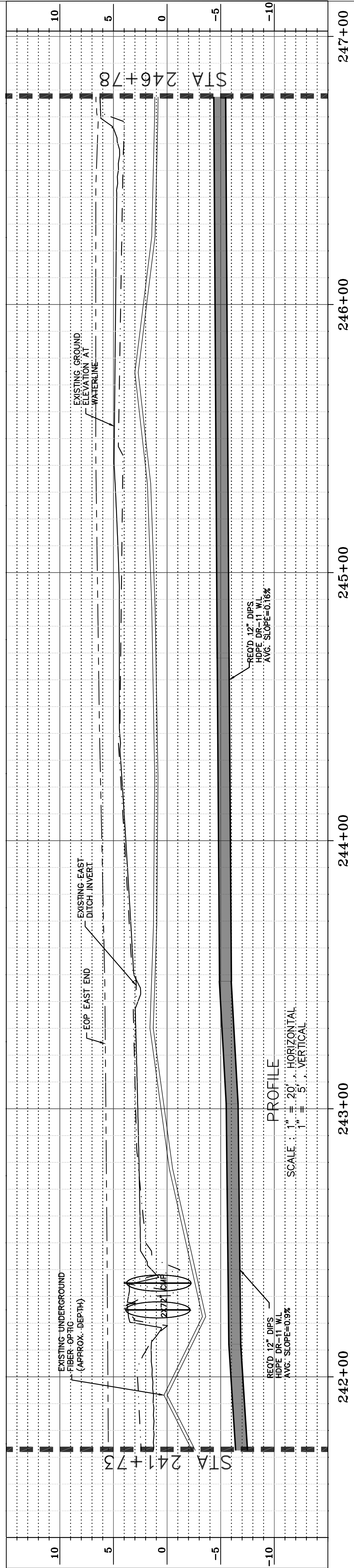


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 19



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.





DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE

DESIGNED BY: FJZ	CHECKED BY: AKGE	PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT	SHEET SIZE: ANSI D	SCALE:
DRAWN BY: ENK	CHECKED BY: AKGE	PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT	SHEET SIZE: ANSI D	SCALE:
SUBMITTED BY: RCLC	CHECKED BY: AKGE	PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT	SHEET SIZE: ANSI D	SCALE:

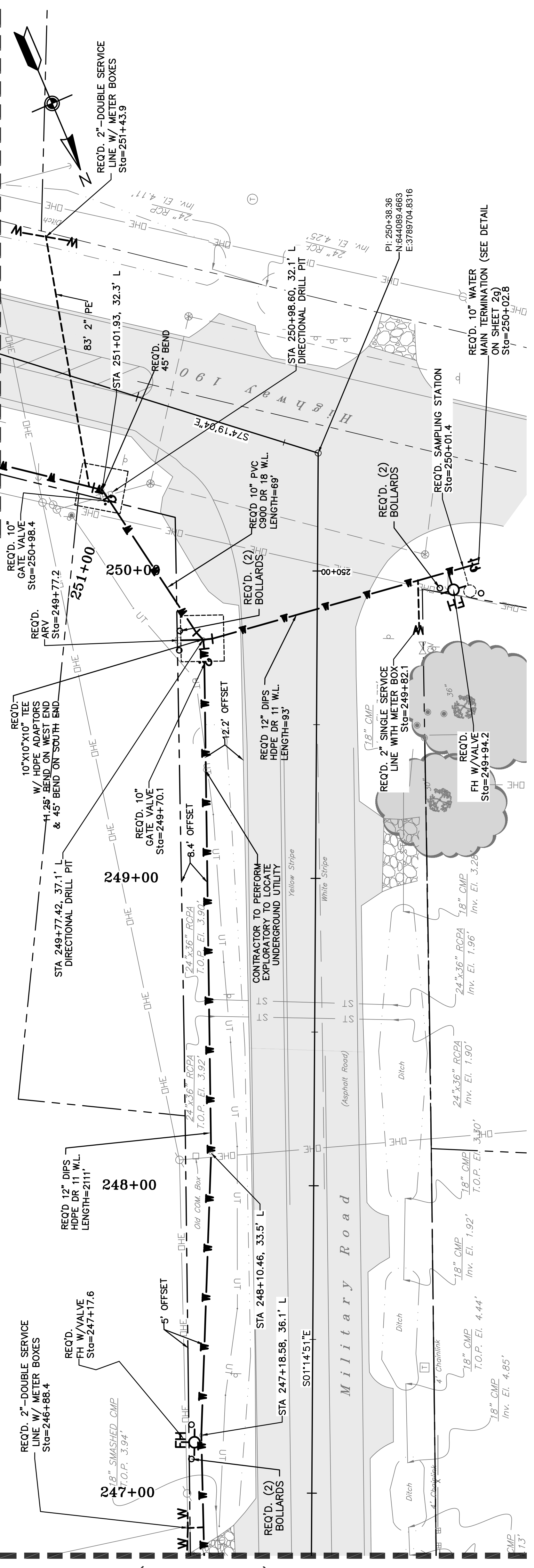


S. MILITARY RD US 190 &  
RUE ESPINADE WATER MAIN  
PLAN AND PROFILE

SHEET NO.  
20

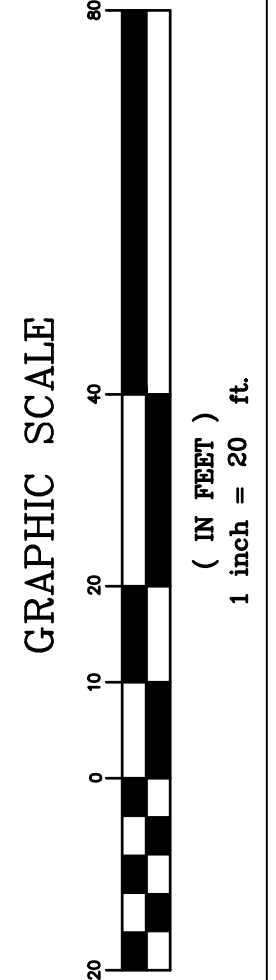
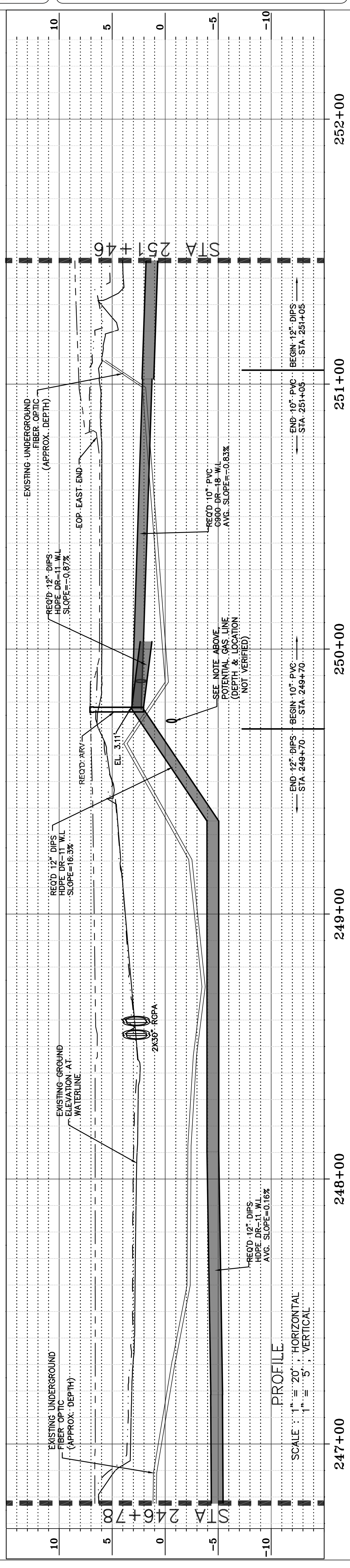
STA 251+46 (SHEET 21)

STA 246+78 (SHEET 19)



**NOTE:**  
GAS LINE MAY CROSS MILITARY ROAD NEAR INTERSECTION OF  
SHORTCUT HIGHWAY. CONFIRM LOCATION AND DEPTH OF GAS LINE  
PRIOR TO WORKING IN THIS AREA.

**THRUST BLOCKING IS REQUIRED AT ALL  
FITTINGS FOR BENDS OR CHANGES IN  
DIRECTION OF WATER MAINS.**

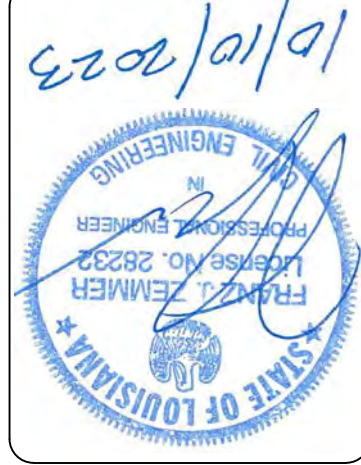




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

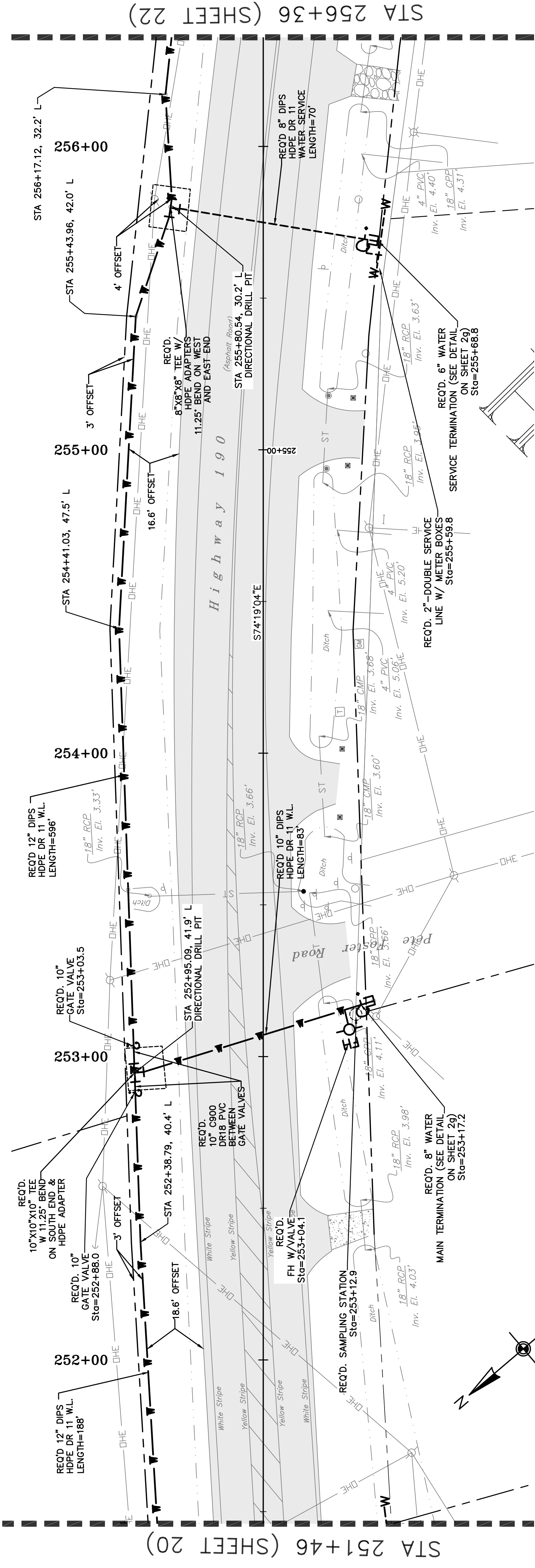
NO.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
DRAWN BY: ENK	APPROVED BY: CPT
SUBMITTED BY: RCLC	SHEET SIZE: ANSI D
SCALE:	

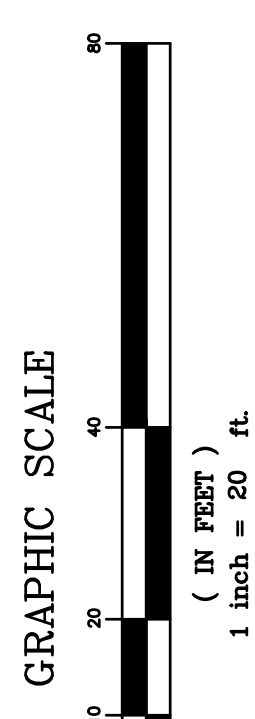
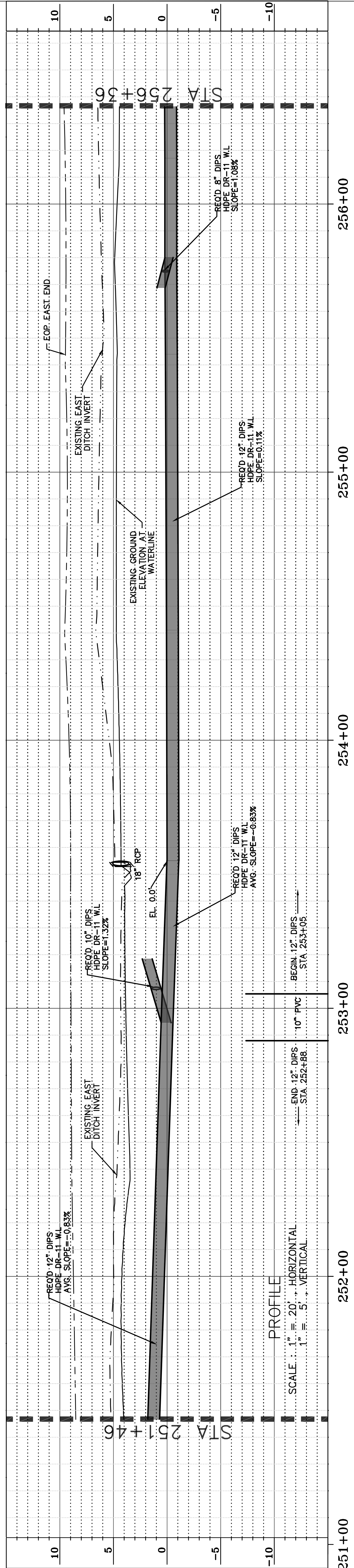


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 21



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



STA 256+36 (SHEET 22)

STA 251+46 (SHEET 20)

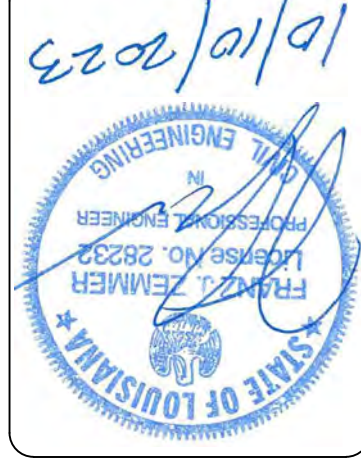
PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

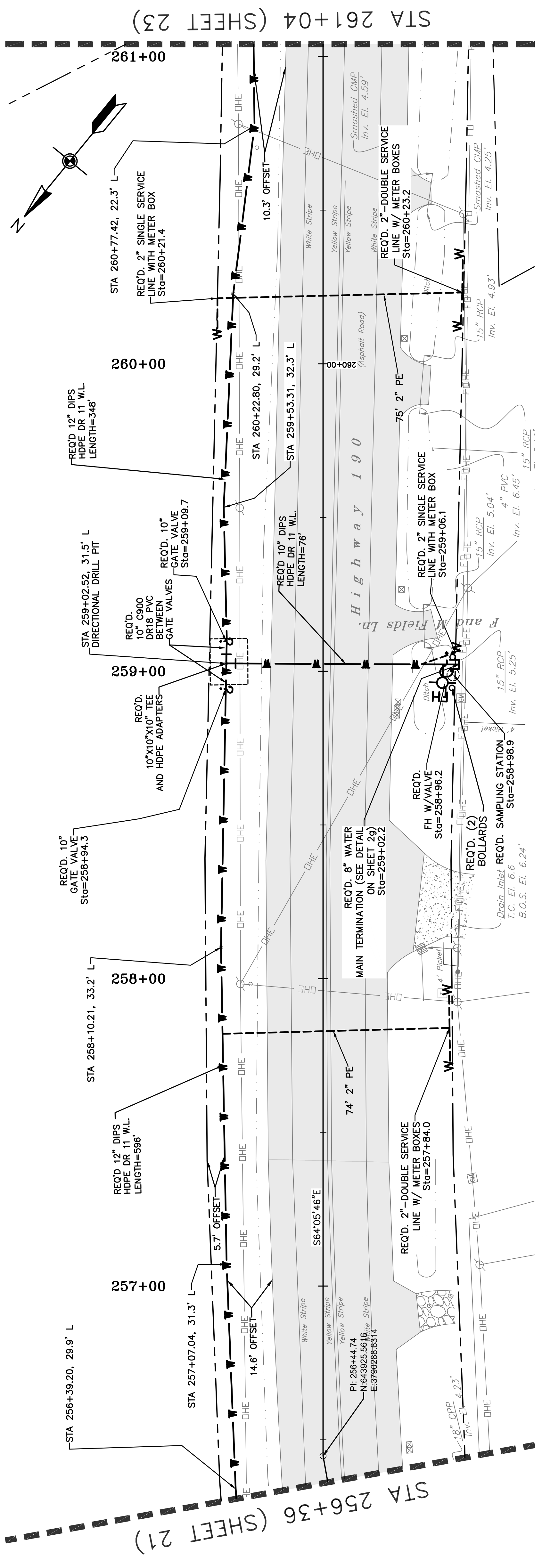
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE	DRAWN BY: ENK
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT
SCALE: ANSI D		

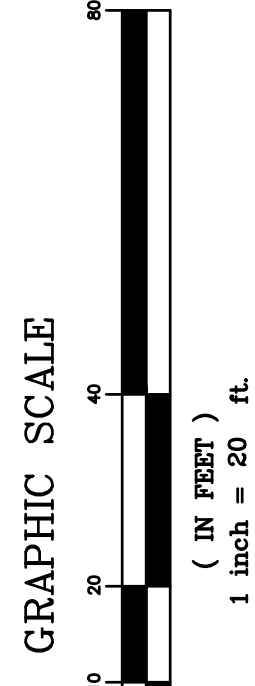
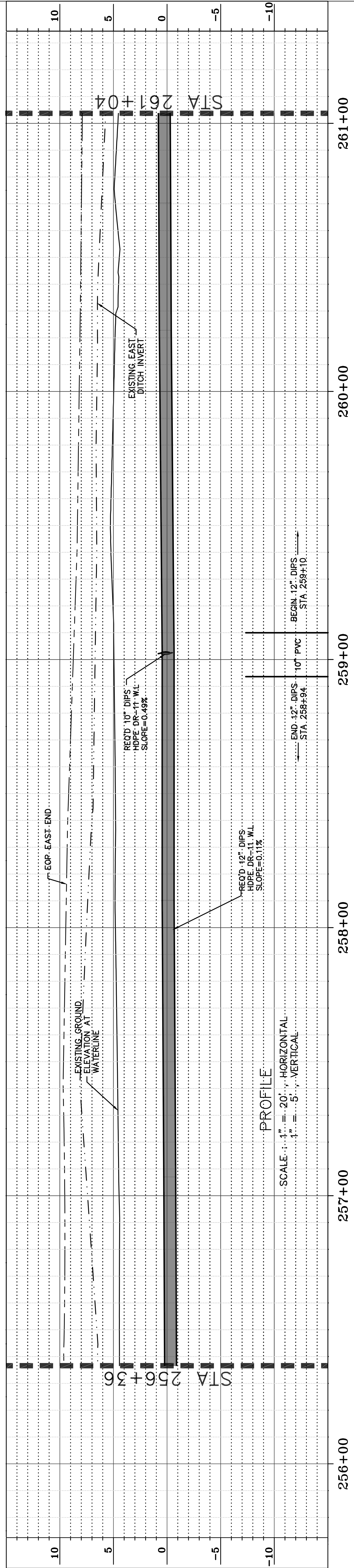


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 22



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.

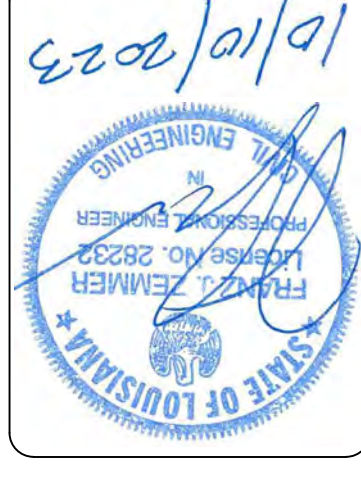




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

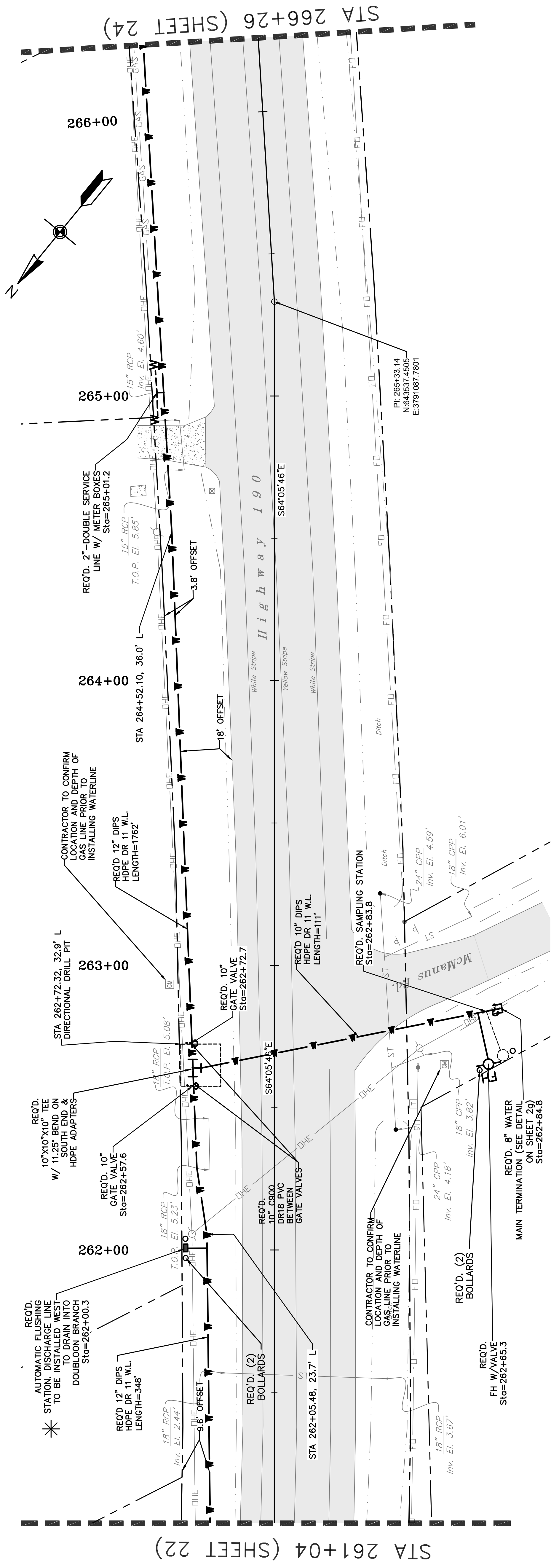
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: ENK
DRAWN BY: ENK	APPROVED BY: CPT
SUBMITTED BY: RCLC	ISSUE DATE: 10.10.2023
PROJECT No.: 301-023-002	SHEET SIZE: ANSI D
SCALE:	



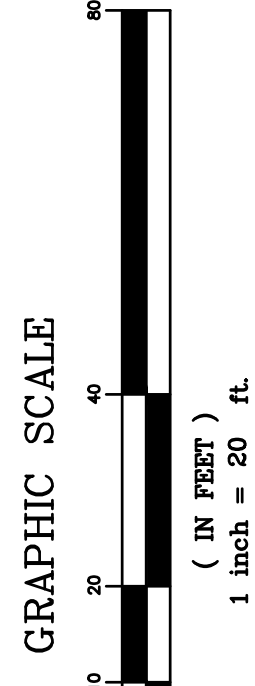
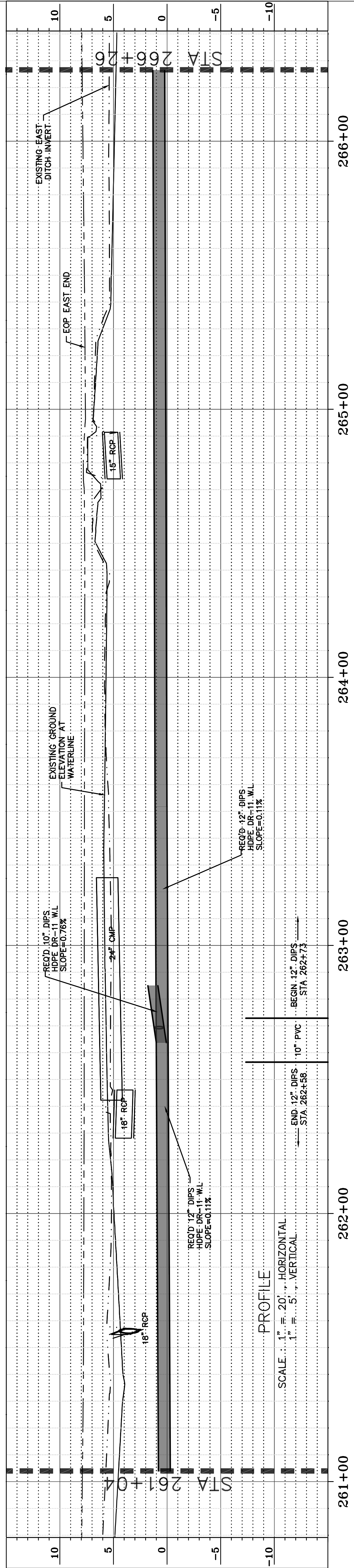
S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 23



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.

\* APPROXIMATE LOCATION. CONTRACTOR SHALL COORDINATE LOCATION WITH STP-DU PRIOR TO SETTING AUTOMATIC FLUSHING VALVE.



PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

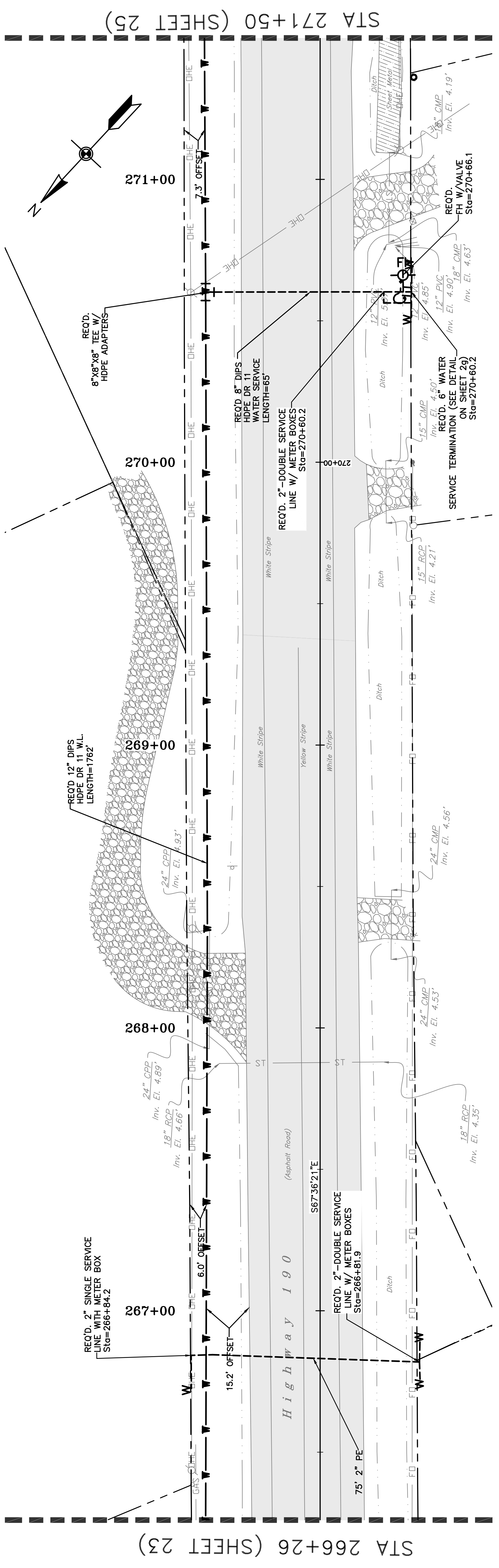
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE	PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT	SHEET SIZE: ANSI D	SCALE:
SUBMITTED BY: RCLC						



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

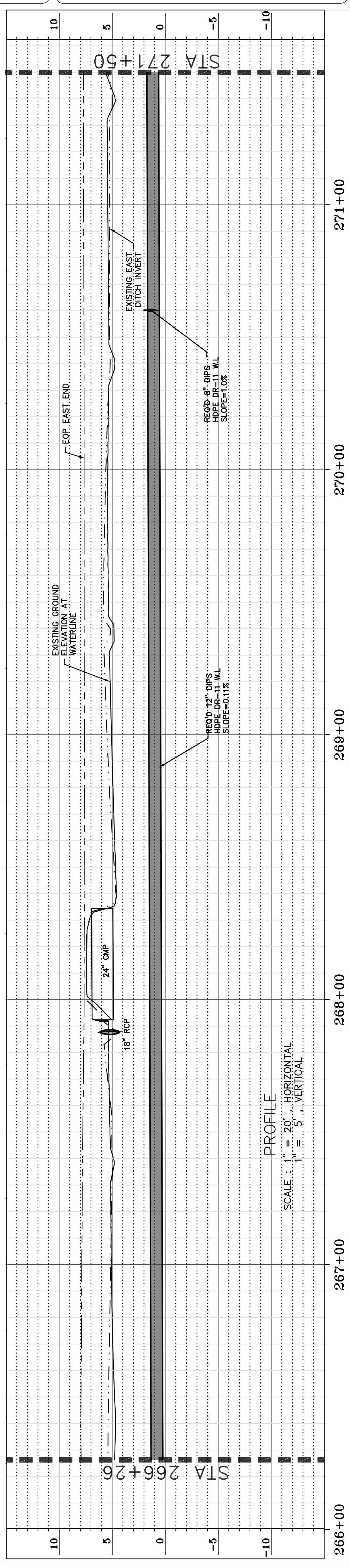
SHEET NO. 24



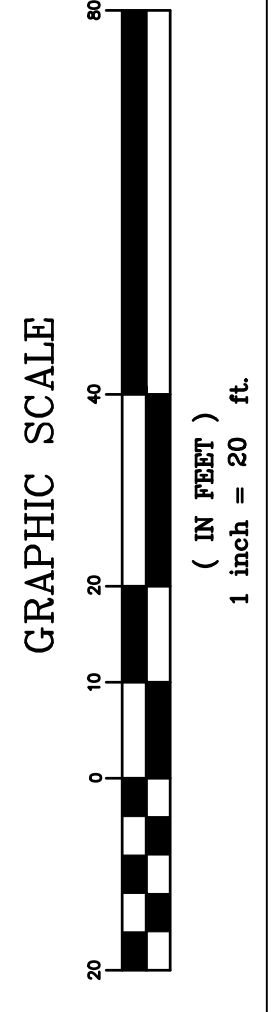
STA 266+26 (SHEET 23)

STA 271+50 (SHEET 25)

THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL

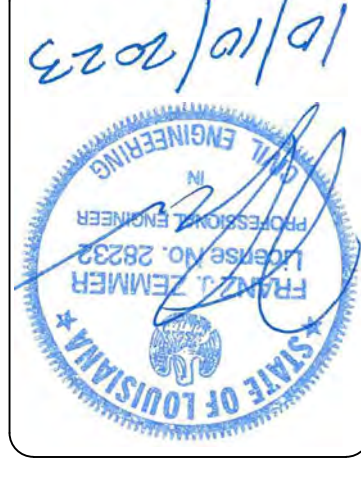




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

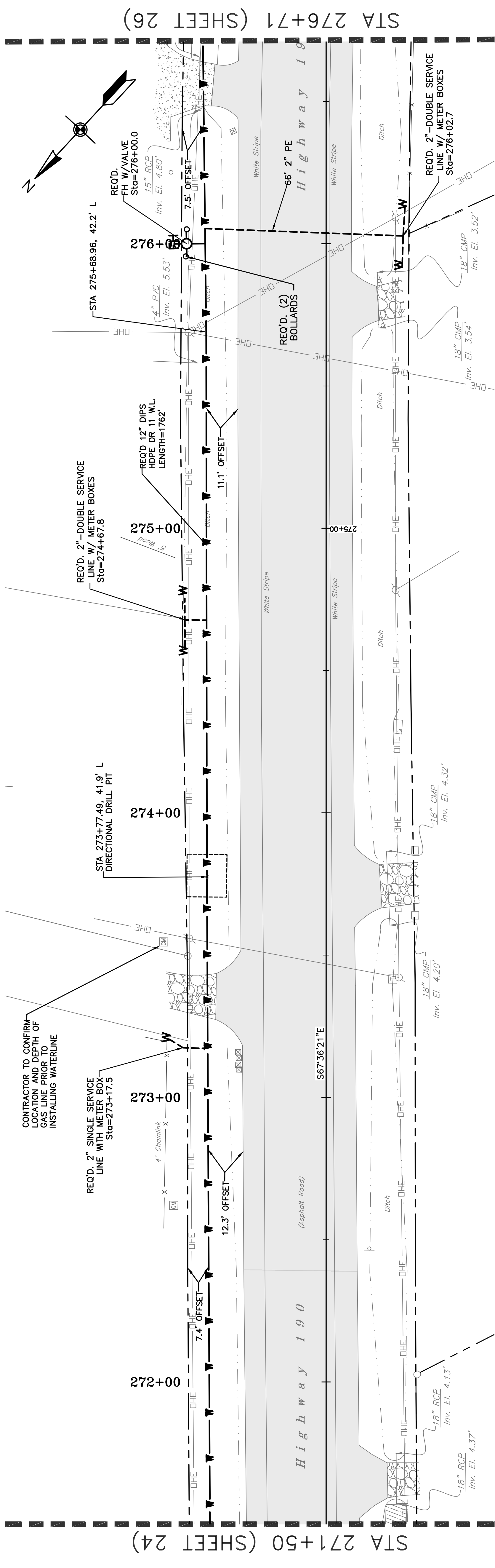
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: ENK
SUBMITTED BY: RCLC	PROJECT No.: 301-023-002
ISSUE DATE: 10.10.2023	APPROVED BY: CPT
SHEET SIZE: ANSI D	SCALE:

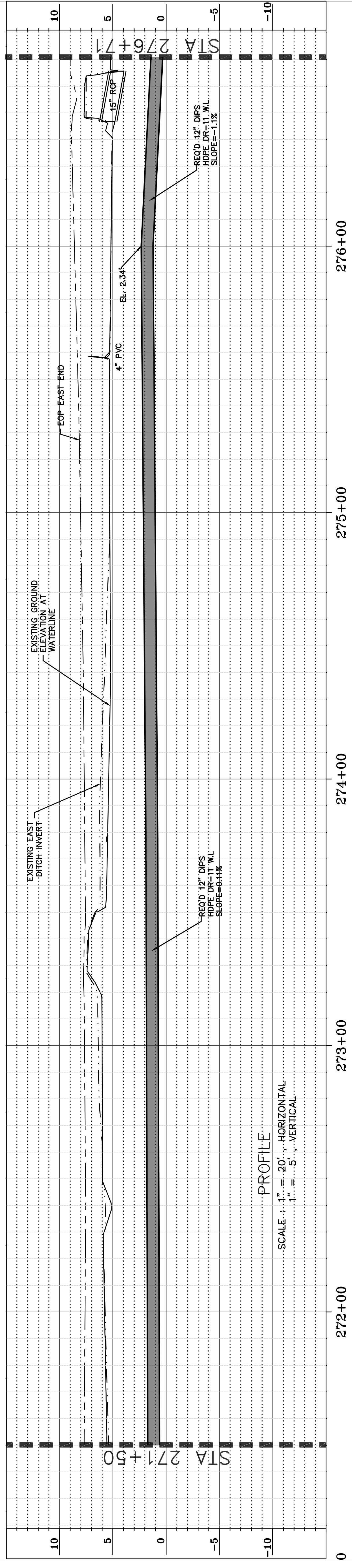


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

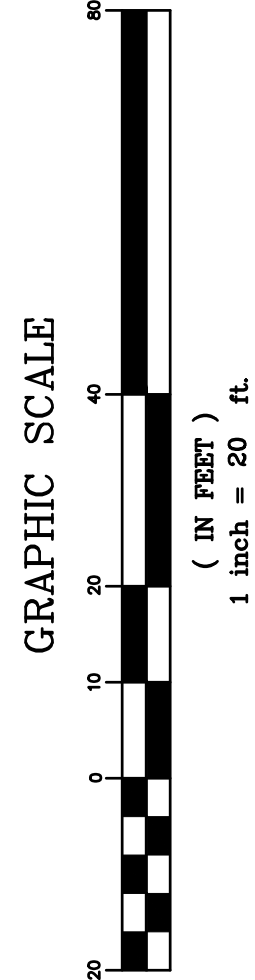
SHEET NO. 25



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL



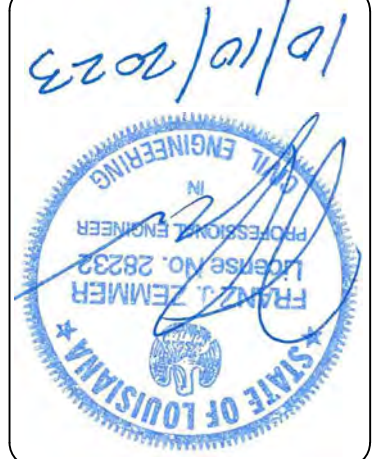




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

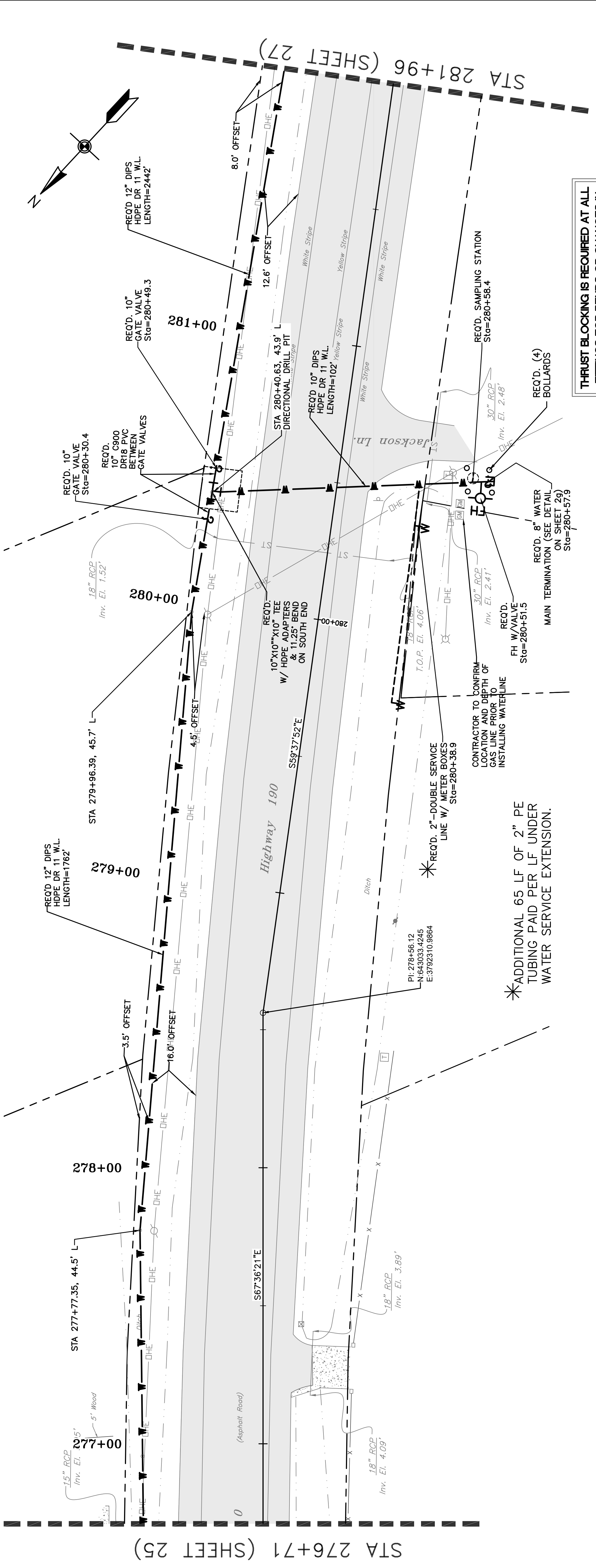
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
DRAWN BY: ENK	APPROVED BY: CPT
	SHEET SIZE: ANSI D
	SCALE:



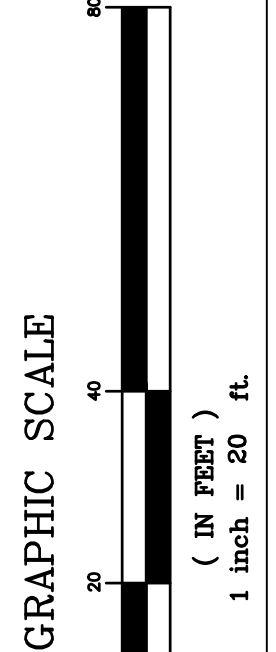
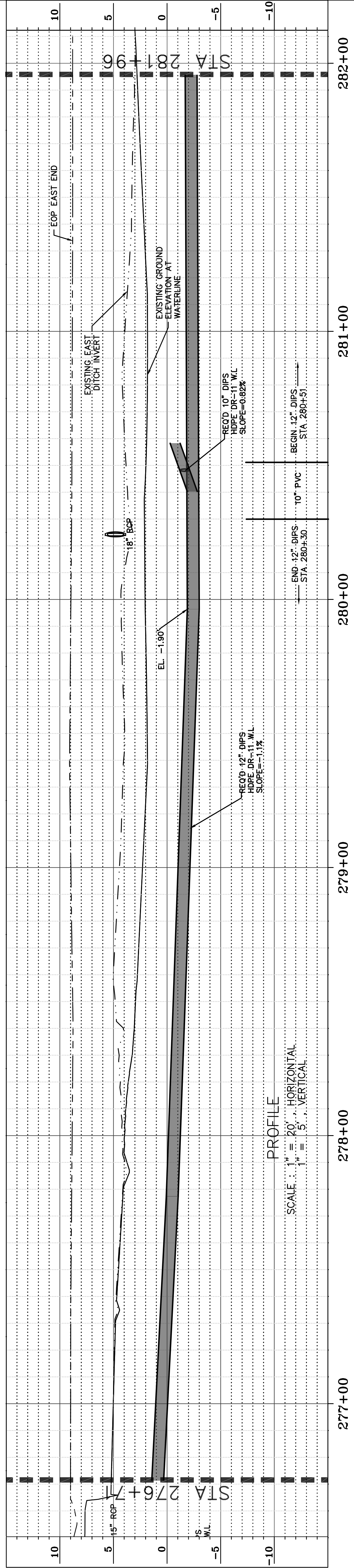
S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 26



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.

ADDITIONAL 65 LF OF 2" PE TUBING PAID PER LF UNDER WATER SERVICE EXTENSION.

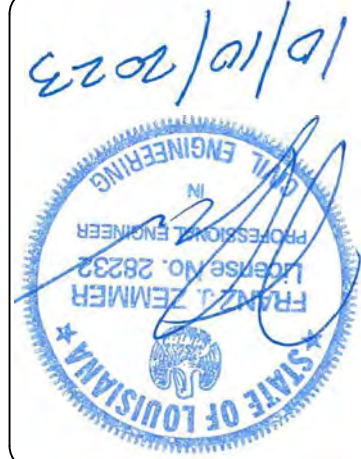




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

No.	DESCRIPTION OF REVISION	DATE:

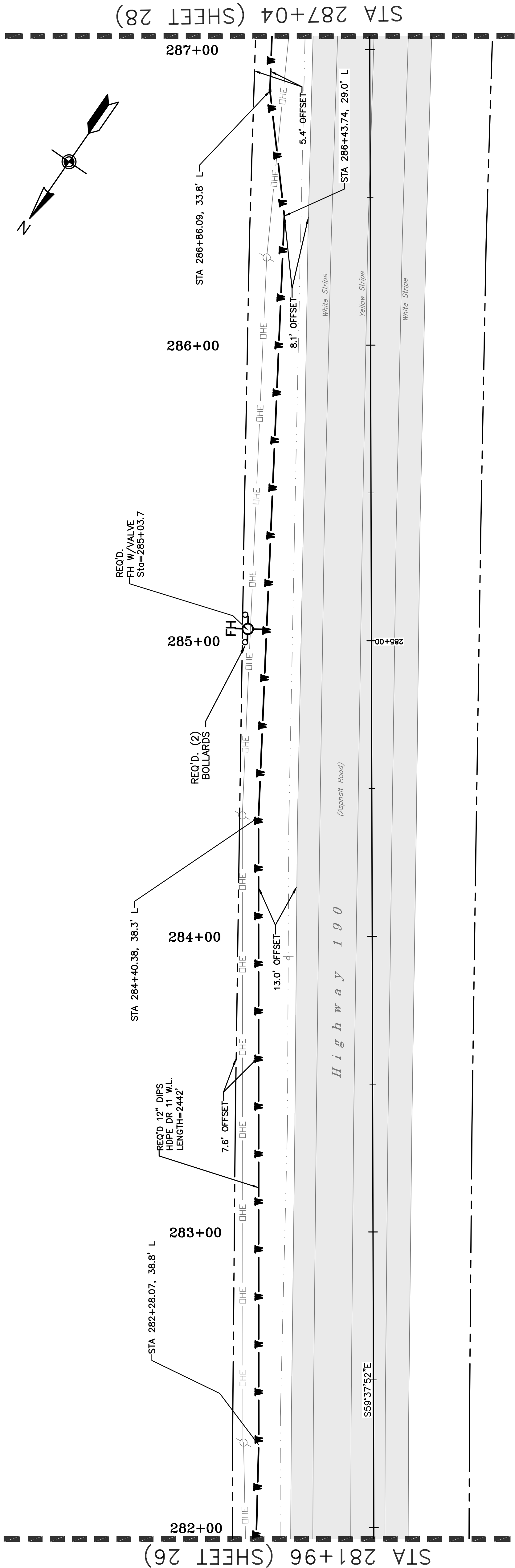
DESIGNED BY: FJZ	CHECKED BY: ENK
DRAWN BY: AKGE	SUBMITTED BY: RCLC
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023
APPROVED BY: CPT	SHEET SIZE: ANSI D
SCALE:	



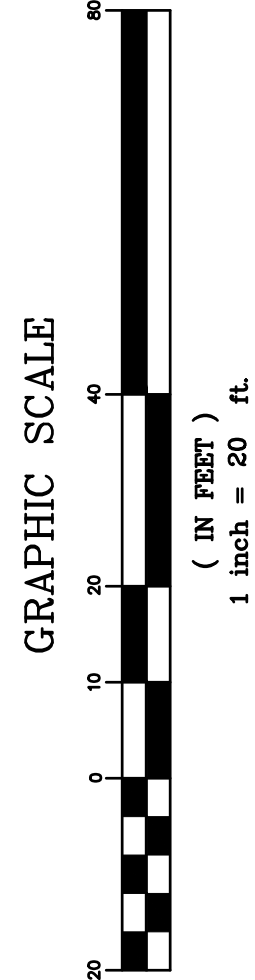
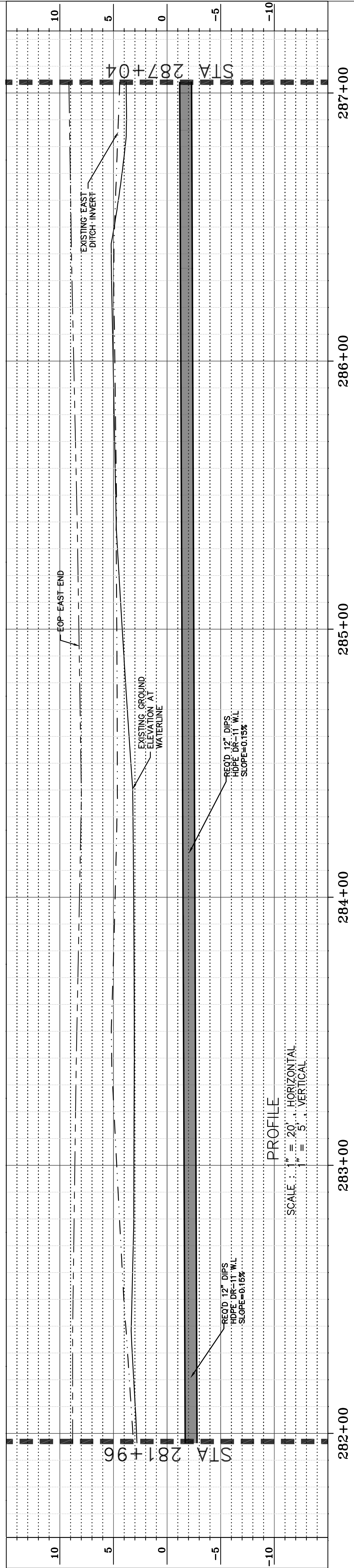
**S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN**

PLAN AND PROFILE

SHEET NO. **27**



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.



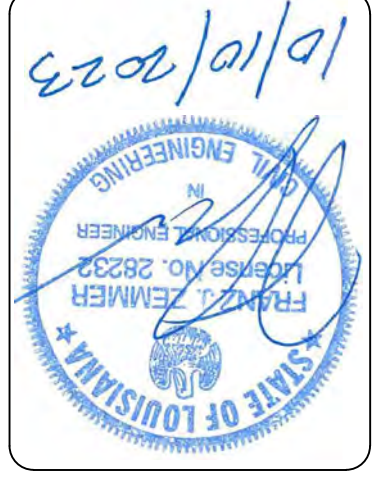
PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 5' VERTICAL



DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

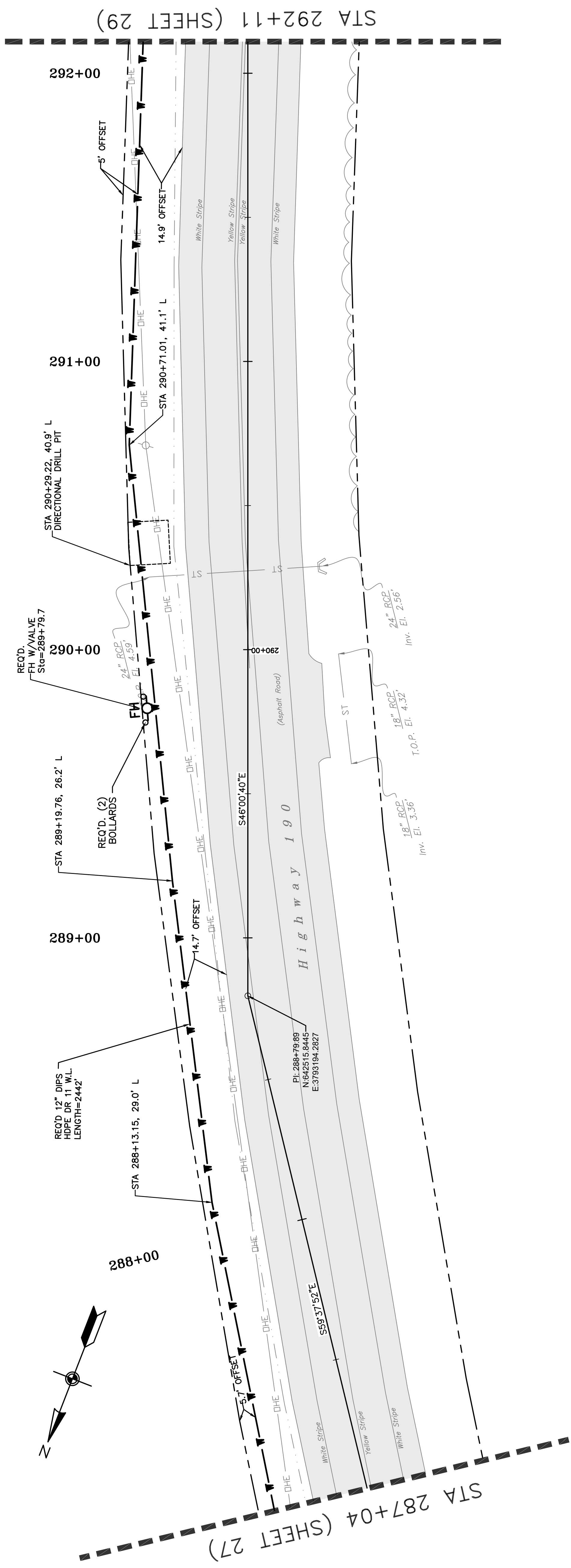
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
DRAWN BY: ENK	APPROVED BY: CPT
SUBMITTED BY: RCLC	SHEET SIZE: ANSI D
SCALE:	

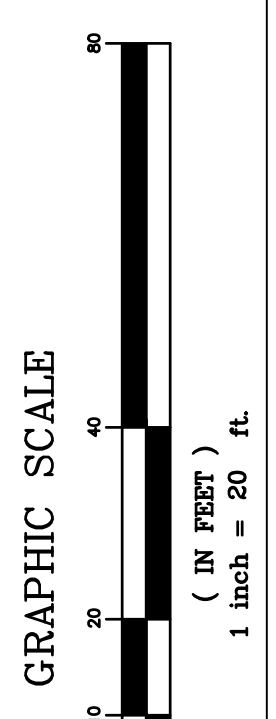
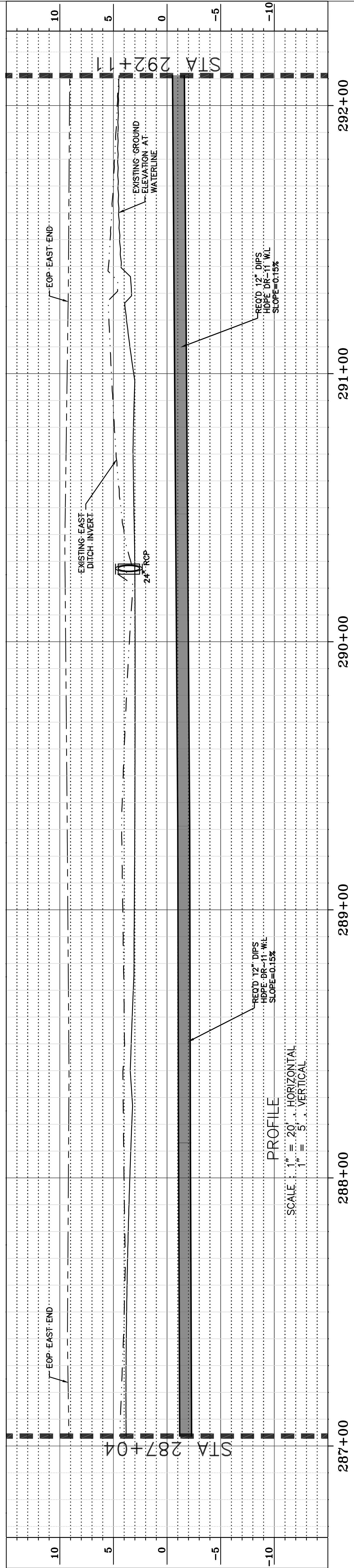


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 28



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.





DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

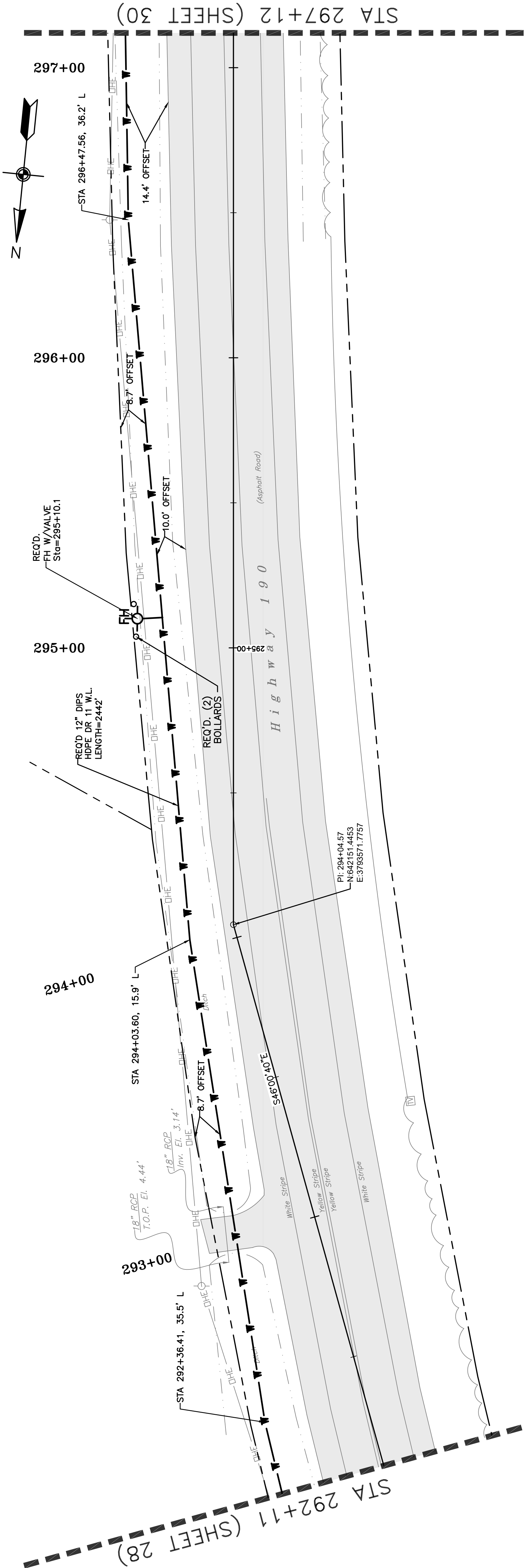
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
DRAWN BY: ENK	APPROVED BY: CPT
SUBMITTED BY: RCLC	SHEET SIZE: ANSI D
SCALE:	

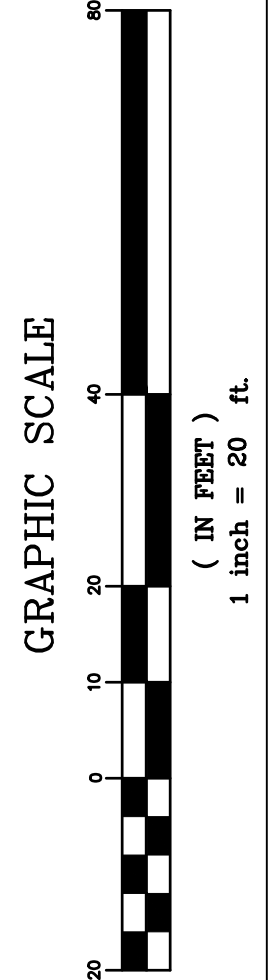
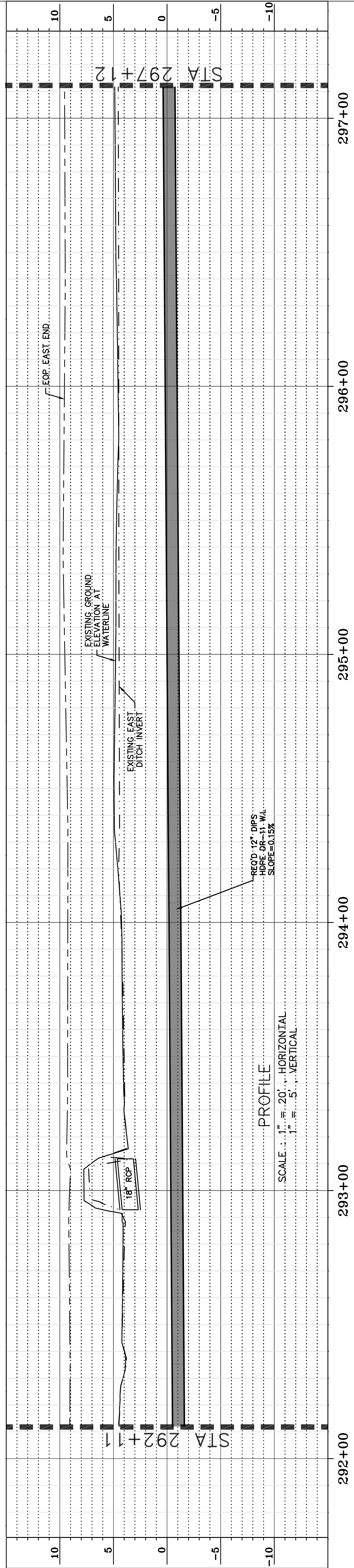


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 29



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.





DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

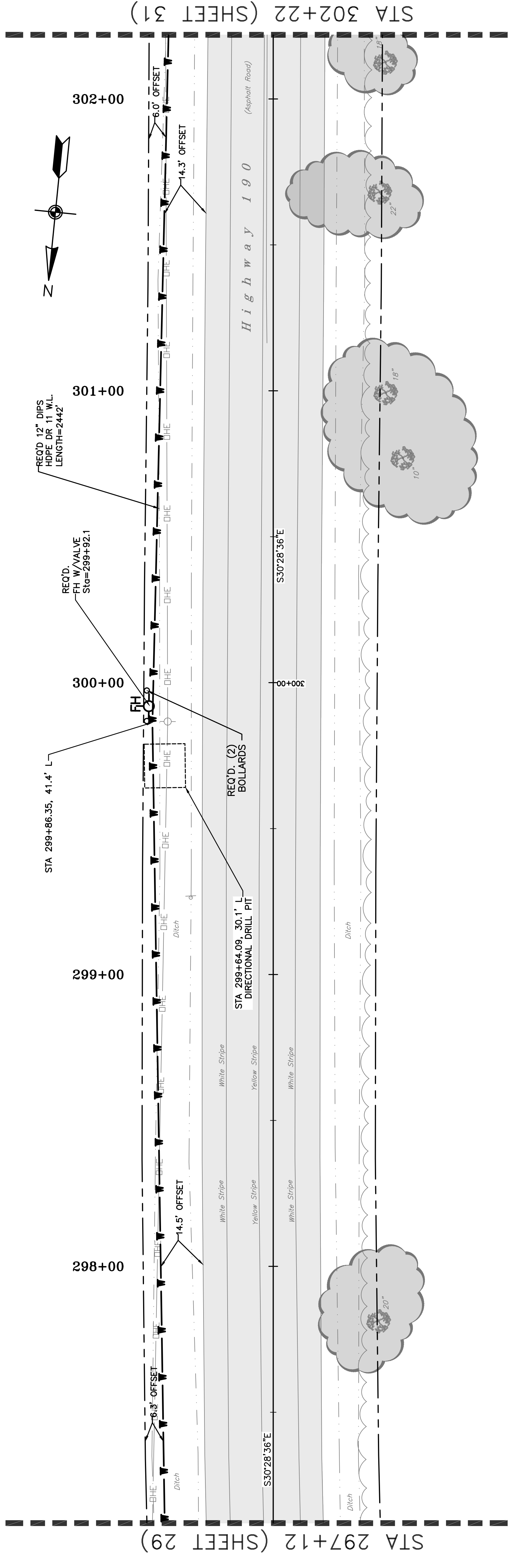
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
DRAWN BY: ENK	APPROVED BY: CPT
SUBMITTED BY: RCLC	SHEET SIZE: ANSI D
SCALE:	

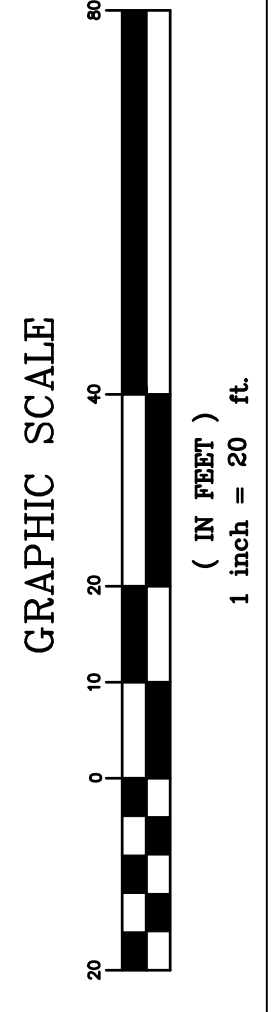
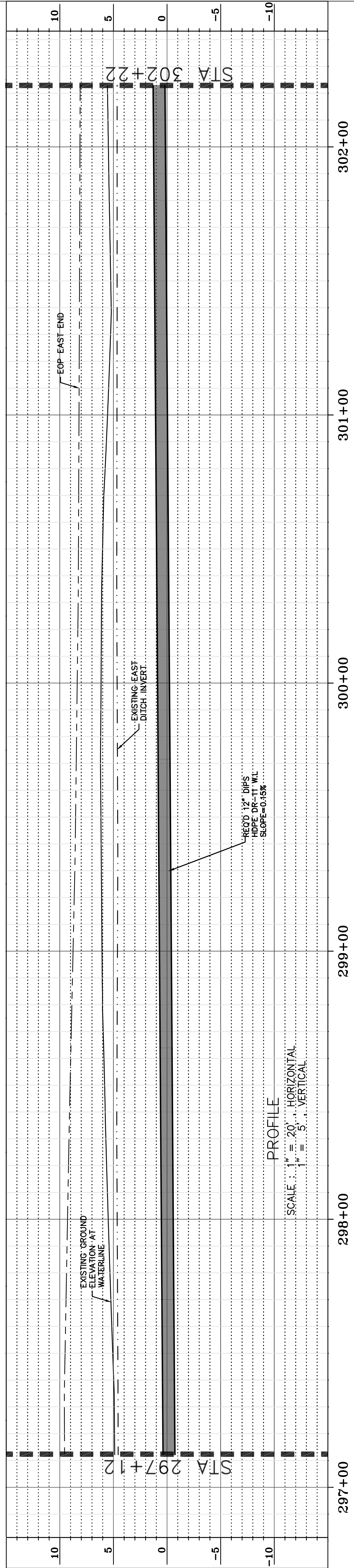


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 30



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.

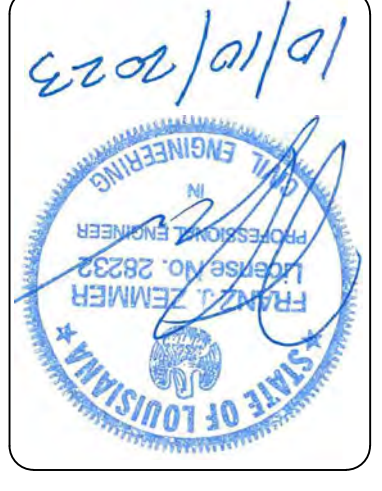




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

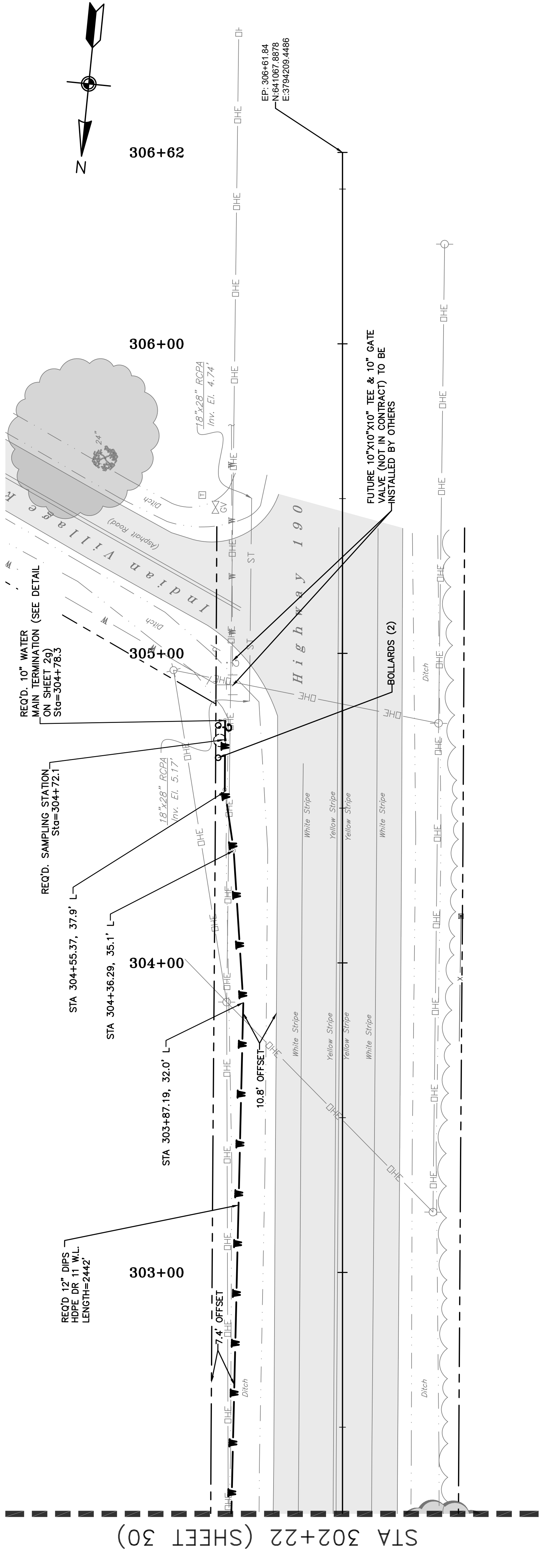
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
SUBMITTED BY: RCLC	APPROVED BY: CPT
ANSI D	SHEET SIZE:
SCALE:	

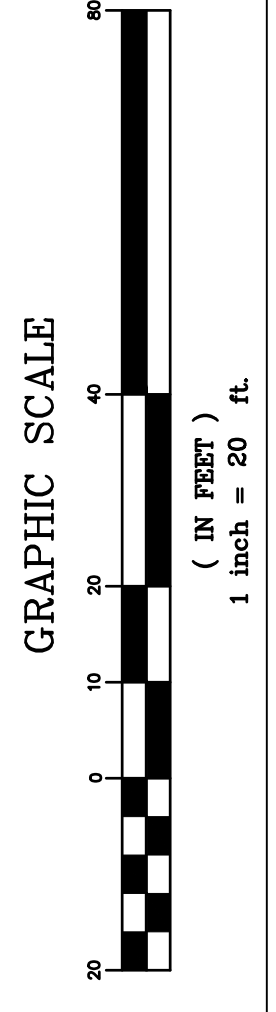
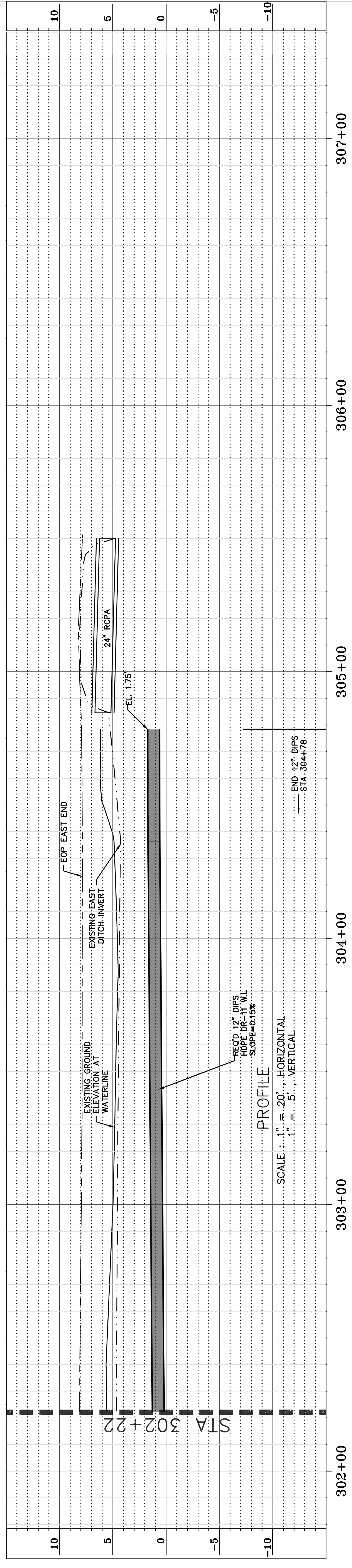


S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
PLAN AND PROFILE

SHEET NO. 31



THRUST BLOCKING IS REQUIRED AT ALL FITTINGS FOR BENDS OR CHANGES IN DIRECTION OF WATER MAINS.





DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

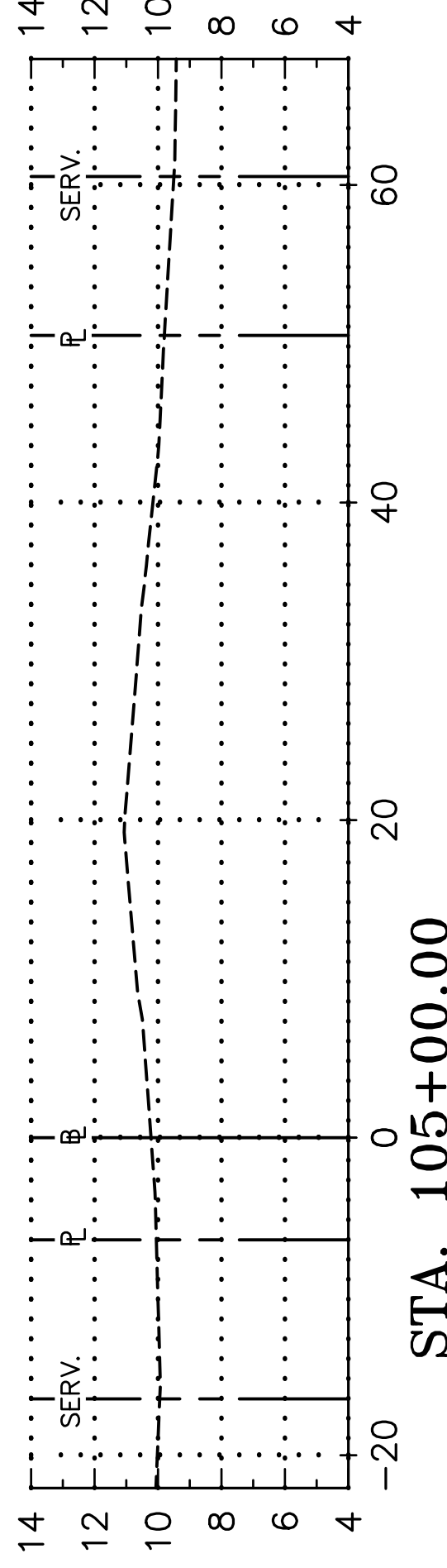
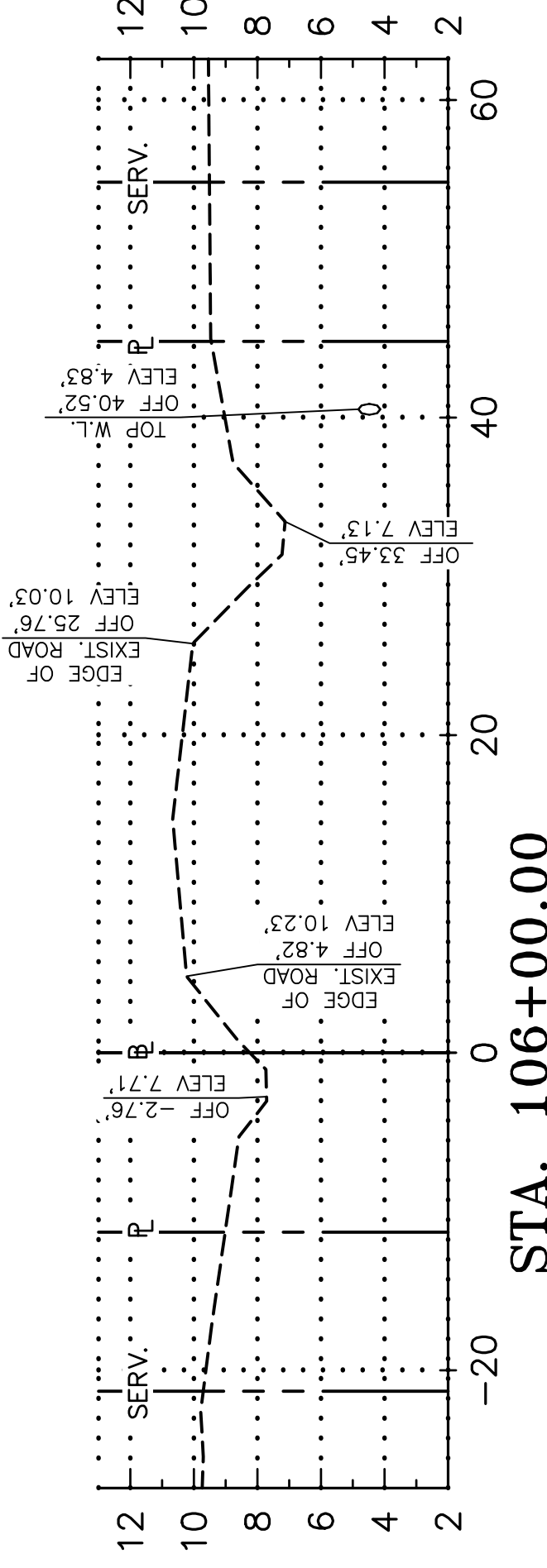
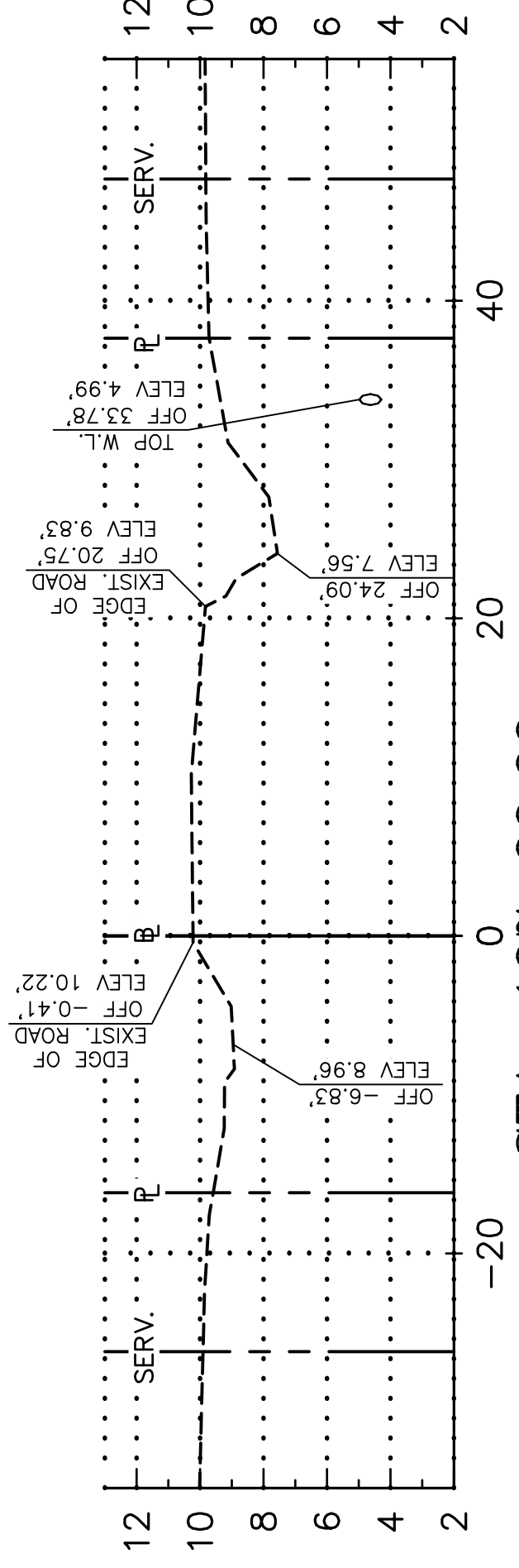
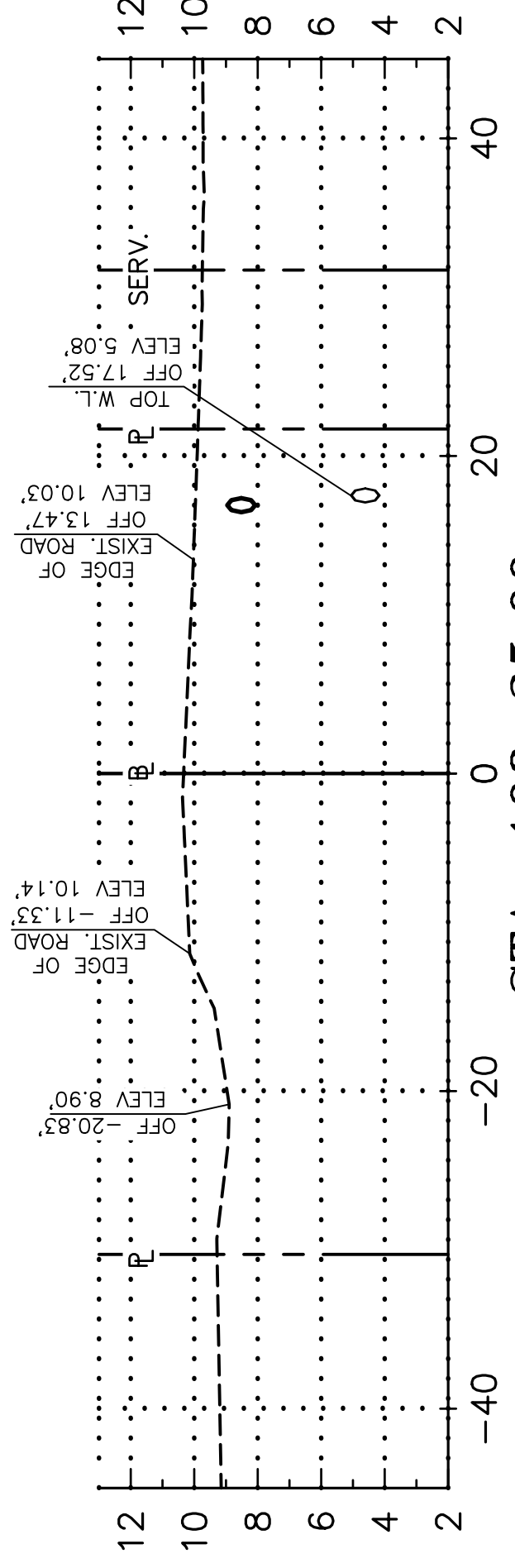
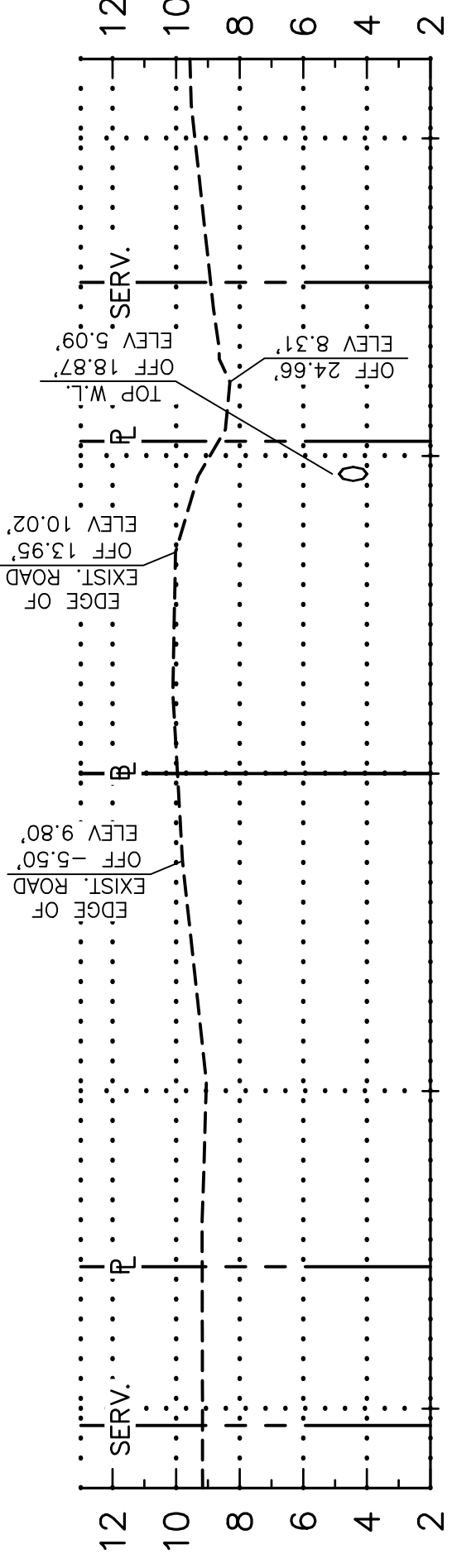
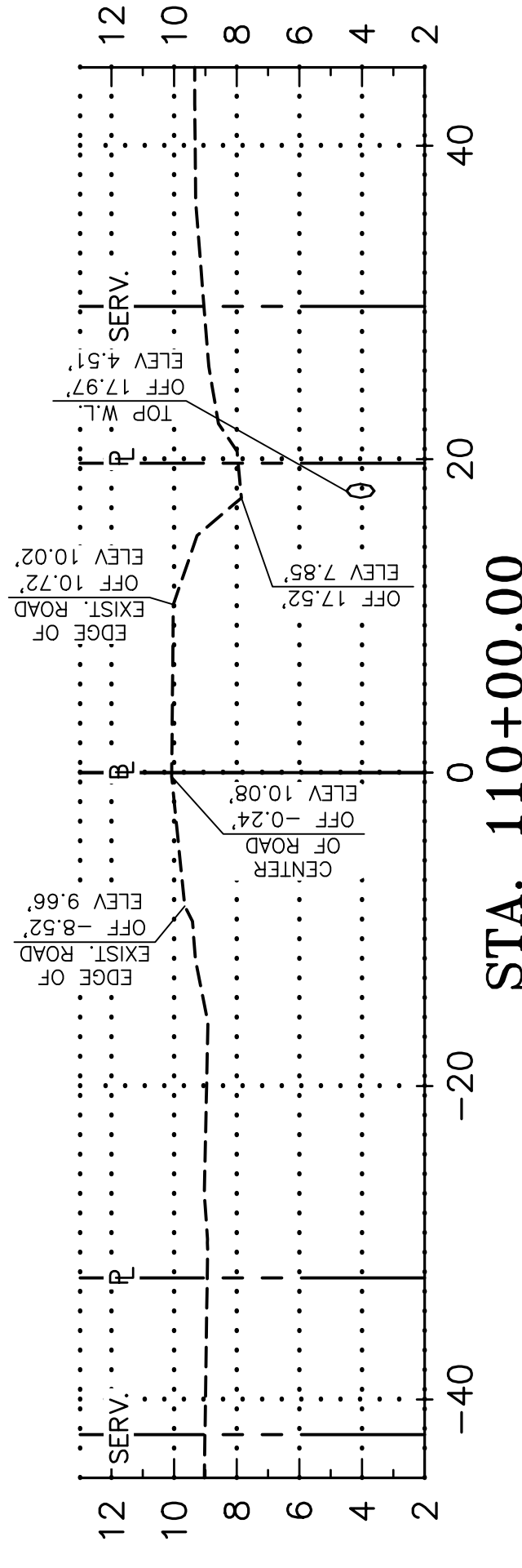
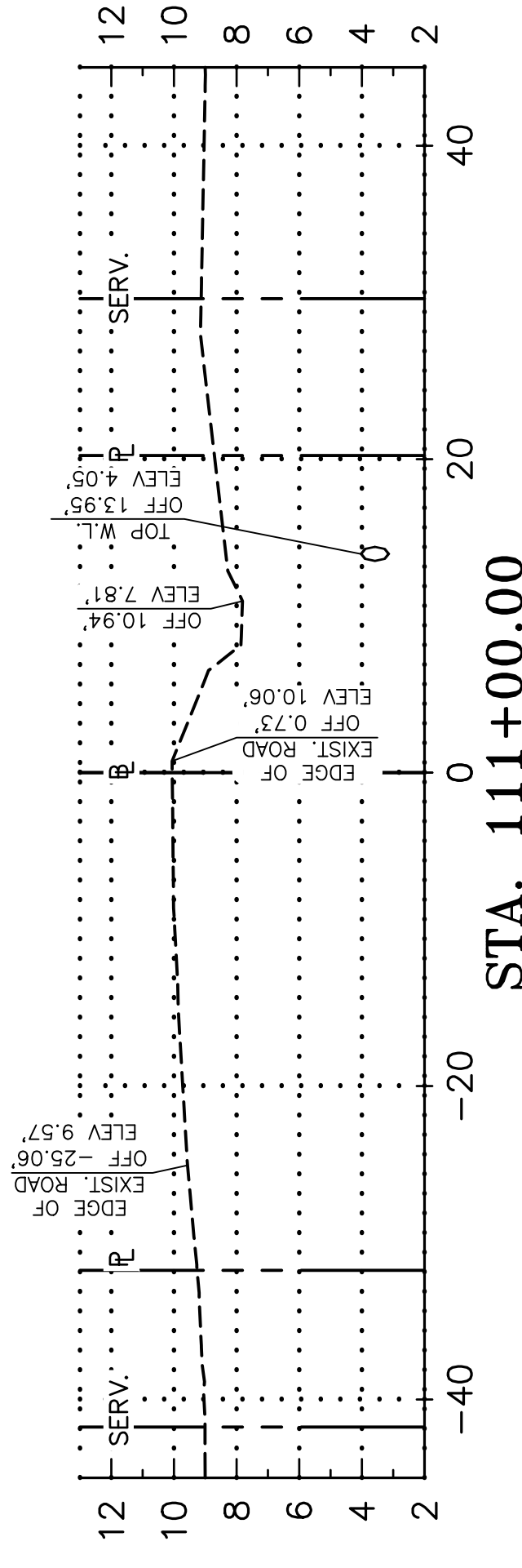
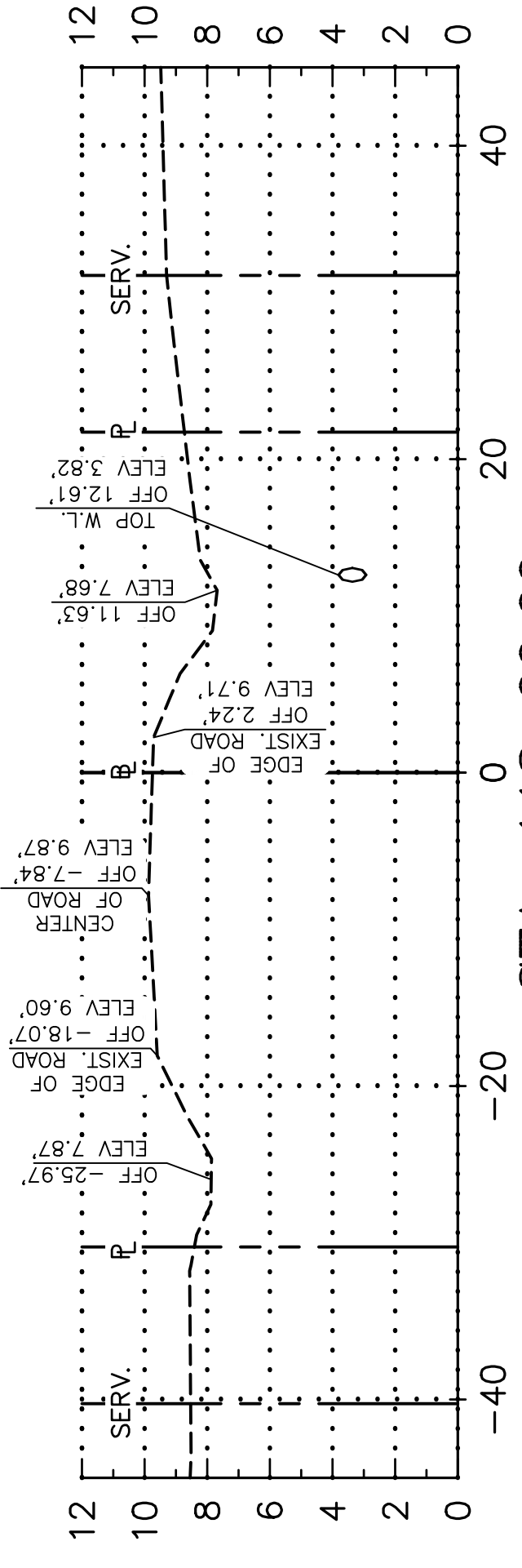
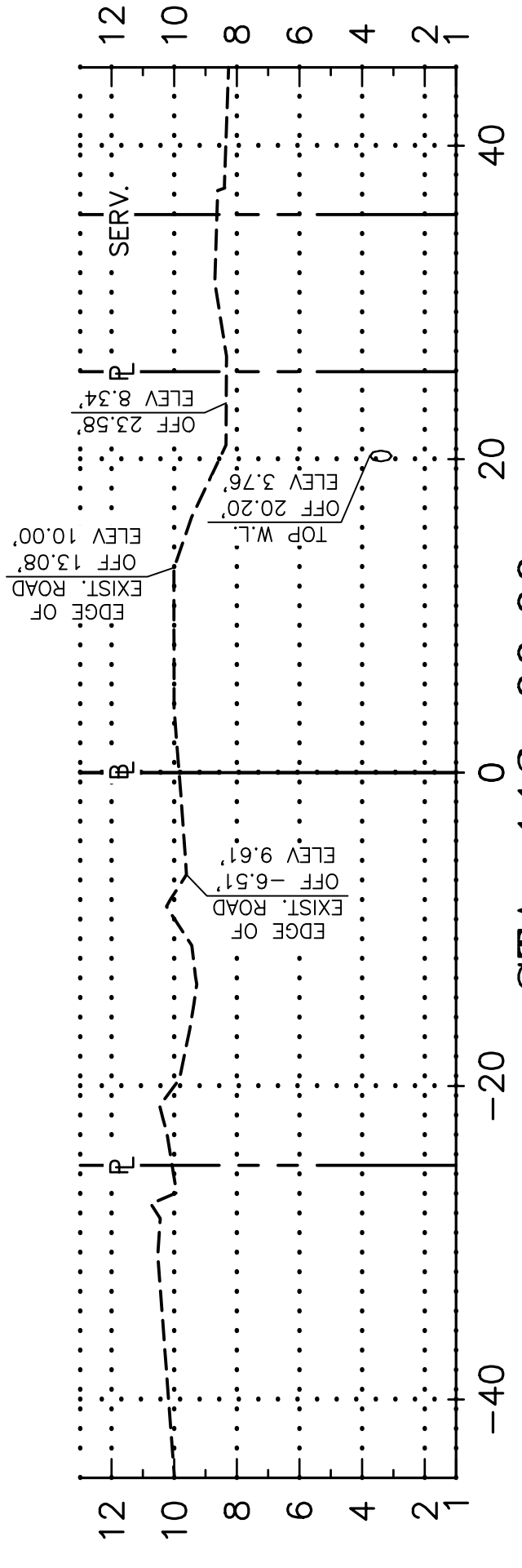
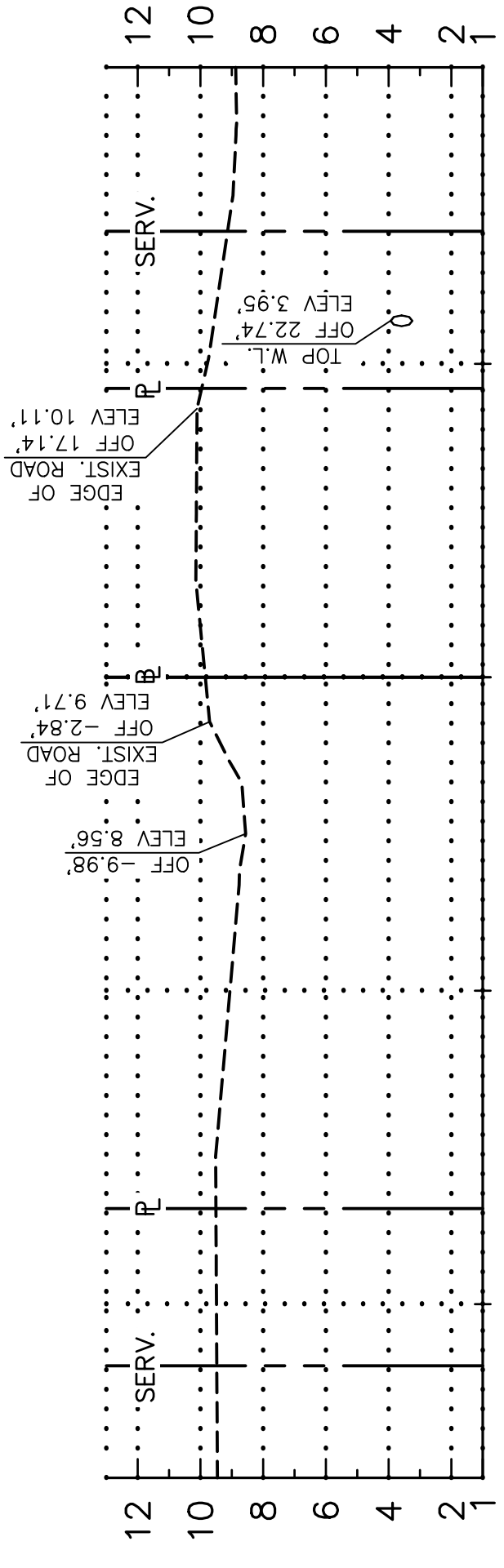
DATE:	DESCRIPTION OF REVISION	No.

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10/10/2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE  
CROSS SECTIONS

SHEET NO.  
401

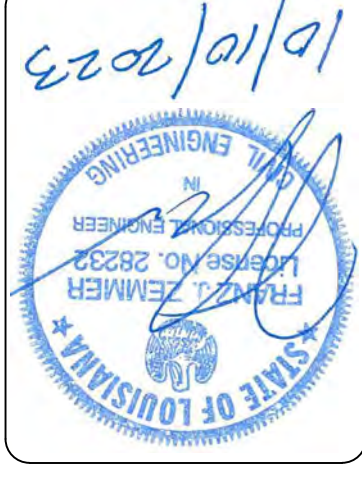




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

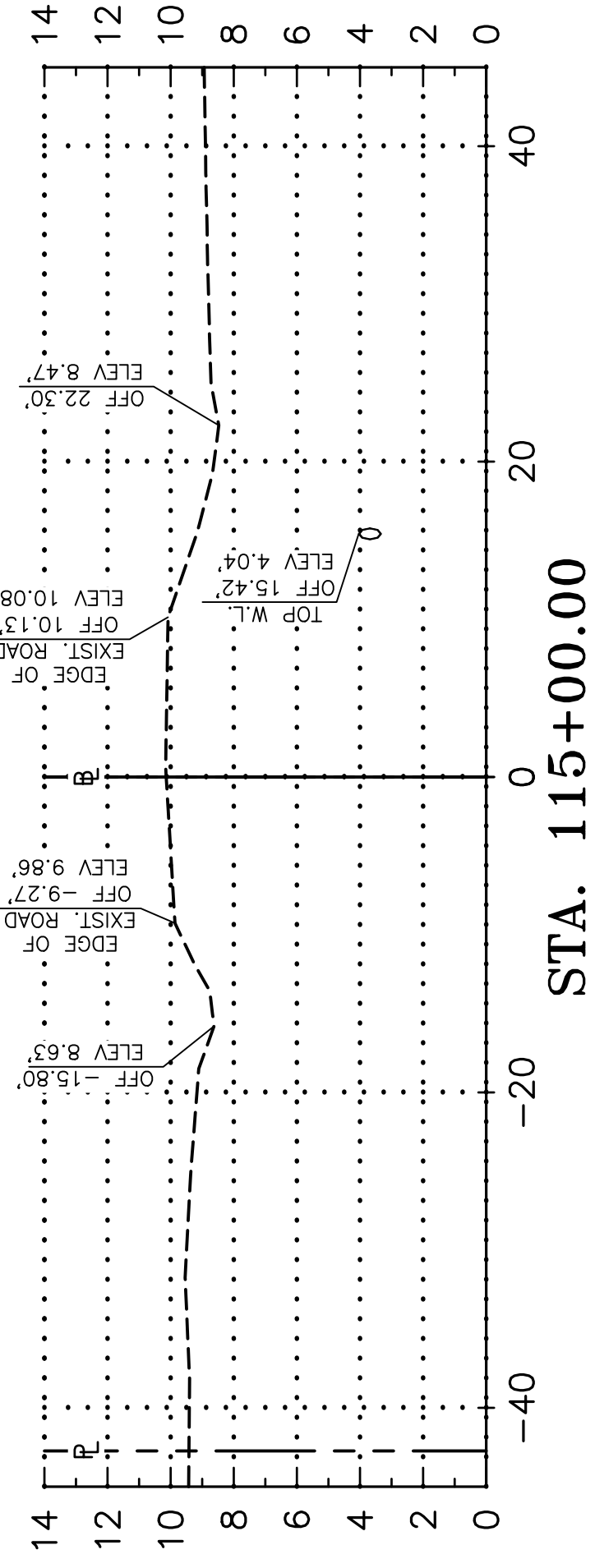
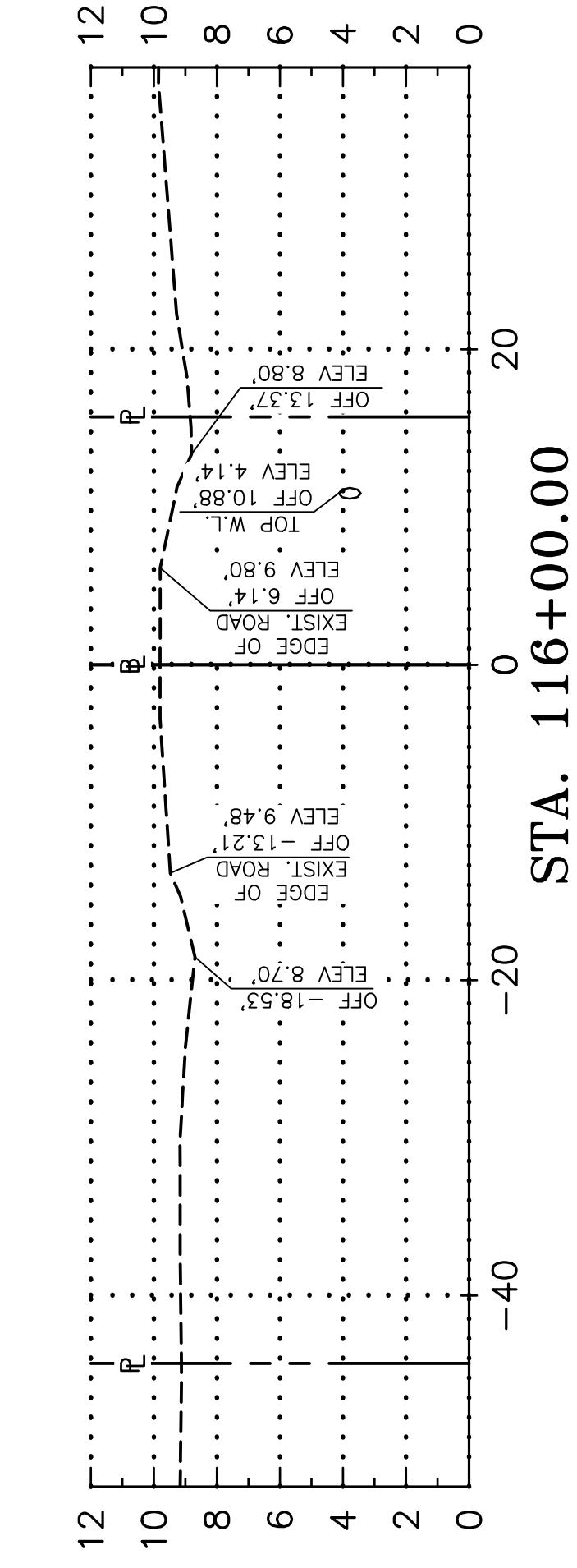
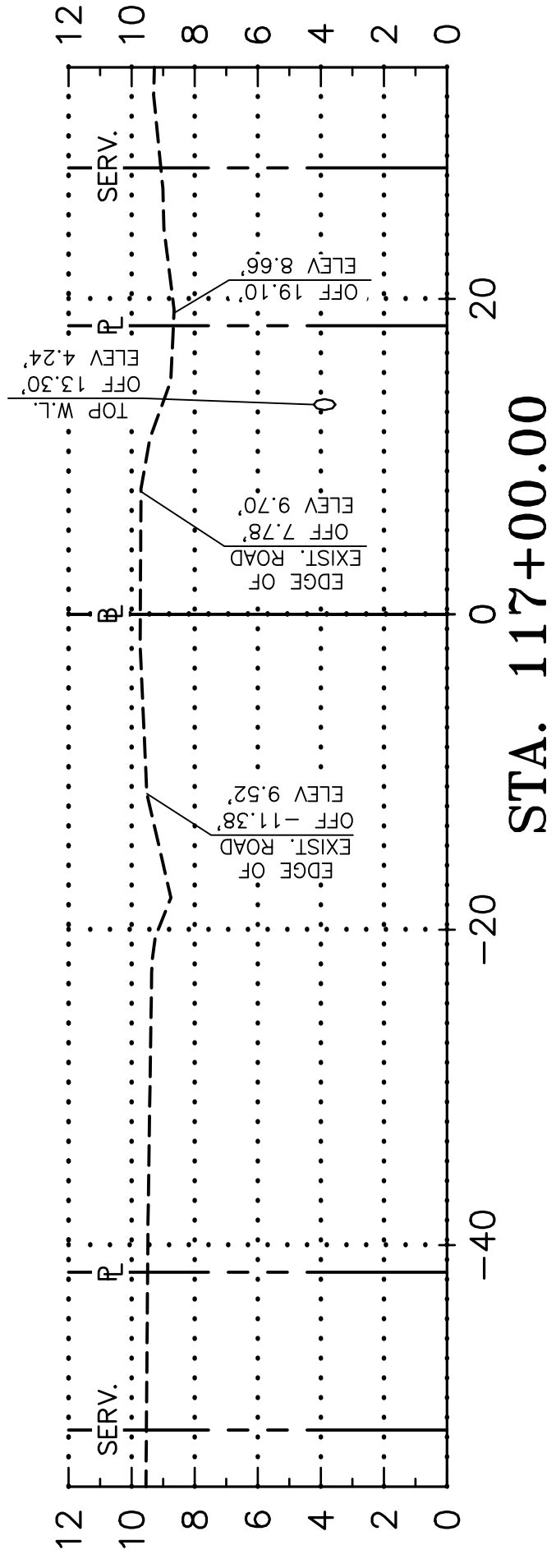
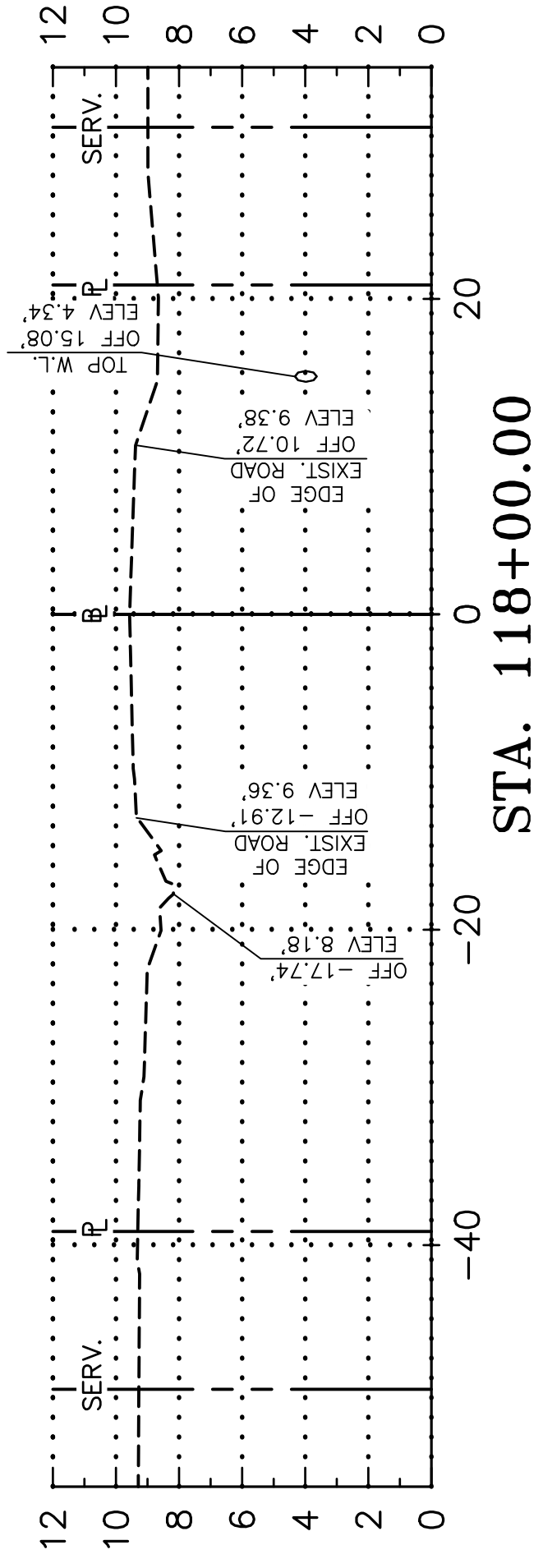
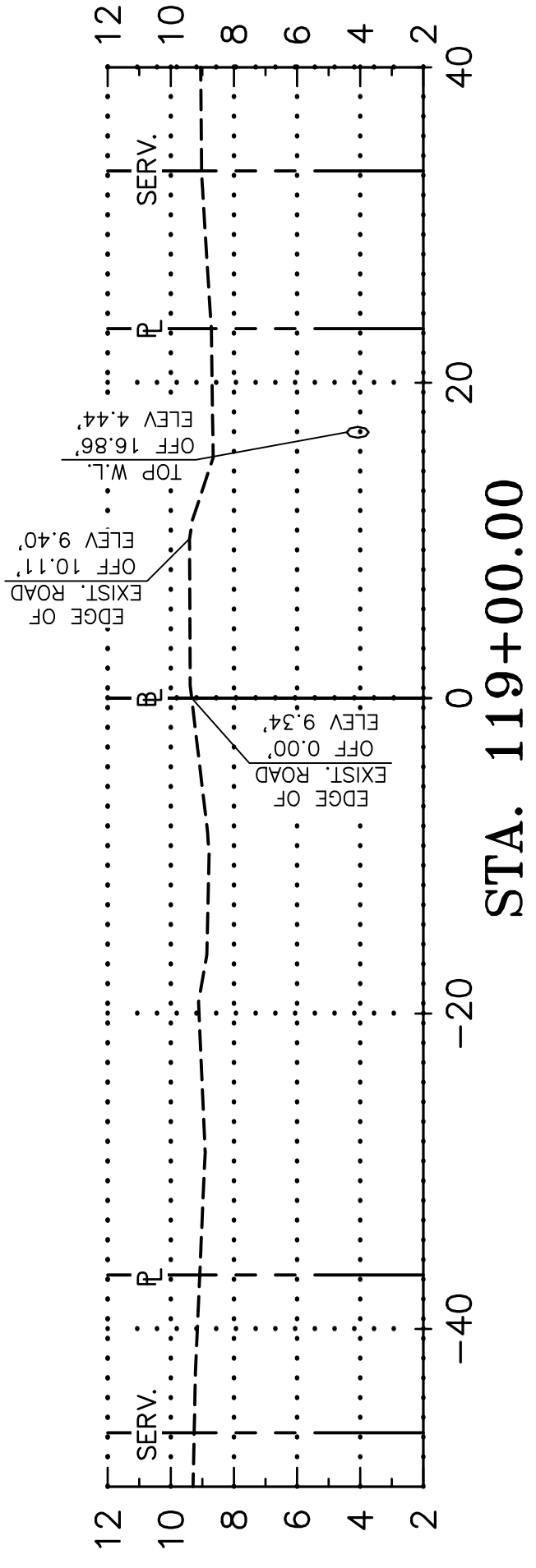
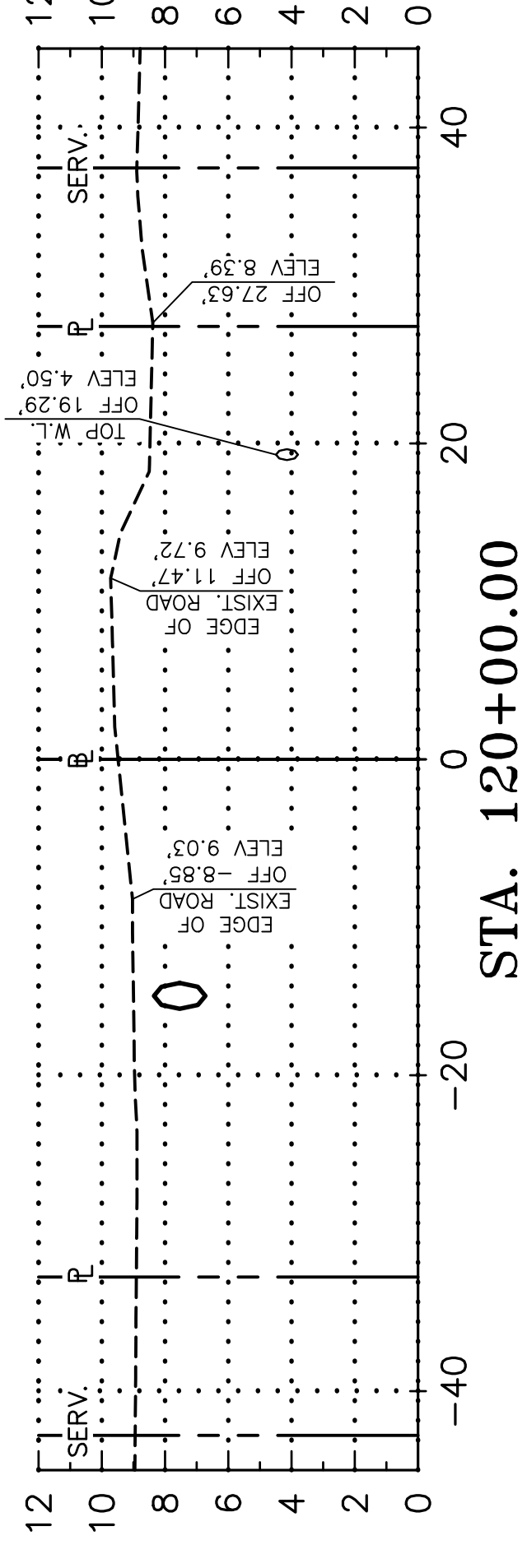
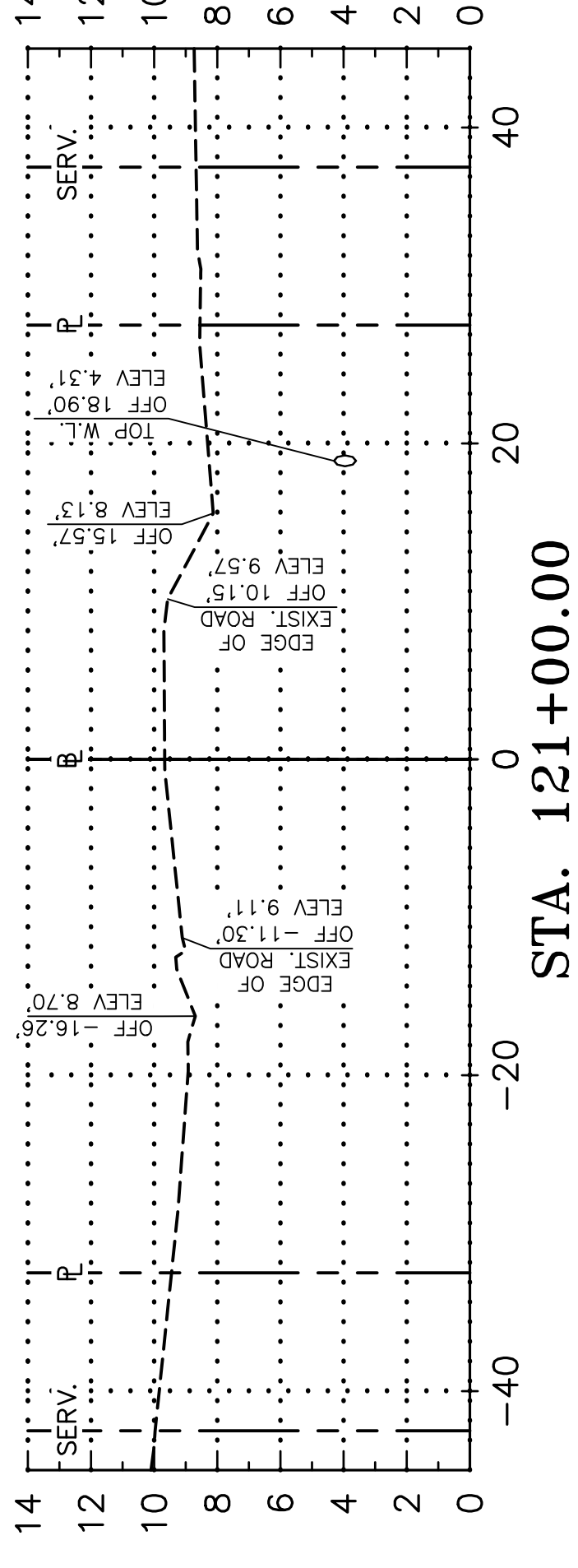
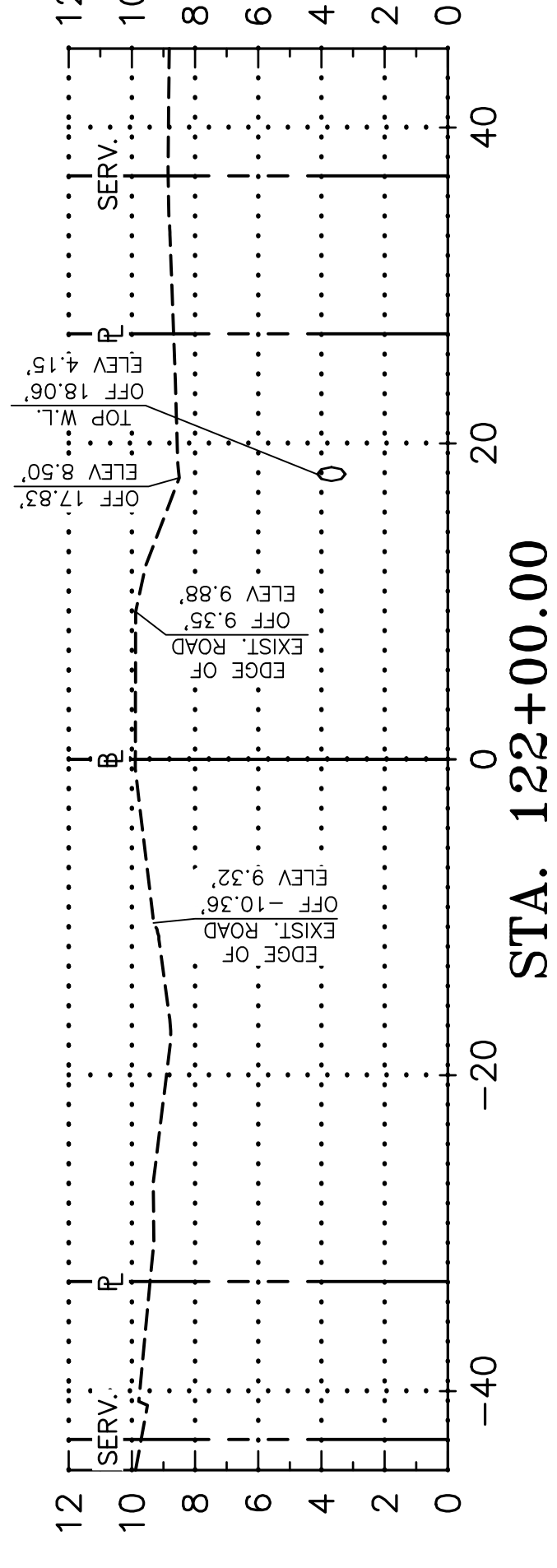
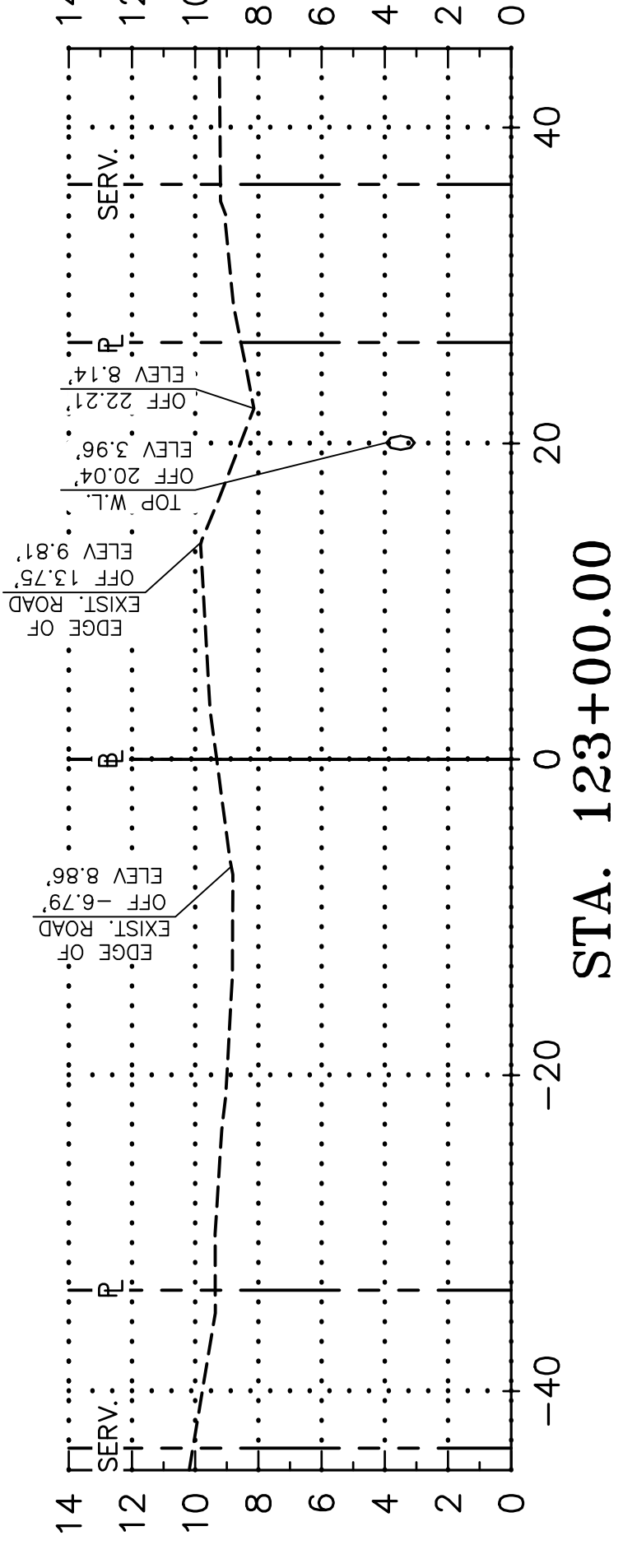
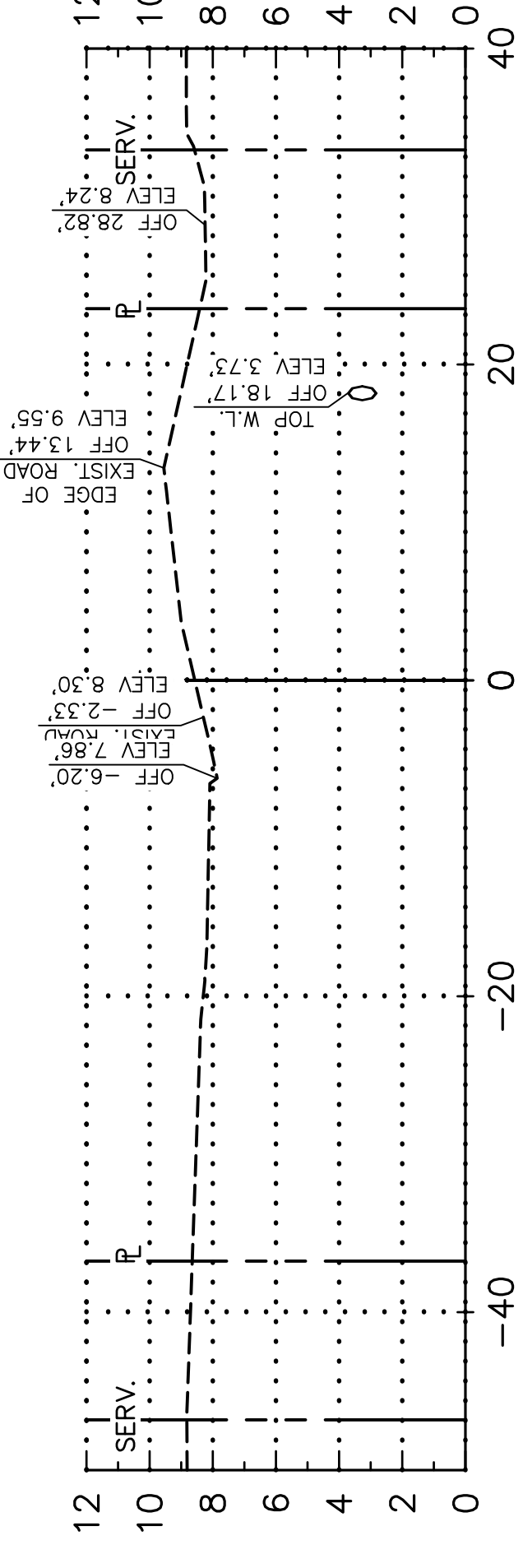
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE
DRAWN BY: ENK	PROJECT No.: 301-023-002
SUBMITTED BY: RCLC	ISSUE DATE: 10.10.2023
APPROVED BY: CPT	SHEET SIZE: ANSI D
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE  
CROSS SECTIONS

SHEET NO.  
402



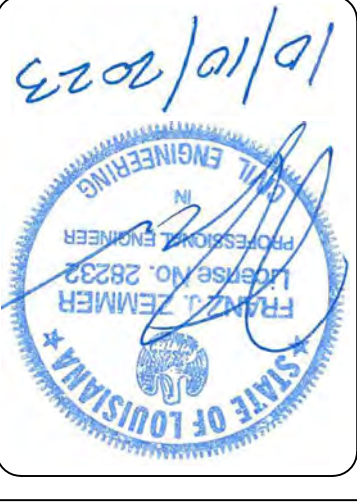




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

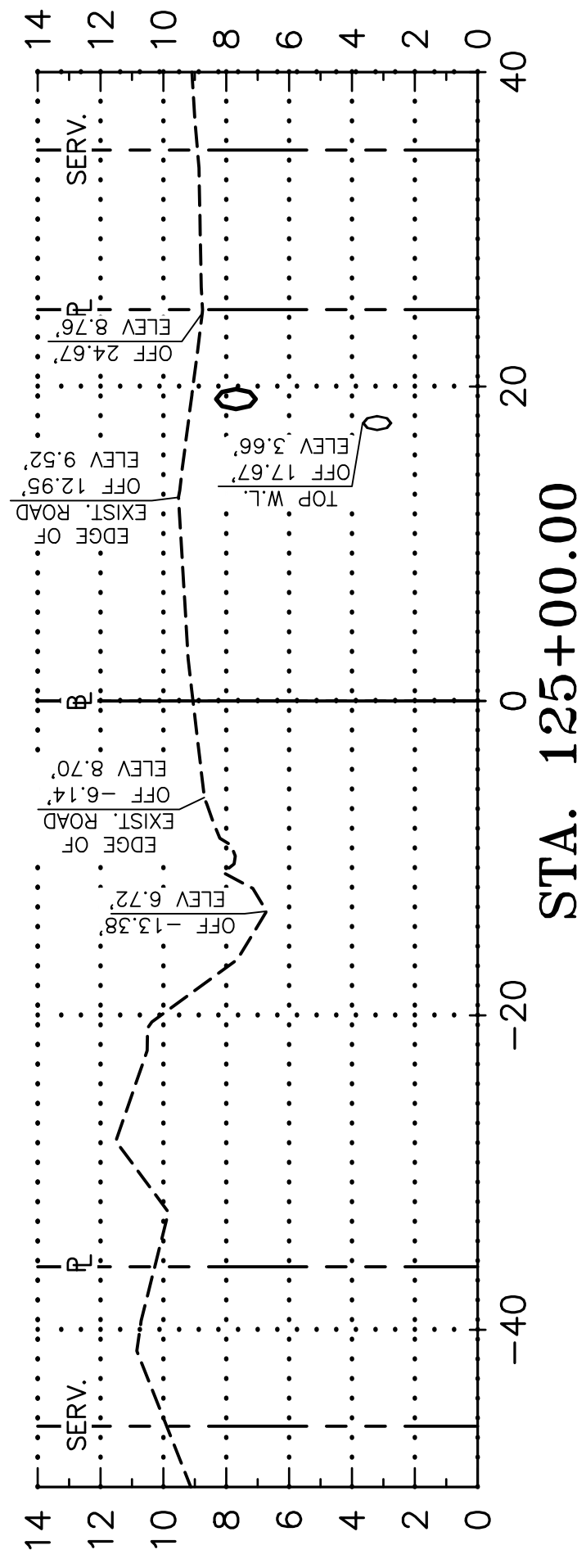
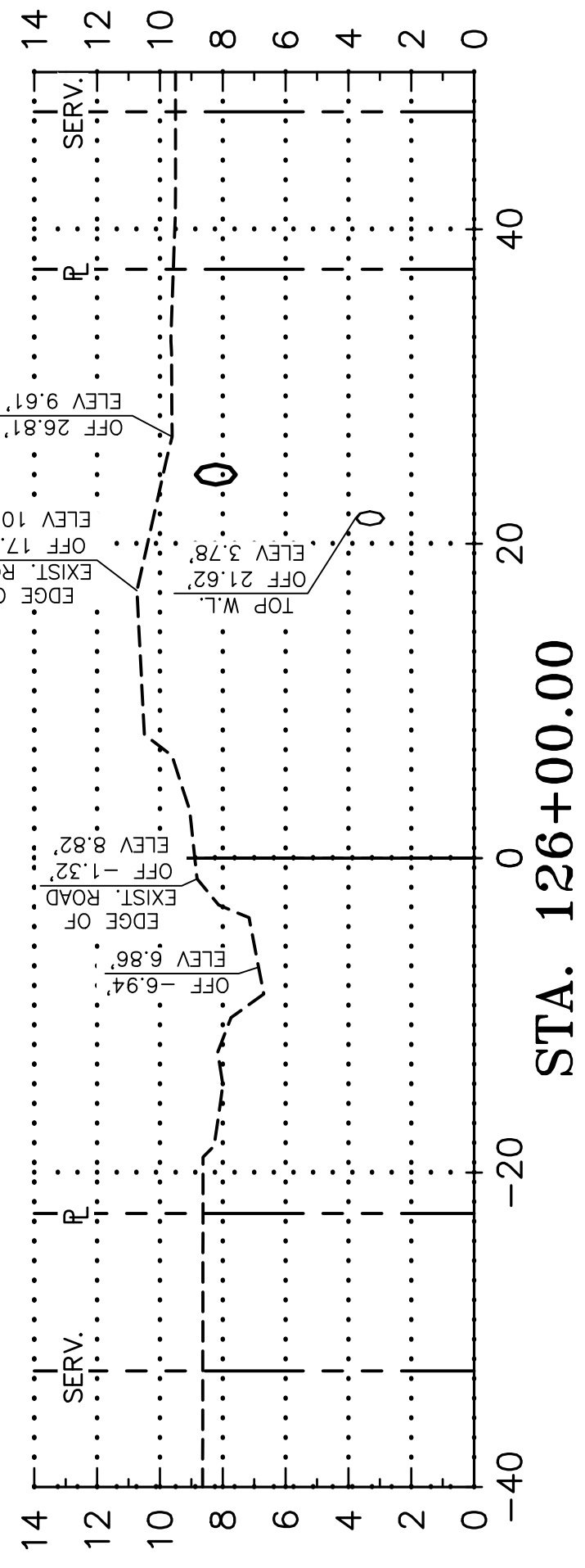
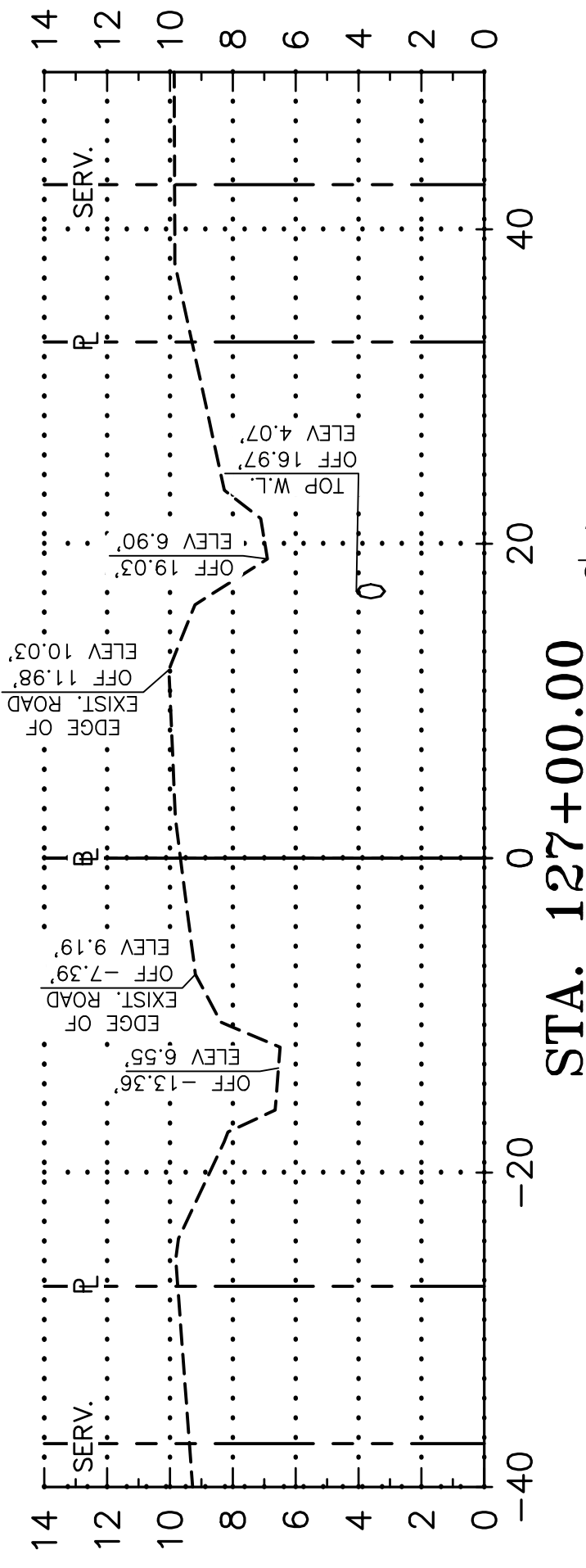
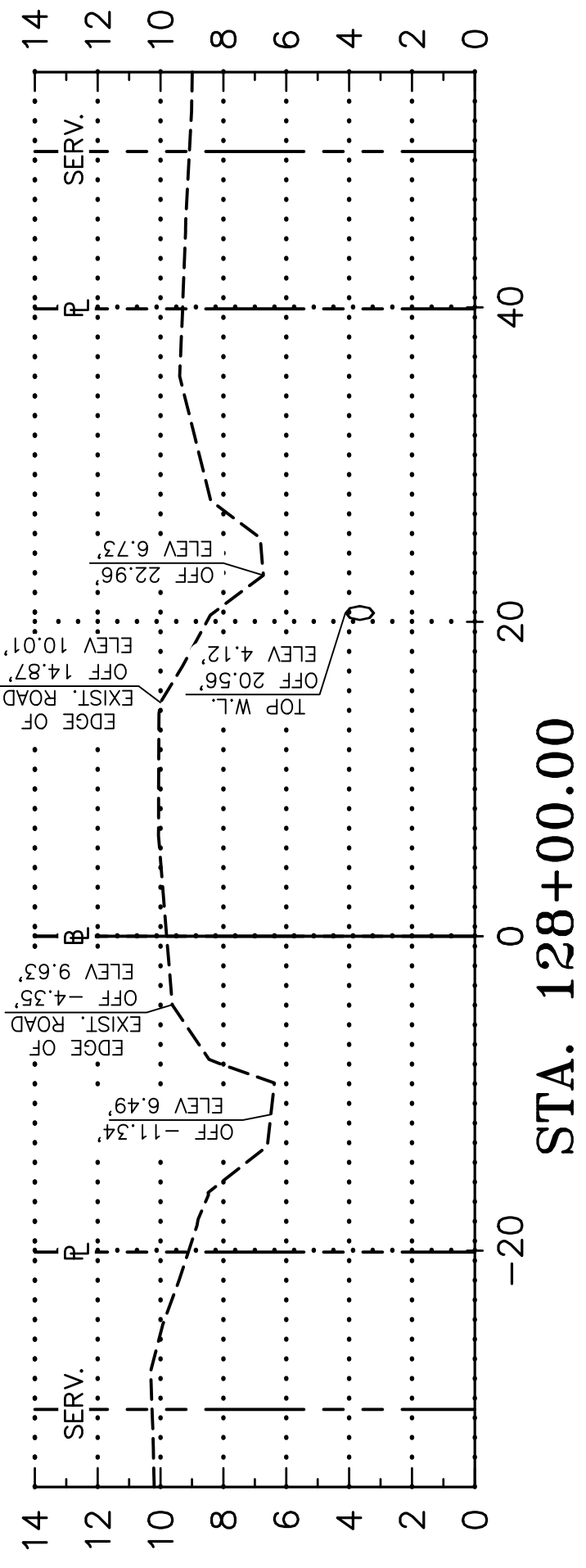
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	
DRAWN BY: ENK	
CHECKED BY: AKGE	
SUBMITTED BY: RCLC	
PROJECT No.: 301-023-002	
ISSUE DATE: 10.10.2023	
APPROVED BY: CPT	
SHEET SIZE: ANSI D	
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
CROSS SECTIONS

SHEET NO.  
403

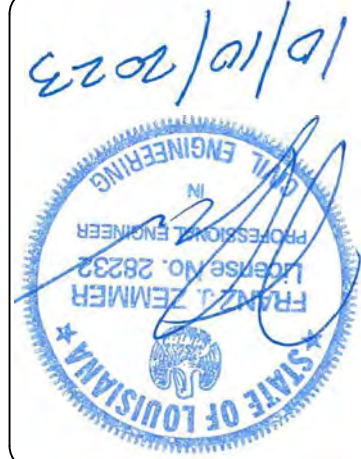




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

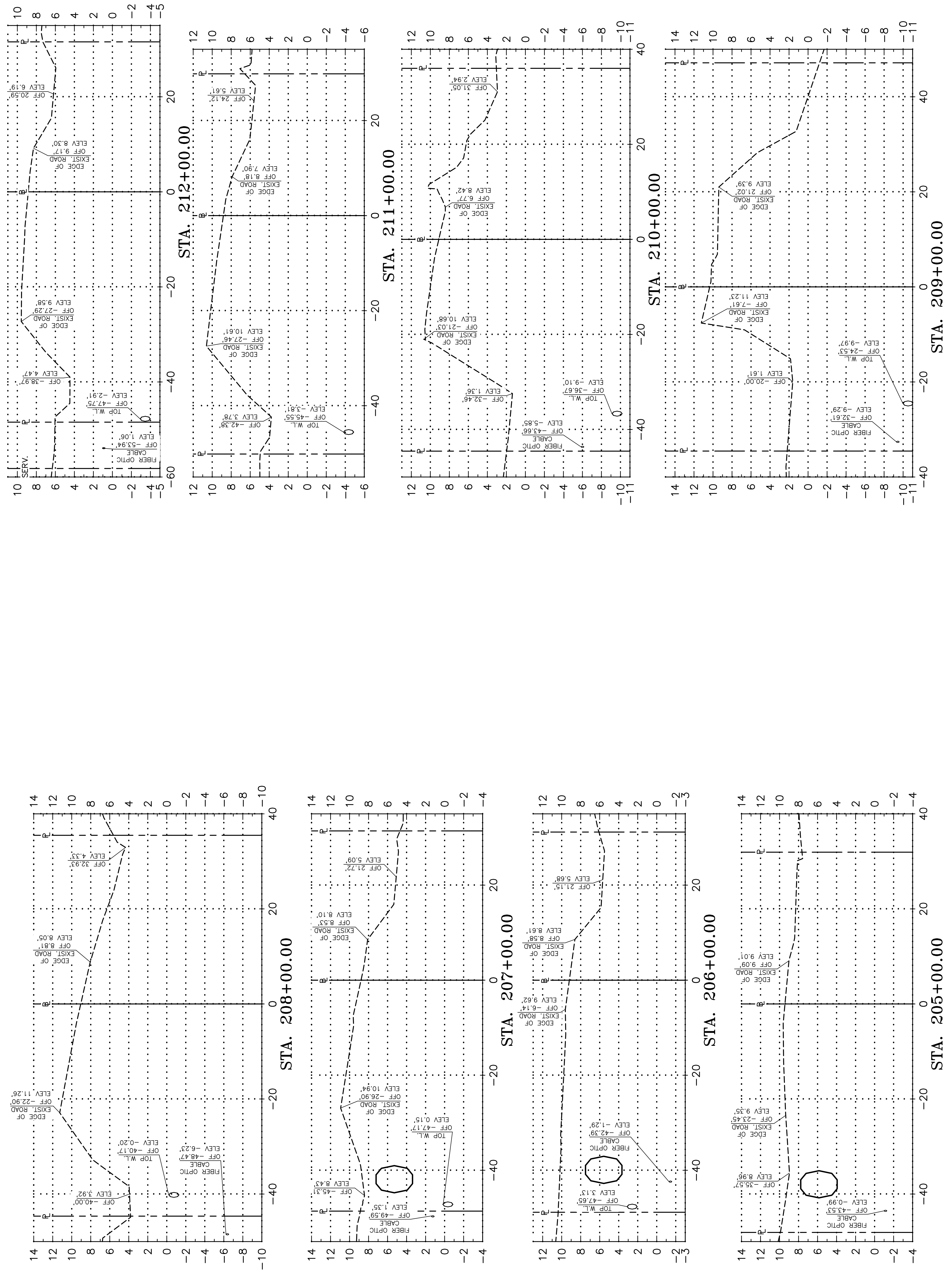
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



# S. MILITARY RD US 190 & RUE ESPLANADE WATER MAIN CROSS SECTIONS

SHEET NO. **404**

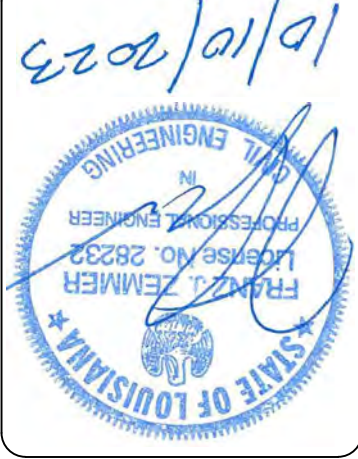




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

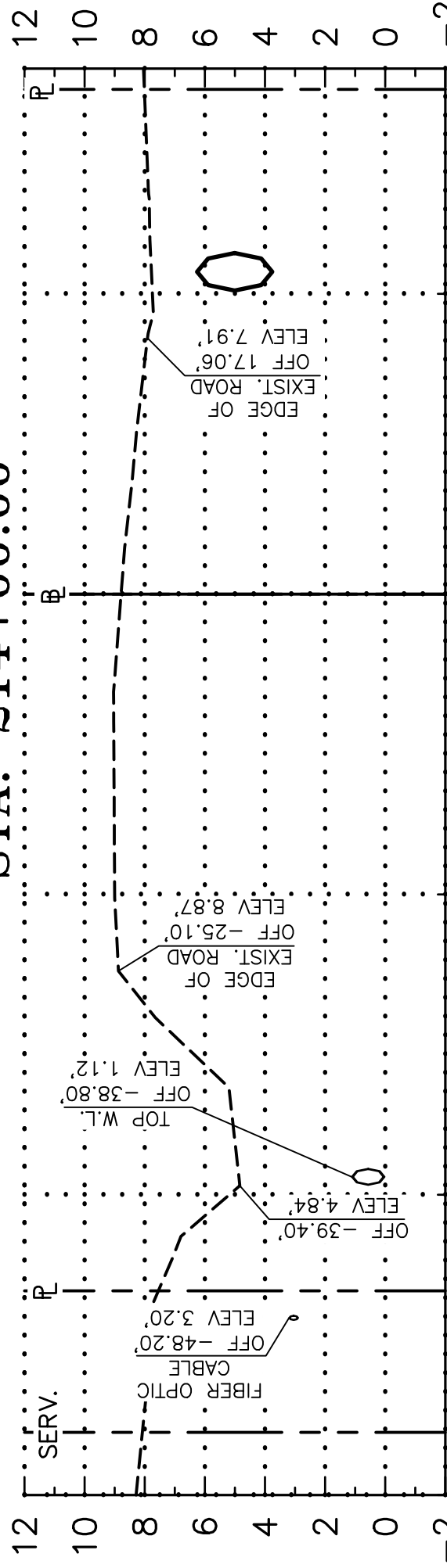
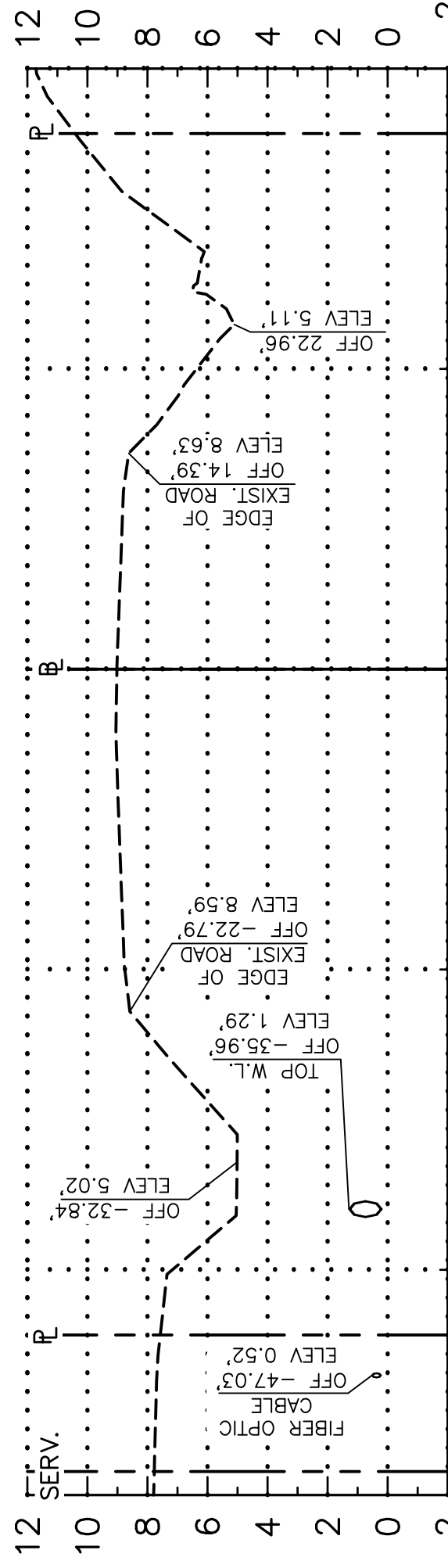
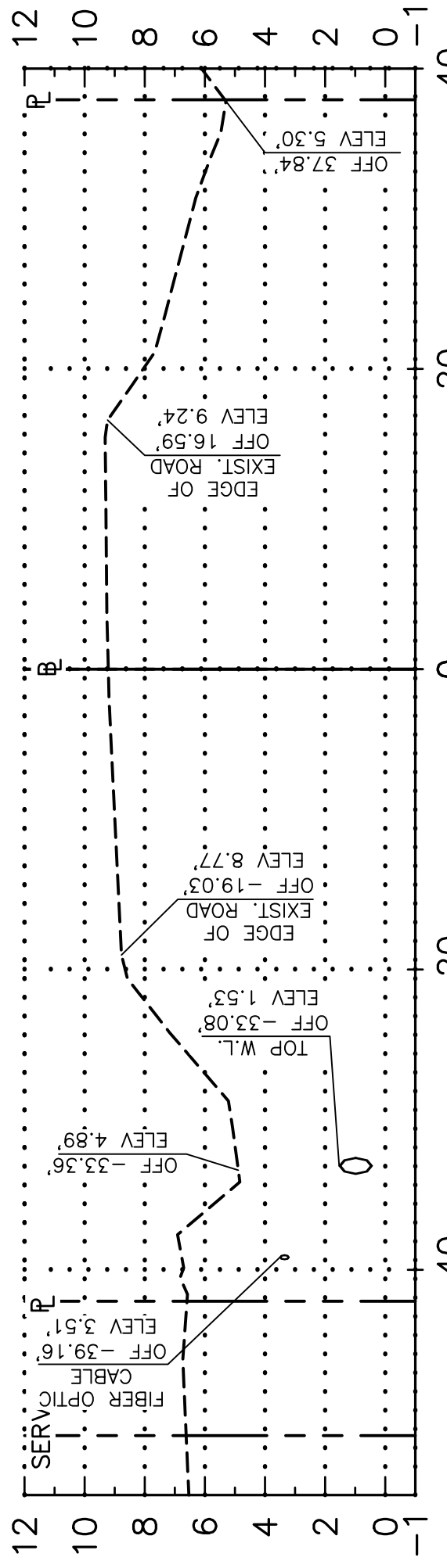
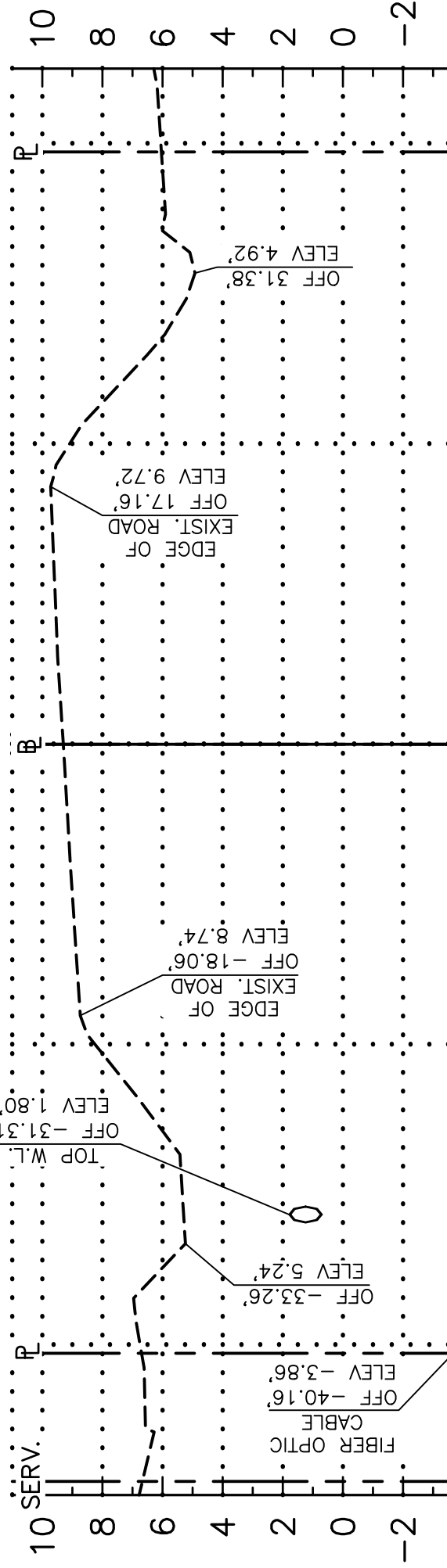
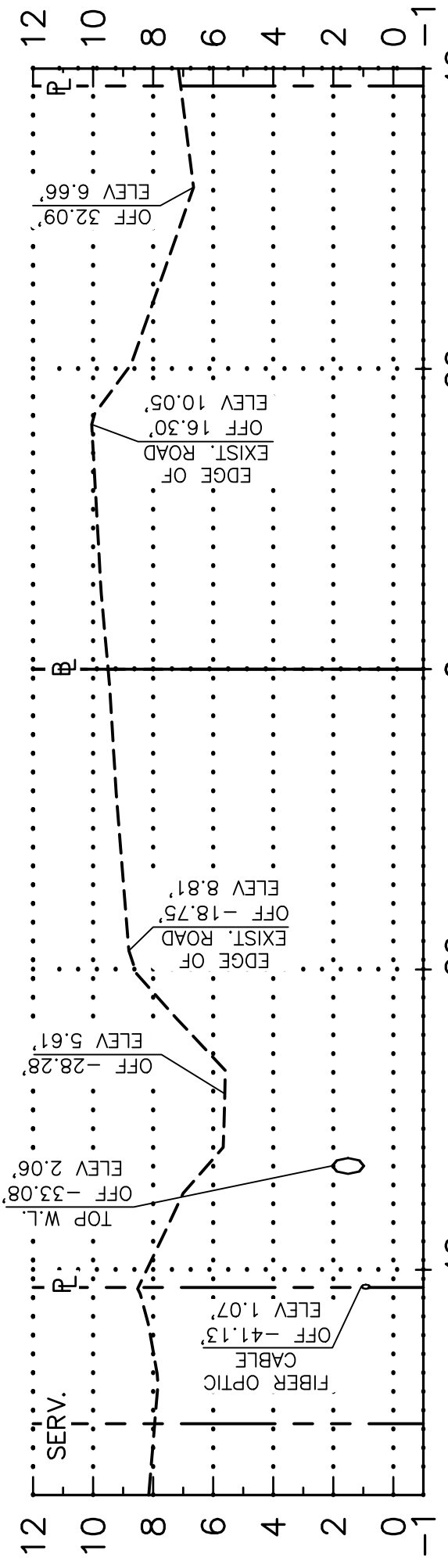
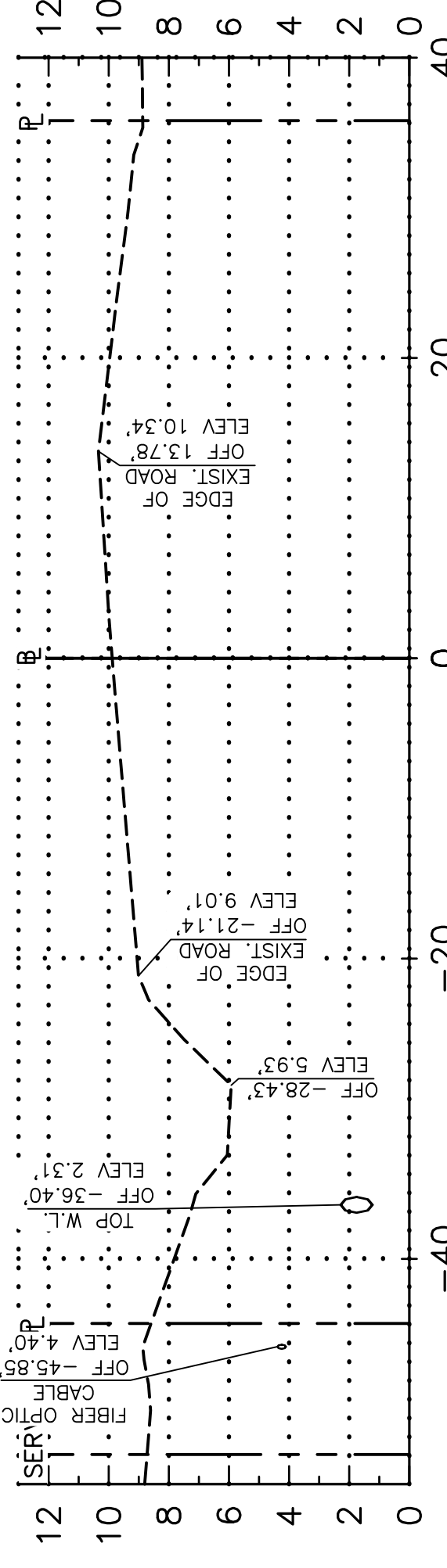
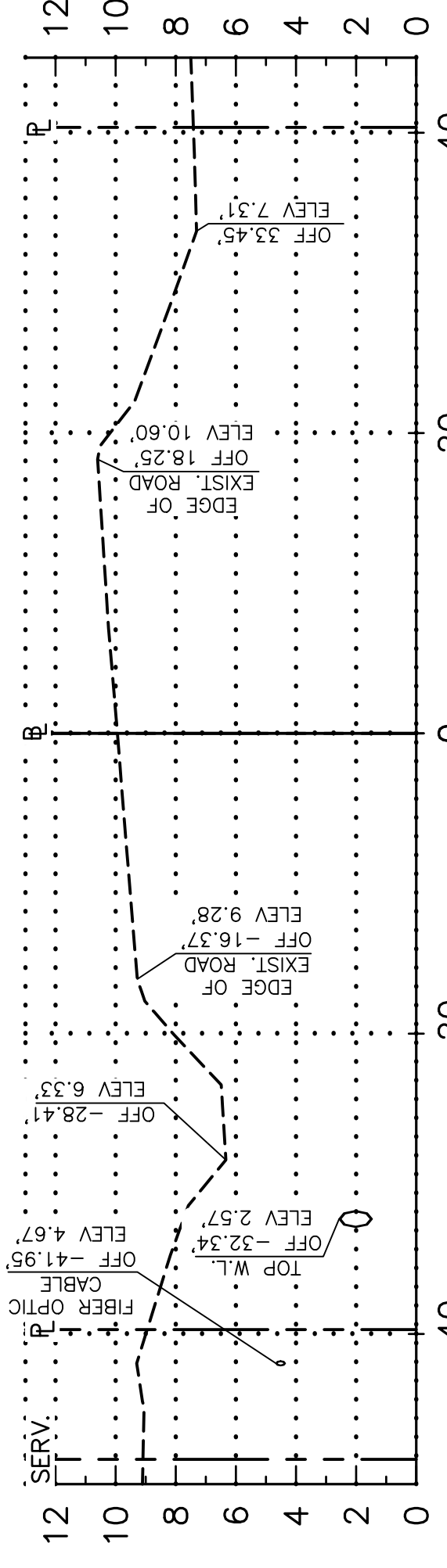
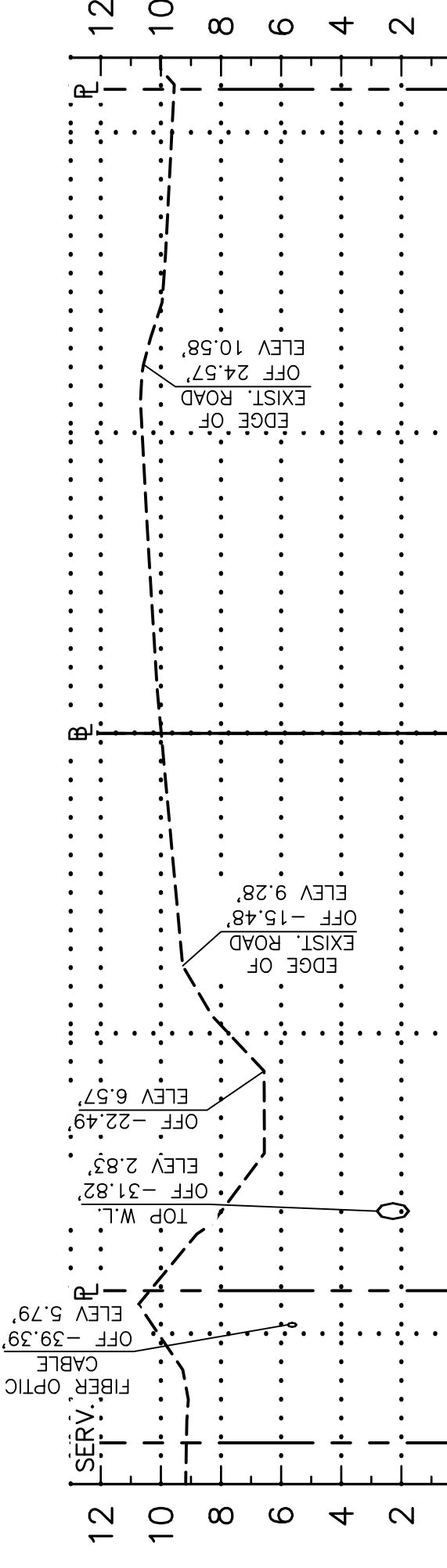
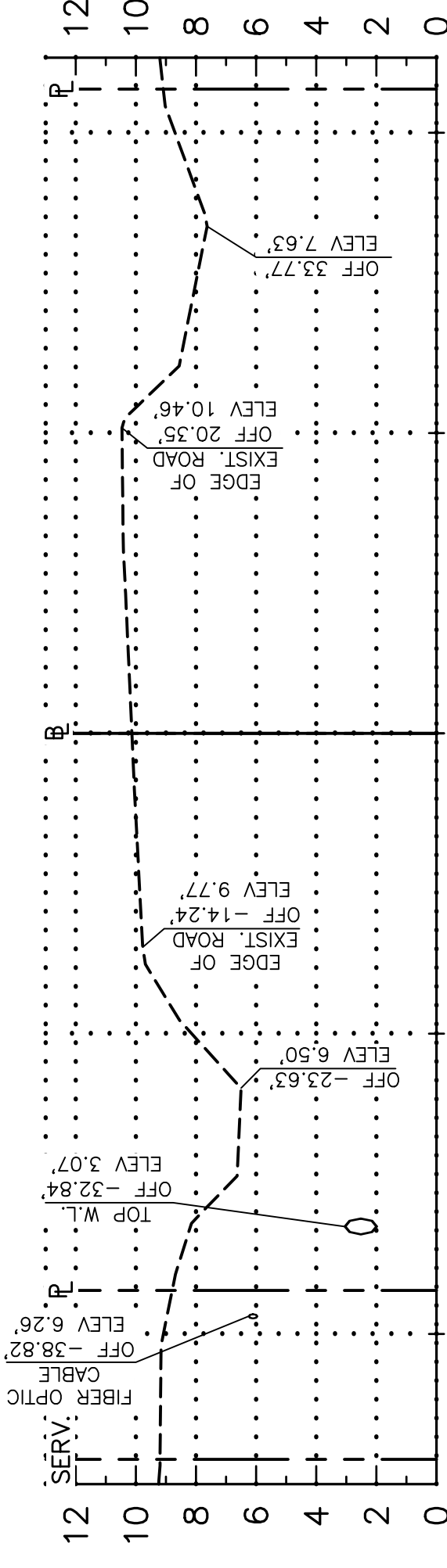
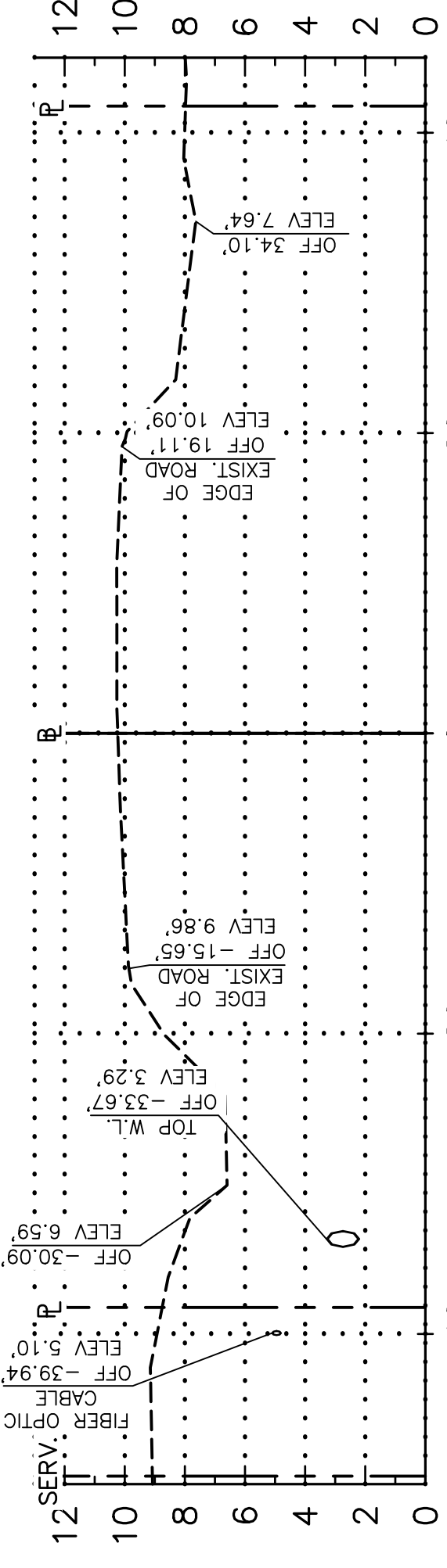
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
S. MILITARY RD.  
CROSS SECTIONS

SHEET NO.  
405

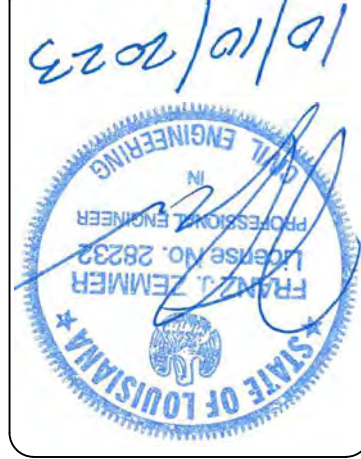




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

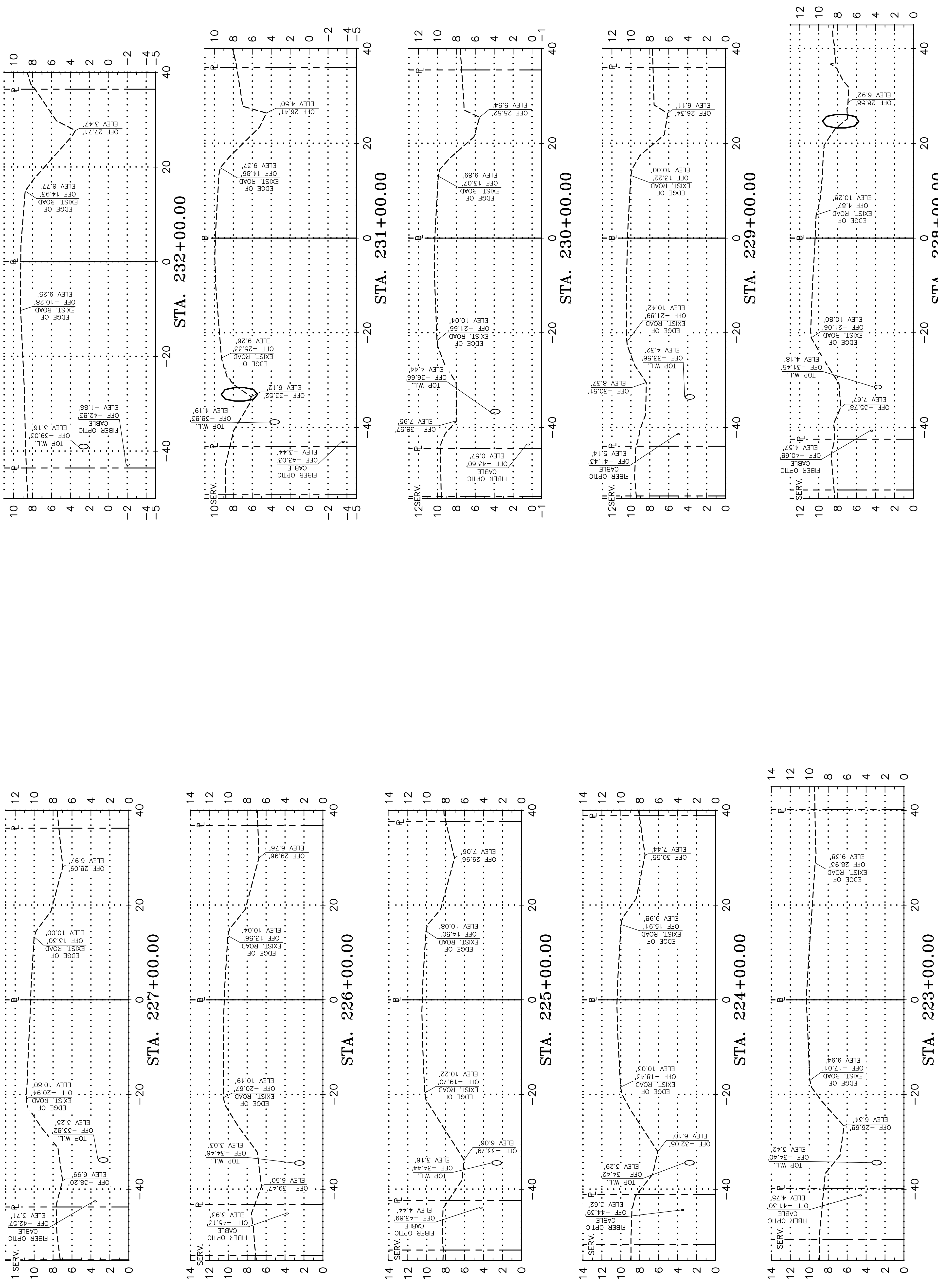
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE	PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT	SHEET SIZE: ANSI D	SCALE:
DRAWN BY: ENK	SUBMITTED BY: RCLC					



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
S. MILITARY RD.  
CROSS SECTIONS

SHEET NO. 406

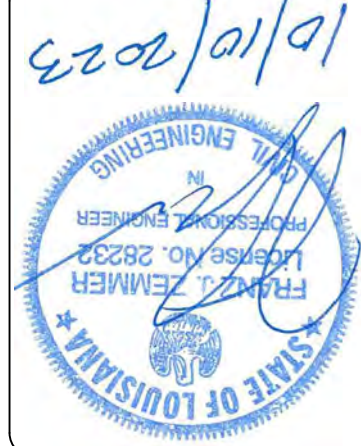




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

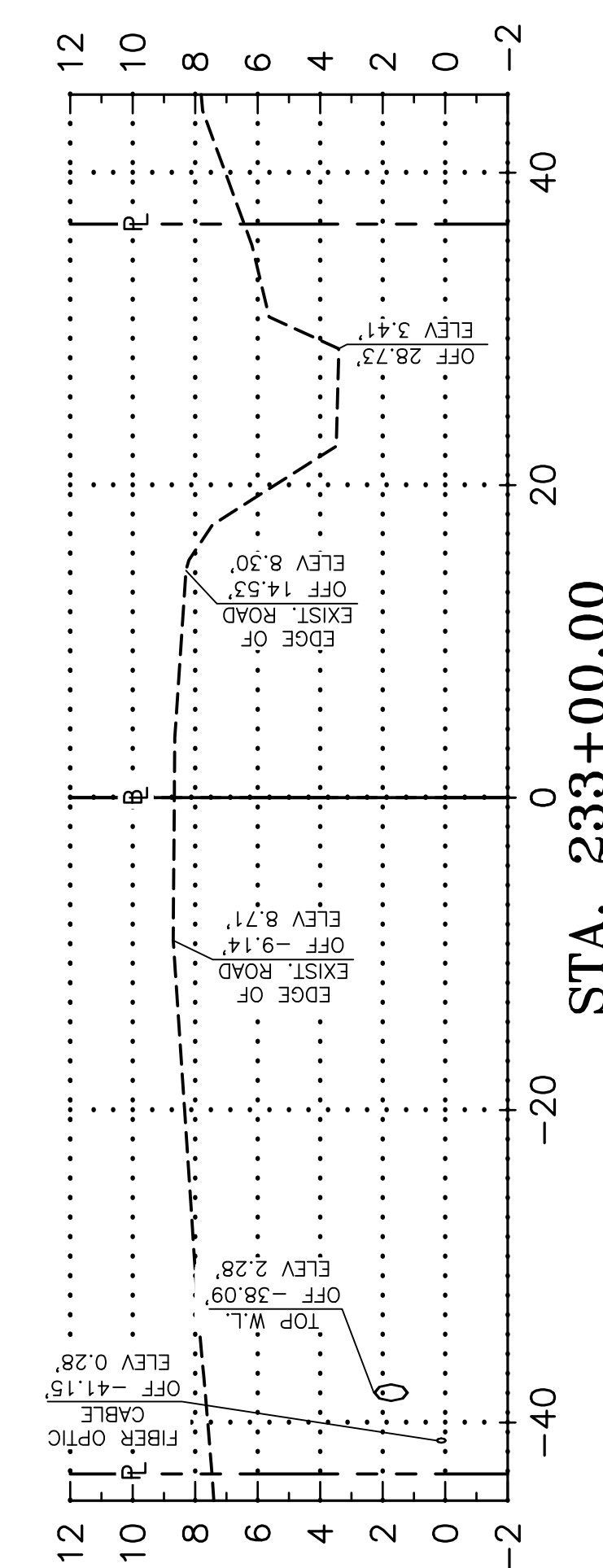
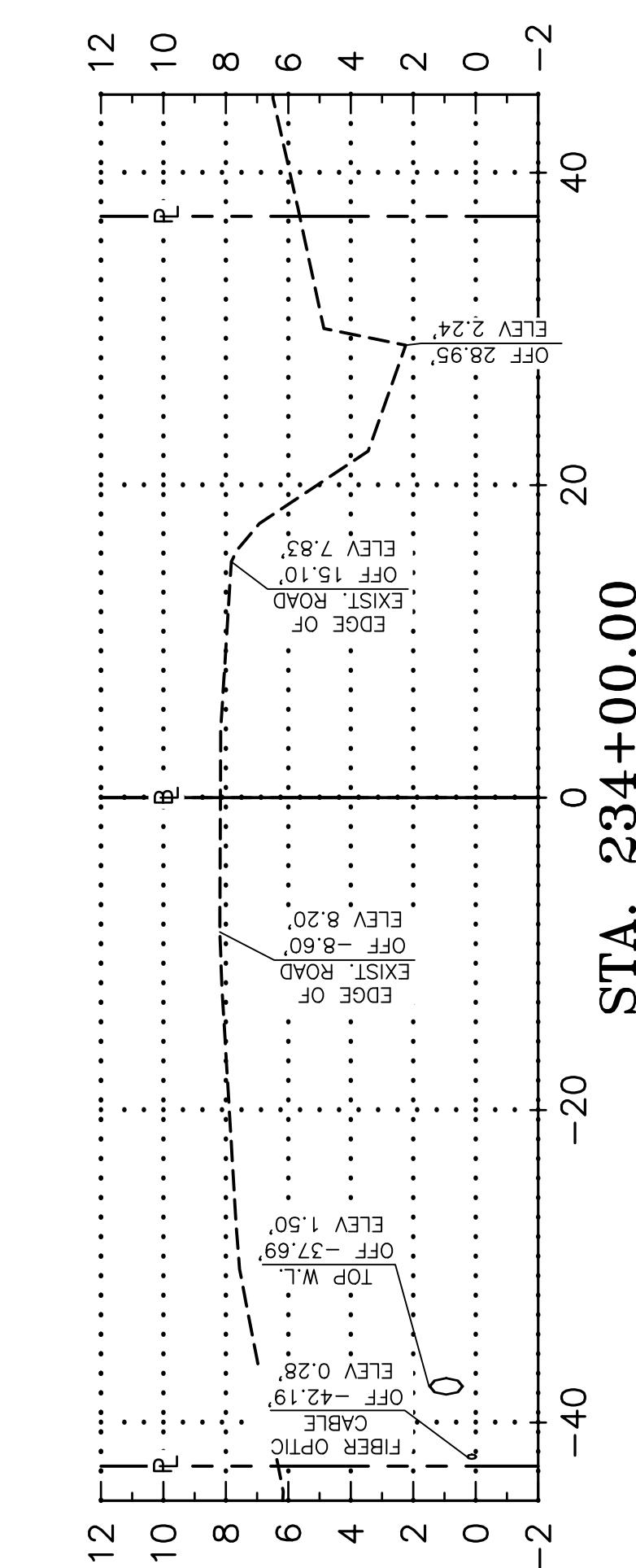
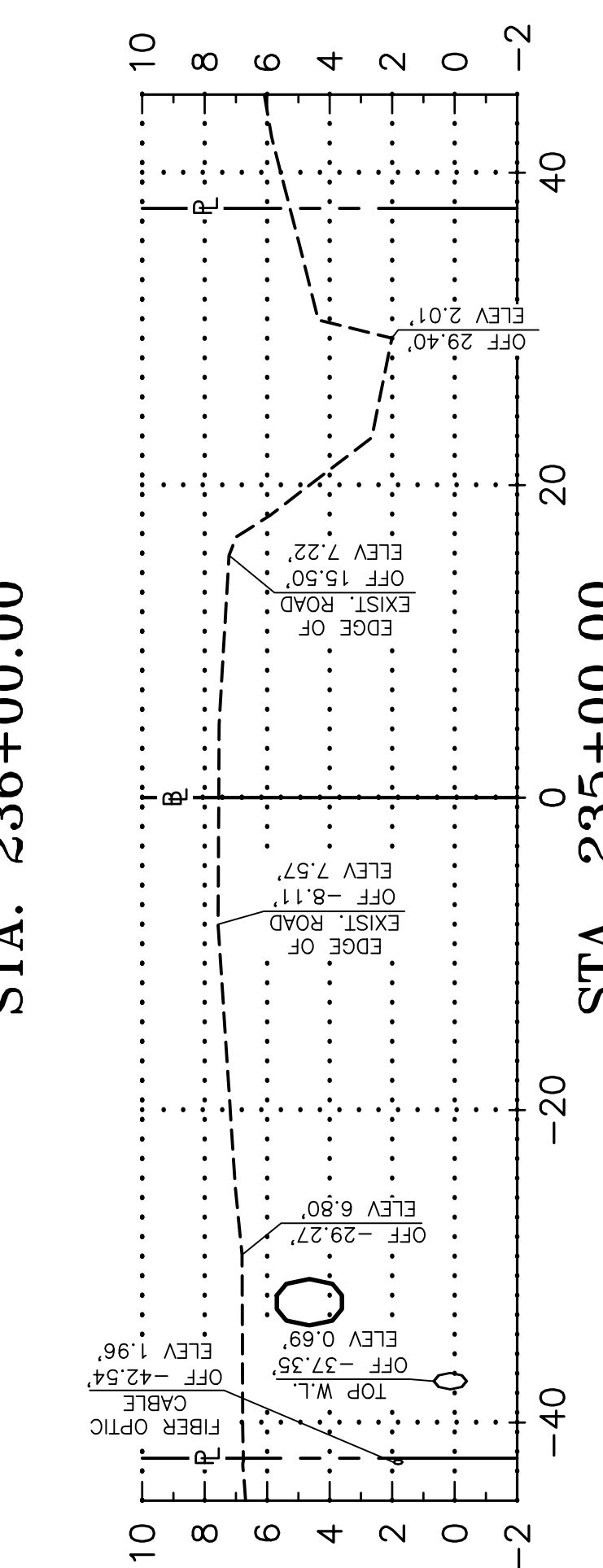
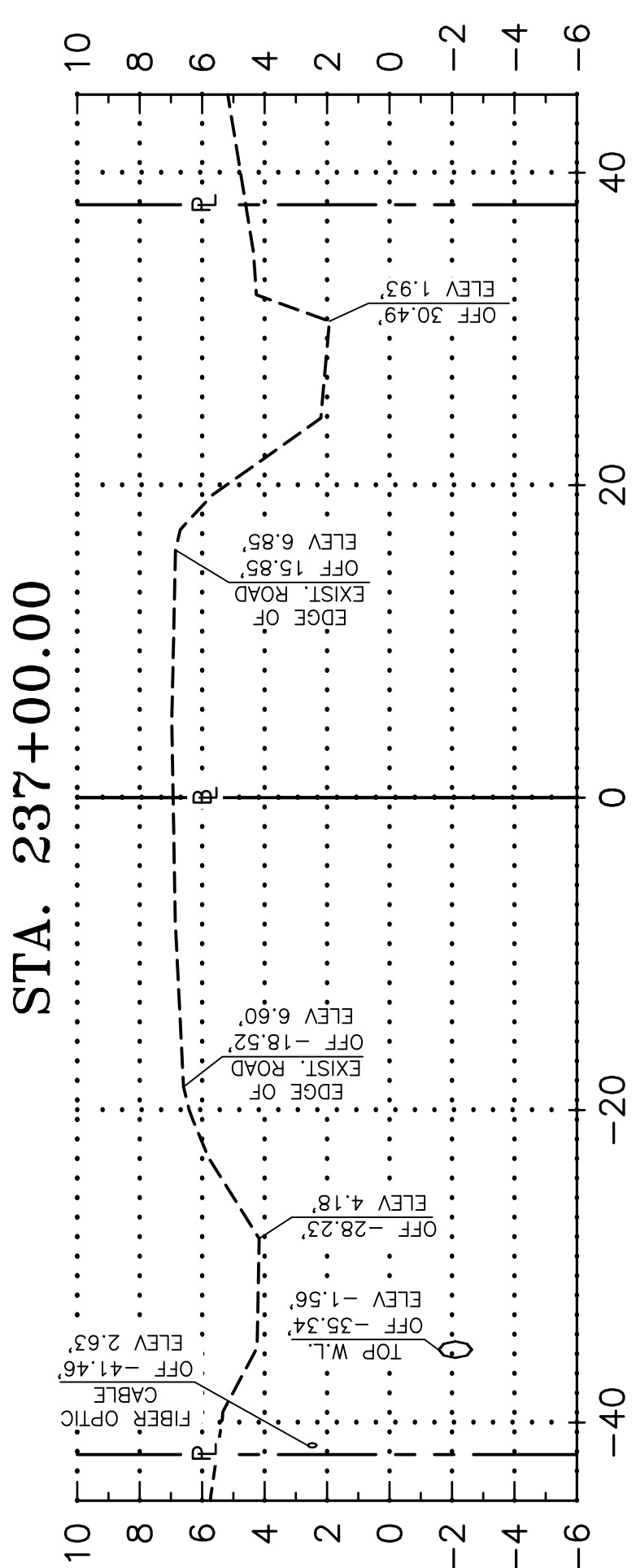
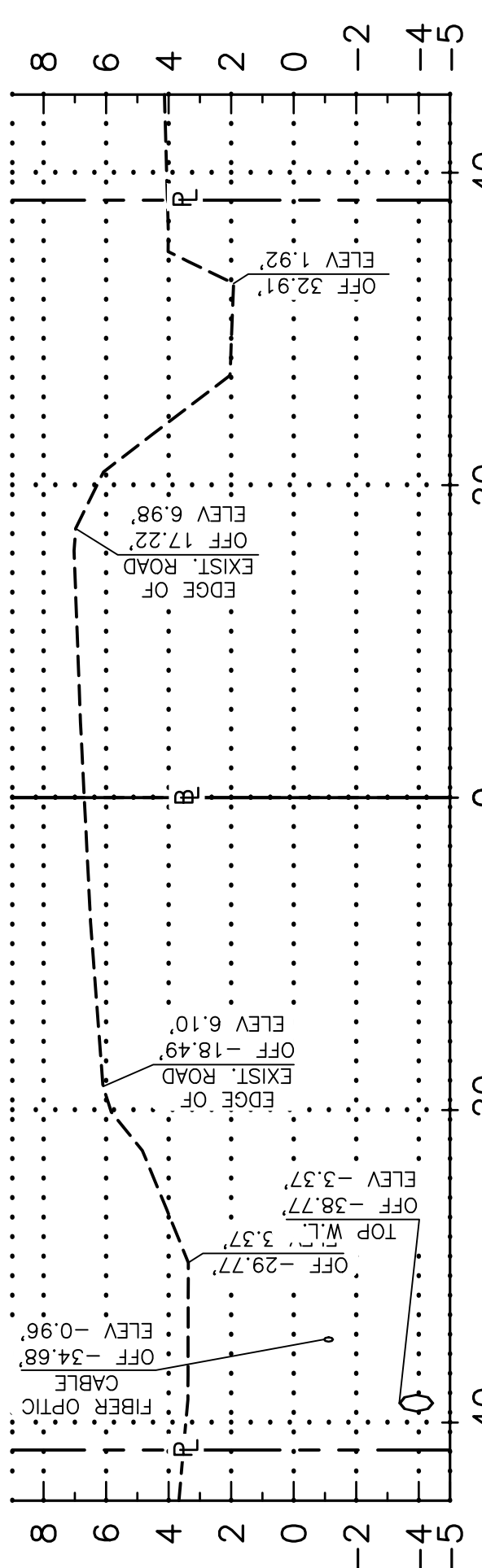
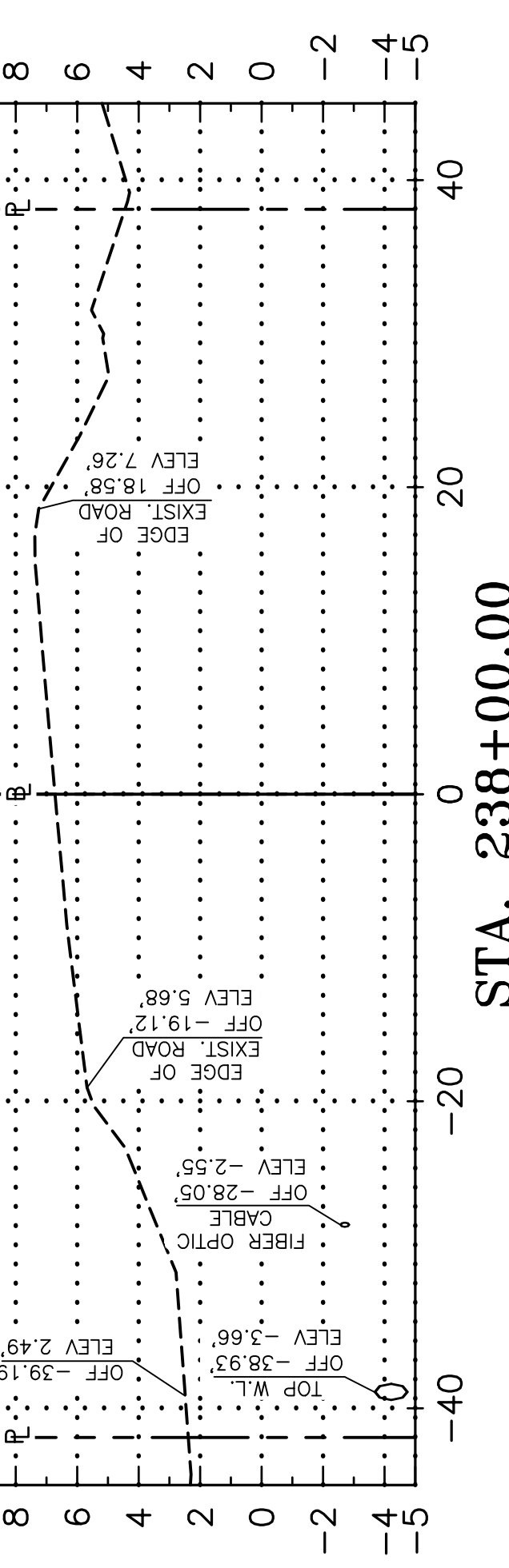
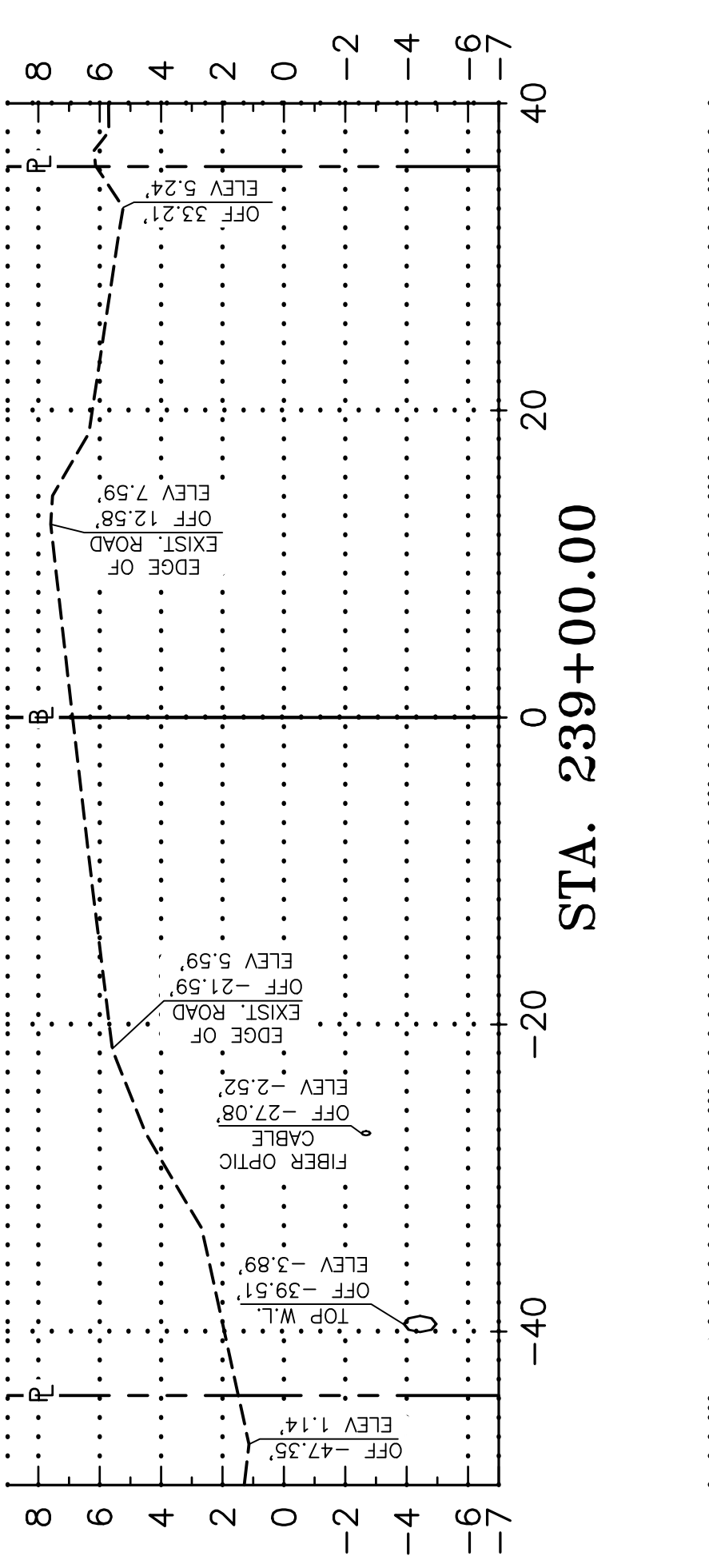
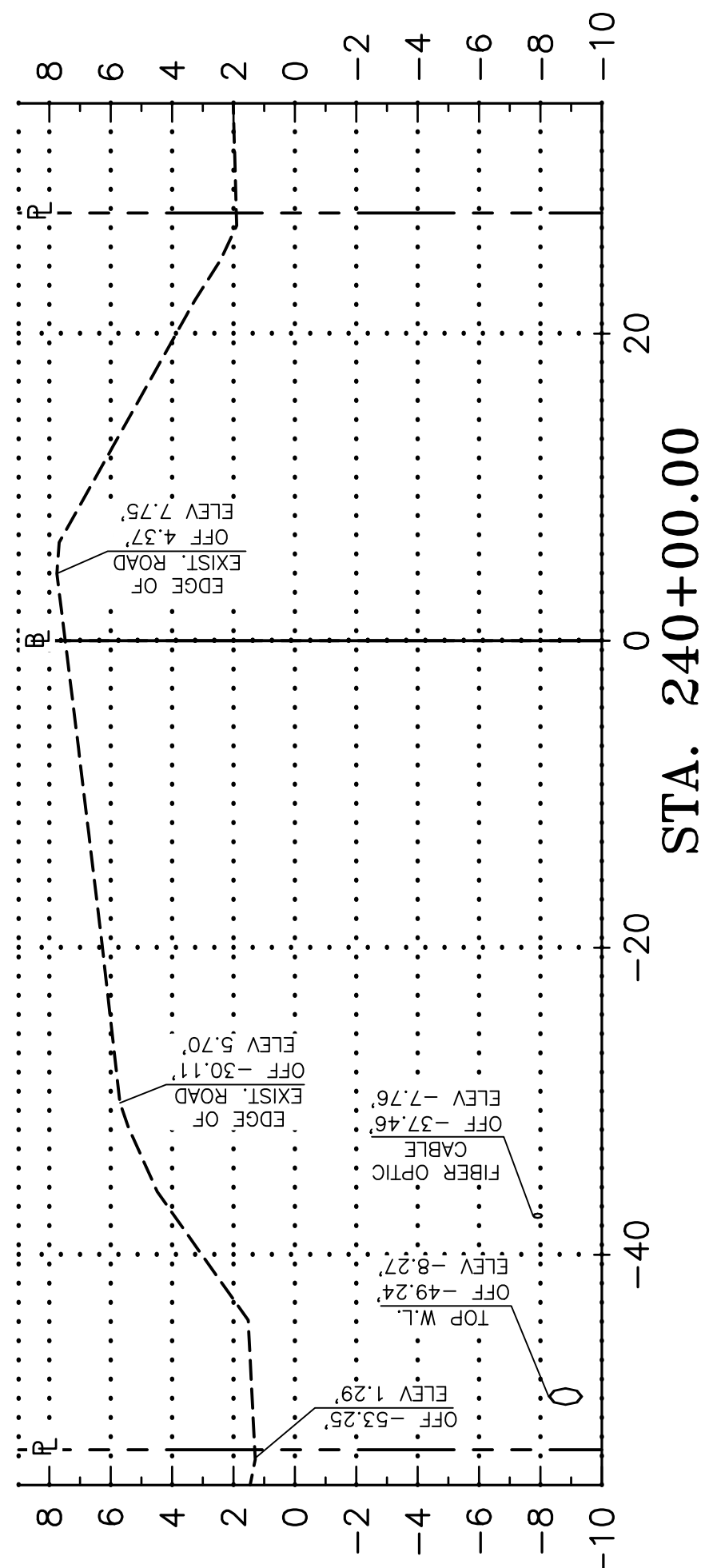
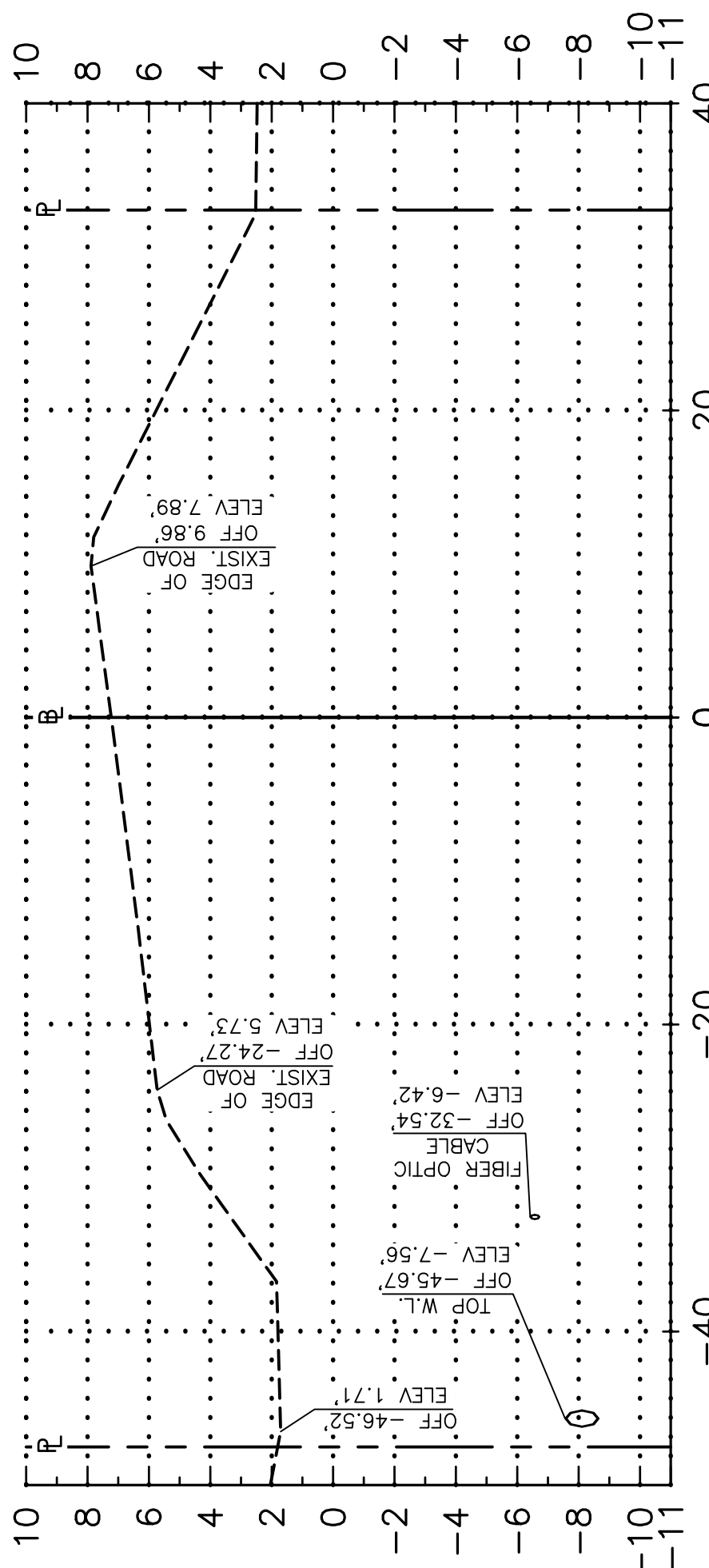
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
DRAWN BY: ENK	APPROVED BY: CPT
SUBMITTED BY: RCLC	SHEET SIZE: ANSI D
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
S. MILITARY RD.  
CROSS SECTIONS

SHEET NO. 407

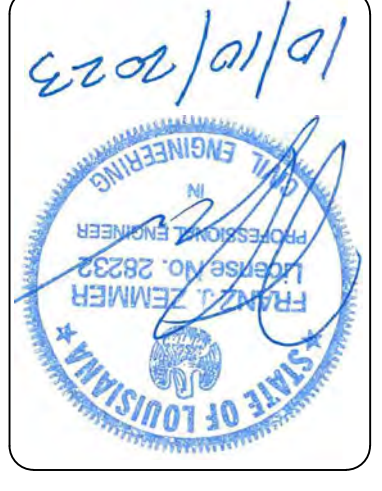




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

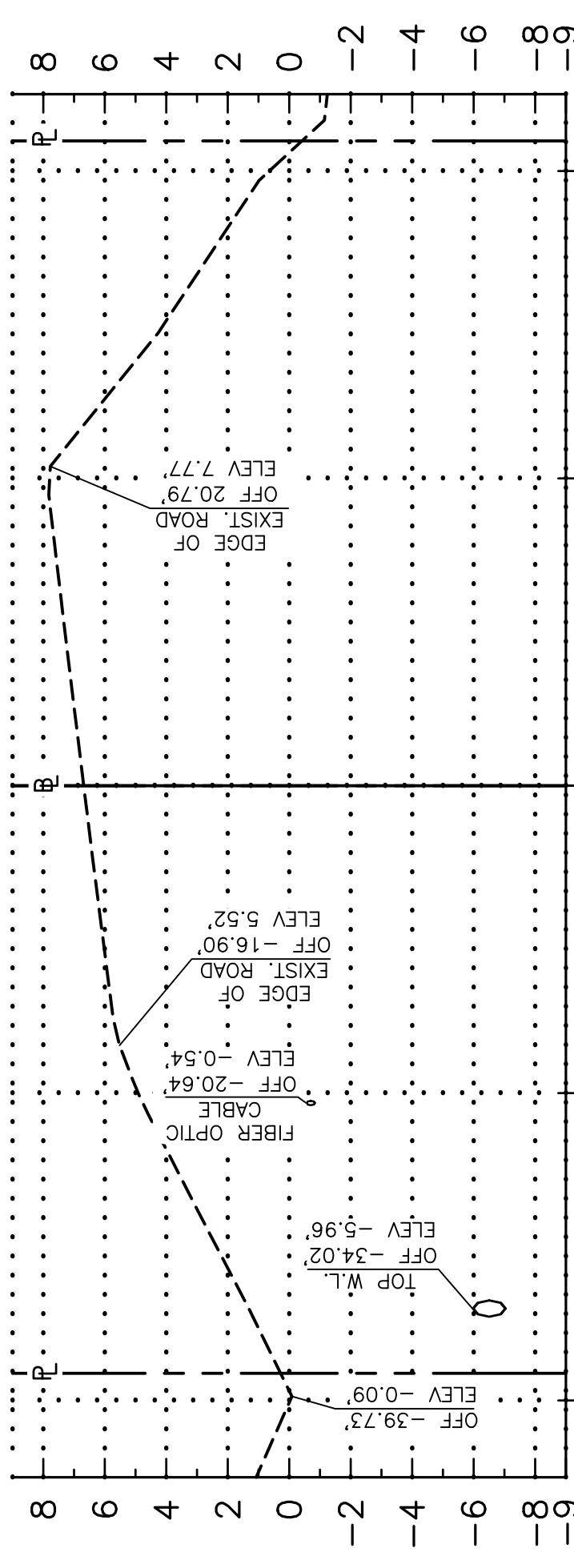
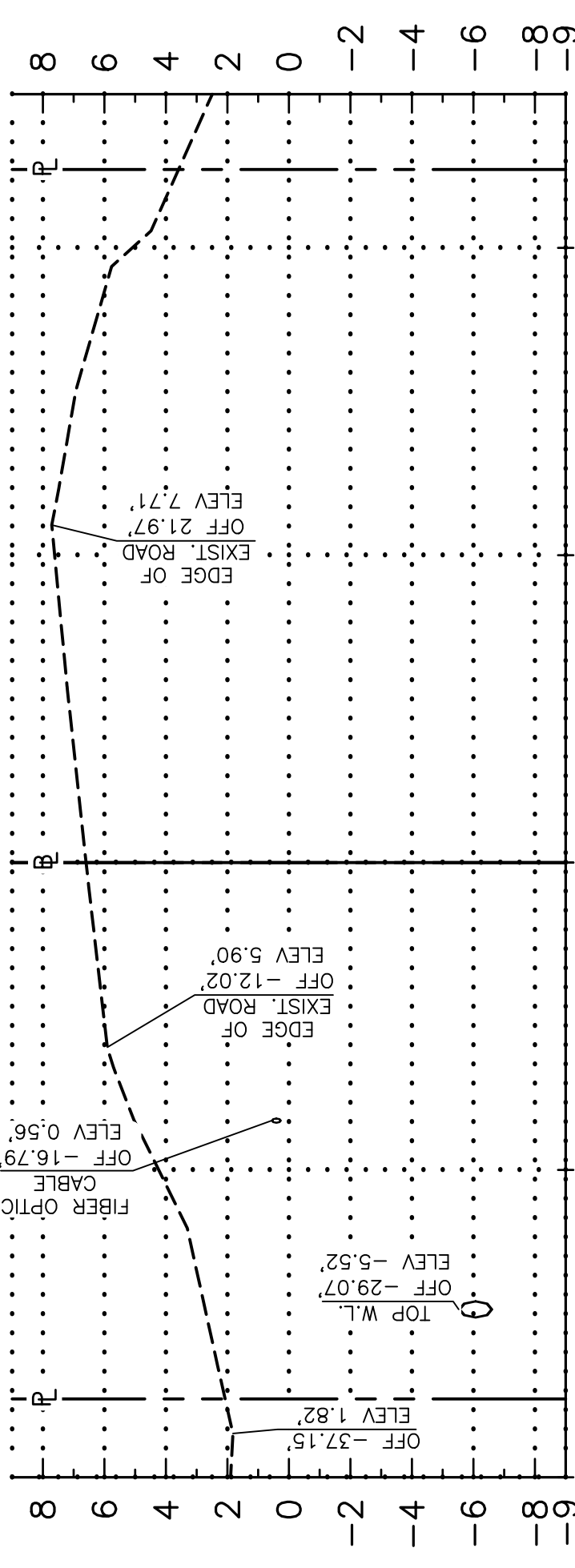
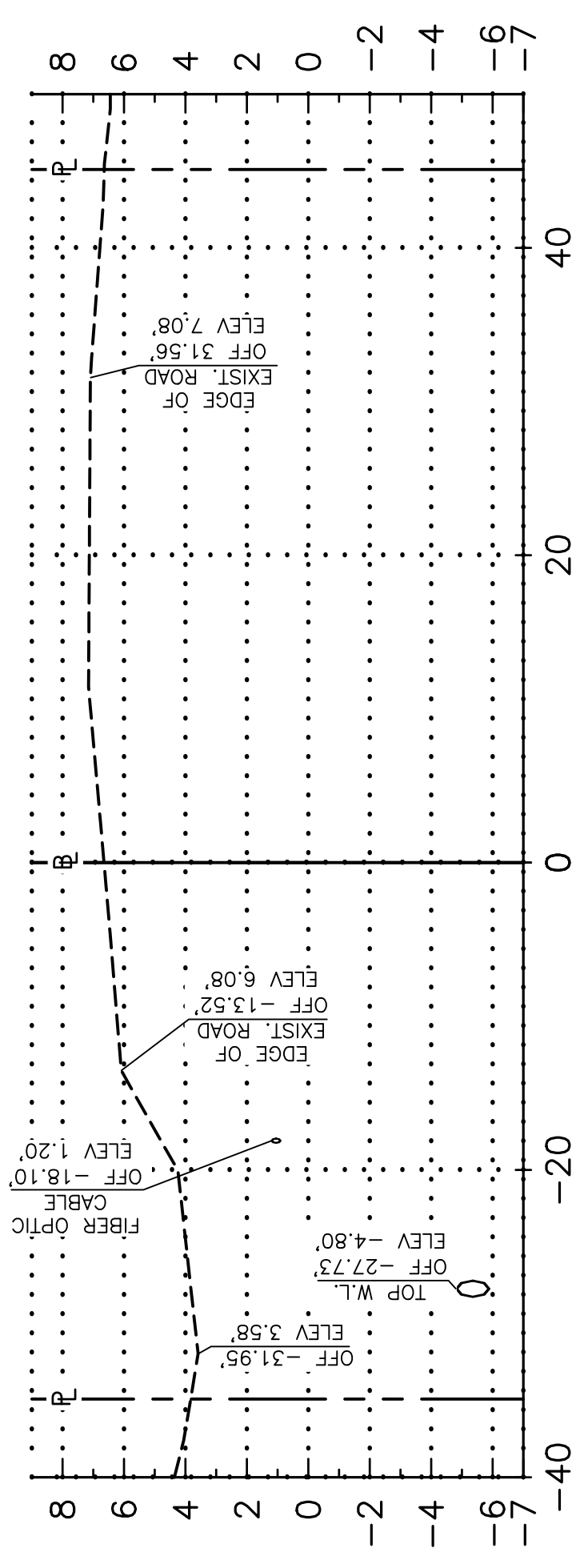
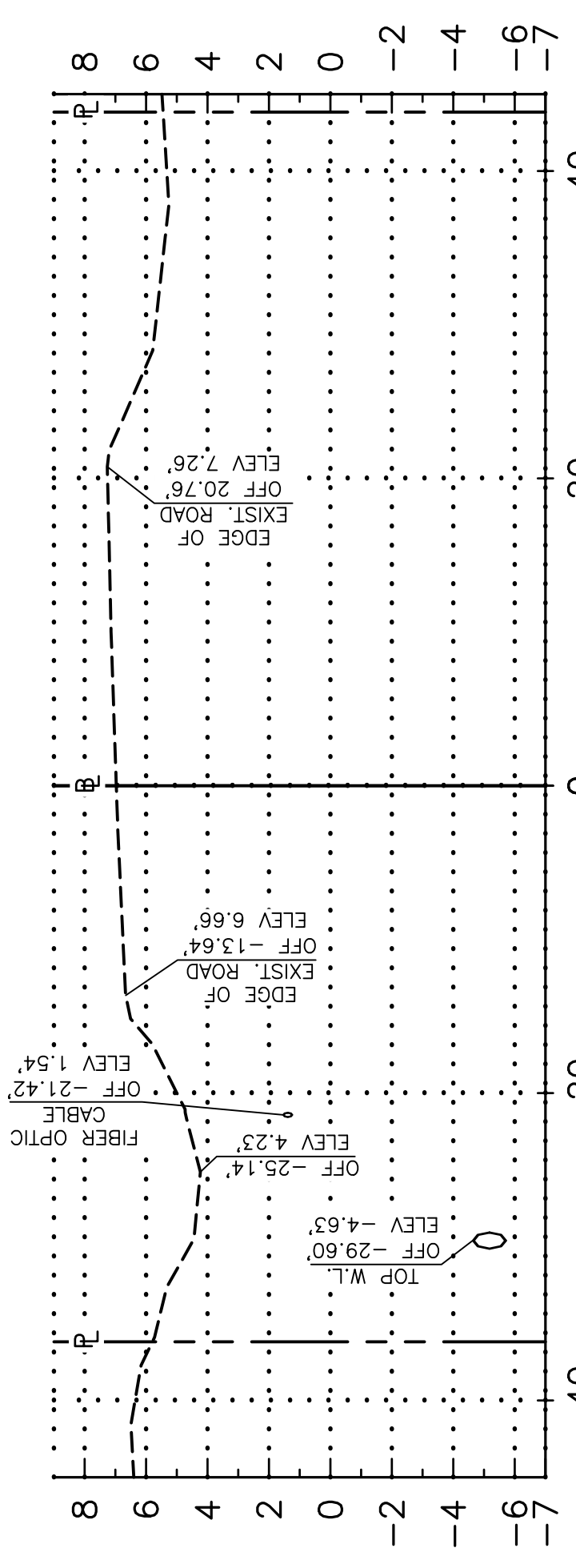
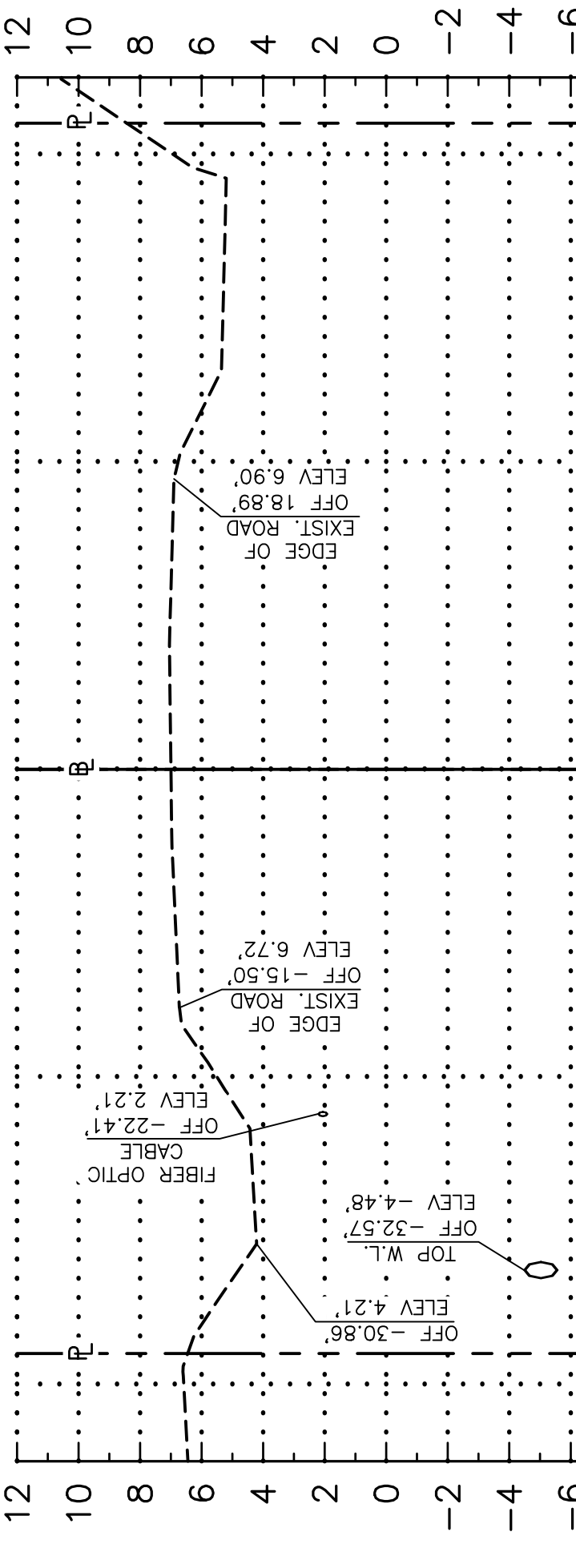
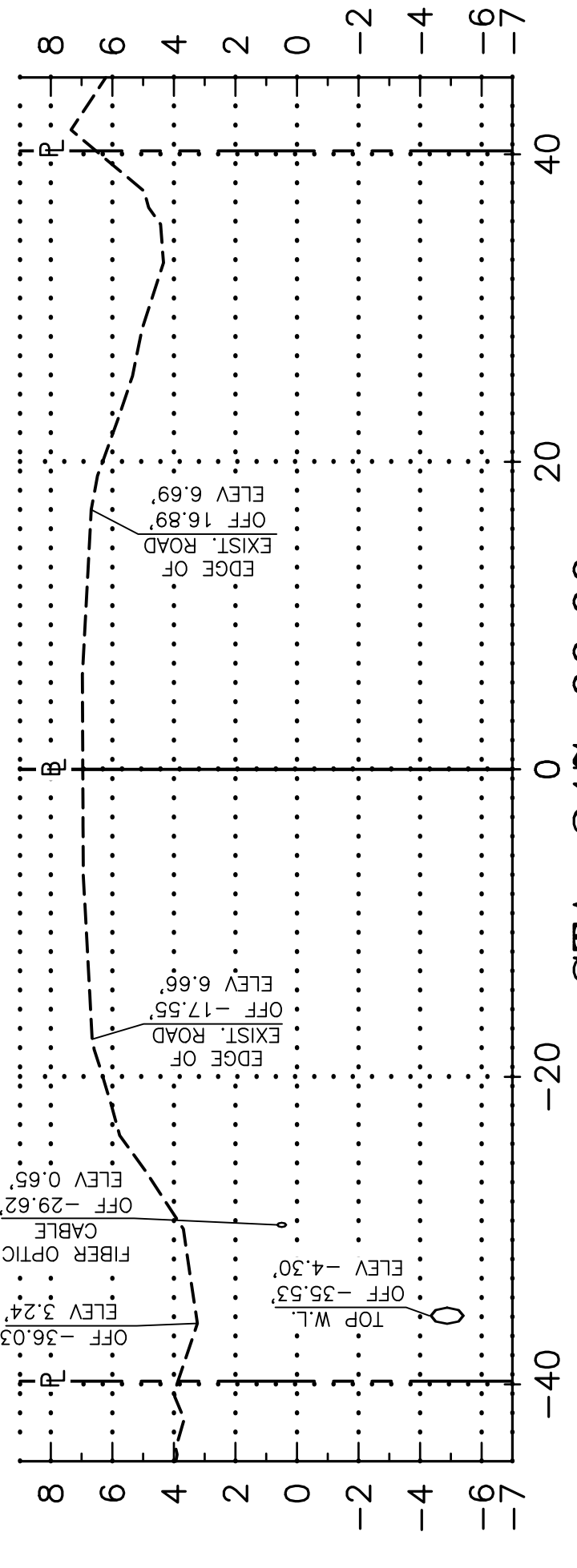
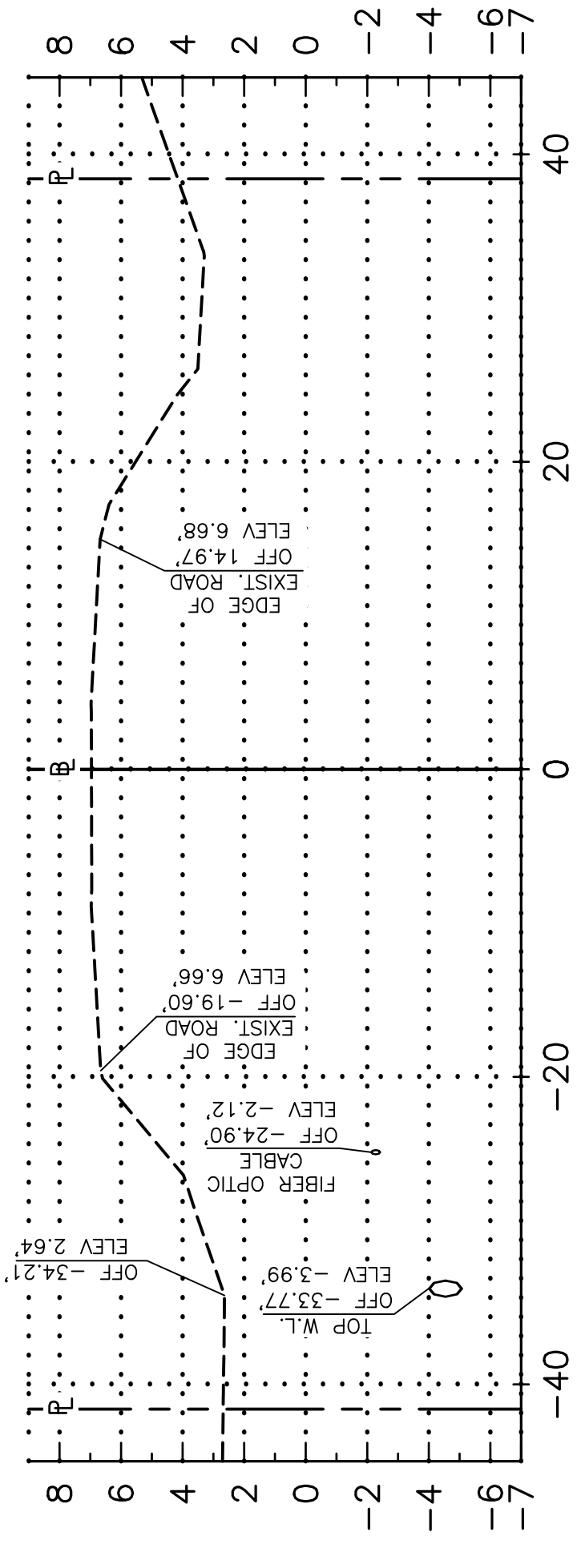
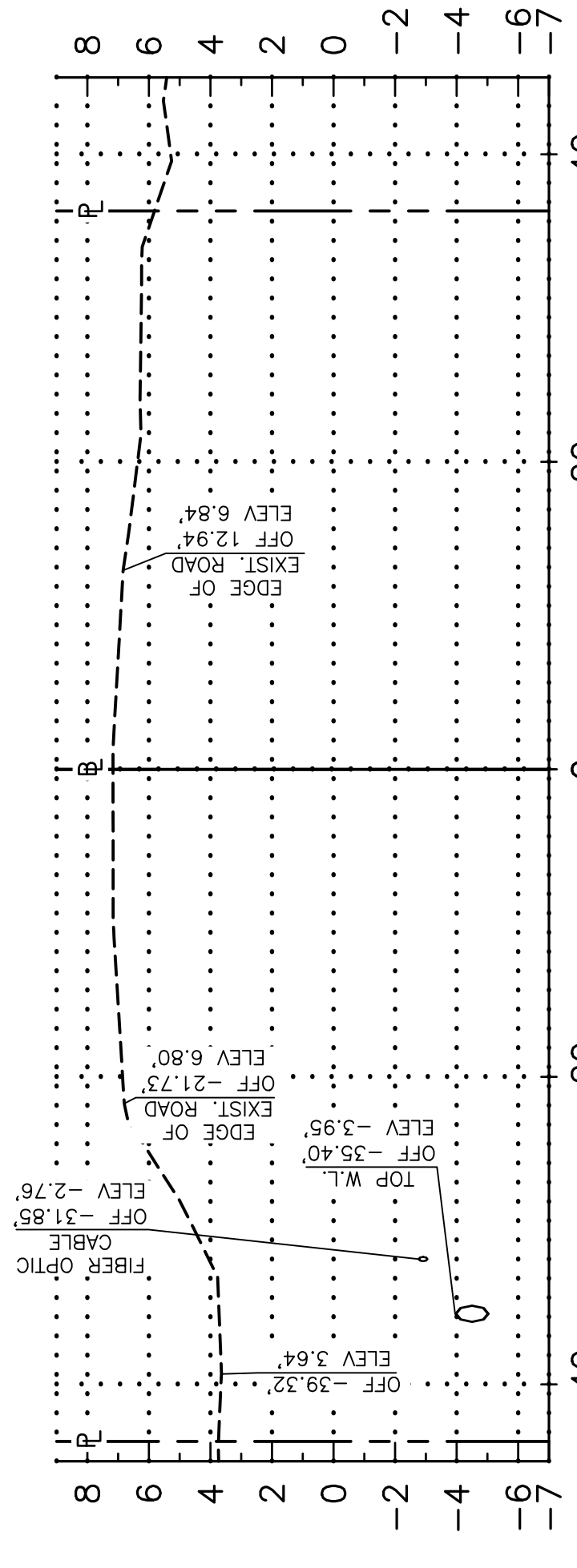
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	CHECKED BY: AKGE	DRAWN BY: ENK
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023	APPROVED BY: CPT
SUBMITTED BY: RCLC	SHEET SIZE: ANSI D	SCALE:



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
S. MILITARY RD.  
CROSS SECTIONS

SHEET NO. 408

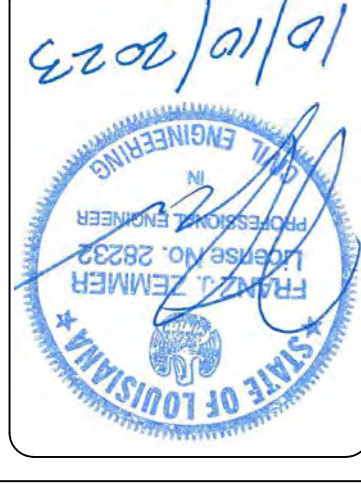




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

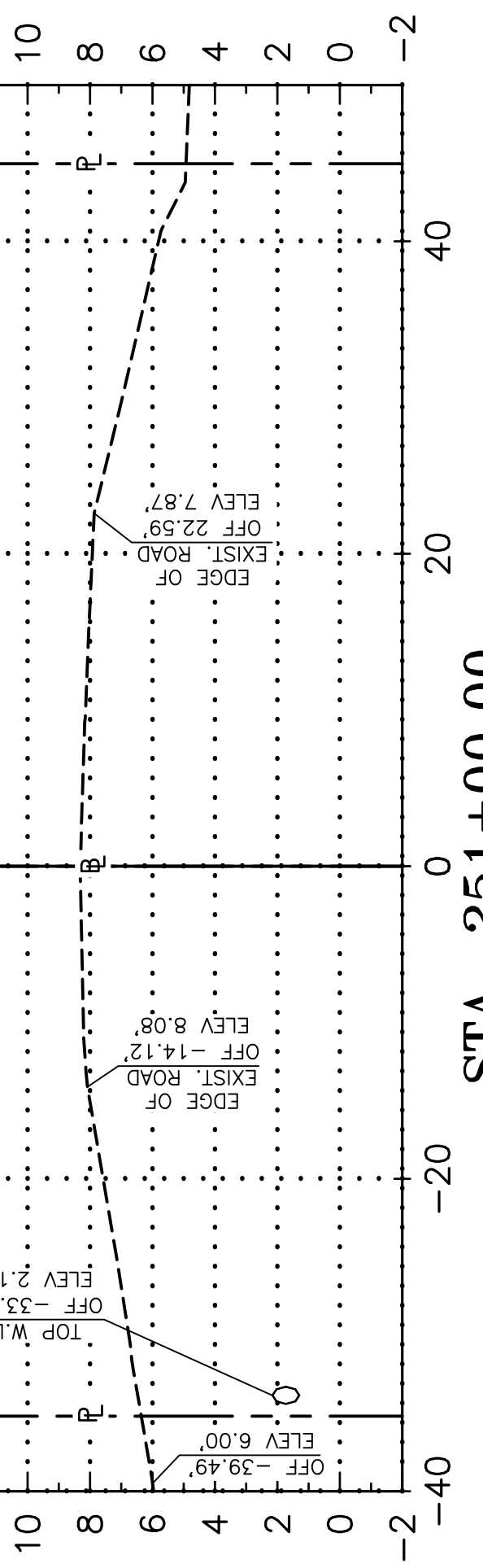
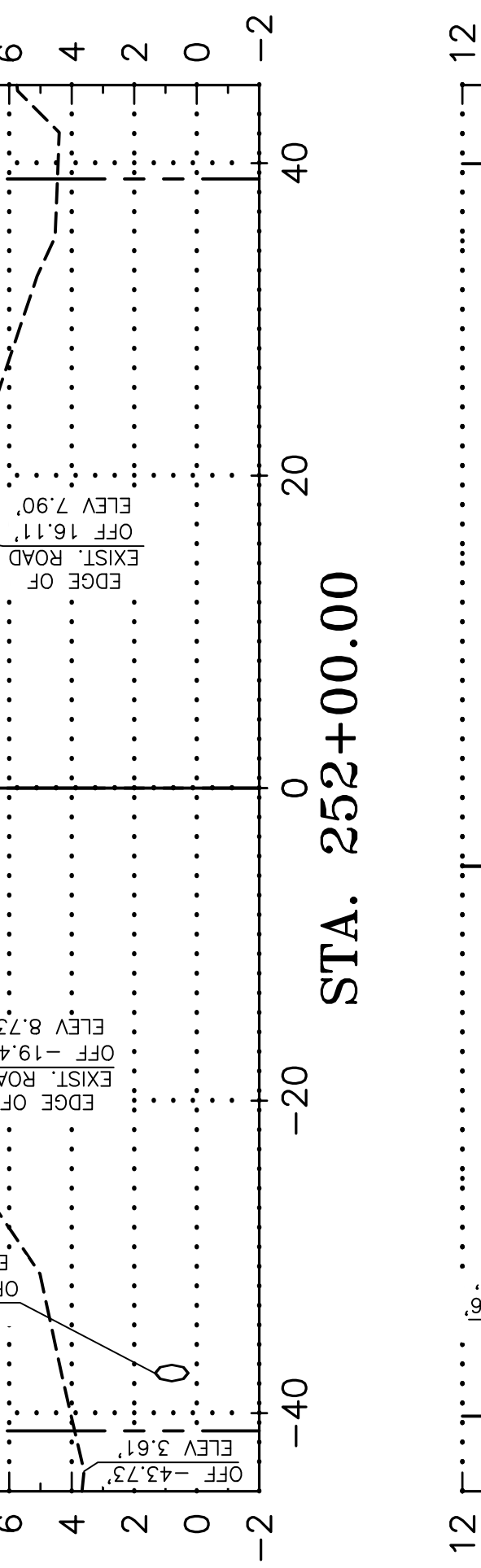
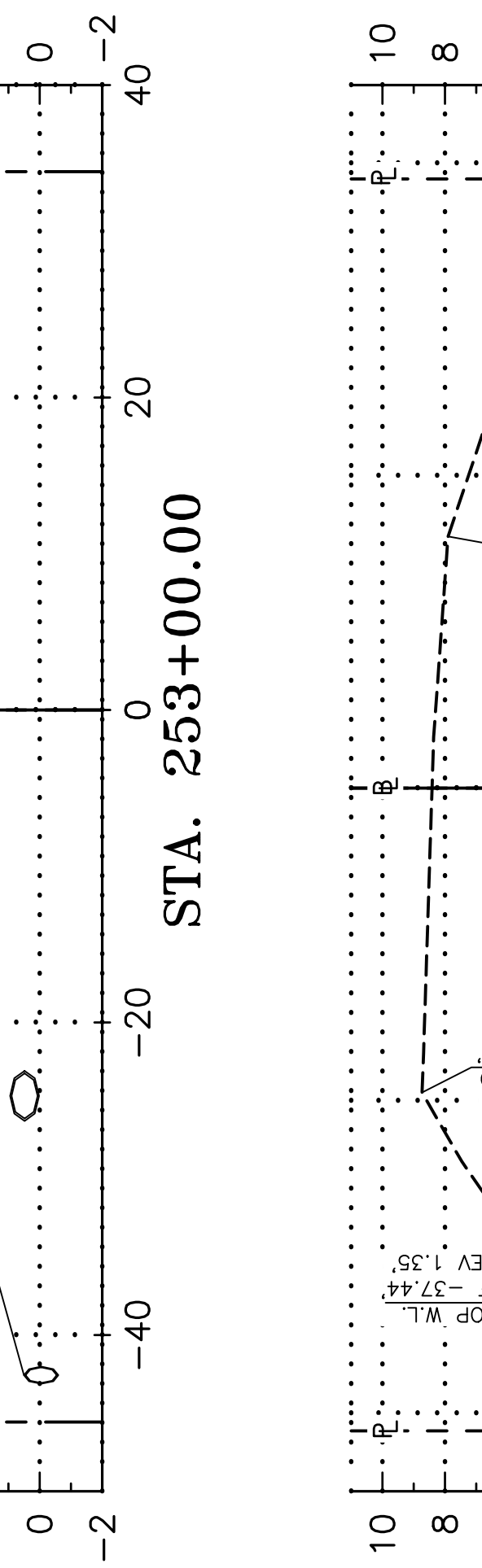
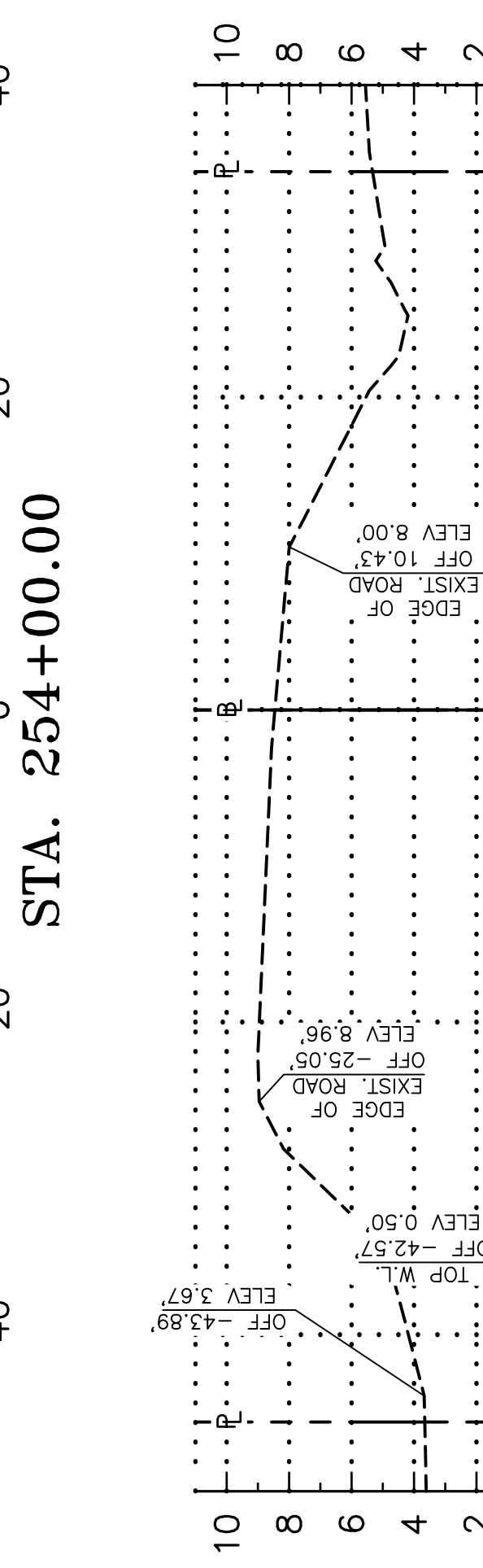
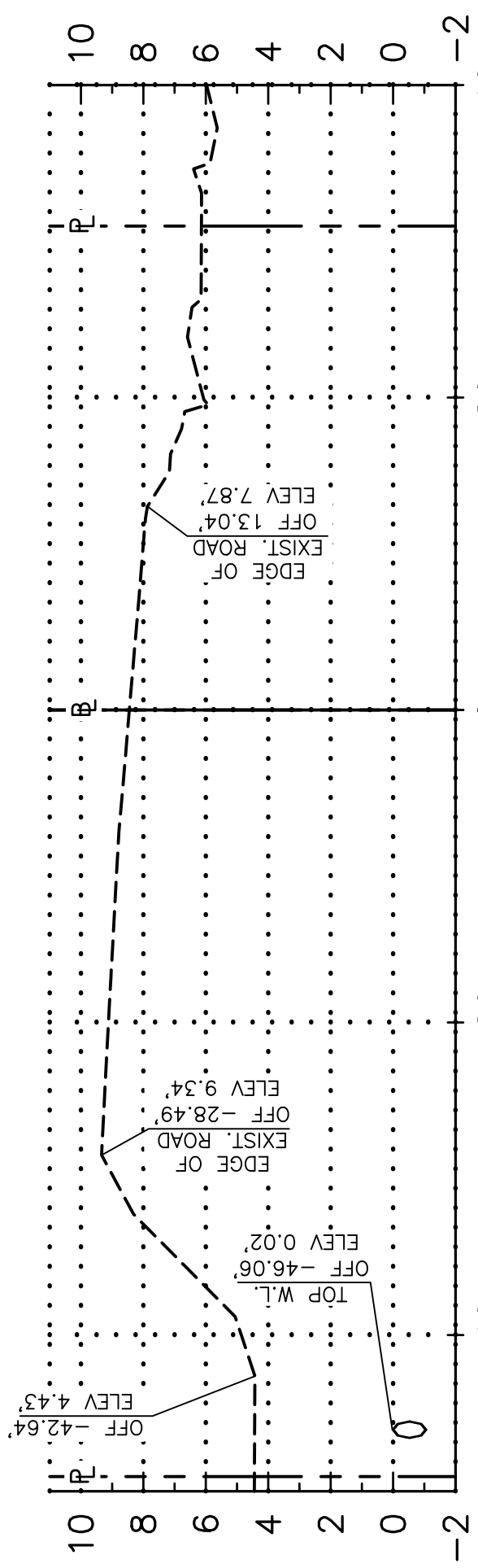
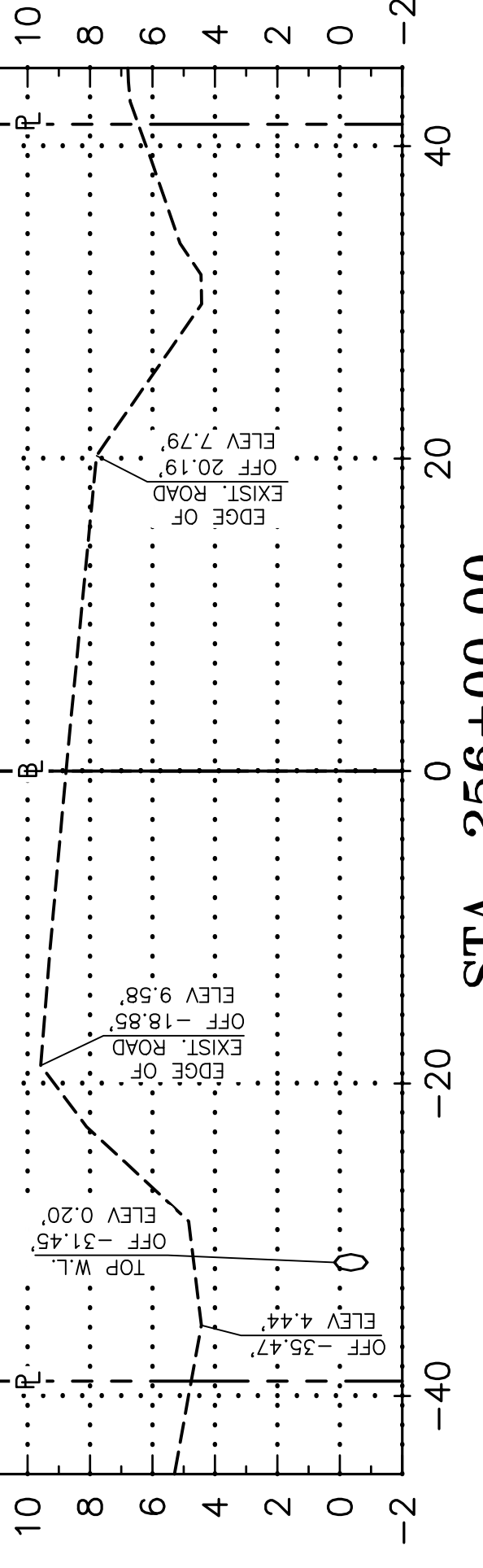
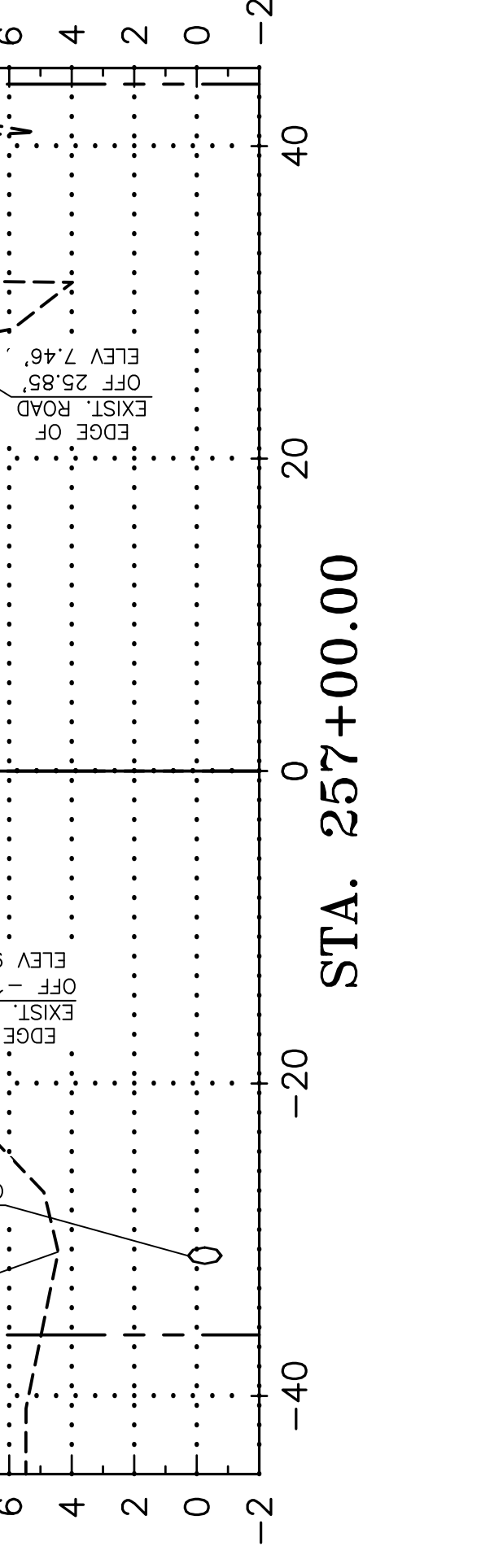
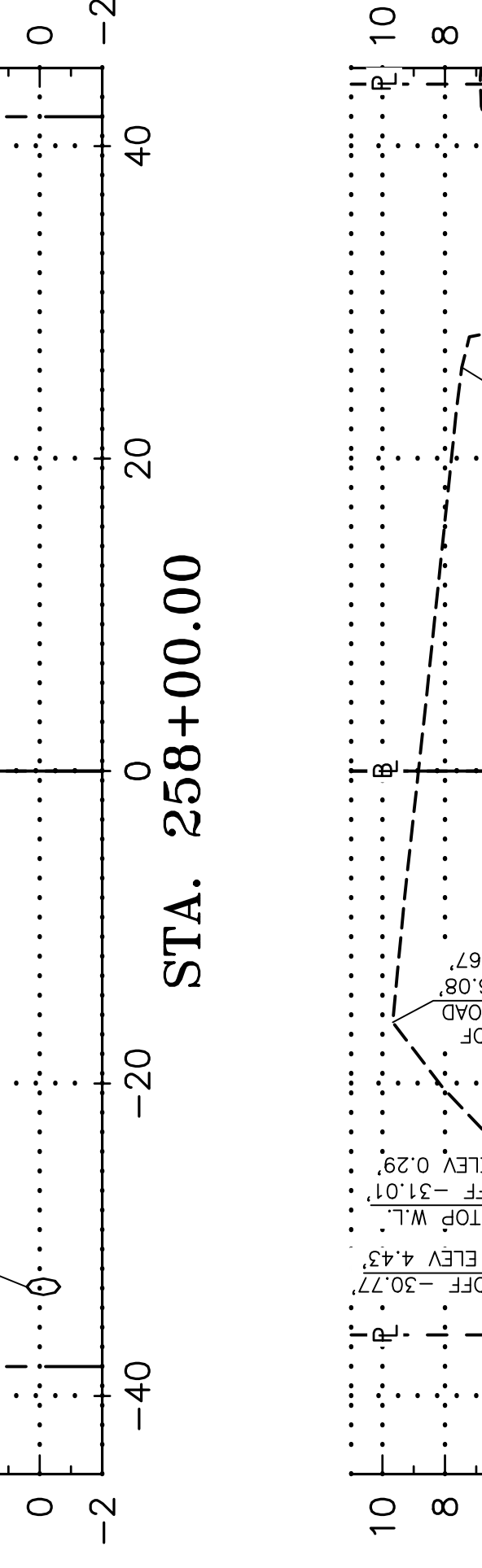
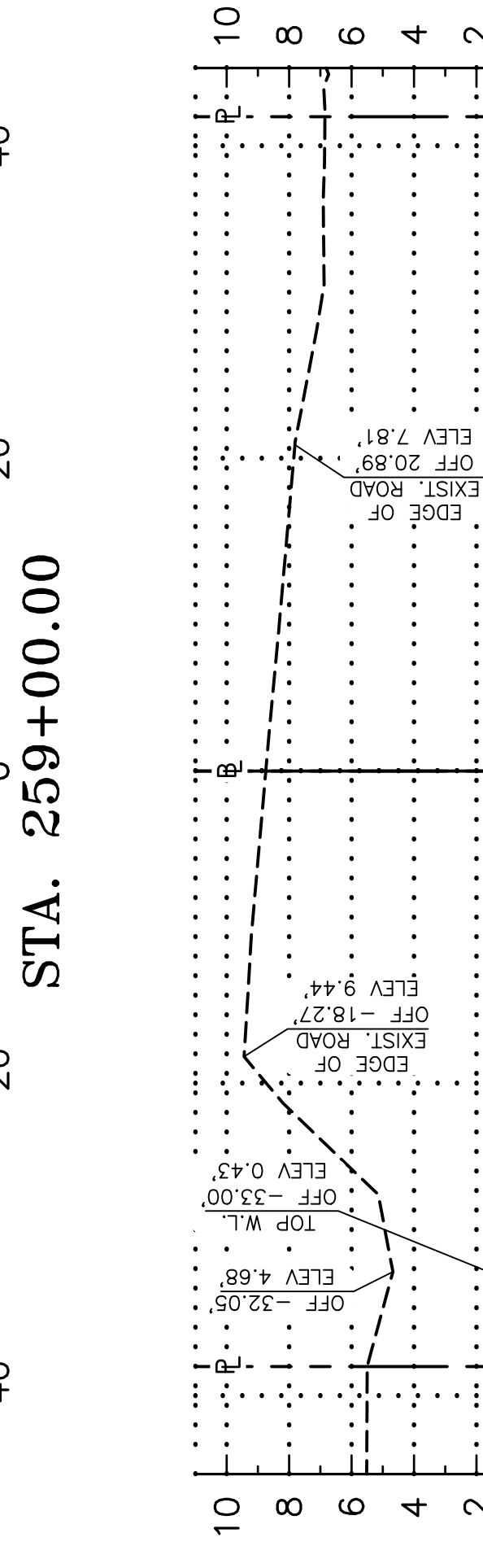
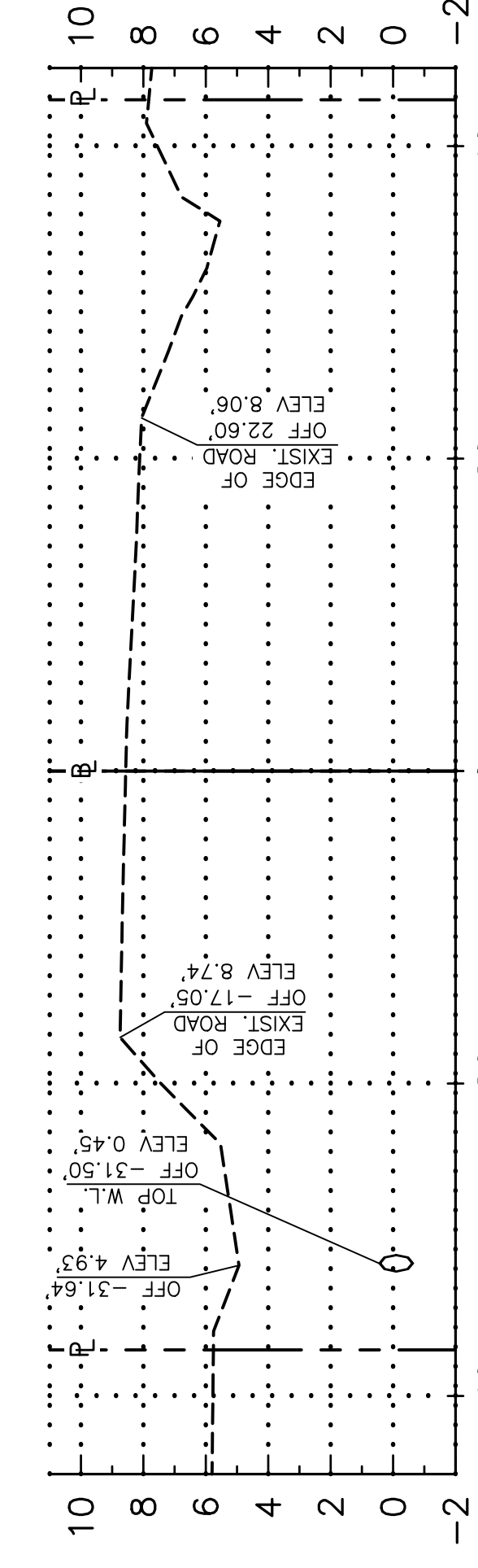
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



S. MILITARY RD US 190 &  
US190  
CROSS SECTIONS

SHEET NO.  
409





DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

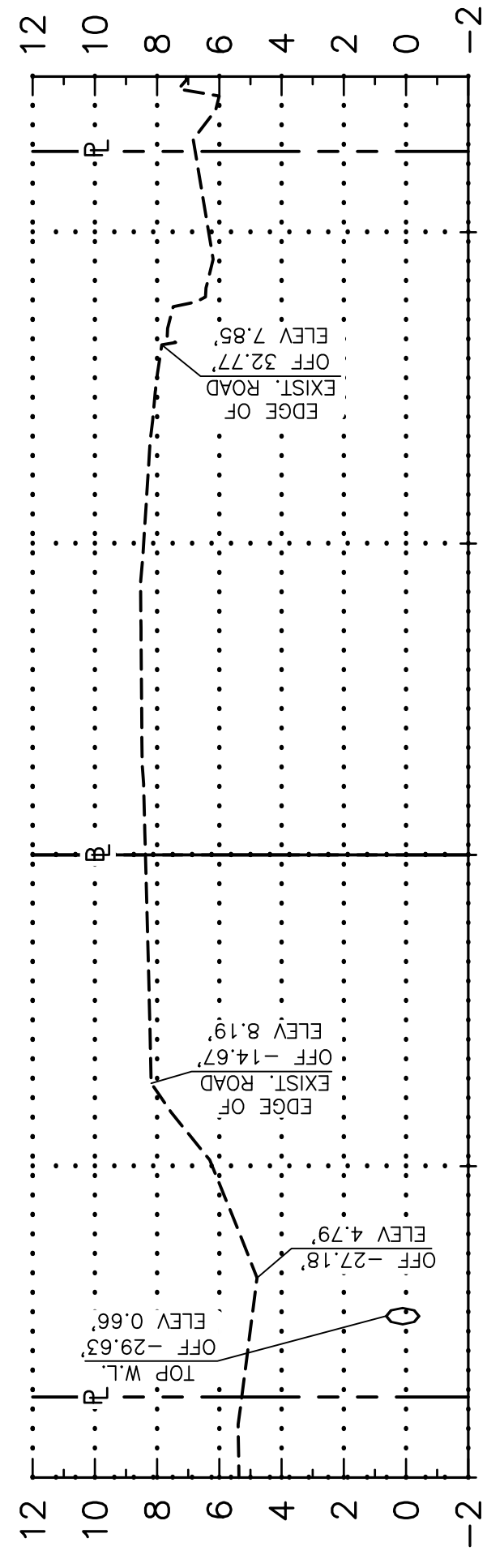
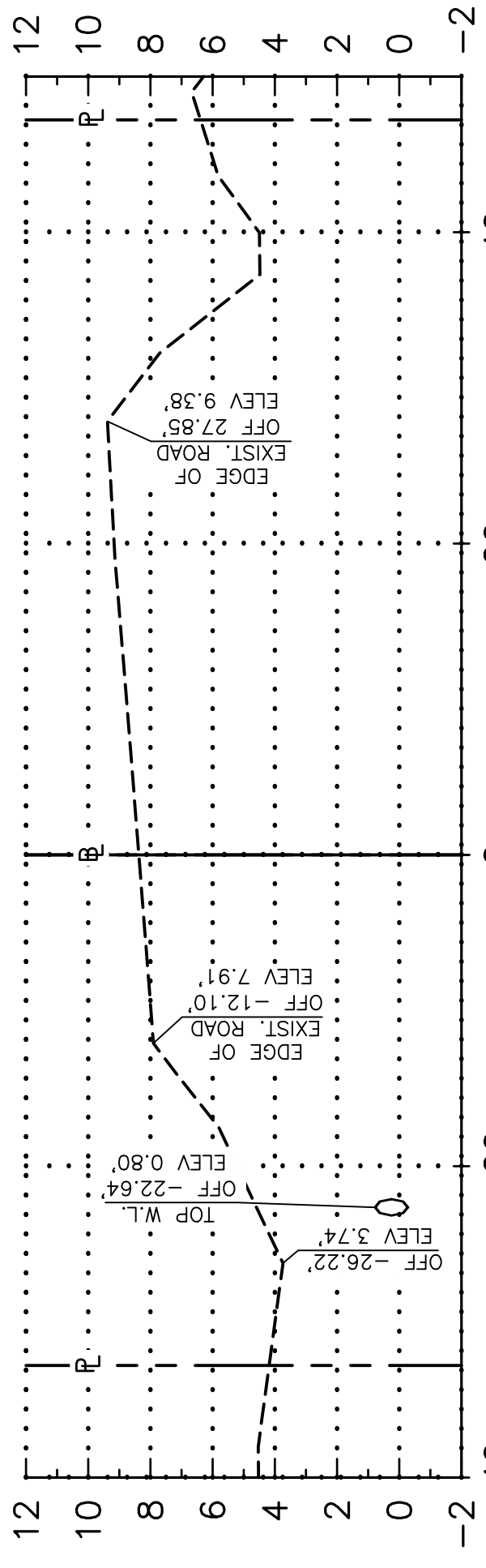
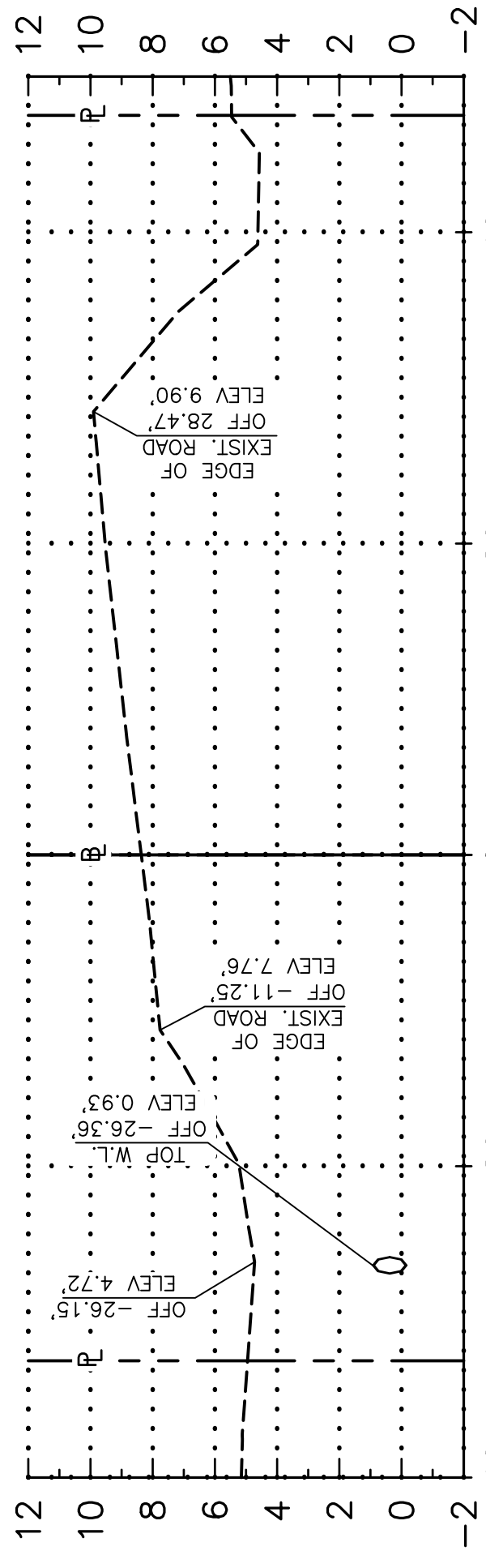
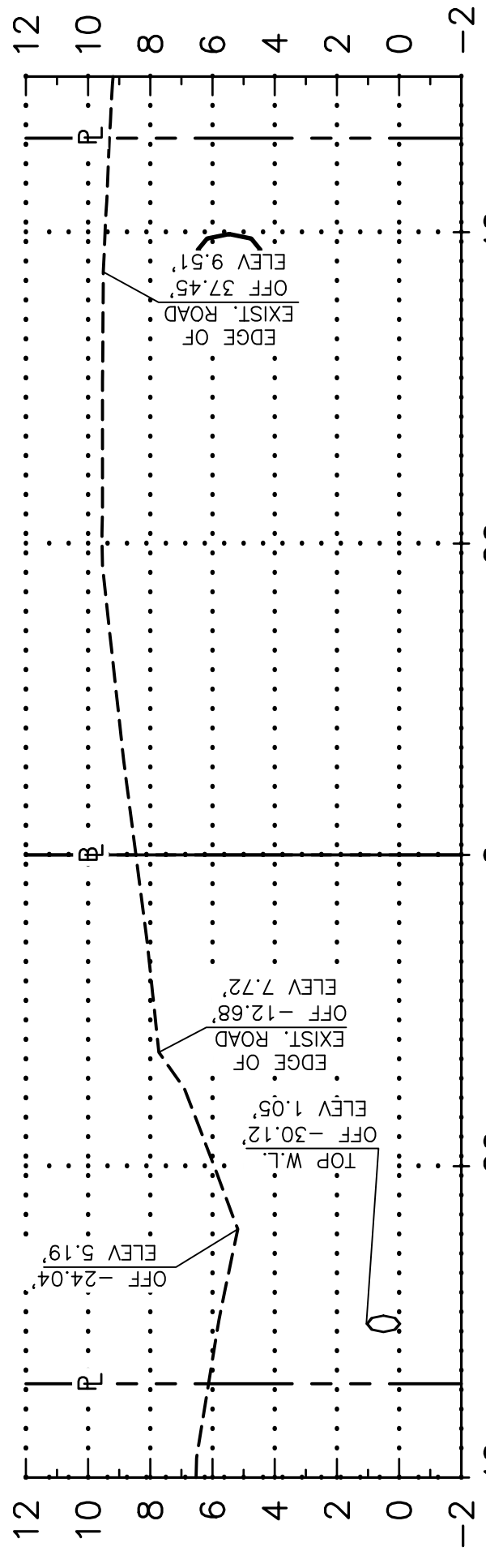
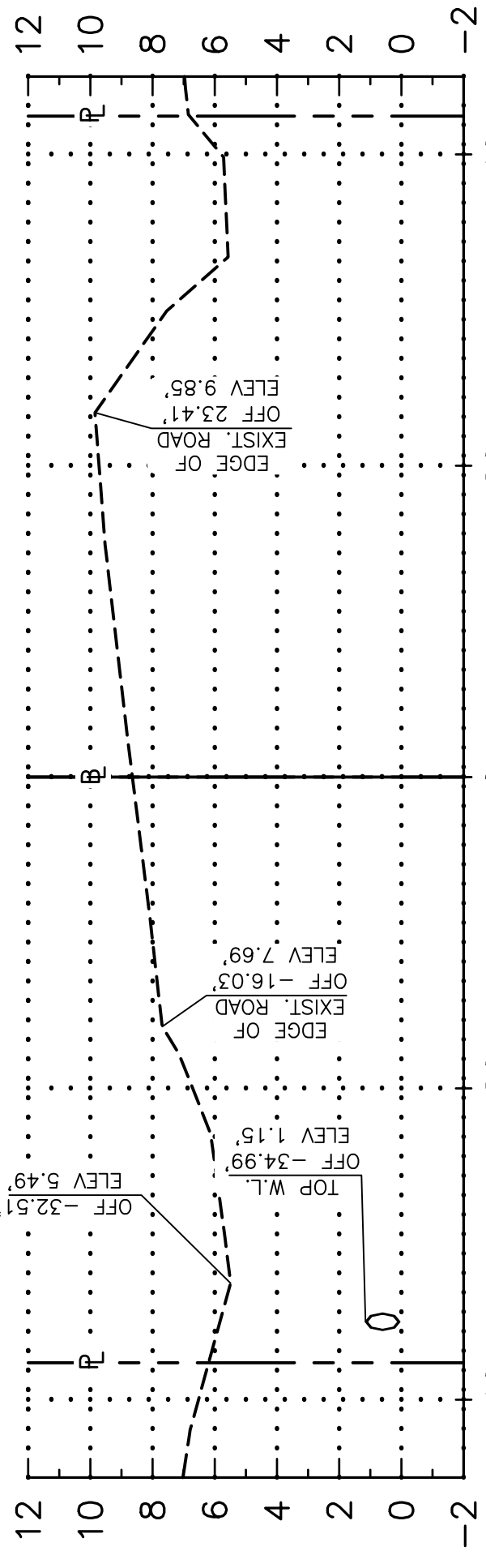
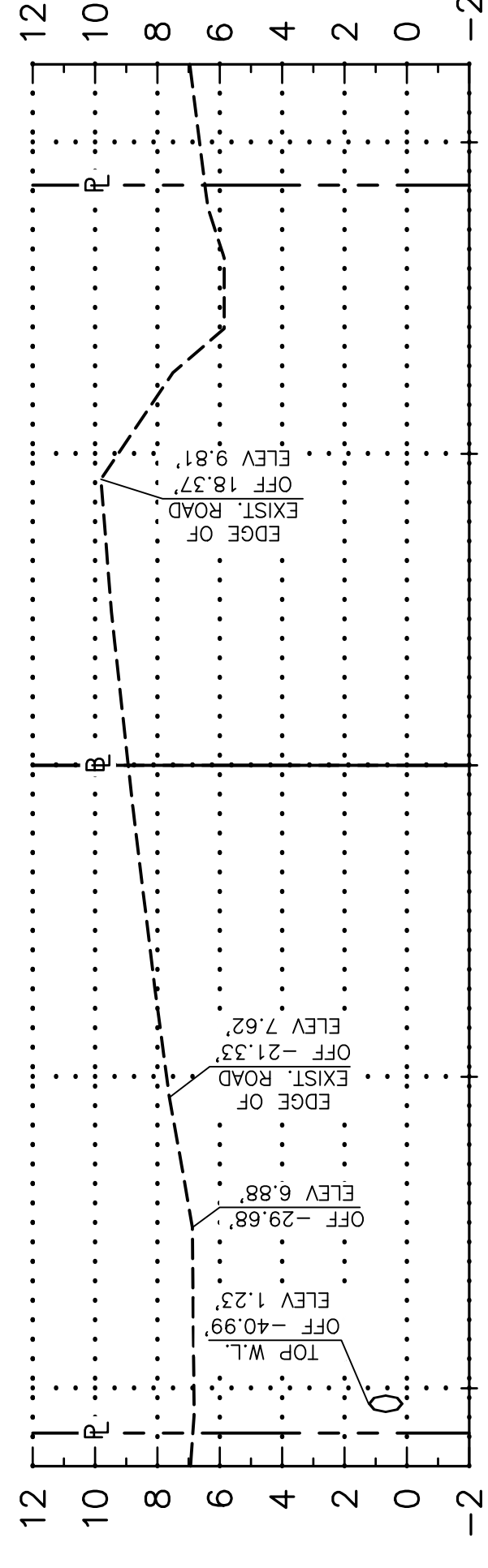
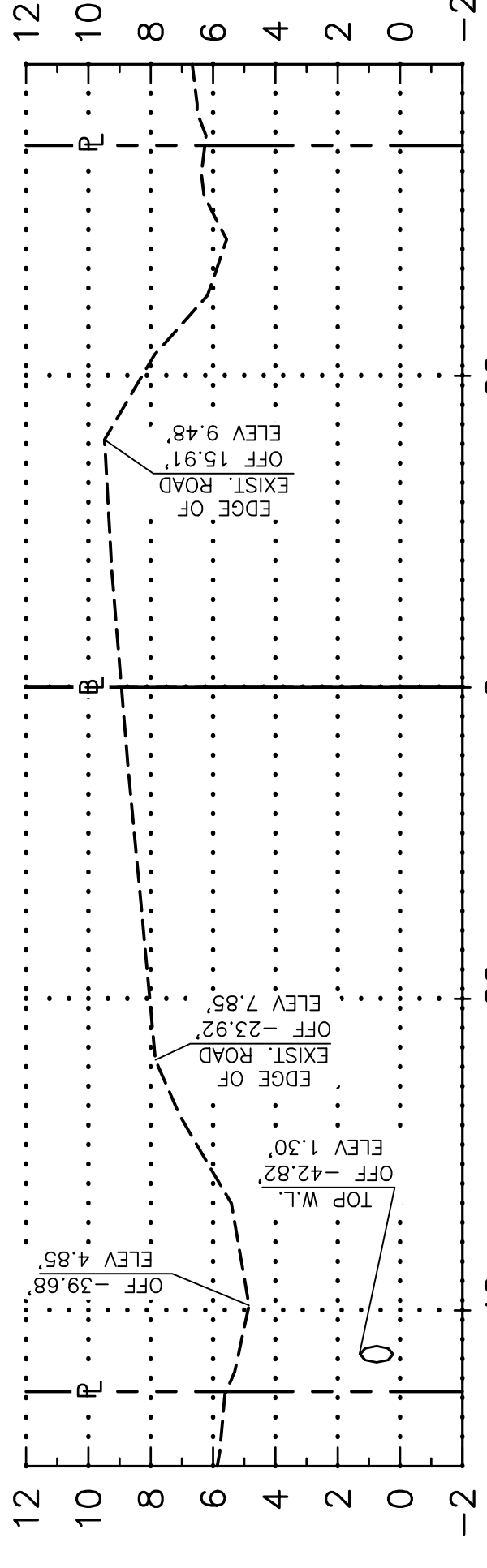
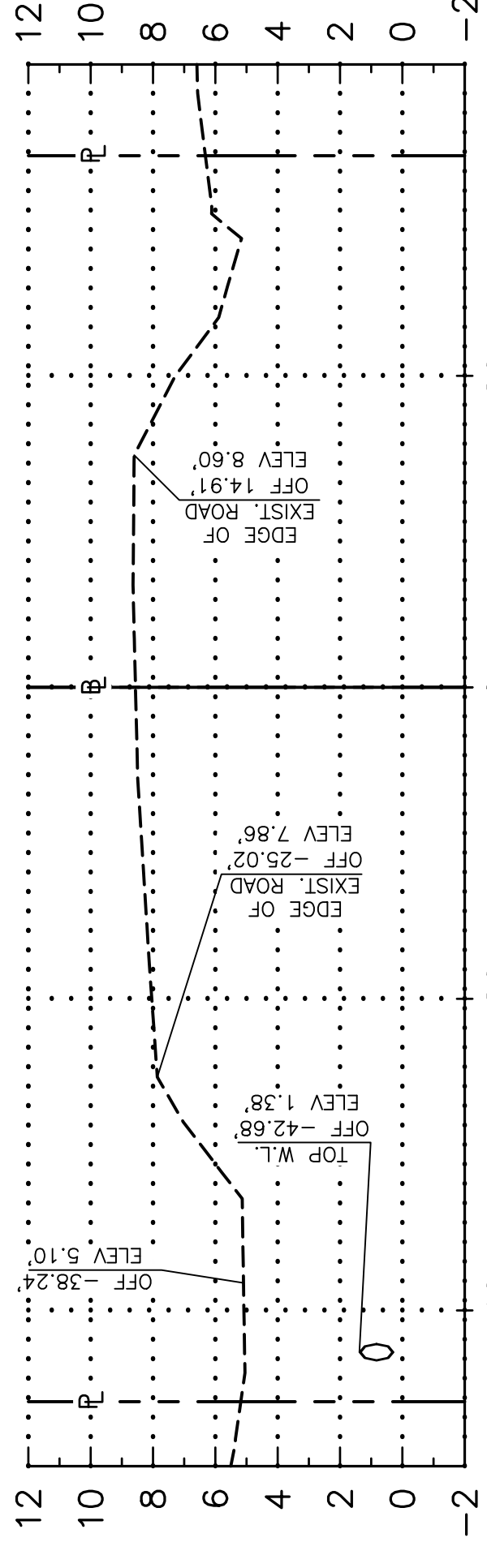
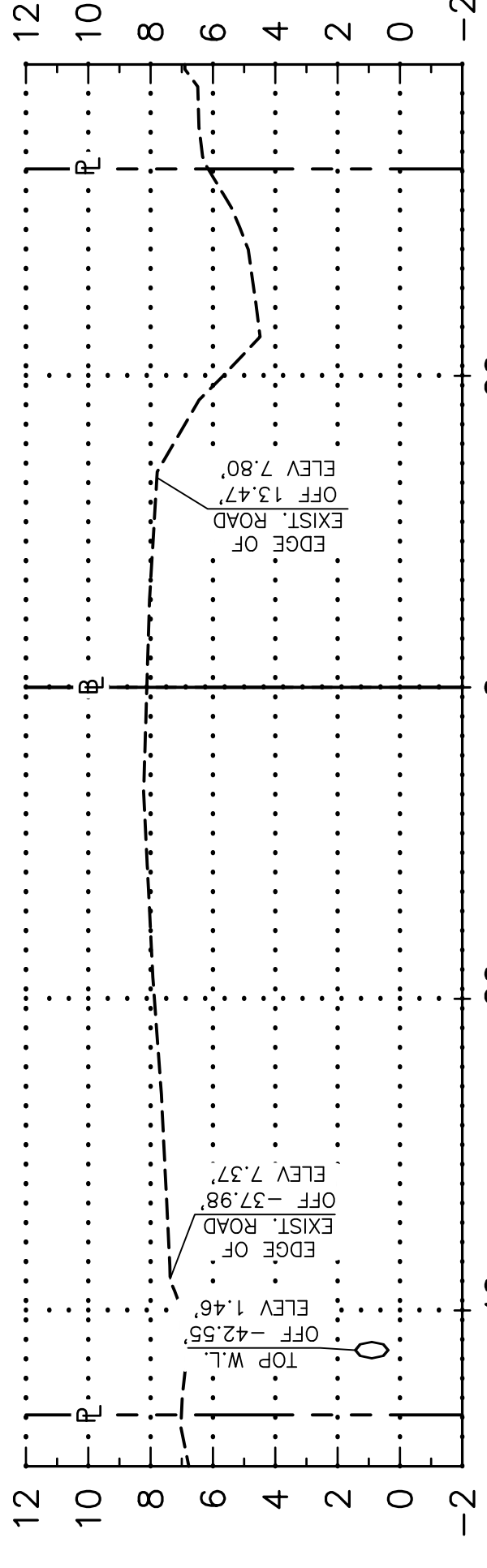
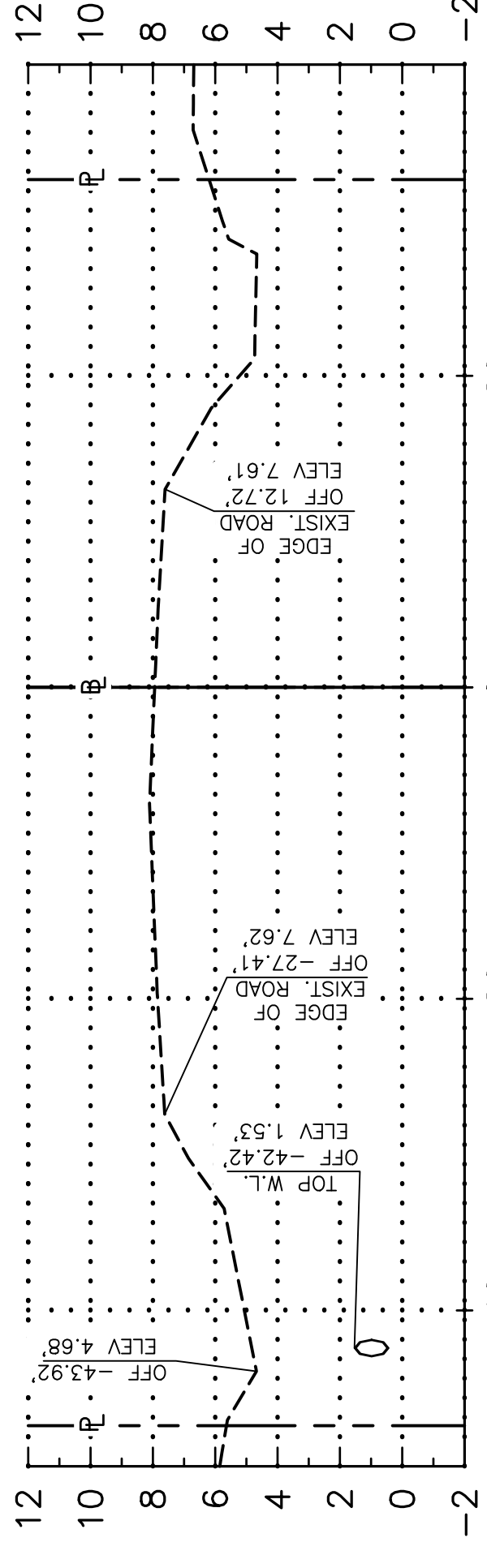
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY:	FJZ
DRAWN BY:	ENK
CHECKED BY:	AKGE
SUBMITTED BY:	RCLC
PROJECT No.:	301-023-002
ISSUE DATE:	10.10.2023
APPROVED BY:	CPT
SHEET SIZE:	ANSI D
SCALE:	



S. MILITARY RD US 190 &  
US190  
CROSS SECTIONS

SHEET NO. 410



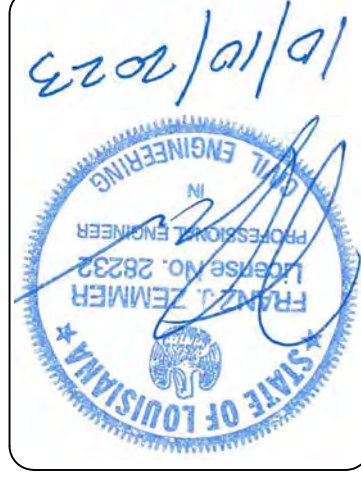




DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

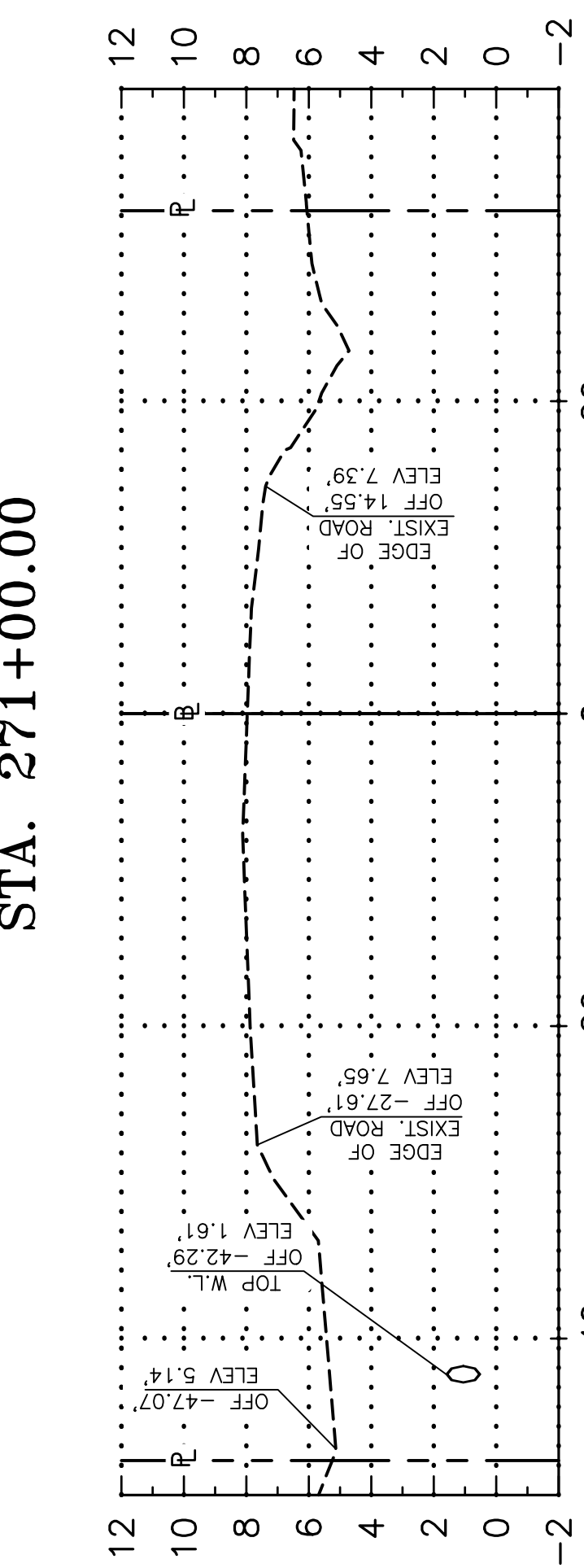
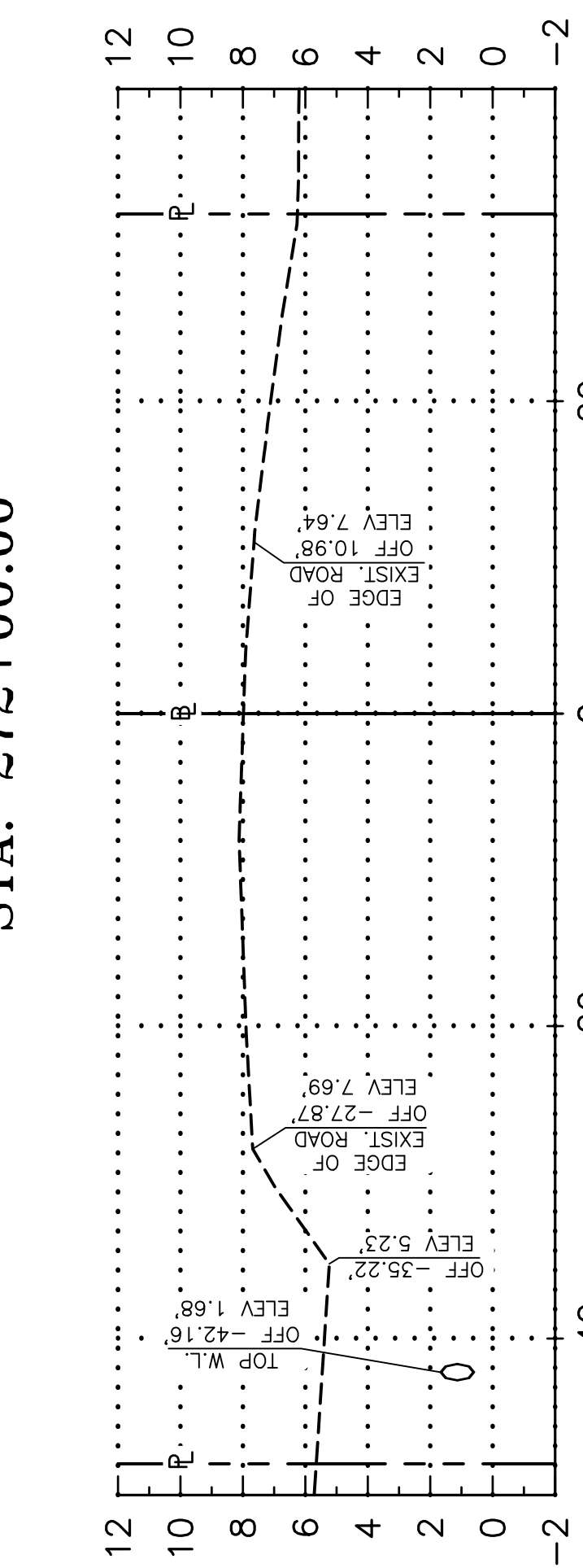
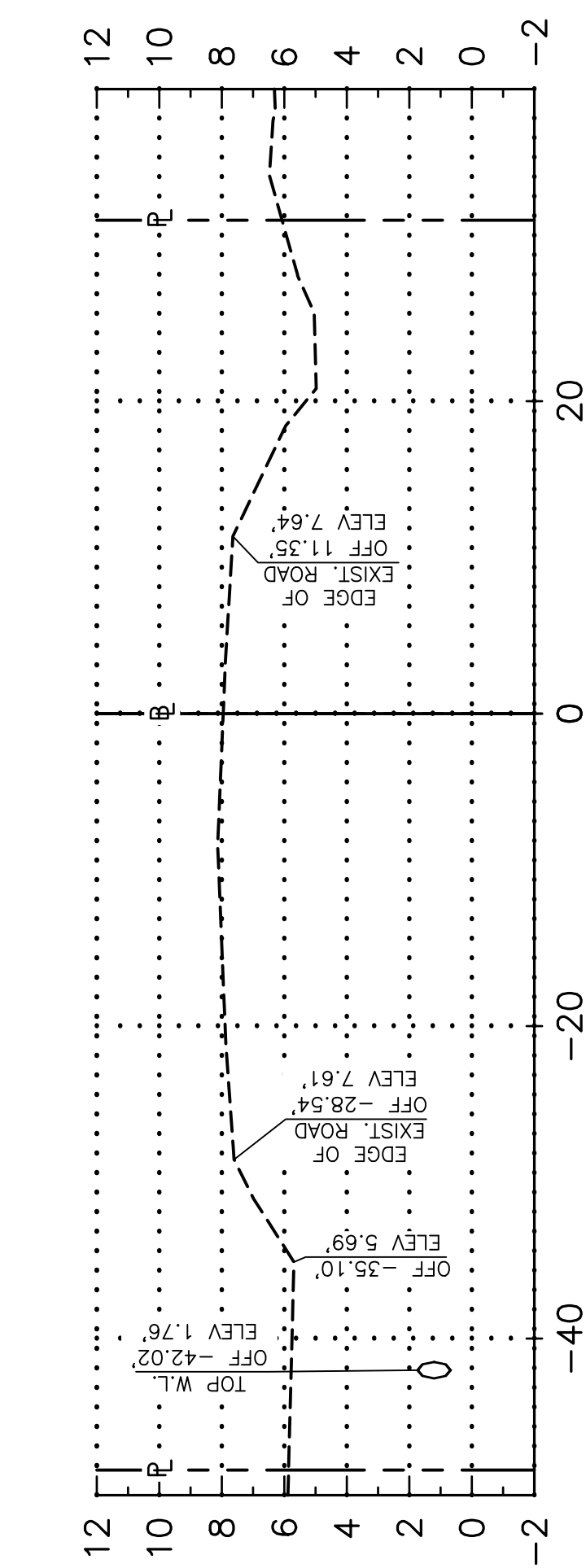
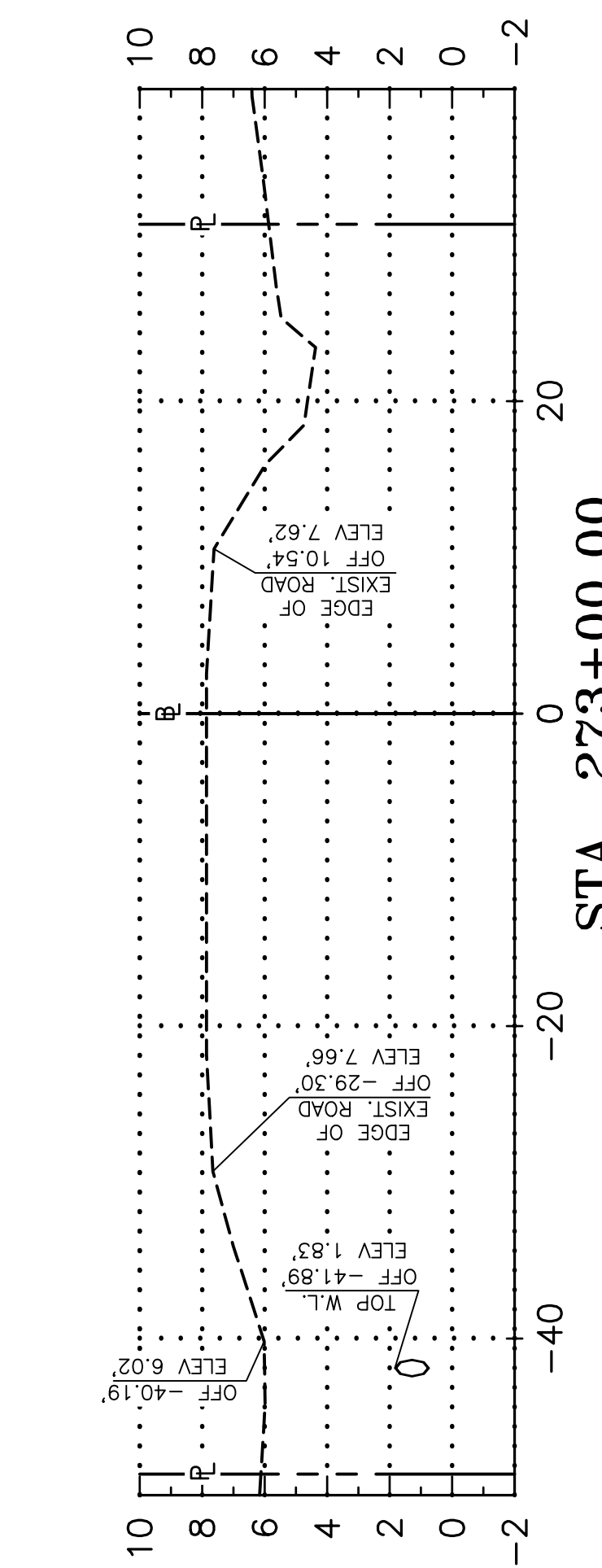
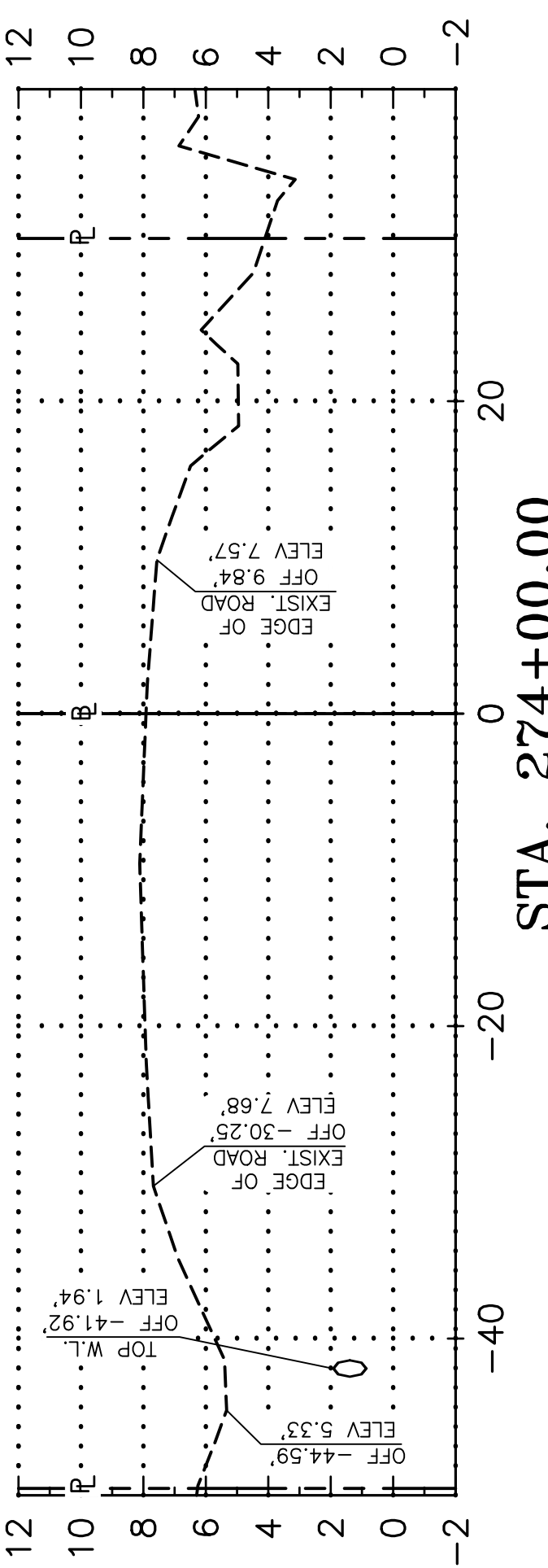
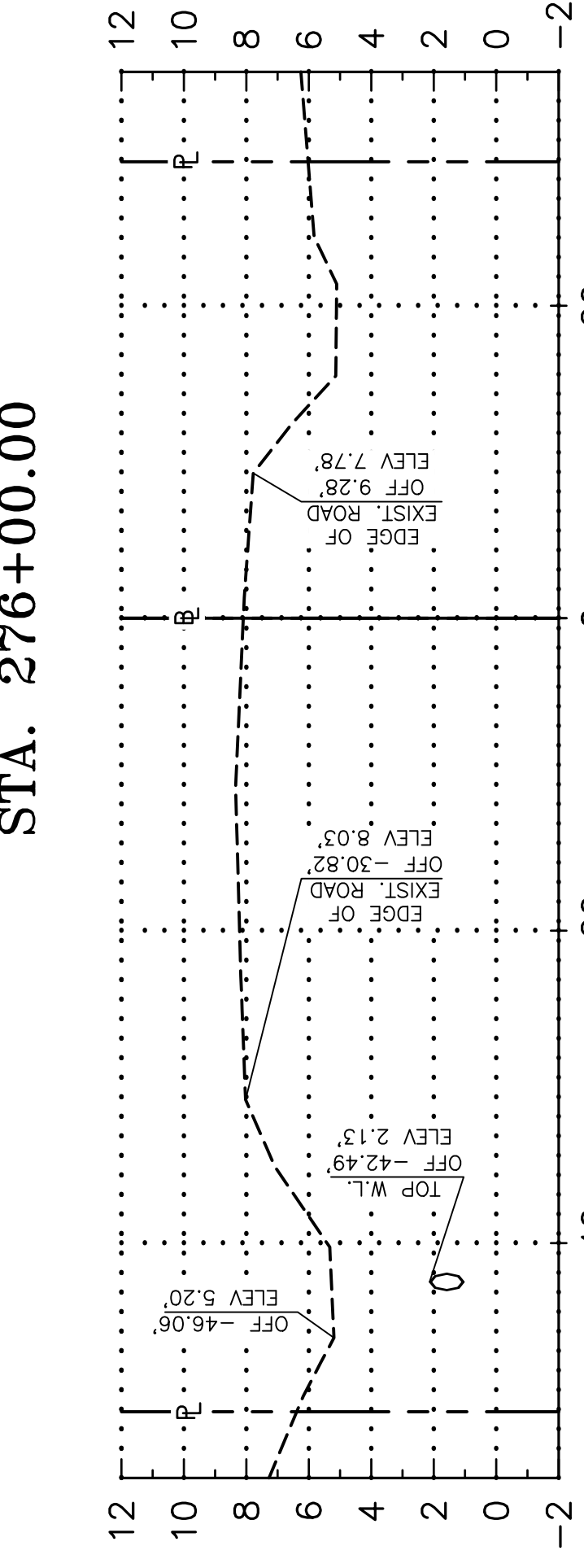
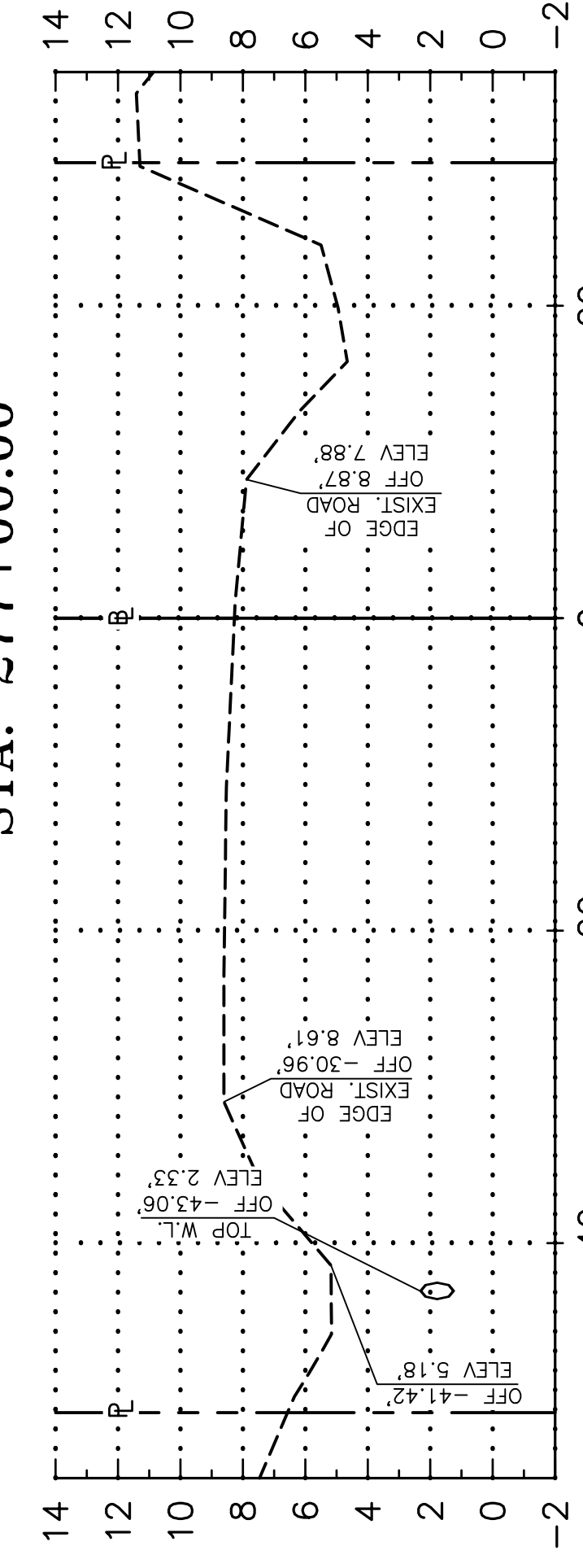
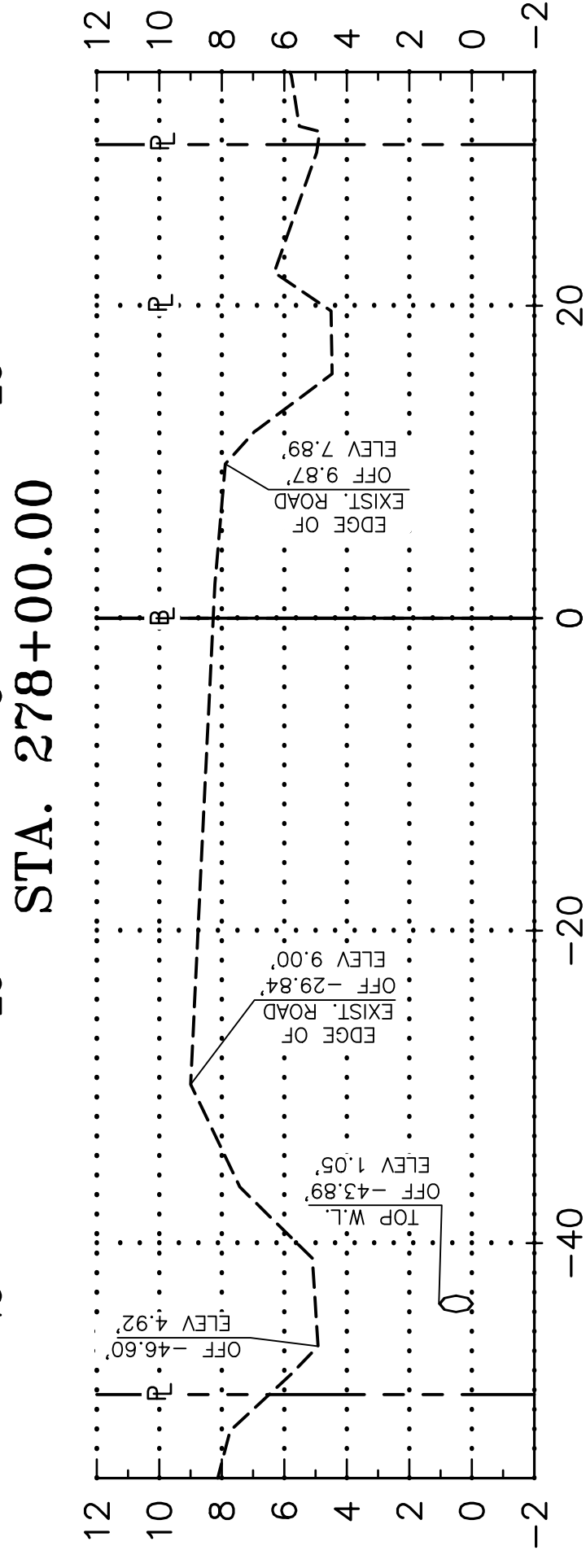
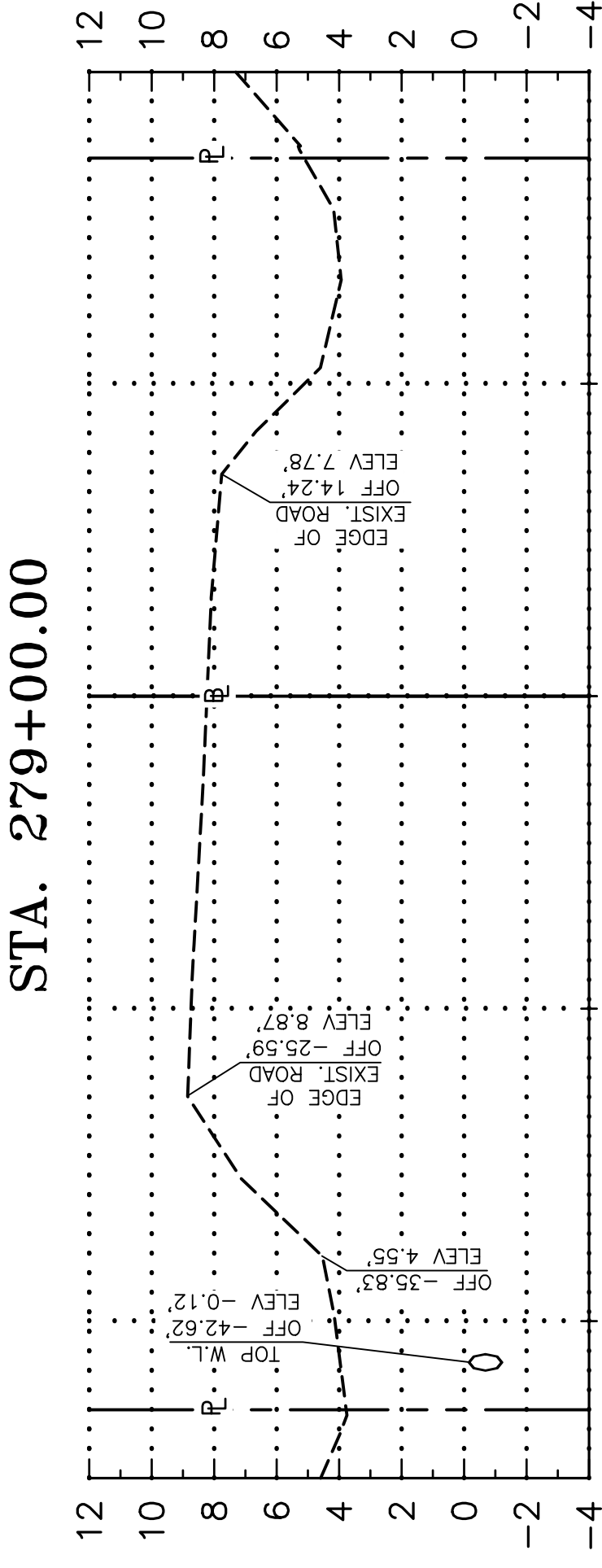
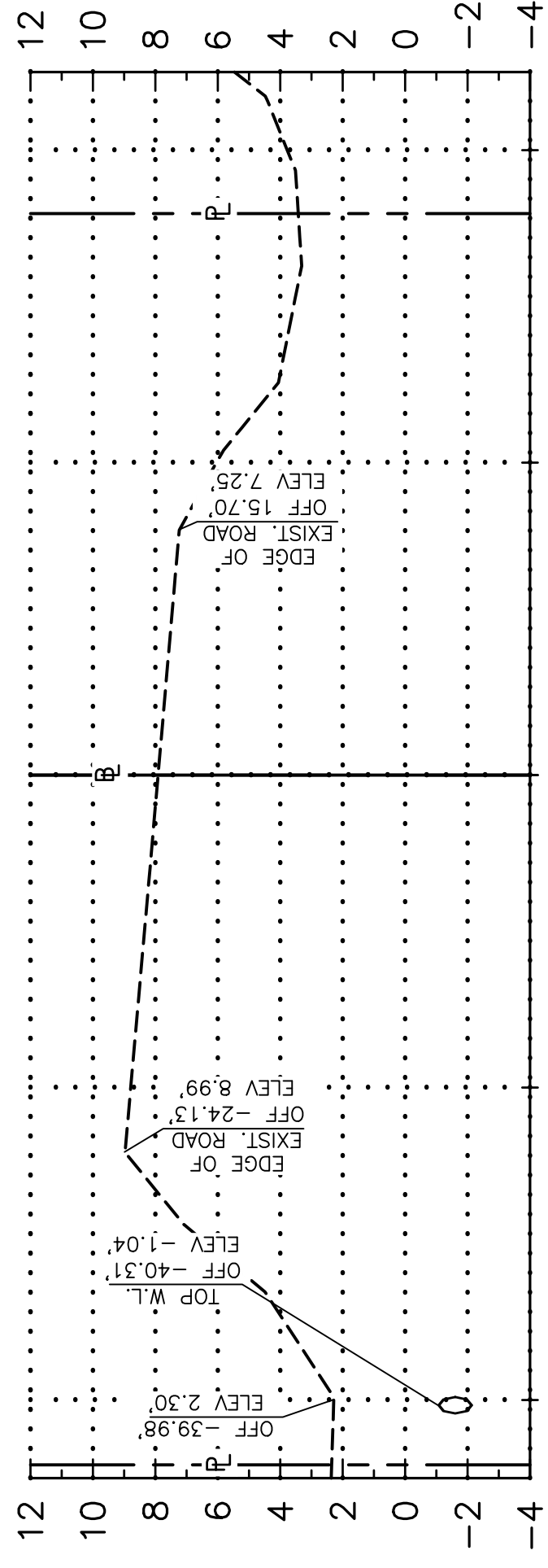
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	DRAWN BY: ENK
CHECKED BY: AKGE	SUBMITTED BY: RCLC
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023
APPROVED BY: CPT	SHEET SIZE: ANSI D
SCALE:	



S. MILITARY RD US 190 &  
US190  
CROSS SECTIONS

SHEET NO. 411





DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

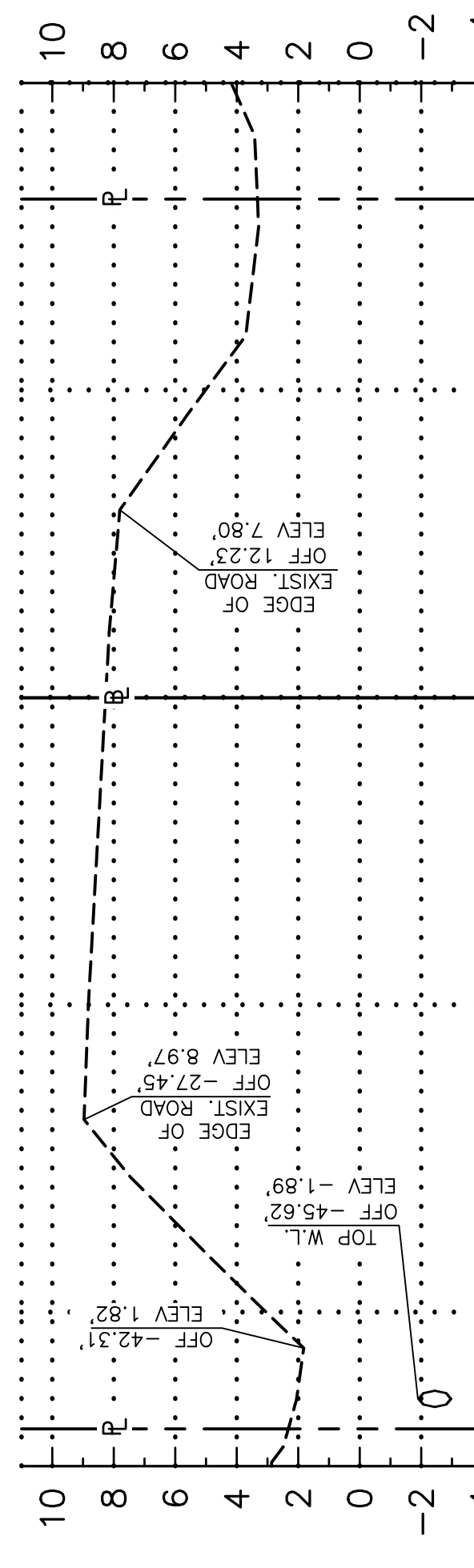
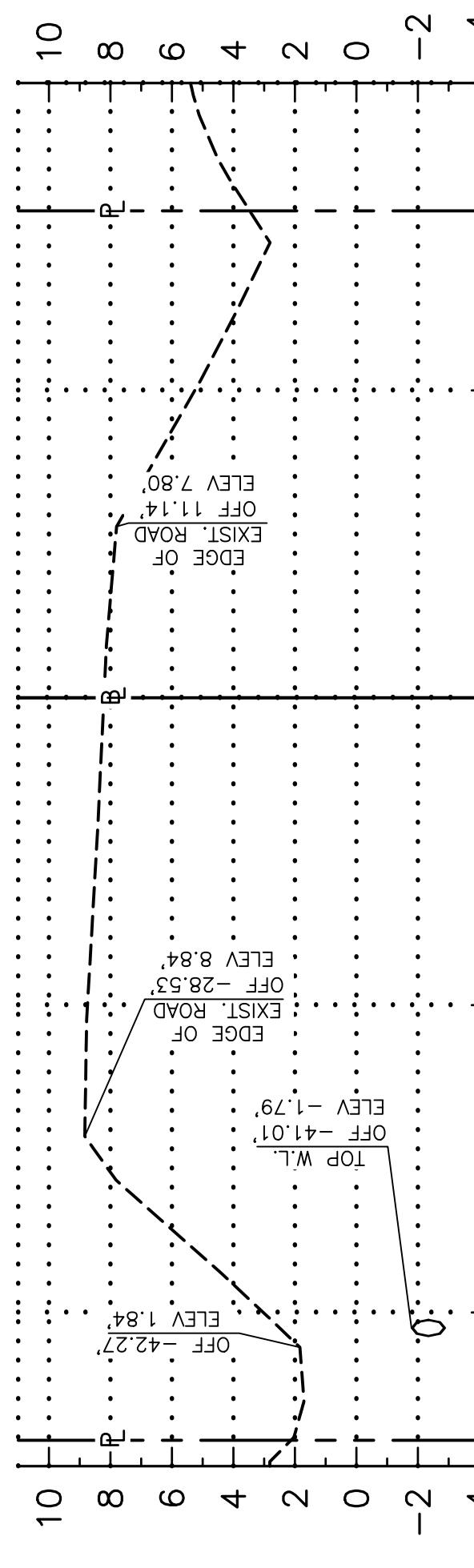
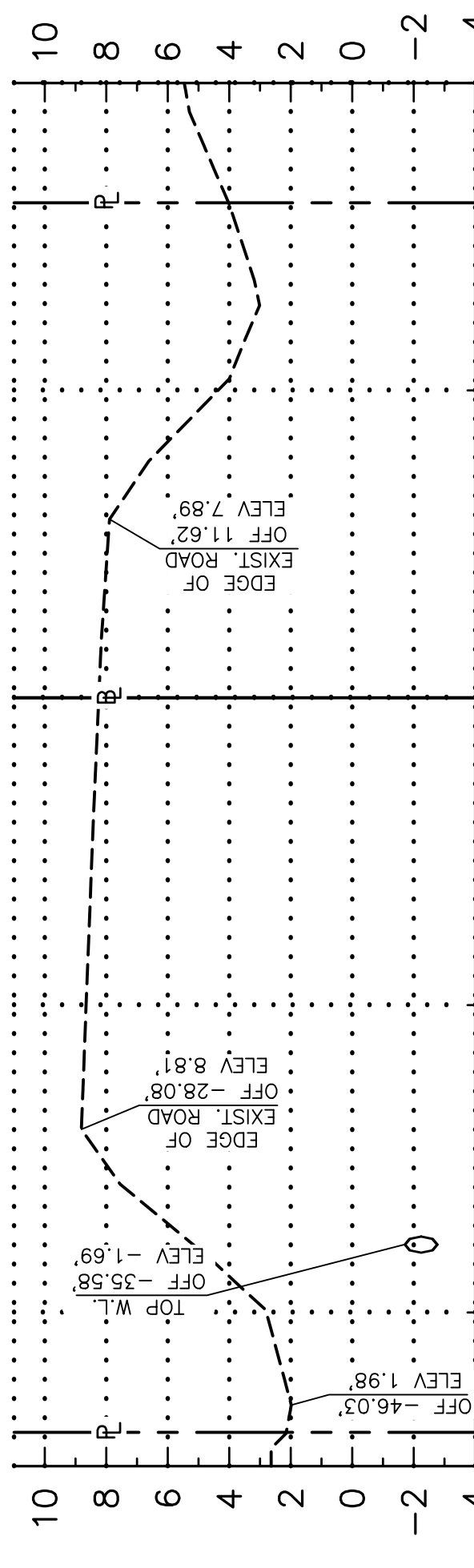
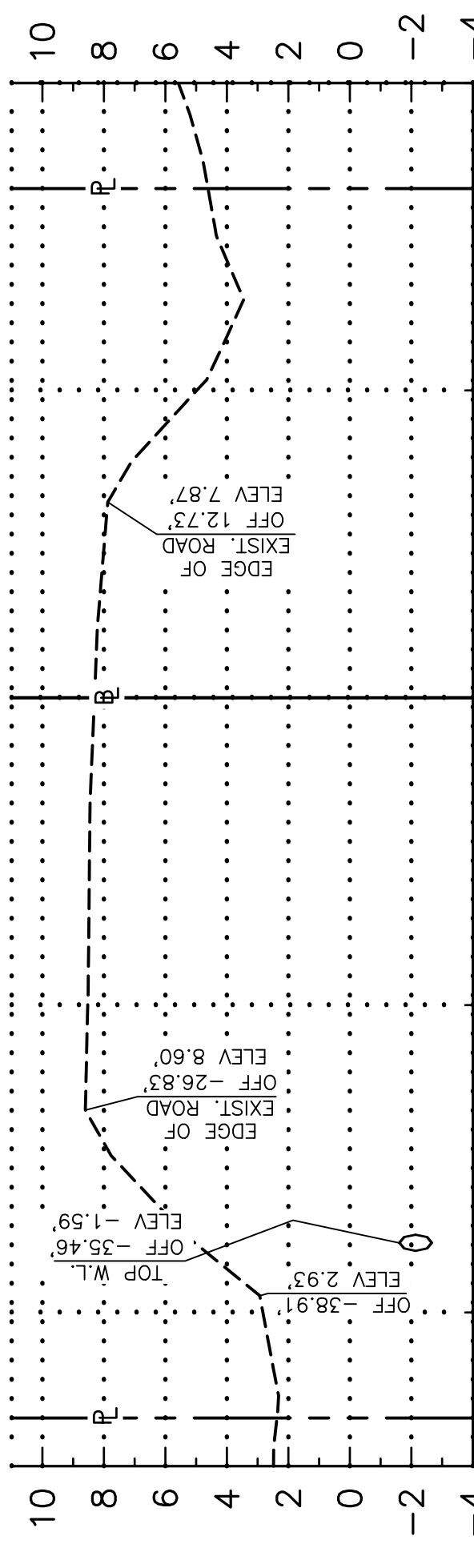
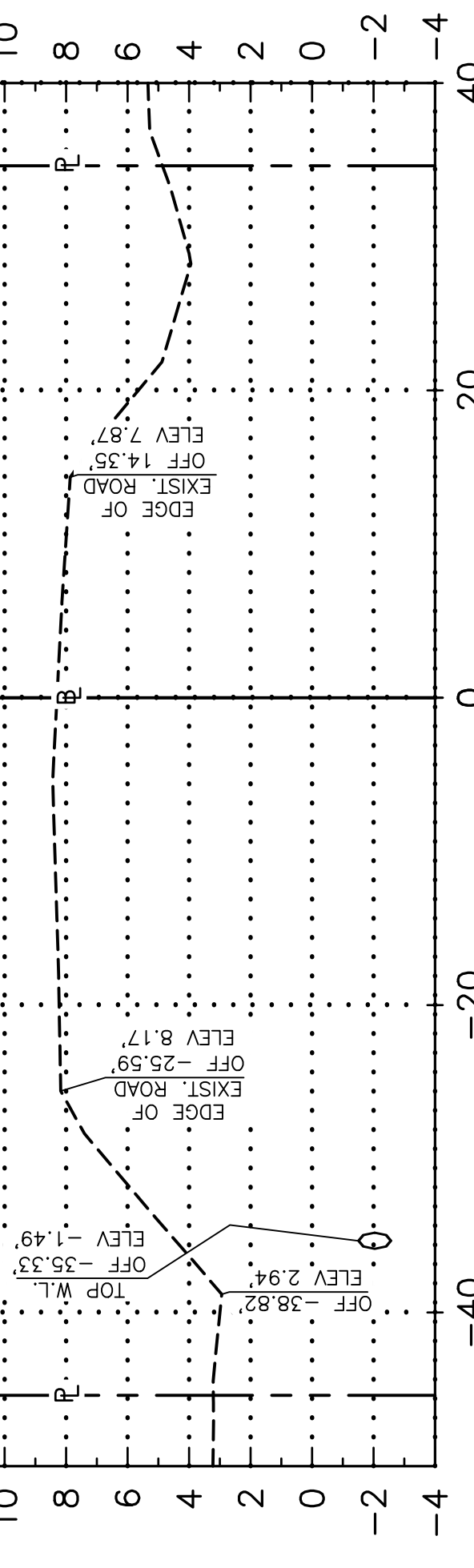
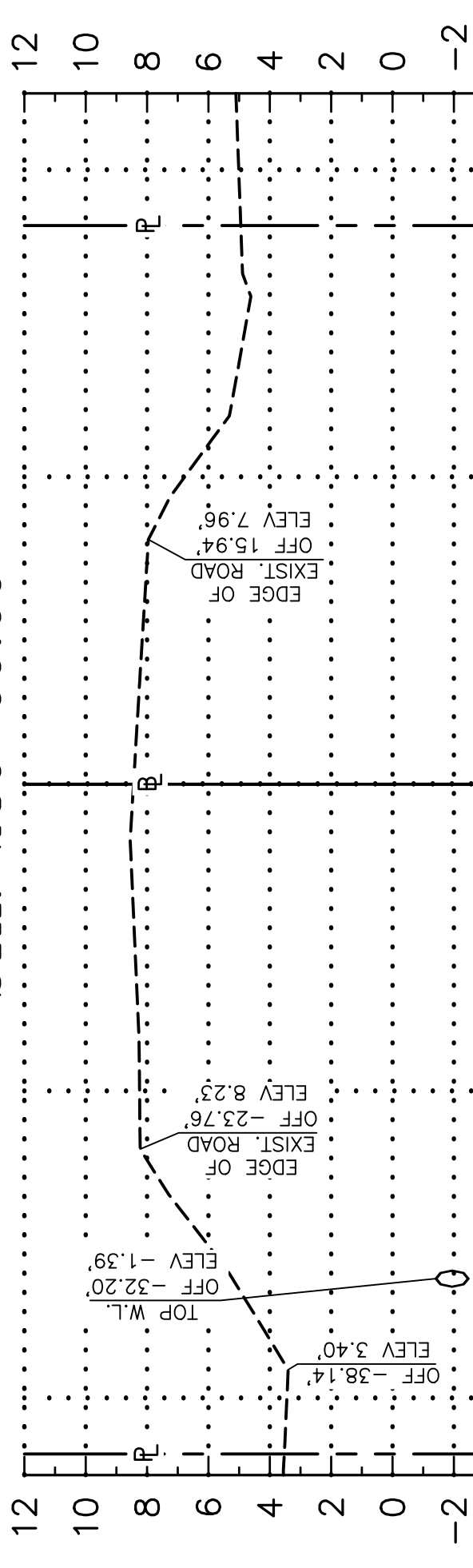
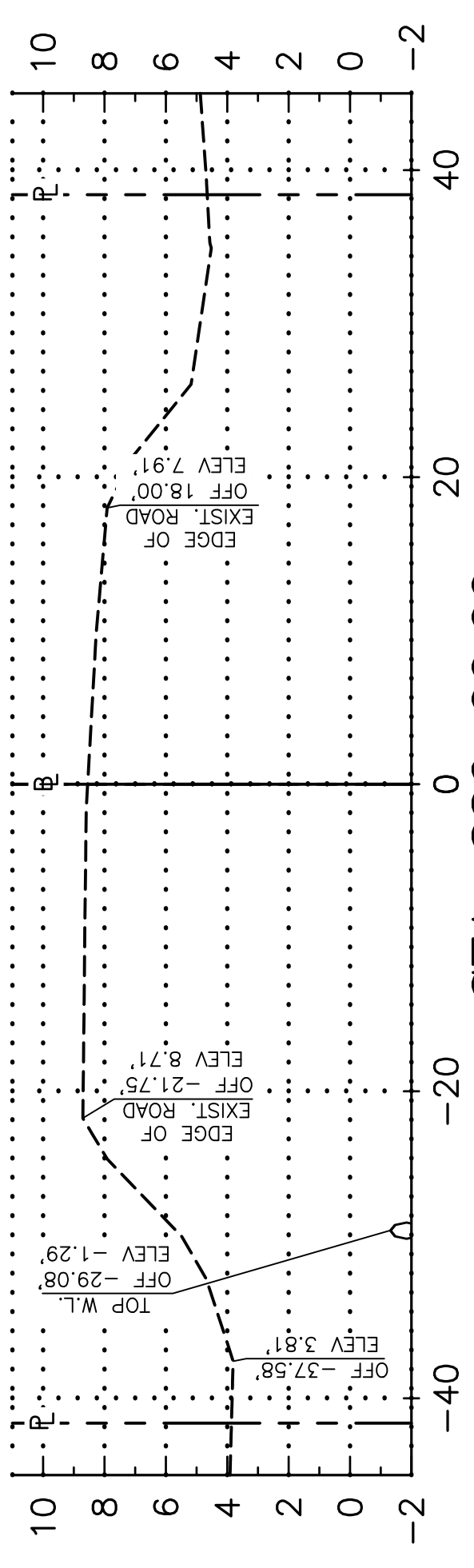
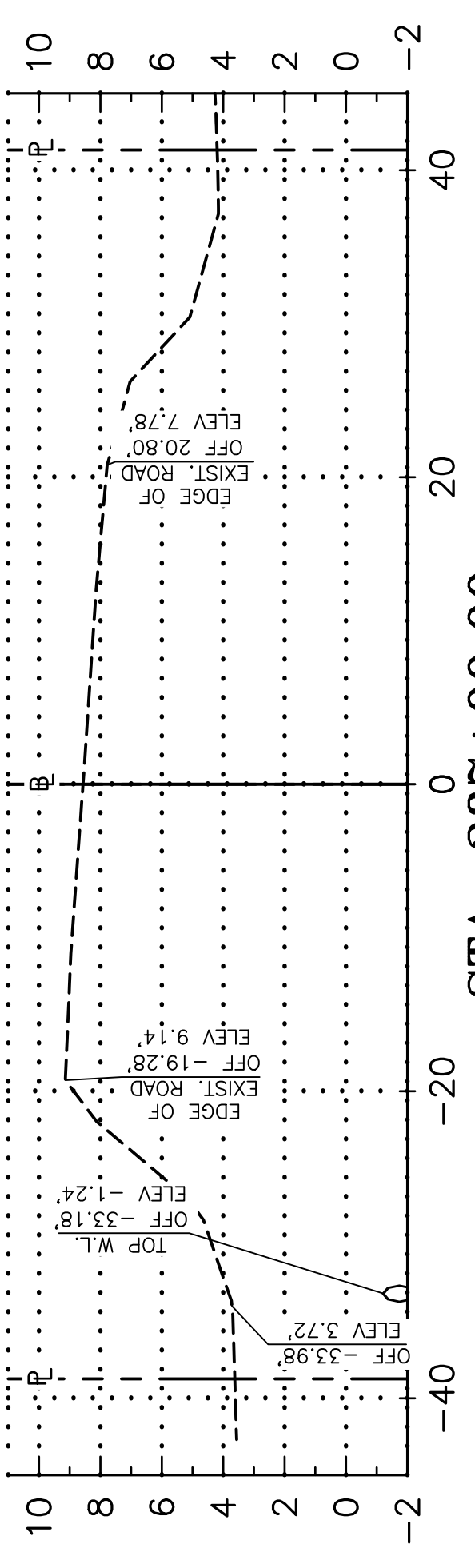
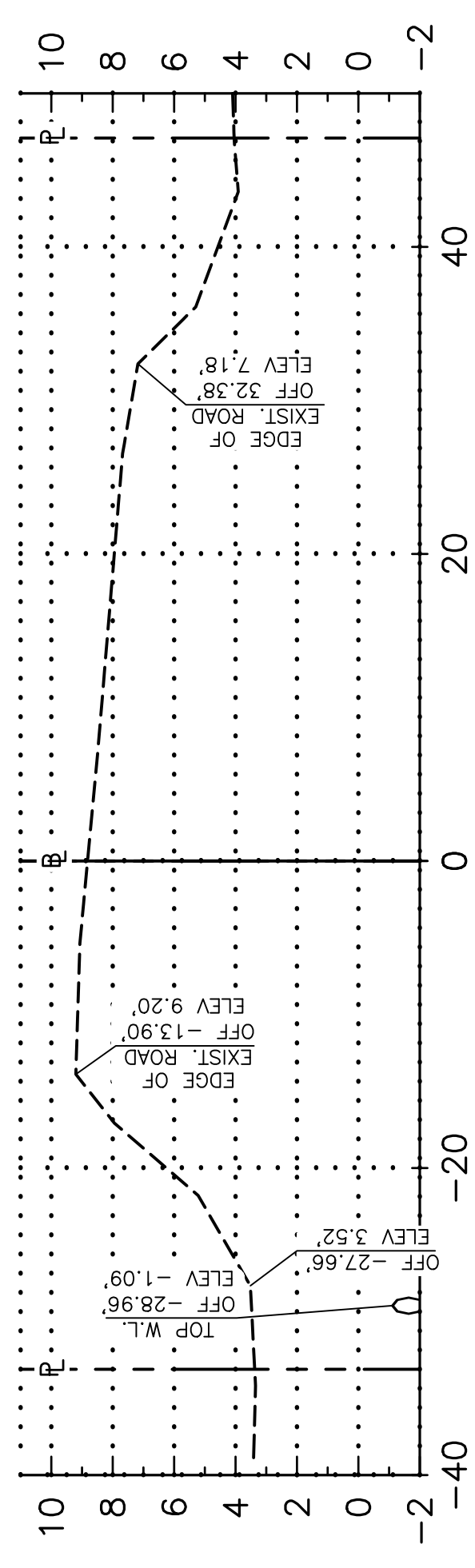
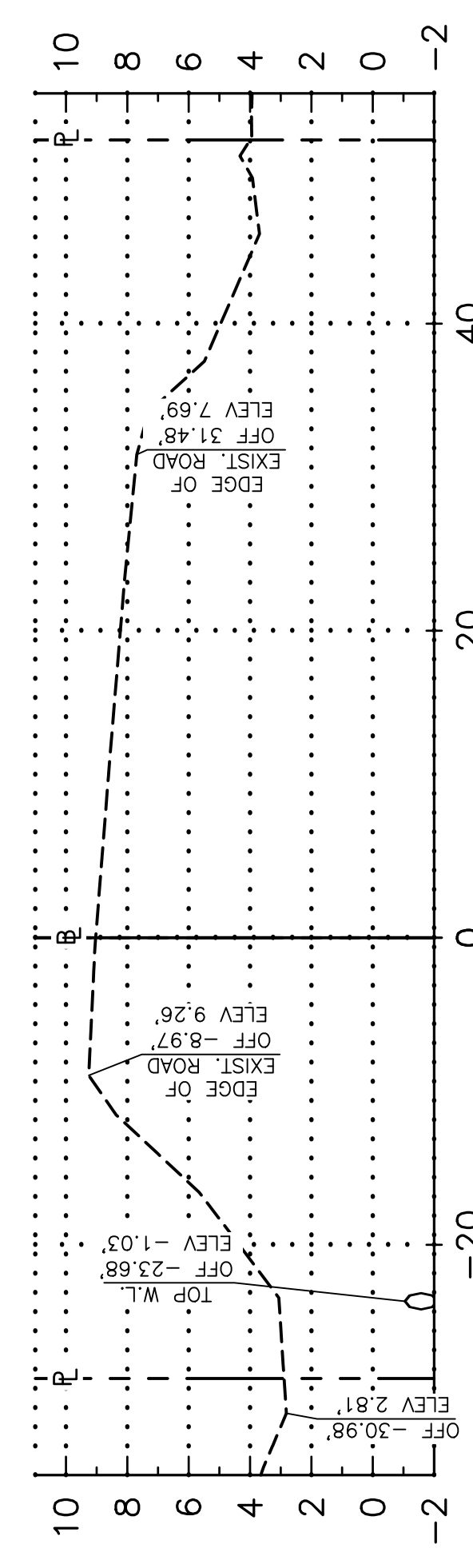
NO.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ
DRAWN BY: ENK
CHECKED BY: AKGE
SUBMITTED BY: RCLC
PROJECT No.: 301-023-002
ISSUE DATE: 10/10/2023
APPROVED BY: CPT
SHEET SIZE: ANSI D
SCALE:



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
US190  
CROSS SECTIONS

SHEET NO. 412





DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

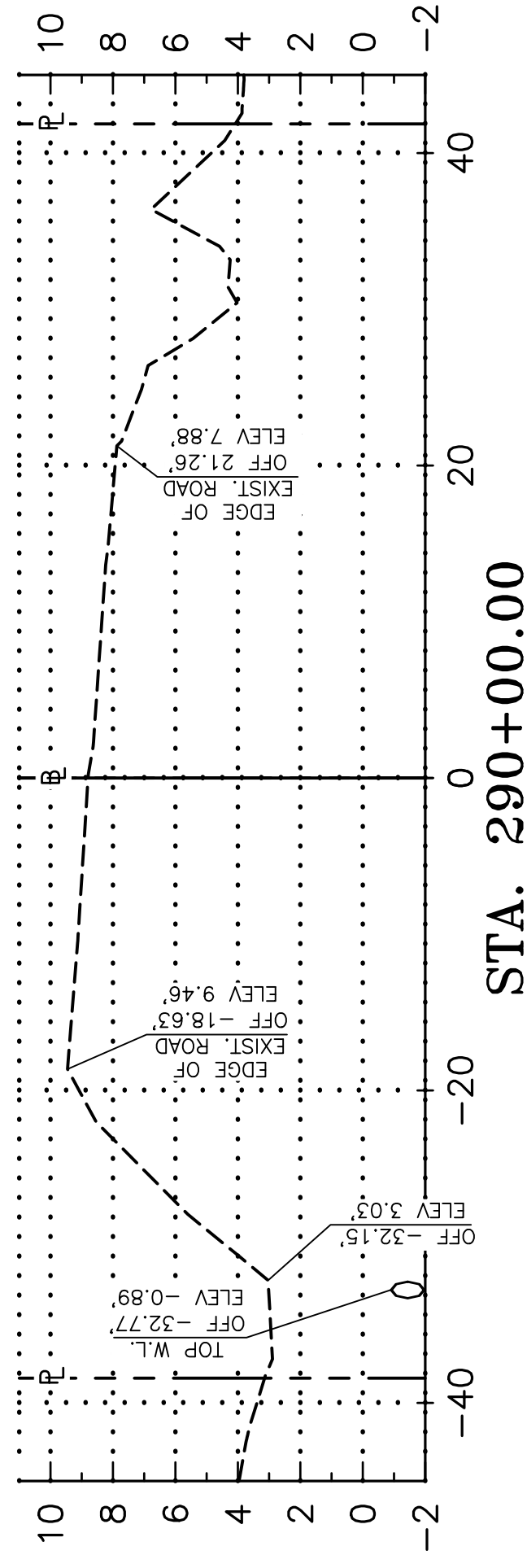
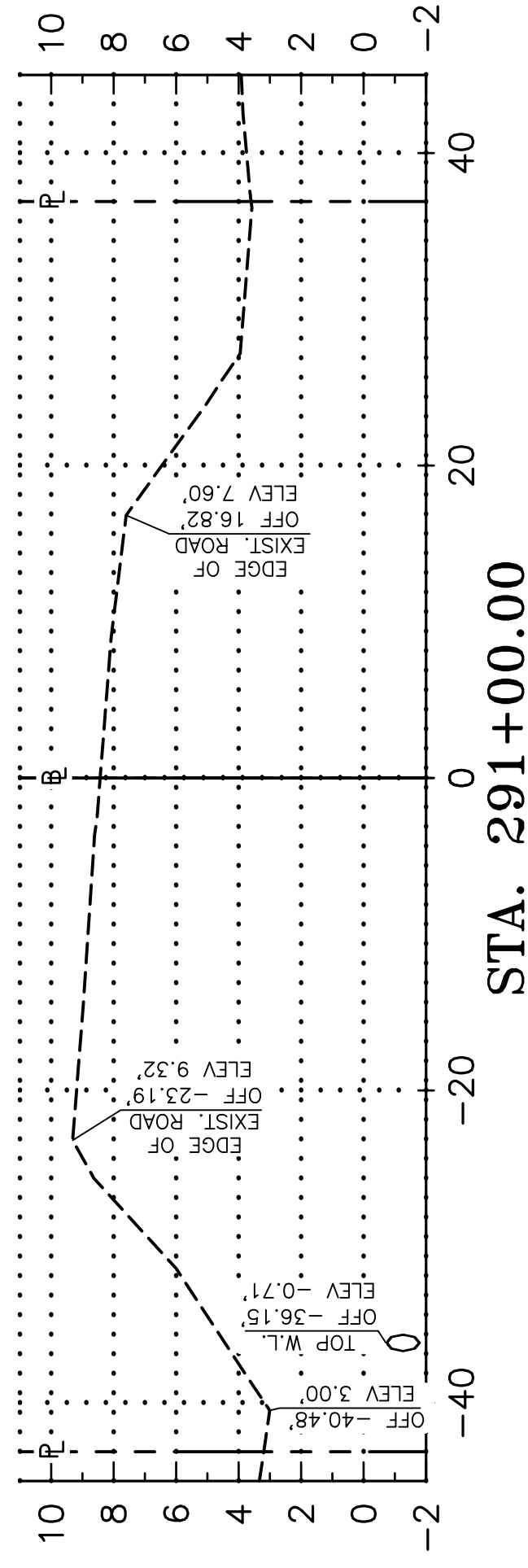
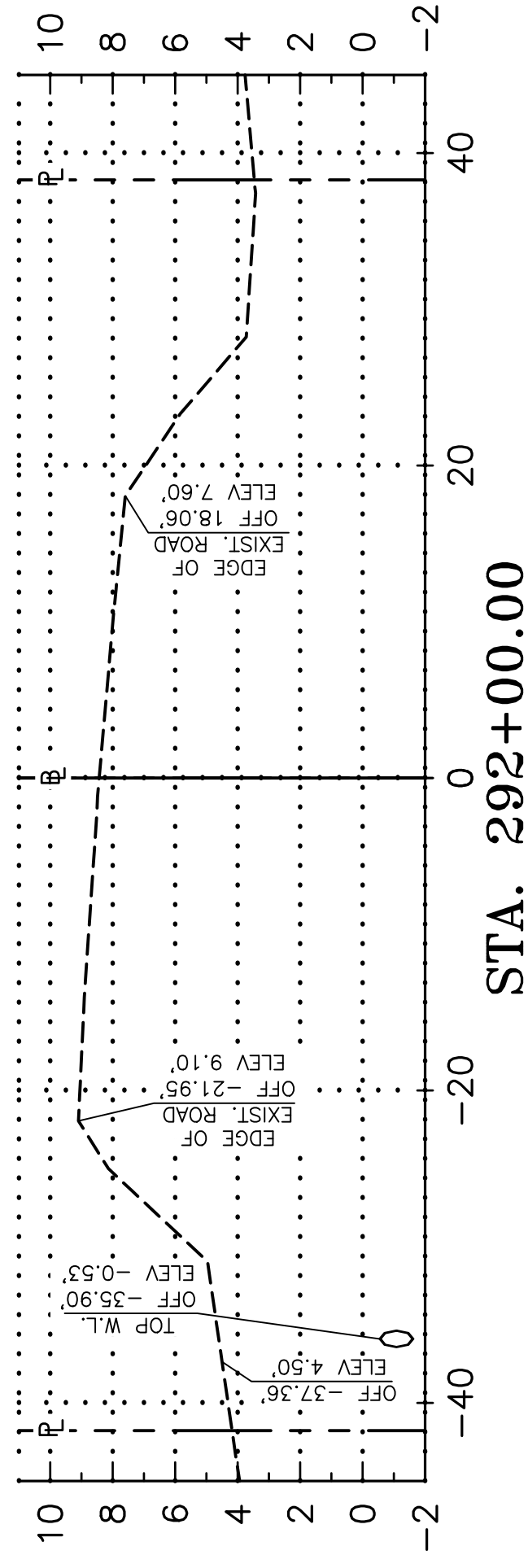
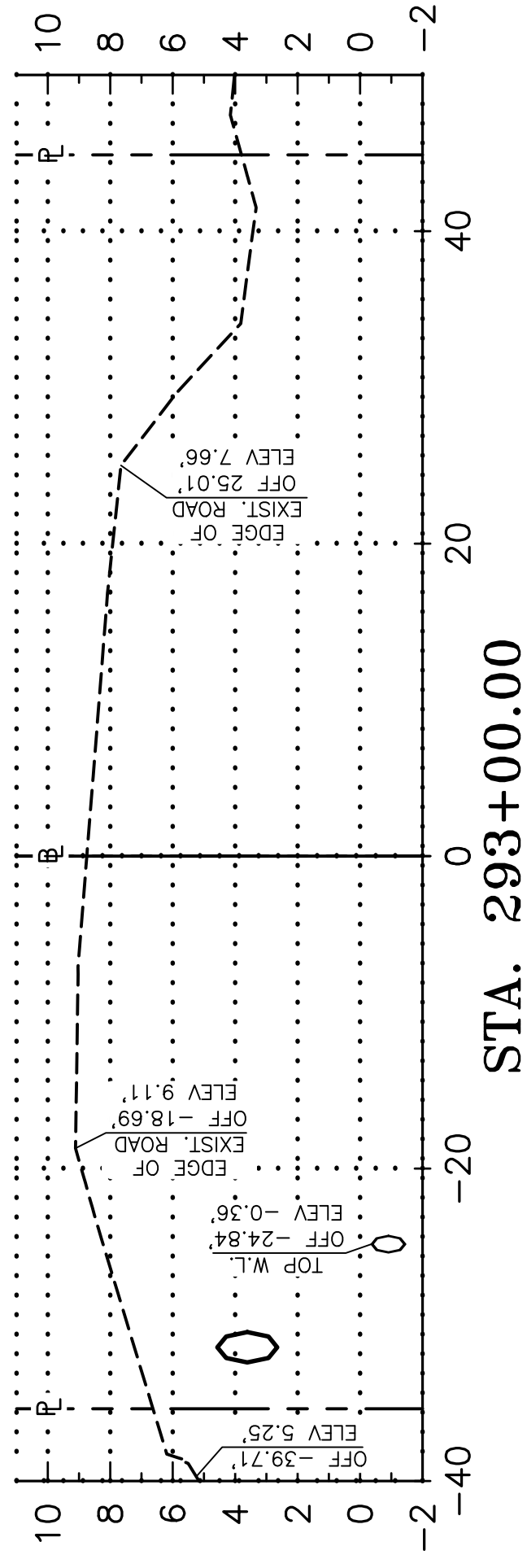
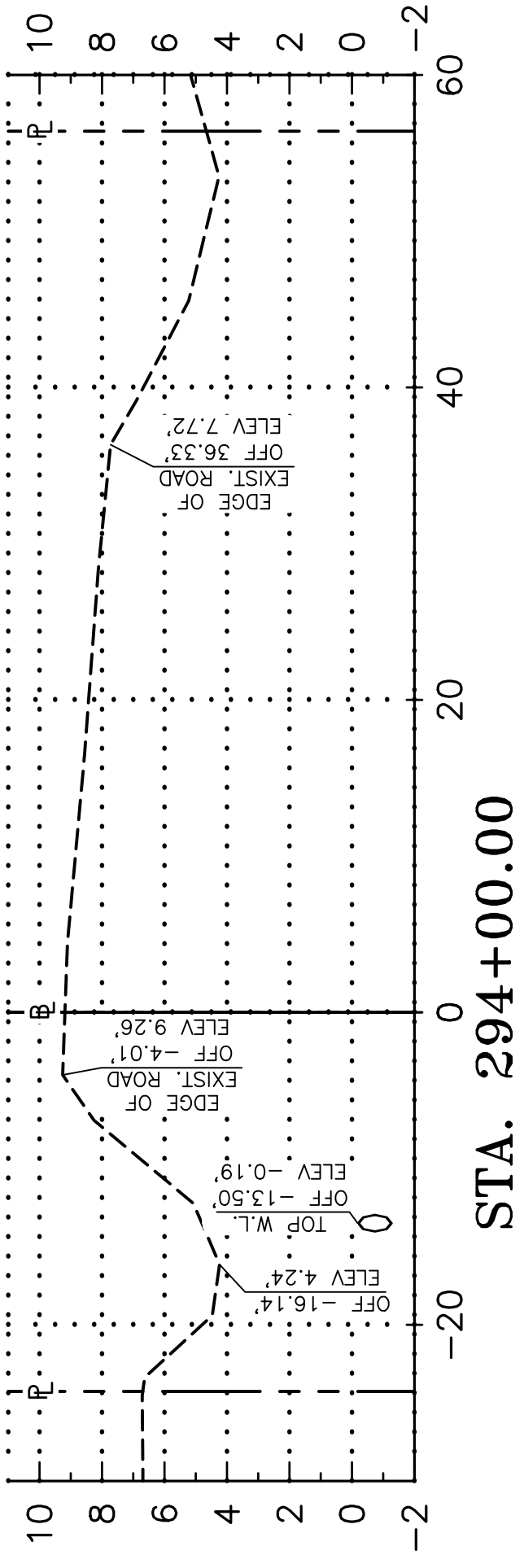
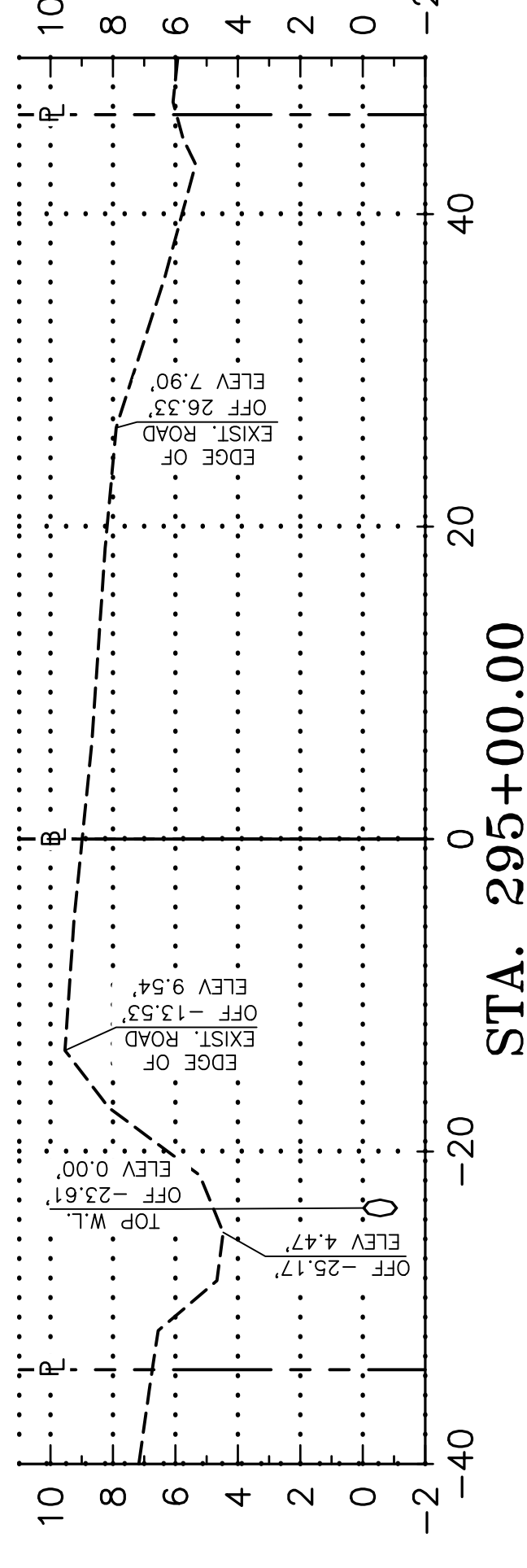
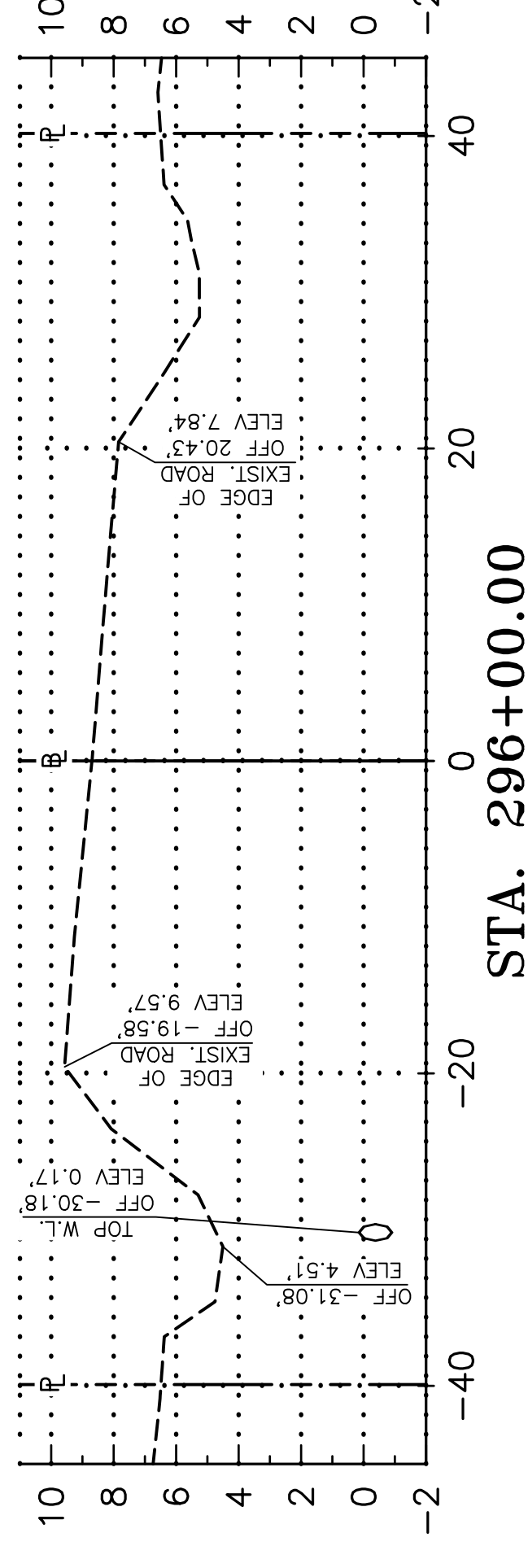
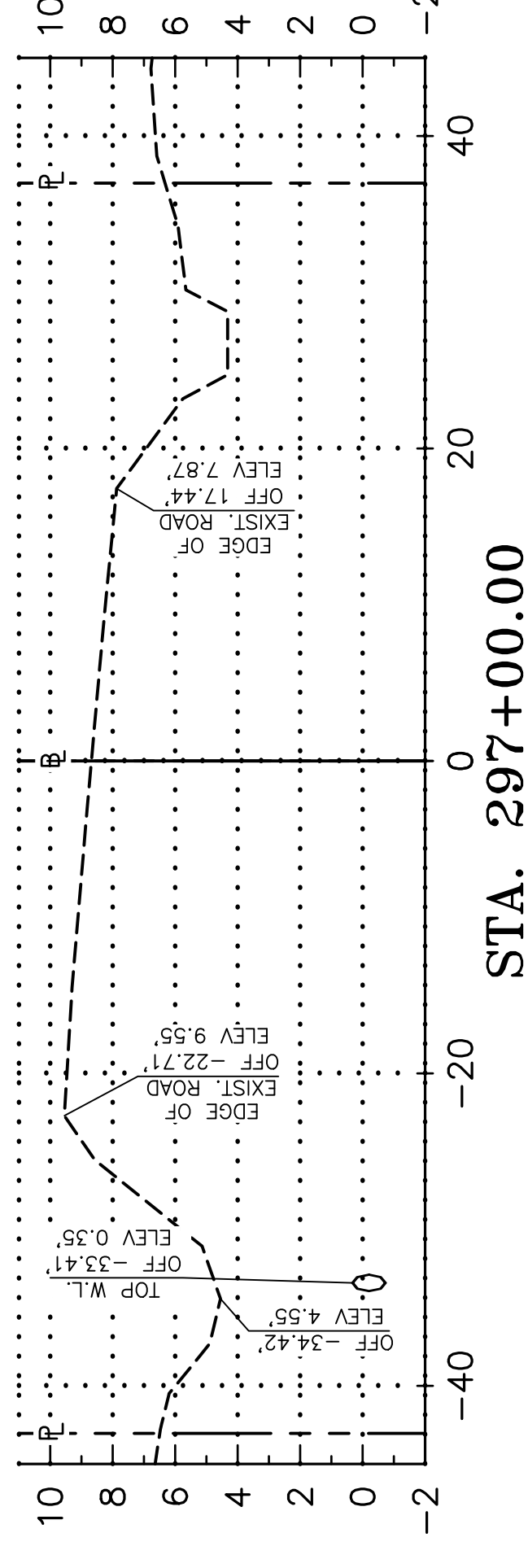
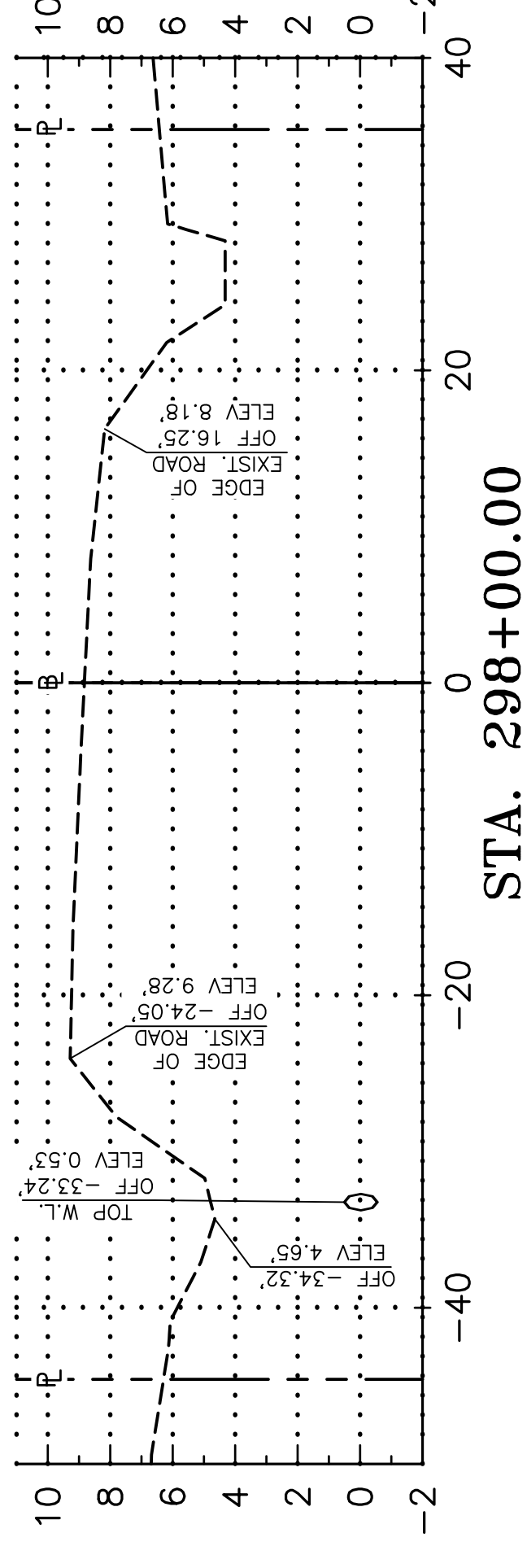
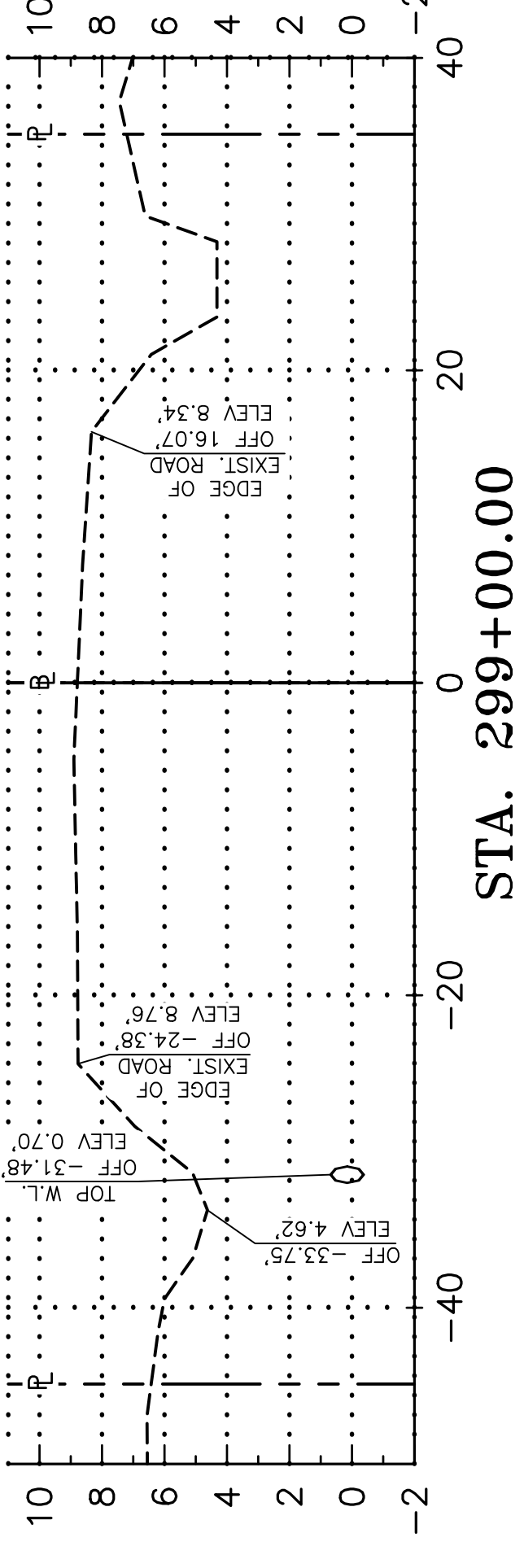
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	DRAWN BY: ENK
CHECKED BY: AKGE	SUBMITTED BY: RCLC
PROJECT No.: 301-023-002	ISSUE DATE: 10.10.2023
APPROVED BY: CPT	SHEET SIZE: ANSI D
SCALE:	



S. MILITARY RD US 190 &  
US190  
CROSS SECTIONS

SHEET NO.  
413





DEPT. OF UTILITIES  
ST. TAMMANY PARISH  
GOVERNMENT  
620 N. TYLER STREET  
COVINGTON, LA 70433

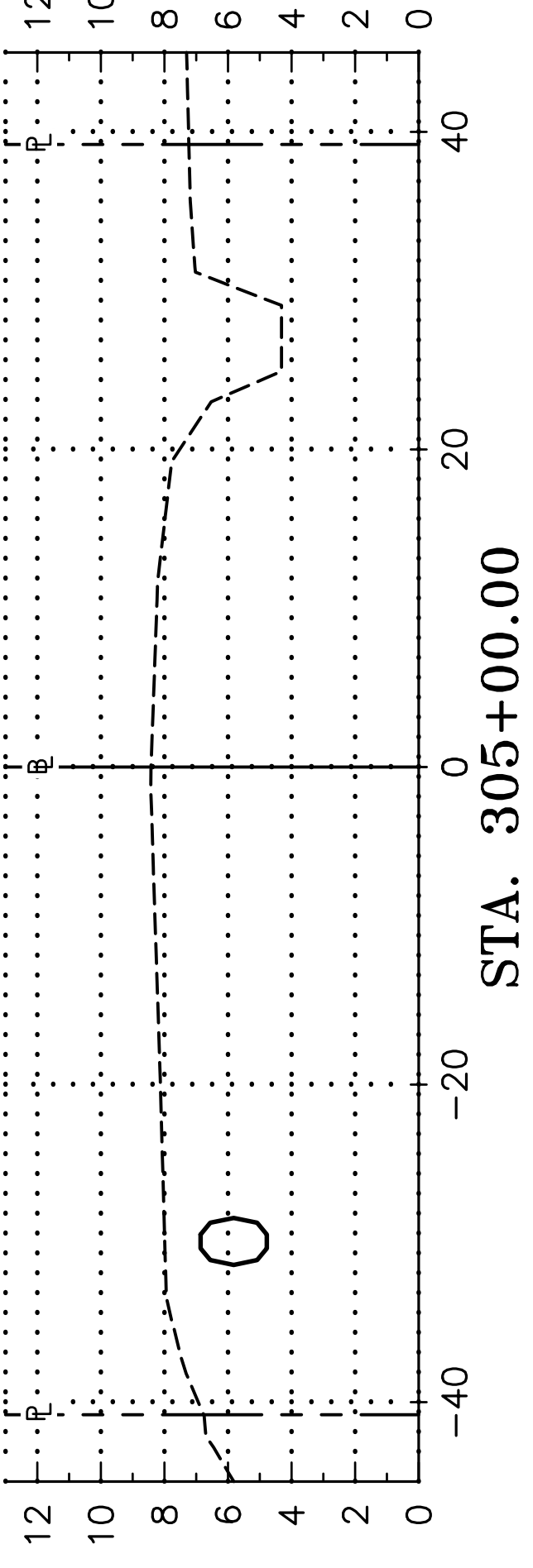
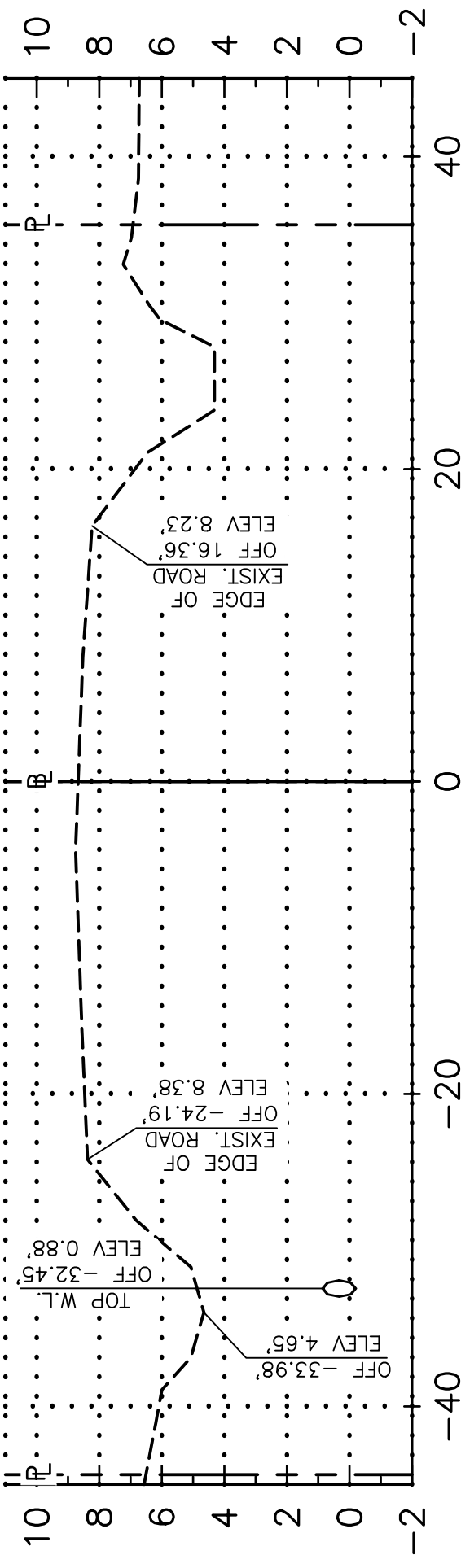
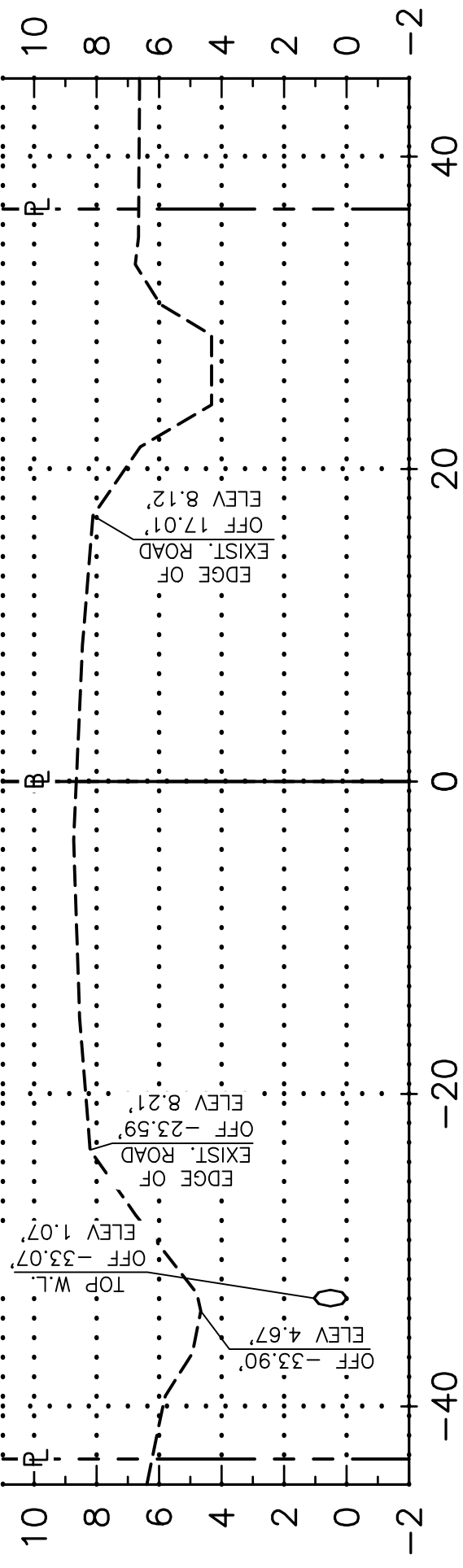
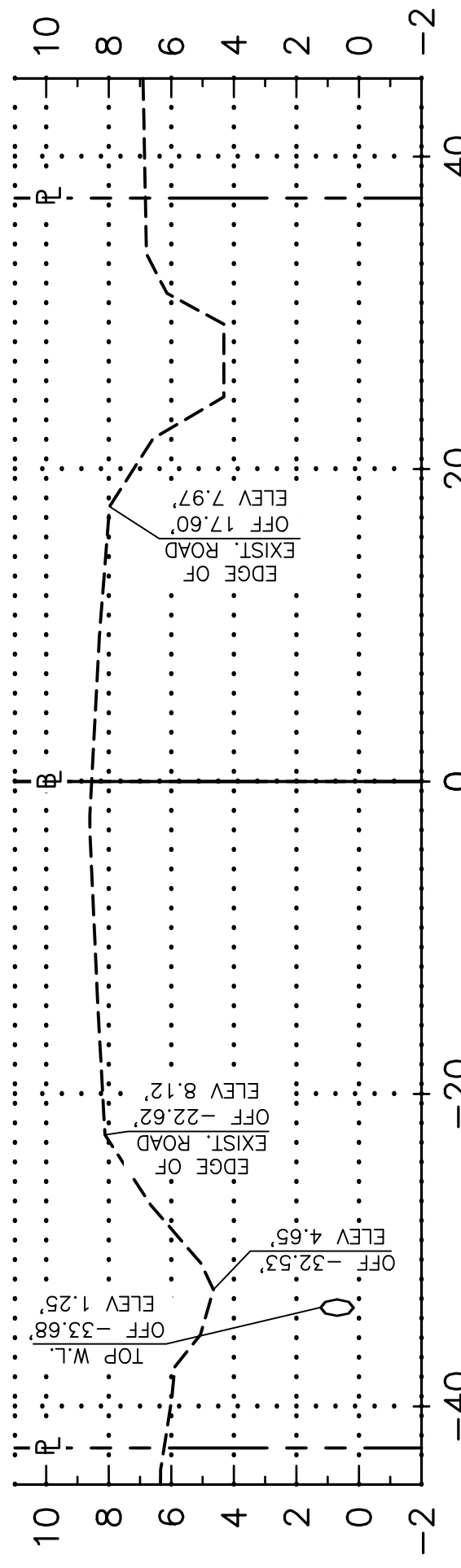
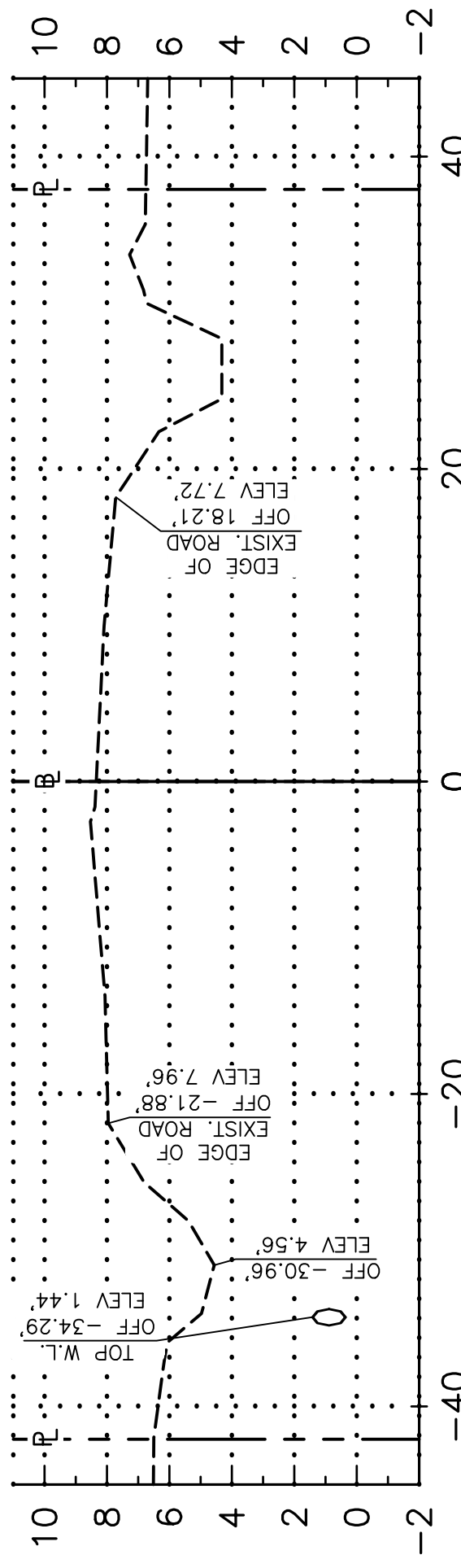
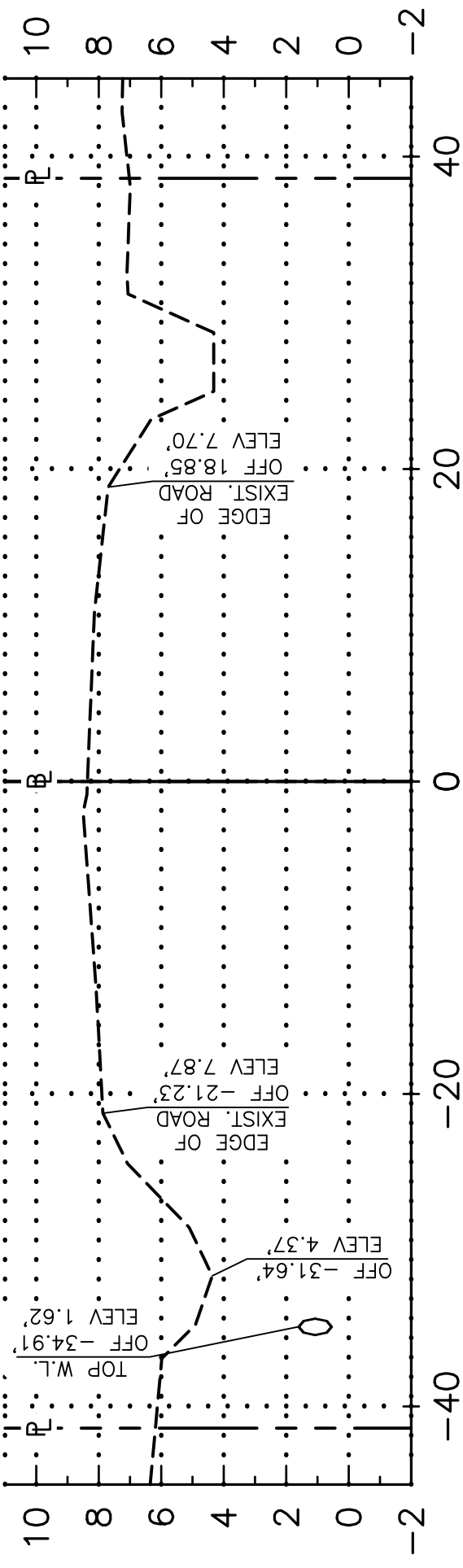
No.	DESCRIPTION OF REVISION	DATE:

DESIGNED BY: FJZ	PROJECT No.: 301-023-002
CHECKED BY: AKGE	ISSUE DATE: 10.10.2023
DRAWN BY: ENK	APPROVED BY: CPT
SUBMITTED BY: RCLC	SHEET SIZE: ANSI D
SCALE:	



S. MILITARY RD US 190 &  
RUE ESPLANADE WATER MAIN  
US190  
CROSS SECTIONS

SHEET NO. 414



# Section 14

## DIVISION 2 TECHNICAL SPECIFICATIONS



10/10/2023

TABLE OF CONTENTS

**DIVISION II - TECHNICAL SPECIFICATIONS**

SECTION 01010 – SUMMARY OF WORK..... 1 – 3

SECTION 01025 – MEASUREMENT AND PAYMENT ..... 1 – 19

SECTION 01030 – PROJECT PROCEDURES ..... 1 - 3

SECTION 01041 – PROJECT COORDINATION ..... 1 - 2

SECTION 01043 – JOB SITE ADMINISTRATION ..... 1 - 1

SECTION 01045 – CUTTING AND PATCHING ..... 1 - 1

SECTION 01051 – CONSTRUCTION LAYOUT ..... 1 – 1

SECTION 01060 – REGULATORY REQUIREMENTS ..... 1 - 1

SECTION 01070 – ABBREVIATIONS, SYMBOLS, TRADE  
NAMES AND MATERIALS..... 1 - 2

SECTION 01090 – REFERENCE STANDARDS..... 1 - 1

SECTION 01115 – CONTROL OF WORK..... 1 - 4

SECTION 01200 – PROJECT MEETINGS..... 1 - 3

SECTION 01340 – SHOP DRAWINGS, PRODUCT DATA AND SAMPLES ..... 1 - 6

SECTION 01380 – SITE CONDITION AND AUDIO/VIDEO SURVEY ..... 1 - 2

SECTION 01400 – QUALITY CONTROL ..... 1 - 2

SECTION 01410 – TESTING LABORATORY SERVICES ..... 1 - 5

SECTION 01500 – CONSTRUCTION FACILITIES AND  
TEMPORARY CONTROLS ..... 1 - 4

SECTION 01505 – MOBILIZATION ..... 1 - 2

SECTION 01530 – PROTECTION OF EXISTING FACILITIES  
AND PROPERTY ..... 1 - 8

SECTION 01550 – SITE ACCESS AND COORDINATION WITH  
RESIDENTS ..... 1 - 2

SECTION 01570 – TRAFFIC REGULATION..... 1 - 2

SECTION 01600 – MATERIAL AND EQUIPMENT ..... 1 - 1

SECTION 01610 – TRANSPORTATION AND HANDLING..... 1 - 1

SECTION 01630 – PRODUCT OPTIONS AND SUBSTITUTIONS..... 1 – 1

SECTION 01700 – CONTRACT CLOSEOUT ..... 1 - 1

SECTION 01710 – CLEANING ..... 1 - 2

SECTION 01720 – PROJECT RECORD DOCUMENTS ..... 1 - 2

SECTION 01730 – OPERATING AND MAINTENANCE DATA ..... 1 - 4

SECTION 01740 – WARRANTIES AND BONDS ..... 1 - 1

SECTION 02100 – SITE PREPARATION..... 1 - 1

SECTION 02110 – SALVAGE OR ABANDONMENT OF EXISTING

MATERIALS .....	1 - 1
SECTION 02140 – DEWATERING.....	1 - 2
SECTION 02160 – SHEETING, SHORING, & BRACING .....	1 - 2
SECTION 02210 – GRADING .....	1 - 1
SECTION 02221 – EXCAVATION, BACKFILLING FOR TRENCHES, PAVEMENT AND UTILITY STRUCTURES.....	1 - 3
SECTION 02272 – GEOTEXTILE FABRIC .....	1 - 2
SECTION 02350 – BASE COURSE .....	1 - 1
SECTION 02500 – ROADWAY, DRIVEWAY, AND SIDEWALK.....	1 - 4
SECTION 02515 – TRAFFIC MAINTENANCE AGGREGATE.....	1 - 1
SECTION 02615 – DUCTILE IRON PIPE & FITTINGS .....	1 - 5
SECTION 02622 – POLYVINYL CHLORIDE PIPE .....	1 - 3
SECTION 02623 – HIGH DENSITY POLYETHYLENE PIPE & FITTINGS.....	1 - 8
SECTION 02624 – TRACER WIRE .....	1 - 6
SECTION 02760 – DIRECTIONAL DRILLING .....	1 - 5
SECTION 02950 – LANDSCAPING .....	1 - 3
SECTION 02999 – MISCELLANEOUS WORK AND CLEANUP .....	1 - 2
SECTION 03100 – CONCRETE FORMWORK .....	1 - 5
SECTION 03200 – CONCRETE REINFORCEMENT .....	1 - 3
SECTION 03300 – CAST-IN-PLACE CONCRETE.....	1 - 9
SECTION 03350 – CONCRETE FINISHES .....	1 - 2
SECTION 09800 – PROTECTIVE COATINGS .....	1 - 12
SECTION 15100 – VALVES & APPERTENANCES .....	1 - 2
SECTION 15208 – INSERTION VALVES .....	1 - 3
SECTION 15209 – TAPPING SLEEVES & VALVE ASSEMBLY .....	1 - 3

SECTION 01010  
SUMMARY OF WORK

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS/REQUIREMENTS INCLUDED

- A. Include the furnishing of all labor, equipment, and materials necessary for the construction of the project as shown on the drawings and specified herein.
- B. The Contractor shall furnish all labor, materials, equipment, tools, services, and incidentals to complete all work required by these Specifications and as shown on the Drawings.
- C. The Contractor shall perform the work complete and shall include repairs, replacements, and restoration required as a result of damages caused during this construction.
- D. Furnish and install all materials, equipment, and labor which is reasonably and properly inferable and necessary for the proper completion of the work, whether specifically indicated in the Contract Documents or not.
- E. In general, the work includes, but is not limited to, water main installation; fire hydrants, gate valves, and air release valve installation; miscellaneous driveway removal and replacement; and incidental items shown on the plans and in these specifications.

1.02 CONTRACTOR'S DUTIES

- A. Contractor shall verify all field and job conditions prior to preparing his bid. Visit and examine the job sites, and with all authorities concerned in order to become familiar with all existing conditions pertinent to the work to be performed thereon. No additional compensation will be allowed for failure to be so informed.
- B. Check all specifications and all drawings and bring to attention any conflicts or variations as shown or noted.
- D. For any points which are not clear, or from items and/or details which the Contractor feels are in need of clarification, consult the Design Professional before submission of a proposal.
- E. In case of discrepancies and/or ambiguities in the drawings and/or in the specifications, the Design Professional shall be consulted prior to submission of a proposal. Failure to do so on the part of the successful bidder shall be construed as explicit agreement on his part to abide by the Design Professional's decision in such matters.
- F. Except as specifically noted, provide and pay for:
  - 1. Labor, materials and equipment
  - 2. Tools, construction equipment and machinery.
  - 3. Temporary facilities required for construction.



4. Other facilities and services necessary for proper execution and completion of work.
5. Pay legally required sales, consumer, and use taxes.
- G. Secure and pay for, as necessary for proper execution and completion of Work, and as applicable at time of receipt of bids:
  1. Permits.
  2. Government Fees.
  3. Licenses.
- H. Give required notices.
- I. Comply with codes, ordinances, rules, regulations, and other legal requirements of public authorities that bear on performance of Work.
- J. Promptly submit written notice to Design Professional of observed variance of Contract Documents from legal requirements.
  1. Appropriate Modifications to Contract Documents will adjust necessary changes.
- K. Enforce strict discipline and good order among employees. Do not employ on Work:
  1. Unfit persons.
  2. Persons not skilled in assigned task.
- L. Work by Others:
  1. Independent Testing Laboratory Services will be employed and paid for by the Owner.
- M. Contractor use of Premises:
  1. Confine operations at site to areas permitted by:
    - a. Law
    - b. Ordinance
    - c. Permits
    - d. Contract Documents
    - e. Design Professional
    - f. Owner
- N. Do not unreasonably encumber site with materials or equipment.
- O. Do not load structures with weight that will endanger structures.
- P. Assume full responsibility for protection and safekeeping of products stored on premises.
- Q. Move any stored products that interfere with operations of Owner or other Contractors.

- R. Maintain "As-Built" Records of all work documenting any changes, revisions or varying field conditions.

1.03 CONTRACTS

Construct the Work under a single lump sum or unit price contract as stated for each item in the bid form.

1.04 WORK SEQUENCE

- A. All work to be done under this Contract shall be done with minimum inconvenience to the private property owners adjacent to this project.
- B. Construct Work in stages to accommodate the Owner's use of the premises during the construction period; coordinate the construction schedule and operations with the Owner's Representative.
- C. Construct the Work in stages to provide for public convenience.
- D. Assume full responsibility for the protection and safekeeping of Products under this Contract, stored on the site.
- E. Move any stored products, under Contractor's control, which interfere with operations of the Owner or separate contractor.
- F. Obtain and pay for the use of additional storage or work areas needed for operations.
- G. Roadway closures shall be avoided, but if necessary, must have prior approval by the Owner.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01025  
MEASUREMENT AND PAYMENT

PART 1 - GENERAL

- A. Refer to Louisiana Uniform Public Work Bid Form in these Specifications and the Summary of Estimated Quantities on the Plans.
- B. Payment for the various items of the Bid Form, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labors, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work all in accordance with the requirements of the Contract Documents, including all costs of compliance with the regulations of public agencies having jurisdiction. The Contractor is hereby on notice that no separate payment will be made for any item that is not specifically set forth in the Bid Form, and all costs therefore shall be included in the prices named in the Bid Form for the various appurtenant items of work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

PART 4 - MEASUREMENT AND PAYMENT

4.01 GENERAL

The Total Bid Price shall cover all work required by the Contract Documents. All costs in connection with the proper and successful completion of the work, including furnishing all materials, sheeting, bracing, bedding, backfill equipment, supplies, and appurtenances; providing all construction equipment, and tools; and performing all necessary labor and supervision to fully complete the work, shall be included in the unit and lump sum prices bid. All work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the prices bid.

4.02 ESTIMATED QUANTITIES

All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the work, and (b) for the purpose of comparing the bids submitted for the work. The actual amounts of work done and materials furnished under unit price items, may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. No compensation will be given for any quantities not used.

4.03 APPROVAL OF PAYMENTS

The Engineer will, within ten (10) days after the receipt of each Application for Payment, either

indicate in writing his approval of payment and present the Application for Payment to Owner or return the Application for Payment to Contractor indicating in writing their reasons for refusing to approve payment. In the latter case, Contractor may make the necessary corrections and re-submit the Application for Payment. Owner shall, within thirty (30) days of presentation to him of an approved Application for Payment, pay Contractor the amount approved by the Engineer.

- 4.04 6" C900 PVC DR-18 WATER SERVICE LINE [BID ITEM NO. 1]  
8" C900 PVC DR-18 WATER MAIN [BID ITEM NO. 2]  
10" C900 PVC DR-18 WATER MAIN [BID ITEM NO. 3]

- A. Measurement: Measurement for length of water main and service line will be the actual linear footage installed by open cut, measured along the top centerline of the pipe. No measurements for the fittings (tees, bends, crosses, reducers, couplings, etc.), adapters, offsets, tie-ins, and incidentals will be made. All costs shall be included in unit bid price.
- B. Payment: Actual total linear feet of water main and service line installed by open cut and accepted, including restrained joints, ductile iron fittings, and transitional couplings measured as provided above will be paid at the unit price bid and this price and payment will constitute full compensation for furnishing, hauling, and installing pipe. The cost for open cut installation including all incidentals without a specific pay item, excavation, materials, sheeting and shoring, sheeting left in place, backfilling and compaction, geogrid, geotextile fabric and equipment, tools, labor and incidental items to install the water main and service line complete and in place shall be included in the linear foot cost.

- 4.05 8" DIPS HDPE DR-11 WATER MAIN SERVICE LINE [BID ITEM NO. 4]  
10" DIPS HDPE DR-11 WATER MAIN [BID ITEM NO. 5]  
12" DIPS HDPE DR-11 WATER MAIN [BID ITEM NO. 6]

- A. Measurement: Measurement for length of water main and service line will be the actual horizontal linear footage measured along the final grade of ground. No additional measurement will be made for additional vertical lengths required to meet depths shown on plans or for field changes to depth made by project engineer.. No measurements for the fittings (tees, bends, crosses, reducers, couplings, etc.), adapters, offsets, tie-ins, and incidentals will be made. All costs shall be included in unit bid price including contractor supplied instrumentation for locating pilot hole, measuring drill string axial and torsion loads, and measuring drilling fluid discharge rate and pressure. Also included in the cost of the item is a wire line and wire line specialist.
- B. Payment: Actual total linear feet of water main and service line installed and accepted, including pipe joint fusing, restrained joints, ductile iron fittings, and transitional couplings, measured as provided above will be paid at the unit price bid and this payment will constitute full compensation for furnishing, hauling, and installing pipe. The cost for direction drill installation including all incidentals without a specific pay item, drilling and receiving pits, providing the tools, materials, equipment, labor, and incidental items to install the water main and service line complete and in place shall be included in the linear foot cost.

4.06 8" GATE VALVE WITH VALVE BOX, CONC. PAD, AND TRACER WIRE BOX [BID ITEM NO. 7]  
10" GATE VALVE WITH VALVE BOX, CONC. PAD, AND TRACER WIRE BOX [BID ITEM NO. 8]

- A. Measurement: Measurement for 8" and 10" Gate Valve with valve box, cast-in-place concrete pad, and tracer wire box furnished and installed complete with Valve Box, cast-in-place concrete pad, tracer wire box, and concrete slab as detailed on the Drawings will be at the per each price bid. Note pre-cast valve concrete pads are not allowed and will not be accepted. Work shall include ALL incidentals necessary to complete item of work.
- B. Payment: Payment for 8" and 10" Gate Valve with valve box, cast-in-place concrete pad, and tracer wire box furnished and installed complete with Valve Box, cast-in-place concrete pad, tracer wire box, and concrete slab shall include the necessary materials, labor and equipment, and all related site, civil, structural, and mechanical as shown on the drawings and in specifications, including any other incidentals not specifically identified for payment under separate pay items.

4.07 WATER MAIN TIE-IN AT STATION 100+00 RUE ROYAL [BID ITEM NO. 9]  
WATER MAIN TIE-IN AT STATION 200+00 MILITARY ROAD (CROSS CREEK) [BID ITEM NO.10]

- A. Measurement: Measurement for water main tie ins will be per each. All costs shall be included in unit bid price which shall include all pipes, fire hydrants, sampling stations, gate valves, valve boxes, concrete pads, HDPE adapters, reducers, tees, flanges, excavation, backfill and all other incidentals necessary to install the water main tie in as detailed in the plans and specifications.
- B. Payment: Payment for water main tie ins in accordance with details on plans, including all pipes, fire hydrants, sampling stations, gate valves, valve boxes, concrete pads, HDPE adapters, reducers, thrust blocking, geogrid, geotextile fabric, tees, flanges, excavation, backfill and all other incidentals, measured as provided above will be paid at the unit price bid per each and this price and payment will constitute full compensation for these items.

4.08 WATER SERVICE TERMINATION 6" C900 PVC DR-18 [BID ITEM NO.11]  
WATER MAIN TERMINATION 8" C900 PVC DR-18 [BID ITEM NO.12]  
WATER MAIN TERMINATION 10" C900 PVC DR-18 [BID ITEM NO.13]

- C. Measurement: Measurement for water main terminations will be per each. All costs shall be included in unit bid price which shall include minimum 5' stub out pipe, gate valves, valve boxes with cast-in-place concrete pads, HDPE adapters, reducers, tees, flanges, excavation, thrust blocking, geogrid, geotextile fabric, backfill and all other incidentals necessary to install the water main termination as detailed in the plans and specifications.
- D. Payment: Payment for water main terminations in accordance with details on plans, including all pipes, gate valves, valve boxes with cast-in-place concrete pads, HDPE adapters, reducers, tees, flanges, excavation, backfill and all other incidentals, measured as provided above will be paid at the unit price bid per each and this price and payment will constitute full compensation for these items.

4.09 6" TO 8" INSERTION VALVE [BID ITEM NO.14]  
10" TO 12" INSERTION VALVE [BID ITEM NO.15]

- A. Measurement: Measurement for insertion valves will be per each. All costs shall be included in unit bid price which shall include insertion valves, cast-in-place concrete pad, value box, excavation, backfill and all other incidentals necessary to install the insertion valves as detailed in the plans and specifications.
- B. Payment: Payment for insertion valves, in accordance with details on plans, including insertion valves, cast-in-place concrete pad, value box, excavation, backfill and all other incidentals necessary to install the insertion valves, measured as provided above will be paid at the unit price bid per each and this price and payment will constitute full compensation for these items.

4.10 6" TO 8" TAPPING SLEEVE AND VALVE ASSEMBLY [BID ITEM NO.16]  
10" TO 12" TAPPING SLEEVE AND VALVE ASSEMBLY [BID ITEM NO.17]

- A. Measurement: Measurement for tapping sleeves and valve assemblies will be per each. All costs shall be included in unit bid price which shall include tapping sleeves, valve assemblies, cast-in-place concrete pad, value box, excavation, backfill and all other incidentals necessary to install the tapping sleeves and valve assemblies as detailed in the plans and specifications.
- B. Payment: Payment for tapping sleeves and valve assemblies, in accordance with details on plans, including tapping sleeves, valve assemblies, cast-in-place concrete pad, value box, excavation, backfill and all other incidentals, measured as provided above will be paid at the unit price bid per each and this price and payment will constitute full compensation for these items.

4.11 1" SINGLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF [BID ITEM NO.18]  
1" SINGLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF [BID ITEM NO. 19]  
1" DOUBLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF [BID ITEM NO. 20]  
1" DOUBLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF [BID ITEM NO. 21]  
  
2" SINGLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF [BID ITEM NO.23]  
2" SINGLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF [BID ITEM NO. 24]  
2" DOUBLE WATER SERVICE LINES (OPEN CUT) UP TO 20LF [BID ITEM NO. 25]  
2" DOUBLE WATER SERVICE LINES (DIRECTIONAL DRILL) UP TO 80LF [BID ITEM NO. 26]

- A. Description: Water service lines to be 1" or 2" PE 3408 DR9 tubing single or double water service lines as shown on the plans and specifications and shall include water meters, water service lines tubing, u-branches, corporation stops, locking curb stops, tees, tracer wire, meter boxes (NDS Jumbo Box, model no D1500-DIRB or approved equal), and incidentals.

Water meters and boxes for single and double water services shall be procured by the Contractor and delivered to St. Tammany Parish Department of Utilities for installation by St. Tammany Parish Department of Utilities at a later date.

- B. Measurement: Measurement for service lines will be per each. All costs shall be included in the unit bid price which shall include water meters, all tubing, water service lines, u-branches, corporation stops, locking curb stops, tees, tracer wire, meter boxes, connections, and all other incidentals necessary to install the service lines as detailed in the plans and specifications.
  - C. Payment: Payment for service lines, in accordance with details on plans, including water meters, all tubing, water service lines, u-branches, corporation stops, locking curb stops, tees, tracer wire, meter boxes, connections, and all other incidentals necessary to install the service lines, measured as provided above will be paid at the unit price bid per each and this price and payment will constitute full compensation for these items.
- 4.12 1" WATER SERVICE EXTENSION [BID ITEM NO.22]  
2" WATER SERVICE EXTENSION [BID ITEM NO.27]
- A. Description: Water service line extensions to be 1" or 2" PE 3408 DR9 tubing for water service lengths exceeding per each pay length where shown on the plans.
  - B. Measurement: Measurement for service lines will be per linear foot. All costs shall be included in the unit bid price which shall include all tubing for water service lines, connections, and all other incidentals necessary to install the service line extensions, as detailed in the plans and specifications.
  - C. Payment: Payment for service lines, in accordance with details on plans, including all tubing for water service lines, connections, and all other incidentals necessary to install the service lines, measured as provided above will be paid at the unit price bid per linear foot and this price and payment will constitute full compensation for these items.
- 4.13 SAMPLING STATION [BID ITEM NO.28]
- A. Description: Sampling station shall include a 1" tee on service line with a smooth bib sample tap faucet installed near the water main that can be opened to collect a water sample.
  - B. Measurement: Measurement for sampling station will be per each. All costs shall be included in the unit bid price which shall include all piping, connections, faucets, excavation, backfill and all other incidentals necessary to install the sampling stations as detailed in the plans and specifications.
  - C. Payment: Payment for sampling station, in accordance with details on plans, including all piping, connections, faucets, excavation, backfill, and all other incidentals necessary to install the sampling stations, measured as provided above will be paid at the unit price bid per each and this price and payment will constitute full compensation for these items.
- 4.14 FIRE HYDRANT WITH GATE VALVE [BID ITEM NO. 29]
- A. DESCRIPTION
- Fire hydrants shall conform to AWWA C502 (latest edition) and shall be furnished complete

with wrench and other appurtenances. Manufacturer's certification of compliance with AWWA C502 and tests listed therein will be required. All hydrants shall be of breakable type, with the breakable section located slightly above the finish ground line. Hydrants shall contain two, two and one-half inch (2-1/2") hose connections, and one, four and one-half inch (4-1/2") steamer connections with national standard fire hose coupling screw threads, five and one-quarter inch (5- 1/4") valve opening, six inch (6") diameter mechanical joint inlet, one and one-half inch (1-1/2") pentagon operating nut. Fire hydrant shall open counterclockwise and is to be painted in conformance with local fire department requirements (colors based on delivered fire flow). No substitutes will be allowed.

B. GENERAL

Contractor shall provide a post-construction fire flow test witnessed and approved by the engineer, owner/operator, and local fire official.

There shall be no trees, shrubs, etc., planted around the fire hydrants or in areas designated as fire lanes.

Hydrants to be installed on swivel tee fitting with an isolation valve with concrete pad and valve box.

- C. Measurement: Measurement for payment for Fire Hydrant will be on a per each basis and shall include all costs for gate valve, lead line, valve box, tracer wire box, and cast-in-place concrete pad. Gate valve, lead line, valve boxes, and concrete pad for fire hydrants will not be measured as separate pay items.
- D. Payment: Payment for Fire Hydrant with gate valve, lead line, and valve box furnished and installed complete with gate valve, lead line, valve box, tracer wire box, and cast-in-place concrete pad shall include the necessary materials, labor and equipment, and all related site, civil, structural, and mechanical as shown on the drawings and in specifications, including any other incidentals not specifically identified for payment under separate pay items.

4.15 AIR RELEASE VALVE WITH SIGN [BID ITEM NO. 30]

- A. Measurement: Measurement for air release valve with sign shall be per each. All costs for air release valve with sign shall be included in this unit bid price. Air release valves shall conform to plans and specifications. Cost of sign and parts, 2" NPT brass gate valve, concrete pad, thrust blocking, lead line shall be included in cost. No additional measurement will be made for varying lengths of lead lines as required by STPDU. Measurement shall include the necessary materials, labor and equipment, and all related site, civil, structural, and mechanical as shown on the drawings and in specifications, including any other incidentals not specifically identified for payment under separate pay items
- B. Payment: Payment for air release valve with sign installed and accepted, including all incidentals, measured as provided above will be paid at the unit price bid and this price and payment will constitute full compensation for furnishing, providing, and installing air release



valve with sign.

#### 4.16 AUTOMATIC FLUSHING STATION [BID ITEM NO. 31]

##### A. DESCRIPTION

1. The device furnished under this Section shall be an automatic water distribution flushing device designed to be utilized in a permanent or semi-permanent manner for monitoring of water quality conditions; recording water quality results; and automatically flushing of potable water distribution lines when select water quality conditions fail to meet the water quality standards identified by the utility and entered into the logic of the 1200 Series S.M.A.R.T. Flush Management software of the device.
2. The primary purpose of this device shall be to automatically flush the necessary amounts of water from the water distribution system for the purpose of improving and/or maintaining water quality without exceeding the volume necessary to mitigate for a specific condition.
3. Secondly, this device shall allow authorized water quality and utility personnel to receive and send critical field data from the remote monitoring/flushing station so that they may periodically ascertain current water quality conditions and establish a cost effective and system efficient flushing response program.
4. Automatic flushing station shall be Hydro-Guard 1200 Series S.M.A.R.T. Flushing System (system management and remote telemetry) direct discharge unit or approved equal.

##### B. GENERAL

1. This device shall be connected to a water distribution line as required by the plans or standard installation detail. The self-contained unit is designed for automatic flushing of the water distribution line through the opening of a control valve that is an integral part of the unit.
2. All programming shall be accomplished by means of an integrated telemetry based PLC with proprietary programming logic that will consistently analyze the water quality readings taken by the integrated chlorine (total) analyzer. The system will be powered by 120VAC (alternative power supply options may be available for certain models and installation locations).
3. This device shall be capable of measuring, monitoring, logging and mitigating (by way of initializing a flush event) the water quality conditions set forth by the St. Tammany Parish Department of Utilities.
4. This device shall be capable of being programmed to activate when chlorine or chloramine residual pH; and/or water temperature levels fall below acceptable standards determined by the operator/end-user.

5. Device must allow for scheduled flush events. A minimum of 10 events per day with durations of one minute to 24 hours per event are required.
6. This device must be capable of performing the following monitoring and condition mitigation activities:
  - a. The device shall be capable of monitoring a variety of water quality conditions including free or total chlorine, pH, temperature, turbidity, TOC, flow (both gallons per minute and total flow) and system pressures from a single installation point.
  - b. The device shall initiate a flush event based on client input when chlorine, temperature, pH, turbidity or a time- based schedule requires such action to mitigate a less than desirable water quality condition or to create a temporary demand on the water service line to prevent water age and conditions associated with water age.
7. The two-way communication (MODBUS TCP; SCADA compatible required) remote telemetry based automated flushing and water quality management device to be supplied under this specification shall be Hydro-Guard<sup>®</sup> as manufactured by Mueller or approved equal.

C. AUTOMATIC WATER DISTRIBUTION FLUSHING SYSTEM COMPONENTS

The remote water quality monitoring/management and water distribution flushing system is comprised of a premium commercial grade chlorine analyzer (total or free), turbidity analyzer, pH sensor, temperature sensor, pressure sensor, etc.

1. Must be constructed of Schedule 80 PVC, no-lead brass, or stainless-steel.
2. A premium grade, industry recognized, double check valve; a multi-function PLC with proprietary system management logic for the control of at least three water quality condition sensors—minimum of pH, chlorine and temperature monitoring— (with the potential for future expansion).
3. Dechlorination system for both flushed water and water utilized by the analyzing device(s) is mandatory.
4. Must be housed in a protective external enclosure that shall include the features indicated by the St. Tammany Parish Department of Utilities.

D. AUTOMATIC FLUSHING UNIT

1. The advanced system management/monitoring and flushing station shall be a single unit consisting of the major components described below:
  - a. Integral System Management Control Hardware and Software – The 1200 Series S.M.A.R.T. System management and monitoring components shall include the

following:

- i. The device's internal control system shall allow for a minimum of three independently operating condition assessment/water quality analyzers (i.e., chlorine, pH, flow, temperature; turbidity, pressure, etc.).
  - ii. The device's internal control system shall be programmable via both a remote web or SCADA interface and an on-site Ethernet option.
  - iii. The device's internal control shall be capable of being managed via Windows® Internet Explorer® (or other web browsers) and shall not require a proprietary interface software.
  - iv. The device's internal control shall be equipped with a unique IP address and shall utilize a proprietary viewer web interface to protect against unauthorized usage.
  - v. The device's management system shall allow owners to change or update the IP address of the device.
  - vi. The devices shall feature user access level settings that will allow the utility to establish permission levels for Administrators/Engineers, Technicians, and Users with access to the data generated by the device. The purpose of this functionality is to limit function control yet provide access to critical system data to all authorized personnel.
  - vii. The device's internal controller shall be capable of two-way communication, in real-time if so desired, via such communication methods as cellular (GSM or CDMA), Wi-Fi, Ethernet, Bluetooth®, or other methods.
  - viii. The device's internal controller must be capable of sending and receiving data packages, as well as storing information on-site for up to one (1) calendar year.
  - ix. The device's internal controller must be capable of sending alarm codes in the event of a probe failure; the device's protective enclosure is accessed (when equipped with the entry detection option); or when a flow or no-flow condition occurs in contrast with what the device's controller has initiated.
  - x. The Analyzer, PVC, electrical components and protective enclosures shall be UL certified.
  - xi. The device internal controller must be SCADA compatible and be capable of communicating with SCADA networks via MODBUS-TCP.
- b. Integral Piping and Control Valve – The piping and control valve components shall include the following:
- i. Adjustable control valve powered by a constant powered, 24VDC solenoid. Contractor to coordinate with St. Tammany Parish Department of Utilities for the preferred Control Valve option:
    - a. DUCTILE CONTROL VALVE WITH FLOW METERING: The device's internal 2-inch ductile iron control valve shall be capable of being activated by a 24VDC solenoid and must feature a built-in flow meter capable of providing GPM and Total Flow.
    - b. COMPOSITE CONTROL VALVE WITHOUT METERING: The device's internal 2-inch nylon reinforced composite control valve shall feature a straight through pass and a single piece EPDM rubber diaphragm.

- ii. The control valve shall be a globe valve type design capable of passing sand and other debris up to 5/8" in diameter without obstructing the valve's throat.
  - iii. The device standard internal and external piping shall be Schedule 80 PVC.
  - iv. The device internal piping and control valve shall have an operational rating of 200 psi (where consistent pressures range above 110 psi it is recommended that a Pressure Reducing Valve be utilized ahead of the automatic flushing system for the protection of the device and its critical components).
  - v. Internal piping and control valve shall be capable of being removed from the housing by means of a flange coupling allowing for quick disassembly, permitting easy maintenance and repairs.
  - vi. The control valve shall be constructed of a non-corrosive glass-reinforced nylon, or equal, and shall be fitted with stainless steel hardware. The valve shall be of the type that can be easily rebuilt.
  - vii. The unit shall be supplied with a 2-inch modular double check valve backflow prevention system that can be removed from its cradle system for annual checks without being disassembled from the piping of the device.
  - viii. The unit shall be a directed discharge system, utilizing flange connections, to connect the inlet and outlet piping to the utility's service lines and discharge piping; optional designs can discharge to atmosphere.
- c. Housing  
The self-contained unit shall be supplied with an above-grade, NEMA 3R (minimum) environment-resistant, vented cabinet to provide stability and protection for the internal components of the device. The cabinet shall be constructed of high grade, heavy gage aluminum. A secondary NEMA 6x (minimum) cabinet must be used to house the system-management electronics.
- d. System Sampling (Required) – The sampling system shall include the following features:
- i. The sampling system shall be constructed of polyethylene or stainless with equal or greater resistance to bacterial regrowth and be connected with brass or stainless fittings.
  - ii. The sampling system shall be designed in such a way to reduce the potential for sampling system contamination by allowing access and inspection of the internal piping compartment and components without disassembly or depressurization of the sampling system.
  - iii. Connection to the device sampling system shall be by means of a quick access sample valve located at the top of the device for ease of access. The device sampling connection shall be housed in a secure weather-tight area to minimize contamination of the sampling connection.
  - iv. The sampling system must allow water quality samples to be obtained on-site with the flushing device in either a flushing or non-flushing state.
- e. Electrical/Electronic System – The Electrical/Electronic System shall include the following features and capabilities:
- i. Be capable of storing instructions and data for a minimum of 12 months via an integrated programmer and capable of operating the device internal control

- valve using a 120VAC power supply (or an alternative power source).
  - ii. Offer continuous monitoring of water quality conditions and 10 flushing program events per day.
    - a. Analyzer must sample water quality conditions (chlorine) a minimum of every five (5) minutes.
    - b. 1200 Series S.M.A.R.T. Management System must record conditions in a daily mode a minimum of every five (5) seconds.
    - c. 1200 Series S.M.A.R.T. Management System must record conditions in a monthly mode a minimum of every ten (10) minutes.
  - iii. Capable of transmitting data to a remote site in real-time or on a periodic basis determined by authorized operators.
  - iv. Capable of receiving data from a remote site in real-time or on a periodic basis determined by authorized operators.
  - v. Offer downloadable data transfers that can be saved as CSV or XLSX files for use in management spreadsheets.
  - vi. Must feature on-site Ethernet interface to allow for on-site access to data and system management controls.
  - vii. Incorporate a chlorine analyzer with an LCD readout.
  - viii. Offer optional manual on and off functions on-site with remote ON/OFF functionality via remote management software.
  - ix. Be secured and water-resistant.
  - x. Use an integrated 24-volt solenoid to operate the control valve that directly turns into a 2-inch control valve.
- f. Dechlorination System (Required)
- i. A tablet feeder designed to accommodate 2 5/8th inch sodium sulfite or ascorbic acid tablets shall be installed on the unit.
  - ii. A portion of the water being flushed shall be directed through the tablet feeder in the creation of a concentrated solution of the dechlorinating agent.
  - iii. The directly treated, concentrated solution shall be introduced to the non-directly treated discharge on the device's splash plate resulting in a homogenous mixture effectively treating the entire discharge.
  - iv. A minimum of 64,000 gallons of flushed water shall be neutralized by the dechlorination system when the chamber is filled to capacity.
- g. Execution
- i. Recommended installation must be provided on drawings (PDF and DWG) supplied by the manufacturer.
  - ii. Electrical wiring schematics must be provided by the manufacturer.
  - iii. Prior to the installation, the drainage patterns for the intended installation location shall be viewed to ensure that any discharged water will not create hazardous conditions for pedestrian or vehicular traffic. The selected location's drainage pattern shall also permit discharged water to flow away from the automatic flushing valve or be absorbed by the surrounding soil as to prevent pooling.
  - iv. Remove debris that might create uneven pressure on the unit from the bottom of the hole. Compact the bottom of the hole to minimize settling after

- installation.
  - v. Install a 4" lift of non-compacted sand or similar bedding material into the bottom of the hole.
  - vi. Backfill the hole around the automatic flushing valve with clean fill, #57 stone and/or a combination of other appropriate materials. Backfilling shall be accomplished in 6" lifts. Use a level to ensure the unit is level after each lift.
  - vii. The area 36" around the automatic flushing valve shall be prepared to prevent erosion.
  - viii. The automatic flushing valve shall be disinfected in accordance with ADH and AWWA standards.
  - ix. Installers must adhere to all manufacturer recommendations; state and local regulations and codes; and the guidance provided by the owner.
- E. Measurement: Measurement for payment for Automatic Flushing Station will be on a per each basis and shall include all costs for the automatic flushing station system as detailed herein. Components and incidentals will not be measured as separate pay items.
- F. Payment: Payment for Automatic Flushing Station shall include the necessary materials, labor and equipment, and all related site, civil, structural, and mechanical as shown on the drawings and in specifications, including any other incidentals not specifically identified for payment under separate pay items.

#### 4.17 TRAFFIC REGULATION [BID ITEM NO. 32]

- A. Measurement: Measurement for payment for Traffic Regulation will be made on a lump sum basis and shall include the preparation of the Traffic Control Device Plan and all materials, tools, traffic control devices, equipment and labor to implement the plan as specified in Section 01570.
- B. Payment: The lump sum bid price for traffic regulations shall include all labor, equipment, and materials necessary to maintain traffic as required in Section 01570 of these Specifications. Contractor shall be allowed to invoice 40% of the bid item upon approval of the Traffic Control Device Plans. The remaining 60% which will be for providing labor and material to maintain the traffic control devices may be billed in equal monthly increments until complete payment of the item.

#### 4.18 CLEARING AND GRUBBING [BID ITEM NO. 33]

A. DESCRIPTION

All work under this section shall be performed in accordance with Section 201 of the Louisiana Standard Specifications for Roads and Bridges, 2016 edition, and latest revisions, or as amended herein.

B. GENERAL

Clearing and grubbing shall be carried out to remove any vegetation including plants,

shrubs, bushes, trees, organic material etc. within the construction limits. All material resulting from the clearing and grubbing operations shall be legally disposed of off the project site at the expense of the Contractor.

- C. Measurement: Measurement for clearing and grubbing will be by the Lump Sum. Work shall include all equipment, labor, materials, and incidentals necessary to clear all trees, vegetation, and debris within the project limits in conflict with the proposed construction in accordance with the plans and specifications.
- D. Payment: Payment for clearing and grubbing will be at the contract unit bid price lump sum. Payment to be made as specified in section 201 of the Louisiana Standard Specifications for Roads and Bridges, 2016 edition.

#### 4.19 REMOVAL OF STRUCTURES AND OBSTRUCTIONS [BID ITEM NO. 34]

- A. Measurement: Measurement for the removal of structures and obstructions will be by the lump sum. Work shall include all equipment, labor, materials and incidentals necessary to remove and legally dispose of signs (removed or relocated) and other items without a designated pay item that are shown to be removed off project site in accordance with the plans and specifications. Reference Section 202 of the Louisiana Standard Specifications for Roads and Bridges, 2016 edition
- B. Payment: Payment for the removal of structures and obstructions will be at the contract unit bid price per lump sum.

#### 4.20 HYDROSEEDING [BID ITEM NO. 35]

- A. Measurement: Measurement for payment for Hydroseeding will be made by the acre for areas within project area that have been disturbed by construction.
- B. Payment: Payment for this item will be made at the contract acre bid for this item. This price shall constitute full compensation for topsoil, watering, and fertilizing of hydroseeded areas in accordance with Section 02950 of these Specifications. No additional compensation will be made for any trees or shrubbery adjacent to construction areas that must be removed as a result of the construction activities, except as authorized elsewhere in the contract documents.

#### 4.21 SODDING [BID ITEM NO. 36]

- A. Measurement: Measurement for payment for Sodding will be made by the square yard for areas within project area that have been disturbed by construction. Sodding areas shall include an area of a 10' wide strip per utility trenches in the project area as shown on the plans. It includes topsoil replacement, watering, and fertilizing as authorized by the Engineer.
- B. Payment: Payment for this item will be made at the contract square yard bid for this item. This price shall constitute full compensation for topsoil, watering, and fertilizing of

hydroseeded areas in accordance with Section 02950 of these Specifications. No additional compensation will be made for any trees or shrubbery adjacent to construction areas that must be removed as a result of the construction activities, except as authorized elsewhere in the contract documents.

4.22 CONSTRUCTION LAYOUT [BID ITEM NO. 37]

- A. Measurement: Measurement for payment will be on a lump sum basis.
- B. Payment: The lump sum bid price for construction layout shall include, but not be limited to, all labor, equipment, and materials necessary to complete all work as required in Section 01051 of these specifications. Distribution of payment will be based on percentage of total contract complete.

4.23 EXPLORATORY EXCAVATION [BID ITEM NO. 38]

- A. Measurement: Measurement for payment for exploratory excavation for the verification of existing utilities will be measured to the nearest 10<sup>th</sup> of a cubic yard by the engineer's representative.
- B. Payment: Payment for exploratory excavation for the verification of existing utilities will be made on a cubic yard basis and payment shall be full compensation to perform the necessary pot holing, backfilling or other appropriate work to verify locations and other necessary information about existing utilities to enable installation of items under this contract. This work requires prior authorization by the Engineer and as specified herein.

4.24 SITE CONDITION AND AUDIO/VIDEO SURVEY [BID ITEM NO. 39]

- A. Measurement: Measurement for payment for Site Condition and Audio/Video Survey and Construction Photographs will be made on a lump-sum basis.
- B. Payment: Payment for this item will be made at the lump-sum price bid price and will constitute full compensation for the Site Condition and Audio/Video Survey as described in Section 01380 Site Condition Audio/Video Survey. Payment will be made at 60% of the bid amount when all site locations have been video recorded and photographed and the remaining 40% will be paid equally among anticipated pay requests for the remaining contract time.

4.25 TRAFFIC MAINTENANCE AGGREGATE (VEHICULAR MEASUREMENT) [BID ITEM NO. 40]

- A. Measurement: Measurement for payment for Traffic Maintenance Aggregate will be on a cubic yard (vehicular measure) basis.
- B. Payment: Payment for Traffic Maintenance Aggregate will be made on a cubic yard (vehicular measure) basis and payment shall be full compensation to perform all work in accordance with the specifications.



4.26 REMOVE AND REPLACE ASPHALT PAVEMENT [BID ITEM NO. 41]

- A. Measurement: Measurement for asphalt paving removed and replaced shall be the actual field measured number of square yards removed and replaced as directed by the Engineer in accordance with the thickness indicated on the plans. The area of asphalt to be measured for payment will be limited to approved dimensions on the plans unless authorized differently by the Engineer. Contractor shall repair all damaged pavement caused by his operations. The Contractor, at no additional cost to the Owner, shall repair all damaged areas outside the above limits for measurement.
- B. Payment: Payment for asphalt removal and replacement will be made for the quantity, as determined above, measured in square yards, at the price per square yard bid in the Proposal, which price and payment shall be full compensation for breaking, removing, hauling and proper disposal of existing asphalt, furnishing and placing the asphalt, base course, geotextile fabric and special backfill (including installation and removal of temporary surfacing), proper disposal of other debris, backfilling around asphalt pavement, and all else incidental thereto, for which separate payment is not provided under other items in the Proposal.

4.27 REMOVE AND REPLACE AGGREGATE DRIVEWAY [BID ITEM NO. 42]

- A. Measurement: Measurement for aggregate driveways removed and replaced shall be the actual field measured number of square yards removed and replaced as directed by the Engineer in accordance with the thickness indicated on the plans. The area of aggregate driveway to be measured for payment will be limited to approved dimensions on the plans unless authorized differently by the Engineer. Contractor shall repair all damaged areas caused by his operations. The Contractor, at no additional cost to the Owner, shall repair all damaged areas outside the above limits for measurement.
- B. Payment: Payment for aggregate removal and replacement will be made for the quantity, as determined above, measured in square yards, at the price per square yard bid in the Proposal, which price and payment shall be full compensation for removing, hauling and proper disposal of existing aggregate, furnishing and placing the aggregate to a minimum thickness of 6 inches, geotextile fabric and proper disposal of other debris, backfilling around aggregate and all else incidental thereto, for which separate payment is not provided under other items in the Proposal.

4.28 REMOVE AND REPLACE CONCRETE DRIVEWAY [BID ITEM NO. 43]

- A. Measurement: Measurement for concrete driveways removed and replaced shall be the actual field measured number of square yards removed and replaced as directed by the Engineer in accordance with the thickness indicated on the plans. The area of concrete to be measured for payment will be limited to approved dimensions on the plans unless authorized differently by the Engineer. Contractor shall repair all damaged pavement caused by his operations. The Contractor, at no additional cost to the Owner, shall repair all damaged areas outside the above limits for measurement.

- B. Payment: Payment for concrete removal and replacement will be made for the quantity, as determined above, measured in square yards, at the price per square yard bid in the Proposal, which price and payment shall be full compensation for breaking, removing, hauling and proper disposal of existing concrete, furnishing and placing the concrete, base course, geotextile fabric and special backfill (including installation and removal of temporary surfacing), proper disposal of other debris, backfilling around concrete pavement, and all else incidental thereto, for which separate payment is not provided under other items in the Proposal.
- 4.29 SAW CUT ASPHALT AND/OR CONCRETE PAVEMENT (FULL DEPTH) [BID ITEM NO. 44]
- A. Measurement: Saw cutting of asphalt and/or concrete pavement shall be to full depth and will be measured at the contract unit price per linear foot of pavement material cut. Work shall include all equipment, labor, materials, and incidentals to perform full depth saw cutting of existing asphalt and/or concrete pavements at locations as shown on the plans or directed by the Project Engineer.
- B. Payment: Payment for saw cutting asphalt and/or concrete pavements will be at the contract unit bid price per linear foot of pavement material cut.
- 4.30 REMOVE AND REPLACE DRAIN LINES 15"RCP [BID ITEM NO. 45]
- A. Measurement: Measurement will be per linear foot of precast Reinforced Concrete Pipe for drain lines removed and replaced, furnished and installed. Work shall include ALL items necessary to complete the storm drain pipe installation.
- B. Payment: Payment for removing, replacing, furnishing, and installing precast Reinforced Concrete Pipe, complete in place will be made per linear foot which price and payment shall be full compensation for all excavation, materials, removal and disposal of existing pipe, sheeting and shoring, sheeting left in place, backfilling, bedding material, equipment, tools, and labor, and incidental items as shown on the Drawings and Specifications. All trenching, sheeting and shoring or other means of trench protection shall be in accordance with OSHA regulations.
- 4.31 REMOVE AND REPLACE SEPTIC OUTFALLS [BID ITEM NO. 46]
- A. Measurement: Measurement will be per linear foot for PVC septic outfalls removed and replaced, furnished and installed to match existing but not to exceed 6" in diameter. Work shall include ALL items necessary to complete the septic outfall installation.
- B. Payment: Payment for removing, replacing, furnishing, and installing PVC septic outfalls, complete in place to match existing, but not to exceed 6" in diameter, will be made per linear foot which price and payment shall be full compensation for all excavation, , removal and disposal of existing pipe, PVC, concrete landing pad, materials, sheeting and shoring, sheeting left in place, backfilling, bedding material, equipment, tools, and labor, and incidental items as shown on the Drawings and Specifications. All trenching, sheeting and

shoring or other means of trench protection shall be in accordance with OSHA regulations.

4.32 BOLLARDS [BID ITEM NO. 47]

- A. Measurement: Measurement for Bollards will be per each furnished and installed complete. Work shall include ALL incidentals necessary to complete item of work.
- B. Payment: Payment for the Bollards will be per each furnished and installed complete and shall be full compensation for all 6" Schedule 40 Steel Pipe (Hot Dipped Galvanized) and concrete, materials, equipment, tools, labor and incidental items as required in the Plans and Specifications or as directed by Project Engineer.

4.33 UTILITY RELOCATION COORDINATION [BID ITEM NO. 48]

- A. Measurement: Measurement for payment for utility relocation coordination with utility companies will be on a lump sum basis.
- B. Payment: Payment for utility relocation coordination will be made on a lump sum basis.

4.34 ENVIRONMENTAL PROTECTION [BID ITEM NO. 49]

A. DESCRIPTION

The work required by this Section shall consist of constructing and maintaining temporary erosion control features that satisfy the terms and conditions of the Storm Water Pollution Prevention Plan (SWPPP) and the National Pollution Discharge Elimination System (NPDES) General Permit. The SWPPP shall be comprised of Section 204 of the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition, and latest revisions, or as amended herein. In addition, the Contractor shall obtain and maintain a Louisiana Department of Environmental Quality Storm Water General Permit for Construction Activities (Permit No. LAR 100000) for the life of the project.

B. GENERAL

The Contractor, by signing this contract, certifies under penalty of law that he understands and will abide by the terms and conditions of the Storm Water Pollution Prevention Plan (SWPPP) and the National Pollution Discharge Elimination System (NPDES) General Permit that require the discharges from construction sites be managed to prevent pollutants from entering waters of the United States in accordance with the Environmental Protection Agency's (EPA) regulations for storm water discharges with respect to 33 U.S.C. § 1342 (Sections 402(p) and 405 of Public Law 100-4).

Temporary erosion control will ensure economical, effective, and continuous control of erosion and water pollution throughout the life of the contract. The Contractor shall prevent the transmission of soil particles and pollutants into streams, canals, lakes, reservoirs, or other waterways. In addition, the Contractor shall note that work may be simultaneously in progress on adjacent sites. The Contractor shall be responsible for coordinating his SWPPP with the SWPPP

for adjacent sites.

The Contractor may use the erosion control plan if provided in the Construction Documents as part of his SWPPP, or develop his own, to be used in the Notice of Intent (NOI) for the NPDES Permit.

#### C. PERMIT

The Contractor will be responsible for devising a satisfactory Storm Water Pollution Prevention Plan for the project prior to applying for the Storm Water General Permit for Construction Activities (Permit No. LAR 100000) from the Louisiana Department of Environmental Quality. The LPDES NOTICE OF INTENT (NOI) TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY application must be completed by the Contractor, approved by the Owner, and submitted by the Contractor at least two days prior to the initiation of construction to:

STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
Permits Division  
Post Office Box 82135  
Baton Rouge, Louisiana 70884-2135

All implementation duties to comply with the SWPPP and maintain the Storm Water General Permit will be the responsibility of the Contractor.

The Contractor will be required to submit a Notice of Termination (NOT) to the Louisiana Department of Environmental Quality upon acceptance of the project by the Owner.

#### D. MATERIALS

The Contractor shall provide all labor, equipment, and materials necessary to complete all work associated with this item.

#### E. MEASUREMENT AND PAYMENT

All costs associated with this work including obtaining and maintaining necessary permits, design, labor, equipment, or materials required by this section (including hay bales, silt fencing, etc.) shall be made under this item at the contract unit price. Payment will be distributed based on percentage of contract complete at contract unit bid per lump sum.

#### 4.35 NO. 57 CRUSHED LIMESTONE BEDDING FOR WATERLINES [BID ITEM NO. 50]

- A. General: When authorized by project engineer in field, No. 57 crushed limestone bedding material for waterlines shall be used as additional bedding material when soft and/or wet bottoms of excavation are encountered as shown in the details in the plans.
- B. Measurement: Measurement for payment for No. 57 crushed limestone bedding will be

measured by the cubic yard net section.

- C. Payment: Payment for No. 57 crushed limestone bedding will be made at the per cubic yard net section price which shall include all work necessary to excavate and haul existing material and replace it with No. 57 crushed limestone installed and compacted in accordance with plan details.

4.36 MOBILIZATION AND DEMOBILIZATION [BID ITEM NO. 51]

- A. Measurement: Measurement for payment for mobilization and demobilization will be on a lump-sum basis for mobilization and demobilization as specified herein. Project signs (minimum of 3, maximum of 5) shall be included within the mobilization and demobilization pay item.
- B. Payment: Payment for mobilization and demobilization shall cover all preparatory work and operating, including the material, labor, equipment, and tools for furnishing, installation, and removal of project signs as directed by the Department of Utilities in accordance with these Specifications; obtaining of all permits, insurance and bonds; movement of personnel, equipment, supplies and incidentals to the project site; the establishment of temporary offices and other construction facilities necessary for work on this project; removal of temporary offices from site, and clean up to place temporary site in original condition, all as required for the proper performance and completion of the work.

Partial payments for mobilization will be made in accordance with the following schedule.

Percent of Total Contract Complete	Allowable Percent of the Lump Sum Price for the Item
1st Partial Estimate	50
50	75
75	100

No price adjustments will be made for this item due to changes in the work.

END OF SECTION

SECTION 01030  
PROJECT PROCEDURES

PART 1 - GENERAL

1.01 CONNECTIONS TO EXISTING SYSTEMS

The Contractor shall perform all work necessary to install water main extension; fire hydrants, gate valves, and air release valves; miscellaneous driveway removal and replacement; and incidental items as shown on the drawings or as directed by the Engineer. The cost of this work shall be included in the price bid for the various items and shall not result in any additional cost to the Owner.

1.02 RELOCATIONS

- A. The Contractor shall be responsible for the relocation of structures, including but not limited to mailboxes, signs, sign poles, fences, piping, conduits and drains that interfere with the positioning of the work as shown on the drawings. The cost of all such relocations shall be included in the price bid for various items.
- B. The relocation of any United States Postal mailbox shall be done only after notifying the subject property owner and the proper postal authorities.

1.03 EXISTING UNDERGROUND PIPING, STRUCTURES, AND UTILITIES

- A. The attention of the Contractor is drawn to the fact that during excavation, the possibility exists of the Contractor encountering various water, gas, telephone, electrical, or other utility lines not shown on the Drawings. The Contractor shall exercise extreme care before and during excavation to locate and flag these lines so as to avoid damage to the existing lines. Should damage occur to an existing line, the Contractor shall notify the affected utility's Owner, Engineer Representative, and also the Owner to immediately make plans to repair the affected line at no cost to the Owner.
- B. It is the responsibility of the Contractor to ensure that all utility or other poles, the stability of which may be endangered by the close proximity of the excavation, are temporarily stayed in position while work proceeds in the vicinity of the pole and that the utility or other companies concerned be given reasonable advance notice of any such excavation by the Contractor.
- C. The locations are shown without express or implied representation, assurance, or guarantee that they are complete or correct or that they represent a true picture of underground piping to be encountered.
- D. The existing piping and utilities that interfere with the new construction shall be rerouted as shown, specified, or required. Before any piping and utilities not shown on the Drawings are disturbed, the Contractor shall notify the Engineer of the location of the pipeline or utility as directed. All privately owned utility relocations (cable, gas, telephone, electric, etc.) shall be performed by the owner of the utility or his approved contractor as directed by the Engineer.

- E. The Contractor shall exercise care in any excavation to locate all existing piping and utilities. All utilities which do not interfere with complete work shall be carefully protected against damage. Any existing utilities damaged in any way by the Contractor shall be restored or replaced by the Contractor at his expense as directed by the Engineer.
- F. It is intended that wherever existing utilities such as water, gas, telephone, electrical, or other service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated on the drawings. However, when in the opinion of the Owner or Engineer, this procedure is not feasible; he may direct the use of fittings for a utility crossing as detailed on the drawings.

#### 1.04 SALVAGE

Any existing equipment or material including, but not limited to, valves, pipes, fittings, couplings, etc. which is removed or replaced as a result of construction under this project, may be designated as salvage by the Engineer or Owner and, if so, shall be delivered to the Owner at a location directed by the Owner. Any equipment or material not worthy of salvaging, as directed by the Owner, shall be disposed of by the Contractor at a suitable location.

#### 1.05 PUMPING

- A. The Contractor, with his own equipment, shall do all pumping necessary to prevent flotation of any part of the work during construction operations.
- B. The Contractor shall, for the duration of the Contract and with his own equipment, pump out water, storm water, groundwater and wastewater that may seep or leak into the excavations.

#### 1.06 ADDITIONAL PROVISIONS

- A. Before commencing work on any of the existing structures or equipment, the Contractor shall notify the Engineer, in writing, at least ten (10) calendar days in advance of the date he proposes to commence such work.
- B. The Contractor shall provide, at his own cost, all necessary temporary facilities for access to, and for protection of, all existing structures. The Owner's personnel must have ready access at all times to the existing structures. The Contractor is responsible for all damage to existing structures, equipment, and facilities caused by his construction operations, and must repair all such damage when and as ordered by the Engineer.
- C. Within seven (7) days prior to commencement of work at the various individual sites, the Contractor shall distribute fliers to all residents and businesses within the project vicinity notifying them of the proposed construction.
- D. Contractor must maintain sidewalk and driveway access to all properties during construction.

- E. Engineer will, within ten (10) days after receipt of each Application for Payment, either indicate in writing his approval of payment and present the Application to Owner or return the Application to Contractor indicating in writing his reasons for refusing to approve payment. In the latter case, Contractor may make necessary corrections and re-submit the Application. Owner shall, within thirty (30) days of presentation to him of an approved Application for Payment, pay Contractor the amount approved by Engineer.

#### 1.07 SHOP DRAWINGS

The Contractor shall not commence construction of any individual activity until completion of Engineer's shop drawings review of all material or equipment pertaining to that activity.

#### 1.08 COORDINATION WITH RESIDENTS

Contractor shall coordinate with the Representative of each Residence regarding the location of the sewer and water service connections at each property line, the temporary blocking of driveways and temporary parking restrictions due to trench work or concrete paving. Contractor's cooperation and coordination with the Parish Representative and the Engineer is also required.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION



SECTION 01041  
PROJECT COORDINATION

PART 1 - GENERAL

1.01 REQUIREMENTS

Contractor shall plan, schedule, and coordinate his operations in a manner that will facilitate the simultaneous progress of the work included under other contracts outside the scope of these Contract Documents. Contractor shall plan, schedule and coordinate with all utilities in a manner conducive to timely and efficient progress in the execution of the contract.

1.02 NOTICES TO OWNERS AND AUTHORITIES

Contractor shall, as provided in the General Conditions, notify owners of adjacent property and utilities when execution of the Work may affect them.

When it is necessary to temporarily deny the access of owners or tenants to their property, or when any utility service connections must be interrupted, Contractor shall give notices at least 7 days in advance to enable the affected persons to provide for their needs. The Contractors, as a minimum, shall place a door hanger type notice, conforming to any applicable local ordinance, at each residence or business giving notice of pending construction in the area with a brief description of the nature of the work, the estimated time frame involved, appropriate information concerning utility interruptions, and instructions on how to limit their inconvenience. Roadway closures shall be avoided, but if necessary, must have prior approval by the Owner.

Utilities and other concerned agencies shall be contacted at least 48 hours prior to cutting or closing streets or other traffic areas or excavating near underground utilities or poles lines.

1.03 CONNECTIONS TO EXISTING FACILITIES

Unless otherwise specified or indicated, Contractor shall make all necessary connections to existing facilities including structures, drain lines, and utilities such as water, sewer, gas, telephone, and electric. In each case, Contractor shall receive permission from Owner or the owning utility prior to undertaking connections. Contractor shall protect facilities against deleterious substances and damage.

Connections to existing facilities that are in service shall be thoroughly planned in advance, and all required equipment, materials and labor shall be on hand at the time of undertaking the connections. Work shall proceed continuously (around the clock if necessary) to complete connections in the minimum time. Operation of valves of other appurtenances on existing utilities, when required, shall be by or under the direct supervision of the utility owner.

1.04 OPERATION OF EXISTING FACILITIES

All existing facilities must be kept in continuous operation throughout the construction period. No interruption will be permitted which adversely affects the degree of service provided. Provided permission is obtained from Owner in advance, portions of the existing facilities may be taken out of service for short periods corresponding with periods of minimum service demands.

Contractor shall provide temporary facilities and make temporary modifications as necessary to keep the existing facilities in operation during the construction period.

#### 1.05 TESTING LABORATORY

St. Tammany Parish Department of Utilities has stated that the Contractor is to pay for and perform all testing required on the water mains and required testing on bedding and backfill up to 12 inches above the piping. A testing laboratory will not be needed for the asphalt and concrete driveways on this project. St. Tammany Parish Department of Utilities will provide visual inspection. However, incidental items may require testing. The pressure testing and chlorination testing of the water main per LDH requirements will be the responsibility of the Contractor. Testing of the water main shall be performed in smaller segments between each gate valve on the project. The Contractor is required to contact the St. Tammany Parish Department of Utilities to have their representative on-site during all testing.

#### 1.06 MECHANICAL AND ELECTRICAL

Contractor shall coordinate all details of the equipment with other related parts of the Work, including verification that all structures, piping, wiring, and equipment components are compatible. Contractor shall be responsible for all structural and other alterations in the Work required to accommodate equipment differing in dimension or other characteristics from that contemplated in the Contract Documents or Specifications.

#### 1.07 COOPERATION WITHIN THIS CONTRACT

All firms or persons authorized to perform any work under this Contract shall cooperate with the General Contractor and his subcontractors or trades and shall assist in incorporating the work of other trades where necessary or required.

Cutting and patching, drilling, and fitting shall be carried out where required by the trade or subcontractor having jurisdiction, unless otherwise indicated herein or directed by the Engineer.

PART 2 - PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01043  
JOB SITE ADMINISTRATION

PART 1 - GENERAL

1.01 SITE ADMINISTRATION

Contractor shall be responsible for all areas of the site used by him, and all subcontractors in the performance of the Work. Contractor will exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to Owner or others. Contractor has the right to exclude from the site all persons who have no purpose related to the Work or its inspection and may require all persons on the site to observe the same safety regulations, as he required of his employees. At all working hours a superintendent that is an employee of the contractor, not a subcontractor, shall be at the job on a full-time basis.

1.02 UNFAVORABLE CONSTRUCTION CONDITIONS

Contractor shall confine his operations to work, which will not be affected adversely by unfavorable weather, wet ground, or other unsuitable construction conditions. No portion of the Work shall proceed under conditions that would affect adversely the quality or efficiency of the Work, unless suitable special precautions or countermeasures are taken by Contractor.

1.03 LAND FOR CONSTRUCTION PURPOSES

- A. Contractor will be permitted to use available land belonging to Owner, on or near the site of the Work, for construction purposes and for the storage of materials and equipment. The location and extent of the areas so used shall be as indicated on the drawings or as directed by the Engineer. Contractor shall immediately move stored material or equipment if any occasion arises, as determined by Owner, requiring access to the storage area. Materials or equipment shall not be placed on the property of Owner until Owner has agreed to the location to be used for storage.
- B. It shall be the Contractor's responsibility to provide arrangements for additional land required for construction or for location of the Resident Project Representative's office if applicable beyond that furnished by the Owner. This work shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the lump sum price for the applicable item.

PART 2- PRODUCTS (NOT USED)

PART 3- EXECUTION (NOT USED)

END OF SECTION

SECTION 01045  
CUTTING AND PATCHING

PART 1 - GENERAL

- 1.01 As provided in the General Conditions and herein, Contractor shall perform all cutting and patching required for the Work, and as may be necessary in connection with uncovering Work for inspection or for the correction of defective Work.
- 1.02 Contractor shall perform all cutting and patching required for the installation of improperly timed Work, to remove samples of installed materials for testing, and to provide for alteration of existing facilities or the installation of new Work in existing construction.
- 1.03 Contractor shall submit to the Engineer enough photographs of the existing roadway/driveway so that the Engineer can establish the existing condition of the roadway/driveway prior to beginning any work.
- 1.04 Except when the cutting or removal of existing construction is specified or indicated, Contractor shall not undertake any cutting or demolition, which may affect the structural stability of the Work or existing facilities.  
  
Contractor shall provide all shoring, bracing, supports, and protective devices necessary to safeguard all Work and existing facilities during cutting and patching operations.
- 1.05 Materials shall be cut and removed to the extent indicated on the drawings or as required to complete the Work. Materials shall be removed in a careful manner with no damage to adjacent facilities or materials. Materials that are not salvageable shall be removed from the site by Contractor.
- 1.06 All Work and existing facilities affected by cutting operations shall be restored with new materials, or with salvaged materials acceptable to Engineer, to obtain a finished installation with the strength, appearance, and functional capacity required. If necessary, entire surfaces shall be patched and refinished.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01051  
CONSTRUCTION LAYOUT

PART 1 - GENERAL

- 1.01 This section covers construction layout work required by the Contractor.
- 1.02 Lines and Grades
- A. All Work shall be done to the lines, grades and elevations indicated on the drawings. Basic horizontal and vertical control points will be designated by Engineer on the Project Plans. These points shall be used as datum for the Work. All survey, layout, and measurement Work shall be performed by Contractor as a part of the Work.
  - B. Contractor shall provide an experienced instrument man, competent assistants, and such instruments, tools, stakes, and other materials required to complete the survey, layout and measurement Work. In addition, Contractor shall furnish, without charge, competent men from his force and such tools, stakes and other materials as Engineer may require in establishing or designating control points, in establishing construction easement boundaries or in checking survey, layout, and measurement Work performed by Contractor. Contractor shall keep Engineer informed, a reasonable time in advance, of the times and places at which he wishes to do Work, so that horizontal and vertical control points may be established, and any checking deemed necessary by Engineer may be done within minimum inconvenience to Engineer and minimum delay to Contractor.
  - C. Before ordering material and before performing work, the Contractor shall verify all measurements as may be required for the proper fitting of various parts of his work or to other work. Contractor shall be responsible for the correctness of his figures and shall satisfactorily correct, without extra cost to the Owner, any of his work, which does not fit, furnishing new work, if necessary, for the purpose. Adapting all work to all field variations is Contractor's responsibility. No extras will be allowed because of minor differences between actual dimensions and dimensions shown on the drawings.
  - D. Contractor shall remove and reconstruct Work, which is improperly located.

PART 2- PRODUCTS (NOT USED)

PART 3- EXECUTION (NOT USED)

END OF SECTION

SECTION 01060  
REGULATORY REQUIREMENTS

PART 1 - GENERAL

- 1.01 The Contractor shall, without additional expense to the Owner, be responsible for obtaining any necessary licenses and permits, and for complying with any applicable Federal, State and municipal laws, codes and regulations, in connection with the prosecution of the Work. Contractor shall take proper safety and health precautions to protect the Work, the workers, the public and the property of others. Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the Work.
- 1.02 The Contractor is hereby advised that any delay in the project as a result of review of any regulatory authority will not be a cause for additional compensation except for possible extension of project time.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01070  
ABBREVIATIONS, SYMBOLS, TRADE NAMES AND MATERIALS

PART 1 - GENERAL

1.01 DESCRIPTION

This Section of the Specifications lists many of the trade associations and general standards that are referenced repeatedly in the Specifications, along with the abbreviations commonly used for these references. This also specifies certain general requirements for the Work, in relation with standards, and with trade associations and their published recommendations. Refer to individual Specification Sections for names and abbreviations of other trade associations and standards that are referenced less repeatedly.

1.02 ABBREVIATIONS AND NAMES

The following abbreviations as referenced in the Contract Document are defined to mean the associated names.

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
ASTM	American Society for Testing and Materials
ASME	American Society of Mechanical Engineers
AWPA	American Wood Preservers Association
AWS	American Welding Society
AWWA	American Water Works Association
CIPRA	Cast Iron Pipe Research Association
CRSI	Concrete Reinforcing Steel Institute
Fed. Spec.	Federal Specification
IEEE	Institute of Electrical and Electronic Engineers
IES	Illuminating Engineering Society
LDOTD	Louisiana Department of Transportation and Development
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Administration
SAE	Society of Automotive Engineers
SHBI	Steel Heating Boiler Institute
UL	Underwriters Laboratories, Inc.

### 1.03 QUALITY ASSURANCE

- A. General Applicability Standards. Except where more explicit or more stringent requirements are specified or are required by governing regulations, applicable standards of the construction industry have the same force and effect for the Work; and are made a part of the Contract Documents by reference, as if copied directly into the Contract Documents, or as if published copies were bound herewith.
- B. Referenced Standards. Referenced standards shall have precedence over non-referenced standards, which are intended by the manufacturer for application to work similar to that required on the Project.
- C. Non-referenced Standards. Industry standards not specifically referenced for applicability to the Work, including standards listed in this Section but not referenced elsewhere, have no particular applicability to the work, except as a general measurement of whether the performed work complies with standards of construction industry.
- D. Comply with the standard that was in effect at the date of bidding except where specifically indicated to comply with a publication of another date.
- E. Copies of Standards. In general, copies of applicable standards have not been bound with the Contract Documents. Where copies of standards are needed for proper performance of the Work, the Contractor is required to obtain such copies directly from the publication source.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION



SECTION 01090  
REFERENCE STANDARDS

PART 1 - GENERAL

1.01 SCOPE

This Section of the Specifications covers reference standards required for the contract.

1.02 REFERENCE STANDARDS

Reference to standards of any technical society, organization, or association, or to codes of local or state authorities, shall mean the latest standard, code, specification, or tentative standard adopted and published at the date of receipt of bids, unless specifically stated otherwise.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01115  
CONTROL OF WORK

PART 1 - GENERAL

1.01 WORK PROGRESS

The Contractor shall furnish personnel and equipment which will be efficient, appropriate, and large enough to secure a satisfactory quality of work and a rate of progress which will ensure the completion of the work within the time stipulated in the Contract. If at any time such personnel or equipment appears to the Design Professional to be inefficient, inappropriate, or insufficient for securing the quality of work required for producing the rate of progress aforesaid, he may order the Contractor to increase the efficiency, change the character, or increase the personnel and equipment, and the Contractor shall conform to such order. Failure of the Design Professional to give such order shall in no way relieve the Contractor of his obligations to secure the quality of the work and rate of progress required.

1.02 PRIVATE LAND

The Contractor shall be aware that some of his work will be performed adjacent to private property. No work or construction matter or equipment shall be on private land at any time unless approved by the Parish.

1.03 WORK LOCATIONS

Work shall be located substantially as indicated on the Drawings, but the Design Professional reserves the right to make such modifications in locations as may be found desirable to avoid interference with existing structures or for other reasons.

1.04 OPEN EXCAVATIONS

- A. All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights, and other means to prevent accidents to persons, and damage to property.
- B. Contractor shall be responsible for supplying materials, services, and labor necessary to provide sheeting, shoring and bracing or supports as required to provide a safe working condition for Contractor's personnel and to provide for protection of utilities, buildings, and structures. It shall be the sole responsibility of the Contractor to comply with these requirements.
- C. Where excavation is required adjacent to existing power poles or other structures, the contractor has the responsibility to maintain the integrity of the structure by bracing or other means subject to the approval of the Project Design Professional.

1.05 DISTRIBUTION SYSTEMS AND SERVICES

- A. The Contractor shall interrupt water, telephone, Cable TV, sewer, gas, or other related utility services and disrupt the normal functioning of the system as little as possible. Contractor shall notify the Design Professional well in advance of any requirement for

dewatering, isolating, or relocating a section of a utility, so that necessary arrangements may be made with the appropriate agency.

- B. If it appears that utility service will be interrupted for an extended period, the Design Professional may order the Contractor to provide temporary service lines. Inconvenience of the users shall be the minimum, consistent with existing conditions. The safety and integrity of the system is of prime importance in scheduling work.
- C. Private utilities located on public right-of-way which are required to be permanently relocated at the job site or removed entirely from the jobsite to accommodate the project will be indicated on the plans.
- D. Private utilities located on public right-of-way which the contractor requests to be temporarily relocated, disconnected or de-energized for the convenience of construction or for safety reasons shall be done so at the contractor's expense.
- E. Disposition of Utilities: Follow rules and regulations of the authority having jurisdiction in executing all Work under this article. Adequately protect active utilities shown on the Drawings from damage and remove or relocate only as indicated or specified. Where active utilities are encountered, but are not shown on the Drawings, advise the Design Professional. Adequately protect, support, or relocate the Work as directed. Remove, plugged or capped inactive and abandoned utilities encountered in excavating and grading operations.

#### 1.06 PROTECTION AND RELOCATION OF EXISTING STRUCTURES AND UTILITIES

- A. The Contractor shall assume full responsibility for the protection of all buildings, structures, and utilities, public or private, including poles, signs, services to building utilities, in the street, gas pipes, water pipes, hydrants, sewers, drains, and electric and telephone cables, whether or not they are shown on the Drawings. The Contractor shall carefully support and protect all such structures and utilities from injury of any kind. Any damage resulting from the Contractor's operation shall be repaired by him at his expense.
- B. The Contractor shall bear full responsibility for obtaining locations of all underground structures and utilities (including existing water services, drain lines, and sewers). Services to buildings shall be maintained, and all costs or charges resulting from damage thereto shall be paid by the Contractor.
- C. Protection and temporary removal and replacement of existing utilities and structures as described in this Section shall be a part of the work under the Contract and all costs in connection therewith shall be included in the unit and or Lump Sum prices established in the Proposal.
- D. If, in the opinion of the Design Professional, permanent relocation of a utility owned by the Parish is required, he may direct the Contractor in writing, to perform the work. Work so ordered will be paid for at the Contract unit prices, if applicable, or as extra work per the General Conditions. If relocation of a privately owned utility is required, the Contractor will notify the Utility to perform the work as expeditiously as possible. The Contractor shall fully cooperate with the Parish and Utility and shall have no claim for delay due to such relocation. The Contractor shall notify public utility companies in

writing at least 48 hours (excluding Saturdays, Sundays, and legal holidays) before excavating near their utilities. Costs of relocating utilities shall be included in the various unit prices of the work to be done or as otherwise provided in these contract documents.

#### 1.07 CARE AND PROTECTION OF PROPERTY

- A. The Contractor shall be responsible for the preservation of all public and private property and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, such property shall be restored by the Contractor, at his expense, to a condition similar or equal to that existing before the damage was done, or he shall make good the damage in another manner acceptable to the Design Professional.
- B. The protection, removal, and replacement of existing physical features along the line of work shall be a part of the work under the Contract, and all costs in connection therewith shall be included in the unit and/or lump sum prices established under the items in the Proposal.

#### 1.08 DRAINAGE

Contractor shall impede drainage only in the event such impediment is necessary for the implementation of the work. When impeding drainage is necessary, Contractor shall take the necessary steps to protect life and property. Flooding of adjacent streets and land will not be permitted.

#### 1.09 WATER FOR CONSTRUCTION PURPOSES

- A. In locations where public water supply is available, the Contractor may purchase water for all construction purposes.
- B. The express approval of the St. Tammany Parish Department of Utilities shall be obtained in writing. Hydrants shall only be operated under the supervision of St. Tammany Parish Department of Utilities personnel.

#### 1.10 MAINTENANCE OF FLOW

The Contractor shall at his own cost, provide for the flow of sewers, drains, and water courses interrupted during the progress of the Work, and shall immediately cart away and remove all offensive matter. The entire procedure of maintaining existing flow shall be fully discussed with the Design Professional well in advance of the interruption of any flow. Pavement removal and replacement which, in the opinion of the Contractor, is necessitated by placement of temporary flow control facilities shall be considered as an item for convenience to the Contractor. Such costs for pavement removal and replacement shall, therefore, be borne by the Contractor at his own cost as required for other flow control measures. The intent of this Specification is that pavement removal be limited to the least amount possible and the Contractor shall investigate alternative methods for flow control which require the least amount of pavement removal.

#### 1.11 CLEANUP

During the course of the Work, the Contractor shall keep the site of his operations in as clean and neat a condition as is possible. Contractor shall dispose of all residue resulting from the construction work and, at the conclusion of the work; he shall remove and haul away any surplus excavation, broken pavement, lumber, equipment, temporary structures, and any other refuse remaining from the construction operations, and shall leave the entire site of the Work in a neat and orderly condition.

#### 1.12 COOPERATION WITHIN THIS CONTRACT

- A. All firms or persons authorized to perform any work under this Contract shall cooperate with the General Contractor and his subcontractors or trades and shall assist in incorporating the work of other trades where necessary or required.
- B. Cutting and patching, drilling, and fitting shall be carried out where required by the trade or subcontractor having jurisdiction, unless otherwise indicated herein or directed by the Design Professional.

#### 1.13 PROTECTION OF CONSTRUCTION AND EQUIPMENT

- A. All newly constructed work shall be carefully protected from damage in any way.
- B. It is the responsibility of the Contractor to provide protection of all structures. Should any of the work become heaved, cracked, or otherwise damaged, all such damaged portions of the work shall be completely repaired and made good by the Contractor at his own expense and to the satisfaction of the Design Professional. If, in the final inspection of the Work, any defects, faults, or omissions are found, the Contractor shall repair these defects without extra compensation for the materials and labor required. Further, the Contractor shall be fully responsible for the satisfactory maintenance and repair of the construction and other work undertaken herein, for at least the guarantee period described in the Contract.

#### 1.14 PROTECTION OF EXISTING CANAL, STREAM, AND DITCH BANKS

- A. The Contractor shall assume full responsibility for the stabilization of all existing canal, stream, and ditch banks during construction operations including directional drilling, open cutting, dredging, excavation, grading, filling and driving of piles and sheet piles among other miscellaneous activities. Any damage resulting from the Contractor's operation shall be repaired by him at his expense.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01200  
PROJECT MEETINGS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Engineer shall schedule and administer preconstruction meeting, periodic progress meetings, and specially called meetings throughout progress of the work and preside over the following items.
  - 1. Distribute written notice of each meeting four (4) days in advance of meeting date.
  - 2. Preside at meetings.
  - 3. Record the minutes; include significant proceedings and decisions.
  - 4. Reproduce and distribute copies of minutes within ten (10) days after each meeting.
    - a. To participants in the meeting.
    - b. To parties affected by decisions made at the meeting.
- B. Representatives of contractors, subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents and preside over the following items.
  - 1. Prepare agenda for meetings.
  - 2. Make physical arrangements for meetings.

1.02 PRECONSTRUCTION MEETING

- A. Schedule prior to beginning of construction.
- B. Location: A central site, convenient for all parties, designated by Owner.
- C. Attendance:
  - 1. Owner's Representative.
  - 2. Engineer and his professional consultants.
  - 3. Resident Project Representative.
  - 4. Contractor's Superintendent.
  - 5. Major Subcontractors.
  - 6. Major Suppliers.
  - 7. Others as appropriate.
- D. Suggested Agenda:

1. Distribution and discussion of:
  - a. List of major subcontractors and supplies.
  - b. Projected Construction Schedules.
  - c. List of all emergency contacts during construction.
2. Critical work sequencing.
3. Major equipment deliveries and priorities.
4. Project Coordination.
  - a. Designation of responsible personnel.
5. Procedures and processing of:
  - a. Field decisions.
  - b. Proposal requests.
  - c. Submittals.
  - d. Change Orders.
  - e. Applications for Payment.
6. Adequacy of distribution of Contract Documents.
7. Procedures for maintaining Record Documents.
8. Use of premises:
  - a. Office, work and storage areas.
  - b. Owner's requirements.
9. Construction facilities, controls and construction aids.
10. Temporary utilities.
11. Safety and first-aid procedures.
12. Security procedures.
13. Housekeeping procedures.

### 1.03 PROGRESS MEETINGS

- A. Schedule regular periodic meetings, as required, at least monthly.
- B. Hold called meetings as required by progress of work.
- C. Location of the meetings: Place chosen by Owner.

- D. Attendance:
1. Owner's representative.
  2. Engineer, and his professional consultants as needed.
  3. Contractor and his subcontractors and/or suppliers as appropriate to the agenda.
  4. Others as appropriate to the agenda.
- E. Suggested Agenda:
1. Review and approval of minutes of previous meeting.
  2. Review of work progress since previous meeting.
  3. Field observations, problems, and conflicts.
  4. Problems that impede Construction Schedule.
  5. Review of off-site fabrication and delivery schedules.
  6. Corrective measures and procedures to regain projected schedules.
  7. Revisions to Construction Schedule.
  8. Progress, schedule, during succeeding work period.
  9. Coordination of schedules.
  10. Review submittal schedules; expedite as required.
  11. Maintenance of quality standards.
  12. Pending changes and substitutions.
  13. Review proposed changes for:
    - a. Effect on Construction Schedule and on completion date.
    - b. Effect on other contracts of the Project.
  14. Other business.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION



SECTION 01340  
SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

- A. Type of Submittals. This Section of the Specifications describes the procedures for submittal requirements applicable to work-related submittals, such as shop drawings, product data, samples and miscellaneous work-related submittals. It does not include the requirements for administrative submittals, which are described in another section.
- B. Individual Section Requirements. The individual submittal requirements are specified in other Sections of the Specifications for each unit of work.
- C. Definitions. The work-related submittals of this Section, in addition to the definitions of the General Conditions and elsewhere in the Contract Documents, are further categorized for convenience as follows:
  - 1. Shop drawings include specially prepared technical data of all forms including drawings, diagrams, performance curves, data sheets, schedules, templates, patterns, reports, calculations, instructions, measurements and similar information not in standard printed form for application to more than one project.
  - 2. Product data includes standard printed information on materials, products and systems, not specially prepared for this project, other than the designation of selections from among available choices printed therein.
  - 3. Samples include both fabricated and unfabricated physical examples of materials, products and units of work, both as complete units and as smaller portions of units of work, either for limited visual inspection or (where indicated) for more detailed testing and analysis.
  - 4. Miscellaneous submittals related directly to the work (non-administrative) include warranties, maintenance agreements, workmanship bonds, project photographs, survey data and reports, physical work records, statements of applicability, quality testing and certifying reports, copies of industry standards, record drawings, field measurement data, operating and maintenance materials, overrun stock, security/protection/safety keys and similar information, devices and materials applicable to the work and not processed as shop drawings, product data or samples. In addition to the above requirements, the Contractor shall submit in writing to the Engineer his proposed excavation plan prior to beginning any excavation operations.

1.02 GENERAL SUBMITTAL REQUIREMENTS

- A. Scheduling. Where appropriate in various required administrative submittals (listings of products, manufacturers, suppliers and subcontractors, and in job progress schedule), show principal work-related submittal requirements and time schedules for coordination and integration of submittal activity with related work in each instance.

Within ten (10) days after the effective date of the Agreement, a schedule shall be submitted of the items of materials and equipment for which shop drawings are required by the specifications. For each required shop drawing, the date shall be given for intended submission of the drawing to the Engineer for review and the date required for its return to avoid delay in any activity beyond the scheduled start date. Shop drawing submittals shall be included in the critical path schedule. All submittals shall be supplied on USB Flash Drive or DVD.

- B. Coordination of Submittal Times. Prepare and transmit each submittal to the Engineer sufficiently in advance of performing related work or other applicable activities, so the installation will not be delayed or improperly sequenced by processing times, including non-approval and resubmittal (if required). Coordinate with other submittals, testing, purchasing, delivery and similar sequenced activities. No extension of time will be authorized because of Contractor's failure to transmit submittals to the Engineer sufficiently in advance of the work.
- C. Sequencing Requirements. As applicable in each instance, do not proceed with a unit of work until submittal procedures have been sequenced with related units of work, in a manner which will ensure that the action will not need to be later modified or rescinded by reason of a subsequent submittal which should have been processed earlier or concurrently for coordination.
- D. Preparation of Submittals. Provide permanent marking on each submittal to identify project, date, Contractor, subcontractor, submittal name and similar information to distinguish it from other submittals. Show Contractor's executed review and approval marking and provide space for the Engineer's "Action" marking. Package each submittal appropriately for transmittal and handling. Submittals, which are received from sources other than through the Contractor's office, will be returned "without action".
- E. Transmittal Form. The transmittal form used to transmit submittals shall be as enclosed copy (see page 01340-6). Submittals received without this submittal form will be returned to the Contractor without action.
- F. Transmittal Identification.
  - 1. Number transmittals in sequence for each Division of the Specifications. The number after the dash indicates the Section of the Specifications, and the number before the dash is the sequence number of the transmittal (1-15100 would be the first transmittal applicable to Section 15100 of the Specifications. The number 2-15100 would be the second transmittal for Section 15100, etc.).
  - 2. Identify resubmittals with a letter of the alphabet following the original number, using A for the first resubmittal, B for the second resubmittal, etc. A resubmittal affecting transmittal 1-15100 would then be numbered 1A-15100. The number 1-15100 would then be entered in the space "Previous Transmittal Number", which is left blank except on resubmittals.
- G. Resubmittal. The Contractor shall be allowed to make one (1) resubmittal to address the Engineer's comments if the original submittal is returned for re-submittal. Any review of subsequent re-submittals will be considered Contractor-required engineering services and

treated in accordance with the requirements of the specifications. No consideration of time extension shall be given for additional time required for review of repeated submittals.

### 1.03 SPECIFIC CATEGORY REQUIREMENTS

- A. General. Except as otherwise indicated in the individual work sections, comply with general requirements specified herein for each indicated category of submittal. Submittals shall contain:
1. The date of submittal and the dates of any previous submittal.
  2. The Project title and number.
  3. Contract identification:
  4. The names of the:
    - a. Contractor
    - b. Supplier
    - c. Manufacturer
  5. Identification of the product, with the Specification Section number and equipment tag numbers.
  6. Field dimensions, clearly identified as such.
  7. Relation to adjacent or critical features of the work or materials.
  8. Applicable standards, such as ASTM or Federal Specification numbers.
  9. Notification to the Engineer in writing, at time of submission, of any deviations in the submittals from requirements of the Contract Documents.
  10. Identification of revisions on resubmittals.
  11. An 8" x 3" blank space for Contractor and Engineer stamps.
  12. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the Work and of Contract Documents. Engineer's review will not proceed unless Contractor's stamp is on drawings.
  13. Submittal sheets or drawings showing more than the particular item under consideration shall have all but the pertinent description of the item for which review is requested crossed out.
- B. Shop Drawings. Provide newly prepared information, on reproducible sheets, with graphic information at accurate scale (except as otherwise indicated), with name of preparer (firm name) indicated. The Contract Drawings shall not be traced or reproduced by any method for use as or in lieu of detail shop drawings. Show dimensions and note which are based on field measurement. Identify materials and products in the work shown. Indicate compliance with standards and special coordination requirements. Do not allow shop drawing copies without appropriate final "Action" markings by the Engineer to be used in connection with the Work.
1. Submittal. The submittal shall be stamped by the Contractor certifying review. Copies will be retained by the engineer and owner, and a copy will be returned marked with "Action" and any correction or modification (if any) as required.
  2. Record Document. The Record Document is to be marked-up and maintained by the Contractor as the "Record Document". A separate copy will be for Contractor's or vendors' use.

- C. **Product Data.** Collect required data into one submittal for each unit of work or system and mark each copy to show which choices and options are applicable to project. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements that have been checked, and special coordination requirements. Maintain one set of product data (for each submittal) at project site, available for reference by the Engineer or others.
1. **Submittals.** Do not submit product data, or allow its use on the project, until compliance with requirements of Contract Documents has been confirmed by the Contractor. Submittal is for information and record, unless otherwise indicated. Initial submittal is final submittal unless returned promptly by the Engineer, marked with an "Action" which indicates an observed noncompliance. One set shall be kept at job site.
  2. **Installer's Copy.** Do not proceed with installation of materials, products or systems until copy of applicable product data is in possession of installer.
- D. **Samples.** Provide units identical with final condition of proposed materials or products for the work. Include "range" samples (not less than 3 units) where unavoidable variations must be expected and describe or identify variations between units of each set. Provide full set of optional samples where the Engineer's selection is required. Prepare samples to match the Engineer's sample where so indicated. Include information with each sample to show generic description, source or product name and manufacturer, limitations, and compliance with standards. Samples are submitted for review and confirmation of color, pattern, texture and "kind" by the Engineer. Engineer will not "test" samples (except as otherwise indicated) for other requirements, which are the exclusive responsibility of the Contractor.
1. **Submittal.** At Contractor's option, provide preliminary submittal of a single set of samples for the Engineer's review and "Action". Otherwise, initial submittal is final submittal unless returned with "Action" which requires resubmittal.
  2. **Quality Control Set.** Maintain returned final set of samples at project site, in suitable condition and available for quality control comparisons by Engineer and by others.

#### 1.04 DISTRIBUTION

- A. **General Distribution.** Provide additional distribution of submittals (not included in foregoing copy submittal requirements) to subcontractors, suppliers, fabricators, installers, governing authorities and others as necessary for proper performance of the work. Include such additional copies in transmittal to the Engineer where required to receive "Action" marking before final distribution. Show such distributions on transmittal forms.
- B. **Review Time.** Allow a minimum of fifteen (15) calendar days following receipt of submittals for the Engineer's initial processing of each submittal requiring review and response, except allow longer periods where processing must be delayed for coordination with subsequent submittals. The Engineer will advise the Contractor promptly when it is determined that a submittal being processed must be delayed for coordination. Allow two

weeks for reprocessing each submittal. Advise the Engineer on each submittal as to whether processing time is critical to progress of the work, and therefore the work would be expedited if processing time could be foreshortened.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

Transmittal of Shop Drawings, Monolith Drawings, Equipment Data, Material Samples or Project No.  New Transmittal  Re-Submittal  
 Manufacturer's Certificates of Compliance for Approval.

Request for Engineer's Review of the following items (This section to be initiated by the Contractor):

TO: FROM:

Item No.	Description of Item Submitted (i.e., Type, Size, Model No., etc.)	Mfg. or Supplier	Mfg. or Contr., Catalog, Curve, Drawing or Brochure No.	Number of Copies	Project Specification Section Number	Project Drawing, Sheet, or Plat Number	Engineer's Use Only Code

Transmittal No. \_\_\_\_\_  
 (If Any)  
 Previous Transmittal No. \_\_\_\_\_

Signature of Contractor: \_\_\_\_\_  
 Date: \_\_\_\_\_

Distribution Requested: Letter Dwgs. Contractor \_\_\_\_\_ On-Site Rep. \_\_\_\_\_  
 Letter Dwgs. Engr. Office \_\_\_\_\_ Others \_\_\_\_\_

**(THIS SECTION TO BE USED ONLY BY THE ENGINEER TO DESIGNATE ACTION)**

Action Codes: The following codes are given to the items submitted: A - No exceptions taken; B - Revise as noted; C - Amend and Re-submit; D - Rejected, see remarks. Corrections and comments made on the shop drawings during this review do not relieve the Contractor from compliance with requirements of the drawings and specifications.

Enclosure Returned (List by Item No.) \_\_\_\_\_  
 By: \_\_\_\_\_  
 Date: \_\_\_\_\_

SECTION 01380  
SITE CONDITION AND AUDIO/VIDEO SURVEY

PART 1 - GENERAL

- 1.01 The Contractor, prior to construction, shall have photographs and videos taken of the area of construction and of nearby structures in the adjacent neighborhood which, in the opinion of the Engineer, should be recorded for future reference. A representative of the Engineer must be present at the time the photographs and video are made.
- 1.02 Prior to beginning the work, and upon completion of the work, a series of digital photographs shall be made to show the existing and improved conditions. Photographs shall be taken along the area of work as described herein. Photographs shall be taken along property line side and roadway side and all servitudes where the improvements are to be constructed including all existing driveways and nearby structures. Two views will be taken at each fifty (50) foot interval as necessary to document areas of potential damage to public and private property. One view shall show up-station along the roadway and servitude, and the other view shall show the property line side view at the station perpendicular to the roadway gutter line.
- 1.03 In addition, during the progress of the work, twelve (12) exposures shall be taken every month consisting of various features or as directed by the Owner's project engineer.

PART 2 - PRODUCTS

- 2.01 Digital photographs shall be of at least 4 megapixels and shall be clear, sharp and encompass depth of field. Photographs shall be submitted as a color printed composite PDF, digital PDF file and original digital camera files on a CD-ROM or USB Drive, and shall be numbered and indexed to a master list to be furnished with the prints. The master list index furnished shall be neatly bound and shall contain at a minimum, the date and time of the photograph, the station location of the photograph, the direction of view and the image number. Two (2) printed colored PDFs on bond paper and (2) CD-ROMS or USB Drive labeled with the Project Title and date shall be furnished with each set of photographs. In addition, any and all digital photographs taken during construction by the contractor shall be retained and a copy of all digital files shall be delivered on CD-ROM media or USB Drive.

PART 3 - EXECUTION

- 3.01 Prior to mobilization and again upon the completion of the work, the Contractor shall video all areas of the servitude, streets and fronts of residences along the project site and any pipe staging areas within the servitude. Views shall include from behind the curb, sidewalk and grass areas, driveways and fronts of residences. Views shall also clearly show any existing damage prior to the commencement of work.
- 3.02 The contractor shall also supply the Engineers with signatures of any resident not allowing external survey of the existing residential structures on an appropriate form. A representative of the Engineer should also be present at the time any video or photographs are made.
- 3.03 The Contractor shall provide a monthly video of the construction and traffic signage. Monthly video shall show a walk through of the project area, showing all construction and traffic signage. One (1) DVD copy of the monthly progress video as described herein shall be delivered.

- 3.04 At the beginning of each phase of construction requiring changes to roadway signage and/or barricades, the Contractor shall provide one (1) DVD of the signs and barricades to the Owner's project engineer to confirm all apparatus required by the contract documents are in place.
- 3.05 Travel speed of the camera for roadway videotaping shall not be greater than 48 feet per minute. The video portion of all recordings shall reproduce bright, sharp, clear pictures with accurate colors and shall be free from distortion, tearing, rolls or any other form of picture imperfection. The audio portion of all recordings shall reproduce precise and concise explanatory notes by the camera operator with proper volume, clarity and freedom from distortion.
- 3.06 Master videos shall be produced with accompanying audio on DVD. Videos shall be identified on screen with the date made. Each DVD shall be furnished with an index that includes at a minimum, the project name, DVD name and sequence number, location, date made, and DVD counter (run time in minutes) at the beginning of each video sequence on the DVD.
- 3.07 The Owner shall have the authority to reject all or any portion of the video survey not conforming to the requirements of this provision. Those rejected portions shall be video recorded again at no additional cost to the Owners.

END OF SECTION



## SECTION 01400 QUALITY CONTROL

### PART 1 - GENERAL

The Contractor shall select and arrange for the service of a testing laboratory to determine that materials and workmanship comply with the requirements of these specifications.

### PART 2 - PRODUCTS

Testing shall meet the requirements of all pertinent codes and regulations and selected standards as specified elsewhere in these Specifications.

### PART 3 - EXECUTION

#### 3.01 PROCESSING AND DISTRIBUTING

The Testing Laboratory shall process required copies of test reports and related instructions and distribute promptly to ensure all necessary retesting and replacement of materials with the least possible delay in progress of the work. The following copies of all reports shall be submitted electronically to the Owner, Engineer, Contractor, and Material Supplier.

#### 3.02 PAYMENT FOR TESTING SERVICES

- A. The Contractor will pay for all initial and routine testing services except as otherwise specified.
- B. When initial tests indicate non-compliance with the Contract Documents, perform subsequent retesting occasioned by the non-compliance by the same testing laboratory at the sole expense of the Contractor.
- C. Inspection or testing performed exclusively for the Contractor's convenience shall be borne by the Contractor.
- D. The Contractor shall pay for the concrete batch design. The testing laboratory will test the batch design.
- E. Should scheduled testing be canceled due to negligence of the Contractor, the Contractor shall be responsible for costs associated with re-scheduling the tests.

#### 3.03 COOPERATION WITH TESTING LABORATORY

Representative of the testing laboratory shall have access to work at all times. Contractor shall provide facilities for such access in order that the laboratory may perform its functions properly.

#### 3.04 TESTING SCHEDULE

- A. The Contractor shall consult the testing laboratory in advance to determine the time required to perform the tests. Include the required time within the construction schedule.

- B. When changes to the construction schedule are necessary, coordinate such changes with the testing laboratory as required.

### 3.05 TAKING SAMPLES

All samples for testing, unless otherwise provided elsewhere in these specifications, shall be taken by the testing laboratory. All sampling equipment and personnel shall be provided by the testing laboratory unless otherwise specified. All deliveries of samples to the testing laboratory shall be performed by the testing laboratory unless otherwise specified.

The Contractor shall promptly remove rejected articles or materials from the site of the Work after notification of rejection.

END OF SECTION

SECTION 01410  
TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall select, arrange, and pay for the services of an independent testing laboratory to perform inspection and tests of materials and construction as hereinafter specified and/or as specified in other sections of the plans and specifications. The Contractor shall cooperate with the laboratory to facilitate the execution of its required services. Employment of the laboratory shall in no way relieve Contractor's obligations to perform the Work of the Contractor.
- B. Related Requirements in Other Parts of these Specifications:
  - 1. Inspections and testing required by laws, ordinances, rules, regulations, orders or approvals of public authorities: Conditions of the Contract.
- C. Related Requirements Specified in Other Sections:
  - 1. Certification of products: The respective sections of specifications.
  - 2. Laboratory tests required, and standards for testing: Each specification section listed and as specified herein.

1.02 LABORATORY DUTIES

- A. Cooperate with Engineer and Contractor; provide qualified personnel after due notice.
- B. Perform specified inspections, sampling and testing of materials and methods of construction.
  - 1. Comply with specified standards.
  - 2. Ascertain compliance of materials with requirements of Contract Documents.
- C. Immediately notify Engineer and Contractor of observed irregularities of deficiencies of work or products.
- D. Promptly submit written reports distributed as per paragraph 3.01. Each report shall include:
  - 1. Date.
  - 2. Project title and number.
  - 3. Testing laboratory name, address and telephone number.
  - 4. Name and signature of laboratory inspector.
  - 5. Date and time of sampling or inspection.
  - 6. Record of temperature and weather conditions.
  - 7. Date of test.
  - 8. Identification of product and specification section.
  - 9. Location of sample or test in the project.

10. Type of inspection or test.
11. Results of tests and compliance with Contract Documents.
12. Interpretation of test results, when requested by Engineer.

E. Perform additional tests as required by Engineer or the Owner.

#### 1.03 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

A. Laboratory is not authorized to:

1. Release, revoke, alter or enlarge on requirements of Contract Documents.
2. Approve or accept any portion of the Work.
3. Perform any duties of the Contractor.

B. The laboratory is authorized to reject asphalt truck loads as specified in paragraph 1.07 of this section.

#### 1.04 CONTRACTOR'S RESPONSIBILITIES

A. Cooperate with laboratory personnel, provide access to Work, and to Manufacturer's operations.

B. Make available, without cost, samples of all materials to be tested in accordance with applicable standard specifications. Further he shall secure and deliver to the laboratory adequate quantities of representative samples of materials proposed to be used and which require testing.

C. Provide to the laboratory the preliminary design, mixes proposed to be used for asphalt materials' mixes, which require control by the test laboratory.

D. Furnish copies of Products' test reports as required.

E. Furnish such nominal labor and sheltered working space as is necessary to obtain samples at the project.

1. Provide access to Work to be tested.
2. Obtain and handle samples at the project site or at the source of the product to be tested.
3. Facilitate inspections and tests.
4. Provide storage and curing of tests samples.

F. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.

1. When tests or inspections cannot be performed after such notice, reimburse Owner for laboratory personnel and travel expenses incurred due to Contractor's negligence.
2. The Contractor shall notify the testing laboratory of any asphalt work at least 24 hours in advance.

3. When changes of the construction schedule are necessary, coordinate such changes with the testing laboratory as required.
- G. Advise the laboratory of the identity of material sources and instruct the suppliers to allow tests or inspections by the laboratory.
- H. Employ and pay for the services of the same or equally qualified independent testing laboratory approved by the Engineer to perform additional inspections, sampling and testing required:
  1. For the Contractor, and
  2. When initial tests indicate Work does not comply with Contract Documents (whether or not subsequent test results indicate compliance with project requirements).

#### 1.05 DESCRIPTION OF LABORATORY SERVICES

- A. Test Methods: Tests and inspections shall be conducted in accordance with the requirements of these specifications or, if not herein specified, in accordance with the latest standards of ASTM or other recognized authorities.
- B. Test Reports: The laboratory shall promptly submit written reports to each test and inspection made to the Engineer, Contractor, suppliers of tested products, and to such other parties the Engineer may specify.
- C. Rejection of Materials: The laboratory shall notify the Contractor, or his authorized representative, of any materials which are not in full conformance with the specifications, and the Engineer shall be informed of such notification.

#### 1.06 SOIL COMPACTION

- A. Soil, Sand and/or Fill - The laboratory shall test all types of soil to be compacted to determine their compliance with these specifications. Then after acceptable sand or soils are provided, the laboratory shall prepare a Modified Proctor curve for each type and make field density tests to determine if the compaction meets the requirements of the specifications.

#### 1.07 CONCRETE AND ASPHALT

- A. Mix Design - In advance of concrete or asphalt operations, materials proposed for use will be sampled and tested to determine their compliance with these specifications. Mix proportions shall be reviewed by the laboratory for each strength and type of concrete or asphalt required and reports submitted to the Engineer for approval, showing the recommended mix designs.
- B. Job Inspection - A representative of the laboratory on the project will check the mixing of the concrete or asphalt and conduct all field tests, such as temperature, etc. as applicable. This representative shall also check and report any substandard operations observed while at the job site.
- C. For concrete, the laboratory shall report the quantity of water added to the truck at the site. If the quantity of water added to the truck at the site exceeds the maximum allowable in accordance with the water/cement ratio specified in the approved design mix

the laboratory representative shall reject the load of concrete. The mixing truck driver shall carry with him and present to the laboratory representative documentation clearly specifying the maximum allowable quantity of water added at the site or tickets commonly referred to as "state tickets." The documentation shall be distributed to the Engineer with the laboratory report.

- D. For concrete, in addition to slump determination frequencies as specified in ASTM C172, the laboratory shall make and report a slump determination at the beginning of each truckload. The slump determination for the very first truckload of each pour shall be an actual slump determination. Remaining slump determinations in accordance with this paragraph shall be visual unless the slump is suspected to be in violation of the specified slump, in which case, an actual slump determination shall be performed.
- E. For Concrete, Cylinders - For each one hundred cubic yards and/or each day's pour or fraction thereof, four (4) test cylinders or test beams shall be cast for each different strength of concrete placed. One (1) cylinder shall be tested and reported at seven (7) days and two (2) at twenty-eight (28) days, unless otherwise directed. The last cylinder shall be retained in reserve for later testing if required. Test cylinders shall be cast for structural concrete and test beams shall be cast for paving.
- F. For asphalt the laboratory shall verify the temperature of the truck and reject the load if it is not in accordance with that required and specified in ACI 301 (latest edition). Additionally, a technician shall be located at the plant to test the mix in accordance with all standard LDOTD requirements.

#### 1.08 ADDITIONAL TESTS

The Engineer reserves the right to require additional tests to those specified or upon materials not herein specified for testing. If such tests are necessary because of apparently defective materials or workmanship, the cost of these additional tests shall be borne by the Contractor whether subsequent tests are in conformance with the Contract Documents or not.

### PART 2 - PRODUCTS

Testing shall meet the requirements of all pertinent codes and regulations and selected standards as specified elsewhere in these Specifications.

### PART 3 - EXECUTION

#### 3.01 PROCESSING AND DISTRIBUTING

The Testing Laboratory shall process required copies of tests reports and related instructions and distribute promptly to ensure all necessary retesting and replacement of materials with the least possible delay in progress of the work. The following copies of all reports shall be distributed electronically to the Owner, Engineer, Contractor, and the Material Supplier.

#### 3.02 PAYMENT FOR TESTING SERVICES

- A. The Contractor will pay for all initial and routine testing services except as otherwise specified.

- B. When initial tests indicate non-compliance with the Contract Documents, perform subsequent retesting occasioned by the non-compliance by the same testing laboratory at the sole expense of the Contractor.
- C. Inspection or testing performed exclusively for the Contractor's convenience shall be borne by the Contractor.
- D. Should scheduled testing be canceled or delayed due to negligence of the Contractor, the Contractor shall be responsible for costs associated with re-scheduling the tests.

### 3.03 COOPERATION WITH TESTING LABORATORY

Representative of the testing laboratory shall have access to work at all times. Contractor shall provide facilities for such access in order that the laboratory may perform its functions properly.

### 3.04 TESTING SCHEDULE

- A. The Contractor shall consult the testing laboratory in advance to determine the time required to perform the tests. Include the required time within the construction schedule.
- B. When changes of the construction schedule are necessary, coordinate such changes with the testing laboratory as required.

### 3.05 TAKING SAMPLES

All samples for testing, unless otherwise provided elsewhere in these specifications, shall be taken by the testing laboratory. All sampling equipment and personnel shall be provided by the testing laboratory unless otherwise specified. All deliveries of samples to the testing laboratory shall be performed by the testing laboratory unless otherwise specified.

The Contractor shall promptly remove rejected articles or materials from the site of the Work after notification of rejection.

END OF SECTION

SECTION 01500  
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

This section covers all construction facilities, temporary environmental controls, roadways and controls, barriers and site security, traffic regulations, and project identification.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 MOBILIZATION (REFER TO SECTION 01505)

3.02 BARRIERS AND ENCLOSURES

A. Barricades and Lights

All streets, roads, highways, and other public thoroughfares, which are closed to traffic and/or the public, shall be protected by effective barricades on which shall be placed acceptable warning signs. Barricades shall be located at the nearest intersecting public highway or street on each side of the blocked section.

All open trenches and other excavations shall have suitable barricades, signs, flagging and lights to provide adequate protection to the public.

Obstructions such as stockpiled drain lines, drainage structures, and equipment shall be provided with similar warning signs and lights.

All barricades and obstructions shall be illuminated with warning lights from sunset to sunrise. Material storage and conduct of the Work on or alongside public streets and highways shall cause the minimum obstruction and inconvenience to the traveling public as possible.

All barricades, lights and other protective devices shall be installed and maintained in conformity with the "Manual on Uniform Traffic Control Devices", latest revision and in the Contractor's Traffic Plan if required by other specifications contained herein.

3.03 SECURITY

A. Protection of Work

Contractor shall be responsible for protection of the site, and all work, material, equipment, and existing facilities thereon, against vandals and other unauthorized persons.

No claim shall be made against Owner by reason of any act of an employee or trespasser, and Contractor shall make good all damage to Owner's property resulting from his failure to provide security measures as specified.

Security measures shall be at least equal to those usually provided to protect the existing facilities during normal operation, but shall also include such additional security fencing, barricades, lighting, watchmen services, and other measures as required to protect the site.



## B. Protection of Public and Private Property

Contractor shall protect, shore, brace, support, and maintain all underground pipes, conduits, drains, and other underground construction uncovered or otherwise affected by his construction operations. All pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with all sod and shrubs in yards and parking areas, shall be restored to their original conditions, whether within or outside the project limits. All replacements shall be made with new materials.

Contractor shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, which may be caused by transporting equipment, materials, or men to or from the Work or any part of site thereof, whether by him or his subcontractors. Contractor shall make satisfactory and acceptable arrangements with the owner of, or the agency or authority having jurisdiction over, the damaged property concerning its repair, replacement, or payment of costs incurred in connection with the damage.

All fire hydrants and water control valves shall be kept free from obstruction and available for use at all times. Fire hydrants to be removed and relocated shall be done as quickly as possible.

### 3.04 ACCESS ROAD

#### A. Access Roads

Contractor shall establish and maintain temporary access roads, and maintain any existing roads, to various parts of the Work as required to complete the Project. Such roads shall be available for the use of all others performing work or furnishing services in connection with this Project and related projects.

### 3.05 MAINTENANCE OF TRAFFIC

Open pits, trenches, unpaved streets, debris, or other obstructions due to construction that will prevent the normal flow of traffic during an extended construction stoppage, for any reason, shall be minimized. In the event an extended construction stoppage is found to be necessary, Contractor shall, at his own expense, provide normal traffic flow during extended construction stoppage. Extended stoppage will be defined by the Engineer.

All excavated material shall be placed so that vehicular and pedestrian traffic may be maintained at all times. If the Contractor's operations cause traffic hazards, he shall repair the road surface, provide temporary roadways, erect wheel guards or fences, or take other measures for safety satisfactory to the Engineer.

Detours around construction areas will be subject to the approval of the Owner and the Engineer. Where detours are permitted the Contractor shall provide all necessary barricades and signs as required to divert the flow of traffic. While traffic is detoured, the Contractor shall expedite construction operations, and periods when traffic is being detoured will be strictly controlled by the Owner.

### 3.06 TEMPORARY ENVIRONMENTAL CONTROLS

#### A. Dust Abatement

Contractor shall take reasonable measures to prevent unnecessary dust. Earth surfaces subject to dusting shall be kept moist with water or by application of a chemical dust suppressant. Dusty materials in piles or in transit shall be covered to prevent blowing.

The Contractor shall furnish all labor, equipment, and means required and shall carry out effective measures wherever and as often as necessary to prevent its operation from producing dust in amounts damaging to property, cultivated vegetation, or domestic animals, or causing a nuisance to persons living in or occupying buildings in the vicinity. The Contractor shall be responsible for any damage resulting from any dust originating from its operations. The dust abatement measures shall be continued until the Contractor is relieved of further responsibility by the Engineer.

#### B. Rubbish Control

During the progress of the Work, the Contractor shall keep the site of the Work and other areas used by it in a neat and clean condition, and free from any accumulation of rubbish. The Contractor shall dispose of all rubbish and waste materials of any nature occurring at the Work site and shall establish regular intervals of collection and disposal of such materials and waste. The Contractor shall also keep its haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Equipment and material storage shall be confined to areas approved by the Engineer. Disposal of all rubbish and surplus materials shall be off the site of construction, at the Contractor's expense, all in accordance with local codes and ordinances governing locations and safety laws, and to the particular requirements of Subpart H, Section 1926.252 of the OSHA Safety and Health Standards for Construction.

#### C. Chemicals

All chemicals used during project construction or furnished for project operation, whether defoliant, soil sterilant, herbicide, pesticide, disinfectant, polymer, reactant or of other classification, shall show approval of either the U.S. Environmental Protection Agency or the U.S. Department of Agriculture. Use of all such chemicals and disposal of residues shall be in strict accordance with the printed instructions of the manufacturer.

#### D. Erosion Control

Contractor shall prevent erosion of soil on the site and adjacent property resulting from his construction activities. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operations that will disturb the natural protection.

Work shall be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation preserved to the greatest extent practicable. Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion. Temporary fast growing vegetation or other suitable ground cover shall be provided as necessary to control runoff.

#### E. Noise Control

Contractor shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during working hours. All construction machinery and vehicles shall be equipped with practical sound muffling devices and operated in a manner to cause the least noise consistent with efficient performance of the Work.

During construction activities on or adjacent to occupied buildings, and when appropriate, Contractor shall erect screens or barriers effective in reducing noise in the buildings; and shall conduct his operations to avoid unnecessary noise which might interfere with the activities of building occupants.

The hourly value of the equivalent steady-state noise level shall not exceed 70 decibels.

#### F. Pollution Control

Contractor shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities. No sanitary wastes will be permitted to enter any drain or watercourse other than sanitary sewers.

No sediment, debris, or other substance will be permitted to enter sanitary sewers and reasonable measures will be taken to prevent such materials from entering any drain or watercourse.

#### G. Wastewater Bypassing

Wastewater bypass pumping must be approved by the Engineer prior to pumping. This work shall be at no direct pay and included in associated items of work.

#### H. Surface Water Control

##### 1. Flood Protection

The facilities to be constructed are located in an area that may be subject to heavy rainfall and flooding. During the construction period, Contractor shall provide temporary protection as necessary to prevent flood damage to new and existing facilities and shall be responsible for any damage that may result from flooding.

##### 2. Temporary Drainage Provisions

Contractor shall provide for the drainage of stormwater and such water as may be applied or discharged on the site in performance of the Work. Drainage facilities shall be adequate to prevent damage to the Work, the site, and adjacent property.

Existing drainage channels and conduits shall be cleaned, enlarged, or supplemented as necessary to carry all increased runoff attributable to Contractor's operations. Dikes shall be constructed as necessary to divert increased runoff from entering adjacent property (except in natural channels), to protect Owner's facilities and the Work and to direct water to drainage channels or conduits. Ponding shall be provided as necessary to prevent downstream flooding. The Contractor shall obtain permission from the Owner before beginning any of the above-mentioned work.

END OF SECTION

SECTION 01505  
MOBILIZATION

PART 1 - GENERAL

Under this item of work, the Contractor shall set up his necessary general plant including shops, storage areas, temporary facilities, and such sanitary and other facilities as are required by local or state law or regulation; all as required for the proper performance and completion of the Work. The Contractor shall provide all items of work covered in this section, which shall include but not be limited to the following principal items:

- A. Moving on to the site of all Contractor's plant and equipment required for first month operations.
- B. Installing temporary construction power, wiring, and lighting facilities.
- C. Establishing fire protection system.
- D. Developing construction water supply.
- E. Providing on-site sanitary facilities and potable water facilities as specified.
- F. Arranging for and erection of Contractor's work and storage yard.
- G. Procurement and submittal of all required contractor and subcontractor insurance certificates and bonds.
- H. Obtaining all required permits.
- I. Posting all OSHA required notices and other information as required by Federal, State and Local Agencies. Establishment of safety programs.
- J. Have the Contractor's superintendent at the job site full time.
- K. Have provided a detailed construction schedule acceptable to the Owner for project use as specified.
- L. Erection of project sign(s) per the attached template with location as specified by Owner.
- M. Project Schedule – Gant Chart.
- N. Project signs – minimum of 3, maximum of 5
- O. Misc. Submittals

PART 2 - PRODUCTS (NOT USED)

### PART 3 - EXECUTION

The Contractor may not engage in any field activities (except for surveys) until he satisfactorily submits shop drawings for critical items and has been given authorization by the Owner to proceed with field activities. All work and activities shall be coordinated with St. Tammany Parish Department of Utilities and Engineer.

END OF SECTION

SECTION 01530  
PROTECTION OF EXISTING FACILITIES AND PROPERTY

PART 1 - GENERAL

1.01 DESCRIPTION

The Contractor shall protect all existing utilities, structures and improvements not designated for removal and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than they were prior to such damage or temporary relocation, all in accordance with requirements specified herein, and in accordance with the requirements of the Contract Documents.

1.02 CARE AND PROTECTION OF PROPERTY

The Contractor shall be responsible for the preservation of all public and private property and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, such property shall be restored by the Contractor, at his expense, to a condition similar or equal to that existing before the damage was done, or he shall make good the damage in another manner acceptable to the Engineer.

Along the location of this Work all fences, walks, brushes, trees, shrubbery, and other physical features shall be protected and restored in a thoroughly workmanlike manner. Fences and other features removed by the Contractor shall be replaced in the location indicated by the Engineer as soon as conditions permit. All grass areas beyond the limits of construction that have been damaged by the Contractor shall be regraded and sodded.

Trees close to the work shall be boxed or otherwise protected against injury. The Contractor shall trim all branches that are liable to damage because of his operations, but in no case shall any tree be cut or removed without prior notification of the Engineer. All injuries to bark, trunk, limbs, and roots of trees shall be repaired by dressing, cutting, and painting according to approved methods, using only approved tools and materials.

The protection, removal, and replacement of existing physical features along the line of work shall be a part of the work under the Contract, and all costs in connection therewith shall be included in the unit and/or lump sum prices established under the items in the Proposal.

1.03 OPEN EXCAVATIONS

All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights, and other means to prevent accidents to persons, and damage to property. The Contractor shall, at his own expense, provide suitable and safe bridges and other crossings for accommodating travel by pedestrians and workmen.

1.04 UTILITY EXPLORATION

Test pits for the purpose of locating underground pipelines or structures in advance of the construction shall be excavated and backfilled by the Contractor prior to commencement of construction. Test pits shall be backfilled immediately after their purpose has been satisfied and the surface restored and maintained in a manner satisfactory to the Engineer.

The Contractor shall determine the exact locations and depths of all utilities indicated on the drawings. In addition to those indicated, the Contractor shall make exploratory excavations of all utilities. All such exploratory excavations shall be performed as soon as practicable after award of contract and, in any event, a sufficient time in advance of construction to avoid possible delays to the Contractor's work. When such exploratory excavations show the utility location as indicated on the drawings to be in error, the Contractor shall so notify the Engineer. The number of exploratory excavations required shall be that number which is sufficient to determine the alignment of the utility.

#### 1.05 RIGHTS-OF-WAY

The Contractor shall not do any work that would affect any oil, gas, sewer, or water pipeline; any telephone, telegraph, or electric transmission line; any fence; or any other structure, nor shall the Contractor enter upon the rights-of-way involved until the Contractor has secured authority therefore from the proper party. After authority has been obtained, the Contractor shall give said party due notice of his intention to begin work and shall give said party convenient access and every facility for removing, shoring, supporting, or otherwise protecting such pipeline, transmission line, ditch, fence, or structure, and for replacing same.

The Contractor shall be aware that his work will be performed adjacent to private property. The Contractor shall notify all property owners adjacent to and along the route once at the award of the contract and once at least 48 hrs in advance of construction by means of either a printed circular or form letter of the general details of the construction. The letter shall also include names and telephone numbers for key project personnel so that property owners can report problems. These contact telephone numbers shall be given so that appropriate personnel can be contacted 24 hours a day, seven days a week.

The Contractor shall not enter or occupy private land outside of easements, except by permission of the Owner.

#### 1.06 PROTECTION OF STREET OR ROADWAY MARKERS AND TRAFFIC SIGNS

The Contractor shall not destroy, remove, or otherwise disturb any existing survey markers or other existing street or roadway markers without proper authorization. No pavement breaking or excavation shall be started until all survey or other permanent marker points that will be disturbed by the construction operations have been properly referenced for easy and accurate restoration. It shall be the Contractor's responsibility to notify the proper representatives of the Owner of the time and location that work will be done. Such notification shall be sufficiently in advance of construction so that there will be no delay due to waiting for survey points to be satisfactorily referenced for restoration. All survey markers or points disturbed, without proper authorization by the Engineer, will be accurately restored at the Contractor's expense after all street or roadway resurfacing has been completed. All traffic signs shall be restored to the original condition and location at the Contractor's expense.

#### 1.07 NOTIFICATION BY THE CONTRACTOR

Prior to any excavation in the vicinity of any existing 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 and state highway rights-of-way the Contractor shall notify the respective authorities representing the owners or agencies responsible for such facilities not less than two (2) working days (48 hours), nor more than five (5) working days prior to excavation so that a representative of said owners or

agencies can be present during such work if they so desire. The Contractor shall request that each utility Owner mark (or stakeout) in the field the location of existing facilities.

#### 1.08 CONFLICTS WITH OTHER UTILITIES

- A. At various locations along the project, the proposed pipeline may closely parallel or cross existing gas lines, buried telephone cables or ducts or other utilities.
- B. It shall be the Contractor's responsibility to give the appropriate utility company sufficient advance notice so that their representatives may verify the utility location on the job site when trenching operations begin. The Contractor shall coordinate and cooperate with these utilities to ensure that no damages occur that would cause interruption of their services.
- C. All temporary support, or minor adjustment which does not require replacement or direct by-pass connections to these existing services (such as all direct-buried telephone cables or two-inch and smaller gas lines) will be the responsibility of the Contractor.
- D. Where it may be necessary to relocate or de-energize or re-energize electrical power lines (aerial or buried), gas mains or telephone ducts (defined here as gas lines larger than 2-1/2 inches and telephone cables within ductwork) to allow construction of the new sewerage facilities, or where major relocation of small services requires replacement or performing connections to the existing lines, all such relocation work must be performed by the respective utility companies personnel, unless written authorization is given to Contractor by utility to perform such work. The Contractor shall immediately notify the proper utility company and the Engineer in writing of the occurrence and location of such required relocations. Any costs associated with this work shall be paid by the Contractor.
- E. The Owner will not be responsible for any delay or inconvenience to the Contractor resulting from the existence, removal or adjustment of any utility. Additional costs incurred as a result therefore shall be the expense of the Contractor and considered as included in the contract bid.
- F. Relocation, or re-alignment of storm drains or sewer lines, which may interfere with the construction of the new pipeline, shall be the responsibility of the Contractor.
- G. The Contractor shall remove and replace storm drains and sewers to facilitate pipeline constructions where required.
- H. Maintenance of Drainage. Contractor shall be responsible for maintenance of existing drainage patterns by temporary ditches, culverts, etc. All existing drainage facilities shall be returned to original condition prior to completion of contract.
- I. The Contractor is ultimately responsible for any construction costs arising from conflicts with other utilities associated with the necessary removal, relocation, or temporary re-routing of all such utilities. All such costs shall be considered incidental to the construction of the facilities shown or indicated in the Contract Documents and shall be included in the lump sum or unit price bid item as applicable.
- J. Adjustments to existing water or sewer house connections shall be made by the contractor in the case of a conflict which occurs at an elevation between the top and bottom of the proposed utility, or if directed in the field by the engineer. The Contractor shall adequately



restore the house connections without work on the private property and without syphons in case of the sewer house connection.

- K. Any adjustments to water service house connections shall be made using 1" diameter polyethylene tubing PE-3408.

## PART 2 - PRODUCTS (NOT USED)

## PART 3 - EXECUTION

### 3.01 EXISTING UTILITIES AND IMPROVEMENTS

#### A. General

The Contractor shall protect all utilities and other improvements which may be impaired during construction operations. It shall be the Contractor's responsibility to ascertain the actual location of all existing utilities and other improvements indicated on the drawings that will be encountered in his construction operations and to see that such utilities or other improvements are adequately protected from damage due to such operations. The Contractor shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be directed by the Engineer.

#### B. Utilities to be Moved

In case it shall be necessary to move the property of any public utility or franchise holder, such utility company or franchise holder will, upon proper application by Contractor, be notified by the Contractor to move such property within a specified reasonable time, and the Contractor shall not interfere with said property until after the expiration of the time stipulated.

#### C. Owner's Right of Access

The right is reserved to the Owner and to the owners of public utilities and franchises to enter at any time upon any public street, alley, right-of-way, driveway, or easement for the purpose of making changes in their property made necessary by the work of this Contract.

#### D. Known Utilities

Existing utility lines that are shown on the drawings or the locations of which are made known to the Contractor prior to excavation and that are to be retained, and all utility lines that are constructed during excavation operations shall be protected from damage during excavation and backfilling and, if damaged, shall be immediately repaired by the Contractor at its expense.

#### E. Unknown Utilities

The Contractor is required to use care in preparing excavations and shall conduct Utility Explorations including utility excavations and field investigations to assess the layout of

subsurface facilities at each excavation site prior to the commencement of work. The Contractor shall uncover subsurface obstructions in advance of construction so that existing subsurface facilities may be identified before the work reaches the obstruction. The Contractor shall proceed at all times with caution while excavating.

Should the Contractor encounter subsurface and/or latent conditions at the site substantially different from those shown on the Drawings or indicated in the Specifications, he shall immediately give notification to the Engineer of such conditions. The Engineer shall thereon promptly investigate the conditions and if he finds that they are substantially different from those shown on the Plans or Specifications, he shall make such changes in the Plans and/or Specifications as he may find necessary. Any increase or decrease in the cost resulting from these changes when appropriate shall be adjusted under the applicable provisions of the contract documents.

F. Utilities to be Removed

When utility lines that are to be removed are encountered within the area of operations, the Contractor shall notify the Utility Owner and the Engineer a sufficient time in advance for the necessary measures to be taken to prevent interruption of the service.

G. Approval of Repairs

All repairs to a damaged improvement shall be inspected and approved by an authorized representative of the improvement owner before being concealed by backfill or other work.

H. Relocation of Utilities

Where the proper completion of the work requires the temporary or permanent removal and/or relocation of an existing utility or other improvement which is shown on the drawings, the Contractor shall at its own expense and with prior approval from the Owner of the utility, remove and, without unnecessary delay, temporarily replace or relocate such utility or improvement in a manner satisfactory to the Owner of the facility. In all cases of such temporary removal or relocation, restoration to former location shall be accomplished by the Contractor in a manner that will restore or replace the utility or improvement as nearly as possible to its former locations and to as good or better condition than found prior to removal.

I. Maintaining in Service

All oil and gasoline pipelines, power, and telephone or other communication cable ducts, gas and water mains, irrigation lines, sewer lines, storm drain lines, poles, and overhead power and communication wires and cables encountered along the line of the work shall be maintained continuously in service during all the operations under the Contract, unless other arrangements are made satisfactory to the Owner of said pipelines, duct, main, irrigation line, sewer, storm drain, pole, or wire or cable. The Contractor shall be responsible for and shall make good all damage due to its operations, and the provisions of this Section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after completion of the backfilling.

### 3.02 SEWER HOUSE CONNECTIONS

- A. The location and elevations of sewer house connections generally are not shown on the plans. However, the Contractor shall locate them at the trench prior to installation of the proposed utility. The Contractor shall excavate in advance of the utility, locate the sewer house connections and make the necessary adjustments if any conflict is anticipated.
- B. The Contractor shall maintain at all times sewer service to all connections in his route.
- C. If a conflict exists between the required utility and sewer house connections, the Contractor shall attempt to resolve such conflict with a vertical offset of the utility (requires engineer's approval) and/or relaying the house connections. In all cases a positive slope must be maintained on the house connection. No siphoning shall be allowed. No work on private property shall be allowed.
- D. The limits of work for removal and replacement of any sewer house connection are to the limits of the property line.
- E. Bedding and backfill requirements of house connections will be the same as those for proposed pipelines, or per the standards of the owning utility authority if none is shown. All adapters, connections, repair material, etc., shall conform to the requirements of the appropriate utility owner.

### 3.03 WATER HOUSE CONNECTIONS

- A. The location and elevations of water house connections generally are not shown on the plans. However, the Contractor shall locate them at the trench prior to installation of the proposed utility. The Contractor shall excavate in advance of the proposed utility, locate the water house connections and make the necessary adjustments to the proposed utility if any conflict is anticipated.
- B. The Contractor shall maintain at all times water service to all connections on his route.
- C. If a conflict exists between the required utility and water house connections, the Contractor shall attempt to resolve such conflict with deflection of the piping (within allowable limits) and/or vertical offset of the proposed utility (requires engineer's approval) and/or relaying the water house connections.
- D. The limits of work for removal and replacement of any water house connection are to the limits of the property line.
- E. Bedding and backfill requirements of water house connections will be the same as those for the proposed utility pipeline or per the utility Owner's standards if none is shown. All adapters, connections, repair material, etc., shall conform to the requirements of the appropriate utility owner.

### 3.04 SUBSURFACE OBSTRUCTIONS

- A. The Contractor shall field determine before pipeline trench and associated excavations are begun the depth and location of existing utilities. Utility locations indicated on the plans were obtained from the records available, but have not been field verified, nor have depths

been measured or observed. The Contractor shall submit descriptions, depths and locations of subsurface obstructions to the Engineer for review at the time it is determined that obstructions exist before or after excavation.

- B. In excavation, backfilling and in laying pipe, care shall be taken not to remove, disturb, or injure existing pipes, conduits or structures. If necessary, the Contractor at his own expense, shall sling, shore-up, and maintain such structures in operation.
- C. The Contractor shall obtain the permission of and give sufficient notice to the proper authorities of their intention to remove or disturb any pipe, conduit, etc., and shall abide by their regulations governing such work.
- D. In the event that subsurface structures are broken or damaged in the prosecution of the Work, the Contractor shall immediately notify the proper authorities and the Engineer, and at the option of said authority, either repair the damage at once, at his own expense, or pay the proper charges for repairing said damage. Repairs shall be made to the satisfaction of the Owner. The Contractor shall be responsible for any damage to persons or property caused by such breaks or due to his own neglect in reporting and/or repairing such damages.
- E. In the event that a conflict with an existing sewer or water service house connection occurs at an elevation between the top and bottom of the proposed utility, the contractor shall make the necessary adjustment to the existing service as shown on the plans or specified herein. Proper notification must be given to the property owner before the adjustment is begun.

### 3.05 TREES AND SHRUBS WITHIN STREET RIGHTS-OF-WAY AND PROJECT LIMITS

#### A. General

The Contractor shall exercise all necessary precautions so as not to damage or destroy any trees or shrubs, including those lying within street rights-of-way and within or outside the project limits, and shall not trim, remove or relocate any trees unless such trees have been approved for trimming, removal or relocation by the Engineer and the jurisdictional agency or Owner. All existing trees and shrubs which are damaged during construction due to Contractor's negligence shall be trimmed, replaced, or relocated by a certified tree company under permit from the jurisdictional Agency or Owner. Tree trimming, replacement, and relocation shall be accomplished in accordance with the following paragraphs. The cost of such work shall be considered incidental to the construction of the facilities proposed and no direct payment will be made. (See Section 02100 "Site Preparation")

#### B. Preserve

Contractor shall take extra measures to protect trees designated to be preserved, such as erecting barricades, trimming to prevent damage from construction equipment, and installing pipe and other Work by means of hand excavation or tunneling methods. Such trees shall not be endangered by stockpiling excavated material or storing equipment against trunk.

#### C. Trimming

Symmetry of the tree and shrubs shall be preserved; no stubs or splices or torn branches left; clean cuts shall be made close to trunk or large branch. Spikes shall not be used for climbing

live trees. All cuts over 1-1/2 inches in diameter shall be coated with an asphaltic emulsion material.

D. Relocate

Contractor shall remove existing trees and shrubs which conflict with the construction as indicated on the plans and specifications. Damaged trees and shrubs due to contractor's negligence may be relocated at the Contractor's expense as directed by the Engineer and the Owner.

E. Replacement

The Contractor shall immediately notify the jurisdictional agency and/or the Owner if any tree or shrub is damaged by the Contractor's operations. If, in the opinion of said agency or the Owner, the damage is such that replacement is necessary, the Contractor shall replace the tree or shrub at its own expense. The tree or shrub shall be of a like size and variety as the one damaged, or, if of a smaller size, the Contractor shall pay to the Owner of said tree a compensatory payment acceptable to the tree owner, subject to the approval of the Engineer and the jurisdictional agency or Owner.

3.06 POLE RELOCATION AND PROTECTION

- A. The Contractor shall take notice of any power, telephone and traffic signal support poles along the length of the project; several may be in proximity to, or direct conflict with, the alignment of the proposed facilities. The relocation of all poles on the plans noted to be relocated shall be the responsibility of and must be performed by the respective utility companies. The Contractor shall immediately notify the proper utility company and the Engineer in writing of the occurrence and location of such required relocations.
- B. For all poles without such notations, it is intended that they shall be supported with mud jackets or by other means of bracing as required by the utility company to maintain them in a stable condition. The temporary support and subsequent stability of these poles will be the Contractor's responsibility.
- C. These tasks shall be performed by Contractor at no direct payment.

3.07 EXISTING FENCE LINES AND GATES

At various locations along the length of the project, existing fences and gates might conflict with, or impair construction operations for the installation of the proposed facilities. Contractor shall protect these fences in place where they do not conflict with construction operations. Where a fence or gate may conflict with the backswing of machinery or otherwise impede construction, the Contractor shall contact the owner and arrange for the temporary removal or relocation of the fence. Any fence or gate removed or temporarily relocated shall be restored to its original condition and location unless otherwise indicated on the plans or arranged with owners of the fence. Where it is impossible to salvage the existing materials to reconstruct the fence or gate, the fence shall be replaced "in kind".

END OF SECTION

SECTION 01550  
SITE ACCESS AND COORDINATION WITH RESIDENTS

PART 1 - GENERAL

1.01 ROADWAY LIMITATIONS

The Contractor shall make its own investigation of the condition of available public and private roads and of clearances, restrictions, bridge load limits, and other limitations affecting transportation and ingress and egress to the site of the Work. It shall be the Contractor's responsibility to construct and maintain, at its own expense, any haul roads required for his construction operations.

1.02 TEMPORARY CROSSINGS

A. General

Wherever necessary or required for the convenience of the public or individual residents at street or highway crossings, private driveways, or elsewhere, the Contractor shall provide suitable temporary bridges over unfilled excavations, except in such cases as the Contractor shall secure the written consent of the individuals or authorities concerned to omit such temporary bridges, which written consent shall be delivered to the Engineer prior to excavation. All such bridges shall be maintained in service until access is provided across the backfilled excavation. Temporary bridges for street and driveway crossings shall conform to the requirements of the authority having jurisdiction in each case, and the Contractor shall adopt designs furnished by said authority for such bridges, or shall submit designs to said authority for approval, as may be required.

B. Street Use

Nothing herein shall be construed to entitle the Contractor to the exclusive use of any public street, alleyway, or parking area during the performance of the Work hereunder, and he shall so conduct his operations as not to interfere unnecessarily with the authorized work of utility companies or other agencies in such streets, alleyways, or parking areas. No street shall be closed to the public without first obtaining permission of the Owner and proper governmental authority. Where excavation is being performed in primary streets or highways, one lane in each direction shall be kept open to traffic at all times unless otherwise provided or shown. Toe boards shall be provided to retain excavated material if required by the Engineer or the agency having jurisdiction over the street or highway. Fire hydrants on or adjacent to the Work shall be kept accessible to fire-fighting equipment at all times. Temporary provisions shall be made by the Contractor to assure the use of sidewalks and the proper functioning of all gutters, sewer inlets, and other drainage facilities.

C. Street Closure

If closure of any street is required during construction, a formal application for a street closure shall be made to the authority having jurisdiction at least 72 hours prior to the required street closure in order to review necessary signing and detour requirements. Streets with only one access route shall not be closed for extended periods of time.

D. Coordination With Residents

Contractor shall coordinate with the Representative of each Residence regarding temporarily relocating storage sheds and other structures, temporarily dismantling fences and reinstalling fences when construction activity in the area is completed, the location of the sewer service connection at each property line, the temporary blocking of driveways and temporary parking restrictions due to trench work or asphalt overlays. Contractor's cooperation and coordination with the Parish Representative and the Engineer is also required.

PART 2- PRODUCTS (NOT USED)

PART 3- EXECUTION (NOT USED)

END OF SECTION

## SECTION 01570 TRAFFIC REGULATION

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

The Contractor shall be responsible for the development and implementation of a traffic control device plan (TCDP) for each work location that will provide for the safe and expeditious movement of traffic through construction zones. A construction zone is defined as the immediate area of actual construction that interferes with the driving or walking public. The TCDP shall comply with the requirements set forth in the Manual on Uniform Traffic Control Devices (MUTCD), as revised, and with the general requirements stipulated below.

#### 1.02 CERTIFICATION

The TCDP shall be designed and certified by a qualified Traffic Control Specialist certified by ATSSA whose qualifications are acceptable to the Owner's Traffic Division or the Engineer if such does not exist.

#### 1.03 SUBMITTALS

The TCDP for the site shall address the conditions for providing traffic flow within the zone during the influence of construction. The TCDP shall be schematically drawn on sheet(s) large enough to show adequate details and be easily readable and reproducible. If larger than eleven inches by seventeen inches (11" x 17"), the sheet(s) shall be submitted with a reproducible transparency so that the Owner and Engineer can produce additional copies as needed.

The Contractor shall submit 7 copies of the TCDP to the Engineer for the Owner and the applicable State Department of Transportation's Engineering Division's review where the TCDP involves a state highway. Such approval is required prior to start of any work that might affect the traffic pattern in the area. The submittal request for the applicable State Department of Transportation shall be 30 days in advance of work. Submittal requirements shall comply with applicable sections of these specifications.

### PART 2 - PRODUCTS

Warning signs, signals, lighting devices, markings, barricades and hand signaling devices used in the TCDP shall comply with the standard sizes and dimensions specified in the Manual of Uniform Traffic Control Devices.

### PART 3 - EXECUTION

#### 3.01 TRAFFIC CONTROL

- A. The necessary precautions shall include, but not be limited to, such items as proper construction warning signs, signals, lighting devices, markings, barricades, channelization, and hand signaling devices (flagging operations) as prescribed and set forth in the Department of Transportation and Development Manual of Uniform Traffic Control



Devices. The Contractor shall be responsible for installation and maintenance of all devices for the duration of the construction period.

- B. Contractor shall provide to the Engineer as a minimum a weekly DVD video taping showing on the film the date, time, and observer of a drive through the project area illustrating the traffic control devices and operating conditions of the site. At the conclusion of construction, video DVD(s) shall become property of the Owner.
- C. The Contractor shall be responsible for removal, relocation, or replacement of any traffic control device in the construction area, which exists as part of the normal pre-construction traffic control scheme. Any such actions shall be performed by the Contractor under the supervision, and in accordance with the Specifications, of the Department of Engineering, unless otherwise specified.
- D. The CONTRACTOR shall make a daily inspection of all MUTC devices for adherence to the submitted plan. The CONTRACTOR shall have a local representative on call in order to remediate or correct any MUTC device deficiencies during non-work hours. The CONTRACTOR shall employ the best available industry practices to eliminate the movement or property damage resulting from the movement of MUTC devices during weather events.

### 3.02 STREET CLOSINGS

- A. All road closure and detour requests must be submitted for approval by the Engineering Department no less than three (3) weeks before the closure is required. The Road Closure request shall be accompanied by a copy of the previously approved Traffic Control Device Plan (TCDP) with the area requested for closure highlighted. This request, upon approval of the Engineer, shall be routed to the Department Director. The Contractor shall anticipate a three (3) week Road Closure Request review, approval and dissemination period.
- B. Once a request has been approved by the Engineering Department, the Contractor shall provide at least 72 hours notification in writing to the Homeowners, Department of Engineering, LADOTD, and Engineer of the necessity to close any portion of a roadway carrying vehicles or pedestrians.
- C. Roadway/driveway closing during concrete replacement will be required until the concrete has attained its design strength. The maximum allowable pavement under construction per segment at any given time shall be 300 yards.
- D. Contractor shall provide adequate detour signing during all street closings.

END OF SECTION

SECTION 01600  
MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.01 REQUIREMENTS

All materials and equipment furnished and installed under this contract shall conform to the general stipulations set forth in this section except as otherwise specified in other sections of the specifications.

1.02 WORKMANSHIP AND MATERIALS

Contractor shall guarantee all equipment against faulty or inadequate design, improper assembly or erection, defective workmanship or materials, and leakage, breakage or other failure. Materials shall be suitable for service conditions.

All equipment shall be designed, fabricated, and assembled in accordance with the best modern engineering and shop practice. Individual parts shall be manufactured to standard sizes and gauges so that repair parts furnished at any time, can be installed in the field. Like parts of duplicate units shall be interchangeable. Equipment shall not have been in service at any time prior to delivery, except as required by tests.

Except where otherwise specified, structural and miscellaneous fabricated steel used in equipment shall conform to AISC standards. All structural members shall be designed for shock or vibratory loads. Unless otherwise specified, all steel which will be submerged, all or in part, during normal operation of the equipment shall be at least 1/4 inch thick.

1.03 RESPONSIBILITY FOR MATERIALS AND EQUIPMENT

Contractor shall be fully responsible for all materials and equipment, which Contractor has furnished, and shall furnish necessary replacements at any time prior to expiration of the Correction Period.

The Contractor shall stock additional supplies of material and equipment, as the Contractor deems necessary for timely and efficient execution of this contract.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01610  
TRANSPORTATION AND HANDLING

PART 1 - GENERAL

All materials shall be suitably packaged to facilitate handling and protection against impact, abrasion, discoloration, and other damage. All painted surfaces that are damaged prior to acceptance of equipment shall be repainted to the satisfaction of Engineer.

Each item, package, or bundle of material shall be tagged or marked as identified in the delivery schedule or on the Shop Drawings. Complete packing lists and bills of material shall be included with each shipment.

The Contractor is responsible for transporting all Owner-furnished items from their stored locations to the appropriate jobsite.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01630  
PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1 - GENERAL

In accordance with applicable state Contractor Statutes, these Contract Documents include provisions for use of equivalent materials and equipment. Requests for review of equivalency shall be submitted in accordance with the Supplemental Conditions, General Conditions and the submittals section.

Other manufacturer's products will be accepted provided sufficient information is submitted to allow Engineer to determine that the products proposed are equivalent to those named. Such items shall be submitted for review by the procedures set forth in the submittals section.

Whenever the names of proprietary products or the names of particular manufacturer's or vendors are used, it shall be understood that the words "or equal" following the enumeration, if not specifically stated, are implied.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01700  
CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

Comply with requirements stated in Conditions of the Contract and in the specifications for administrative procedures in closing out the work.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Conditions of the Contract. Fiscal provisions, legal submittals and additional administrative requirements.
- B. Section 01710: Cleaning.
- C. Section 01720: Project Record Documents.
- D. Section 01740: Warranties and Bonds.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01710  
CLEANING

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

Execute cleaning, during progress of the work, and at completion of the work, as required by General conditions.

1.02 RELATED REQUIREMENTS

- A. Conditions of the Contract.
- B. Each Specification Section: Cleaning for specific products or work.

1.03 DISPOSAL REQUIREMENTS

Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
- B. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.01 DURING CONSTRUCTION

- A. Execute periodic cleaning to keep the work, the site and adjacent properties free from accumulations of waste materials, rubbish and windblown debris, resulting from construction operations.
- B. Provide on-site containers for the collection of waste materials, debris and rubbish.
- C. Remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal areas away from the site.

3.02 FINAL CLEANING

- A. Employ skilled, workmen for final cleaning.
- B. Rake the surfaces of the grounds clean.
- C. Prior to final completion, or Owner occupancy, Contractor shall conduct an inspection of sight-exposed exterior surfaces, and all work areas, to verify that the entire work is clean.

END OF SECTION

SECTION 01720  
PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 DESCRIPTION

The Contractor shall maintain at the site for the Owner's permanent records one copy of:

1. Drawings.
2. Specifications.
3. Addenda.
4. Change Orders and other Modifications to the Contract.
5. Engineer Field Orders or Written Instructions.
6. Approved Shop Drawings, Product Data.
7. Field Test Records.
8. Construction Photographs.
9. As-Built Survey of Drainage Improvements, including all utilities encountered.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. The Contractor shall store documents and samples in Contractor's field office apart from documents used for construction.
- B. The Contractor shall provide files and racks for storage of documents.
- C. The Contractor shall maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.
- D. The Contractor shall make documents and samples available at all times for inspection by the Engineer and Owner.

3.02 MARKING-UP RECORD DRAWINGS

The Contractor shall mark with red erasable pencil and, where necessary, use other pencil colors, as required.

3.03 RECORDING

- A. Label each document (including record prints and shop drawings) "PROJECT RECORD" in neat large printed letters.
- B. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.



C. Drawings

Legibly mark field drawings to record actual construction:

1. Location of internal utilities and appurtenances concealed in the construction, referenced to visible and accessible features of the structure.
2. Field changes of dimensions and details.
3. Changes made by Field Order by Change Order.
4. Details not on original Contract Drawings.

D. Specifications and Addenda

The Contractor shall legibly mark each Section to record:

1. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.
2. Changes made by Field Order or by Change Order.

3.04 AS-BUILT SURVEY

The Contractor shall maintain an "as-built" survey showing the precise location of the installed water lines and any other utilities encountered or relocated, as described in other sections of these Specifications.

3.05 SUBMITTALS

- A. At Contract close-out deliver Record Documents to the Engineer including marked-up Drawings, As-Built Survey, Specifications, Addenda, Change Orders and other modifications to Contract; Engineers Field Orders and Written Instructions, Approved Shop Drawings, Product Data, Field Test Records and any other documents which serve as a record of actual field installation and construction different from the original Contract Documents. Engineer will submit them to Owner.
- B. Accompany submittals with transmittal letters in duplicate, containing:
1. Date
  2. Project title and number
  3. Contractor's name and address
  4. Title and number of each Record Document
  5. Signature of Contractor or his authorized representative.

END OF SECTION

SECTION 01730  
OPERATING AND MAINTENANCE DATA

PART I - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under contract. Prepare operating and maintenance data as specified in this section and as referenced in other pertinent sections of the specifications.
- B. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems.

1.02 RELATED REQUIREMENTS

- A. Section 01340: Shop Drawings, Product Data and Samples.
- B. Section 01700: Contract Closeout.
- C. Section 01740: Warranties and Bonds.

1.03 FORM OF SUBMITTALS

- A. Prepare data in form of an instructional manual for use by Owner's personnel.
- B. Format:
  - 1. Size: 8 1/2" X 11".
  - 2. Paper: 20 pound minimum, white, for typed pages.
  - 3. Text: Manufacturer's printed data, or neatly typewritten.
  - 4. Drawings:
    - a. Provide reinforced punched binder tab, bind in with text.
    - b. Fold larger drawings to size of text pages.
  - 5. Provide fly-leaf for each separate product or each piece of operating equipment.
    - a. Provide typed description of product and major component parts of equipment.
    - b. Provide indexed tabs.
  - 6. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS".
  - 7. List:
    - a. Title of project.
    - b. Identity of separate structure as applicable.
    - c. Identity of general subject matter covered in the manual.
- C. Binders:
  - 1. Commercial quality 3-ring binders with durable and cleanable plastic covers.
  - 2. Maximum ring size: 1"

3. When multiple binders are used, correlate the data into related consistent groupings.

#### 1.04 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Submit five (5) copies of complete manual in final form.
- B. Content, for each unit of equipment and system, as appropriate:
  1. Description of unit and component parts.
    - a. Function, normal operating characteristics, and limiting conditions.
    - b. Performance curves, engineering data and tests.
    - c. Complete nomenclature and commercial number of replaceable parts, which are cross-referenced with manufacturer's parts list.
  2. Operating procedures:
    - a. Start-up, break-in, routine and normal operating instructions.
    - b. Regulation, control, stopping, shutdown and emergency instructions.
    - c. Summer and winter operating instructions (if applicable).
    - d. Special operating instructions.
  3. Maintenance Procedures:
    - a. Routine operations.
    - b. Guide to "troubleshooting".
    - c. Disassemble, repair and reassemble.
    - d. Alignment, adjusting and checking.
  4. Servicing and lubrication schedule.
    - a. List of lubricants required.
  5. Manufacturer's printed operating and maintenance instructions.
  6. Description of sequence of operation by control manufacturer.
  7. Original manufacturer's parts list, illustrations, assembly drawings and diagrams required for maintenance.
    - a. Predicted life of parts subject to wear.
    - b. Items recommended to be stocked as spare parts.
  8. As-installed control diagrams by controls manufacturer.
  9. Each contractor's coordination drawings.
    - a. As-installed color coded piping diagrams.
  10. Charts of valve tag numbers, with location and function of each valve.
  11. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.

12. Other data as required under pertinent sections of specifications.

C. Content, for each electric and electronic system, as appropriate:

1. Description of system and component parts.
  - a. Function, normal operating characteristics, and limiting conditions.
  - b. Performance curves, engineering data and tests.
  - c. Complete nomenclature and commercial number of replaceable parts.
2. Circuit directories of panel boards.
  - a. Electrical service.
  - b. Controls.
  - c. Communications.
3. As-installed color coded wiring diagrams.
4. Operating procedures:
  - a. Routine and normal operating instructions.
  - b. Sequences required.
  - c. Special operating instructions.
5. Maintenance procedures:
  - a. Routine operations.
  - b. Guide to "troubleshooting".
  - c. Disassembly, repair and reassembly.
  - d. Adjustment and checking.
6. Manufacturer's printed operating and maintenance instructions.
7. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
8. Other data as required under pertinent sections of specifications.

D. Prepare and include additional data when the need for such data becomes apparent during instruction of Owner's personnel.

E. Additional requirements for operating and maintenance data: Respective sections of specifications.

#### 1.05 SUBMITTAL SCHEDULE

- A. Submit two (2) copies of preliminary draft of proposed formats and outlines of contents. Engineer will review draft and return one copy with comments.
- B. Submit one (1) copy of completed data in final form fifteen days prior to final inspection. Copy will be returned after final inspection with comments.
- C. Submit specified number of copies of approved data in final form ten (10) days after final inspection.

1.06 INSTRUCTION OF OWNER'S PERSONNEL

- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in operation, adjustment and maintenance of products, equipment and systems.
- B. Operating and maintenance manual shall constitute the basis of instruction. Review contents of manual with personnel, in full detail, to explain all aspects of operations and maintenance.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01740  
WARRANTIES AND BONDS

PART 1 - GENERAL

- 1.01 Contractor shall maintain and keep in good repair the improvements covered by these Drawings and Specifications during the life of the Contract.
- 1.02 Contractor shall indemnify the Owner against any repairs which may become necessary to any part of the work performed and to items of equipment and systems procured for or furnished under this Contract, arising from defective workmanship or materials used therein, for a period of one (1) year from the date of final acceptance of the Work by the Owner.
- 1.03 The Contractor shall, at his own expense, furnish all labor, materials, tools and equipment required and shall make such repairs and removals or shall perform such work or reconstruction as may be made necessary by structural or functional defect or failure resulting from neglect, faulty workmanship or faulty materials, in any part of the Work performed by him.
- 1.04 Except as noted on the Drawings or as specified, return structures such as embankments and fences to their original condition prior to the completion of the Contract. Repair damage to facilities not designated for removal, resulting from the Contractor's operations, at no cost to the Owner.
- 1.05 The Contractor shall be responsible for all road, entrance and driveway reconstruction and repairs and maintenance of same for a period of one year from the date of such reconstruction. In the event the repairs and maintenance are not made immediately, and it becomes necessary for the Owner of the road to make such repairs, the Contractor shall reimburse the Owner of the road for the cost of such repairs.
- 1.06 In the event the Contractor fails to proceed to remedy the defects of which he has been notified within 15 days of the date of such notice, the Owner reserves the right to cause the required materials to be procured and the work to be done, as described in the Drawings and Specifications, and to hold the Contractor and the sureties on his bond liable for the cost and expense thereof.
- 1.07 All warranties, bonds, insurance, etc. shall provide for 30-day advance notice to the Owner prior to cancellation or renewal date. No payment will be made to the Contractor for any work without insurance and bonds being in effect.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 02100  
SITE PREPARATION

PART 1- GENERAL

1.01 SCOPE OF WORK

- A. The Contractor shall clear and grub all of the area within the limits of construction or as required, which includes, but is not limited to, utility easements (servitudes). The width of the area to be cleared shall be reviewed by the Engineer prior to the beginning of any clearing.
- B. The Contractor shall maintain erosion control measures throughout the duration of the project.

1.02 SITE AND WORK DESCRIPTION

Any areas damaged by the Contractor shall be filled and graded to drain at no direct cost. Contractor shall water, sod or hydroseed, and fertilize damaged areas per Section 02950 Landscaping of these specifications. Contractor shall perform this repair work immediately after being instructed by the Engineer.

PART 2- PRODUCTS (NOT USED)

PART 3- EXECUTION

3.01 PRESERVATION OF DEVELOPED PRIVATE PROPERTY

- A. The Contractor shall exercise extreme care to avoid unnecessary disturbance of developed private property along the route of the construction.
- B. Improvements to the land, such as fences, walls, outbuildings, and other structures which of necessity must be removed, shall be replaced with equal quality materials and workmanship.
- C. The Contractor shall clean up the construction site adjacent to developed private property directly after construction is completed, upon approval of the Engineer.

3.02 PRESERVATION OF PUBLIC PROPERTY

The Contractor shall exercise extreme care to avoid unnecessary disturbance to the preservation of public lands, parks, rights-of-way, easements, servitudes, and all other areas.

END OF SECTION

SECTION 02110  
SALVAGE OR ABANDONMENT OF EXISTING MATERIALS

PART 1- GENERAL

1.01 SCOPE OF WORK

This section covers the salvage or abandonment of found materials and/or existing materials and equipment.

PART 2- PRODUCTS (NOT USED)

PART 3- EXECUTION

3.01 DESCRIPTION

All materials found shall be removed and shall be salvaged and/or disposed of as specified herein. The entire site shall be graded to match adjacent ground surface and restored in accordance with these specifications.

- A. Existing materials and equipment designated by the Engineer as salvageable items which are removed, shall remain Owner's property, including (but not limited to) all piping, valves and fittings, etc. Any items, which are not designated as salvageable by the Engineer, shall be removed and legally disposed of by the Contractor at no cost to the Owner.
- B. Contractor shall carefully remove in a manner to prevent damage all materials and equipment specified or indicated to be salvaged or to remain property of Owner
- C. Salvaged items shall be removed and delivered to the Owner by Contractor in good condition to a location designated by the Engineer.
- D. Any items damaged in removal, storage or handling through carelessness or improper procedures shall be replaced by Contractor in kind or with new items. Any damaged or disturbed area shall be backfilled, compacted, watered, seeded, and fertilized. It shall be finish-graded for positive drainage to the satisfaction of the Engineer.
- E. Temporarily relocate mailboxes affected by construction activities in order to maintain mail services and reinstall in original location upon completion of work at no direct pay.

3.02 PRESERVATION OF PUBLIC PROPERTY

The appropriate paragraphs of Section 01530 of these specifications shall apply to the preservation and restoration of public lands, parks, rights-of-way, easements, servitudes, and all other damaged areas.

END OF SECTION



SECTION 02140  
DEWATERING AND PRESSURE RELIEF

PART 1 - GENERAL

1.01 SCOPE

This section shall include supplying materials, equipment, services, and labor necessary to prevent surface water and subsurface or groundwater from flowing into excavations and from flooding project site and surrounding area. The Contractor shall dewater and dispose of the water so as not to cause injury to public or private property, or to cause a nuisance or a menace to the public. It shall be the sole responsibility of the Contractor to have adequate equipment and personnel at the site at all times to comply with these requirements.

1.02 RELATED WORK SPECIFIED ELSEWHERE

Section 02221: Excavation, Backfilling for trenches, pavement, and utility structures.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 INSTALLATION

- A. The Contractor shall install all equipment necessary for dewatering. Contractor shall have on hand, at all times, sufficient pumping equipment and machinery in good working condition and shall have available, at all times, competent workmen for the operation of the pumping equipment. Adequate standby equipment shall be kept available at all times to insure efficient dewatering and maintenance of dewatering operation during power failures.
- B. The Contractor is responsible for providing whatever equipment is necessary to adequately dewater the sites in accordance with the requirements of this section, should that equipment be wells, wellpoints, sump pumps or other operations.

3.02 PERFORMANCE

The control of groundwater shall be such that softening of the bottom of excavations or formation of unstable conditions during excavation shall be prevented. Dewatering systems shall be designed and operated to prevent erosion of the natural soils. Care shall be taken to prevent disturbance, due to the method of dewatering, of pipe bedding already in place in the trench. The Contractor is fully responsible for maintaining the integrity of previously placed pipe and bedding during dewatering and the release of groundwater.

During excavation, construction of structures, installation of pipelines and sewers, placement of the structure and trench backfill, and the placing and setting of concrete, excavations shall be kept free of water. The Contractor shall control surface runoff to prevent entry or collection of water in excavations. The static water level shall be controlled in the vicinity of the excavation to maintain the undisturbed state of the foundation soils and allow the placement of any fill or backfill to the

required density. The dewatering system shall be installed and operated so that the groundwater level outside the excavation is not altered to an extent that would damage or endanger adjacent structures or property.

### 3.03 RELEASE OF GROUNDWATER

The release of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soils, prevent disturbance of compacted backfill and prevent flotation or movement of structures, pipelines, and sewers.

### 3.04 PAYMENT

All work in this section shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the unit price or lump-sum price of associated items of work.

END OF SECTION

SECTION 02160  
SHEETING, SHORING, AND BRACING

PART I - GENERAL

1.01 SCOPE

This section shall include supplying materials, services, and labor necessary to provide sheeting, shoring, and bracing, supports and/or trench protection as required to provide a safe working condition for Contractor's personnel and to provide for protection of utilities, buildings, and structures. It shall be the sole responsibility of the Contractor to comply with these requirements as set forth by OSHA regulations and all local codes and authorities having jurisdiction.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02140: Dewatering
- B. Section 02210: Grading
- C. Section 02221: Excavation, Backfilling for Trenches, Pavement, and Utility Structures

1.03 SUBMITTALS

The Contractor is solely responsible to design, provide, install and maintain trench protection and support systems required to complete the work in a continuous safe manner.

1.04 SAFETY REQUIREMENTS

All sheeting, shoring, and bracing of excavations shall conform to requirements necessary to comply with local codes and authorities having jurisdiction.

Sheet pile installations will cause vibrations that may affect existing residences or underground utilities in the vicinity of the proposed excavation. Peak particle velocities due to sheet pile installation shall be monitored at critical locations with a seismograph during the installation of sheet piles. The record of peak particle velocities will provide information in assessing the need for changes in driving operations and the types of changes best suited for the project requirements. Monitoring will be performed by a testing lab provided by the Contractor. No driving operations shall take place without vibration monitoring on site and in place.

PART 2 - PRODUCTS

2.01 WOOD SHEETING

Wood for shoring and sheeting shall be green, rough cut hardwood (i.e. oak or hickory). Planking for sheeting and foundation lumber shall have a minimum thickness of 2 inches.

## 2.02 STEEL SHEETING

Steel sheet piling shall be a continuous interlock design. The sheet piling must, be in good condition and shall provide a tight interlocking connection which will retard the infiltration of ground water. Steel sheeting is recommended for all deep water main installations.

## 2.03 OTHER

Other means of trench protection meeting the requirements of OSHA will be allowed.

## PART 3 - EXECUTION

### 3.01 PERFORMANCE

The planning, installation and removal of all sheeting, shoring, bracing, and sheet piling shall be accomplished in such a manner as to maintain the required trench or excavated cross section and to maintain the undisturbed state of the soils adjacent to the trench and below the excavated bottom. All trenches and structural excavations shall be properly protected in accordance with OSHA regulations.

The use of horizontal strutting below the barrel of a pipe or structure or the use of a pipe as support for trench bracing will not be permitted.

Steel Sheeting shall be driven and extracted by either the vibratory or push/pull methods only. Impact driving or jetting shall not be allowed unless approved by the Engineer.

Steel sheeting or piling which are withdrawn shall be extracted in a manner so as to prevent subsequent settlement of the pipe or produce additional loadings to the structure and to maintain the undisturbed state of the soil adjacent to the trench or in the immediate area.

All work in this section shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the unit price or lump-sum price of associated items of work.

END OF SECTION

SECTION 02210  
GRADING

PART 1 - GENERAL

This section includes all grading work required for the construction of the water main extension, fire hydrant placement, air release valves placement, driveway replacement, and other items of work involving grading as shown on the Drawings within the project area. Grading operations shall include rough and finish grading of all affected areas to provide adequate drainage for the project area.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.01 Site shall be graded to meet existing contours on adjacent properties to the construction site so as to provide positive drainage into existing drainage structures. All initial and final grading work shall provide positive drainage into existing or required drainage facilities or structures.
- 3.02 Finish grading shall include furnishing and placing topsoil, 4 inches thick, using stockpiled excavated material or additional approved topsoil as required to cover entire site to an elevation appropriate for the placing of sod and/or seed as required elsewhere in these specifications.

END OF SECTION

SECTION 02221  
EXCAVATION, BACKFILLING FOR TRENCHES, PAVEMENT AND UTILITY STRUCTURES

PART 1 - GENERAL

1.01 DESCRIPTION

The Contractor shall furnish all materials, labor and equipment necessary to remove all earth, rock, water, debris and other materials to the extent required for the construction of the improvements shown on the Drawings. Also included is the preparation of the subgrade or sub-base for the foundation of the improvements and the backfilling and compaction around the improvements to the lines and grades established on the Drawings.

1.02 EXTENT OF WORK

Excavation shall extend to the width and depth shown on the Drawings or as specified, or where not specified, Contractor shall confine his excavation to the least width practicable and shall provide suitable room for installing pipe and appurtenances.

1.03 BEDDING AND BACKFILLING FOR TRENCHES UNDER ROADWAY

The Contractor shall furnish and place all sheeting, bracing, and supports for the installation of water lines or other piping. Contractor shall backfill all trenches with granular material, as indicated. The bottom of the excavation shall be firm, dry, and in all respects, acceptable. The Contractor shall be required to deposit granular material for pipe bedding in accordance with the Drawings. Crushed No. 57 line stone shall be incorporated in bedding when soft and/or wet trench bottom is encountered. This item will be only be used at the approval of the engineer and shall consist of excavation below grade with geogrid placed directly on the bottom of the trench immediately after excavation has reached the proper depth.

PART 2 - PRODUCTS

2.01 GRANULAR MATERIAL FOR TRENCHES UNDER ROADWAY

Granular material for backfill, bedding, structural fill, and Base Course shall conform to either of the following requirements.

- A. Non-Plastic Fine Sand  
or
- B. Sand with less than 10% passing the No. 200 sieve.

Material shall be compacted to a minimum of 95% per ASTM D698. It shall be free of roots, shells, or any other foreign matter, AASHTO A-3 material or better. Granular material used under roadways shall be encapsulated in geotextile fabric as shown on plans.

2.02 CRUSHED LIMESTONE FOR TRENCHES UNDER ROADWAY

Crushed No. 57 limestone used as foundation material and Class II Base Course shall be from a source approved by the LADOTD. Materials shall conform to the requirements of Section 1003.03 and 1003.10 of the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition.

Class II base course materials shall be compacted to a minimum of 95% of Maximum Dry Density near Optimum Moisture Content per ASTM D1557. Crushed No. 57 limestone shall be compacted to a minimum of 90% of the maximum dry unit weight as determined by ASTM D4253. All materials shall be free of roots, shells, or any other foreign matter. Granular material shall be AASHTO A-4 material or better. Geotextile fabric should be placed between the bedding materials and subgrade.

### 2.03 GEOTEXTILE FABRIC.

The Contractor shall furnish and install geotextile fabric as shown on the plans. Geotextile fabric shall conform to Section 02272 – Geotextile Fabric.

## PART 3 - EXECUTION

### 3.01 EXCAVATION

- A. Excavation shall be open cuts with vertical sides using sheeting and bracing or other means of trench protection. All trench protection for excavations shall be in accordance with OSHA regulations.
- B. In case the excavation for any pipeline is carried below the required depth as shown in the bedding details due to an error by the Contractor not for the purpose of removing stumps, roots, logs, etc., the Contractor shall fill and compact the bottom of the excavation up to grade with bedding material in a manner acceptable to the Engineer, without additional compensation for the materials, excavation or the backfilling.
- C. All material excavated shall be placed so as to minimize interference with public travel and to permit proper access for inspection of the work.

### 3.02 DISPOSAL OF MATERIALS

- A. Excavated material shall be stocked without excessive surcharge on the trench bank or obstructing free access to hydrants and valves. Inconvenience to traffic and abutters will not be allowed. Site drainage shall be maintained at all times.
- B. All excess excavated material shall be removed from the site of the work by the Contractor and disposed of at a legally approved off-site area at no cost to the Owner.

### 3.03 OVER-EXCAVATION TO REMOVE STUMPS, ROOTS, LOGS

- A. Stumps, roots, and logs, which are encountered within the trench area, shall be cut to a depth of up to two (2) foot below the bottom of the trench. The Contractor shall fill this excavated space with compacted bedding material as described in paragraph 3.06.
- B. When so required by the Engineer, the Contractor shall probe one (1) foot below the established bottom of the trench. If any stump, roots, logs, etc., are discovered by this probing, the Contractor shall cut them out just as if they had been visible in the trench.
- C. Blasting will not be allowed for the removal of stumps.

### 3.04 TEST PITS

Test pits for the purpose of locating underground utilities or structures in advance of the construction shall be excavated by the Contractor. Test pits shall be backfilled with compacted granular material immediately after the desired information has been obtained.

### 3.05 PIPE INSTALLATION

Water main installation shall be in accordance with Sections 02615, 02622, and 02623.

### 3.06 BACKFILLING AND BEDDING

- A. As soon as practicable after the pipe has been laid and jointed, backfilling shall begin and thereafter be prosecuted expeditiously. Bedding shall conform to the details on the Drawings or as established in the specifications. When laying pipe, the groove for the pipe and bell hole must be accurately shaped, and the bedding must be closely packed under and around the pipe.
- B. Bedding material shall be granular material placed and compacted as shown on the Drawings for trenches under roadway. The compaction of the bedding shall consist of the placement of the bedding in lifts not exceeding 8 inches and compacted to a minimum of 95% of the maximum dry density in accordance with ASTM D 1557.
- C. The remainder of the trench under roadway above the bedding shall be backfilled with granular material. Compaction shall be verified by the testing lab at a minimum of once every 400 feet. During such test, compaction shall be measured at each lift.
- D. Backfill around manholes shall be treated as in paragraph C above.
- E. Broken paving shall not be placed in backfill.

### 3.07 RESTORING TRENCH SURFACE

- A. Where the trench occurs adjacent to paved streets, under paved streets, in shoulders, sidewalks, or in open areas, the Contractor shall thoroughly compact the backfill and shall maintain the surface as the work progresses. If settlement takes place, he shall immediately deposit additional fill to restore the level of the ground.
- B. The surface of any driveway or any other area which is disturbed by the trench excavation and which is not a part of the paved street shall be restored by the Contractor to a condition at least equal to that existing before work began.
- C. In sections where the water main passes through grassed areas, the Contractor shall regrade and seed or sod all disturbed areas as specified in other sections or as directed by the Engineer.

END OF SECTION



SECTION 02272  
GEOTEXTILE FABRIC

PART 1 – GENERAL

1.01 SCOPE

This work consists of furnishing all labor, materials, equipment and incidentals required to furnish and install the geotextile fabric at the locations shown on the plans, or as directed, in conformance with manufacturer's directions and these specifications.

1.02 RELATED WORK

- A. Section 01340: Shop Drawings, Product Data, and Samples
- B. Section 02221: Excavation, Backfilling For Trenches, Pavement and Utility Structures

1.03 SUBMITTALS

The characteristics and properties of the geotextile fabric to be installed shall be submitted to the Engineer prior to the installation of the fabric in accordance with Section 01340.

PART 2 – PRODUCTS

2.01 ACCEPTABLE PRODUCTS

The geotextile fabric should meet or exceed the material requirements for Class D geotextile fabric as presented in Section 1019.01 of the Louisiana Standard Specifications for Roads and Bridges, 2016 edition.

2.02 MATERIALS

- A. The geotextile fabric shall be a non-woven high strength fabric with high burst and puncture strength. It shall be a non-woven fabric composed of at least 85% by weight polyester, polyolefins, or polyamides. Geotextile fabric shall meet the requirements as shown in the table below:

AOS Metric Sieve, $\mu\text{m}$ Min (ASTM D4751)	212
Grab Tensile, N, Min. (ASTM D 4632-86)	800
Elongation, Min. (ASTM D 4632-86)	50%
Burst Strength, N, Min. (ASTM D3787)	1290
Trapezoidal Tear, N, Min. (ASTM D 4533)	220
Puncture Resistance, N, Min. (ASTM D 4833)	330
Permittivity $\text{Sec}^{-1}$ , min. (ASTM 4491)	1.0

- B. The manufacturer of the geotextile fabric shall have been normally engaged in the manufacture of fabrication of this geotextile fabric for at least five continuous years.

## 2.03 FABRICATION

The geotextile fabric shall be furnished to the Contractor by the manufacturer as a continuous sheet in the widths required for installation in the trench. The length of each sheet shall be such that the total number of sheets to be joined in the field is minimized.

## PART 3 – EXECUTION

### 3.01 HANDLING

- A. The Contractor shall handle and store the sheets in accordance with the recommendations of the manufacturer to avoid any damage. Geotextile fabric shall be stored such that it is not exposed to sunlight.
- B. Damaged geotextile fabric will not be acceptable for installation until and unless it has been replaced to the satisfaction of the Engineer.

### 3.02 INSTALLATION

- A. The geotextile fabric shall be placed without folds or wrinkles and in accordance with manufacturer's recommendations. Laps shall be as recommended by the manufacturer but in no case shall be less than 24".
- B. The recommendations of the manufacturer shall be followed during the installation of the fabric. Care shall be taken during pipe laying, embedment and backfilling operations to avoid damage to the geotextile fabric. Any portion of the fabric damaged during installation shall be removed and replaced or repaired to the satisfaction of the Engineer prior to continuing the installation of the geotextile fabric.
  - 1. Field Joints. The number of field joints shall be minimized. Lap joints shall be used to join sections in the field.

END OF SECTION

SECTION 02350  
BASE COURSE

PART 1 - GENERAL

Installation and material of crushed stone Class II base course shall meet the requirements of Section 302 of the 2016 Edition of the Louisiana Department of Transportation and Development Standard Specifications for Roads and Bridges. It shall be compacted to 95% per ASTM D-698.

PART 2 - PRODUCT (NOT USED)

PART 3 - EXECUTION

Contractor is to compact the subgrade to the appropriate density of adjacent ground. Contractor is to install compacted crushed stone Class II base course to the thickness, lines and grades shown on the drawings or as directed by the Engineer.

END OF SECTION

revise

SECTION 02500  
ROADWAY, DRIVEWAY, AND SIDEWALK

PART 1 - GENERAL

1.01 DESCRIPTION

This section shall include the repair, construction, or reconstruction of all paved and unpaved roadway and driveway areas encountered on the project. This work will include replacement of pavements, aggregate surfaces, and other improvements removed or damaged by the Contractor during the course of his contract.

All construction materials and procedures shall conform to the Louisiana Standard Specifications for Roads and Bridges (DOTD), 2016 Edition and revisions to date, unless otherwise specified.

Also, drawings included in these contract documents reflect typical roadway restoration details.

Bituminous pavement sections replaced shall be sawcut at the limits for removal.

All pavements or other surfacing of driveways, which are damaged by the construction activities, shall be replaced as shown on the Plans to its preconstruction condition or better.

NOTICE: The Contractor is responsible for notifying the Project Engineer and the Department of Engineering, at least 24 hours in advance, of any placement of asphalt.

1.02 SUBMITTALS

The Contractor shall make submittals, for approval by the Engineer, on the following items:

1. Base course material.
2. Asphalt mix design.
3. Concrete mix design.
4. Load transfer devices.
5. Joint material.

PART 2 – MATERIALS

2.01 BASE COURSE

This work consists of furnishing and placing base course material for the roadway base as per plan details and paving schedules, and in accordance with the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition, unless otherwise specified.

Density tests will be taken on the roadway base materials. The Contractor shall not be allowed to restore the roadway until backfill material in the trench area has been compacted to 95% density per ASTM D698.

It will be the Contractor's responsibility to fill void areas in the existing road base material with

compacted granular material to establish a level uniform surface. This cost shall be included in the unit price for pavement work.

## 2.02 ASPHALT CONCRETE PAVING

All materials and construction under this section shall conform to:

1. Section 502 of the Louisiana Specifications for Roads and Bridges, 2016 Edition. The binder course shall be Level 1 and the wearing course shall be Level A.
2. Saw cutting at full depth will be required along the entire limits of the removed asphalt areas.

## 2.03 CONCRETE PAVEMENT

All materials and construction under this section shall conform to Section 03300 of these specifications and Section 601 of the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition, unless otherwise specified. In the case of any discrepancies, Section 03300 shall serve as the proper information to utilize.

All existing concrete curb, walks, and driveways shall be replaced with concrete to the line and grade as directed by the Engineer and to a thickness as indicated on the typical details shown on the plans. Prior to construction in an area, the Contractor shall adequately reference the existing curb and other pavement elevations to establish the preconstruction elevation. These pavement elevations shall be submitted to the Engineer for review and possible modification to improve drainage.

The restored paving elevations shall correspond to the elevations established prior to construction in the area, or as modified by the Engineer, to allow for drainage of the area.

Curbs and sidewalks shall be sawcut and removed to the nearest joint scorings unless shown otherwise in the drawings. All concrete streets shall be removed from joint to joint unless shown otherwise on the drawings. Driveways shall be removed from joint to joint unless shown otherwise on the drawings.

Portland Cement Concrete Requirements for roadway pavements shall be per St. Tammany Parish's standard mix design:

The pavement shall not be opened to traffic until a compressive strength of 4,000 psi is attained and in no case shall the pavement be opened to traffic within a three (3) day period after the concrete has been placed.

The final roadway surface finish shall be a "Drag Finish" as defined in the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition, or as otherwise directed by the City Engineer.

Portland Cement Concrete Requirements for sidewalks, driveways and curbs shall be per St. Tammany Parish's standard mix design.

Sidewalks shall not be opened to the public within a three (3) day period after the concrete is placed. The final sidewalk surface shall be a light broom finish.

## 2.04 GENERAL

Unless otherwise approved by the Engineer, the kind of pavement to be constructed in replacement work shall correspond with the kind removed from the area. The respective kind of concrete (asphalt or portland cement) shall be placed, shaped, compacted, and finished to establish grade and cross section by practicable means which will result in a dense, uniform-textured pavement. Abutting edges of old pavement shall be trimmed of all loose fragments and shall be painted with asphalt or thoroughly moistened with water, as appropriate, to provide good bond between the old and new pavement.

## 2.04 SPECIAL PAVING REQUIREMENTS

To provide for the comfort and safety of the traveling public, it is the Contractor's responsibility to backfill, with base course (stone) material, up to the top of the adjacent pavement and maintain it at that elevation until the roadway is closed to traffic during the street restoration work.

Maintenance shall consist of regrading a temporary base course surface material and of restoring said surface to proper grade and cross section daily or more frequently, as directed by the Engineer, together with wetting as required for dust abatement.

At the time of placing the pavement, excess foundation material shall be removed and shall be disposed of in a satisfactory manner. Paving of any area shall be completed on the day it is started, and the area shall be placed in service at the earliest practicable time. The Contractor is responsible for maintaining access to the residents of the area and shall inconvenience the affected property owners as little as possible.

At no time shall pavement material be placed in water or on saturated base material.

All work to be performed under this section shall be conducted with regard for public safety and maintaining traffic flow.

## 2.05 CUTTING OF PAVEMENT FOR TRENCH PATCHES

Concrete pavement sections shall be removed as shown on the drawings. Asphalt pavement structures shall be cut with a concrete saw along each edge of the area to be removed with the area being limited in width as shown in the plans.

Cuts shall be clean, vertical cuts made true to lines parallel to or at right angles of any existing curb line. Depths of the cuts shall be to full depth for the removal of pavement between or alongside them without damage to pavement or structures to be left in place. Any pavement damaged by the Contractor's operation shall be replaced at the Contractor's expense.

## 2.06 AGGREGATE ROADS, DRIVEWAYS AND WALKS

All existing aggregate roads, driveways, and shoulders removed shall be replaced to the same lines and grades with base course material to a compacted thickness of 6" on geotextile fabric or the thickness of the removed surfacing, whichever is greater in accordance with Section 401 and 302 of the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition, unless otherwise specified.

Density tests will be taken on the roadway base materials. The Contractor shall not be allowed to restore the roadway until backfill material in the trench area has been compacted to 95% density per ASTM D698.

It will be the Contractor's responsibility to fill void areas in the existing driveway material with compacted granular material to establish a level uniform surface. This cost shall be included in the unit price for pavement work.

## 2.07 TESTING REQUIREMENTS

### A. Asphalt Roadways and Driveways

1. No testing required..

### B. Concrete Sidewalks and Driveways

1. One slump test minimum per 200 cubic yards of concrete or fraction thereof.
2. Four (4) cylinders minimum per 200 cubic yards of concrete or fraction thereof.
3. Independent densities, slumps, cylinders, cores, etc., will be required for isolated areas.

C. All initial testing shall be performed by the Contractor's testing laboratory and at the Contractor's expense. When initial tests indicate non-compliance with the Contract Documents, perform subsequent retesting occasioned by the non-compliance by the same testing laboratory at the sole expense of the Contractor .

D. Joint Sealer: All joints in driveway surface shall be cleaned and sealed with approved joint sealant.

## 2.08 CLEANING FOR ACCEPTANCE OF STREET

Prior to acceptance, the Contractor shall be required to clean up any street that is dirtied as a result of construction activity, as directed by the Project Engineer.

## PART 3- EXECUTION (NOT USED)

END OF SECTION

SECTION 02515  
TRAFFIC MAINTENANCE AGGREGATE

PART 1- GENERAL

1.01 SCOPE OF WORK

This work consists of furnishing, constructing, and removing aggregate ramps and surfacing for maintenance of traffic in accordance with the following requirements.

PART 2- PRODUCTS

2.01 MATERIALS

Aggregate for maintenance of traffic shall be crushed stone, recycled Portland cement concrete or reclaimed asphaltic pavement satisfactory to engineer.

PART 3- EXECUTION

- 3.01 All work under this section not specified otherwise shall be performed in accordance with Section 402 of the Louisiana Standard Specifications for Roads and Bridges, 2016 edition, and latest revisions, or as amended herein.
- 3.02 Access to residences and businesses in the immediate construction area by way of temporary ramps and surfacing shall be established at the end of each workday. Unless directed by the Engineer, previously placed material removed to facilitate construction activities shall be stockpiled in the immediate area and reused for temporary ramps and surfacing as many times as is practical. New material shall be utilized only with the approval of the Engineer.
- 3.03 When temporary ramps and surfacing are no longer necessary for maintenance of traffic, or at the direction of the Engineer, the Contractor shall remove the material from the project and properly dispose of it. This material shall not be used in any other portion of the project without the expressed, written consent of the Engineer.

END OF SECTION



SECTION 02615  
DUCTILE IRON PIPE AND FITTINGS

PART 1 - GENERAL

1.01 SCOPE OF WORK

Furnish all labor, materials, equipment and incidentals required and install ductile iron pipe, and ductile iron fittings for buried piping complete as shown on the drawings and as specified herein.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01500: Construction Facilities and Temporary Controls
- B. Section 02221: Excavation, Backfilling for Trenches, Pavement & Structures.
- C. Section 09800: Protective Coatings, except as specified herein.

1.03 GOVERNING STANDARDS

- A. Except as modified or otherwise provided herein, the manufacture of ductile iron pipe shall be governed by AWWA C151, latest revision.
- B. All pipe manufacturers to be considered shall be experienced in producing pipe of the type, size and quality specified herein, with a minimum of at least five (5) years of successful performance.

1.04 SUBMITTALS

- A. The Contractor shall submit to the Engineer, within ten days after signing of the contract, a list of materials to be furnished, the names of the suppliers and the date of delivery of materials to the site.
- B. The Contractor shall submit for approval, as provided in the General Conditions, complete, detailed working drawings of all ductile iron pipe and fittings.
- C. Design calculations shall be submitted which ascertain conformance of pipe, fittings and joints with the referenced standards and these Specifications.
- D. Line laying schedule and marking diagrams which indicate the specific number of each pipe and fitting and the location of each pipe and the direction of each fitting in the completed line. In addition, the laying schedule shall include: the pipe station and invert elevation at all changes in grade or horizontal alignment; all elements of curves and bends, both in horizontal and vertical alignment; and the limits of each reach of restrained joints.
- E. The Contractor shall submit and shall comply with the recommendations of the pipe manufacturer for handling, storing, and installing pipe and fittings.
- F. Manufacturer will furnish Owner notarized certificates that pipe has been manufactured,

tested and inspected in accordance with applicable specifications.

- G. Mill Certificates. Certified mill certificates shall be furnished to the Engineer by the manufacturer for all pipe and fittings at least 10 days prior to shipment of pipe and fittings to jobsite.

## 1.05 QUALITY ASSURANCE

- A. Inspection: All pipe shall be subject to inspection at the place of manufacture.
- B. During the manufacture of the pipe, the Engineer shall be given access to all areas where manufacturing is in process and shall be permitted to make all inspections necessary to confirm compliance with the Specifications.
- C. Tests: Except as modified herein, all materials used in the manufacture of the pipe shall be tested in accordance with the requirements of AWWA C151, as applicable.
- D. The Contractor shall perform said material tests at no additional cost to the Owner. The Engineer shall have the right to witness all testing conducted by the Contractor, provided that the Contractor's schedule is not delayed for the convenience of the Engineer.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

- A. Ductile iron pipe shall be designed and manufactured in accordance with ANSI/AWWA C150/A21.50 and ANSI/AWWA C151/A21.51, Latest Revision subject to the following supplemental requirements. All pipes and fittings shall be designed for a 200 psi working pressure, 100 psi surge allowance. External loading for design shall be an earth cover of nine (9) feet with an AASHTO H-20 truck live load on unpaved road. The external loading shall be based on a soil density of 120 pounds per cubic foot and crushed stone bedding. Pipe shall be manufactured by American Ductile Iron Pipe, U.S. Pipe, or approved equal.
- B. Each pipe shall be subjected to a hydrostatic pressure test at the point of manufacture to a minimum of 75% of the yield strength for 18" and larger pipe.
- C. Where restrained joint pipe is required, "Fast Grip Gasket" as manufactured by American Ductile Iron Pipe, "TR-Flex" as manufactured by U.S. Pipe, or approved equal, shall be used. The length of restrained pipe shall be as tabulated or noted on the plans. Restrained joints shall be rated for a working pressure of 250 psi minimum. The manufacturer shall furnish test results showing that restrained joints in the sizes specified have been successfully tested to at least twice the specified pressure rating of the joint without leakage or failure. Tests shall be performed on pipe with metal thickness less than or equal to that specified for the project.
- D. Ductile iron fittings shall conform to the latest revisions of ANSI/AWWA C110/A21.10. or ANSI/AWWA C153/A21.53. Lining and coating for fittings shall be the same as specified for ductile-iron pipe. All fittings shall be ductile iron.

- E. Where restrained joint, high deflection fittings are required, "Xtra Flex" as manufactured by U.S. Pipe, or approved equal shall be used.
- F. All pipe, fittings, and accessories shall be installed and tested in accordance with the latest revision of AWWA C600.
- G. Unless approved by the Engineer, the maximum pipe laying length shall be 20 feet.
- H. All buried ductile iron pipe and fittings shall be encased in polyethylene encasement conforming to ANSI/AWWA C105.
- I. All pipe and fittings shall be manufactured in the United States.

## 2.02 COATING

- A. All ductile iron pipe shall conform to ANSI/AWWA A21.51/C151, ANSI/AWWA A21.50/C150 and "shall be minimum thickness Class 51 or greater" or "shall be minimum pressure Class 200 or greater ductile iron pipe in accordance with table below". All ductile iron pipes that will have less than 24" of cover shall be minimum thickness Class 52 restrained joint pipe. Ductile iron pipe shall have a factory cement mortar lining as per ANSI/AWWA A21.4/C104, and factory asphaltic exterior coating. Polyethylene encasement in accordance with ANSI/AWWA C105/A21.5 (minimum 8 mil thick) shall be required for all ductile iron pipes.

## 2.03 IDENTIFICATION

Each length of pipe and each fitting shall be marked with the name of manufacturer, size and class. All gaskets shall be marked with the name of manufacturer, size, and proper insertion direction.

## PART 3 - EXECUTION

### 3.01 LAYING DUCTILE IRON PIPE AND FITTINGS

- A. All buried piping shall be installed in accordance with recommendations of the pipe manufacturer and as specified herein.
- B. Care shall be taken in handling, storage, and installation of pipe and fittings to prevent injury to the pipe or coatings. All pipe and fittings shall be examined before laying, and no piece shall be installed which is found to be defective. All damage to the pipe coatings shall be repaired according to the manufacturer's recommendations.
- C. All pipe and fittings shall be kept clean and shall be thoroughly cleaned before laying.
- D. Pipe shall be laid to lines and grades shown on the drawings with bedding and backfill as shown on the drawings. Blocking under the pipe will not be permitted.
- E. Under no circumstances shall the pipe or accessories be dropped into the trench.

- F. Bell holes shall be formed at the ends of the pipe to prevent point loading at the bells and to facilitate installation. Excavation shall be made as needed outside the normal trench section at field joints to permit adequate access for the joints for connection operations and for application of coating on field joints.
- G. Each section of pipe shall be laid in the order and position shown on the laying schedule. In laying pipe, it shall be laid to the set line and grade, within approximately one inch plus or minus. On grades of zero slope, the intent is to lay to grade.
- H. Where necessary to raise or lower the pipe due to unforeseen obstructions or other causes, the Engineer may change the alignment and/or the grades. Such change shall be made by the deflection of joints, by the use of bevel adapters, or by the use of additional fittings. However, in no case shall the deflection in the joint exceed the maximum deflection recommended by pipe manufacturer. No joint shall be misfit any amount which will be detrimental to the strength and water tightness of the finished joint.

### 3.02 TESTING

- A. All water mains shall be field tested. The Contractor shall supply all labor, equipment, material, gages, pumps, and incidentals required for testing.
- B. The test pressure shall be 1.5 times the working pressure unless noted otherwise. The test pressure shall be measured at the highest point along the test section.
- C. Testing shall be conducted after backfilling has been completed and before placement of permanent surface.
- D. Testing procedure shall be as follows:
  - 1) Fill line slowly with water. Maintain flow velocity less than two feet (2') per second.
  - 2) Expel air completely from the line during filling and again before applying test pressure. Air shall be expelled by means of taps at points of highest elevation.
  - 3) Apply test pressure. Measure the quantity of water that must be pumped into the line to maintain pressure within 5 psi of the test pressure for a period of two (2) hours. This quantity is defined as leakage.
  - 4) Carefully examine any exposed pipe, fittings, and joints during the test.
- E. Allowable leakage: No pipe installation will be accepted if the leakage is greater than that determined by the following formula:

$$L = \frac{S D P^{1/2}}{133200}$$

L = Loss Gal/hr.

S = Length of pipe tested, in feet

D = Nominal diameter in inches

P = Average test pressure

Notes: The following shall be determined at the discretion of the Engineer.

- 1) Minimum Test pressure of 100 psig unless otherwise noted.
- 2) Test duration shall be a minimum of two hours.
- 3) All visible leaks are to be repaired regardless of the amount of leakage.

F. If any test of pipe laid discloses leakage greater than that allowed, the Contractor shall, at his own expense, locate and repair the cause of leakage and retest the line.

G. All visible leaks are to be repaired regardless of the amount of leakage.

H. All testing shall be in accordance with AWWA C600.

### 3.03 CLEANING

At the conclusion of the work, the Contractor shall thoroughly clean all of the new pipelines by flushing with water or other means to remove all dirt, stones, pieces of wood, or other material which may have entered during the construction period. Debris cleaned from the lines shall be removed from the job site. If, after this cleaning, any obstructions remain, they shall be removed.

END OF SECTION

SECTION 02622  
POLYVINYL CHLORIDE PIPE

PART 1 - GENERAL

1.01 RELATED WORK

1.02 DESCRIPTION

- A. The Contractor shall furnish and install the polyvinyl chloride (PVC) pipe along with labor, materials and equipment necessary for installation in accordance with the Plans and Specifications.

1.03 REFERENCES

- A. ASTM D1784
- B. ASTM D1785
- C. ASTM F441
- D. AWWA C-900
- E. AWWA C-905

1.04 SUBMITTALS

- A. Certified mill tests shall be furnished to the Engineer by the manufacturer for all pipe and fittings at least 10 days prior to shipment of material to the job site.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Pipe:
  - 1. All polyvinyl chloride (PVC) pipe shall be extruded from PVC meeting the requirements of cell classification 12454-B as defined in ASTM D1784.
  - 2. All polyvinyl chloride (PVC) pipe used to transport potable water shall be in accordance with AWWA C-900 for sizes 4" to 12" (DR18 Class 235).
- B. Fitting and Specials:
  - 1. The strength class of the fitting shall be not less than the strength of any adjoining pipe.

C. Joints:

1. The pipe will have integral bell elastomeric gasketed joints in accordance with ASTM F477. The gaskets shall be inserted into the pipe bell at the factory prior to shipment.

D. Protective Coatings:

1. No protective coating will be required on polyvinyl chloride (PVC) pipe.

E. Restrained Joints:

1. Polyvinyl chloride (PVC) pipe shall be restrained using the Series 1100 PV or 1100 HV MEGALUG mechanical joint thrust restraint as manufactured by EBAA Iron, Inc. or approved equal (if under pressure).
2. The EBAA Iron Series 1100 PV or 1100 HV MEGALUG assembly shall be cast completely of closely controlled ductile iron conforming to ASTM A536, latest revision, and furnished with silicone bronze IFI 140 Grade 655 bolts. All glands and bolts shall be coated with two (2) coats of coal tar epoxy, Koppers 300-M Bitumastic or approved equal, with a minimum dry film thickness of eight (8) mils per coat.
3. Both types of restraining glands shall be wrapped with an eight (8) mil thick polyethylene tube for additional protection. The polyethylene wrap shall extend a minimum of two (2') feet in either direction from the gland and secured on the end with circumferential turns of tape.
4. All restrained joints shall be inspected at the job site after installation. Field touch-up and repair if needed shall be made by the Contractor under the supervision and inspection of a representative of the coating supplier.

## PART 3 - EXECUTION

### 3.01 TESTING AND INSPECTION

- A. All new and/or modified segments of the water distribution system shall be tested to a pressure of 50% above the normal operating pressure or 100 P.S.I. Whichever is greater. This pressure shall be maintained for a period of two (2) hours with no discernible pressure loss. Leaks shall be repaired by removing and replacing faulty sections. The pressure test shall be performed by the contractor under the direct supervision of the St. Tammany Parish Department of Utilities. Before being placed in service, all new, modified and/or contaminated segments of the water distribution system shall be flushed and disinfected (chlorinated) by the contractor under the direct supervision of the St. Tammany Parish Department of Utilities.

Flushing should be done at flow rates sufficient to provide a velocity in the lines of at least 2.5 feet per second. Disinfection should comply with AWWA Standard C651, "disinfecting water mains".

In order to minimize backflow (back siphon, back pressure) or undesired reversal of the flow of unclean liquids into the drinking water distribution system, as a minimum, the use of a single check valve is required during flushing. When practical (mains up to 12" in diameter) a floater meter must be used for flushing. Utilizing a floater meter will provide the necessary backflow prevention and also will help the parish to account for the water use. As always, the contractor will not be charged for using any reasonable amount of water for flushing.

Only after satisfactory pressure testing and disinfection (chlorination), and successful bacteriological analysis is completed can the segment be tied into the existing water distribution system. Under no circumstances will the contractor be allowed to make a tie-in to the existing water distribution system without direct supervision of the St. Tammany Parish Department of Utilities. All costs associated with the testing and chlorination procedures shall be the responsibility of the contractor.

Typically, the contractor will not be charged for the water used to flush, pressure test and chlorinate the system. The contractor will be charged for the excess water when the water distribution system will require an excess amount of water to be properly flushed, pressure tested and chlorinated, due to negligence of the contractor.

END OF SECTION



SECTION 02623  
HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS

PART 1 – GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required and install high density polyethylene (HDPE) pipe and fittings complete as shown on the Drawings and as specified herein.

1.02 RELATED WORK

- A. Section 02221 – Excavation, Backfilling for Trenches, Pavement, and Utility Structures
- B. Section 02760 – Directional Drilling

1.03 SUBMITTALS

- A. Submit to the Engineer, in accordance with Section 01340, the following information:
  - 1. List of materials to be furnished, the names of the suppliers and the date of delivery of materials to the site.
  - 2. The origin of the resin to be used in the manufacturing of the pipe including the supplier's name and production plant, as well as brand name and number.
  - 3. Documentation from the resin's manufacturer showing results of the following tests for resin identification:
    - a. Melt Flow Index – ASTM D1238
    - b. Density – ASTM D1505
  - 4. Manufacturer quality control manual describing implementation of quality control procedures during pipe manufacturing process.
  - 5. Pipe manufacturer's certification of compliance with this Section.
  - 6. One complete, detailed shop drawing of all polyethylene pipe, including the location of all fittings, joints and connections to structures.
  - 7. Manufacturer's recommendations for handling, storing and installing pipe and fittings.
  - 8. For each shipment of pipe of manufacturer's certification that the pipe was manufactured from the same resins identified in Paragraph 1.03A2 above.
  - 9. Name, address and telephone number for manufacturer and distributor.

- B. Submit Contractor's plan for pressure testing the installed pipe in accordance with these specifications at least 10 days prior to testing.

#### 1.04 REFERECE STANDARDS

##### A. American Society for Testing and Materials (ASTM)

1. ASTM D1238 – Standard Method for Flow Rates Thermoplastics by Extrusion Plastometer.
2. ASTM D1248 – Standard Specification for Polyethylene Plastic Molding and Extrusion Materials.
3. ASTM D1505 – Standard Test Method for Density of Plastics by the Density-Gradient Technique.
4. ASTM D1603 – Standard Test Method for Carbon Black in Olefin Plastics.
5. ASTM D2657 – Standard Practice for Heat-Joining Polyolefin Pipe and Fittings.
6. ASTM D2837 – Standard Test Method of Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials.
7. ASTM D3350 – Standard Specifications for Polyethylene Plastic Pipe Fittings Materials.
8. ASTM F714 – Standard Specifications for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter.

##### B. American National Standards Institute (ANSI)

1. ANSI B16.1 – Cast Iron Fittings and Flanged Fittings.
2. ANSI B16.21 – Non-Metallic Flat Gaskets for Pipe Flanges.

- C. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

#### 1.05 QUALITY ASSURANCE

- A. All HDPE pipe and fittings shall be manufactured by a single manufacturer who is fully experienced, reputable and qualified in the manufacturer of the polyethylene pipe to be furnished. All HDPE pipe and fittings shall be supplied by a single distributor who is fully experienced, reputable, and qualified with the distribution of the pipe to be furnished. The pipe shall be designed, constructed, and installed in accordance with the best practices and methods and shall comply with these specifications.
- B. All HDPE pipe to be installed under this Contract may be inspected at the factory for compliance with this Section by an independent testing laboratory provided by the Owner. The manufacturer's cooperation shall be required in these inspections. The

cost of these plant inspections of all pipe approved for this Contract, plus the cost of inspection of a reasonable amount of disapproved pipe, will be borne by the Owner.

- C. Inspection of the pipe may also be made by the Engineer or other representatives of the Owner after delivery. The pipe shall be subject to rejection at any time on account of failure to meet any of the specified requirements, even though pipes may have been accepted as satisfactory at the place of manufacture. Pipe rejected after delivery shall be marked for identification and shall immediately be removed from the job.

D. Resin Evaluations

1. All incoming resin shall be sampled for conformance testing against test results supplied by the resin manufacturer. Samples shall be taken from the top and bottom of each compartment from every hopper car received. The following conformance tests shall be performed on the sample:
  - a. Melt Flow Index – ASTM D1238
  - b. Density – ASTM D1505
  - c. The results of these tests shall become part of the manufacturer's permanent quality control records.

E. Finished Product Evaluation

1. Each length of pipe produced shall be checked by production staff for the items listed below. The results of all measurements shall be recorded on production sheets that become part of the manufacturer's permanent records.
  - a. Pipe in process shall be checked visually, inside and out for cosmetic defects, (grooves, pits, hollows, etc.).
  - b. Pipe outside diameter shall be measured using a suitable periphery tape to ensure conformation with ASTM P714.
  - c. Pipe wall thickness shall be measured at 12 equally spaced locations around the circumference at both ends of the pipe to ensure conformance with ASTM F714.
  - d. Pipe length shall be measured.
  - e. Pipe marking shall be examined and checked for accuracy.
  - f. Pipe ends shall be checked to ensure they are out square and clean.
  - g. Subject inside surface to a "reverse and test" to ensure the pipe is free of oxidation (brittleness).

F. Stress Regression Testing

1. The polyethylene pipe manufacturer shall provide certification that stress regression testing has been performed on the specific polyethylene resin being utilized in the manufacturer of this product. This stress regression testing shall have been done in accordance with ASTM D2837 and the manufacturer shall provide a product supplying a minimum Hydrostatic Design Basis (HDB) of 1600 psi as determined in accordance with ASTM D2837.

## 1.06 WARRANTY

A. The pipe manufacturer shall provide a warranty against manufacturing defects of material and workmanship for a period of ten years after the final acceptance of the project by the Owner. The manufacturer shall replace, at no additional cost to the Owner, any defective pipe material within the warranty period.

## PART 2 - PRODUCT

### 2.01 MATERIALS

#### A. Pipe

1. HDPE pipe is a flexible conduit and shall be designed to transfer imposed loads to the surrounding embedment medium. The pipe and fittings shall be free from all defects including indentations, delaminations, cracks, bubbles, pinholes, inclusions or occlusions which, due to their nature, degree, or extent, detrimentally affect the strength and serviceability of the pipe. Any pipe or fittings with such defects that, in the judgment of the Engineer, will affect the strength and serviceability shall be required or rejected.
2. All Polyethylene Pipe (PE) water main and fittings shall meet or exceed requirements of ASTM D-1248, ASTM D-2239, ASTM D-2513, latest revisions, and applicable U.S. Department of Transportation Pipeline Safety Codes for specifications, tolerances, and all applicable regulations. All PE pipe and fittings shall have a DR rating of 11 with a minimum melt index of 1.5 under condition "F" of ASTM D-1238 and a minimum Environmental Stress Cracking Resistance of 5000 hours under Condition "C" of ASTM D-1693. Pipe and fittings shall be PE 4710 as manufactured by US Fusion or approved equal and shall have butt fused joints. A letter shall be submitted to ENGINEER by material manufacturer prior to Award of Contract certifying that materials to be furnished meets or exceeds the requirements of these specifications.
3. The polyethylene compound shall be suitably protected against degradation by ultraviolet light as required by ASTM D1603.
4. The pipe shall meet the dimension requirements of the Dimension Ratio: DR11.
5. All polyethylene pipe shall meet the requirements of ASTM F714.
6. The pipe shall be joined with butt, heat fusion joints. All joints shall be made in strict compliance with the manufacturer's recommendations.
7. All high-density polyethylene with the manufacturer's recommendations.
8. Fittings shall be fully pressure rated to match the pipe DR pressure rating. All fittings shall be molded or fabricated by the manufacturer.

## 2.02 PIPE IDENTIFICATION

- A. The following shall be continuously indent printed on the pipe or spaced at intervals not exceeding 5-ft:
1. Name and/or trademark of the pipe manufacturer.
  2. Nominal pipe size.
  3. Dimension ratio.
  4. The letters PE followed by the polyethylene grade in accordance with ASTM D1248, followed by the hydrostatic design basis in 100's of psi, e.g., PE 4710.
  5. Manufacturing standard reference, e.g., ASTM F714.
  6. A production code from which the date and place of manufacture can be determined.

## PART 3 – EXECUTION

### 3.01 HANDLING

- A. Handling and laying of pipe and fittings shall be in accordance with the manufacturer's instruction and as specified herein.
- B. Pipes shall be stored on clean level ground, preferably turf or sand, free of sharp objects that could damage the pipe. Stacking of the polyethylene pipe shall be limited to a height that will not cause excessive deformation of the bottom layers of pipes under anticipated temperature conditions. Where necessary, due to ground conditions, the pipe shall be stored on wooden sleepers, spaced suitably and of such width as not to allow deformation of the pipe at the point of contact with the sleeper or between supports.
- C. Care shall be taken in loading, transporting, and unloading to prevent injury to the pipe. The handling of the pipe shall be in such a manner that the pipe is not damaged by dragging it over sharp and cutting objects. Ropes, fabric or rubber protected slings and straps shall be used when handling pipes. Chains, cables or hooks inserted in the pipe ends shall not be used. Two slings spread apart shall be used for lifting each length of pipe. Slings shall not be positioned at butt-fused joints. Pipe or fittings shall not be dropped.
- D. All pipe or fittings shall be examined before laying and no piece shall be installed which is found to be defective. The maximum allowable depths of cuts, scratches or gouges on the exterior of the pipe are 10 percent of wall thickness. The interior pipe surface shall be free of cuts, gouges or scratches. Any damage to the pipe shall be repaired as directed by the Engineer. If any defective pipe section is discovered after it has been laid, it shall be removed completely and the ends of the pipeline rejoined, at the Contractor's expense.

### 3.02 LAYING PIPE AND FITTINGS

- A. All pipe and fittings shall be thoroughly cleaned before laying, shall be kept clean until they are used in the work and when laid, shall conform to the lines and grades shown on the Drawings.
- B. All pipe shall be sound and clean before laying (or hanging). Good alignment shall be preserved in laying. The deflection shall not exceed that recommended by manufacturer.
- C. When laying is not in progress, including during lunchtime, the open ends of the pipe shall be closed by watertight plugs or other approved means. All plugs shall be OD fitting plugs. No plugs will be allowed that require insertion of the plug into the pipe.
- D. When cutting pipe is required, the cutting shall be done by a machine, leaving a smooth cut at right angles to the axis of the pipe.
- E. The pipe shall be joined by the method of thermal butt fusion, as outlines in ASTM D2657. All joints shall be made in strict compliance with the manufacturer's recommendations by a factory qualified joining technician as designated by the pipe manufacturer with a minimum of three years experience with the fusion equipment to be used.
- F. Fittings shall be connected to HDPE pipe in accordance with manufacturer's recommendations.

### 3.03 TESTING

- A. All testing shall be conducted in accordance with St. Tammany Parish Department of Utilities standards.
- B. All new and/or modified segments of the water distribution system shall be tested to a pressure of 50% above the normal operating pressure or 100 P.S.I. Whichever is greater. This pressure shall be maintained for a period of two (2) hours with no discernible pressure loss. Leaks shall be repaired by removing and replacing faulty sections. The pressure test shall be performed by the contractor under the direct supervision of the St. Tammany Parish Department of Utilities. Before being placed in service, all new, modified and/or contaminated segments of the water distribution system shall be flushed and disinfected (chlorinated) by the contractor under the direct supervision of the St. Tammany Parish Department of Utilities.

Flushing should be done at flow rates sufficient to provide a velocity in the lines of at least 2.5 feet per second. Disinfection should comply with AWWA Standard C651, "disinfecting water mains".

In order to minimize backflow (back siphon, back pressure) or undesired reversal of the flow of unclean liquids into the drinking water distribution system, as a minimum, the use of a single check valve is required during flushing. When practical (mains up to 12" in diameter) a floater meter must be used for flushing. Utilizing a floater meter will provide the necessary backflow prevention and also will help the parish to account for

the water use. As always, the contractor will not be charged for using any reasonable amount of water for flushing.

Only after satisfactory pressure testing and disinfection (chlorination), and successful bacteriological analysis is completed can the segment be tied into the existing water distribution system. Under no circumstances will the contractor be allowed to make a tie-in to the existing water distribution system without direct supervision of the St. Tammany Parish Department of Utilities. All costs associated with the testing and chlorination procedures shall be the responsibility of the contractor.

Typically, the contractor will not be charged for the water used to flush, pressure test and chlorinate the system. The contractor will be charged for the excess water when the water distribution system will require an excess amount of water to be properly flushed, pressure tested and chlorinated, due to negligence of the contractor.

- C. The following test pressures and durations will be required as a minimum, based on the normal operating pressure of 60 psi:
- initial expansion phase, pressure: 130 psi, for three (3) hours
  - test phase, pressure 120 psi, for one (1) hour

Immediately following the initial expansion phase, reduce test pressure by 10 psi, and stop adding test liquid.

If test pressure remains steady [(within 5% of the target value), (for example 6 psi for the target value of 120 psi)] for one (1) hour, no leakage is indicated.

### 3.04 CLEANING

- A. At the conclusion of the work, the Contractor shall thoroughly clean all new pipelines by flushing the water to remove any foreign material, which may have entered during the construction period. Debris cleaned from the lines shall be removed from the job site. Contractor will be responsible for the cost of the water to flush pipes.

### 3.05 TIE-INS TO EXISTING FACILITIES

- A. Contractor shall provide the OWNER and ENGINEER a proposed time schedule and construction procedure for his anticipated construction force for each tie-in. Before any work is performed at those locations, the CONTRACTOR shall have prior approval of his detailed written plan, schedule and procedure by the OWNER.
- B. The method used to make the tie-ins to the existing facilities must be approved by the St. Tammany Parish Department of Utilities and Project Engineer prior to construction of the tie-ins. Line stoppers when required shall be welded line stopper fittings manufactured by Mueller or approved equal.
- C. The new water main must be pressure tested, inspected, and approved by the OWNER/ENGINEER before any new valves are opened and the cutting and plugging of the existing water main or tie-ins are performed. All tie-ins must be performed in the presence of OWNER or his representative after notice of at least twenty-four (24) hours is given.

- D. All tie-ins shall include all necessary transition fittings and plug for cut plug operation.
- E. CONTRACTOR shall complete the water main changeover with minimum inconvenience to the Owner. CONTRACTOR shall ensure prior to transferring the service that all proper fittings and pipe are available.

END OF SECTION



SECTION 02624  
TRACER WIRE

PART 1 – GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required and install tracer wire complete as shown on the Drawings and as specified herein.

1.02 RELATED WORK

- A. Section 02221 – Excavation, Backfilling for Trenches, Pavement, and Utility Structures
- B. Section 02615 – Ductile Iron Pipe & Fittings
- C. Section 02622 – Polyvinyl Chloride Pipe
- D. Section 02623 – High Density Polyethylene Pipe & Fittings
- E. Section 02760 – Directional Drilling

1.03 SUBMITTALS

- A. Submit to the Engineer, in accordance with Section 01340, the following information:
  - 1. List of materials to be furnished, the names of the suppliers and the date of delivery of materials to the site.
  - 2. Manufacturer's certification of compliance with this Section.
  - 3. Manufacturer's recommendations for handling, storing and installing tracer wire.
  - 4. Name, address and telephone number for manufacturer and distributor.

1.06 WARRANTY

- A. The manufacturer shall provide a warranty against manufacturing defects of material and workmanship for a period of two years after the final acceptance of the project by the Owner. The manufacturer shall replace, at no additional cost to the Owner, any defective pipe material within the warranty period.

PART 2 - PRODUCT

2.01 MATERIALS

- A. All trace wire and trace wire products shall be domestically manufactured in the U.S.A.

- B. All trace wire shall have HDPE insulation intended for direct bury, color coated per APWA standard for the specific utility being marked.
- C. All non-metallic pipe shall be marked with an electronic tracer wire and a detector tape. Tracer shall be laid directly over the pipe and shall terminate in valve boxes or pipeline markers. Detector tape shall be placed in the trench during backfilling and shall be placed about 12 inches from the top of the ground.
- D. Tracer wire used with pipe shall be 14-gauge single strand copper with THWN coating for buried service. Splices in the tracer wire shall be made using a waterproof mechanical splice kit specifically designated for underground connections to electrical or telephone wiring. Splice connection methods shall be approved by the Engineer prior to use.
- E. Detector tape shall be color coded, foil backed and printed with the marking "WARNING/CAUTION WATER LINE BURIED BELOW." Detector tape shall be laid in the trench while backfilling and shall be placed about 12 inches from the top of the ground.
- F. Trace Wire - Open Trench – Trace wire shall be #12 AWG Copper Clad Steel, High Strength with minimum 450 lb. break load, with minimum 30 mil HDPE insulation thickness.
- G. Trace Wire - Directional Drilling/Boring – Trace wire shall be #12 AWG Copper Clad Steel, Extra High Strength with minimum 1,150 lb. break load, with minimum 30 mil HDPE insulation thickness.
- H. Products - The following products to choose the correct applications for the tracer wire project.
  - 1. Copper clad Steel (CCS) trace wire:
    - a. Open Trench – Copperhead #12 High Strength part # 1230\*-HS\*\*
    - b. Directional Drilling/Boring – Copperhead Extra High Strength part # 1245\*-EHS\*\*
    - c. Pipe Bursting/Slip lining – Copperhead SoloShot Extreme Strength 7 x 7 Standard part # PBX-50\*.-\*\*
      - i. \*Denotes color: B=Blue, G=Green, P=Purple
      - ii. \*\*Denotes spool size: 500' 1000' 2500'
  - 2. Connectors
    - a. Copperhead 3-way locking connector part # LSC1230\*
    - b. DryConn 3-way Direct Bury Lug: Copperhead Part # 3WB-01
  - 3. Termination/Access
    - a. Non-Roadway access boxes applications: Trace wire access boxes Grade level Copperhead adjustable lite duty Part # LD14\*TP
    - b. Concrete / Driveway access boxes applications: Trace wire access boxes Grade level Copperhead Part # CD14\*TP 14"
    - c. Fire hydrants trace wire access box applications: Above ground two terminal Cobra Test Station, denoting "F" include hydrant mounting flange.

Copperhead part # T2\*-FLPKG-5/8 to fit hydrants with 5/8" bolts and T2\*-FLPKG-3/4 to fit hydrants with 3/4" bolts.

4. Grounding
  - a. Drive in Magnesium Anode: Copperhead Part # ANO-12 (1.5 lb)

#### I. Connectors

1. All mainline trace wires must be interconnected in intersections, at mainline tees and mainline crosses. At tees, the three wires shall be joined using a single 3-way lockable connector. At Crosses, the four wires shall be joined using a 4-way connector. Use of two 3-way connectors with a short jumper wire between them is an acceptable alternative.
2. Direct bury wire connectors shall include 3-way lockable connectors and mainline to lateral lug connectors specifically manufactured for use in underground trace wire installation. Connectors shall be dielectric silicon filled to seal out moisture and corrosion and shall be installed in a manner so as to prevent any uninsulated wire exposure.
3. Non locking friction fit, twist on or taped connectors are prohibited.

#### J. Termination/Access

1. All trace wire termination points must utilize an approved trace wire access box (above ground access box or grade level/in-ground access box as applicable), specifically manufactured for this purpose.
2. All grade level/in-ground access boxes shall be appropriately identified with "sewer" or "water" cast into the cap and be color coded.
3. A minimum of 2ft. of excess/slack wire is required in all trace wire access boxes after meeting final elevation.
4. All trace wire access boxes must include a manually interruptible conductive/connective link between the terminal(s) for the trace wire connection and the terminal for the grounding anode wire connection.
5. Grounding anode wire shall be connected to the identified (or bottom) terminal on all access boxes.
6. Service Laterals on public property – Trace wire must terminate at an approved grade level/in-ground trace wire access box, located at the edge of the road right-of-way, and out of the roadway.
7. Service Laterals on private property – Trace wire must terminate at an approved above-ground trace wire access box, affixed to the building exterior directly above where the utility enters the building, at an elevation not greater than 5 vertical feet above finished grade, or terminate at an approved grade level/in-ground trace wire access box, located within 2 linear feet of the building being served by the utility.

8. Hydrants – Trace wire must terminate at an approved above-ground trace wire access box, properly affixed to the hydrant grade flange. (affixing with tape or plastic ties shall not be acceptable)
9. Long-runs, in excess of 500 linear feet without service laterals or hydrants – Trace wire access must be provided utilizing an approved grade level/in-ground trace wire access box, located at the edge of the road right-of-way, and out of the roadway. The grade level/in-ground trace wire access box shall be delineated using a minimum 48” polyethylene marker post, color coded per APWA standard for the specific utility being marked.

#### K. Grounding

1. Trace wire must be properly grounded at all dead ends/stubs.
2. Grounding of trace wire shall be achieved by use of a drive-in magnesium grounding anode rod with a minimum of 20ft of #12 red HDPE insulated copper clad steel wire connected to anode (minimum 1.5 lb.) specifically manufactured for this purpose and buried at the same elevation as the utility.
3. When grounding the trace wire at dead ends/stubs, the grounding anode shall be installed in a direction 180 degrees opposite of the trace wire, at the maximum possible distance.
4. When grounding the trace wire in areas where the trace wire is continuous and neither the mainline trace wire or the grounding anode wire will be terminated at/above grade, install grounding anode directly beneath and in-line with the trace wire. Do not coil excess wire from grounding anode. In this installation method, the grounding anode wire shall be trimmed to an appropriate length before connecting to trace wire with a mainline to lateral lug connector.
5. Where the anode wire will be connected to a trace wire access box, a minimum of 2ft. of excess/slack wire is required after meeting final elevation.

### PART 3 – EXECUTION

#### 3.01 GENERAL

- A. Trace wire installation shall be performed in such a manner that allows proper access for connection of line tracing equipment, proper locating of wire without loss or deterioration of low frequency (512Hz) signal for distances in excess on 1,000 linear feet, and without distortion of signal caused by multiple wires being installed in close proximity to one another.
- B. Trace wire systems must be installed as a single continuous wire, except where using approved connectors. No looping or coiling of wire is allowed.
- C. Any damage occurring during installation of the trace wire must be immediately repaired by removing the damaged wire and installing a new section or wire with approved connectors. Taping and/or spray coating shall not be allowed.

- D. Trace wire shall be installed at the bottom half of the pipe and secured (taped/tied) at 5' intervals.
- E. Trace wire must be properly grounded as specified.
- F. Trace wire on all service laterals/stubs must terminate at an approved trace wire access box located directly above the utility, at the edge of the road right-of-way, but out of the roadway. (See Trace wire Termination/Access)
- G. At all mainline dead-ends, trace wire shall go to ground using an approved connection to a drive-in magnesium grounding anode rod, buried at the same depth as the trace wire. (See Grounding)
- H. Mainline trace wire shall not be connected to existing conductive pipes. Treat as a mainline dead-end, ground using an approved waterproof connection to a grounding anode buried at the same depth as the trace wire.
- I. All service lateral trace wires shall be a single wire, connected to the mainline trace wire using a mainline to lateral lug connector, installed without cutting/splicing the mainline trace wire.
- J. In occurrences where an existing trace wire is encountered on an existing utility that is being extended or tied into, the new trace wire and existing trace wire shall be connected using approved splice connectors and shall be properly grounded at the splice location as specified.

### 3.02 WATER SYSTEM

- A. A mainline trace wire must be installed, with all service lateral trace wires properly connected to the mainline trace wire, to ensure full tracing/locating capabilities from a single connection point.
- B. Lay mainline trace wire continuously, by-passing around the outside of valves and fittings on the North or East side.
- C. Trace wire on all water service laterals must terminate at an approved trace wire access box color coded blue and located directly above the service lateral at the edge of road right-of-way.
- D. Above-ground tracer wire access boxes will be installed on all fire hydrants.
- E. All conductive and non-conductive service lines shall include tracer wire.

### 3.03 PROHIBITED PRODUCTS AND METHODS

- A. The following products and methods shall not be allowed or acceptable:
  - 1. Uninsulated trace wire
  - 2. Trace wire insulations other than HDPE
  - 3. Trace wires not domestically manufactured
  - 4. Non locking, friction fit, twist on or taped connectors

5. Brass or copper ground rods
6. Wire connections utilizing taping or spray-on waterproofing
7. Looped wire or continuous wire installations, that has multiple wires laid side-by-side or in close proximity to one another
8. Trace wire wrapped around the corresponding utility
9. Brass fittings with trace wire connection lugs
10. Wire terminations within the roadway, i.e. in value boxes, cleanouts, manholes, etc.
11. Connecting trace wire to existing conductive utilities

#### 3.04 TESTING

- A. All new trace wire installations shall be located using typical low frequency (512Hz) line tracing equipment, witnessed by the contractor, engineer and facility owner as applicable, prior to acceptance of ownership.
- B. This verification shall be performed upon completion of rough grading and again prior to final acceptance of the project.
- C. Continuity testing in lieu of actual line tracing shall not be accepted.

END OF SECTION

SECTION 02760  
DIRECTIONAL DRILLING

PART 1 – GENERAL

1.01 SCOPE OF WORK

- A. The work covered by this section of the Specifications consists of plant, labor, equipment, and materials, and performing all operations in connection with the installation of high-density polyethylene pipe by the use of the horizontal directional drilling method complete. The work shall be done in strict accordance with this and other applicable sections of the Specifications, all applicable drawings, and subject to the terms and conditions of the contract.

1.02 QUALITY ASSURANCE

- A. Polyethylene pipe jointing shall be performed by personnel trained in the use of joint fusion recommended methods for pipeline connections. Personnel directly involved with installing the pipe shall receive training in the proper methods for handling, inserting, trimming and finishing the pipe.

1.03 SUBMITTALS

- A. The Contractors shall develop a summary work plan report and proposed profile drawing(s) for the installation by directional drilling. The summary report should include the proposed staging area(s), fusing/laydown area(s), traffic impacts, resident access impacts, pedestrian impacts, boring and receiving pit locations, fracking control procedures and anticipated schedule(s). The Contractor's proposed work plan and profile drawing shall be subject to review and written approval by Owner. The profile drawing and drilling work plan shall be submitted to the Engineer at least fourteen (14) days prior to start the construction. It will be the Contractor's responsibility to determine the entry pilot hole and exit location within the permitted locations shown on the drawings as approved by the Engineer. It will be the Contractor's responsibility to determine the staging, laydown and fusing areas.

A Suggested Site Staging Locations and/or Plan is provided in the plans for contractor's use. Contractor may alter this plan or derive a completely different plan to complete the directional drilling operations. As stated above, this plan will be reviewed for approval by Owner and Engineer.

- A. Shop drawings, catalog data and manufacturer's technical data showing complete information on material composition, physical properties and dimensions of pipe fittings shall be submitted. Include manufacturer's recommendation for handling, storage and repair of pipe fittings if damaged.
- B. Contractor shall submit calculations showing design of pipe wall strength based on amount of pull back required for the pipe installation. The pullback force shall not exceed 50% of the pipe tensile strength. The radius of bending shall be no less than 1,800 feet and in compliance with radius of bending recommended by pipe manufacturer. The pipe shall be designed for a minimum of 1.25 times the specified pressure.

- C. Contractor shall coordinate with the St. Tammany Parish Department of Utilities / Project Engineer and any affected Landowners during his layout, submittal and execution of the drilling procedure.
- D. Contractor shall also include any traffic detours and pipe laying strategies into Contractor's boring plan submittal although a separate traffic plan must still be submitted.

## Part 2 – PRODUCTS

### 2.01 POLYETHYLENE PIPES

- A. Contractor shall use DR-11 HDPE, Ductile Iron Pipe Size (D.I.P.S.)
- B. All HDPE to be in accordance with Section 02623.

## PART 3 – EXECUTION

### 3.01 LAUNCHING AND RECEIVING PITS

- A. The approximate locations of all expected launching and receiving pits are to be shown in the plans. The actual number and location of the pits shall be decided by the Contractor and approved by the Engineer prior to excavation.
- B. Launching and receiving pits shall be backfilled with compacted granular material and the surrounding area restored in accordance with the appropriate sections of these specifications.
- C. Excess drilling fluids shall be contained at entry and exit pits until recycled or removed from the site. Entry and exit pits should be of sufficient size to contain the expected return of drilling fluids and soil cuttings. If pit size is limited by field conditions, contractor shall submit an alternative drilling fluids and soil cuttings management plan to engineer for approval.

### 3.02 UTILITY COORDINATOR

- A. Before any excavation is done for any purpose, it will be the responsibility of the Contractor to check with the various utility companies and determine the location of their facilities. Any necessary temporary construction easements and/or right-of-way areas will be arranged by the Contractor at no cost to the Owner.
- B. Contractor is responsible for maintaining a list of all project related utility companies and contact information on project site at all times.
- C. Contractor is responsible for immediately notifying utility companies, owner, and engineer in the event of boring into a natural gas line, live power cable, water main, sewer lines, and/or fiber optic cable.

### 3.03 DIRECTIONAL DRILLED REQUIREMENTS



- A. The pilot hole shall be drilled along the path shown on the plan and profile drawing. The pilot hole tolerance are as follows:
1. Elevation: 15 feet below ground surface (maximum depth measured to top of outside wall of HDPE pipe) unless shown otherwise on the plans or approved by the Engineer in writing.
  2. Alignment + or – 2 feet
  3. Curve Radius: The pilot hole shall be drilled at a radius of no less than 1,800 feet and in compliance with manufacturer’s recommendations.
  4. Entry Point Location: The pilot hole shall initially penetrate the ground surface area at the exact location shown on the drawings or approved by the Engineer.
  5. Exit Point Location: The pilot hole shall finally penetrate ground surface within + or – 2 feet of the alignment shown on the drawing and within +15 feet and – 0 feet of the length shown on the drawings.
- B. The Contractor shall at all times provide and maintain instrumentation which will accurately locate the pilot hole (both horizontal and vertical displacement points), measure drill string axial and torsional loads, and measure drilling fluid discharge rate and pressure. A wire line and wire line specialist shall be used to accurately locate the horizontal and vertical position of the pilot hole. The Engineer will have access to these instruments and their readings at all times during the drilling and pull back operations. A final “as-built” plan and profile shall be submitted to the Engineer within ten (10) days after completing the pull back. The Contractor shall also furnish a copy of the drilling at this time.
- C. Pre-reaming operations shall be conducted at the discretion of the Contractor. All provisions of these specifications relating to simultaneous reaming and pulling back operations shall also pertain to pre-reaming operations.
- D. The maximum allowable tensile load imposed on the pull section shall not exceed 90% of the product of the specified minimum yield strength of the pipe and the area of the pipe section, or the requirements of Paragraph 1.03 C.
- E. A swivel shall be used to connect the pull section to the assembly to minimize torsional stress imposed on the section.
- F. The pull back section of the pipeline shall be supported as it proceeds during pull back so that it moves freely, and the pipe is not damaged.
- G. The pull back section shall be installed in the reamed hole in such a manner that external pressures are minimized. Any damage to the pipe resulting from external pressure during installation shall be the responsibility of the Contractor.
- H. Buoyancy modification shall be used at the discretion of the Contractor. Any buoyancy modification procedure proposed for use shall be submitted to the Engineer for approval. No procedure shall be used that has not been approved by the Engineer.

The Contractor is responsible for any damage to the pull section resulting from buoyancy modification.

- I. The contractor shall minimize overcutting of the borehole during reaming operations. The contractor is responsible, at no expense to the owner, for repairing any settlement damage caused by drilling operations to conditions equal to or better than the pre-existing condition.

#### 3.04 DRILLING FLUIDS AND WATER

- A. Prior to drilling operations, contractor must submit a drilling fluid management plan to engineer for approval. At a minimum, the plan shall contain the following information:
  1. Identify source of fresh water for mixing the drilling mud.
  2. Describe contractor's method of slurry containment.
  3. Describe contractor's method of recycling drilling fluid and spoils.
  4. Describe method of transporting drilling fluids and spoils offsite.
- B. All drilling fluids, mud or other chemicals used by Contractor must be submitted to Engineer for approval. No fluid will be approved or utilized that does not comply with permit requirements and environmental regulations. The contractor shall use a reclaimer to reclaim drilling fluids utilized for the installation.
- C. The contractor shall ensure that all drilling fluids are disposed of in a manner acceptable to appropriate local, state, and federal agencies.
- D. Operations shall be conducted to minimize blow throughs to the surface or "fracking out." Clean up of drilling fluids and the associated cost and disposal shall be the responsibility of the Contractor.
- E. Any damage caused by drilling equipment, heaving, settlement, and/or "fracking out" shall be repaired by the Contractor at no expenses to the Owner to a condition equal to or better than it's pre-existing condition.
- F. Contractor shall take precautions to keep drilling fluids out the streets, manholes, sanitary and storm sewers, and water bodies.

#### 3.05 FRACTURING AND RETURN LOSS CONTROL AND REMEDIATION

- A. In the event that a drilling fluid fracture (frac out), inadvertent returns or returns loss occurs during HDD operations, Contractor shall cease operations; notify Engineer and all appropriate regulatory agencies. HDD Operations shall not continue until the Engineer and/or Owner are satisfied the Contractor has appropriate responses and solutions for existing fracture clean-up and future fracture sites.
- B. Contractor shall immediately contain and clean-up drilling fluid loss prior to continuing HDD operations. Contractor shall prevent drilling fluids from entering streets, adjacent properties, streams or other water bodies and municipal storm or sanitary sewer lines, manholes and drainage structures.

- C. At no time will fracking material be allowed to enter the drainage system. If fracking material inadvertently enters the drainage system, the contractor shall clean by mechanical or manual means and methods all effected drainage structures, pipes or canals to the satisfaction of the Engineer and/or the St. Tammany Parish Department of Utilities personnel in a timely manner.
- D. Contractor will dedicate personnel to continuously monitor the drilling alignment for fractures. Contractor shall have ample equipment, material and personnel on hand to expeditiously contain and clean all “fracking” sites. The contractor shall make a concentrated effort to remove as much fracking material as possible by mechanical or manual means and methods. Fracking material shall be disposed of in a legal manner. The washing or hosing down of fracking material will not be permitted. Upon acceptable cleanup of fracking sites, sand, seed and/ or sod will be used to remediate the area(s) to their original condition.
- E. No additional payment shall be made for cleanup costs required by Owner, Engineer, or regulatory agencies due to loss of drilling fluid.
- F. If mud fracture or returns loss continues, Contractor will cease operations, notify Engineer to discuss additional options to control or minimize the loss and work will then proceed accordingly.

### 3.06 TESTING

- A. Pipe shall be tested both before and after installation in accordance with Section 02623.

### 3.07 GENERAL

- A. The Contractor shall be responsible for any damage to pipes, utilities, roadways, sidewalks, driveways, landscaping, canal banks, etc., that may be caused by drilling operations. This includes any damage caused by “fracking out.” The Contractor shall take all steps necessary to minimize or avoid “fracking out” and shall be responsible for clean up of all drilling fluids and damage should it occur.
- B. The maximum depth of installation for the directionally drilled pipe shall be 15’-0” except at French Branch and Doubloon Branch crossings. Should maintenance ever be required on the water main, the owner has an interest in maintaining the installation no deeper than 15’-0”. The Contractor shall be responsible for hiring his own geotechnical engineer to calculate the safe installation depth that will not cause significant damage to surrounding structures. Should it be determined that the geotech recommend installation depth be deeper than 15-0” to avoid significant damage, the contractor shall submit calculations and data explaining such for the owner and engineer to review. Submittal of the information does not guarantee that installation deeper than 15-0” will be allowed and regardless of approval or not, the Contractor will still be responsible for all associated damages resulting from boring operations. In no instance, except at bore pit locations, shall the pipe be installed via directional drilling less than 5’-0” deep.

END OF SECTION

SECTION 02950  
LANDSCAPING

PART 1 - GENERAL

1.01 RELATED WORK NOT INCLUDED

- A. Construction Photographs

1.02 DESCRIPTION

- A. The Contractor shall furnish all labor, materials, and equipment to satisfactorily return all construction areas to their original conditions or better.
- B. The work includes furnishing and placing topsoil, fertilizer, seeding, hydroseeding, or sod, planting, watering, and maintenance of these areas.

1.03 QUALITY ASSURANCE

- A. Requirements

It is the intent of this specification that the Contractor is obliged to deliver satisfactory stand of perennial grass as specified. If necessary, the Contractor shall repeat any or all of the work, including plowing, fertilizing, seeding, hydroseeding, or sodding, and watering, at no additional cost to the Owner until a satisfactory stand is obtained.

- B. Satisfactory Stand

For purposes of grassing, a satisfactory stand of grass is herein defined as a full cover over areas to be seeded, hydroseeded, or sodded with grass free of weeds, alive and growing, leaving no bare spots.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Fertilizer

Slow-release type meeting the following minimum requirements: 12 percent nitrogen, 3 percent phosphorus, 6 percent potassium; 40 percent other available materials derived from organic sources. Fertilizer shall be uniform in composition, dry and free flowing delivered to sites in original unopened containers bearing manufacturer's statement or guarantee.

- B. Seed and Hydroseeding

Seed and Hydroseeding shall be in accordance with Louisiana Standard Specifications for Roads and Bridges, 2016 edition.

C. Sod

When not specified, sod shall be the same type as existing adjacent grass.

D. Topsoil

Topsoil stockpiled during excavation shall be used. If additional topsoil is required, it shall be obtained off site at Contractor's expense. Topsoil shall be fertile, natural surface soil, capable of producing all trees, plants, and grassing specified herein.

E. Water

It is the Contractor's responsibility to supply all water to the site, as required during planting operations and through the maintenance period and until the work is accepted. The Contractor shall make whatever arrangements may be necessary to ensure an adequate supply of water to meet the needs for his work. He shall also furnish all necessary hose, equipment, attachments, and accessories for the adequate irrigation of lawns and planted areas as may be required. Water shall be suitable for irrigation and free from ingredients harmful to plant life.

### PART 3 - EXECUTION

#### 3.01 TIME OF PLANTING

When the trench backfill has compacted sufficiently, the Contractor shall commence work immediately to minimize erosion, including fine grading as required.

#### 3.02 SOIL PLACEMENT

Areas shall be plowed to a depth of 6". Depressions shall be filled and sticks and rubbish removed. Following subgrade preparation topsoil shall be spaced evenly 4" thick over planting areas; prepare surface by raking or other means so as to establish smooth finish grade with positive drainage. Apply 20 lbs of 12-3-6 fertilizer per 1000 sq ft.

#### 3.03 FINISH GRADING

Areas to be seeded shall be finished graded, raked, and debris removed. Soft spots and uneven grades shall be eliminated. Seeds shall be placed within 24 hours following application of fertilizer. SWPPP will remain in effect until the seed is placed.

#### 3.04 REGRASSING

A. Preparation of Subgrade: Unless otherwise specified, subsoil shall be graded and uniformly compacted so that it will be parallel to proposed finished grade.

#### 3.05 CLEANUP

Soil or similar materials brought onto paved areas shall be removed promptly, keeping these areas as clean as possible at all times. During completion of planting operations, all excess soil, stones, and

debris remaining shall be promptly removed from the construction areas specifically, from the right-of-way.

### 3.06 LANDSCAPE MAINTENANCE

Maintain landscape work for a period of 90 days immediately following complete installation of work or until Owner accepts project. Include watering, weeding, cultivating, restoration of grade, mowing and trimming grass, protection from insects and diseases, fertilizing and similar operations as needed to ensure normal growth and good health for live plant material.

### 3.07 REPAIRS TO LAWN AREAS DISTURBED BY CONTRACTOR'S OPERATIONS

Areas seeded under this Contract and all areas damaged by the Contractor's operation shall be repaired at once by proper soil preparation, fertilizing, and seeding, in accordance with these Specifications.

END OF SECTION

SECTION 02999  
MISCELLANEOUS WORK AND CLEANUP

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. This section includes operations, which cannot be specified in detail as separate items but can be sufficiently described as to the kind and extent of work involved. The Contractor shall furnish all labor, materials, equipment and incidentals to complete the work under this section.
- B. The work of the section includes, but is not limited to, the following:
  - 1. Restoring of fences and guard rails
  - 2. Crossing utilities
  - 3. Restoring easements (servitudes) and rights-of-way
  - 4. Cleaning up
  - 5. Incidental work

1.02 WORK SPECIFIED UNDER OTHER SECTIONS

All work shall be completed in a workmanlike manner by competent workmen in full compliance with all applicable sections of these specifications.

PART 2 - PRODUCTS

2.01 MATERIALS

Materials required for this section shall be of at least the same type and quality as materials which are to be restored. Where possible, the Contractor shall reuse existing materials which are removed and then replaced, with the exception of paving.

PART 3 - EXECUTION

3.01 RESTORING OF FENCES

It may be necessary for the Contractor to remove, store and replace existing fences during construction. Only the section directed by the Engineer shall be removed. If any section of fence is damaged due to the Contractor's negligence, it shall be replaced with fencing equal to or better than that damage at no cost to the Owner, and the work shall be satisfactory to the Engineer.

3.02 CROSSING UTILITIES

This item shall include any extra work required in crossing culverts, water courses, drains, water mains, and other utilities, including all sheeting and bracing, extra excavation and backfill, or any other work required for the crossing, whether or not shown on the drawings.

3.03 CROSSING OR WORKING ADJACENT TO EXISTING GAS LINES, TELEPHONE LINES, ELECTRIC LINES, AND CABLE TV LINES

The Contractor shall notify the proper authority of the utility involved when work adjacent to these lines is required. The Contractor shall coordinate all work by the utility so that the progress of construction will not be hampered. Contractor is to notify the utility company at least 48 hours in advance.

3.04 RESTORING THE EASEMENTS (SERVITUDES) AND RIGHTS-OF-WAY

A. Portions of the construction occur in easements through private property. The Contractor shall be responsible for all damage to private property due to his operations. Contractor shall protect from injury all walls, fences, cultivated shrubbery, pavement, underground facilities, such as water pipe, or other utilities which may be encountered along the easement. If removal and replacement are required, it shall be done in a workmanlike manner so that the replacement is equivalent to that which existed prior to construction.

B. Existing lawn surfaces damaged by construction shall be regraded and resodded. These areas shall be maintained until all work under this contract has been completed and accepted.

3.05 CLEANING UP

The Contractor shall remove all construction material, excess excavation, buildings, equipment and other debris remaining on the job as a result of construction operations and shall render the site of the work in a neat and orderly condition.

3.06 INCIDENTAL WORK

Do all incidental work not otherwise specified, but obviously necessary, for the proper completion of the contract as specified and as shown on the drawings.

END OF SECTION



SECTION 03100  
CONCRETE FORMWORK

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Formwork for cast-in place concrete, with shoring, bracing and anchorage.
- B. Form accessories.
- C. Form stripping.

1.02 PRODUCTS INSTALLED BUT NOT FURNISHED UNDER THIS SECTION

- A. Section 03300 - Cast-In-Place Concrete: Supply of concrete accessories for placement by this Section.

1.03 RELATED SECTIONS

- A. Section 03200 - Concrete Reinforcement.
- B. Section 03300 - Cast-in-Place Concrete.

1.04 REFERENCES

- A. ACI 347 - Recommended Practice For Concrete Formwork.
- B. PS-1 - Construction and Industrial Plywood.

1.05 DESIGN REQUIREMENTS

- A. Design, engineer, and construct formwork, shoring and bracing to conform to design and code requirements; resultant concrete to conform to required shape, line and dimension.

1.06 SUBMITTALS

- A. Submit under provisions of Section 01340.
- B. Shop Drawings: Submit diagram of proposed construction joints not shown on Drawings.
- C. Product Data: Provide data on form release agent, void form materials and installation requirements.

1.07 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 347, 301, and 318.
- B. Maintain one copy of each document on site.

## 1.08 QUALIFICATIONS

- A. Design, engineer and construct forms, shores, bracing and other temporary supports to support loads imposed during construction in accordance with ACI 347. Design formwork under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State of Louisiana.

## 1.09 REGULATORY REQUIREMENTS

- A. Conform to applicable code for design, fabrication, erection and removal of formwork.

## 1.10 FIELD SAMPLES

- A. Provide under provisions of Section 01410. Coordinate with requirements stated in Section 03300.

## 1.11 DELIVERY, STORAGE, AND HANDLING

- A. Delivery, storage, and handling of products shall be in accordance with provisions of Section 01600.
- B. Deliver void forms and installation instructions in manufacturer's packaging.
- C. Store materials off ground in ventilated and protected manner to prevent deterioration from moisture.

## 1.12 COORDINATION

- A. Coordinate this Section with other Sections of work which require attachment of components to formwork.

## PART 2 - PRODUCTS

### 2.01 WOOD FORM MATERIALS

- A. Plywood: New, waterproof, synthetic resin bonded, exterior type Douglas Fir or Southern Pine plywood manufactured especially for concrete formwork and shall conform to the requirements of PS 1 for concrete forms, Class I, and shall be edge sealed. Face adjacent to concrete Grade B or better.
- B. Lumber: Southern Pine species; No. 2 grade; with grade stamp clearly visible.

### 2.02 MANUFACTURERS - RELEASE AGENTS

- A. Richmand Screw Anchor Co.
- B. Superior Concrete Accessories, Inc.; Strip-eez Form Release.

- C. Preco Industries, LTD; Preco Slip-Off.
- D. Substitutions: Under provisions of Section 01630.

### 2.03 PREFABRICATED FORMS

- A. Preformed Steel Forms: Minimum 16 gage matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.
- B. Glass Fiber Fabric Reinforced Plastic Forms: Matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished concrete surfaces.
- C. Void Forms: Moisture resistant treated paper faces, biodegradable, structurally sufficient to support weight of wet concrete mix until initial set; 4 inches thick.

### 2.04 FORMWORK ACCESSORIES

- A. Form Release Agent: Colorless liquids which will not stain concrete, or absorb moisture, or impair natural bonding or color characteristics of coating intended for use on concrete.
- B. Corners: Chamfered rigid plastic or wood strip type; 1/2 x 1/2 inch size unless noted otherwise; maximum possible lengths.
- C. Nails, Spikes, Lag Bolts, Through Bolts, and Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.
- D. Joint Filler: Preformed type, 1/2 inch thick, unless shown otherwise.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Verify lines, levels and centers before proceeding with formwork. Ensure that dimensions agree with Drawings.

### 3.02 EARTH FORMS

- A. Earth forms shall not be used.

### 3.03 ERECTION - FORMWORK

- A. Erect formwork, shoring and bracing to achieve design requirements, in accordance with requirements of ACI 301.
- B. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to overstressing by construction loads.

- C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.
- D. Align joints and make watertight. Keep form joints to a minimum.
- E. Obtain approval before framing openings in structural members which are not indicated on Drawings.
- F. Install void forms in accordance with manufacturer's recommendations. Protect forms from moisture or crushing.

#### 3.04 APPLICATION - FORM RELEASE AGENT

- A. Apply form release agent on formwork in accordance with manufacturer's recommendations.
- B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
- C. Do not apply form release agent where concrete surfaces will receive special finishes or applied coverings which are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces soaked prior to placement of concrete.

#### 3.05 INSERTS, EMBEDDED PARTS, AND OPENINGS

- A. Provide formed openings where required for items to be embedded in or passing through concrete work.
- B. Locate and set in place items which will be cast directly into concrete.
- C. Coordinate work of other Sections in forming and placing openings, slots, recesses, chases, sleeves, bolts, anchors, and other inserts.
- D. Install accessories in accordance with manufacturer's instructions, straight, level, and plumb. Ensure items are not disturbed during concrete placement.

#### 3.06 FORM CLEANING

- A. Clean and remove foreign matter within forms as erection proceeds.
- B. Clean formed cavities of debris prior to placing concrete.
- C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.
- D. During cold weather, remove ice and snow from within forms. Do not use de-icing salts or water to clean out forms. Use compressed air or other means to remove foreign matter.

### 3.07 FORMWORK TOLERANCES

- A. Construct formwork to maintain tolerances required by ACI 301.

### 3.08 FIELD QUALITY CONTROL

- A. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.
- B. Do not reuse wood formwork more than 3 times for concrete surfaces to be exposed to view. Do not patch formwork.

### 3.09 FORM REMOVAL

- A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.
- B. Minimum Curing Period Prior to Form Removal:
  - 1. Air Temperature: Above 60°F: 3 days.
  - 2. Air Temperature: 50°F to 60°F: 5 days.
  - 3. Air Temperature: 40°F to 50°F: 7 days.
  - 4. Air Temperature: Less than 40°F: When temperature below 40°F prevails, leave forms until concrete reaches 75% of 28-day design strength.
- C. Observance of minimum curing periods listed above does not relieve Contractor of responsibility for safety of structure during construction.
- D. Remove wood forms from under floors, ramps, steps, and similar places (through temporary openings if necessary) so no material will be left to rot or to be infested by termites.
- E. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- F. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.

END OF SECTION

SECTION 03200  
CONCRETE REINFORCEMENT

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Reinforcing steel bars, wire fabric and accessories for cast-in-place concrete.

1.02 RELATED SECTIONS

- A. Section 03100 - Concrete Formwork.
- B. Section 03300 - Cast-in-Place Concrete.

1.03 REFERENCES

- A. ACI 301 - Structural Concrete for Buildings.
- B. ACI 315 - Details and Detailing for Concrete Reinforcement.
- C. ACI 318 - Building Code Requirements For Reinforced Concrete.
- D. ACI SP-66 - American Concrete Institute - Detailing Manual.
- E. ANSI/ASTM A82 - Cold Drawn Steel Wire for Concrete Reinforcement.
- F. ANSI/ASTM A185 - Welded Steel Wire Fabric for Concrete Reinforcement.
- G. ANSI/ASTM A496 - Deformed Steel Wire Fabric for Concrete Reinforcement.
- H. ANSI/ASTM A497 - Welded Deformed Steel Wire Fabric for Concrete Reinforcement.
- I. ASTM A615 - Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- J. CRSI - Concrete Reinforcing Steel Institute Manual of Practice.
- K. CRSI 63 - Recommended Practice For Placing Reinforcing Bars.
- L. CRSI 65 - Recommended Practice For Placing Bar Supports, Specifications and Nomenclature.
- M. AWS D1.4 - Structural Welding Code Reinforcing Steel.

1.04 SUBMITTALS

- A. Submit under provisions of Section 01340.
- B. Shop Drawings: Indicate bar sizes, spacings, locations, and quantities of reinforcing steel

and wire fabric, bending and cutting schedules, and supporting and spacing devices. Comply with Part B, Chapter 3 of ACI 315 for preparation of shop drawings.

- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

#### 1.05 QUALITY ASSURANCE

- A. Perform Work in accordance with CRSI 63, 65 and Manual of Practice ACI 301, ACI SP-66 and ACI 318.
- B. Maintain one copy of each document on site.
- C. Submit certified copies of mill test report of reinforcement materials analysis.

#### 1.06 COORDINATION

- A. Coordinate with placement of formwork, formed openings and other Work.

### PART 2 - PRODUCTS

#### 2.01 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615, 60 ksi yield grade; deformed billet steel bars, plain finish.
- B. Welded Steel Wire Fabric: ASTM A185 Plain Type in flat sheets; plain finish.

#### 2.02 ACCESSORY MATERIALS

- A. Tie Wire: Minimum 16 gage annealed type.
- B. Chairs, Bolsters, Bar Supports, and Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions including load bearing pad on bottom to prevent vapor barrier puncture.
- C. Special Chairs, Bolsters, Bar Supports, and Spacers Adjacent to Weather Exposed Concrete Surfaces: Plastic coated steel type; size and shape as required.

#### 2.03 FABRICATION

- A. Fabricate concrete reinforcing in accordance with CRSI Manual of Practice, ACI SP-66 and ACI 318.
- B. Welded reinforcement (AWS D 1.4): Do not weld reinforcement in the shop or field unless approved in writing by the Engineer.
- C. Locate reinforcing splices not indicated on Drawings, at point of minimum stress. Review location of splices with Engineer.

### PART 3 - EXECUTION

#### 3.01 PLACEMENT

- A. Perform concrete reinforcement work in accordance with CRSI Manual of Standard Practice and Documents 63 and 65.
- B. Place, support and secure reinforcement against displacement. Do not deviate from required position.
- C. Do not displace or damage vapor barrier.
- D. Accommodate placement of formed openings.
- E. Conform to applicable code for concrete cover over reinforcement.
- F. Damaged, missing, and/or new dowel bars (longitudinal / traverse) and Starlugs shall be replaced, 1-1/8" x 18" painted smooth dowel bars on 12" on centers shall be used unless directed otherwise by the Engineer. The bars shall be drilled and doweled into the existing pavement by drilling 1-1/2" holes to a depth of 9" and filling with an approved epoxy grout before insertion of the dowel bars.

#### 3.02 FIELD QUALITY CONTROL

- A. Field inspection will be performed under provisions of Section 01410.

END OF SECTION



SECTION 03300  
CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Cast-in-place concrete.
- B. Control, and expansion and contraction joint devices associated with concrete work.
- C. Equipment pads, drainage structures, thrust blocks, and mechanical supports.

1.02 RELATED SECTIONS

- A. Section 03100 - Concrete Formwork: Formwork and accessories.

1.03 REFERENCES

- A. ACI 212 - Chemical Admixtures for Concrete.
- B. ACI 301 - Structural Concrete for Buildings.
- C. ACI 302 - Guide for Concrete Floor and Slab Construction.
- D. ACI 304 - Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete.
- E. ACI 305R - Hot Weather Concreting.
- F. ACI 306R - Cold Weather Concreting.
- G. ACI 308 - Standard Practice for Curing Concrete.
- H. ACI 309R - Guide for Consolidation of Concrete.
- I. ACI 318 Building Code Requirements for Reinforced Concrete.
- J. ANSI/ASTM D994 - Preformed Expansion Joint Filler for Concrete (Bituminous Type).
- K. ANSI/ASTM D1751 - Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
- L. ASTM C31 - Standard Method of Making and Curing Concrete Test Speciment in the field.
- M. ASTM C33 - Concrete Aggregates.
- N. ASTM C39 - Compressive Strength of Cylindrical Concrete Specimens.

- O. ASTM C94 - Ready-Mixed Concrete.
- P. ASTM C109 - Standard Test Method for Hydraulic Cement Mortars.
- Q. ASTM C138 - Standard Test Method for Unit Weight, Yield, and Air Content (Gravimetric) of Concrete.
- R. ASTM C143 - Test for Slump of Portland Cement Concrete.
- S. ASTM C150 - Portland Cement.
- T. ASTM C171 - Sheet Materials for Curing Concrete.
- U. ASTM C172 - Compressive Strength of Cylindrical Concrete Specimens.
- V. ASTM C173 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.
- W. ASTM C231 - Test Method for Air Content of Freshly Mixed Concrete by Pressure Method.
- X. ASTM C260 - Air Entraining Admixtures for Concrete.
- Y. ASTM C309 - Liquid Membrane - Forming Compounds for Curing Concrete.
- Z. ASTM C494 - Chemical Admixtures for Concrete.
- AA. ASTM C618 - Fly Ash and Raw or Calcinated Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete.

#### 1.04 SUBMITTALS

- A. Submit under provisions of Section 01340.
- B. Product Data: Provide data on joint devices, attachment accessories, and proposed admixtures.
- C. Concrete Manufacturer shall perform and submit the following:
  - 1. Mix Design - In advance of concrete operations, materials proposed for use in concrete will be sampled and tested to determine their compliance with these specifications. Mix proportions shall be reviewed by the laboratory for each strength and type of concrete required and reports submitted to the Engineer for approval, showing the mix designs. Submit mix design in accordance with ACI 301.
  - 2. Include the following information in concrete mix design:
    - a. Proportions of cement, fine and coarse aggregate, and water.
    - b. Water-cement ratio, 3-day and/or 28-day compressive and design strength,

- slump, and air content.
- c. Type of cement and aggregate.
- d. Aggregate gradation.
- e. Type and dosage of admixtures.
- f. Special requirements for pumping.
- g. Range of ambient temperature and humidity for which design is valid.
- h. Special characteristics of mix which require precautions in mixing, placing, or finishing techniques to achieve finished product specified.

#### 1.05 TESTS

- A. Required testing will be performed in accordance with ACI 301 by Testing Laboratory employed and paid by Owner.
  - 1. Provide free access to Work and cooperate with appointed firm.
  - 2. Submit proposed mix design of each class of concrete to testing firm for review prior to commencement of Work. Tests of cement and aggregates may be performed to ensure conformance with specified requirements.
  - 3. Notify Testing Laboratory 24 hours prior to proposed concrete pour. Testing Laboratory shall be present at every concrete pour.
- B. Testing firm will:
  - 1. Review the Contractor's proposed materials and mix design.
  - 2. Conduct strength tests:
    - a. Secure composite samples (ASTM C172).
    - b. Mold, cure specimens from each sample (ASTM C31). A minimum of four concrete test cylinders shall be taken for every 100 or less cu. yds. of each class of concrete placed each day and not less than once for each 5000 sq. ft. of surface area for slabs.
    - c. Test cylinders in accordance with ASTM C39. Two specimens will be tested at 28 days for acceptance and one will be tested at 7 days for information. One specimen will be retained in reserve for later testing if required.
  - 3. Conduct slump tests: At least one slump test will be taken for each set of four test cylinders taken (ASTM C143).
  - 4. Conduct air content tests: At least one air content test will be made when slump test is taken in accordance with either ASTM C231, ASTM C173, or ASTM C138.
  - 5. Conduct temperature tests: Determine temperature of concrete sample for each strength test.

#### 1.06 PROJECT RECORD DOCUMENTS

- A. Contractor shall keep a record of “As-Builts” drawings to the satisfaction of the Engineer which is to be submitted at the end of project to the Parish Engineer.
- B. Accurately record actual locations of embedded utilities and components which are concealed from view.

#### 1.07 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301 and ACI 304.
- B. Maintain one copy of each document on site.
- C. Acquire cement and aggregate from same source for all work.
- D. Conform to ACI 305R when concreting during hot weather.
- E. Conform to ACI 306R when concreting during cold weather.

#### 1.08 COORDINATION

- A. Coordinate work under provisions of Section 01041.
- B. Coordinate the placement of joint devices with erection of concrete formwork and placement of form accessories.

### PART 2 - PRODUCTS

#### 2.01 GENERAL

All concrete shall be placed to the line and grade as directed by the Engineer and to a thickness as indicated on the typical details shown on the plans. Portland Cement Concrete Requirements for roadway pavements shall be per the St. Tammany Parish’s standard mix design. The concrete shall be placed, shaped, compacted, and finished to establish grade and cross section by practicable means which will result in a dense, uniform-textured pavement.

#### 2.02 CONCRETE MATERIALS

- A. Cement: ASTM C150, Type II.
- B. Fine and Coarse Aggregates: ASTM C33.
- C. Water: Clean potable water.

## 2.03 ADMIXTURES

- A. Air Entrainment: ASTM C260.
- B. Chemical: Admixtures for normal weight concrete may be used providing the requirements of ACI 212 are met and written approval from the Engineer is obtained by the Contractor.

## 2.04 ACCESSORIES

- A. Bonding Agent: Two component modified epoxy resin; n-solvent two component polysulphide epoxy manufactured by Sika Chemical Corporation.
- B. Vapor Barrier: 6 mil thick clear polyethylene film type recommended for below grade application.
- C. Non-Shrink Grout: Premixed, non-shrinking, high strength grout compound consisting of non-metallic aggregate, cement, water reducing, plasticizing agents and free of gypsum; compressive strength of 5,000 psi in 28 days.
- D. Epoxy Bonding Agent: ASTM C881
  - 1. Concessive 1001 LPL by Adhesive Engineering Co.
  - 2. Uniweld by Permagile.
  - 3. EVA-POX HI MOD GEL #23 by E-Poxy Industries, Inc.

## 2.05 CURING COMPOUNDS

- A. Membrane Curing Compound ASTM C309 Type 1.
- B. Manufacturers -
  - 1. Curecrete Chemical Company; Ashford Formula
  - 2. Sonneburn-Contech; Kure-N-Seal
  - 3. W. R. Grace; Clear Seal 150
  - 4. L & M Construction Chemicals; Seal Hard
  - 5. Gifford-Hill; Sealco.
- C. Substitutions: Under provisions of Section 01630.
- D. Water: Potable and not detrimental to concrete.

## 2.06 CONCRETE MIX

- A. Mix and deliver concrete in accordance with ACI 304 and ASTM C94.
- B. Provide concrete to the following criteria per cubic yard of concrete:
  - 1. 28-day strength concrete – 4,000 psi
  - 2. Cement (ASTM C-150, Type I/II): 4.64 sacks (436 lbs.)
  - 3. Fly Ash (ASTM C-618): 1.16 sacks (109 lbs.)
  - 4. Gravel (ASTM C-33, Grade A): 1,775 lbs.

5. Sand (ASTM C-33): 1,226 lbs.
  6. Water (potable): 30 gallons (250 lbs.)
  7. Type A Water Reducer (ASTM C-494): 16.35 lbs.
  8. Air Entrainment: 5% by volume, use per manufacturers specifications
  9. Fiber reinforcement: 1.5 lbs./CY microfibers (Matrix Monofilament Microfiber as manufactured by FRC industries or approved equal). Fiber reinforcement shall be applied at the plant. Bag size shall be one (1) pound.
- C. Concrete pavement shall be cured at seven (7) days unless otherwise approved by the Engineer. If a Contractor uses "High Early" strength concrete (3-day curing period) at his discretion, pavement shall be made under the regular (7-day curing) concrete paving item.
- D. Use accelerating admixtures in cold weather only when approved by Engineer. Use of admixtures will not relax cold weather placement requirements.
- E. Use calcium chloride only when approved by Engineer.
- F. Use set retarding admixtures during hot weather only when approved by Engineer.
- G. Admixtures:
1. Air Entraining Admixtures: ASTM C260. Add to concrete mix for concrete work subject's freeze-thaw cycling. Air Content: See above.

### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Verify existing site conditions.
- B. Verify requirements for concrete cover over reinforcement.
- C. Verify that anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not cause hardship in placing concrete.

#### 3.02 PREPARATION

- A. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.
- B. In locations where new concrete is dowelled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout in accordance with manufacturer's instructions.

#### 3.03 PLACING CONCRETE

- A. Place concrete in accordance with ACI 304, ACI 301, ACI 350 and ACI 318.

- B. Notify Engineer minimum 24 hours prior to commencement of operations.
- C. Ensure reinforcement, inserts, embedded parts, formed joint fillers, and joint devices are not disturbed during concrete placement.
- D. Install vapor barrier under slabs on grade. Lap joints minimum 6 inches and seal watertight by sealant applied between overlapping edges and ends taping edges and ends.
- E. Repair vapor barrier damaged during placement of concrete reinforcing. Repair with vapor barrier material; lap over damaged areas minimum 6 inches and seal watertight.
- F. Install joint fillers in accordance with manufacturer's instructions.
- G. Separate slabs on grade from vertical surfaces with 1/2 inch thick joint filler.
- H. Extend joint filler from bottom of slab to within 1/2 inch of finished slab surface.
- I. Install joint devices in accordance with manufacturer's instructions.
- J. Install joint covers in longest practical length when adjacent construction activity is complete.
- K. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- L. Place concrete continuously between predetermined expansion, control, and construction joints.
- M. Do not interrupt successive placement; do not permit cold joints to occur.
- N. Vibration: As soon as concrete is deposited, thoroughly agitate with mechanical vibrators and suitable hand tools to work mixture into corners of forms and around reinforcing and embedded items. Use mechanical vibrators with minimum frequency of 9000 revolutions/minute. Do not over vibrate or use vibrators to transport concrete within forms. Insert and withdraw vibrators at approximately 18 inches apart. At each insertion, vibrate generally 5-15 seconds, sufficient to consolidate concrete but not long enough to cause segregation. Keep spare vibrator on job site during concrete placement operations. Do not insert vibrator into lower courses that have begun to set.
- O. Saw cut joints within 24 hours after placing. Using 3/16 inch thick blade, cut into 1/4 depth of slab thickness.
- P. Contractor shall be responsible for proper oversight and protection of the pavement, sidewalk, or drives, during the initial curing time until the concrete is sufficiently set to resist marring or vandalism.

### 3.04 CONCRETE FINISHING

- A. Finish concrete surfaces to requirements ACI 301.

- B. Provide formed concrete surfaces to be left exposed with smooth rubbed finish.
- C. Provide exterior, exposed concrete slabs with broomed finish.

### 3.05 FORMED SURFACES

- A. Forms shall not be stripped before the concrete has attained a strength of at least 30 percent of the ultimate design strength. This is equivalent of approximately "100 day-degrees" of moist curing.
- B. Care shall be exercised to prevent damaging edges or obliterating the lines of chambers or corners when removing the forms or doing any work or work adjacent thereto.
- C. Clean all exposed concrete surfaces and adjoining work stained by leakage of concrete, to the satisfaction of the Engineer.
- D. Smooth Rubbed finish. Fins and other projections shall be removed as approved.

### 3.06 CURING AND PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
- C. Cure concrete floor surfaces to requirements ACI 308.
- D. Horizontal Surfaces
  - 1. Spraying: Fog spray water over floor slab areas and maintain wet for 7 days.
  - 2. Membrane Curing Compound: Apply curing compound in accordance with manufacturer's instructions in 2 coats with second coat at right angles to first. However, the rate of application shall never be less than one (1) gallon per 100 ft<sup>2</sup> of exposed area.
- E. Vertical Surfaces
  - 1. Spraying: Spray water over surfaces and maintain wet for 7 days.
  - 2. Membrane Curing Compound: Apply curing compound in accordance with manufacturer's instructions in 2 coats with second coat at right angles to first. However, the rate of application shall never be less than one (1) gallon per 100 ft<sup>2</sup> of exposed area.



### 3.07 PATCHING

- A. Allow Engineer to inspect concrete surfaces immediately upon removal of forms.
- B. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Engineer upon discovery.
- C. Patch imperfections in accordance with ACI 301.

### 3.08 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by the Engineer.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express written direction of Engineer for each individual area.

END OF SECTION

SECTION 03350  
CONCRETE FINISHES

PART 1 - GENERAL

1.01 SCOPE OF WORK

Furnish all labor, materials, equipment, and incidentals required to finish cast-in-place concrete surfaces as specified herein.

1.02 RELATED WORK

A. Patching and repair of defective and honeycombed concrete is included in Section 03300.

1.03 SUBMITTALS

Submit to the Engineer as provided in the General Conditions and Section 01340, the proposed chemical hardener manufacturers' surface preparation and application procedures.

1.04 SCHEDULE OF FINISHES

A. Concrete for the project shall be finished in the various specified manners either to remain as natural concrete or to receive an additional applied finish or material under another section.

B. The base concrete for the following conditions shall be finished as noted and as further specified herein:

1. Concrete to receive waterproofing and dampproofing - Off-form finish.
2. Exterior exposed concrete slabs, walkways and stairs - broomed finish.
3. Concrete on which liquids flow - steel trowel finish.
4. Concrete where not exposed in the finished work and not scheduled to receive an additional applied finish or material - Off-form finish.

1.05 RESPONSIBILITY FOR CHANGING FINISHES

A. The surface finishes specified for concrete to receive additional applied finishes or materials are the finishes required for the proper application of the actual products specified under other sections. Where different products are approved for use, it shall be the Contractor's responsibility to determine if changes in finishes are required and to provide the proper finishes to receive these products.

B. Changes in finishes made to accommodate products different from those specified shall be performed at no additional cost to the Owner. Submit the proposed new finishes and their construction methods to the Engineer for approval.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

Portland cement and component materials required for finishing the concrete surfaces shall be as specified in Section 03300.

## PART 3 - EXECUTION

### 3.01 FORMED SURFACES

- A. Forms shall not be stripped before the concrete has attained a strength of at least 30 percent (30%) of the ultimate design strength. This is equivalent to approximately "100-day degrees" of moist curing.
- B. Care shall be exercised to prevent damaging edges or obliterating the lines of chamfers or corners when removing the forms or doing any work or work adjacent thereto.
- C. Clean all exposed concrete surfaces and adjoining work stained by leakage of concrete, to the satisfaction of the Engineer.
- D. Off-form finish. Fins and other projections shall be removed as approved. Tie cone holes and other minor defects shall have been filled under Section 03300.

### 3.02 APPROVAL OF FINISHES

- A. All concrete surfaces will be inspected during the finishing process by the Engineer.
- B. Surfaces which, in the opinion of the Engineer, are unsatisfactory shall be refinished or reworked until approved by the Engineer.

END OF SECTION

SECTION 09800  
PROTECTIVE COATINGS

PART 1 - GENERAL

- 1.01 This specification covers preparation of surfaces, performance and completion of all surfaces unless specified otherwise elsewhere in the specifications and drawings.
- 1.02 All materials delivered to job site shall be in original sealed and labeled containers of the paint manufacturer.
- 1.03 Coatings shall be applied during good painting weather. Air and surface temperatures shall be within limits prescribed by the manufacturer for the coating being applied and work areas shall be reasonably free of airborne dust at the time of application and while coating is drying.
- 1.04 Upon completing the installation of the protective coatings, the Contractor must obtain written certification from the manufacturer that all work has been performed within the limits prescribed by the manufacturer.

PART 2 - PRODUCTS

2.01 PAINT MATERIALS

All materials specified herein are manufactured by Tnemec Co., Inc., North Kansas City, Missouri. These products are specified to establish standards of performance and quality and are approved for use on this project. All Products shall carry a minimum five year warranty. Upon completing the installation of the protective coatings, the Contractor must obtain written certification from the manufacturer that all work has been performed within limits prescribed by the manufacturer.

2.02 SUBSTITUTIONS

- A. Equivalent materials of other manufacturers may be substituted on approval of the Engineer. Requests for substitution shall include Manufacturer's literature for each product giving the name, generic type, descriptive information and evidence of satisfactory past performance. Submittals shall include the following performance data as certified by a qualified testing laboratory:
  1. Abrasion – Fed. Test Method Std. No. 141, Method 6192, CS-17 Wheel, 1,000 grams load.
  2. Adhesion – Elcometer Adhesion Tester.
  3. Exterior Exposure – Exposed at 45 degrees facing ocean (South Florida Marine Exposure).
  4. Hardness – ASTM D3363-74

5. Humidity - ASTM D2247-68
6. Salt Spray (Fog) - ASTM B117-73

B. Bidders desiring to use coatings other than those specified shall submit their proposal in writing to the Engineer. Substitutions, which decrease the film thickness, the number of coats applied, change the generic type of coating, or fail to meet the performance criteria of the specified materials will not be approved. Prime and finish coats of all surfaces shall be furnished by the same manufacturer.

### 2.03 COLORS

- A. Colors, where not specified, shall be as selected by the Engineer. The Contractor shall furnish color chips for each protective coating system for review and selection.
- B. Safety Color Code for Marking Physical Hazards. The safety color selected for the marking of physical hazards and safety, fire fighting and protection equipment shall be in accordance with OSHA 1910.144.

1. Color Selection

Colors shall meet the tests specified in ANSI Z53.1. The colors used shall conform to the color chips identified by numbers specified in Federal Standard 595.

<u>Color</u>	<u>Standard</u>	<u>Color</u>	<u>Standard</u>
Red	11105	Blue	15120
Yellow	13655	Purple	17142
Orange	12246	White	17875
Green	14260	Black	17038

- C. Color Selection

1. The color selection for the items not covered by OSHA Color Standards shall either be in accordance with the Painting Schedule or are to be determined after submittal of color chips by Contractor.
2. Generally, different colors will be selected for pumps, equipment, piping, valves and electrical items, and for interior and exterior locations.

2.04 PAINTING SCHEDULE

A. Ferrous Metals

Item	Surface Preparation	Primer	2 <sup>nd</sup> Coat	Finish Coat
Ferrous surfaces not including those listed below and not specified elsewhere to be coated, which are non immersed and UV exposed	SSPC-SP6 Commercial Blast Cleaning	Epoxy-Polyamide Primer (3.0-5.0 dry mils)	Epoxy-Polyamide (4.0-6.0 dry mils)	Aliphatic Polyurethane (3.0-5.0 dry mils)
Ferrous surfaces not including those listed below and not specified elsewhere to be coated, which are to be immersed continuously or intermittently.	SSPC-SP10 Near White Metal Blast Cleaning	Epoxy-Amine Primer (3.0-5.0 dry mils)	Epoxy-Amine (4.0-6.0 dry mils)	N/A
Ferrous surfaces not including those listed below and not specified elsewhere to be coated, which are nonimmersed and not UV exposed.	SSPC-SP6 Commercial Blast Cleaning	Epoxy-Amine Primer (3.0-5.0 dry mils)	Epoxy-Amine (4.0-6.0 dry mils)	N/A
Exterior surfaces of ductile iron pipe and fittings that are not buried. Exterior surfaces of buried ductile iron pipe & fittings shall be prepared & coated in accordance with Section 02615. See other sections for interior lining of DI pipe & fittings.	SSPC-SP1 to remove all soluble surface contaminants. SSPC-SP7 Brush-off Blast Cleaning to remove all insoluble contaminants, loose rust and oxides. Do not overblast.	Epoxy-Amine Primer (5.0-6.0 dry mils)	Epoxy-Amine (5.0-6.0 dry mils)	Aliphatic Polyurethane (3.0-5.0 dry mils) (3.0-5.0 dry mils)
Ductile iron and cast iron surfaces of pumps and valves.	SSPC-SP1 to remove all soluble surface contaminants. SSPC-SP7 Brush-off Blast Cleaning to remove all insoluble contaminants, loose rust and oxides. Do not overblast.	Epoxy-Amine Primer (5.0-6.0 dry mils)	Epoxy-Amine (5.0-6.0 dry mils)	Aliphatic Polyurethane (3.0-5.0 dry mils) (Delete if not UV exposed)

<p>All other ductile iron and cast iron surfaces that are not shown above and not indicated to be coated elsewhere.</p>	<p>SSPC-SP1 to remove all soluble surface contaminants. SSPC-SP7 Brush-off Blast Cleaning to remove all insoluble contaminants, loose rust and oxides. Do not overblast.</p>	<p>Epoxy-Amine Primer (5.0-6.0 dry mils)</p>	<p>Epoxy-Amine (5.0-6.0 dry mils)</p>	<p>Aliphatic Polyurethane (3.0-5.0 dry mils) (Delete if not UV exposed)</p>
---	--	--	---------------------------------------	---

NOTE: Galvanized and stainless steel shall not be painted.

- B. Non-Ferrous Metals: Non-Ferrous Metal surfaces shall not be painted unless specifically required by equipment, product, or material manufacturers or unless required elsewhere in the specifications and drawings.

## 2.05 PERFORMANCE REQUIREMENTS

### A. Epoxy-Polyamide

1. Minimum solids by volume\*: 56.0 + 1.0% (Mixed).
2. Weight per gallon\*: 12.50 + 0.20 lbs. (Mixed).
3. Abrasion: No more than 115 mg. loss after 1,000 cycles CS-17 Wheel, 1,000 grams load).
4. Adhesion (ASTM D 4060) Not less than 1000 psi pull average of three trials (Elcometer Adhesion Tester 0 to 1,000 psi).
5. Exterior Exposure  
  
No blistering, cracking or delamination of the film. No rust creepage at scribe or no rusting at edges after 72 months exposure.
6. Fresh Water Immersion  
  
No blistering, cracking, softening or delamination of the film after four years immersion in 77 F. tap water.
7. Hardness  
  
Must pass 3H (ASTM D 3363-74).
8. Humidity (ASTM D 4585)

No blistering, cracking, rusting or delamination of the film after 4500 hours.

9. The epoxy-polyamide shall contain no lead or soluble chromates.

B. High-Solids Catalyzed Epoxy - Amine

1. Minimum solids by volume\*: 82.0 + 2.0% (Mixed).
2. Weight per gallon\*: 14.70 + 0.25 lbs. (Mixed).
3. Abrasion

No more than 120 mg. loss after 1,000 cycles (ASTM D 4060).

4. Chemical Resistance

No blistering, cracking, softening or delamination of the film after seven days exposure at 75°F. Reagents used to qualify the coating for splash, spillage and fumes are as follows:

50% Sodium Hydroxide	10% Lactic Acid
10% Ammonium Hydroxide	10% Oxalic Acid
10% Hydrochloric Acid	Glycol
10% Sulfuric Acid	Xylene
10% Phosphoric Acid	Aliphatic Hydrocarbon
5% Sodium Chloride	Skydrol

5. Fresh Water

No blistering, cracking, softening or delamination of the film after four years exposure.

6. Salt Spray Resistance

No blistering, cracking, rusting or delamination of the film. No more than 1/32 inch rust creepage at scribe after 1,500 hours exposure (ASTM B 117-73).

\* Values may vary with color.

C. Coal Tar-Epoxy

1. Minimum solids by volume  
75.0 + 2.0% (Mixed).
2. Weight per gallon



11.60 + 0.25 lbs. (Mixed).

3. Abrasion

No more than 145 mg. loss after 1,000 cycles (ASTM D4060, CS-17 Wheel, 1,000 grams load).

4. Adhesion (ASTM D 4541)

(Steel) - Not less than 850 psi, average of three trials.

5. Impact

No visible cracking or delamination after 40 inch/lbs. average (ASTM D 2794).

6. Salt Spray Resistance

No blistering, cracking, rusting or delamination of the film. No more than 1/16 inch rust creepage at scribe after 1,500 hours exposure (ASTM B 117-73).

7. Hot Water Immersion

No blistering, cracking, softening or delamination of the film after sixty days exposure. (Coating applied to sandblasted still panels. Cured outdoors for eight days. and immersed in 185°F. tap water).

8. Minimum of 68% epoxy resin and 32% coal tar pitch.

9. 2.73 lbs. VOC after thinning.

D. Aggregate-Filled 100% Solids Polyamine Epoxy

1. Minimum solids by volume\*

100.0 (mixed)

2. Weight per gallon

15.46 ± 0.25 lbs. (mixed).

3. Abrasion (ASTM D 4060)

No more than 88 mg loss (1000 gram load)

4. Adhesion (ASTM D 4541)

Not less than 933-psi pull, average of three tests.

5. Chemical Resistance (ASTM C 868)

No blistering, cracking, erosion, softening, swelling, loss of adhesion of gloss after 98 days continuous immersion at 100F in 10% or 25% sulfuric acid.

6. Impact (ASTM D 2794)

No visible cracking or delamination after 160 inch pounds direct impact.

7. Severe Accelerated Wastewater Test

Initial impedance of  $10 \log Z$  in ohms  $\text{cm}^2$  @ 0.1 Hz). No blistering, cracking, checking or loss of adhesion. Final electrical impedance greater than 9  $\log Z$  after 28 days exposure.

8. Compressive Strength

No less than 5060 psi compressive strength (average of three tests)

### PART 3 – EXECUTION

#### 3.01 GENERAL

- A. All surface preparation, coating and painting shall conform to applicable standards of the Steel Structures Painting Council (SSPC), and the manufacturer's printed instructions. Material applied prior to approval of the surface by the Engineer shall be removed and reapplied to the satisfaction of the Engineer at the expense of the Contractor.
- B. All work shall be performed by skilled craftsmen qualified to perform the required work in a manner comparable with the best standards of practice. Continuity of personnel shall be maintained, and transfers of key personnel shall be coordinated with the Engineer.
- C. The Contractor shall provide a supervisor at the work site during cleaning and application operation. The supervisor shall have the authority to sign change orders, coordinate work and make decisions pertaining to the fulfillment of the contract.
- D. Dust, dirt, oil, grease or any foreign matter that will affect the adhesion or durability of the finish must be removed by washing with clean rags dipped in an approved cleaning solvent and wiped dry with clean rags as per SSPC SPI.
- E. Coating and painting systems include surface preparations, prime coating and finish coatings. Any off-site work which does not conform to this specification is subject to rejection by the Engineer.
- F. Shop applied prime coatings which are damaged during transportation, construction or installation shall be thoroughly cleaned and touched up in the field as directed by the Engineer. The Contractor shall use repair procedures which insure the complete protection of all adjacent primer. The specified repair method and equipment may

include wirebrushing, hand or power tool cleaning or dry air blast cleaning. In order to prevent injury to surrounding painted areas, blast cleaning may require use of lower air pressure, small nozzle and abrasive particle sizes, short blast nozzle, distance from surface, shielding and masking. If damage is too extensive or uneconomical to tough-up, then the item shall be re-cleaned and coated or painted as directed by the Engineer.

- G. The Contractor's coating and painting equipment shall be designed for application of materials specified and shall be maintained in first class working condition. Compressors shall have suitable traps and filters to remove water and oils from the air. Contractor's equipment shall be subject to approval of the Engineer.
- H. Application of the first coat shall follow immediately after surface preparation and cleaning and within an eight hour working day. Any cleaned areas not receiving first coat within eight hour period shall be re-cleaned prior to application of first coat.
- I. Prior to assembly, all surfaces made inaccessible after assembly shall be prepared as specified herein and shall receive the coating or paint system specified.

### 3.02 SURFACE PREPARATION

- A. The latest revision of the following surface preparation specifications of the Steel Structures Painting Council (SSPC) shall form a part of this specification.
  - 1. Solvent Cleaning (SSPC SP): Removal of oil, grease, soil and other contaminants by use of solvents, emulsions, cleaning compounds, steam cleaning or similar materials and methods which involve a solvent or cleaning action.
  - 2. Hand Tool Cleaning (SSPC SP2): Removal of loose rust, loose mill scale and other detrimental foreign matter to degree specified by hand chipping, scraping, sanding and wirebrushing.
  - 3. Power Tool Cleaning (SSPC-SP3): Removal of loose rust, loose mill scale and other detrimental foreign matter to degree specified by power wire brushing, power impact tools or power sanders.
  - 4. White Metal Blast Cleaning (SSPC-SP5): Blast cleaning to a gray-white uniform metallic color until each element of surface area is free of all visible residues.
  - 5. Commercial Blast Cleaning (SSPC-SP6): Blast cleaning until at least two thirds of each element of surface area is free of all visible residues.
  - 6. Brush-Off Blast Cleaning (SSPC-SP7): Blast cleaning to remove loose rust, loose mill scale and other detrimental foreign matter to degree specified.
  - 7. Near White Blast Cleaning (SSPC-SP10): Blast cleaning to nearly white metal cleanliness, until at least 95 percent of each element of surface area is free of all visible residues.

- B. Slag and weld metal accumulation and spatters not removed by the fabricator, erector or installer shall be removed by chipping and grinding. All sharp edges shall be peened, ground or otherwise blunted as required by the Engineer.
- C. Field blast cleaning for all surfaces shall be by dry method unless otherwise directed.
- D. Particle size of abrasives used in blast cleaning shall be that which will produce a 1/2 - 2 mil (37.5 microns - 50.0 microns) surface profile or in accordance with recommendations of the manufacturer of the specified coating or paint system to be applied.
- E. Abrasive used in blast cleaning operations shall be new, washed, graded and free of contaminants that would interfere with adhesion of coating or paint and shall not be reused unless specifically approved by the Engineer.
- F. Surface preparation will be based upon comparison with: "Pictorial Surface preparation Standards for Painting Steel Surfaces", SSPC-Vis 1 ASTM Designation D220; "Standards Methods of Evaluation Degree of Rusting on Painted Steel Surfaces", SSPC-Vis-2 ASTM Designation D610; "Visual Standard for Surfaces of New Steel Airblast Cleaned with Sand Abrasive".
- G. During blast cleaning operations, caution shall be exercised to ensure that existing coatings or paint are not exposed to abrasion from blast cleaning.
- H. The Contractor shall keep the area of his work in a clean condition and shall not permit blasting materials to accumulate as to constitute a nuisance or hazard to the prosecution of the work or the operation of the existing facilities.
- I. Blast cleaned surfaces shall be cleaned prior to application of specified coatings or paint. No coatings or paint shall be applied over damp or moist surfaces.

### 3.03 APPLICATION

- A. Coating and paint application shall conform to the requirements of the Steel Structures Painting Council Paint Application Specification SSPC-PA latest revision for "Shop Field and Maintenance Painting", and the manufacturer of the coating and paint materials.
- B. Thinning shall be permitted only as recommended by the manufacturer and approved by the Engineer.
- C. Each application of coating or paint shall be applied evenly, free of brush marks, sags, runs, with no evidence of poor workmanship. Care shall be exercised to avoid lapping on glass or hardware. Coatings and paints shall be sharply cut to lines. Finished surfaces shall be free from defects or blemishes.
- D. Protective coverings or drop cloths shall be used to protect floors, fixtures, and equipment. Care shall be exercised to prevent coatings or paints from being splattered

onto surfaces which are not to be coated or painted. Surfaces from which materials cannot be removed satisfactorily shall be recoated or repainted as required to produce a finish satisfactory to the Engineer.

- E. When two coats of paint are specified, where possible, the first coat shall contain sufficient approved color additive to act as an indicator of coverage or the two coats must be of contracting color.
- F. Film thicknesses per coat specified are the minimum required. Contractor shall apply additional coats as necessary to achieve the specified thickness.
- G. No coating or paint shall be applied: When the surrounding air temperature or the temperature of the surface to be coated or painted is below 40 degrees F., too wet or damp surfaces or in rain, snow, fog or mist; when the temperature is less than 5 degrees F. above the dewpoint; when it is expected the air temperature will drop below 40 degrees F. six hours after application of coating and paint. Dewpoint shall be measured by use of an instrument such as a Sling Psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychrometric Tables.
- H. If above conditions are prevalent, coating or painting shall be delayed or postponed until conditions are favorable. The day's coating or painting shall be completed in time to permit the film sufficient drying time prior to damage by atmospheric conditions.
- I. All material shall be applied as per manufacturer's recommendations.
- J. All welds and irregular surfaces shall receive a brush coat of the specified product prior to application of the first complete coat.
- K. All parts that can be disassembled such as vents and manhole covers shall be removed and coated inside and out as per applicable coating systems. Upon completion of coating, those parts disassembled shall be reassembled prior to placing in service.

### 3.04 ACCEPTANCE OF WORK

- A. All surface preparation and repairs shall be approved by the Engineer/Owner before primer is applied.
- B. Request acceptance of each coat before applying next coat.
- C. Correct work that is not acceptable and request reinspection.
- D. Thickness of coatings and or the paint shall be checked with a non-destructive, magnetic type thickness gauge. (Use an instrument such as a Tooke Gauge if a destructive tester is deemed necessary.) Coating integrity of interior coated surfaces shall be tested with approved inspection devices. Holiday detection shall be performed prior to application of aluminum or metallic finish coats. Non-destructive holiday detector shall not exceed 67.5 volts nor shall destructive holiday detector

exceed the voltage recommended by the manufacturer of the coating system. For thicknesses between 10 and 20 mils (250 microns and 500 microns) a non-sudsing type setting agent, such as Kodak Photo-Flo, shall be added to the water and detector sponge prior to detector use. All pinholes shall be marked and repaired in accordance with the manufacturer's printed recommendations and retested. No pinholes or other irregularities shall be permitted in the final coating.

- E. The Contractor shall furnish, until final acceptance of coating and painting, inspection devices in good working condition for detection of holidays and measurement of dry-film thickness of coating and paint. The Contractor shall also furnish U.S. Department of Commerce, National Bureau of Standards certified thickness calibration plates to test accuracy of dry-film thickness gauge and certified instrumentation to test accuracy of holiday detectors.
- F. The coating contractor is to regularly check his work with these devices to make sure that dry-film thickness meets specifications. The Engineer shall at his discretion use the Contractors or his own equipment to perform similar inspections.
- G. Dry-film thickness gauges and holiday detectors shall be made available for the Engineer's use at all times until final acceptance of application. Holiday detection device shall be operated in the presence of the Engineer.
- H. Concrete surfaces in immersion service must have void - and pinhole-free coating application. Inspection of coating system with 5X magnification will provide these assurances.
- I. Warranty inspection shall be conducted during the eleventh month following completion of all coating and painting work. All defective work shall be repaired in accordance with this specification and to the satisfaction of the Engineer/Owner.
- J. In accordance with requirements set forth by regulatory agencies applicable to the construction industry and manufacturer's printed instructions and appropriate technical bulletins and manuals, the Contractor shall provide and require use of personnel protective lifesaving equipment for persons working in, or about the project site.
- K. Equipment shall include protective helmets which shall be worn by all persons while in the vicinity of the work. In addition, workers engaged in or near the work during sandblasting shall wear eye and face protection devices and air purifying, half-mask or mouthpiece respirator with appropriate filter. Barrier creams shall be used on any exposed areas of skin.
- L. Where ventilation is used to control hazardous exposure, all equipment shall be explosion proof. Ventilation shall reduce the concentration of air contaminant to the degree a hazard does not exist. Air circulation and exhausting of solvent vapors shall be continued until coatings have fully cured.
- M. Whenever the occupational noise exposure exceeds maximum allowable sound levels, the Contractor shall provide and require the use of approved ear protective devices.

- N. Adequate illumination shall be provided while work is in progress, including explosion-proof lights and electrical equipment. Whenever required by the Engineer, the Contractor shall provide additional illumination and necessary supports to cover all areas to be inspected. The level of illumination for inspection purposes shall be determined by the Engineer.
- O. All temporary ladders and scaffolding shall conform to applicable safety requirements. They shall be erected where requested by the Engineer to facilitate inspection and be moved by the Contractor to locations requested by the Engineer.
- P. All coatings and paints shall be stored in enclosed structures to protect them from weather and excessive heat or cold. Flammable coatings or paint must be stored to conform with Parish, State, and Federal safety codes for flammable coating or paint materials. At all times, coatings and paints shall be protected from freezing.

### 3.05 CLEAN UP

Upon completion of the work, all staging, scaffolding and containers shall be removed from the site or destroyed in a manner approved by the Engineer. Coating or paint spots and oil or stains upon adjacent surfaces shall be removed and the job site cleaned. All damage to surfaces resulting from the work of painting contractor or subcontractor shall be cleaned, repaired, or refinished to the satisfaction of the Engineer at no cost to the Owner.

END OF SECTION

SECTION 15100  
VALVES AND APPURTENANCES

PART 1- GENERAL

1.01 RELATED ITEMS SPECIFIED ELSEWHERE

A. Shop Drawings, Product Data and Samples, Section 01340.

1.02 DESCRIPTION

Under this section of the specifications, the Contractor shall furnish all labor, material, tools and equipment necessary to install the valves and appurtenances within the project all as indicated on the project plans, as herein specified and as recommended by the manufacturer. All work shall be in accordance with APWA, AWWA, ASTM and other applicable standards.

1.03 QUALITY ASSURANCE

Within the requirements of the section pertaining to "Shop Drawings, Product Data and Samples" of these specifications as well as any other applicable sections of these specifications, the Contractor shall submit shop drawings, product data and other miscellaneous information for all equipment herein specified to the Engineer for approval prior to fabricating or ordering any of the proposed equipment or constructing any item of work which is affected by the particular characteristics of any of the proposed equipment.

1.04 PRODUCT DELIVERY, HANDLING AND STORAGE

The equipment herein specified shall be packaged and shipped in a manner which shall adequately protect the equipment from damage. Upon receipt of the equipment by the Contractor, the equipment shall be stored in a location within the Contractor's staging area remote from possible damage. If any equipment is damaged, lost or stolen at any time prior to acceptance of the project, it shall be replaced at the Contractor's expense.

PART 2 - PRODUCTS

2.01 AIR RELEASE VALVES

The air release valve shall automatically function at full line pressure to release to the atmosphere small amounts of entrained air that may accumulate in the pipeline without spillage or spurt. Once the accumulated air is exhausted, the valve shall shut tightly to prevent wastewater leakage. The valve body and cover shall be cast iron conforming to ASTM A126, Class B. The float, stem and internal linkage shall be stainless steel conforming to ASTM A240.

Flush-out accessories shall be furnished and assembled to the valve consisting of an inlet shutoff valve, blow-off valve, clear water inlet valve, six (6) feet of rubber hose and quick disconnect couplings. A gate valve located between the ARV and the water main shall be furnished and installed. Bollard surrounding ARV shall be located and painted as shown on plans.

See plans for Air Release Valve model and type.



## 2.02 GATE VALVES AND VALVE BOXES

Gate valves shall be resilient seat and shall conform to ANSI/AWWA C509. Square wrench nut, extension stems with 2 appurtenances as required. Manufacturer's certification of the valves' compliance with AWWA specification C509 and tests listed therein will be required. Valves shall be Mueller or equal.

Valve box pads shall be 24" x 24" x 4" thick concrete with 6x6 #6 WWM. Pad is to be set at finish grade.

Underground valve identification (UVI) markers only required when/where left handed valves are found or known to be installed. Markers shall be 3" dia. 1/8" thick solid hard brass with 1/4" rod anchor with "tamper proof" hook end. Surface shall be engraved with 1/4" to 3/8" capital letters approximately .015" depth - hand punched letters not acceptable. For marker text, refer to underground valve marker detail. Surface ground smooth and epoxy coated to prevent tarnishing. Markers are to be WAGCO markers or approved equal.

UVI markers shall be installed in the valve pad in unpaved areas, in concrete adjacent to valve box cover in sidewalk or driveway areas, and in concrete curb adjacent to valve in paved areas. UVI's placed in curb for valves in paved areas shall be installed with the same location arrangement as the valves.

Tracer wire box shall be included in valve boxes and shall be by USA BlueBook Manufacturer or approved equal. Valve boxes must accommodate tracer wire boxes.

Valve boxes and lids shall be constructed of cast iron, with valve box lids manufactured with the letter "W" cast into the top surface.

## 2.03 VALVE RESTRAINTS

All valves shall be furnished with restrained joints such as mechanical joints with retainer glands for underground installations or flanged joints for installations inside of structures. Force main piping on either side of such valve installations shall be restrained as indicated on the Drawings.

## PART 3 - EXECUTION

Valves shall be installed in the locations shown on the drawings, as herein specified and as per the manufacturer's recommendations. All valve installations shall be installed with appropriate gaskets, suitable for use in waterlines. Air release valves installation shall include a gate valve beneath the ARV.

END OF SECTION

SECTION 15208  
INSERTION VALVES

PART 1 -- GENERAL

1.01 THE REQUIREMENT

- A. The CONTRACTOR shall provide and install insertion valves, complete and operable, in accordance with the Contract Documents.
- B. Unit Responsibility: A single manufacturer shall be made responsible for coordination of design, assembly, testing, and furnishing each valve; however, the CONTRACTOR shall be responsible to the OWNER for compliance with the requirements of each valve section. Unless indicated otherwise, the responsible manufacturer shall be the manufacturer of the valve.
- C. Single Manufacturer: Where 2 or more valves of the same type and size are required, the valves shall be furnished by the same manufacturer.

1.02 CONTRACTOR SUBMITTALS

- A. Furnish submittals in accordance with Section 01340 – Shop Drawings, Product Data and Samples.
- B. Shop Drawings: Shop Drawings shall contain the following information:
  - 1. Valve name, size, Cv factor, pressure rating, and identification number (if any).
  - 2. Complete information on valve actuator, including size, manufacturer, model number, and mounting.
  - 3. Assembly drawings showing part nomenclature, materials, dimensions, weights, and relationships of valve handles, handwheels, and position indicators.
- C. Operations and Maintenance Manual: A comprehensive Operations and Maintenance Manual shall be provided for each valve installation.

PART 2 -- PRODUCTS

2.01 INSERTION VALVES

- A. Sleeve
  - 1. Intended Use: Provides attachment to pipe for drilling and final assembly of the Insertion Water Control Valve. May be used on cast iron, ductile iron, asbestos cement and C900 PVC pipe. Contractor shall supply and install an InsertaValve™ Water Control Valve or approved equal.
  - 2. General: The fabricated sleeve will assure a 360 degree seal around the pipe under working pressures up to 150 psi. It will accommodate the equipment and fixtures

necessary to drill the pipe and install the insertion valve assembly without any interruption in water service.

3. Materials: Made of ASTM A-36 steel, epoxy coated to 10-12 mils.
4. Flange: A special flange will mate with the insertion valve installation equipment and valve assembly.
5. Neck: The precision manufacturing tolerances of the neck will assure proper alignment and support of the insertion valve assembly. The neck will incorporate a slide gate body that will provide a connecting flange and sealing surface for the slide gate housing. The slide gate body will also provide a sealing surface for the slide gate disk o-ring.
6. Bolts and Nuts: High strength, low alloy, steel bolts and nuts meeting AWWA standard C-111. Type 304 stainless steel bolts with Xylan coated nuts to prevent galling are optional.
7. Lugs: Sleeve sidebar lugs will properly align the sleeve halves during installation, provide a bolting surface and assure a 360 degree seal. The lugs will prevent excessive stress on the pipe and minimize distortion of soft (PVC) pipe.
8. Mat Gaskets: Made of Styrene Butadiene Rubber (SBR) compounded for potable water service in accordance with ASTM D2000 3 BA715. The gaskets provide a positive 360 degree seal on the pipe and assure a tight, durable, and resilient seal.
9. Coating: The sleeve will be lined and coated with fusion bonded epoxy. Epoxy to meet the requirements of AWWA C-213.
10. Armors: Heavy gauge type 304 stainless steel armor plates will bridge the gap between the sleeve halves.

#### B. Valve Assembly

1. General: Designed to be inserted into the insertion valve sleeve after the drilling procedure is performed, the Valve Assembly shall perform as a water control device giving an effective shutoff of the flow of water. The valve will be installed in the open position, under pressure and under flow conditions without any interruption of water service. The insertion valve shall give a full flow waterway after installation.
2. Plug: Constructed of urethane rubber, with a durometer of 65 Shore A. The plug shall seal on the inside diameter of the pipe and inside diameter of the drilled hole.
3. Valve Stem and Stem Nut: Manufactured of high strength bronze suitable for valve stems and nuts.
4. Gearbox: The gearbox will provide the force necessary to compress the plug to shut off the flow of water in the pipeline.
5. Gaskets: Made of SBR rubber, compounded for potable water service in accordance with ASTM D-2000 3 BA715, with a durometer of 70 Shore A. The gasket shall act as the sealing interface between the valve flange and the sleeve flange.

6. Bolts and Nuts: Grade 3 or better alloy steel, zinc plated for corrosion protection. Type 304 stainless steel bolts, nuts and washers are optional. Stainless steel nuts are Xylan coated to prevent galling.

## PART 3 -- EXECUTION

### 3.01 INSTALLATION

- A. Insertion valves shall be installed in strict accordance with the manufacturer's published recommendations.
- B. General: Valves, actuating units, stem extensions, valve boxes, and accessories shall be installed in accordance with the manufacturer's written instructions and as indicated. Gates shall be adequately braced to prevent warpage and bending under the intended use. Valves shall be firmly supported to avoid undue stresses on the pipe.
- C. Access: Valves shall be installed with easy access for actuation, removal, and maintenance and to avoid interference between valve actuators and structural members, handrails, or other equipment.

END OF SECTION

SECTION 15209  
TAPPING SLEEVE & VALVE ASSEMBLY

PART 1 -- GENERAL

1.01 REQUIREMENTS

- A. The CONTRACTOR shall provide and install tapping sleeves and valve assemblies, complete and operable, in accordance with the Contract Documents to install water mains or services connecting to existing water mains. During such installation, the existing water main shall remain in service at all times.
- B. Unit Responsibility: A single manufacturer shall be made responsible for coordination of design, assembly, testing, and furnishing the complete hot tap and valve assembly system as one unit.
- C. Single Manufacturer: Where 2 or more valves of the same type and size are required, the valves shall be furnished by the same manufacturer.
- D. NSF61 certified.

1.02 CONTRACTOR SUBMITTALS

- A. Furnish submittals in accordance with Section 01340 – Shop Drawings, Product Data and Samples.
- B. Shop Drawings: Shop Drawings shall contain the following information:
  - 1. Tapping Sleeve and Valve name, size, Cv factor, pressure rating, and identification number (if any).
  - 2. Complete information on Tapping Sleeve and Valve actuator, including size, manufacturer, model number, and mounting.
  - 3. Assembly drawings showing part nomenclature, materials, dimensions, weights, and relationships of valve handles, handwheels, and position indicators.
- C. Operations and Maintenance Manual: A comprehensive Operations and Maintenance Manual shall be provided for each valve installation.

PART 2 -- PRODUCTS

2.01 TAPPING SLEEVES AND VALVE ASSEMBLIES

- A. Sleeve
  - 1. Intended Use: Provides attachment to pipe for drilling and final assembly of the Tapping Sleeve and Valve Assembly. May be used on cast iron, ductile iron, asbestos cement and C900 PVC pipe. Contractor shall supply and install a Mueller Tapping Sleeve or approved equal.

2. General: The fabricated sleeve will assure a 360 degree seal around the pipe under working pressures up to 200 psi. It will accommodate the equipment and fixtures necessary to drill the pipe and install the insertion valve assembly without any interruption in water service.
  3. Materials: Made of ASTM A 240 type 304 stainless steel UNS designated S30400.
  4. Flange: **Flange shall be 304 Stainless Steel** per AWWA C228-08. ANSI class 125 and 150 drillings and recessed to accept tapping valve. GMAW welded to neck.
  5. Outlet: Heavy gauge 304L Stainless Steel. Fused to shell by GMAW weld on the outside and GTAW weld on the inside.
  6. Bolts and Nuts: BOLTS shall be 304 Stainless Steel, 4 inch sleeves use 1/2" UNC rolled thread, 6 - 12 inch sleeves use 5/8" UNC rolled thread. Bolts are GMAW welded to sidebar. NUTS shall be heavy hex, 304 Stainless Steel, 4 inch nominal size sleeves uses 1/2" UNC threads, 6 inch nominal size and larger sleeves uses 5/8" UNC thread. Nuts coated to prevent galling.
  7. Lugs: Sleeve sidebar lugs will properly align the sleeve halves during installation, provide a bolting surface and assure a 360 degree seal. The lugs will prevent excessive stress on the pipe and minimize distortion of soft (PVC) pipe. Lugs shall be 304 Stainless Steel, fused to sidebars by GMAW welding.
  8. Washers: 1/2" or 5/8" 304 Stainless Steel flat washers. 1/2" or 5/8" Plastic washer prevents galling between nut or stainless steel washer and lifter bar on all sizes.
  9. Mat Gaskets: Virgin SBR rubber compounded for water and sewer service in accordance with ASTM D 2000 MAA 610. Specially designed grid pattern and tapered ends to assure seal around full circumference of pipe. Reinforced ring at outlet provides hydrodynamic seal.
  10. Lifter Bars: 304 Stainless Steel, lip curved to hold position while tightening. Heavy gauge serves as bearing surface for nuts.
  11. Shell: Heavy gauge Stainless Steel top half 304L back half 304.
  12. Armors: Heavy gauge type 304 stainless steel armor plates will bridge the gap between the sleeve halves.
- B. Valve Assembly
1. General: Designed to be inserted into the tapping sleeve after the drilling procedure is performed, the Valve Assembly shall perform as a water control device giving an effective shutoff of the flow of water.
  2. Plug: Constructed of urethane rubber, with a durometer of 65 Shore A. The plug shall seal on the inside diameter of the pipe and inside diameter of the drilled hole.
  3. Valve Stem and Stem Nut: Manufactured of high strength bronze suitable for valve stems and nuts.

4. Gearbox: The gearbox will provide the force necessary to compress the plug to shut off the flow of water in the pipeline.
5. Gaskets: Made of SBR rubber, compounded for potable water service in accordance with ASTM D-2000 3 BA715, with a durometer of 70 Shore A. The gasket shall act as the sealing interface between the valve flange and the sleeve flange.
6. Bolts and Nuts: Grade 3 or better alloy steel, zinc plated for corrosion protection. Type 304 stainless steel bolts, nuts and washers are optional. Stainless steel nuts are Xylan coated to prevent galling.

## PART 3 -- EXECUTION

### 3.01 INSTALLATION

- A. Tapping sleeve and valve assembly shall be installed in strict accordance with the manufacturer's published recommendations.
- B. General: Valves, actuating units, stem extensions, valve boxes, and accessories shall be installed in accordance with the manufacturer's written instructions and as indicated. Gates shall be adequately braced to prevent warpage and bending under the intended use. Valves shall be firmly supported to avoid undue stresses on the pipe.
- C. Access: Valves shall be installed with easy access for actuation, removal, and maintenance and to avoid interference between valve actuators and structural members, handrails, or other equipment.

END OF SECTION