

### TOWN OF JOHNSTON REQUEST FOR PROPOSALS DIESEL FUEL STATION

**RFP Number** 2024-003

**Issuing Department** Department of Development

& Public Services

**Mandatory Pre-Bid Conference** Tuesday, November 14th 2023

**Location** 100 Irons Avenue

**Time** 10:00am

**Bid Due Date & Opening** Tuesday, November 28st 2023

**Time** 10:00am



### **PURCHASING DEPARTMENT** TOWN OF JOHNSTON, RHODE ISLAND

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The Town of Johnston is seeking proposals for a Diesel Fuel Station.

### **SUBMISSION OF BIDS INSTRUCTIONS**

Sealed bids will be accepted at the Office of the Town Clerk at Johnston Town Hall. Proposals may be submitted up to 10:00 AM Tuesday, November 28th, 2023. All proposals will then be publicly opened and read aloud in the Conference Room located at Town Hall.

A Mandatory Pre-Bid Conference will be held at 10:00 AM on Tuesday, November 14<sup>th</sup>, 2023. Located at the Department of Development and Public Services, 100 Irons Avenue, Johnston, RI 02919. Bidders must attend and sign in at the pre-bid conference; any bid submitted without attending the mandatory pre-bid conference will be rejected.

A sealed package must be submitted containing one (1) original bid, labeled original and one (1) unbound copy.

The bids must be marked with the name and address of the bidder, and the date and time of bid opening. Bids must be received prior to the due date and time. Bids received after that time shall be returned unopened. Packages submitted must be sealed and clearly marked: "DIESEL FUEL STATION" Any communications that are not competitive sealed proposals should have "NOT A BID" written on the envelope or wrapper.

Envelopes containing bids must be sealed and addressed to:

Town Clerk's Office Johnston Town Hall 1385 Hartford Avenue Johnston, RI 02919

The Town is not responsible for accepting any submissions delivered to other town buildings. Bids received prior to the time of opening will be securely kept, unopened until the opening time. No responsibility will attach to an officer or person for the premature opening of a bid not properly addressed and identified.

### **Documents Required for Submission with Sealed Bid**

- 1. A sealed package must be submitted containing one (1) original bid, labeled original and one (1) unbound copy.
- 2. Bid Form: found on page 8 of this RFP. Must be signed by a responsible member of the firm with their signature and official title.



### **Documents Required if Selected as Winning Bidder**

- 1. Performance Bond or Certified Bank Check: Must be for 100% of completed cost of project/service.
- 2. Insurance Binder: A certificate of insurance indicating liability and workers' compensation coverage must be provided.
- 3. IRS Form W-9: Should be completed and submitted if the bidder falls under IRS requirements to file this form.

### **NOTICES TO PROPOSERS**

- I. Any bidder may withdraw the firm's bid by written request at any time prior to the advertised time for opening. Telephonic, email or facsimile transmitted bids, amendments, or withdrawals will not be accepted.
- II. Unless otherwise specified, no bid may be withdrawn after the date and time of the bid opening. Time is of the essence in this bid and failure to deliver within the time period shall be considered default.
- III. If any proprietary, trade, brand or manufacturer's name or part number is used herein in describing the required equipment, it shall be understood to indicate the minimum standard of composition and quality desired, and shall not be construed to exclude equipment that equals or exceeds the functional capability and quality of the named equipment. If bids are based on such equipment, indicate the manufacturer's name, model and number for the equipment and include any literature or other explanation of the equipment's quality or performance.
- IV. Negligence on the part of the bidder in preparing the bid confers no rights for the withdrawal of the bid after said bid has been opened.
- V. Descriptive materials such as plans, drawings, photographs, written descriptions, and particularly manufacturer's literature that will enable the Town to determine the exact quality, design and appearance of the equipment proposed, shall accompany the bid. All equipment listed, or shown, in the manufacturer's literature, drawings or photographs, and approved by the Town, shall be furnished.
- VI. All prices bid must be on the basis of F.O.B. Delivery Point, Town of Johnston. Therefore, shipping costs are to be included within the process quoted. Deliveries must consist only of new merchandise or equipment and shall be made between 7:30am and 3:00pm, or as may be arranged during emergencies.
- VII. Bids received prior to the time of opening will be securely kept, unopened. No responsibility will attach to an officer or person for the premature opening of a bid not properly addressed and identified.
- VIII. The Finance Director or his designee may waive any or all bids for cause, failure to meet specifications or any reason deemed appropriate. The Town of Johnston reserves the right to reject any or all responses or parts thereof, to waive any informality in them, or accept any bid deemed in the best interest of the Town.



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IX. An award will be given in writing to the bidder whose offer provides the greatest value to the Town, from the standpoint of meeting specifications and requirements of bidding documents, suitability to purpose, quality, service, previous experience, price, ability to deliver, or for any other reason deemed by the Town to be in its own best interest. Any final analysis or weighted point score does not imply that one bidder is superior to another, but simply, in the Town's judgment the bidder selected appears to offer the best overall solution for our current and anticipated needs. Thus, the result will not be determined by price alone.

Award will be based on, but not limited necessarily to the following (where applicable):

- a) Adherence to all conditions and requirements of the bid specifications;
- b) Total bid price; (including any discounts), unit bid price, or extended price;
- c) General reputation and experience of bidders;
- d) Evaluation of the bidder's ability to service the Town;
- e) Financial responsibility of the bidder;
- f) Prior knowledge of and experience with the bidder in terms of past performance;
- g) Needs and requirements of the Town;
- h) Experience with the products involved;
- i) Bidder's ability to meet delivery and stocking requirements;
- j) Delivery date or service date; and
- k) Ordering method.
- X. After the bid is awarded, all documents pertaining to the successful bid will be available for public inspection in the Town purchasing office.
- XI. If all Bids exceed the available funds, the Finance Director may re-solicit new Bids or enter into competitive negotiations with two or more of the lowest bidders meeting all requirements as outlined.
- XII. A reasonable inquiry to determine the responsibility of the bidder or offer may be conducted. Failure to promptly supply information related to such an inquiry may be grounds for disqualification of a bidder. All information supplied is confidential.
- XIII. The Town may make such investigations as it deems necessary to determine the ability of the bidder to provide the materials or services, and the bidder shall furnish to the Town all such information and data for this purpose as the Town may request. The Town reserves the right to reject any bid if such bidder fails to satisfy the Town that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein.
- XIV. Bid price shall be firm; unit price shall include any and all trade discounts. Price shall be inclusive of any freight, handling, delivery surcharges or any other incidental charges. Your bid shall be exclusive of any Federal or State taxes, as the Town of Johnston is exempt from payment of such taxes. A certificate of exemption shall be forwarded to the elected vendor upon request.
- XV. Delivery shall be made to the Town of Johnston on the "ship to" address of the Purchase Order. Delivery is required within the time stated herein from the date of the issuance of the purchase order, unless otherwise noted. Delivery shall include assembly, servicing and placement of equipment in operable status unless specified otherwise. No deliveries shall become due or acceptable without a written Purchase Order issued by the Town of Johnston.



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- XVI. The Department Director, or his designee, shall accomplish inspection and acceptance of materials/equipment purchased for the department.
- XVII. In case of default, the Town may procure the materials from other sources and hold the bidder responsible for any excess costs occasioned thereby and may immediately cancel the Purchase Order.
- XVIII. Bidders are advised that this section of the specifications will be evaluated before the technical specifications. Bids that do not comply with our General Conditions, Bonding, Insurance, Delivery, Bidder Qualifications, Service and Warranty requirements will be immediately deemed non-responsive and shall be immediately rejected without further review of the technical specification.
  - XIX. Bids not received by the Bid Submittal Deadline are late. Late Bids will be returned to Bidders unopened.
  - XX. No employee, officer or agent of the Town of Johnston shall participate in the selection, the award or administration, of the contract if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when one of the following has a financial or other interest in any firm proposing on or selected for the award:
    - a) The employee or an officer or agent of the employee;
    - b) Any member of the employee's immediate family;
    - c) The employee's business partner; or
    - d) An organization that employs, or is about to employ, any of the above.
  - XXI. This is a "prevailing wage" contract. Prevailing Wage refers to the requirements of the Rhode Island General Law 37-13 and the general prevailing rate of pay for regular, holiday and overtime wages to be paid to each craftsman, mechanic, teamster, laborer or other type of worker performing work on public works projects when state or municipal funds are used in excess of \$1,000. Contractors must refer to the applicable Davis Bacon Wage Determination rate schedule available at the Rhode Island Department of Labor and Training website to determine the prevailing wage rates for a public works construction project.



### **INQURIES**

Any questions concerning clarification on any portion of this RFP should be made to:

### By Mail:

Tyler P. Carney Johnston Town Hall 1385 Hartford Avenue Johnston RI, 02919

### By Email:

Tyler P. Carney tcarney@johnston-ri.us

All bidders are responsible for ensuring that no addenda have been made to the original proposal package. All proposal packages and addenda shall be posted to the Town's website and are also available by contacting Tyler Carney, at <a href="mailto:tearney@johnston-ri.us">tearney@johnston-ri.us</a>



### **BID FORM**

Name of Bidder (Firm or Individual):	
Contact Name:	
Contact Phone Number:	
Contact Email:	
Business Address:	
Total Bid Amount:	
	Signature of Representative
	Title of Representative
	Date



### **SCOPE OF WORK**

- 1. Design, furnish, and install a new, fully functional, "turn key," 8,000-gallon ConVault Diesel Fuel Station with an above ground storage tank (AST) in the location as indicated on the project site plan.
- 2. The Fuel Station furnishment and installation is to include the requisite fuel port/dispenser and necessary hoses, a back-up fuel port/dispenser for emergency use, repurposing and repositioning of the Town's existing FuelMaster Card Reader/Data Entry Unit, underground connection of the FuelMaster System in its entirety (power and data) via conduit to the existing Office Building as necessary, requisite programming of the FuelMaster System for full functionality, all required vapor/emission/recovery system(s), all required fire suppression system(s), a size appropriate reinforced concrete dispensing slab that accommodates for oversize Public Works and Fire Department vehicles as well as the AST itself, 6" concrete protective bollards as necessary/required around the facility, insulation around all necessary lines, hoses, fittings, connections, and other areas to ensure system functionality during cold weather, a tank mounted canopy (and any necessary footings) to provide foul weather cover to the FuelMaster System and personnel member(s) operating same, tank mounted LED lights to appropriately illuminate the FuelMaster System and fuel port/dispenser, a fuel tank gauge to read the current status of diesel fuel present, any necessary fixed ladder(s) for appropriate fuel tank access (at high points or on the tank top), all tank identification, hazard, and fuel plaques, as well as any and all items not listed that are required to install a fully functional, safe, Diesel Fuel Station system that meets all regulatory approvals.
- 3. The ConVault concrete slab that the fuel storage tank sits on must be designed by a licensed, structural engineer. All other trade drawings necessary in the furnishment and installation of the requested 8,000-gallon, ConVault Diesel Fuel Station are required to be designed by licensed engineers in the applicable trade.
- 4. Furnish any and all materials, labor, and equipment to deliver, off-load, and install said Fuel Station in its entirety at the site.
- 5. Submit requisite plans, stamped drawings, and permits (i.e., EPA, RI DEM), as well as obtain a building permit from the Town of Johnston (Town fees waived for this project).
- 6. Provide, set up, and erect any and all safety equipment as required by OSHA, DEM, or any other state and federal entities for the duration of the project installation period. Break down and remove same when finished.
- 7. Perform all work according to State of Rhode Island Building Code and all relevant codes.
- 8. Remove the appropriate amount of diesel fuel present in the existing tank in preparation for the tank's decommissioning and place said fuel into the new Fuel Station at the appropriate time.



- 9. Per any and all State, Federal, and Environmental guidelines, remove and properly dispose of any remaining fuel in the existing tank that is not suitable for placement into the new Fuel Station.
- 10. Assist the Town with the process of decommissioning the old Fuel Station AST so that it can be appropriately removed as scrap.
- 11. All labor is prevailing wage as per State, Federal, and Davis-Bacon Act Guidelines (as applicable).
- 12. Leave premises clean, orderly, and free of project debris.
- 13. Provide a minimum of a one-year full warranty on parts (unless listed as longer by the manufacturer(s)) and labor for the entire Fuel Station.
- 14. Provide Fuel Station system training and support as needed for a minimum of a one-year term (unless listed as longer by the manufacturer(s)).
- 15. Furnish and honor all manufacturers' warranties and terms, as listed.



### **PROJECT SPECIFICATIONS**

### **SECTION 1 - AST INSTALLATION**

### PART 1 - DESCRIPTION

### 1.01 WORK INCLUDED

- a. Provide (1) 8,000 Concrete Aboveground Fuel Storage Tank for diesel fuel. This tank shall be approved for listing under U.L. Standard 2085- Aboveground Tanks, Protected Type, Secondary containment with Vehicle Impact and Projectile Resistance. Unit must comply with all provisions of U.F.C. 79-7, Appendix A-II-F. The tank and its enclosure shall be a completed unit at the factory (shop fabricated). The tank system shall be approved for Phase I and Phase II Vapor Recovery by the California Air Resource Board for gasoline and methanol.
- b. Shelf-Mount fuel dispenser with pump.
- c. Fuel Management System.
- d. Fire Suppression System

### 1.02 RELATED WORK

- a. Section 2 Sitework
- b. Section 3 Electrical

### 1.03 QUALITY ASSURANCE

- a. Unit shall have concrete exterior finish with architectural finish.
- b. Unit shall have permanent exterior warning signs in proper location and configuration to meet applicable code requirements.
- c. Unit shall be approved for stage I and Stage II Balance Recovery (California Air Resources Board Executive Order G-70-116).
- d. Vaults shall have concrete support legs of unitized monolithic construction. Unit shall be placed on a foundation of a minimum eight-inch thick reinforced concrete pad.
- e. Tank shall have a seven-gallon overfill system, U.L. listed, with internal reservoir and normally closed U.L. listed drain port.
- f. Vaulted tank design shall have been in manufacturing production and commercial use for a minimum of ten years.
- g. Tank and concrete vault shall be finished as one unit at the factory and require no assembly, construction, or completion at the installation site.



### **PURCHASING DEPARTMENT**TOWN OF JOHNSTON, RHODE ISLAND

### 1.04 SUBMITTALS

- a. Product Data:
  - Submit product data, for each component.
- b. Shop Drawings:
  - Submit shop drawings showing all components. The drawing(s) shall be in 1/2" to 1'-0" scale. The drawing shall include:
    - 1 Location of all components
    - 2 Wire diagrams of all connections between components

### 1.05 DELIVERY

- a. Coordinate completion of other sitework before delivery of the unit.
- b. The unit is to be delivered and put into place as a single operation.
- c. Immediately upon placement, protect unit and its components with barriers until the completion of the installation of bollards.

### PART 2 - PRODUCTS

### 2.01 CONCRETE ABOVEGROUND FUEL STORAGE TANK SYSTEM

- a. 8,000-gallon Concrete Aboveground Fuel Storage Tank System.
- b. Convault Above Ground Tank System.
- c. United Concrete Products, Inc. 800-234-3119.

### 2.02 STEEL TANK

The primary tank shall be rectangular in shape and have continuous welds on all sides conforming with The American Welding Society Standard for Continuous Weld. The primary tank shall be a minimum 0.125 inch thick carbon steel approved per U.L. Standard 142. The tank shall be warranted for 20 years by the manufacturer.

- a. Steel tank shall be manufactured in accordance with U.L. 142.
- b. Steel tank shall be rectangular in shape and have continuous welds on all sides conforming with The American Welding Society Standard for Continuous Weld.
- c. Steel Tank shall be pressure-tested at 5 psi for 24 hours.
- d. Steel tank shall have an emergency vent as required by N.F.P.A. 30.
- e. Steel tank openings shall be threaded, including the detector tube.
- f. Outer surface of the steel tank shall be covered by ¼ inch minimum thick insulating spacer panels of polystyrene which melts on contact with leaking petroleum products.
- g. Secondary containment shall consist of a 30 mil. non-permeable high-density polyethylene liner enclosing the polystyrene spacer panels.
- h. Steel tank shall be pressurized to 5 psi until concrete sets to provide expansion space between concrete and steel tank during use.



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- i. Steel tank shall be supported by internal bracing.
- j. No steel or insulating spacer panels in the unit shall come in direct contact with concrete or any other corrosive material with the exception of tank top openings which must be schedule 40 steel pipe.

### 2.03 CONCRETE ENCASEMENT

The concrete encasement shall be 6 inches thick with minimum design strength of 5,000 psi. The concrete design shall include the following for long-term durability; less than 3% air entrainment, water-reducing admixture, rebar reinforcement. Vault shall be a coated concrete exterior and of a continuous and visually verifiable monolithic (seamless) pour on top, bottom and sides of the steel tank and contain no cold joints or heat sinks (heat transfer points) on the bottom and sides. The steel tank shall be pressurized at 5 psi during concrete encasement.

- a. Steel tank and secondary containment shall be encased in a homogenous layer of a minimum 5,000 psi factory poured reinforced concrete 6 inches thick with no penetrating metal elements except at the top.
- b. Vault shall be of a continuous and visually verifiable monolithic (seamless) pour on top, bottom and sides of the steel tank and contain no cold joints or heat sinks (heat transfer points) on the bottom and sides.
- c. Vault shall have the capability of physical monitoring between primary and secondary containment.
- d. Vaulted tank shall be tested in accordance with U.L. Standard 1709 and shown to have a two-hour fire wall as mandated by the Uniform Fire Code.
- e. Complete tank and vault assembly including secondary containment U.L. 2085 for insulated and protected tanks.

### 2.04 FIRE RESISTANCE

a. The tank system shall be designed and tested to provide 2-hour fire protection for the primary tank. No Steel members shall penetrate the walls or floor of the concrete encasement to assure isolation from pool fire heat. The fire resistance of the tank shall be tested in accordance with the procedure established in U.L. 1709 by Warnock-Hersey International, a certified fire testing facility. The monolithic concrete construction provides a 2-hour fire protection rating and is listed in accordance with Underwriters Laboratory subject 2085. The U.L. subject 2085 listing establishes not only fire protection but also resistance to impact, bullet resistance and environmental resistance.

### 2.05 THERMAL AND CORROSION PROTECTION

a. The tank construction shall include thermal insulation to protect against temperature extremes and corrosion by isolating the steel tank from the concrete. No steel or insulating spacer in the unit shall come in direct contact with concrete or any other corrosive material.

### 2.06 SECONDARY CONTAINMENT WITH LEAK MONITORING



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a. The tank system shall include an impervious barrier to contain leaks from the primary tank. A leak detection access tube shall be located between the inner tank and secondary barrier. In the event of a leak, a positive space shall be available to permit leaked fluid to flow to the detection tube.

### 2.07 OVERFILL/SPILL CONTAINMENT

- a. The tank system shall include a minimum 7-gallon internal overfill/spill containment surrounding the fill pipe, which is U.L. Listed. The overfill/spill container hall include a normally-closed plunger valve to release spilled product into the main tank. The remote fill box shall be mounted directly to the exterior of the tank.
- b. Remote fill box: Model ARFP-3 stainless steel remote fill box with wall mount flange as manufactured by Fairfield Industries.

### 2.08 OVERFILL PROTECTION

a. Overfill protection shall be provided by the following methods: a) direct reading level gauge at tank visible from fill pipe access; b) valve located within fill pipe to close automatically at a specified fill level; c) audible high-level alarm activated by a float switch at a specified fill level.

### 2.09 EXTERIOR FINISH

a. The tank system has a concrete exterior to resist weather, reflect sunlight and inhibit corrosion.

### 2.10 VENTING

a. Tank system shall conform to local jurisdiction and shall at a minimum include a 2" atmospheric vent and emergency venting in accordance with N.F.P.A. 30.

### 2.11 SUPPORT LEGS

a. Vaults shall have concrete support legs of unitized monolithic construction raising the concrete enclosure a minimum of 3" above the ground to provide visual inspection capability.

### 2.12 SHELF- MOUNT FUEL DISPENSERS

- a. Dispensers: (1) Wayne S-1 shelf mounted fleet fuel dispenser with mounting bracket and filter.
- b. Submersible pump: (1) FE Petro STP75-VL2 with STP-CBS control box and full port ball valve.
- c. Solenoid valve with thermal pressure relief: (1) Two-way electrically operated, normally closed diaphragm valve to prevent accidental siphoning of fuel in the case of a leak or break in the fuel line, provide Model No. 821-0150AC with Model No. 82RV relief valve as manufactured by OPW.
- d. Overfill prevention valve: Model No. 61FSTOP as manufactured by OPW, Co.
- e. Mechanical tank gage: Morrison Brothers 818f clock gage.
- f. Emergency shear valve: OPW 10 BU-5725 1 ½" diameter shear valve.
- g. Diesel hose and nozzle: VST 22341481-301, ¾" x 10'6" curb hose with OPW 241TPS-0241, ¾" diameter hose swivel, 66V-0300, ¾" diameter hose breakaway, 66H-0075, ¾" diameter whip hose, and OPW 11AP-0400, unleaded automatic nozzle.



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h. Fuel piping: 1 ½" diameter Schedule 40 black pipe with malleable fittings for the diesel fuel facility. Piping shall be tested in accordance with all local, state, and federal requirements and painted prior to being put into service.

### 2.13 FUEL MANGEMENT SYSTEM

a. The existing Fuel Master fuel management system will be repurposed from the current DPW location.

### 2.14 ACCESS STEPS

a. Provide (1) set of 2'6" wide x 6'4" tall galvanized steel access steps, with handrails, to be installed at the site adjacent to the fill port.

### PART 3 - EXECUTION

### 1.01 INSPECTION

a. Verify concrete slab, site work and electrical conduits and stub outs are complete and ready to receive the unit.

### 1.02 INSTALLATION

- a. The tank system, including accessories shall be installed in strict accordance with the manufacturers recommendations and applicable fire and environmental codes. A local Building Permit shall be obtained prior to installation. The fee for this permit will be waived by the Town of Johnston.
- b. Tank shall be installed on the reinforced concrete slab beneath the existing canopy. Protective bollards may be installed on sides exposed to vehicles. Bollards shall be 7 inches diameter concrete-filled polyethylene and shall be a minimum 7 feet long and installed in concrete a minimum of 3 feet into the ground. Location of bollards shall be in accordance with state and local codes.
- c. Tank shall be marked on all sides with warning signs: "COMBUSTIBLE", "NO SMOKING", product identification, and other signs as required by the applicable codes.
- d. Electrical work shall be in accordance with local codes and shall be rated for hazardous area as required.
- e. Vaulted tank design shall have been in manufacturing production and commercial use for a minimum of ten years.
- f. Tank and concrete vault shall be shop-fabricated as one unit at the factory and require no assembly, construction, or completion at the installation site.

### **SECTION 2 – SITE WORK**

### 1.01 CONCRETE TANK SLAB

- a. Provide the concrete reinforcing as shown on the tank slab details in the contract drawings.
- b. Pour and finish the concrete tank slab as shown with 5,000 PSI concrete. The 8,000-gallon tank slab will measure 8' x 23'1" x 12" thick.



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c. Adjust the slab elevation in accordance with the existing grades to allow for water to drain to the surrounding area.

### 1.02 CONCRETE FUELING SLAB

- a. Provide the concrete reinforcing as shown on the tank slab details in the contract drawings.
- b. Pour and finish the concrete tank slab as shown with 5,000 PSI concrete. The fueling slab will measure  $15' \times 30'$ -0"  $\times 8$ " thick.
- c. Adjust the slab elevation in accordance with the existing grades to allow for water to drain to the surrounding area.

### **SECTION 3 - ELECTRICAL INSTALLATION**

### 1.01 ELECTRICAL WORK

- a. Provide new circuit breakers on the (4) circuits for the following:
  - 1-submersible fuel pump, 20 amp, 2-pole
  - 1-dispensers, 20 amp, single pole
  - 1-fuel management system, 20 amp, single pole
- b. Provide all new underground conduits (rigid galvanized) and wiring from the building to the new fueling facility. These conduits will be run to the new pump, dispenser, and fuel management system.
- c. Contractor shall be responsible for the routing and layout of the electrical conduits to provide a functioning system with the equipment specified.
- d. All wiring shall be installed to meet Article 514 for Hazardous Location installations.
- e. Provide labeling and identification of all circuits and equipment.
- f. Provide all of the aboveground conduits to complete the fueling system on the equipment at the tank area.
- g. Provide the power and low voltage control wiring for the fuel management system.
- h. Provide (2) spare conduits from the building to the tank area for future convenience.
- i. Provide an emergency pump stop switch and associated electrical work as shown on the Contract Drawing.
- j. All wiring to be performed in accordance with applicable federal, state, local, and NFPA regulations and codes.

### 1.02 FIRE SUPPRESSION SYSTEM

- a. Provide a pre-engineered fuel island fire suppression system for the new fueling facility.
- b. System shall utilize an automatic, fixed pipe and nozzle distribution arrangement.
- c. The pre-engineered system shall comply with NFPA 17 and be installed in strict accordance with the manufacturer's guidelines supplied with the design package.



### **FINAL SITE PLAN DRAWINGS**

See attached (following pages) final site plan drawings for the location of the requested Diesel Fuel Station.

\*The proposed location is listed on page 4 of the drawings

### SITE IMPROVEMENT PLANS FOR

### TOWN OF JOHNSTON DEPARTMENT OF DEVELOPMENT AND PUBLIC SERVICES



100 IRONS AVENUE JOHNSTON, RHODE ISLAND

THE HONORABLE JOSEPH POLISENA, JR. - MAYOR OF JOHNSTON THOMAS E. DELLER, AICP, DIRECTOR DPW - TOWN PLANNER/ADMINISTRATIVE OFFICER

OWNER: TOWN OF JOHNSTON

TOWN OF JOHNSTON C/O THOMAS DELLER, DPW DIRECTOR

100 IRONS AVENUE

JOHNSTON, RI 02919

PHONE: 401-231-4000, EXT. 4201

CIVIL ENGINEER: JOE CASALI ENGINEERING, INC. 300 POST ROAD

WARWICK, RI 02888

PHONE: 401-944-1300

FAX: 401-944-1313

WETLAND BIOLOGIST: NATURAL RESOURCE SERVICES, INC.

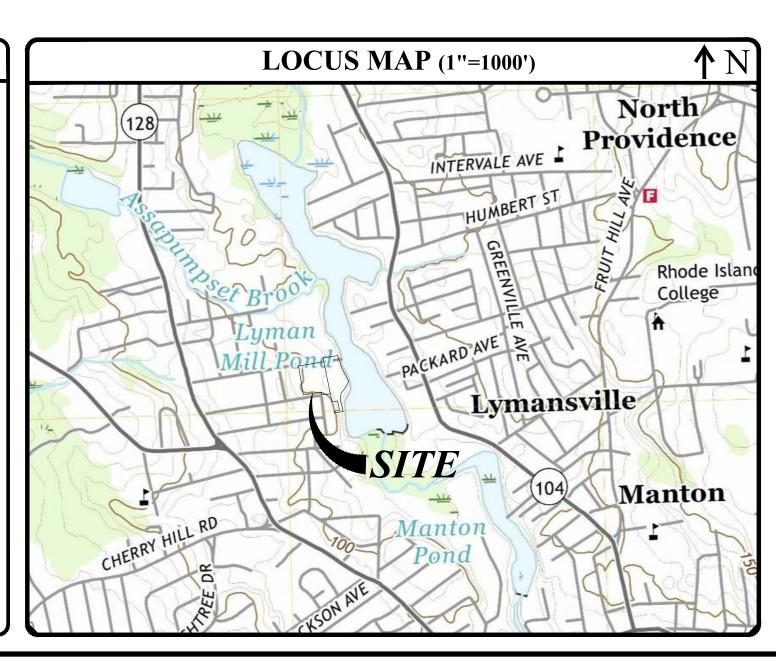
180 TINKHAM LANE

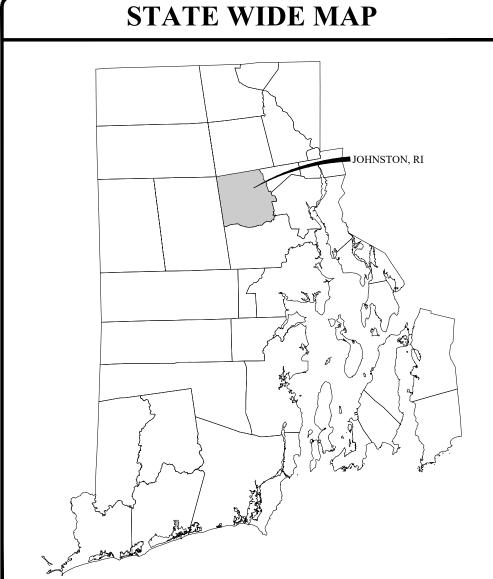
HARRISVILLE, RI 02830 PHONE: 401-568-7390

**SURVEYOR:** N. VELTRI SURVEY. INC

190 PUTNAM PIKE JOHNSTON, RI 02919

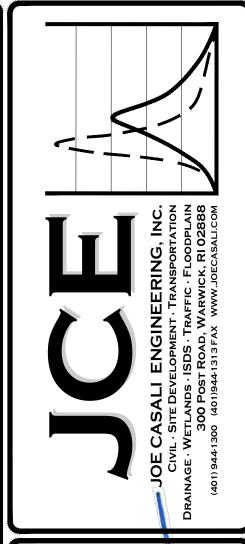
PHONE: 401-231-3200

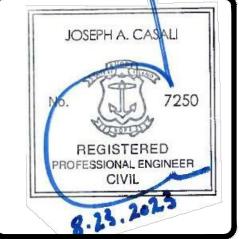




SHEET NO.	PLAN
1	COVER SHEET
2	GENERAL NOTES & LEGEND
3	EXISTING CONDITIONS AND SITE PREP. PLAN
4	SITE PLAN
5	GRADING AND DRAINAGE PLAN
6	UTILITY PLAN
7	DRAINAGE DETAILS I
8	CIVIL DETAILS I
9	CIVIL DETAILS II
10	RI STANDARDS
R1	EXISTING CONDITIONS PLAN, PREPARED BY N. VELTRI SURVEYING, INC., DATED AUGUST 2022.

**INDEX OF DRAWINGS** 





DEV. AND PUBLIC SERV 100 IRONS AVENUE JOHNSTON, RHODE ISLAND

REVISIONS: NO. DATE. DESCRIPTION

DESIGNED BY: WMLJR
DRAWN BY: SD/SEP
CHECKED BY: JAC
DATE: AUGUST 2023
PROJECT NO: 06-90i

PRELIMINARY, NOT FOR CONSTRUCTION

> COVER SHEET

> > SHEET 1 OF 10

### GENERAL NOTES

- . CLASS I LIMITED CONTENT BOUNDARY SURVEY AND CLASS III TOPOGRAPHIC SURVEY COMPLETED BY NICHOLAS VELTRI, PLS #1719 OF N. VELTRI SURVEY, INC., 24 CELESTIAL DRIVE, NARRAGANSETT, RI 02882 IN AUGUST 2022. SUPPLEMENTAL INFORMATION OBTAINED BY JOE CASALI ENGINEERING, INC. IN APRIL 2023.
- 2. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR CITY WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
- 3. THIS SITE LIES IN ZONE X (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD), AS SHOWN ON THE FIRM MAP FOR THE TOWN OF JOHNSTON, COMMUNITY PANEL NO. 44007C0303H, EFFECTIVE OCTOBER 2, 2015.
- 4. SOILS EXISTING ON THE SITE CONSISTS OF HINCKLEY LOAMY SAND, 8-15 PERCENT SLOPES, (HkC), AND SUDBURY SANDY LOAM, 0-3 PERCENT SLOPES (Ss).
- 5. THE SITE IS LOCATED WITHIN THE URBAN RIVER REGION. THE WOONASQUATUCKET RIVER IS A 4TH ORDER STREAM LOCATED ALONG THE EASTERN PROPERTY LINE. THIS PORTION OF THE RIVER IS SHOWN AS LYMAN MILL POND WHICH HAS A 25-FOOT BUFFER ZONE AND A 100-FOOT RIDEM JURISDICTIONAL AREA ASSOCIATED WITH IT.
- 6. THE PROPOSED DEVELOPMENT IS LOCATED WITHIN THE WOONASQUATUCKET RIVER WATERSHED (RIDEM INVENTORY #010900040502). THERE ARE NO EXTRAORDINARY OR UNUSUAL FEATURES ON THE SUBJECT SITE.
- 7. AN EASEMENT EXISTS REGARDING THE EXISTING SEWER SERVICE ACROSS AP 34, LOT 112 AS SHOWN ON THE PLANS.
- 8. TELEPHONE, ELECTRIC, COMMUNICATIONS, AND SEWER SERVICES ARE AVAILABLE WITHIN THE SITE. WATER AND GAS SERVICES ARE AVAILABLE FROM WITHIN IRONS AVENUE.

### SITE NOTES:

- . CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) OF ALL MATERIALS INDICATED ON THE PLANS.
- 2. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS, AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICAN WITH DISABILITIES ACT AND WITH ALL APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS, WHICHEVER IS MORE STRINGENT.
- 3. STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED ADJACENT TO DRAINAGE STRUCTURES.
- 4. ALL DISTURBED AREAS OUTSIDE OF THE PAVED AREAS WILL RECEIVE A MINIMUM OF 6" OF LOAM AND SEED.
- 5. THE LAYOUT SHOWN REPRESENTS A GRAPHICAL DESIGN, AND PRIOR TO THE CONSTRUCTION, THE CONTRACTOR SHALL ENGAGE A PROFESSIONAL LAND SURVEYOR (PLS) REGISTERED IN THE STATE OF RHODE ISLAND TO SET AND VERIFY ALL LINES AND GRADES. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS ARE TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY ITEMS FOUND WHICH DO NOT MATCH THE PLANS MUST BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO CONSTRUCTION FOR REVIEW. NO WORK SHALL PROCEED UNTIL AUTHORIZED BY THE ENGINEER.
- 6. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SURVEY LAYOUT SERVICES FOR THE WORK AND SHALL SUBMIT "AS-BUILT" DRAWINGS OF ALL WORK, WHICH SHALL BE STAMPED AND CERTIFIED BY A RHODE ISLAND REGISTERED PROFESSIONAL LAND SURVEYOR.
- 7. ANY ITEM OF WORK NOT SPECIFICALLY INDICATED ON THE PLANS BUT IS REQUIRED FOR THE COMPLETE CONSTRUCTION OF THE PROJECT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND INCLUDED IN THE CONTRACT BID PRICE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING SITE CONDITIONS.
- 8. WHERE NECESSARY TO REMOVE CURBS, CATCH BASINS OR DRAINS TO COMPLETE WORK, THE CONTRACTOR SHALL REPLACE SUCH ITEMS TO THE SATISFACTION OF THE ENGINEER AND THE TOWN AT NO ADDITIONAL COST TO THE OWNER.
- 9. ANY EXISTING PIPE OR UTILITY DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 10. THE CONTRACTOR SHALL RESTORE TO ITS ORIGINAL CONDITION OR REPLACE TREES, SHRUBS, FENCES, SIGNS, GUARDRAILS, DRIVEWAYS, SIDEWALKS AND ANY OTHER OBJECT AFFECTED BY THIS OPERATION, UNLESS OTHERWISE NOTED ON THE SITE PLANS.
- 11. THE TOPS OF ALL VALVE BOXES AND CURB BOXES SHALL BE FLUSH WITH GROUND OR PAVEMENT SURFACE LEVEL AND PLUMB, UNLESS OTHERWISE DIRECTED.
- OTHERWISE DIRECTED.
- 12. ROADWAYS SHALL BE LEFT PASSABLE AT ALL TIMES. CLOSURE OF ROADWAY IS NOT PERMITTED.
- 13. WATER SERVICE SHALL BE MAINTAINED AT ALL TIMES.
- 14. ALL LEDGE TO BE REMOVED BY MECHANICAL MEANS.
- 15. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN THE DRY. THE CONTRACTOR SHALL PROVIDE, OPERATE AND MAINTAIN ALL PUMPS, DRAINS, WET POINTS, SCREENS, OR OTHER FACILITIES NECESSARY TO CONTROL, COLLECT AND DISPOSE OF ALL SURFACE AND SUBSURFACE WATER ENCOUNTERED IN THE PERFORMANCE OF THE WORK.
- 16. ALL SITE WORK, INCLUDING BUT NOT LIMITED TO, BITUMINOUS PAVEMENT, ROADWAY CONSTRUCTION, AGGREGATE MATERIALS, DRAINAGE STRUCTURES, CURBING, SIDEWALK, LANDSCAPING, SAW CUTTING, ETC. SHALL CONFORM TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, AMENDED DECEMBER 2010 (WITH LATEST ADDENDA).

### SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- . THE SILT FENCE LINE ILLUSTRATED ON THESE PLANS SHALL SERVE AS THE STRICT LIMIT OF DISTURBANCE FOR THE PROJECT WITHIN OR ADJACENT TO REGULATED FRESHWATER WETLAND AREAS.
- 2. THE LIMITS OF CLEARING, GRADING, AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THESE LIMITS, AS DEPICTED ON THE PLAN SHALL BE TOTALLY UNDISTURBED, TO REMAIN IN NATURAL CONDITION.
- 3. ALL CATCH BASINS AND CULVERTS SHALL BE PROTECTED WITH SILT SACK SEDIMENT TRAPS AND/OR STRAW WATTLES DURING CONSTRUCTION ACTIVITIES. ALL PROPOSED STORM WATER DISCHARGE AREAS SHALL BE LINED WITH A RIPRAP SPLASH PAD AND PROTECTED WITH STAKED HAYBALE OUTLET PROTECTION (R.I. STD. 9.1.0), OR STAKED HAYBALE WITH SILT FENCE (R.I. STD. 9.3.0) OUTLET PROTECTION (STAKED HAYBALE OR STAKED HAYBALE WITH SILT FENCE) SHALL ALSO BE INSTALLED AT ALL EXISTING STORMWATER DISCHARGE LOCATIONS WHERE DISTRIBUTING PIPES, CATCH BASINS, AND MANHOLES ARE TO BE CLEANED AND FLUSHED.
- 4. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEEDED, PROTECTED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL REGULARLY CHECK ALL SEEDED AREAS TO ENSURE THAT A GOOD STAND OF VEGETATION IS MAINTAINED.
- 5. ALL SILT FENCE, TEMPORARY TREATMENT (HAY, STRAW, ETC.) AND TEMPORARY EROSION PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
- 6. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES OF NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEEDED AND/OR STABILIZED PER CONTRACT SPECIFICATIONS.
- 7. THE SILT FENCE SHALL BE CHECKED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH STORM FOR UNDERMINING OR DETERIORATION. WEEKLY INSPECTION REPORTS SHALL BE PREPARED IN ACCORDANCE WITH THE PROJECT'S SOIL EROSION AND SEDIMENTATION CONTROL PLAN (SESCP). THE CONTRACTOR SHALL REPAIR OR REPLACE ANY SILT FENCE AS NEEDED. THE CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE SILT FENCE BECOMES FILLED WITH SEDIMENTS.
- 8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SOIL EROSION AND SEDIMENT CONTROLS ON THE PROJECT SITE FOR THE ENTIRE DURATION OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL FOLLOW THE DIRECTION OF THE ENGINEER, TOWN ENGINEER, OR OWNER WITH REGARD TO INSTALLATION, MAINTENANCE, AND REPAIR OF ALL SOIL EROSION AND SEDIMENTATION CONTROLS ON THE PROJECT SITE. TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROLS (HAYBALES, SILT FENCE, ETC.) SHALL BE MAINTAINED UNTIL ALL EXPOSED SOILS ARE SATISFACTORILY STABILIZED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND/OR RESEEDING ALL AREAS THAT DO NOT DEVELOP WITHIN ONE YEAR FROM THE COMPLETION OF CONSTRUCTION.
- 9. ALL REFERENCED SOIL EROSION AND SEDIMENTATION CONTROLS INCLUDING MATERIALS USED, APPLICATION RATES AND THE INSTALLATION PROCEDURES SHALL BE PERFORMED PER THE "RHODE ISLAND EROSION AND SEDIMENTATION HANDBOOK", ISSUED 1989 (REVISED 2014, UPDATED 2016).

### BMP MAINTENANCE SCHEDULE:

- 1. ALL MAINTENANCE (INCLUDING CLEANING) REQUIRED DURING THE CONSTRUCTION PHASE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL INCLUDE:
  - A. MEASURES NEEDED TO ENSURE THE PROPER OPERATION OF THE STORMWATER RUNOFF (DRAINAGE) AND WATER QUALITY CONTROL SYSTEMS TO INCLUDE INSPECTION, CLEANING AND REPAIRS ALL PIPES, INTAKE AND DISCHARGE STRUCTURES, CATCH BASIN SUMPS, AND MANHOLES.
  - B. INSPECTION OF ALL SLOPES, BERMS, AND OTHER CONTROL STRUCTURES FOR STRUCTURAL INTEGRITY/STABILITY AND EVIDENCE OF SOIL EROSION PROCESSES, AND MAINTENANCE OF THESE STRUCTURES IF NECESSARY. INSPECTIONS SHALL BE PERFORMED FOLLOWING ALL RAIN EVENTS OF 1/2 INCH RAINFALL OR MORE IN A 24-HOUR PERIOD, OR BI-MONTHLY IF NO RAINFALL EVENT OCCURS.
- 2. UPON COMPLETION OF THE PROJECT CONSTRUCTION, AND PRIOR TO VACATING THE SITE, THE CONTRACTOR SHALL CONDUCT A FINAL INSPECTION AND CLEANING OF THE DRAINAGE SYSTEM AND ALL ASSOCIATED STRUCTURES.
- 3. ALL INSTALLATION, CLEANING, AND MAINTENANCE OF THE STORMWATER DRAINAGE SYSTEM SHALL FOLLOW AT LEAST THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION MINIMUM STANDARDS, SECTION 212 AND SECTION 708. WHERE APPROPRIATE, PROCEDURES REGARDING THE DRAINAGE INSTALLATION, CLEANING, INSPECTION, AND MAINTENANCE OF THE STORMWATER DRAINAGE SYSTEM SHALL BE FOLLOWED AS OUTLINED IN THE "RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL" (RIDEM/RICRMC, AMENDED 2015).
- 4. AFTER CONSTRUCTION, STORMWATER BMPS SHALL BE INSPECTED AND MAINTAINED BY THE OWNER AS FOLLOWS:

- PERFORM ROUTINE ROOF INSPECTIONS QUARTERLY.
- KEEP ROOFS CLEAN AND FREE OF DEBRIS.
- KEEP ROOF DRAINAGE SYSTEMS CLEAR.

### PRE-TREATMENT - PEA GRAVEL DIAPHRAGM

• AFTER CONSTRUCTION, THE SEDIMENT FOREBAYS SHALL BE INSPECTED AND CLEANED WHEN SEDIMENT BUILD UP IS IN EXCESS OF 6" OR 25% OF THE SEDIMENT STORAGE VOLUME.

### PRE-TREATMENT SEDIMENT FOREBAYS

- AFTER CONSTRUCTION, THE SEDIMENT FOREBAYS SHALL BE INSPECTED AND CLEANED WHEN SEDIMENT BUILD UP IS IN EXCESS
- OF 6" OR 25% OF THE SEDIMENT STORAGE VOLUME.

### BIORETENTION & INFILTRATION BAS

- DURING THE SIX MONTHS IMMEDIATELY AFTER CONSTRUCTION, THE INFILTRATION BASIN SHALL BE INSPECTED AFTER THE FIRST TWO RAINFALL EVENTS OF AT LEAST 1.0 INCH TO ENSURE THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER INSPECTIONS SHALL BE CONDUCTED ON AN ANNUAL BASIS AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL TO 2 INCHES.
- SILT AND SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT BASIN WHEN THE ACCUMULATION EXCEEDS SIX INCHES, OR WHEN WATER PONDS ON THE SURFACE OF THE INFILTRATION BASIN FOR MORE THAN 48 HOURS.
- WATER PONDS ON THE SURFACE OF THE INFILTRATION BASIN FOR MORE THAN 48 HOURS
  SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.
- SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.

   THE OUTLIFT DEVICES SHALL BE CLEANED/REDAIRED WHEN NECESSA.
- THE OUTLET DEVICES SHALL BE CLEANED/REPAIRED WHEN NECESSARY.
  TRASH AND DEBRIS SHALL BE REMOVED WHEN NECESSARY.
- THE OUTFLOW WEIR SHOULD BE INSPECTED ANNUALLY TO ENSURE THAT IT IS FUNCTIONING PROPERLY.

### LOAMING & SEEDING

SEEDING ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH SECTION L.02 SEEDING OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, 2010 EDITION (WITH LATEST ADDENDA), AND SHALL ALSO CONFORM TO THE FOLLOWING:

- 1. AFTER ROUGH GRADING IS COMPLETED, ALL DISTURBED AREAS AND AREAS LABELED AS 'LOAM AND SEED' ARE TO BE BROUGHT TO AN ELEVATION OF 6" BELOW THE PROPOSED FINISHED GRADE. SCARIFY THE SUBGRADE TO A DEPTH OF 12" WITH THE TEETH OF A BACKHOE OR A POWER RAKE TO RESULT IN AN UNCOMPACTED SUBSOIL. 6" OF GOOD QUALITY TOPSOIL IS TO BE APPLIED AND RAKED TO FINISHED GRADE.
- 2. THE TOPSOIL IS TO BE GOOD QUALITY LOAM, FERTILE AND FREE OF WEEDS, STICKS AND STONES OVER 3/4" IN SIZE AND OTHERWISE COMPLYING WITH SECTION M.18.01 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, 2010 EDITION (WITH LATEST ADDENDA),
- . PRIOR TO SEEDING OR SODDING, FERTILIZE WITH 10-10-10 OR EQUIVALENT ANALYSIS. AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE IN SLOW RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 1-2" OF THE PLANTING SOIL. APPLY AT A RATE OF 8 LBS. PER 1000 SQUARE FEET.
- 4. APPLY LIME AT A RATE OF ONE TON PER ACRE AND UNIFORMLY INCORPORATE INTO THE TOP 1-2" OF TOPSOIL.

### 5. SEEDING

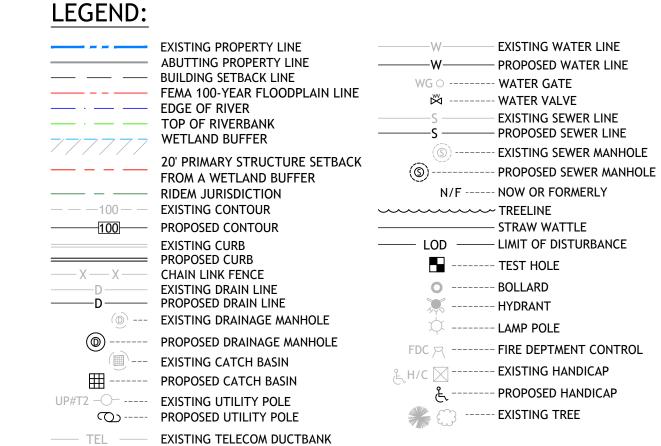
- AFTER THE SEED BED IS PREPARED, SEED IS TO BE BROADCAST EVENLY OVER THE SURFACE AND WORKED INTO THE TOP 1" OF SOIL. SEED SHALL BE APPROVED URI #2 OR APPROVED EQUAL. APPLY AT A RATE OF 4-5 LBS. PER 1000 SQUARE FEET OR AS OTHERWISE DIRECTED BY THE MANUFACTURER.
- URI #2 IMPROVED SEED MIX, % BY WEIGHT:
- 40% CREEPING RED FESCUE
- 20% IMPROVED PERENNIAL RYEGRASS 20% IMPROVED KENTUCKY BLUEGRASS
- 20% KENTUCKY BLUEGRASS
- RECOMMENDED SEEDING DATES ARE MARCH 15 TO JUNE 15 AND SEPTEMBER 15 TO NOVEMBER 15. AT THE CONTRACTORS DISCRETION, SEED MAY BE APPLIED BY HYDROSEEDING RATHER THAN THE METHOD DESCRIBED ABOVE.

### MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING POLICE PROTECTION. ALL TEMPORARY AND VEHICULAR SIGNS, BARRICADES AND LANE CLOSURES SHALL BE IN CONFORMANCE WITH THE LATEST REVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION.
- 2. TEMPORARY CONSTRUCTION SIGNS AND ALL APPLICABLE TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC.
- 3. THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED IN THE STATE OR TOWN RIGHT-OF-WAY.
- 4. ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS CHANNELING DEVICES, ETC, SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.
- 5. SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE RIDOT SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.

### MISCELLANEOUS UTILITY NOTES:

- 1. PRIOR TO CONSTRUCTION ALL POTENTIAL UTILITY/DRAINAGE CONFLICTS MUST BE IDENTIFIED BY THE CONTRACTOR. ANY MODIFICATIONS TO THE PROPOSED UTILITIES TO AVOID CONFLICTS MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- 2. OVERHEAD AND/OR UNDERGROUND ELECTRIC, GAS AND COMMUNICATIONS SERVICES ARE TO BE COORDINATED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY.
- 3. THE CONTRACTOR SHALL AT ALL TIMES PROVIDE A SUFFICIENT NUMBER OF WORKMEN AND GUARDS AS MAY BE NECESSARY TO PROPERLY SAFEGUARD THE PUBLIC FROM THEIR OPERATIONS.
- 4. THE CONTRACTOR SHALL TAKE PRECAUTIONS AGAINST DAMAGING OF PAVING, SIDEWALKS, UTILITIES, OR PRIVATE PROPERTIES AND SHALL PROMPTLY REPAIR AT HIS OWN EXPENSE ANY DAMAGE TO SUCH PAVING, SIDEWALKS, UTILITIES, OR PRIVATE PROPERTIES TO THE SATISFACTION OF THE OWNER AND/OR THE TOWN OF SMITHFIELD.
- 5. EXISTING UTILITY FRAMES AND COVERS FOR SANITARY SEWER, WATER, GAS, STORM DRAINAGE AND OTHER UTILITIES SHALL BE ADJUSTED TO GRADE AS REQUIRED IN NEW PAVING AND PAVEMENT OVERLAY AREAS.
- 6. THE CONTRACTOR SHALL CONFINE HIS CONSTRUCTION OPERATIONS AND ACTIVITIES TO WITHIN THE STREET LINES, EASEMENT AND/OR RIGHT-OF-WAY, AS SHOWN ON THE DRAWINGS.
- 7. ALL CONSTRUCTION MATERIALS, AS WELL AS ALL MATERIAL SHOP DRAWINGS AND MANUFACTURERS DATA SHEETS SHALL BE REVIEWED AND APPROVED BY THE DESIGN ENGINEER, OR HIS/HER REPRESENTATIVE PRIOR TO FABRICATION AND INSTALLATION.



EXISTING ELECTRIC DUCTBANK

— GAS — PROPOSED GAS LINE



REGISTERED PROFESSIONAL ENGINEER CIVIL

EPT. OF DEV. AND PUBLIC SER
100 IRONS AVENUE
JOHNSTON, RHODE ISLAND

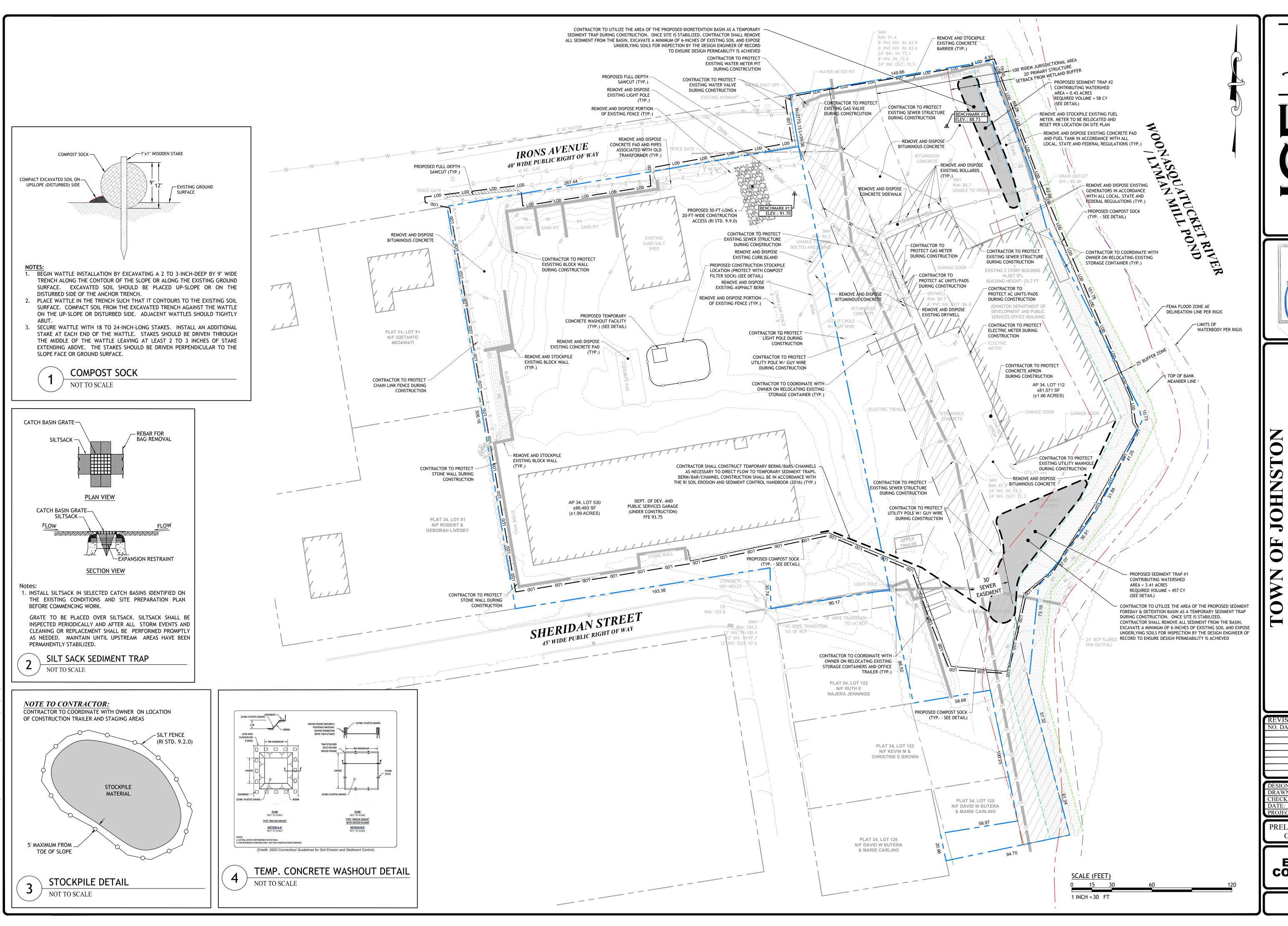
REVISIONS: NO. DATE. DESCRIPTION

DESIGNED BY: WMLJR
DRAWN BY: SD/SEP
CHECKED BY: JAC
DATE: AUGUST 2023
PROJECT NO: 06-90i

PRELIMINARY, NOT FOR CONSTRUCTION

GENERAL NOTES & LEGEND

SHEET 2 OF 10

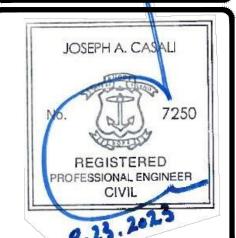


CASALI ENGINEERING, INC.

WETLANDS · ISDS · TRAFFIC · FLOODPLAIN

300 POST ROAD, WARWICK, RI 02888

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## DEPT. OF DEV. AND PUBLIC SERVICI 100 IRONS AVENUE JOHNSTON, RHODE ISLAND

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**EXISTING CONDITIONS** 

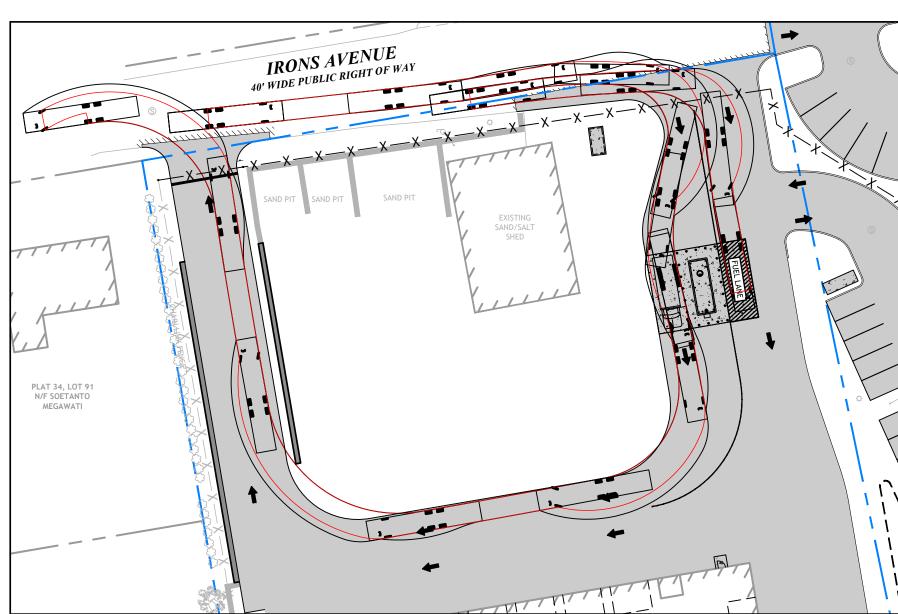
SHEET 3 OF 10

### ZONING DIMENSIONAL REQUIREMENTS

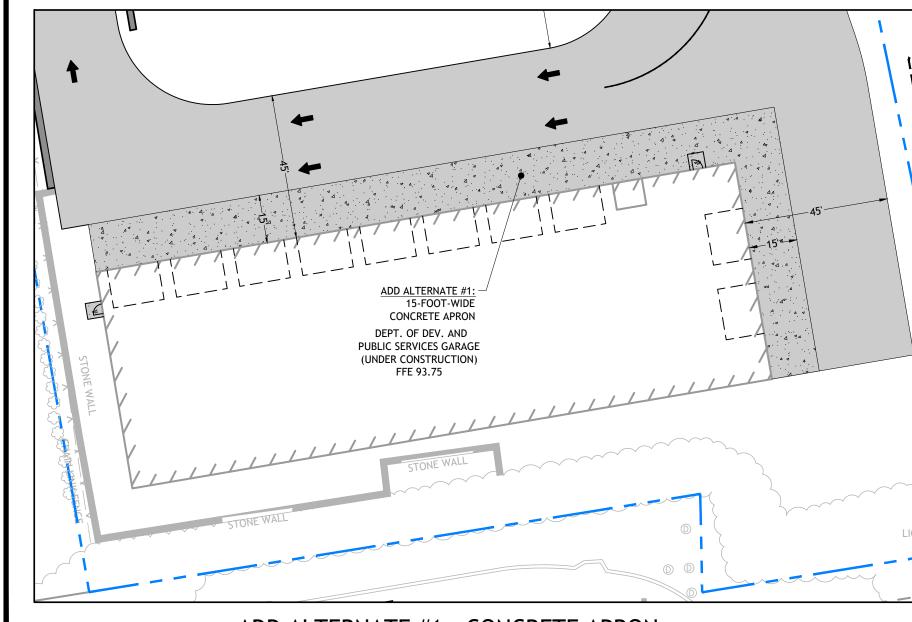
ZONING CRITERIA	REQUIRED
ZONING DISTRICT	I
MINIMUM FRONT YARD SETBACK	50 FT
MINIMUM SIDE YARD SETBACK <sup>(1)</sup>	50 FT
MINIMUM REAR YARD SETBACK <sup>(1)</sup>	50 FT
MAXIMUM STRUCTURE HEIGHT <sup>(2)</sup>	40 FT
MINIMUM BUILDING COVERAGE	40%

<sup>\*</sup> EXISTING NON-CONFORMING CONDITION

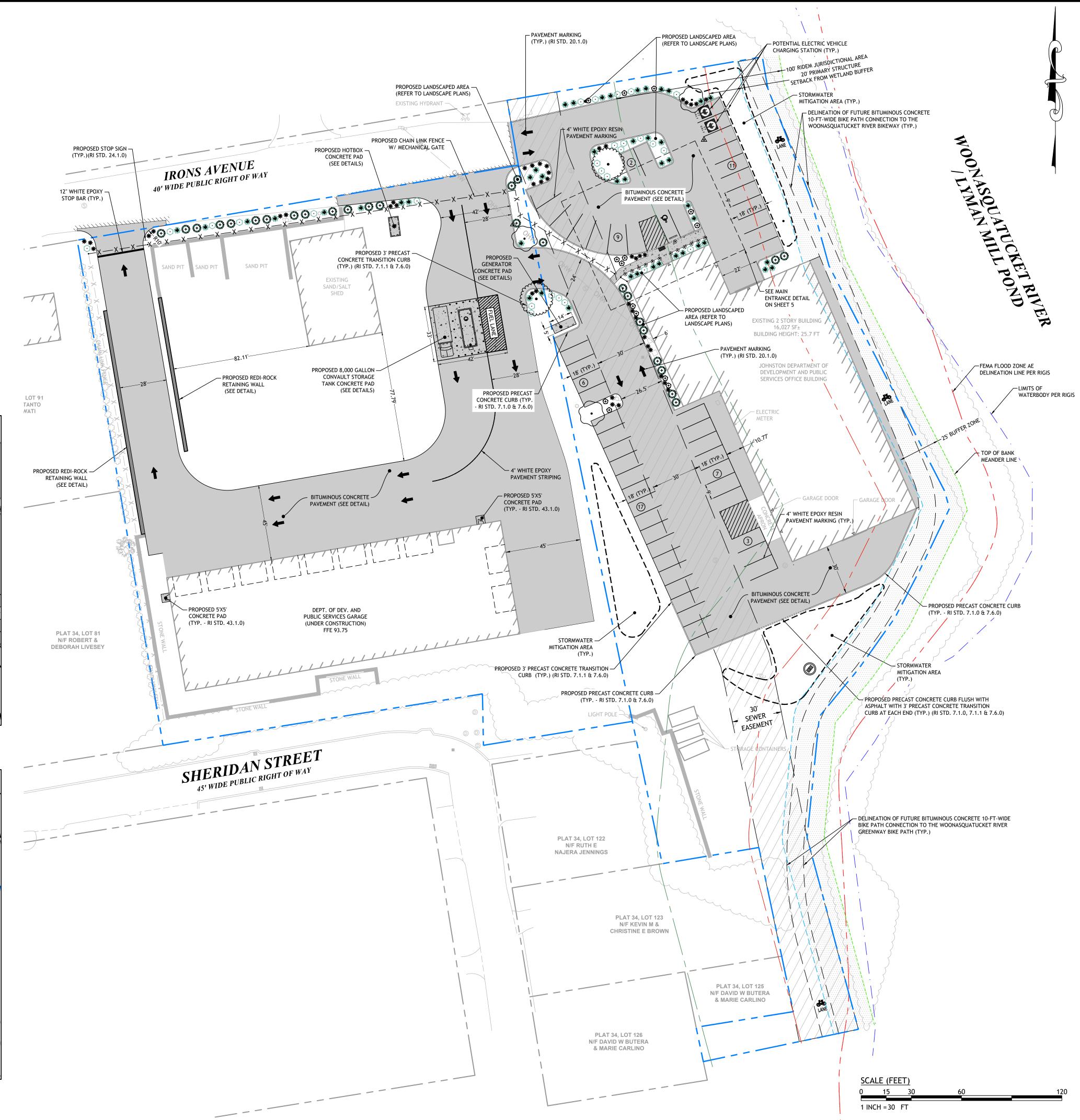
- 1. MINIMUM SIDE YARD AND MINIMUM REAR YARD DEPTH MAY BE DECREASED TO ZERO WHERE ADJACENT LOTS OR LAND PARCELS ARE TO BE COMBINED FOR THE PURPOSE OF SIMULTANEOUS DEVELOPMENT OF ONE LARGE STRUCTURE OR OF INTERCONNECTED STRUCTURES AS PART OF A PLANNED INTEGRATED COMMERCIAL OR INDUSTRIAL DEVELOPMENT.
- 2. TOWERS, CHIMNEYS AND SIMILAR VERTICAL ELEMENTS MAY EXCEED THE MAXIMUM HEIGHT SPECIFIED FOR THE DISTRICT, PROVIDED THAT ANY SUCH VERTICAL ELEMENT SHALL BE SET BACK FROM ANY LOT LINE ONE ADDITIONAL FOOT FOR EACH FOOT BY WHICH IT EXCEEDS THE MAXIMUM BUILDING HEIGHT LIMIT FOR THE DISTRICT.



TURNING TEMPLATES
SCALE: 1" = 30'



ADD ALTERNATE #1 - CONCRETE APRON SCALE: 1" = 30'



JOSEPH A. CASALI

REGISTERED

NO. DATE. DESCRIPTION

DRAWN BY: SD/SEP CHECKED BY: JAC

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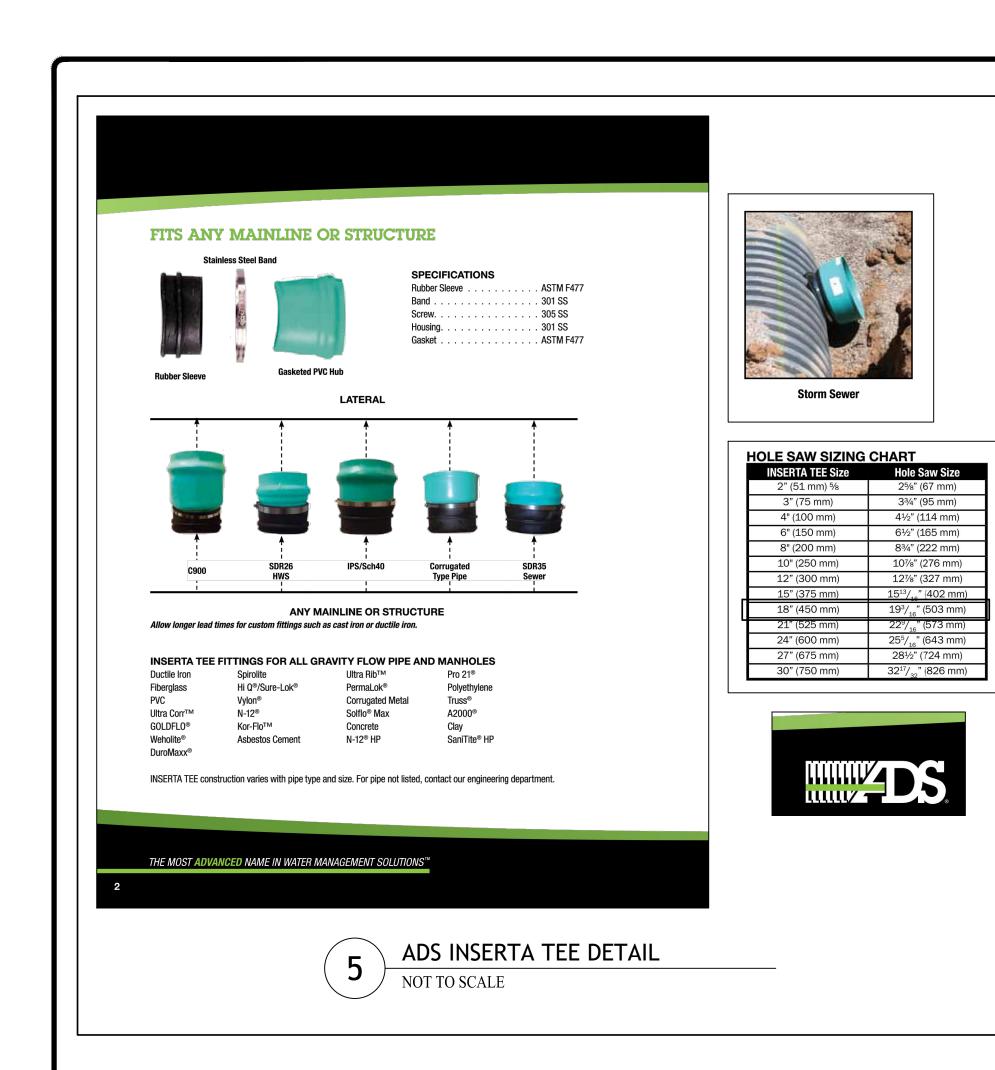
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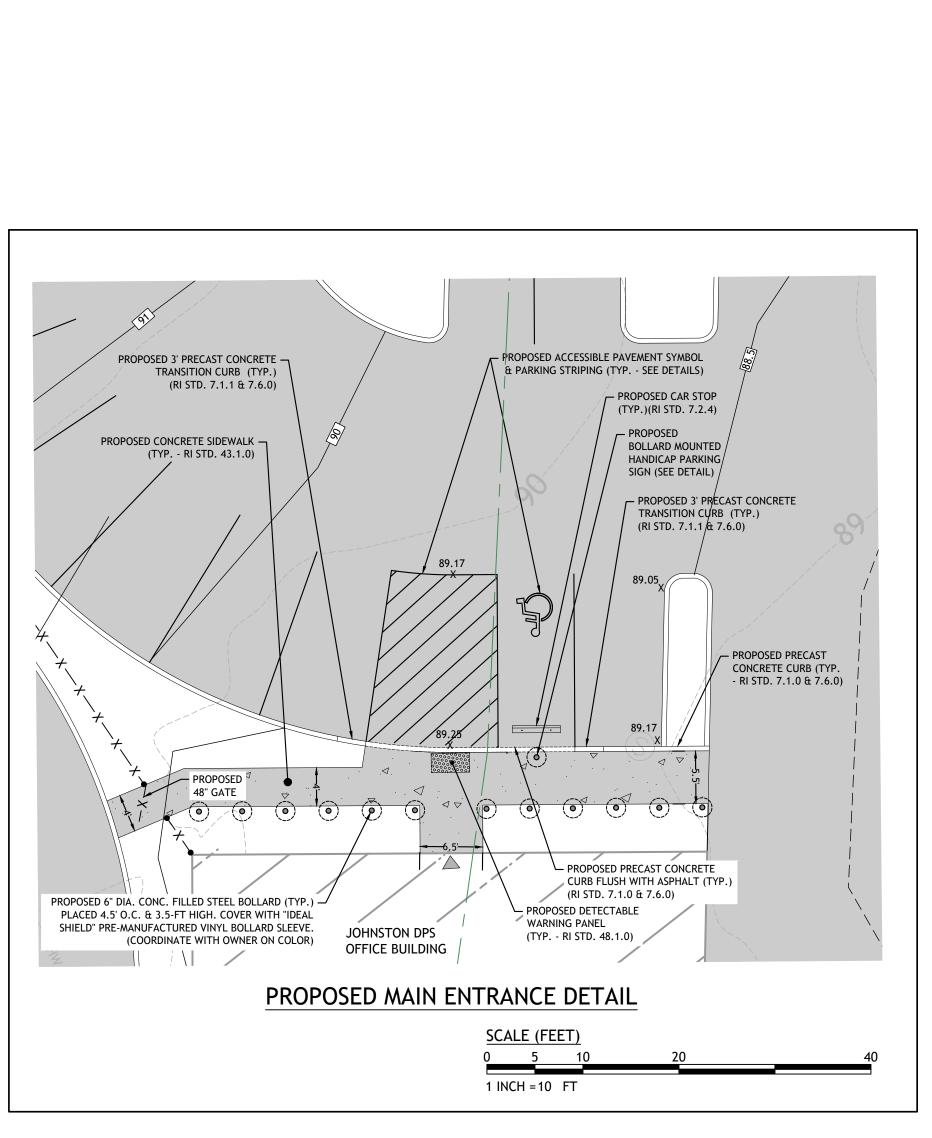
**PLAN** 

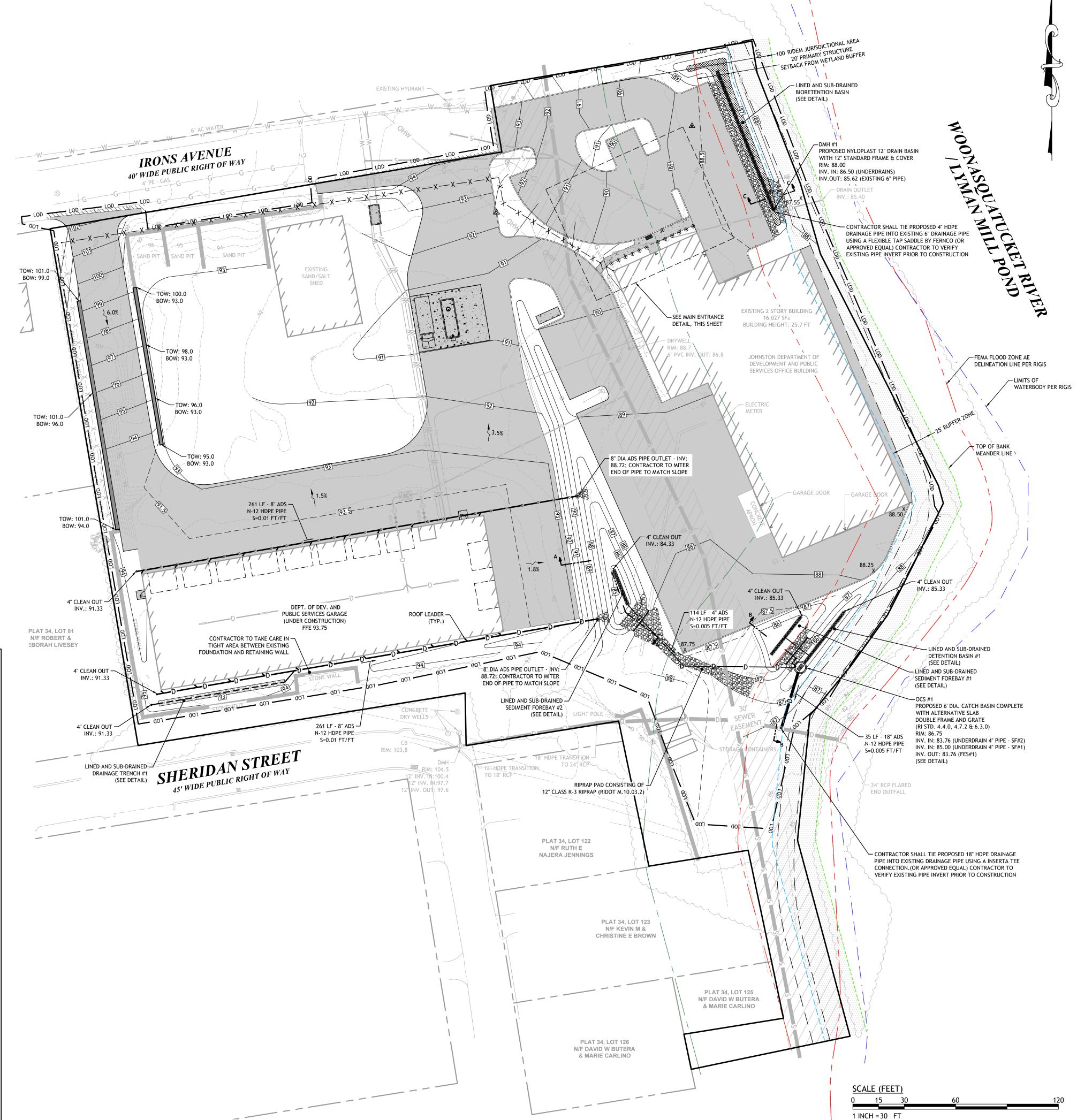
SHEET 4 OF 10

AUGUST 2023

ROFESSIONAL ENGINEER







JOSEPH A. CASALI

REGISTERED

PROFESSIONAL ENGINEER

CIVIL

**REVISIONS:** 

NO. DATE. DESCRIPTION

DESIGNED BY: WMLJR DRAWN BY: SD/SEP

DATE: AUGUST 2023

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CONSTRUCTION

**GRADING &** 

**DRAINAGE** 

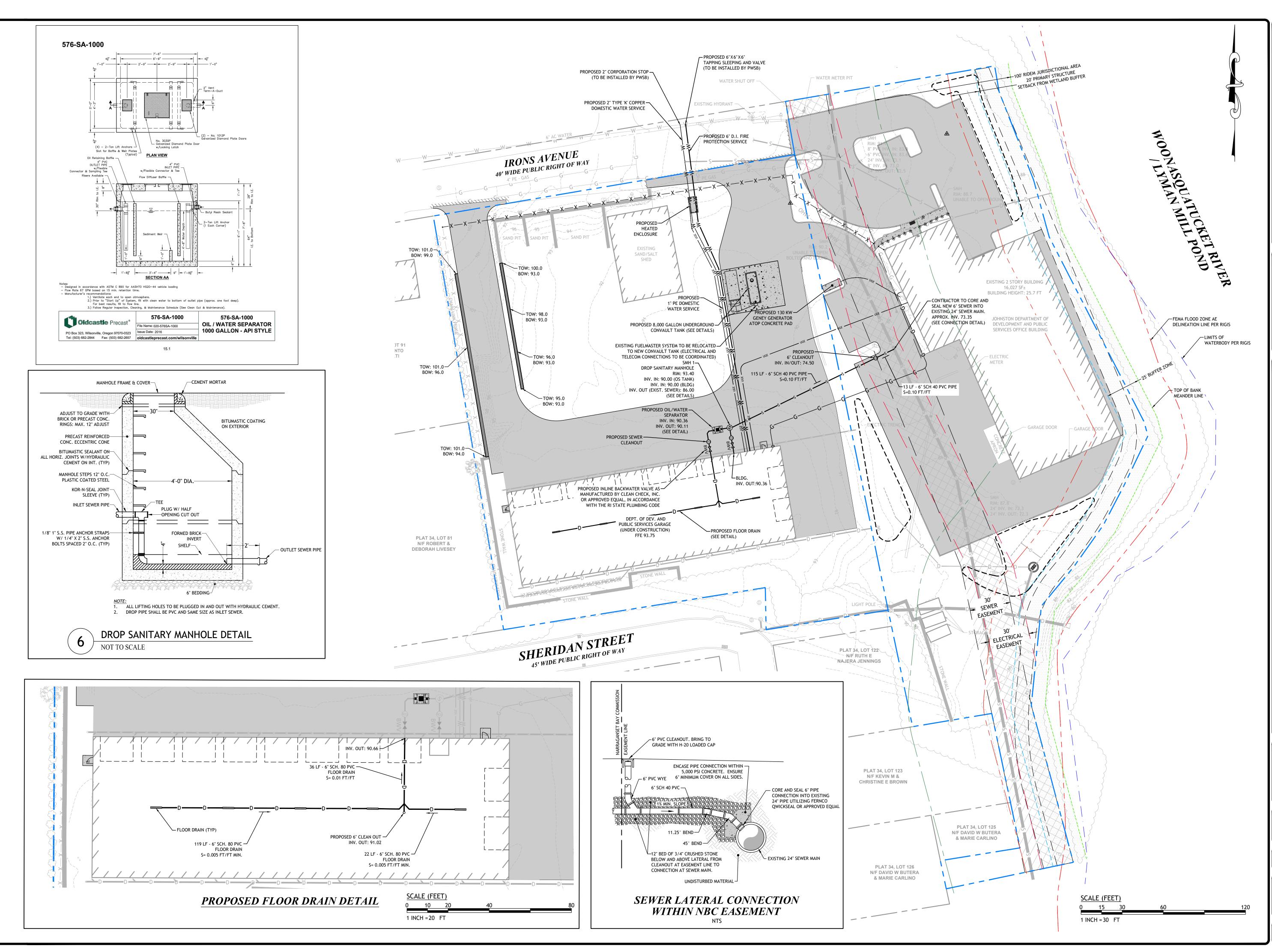
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SHEET

5 OF 10

CHECKED BY: JAC

PROJECT NO: 06-90i



JOE CASALI ENGINEERING, INC.
CIVIL. SITE DEVELOPMENT · TRANSPORTATION
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DEPT. OF DEV. AND PUBLIC SERVIC 100 IRONS AVENUE JOHNSTON, RHODE ISLAND

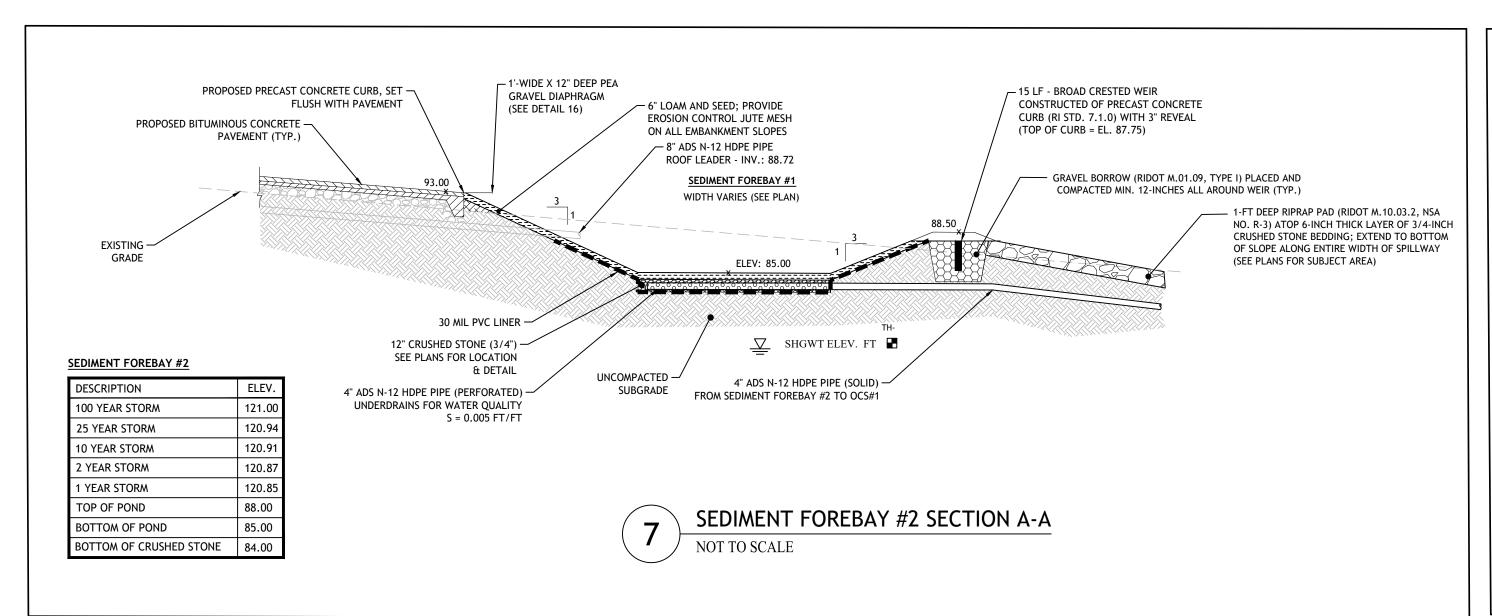
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1 9/21/23 NBC COMMENTS

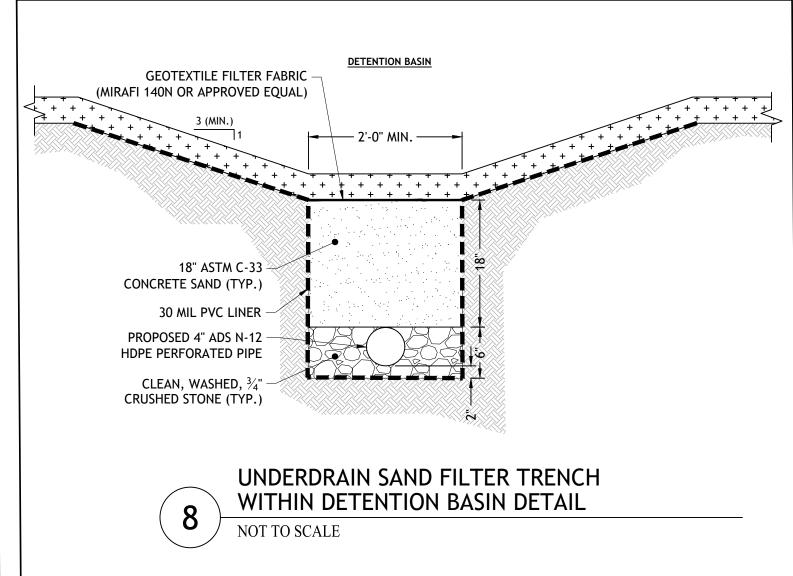
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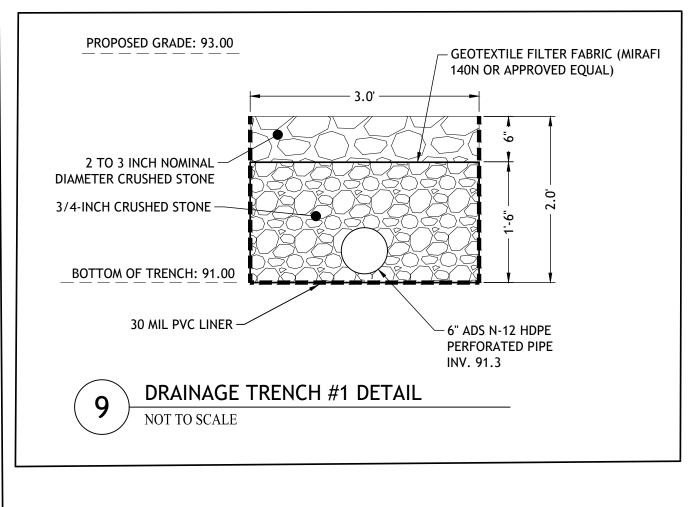
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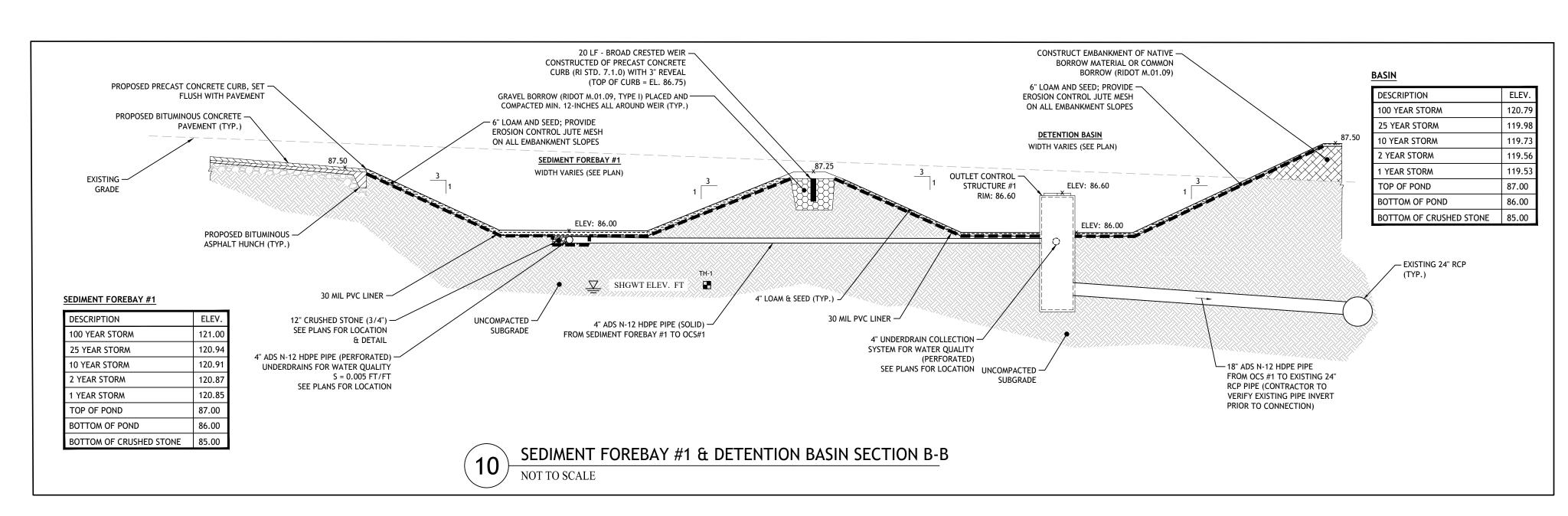
> UTILITY PLAN

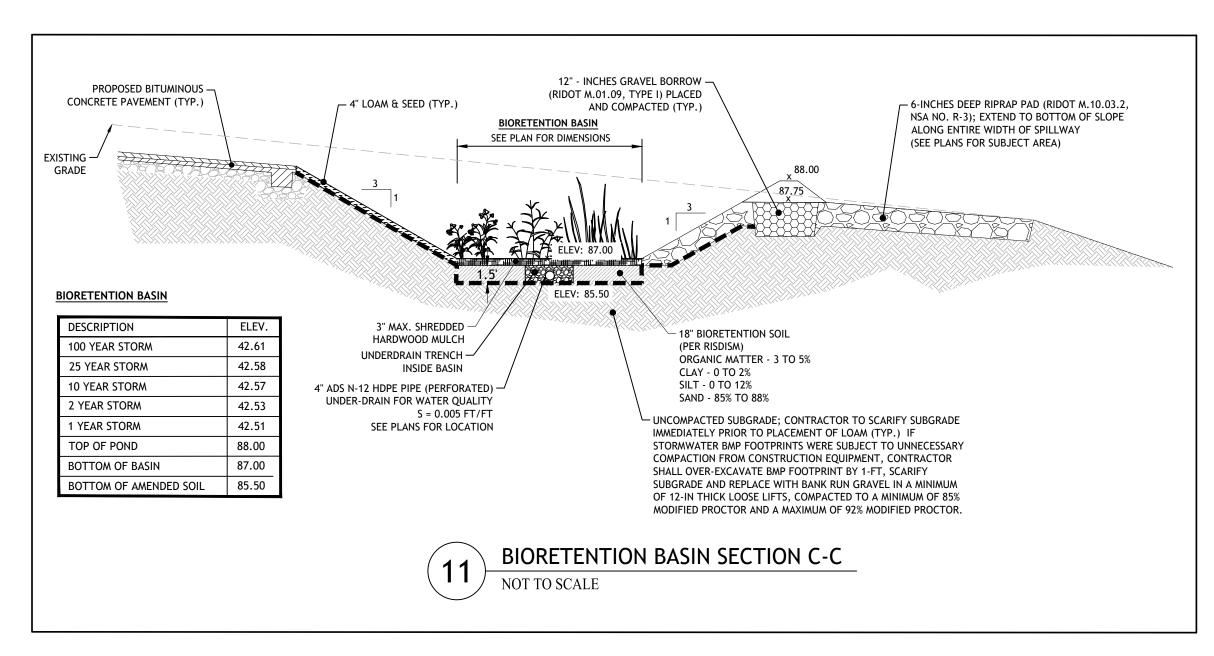
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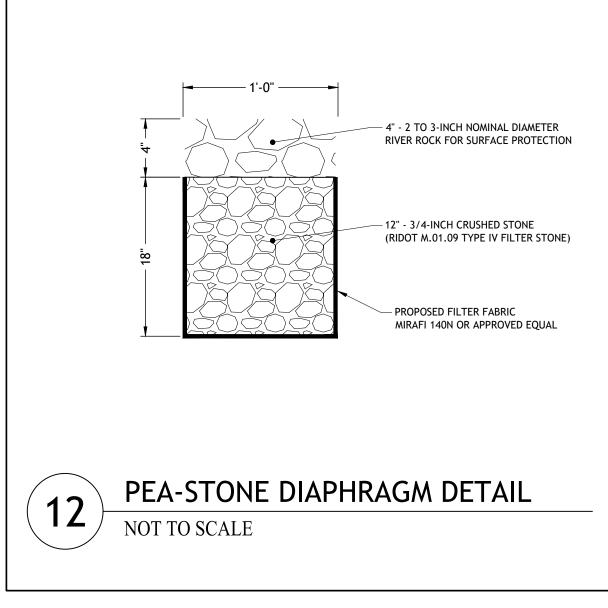


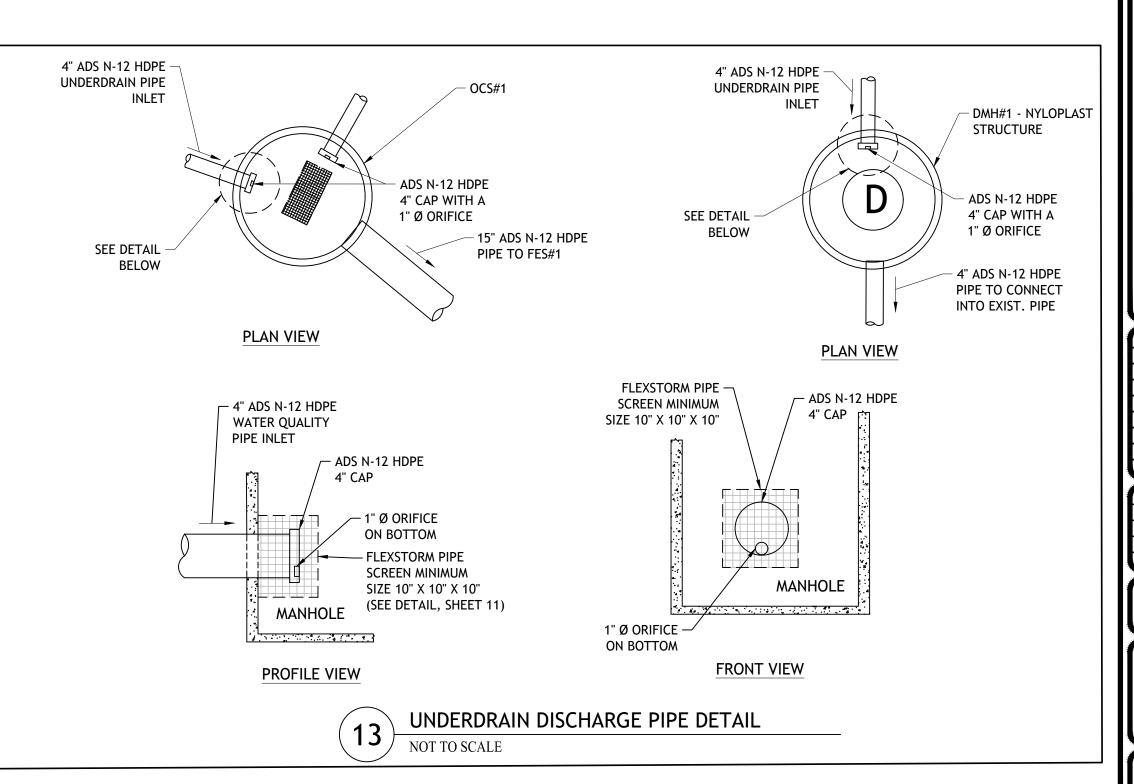


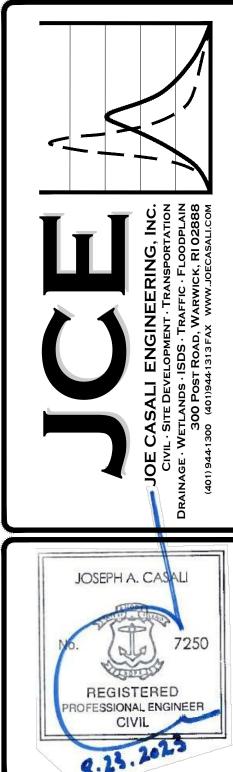












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REVISIONS:
NO. DATE. DESCRIPTION

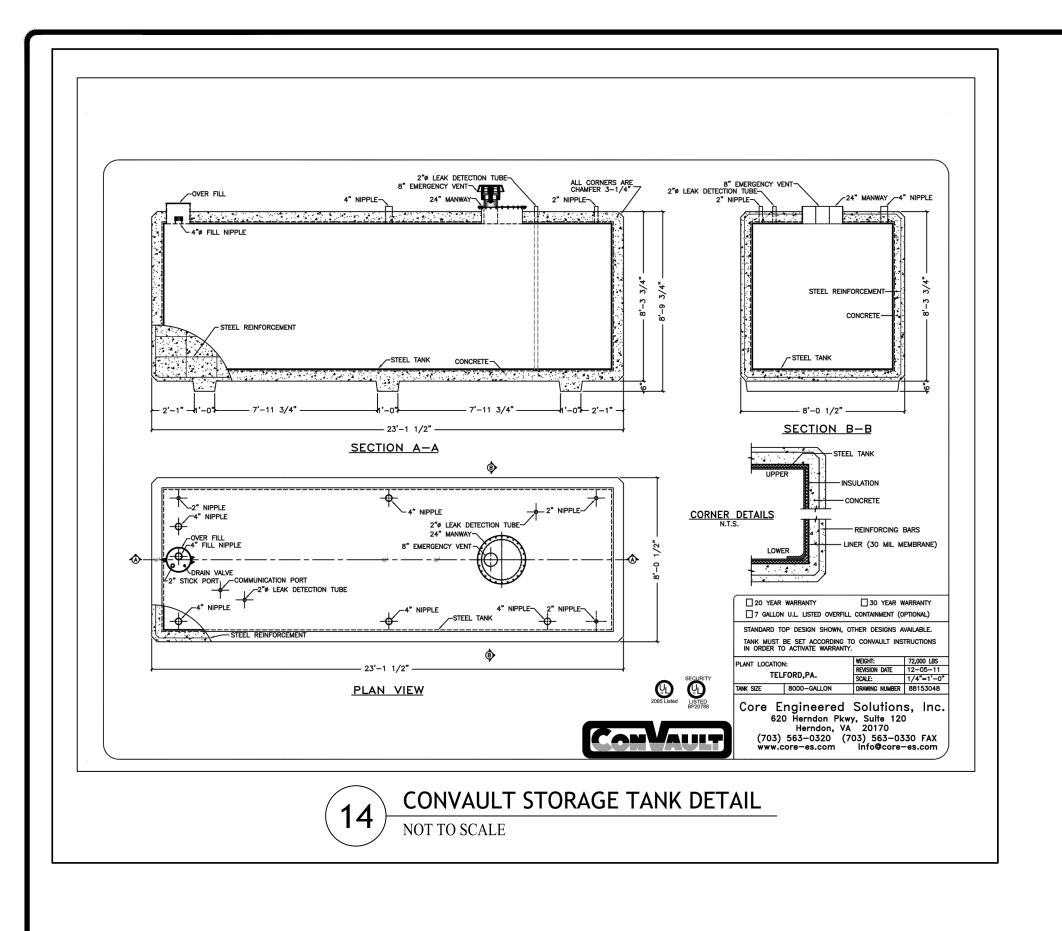
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DRAWN BY: SD/SEP
CHECKED BY: JAC

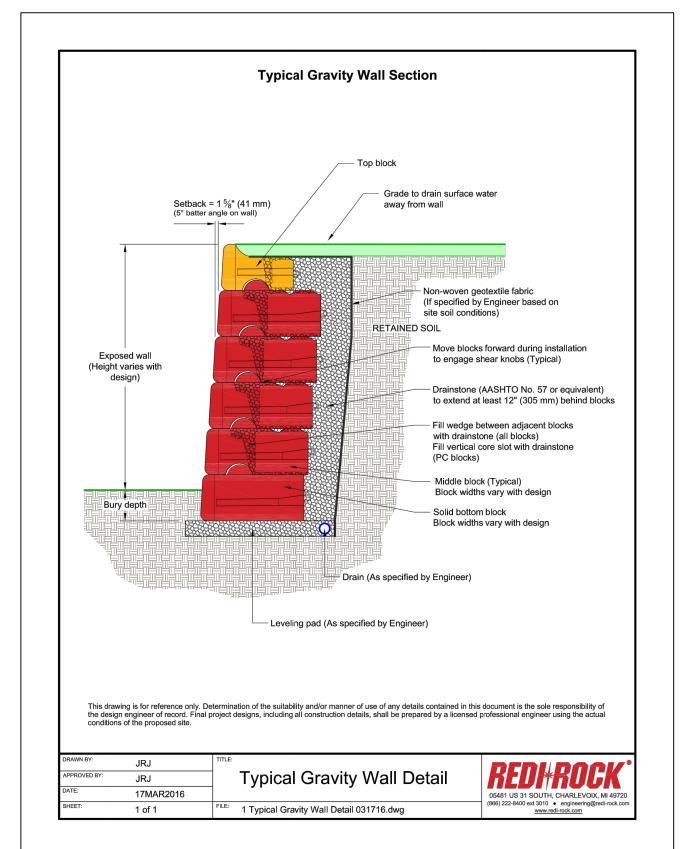
DATE: AUGUST 2023
PROJECT NO: 06-90i

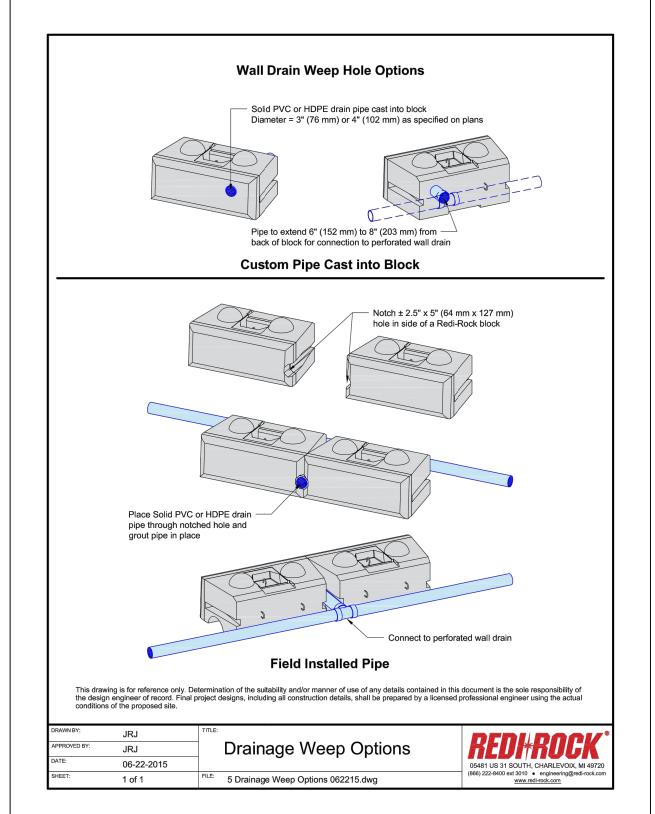
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CONSTRUCTION

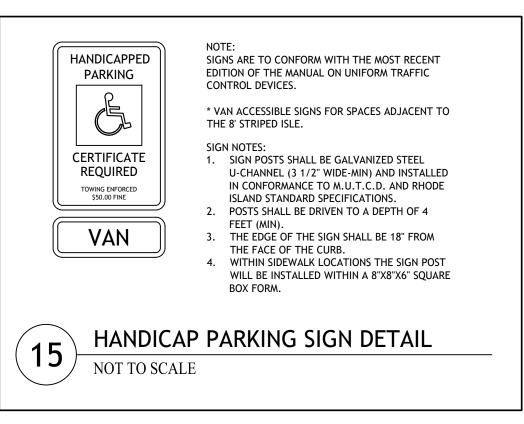
DRAINAGE DETAILS I

> SHEET 7 OF 10









1. IF UNSUITABLE MATERIALS ARE ENCOUNTERED AT SUBGRADE ELEVATION, THE

CONTRACTOR SHALL NOTIFY THE ENGINEER. THE DEPTH OF UNSUITABLE

MATERIAL TO BE REMOVED WILL BE DETERMINED IN THE FIELD. THE

CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE THE UNSUITABLE

MATERIALS AND REPLACE WITH SUITABLE MATERIAL APPROVED BY THE

MINIMUM COMPACTION FOR GRAVEL BORROW SUB-BASE AND SUBGRADE: 95%

**BITUMINOUS CONCRETE PAVEMENT** 

- CONTRACTOR SHALL NOTIFY ENGINEER

OF ANY UNSUITABLE MATERIAL FOUND DURING EXCAVATION. UNSUITABLE

DISPOSED TO A DEPTH DETERMINED IN

MATERIAL TO BE REMOVED AND

THE FIELD BY THE ENGINEER.

2" BITUMINOUS CONCRETE -SURFACE COURSE (CLASS 9.5)

ASPHALT TACK COAT

3" BITUMINOUS CONCRETE -BASE COURSE (CLASS 12.5)

8" GRAVEL BORROW (RIDOT -M.01.09 TYPE I) PLACED AND

COMPACTED SUBGRADE -

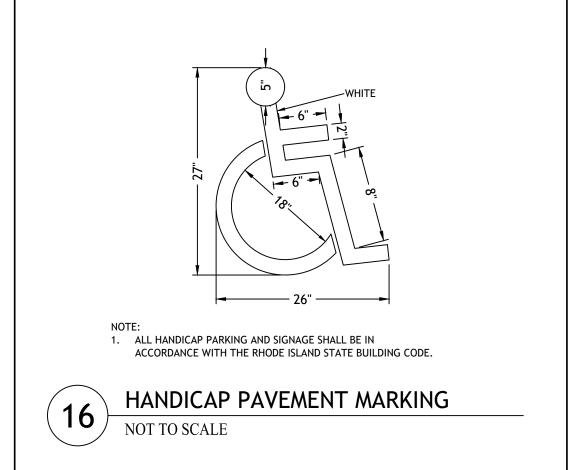
LOOSE LIFT

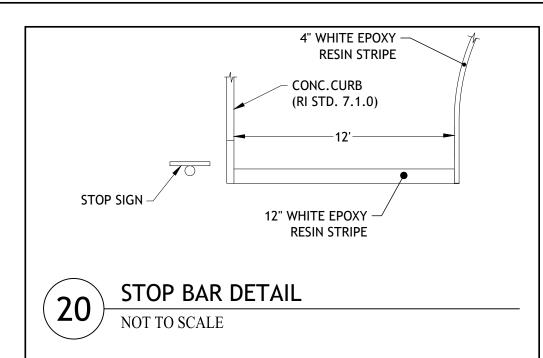
COMPACTED IN ONE, UNIFORM

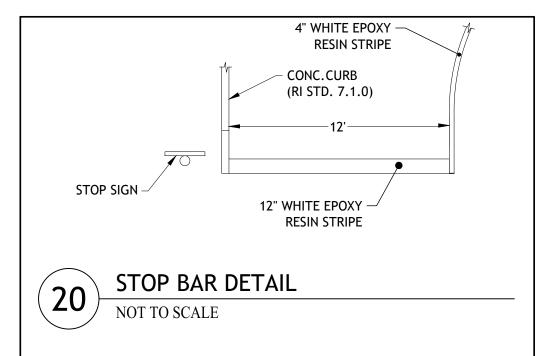
**NOTES:** 

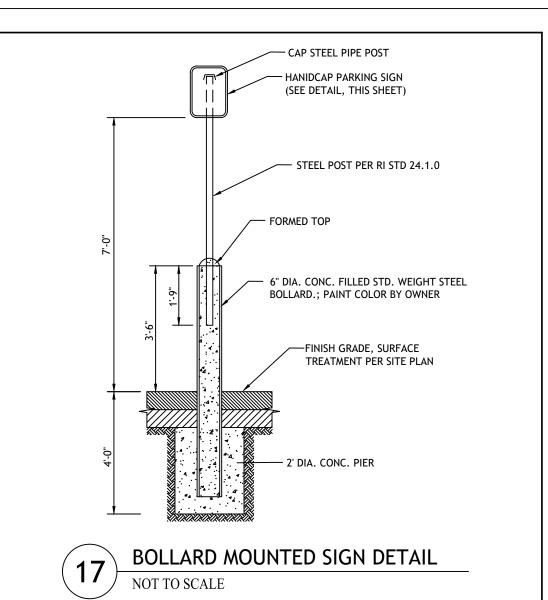
ENGINEER.

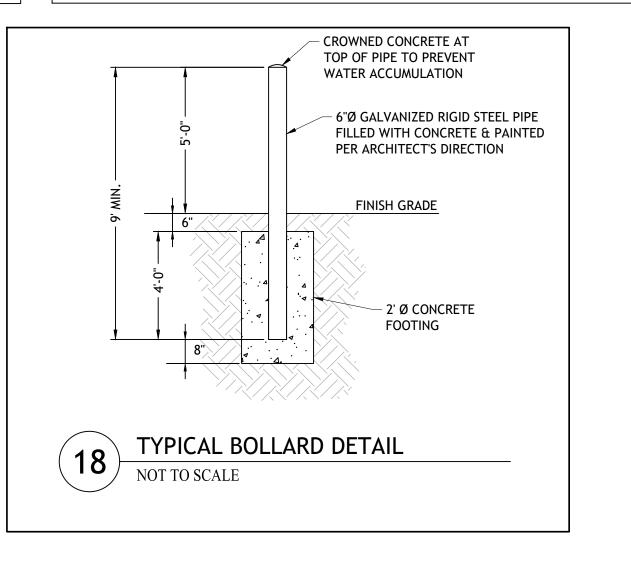
MODIFIED PROCTOR.

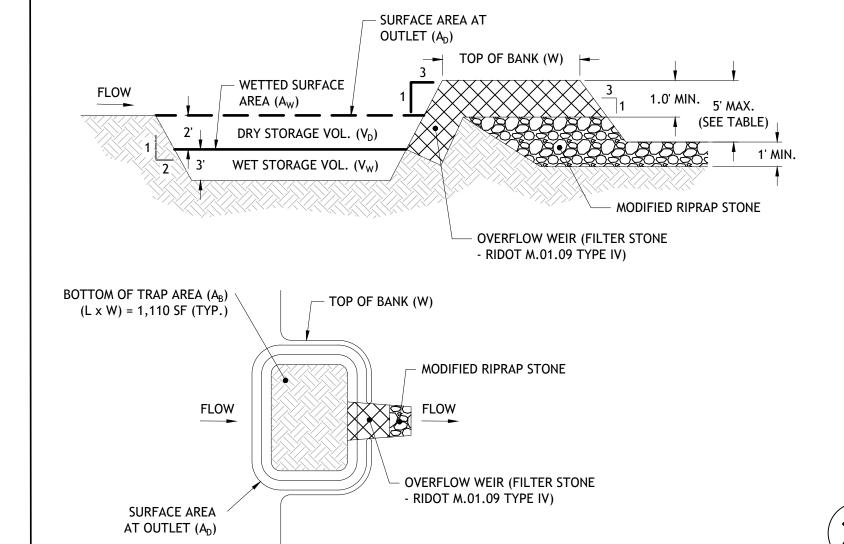








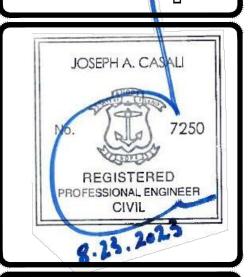




### NOTES:

- 1. PHASING IS ANTICIPATED TO BE UTILIZED FOR THIS PROJECT IN ORDER TO COMPLETE DISTURBANCE ACTIVITIES WITHIN A SIX (6) MONTH WINDOW. A DETAILED PHASING PLAN WILL BE DEVELOPED UPON ENGAGEMENT OF A SITE CONTRACTOR AND SUBMITTED TO THE DESIGN ENGINEERING AND THE TOWN OF COVENTRY FOR REVIEW AND APPROVAL .
- 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD FIT AND DETERMINE ACTUAL SEDIMENT TRAP SIZES, LOCATIONS, DIVERSION BERM LOCATIONS, SWALES, SILT FENCE LOCATIONS AND ANY OTHER APPROPRIATE SEDIMENT CONTROL MEASURES. ALL SOIL EROSION MEASURES SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (2016).
- 3. PROPOSED SEDIMENT TRAP SHOWN SHALL BE DESIGNED TO ACCOMMODATE DRAINAGE FROM CONTRIBUTING AREAS OF 1 TO 5 ACRES.
- 4. EACH TEMPORARY SEDIMENT TRAP SHALL BE PROVIDED A SEDIMENT STORAGE STAKE AND MARKER, IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (2016).

TEMPORARY SEDIMENT TRAP DETAIL



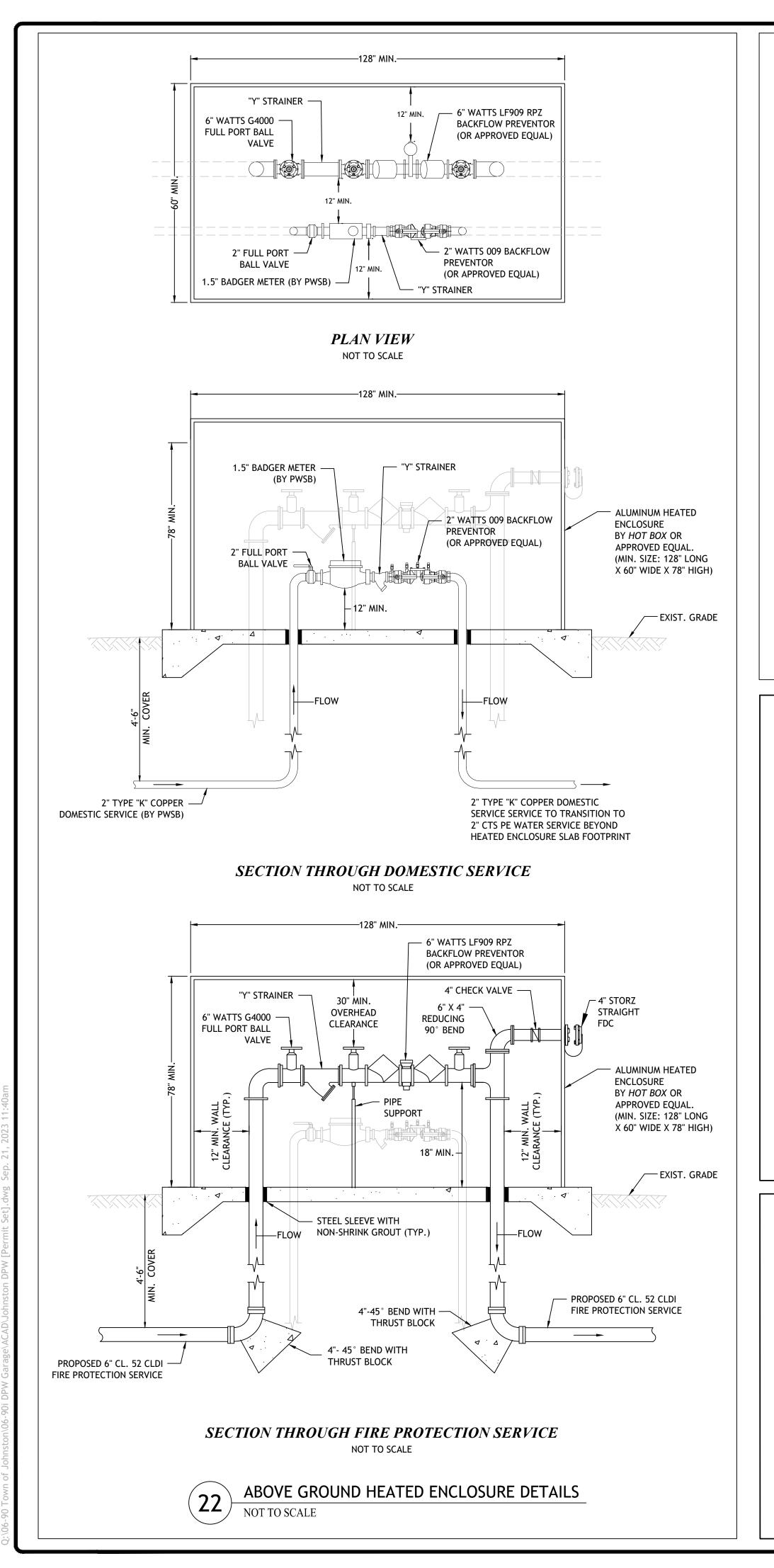
**REVISIONS:** NO. DATE. DESCRIPTION

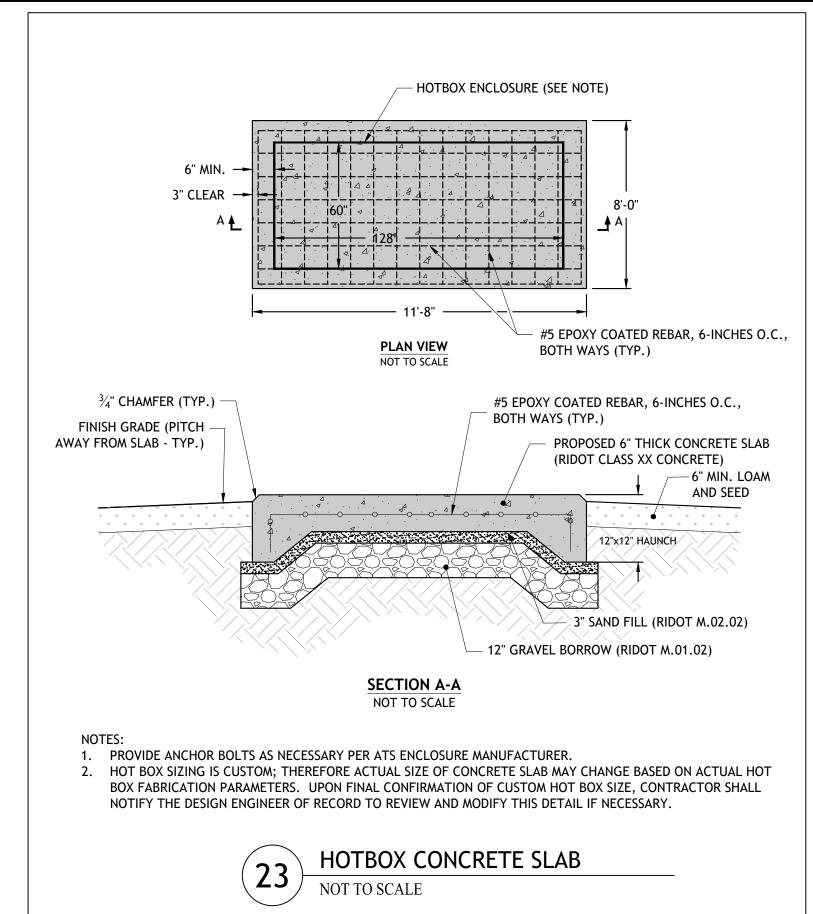
> DRAWN BY: SD/SEP CHECKED BY: JAC AUGUST 2023 PROJECT NO: 06-90i

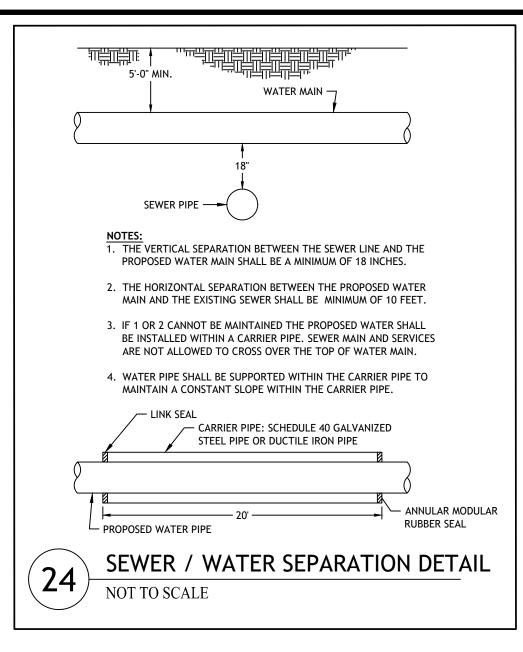
PRELIMINARY, NOT FOR CONSTRUCTION

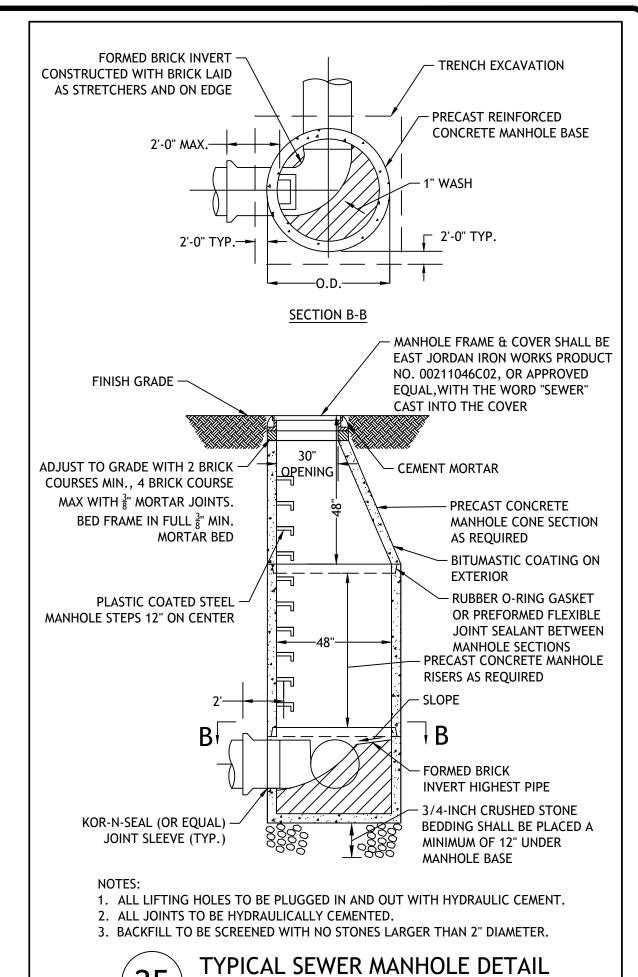
> CIVIL **DETAILS I**

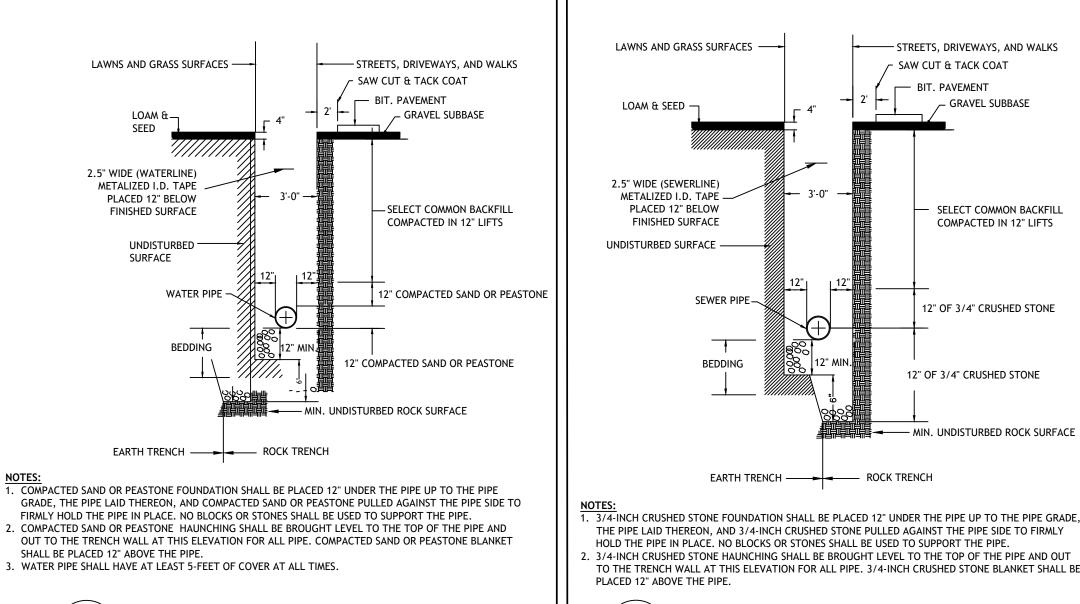
> > SHEET 8 OF 10

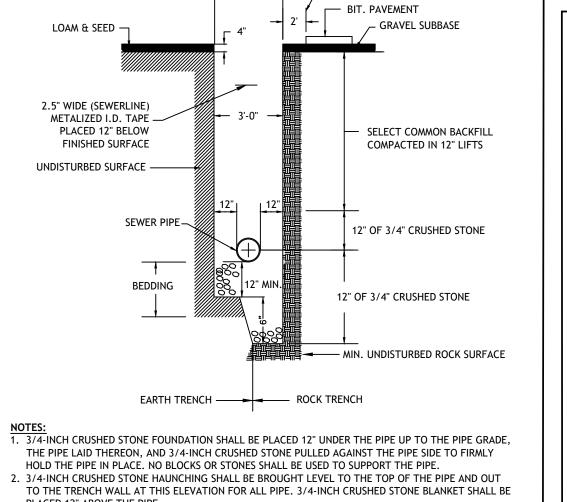




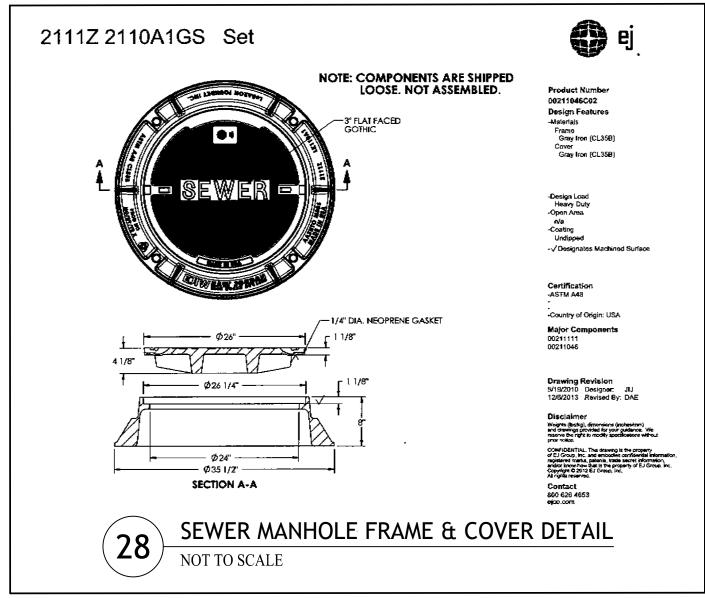




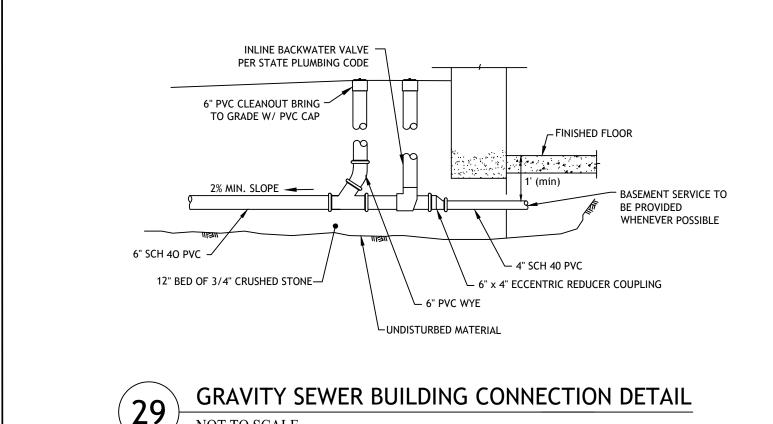




TYPICAL SEWER LINE TRENCH DETAIL NOT TO SCALE

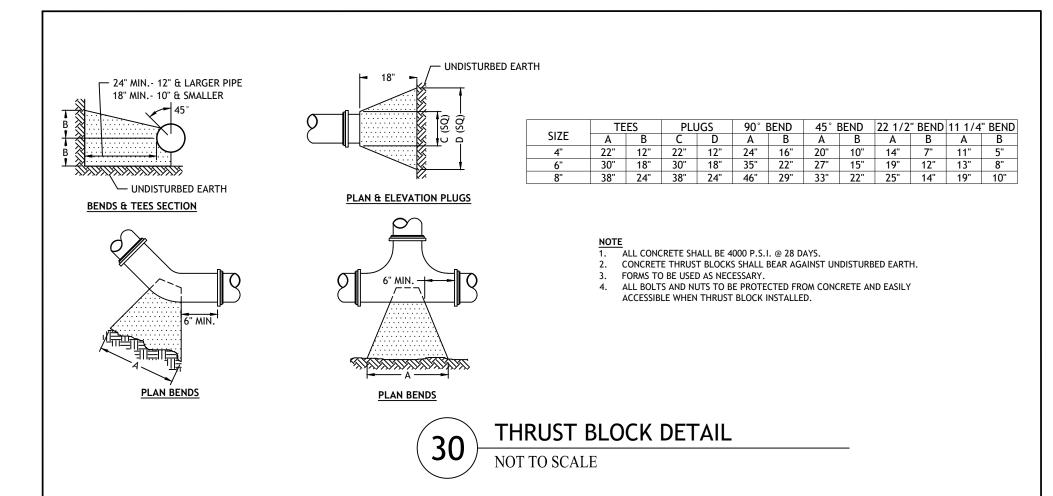


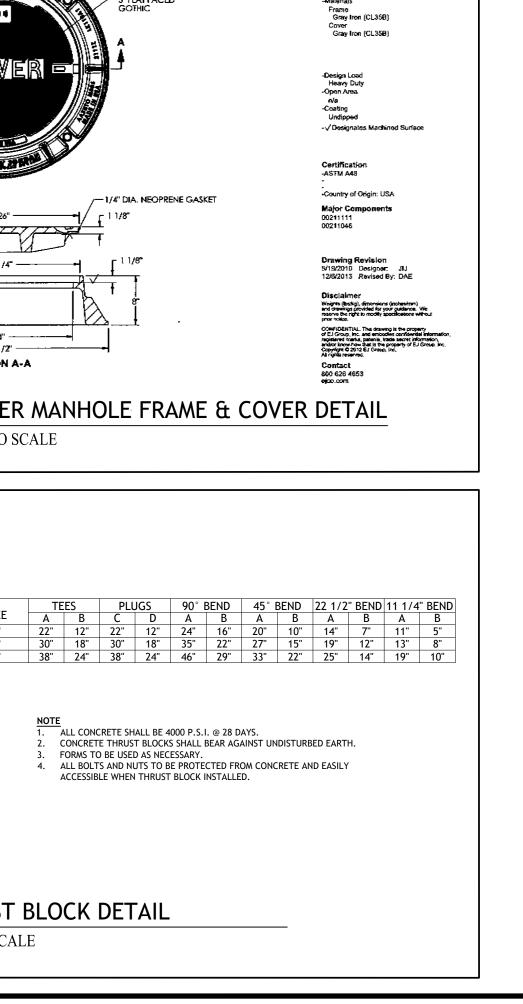
NOT TO SCALE



WATER LINE TRENCH DETAIL

NOT TO SCALE





NO. DATE. DESCRIPTION 1 9/21/23 NBC COMMENTS DRAWN BY: SD/SEP CHECKED BY: JAC AUGUST 2023 PROJECT NO: 06-90i PRELIMINARY, NOT FOR

CONSTRUCTION

JOSEPH A. CASALI

REGISTERED

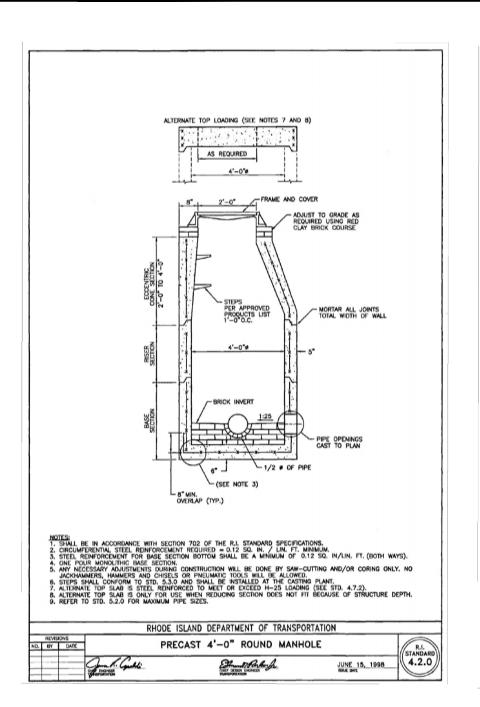
ROFESSIONAL ENGINEER

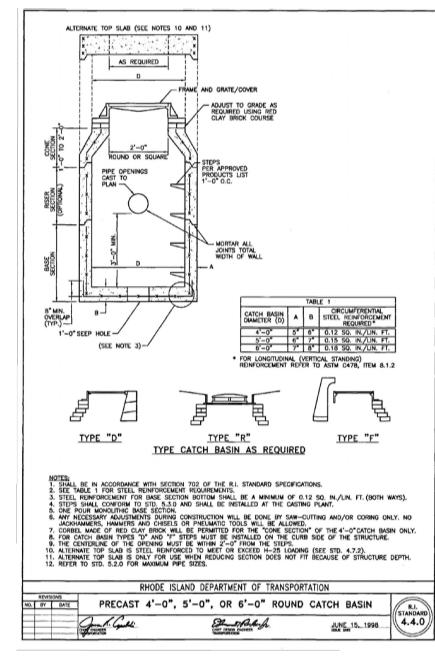
CIVIL

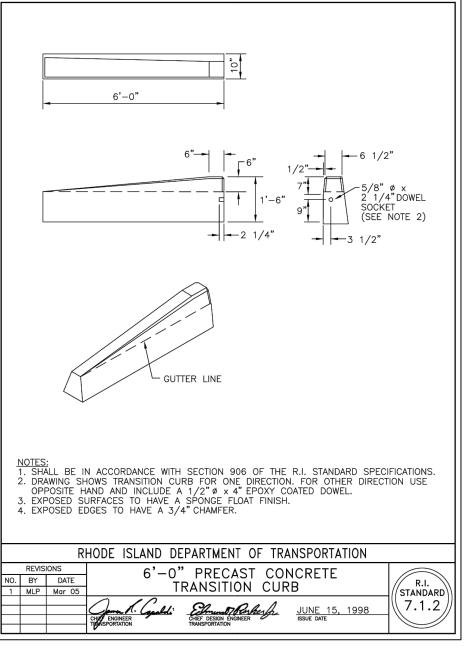
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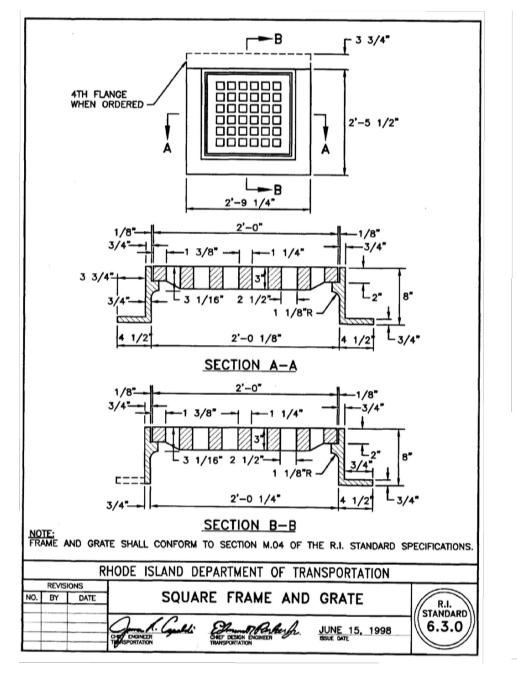
**CIVIL DETAILS II** 

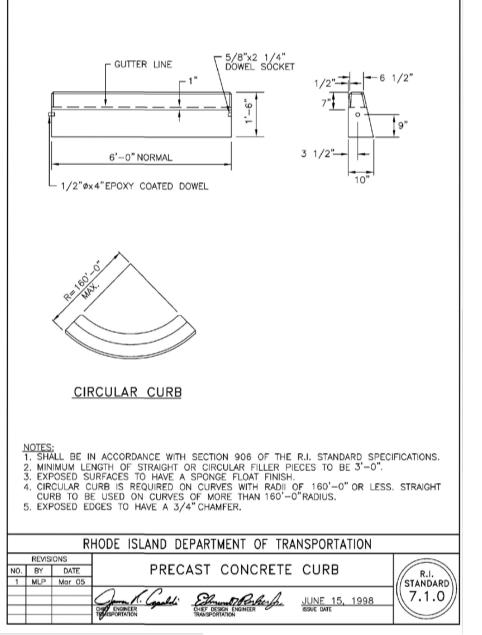
> SHEET 9 OF 10

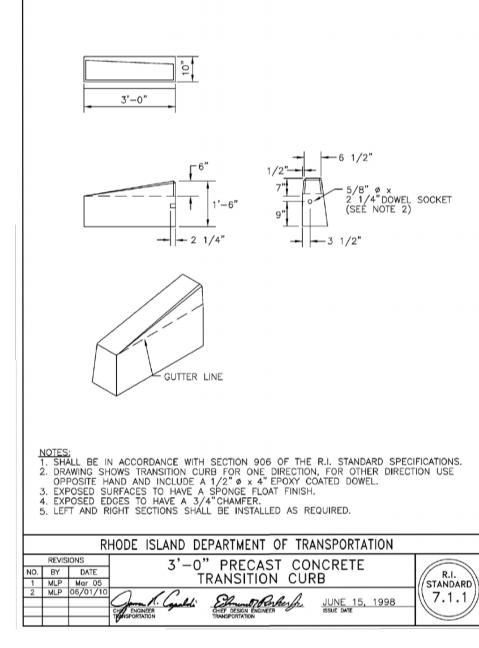


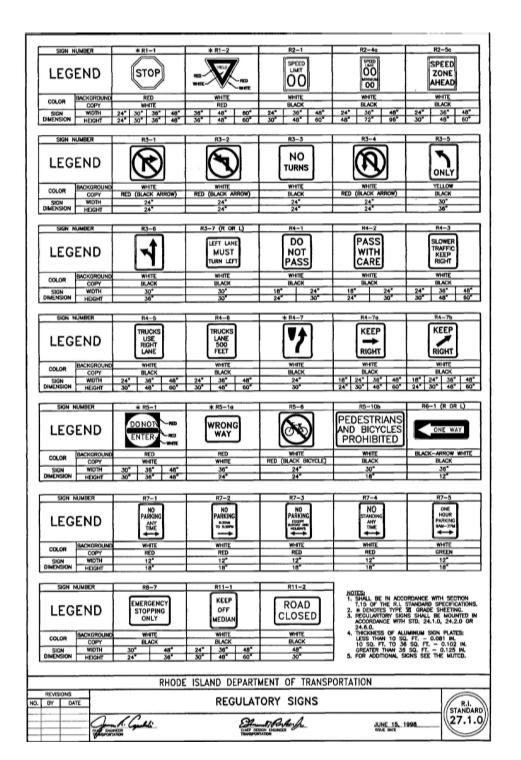


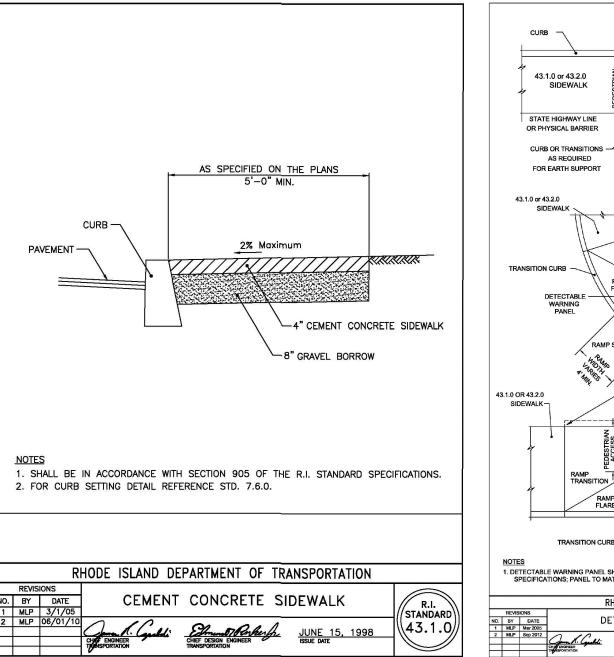


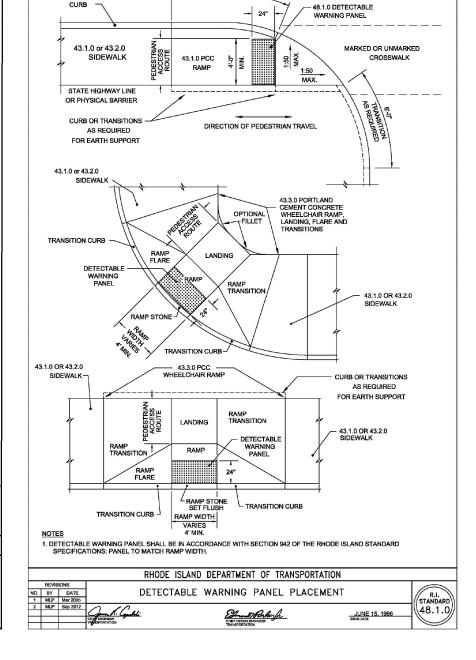


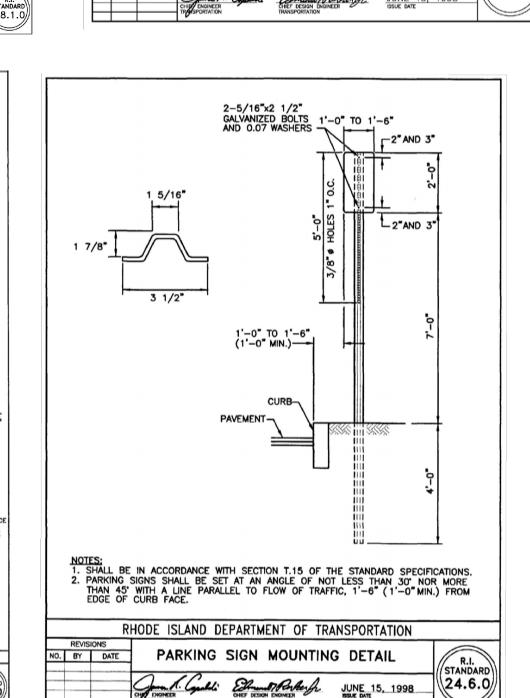


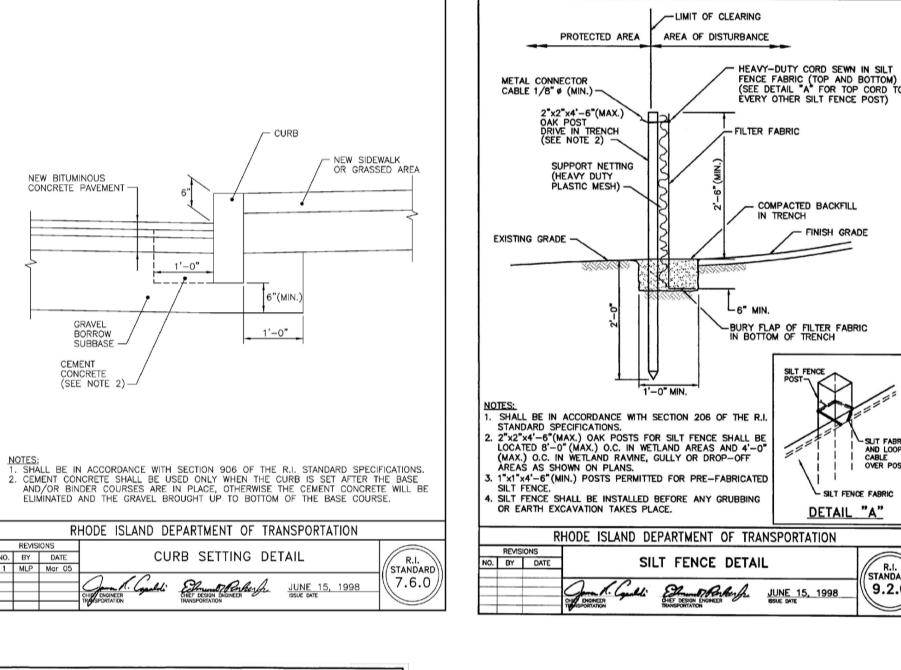


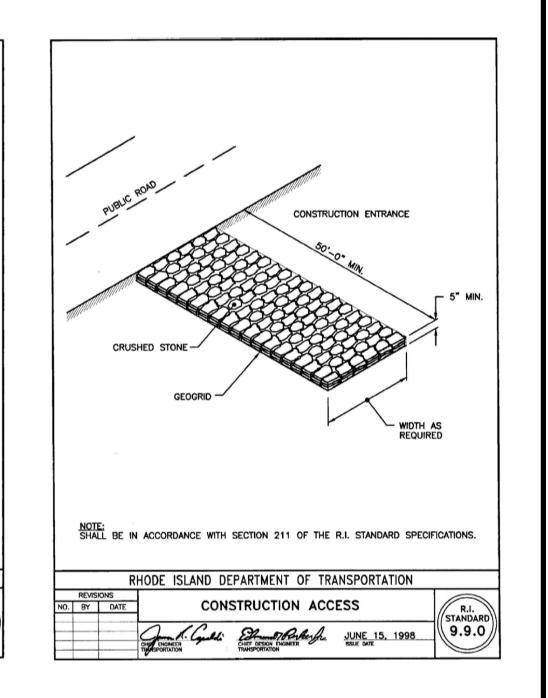






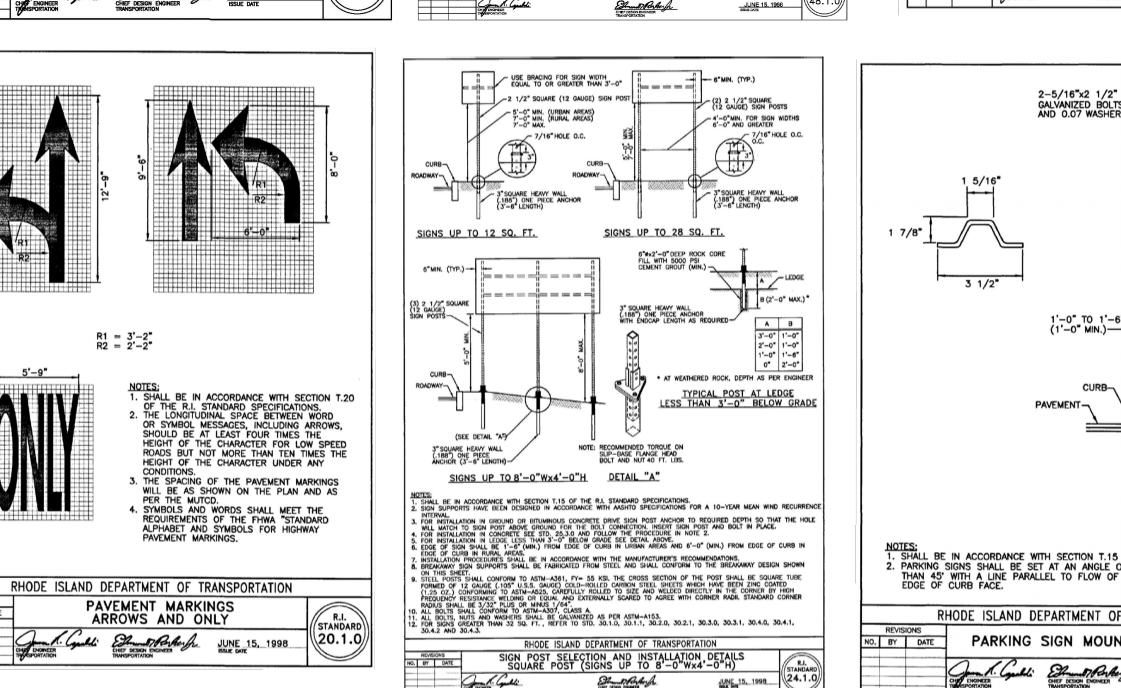


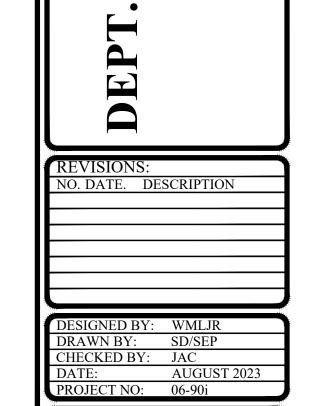




SILT FENCE FABRIC

9.2.0





OF

JOSEPH A. CASALI

REGISTERED ROFESSIONAL ENGINEER CIVIL

CONSTRUCTION **RI STANDARD** 

**DETAILS** 

PRELIMINARY, NOT FOR

SHEET 10 OF 10

