

PROJECT:

West Parish Filters Water Treatment
Plant
1515 Granville Road
Westfield, MA 01085
Project No. 24-51

ADDENDUM NO. 12 05/28/2024

Posted: 05/28/2024 at 5:44PM EDT

Awarding Authority/Owner:

Springfield Water and Sewer Commission
250 M Street Extension
Agawam, MA 01001

Reference Contract Documents (drawings and specifications) dated 02/26/2024

The attention of Bidders submitting proposals for the above subject project is called to the following addendum to the specifications and drawings. The items set forth herein, whether of omission, addition, substitution, or clarifications are all to be included in and form a part of the proposal submitted.

THE NUMBER OF THIS ADDENDUM (**12**) MUST BE ENTERED IN THE APPROPRIATE SPACE "B" PROVIDED AFTER THE WORD "NUMBERS" OF THE CONTRACT FORM ENTITLED "FORM FOR GENERAL BID," AND IN SPACE "B" OF THE "FORM FOR SUB-BID."

BID DOCUMENT MODIFICATIONS ARE AS FOLLOWS.

Other Modifications / Attachments:

The following attachment includes additional modifications, clarifications and/or provisions not included in the items above in this Addendum.
See document at the end of document.

All other of the portions of the Contract Documents remain unchanged. Please be reminded to acknowledge this Addendum on the bid forms.

ATTACHMENTS

24-51 Addendum No. 12.pdf


--- End of Addendum No. **12** ---

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

SWSC BID NO. 24-51

ADDENDUM NO. 12



Marc W. Morin
05/28/2024

TO ALL CONTRACTORS ESTIMATING:

Bidders are hereby informed that plans and specifications for the above-mentioned contract are modified, corrected, and/or supplemented as follows, and that Addendum No. 12 becomes a part of the Contract Documents and consists of Item Nos. 12-1 through 12-46.

ANNOUNCEMENTS (THESE ITEMS NOT TO BECOME PART OF THE CONTRACT DOCUMENTS AND ARE FOR INFORMATION ONLY)

Figure 5 referenced in Attachment 4: Beneficial Use Determination Approval of 01 41 00.01 Schedule of Permits is included as Attachment A.

DRAWING CHANGES

ITEM 12-1: CONTRACT DRAWINGS

Delete the following drawing sheets in their entirety and replace with the attached drawings in Attachment No. B:

- G-002, Index of Drawings, Sheet 1
- G-014, Raw and Finished Water Sequence of Construction – Sheet 2
- C-001, Overall Site Plan and Drawing Key
- C-002, Erosion and Sediment Control Phasing Plan – Phase I
- C-003, Erosion and Sediment Control Phasing Plan – Phase II
- C-004, Erosion and Sediment Control Phasing Plan – Phase II
- C-005, Erosion and Sediment Control Phasing Plan – Phase IV
- C-006, Erosion and Sediment Control Phasing Plan – Phase V
- C-007, Overall Site Access Plans – Phase I
- C-008, Overall Site Access Plans – Phase II
- C-009, Overall Site Access Plans – Phase III
- C-010, Overall Site Access Plans – Phase IV
- C-100, Overall Existing Conditions with Yard Piping Demolition Plan
- C-101, Existing Conditions with Yard Piping Demolition Plan – Sheet 1
- C-102, Existing Conditions with Yard Piping Demolition Plan – Sheet 2
- C-105, Existing Conditions with Yard Piping Demolition Plan – Sheet 5
- C-107, Existing Conditions with Yard Piping Demolition Plan – Sheet 7
- C-110, Overall Demolition Plan
- C-111, Demolition Plan – Sheet 1
- C-112, Demolition Plan – Sheet 2
- C-115, Demolition Plan – Sheet 5
- C-120, Interim Overall Grading and Drainage Plan
- C-121, Interim Site Plan 1
- C-122, Interim Site Plan 2
- C-123, Interim Site Plan 3
- C-124, Interim Site Plan 4
- C-125, Interim Site Plan 5
- C-130, Overall Grading and Drainage Plan
- C-131, Grading and Drainage Plan – Sheet 1
- C-132, Grading and Drainage Plan – Sheet 2
- C-133, Grading and Drainage Plan – Sheet 3
- C-134, Grading and Drainage Plan – Sheet 4

- C-140, Overall Yard Piping Plan
- C-141, Yard Piping Plan – Sheet 1
- C-142, Yard Piping Plan – Sheet 2
- C-143, Yard Piping Plan – Sheet 3
- C-144, Yard Piping Plan, Sheet 4
- C-145, Yard Piping Plan, Sheet 5
- C-146, Yard Piping Plan, Sheet 6
- C-150, Overall Final Site Plan
- C-151, Final Site Plan – Sheet 1
- C-152, Final Site Plan – Sheet 2
- C-153, Final Site Plan – Sheet 3
- C-154, Final Site Plan – Sheet 4
- C-160, Staking Plan – Limit of Disturbance
- C-161, Staking Plan – Sheet 1
- C-162, Staking Plan – Sheet 2
- C-163, Staking Plan – Sheet 3
- C-164, Staking Plan – Sheet 4
- C-165, Staking Plan – Sheet 5
- C-166, Staking Plan – Sheet 6
- C-167, Staking Tables
- C-168, Staking Tables – Limit of Disturbance
- C-170, Site Sections – Overall Plan
- C-171, Site Sections – Sheet 1
- C-172, Site Sections – Sheet 2
- C-173, Site Sections – Sheet 3
- C-174, Site Sections – Sheet 4
- C-175, Site Sections – Sheet 5
- C-176, Site Sections – Sheet 6
- C-203, Access Road Plan and Profile – Sheet 3
- C-204, Access Road Plan and Profile – Sheet 4
- C-205, Roadway Sections
- C-206, Roadway Details
- C-210, Stormwater Wetland Pond Plan
- C-211, Stormwater Wetland Profile and Cross Sections
- C-212, Storm Drain Profiles – Sheet 1
- C-213, storm Drain Profiles – Sheet 2
- C-214, Storm Drain Profiles – Sheet 3
- C-215, Storm Drain Profiles – Sheet 4
- C-216, Storm Drain Profiles – Sheet 5
- C-217, Storm Drain Profiles – Sheet 6
- C-220, Site Drain Profile
- C-231, Sanitary Sewer Profiles
- C-236, Holding Tank Detail
- C-240, Overall Transmission Mains Plan

- C-241, Raw Water Transmission Main Plan And Profile - Sheet 1
- C-242, Raw Water Transmission Main Plan And Profile - Sheet 2
- C-243, Raw Water Transmission Main Plan And Profile - Sheet 3
- C-244, Raw Water Transmission Main Plan And Profile - Sheet 4
- C-245, Raw Water Transmission Main Plan And Profile - Sheet 5
- C-246, Raw Water Transmission Main Connection Details - Sheet 1
- C-247, Raw Water Transmission Main Connection Details - Sheet 2
- C-248, Wash Water Profile
- C-251, Treated Water Transmission Main Plan And Profile - Sheet 1
- C-252, Treated Water Transmission Main Plan And Profile - Sheet 2
- C-253, Treated Water Transmission Main Plan And Profile - Sheet 3
- C-254, Treated Water Transmission Main Connection Details
- C-261, Transmission Main Restoration Plan
- C-262, Fence Restoration Plan - Sheet 1
- C-271, Overflow Profile - Sheet 1
- C-273, Process Piping Profiles - Sheet 1
- C-275, Wash Water And Domestic Water Profiles
- C-276, Process And Domestic Water Profiles
- C-304, Erosion And Sediment Control Details - Sheet 4
- C-311, Steel Pipe Details - Sheet 2
- C-314, Site Details - Sheet 1
- C-317, Yard Piping Details - Sheet 2
- C-318, Cathodic Protection Details - Sheet 1
- C-319, Cathodic Protection Details - Sheet 2
- L-102, Planting Plan – Sheet 2
- L-104, Planting Plan – Sheet 4
- L-106, Planting Plan – Sheet 6
- L-107 Planting Plan – Sheet 7
- M-105 Details Sheet 5
- E-011, Overall Existing Power And Lighting Plan
- E-012, Overall Site Plan
- E-1121, Water Treatment Building – Lighting Plan at 457.00 – Administrative Area 1
- E-1804, Water Treatment Building Panel Board Schedules – Administrative Area Sheet 2
- E-2228, Water Treatment Building Lighting Plan at 471.00 Process Area 8
- E-2803, Water Treatment Building - Overall Proposed Single Line Diagram - Sheet 2

SPECIFICATION CHANGES

ITEM 12-2: Section 00 20 00 – Instructions to Bidders

Delete paragraph 9.01 in its entirety and replace with the following:

“All questions about the meaning or intent of the Bidding Documents shall be submitted to Owner in writing to Theo Theocles at Theo.Theocles@waterandsewer.org and to Engineer in writing to Marc Morin at MMorin@hazenandsawyer.com. To receive consideration, questions must be received by Owner and Engineer no later than Tuesday, April 30, 2024 at 4:30 PM (EST) for Filed Sub-Bids and no later than Tuesday, June 11, 2024 at 4:30 PM (EST) for General Bids. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents for receipt not later than Tuesday, June 4, 2024 for Filed Sub-Bids and not later than Tuesday, June 18, 2024 for General Bids. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.”

ITEM 12-3: Section 00 20 00 – Instructions to Bidders

After paragraph 15.03 insert the following:

“15.04 Base Bid With Alternates

- A. The “Base Bid” is the sum stated in the Bid for which the Bidder offers to furnish the Goods and Special Services described in the Procurement Bidding Documents as the base, from which work may be deleted for sums stated in Alternate Bids. An “Alternate Bid” (or Alternate) is an amount stated in the Bid to be deducted from the amount of the Base Bid if the corresponding change in the Goods and Special Services, as described in the Procurement Bidding Documents, is accepted.
- B. As set forth in the Bid Form, Bidder shall enter an amount for the Lump Sum Base Bid, and enter a separate amount for each Alternate Bid described in the Procurement Bidding Documents.
- C. The apparent low Bid will be determined on the basis of the total amount of the Base Bid, plus (in the order listed on the Bid Form) the Alternate Bids providing the most features within the funds determined by the Buyer to be available. If

the addition of another Alternate Bid item listed in the Bid Form would make the total amount exceed the available funds, it will be skipped and the next subsequent Alternate Bid in a lower amount will be added, provided the total amount does not exceed the available funds.

- D. Award will be made to the responsible Bidder that provides the lowest Bid amount for any combination of Base Bid plus selected additive Alternate Bids which Buyer determines provides the most beneficial combination of alternatives within the funds available.”

ITEM 12-4: Section 00 20 00 – Instructions to Bidders

Delete paragraph 27.04.A in its entirety and replace with the following:

- “A. If at any time within the said period of guarantee any part of the work requires repairing, correction or replacement, the Owner may notify the Contractor in writing to make the required repairs, correction or replacements. If the Contractor neglects to commence making such repairs, corrections or replacements to the satisfaction of the Owner within seven (7) days from the date of receipt of such notice, or having commenced fails to prosecute such Work with diligence, the Owner may employ other persons to make said repairs, correction or replacements, and charge the costs, including compensation for additional professional services, to the Contractor.”

ITEM 12-5: Section 00 20 00 – Instructions to Bidders

Delete paragraph 27.07 in its entirety and replace with the following:

- “27.07 This Project is subject to the requirements of the Department of Environmental Protection’s Diesel Retrofit Program. Bidders must submit a signed and dated Statement of Intent to Comply form as part of their Bid proposal documents.”

ITEM 12-6: Section 00 20 00 – Instructions to Bidders

Delete paragraph 27.08 in its entirety and replace with the following:

- “27.08 The Contractor shall comply with the use of American Iron and Steel in accordance with Public Law 113-76, Section 436, the Consolidated Appropriation Act of 2014.”

ITEM 12-7: Section 00 40 00 – Forms for General Bid

Delete Section 00 40 00 – Forms for General Bid and replace with Section 00 40 00 included in Attachment C.

ITEM 12-8: Section 00 40 01 – Forms for Sub-Bid

Delete Section 00 40 01 – Forms for Sub-Bid and replace with Section 00 40 01 included in Attachment D.

ITEM 12-9: Section 00 52 00 Agreement

Delete Section 00 52 00 - Agreement and replace with Section 00 52 00 included in Attachment E.

ITEM 12-10: Section 00 73 00 – Supplementary Conditions

Delete SC-2.01 in its entirety and replace with the following:

“SC-2.01

Delete paragraph 2.01.B of the General Conditions in its entirety and insert the following in its place:

“B. Before any Work at the Site is started, Contractor shall deliver to Owner, with a copy to Engineer, certificates of insurance (and other evidence of insurance requested by Owner) which Contractor is required to purchase and maintain in accordance with the requirements of Article 5.

1. Contractor shall include and identify on the certificate of insurance, indemnification as required by Article 6.20 of the General Conditions.
2. Contractor agrees to defend, indemnify, and hold harmless Hazen and Sawyer and the Springfield Water and Sewer Commission from any claim or liability, arising out of Contractor’s performance of Work under the Agreement for any environmental pollution or contamination the Contractor creates, generates, or releases in connection with the project, except to the extent that either Hazen and Sawyer and the Springfield Water and Sewer Commission has negligently caused or contributed to any such pollution or contamination. This indemnification includes reasonable attorney fees and expenses incurred by Hazen and Sawyer and the Springfield Water and Sewer Commission in defense of such claim. This indemnification does not extend to other pre-existing Hazardous and contaminated material that requires off-site disposal at the Commission’s facilities.”

ITEM 12-11: Section 01 14 00 Coordination with Owner’s Operations

Delete Section in its entirety and replace with Attachment F.

ITEM 12-12: Section 01 20 00 Measurement and Payment

Delete paragraph 1.03.B.6 in its entirety and replace with the following:

- “6. Item 310001.1: Rock and Boulder Excavation
- a. Description: Work under this Item shall consist of the break up, removal, handling, loading/live loading, stockpiling, and disposal of rock and boulders as defined in Section 31 00 01 – Earthwork. This Item is for rock and boulder excavation associated with the Raw Water Transmission Mains (drawings C-241 through C-245), Treated Water Transmission Main (drawing C-246), and the Wash Water pipeline (drawing C-248) . All other rock and boulder excavation shall be included in the lump sum Item 1.
 - b. Measurement: This Work will be measured for payment as the actual volume of material excavated. Payment limits shall be in accordance with Contract Documents and as agreed to with the Engineer and Owner prior to excavation and payment.
 - c. Payment: This Work will be paid for at the Contract unit price per cubic yard of rock and boulders to be excavated, which shall include all materials, equipment, tools, and labor necessary to handle, load, and transport the rock and boulders to a stockpile location, and dispose of all rock and boulders offsite, and all equipment materials, tools, and labor incidental to this Work.
 - d. Quantity is estimated and may vary based on site conditions.”

ITEM 12-13: Section 01 41 00 Regulatory Requirements

After paragraph 3.01.A.8, insert the following:

- “9. Septic Approval
- 10. Water Quality Certification. Note this permit is not required. Response Included.
- 11. Massachusetts Department of Environmental Protection Approval of Chemical Addition Retrofit of Water Systems Serving Less Than 3,300 People (BRP WS34 Approval).”

ITEM 12-14: Section 01 41 00.01 Schedule of Permits

After Attachment 9 “Septic Approval”, insert Attachment 10 “Water Quality Certification Correspondence” and Attachment 11 “Massachusetts Department of Environmental Protection Approval of Chemical Addition Retrofit of Water Systems Serving Less Than 3,300 People (BRP WS34 Approval)” included in Attachment G.

ITEM 12-15: Section 01 51 00 Temporary Utilities

Delete paragraph 1.01.A.7 in its entirety and replace with the following:

- “7. The Electrical Subcontractor shall provide temporary light and electrical power, including service costs. The Contractor shall provide temporary electric or propane heating.”

ITEM 12-16: Section 01 51 00 Temporary Utilities

Delete paragraph 1.03.C in its entirety and replace with the following:

- “C. Heating:
 - 1. Contractor shall provide temporary heating, ventilation coverings and enclosures necessary to heat permanent structures as required to protect materials and equipment against wetness and temperature damage, to dry out the Work, and to facilitate the Work in structures.
 - 2. Equipment, fuel, materials, personnel and methods used shall be adequate to maintain critical installation temperatures and ventilation of Work at all times in areas where necessary to perform the Work.
 - 3. Enclosed structures shall have a minimum temperature of 50°F, unless otherwise specified, where Work is performed.
 - 4. Contractor shall provide sufficient heat to maintain a minimum temperature of 65°F before and during application of interior finishing, painting, coating, etc.
 - 5. Contractor shall replace any Work damaged by dampness or insufficient/abnormal heating at no cost to the Owner.”

ITEM 12-17: Section 01 61 00 Product Requirements and Options

Delete paragraph 1.04.C.2 in its entirety and replace with the following:

- “2. For products specified by naming one or more products or Suppliers, “or equal” products will be considered by Engineer.”

ITEM 12-18: Section 01 71 23 Field Engineering

Delete paragraphs 1.01, 1.02 and 1.03 in their entirety and replace with:

“1.01 SUMMARY

- A. Provide field engineering and professional services of the types indicated for the Project, including:
 1. Furnishing civil, structural, and other professional engineering services specified or required to execute construction methods.
 2. Developing and making all detail surveys and measurements required for construction.
 3. Keeping a transit, theodolite, or total station (theodolite with electronic distance measurement device); leveling instrument; and related implements such as survey rods and other measurement devices, at the Site at all times, and having a skilled instrument person available when necessary for laying out the Work.
 4. Being responsible for all locations, dimensions and levels. No data other than Change Order, Work Change Directive, or Field Order shall justify departure from dimensions and levels required by the Contract Documents.
 5. Rectifying all Work improperly installed because of not maintaining, not protecting, or removing without authorization established reference points, stakes, marks, and monuments.
 6. Providing such facilities and assistance necessary for Engineer to check lines and grade points.
- B. Related Sections:
 1. Section 01 25 00 – Substitution Procedures
 2. Section 01 26 00 – Contract Modification Procedures

3. Section 01 61 00 – Product Requirements and Options
4. Section 01 78 39 – Project Record Documents

1.02 ADMINISTRATIVE REQUIREMENTS

A. Departures from Contract Drawings:

1. Contract Drawings show the extent and arrangement of the Work.
2. Notify Engineer of departures from the Drawings that the Contractor deems required for incorporation of the Work at the Site in accordance with Section 01 26 00 – Contract Modification Procedures.
3. Provide field engineering services for equipment and materials that require modifications to existing structures, auxiliary equipment, piping, electrical controls that are not indicated for modifications in the Contract Documents.

B. Structural Design Criteria:

1. Structural design in the Contract Documents of facilities, structures, supports, roofs and floors are based on typical weights for equipment and materials and design criteria in the Contract Documents.
2. Notify Engineer of equipment and materials to be considered as substitutions and “or equals” in accordance with Section 01 25 00 – Substitution Procedures and Section 01 61 00 – Product Requirements and Options.
3. Provide services for incorporation of equipment and materials that exceed structural design criteria at no additional cost to Owner.

1.03 SERVICES AND RESPONSIBILITIES

A. Field Engineer:

1. Employ and retain field engineer at the Site capable of performing field engineering tasks required, including:
 - a. Provide reports to Engineer on the Work.
 - b. Check formwork, reinforcing, inserts, structural steel, bolts, sleeves, piping and other equipment and materials for conformance with Contract Documents.

- c. Maintain field office files and drawings, record documents, and coordination with Subcontractors.
- d. Prepare layout and coordination drawings for construction operations.
- e. Check and coordinate Work for conflicts, interferences, and discrepancies with notification to Engineer.
- f. Cooperate with Engineer and Owner in observing the Work and field inspections.
- g. Review and coordinate the Work with Shop Drawings and other submittals.

B. Contractor's Surveyor:

- 1. Contractor shall employ or retain the services, as needed, at the Site a surveyor with experience and capability of performing surveying and layout tasks required in the Contract Documents and as required for the Work. Surveyor's tasks include, but are not necessarily limited to, the following:
 - a. Providing required surveying equipment, including transit or theodolite, level, stakes, and surveying accessories.
 - b. Establishing required lines for constructing all facilities, structures, pipelines, and site improvements.
 - c. Preparing and maintaining professional-quality, accurate, well organized, legible notes of all measurements and calculations made while surveying and laying out the Work.
 - d. Complying with requirements of the Contract Documents relative to surveying and related work."

ITEM 12-19: Section 03 30 00 Cast-In-Place Concrete

Delete paragraph 1.05.B in its entirety and replace with the following:

- "B. Trial concrete mixes shall be tested when required in accordance with Article 3.01 at no additional cost to the Owner. Where historical data is utilized for mix design verification, submit certified cement chemical analysis (mill test report) for the historical concrete."

ITEM 12-20: Section 03 30 00 Cast-In-Place Concrete

Delete paragraph 2.11.B.1 in its entirety and replace with the following:

1. Compressive Strength (28-Day)

Concrete Class A1	4,500 psi (min.), 6500 psi (max.)
Concrete Class A2, A3, A4	4,000 psi (min.)
Concrete Class A6, A7	6,000 psi (min.)
Concrete Class B	3,000 psi (min.)

ITEM 12-21: Section 03 30 00 Cast-In-Place Concrete

Delete paragraph 3.02.A in its entirety and replace with the following:

- “A. Concurrent with the trial batch requirements stated in Article 3.01, the testing laboratory shall perform drying shrinkage tests for the trial batches as specified herein. Shrinkage testing is only required for concrete to be used for environmental concrete structures (Class A1).”

ITEM 12-22: Section 04 00 00 Basic Masonry Requirements

After paragraph 1.03.H insert the following:

- “I. MASONRY SUBCONTRACTOR shall furnish and install firestopping at fire rated masonry walls to retain the integrity of fire-rated construction by maintaining an effective barrier against the spread of flame, smoke, and hot gases through joints between fire rated assemblies, including but not limited to joints between masonry walls, at adjoining walls, floors, and underside of structure in accordance with Section 07 84 00 – Firestopping.
1. MASONRY SUBCONTRACTOR shall furnish and install the firestopping material selected by the CONTRACTOR.
- J. Staging and Scaffolding:
1. Hoisting Equipment: The MASONRY SUBCONTRACTOR shall furnish, install and maintain all mechanical hoisting equipment, operating personnel and rigging required for the execution of the Work as specified in this Section.
 2. Staging, Planking and Scaffolding: The MASONRY SUBCONTRACTOR shall furnish, install and maintain all staging, planking and scaffolding up to eight feet in height required for the Work in this Section.”

ITEM 12-23: Section 08 14 00 Wood Doors

Delete paragraph 2.02.G in its entirety and replace with the following:

“G. Veneers:

1. Apply to crossbanded core in hot press using Type I, exterior, water-resistant adhesive 1/16-inch (1.6 mm) minimum high density engineered wood composite with no added Urea-formaldehyde.
2. Species: Red Oak
3. Cut: Plain.
4. Match: Book.
5. Assembly: Balanced.”

ITEM 12-24: Section 08 71 01 Finish Hardware

Delete paragraph 2.2.R in its entirety and replace with the following:

“R. Kickplates

1. Stainless steel, 0.050" thick, beveled 3 sides, 8" high, width 2 inches less than door width.
2. Provide at push side of door.
3. Acceptable manufacturers: H.B. Ives, Hagar Hardware, and Builders Brass Works.”

ITEM 12-25: Section 08 71 01 Finish Hardware

Delete Table 1: Hardware Sets in its entirety and replace with the table included in Attachment H.

ITEM 12-26: Section 09 20 00 Basic Lathing and Plastering Requirements

Delete paragraph 1.02.F in its entirety and replace with the following:

“F. LATHING AND PLASTERING SUBCONTRACTOR shall furnish and install thermal and sound attenuation batt insulation at cold-formed metal stud framing cavities in accordance with Section 07

21 00 – Thermal Insulation.

1. CONTRACTOR shall furnish and install cavity insulation at cold-formed sub-girt framing in accordance with Section 07 21 00 – Thermal Insulation.

G. LATHING AND PLASTERING SUBCONTRACTOR shall furnish and install firestopping at fire rated gypsum wall systems to retain the integrity of fire-rated construction by maintaining an effective barrier against the spread of flame, smoke, and hot gases through joints between fire rated assemblies, including but not limited to joints between gypsum wall systems, at adjoining walls, floors, and underside of structure in accordance with Section 07 84 00 – Firestopping.

1. LATHING AND PLASTERING SUBCONTRACTOR shall furnish and install the firestopping material selected by the CONTRACTOR.

H. Staging and Scaffolding:

1. Hoisting Equipment: The LATHING AND PLASTERING SUBCONTRACTOR shall furnish, install and maintain all mechanical hoisting equipment, operating personnel and rigging required for the execution of the Work as specified in this Section.
2. Staging, Planking and Scaffolding: The LATHING AND PLASTERING SUBCONTRACTOR shall furnish, install and maintain all staging, planking and scaffolding up to eight feet in height required for the Work in this Section.”

ITEM 12-27: Section 09 20 00 Basic Lathing and Plastering

Delete paragraph 1.03 in its entirety and replace with the following:

“1.03 RELATED WORK

- A. Division 01 - General Requirements
- B. Section 01 33 00 - Submittal Procedures
- C. Section 01 74 00 - Cleaning and Waste Management
- D. Section 05 40 00 – Cold-Formed Metal Framing
- E. Section 07 21 00 – Thermal Insulation
- F. Section 07 84 00 - Firestopping
- G. Section 07 90 00 - Joint Fillers, Sealants, and Caulking”

ITEM 12-28: Section 09 29 00 Gypsum Drywall System

Delete paragraph 1.03 in its entirety and replace with the following:

“1.03 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 04 43 00 – Stone Masonry
- B. Section 05 40 00 – Cold-Formed Metal Framing
- C. Section 07 21 00 – Thermal Insulation
- D. Section 07 27 26 – Fluid-Applied Membrane Air Barriers
- E. Section 07 84 00 – Firestopping
- F. Section 07 90 00 – Joint Fillers, Sealants and Caulking
- G. Section 09 30 00 – Tiling
- H. Section 09 90 00 – Painting”

ITEM 12-29: Section 26 06 11 Cable and Conduit Schedule

Delete Part 2 in its entirety and replace with the Part 2 in Attachment I.

ITEM 12-30: Section 26 50 00 Lighting

Delete table in 2.02.G in its entirety and replace with the table included in Attachment J.

ITEM 12-31: Section 31 00 01 Earthwork

After paragraph 1.14.D insert the following:

- “E. The Contractor shall comply with the requirements of the Beneficial Use Determination (BUD) Permit Approval for the filter sand media and uncoated concrete material including the following:
 - 1. Only the subject BUD material; clean soil fill’ and crushed, uncoated concrete shall be used as common fill. The uncoated concrete shall be crushed to less than four inches in diameter.
 - 2. All solid waste and scrap metal (e.g., rebar) shall be removed from the uncoated concrete, and shall be disposed or recycled properly off-site at permitted solid waste disposal or recycling facilities.

3. The BUD material shall not be reused outside of the approved limits without a separate MassDEP BUD permit.
4. The mixed uncoated, crushed concrete and BUD material shall be covered with a separation geotextile, a minimum thickness of 24 inches of clean fill (unless shown otherwise on the Contract Drawings),, and shall be compacted as required for proper engineering control.
5. All appropriate measures shall be taken during demolition of the sand filter units and bins, placement of the BUD material, and any other associated construction activities, to mitigate or eliminate the creation of nuisance dusts, in accordance with the regulations at 310 CMR 16.05(3)(e) and 310 CMR 19.010(16)(3). Demolition of sand filter units and bins and associated activities with the BUD material shall occur only during normal business hours: Monday through Saturday, 6:00 AM through 6:00 PM.
6. All appropriate Health and Safety measures shall be taken during the handling, processing, and placement of the BUD material (filter sand media) and uncoated concrete from sand filter units and bins.”

ITEM 12-32: Section 31 00 01 Earthwork

After paragraph 2.01.C.4 insert the following:

5. BUD material can be used as Common Fill, provided that it meets the requirements under Section 1.14.E and 2.01.B.6.

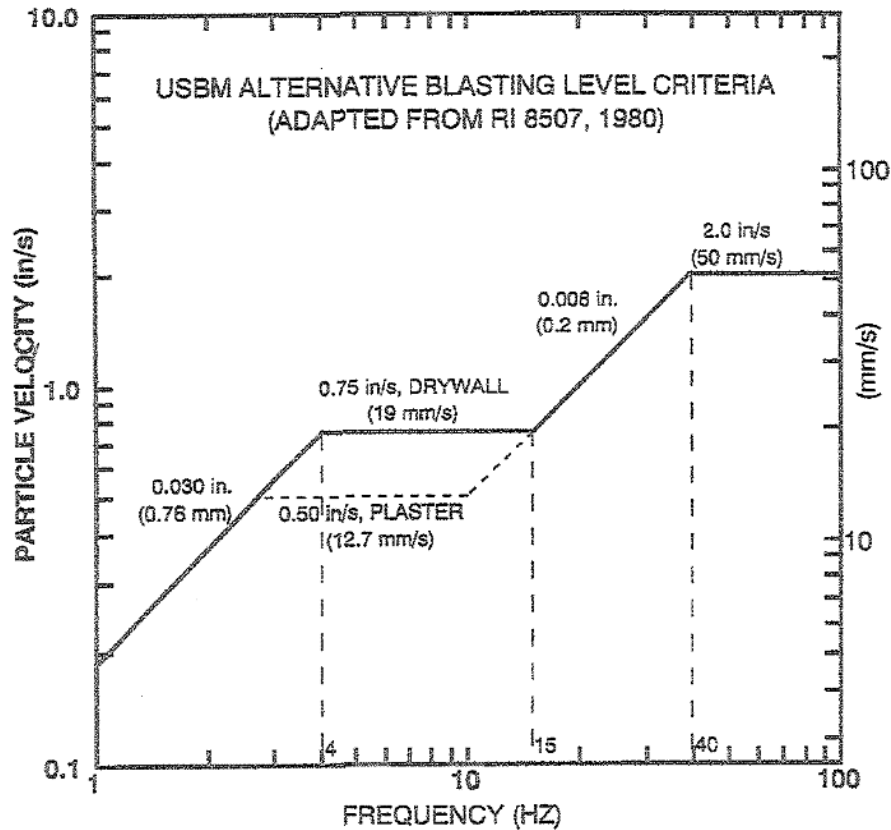
ITEM 12-33: Section 31 00 01 Earthwork

Delete paragraph 2.01E in its entirety and replace with the following:

- “E. Onsite concrete can be crushed and blended with soil creating a well graded soil and reused onsite. The concrete-soil blend can be used below the pavement sections and for common fill areas. Concrete materials associated with the BUD shall be placed in accordance BUD Permit Approval and the contract documents.”

ITEM 12-34: Section 31 00 01 Earthwork

Replace Figure 1 in paragraph 3.02.N.1 with the following:



ITEM 12-35: Section 31 05 16 Aggregate Materials

After paragraph 1.03.A.4 insert the following:

- “5. ASTM C 33 – Standard Specifications for Concrete Aggregates”

ITEM 12-36: Section 31 05 16 Aggregate Materials

After paragraph 1.04.A.3 insert the following:

- “4. Details of compaction equipment.”

ITEM 12-37: Section 31 05 16 Aggregate Materials

After paragraph 2.03 insert the following:

“2.04 FINE CONCRETE SAND

- A. Fine Concrete Sand shall meet the requirements of ASTM C 33 and shall be in accordance with the following gradation requirements:

<u>Sieve Size</u>	<u>Percent Passing</u>
-------------------	------------------------

3/8 inch	100
No.4	95-100
No. 8	80-100
No. 16	50-85
No. 30	25-60
No. 50	5-30
No. 100	0-10"

ITEM 12-38: Section 31 05 16 Aggregate Materials

Delete paragraph 3.02 in its entirety and replace with the following:

“3.02 FILTER DIAPHRAGM

- A. Fine concrete sand shall be placed uniformly in layers not to exceed 8 inches thick before compaction. Each layer shall be thoroughly wetted immediately prior to compaction.
- B. Each layer of sand shall be compacted by a minimum of two passes of a vibratory plate compactor weighing at least 160 pounds. The compactor shall have a minimum centrifugal force of 2,450 pounds at a vibrating frequency of no less than 5,000 cycles per minute.
- C. The sand shall be placed to avoid segregation of particle sizes and to ensure the continuity and integrity of all zones. No foreign material shall be allowed to become intermixed with or otherwise contaminate the sand.
- D. Traffic shall not be permitted to crossover filter zones at random. Equipment crossovers shall be maintained, and the number and location of such crossovers shall be established and approved before the beginning of diaphragm placement. Each crossover shall be cleaned of all contaminating material and shall be inspected and approved by the engineer before the placement of additional sand material.
- E. Any damage to the foundation surface or the trench sides or bottom occurring during placement of sand filter shall be repaired before the sand filter zone placement is continued.

3.03 STOCKPILING

- A. Stockpile differing materials separately to prevent mixing.
- B. Direct surface water away from stockpile site so as to prevent erosion or deterioration of materials.
- C. Soil stockpiles shall be protected with perimeter erosion control and temporary or permanent stabilization measures, as appropriate, at all times during construction activities. Stockpile slopes shall be 3H:1V at maximum and top of stockpile shall have a minimum 5% grade to provide positive

- drainage.
- D. Stockpile Cleanup: Remove stockpile, leave area in a clean and neat condition. Grade site surface to prevent free standing surface water.”

ITEM 12-39: Section 31 23 19 Dewatering

Delete Section 31 23 19 – Dewatering and replace with Section 31 23 19 included in Attachment K.

ITEM 12-40: Section 31 50 00 Support of Excavation

Delete Section 31 50 00 – Support of Excavation and replace with Section 31 50 00 included in Attachment L.

ITEM 12-41: Section 32 10 00 Paving and Surfacing

Delete Section 32 10 00 – Paving and Surfacing and replace with Section 32 10 00 included in Attachment M.

ITEM 12-42: Section 40 06 20 Process Pipe, Valve and Gate Schedule

Add row for “Future Treatment” in the Water Treatment Plant Pipe Schedule as follows:

FUTURE TREATMENT ⁹	TREATMENT BUILDING AND YARD	STEEL	WELDED/ RESTRAINED	SECTION 40 05 24.23	WELDED/ RESTRAINED	SECTION 40 05 24.23	N/A	N/A	NO	20	N/A	40	30
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ITEM 12-43: Section 40 06 20 Process Pipe, Valve and Gate Schedule

Add row for “<4” Centrifuge Feed” in the Water Treatment Plant Pipe Schedule as follows:

CF	CENTRIFUGE FEED	DEWATERING BUILDING AND TREATMENT BUILDING	>= 4" DIP	RESTRAINED	PRESSURE CLASS 53	N/A	N/A	FLANGED ⁴	CLASS 53	NO	40	50	70
			<4" PVC / CPVC ⁵⁹	N/A	N/A	N/A	N/A	FLANGED ⁴	SCH 80				

ITEM 12-44: Section 46 76 33 – Dewatering Centrifuges

Delete paragraph 2.04.I in its entirety and replace with the following:

- “I. All wetted parts of the centrifuge rotating assembly shall be made of Type 316 stainless steel or Type 2205 stainless steel except for O-rings, seals, and abrasion resistant materials. O-rings and seals shall be made of Viton (Fluorocarbon) rubber. The sludge feed pipe, solids discharge, and liquid discharge compartments shall be constructed of Type 316 stainless steel.”

ITEM 12-45: Section 46 76 33 – Dewatering Centrifuges

Delete paragraph 2.05.A in its entirety and replace with the following:

- “A. All Wetted Parts: AISI, Type 316 stainless steel, Type 2205 stainless steel, unless otherwise specified.”

ITEM 12-46: Section 46 76 33 – Dewatering Centrifuges

Delete paragraph 4.03.C in its entirety and replace with the following:

- “C. Results of the Manufacturer’s shop testing activities shall be submitted to the Engineer prior to shipment of the affected components to the project site.”

RESPONSES TO BIDDER QUESTIONS

Number	Question	Response
12-Q1	<p>Forms for General Bid:</p> <ul style="list-style-type: none"> a. Specification page: 00 40 00-4 i. Does item D.1 include both the SRF Eligible Base Bid Items and SRF Ineligible Base Bid Items? ii. Should item D.2 Filed Sub Bids be included as a separate table after the SRF Eligible Base Bid Items table with a total Filed Sub Bid cost on page 00 40 00-3? iii. Where on the Bid Form does the General Contractor figure Total Base Bid Price and a Total Base Bid + Alternates Price. iv. How will Alternate 1 and Alternate 2 be 	<ul style="list-style-type: none"> i. Item D.1 is to include both the SRF Eligible base bid and the SRF Ineligible base bid items. ii. A Filed Sub-bid table is included under Section 00 40 01 - Forms for Filed Sub-bid iii. The Contractor is to include the Base Bid Price under article D without the inclusion of the alternatives. Alternatives shall be included under item C with addition or deduction from the base price. iv. See answer for bullet iii.

	applied to the General Contractors bid?	
12-Q2	Specification 41 22 00-2 Section 1.03 Crane and Hoist Schedules – At the Treatment Building Filter Aid Polymer Room and Dewatering Building Dewatering Polymer Building how many Manual Chain Hoists are required?	Each application requires 1 manual chain hoist.
12-Q3	Section 46 76 33: 2.06.D.1 - Please consider powder coating as an acceptable alternative to epoxy. Epoxy will increase cost.	Noted. To be confirmed during shop drawing submittal review. Requests for substitutions shall be in accordance with Specification Section 01 25 00 Substitution Procedures, if warranted by the selected manufacturer.
12-Q4	Section 46 76 33: 2.06.G.4a – Centrisys' hydraulic backdrive options are 25HP or 40HP. Please advise if either are acceptable.	Noted. To be confirmed during the shop drawing submittal review.
12-Q5	Please confirm that a separate CCP, CPP, and local OIT panels are the design intention. There is a discrepancy between the drawings and specifications.	The design intent is to include combination CCP / CPP separated by an internal divider panel; and a local OIT panel / Centrifuge Local Control Panel (CLCP) wall-mounted outside the Electrical Room separate from the CCP and CPP cabinets, for each of two dewatering centrifuges. Section 46 76 33 Dewatering Centrifuge revised for clarity. As captured in addendum items 4-72 through 4-76.
12-Q6	Drawing C-251 shows temporary TW lines and appears to indicate that it is ductile iron pipe. The pipe schedule in 40 06 20 does not indicate what pipe material is required for these temporary lines. Please confirm the material for temporary 36"/42"/60" Treated Water lines.	Ductile iron is not indicated on the drawings. The pipe schedule indicates that temporary treated water lines are steel and HPDE. Steel is required at the connection point to the existing lines, and HDPE may be used elsewhere. This was clarified on C-310 addendum item 5-1.
12-Q7	Drawings M-2108 and M-2301 have 24" vent lines drawn and appear to be flanged ductile iron piping. The pipe schedule in section 40 06 20 indicates vent lines are to be socket weld	Confirmed that 24" vent lines on Drawings M-2108 and M-2301 shall be flanged ductile iron piping.

	PVC. Please confirm the pipe material for these lines.	
12-Q8	<p>Per drawing C-251 and Temporary Treated Water Transmission Main:</p> <p>Please confirm the type of material required for the 60"/42"/36" temporary pipelines & connections.</p>	Issued clarification as part of question 91 and Addenda item 5-1, drawing C-310.
12-Q9	Addendum 2 includes the BUD Permit Approval obtained by SWSC. There is a reference to a Figure 5, which was provided to MA DEP clarifying where the regulated material is intended to be re-used. Please provide a copy of Figure 5.	Figure 5 is provided in Addendum 12. Note that the figures are references and not contract documents. The figures show general locations where materials maybe placed but doesn't mean the entire area can be backfilled with that material. The contractor is responsible for implementing the materials as required in specification section 31 00 01 and the contract drawing dwg C-205.
12-Q10	Drawings C-251 identifies a significant excavation required to install the 42" & 36" Temporary Treated Water Line adjacent to existing SSF No 16 and sand storage tanks 4, 5 & 6. Can SSF 15, 16 and sand storage tanks 4,5, & 6 be demolished prior to (or concurrent) with the excavation required for the Temporary Treated Water Mains? This would provide a staging area and also allow us to begin additional work prior to the full commissioning of the Temporary Water mains.	See specification section 01 14 00 - Coordination with Owner's Operations. Section 1.06 outlines that the temporary treated water mains must be installed prior to the demolition of the SSF's. This includes the sand storage tanks.

12-Q11 (5-Q189)	Will the local electrical and fire alarm fees be paid by the EC? Or should we use the allowance mentioned in PG 421 4. Item 014100.1: Page # 421.4 City of Westfield Building	Revised Response: The City of Westfield electrical and alarm permit and inspection fees shall be paid under Bid Item 014100.1. Response in Addendum 5: Utility fees will be paid by the owner.
12-Q12	Drawing E-0210 EL-457.00 does not show areas from E-2101 through E-2105	Drawing E-0210 shows the area from drawings E-2104 & E-2105. However the remaining areas don't exist at EL. 457. The note is shown to the drawings E-2101, E-2102, E-2103.
12-Q13	I see no room designated as SCADA/IT room in the Dewatering building. Please confirm the SCADA/IT room location that is to contain the ACP, network switch and patch panel in the Dewatering Building.	ACP added to control room shown on drawing E-3301. Network switch and patch panel internal to data rack shown the in control room.
12-Q14	After viewing the proposed lay down area, will the area be suitable to store trailers, material and C-Boxes? And will it be brought up to grade?	The contractor may use the staging areas as shown on the plans and modify the grade provided it is restored to existing conditions.
12-Q15	Drawing C-251 identifies the Treated Water Transmission Main work that needs to be completed prior to decommissioning the existing sand filters. We have significant questions on this scope. Is it possible to have a separate pre-bid meeting to further explain the Engineers intent on this? One of our concerns is that we may not be able to procure the valves in time to complete the work in the November to April time frame allowed. If this were to occur, we need to understand available options.	A pre-bid meeting to discuss the transmission main work will not be scheduled. If the contractor is limited by lead times or availability for valves, alternative methods of isolation can be considered and evaluated as part of the shop drawing review. See response to 12-Q20 for procurement of valves.
12-Q16	Drawing C-241: There is an existing bituminous access road that runs up the hill to the EDV Chamber. The road will be at least partially, if not completely, destroyed by the proposed construction activities. Please advise as to the restoration requirements upon completion of the installation of the 60" CS	See revised drawing C-261 for limits of restoration.

	Pipe, the 8" WW and the electric duct bank.	
12-Q17	Addendum #5, Item 5-57 inserts replacement language for 05 51 33, 3.01.A. Best practice to avoid miscommunication and discrepancies is for the fabricator to perform field verification first-hand. Please confirm that the Miscellaneous and Ornamental Iron Subcontractor shall perform all required field verification for items that they are to fabricate, supply, and/or install.	The Subcontractors shall be responsible for field measurements per Section 01 71 23 Field Engineering. Contractor shall be responsible for measurements to verify equipment has been coordinated with all other trades.
12-Q18	Addendum #5, Item 5-59 inserts replacement language for 05 53 00, 3.01.A. Best practice to avoid miscommunication and discrepancies is for the fabricator to perform field verification first-hand. Please confirm that the Miscellaneous and Ornamental Iron Subcontractor shall perform all required field verification for items that they are to fabricate, supply, and/or install.	See response to 12-Q17
12-Q19	Addendum #5, Item 5-60 inserts replacement language for 05 55 00, 3.01.A. Best practice to avoid miscommunication and discrepancies is for the fabricator to perform field verification first-hand. Please confirm that the Miscellaneous and Ornamental Iron Subcontractor shall perform all required field verification for items that they are to fabricate, supply, and/or install.	See response to 12-Q17
12-Q20	5-Q60 identifies a significant schedule risk that has not been resolved in the response provided. Leaving this significant matter to be resolved "as part of the shop drawing review" leaves an unbounded risk that should be resolved pre-bid. It is recommended that the Owner (1) accept the use of non-AIS compliant valves for temporary use, provided that these temporary valves are removed from the project prior to final completion or (2) release a design change in an upcoming addendum to utilize materials commercially available to support the required timeframes. Absent one of these considerations, the Contractor is being asked to submit a lump sum bid for an unattainable	Per EPA guidance, items that are primarily made of iron and steel, but are only on the site temporarily, do not have to be produced in the US. Valves may be exempt from AIS-requirements given that they are removed from the site prior to final completion.

	scope.	
12-Q21	Electrical drawings E-3801 E-3802 and show the motor starters for conveyors 1-3 located in MCC-4A. Drawing I-3014 indicates conveyor motor power coming from LCP-60300. Which is correct?	Screw conveyor specification section 46 76 42 does not indicate a starter in the vendor provided local control panel, so the E drawings are correct.
12-Q22	Electrical drawing E-3804 shows Power Panel PP-1-DW supplying power for MOV-60311, 60312, 60321, 60322 (slide gates SLG-60311, 60312, 60321, 60322). Drawing I-3014 indicates slide gate power coming from LPC-60300. Which is correct?	Drawing E-3804 is correct. I drawings indicate instrumentation and control connections.
12-Q23	Section 46 76 42, paragraph 2.09.L.3 states "Remote Local-Off-Remote selector switch, Open/Close pushbuttons, and Open/Closed pilot lights for a remote manual control station (see below)." Paragraph M.1 states "Actuators shall be furnished with a Local-Off-Remote selector switch; Open-Close selector switch for local control..." Based on these two paragraphs, it is not clear whether or not a separate Local Control Station (LCS) is required for slide gate operation (electrical plans do not show remote Local Control Stations). Please advise if separate control is required, and if so, one separate LCS for each slide gate? If yes, is it acceptable to provide local control for all the slide gates on LCP-60300?	The intent of this paragraph was to have the ability to change operation locally. The design intent was that this is would be located on the face of the actuators themselves rather than a designated local control panel.
12-Q24	Section 46 76 42, paragraph 2.10.B.1 states "Conveyor manufacturer shall provide a control panel with the following front of controls: a. E-stop b. Hand-Off-Auto selector switch. c. Fault indication light. d. Discharge Trailer Selector Switch." Do you want separate Hand-Off-Auto selector switches for each conveyor, or one Hand off Auto selector switched for the entire system? Since each conveyor is reversing, do you also want individual Forward-Off-Reverse selector switches for each conveyor?	Please provide individual Forward-Off-Reverse switches for each conveyor as well as individual Hand-Off-Auto switches, Fault indication lights, Discharge Trailer selection switches, and any other front-of-panel controls. A single E-stop may be provided for both Conveyors.
12-Q25	Section 46 76 42, paragraph 2.10.B.2 states "In Remote Mode, the conveyors shall have logic for proper direction and operation of conveyors to manage conveyors and gates to deliver material from inlet to designated trailer and to distribute the material in the trailers evenly using the conveyor vendor supplied level transmitters." Are the level transmitters to	Yes, level transmitters are specified in Section 40 72 23.01 section 2.01.

	be as specified in section 40 72 23.01?	
12-Q26	Section 46 76 42, paragraph 2.10.B.2 states "In Remote Mode, the conveyors shall have logic for proper direction and operation of conveyors to manage conveyors and gates to deliver material from inlet to designated trailer and to distribute the material in the trailers evenly using the conveyor vendor supplied level transmitters." To provide the logic as specified in this paragraph, we recommend using a MicroLogix 1400, with a 6" Panelview Plus HMI. Is this acceptable?	This shall be confirmed during the submittal process.
12-Q27	Please give the location of DSW- ACCU-01,02,03,04	As per spec 23 81 23, the ACCU units shall be provided with a factory mounted and wired disconnect switch.
12-Q28	Please give the location of DSW- AC-03,04	As per spec 23 81 23, the AC units shall be provided with a factory mounted and wired disconnect switch.
12-Q29	Please give the location of DSW-FCV 60504, 05	The location of DSW-FCV 60504 is shown on drawing E-2105.
12-Q30	Please give the location of FCV 60505	FCV 60505 does not exist, however the locations of MOV 60505 and disconnect switch DSW-MOV-60505 are shown on drawing E-2105.
12-Q31	Please confirm that all exhaust fan disconnects, and motor starters are to be provided and installed by the HVAC contractor as shown on E-3808.	Contractor to coordinate with exhaust fan specification requirements for motor starters and disconnect switch.
12-Q32	Not Used	Not Used
12-Q33	P-639, P-657, and P-640 Do the rollup door motors require a disconnect?	See specification 08 33 23 Overhead Coiling Doors for provided equipment and installation requirements.
12-Q34	P-1059, and 1060 are listed as 2 #10 AWG but are called out as 40-amp circuits on panel LP-1-CHEM-TB. Please advise.	The C & C schedule is updated to show 2#8 AWG.
12-Q35	"Items DSW-MX-55112,117 are shown on two prints E-2208, and E-2108. MX-55112,117 are not shown on any prints. Please advise. "	The location of MX-55112, 117 should be next to items DSW-MX-55112, 117. Coordinate the locations of these equipment with mechanical drawings.
12-Q36	Items WE-55111 and 55116 on panel LP-1-CHEM-TB are not located on the plans.	Items WE-55111 and 55116 are located in the filter aid

	Please advise.	polymer room 2216. Coordinate the locations of these equipment with mechanical drawings.
12-Q37	Please give the location of FSL-52106.	FSL-52106 is located in sodium hydroxide storage room 2215.
12-Q38	Please locate the flow switches circuited from panel LP-1-PLUMB-TB, they are not shown on the electrical plans	The locations of the flow switches are mentioned in the panelboard schedule. Coordinate the locations of these equipment with plumbing drawings.
12-Q39	The panel schedule LP-UPS-EMERG-1 DW indicates this panel being in the I&C room, however on drawing #3304 it is located 20 feet west in the control room. Please advise.	The panel LP-UPS-EMERG-1 is located in the control room as shown on drawing # E-3301.
12-Q40	Panel schedule LP UPS EMER 1 ADM indicates an exit marked ckt.. #20, however the panel schedule shows a spare for #20—these exits are located on ---- E-2228	Change all emergency lights/exit signs on circuit LP-UPS-EMER-1-ADM/20 to LP-UPS-EMER-1-ADM/12
12-Q41	What lights in the elevator shaft and pit are required on this project, no detailed drawing is in the set. Please advise.	Drawing E-1121 has been revised to add the elevator pit lights and light switch. Light Fixture type LW9 has been added to the specification section 26 50 00.
12-Q42	Drawing S-2205 – Please confirm the scope of responsibility for the steel support beams for pipe supports. Per Note 3, these are to be furnished and installed as part of the Misc. Metals Filed Sub Bid. This would be typical for all similar beams and pipe supports on the project.	Fabricated pipe supports are provided and installed by the Misc and Ornamental Iron FSB. The structural steel beams supporting the pipe supports are provided and installed by the Contractor. Typically, structural steel members are exempt from Miscellaneous and Ornamental Iron FSB, which is true in this case.
12-Q43	Addendum 5, Item 5-57 – Changed the responsibility for field dimensioning the Misc. Metals Filed Sub bidders work to the Contractor. Why would the Contractor field measure work that is the responsibility of the Subcontractor? Please clarify.	See response to 12-Q17
12-Q44	Section 09 29 00 (Lathing & Plastering Filed Sub-bid) does not reference section 07 21 00 (Thermal Insulation) – Confirm the Thermal and Sound Attenuation Batt cavity wall insulation is included in the Lathing & Plastering Filed Sub-Bidders scope of work.	Lathing & Plastering FSB shall furnish and install thermal and sound attenuation batt insulation at cold-formed metal stud cavities. Please refer to clarification in Section 09 20 00

		and 09 29 00 in Addendum No. 12.
12-Q45	Drawing A-1301(Typical) shows Office Furniture with a reference to Section 12 51 00. There is no Section 12 51 00 in the Specifications. Please clarify.	Furniture is shown on plans for coordination purposes. Please refer to note 12 51 00.0 on A-004.
12-Q46	Section 01 14 00, Paragraph 1.06.2.c – The 10 day durational restriction for Tie-in 3 is inadequate. The proposed 36” TW TM line will be installed in bedrock 9’ below the existing line. The rock removal will be a combination of drilling, hammering and chemical splitting. Complicating this task, the existing Raw Water line immediately adjacent to the excavation will need to be supported. Please review and provide an adequate duration for the work.	See revised alignment for TW TM on drawing C-246 and revisions to specification section 01 14 00. The horizontal alignment has been shifted to mitigate the depth of rock removal and provides more separation from the existing raw water TM. Sequence of construction modifications have been outlined in 01 14 00.
12-Q47	Can an additional site walk-through be scheduled?	No, a third site walk will not be scheduled.
12-Q48	<p>Section 01 20 00 (Measurement and Payment, Item 31000.1 Rock Excavation – The pay Item Description needs to be clarified;</p> <p>a. The reference pay items have been deleted.</p> <p>b. The end of the Rock Excavation pay item description states “All other rock shall be included in Bid Item 1”. How are we to quantify rock in areas without specifically located borings?</p> <p>c. Section 31 00 01, paragraph 1.06.E defines rock to includes boulders. Will boulders be paid for in the Rock Excavation pay item?</p> <p>d. Section 31 00 01 separates rock as a payable item based on the size of excavator, with a smaller piece of equipment applicable in trenches. Will the new Raw Water Transmission lines be classified as trench excavation?</p>	<p>a. The reference pay items for Item 310001.1 have been revised to indicate the pipeline drawings associated rock removal and is included as part of Addendum 12.</p> <p>b. The Contractor shall based their bid on their interpretation of the available geotechnical information provided.</p> <p>c. Only rock and boulders as described under 01 20 00, 1.03.B, 6.a will be paid for under that item 31000.1.</p> <p>d. Yes, the raw water transmission mains are classified as trench excavation.</p>
12-Q49	Drawing C-251 (Plan A Temporary Treated Water) shows two caps installed on water transmission lines in the northwest corner of SSF 15. Do these caps need to be installed prior to demolishing the existing sand filters? Would line stops be required in these locations?	Per Section 01 14 00 - Coordination with Owner's operation, cutting and capping TM 3 shall occur after Tie-in 4 is complete, alongside the decommissioning of SSF 15-18. Both sections can be

		hydraulically isolated without the use of linestops. Additional language can be added to clarify that this includes the caps at the Northwest corner of SSF 15.
12-Q50	Section 40 06 20-Water Treatment Plant Piping Schedule for SW-Sample Water it indicates interior exposed pipe is flanged PVC/CPVC SCH 80 pipes with a footnote #4, which the foot note indicates that flanges will be provided as shown on the drawings. Please confirm that if no flanges are shown on drawings a socket connection is acceptable.	Confirmed.
12-Q51	Drawing A-004, Note 12 24 13.0 – States roller shades shall be provided for all exterior glazed openings at Offices, Laboratory, Lobby, Break Room and Control Rooms. Please clarify if the Lobby curtain walls require full height roller shades	Please refer to Window Schedule on drawing A-016. Windows to receive roller shades are indicated in column "window treatment".
12-Q52	The current deadline for General Contractor questions is May 14, 2024, at 4:30 pm. Since the Filed Sub Bid date is now on May 21st please extend the General Contractor questions deadline by 2 weeks from the Filed Sub Bid Date to allow sufficient time for review of Filed Sub Bid results, submission of any follow up questions, process addendums, and pursue 'No Bid' Filed Sub Bid scopes that may become the General Contractors responsibility for coverage. Based on all of these reasons, please extend the General Contractor bid date from June 4, 2024 to June 18, 2024	The General Bid deadline was extended in Addendum 10.
12-Q53	Buried Pipe Below Treatment Building Slab – 8" and 12" DR (Drain) – Drawing M-2000 and Specification Sections Steel Pipe 40 05 24.23 and Pipe Schedule 40 06 20-3. The Pipe Schedule calls for the concrete encased 8" Drain located beneath the Treatment Building to be welded steel pipe/restrained. Due to the 8" and 12" diameter and type of service of this Drain line please confirm that a grooved steel pipe with a mechanical type of coupling such as Victaulic are acceptable for use at each joint of under-slab pipe in lieu of welding each joint of pipe or mechanically restrained ductile iron pipe.	The drain pipe shall be steel pipe with welded/restrained joints in accordance with Specification Section 40 06 20. Requests for substitutions shall be in accordance with Specification Section 01 25 00.

12-Q54	Specification section 40 06 20 specifies that Centrifuge Feed (CF) piping ≥ 4 " to be ductile iron pipe. Please specify the material and joint type for CF piping smaller than 4" in diameter.	The <4 " CF piping shall be PVC SCH 80. See Addendum 9 for details.
12-Q55	Specification section 40 06 20 specifies that Wash Water (WW) piping to be restrained joint ductile iron pipe for buried applications. Please specify the material and joint type for WW systems for exposed applications including piping <4 " in diameter.	There are no WW applications for the general bid exposed or less than 4" in diameter. Exposed piping within the building would be part of the plumbing filed sub bid and can be found in the plumbing and insulation schedule in the Plumbing drawings.
12-Q56	During construction of the Raw Water Transmission Mains, Temporary Treated Waterline, and Treated Water Transmission Mains, per line, how many feet of open trench is the contractor permitted to have open?	See specification section 40 05 00 - Basic Mechanical Requirements, 3.1 G which states the trench length to be limited to approximately 100 feet.
12-Q57	Not Used	Not Used
12-Q58	Specification 40 06 20 Water Treatment Plant Piping Schedule – Please confirm the buried pipe and below slab 36" Future Treatment line beneath the Water Treatment Plant Building will be the same material and joint type as the (TW) Treated Water pipe.	The 36" Future Treatment line shall be the same as the TW pipe. See Addendum 12 for details.
12-Q59	Drawing C-243 Note 1, C-245 Note 1, and detail C-317 – Please confirm limits and corresponding stations of Controlled Density Fill since sections of both pipelines will be encased with concrete.	Trench types/limits for the TMs have been adjusted.
12-Q60	31 50 00 – 1.02 states that: "Sheet pile walls are prohibited. Any deep foundation element of a temporary support of excavation must be drilled and not driven." The specifications for the recent Clearwell and Backwash pumping Station Project did not prohibit the use of sheet pile walls but did require the contractor to "Provide threshold and limiting values of horizontal and vertical deformations for the excavation support system and associated actions when the threshold and limiting values are reached". We request that the prohibition of sheet pile support of excavation walls be removed, and sufficient deformation monitoring	We have reviewed the request. Sheet piles are prohibited.

	requirements be implemented instead.	
12-Q61	<p>This question was asked in our RFI 5 –</p> <p>Addendum 2 includes the BUD Permit Approval obtained by SWSC. There is a reference include of a Figure 5, which was provided to MA DEP clarifying where the regulated material is intended to be re-used. Please provide a copy of Figure 5.</p> <p>Addendum 7 placed the disposal of excess regulated material on the Contractor. We cannot calculate the site balance to determine quantity or cost of disposal without this information. Please provide ASAP.</p>	BUD figure provided as part of Addendum 12. Note that the figures are references and not contract documents. The figures show general locations where materials maybe placed but doesn't mean the entire area can be backfilled with that material. The contractor is responsible for implementing the materials as required in specification section 31 00 01 and the contract drawing dwg C-205.
12-Q62	Addendum #7, Item 7-5, assigns supply and installation of galvanized steel angle masonry veneer supports to the General Contractor. This appears to be in conflict with MGL Chapter 140, Section 44F, and is work that should be assigned to the Miscellaneous and Ornamental Iron Subcontractor, whereby this is work that “is customarily performed in that sub-trade”. Please confirm that this work shall be performed by the Miscellaneous and Ornamental Iron Subcontractor.	This work shall be performed by the General Contractor as clarified in Addenda 6 and 7.
12-Q63	Addendum #7, Item 7-22, is in conflict with Item 7-16. Please clarify. Resolution will be needed prior to the submission of Filed Sub-Bids.	Addendum 12 clarifies temporary heating responsibility. Masonry Subcontractor will be responsible for their own heating for masonry construction in cold weather.
12-Q64	Addendum #7, Item 7-41, states that “The ELEVATOR SUBCONTRACTOR shall furnish, install and maintain all staging, planking and scaffolding up to eight feet in height required for the Work in this Section.” Please confirm that all Filed Subcontractors will be responsible for supplying all of their own Hoisting Equipment, Scaffolding, Staging, Planking and Machinery. Given the filed sub bid procurement process and timing, the General Contractor is not in a position to quantify and coordinate the anticipated needs of the filed sub bidders prior to the general bid. Alternatively, the Owner could identify an allowance to be carried by all Contractors.	Proceed as indicated in Addendum 7 Item 7-41.

	This is even more problematic with the movement of the FSB date to only 2-weeks prior to the GC bid date.	
12-Q65	Please revisit Question 7-Q1. The response does not appear to directly answer the question. Clarity is needed in establishing Filed Sub-Bid scopes.	Refer to Section 04 00 00 Part 1.02.I, 1.02.I.1 in Addendum No. 12.
12-Q66	Addendum #7, Item 7-Q18: Builder's Risk insurers typically will not honor coverage once the Owner takes beneficial use/occupancy upon Substantial Completion. Please confirm that Contractor's Builders Risk policies will terminate upon beneficial use/occupancy and Substantial Completion.	Builders risk insurance shall be in place through final completion.
12-Q67	Please reconcile Item 7-30 and the responses to 7-Q33, 7-Q37 and 7-Q38.	No conflict with this item and question responses. Sub-girt framing is work of the General Contractor. Lathing and plastering Subcontractor is responsible for the exterior and interior metal stud wall framing.
12-Q68	Relative to the response to 7-Q69, it is understood that the terms of subcontracts not governed by the Filed Sub-Bid laws are dictated by the mutual agreement between the parties, however the terms of the Subcontract between the General Contractor and the Filed Sub-Bidders are governed by the General Contract Documents and FSB statutes. Therefore, we request that "Contractor" be added to 01 51 00, 1.03.D.	Request denied.
12-Q69	Relative to the response to 7-Q70, this creates an undefined/unquantifiable expense to be borne by the General Contractor. Only the trade utilizing the hoisting, scaffolding, staging, planking and machinery is able to quantify their needs for same. This is particularly problematic given only 2-weeks between the Filed Sub-Bid date and the General Bid Date. To ensure quantifiable bids and mitigate disputes, please confirm that all Filed Subcontractors will be responsible for supplying their own Hoisting Equipment, Scaffolding, Staging, Planking and Machinery.	Proceed as currently specified.
12-Q70	The response to 7-Q71 appears to be in conflict with Item 7-16, as masonry is a "permanent structure". Please clarify.	Addendum 12 clarifies temporary heating responsibility. Masonry Subcontractor will be

		responsible for their own heating for masonry construction in cold weather.
12-Q71	Given the volume of changes made via recent Addenda, it is requested that the General Bid date be extended to June 18, 2024.	Addendum No. 10 revised the General Bid date to June 25, 2024
12-Q72	Item 30 Pipe Insulation, what size pipe needs insulation and what lengths.	See the Contract drawings and Specification Section 40 42 13 for information on pipe insulation.
12-Q73	Item 31 Existing Curbs, Steps, and Walls removed and Reset what type Curb, What steps and what Walls need to be reset. This information is necessary to properly price this item.	Contractor needs to provide reference to the question and what it pertains to in the contractor documents (drawing or spec reference).
12-Q74	Addendum 7 – Q58- First question – The answer is still confusing. Are you expecting the General Contractors to identify the DBE's with their Bid? If not, why would we submit these forms?	Yes. The DBEs need to be identified on the required forms.
12-Q75	Please confirm the material type at the wall castings for the manways. The blind flange is noted as FRP but nothing is noted for the casting.	The wall castings for manways is called out per the details on M-001 and M-002. These follow the same material specification for pipe penetrations.
12-Q76	Please answer the following relating to Section 03 30 00 – Cast in Place Concrete; Paragraph 2.01-C.1 requires the concrete aggregates to be certified NSF 61. This is a non-typical requirement as the aggregates are virgin materials extracted from the ground. If this requirement is enforced, we are unsure of how long this testing takes and the associated costs that would be incurred. We have NSF61 certs for our cementitious and admixture materials at this time.	03 30 00.2.01.C provides the option of testing 1) testing concrete aggregates, hydraulic cement, and supplemental cementitious materials, or 2) testing concrete cylinders. If testing aggregates is not a desirable option, option 2 can be selected.
12-Q77	Section 03 30 00 – Cast in Place Concrete Paragraph 2.01-C.2 requires the concrete cylinders from the trial batch(s) to be tested for NSF 61 conformance as well. Similar to the above item, I am unsure of testing duration and costs for this item. Also, how many of the mixes detailed within spec 03 30 00 would be required to have this testing?	03 30 00.2.01 provides structures requiring NSF/ANSI Standard 61 certification which are all environmental/Class A1 structures.
12-Q78	Section 03 30 00 – Cast in Place Concrete Paragraph 2.11-B.1 & 2 list mix strength and W/C Ratio criteria. In my opinion, the maximum strengths shown within B.1 are unrealistic when compared to the W/C Ratio	See update to 03 30 00.2.11.B1 issued in Addendum 12. For Class A1 concrete structures, watertightness and durability is

	<p>items contained within B.2. If these max strengths are enforced for field placed concrete, what is the risk? Will concrete be removed for being too strong @ 28 days? I'd prefer to see this item either removed or expanded upon. We don't believe that these min/max strengths are realistic for this project with all of the other design criteria that is contained within the project docs.</p>	<p>critical, and the concrete maximum compressive strength requirement remains in the specification. In recent years, we have seen an increase in concrete strength that has resulted in an increase heat of hydration and increase in shrinkage cracks. Per 03 30 00.3.12.D, the Contractor is responsible for repairing structural cracking due to drying or thermal shrinkage. We have found that providing a maximum compressive strength can open discussions during construction and result in concrete requiring less crack repair. Concrete having compressive strength exceeding the value in the specification will not require removal but will be evaluated on an individual basis. The Contractor remains responsible for ensuring concrete is watertight including any repairs required. We appreciate your concern and will be open to any suggestions at that time.</p>
12-Q79	<p>Specification 03 30 00-3.01.B details trial mix testing items. I want to clarify that the trial batch approval criteria laid out within this item is correct for all specified mix designs within section 03 30 00. ACI guidelines for concrete acceptance utilizing either historical strength testing or trial mix testing are much different when compared to the requirements of this section.</p>	<p>Specify what trial batch approval criteria in specification exceeds ACI guidelines. Note 1.04.A.8 allows field experience records and/or trial mix to be submitted for quality assurance. Addendum 12 adds clarification for allowing historical date by expanding section 1.05.B.</p>
12-Q80	<p>Specification 03 30 00-3.02 details shrinkage testing for the concrete but does not specifically state which specific mixes may or may not be included with this requirement. Can the design team please specify which specific classes of concrete, if any, will be subject to this shrinkage criteria.</p>	<p>See update to 03 30 00.3.02.A issued in Addendum 12.</p>
12-Q81	<p>Please clarify the following regarding the doors and hardware; 08 71 01 Table 1 Hardware Sets; 03 & 05-EL are to be carried with a "Panic Exit Device w/ Dummy Trim". Should</p>	<p>Thank you. Hardware sets 03 & 05-EL modified. Refer to Section 08 71 01 Table 1 in Addendum No. 12. Refer to</p>

	this exit device be carried as Surface Vertical Rod, Concealed Vertical Rod, or Rim exit device? Also, please note these openings are to an electrical room. Please confirm you would like to carry a dummy trim (dummy trim does not have key override).	2.2.1.5 for concealed vertical rod requirement.
12-Q82	Please clarify the following regarding the doors and hardware; 08 14 00-3 / 2.02 G & H; Wood door specs do not call for a finish veneer cut type. Please advise if this will be plain slice, quarter saw or some other type of saw cut?	Cut type shall be plain, typically used with bookmatch. Refer to clarification in Addendum No. 12.
12-Q83	Please clarify the following regarding the doors and hardware; 08 71 01 Table 1 Hardware Sets; Does not identify counts of items. Will kickplates be required on both sides of the doors, or only push side?	Kickplate required at push side of door only. Refer to clarification in Section 08 71 01 in Addendum No. 12.
12-Q84	Please clarify the below slab pipe encasement requirements for the process pipe: Drawing S-004 shows two typical pipe encasements, with "Type I" being not applicable to the project due to a pile supported structure reference. The second, "Type II" would then be considered typical for the project. The Type I encasements are not attached to the slabs.	Addendum 4 issued S-004 with updates to S-03-0404. Note 4/S-03-0404 provides Contractor the option of utilizing Type I or Type II encasements.
12-Q85	Please clarify the below slab pipe encasement requirements for the process pipe: The structural drawings do not show the pipe encasements.	See Addendum 4 issued S-004 with updates to S-03-0404. All piping and conduits below slabs on Earth to be encased by general contractor unless noted otherwise.
12-Q86	Please clarify the below slab pipe encasement requirements for the process pipe: The process mechanical sections appear to show pipe encasement, with some that may attach to the slabs, consistent with the Type 1 detail. However, the sections shown on the mechanical drawings are inconsistent.	See Addendum 4 issued S-004 with updates to S-03-0404. All piping and conduits below slabs on Earth to be encased by general contractor unless noted otherwise.
12-Q87	Please clarify which below slab process lines must be attached to the slab as shown on the typical details provided on the structural drawings.	Addendum 4 issued S-004 with updates to S-03-0404. Note 4/S-03-0404 provides Contractor the option of utilizing Type I or Type II encasements.
12-Q88	Section 46 76 33: Mechanical - 2.04.I – All wetted parts of the centrifuge rotating assembly shall be made of Type 316 stainless steel except for O-rings, seals, and abrasion resistant materials. In our experience type 316 SS is not sufficient to protect the bowl and scroll of a centrifuge	Type 316 SS or 2205 duplex stainless steel are acceptable. Revised Section 46 76 33 Part 2.04 (I) and Part 2.05 (A).

	<p>from operational forces. Please consider requiring 2205 duplex stainless steel for the bowl and scroll, lower grade steel will create longevity issues.</p>	
12-Q89	<p>Section 46 76 33: 2.04.H - The paint shall consist of a two- part epoxy metal primer and a polyurethane finish coat.</p> <p>This will add additional cost past our standard powder coat finish. Please consider the use of powder coat in lieu of epoxy.</p>	<p>No change required. To be determined during shop drawing submittal review period.</p>
12-Q90	<p>Section 46 76 33: 2.06.H – A power run through option shall be provided where in the case of a power loss, the system shall generate electricity from the bowl and feed it back to the backdrive system and the conveyor to clear out the solids inside the machine.</p> <p>During a power loss event the power run through system will power the centrifuge to clear the bowl of solids. This feature will not power the shared conveyor to move this cleared sludge. In a power loss situation there could still be as much as 26.5 cubic feet of solids in one centrifuge. If allowed to run to fruition (usually takes about 5 minutes to clear out solids) they will just pack into the conveyor if it is not running, creating a large cleanup. Provisions for the conveyor system must be made, based on our experience the conveyors would need to be powered individually to ensure they are running in a power loss scenario.</p>	<p>Noted. The conveyor system, along with the Dewatering Centrifuge is on the emergency generator backup and is programmed to commence operation within a minute to power the conveyor to move the dewatered solids to the vertical chutes/truck bay.</p>
12-Q91	<p>Section 46 76 33: 2.06.I.1 – The centrifuge unit shall be mounted on not less than four Spring type isolators. Spring isolator shall consist of not less than one steel spring provided with built-in leveling bolts and damping fluid to control oscillation.</p> <p>Centrisys uses rubber spring type vibration isolators that do not use damping fluid and do not use or need leveling bolts. Please consider revising.</p>	<p>No change required. To be determined during shop drawing submittal review period.</p>
12-Q92	<p>Section 46 76 33: 2.06.I.1 – The centrifuge unit</p>	<p>To be confirmed during shop</p>

	<p>shall be mounted on not less than four Spring type isolators. Spring isolator shall consist of not less than one steel spring provided with built-in leveling bolts and damping fluid to control oscillation.</p> <p>Based on the dewatering room drawings the hydraulic pumping unit is located too far from the centrifuges. Hydraulic hoses are a maximum of 15 ft long for municipal applications. Distances further than 15 ft will require hard piping that will increase cost.</p>	<p>drawing submittal review period.</p>
12-Q93	<p>Section 46 76 33: 3.02. B – Ventilation shall occur only across heat sinks installed on the back of the enclosure.</p> <p>Fan/filter cooling is Centrisys’ standard and preferred method of cooling the control panel. Please consider revision.</p>	<p>To be confirmed during shop drawing submittal review period.</p>
12-Q94	<p>Section 46 76 33: 3.05.B.3 - 3. The operator shall have the ability to go to the detail screen for all of the items shown on the overview screen by touching the component of interest. This is custom programming that would increase the design time required and the overall cost. Please consider revision.</p>	<p>Providing a menu to access the various detail screens from the overview screen is also acceptable.</p>
12-Q95	<p>Section 46 76 33: 3.05.I. 1-5 - I. Communications Parameters Screen</p> <ol style="list-style-type: none"> 1. Screen shall show status of fiber optic network link between centrifuge PLC and SCADA by displaying the centrifuge PLC and SCADA in block diagram format. The color of the PLC shall change based on the status of communications. 2. The screen shall display the number of packages sent. 3. The screen shall display the number of “no acknowledge” packages accumulated. 4. The screen shall display the number of time-outs or watchdogs. Exception. This would be within the scope of the Systems Integrator (SI). Please revise. 	<p>These items require coordination with the SI, but are the centrifuge manufacturer's responsibility to include in their configuration.</p>
12-Q96	<p>Section 46 76 33: 3.05.N - N. Firmware Data</p>	<p>For any software or firmware used in the centrifuge control panel, display the license and version number, and a method</p>

	<p>1. Display the following information:</p> <p>a. License number (for each item where a software/firmware license is required)</p> <p>b. The version of the software/firmware being used. Screen shall allow for password protected change to this data to indicate that the data has been changed.</p> <p>c. Provide a place on the screen to allow for maintenance to indicate the date when new firmware was entered.</p> <p>Exception. Centrisys does not provide software licenses. Please revise</p>	<p>to update the date on which said software or firmware was updated. No additional software licenses are required to be provided to the Owner.</p>
12-Q97	<p>Upon review of Addendum 5 specifications and contract drawings, please confirm that the Support Details included but not limited to in drawings M-003, M-004, and M-102 are to be designed, fabricated, furnished, and installed by the Miscellaneous Metals Filed Sub Bidder.</p>	<p>Fabricated supports are the responsibility of the Miscellaneous and Ornamental Iron Subcontractor. Manufactured supports are the responsibility of the General Contractor.</p>
12-Q98	<p>Specification Section 31 00 01-02 - "3.07 BEDROCK REMOVAL" states that Blasting is prohibited but goes on to say Vibrations shall be limited to those recommended by the United States Bureau of Mines, RI 8507, see Article 3.02.N. We have found this report of investigation but can not locate article 3.02N. Can you please provide the referenced article.</p>	<p>Article 3.02 N is located in the Earthwork specification 31 00 01, and is titled Vibration Control.</p>
12-Q99	<p>Specification Section 31 00 01-02 - "3.07 BEDROCK REMOVAL" states that Blasting is prohibited but goes on to say Vibrations shall be limited to those recommended by the United States Bureau of Mines, RI 8507, see Article 3.02.N. Since this report of investigation presents findings related to blast produced ground vibration is it permissible to use blasting methods to remove Rock on the project provided it meets the thresholds described in the report?</p>	<p>Blasting and explosives shall not be used.</p>
12-Q100	<p>"Specification Section 31 00 01-02 - "3.07 BEDROCK REMOVAL" states that Chemical or hydraulic splitting of bedrock is required within 50 feet of the existing bedrock tunnel that is located adjacent to the existing EDV Structure. Since Chemical splitting will require hydraulic hammering to complete removal of rock once fractured will it be permissible to use machine</p>	<p>Chemical or hydraulic splitting shall be performed at spacings as needed to fracture bedrock for removal using conventional earth moving equipment (i.e., ripping fractured rock with an excavator). If initial splitting hole spacings do not result in</p>

	<p>mounted hydraulic hammers to break up rock once fractured by chemical methods within 50' of the existing bedrock tunnel?</p>	<p>sufficiently fractured bedrock, splitting hole spacings shall be decreased. If fractured bedrock from decreased spacing of splitting holes is unable to be removed using conventional earth moving equipment, and on a case-by-case basis, the Owner may allow hydraulic hammering, provided the Contractor can demonstrate acceptable vibration levels and that there is no over excavation of bedrock.</p>
12-Q101	<p>GC 2.10 b.2 - We have received and appreciate the revisions you made to the General Conditions 2.10 b.2 in response to our prior inquiry. However, we request the following additional revisions to the RFP language related to General Condition 2.01B.2:</p> <p>a. We request that the word “threatened” be removed from the first sentence of General Condition 2.01B.2.</p> <p>b. We request that the final sentence of General Condition 2.01B.2 be changed to the following:</p> <p>“This indemnification does not extend to other pre-existing Hazardous and contaminated materials on site, concerning which Owner recognizes its generator status, and which requires on site remediation at the Commission’s Facilities or disposal off-site.”</p>	<p>a. “Threatened” removed. See Addendum 12 Item 12-10.</p> <p>b. Request denied.</p>
12-Q102	<p>Regarding the installation schedule for the Yard Piping Butterfly Valves, 36”, 42” and 60” with Mechanical Joint ends, it is our understanding that to meet the project schedule, these valves must be delivered in 20-22 weeks or less.</p> <p>Currently due to the massive demand for domestic iron and steel, foundry capacity is extremely limited, resulting in extended lead times for valve components, particularly the valve discs.</p>	<p>See response to 12-Q20.</p>

	<p>For this reason, GA requests approval to supply AIS-exempt butterfly valves for this project, using lead-free Aluminum-Bronze discs, UNS C95400 in order to achieve the desired project lead time and ensure this critical project maintains its schedule.</p> <p>Aluminum-Bronze is allowable for butterfly discs per AWWA C504 sections 4.1.2.11, 11.1, 11.2 and 4.2.4.1 (see extracted pages from AWWA C504-23 appended to this letter). Furthermore, Aluminum-Bronze is mechanically superior to Ductile Iron A536 65-45-12 as it has higher tensile strength (85ksi vs 65ksi), hardness (170 vs 131 Brinell) and corrosion resistance as it is a non-ferrous alloy.</p> <p>Further, the disc material will not be directly exposed to the fluid media as we provide the discs coated with NSF61-approved liquid epoxy coating, just like our standard ductile iron discs.</p> <p>GA Industries has supplied butterfly valves with UNS C95400 on other AIS projects in the past with great success, we are happy to provide project references if requested.</p> <p>We are requesting a material substitution, approved by AWWA in order to meet the delivery schedule. Please advise that this is acceptable.</p>	
12-Q103	<p>Addendum 5, Item 5-5: Section 00 40 00-4 – Forms for General Bid and Specification 01 20 00-1.03.B.1.a.</p> <p>Measurement and Payment:</p> <p>a. Bid Form Item No. 011100.1 – Lump Sum – General Construction: Please confirm that the General Contractor is to include the cost of the Filed Sub Bids as part of this item.</p>	<p>No. Item does not include the work of the Filed Sub-Bidders. The work of the filed sub bidders is included in the total at the top of page 00 40 00-4.</p>
12-Q104	<p>Addendum 5, Item 5-5: Section 00 40 00-4 – Forms for General Bid was replaced. The Items to be totaled in the Total amount of Base Bid appear to be from the previous Bid Form and do not match the revised Bid Form. Please</p>	<p>The bid item is clarified in the revised Bid Form included in Addendum 12.</p>

	<p>Review and Clarify: "Total amount of Base Bid based on Engineer's estimate of quantities for items 011100.01 through 400524.4 inclusive and the work on the Filed Sub-Bidders (in words): _____ Dollars (in figures) (\$ _____).</p>	
12-Q105	<p>Due to the size and complexity of the project we respectfully request a two (2) week extension to the bid date to allow ample time for all subtrades to put together their respective trade bid.</p>	<p>The bid deadlines were revised in Addenda 10 and 11.</p>

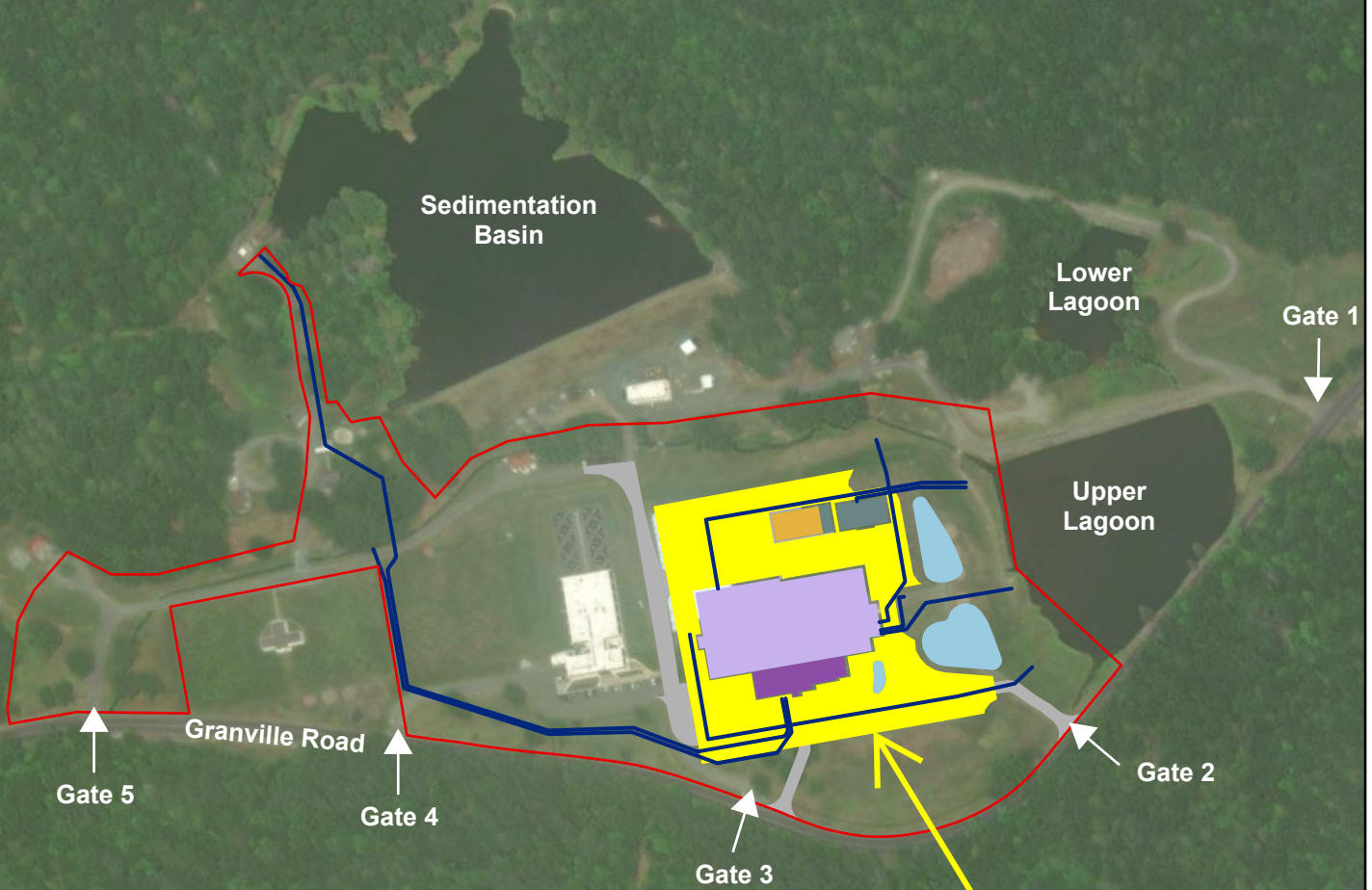
SPRINGFIELD WATER AND SEWER COMMISSION

Theo G. Theocles, Esq.
 Director of Legal Affairs/Chief Procurement Officer

Date: May 28, 2024

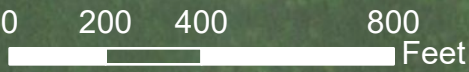
Attachment A – Figure 5 from 01 41 00.01 BUD Approval

*All design components shown in this schematic are approximate and may be refined as design advances.



Identified areas where the mix of sand and crushed concrete can be placed as backfill

- | | |
|-----------------------|----------------------------|
| Limits of Disturbance | Pavement |
| Yard Piping | Stormwater Management Area |
| Admin Building | WTP Building |
| Centrate Tank | Waste Washwater Tank |
| Dewatering Building | |



**Figure 5
Potential Area of Refuse for BUD Permit at Proposed Project Site Facilities***

Attachment B – Contract Drawings

Drawing No.	GENERAL DRAWINGS
	Title
G-001	COVER SHEET WITH LOCUS PLAN
G-002	INDEX OF DRAWINGS - SHEET 1
G-003	INDEX OF DRAWINGS - SHEET 2
G-004	INDEX OF DRAWINGS - SHEET 3
G-005	INDEX OF DRAWINGS - SHEET 4
G-006	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
G-007	WATER TREATMENT BUILDING - KEY PLAN AT EL 457.00
G-008	WATER TREATMENT BUILDING - KEY PLAN AT EL 471.00
G-009	WATER TREATMENT BUILDING - KEY PLAN AT EL 485.00
G-010	WATER TREATMENT BUILDING - KEY PLAN AT EL 499.00
G-011	PROCESS FLOW DIAGRAM
G-012	HYDRAULIC PROFILE - EXISTING SOURCE
G-013	RAW AND FINISHED WATER SEQUENCE OF CONSTRUCTION - SHEET 1
G-014	RAW AND FINISHED WATER SEQUENCE OF CONSTRUCTION - SHEET 2

Drawing No.	REMOVALS DRAWINGS
	Title
R-001	SLOW SAND FILTERS - OVERALL TOP DEMOLITION PLAN
R-002	SLOW SAND FILTERS - OVERALL BOTTOM DEMOLITION PLAN
R-003	SLOW SAND FILTERS 7-10 - ENLARGED TOP DEMOLITION PLAN - SSF 7 & 8
R-004	SLOW SAND FILTERS 7-10 - ENLARGED TOP DEMOLITION PLAN - SSF 9 & 10
R-005	SLOW SAND FILTERS 7-10 - ENLARGED BOTTOM DEMOLITION PLAN - SSF 7 & 8
R-006	SLOW SAND FILTERS 7-10 - ENLARGED BOTTOM DEMOLITION PLAN - SSF 9 & 10
R-007	SLOW SAND FILTERS 7-10 - SECTIONS - SSF 7-10 - SHEET 1
R-008	SLOW SAND FILTERS 7-10 - SECTIONS - SSF 7-10 - SHEET 2
R-009	SLOW SAND FILTERS 15-18 - ENLARGED TOP DEMOLITION PLAN - SSF 15 & 16
R-010	SLOW SAND FILTERS 15-18 - ENLARGED TOP DEMOLITION PLAN - SSF 17 & 18
R-011	SLOW SAND FILTERS 15-18 - ENLARGED BOTTOM DEMOLITION PLAN - SSF 15 & 16
R-012	SLOW SAND FILTERS 15-18 - ENLARGED BOTTOM DEMOLITION PLAN - SSF 17 & 18
R-013	SLOW SAND FILTERS 15-18 - SECTIONS - SSF 15-18
R-014	SAND BINS - DEMOLITION PLANS
R-015	SAND BINS - DEMOLITION SECTIONS

R-101	REGULATOR HOUSE 3, SSF NOS. 7-10 - BASEMENT DEMOLITION PLAN
R-102	REGULATOR HOUSE 3, SSF NOS. 7-10 - FIRST FLOOR DEMOLITION PLAN
R-103	REGULATOR HOUSE 3, SSF NOS. 7-10 - SECOND FLOOR DEMOLITION PLAN
R-104	REGULATOR HOUSE 3, SSF NOS. 7-10 - ROOF DEMOLITION PLAN
R-105	REGULATOR HOUSE 3, SSF NOS. 7-10 - DEMOLITION SECTION 1
R-106	REGULATOR HOUSE 3, SSF NOS. 7-10 - DEMOLITION SECTION 2

R-201	REGULATOR HOUSE 4, SSF NOS. 15-18 - BASEMENT DEMOLITION PLAN
R-202	REGULATOR HOUSE 4, SSF NOS. 15-18 - FIRST FLOOR DEMOLITION PLAN
R-203	REGULATOR HOUSE 4, SSF NOS. 15-18 - ROOF DEMOLITION PLAN
R-204	REGULATOR HOUSE 4, SSF NOS. 15-18 - DEMOLITION SECTION 1
R-205	REGULATOR HOUSE 4, SSF NOS. 15-18 - DEMOLITION SECTION 2

Drawing No.	CIVIL DRAWINGS
	Title
C-000	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C-001	OVERALL SITE PLAN AND DRAWING KEY
C-002	EROSION AND SEDIMENT CONTROL PHASING PLAN - PHASE I
C-003	EROSION AND SEDIMENT CONTROL PHASING PLAN - PHASE II
C-004	EROSION AND SEDIMENT CONTROL PHASING PLAN - PHASE III
C-005	EROSION AND SEDIMENT CONTROL PHASING PLAN - PHASE IV
C-006	EROSION AND SEDIMENT CONTROL PHASING PLAN - PHASE V
C-007	OVERALL SITE ACCESS PLANS - PHASE I
C-008	OVERALL SITE ACCESS PLANS - PHASE II
C-009	OVERALL SITE ACCESS PLANS - PHASE III
C-010	OVERALL SITE ACCESS PLANS - PHASE IV

C-100	OVERALL EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN
C-101	EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN - SHEET 1
C-102	EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN - SHEET 2
C-103	EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN - SHEET 3
C-104	EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN - SHEET 4
C-105	EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN - SHEET 5
C-106	EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN - SHEET 6
C-107	EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN - SHEET 7
C-110	OVERALL DEMOLITION PLAN
C-111	DEMOLITION PLAN - SHEET 1
C-112	DEMOLITION PLAN - SHEET 2
C-113	DEMOLITION PLAN - SHEET 3
C-114	DEMOLITION PLAN - SHEET 4
C-115	DEMOLITION PLAN - SHEET 5
C-116	DEMOLITION PLAN - SHEET 6
C-120	INTERIM OVERALL GRADING AND DRAINAGE PLAN
C-121	INTERIM SITE PLAN 1
C-122	INTERIM SITE PLAN 2
C-123	INTERIM SITE PLAN 3
C-124	INTERIM SITE PLAN 4
C-125	INTERIM SITE PLAN 5

x DENOTES DRAWINGS THAT INCLUDE WORK THAT IS ALL OR IN-PART FILED SUB-BID. SEE SPECIFICATIONS FOR LISTING OF FILED SUB-BID WORK. LISTED FILED SUB-BID SHEETS MAY INCLUDE WORK OF THE GENERAL CONTRACTOR.



Drawing No.	CIVIL DRAWINGS (CONT.)
	Title
C-130	OVERALL GRADING AND DRAINAGE PLAN
C-131	GRADING AND DRAINAGE PLAN - SHEET 1
C-132	GRADING AND DRAINAGE PLAN - SHEET 2
C-133	GRADING AND DRAINAGE PLAN - SHEET 3
C-134	GRADING AND DRAINAGE PLAN - SHEET 4
C-135	GRADING AND DRAINAGE PLAN - SHEET 5
C-136	GRADING AND DRAINAGE PLAN - SHEET 6
C-140	OVERALL YARD PIPING PLAN
C-141	YARD PIPING PLAN - SHEET 1
C-142	YARD PIPING PLAN - SHEET 2
C-143	YARD PIPING PLAN - SHEET 3
C-144	YARD PIPING PLAN - SHEET 4
C-145	YARD PIPING PLAN - SHEET 5
C-146	YARD PIPING PLAN - SHEET 6
C-150	OVERALL FINAL SITE PLAN
C-151	FINAL SITE PLAN - SHEET 1
C-152	FINAL SITE PLAN - SHEET 2
C-153	FINAL SITE PLAN - SHEET 3
C-154	FINAL SITE PLAN - SHEET 4
C-155	FINAL SITE PLAN - SHEET 5
C-156	FINAL SITE PLAN - SHEET 6
C-157	FINAL SITE PLAN - SHEET 7
C-160	STAKING PLAN - LIMIT OF DISTURBANCE
C-161	STAKING PLAN - SHEET 1
C-162	STAKING PLAN - SHEET 2
C-163	STAKING PLAN - SHEET 3
C-164	STAKING PLAN - SHEET 4
C-165	STAKING PLAN - SHEET 5
C-166	STAKING PLAN - SHEET 6
C-167	STAKING TABLES
C-168	STAKING TABLES - LIMIT OF DISTURBANCE
C-170	SITE SECTIONS - OVERALL PLAN
C-171	SITE SECTIONS - SHEET 1
C-172	SITE SECTIONS - SHEET 2
C-173	SITE SECTIONS - SHEET 3
C-174	SITE SECTIONS - SHEET 4
C-175	SITE SECTIONS - SHEET 5
C-176	SITE SECTIONS - SHEET 6
C-177	SITE SECTIONS - SHEET 7
C-201	ACCESS ROAD PLAN AND PROFILE - SHEET 1
C-202	ACCESS ROAD PLAN AND PROFILE - SHEET 2
C-203	ACCESS ROAD PLAN AND PROFILE - SHEET 3
C-204	ACCESS ROAD PLAN AND PROFILE - SHEET 4
C-205	ROADWAY SECTIONS
C-206	ROADWAY DETAILS
C-210	STORMWATER WETLAND POND PLAN
C-211	STORMWATER WETLAND POND PROFILE AND CROSS SECTIONS
C-212	STORM DRAIN PROFILES - SHEET 1
C-213	STORM DRAIN PROFILES - SHEET 2
C-214	STORM DRAIN PROFILES - SHEET 3
C-215	STORM DRAIN PROFILES - SHEET 4
C-216	STORM DRAIN PROFILES - SHEET 5
C-217	STORMWATER DETAILS - SHEET 1
C-218	STORMWATER DETAILS - SHEET 2
C-219	STORMWATER DETAILS - SHEET 3
C-220	SITE DRAIN PROFILE
C-231	SANITARY SEWER PROFILES
C-232	SANITARY PUMP STATION DETAIL
C-233	SEPTIC SYSTEM PLAN
C-234	SEPTIC SYSTEM DETAILS - SHEET 1
C-235	SEPTIC SYSTEM DETAILS - SHEET 2
C-236	HOLDING TANK DETAILS
C-240	OVERALL TRANSMISSION MAINS PLAN
C-241	RAW WATER TRANSMISSION MAIN PLAN AND PROFILE - SHEET 1
C-242	RAW WATER TRANSMISSION MAIN PLAN AND PROFILE - SHEET 2
C-243	RAW WATER TRANSMISSION MAIN PLAN AND PROFILE - SHEET 3
C-244	RAW WATER TRANSMISSION MAIN PLAN AND PROFILE - SHEET 4
C-245	RAW WATER TRANSMISSION MAIN PLAN AND PROFILE - SHEET 5
C-246	RAW WATER TRANSMISSION MAIN CONNECTION DETAILS - SHEET 1
C-247	RAW WATER TRANSMISSION MAIN CONNECTION DETAILS - SHEET 2
C-248	WASH WATER PROFILE
C-251	TREATED WATER TRANSMISSION MAIN PLAN AND PROFILE - SHEET 1
C-252	TREATED WATER TRANSMISSION MAIN PLAN AND PROFILE - SHEET 2
C-253	TREATED WATER TRANSMISSION MAIN PLAN AND PROFILE - SHEET 3
C-254	TREATED WATER TRANSMISSION MAIN CONNECTION DETAILS
C-261	TRANSMISSION MAIN RESTORATION PLAN
C-262	FENCE RESTORATION PLAN - SHEET 1
C-263	FENCE RESTORATION PLAN - SHEET 2
C-271	OVERFLOW PROFILE - SHEET 1
C-272	OVERFLOW PROFILE - SHEET 2
C-273	PROCESS PIPING PROFILES - SHEET 1

Drawing No.	CIVIL DRAWINGS (CONT.)
	Title
C-274	PROCESS PIPING PROFILES - SHEET 2
C-275	WASH WATER AND DOMESTIC WATER PROFILES
C-276	PROCESS WATER AND DOMESTIC WATER PROFILES
C-301	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS - SHEET 1
C-302	EROSION AND SEDIMENT CONTROL DETAILS - SHEET 2
C-303	EROSION AND SEDIMENT CONTROL DETAILS - SHEET 3
C-304	EROSION AND SEDIMENT CONTROL DETAILS - SHEET 4
C-310	STEEL PIPE DETAILS - SHEET 1
C-311	STEEL PIPE DETAILS - SHEET 2
C-312	STEEL PIPE DETAILS - SHEET 3
C-313	STEEL PIPE DETAILS - SHEET 4
C-314	SITE DETAILS - SHEET 1
C-315	SITE DETAILS - SHEET 2
C-316	YARD PIPING DETAILS - SHEET 1
C-317	YARD PIPING DETAILS - SHEET 2
C-318	CATHODIC PROTECTION DETAILS - SHEET 1
C-319	CATHODIC PROTECTION DETAILS - SHEET 2

Drawing No.	LANDSCAPE DRAWINGS
	Title
L-001	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
L-002	DRAWING KEY AND OVERALL PLANTING PLAN
L-101	PLANTING PLAN - SHEET 1
L-102	PLANTING PLAN - SHEET 2
L-103	PLANTING PLAN - SHEET 3
L-104	PLANTING PLAN - SHEET 4
L-105	PLANTING PLAN - SHEET 5
L-106	PLANTING PLAN - SHEET 6
L-107	PLANTING PLAN - SHEET 7
L-108	PLANTING PLAN - SHEET 8
L-201	PLANTING SCHEDULE
L-202	DETAILS - SHEET 1
L-203	DETAILS - SHEET 2

Drawing No.	ARCHITECTURAL DRAWINGS
	Title
x A-001	GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS
x A-002	ARCHITECTURAL NOTES - SHEET 1
x A-003	ARCHITECTURAL NOTES - SHEET 2
x A-004	ARCHITECTURAL NOTES - SHEET 3
x A-005	ROOF DETAILS
x A-006	EXPANSION JOINT DETAILS
x A-007	EXTERIOR WALL DETAILS
x A-008	COLUMN DETAILS
x A-009	INTERIOR PARTITION DETAILS
x A-010	FIRESTOPPING DETAILS
x A-011	RAILING DETAILS
x A-012	TOILET ACCESSORIES AND FIXTURES
x A-013	FINISH SCHEDULE
x A-014	DOOR SCHEDULE
x A-015	DOOR DETAILS
x A-016	WINDOW SCHEDULE AND TYPES
x A-017	WINDOW DETAIL
x A-018	TRANSLUCENT PANEL SCHEDULE, TYPES AND DETAILS
x A-019	LOUVER SCHEDULE AND DETAILS, IDENTIFYING DEVICES SCHEDULE
x A-020	IDENTIFYING DEVICES DETAILS

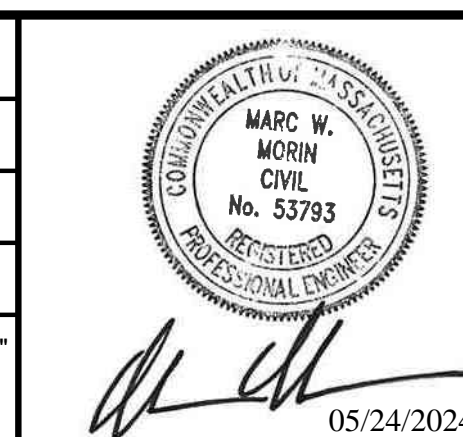
A-0100	WATER TREATMENT BUILDING - BUILDING CODE SUMMARY
A-0101	WATER TREATMENT BUILDING - LIFE SAFETY PLAN AT EL 457.00
A-0102	WATER TREATMENT BUILDING - LIFE SAFETY PLAN AT EL 471.00
A-0103	WATER TREATMENT BUILDING - LIFE SAFETY PLAN AT EL 485.00
A-0104	WATER TREATMENT BUILDING - ROOF SAFETY PLAN AT EL 499.00
A-0105	WATER TREATMENT BUILDING - LIFE SAFETY EXTERIOR ELEVATIONS
A-0106	DEWATERING BUILDING - BUILDING CODE SUMMARY
A-0107	DEWATERING BUILDING - LIFE SAFETY PLANS
A-0108	DEWATERING BUILDING - LIFE SAFETY EXTERIOR ELEVATIONS

x A-1101	WATER TREATMENT BUILDING - PLAN AT EL 457.00 - ADMINISTRATION AREA 1
x A-1200	WATER TREATMENT BUILDING - OVERALL PLAN AT EL 471.00 - ADMINISTRATION AREA
x A-1201	WATER TREATMENT BUILDING - PLAN AT EL 471.00 - ADMINISTRATION AREA 1
x A-1202	WATER TREATMENT BUILDING - PLAN AT EL 471.00 - ADMINISTRATION AREA 2
x A-1203	WATER TREATMENT BUILDING - ENLARGED LABORATORY PLAN AT EL 471.00 - ADMINISTRATION AREA
x A-1204	WATER TREATMENT BUILDING - LABORATORY INTERIOR ELEVATIONS AT EL 471.00 - ADMINISTRATION AREA SHEET 1
x A-1205	WATER TREATMENT BUILDING - LABORATORY INTERIOR ELEVATIONS AT EL 471.00 - ADMINISTRATION AREA SHEET 2
x A-1206	WATER TREATMENT BUILDING - ENLARGED RESTROOMS PLAN AND INTERIOR ELEVATIONS AT EL 471.00 - ADMINISTRATION AREA
x A-1207	WATER TREATMENT BUILDING - ENLARGED LOCKER ROOM AND BREAK ROOM PLAN AT EL 471.00 - ADMINISTRATION AREA
x A-1208	WATER TREATMENT BUILDING - LOCKER ROOM AND BREAK ROOM INTERIOR ELEVATIONS AT EL 471.00 - ADMINISTRATION AREA
x A-1209	WATER TREATMENT BUILDING - OVERALL REFLECTED CEILING PLAN AT EL 471.00 - ADMINISTRATION AREA

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REV	ISSUED FOR	DATE	BY
3	ADDENDUM NO. 12	MAY 24	MWM
2	ADDENDUM NO. 7	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	C. BROWN
DRAWN BY:	D. KVOPKA
CHECKED BY:	M. MORIN
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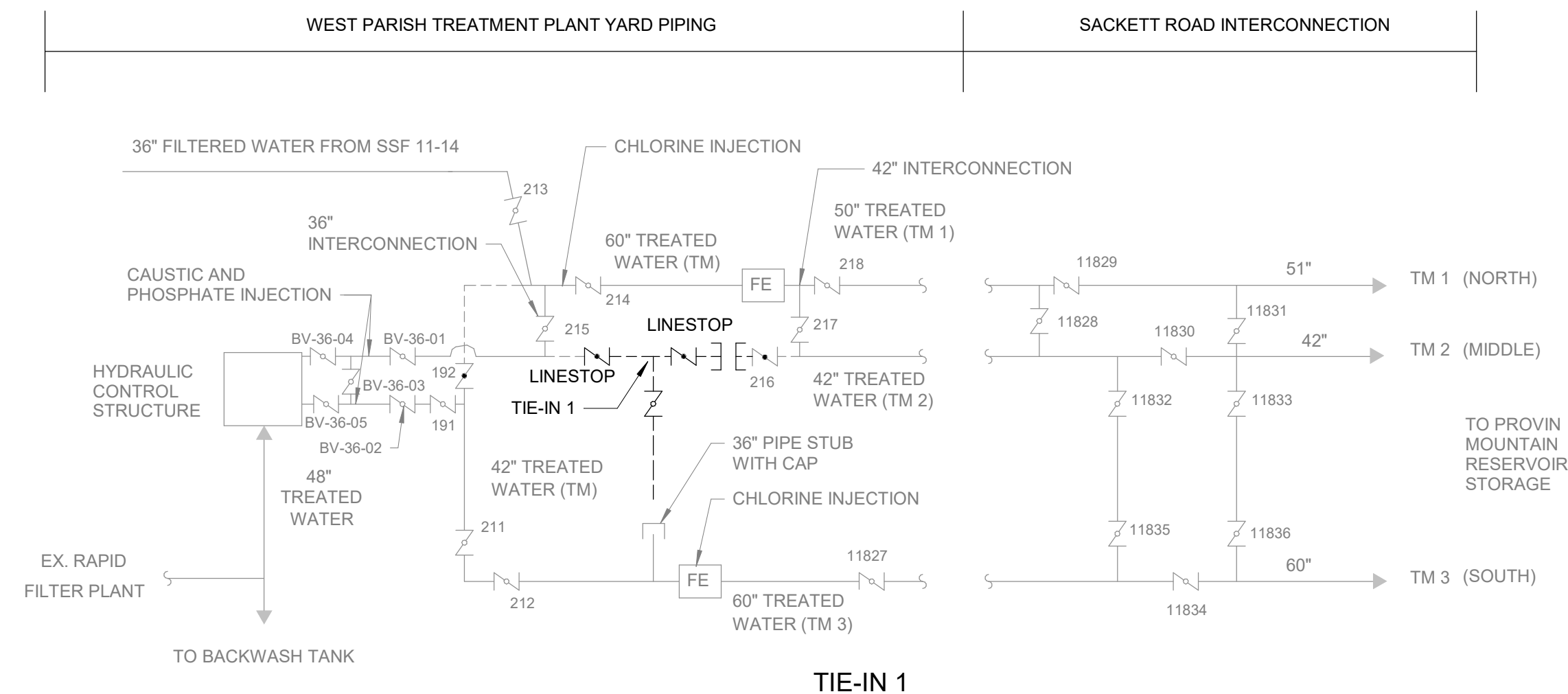
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100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

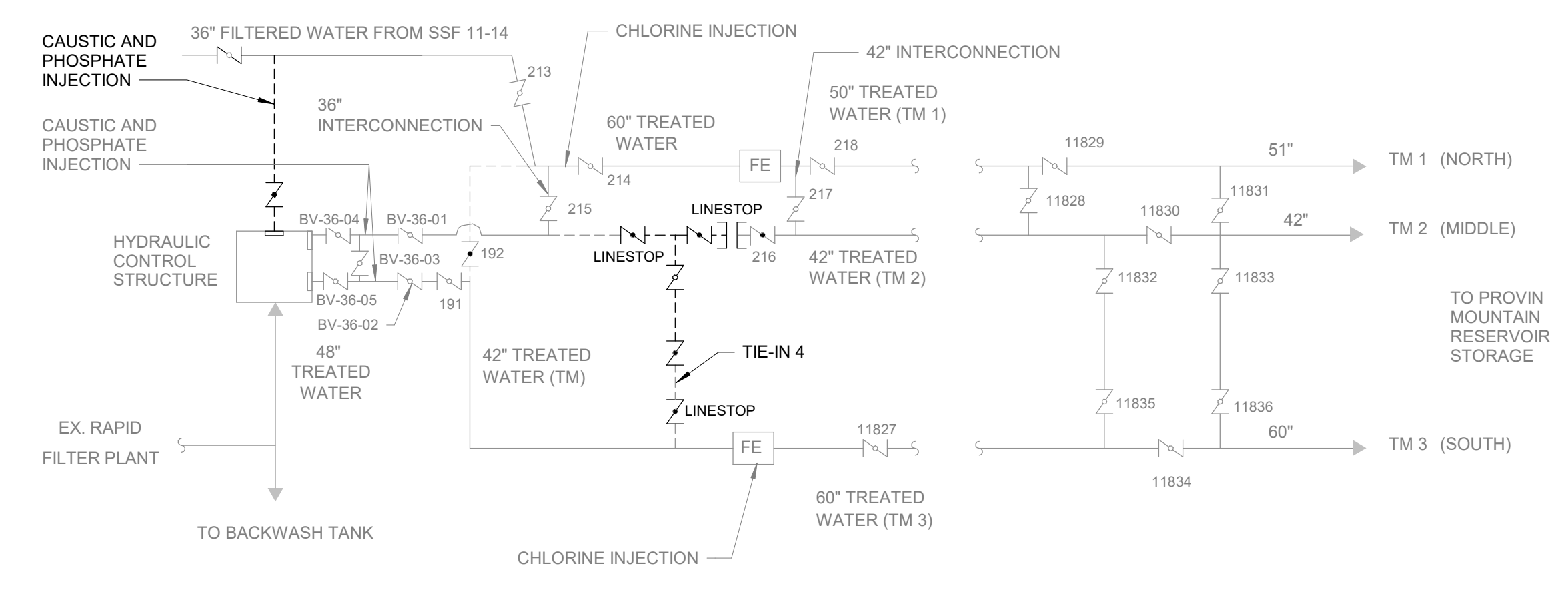
GENERAL INDEX OF DRAWINGS - SHEET 1

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	G-002

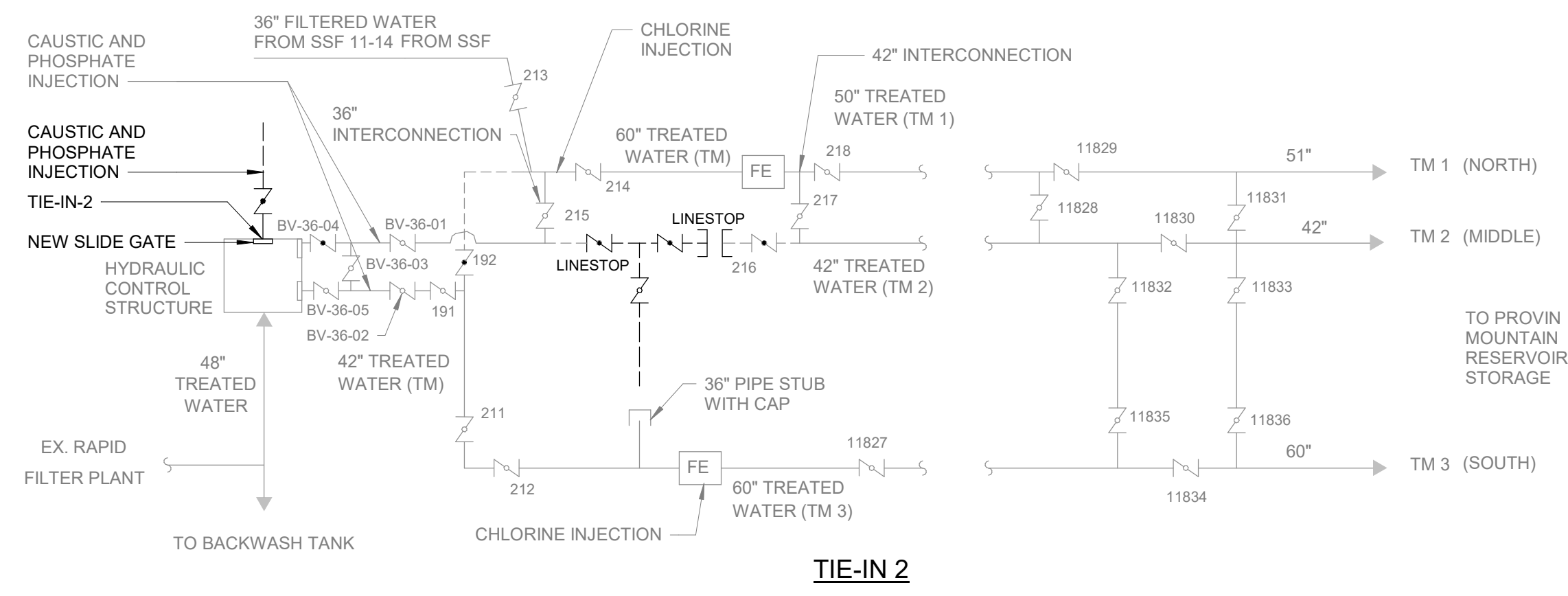
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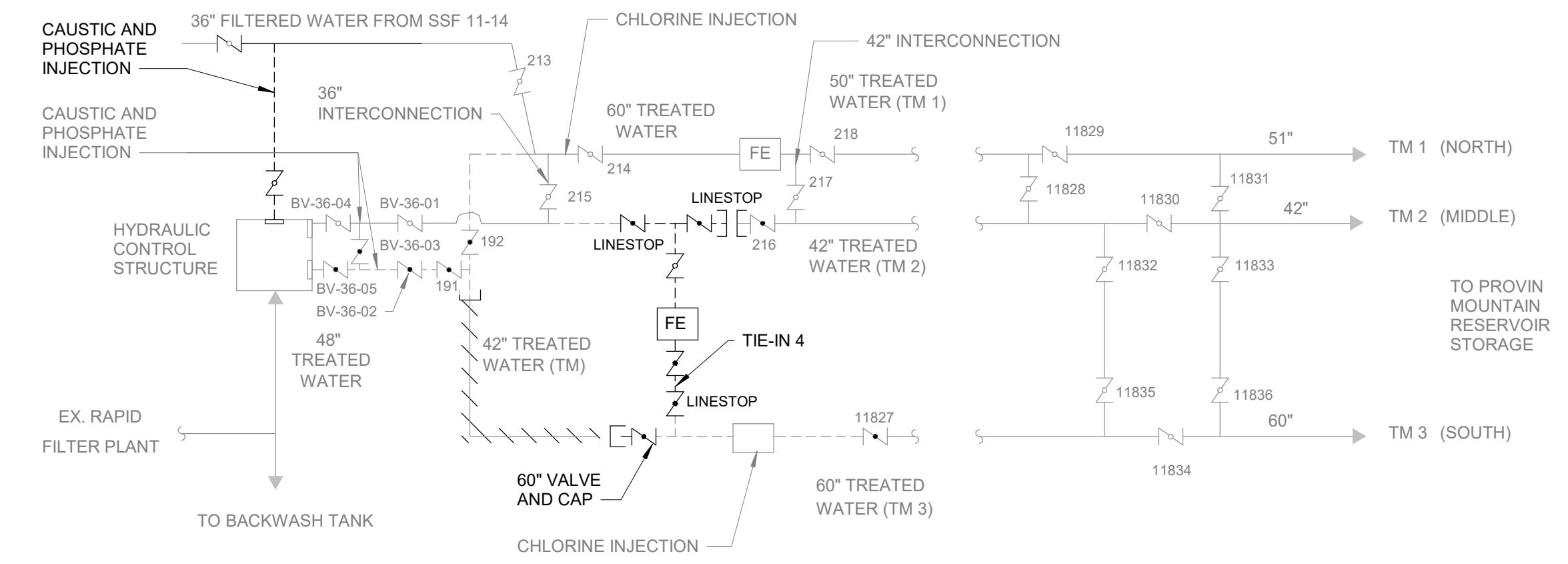
TIE-IN 1



TIE-IN 4 PART 1

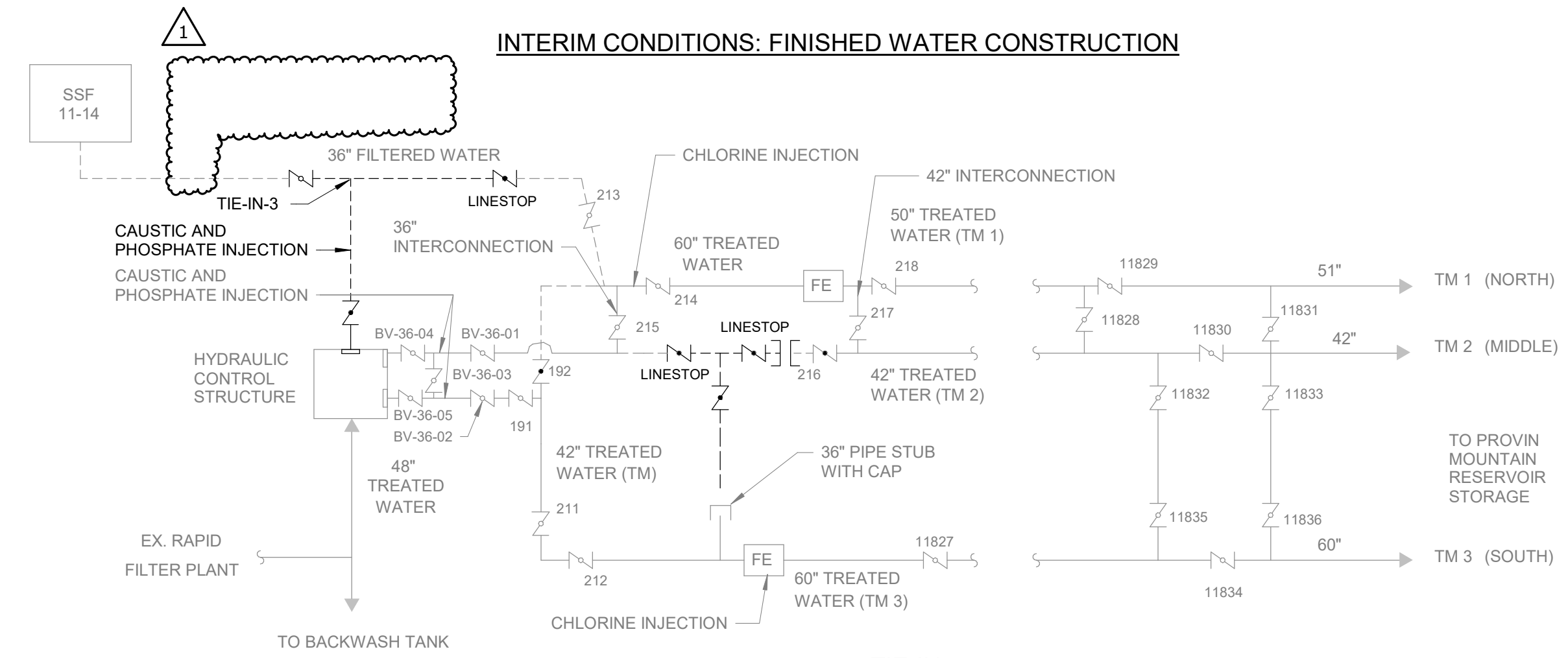


TIE-IN 2

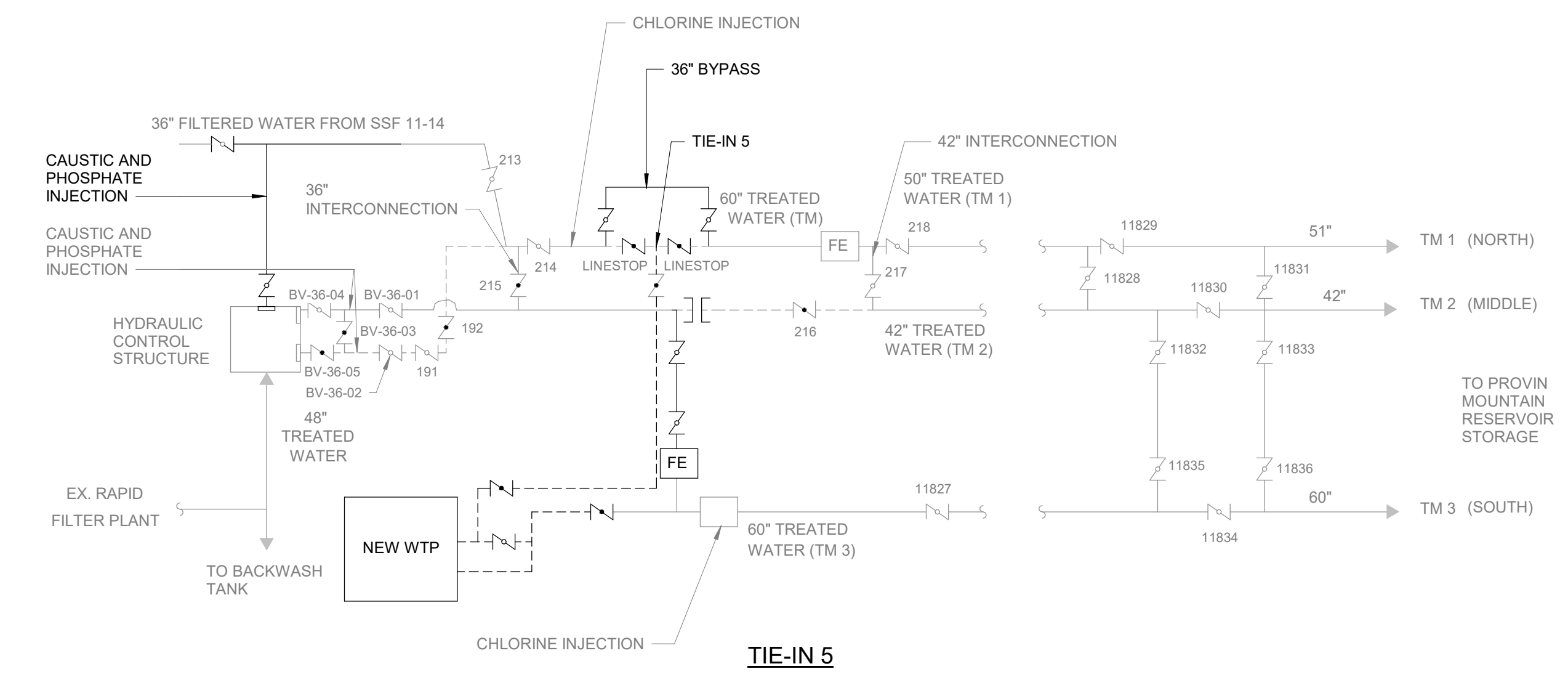


TIE-IN 4 PART 2

INTERIM CONDITIONS: FINISHED WATER CONSTRUCTION



TIE-IN 3



TIE-IN 5

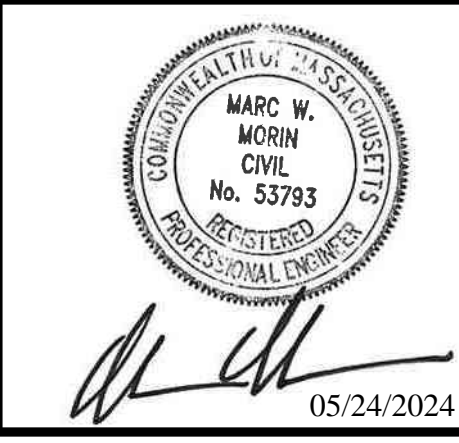
LEGEND

- EX. INFRASTRUCTURE
- NEW INFRASTRUCTURE
- //// DEMOLITION
- - - - - OUT OF SERVICE
- ⊙ VALVE NO. VALVE IN CLOSED POSITION
- ⊙ VALVE NO. VALVE OPEN IN POSITION

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1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	C. THORNTON
DRAWN BY:	T. ORDONEZ
CHECKED BY:	M. MORIN
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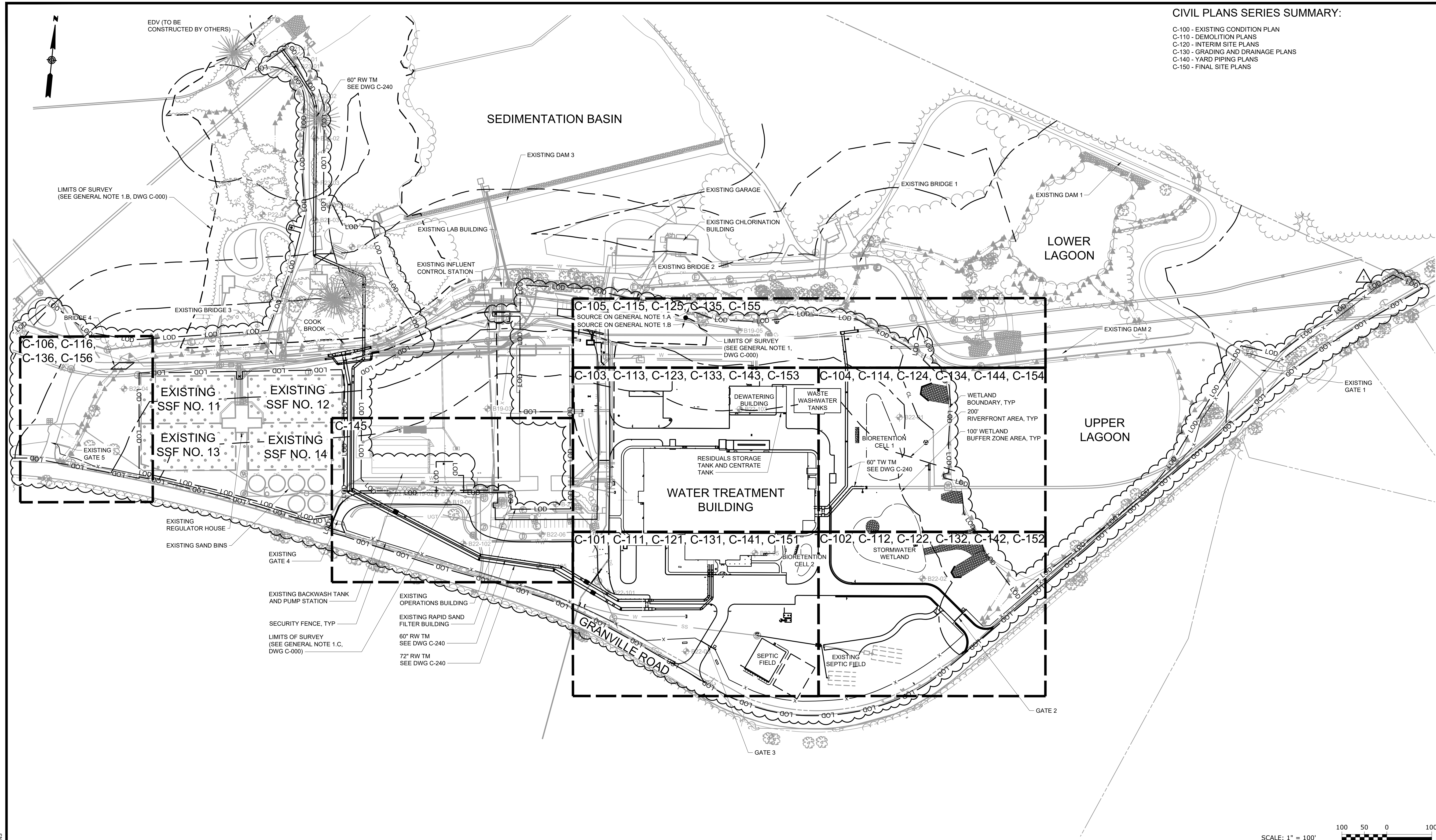
SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

GENERAL RAW AND FINISHED WATER SEQUENCE OF CONSTRUCTION - SHEET 2

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	G-014

CIVIL PLANS SERIES SUMMARY:

- C-100 - EXISTING CONDITION PLAN
- C-110 - DEMOLITION PLANS
- C-120 - INTERIM SITE PLANS
- C-130 - GRADING AND DRAINAGE PLANS
- C-140 - YARD PIPING PLANS
- C-150 - FINAL SITE PLANS



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 PLOT DATE: 5/22/2024 7:21 PM BY: KROBBINS

SCALE: 1" = 100'

REV	ISSUED FOR	DATE	BY
1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN

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0 1/2" 1"

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SPRINGFIELD WATER AND SEWER COMMISSION

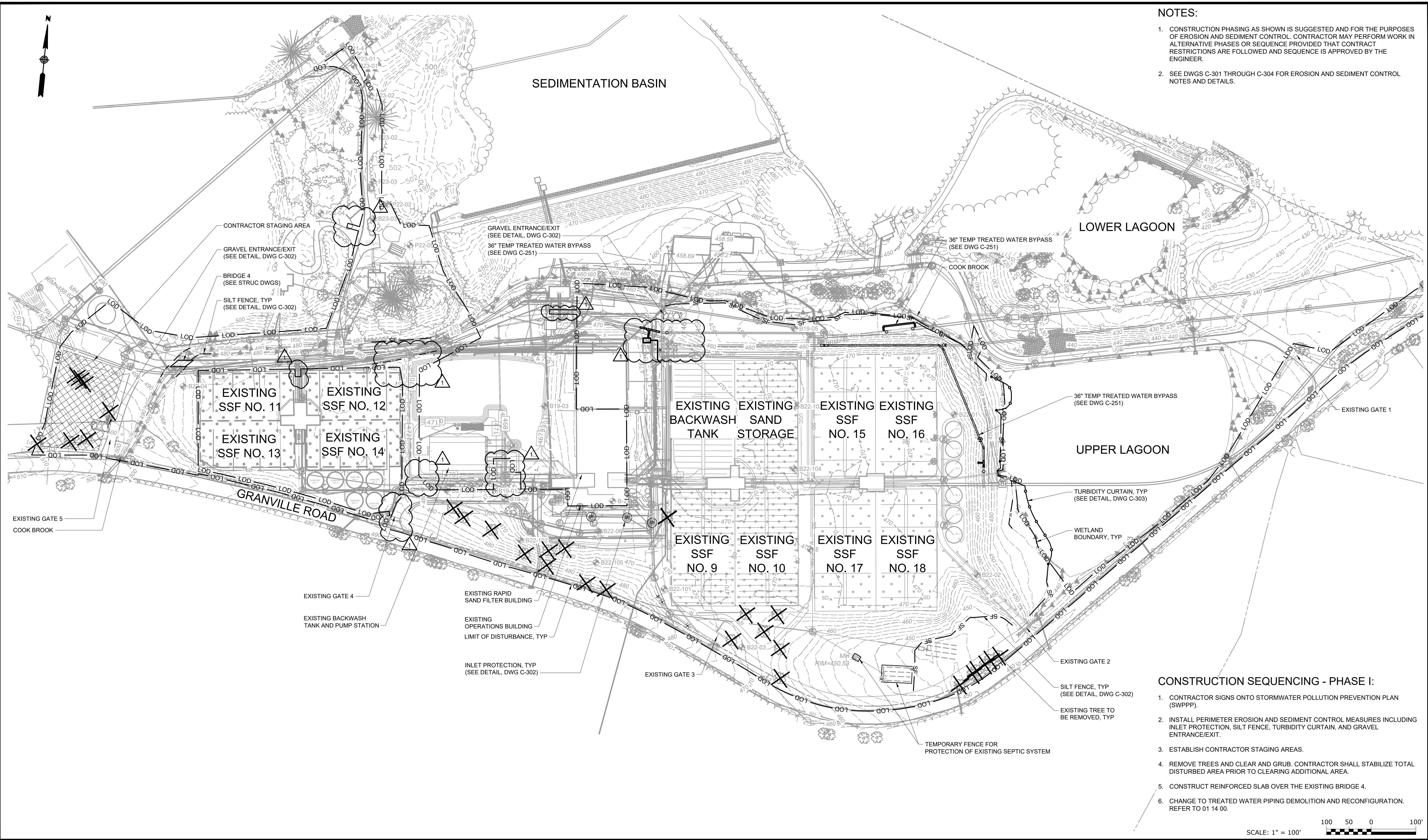
WEST PARISH WATER TREATMENT PLANT

CIVIL OVERALL SITE PLAN AND DRAWING KEY

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-001

NOTES:

- CONSTRUCTION PHASING AS SHOWN IS SUGGESTED AND FOR THE PURPOSES OF EROSION AND SEDIMENT CONTROL. CONTRACTOR MAY PERFORM WORK IN ALTERNATIVE PHASES OR SEQUENCE PROVIDED THAT CONTRACT RESTRICTIONS ARE FOLLOWED AND SEQUENCE IS APPROVED BY THE ENGINEER.
- SEE DWGS C-301 THROUGH C-304 FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.



CONSTRUCTION SEQUENCING - PHASE I:

- CONTRACTOR SIGNS ONTO STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- INSTALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES INCLUDING INLET PROTECTION, SILT FENCE, TURBIDITY CURTAIN, AND GRAVEL ENTRANCE/EXIT.
- ESTABLISH CONTRACTOR STAGING AREAS.
- REMOVE TREES AND CLEAR AND GRUB. CONTRACTOR SHALL STABILIZE TOTAL DISTURBED AREA PRIOR TO CLEARING ADDITIONAL AREA.
- CONSTRUCT REINFORCED SLAB OVER THE EXISTING BRIDGE 4.
- CHANGE TO TREATED WATER PIPING DEMOLITION AND RECONFIGURATION. REFER TO 01 14 00.

SCALE: 1" = 100'

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PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	J. RIVAS		
DRAWN BY:	K. ROBBINS		
CHECKED BY:	D. SHEERAN		
1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

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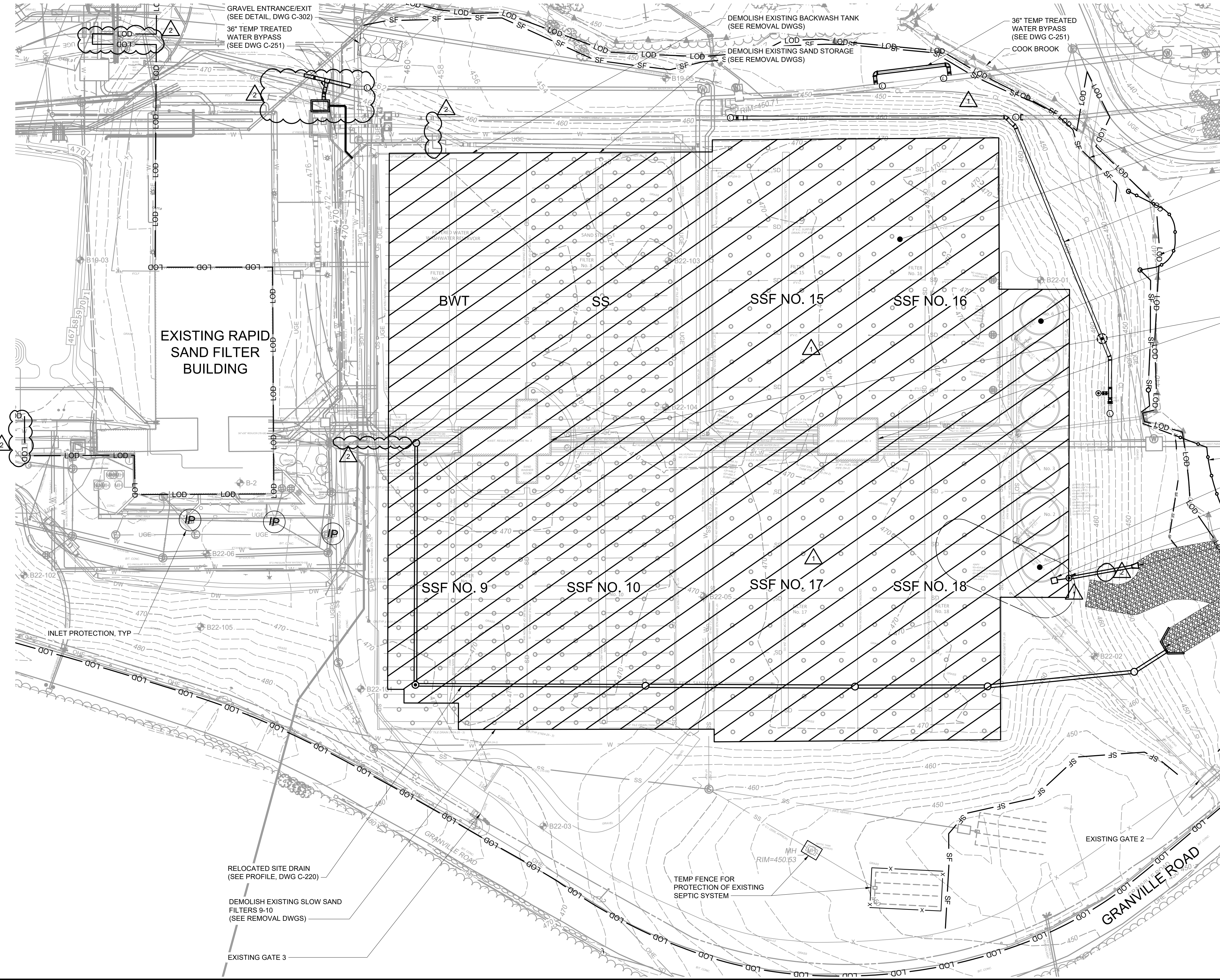
SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL

EROSION AND SEDIMENT CONTROL PHASING PLAN - PHASE I

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-002



- NOTES:**
- CONSTRUCTION PHASING AS SHOWN IS SUGGESTED AND FOR THE PURPOSES OF EROSION AND SEDIMENT CONTROL. CONTRACTOR MAY PERFORM WORK IN ALTERNATIVE PHASES OR SEQUENCE PROVIDED THAT CONTRACT RESTRICTIONS ARE FOLLOWED AND SEQUENCE IS APPROVED BY THE ENGINEER.
 - SEE DWGS C-301 THROUGH C-304 FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.

- SILT FENCE, TYP
- DEMOLISH EXISTING SLOW SAND FILTERS 15-18 (SEE REMOVAL DWGS)
- 36" TEMP TREATED WATER BYPASS (SEE DWG C-251)
- LIMIT OF DISTURBANCE, TYP
- DEMOLISH EXISTING SAND BINS (SEE REMOVAL DWGS)
- UPPER LAGOON
- DEMOLISH EXISTING REGULATOR HOUSES (SEE REMOVAL DWGS)
- TURBIDITY CURTAIN, TYP
- TEMP SEDIMENT BASIN (SEE DETAIL, DWG C-304)
- SKIMMER (SEE DETAIL, DWG C-304)
- RISER (SEE DETAIL, DWG C-304)
- FES-01
- RIPRAP OUTLET PROTECTION, TYP (SEE DETAIL, DWG C-302)

- CONSTRUCTION SEQUENCING - PHASE II:**
- DEMOLISH EXISTING ABOVE-GRADE REGULATOR BUILDINGS.
 - REMOVE, ABANDON, AND CAP YARD PIPING CONNECTED TO EXISTING INFRASTRUCTURE TO BE DEMOLISHED. (SEE C-100 SERIES DRAWINGS).
 - START DEMOLITION OF SLOW SAND FILTERS (SSF) NO. 15 THROUGH NO. 18 AND SAND BINS.
 - A. PROCESS AND STOCKPILE MATERIALS FOR RE-USE AND BACKFILL AREAS WITH REQUIRED BACKFILL AFTER EACH AREA IS DEMOLISHED AND EXCAVATED TO SUBGRADE.
 - B. ESTABLISH TEMPORARY ACCESS ROADS, TEMPORARY DIVERSION DITCHES, SEDIMENT BASIN, AND OUTFALL AS WORK ADVANCES.
 - SUPPORT WALLS OF BACKWASH TANK (BWT) AND SSF NO. 9 (SEE R-SERIES DRAWINGS).
 - DEMOLISH BWT, SAND STORAGE (SS), AND SSF NO. 9 AND 10.
 - A. STOCKPILE MATERIALS FOR RE-USE AND BACKFILL AREAS WITH REQUIRED BACKFILL MATERIALS AS EACH AREA IS DEMOLISHED TO SUBGRADE.
 - B. CONTINUE TO ESTABLISH TEMPORARY ACCESS ROADS AND TEMPORARY DIVERSION DITCHES.
 - BACKFILL AREAS TO INTERIM SITE PLAN GRADES TO ALLOW FOR FOUNDATIONS OF STRUCTURES AND TANKS TO BE CONSTRUCTED (SEE C-120 SERIES DRAWINGS).
 - CONSTRUCT SITE DRAIN AND DEMOLISH EXISTING 30-INCH DRAIN DISCHARGING TO THE UPPER LAGOON.
 - REMOVE TURBIDITY CURTAIN DOWNSTREAM OF HW-01 AND FES-01.

SCALE: 1" = 50'

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2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
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WETHERSFIELD, CT 06109

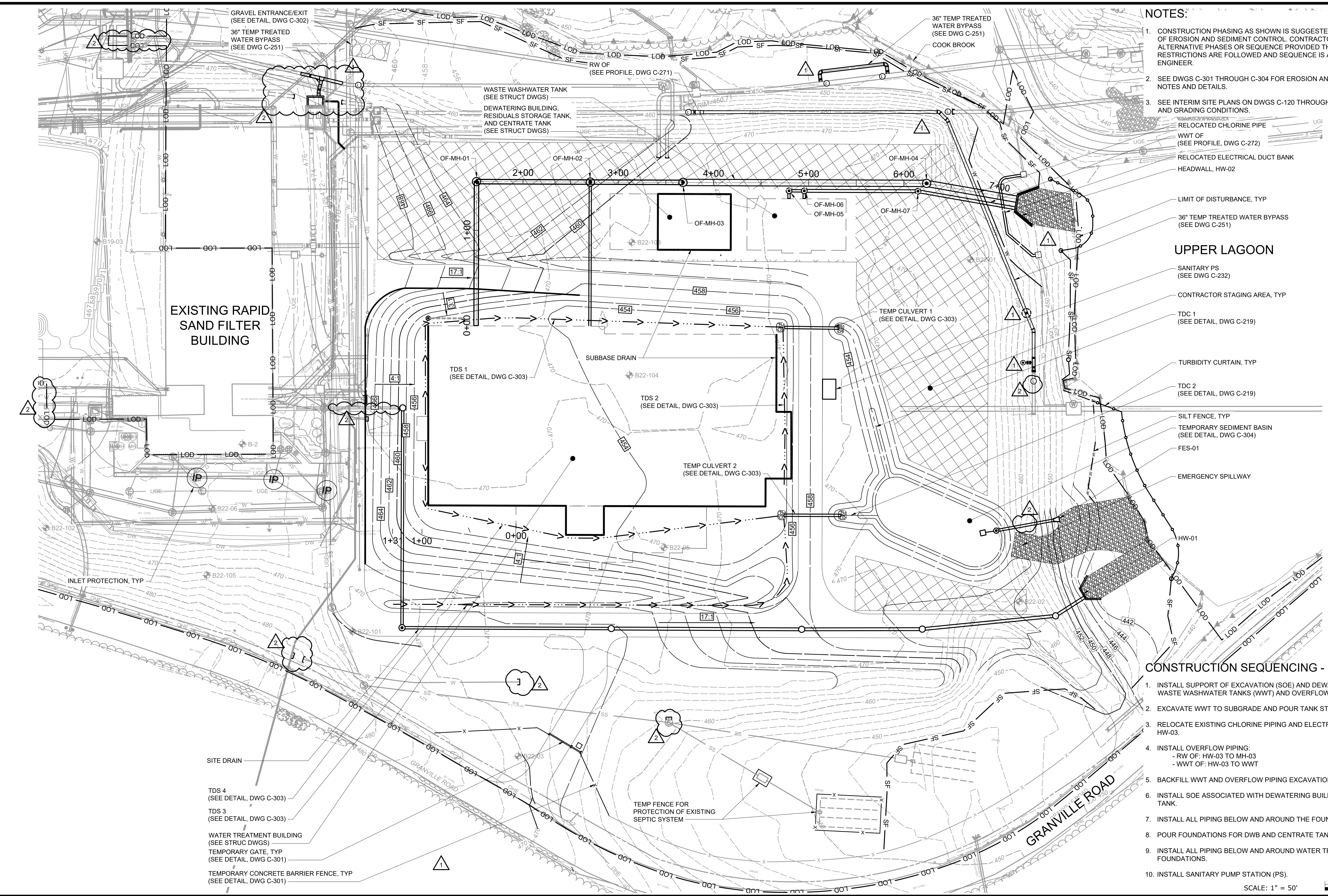
SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL

EROSION AND SEDIMENT CONTROL PHASING PLAN - PHASE II

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-003



- NOTES:**
- CONSTRUCTION PHASING AS SHOWN IS SUGGESTED AND FOR THE PURPOSES OF EROSION AND SEDIMENT CONTROL. CONTRACTOR MAY PERFORM WORK IN ALTERNATIVE PHASES OR SEQUENCE PROVIDED THAT CONTRACT RESTRICTIONS ARE FOLLOWED AND SEQUENCE IS APPROVED BY THE ENGINEER.
 - SEE DWGS C-301 THROUGH C-304 FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
 - SEE INTERIM SITE PLANS ON DWGS C-120 THROUGH C-125 FOR PHASE III SITE AND GRADING CONDITIONS.
- RELOCATED CHLORINE PIPE
 - WWT OF (SEE PROFILE, DWG C-272)
 - RELOCATED ELECTRICAL DUCT BANK
 - HEADWALL, HW-02
 - LIMIT OF DISTURBANCE, TYP
 - 36" TEMP TREATED WATER BYPASS (SEE DWG C-251)
- UPPER LAGOON**
- SANITARY PS (SEE DWG C-232)
 - CONTRACTOR STAGING AREA, TYP
 - TDC 1 (SEE DETAIL, DWG C-219)
 - TURBIDITY CURTAIN, TYP
 - TDC 2 (SEE DETAIL, DWG C-219)
 - SILT FENCE, TYP
 - TEMPORARY SEDIMENT BASIN (SEE DETAIL, DWG C-304)
 - FES-01
 - EMERGENCY SPILLWAY

- CONSTRUCTION SEQUENCING - PHASE III:**
- INSTALL SUPPORT OF EXCAVATION (SOE) AND DEWATERING SYSTEM FOR WASTE WASTEWATER TANKS (WWT) AND OVERFLOW PIPING.
 - EXCAVATE WWT TO SUBGRADE AND POUR TANK STRUCTURE.
 - RELOCATE EXISTING CHLORINE PIPING AND ELECTRICAL DUCT BANK NEAR HW-03.
 - INSTALL OVERFLOW PIPING:
- RW OF: HW-03 TO MH-03
- WWT OF: HW-03 TO WWT
 - BACKFILL WWT AND OVERFLOW PIPING EXCAVATIONS.
 - INSTALL SOE ASSOCIATED WITH DEWATERING BUILDING (DWB) AND CENTRATE TANK.
 - INSTALL ALL PIPING BELOW AND AROUND THE FOUNDATIONS OF DWB.
 - POUR FOUNDATIONS FOR DWB AND CENTRATE TANK.
 - INSTALL ALL PIPING BELOW AND AROUND WATER TREATMENT BUILDING (WTB) FOUNDATIONS.
 - INSTALL SANITARY PUMP STATION (PS).

SCALE: 1" = 50'

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2	ADDENDUM NO. 12	MAY 24	MWM	D. SHEERAN
1	ADDENDUM NO. 3	MAR 24	MWM	D. SHEERAN
0	ISSUED FOR BIDS	FEB 24	MWM	D. SHEERAN

PROJECT ENGINEER: K. BARRETT
 DESIGNED BY: J. RIVAS
 DRAWN BY: J. HARKINS
 CHECKED BY: D. SHEERAN
 DATE: 5/22/2024

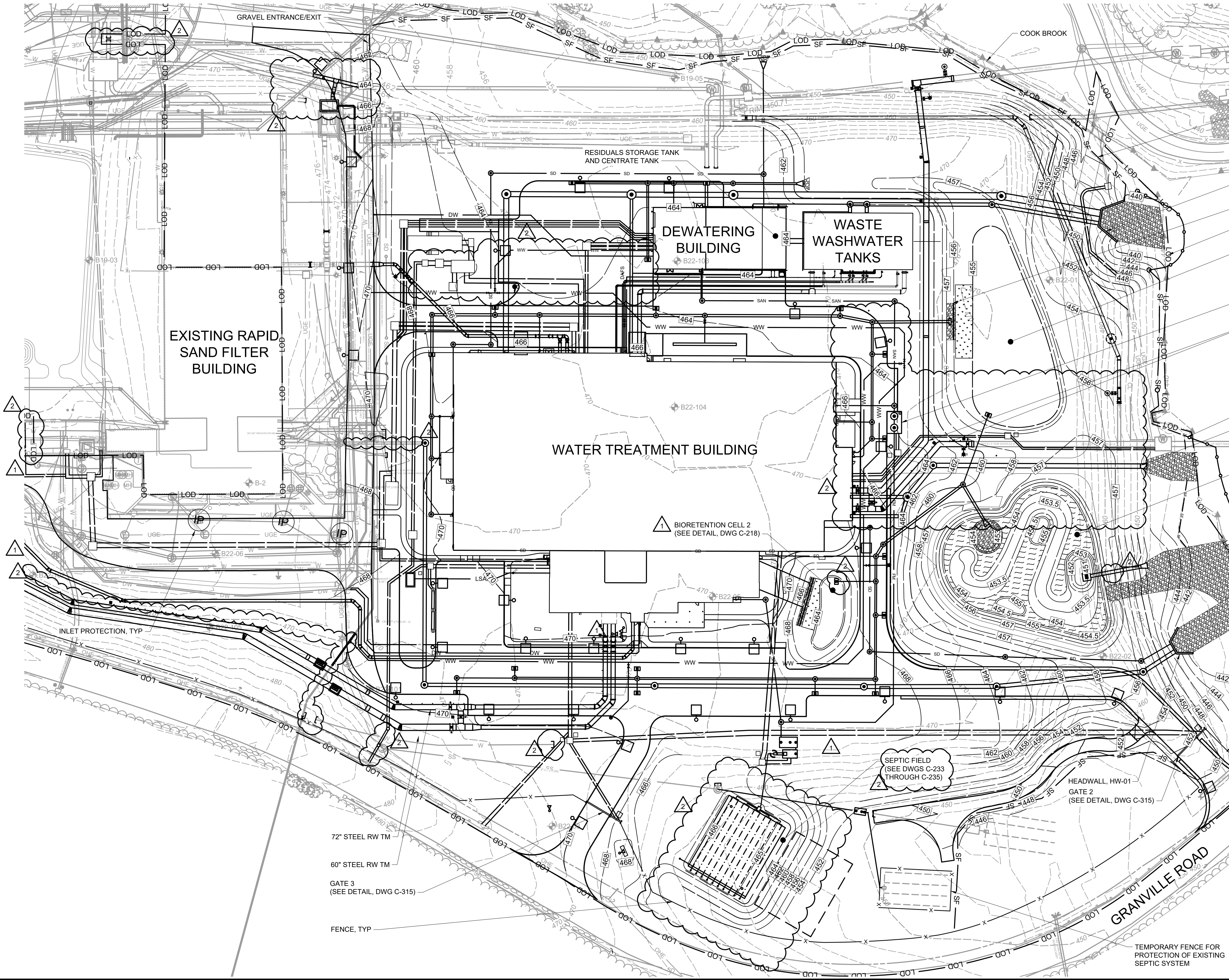


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 WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL
 EROSION AND SEDIMENT CONTROL
 PHASING PLAN - PHASE III

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-004



- NOTES:**
- CONSTRUCTION PHASING AS SHOWN IS SUGGESTED AND FOR THE PURPOSES OF EROSION AND SEDIMENT CONTROL. CONTRACTOR MAY PERFORM WORK IN ALTERNATIVE PHASES OR SEQUENCE PROVIDED THAT CONTRACT RESTRICTIONS ARE FOLLOWED AND SEQUENCE IS APPROVED BY THE ENGINEER.
 - SEE DWG C-301 THROUGH C-304 FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.

- SILT FENCE, TYP
- HEADWALL, HW-02
- LEVEL SPREADER, TYP
- LIMIT OF DISTURBANCE, TYP
- BIORETENTION CELL 1 (SEE DETAIL, DWG C-218)
- UPPER LAGOON**
- SANITARY PS
- 60" STEEL FW TM (SEE DWGS C-252 AND C-253)
- TURBIDITY CURTAIN, TYP
- FES-04
- STORMWATER WETLAND (SEE DWG C-210)

- CONSTRUCTION SEQUENCING - PHASE IV:**
- POUR FOUNDATIONS FOR WTB. BACKFILL AROUND BUILDING TO SUBBASE OF ROADWAYS AND LANDSCAPED AREAS.
 - TEMPORARILY STABILIZE AREAS AND CONSTRUCT DITCHES TO CONVEY RUNOFF TO SEDIMENT BASIN.
 - CONSTRUCT SUPERSTRUCTURE OF BUILDINGS.
 - CONSTRUCT RW TM AND FW TM. (SEE DWGS C-240 THROUGH C-253).
 - INSTALL YARD PIPING AND OVERFLOW PIPING AROUND WTB. (SEE C-140 SERIES DWGS).
 - EXCAVATE SEDIMENT BASIN TO SUBGRADE FROM EAST TO WEST DIRECTION TO MAINTAIN DRAINAGE PATH. GRADE OUT CONTOURS FOR STORMWATER WETLAND.
 - EXCAVATE SEDIMENT BASIN TO SUBGRADE FROM SOUTH TO NORTH TO MAINTAIN DRAINAGE PATH. GRADE OUT CONTOURS FOR BIORETENTION, BIO-01.
 - INSTALL BIORETENTION SOIL MEDIA AND STABILIZE AREAS AROUND THE BIORETENTION.
 - INSTALL LANDSCAPING WITHIN STORMWATER WETLAND AND PROVIDE TEMPORARY STABILIZATION MEASURES.
 - INSTALL STORM DRAIN NETWORK AROUND WTB. (SEE C-130 SERIES DWGS).
 - REMOVE REMAINING CONSTRUCTION DITCHES AND GRADE AREAS TO SUBGRADE/FINAL GRADES AND STABILIZE.
 - INSTALL SANITARY DRAINS, SANITARY FORCE MAIN, AND SEPTIC FIELD. (SEE C-230 SERIES DWGS).
 - INSTALL ELECTRICAL DUCT BANKS AND ASSOCIATED STRUCTURES FROM PROPERTY LINE TO EQUIPMENT PADS. CONNECT DUCT BANKS TO THE WTB, DWB, WWT, SANITARY PUMP STATION, EMERGENCY GENERATOR, AND ACCESS GATES.
 - INSTALL TRUCK DELIVERY CONTAINMENT AREA AND ASSOCIATED DRAINAGE PIPING TO TIE INTO STORM DRAIN SYSTEM.

SCALE: 1" = 50'

File: C:\USERS\JLUDCACC\DCS\HAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-005 Saved by: JLU Save date: 5/22/2024 3:49 PM
 PLOT DATE: 5/22/2024 4:56 PM BY: JLU

REV	ISSUED FOR	DATE	BY
2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL

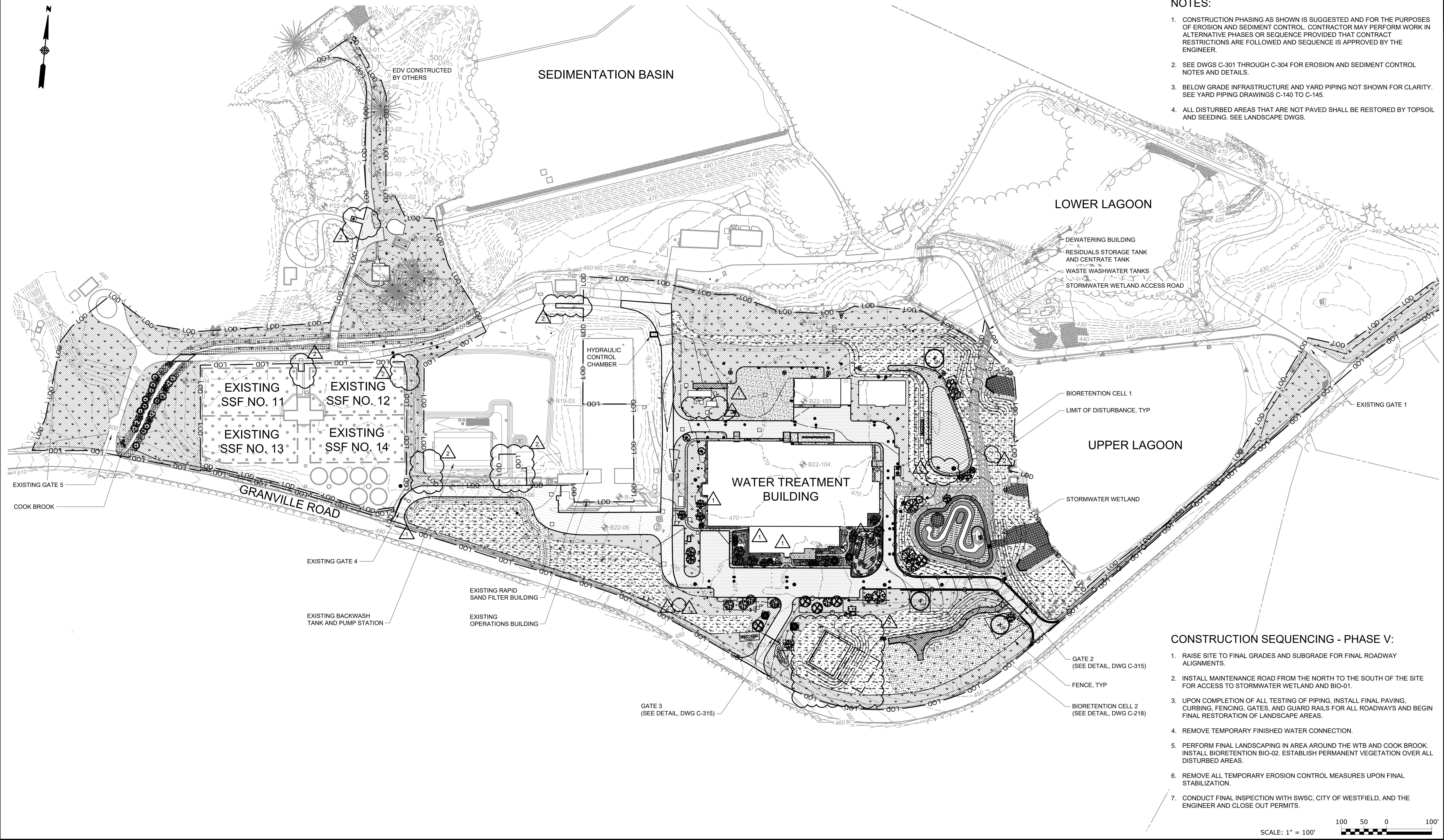
EROSION AND SEDIMENT CONTROL PHASING PLAN - PHASE IV

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-005



NOTES:

- CONSTRUCTION PHASING AS SHOWN IS SUGGESTED AND FOR THE PURPOSES OF EROSION AND SEDIMENT CONTROL. CONTRACTOR MAY PERFORM WORK IN ALTERNATIVE PHASES OR SEQUENCE PROVIDED THAT CONTRACT RESTRICTIONS ARE FOLLOWED AND SEQUENCE IS APPROVED BY THE ENGINEER.
- SEE DWGS C-301 THROUGH C-304 FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
- BELOW GRADE INFRASTRUCTURE AND YARD PIPING NOT SHOWN FOR CLARITY. SEE YARD PIPING DRAWINGS C-140 TO C-145.
- ALL DISTURBED AREAS THAT ARE NOT PAVED SHALL BE RESTORED BY TOPSOIL AND SEEDING. SEE LANDSCAPE DWGS.



CONSTRUCTION SEQUENCING - PHASE V:

- RAISE SITE TO FINAL GRADES AND SUBGRADE FOR FINAL ROADWAY ALIGNMENTS.
- INSTALL MAINTENANCE ROAD FROM THE NORTH TO THE SOUTH OF THE SITE FOR ACCESS TO STORMWATER WETLAND AND BIO-01.
- UPON COMPLETION OF ALL TESTING OF PIPING, INSTALL FINAL PAVING, CURBING, FENCING, GATES, AND GUARD RAILS FOR ALL ROADWAYS AND BEGIN FINAL RESTORATION OF LANDSCAPE AREAS.
- REMOVE TEMPORARY FINISHED WATER CONNECTION.
- PERFORM FINAL LANDSCAPING IN AREA AROUND THE WTB AND COOK BROOK. INSTALL BIORETENTION BIO-02. ESTABLISH PERMANENT VEGETATION OVER ALL DISTURBED AREAS.
- REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON FINAL STABILIZATION.
- CONDUCT FINAL INSPECTION WITH SWSC, CITY OF WESTFIELD, AND THE ENGINEER AND CLOSE OUT PERMITS.

SCALE: 1" = 100'

File: C:\USERS\JLUDCACC\SHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-006 Saved by: JLU Save date: 5/22/2024 3:49 PM
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1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

0 1/2" 1"



Hazen
 HAZEN AND SAWYER
 100 GREAT MEADOW ROAD, SUITE 702
 WETHERSFIELD, CT 06109

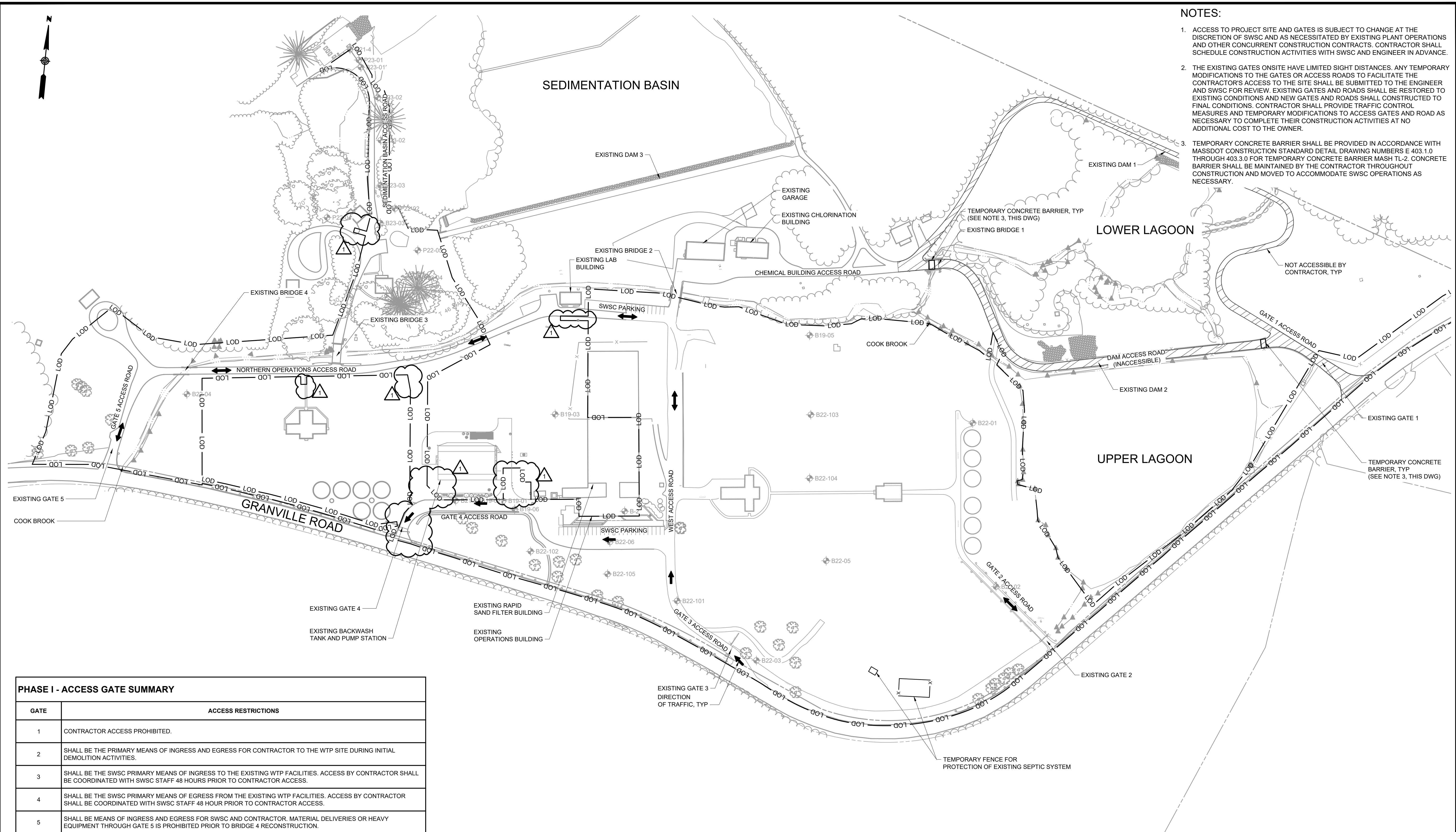
SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL
 EROSION AND SEDIMENT CONTROL
 PHASING PLAN - PHASE V

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-006

NOTES:

1. ACCESS TO PROJECT SITE AND GATES IS SUBJECT TO CHANGE AT THE DISCRETION OF SWSC AND AS NECESSITATED BY EXISTING PLANT OPERATIONS AND OTHER CONCURRENT CONSTRUCTION CONTRACTS. CONTRACTOR SHALL SCHEDULE CONSTRUCTION ACTIVITIES WITH SWSC AND ENGINEER IN ADVANCE.
2. THE EXISTING GATES ONSITE HAVE LIMITED SIGHT DISTANCES. ANY TEMPORARY MODIFICATIONS TO THE GATES OR ACCESS ROADS TO FACILITATE THE CONTRACTOR'S ACCESS TO THE SITE SHALL BE SUBMITTED TO THE ENGINEER AND SWSC FOR REVIEW. EXISTING GATES AND ROADS SHALL BE RESTORED TO EXISTING CONDITIONS AND NEW GATES AND ROADS SHALL BE CONSTRUCTED TO FINAL CONDITIONS. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES AND TEMPORARY MODIFICATIONS TO ACCESS GATES AND ROAD AS NECESSARY TO COMPLETE THEIR CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
3. TEMPORARY CONCRETE BARRIER SHALL BE PROVIDED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARD DETAIL DRAWING NUMBERS E 403.1.0 THROUGH 403.3.0 FOR TEMPORARY CONCRETE BARRIER MASH TL-2. CONCRETE BARRIER SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND MOVED TO ACCOMMODATE SWSC OPERATIONS AS NECESSARY.



PHASE I - ACCESS GATE SUMMARY

GATE	ACCESS RESTRICTIONS
1	CONTRACTOR ACCESS PROHIBITED.
2	SHALL BE THE PRIMARY MEANS OF INGRESS AND EGRESS FOR CONTRACTOR TO THE WTP SITE DURING INITIAL DEMOLITION ACTIVITIES.
3	SHALL BE THE SWSC PRIMARY MEANS OF INGRESS TO THE EXISTING WTP FACILITIES. ACCESS BY CONTRACTOR SHALL BE COORDINATED WITH SWSC STAFF 48 HOURS PRIOR TO CONTRACTOR ACCESS.
4	SHALL BE THE SWSC PRIMARY MEANS OF EGRESS FROM THE EXISTING WTP FACILITIES. ACCESS BY CONTRACTOR SHALL BE COORDINATED WITH SWSC STAFF 48 HOUR PRIOR TO CONTRACTOR ACCESS.
5	SHALL BE MEANS OF INGRESS AND EGRESS FOR SWSC AND CONTRACTOR. MATERIAL DELIVERIES OR HEAVY EQUIPMENT THROUGH GATE 5 IS PROHIBITED PRIOR TO BRIDGE 4 RECONSTRUCTION.

*ACCESS RESTRICTIONS CORRESPOND WITH THE WORK SHOWN ON DRAWING C-002 AND C-003

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REV	ISSUED FOR	DATE	BY
1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE
 0 1/2" 1"

 5/22/2024

Hazen
 HAZEN AND SAWYER
 100 GREAT MEADOW ROAD, SUITE 702
 WETHERSFIELD, CT 06109

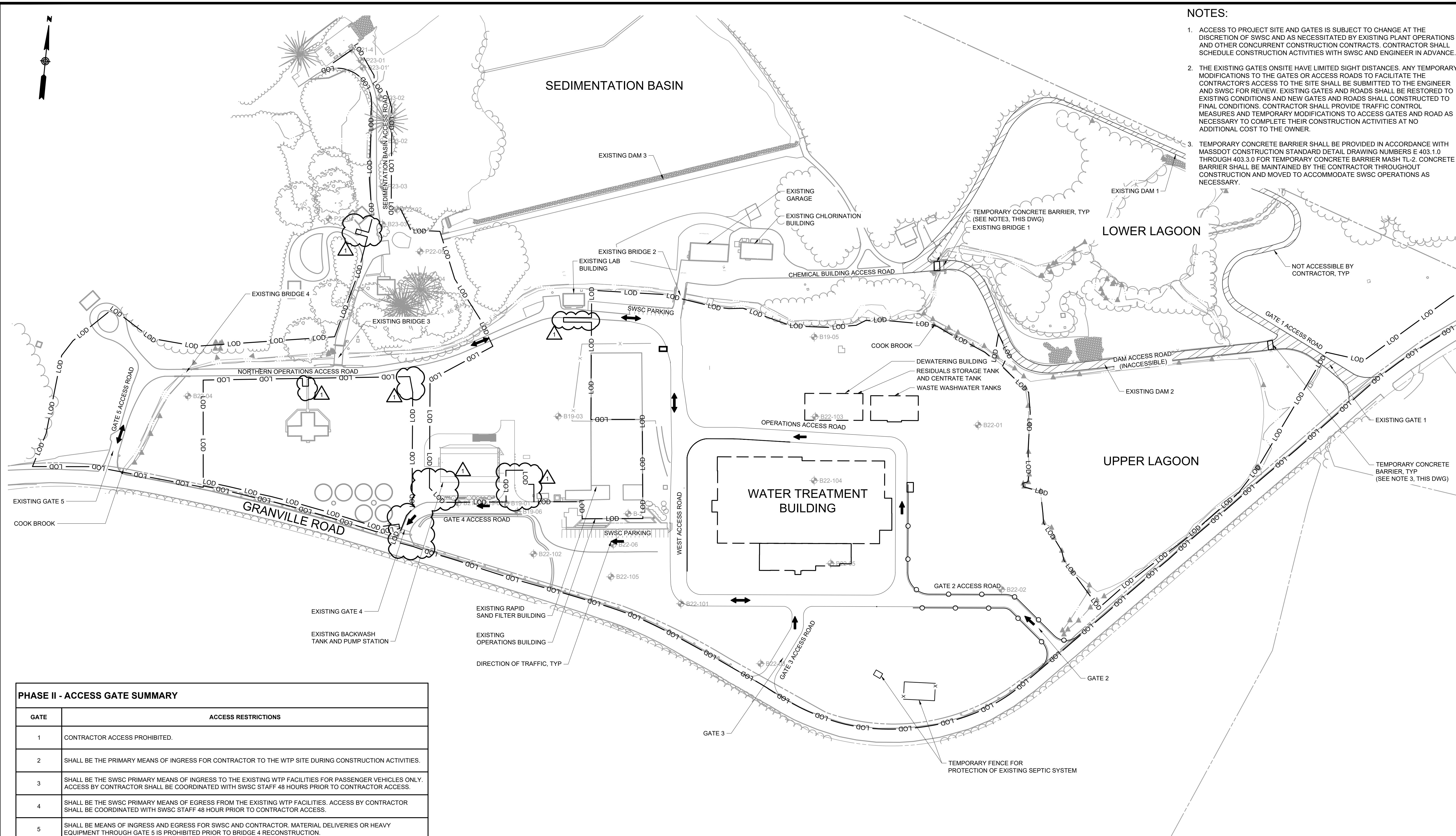
SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL
OVERALL SITE ACCESS PLANS
 PHASE I

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-007

NOTES:

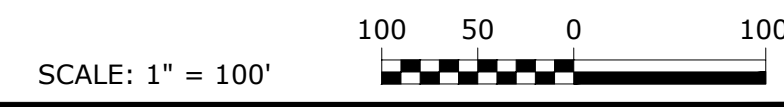
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- THE EXISTING GATES ONSITE HAVE LIMITED SIGHT DISTANCES. ANY TEMPORARY MODIFICATIONS TO THE GATES OR ACCESS ROADS TO FACILITATE THE CONTRACTOR'S ACCESS TO THE SITE SHALL BE SUBMITTED TO THE ENGINEER AND SWSC FOR REVIEW. EXISTING GATES AND ROADS SHALL BE RESTORED TO EXISTING CONDITIONS AND NEW GATES AND ROADS SHALL BE CONSTRUCTED TO FINAL CONDITIONS. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES AND TEMPORARY MODIFICATIONS TO ACCESS GATES AND ROAD AS NECESSARY TO COMPLETE THEIR CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
- TEMPORARY CONCRETE BARRIER SHALL BE PROVIDED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARD DETAIL DRAWING NUMBERS E 403.1.0 THROUGH 403.3.0 FOR TEMPORARY CONCRETE BARRIER MASH TL-2. CONCRETE BARRIER SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND MOVED TO ACCOMMODATE SWSC OPERATIONS AS NECESSARY.



PHASE II - ACCESS GATE SUMMARY

GATE	ACCESS RESTRICTIONS
1	CONTRACTOR ACCESS PROHIBITED.
2	SHALL BE THE PRIMARY MEANS OF INGRESS FOR CONTRACTOR TO THE WTP SITE DURING CONSTRUCTION ACTIVITIES.
3	SHALL BE THE SWSC PRIMARY MEANS OF INGRESS TO THE EXISTING WTP FACILITIES FOR PASSENGER VEHICLES ONLY. ACCESS BY CONTRACTOR SHALL BE COORDINATED WITH SWSC STAFF 48 HOURS PRIOR TO CONTRACTOR ACCESS.
4	SHALL BE THE SWSC PRIMARY MEANS OF EGRESS FROM THE EXISTING WTP FACILITIES. ACCESS BY CONTRACTOR SHALL BE COORDINATED WITH SWSC STAFF 48 HOUR PRIOR TO CONTRACTOR ACCESS.
5	SHALL BE MEANS OF INGRESS AND EGRESS FOR SWSC AND CONTRACTOR. MATERIAL DELIVERIES OR HEAVY EQUIPMENT THROUGH GATE 5 IS PROHIBITED PRIOR TO BRIDGE 4 RECONSTRUCTION.

*ACCESS RESTRICTIONS CORRESPOND WITH THE WORK SHOWN ON DRAWING C-004



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 PLOT DATE: 5/22/2024 4:59 PM BY: JLU

REV	ISSUED FOR	DATE	BY
1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

Hazen

HAZEN AND SAWYER
 100 GREAT MEADOW ROAD, SUITE 702
 WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL

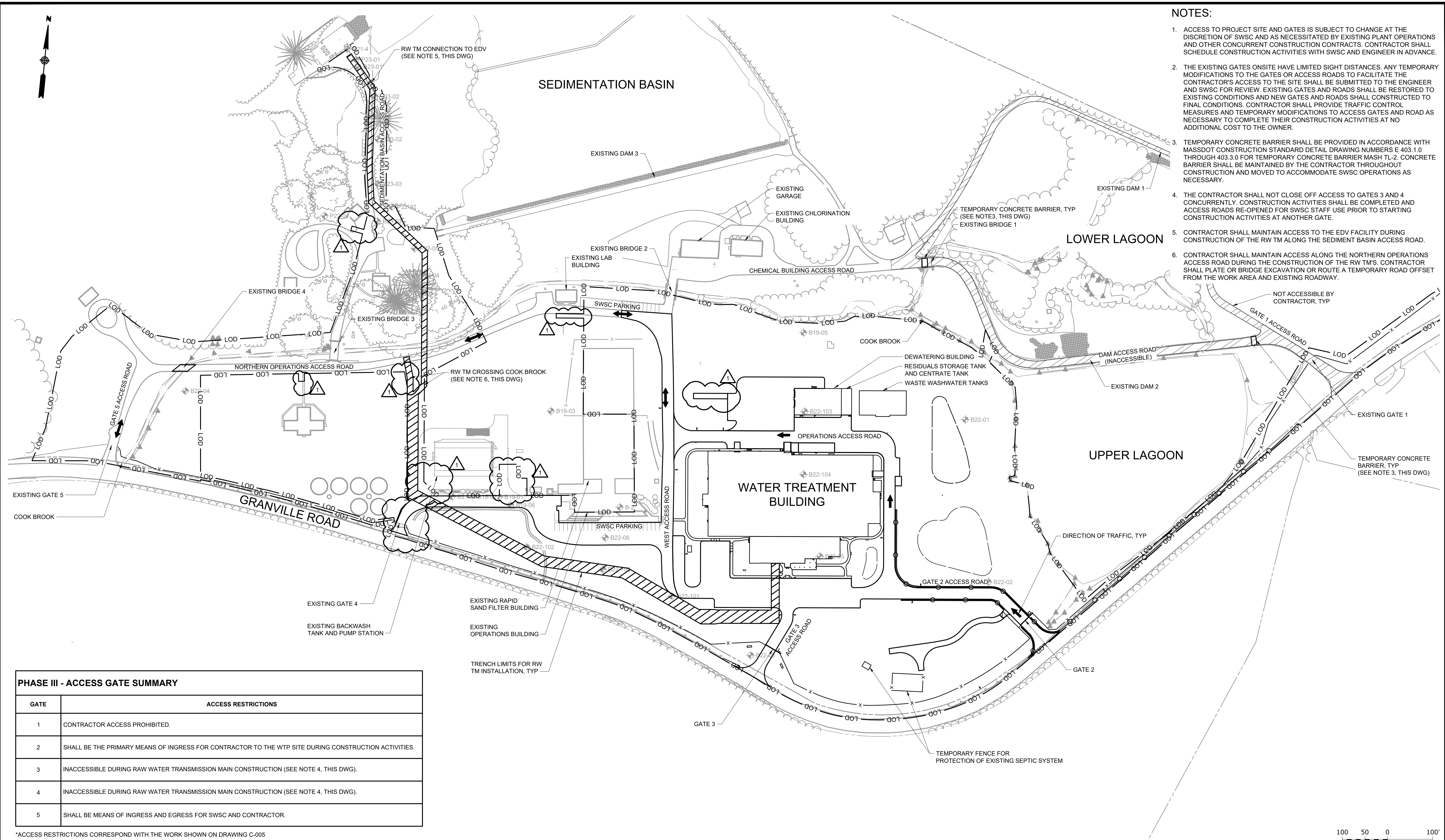
OVERALL SITE ACCESS PLANS

PHASE II

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-008

NOTES:

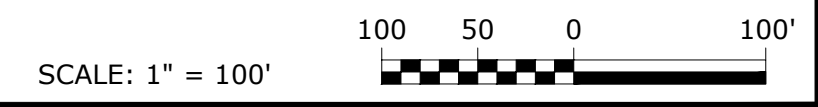
- ACCESS TO PROJECT SITE AND GATES IS SUBJECT TO CHANGE AT THE DISCRETION OF SWSC AND AS NECESSITATED BY EXISTING PLANT OPERATIONS AND OTHER CONCURRENT CONSTRUCTION CONTRACTS. CONTRACTOR SHALL SCHEDULE CONSTRUCTION ACTIVITIES WITH SWSC AND ENGINEER IN ADVANCE.
- THE EXISTING GATES ONSITE HAVE LIMITED SIGHT DISTANCES. ANY TEMPORARY MODIFICATIONS TO THE GATES OR ACCESS ROADS TO FACILITATE THE CONTRACTOR'S ACCESS TO THE SITE SHALL BE SUBMITTED TO THE ENGINEER AND SWSC FOR REVIEW. EXISTING GATES AND ROADS SHALL BE RESTORED TO EXISTING CONDITIONS AND NEW GATES AND ROADS SHALL BE CONSTRUCTED TO FINAL CONDITIONS. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES AND TEMPORARY MODIFICATIONS TO ACCESS GATES AND ROAD AS NECESSARY TO COMPLETE THEIR CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
- TEMPORARY CONCRETE BARRIER SHALL BE PROVIDED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARD DETAIL DRAWING NUMBERS E 403.1.0 THROUGH 403.3.0 FOR TEMPORARY CONCRETE BARRIER MASH TL-2. CONCRETE BARRIER SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND MOVED TO ACCOMMODATE SWSC OPERATIONS AS NECESSARY.
- THE CONTRACTOR SHALL NOT CLOSE OFF ACCESS TO GATES 3 AND 4 CONCURRENTLY. CONSTRUCTION ACTIVITIES SHALL BE COMPLETED AND ACCESS ROADS RE-OPENED FOR SWSC STAFF USE PRIOR TO STARTING CONSTRUCTION ACTIVITIES AT ANOTHER GATE.
- CONTRACTOR SHALL MAINTAIN ACCESS TO THE EDV FACILITY DURING CONSTRUCTION OF THE RW TM ALONG THE SEDIMENT BASIN ACCESS ROAD.
- CONTRACTOR SHALL MAINTAIN ACCESS ALONG THE NORTHERN OPERATIONS ACCESS ROAD DURING THE CONSTRUCTION OF THE RW TMS. CONTRACTOR SHALL PLATE OR BRIDGE EXCAVATION OR ROUTE A TEMPORARY ROAD OFFSET FROM THE WORK AREA AND EXISTING ROADWAY.



PHASE III - ACCESS GATE SUMMARY

GATE	ACCESS RESTRICTIONS
1	CONTRACTOR ACCESS PROHIBITED.
2	SHALL BE THE PRIMARY MEANS OF INGRESS FOR CONTRACTOR TO THE WTP SITE DURING CONSTRUCTION ACTIVITIES.
3	INACCESSIBLE DURING RAW WATER TRANSMISSION MAIN CONSTRUCTION (SEE NOTE 4, THIS DWG).
4	INACCESSIBLE DURING RAW WATER TRANSMISSION MAIN CONSTRUCTION (SEE NOTE 4, THIS DWG).
5	SHALL BE MEANS OF INGRESS AND EGRESS FOR SWSC AND CONTRACTOR.

*ACCESS RESTRICTIONS CORRESPOND WITH THE WORK SHOWN ON DRAWING C-005



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 Plot Date: 5/22/2024, 5:00 PM, BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	J. RIVAS		
DRAWN BY:	K. ROBBINS		
CHECKED BY:	D. SHEERAN		
1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

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

0 1/2" 1"

Hazen

HAZEN AND SAWYER
 100 GREAT MEADOW ROAD, SUITE 702
 WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL

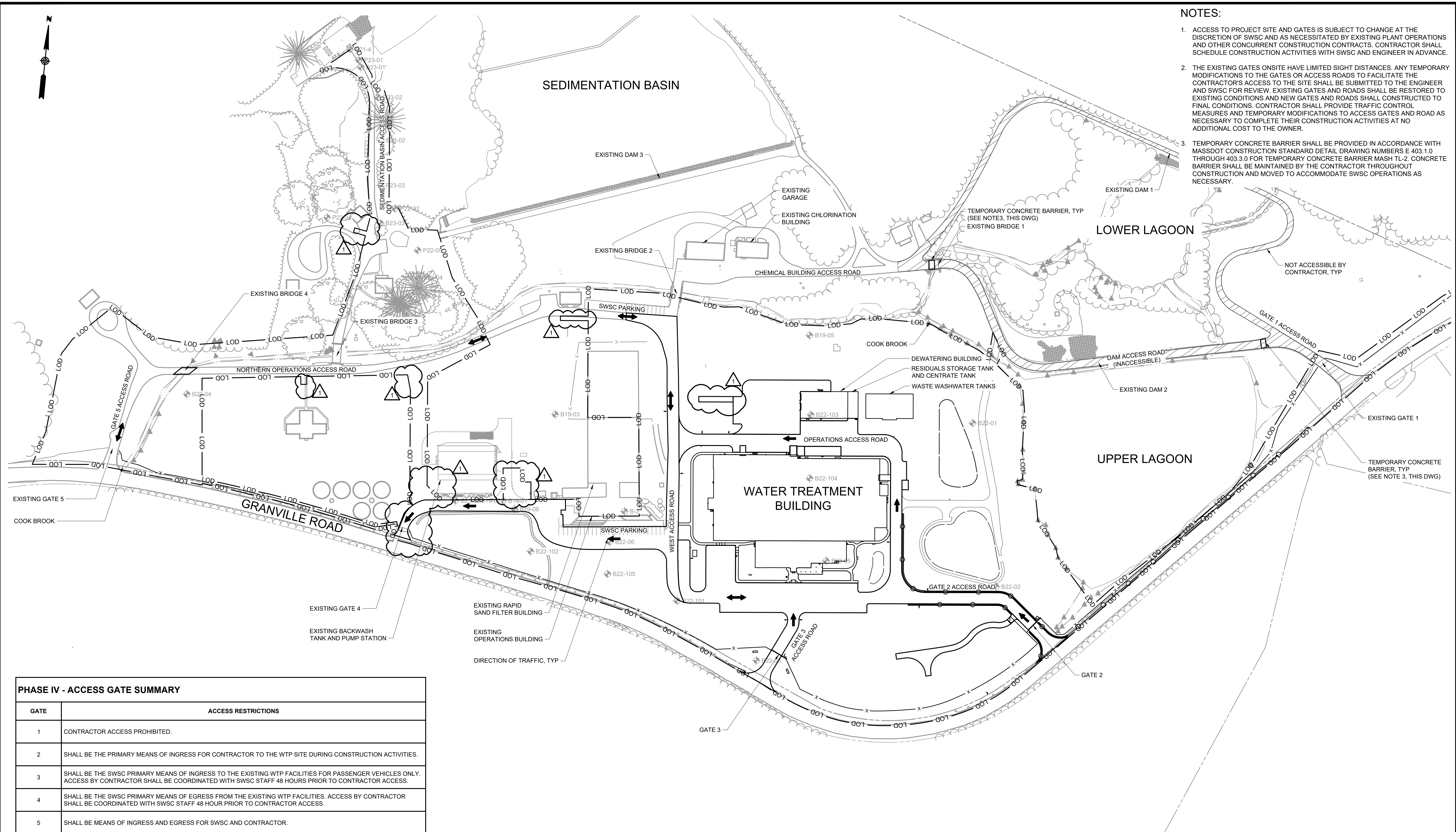
OVERALL SITE ACCESS PLAN

PHASE III

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-009

NOTES:

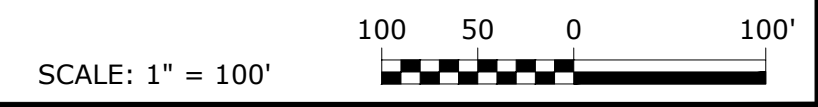
- ACCESS TO PROJECT SITE AND GATES IS SUBJECT TO CHANGE AT THE DISCRETION OF SWSC AND AS NECESSITATED BY EXISTING PLANT OPERATIONS AND OTHER CONCURRENT CONSTRUCTION CONTRACTS. CONTRACTOR SHALL SCHEDULE CONSTRUCTION ACTIVITIES WITH SWSC AND ENGINEER IN ADVANCE.
- THE EXISTING GATES ONSITE HAVE LIMITED SIGHT DISTANCES. ANY TEMPORARY MODIFICATIONS TO THE GATES OR ACCESS ROADS TO FACILITATE THE CONTRACTOR'S ACCESS TO THE SITE SHALL BE SUBMITTED TO THE ENGINEER AND SWSC FOR REVIEW. EXISTING GATES AND ROADS SHALL BE RESTORED TO EXISTING CONDITIONS AND NEW GATES AND ROADS SHALL BE CONSTRUCTED TO FINAL CONDITIONS. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL MEASURES AND TEMPORARY MODIFICATIONS TO ACCESS GATES AND ROAD AS NECESSARY TO COMPLETE THEIR CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
- TEMPORARY CONCRETE BARRIER SHALL BE PROVIDED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARD DETAIL DRAWING NUMBERS E 403.1.0 THROUGH 403.3.0 FOR TEMPORARY CONCRETE BARRIER MASH TL-2. CONCRETE BARRIER SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND MOVED TO ACCOMMODATE SWSC OPERATIONS AS NECESSARY.



PHASE IV - ACCESS GATE SUMMARY

GATE	ACCESS RESTRICTIONS
1	CONTRACTOR ACCESS PROHIBITED.
2	SHALL BE THE PRIMARY MEANS OF INGRESS FOR CONTRACTOR TO THE WTP SITE DURING CONSTRUCTION ACTIVITIES.
3	SHALL BE THE SWSC PRIMARY MEANS OF INGRESS TO THE EXISTING WTP FACILITIES FOR PASSENGER VEHICLES ONLY. ACCESS BY CONTRACTOR SHALL BE COORDINATED WITH SWSC STAFF 48 HOURS PRIOR TO CONTRACTOR ACCESS.
4	SHALL BE THE SWSC PRIMARY MEANS OF EGRESS FROM THE EXISTING WTP FACILITIES. ACCESS BY CONTRACTOR SHALL BE COORDINATED WITH SWSC STAFF 48 HOUR PRIOR TO CONTRACTOR ACCESS.
5	SHALL BE MEANS OF INGRESS AND EGRESS FOR SWSC AND CONTRACTOR.

*ACCESS RESTRICTIONS CORRESPOND WITH THE WORK SHOWN ON DRAWING C-006



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 PLOT DATE: 5/22/2024 5:01 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	J. RIVAS		
DRAWN BY:	K. ROBBINS		
CHECKED BY:	D. SHEERAN		
1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

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

0 1/2" 1"

5/22/2024

Hazen

HAZEN AND SAWYER
 100 GREAT MEADOW ROAD, SUITE 702
 WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL OVERALL SITE ACCESS PLAN PHASE IV

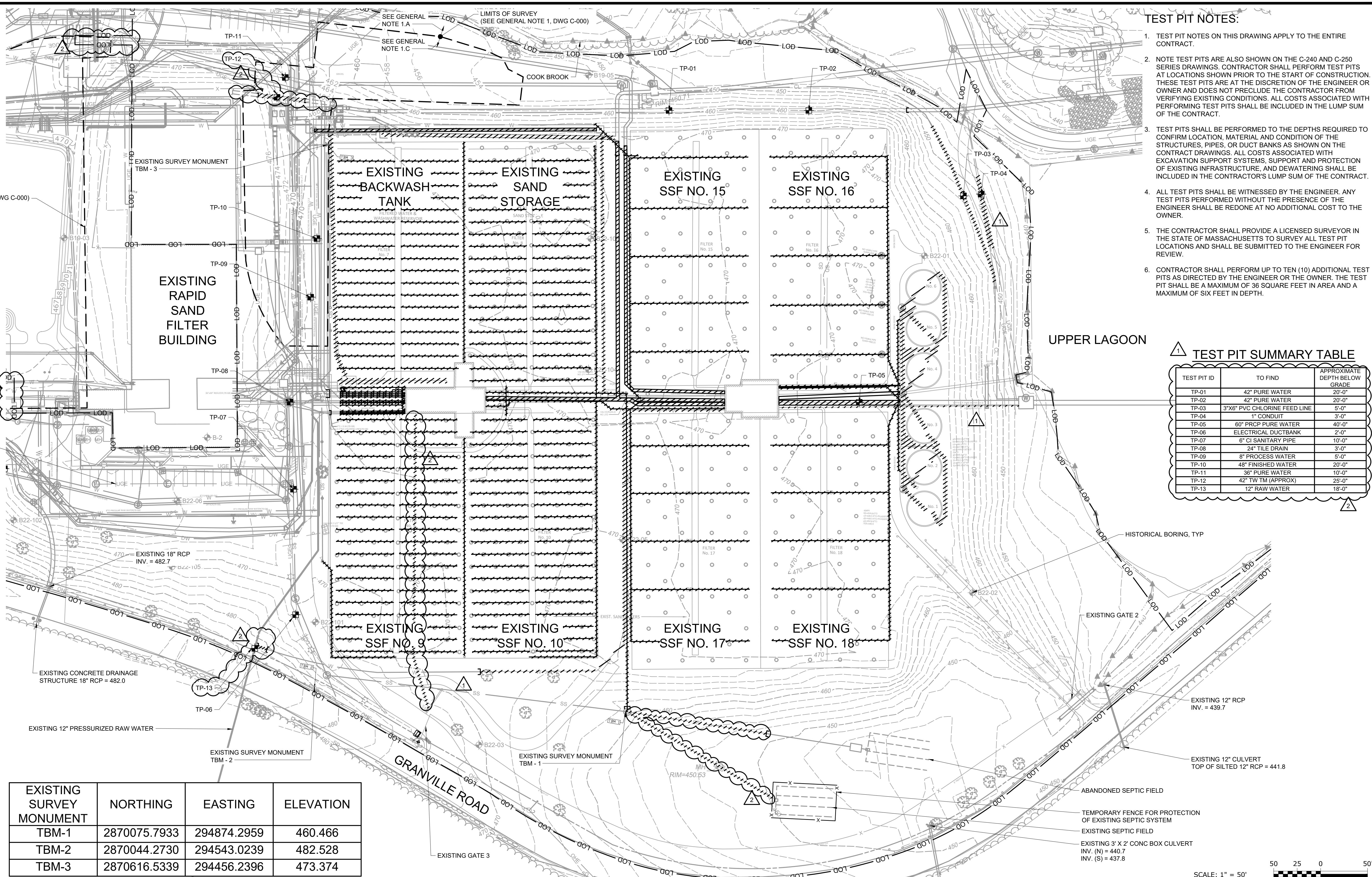
DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-010

TEST PIT NOTES:

- TEST PIT NOTES ON THIS DRAWING APPLY TO THE ENTIRE CONTRACT.
- NOTE TEST PITS ARE ALSO SHOWN ON THE C-240 AND C-250 SERIES DRAWINGS. CONTRACTOR SHALL PERFORM TEST PITS AT LOCATIONS SHOWN PRIOR TO THE START OF CONSTRUCTION. THESE TEST PITS ARE AT THE DISCRETION OF THE ENGINEER OR OWNER AND DOES NOT PRECLUDE THE CONTRACTOR FROM VERIFYING EXISTING CONDITIONS. ALL COSTS ASSOCIATED WITH PERFORMING TEST PITS SHALL BE INCLUDED IN THE LUMP SUM OF THE CONTRACT.
- TEST PITS SHALL BE PERFORMED TO THE DEPTHS REQUIRED TO CONFIRM LOCATION, MATERIAL AND CONDITION OF THE STRUCTURES, PIPES, OR DUCT BANKS AS SHOWN ON THE CONTRACT DRAWINGS. ALL COSTS ASSOCIATED WITH EXCAVATION SUPPORT SYSTEMS, SUPPORT AND PROTECTION OF EXISTING INFRASTRUCTURE, AND DEWATERING SHALL BE INCLUDED IN THE CONTRACTOR'S LUMP SUM OF THE CONTRACT.
- ALL TEST PITS SHALL BE WITNESSED BY THE ENGINEER. ANY TEST PITS PERFORMED WITHOUT THE PRESENCE OF THE ENGINEER SHALL BE REDONE AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL PROVIDE A LICENSED SURVEYOR IN THE STATE OF MASSACHUSETTS TO SURVEY ALL TEST PIT LOCATIONS AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
- CONTRACTOR SHALL PERFORM UP TO TEN (10) ADDITIONAL TEST PITS AS DIRECTED BY THE ENGINEER OR THE OWNER. THE TEST PIT SHALL BE A MAXIMUM OF 36 SQUARE FEET IN AREA AND A MAXIMUM OF SIX FEET IN DEPTH.

TEST PIT SUMMARY TABLE

TEST PIT ID	TO FIND	APPROXIMATE DEPTH BELOW GRADE
TP-01	42" PURE WATER	20'-0"
TP-02	42" PURE WATER	20'-0"
TP-03	3"x6" PVC CHLORINE FEED LINE	5'-0"
TP-04	1" CONDUIT	3'-0"
TP-05	60" PRCP PURE WATER	40'-0"
TP-06	ELECTRICAL DUCTBANK	2'-0"
TP-07	6" CI SANITARY PIPE	10'-0"
TP-08	24" TILE DRAIN	3'-0"
TP-09	8" PROCESS WATER	5'-0"
TP-10	48" FINISHED WATER	20'-0"
TP-11	36" PURE WATER	10'-0"
TP-12	42" TW TM (APPROX)	25'-0"
TP-13	12" RAW WATER	18'-0"



EXISTING SURVEY MONUMENT	NORTHING	EASTING	ELEVATION
TBM-1	2870075.7933	294874.2959	460.466
TBM-2	2870044.2730	294543.0239	482.528
TBM-3	2870616.5339	294456.2396	473.374

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2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. CAMPOS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL

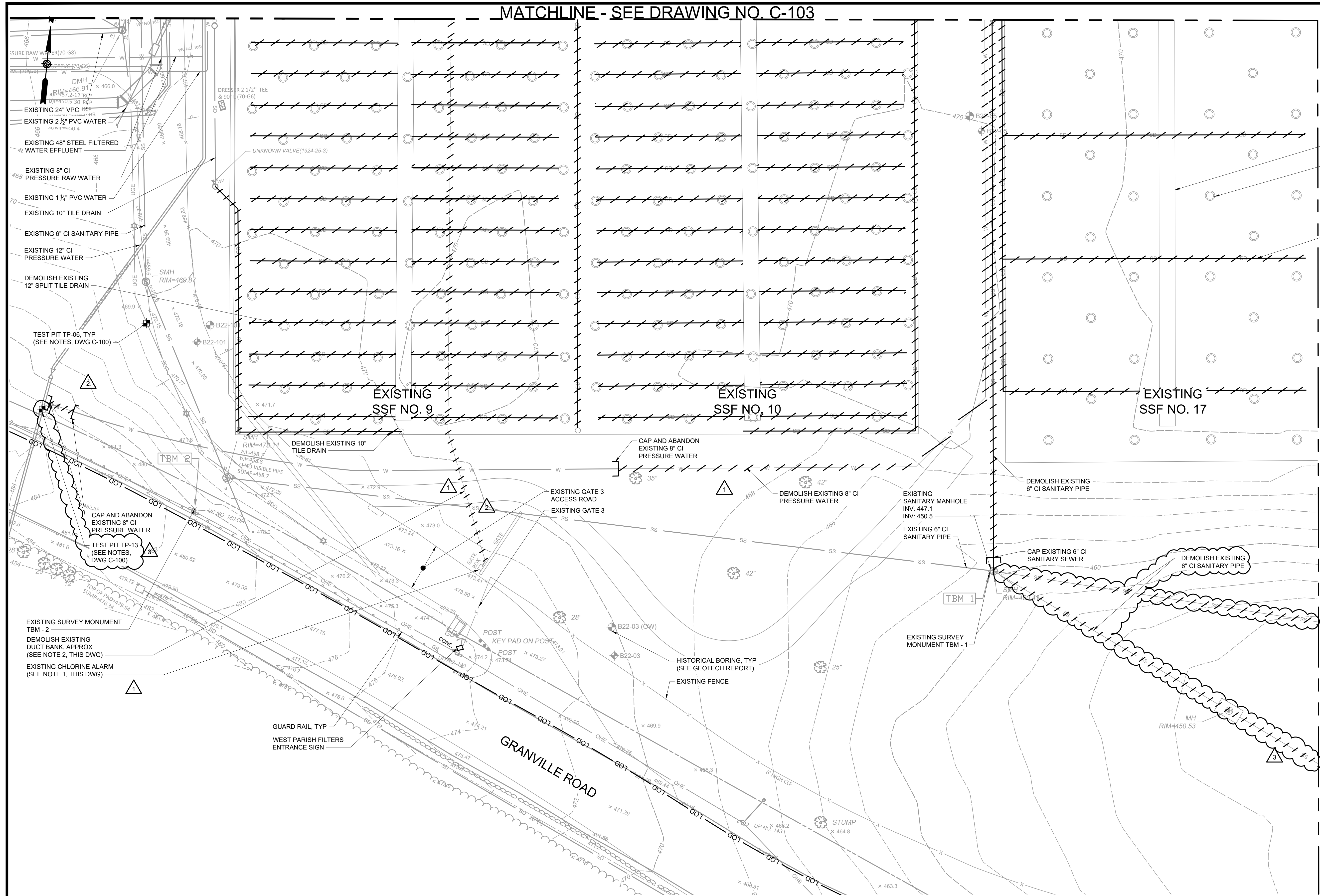
OVERALL EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-100



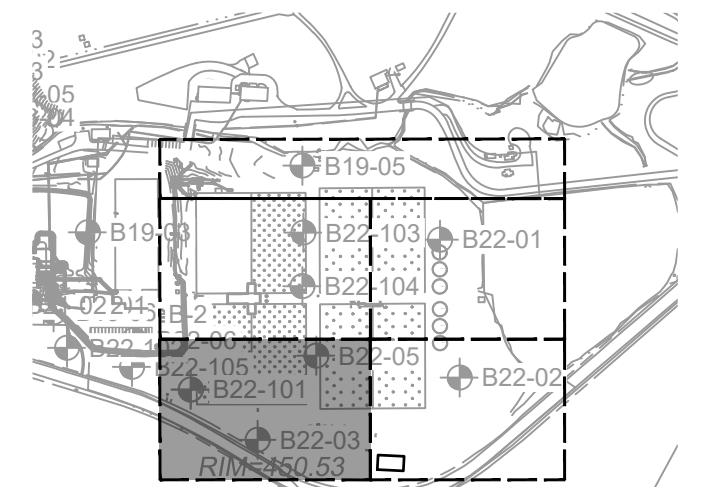
MATCHLINE - SEE DRAWING NO. C-103

- NOTES:**
- EXISTING CHLORINE ALARM SHALL BE MAINTAINED DURING CONSTRUCTION.
 - EXISTING ELECTRICAL AND COMMUNICATION DUCT BANK SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION TO PROVIDE POWER AND SIGNAL TO SECURITY APPARATUS AND CHLORINE ALARM. CONTRACTOR SHALL RELOCATE ALARM AND SECURITY APPARATUS ONCE GATE 3 IS PERMANENTLY RELOCATED. SEE ELECTRICAL DWGS.



- EXISTING COLLECTOR CHANNEL
- EXISTING 4' ACCESS MANHOLE, TYP
- DEMOLISH EXISTING 8" DRAIN PIPE, TYP

MATCHLINE - SEE DRAWING NO. C-102

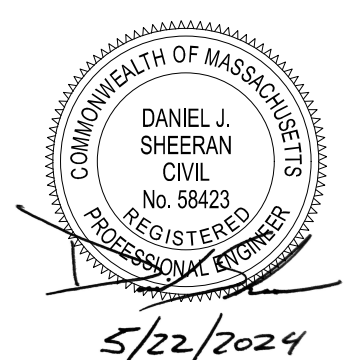


KEY MAP
NTS

SCALE: 1" = 20'

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PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	J. RIVAS		
DRAWN BY:	K. CAMPOS		
CHECKED BY:	D. SHEERAN		
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"		
DATE	BY		
3	ADDENDUM NO. 12	MAY 24	MWM
2	ADDENDUM NO. 5	APR 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY



Hazen
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100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

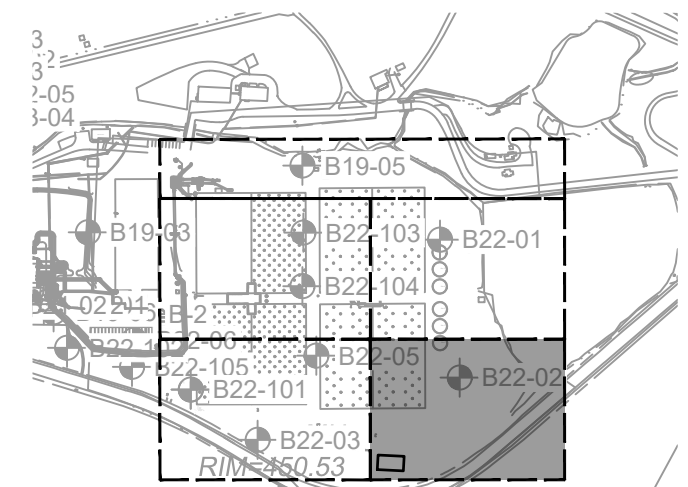
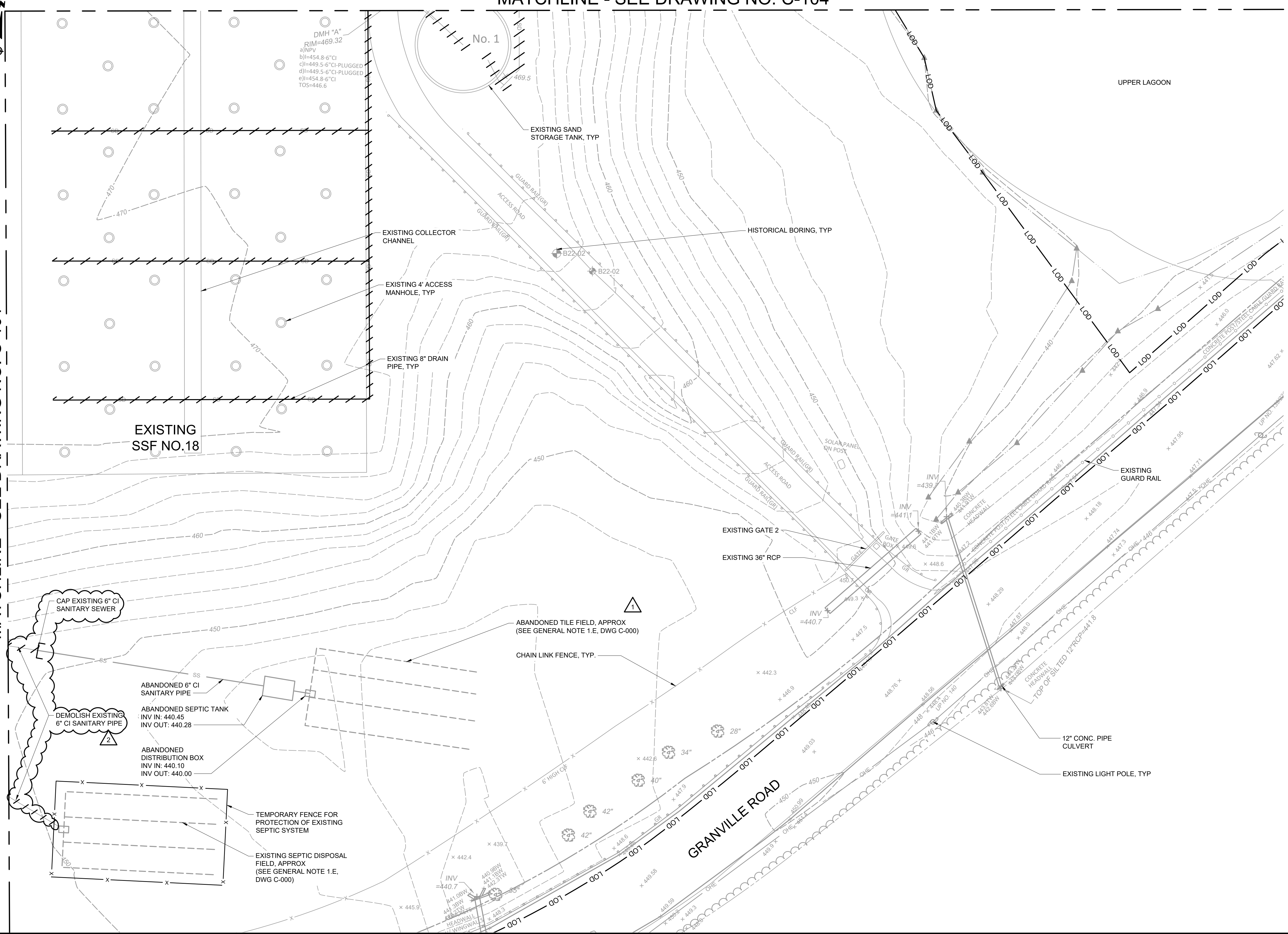
SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL
EXISTING CONDITIONS
WITH YARD PIPING DEMOLITION PLAN
SHEET 1

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-101

MATCHLINE - SEE DRAWING NO. C-104

MATCHLINE - SEE DRAWING NO. C-101



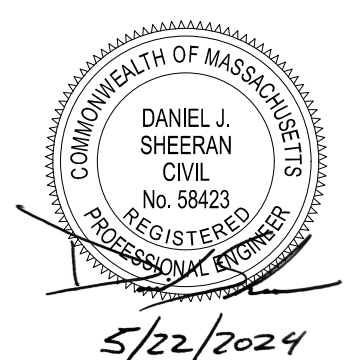
KEY MAP
NTS

SCALE: 1" = 20'

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PLOT DATE: 5/22/2024 5:03 PM BY: JLU

2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. CAMPOS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	
0	1/2" 1"



Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

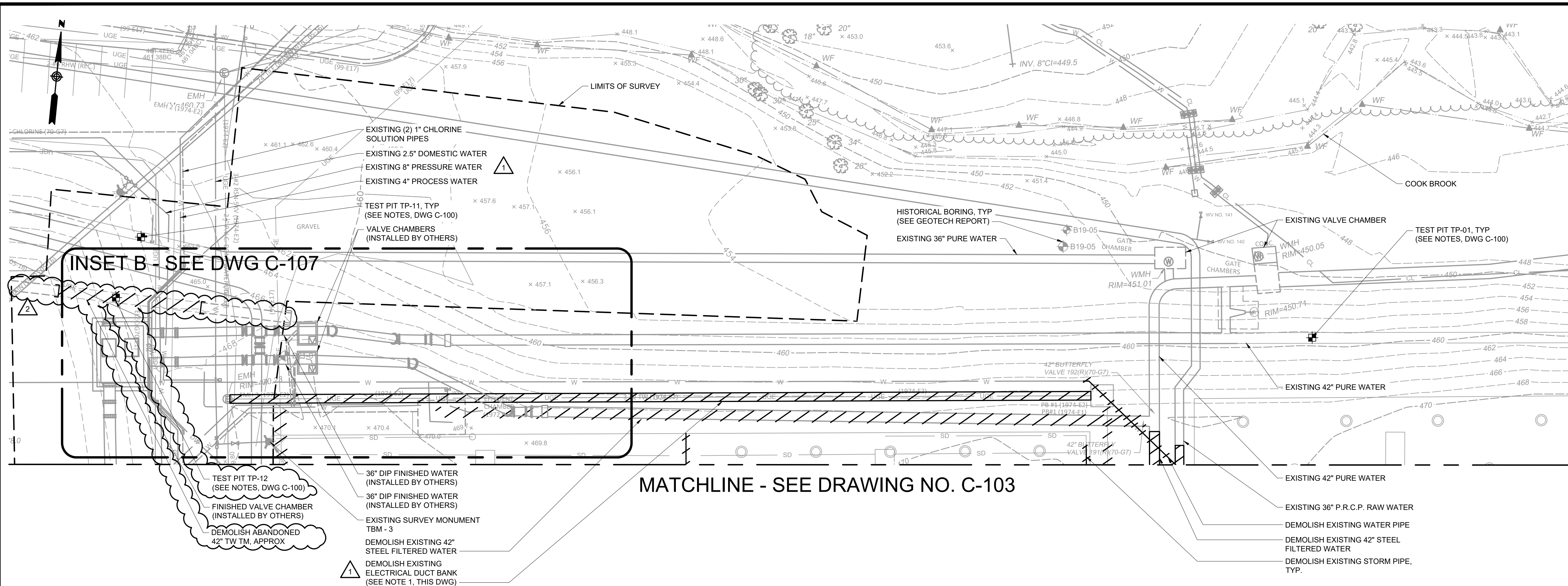
CIVIL
EXISTING CONDITIONS
WITH YARD PIPING DEMOLITION PLAN
SHEET 2

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-102

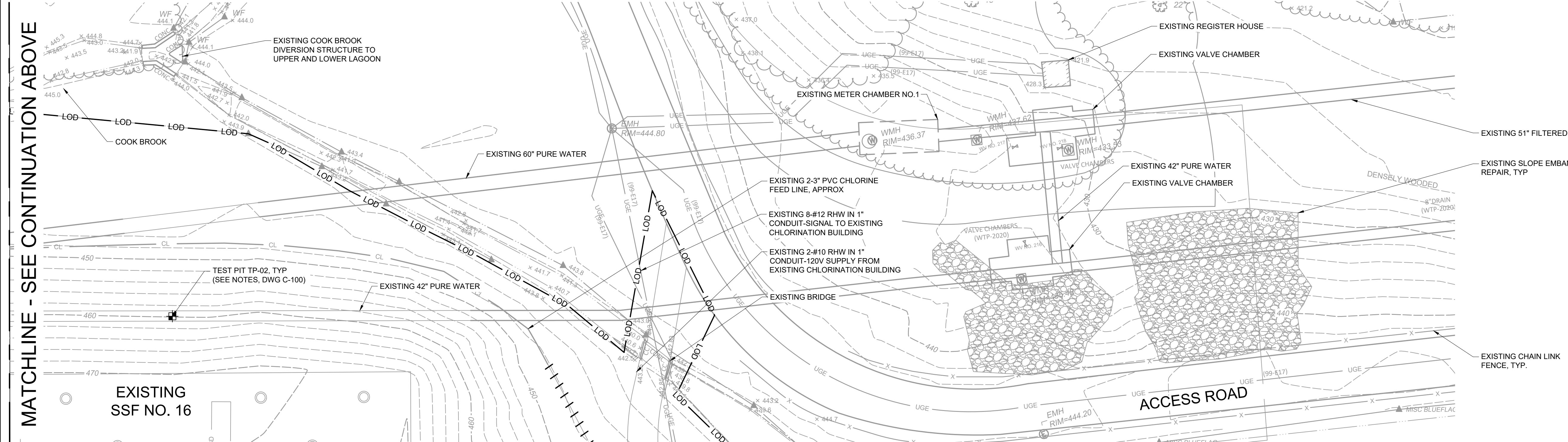
- NOTES:**
- CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND COMMUNICATION TO THE EXISTING METER CHAMBER PRIOR TO DEMOLITION OF THE DUCT BANK. SEE ELECTRICAL OVERALL SITE PLAN, DWG E-012.



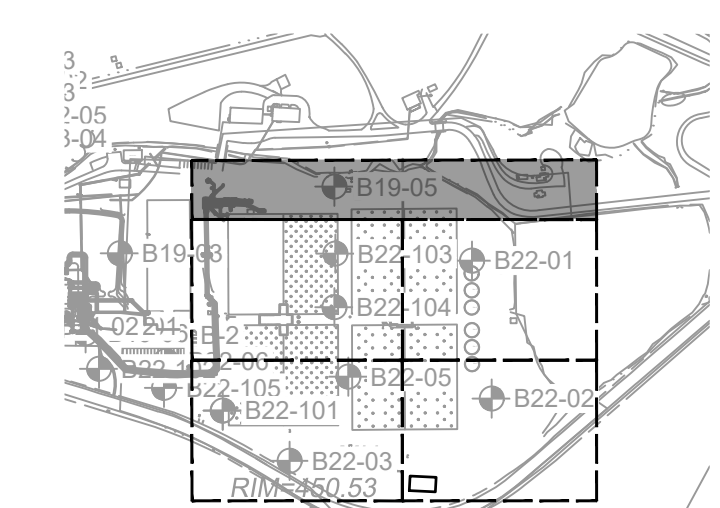
MATCHLINE - SEE CONTINUATION BELOW



MATCHLINE - SEE DRAWING NO. C-103



MATCHLINE - SEE DRAWING NO. C-104

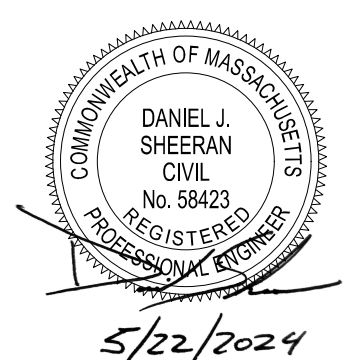


KEY MAP
NTS

SCALE: 1" = 20'

REV	ISSUED FOR	DATE	BY
2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. CAMPOS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	
0	1/2" 1"



5/22/2024

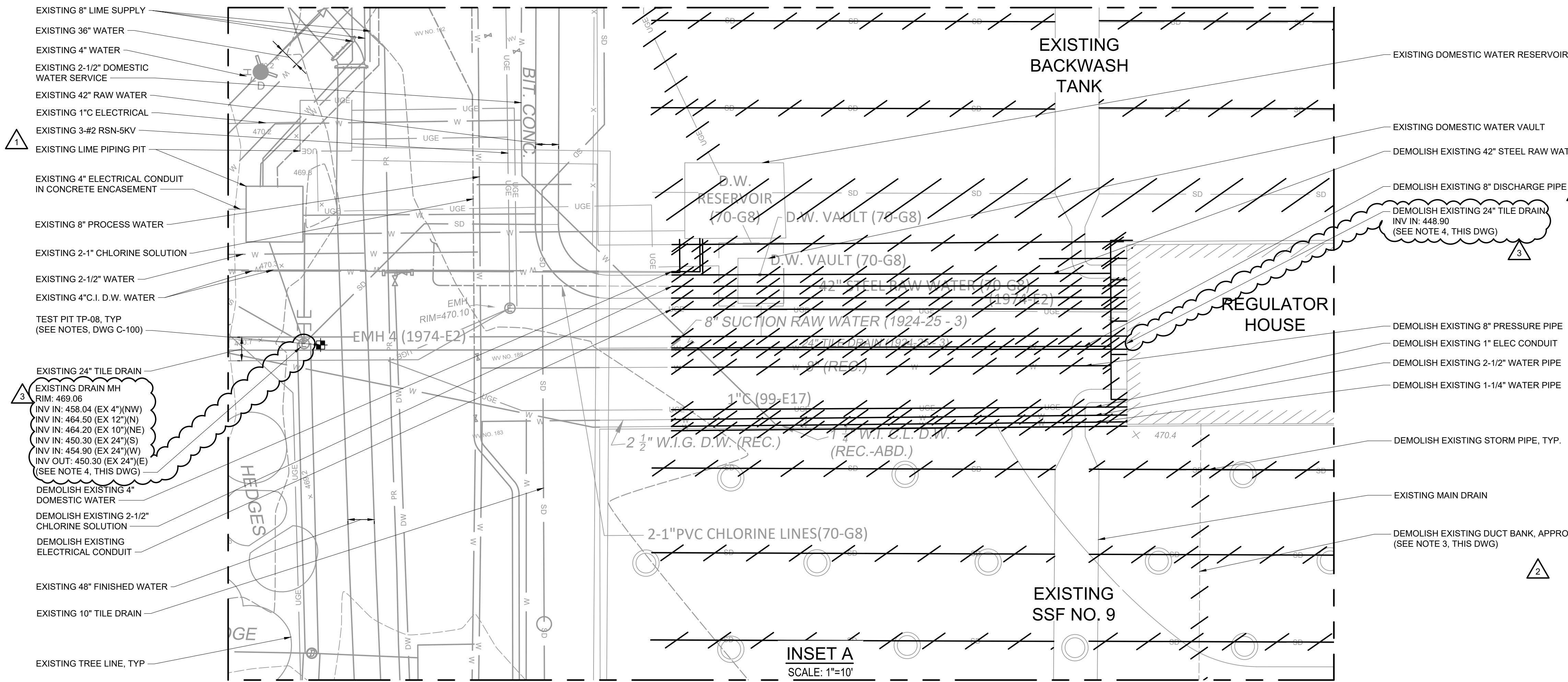
Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

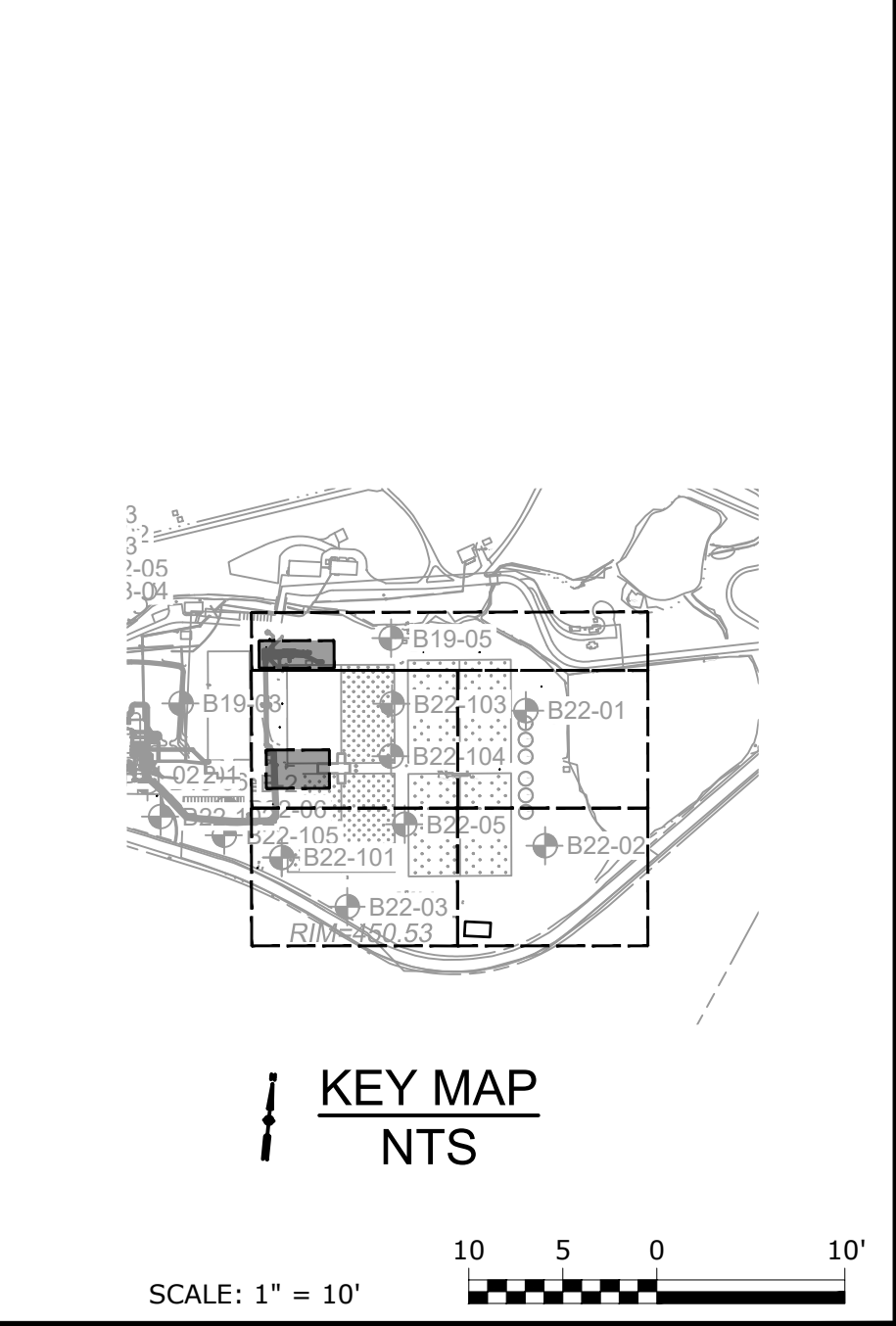
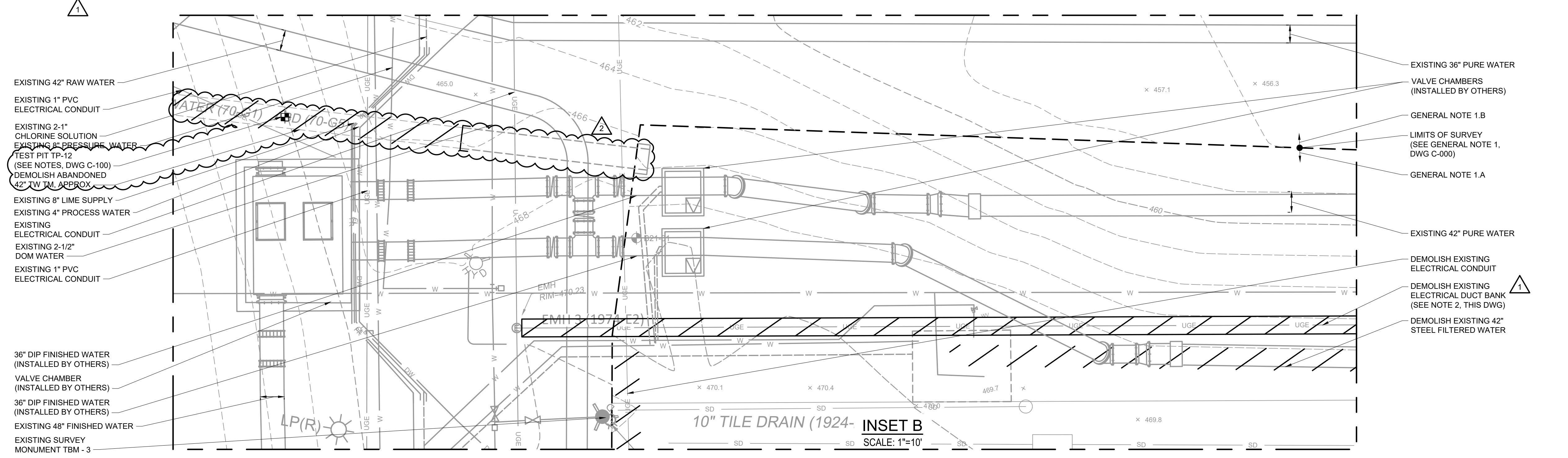
CIVIL
EXISTING CONDITIONS
WITH YARD PIPING DEMOLITION PLAN
SHEET 5

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-105

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PLOT DATE: 5/22/2024 5:04 PM BY: JLU



- NOTES:**
- MANHOLE COVERS EXIST ON TOP OF BACKWASH TANK. THESE ARE NOT CURRENTLY SHOWN ON PLAN SINCE THE BACKWASH TANK WAS COVERED WITH A TARP DURING THE FIELD SURVEY.
 - CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND COMMUNICATION TO THE EXISTING FLOW METER CHAMBER PRIOR TO DEMOLITION OF DUCT BANK. SEE ELECTRICAL OVERALL SITE PLAN, DWG E-012.
 - EXISTING ELECTRICAL AND COMMUNICATION DUCT BANK SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION TO PROVIDE POWER AND SIGNAL TO SECURITY APPARATUS AND CHLORINE ALARM. CONTRACTOR SHALL RELOCATE ALARM AND SECURITY APPARATUS ONCE GATE 3 IS PERMANENTLY RELOCATED. SEE ELECTRICAL DWGS.
 - CONTRACTOR SHALL MAINTAIN EXISTING FLOW OF TILE DRAIN (APPROXIMATELY 60 CFS) BY TEMPORARY FLUMING OR OTHER SUITABLE MEANS AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL SUBMIT FLUMING AND BYPASS DIAGRAM TO ENGINEER FOR REVIEW PRIOR TO THE START OF CONSTRUCTION.



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 PLOT DATE: 5/22/2024 5:05 PM BY: JLU

REV	ISSUED FOR	DATE	BY
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2	ADDENDUM NO. 5	APR 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. CAMPOS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

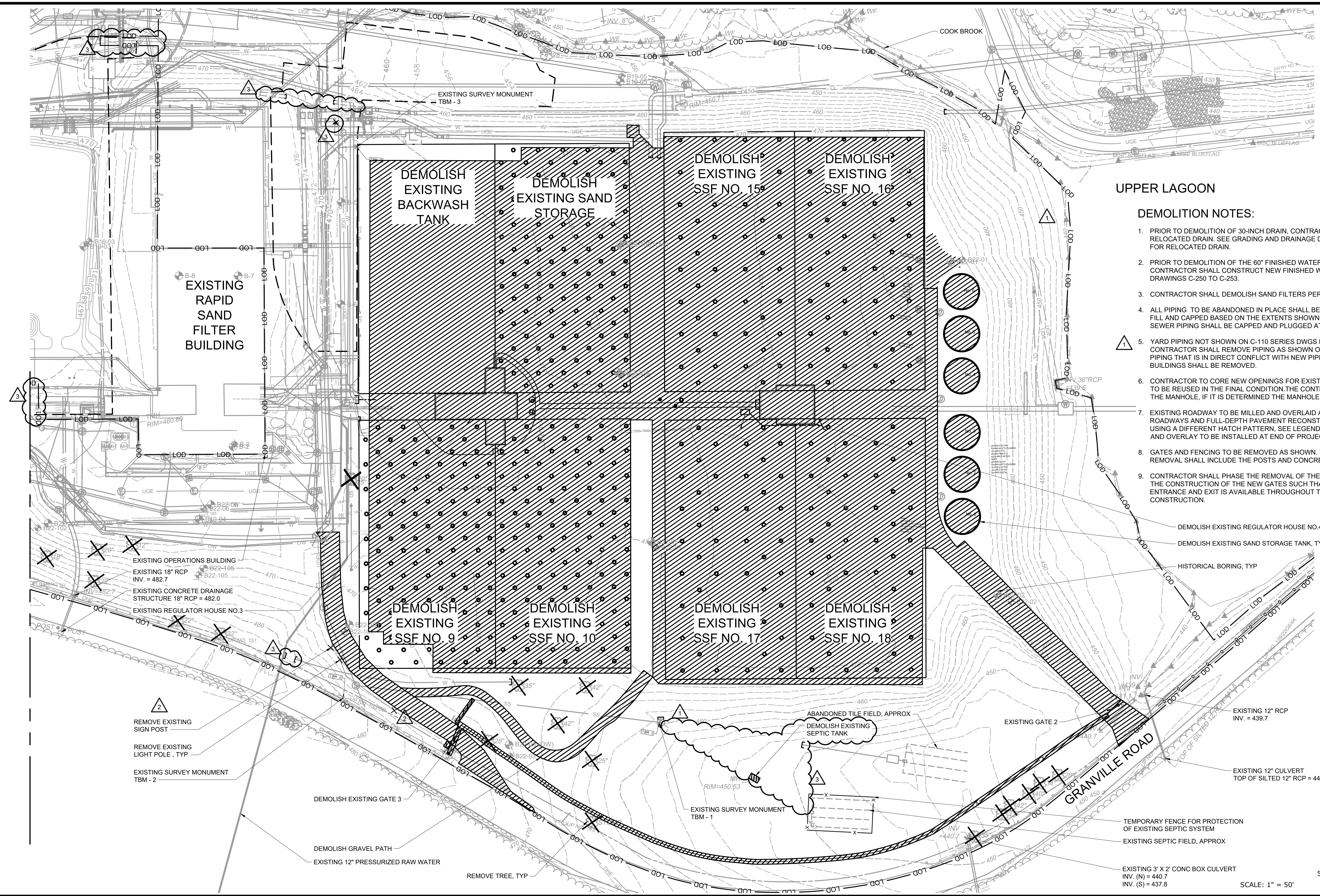
HAZEN AND SAWYER
 100 GREAT MEADOW ROAD, SUITE 702
 WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL EXISTING CONDITIONS WITH YARD PIPING DEMOLITION PLAN SHEET 7

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-107



UPPER LAGOON

DEMOLITION NOTES:

- PRIOR TO DEMOLITION OF 30-INCH DRAIN, CONTRACTOR SHALL CONSTRUCT RELOCATED DRAIN. SEE GRADING AND DRAINAGE DRAWINGS C-133 TO C-134 FOR RELOCATED DRAIN.
- PRIOR TO DEMOLITION OF THE 60" FINISHED WATER CONNECTION, CONTRACTOR SHALL CONSTRUCT NEW FINISHED WATER MAINS, SEE DRAWINGS C-250 TO C-253.
- CONTRACTOR SHALL DEMOLISH SAND FILTERS PER REMOVALS DRAWING.
- ALL PIPING TO BE ABANDONED IN PLACE SHALL BE FILLED WITH FLOWABLE FILL AND CAPPED BASED ON THE EXTENTS SHOWN. STORM AND SANITARY SEWER PIPING SHALL BE CAPPED AND PLUGGED AT EXISTING MANHOLES.
- YARD PIPING NOT SHOWN ON C-110 SERIES DWGS FOR CLARITY. CONTRACTOR SHALL REMOVE PIPING AS SHOWN ON C-100 SERIES DWGS. PIPING THAT IS IN DIRECT CONFLICT WITH NEW PIPING, STRUCTURES, OR BUILDINGS SHALL BE REMOVED.
- CONTRACTOR TO CORE NEW OPENINGS FOR EXISTING MANHOLES THAT ARE TO BE REUSED IN THE FINAL CONDITION. THE CONTRACTOR SHALL REPLACE THE MANHOLE, IF IT IS DETERMINED THE MANHOLE CANNOT BE CORED.
- EXISTING ROADWAY TO BE MILLED AND OVERLAID AS SHOWN. NEW ROADWAYS AND FULL-DEPTH PAVEMENT RECONSTRUCTION ARE SHOWN USING A DIFFERENT HATCH PATTERN. SEE LEGEND. FINAL SURFACE COURSE AND OVERLAY TO BE INSTALLED AT END OF PROJECT.
- GATES AND FENCING TO BE REMOVED AS SHOWN. FENCE AND GATE REMOVAL SHALL INCLUDE THE POSTS AND CONCRETE FOOTINGS.
- CONTRACTOR SHALL PHASE THE REMOVAL OF THE EXISTING GATES WITH THE CONSTRUCTION OF THE NEW GATES SUCH THAT AT LEAST ONE ENTRANCE AND EXIT IS AVAILABLE THROUGHOUT THE ENTIRETY OF CONSTRUCTION.

DEMOLISH EXISTING REGULATOR HOUSE NO.4
DEMOLISH EXISTING SAND STORAGE TANK, TYP

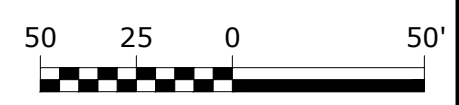
HISTORICAL BORING, TYP

EXISTING 12" RCP
INV. = 439.7

EXISTING 12" CULVERT
TOP OF SILTED 12" RCP = 441.8

TEMPORARY FENCE FOR PROTECTION
OF EXISTING SEPTIC SYSTEM
EXISTING SEPTIC FIELD, APPROX

EXISTING 3' X 2' CONC BOX CULVERT
INV. (N) = 440.7
INV. (S) = 437.8

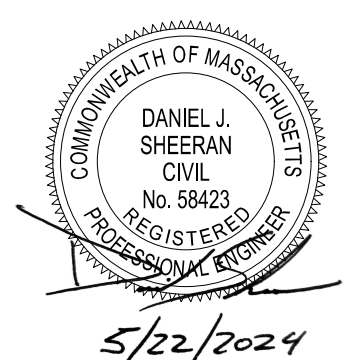


SCALE: 1" = 50'

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PLOT DATE: 5/22/2024 5:08 PM BY: JLU

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2	ADDENDUM NO. 4	APR 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. CAMPOS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"



Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL
OVERALL DEMOLITION PLAN

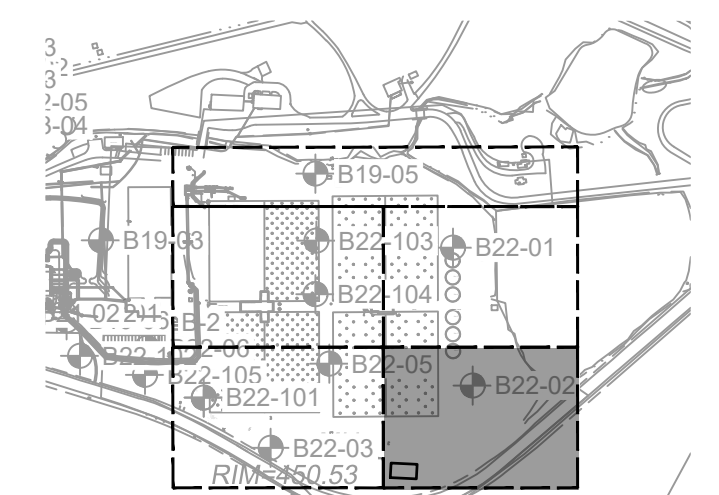
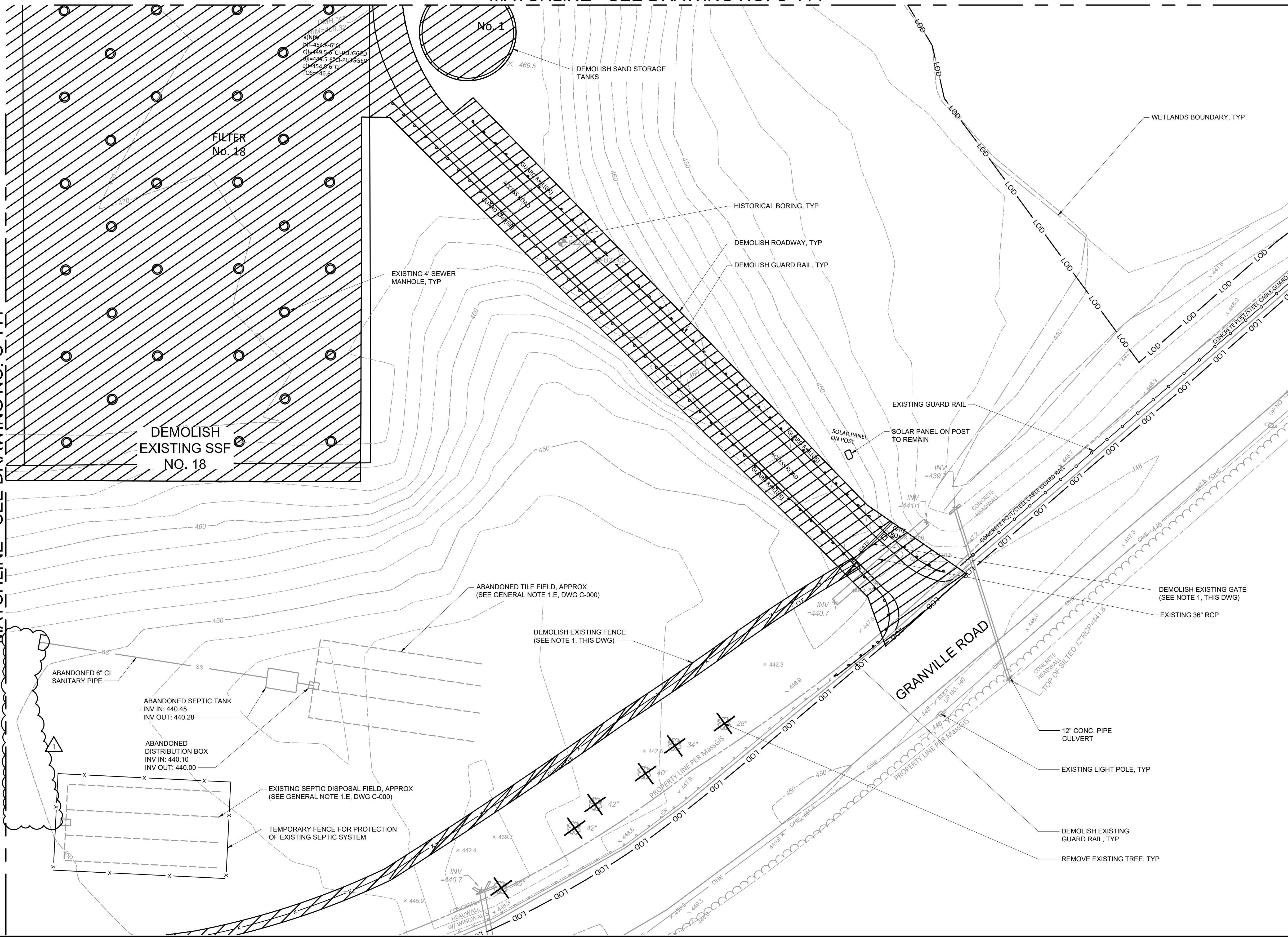
DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-110

MATCHLINE - SEE DRAWING NO. C-114

NOTES:

- CONTRACTOR SHALL MAINTAIN PERIMETER SECURITY OF PLANT SITE THROUGHOUT CONSTRUCTION ACTIVITIES THROUGH THE USE OF TEMPORARY FENCING OR OTHER SECURITY MEASURES AS APPROVED BY OWNER.

MATCHLINE - SEE DRAWING NO. C-111



KEY MAP
NTS

SCALE: 1" = 20'

File: C:\USERS\JLUDC\DCG\SHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-112.dwg, Date: 5/22/2024, 4:02 PM, PLOT DATE: 5/22/2024, 5:08 PM, BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	J. RIVAS		
DRAWN BY:	K. CAMPOS		
CHECKED BY:	D. SHEERAN		
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"		
1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

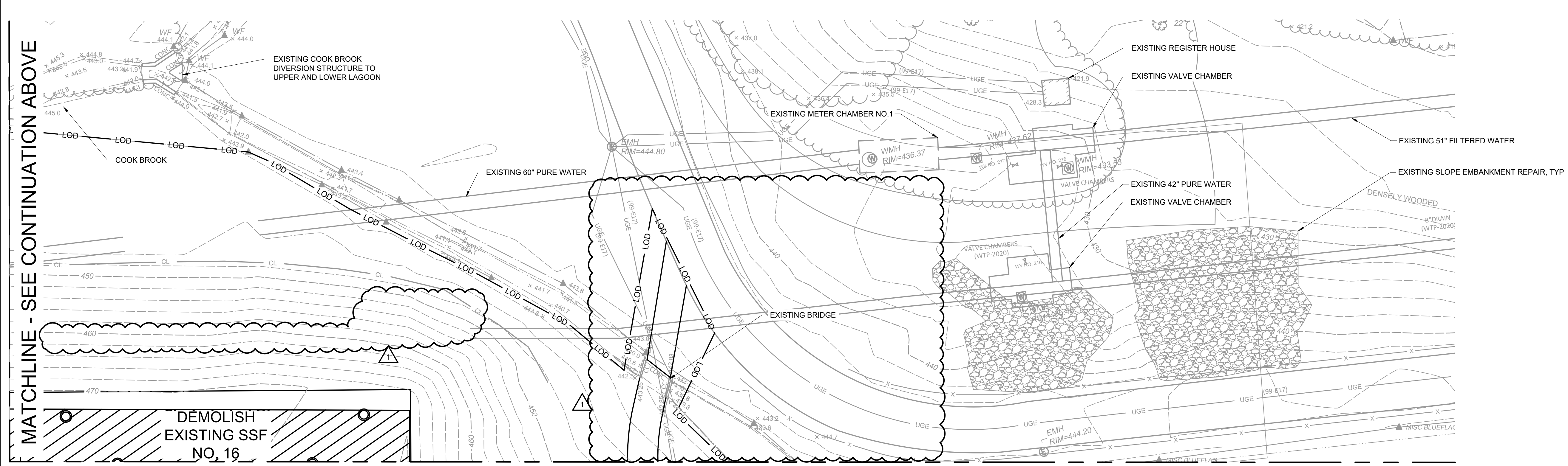
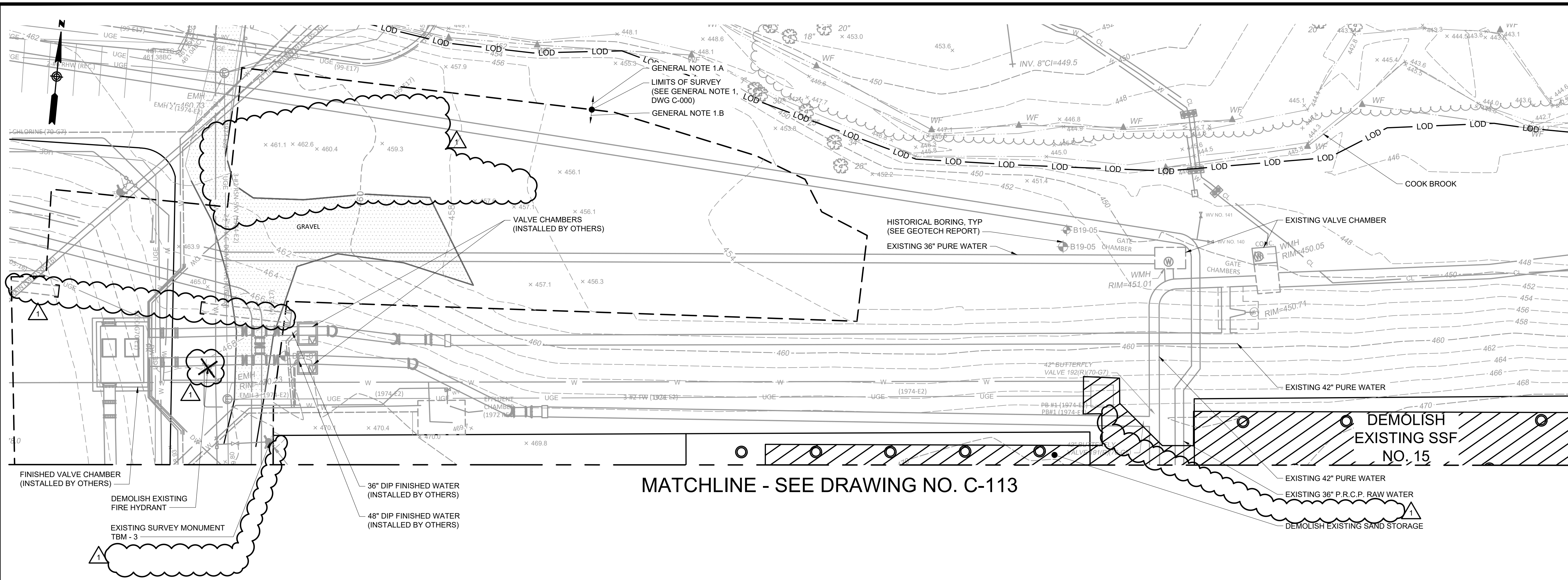


Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

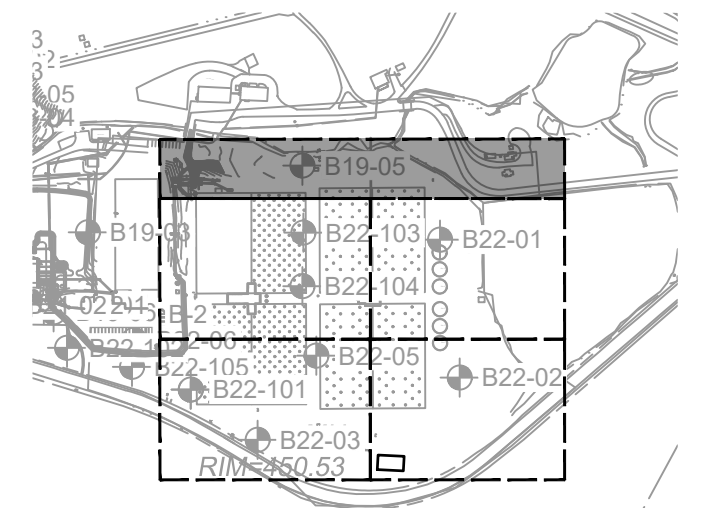
CIVIL DEMOLITION PLAN SHEET 2

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-112



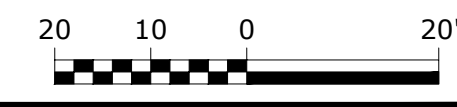
MATCHLINE - SEE CONTINUATION BELOW

MATCHLINE - SEE CONTINUATION ABOVE



KEY MAP
NTS

SCALE: 1" = 20'



PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. CAMPOS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
DATE	BY
1 ADDENDUM NO. 12 MAY 24 MWM	
0 ISSUED FOR BIDS FEB 24 MWM	
ISSUED FOR	DATE



Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

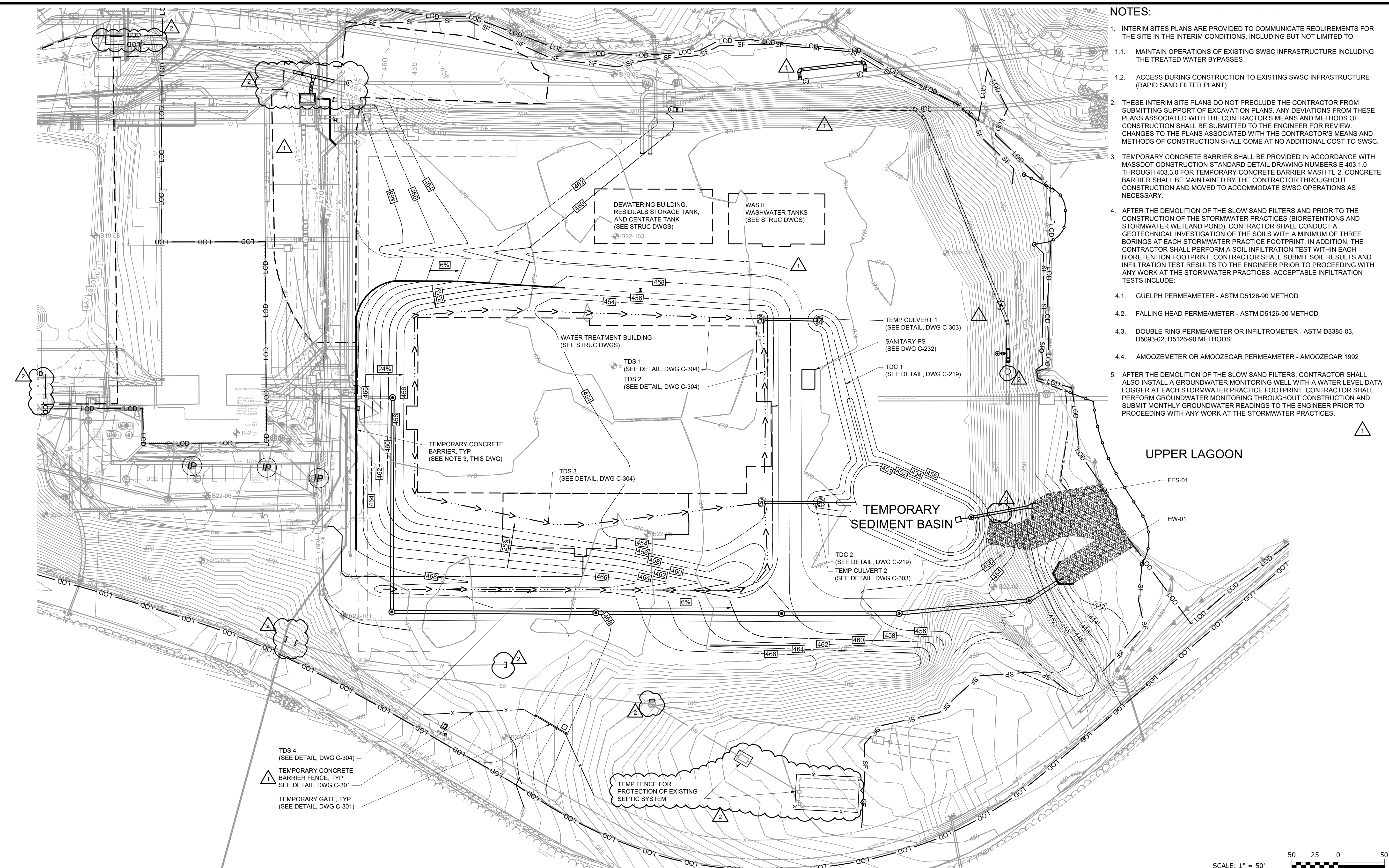
SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL DEMOLITION PLAN SHEET 5

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-115

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- NOTES:**
- INTERIM SITES PLANS ARE PROVIDED TO COMMUNICATE REQUIREMENTS FOR THE SITE IN THE INTERIM CONDITIONS, INCLUDING BUT NOT LIMITED TO:
 - MAINTAIN OPERATIONS OF EXISTING SWSC INFRASTRUCTURE INCLUDING THE TREATED WATER BYPASSES
 - ACCESS DURING CONSTRUCTION TO EXISTING SWSC INFRASTRUCTURE (RAPID SAND FILTER PLANT)
 - THESE INTERIM SITE PLANS DO NOT PRECLUDE THE CONTRACTOR FROM SUBMITTING SUPPORT OF EXCAVATION PLANS. ANY DEVIATIONS FROM THESE PLANS ASSOCIATED WITH THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. CHANGES TO THE PLANS ASSOCIATED WITH THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION SHALL COME AT NO ADDITIONAL COST TO SWSC.
 - TEMPORARY CONCRETE BARRIER SHALL BE PROVIDED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARD DETAIL DRAWING NUMBERS E 403.1.0 THROUGH 403.3.0 FOR TEMPORARY CONCRETE BARRIER MASH TL-2. CONCRETE BARRIER SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND MOVED TO ACCOMMODATE SWSC OPERATIONS AS NECESSARY.
 - AFTER THE DEMOLITION OF THE SLOW SAND FILTERS AND PRIOR TO THE CONSTRUCTION OF THE STORMWATER PRACTICES (BIORETENTIONS AND STORMWATER WETLAND POND), CONTRACTOR SHALL CONDUCT A GEOTECHNICAL INVESTIGATION OF THE SOILS WITH A MINIMUM OF THREE BORINGS AT EACH STORMWATER PRACTICE FOOTPRINT. IN ADDITION, THE CONTRACTOR SHALL PERFORM A SOIL INFILTRATION TEST WITHIN EACH BIORETENTION FOOTPRINT. CONTRACTOR SHALL SUBMIT SOIL RESULTS AND INFILTRATION TEST RESULTS TO THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK AT THE STORMWATER PRACTICES. ACCEPTABLE INFILTRATION TESTS INCLUDE:
 - GUELPH PERMEAMETER - ASTM D5126-90 METHOD
 - FALLING HEAD PERMEAMETER - ASTM D5126-90 METHOD
 - DOUBLE RING PERMEAMETER OR INFILTRMETER - ASTM D3385-03, D5093-02, D5126-90 METHODS
 - AMOOZEMETER OR AMOOZEGAR PERMEAMETER - AMOOZEGAR 1992
 - AFTER THE DEMOLITION OF THE SLOW SAND FILTERS, CONTRACTOR SHALL ALSO INSTALL A GROUNDWATER MONITORING WELL WITH A WATER LEVEL DATA LOGGER AT EACH STORMWATER PRACTICE FOOTPRINT. CONTRACTOR SHALL PERFORM GROUNDWATER MONITORING THROUGHOUT CONSTRUCTION AND SUBMIT MONTHLY GROUNDWATER READINGS TO THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK AT THE STORMWATER PRACTICES.



SCALE: 1" = 50'

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 PLOT DATE: 5/22/2024 4:48 PM BY: JLU

REV	ISSUED FOR	DATE	BY
2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	J. HARKINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

0 1/2" 1"

5/22/2024

Hazen

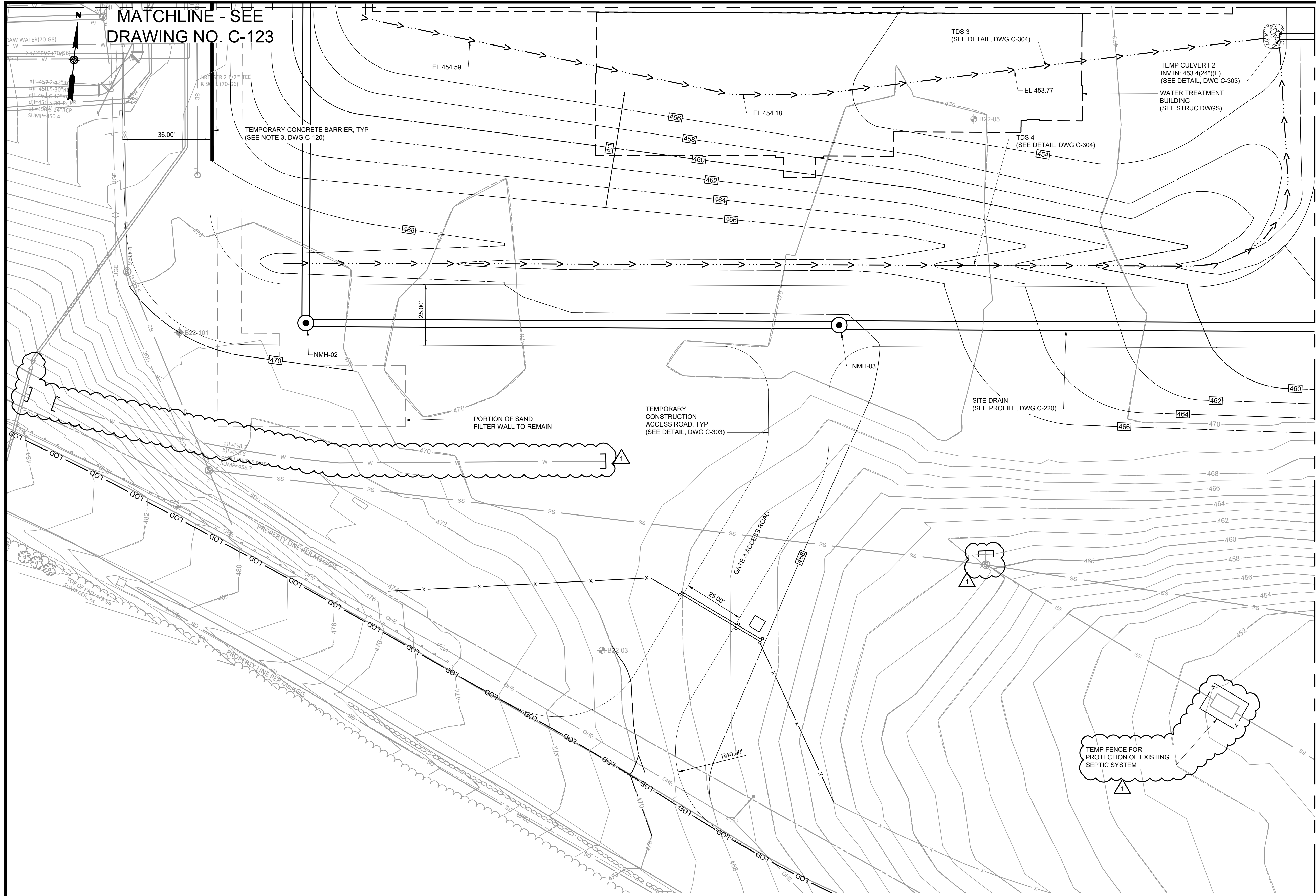
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

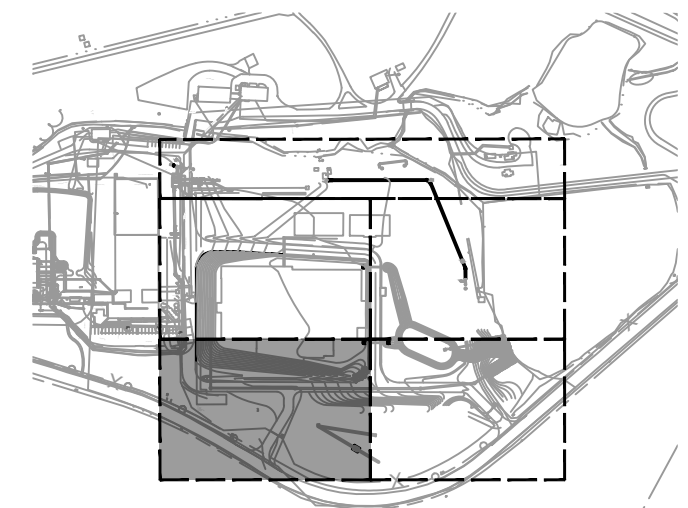
WEST PARISH WATER TREATMENT PLANT

CIVIL INTERIM OVERALL GRADING AND DRAINAGE PLAN

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-120



MATCHLINE - SEE DRAWING NO. C-122



KEY MAP
NTS

SCALE: 1" = 20'

File: C:\USERS\JLUDCACC\DCS\HAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTR PROJECT FILES\CIVIL\C-121.dwg Date: 5/22/2024 4:13 PM PLOT DATE: 5/22/2024 4:47 PM BY: JLU

1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	J. HARKINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

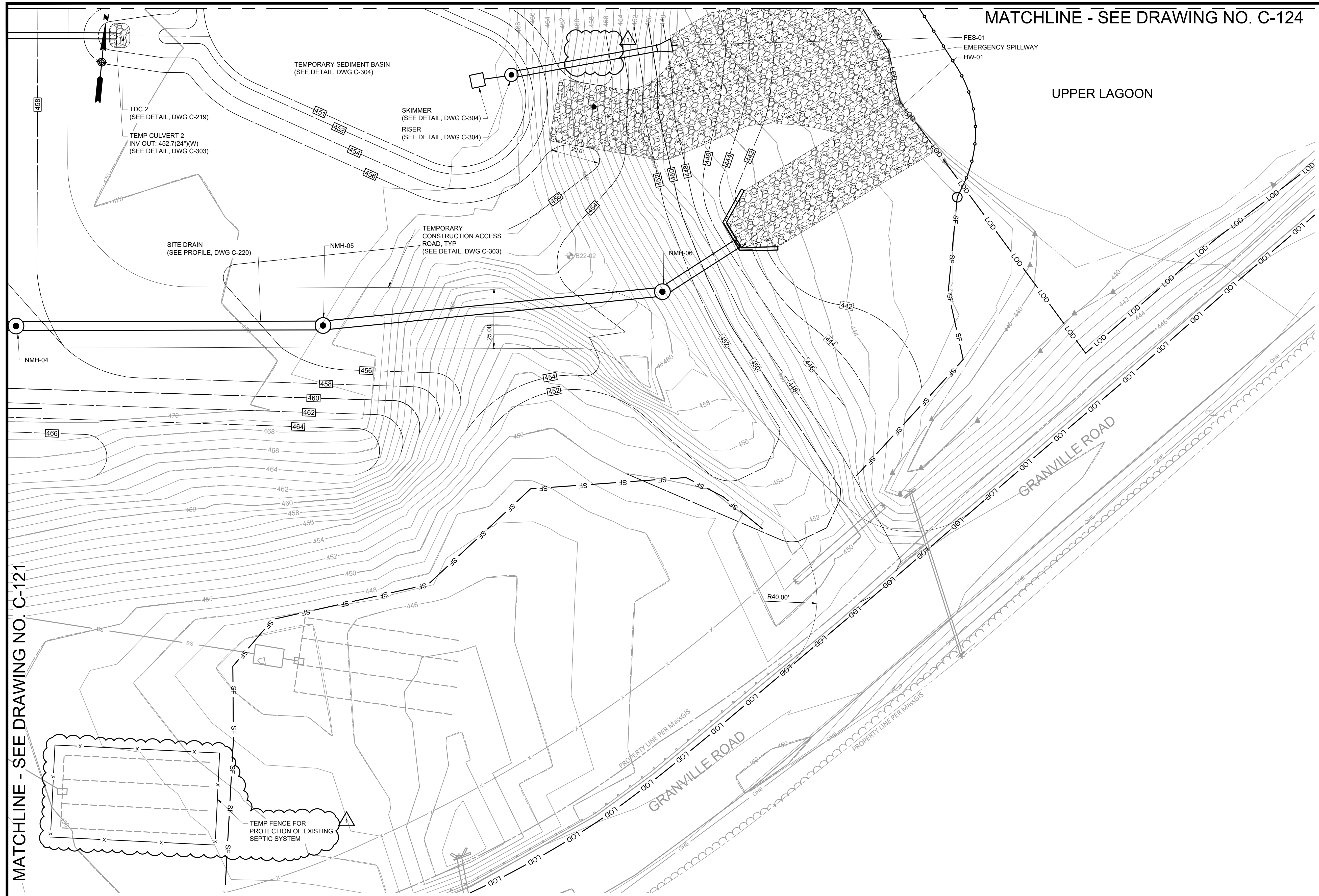
SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL
INTERIM SITE PLAN 1

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-121

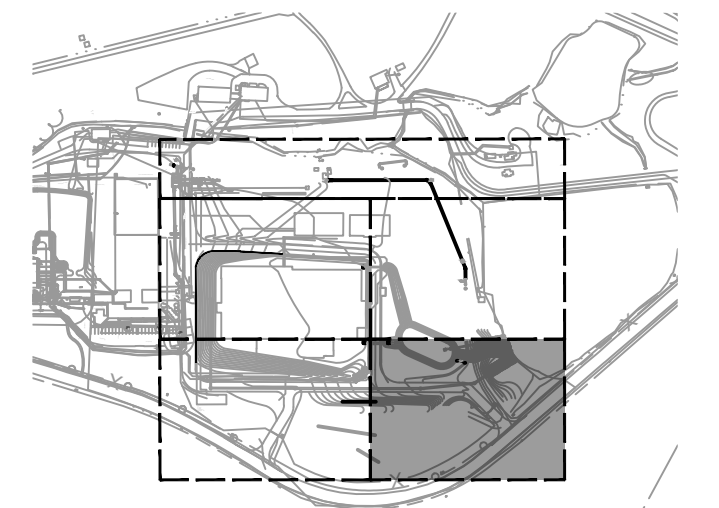
MATCHLINE - SEE DRAWING NO. C-124



UPPER LAGOON

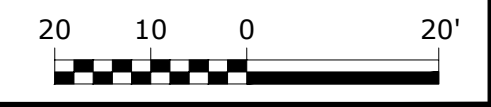
GRANVILLE ROAD

MATCHLINE - SEE DRAWING NO. C-121



KEY MAP
NTS

SCALE: 1" = 20'



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REV	ISSUED FOR	DATE	BY
1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	J. HARKINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

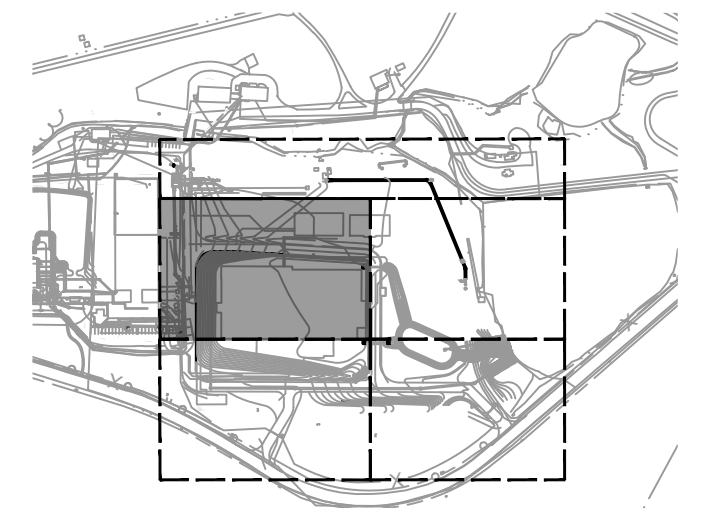
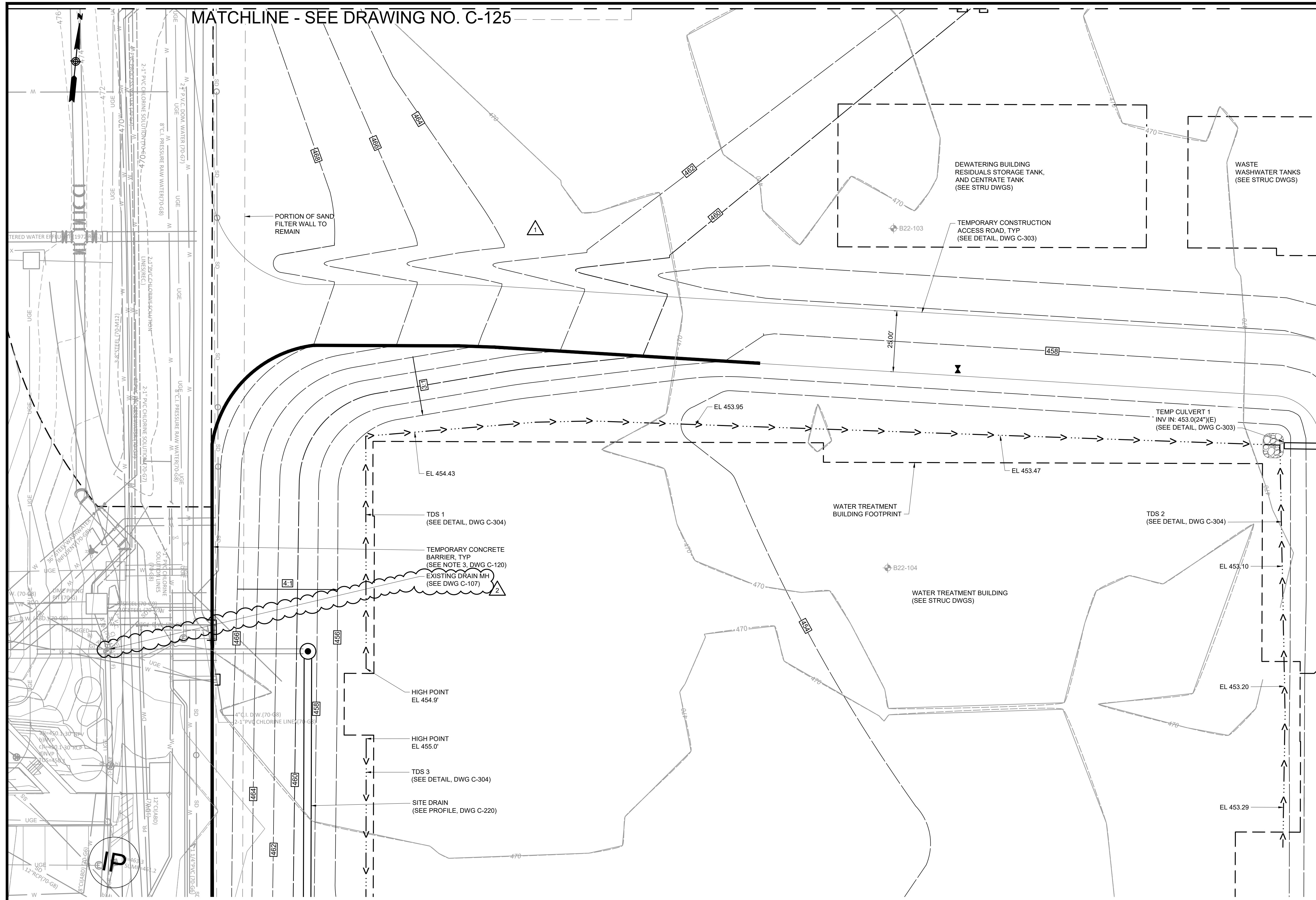
WEST PARISH WATER TREATMENT PLANT

CIVIL
INTERIM SITE PLAN 2

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-122

MATCHLINE - SEE DRAWING NO. C-125

MATCHLINE - SEE DRAWING NO. C-124



SCALE: 1" = 20'

File: C:\USERS\JLUDCACC\CSHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-123 Saved by: JLU Save date: 5/22/2024 4:26 PM PLOT DATE: 5/22/2024 4:48 PM BY: JLU

REV	ISSUED FOR	DATE	BY
2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	J. HARKINS
CHECKED BY:	D. SHEERAN

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

0 1/2" 1"

5/22/2024

Hazen

HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL INTERIM SITE PLAN 3

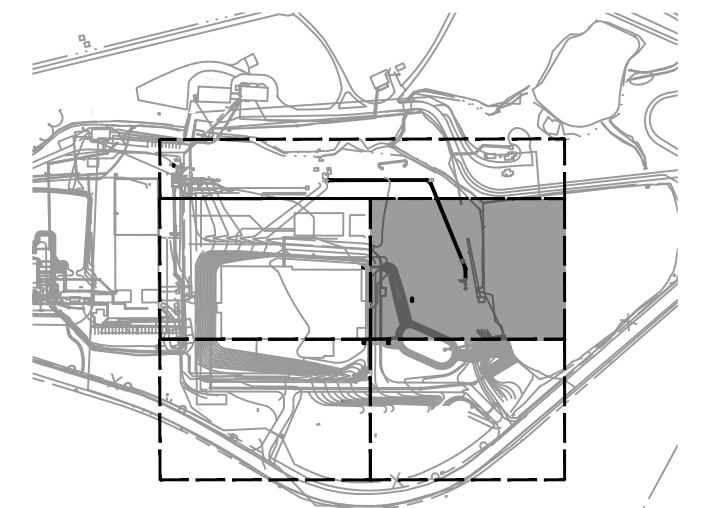
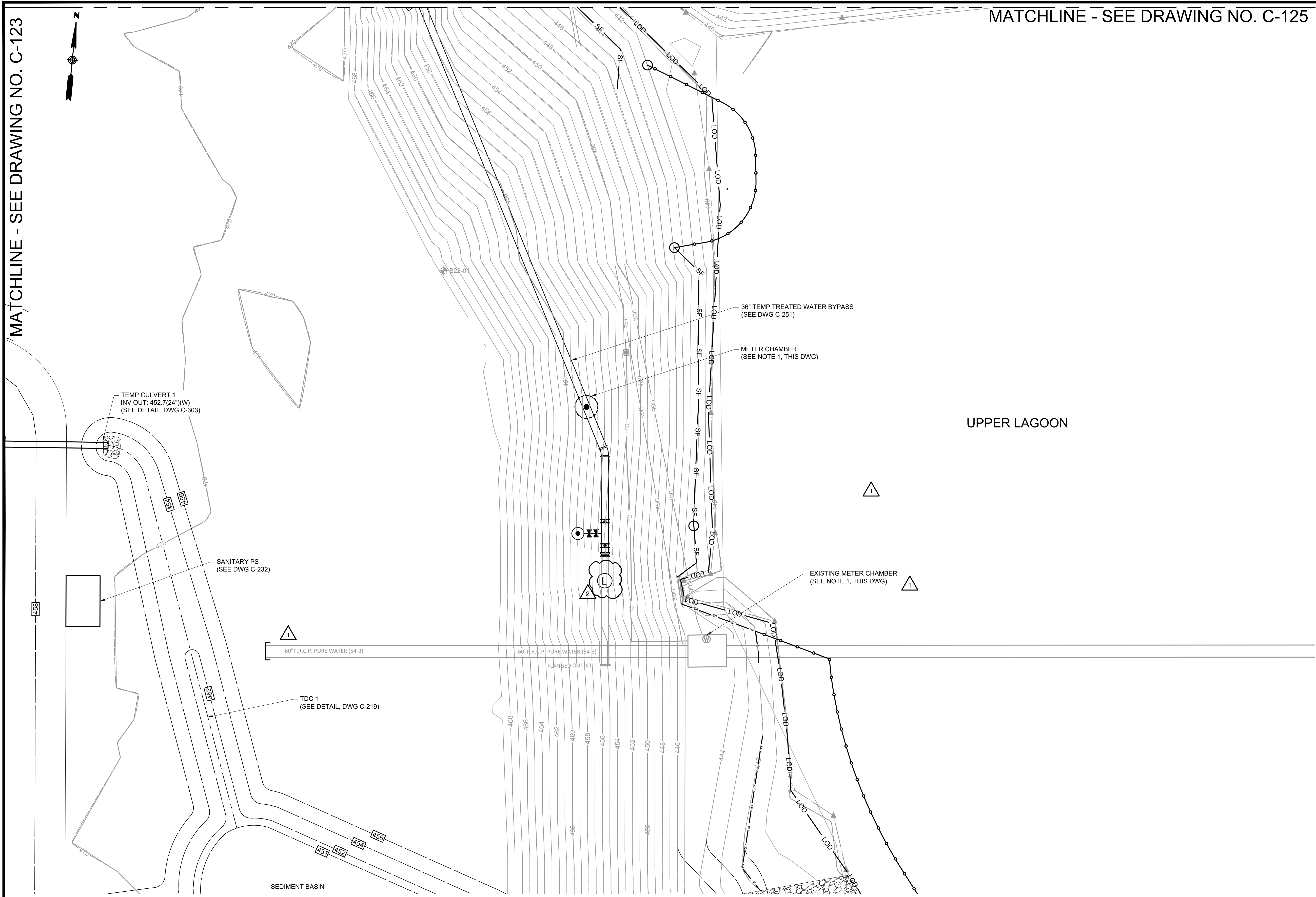
DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-123

MATCHLINE - SEE DRAWING NO. C-123

MATCHLINE - SEE DRAWING NO. C-125

NOTES:

- SEE ELECTRICAL OVERALL SITE PLAN, DWG E-012 FOR TEMPORARY POWER AND COMMUNICATION. SEE DWG M-105 FOR METER CHAMBER DETAIL.



KEY MAP
NTS

SCALE: 1" = 20'

File: C:\USERS\JLUDC\DCD\SHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-124.dwg Date: 5/22/2024 4:24 PM PLOT DATE: 5/22/2024 4:48 PM BY: JLU

2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	J. HARKINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

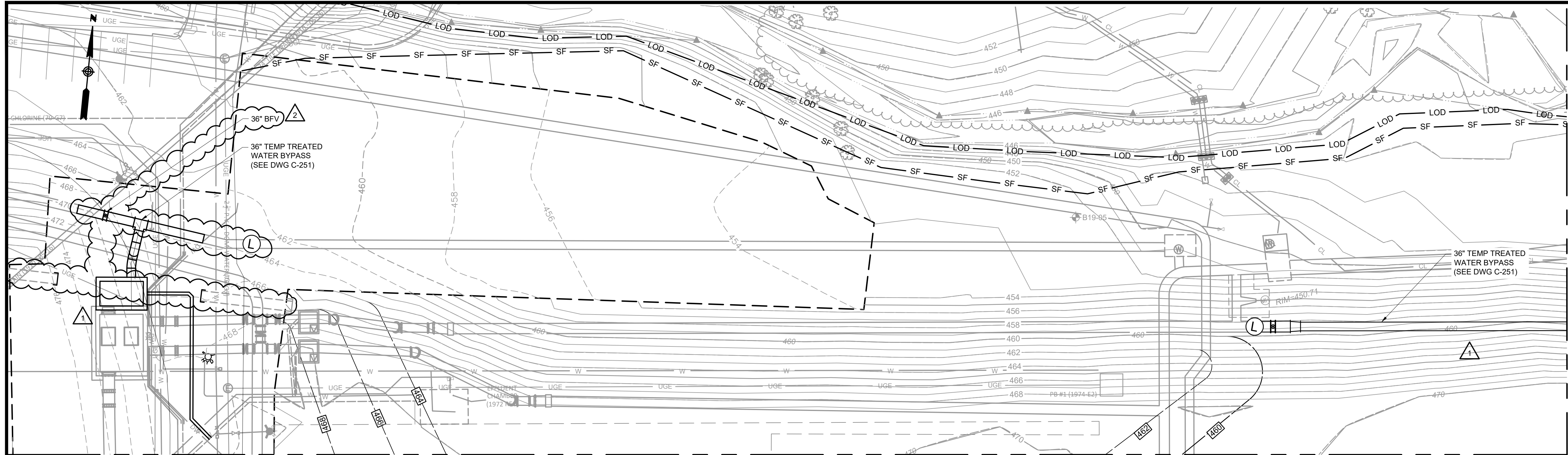
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

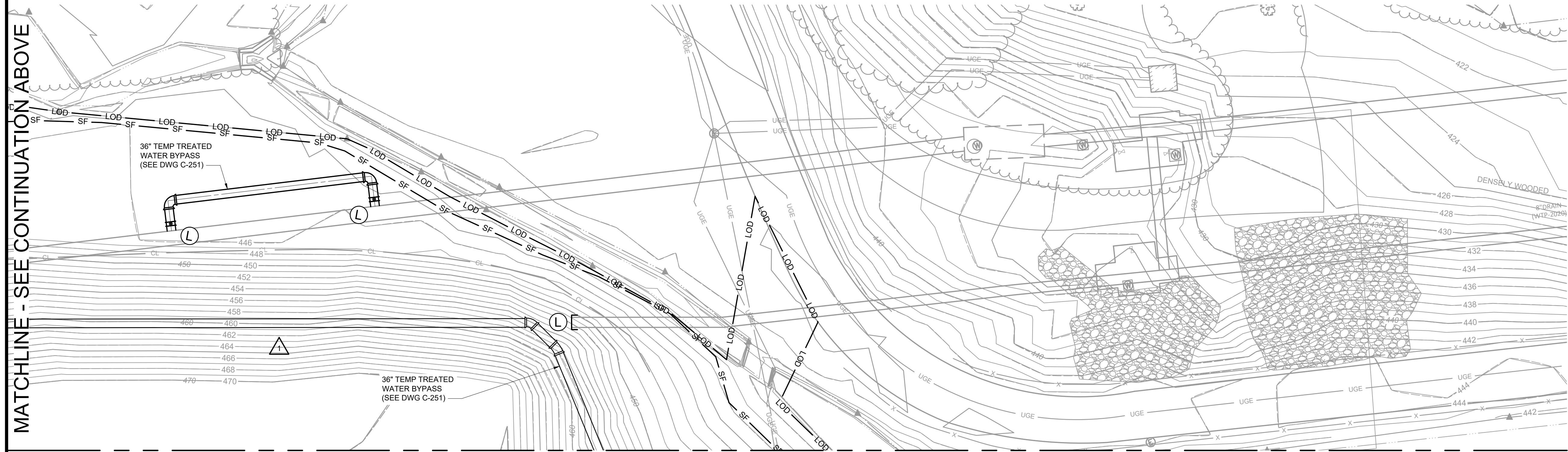
CIVIL
INTERIM SITE PLAN 4

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-124



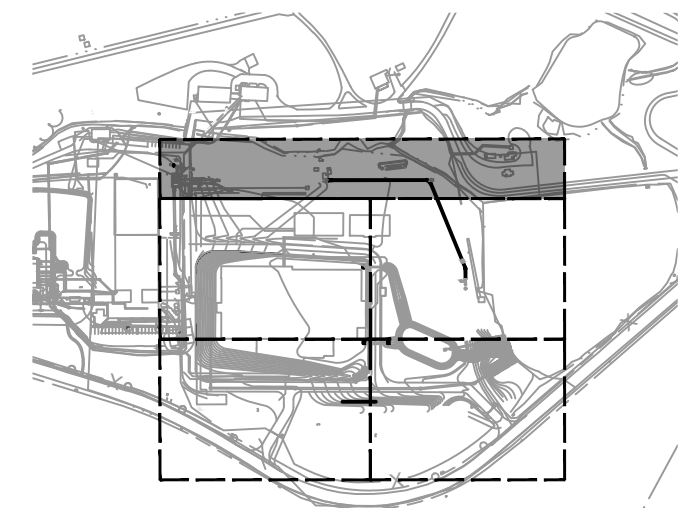
MATCHLINE - SEE CONTINUATION BELOW

MATCHLINE - SEE DRAWING NO. C-123



MATCHLINE - SEE CONTINUATION ABOVE

MATCHLINE - SEE DRAWING NO. C-124



KEY MAP
NTS

SCALE: 1" = 20'



File: C:\USERS\JLUDC\DCD\SHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTF\PROJECT FILES\CIVIL\C-125.dwg, Date: 5/22/2024, 4:14 PM, PLOT DATE: 5/22/2024, 4:45 PM, BY: JLU

REV	ISSUED FOR	DATE	BY
2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	J. HARKINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

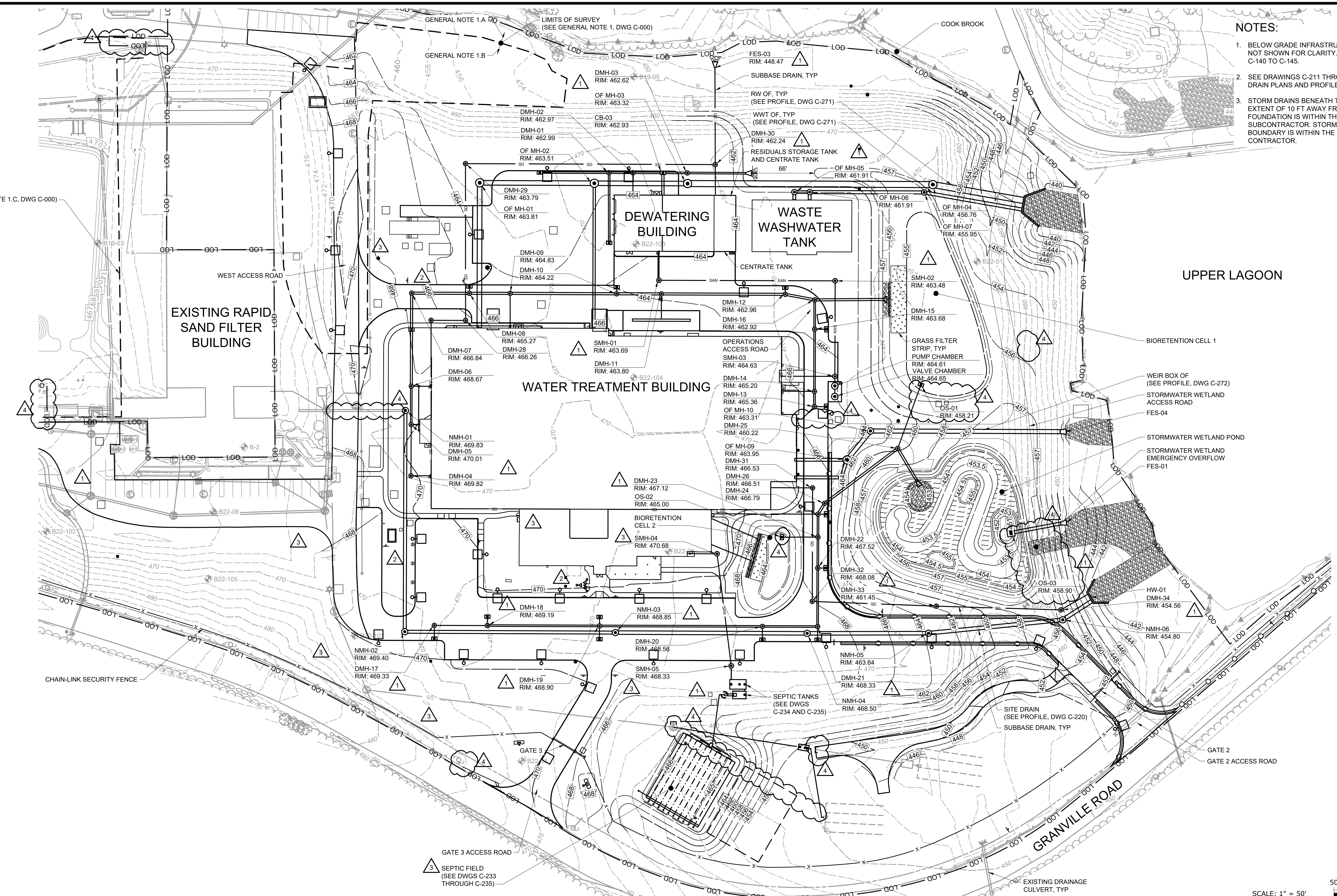
SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL
INTERIM SITE PLAN 5

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-125

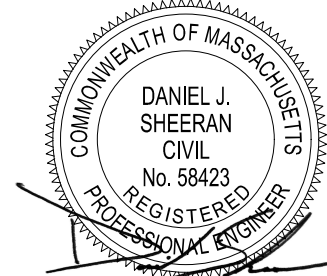
- NOTES:**
- BELOW GRADE INFRASTRUCTURE AND YARD PIPING NOT SHOWN FOR CLARITY. SEE YARD PIPING DRAWINGS C-140 TO C-145.
 - SEE DRAWINGS C-211 THROUGH C-215 FOR STORM DRAIN PLANS AND PROFILES.
 - STORM DRAINS BENEATH THE BUILDINGS AND TO AN EXTENT OF 10 FT AWAY FROM THE BUILDING FOUNDATION IS WITHIN THE SCOPE OF THE PLUMBING SUBCONTRACTOR. STORM DRAINS BEYOND THE 10 FT BOUNDARY IS WITHIN THE SCOPE OF THE GENERAL CONTRACTOR.



File: C:\USERS\JLUDCACC\DCG\SHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTR PROJECT FILES\CIVIL-C-130.dwg, Save date: 5/20/2024, 4:58 PM
 Plot Date: 5/22/2024, 4:41 PM, BY: JLU

REV	ISSUED FOR	DATE	BY
4	ADDENDUM NO. 12	MAY 24	MWM
3	ADDENDUM NO. 4	APR 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	



5/22/2024

Hazen

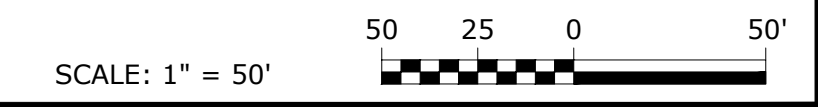
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL
OVERALL GRADING AND DRAINAGE PLAN

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-130



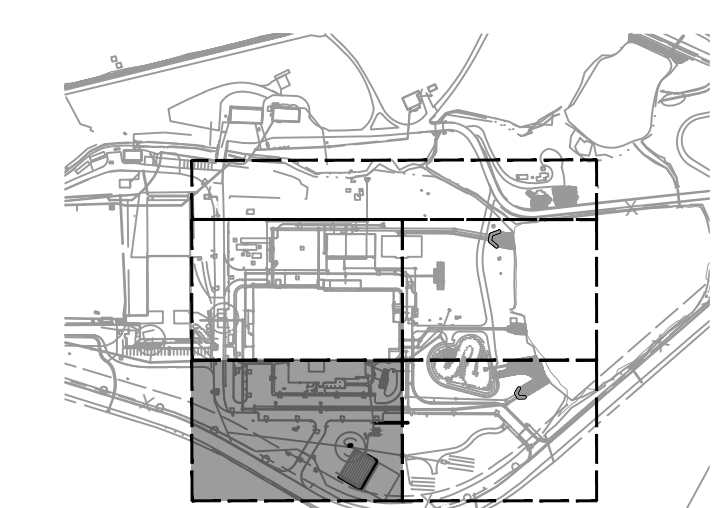
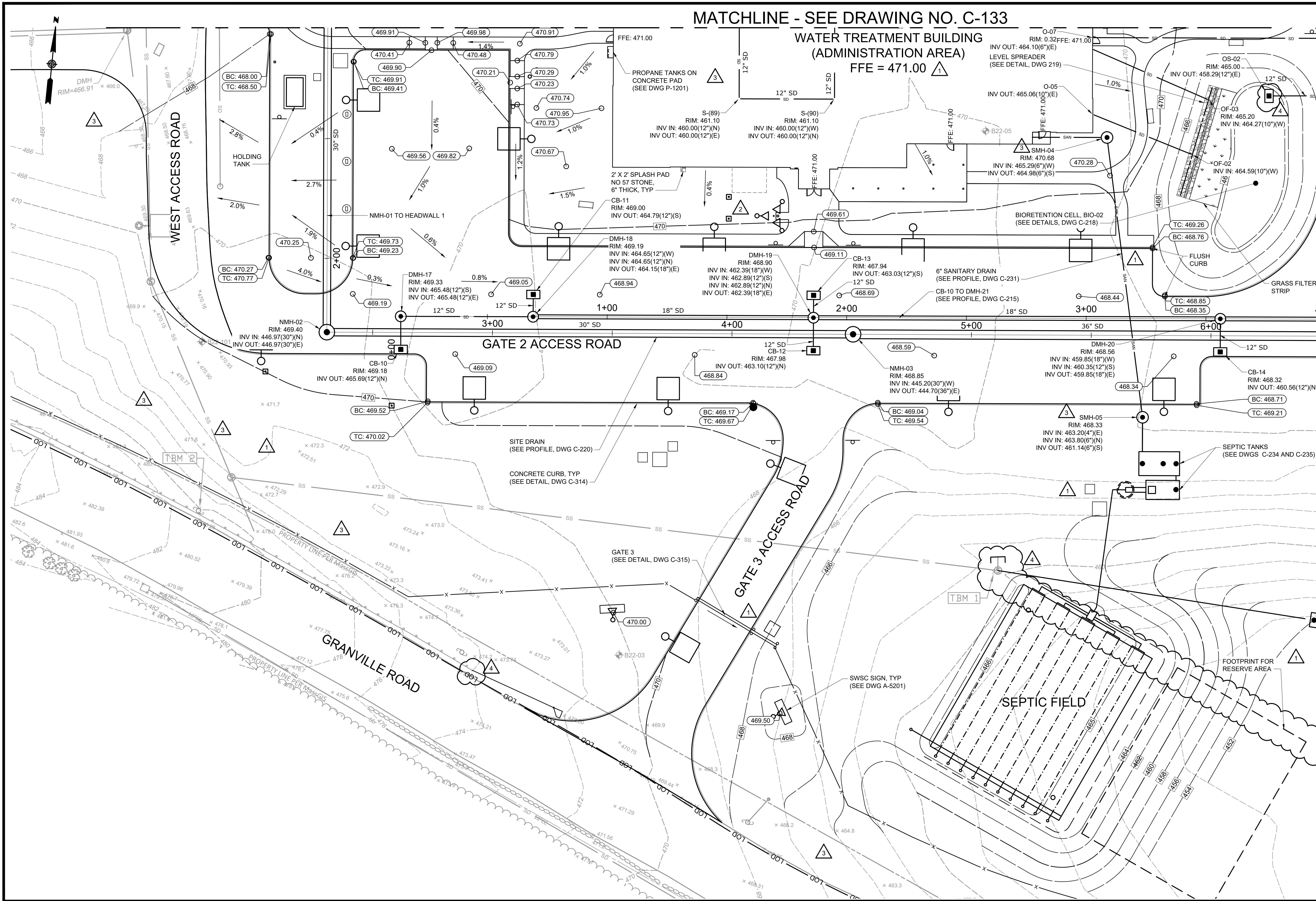
MATCHLINE - SEE DRAWING NO. C-133

WATER TREATMENT BUILDING
(ADMINISTRATION AREA)
FFE = 471.00

NOTES:

1. BELOW GRADE INFRASTRUCTURE AND YARD PIPING NOT SHOWN FOR CLARITY. SEE YARD PIPING DRAWINGS C-140 TO C-145.
2. SEE DRAWINGS C-211 THROUGH C-215 FOR STORM DRAIN PLANS AND PROFILES.
3. SEE DRAWINGS C-201 THROUGH C-205 FOR ACCESS ROAD PLANS AND PROFILES.

MATCHLINE - SEE DRAWING NO. C-132

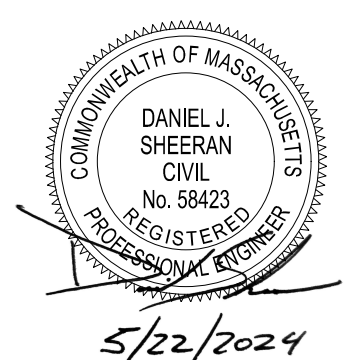


KEY MAP
NTS

SCALE: 1" = 20'

File: C:\USERS\JLUDCACC\DCSHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-131_Saved by JLU Save date: 5/20/2024 5:01 PM
PLOT DATE: 5/22/2024 4:41 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	J. RIVAS		
DRAWN BY:	K. ROBBINS		
CHECKED BY:	D. SHEERAN		
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"		
DATE	BY		
4	ADDENDUM NO. 12	MAY 24	MWM
3	ADDENDUM NO. 4	APR 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY



Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

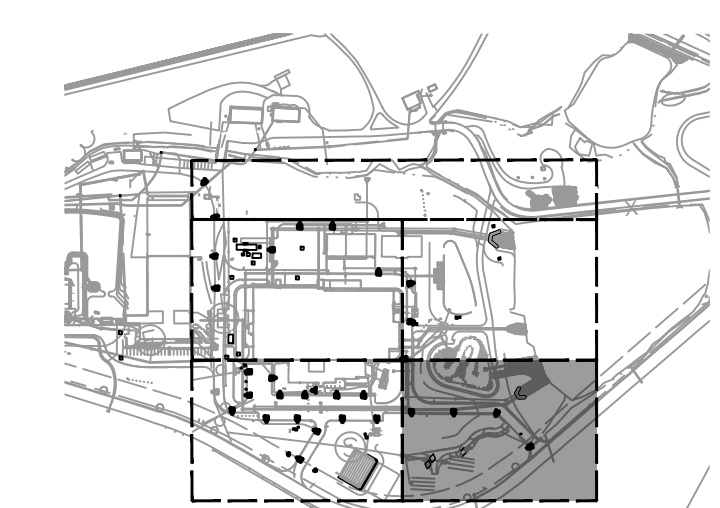
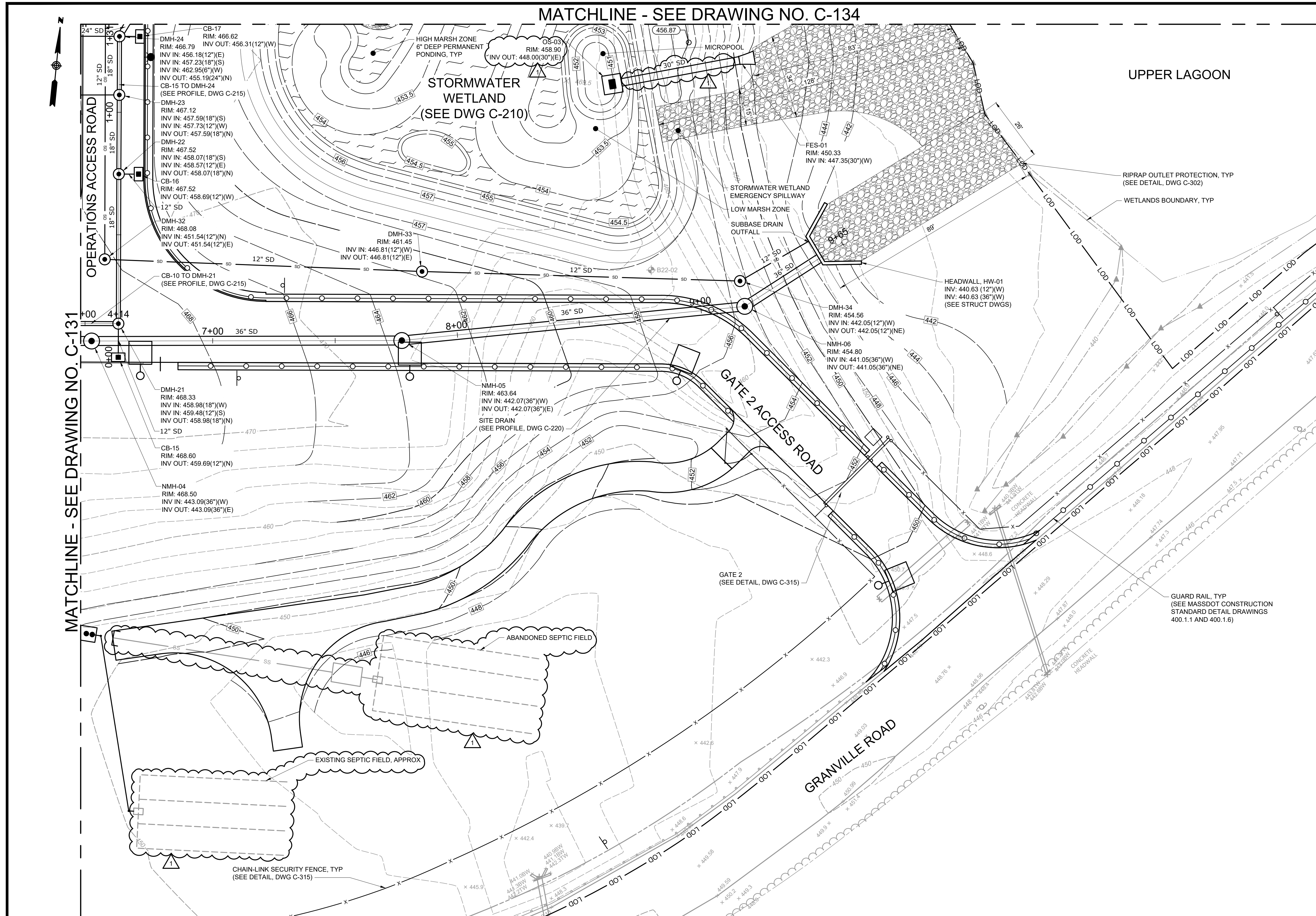
SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL
GRADING AND DRAINAGE PLAN
SHEET 1

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-131

MATCHLINE - SEE DRAWING NO. C-134

- NOTES:
- BELOW GRADE INFRASTRUCTURE AND YARD PIPING NOT SHOWN FOR CLARITY. SEE YARD PIPING DRAWINGS C-140 TO C-145.
 - SEE DRAWINGS C-211 THROUGH C-215 FOR STORM DRAIN PLANS AND PROFILES.
 - SEE DRAWINGS C-201 THROUGH C-205 FOR ACCESS ROAD PLANS AND PROFILES.



KEY MAP
NTS

SCALE: 1" = 20'

File: C:\USERS\JLUDCACC\GCSHAZEN AND SAWYER\PROJECT FILES\CIVIL\C-132 Saved by: JLU Save date: 5/22/2024 4:39 PM PLOT DATE: 5/22/2024 4:40 PM BY: JLU

REV	ISSUED FOR	DATE	BY
1	ADDENDUM NO. 12	MAY 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

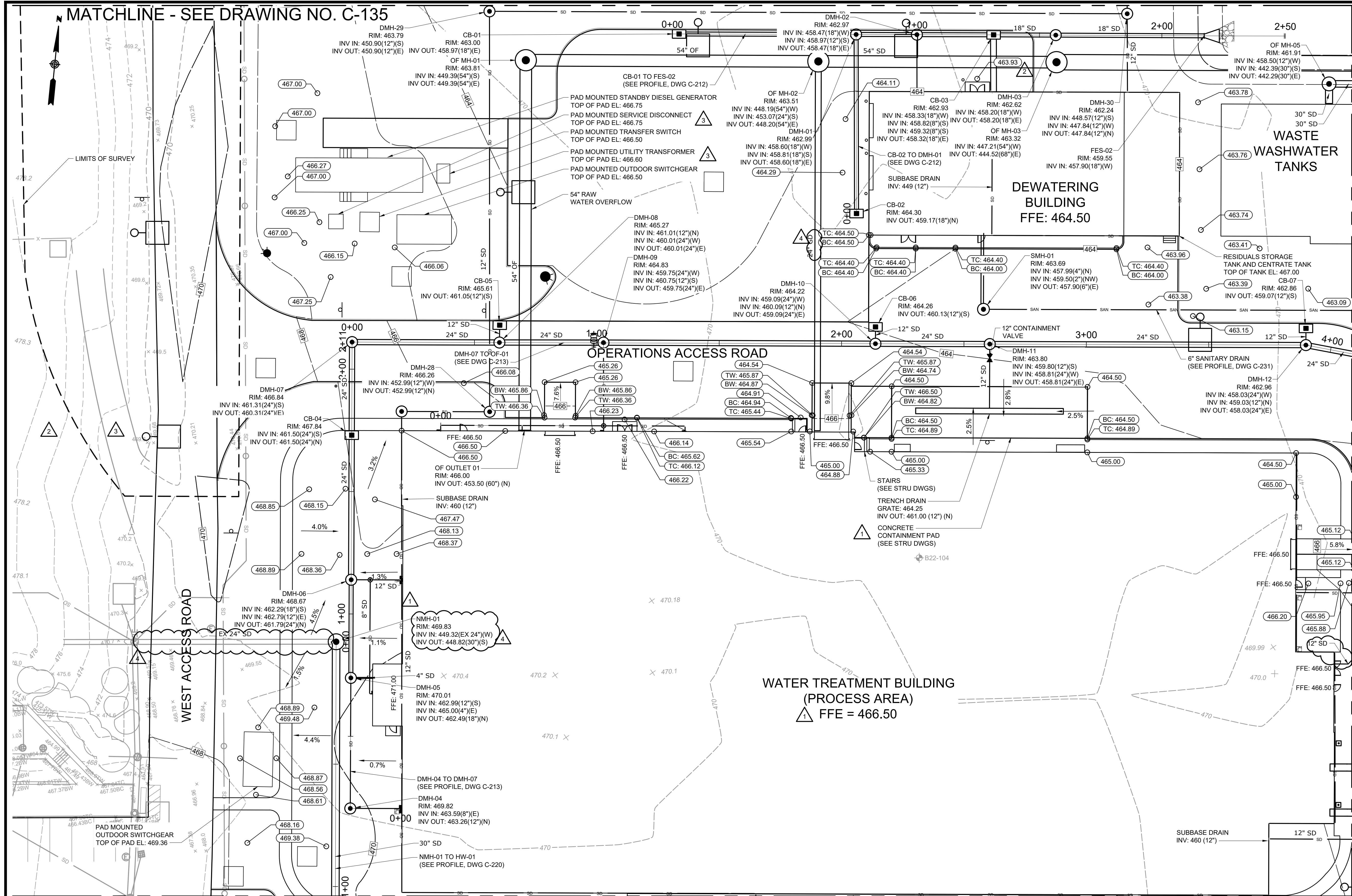
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

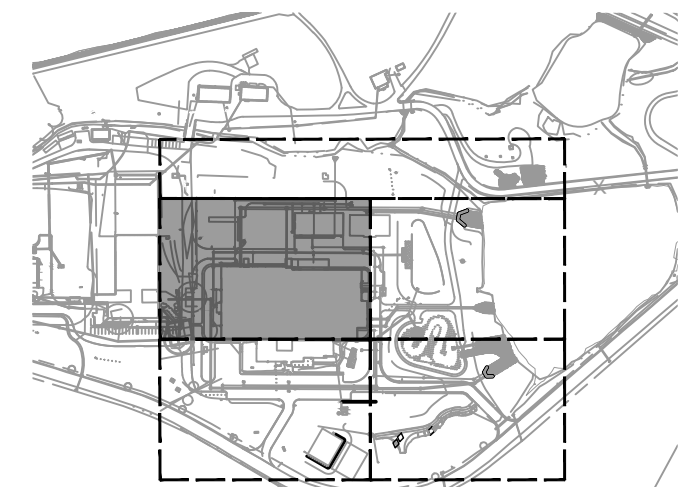
CIVIL
GRADING AND DRAINAGE PLAN
SHEET 2

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-132



- NOTES:**
- BELOW GRADE INFRASTRUCTURE AND YARD PIPING NOT SHOWN FOR CLARITY. SEE YARD PIPING DRAWINGS C-140 TO C-145.
 - SEE DRAWINGS C-211 THROUGH C-215 FOR STORM DRAIN PLANS AND PROFILES.
 - SEE DRAWINGS C-201 THROUGH C-205 FOR ACCESS ROAD PLANS AND PROFILES.

MATCHLINE - SEE DRAWING NO. C-134



KEY MAP
NTS

SCALE: 1" = 20'

4	ADDENDUM NO. 12	MAY 24	MWM
3	ADDENDUM NO. 4	APR 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

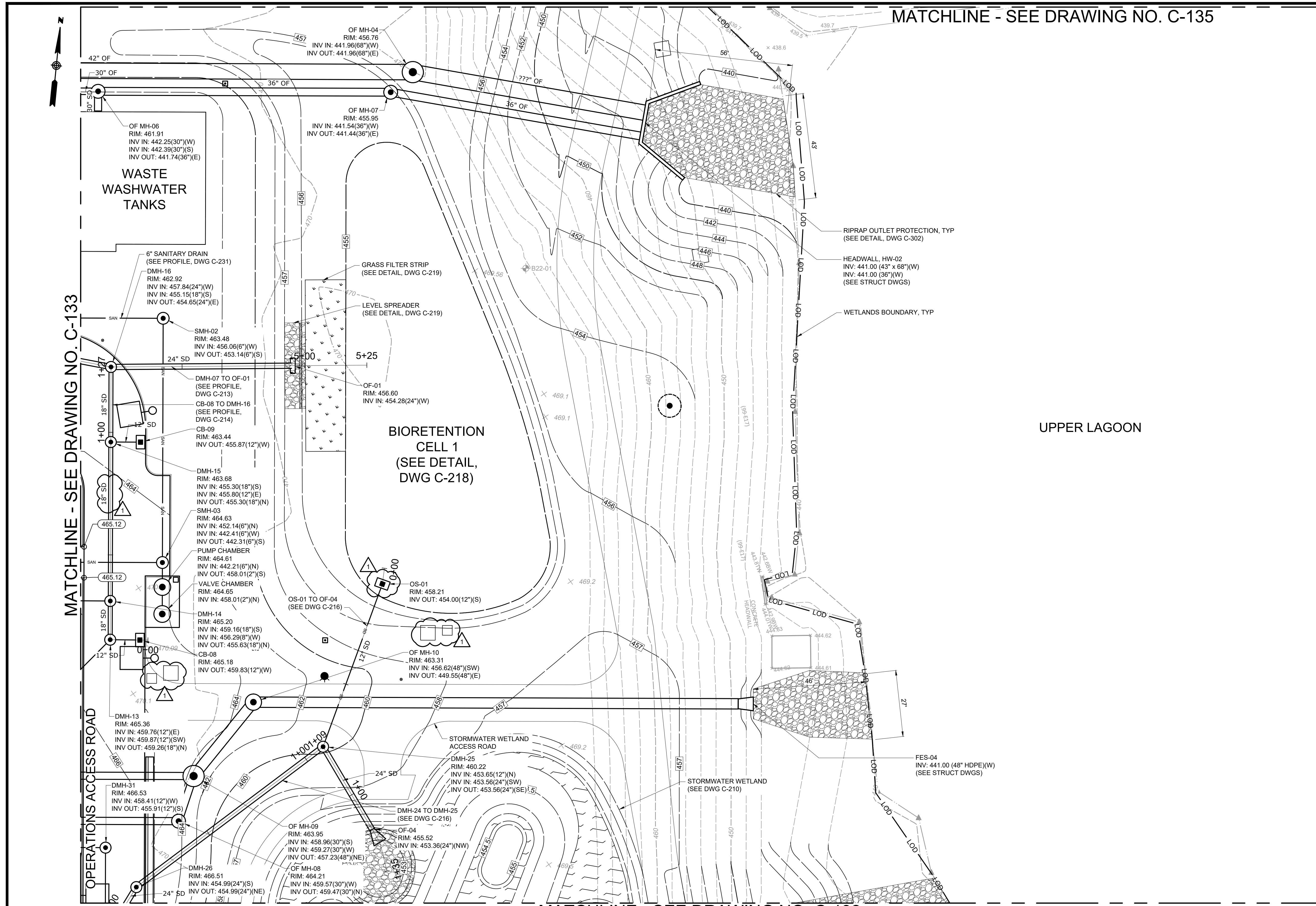
CIVIL
GRADING AND DRAINAGE PLAN
SHEET 3

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-133

MATCHLINE - SEE DRAWING NO. C-135

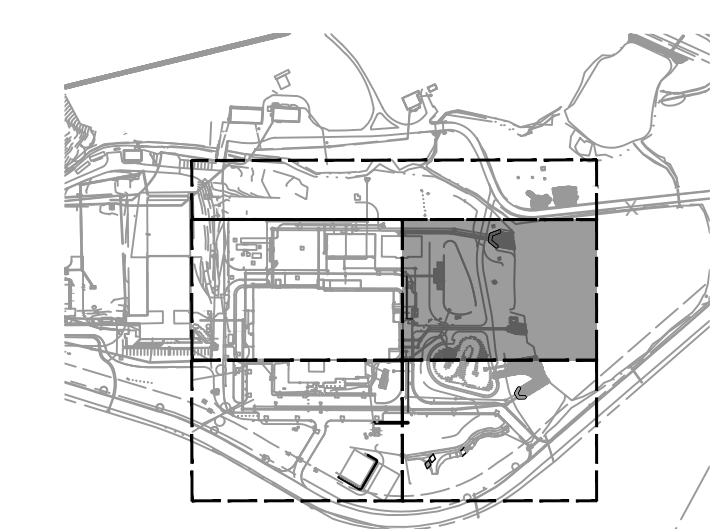
NOTES:

- BELOW GRADE INFRASTRUCTURE AND YARD PIPING NOT SHOWN FOR CLARITY. SEE YARD PIPING DRAWINGS C-140 TO C-145.
- 60" OVERFLOW DISCHARGE LOCATION WILL REQUIRE REGRADING OVER THE TOP OF EXISTING ELECTRICAL DUCT BANK. THE DUCT BANKS MUST BE RELOCATED AND SET TO MINIMUM BURIAL DEPTH. SEE YARD PIPING DRAWING C-144.
- SEE DRAWINGS C-211 THROUGH C-215 FOR STORM DRAIN PLANS AND PROFILES.



MATCHLINE - SEE DRAWING NO. C-133

MATCHLINE - SEE DRAWING NO. C-132

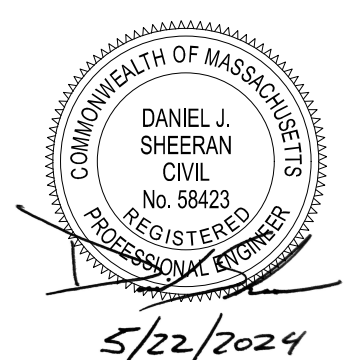


KEY MAP
NTS

SCALE: 1" = 20'

File: C:\USERS\JLUDCACC\DRAWINGS\HAZEN AND SAWYER\09398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-134.dwg, Date: 5/22/2024, 4:38 PM, PLOT DATE: 5/22/2024, 4:38 PM, BY: JLU

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
DATE	BY
1 ADDENDUM NO. 12 MAY 24 MWM	
0 ISSUED FOR BIDS FEB 24 MWM	
REV	ISSUED FOR

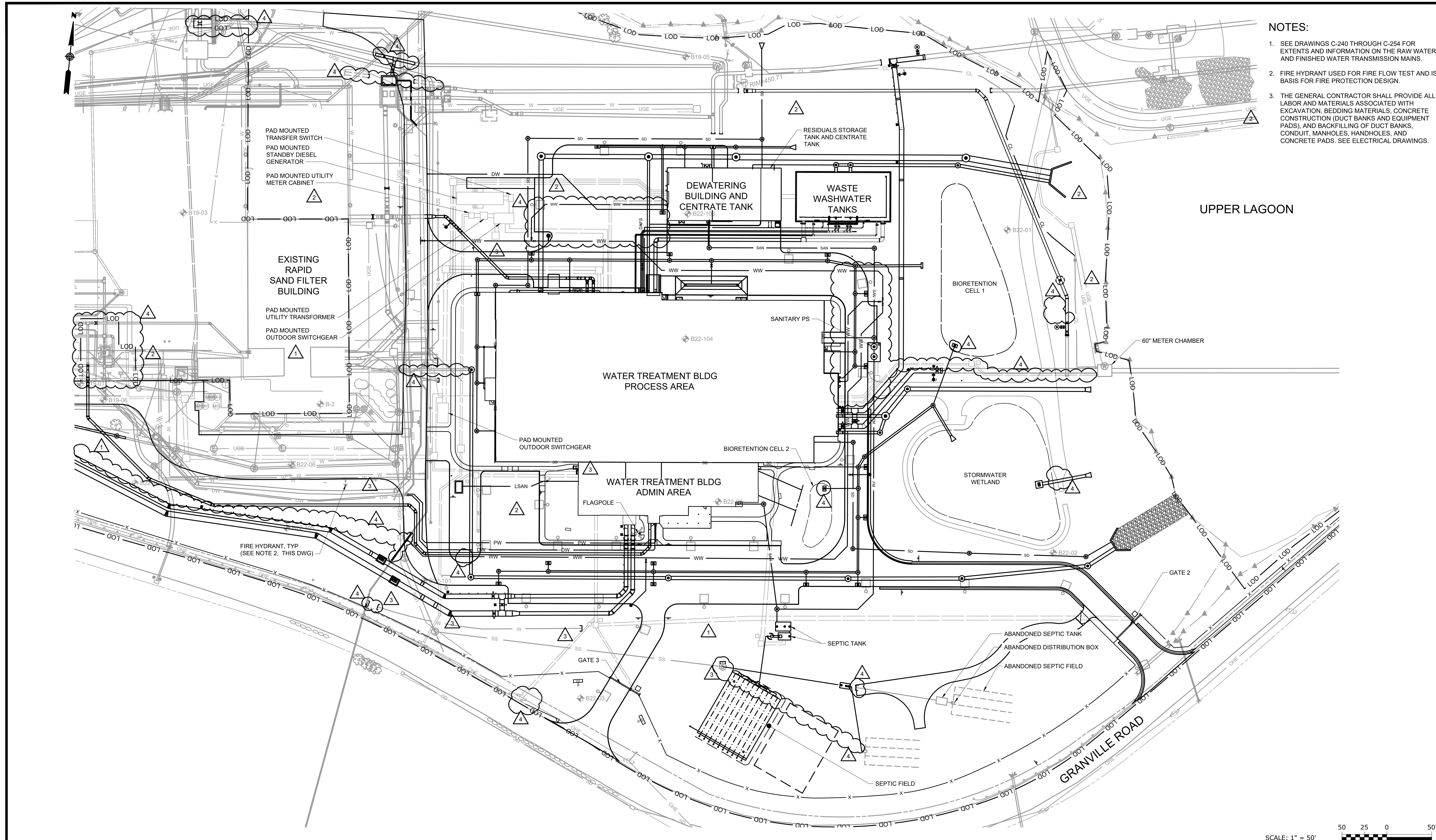


Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL GRADING AND DRAINAGE PLAN SHEET 4
DATE: FEBRUARY 2024
HAZEN NO.: 90398-004
CONTRACT NO.: 24-51
DRAWING NUMBER:
C-134

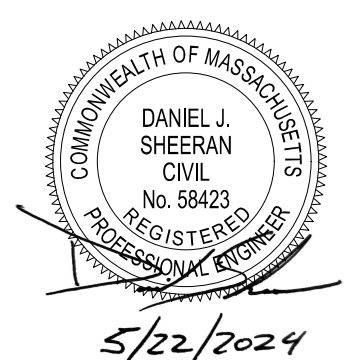
- NOTES:**
- SEE DRAWINGS C-240 THROUGH C-254 FOR EXTENTS AND INFORMATION ON THE RAW WATER AND FINISHED WATER TRANSMISSION MAINS.
 - FIRE HYDRANT USED FOR FIRE FLOW TEST AND IS BASIS FOR FIRE PROTECTION DESIGN.
 - THE GENERAL CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS ASSOCIATED WITH EXCAVATION, BEDDING MATERIALS, CONCRETE CONSTRUCTION (DUCT BANKS AND EQUIPMENT PADS), AND BACKFILLING OF DUCT BANKS, CONDUIT, MANHOLES, HANDHOLES, AND CONCRETE PADS. SEE ELECTRICAL DRAWINGS.



SCALE: 1" = 50'

File: C:\USERS\JLU\DRAWING\SHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL-C-140 Saved by KROBBINS Save date: 5/22/2024 10:14 AM
 PLOT DATE: 5/22/2024 5:12 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	L. WALLACE		
DRAWN BY:	J. LU		
CHECKED BY:	D. SHEERAN		
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0	1/2"	1"
REV	ISSUED FOR	DATE	BY
4	ADDENDUM NO. 12	MAY 24	MWM
3	ADDENDUM NO. 4	APR 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM



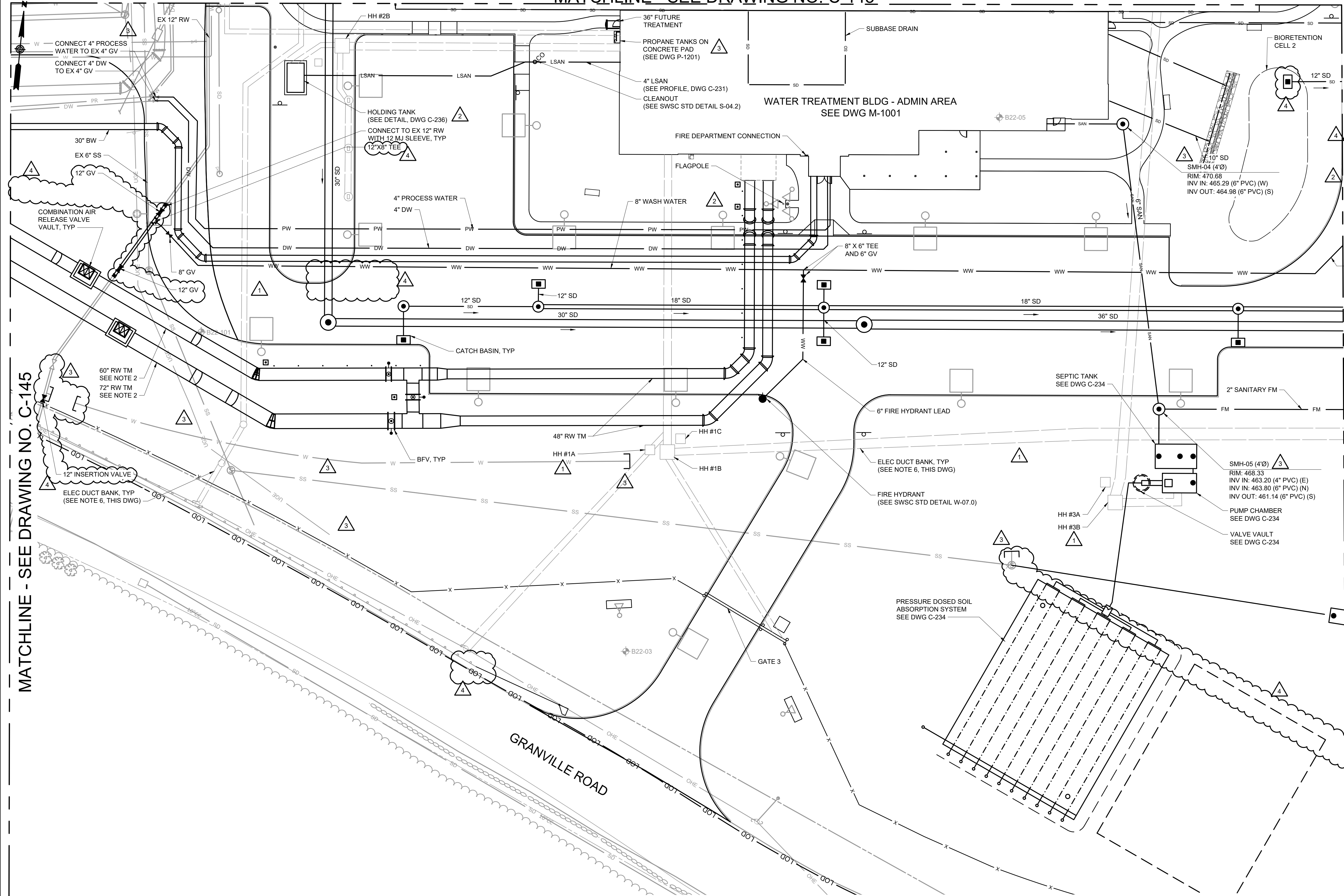
Hazen
 HAZEN AND SAWYER
 100 GREAT MEADOW ROAD, SUITE 702
 WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL OVERALL YARD PIPING PLAN

DATE: FEBRUARY 2024
 HAZEN NO.: 90398-004
 CONTRACT NO.: 24-51
 DRAWING NUMBER: C-140

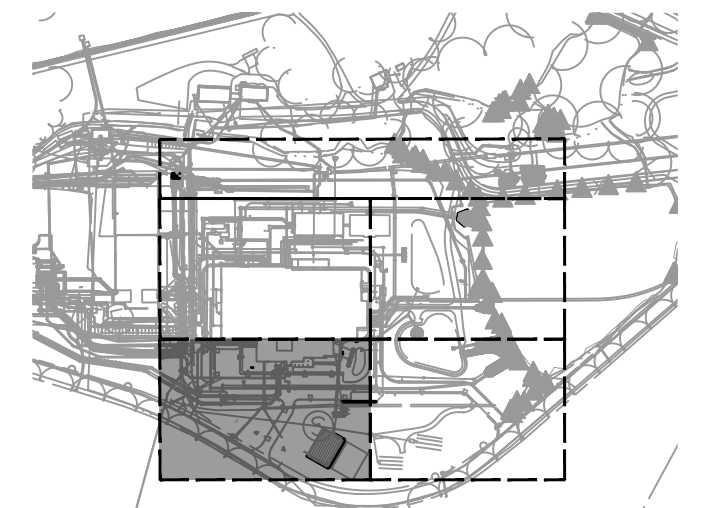
MATCHLINE - SEE DRAWING NO. C-143



- NOTES:**
- SEE DRAWINGS C-131 THROUGH C-136 FOR ADDITIONAL INFORMATION ON STORM DRAINS AND MANHOLES.
 - SEE DRAWINGS C-240 THROUGH C-245 FOR ADDITIONAL INFORMATION ON THE RAW WATER TRANSMISSION MAINS.
 - SEE DRAWINGS C-211 AND C-215 FOR STORM DRAIN PROFILES.
 - SEE DRAWINGS C-271 THROUGH C-274 FOR PROCESS PIPING AND OVERFLOW PROFILES.
 - SEE DRAWING C-275 FOR WATER PIPING PROFILES.
 - ELECTRICAL DUCT BANKS, MANHOLES, HANDHOLES, LIGHTS, AND EQUIPMENT ARE SCREENED FOR CLARITY. SEE ELECTRICAL DRAWINGS E-012 AND E-013 AND NOTE 3 ON DRAWING C-140.

MATCHLINE - SEE DRAWING NO. C-142

MATCHLINE - SEE DRAWING NO. C-145



KEY MAP
NTS

SCALE: 1" = 20'

File: C:\USERS\JLU\DRAWING\HAYZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-141.dwg Save date: 5/20/2024 5:08 PM PLOT DATE: 5/22/2024 5:13 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	L. WALLACE		
DRAWN BY:	J. LU		
CHECKED BY:	D. SHEERAN		
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"		
REV	ISSUED FOR	DATE	BY
4	ADDENDUM NO. 12	MAY 24	MWM
3	ADDENDUM NO. 4	APR 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM



5/22/2024

Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

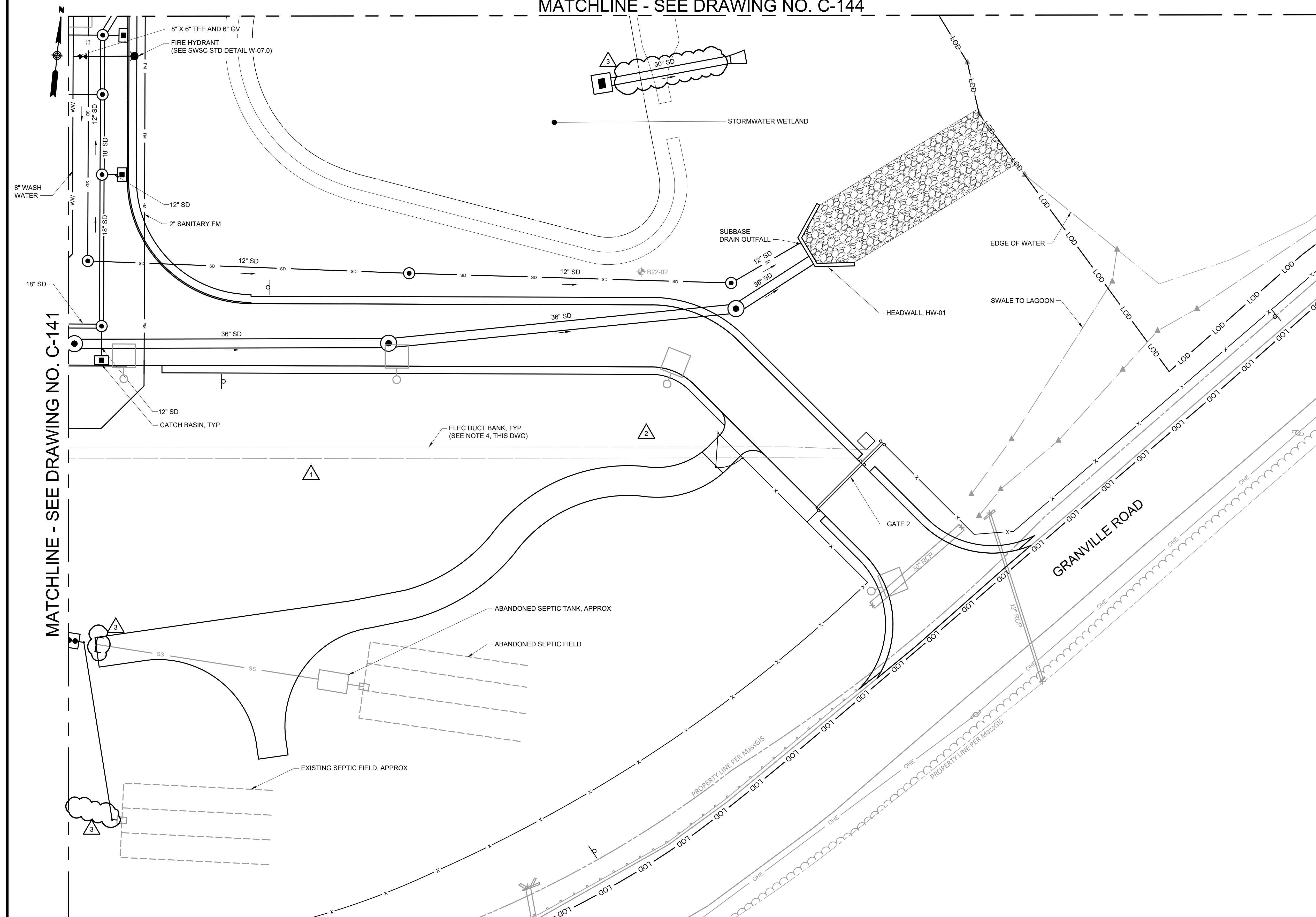
CIVIL
YARD PIPING PLAN
SHEET 1

DATE: FEBRUARY 2024
HAZEN NO.: 90398-004
CONTRACT NO.: 24-51
DRAWING NUMBER:
C-141

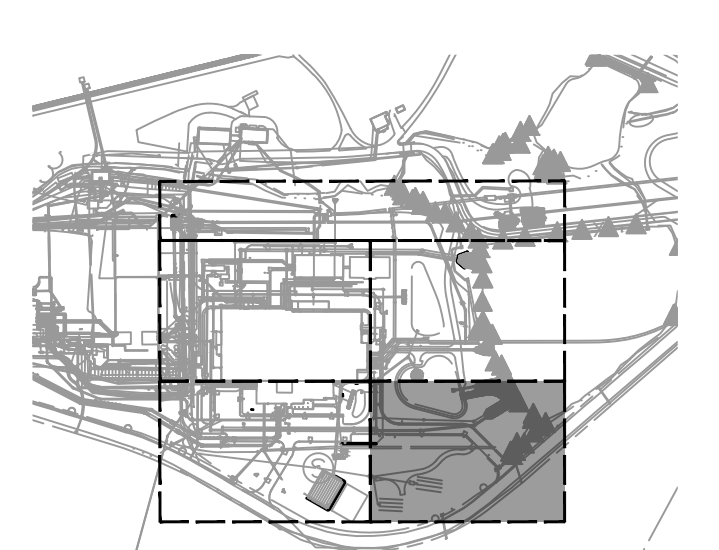
MATCHLINE - SEE DRAWING NO. C-144

NOTES:

- SEE DRAWINGS C-131 THROUGH C-136 FOR ADDITIONAL INFORMATION ON STORM DRAINS AND MANHOLES.
- SEE DRAWINGS C-211 AND C-215 FOR STORM DRAIN PROFILES.
- SEE DRAWING C-275 FOR WASH WATER PROFILE.
- ELECTRICAL DUCT BANKS, MANHOLES, HANDHOLES, LIGHTS, AND EQUIPMENT ARE SCREENED FOR CLARITY. SEE ELECTRICAL DRAWINGS D-012 AND D-013 AND NOTE 3 ON DRAWING C-140.



MATCHLINE - SEE DRAWING NO. C-141

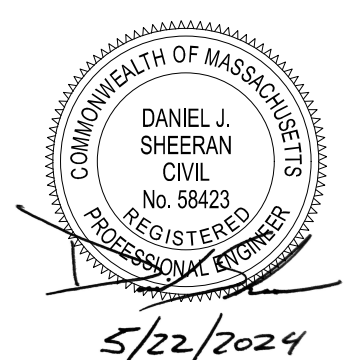


KEY MAP
NTS

SCALE: 1" = 20'

File: C:\USERS\JLUDCACC\DCG\HAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-142 Saved by: JLU Save date: 5/20/2024 5:11 PM PLOT DATE: 5/22/2024 5:14 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	L. WALLACE		
DRAWN BY:	K. ROBBINS		
CHECKED BY:	D. SHEERAN		
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"		
REV	ISSUED FOR	DATE	BY
3	ADDENDUM NO. 12	MAY 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM



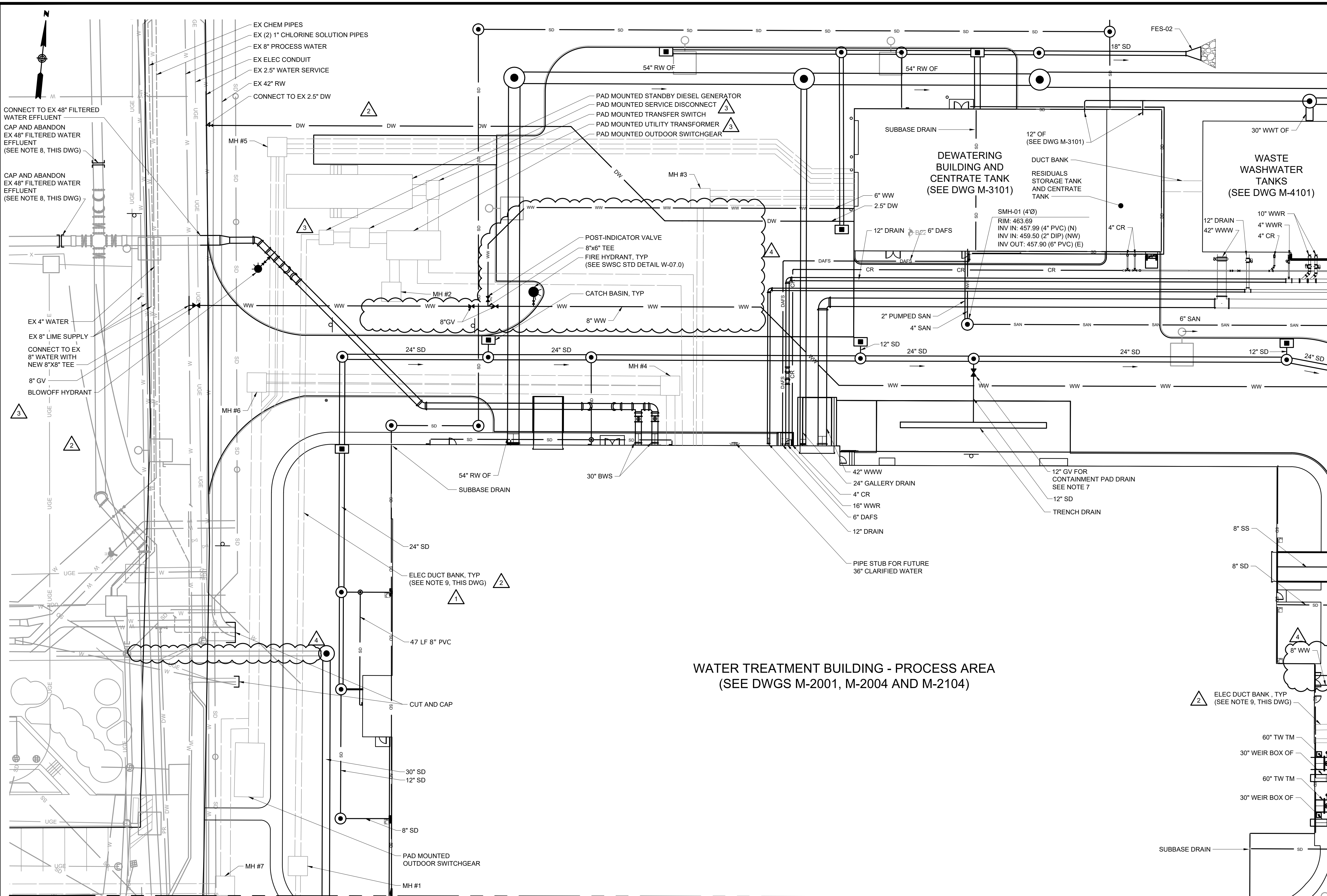
5/22/2024

Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL YARD PIPING PLAN SHEET 2

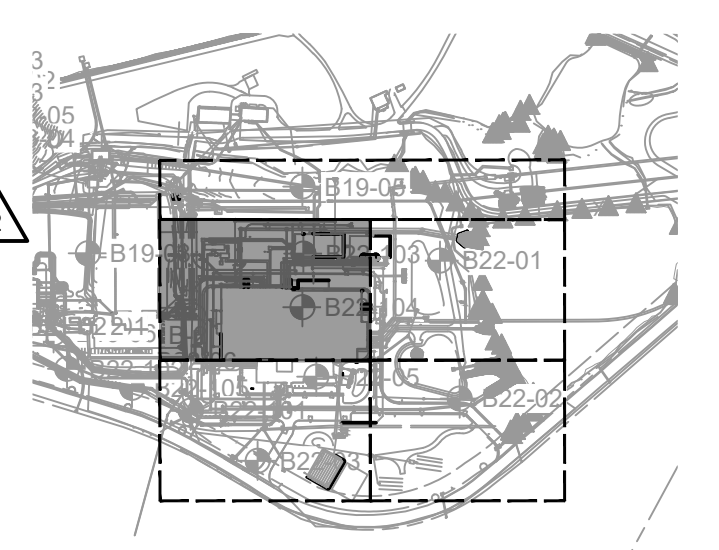
DATE: FEBRUARY 2024
HAZEN NO.: 90398-004
CONTRACT NO.: 24-51
DRAWING NUMBER:
C-142



- NOTES:**
- SEE DRAWINGS C-131 THROUGH C-136 FOR ADDITIONAL INFORMATION ON STORM DRAINS AND MANHOLES.
 - SEE DRAWINGS C-251 THROUGH C-254 FOR ADDITIONAL INFORMATION ON THE FINISHED WATER TRANSMISSION MAINS.
 - SEE DRAWINGS C-212 AND C-216 FOR STORM DRAIN PROFILES.
 - SEE DRAWINGS C-271 THROUGH C-274 FOR PROCESS PIPING AND OVERFLOW PROFILES.
 - SEE DRAWING C-275 FOR WATER PIPING PROFILES.
 - SEE DRAWING E-012 FOR ADDITIONAL INFORMATION ON DUCT BANKS AND ELECTRICAL EQUIPMENT.
 - THE GATE VALVE ON THE 12" PIPE FROM THE CONTAINMENT PAD TO BE CLOSED DURING DELIVERIES. VALVE TO REMAIN OPEN AT ALL OTHER TIMES TO ALLOW FOR STORMWATER TO DRAIN FROM THE CONTAINMENT PAD.
 - INSTALL PIPE CAPS AND ABANDON EXISTING 48" FILTERED WATER EFFLUENT AS SHOWN AND IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION AS SPECIFIED IN SECTION 01 14 00.
 - ELECTRICAL DUCT BANKS, MANHOLES, HANDHOLES, LIGHTS, AND EQUIPMENT ARE SCREENED FOR CLARITY. SEE ELECTRICAL DRAWINGS D-012 AND D-013 AND NOTE 3 ON DRAWING C-140.

MATCHLINE - SEE DRAWING NO. C-144

WATER TREATMENT BUILDING - PROCESS AREA
(SEE DWGS M-2001, M-2004 AND M-2104)



KEY MAP
NTS

SCALE: 1" = 20'

MATCHLINE - SEE DRAWING NO. C-141

File: C:\USERS\JLUDCACC\DCS\HAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-143.dwg Date: 5/20/2024 5:12 PM PLOT DATE: 5/22/2024 5:17 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	L. WALLACE		
DRAWN BY:	K. ROBBINS		
CHECKED BY:	D. SHEERAN		
ADDENDUM NO. 12	MAY 24	MWM	
ADDENDUM NO. 4	APR 24	MWM	
ADDENDUM NO. 3	MAR 24	MWM	
ADDENDUM NO. 2	MAR 24	MWM	
ISSUED FOR BIDS	FEB 24	MWM	
REV	ISSUED FOR	DATE	BY



Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

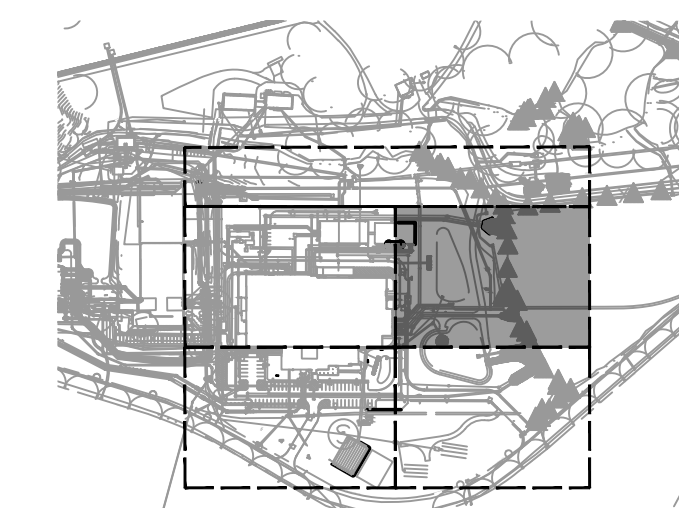
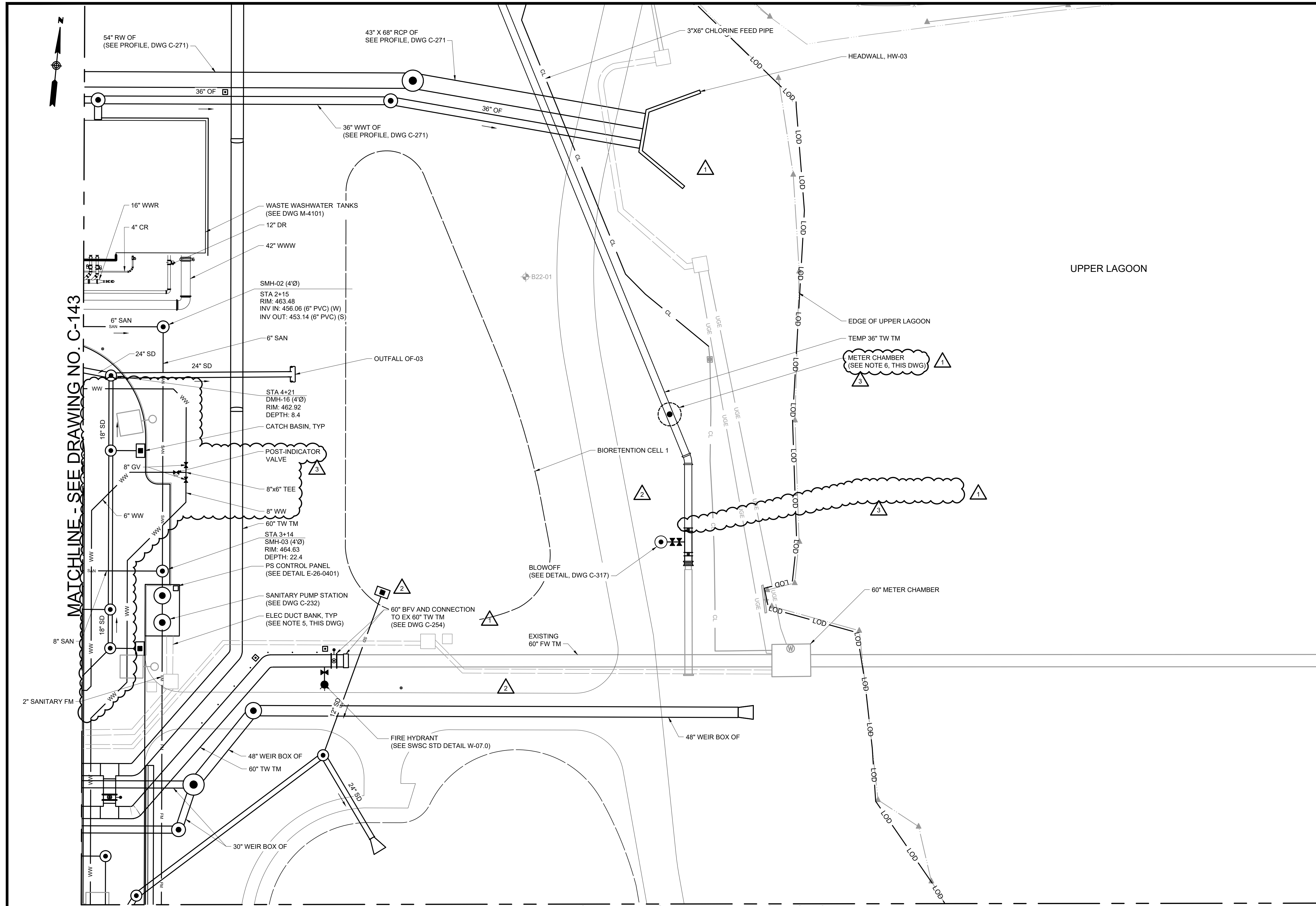
SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL
YARD PIPING PLAN
SHEET 3

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-143

NOTES:

1. SEE DRAWINGS C-131 THROUGH C-136 FOR ADDITIONAL INFORMATION ON STORM DRAINS AND MANHOLES.
2. SEE DRAWINGS C-251 THROUGH C-254 FOR ADDITIONAL INFORMATION ON THE TREATED WATER TRANSMISSION MAINS.
3. SEE DRAWINGS C-212 AND C-216 FOR STORM DRAIN PROFILES.
4. SEE DRAWINGS C-271 THROUGH C-274 FOR OVERFLOW AND PROCESS PIPING PROFILES.
5. ELECTRICAL DUCT BANKS, MANHOLES, HANDHOLES, LIGHTS, AND EQUIPMENT ARE SCREENED FOR CLARITY. SEE ELECTRICAL DRAWINGS E-012 AND E-103 AND NOTE 3 ON DRAWING C-140.
6. REMOVE SPOOL PIECE AND CUT AND CAP TEMPORARY 36" TW TM WITHIN METER CHAMBER. SEE MECHANICAL DWGS.
7. SEE DRAWING C-275 FOR WASH WATER PROFILES.



KEY MAP
NTS

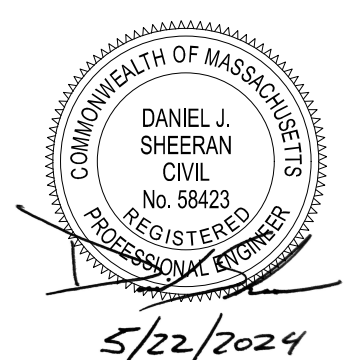
SCALE: 1" = 20'

MATCHLINE - SEE DRAWING NO. C-143

MATCHLINE - SEE DRAWING NO. C-142

File: C:\USERS\JLUDC\DCD\SHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-144.dwg Date: 5/22/2024 5:14 PM PLOT DATE: 5/22/2024 5:18 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	L. WALLACE
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
5/22/2024	

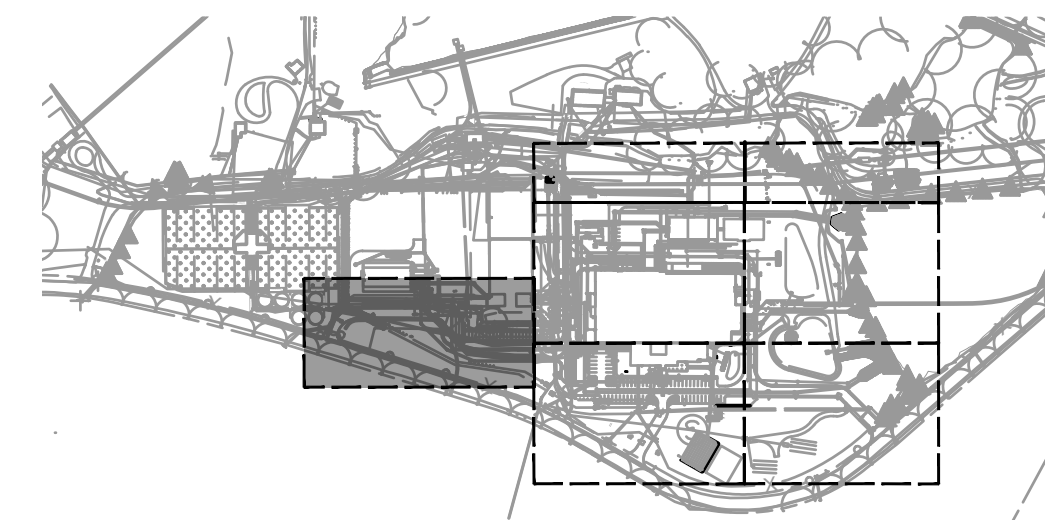


Hazen
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100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

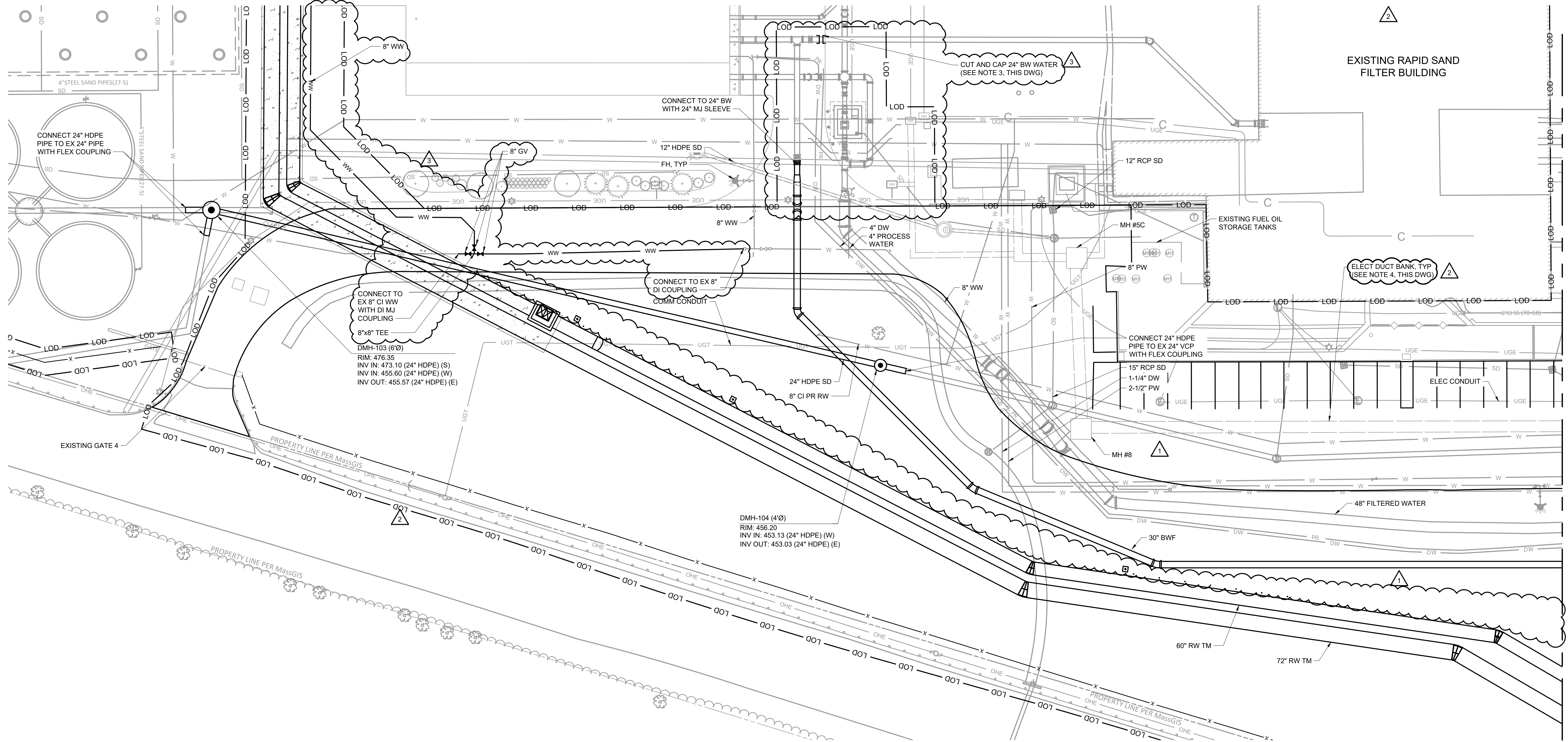
CIVIL YARD PIPING PLAN SHEET 4

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-144



KEY MAP
NTS

- NOTES:**
- SEE DRAWINGS C-240 THROUGH C-246 FOR ADDITIONAL INFORMATION ON THE RAW WATER TRANSMISSION MAINS.
 - SEE DRAWING C-248 FOR WASH WATER PROFILE.
 - SEE SEQUENCE OF CONSTRUCTION SPECIFIED IN SECTION 01 14 00.
 - ELECTRICAL DUCT BANKS, MANHOLES, HANDHOLES, LIGHTS, AND EQUIPMENT ARE SCREENED FOR CLARITY. SEE ELECTRICAL DRAWINGS E-012 AND E-013 AND NOTE 3 ON DRAWING C-140.



MATCHLINE - SEE DRAWING NO. C-141

SCALE: 1" = 20'



File: C:\USERS\JLUDCACC\GSHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-145.dwg Saved by: KROBBINS Save date: 5/22/2024 8:22 PM
PLOT DATE: 5/22/2024 5:21 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	L. WALLACE		
DRAWN BY:	K. ROBBINS		
CHECKED BY:	D. SHEERAN		
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"		
DATE	BY		
3	ADDENDUM NO. 12	MAY 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM
REV	ISSUED FOR	DATE	BY



5/22/2024

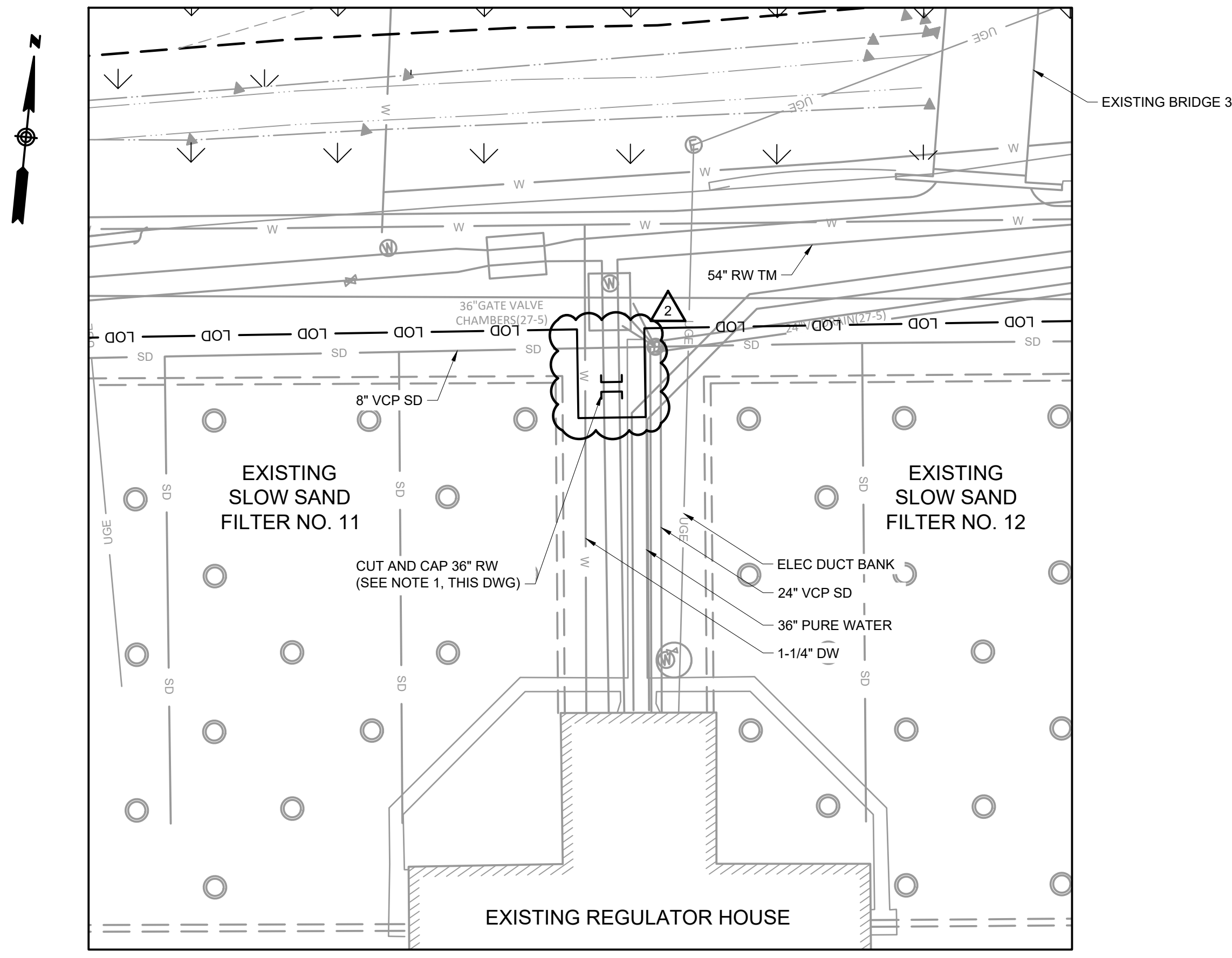
Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

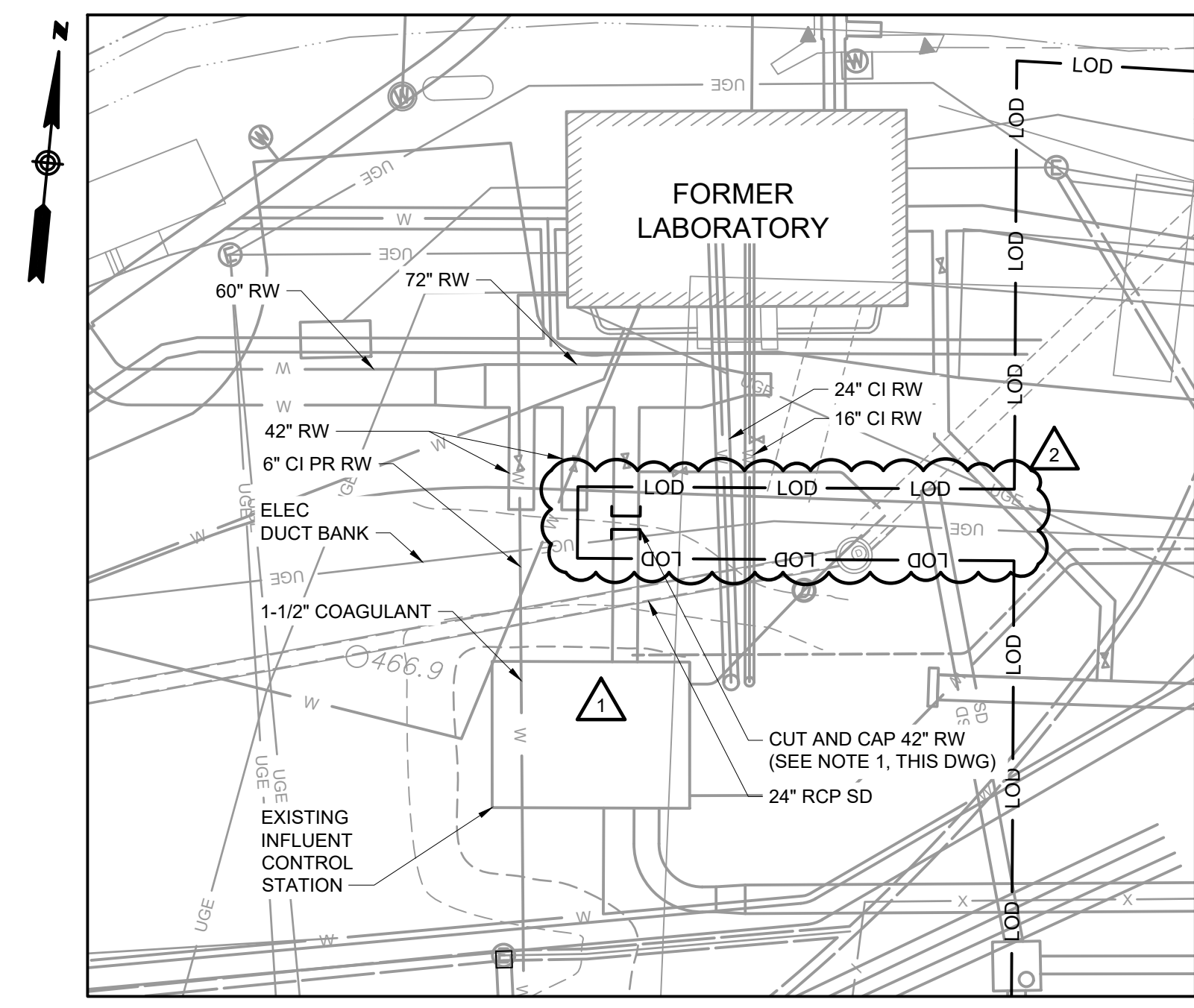
CIVIL YARD PIPING PLAN SHEET 5

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-145

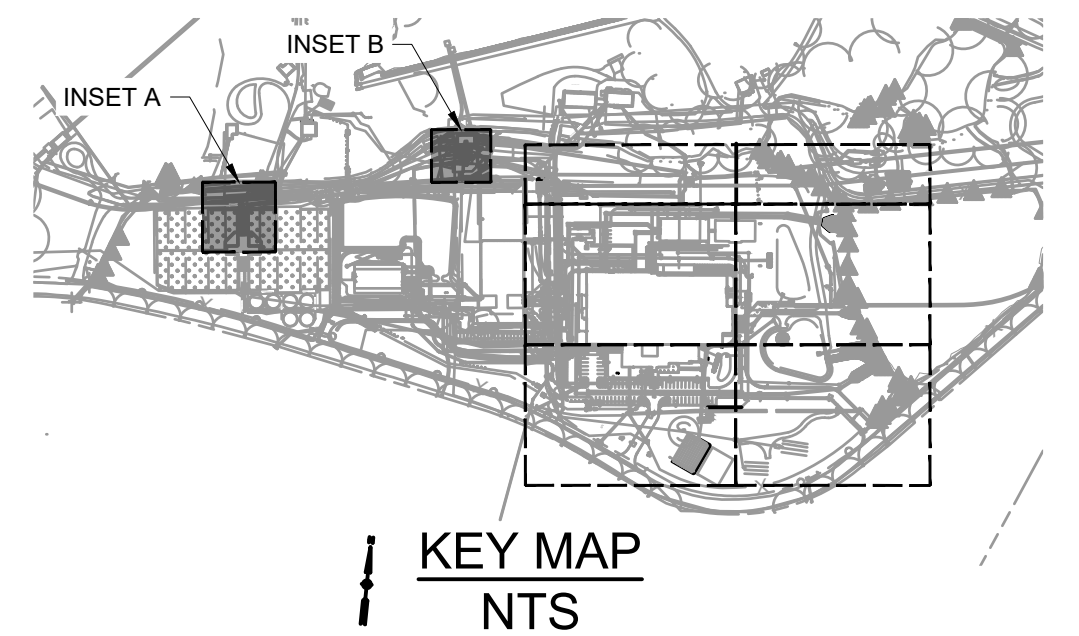
NOTES:
 1. SEE SEQUENCE OF CONSTRUCTION SPECIFIED IN SECTION 01 14 00.



INSET A - SSF 11 AND 12
 SCALE: 1" = 20'



INSET B - INFLUENT CONTROL STATION
 SCALE: 1" = 20'



SCALE: 1" = 20'

File: C:\USERS\JLUDCACC\CSHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-146 Saved by: JLU Save date: 5/20/2024 5:16 PM
 PLOT DATE: 5/22/2024 5:22 PM BY: JLU

				PROJECT ENGINEER:	K. BARRETT
				DESIGNED BY:	L. WALLACE
				DRAWN BY:	K. ROBBINS
				CHECKED BY:	D. SHEERAN
2	ADDENDUM NO. 12	MAY 24	MWM	IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"
1	ADDENDUM NO. 2	MAR 24	MWM		
0	ISSUED FOR BIDS	FEB 24	MWM		
REV	ISSUED FOR	DATE	BY		



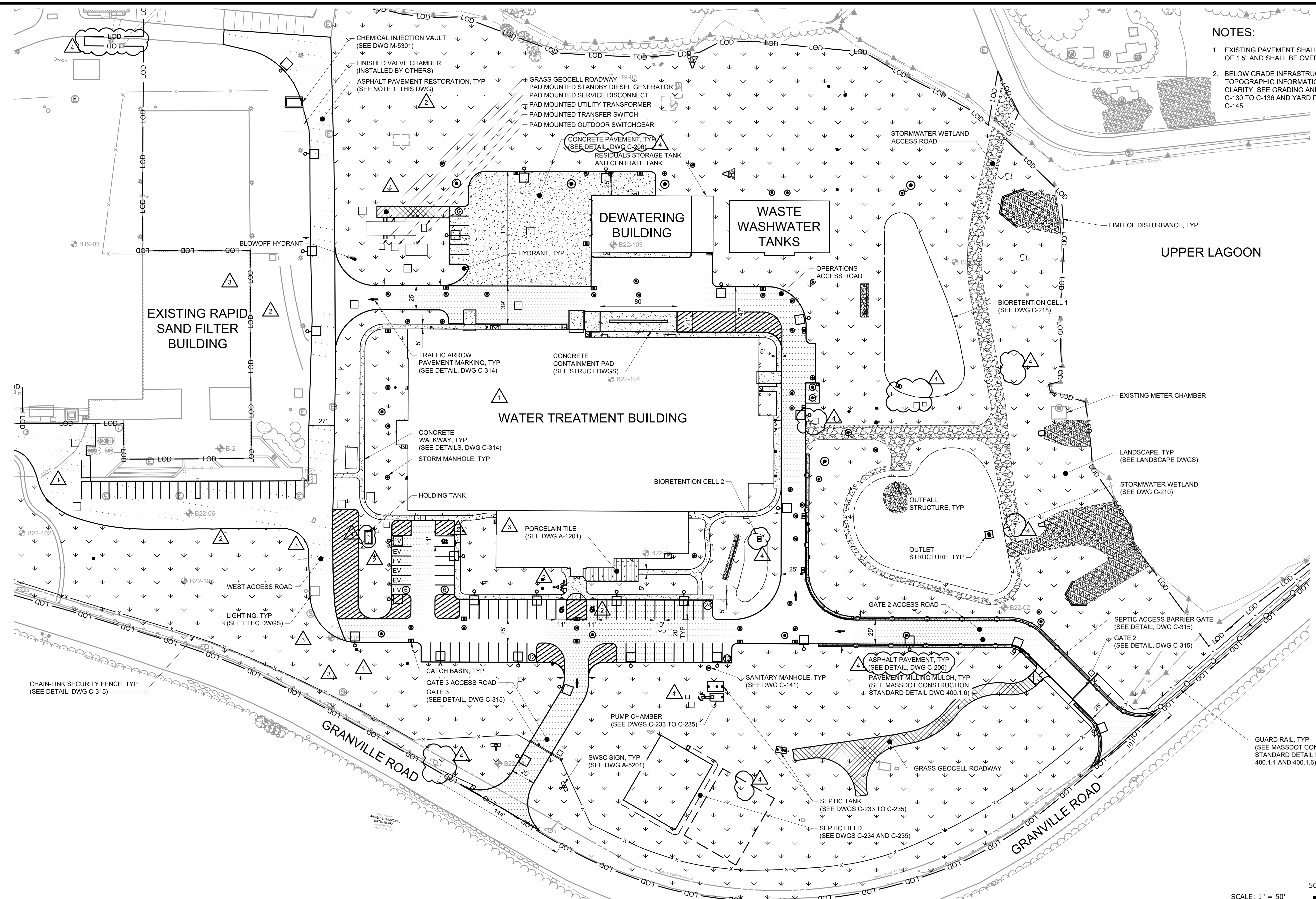
Hazen
 HAZEN AND SAWYER
 100 GREAT MEADOW ROAD, SUITE 702
 WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL YARD PIPING PLAN SHEET 6

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-146

- NOTES:**
- EXISTING PAVEMENT SHALL BE MILLED TO A MINIMUM OF 1.5" AND SHALL BE OVERLAID TO FINAL GRADES.
 - BELOW GRADE INFRASTRUCTURE, YARD PIPING, AND TOPOGRAPHIC INFORMATION NOT SHOWN FOR CLARITY. SEE GRADING AND DRAINAGE DRAWINGS C-130 TO C-136 AND YARD PIPING DRAWINGS C-140 TO C-145.



File: C:\USERS\JLUDCACC\DCSHAZEN AND SAWYER\PROJECT FILES\CIVIL\C-150_SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-150_SAWYER.dwg: 5/22/2024 4:47 PM
 PLOT DATE: 5/22/2024 5:24 PM BY: JLU

REV	ISSUED FOR	DATE	BY
4	ADDENDUM NO. 12	MAY 24	MWM
3	ADDENDUM NO. 4	APR 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	
0	1/2" 1"



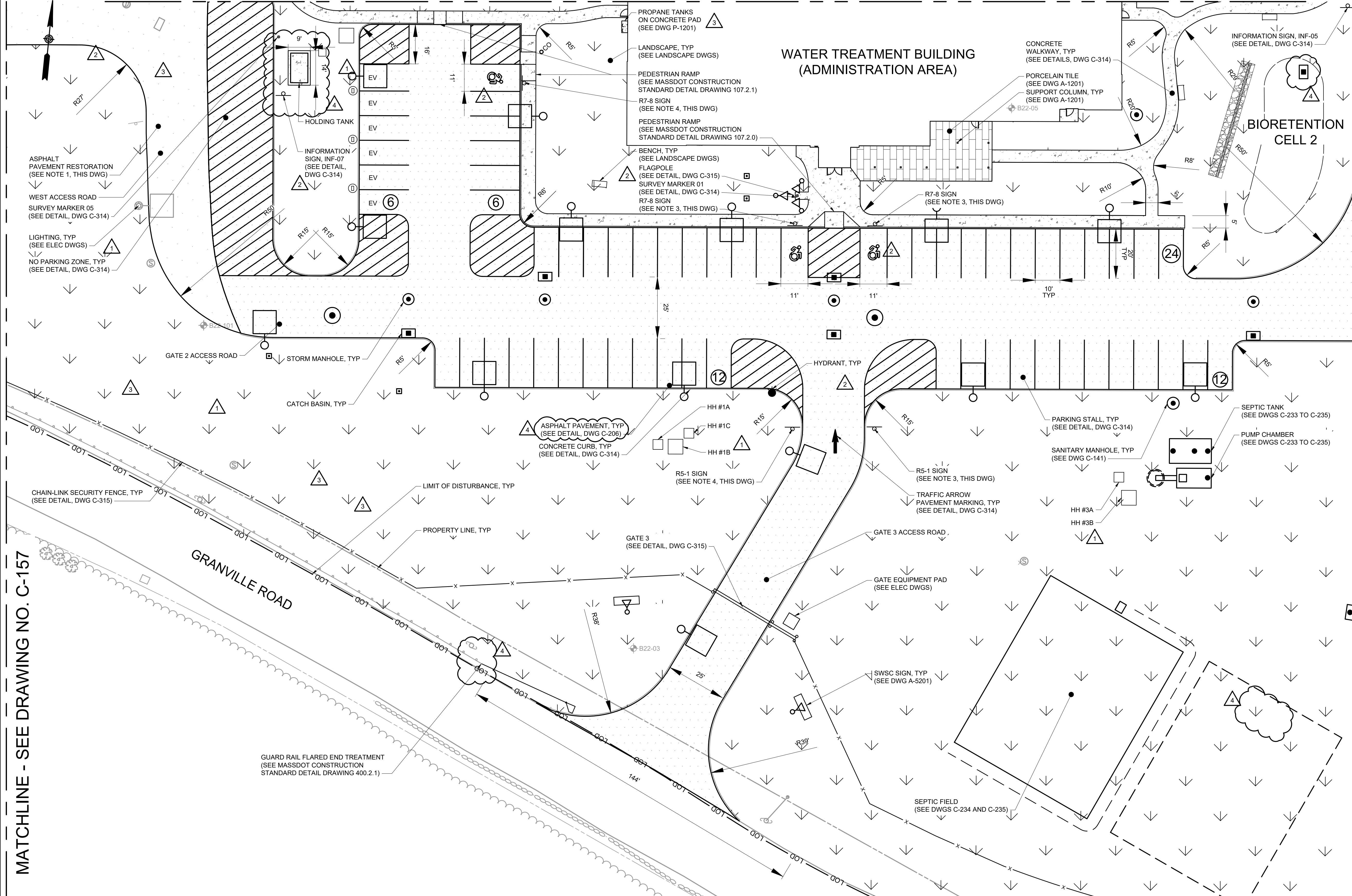
Hazen
 HAZEN AND SAWYER
 100 GREAT MEADOW ROAD, SUITE 702
 WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL OVERALL FINAL SITE PLAN

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-150

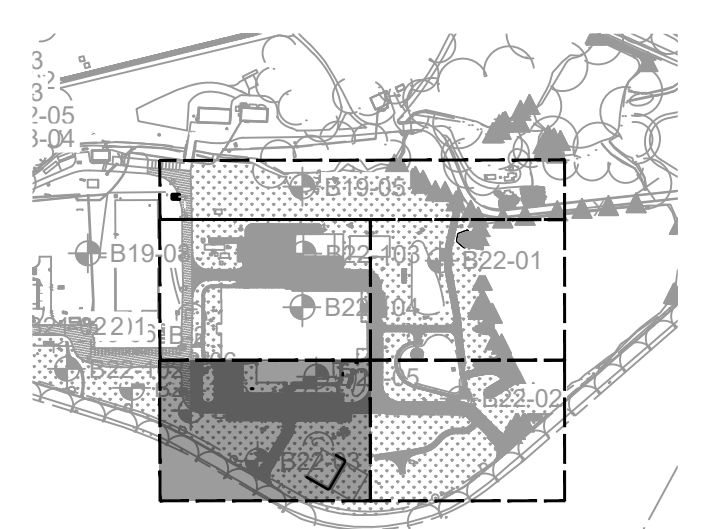
MATCHLINE - SEE DRAWING NO. C-153



- NOTES:**
- EXISTING PAVEMENT SHALL BE MILLED TO A MINIMUM OF 1.5" AND SHALL BE OVERLAID TO FINAL GRADES.
 - BELOW GRADE INFRASTRUCTURE, YARD PIPING, AND TOPOGRAPHIC INFORMATION NOT SHOWN FOR CLARITY. SEE GRADING AND DRAINAGE DRAWINGS C-130 TO C-136 AND YARD PIPING DRAWINGS C-140 TO C-145.
 - NEW SIGNS SHALL CONFORM TO THE 2009 MUTCD FOR SIZE, COLOR, AND TEXT DIMENSION. SEE DWG C-314 FOR MUTCD SIGN SCHEDULE.

MATCHLINE - SEE DRAWING NO. C-152

MATCHLINE - SEE DRAWING NO. C-157

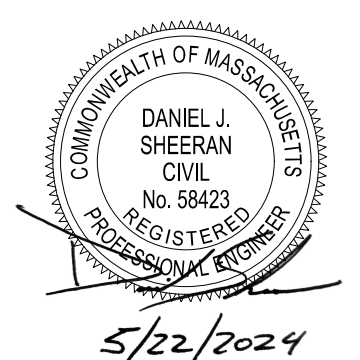


KEY MAP NTS

SCALE: 1" = 20'

File: C:\USERS\JLUDCACC\DCS\HAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-151 Saved by: JLU Save date: 5/20/2024 5:17 PM PLOT DATE: 5/22/2024 5:24 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	J. RIVAS		
DRAWN BY:	K. ROBBINS		
CHECKED BY:	D. SHEERAN		
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0	1/2"	1"
REV	ISSUED FOR	DATE	BY
4	ADDENDUM NO. 12	MAY 24	MWM
3	ADDENDUM NO. 4	APR 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM



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WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL FINAL SITE PLAN SHEET 1

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-151

MATCHLINE - SEE DRAWING NO. C-154

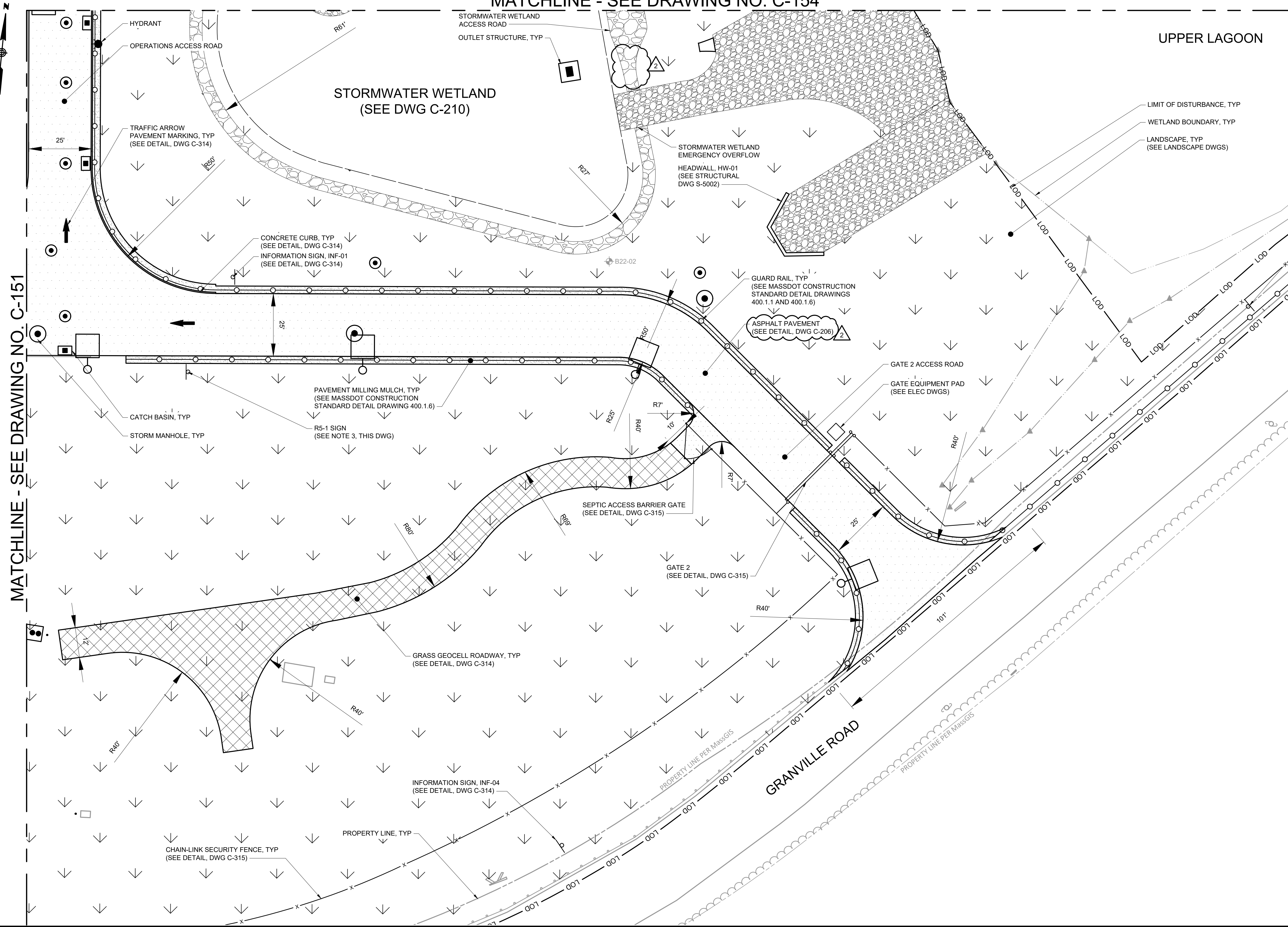
UPPER LAGOON

NOTES:

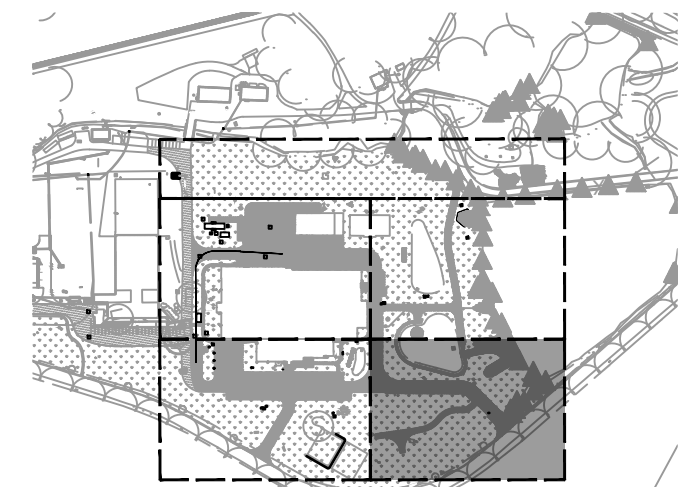
- EXISTING PAVEMENT SHALL BE MILLED TO A MINIMUM OF 1.5" AND SHALL BE OVERLAID TO FINAL GRADES.
- BELOW GRADE INFRASTRUCTURE, YARD PIPING, AND TOPOGRAPHIC INFORMATION NOT SHOWN FOR CLARITY. SEE GRADING AND DRAINAGE DRAWINGS C-130 TO C-136 AND YARD PIPING DRAWINGS C-140 TO C-145.
- NEW SIGNS SHALL CONFORM TO THE 2009 MUTCD FOR SIZE, COLOR, AND TEXT DIMENSION. SEE DWG C-314 FOR MUTCD SIGN SCHEDULE.



MATCHLINE - SEE DRAWING NO. C-151

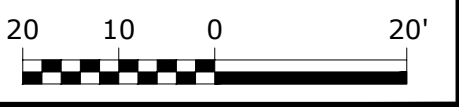


INFORMATION SIGN, INF-03
(SEE DETAIL, DWG C-314)



KEY MAP
NTS

SCALE: 1" = 20'



File: C:\USERS\JLUDC\DCD\SHAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-152 Saved by: JLU Save date: 5/20/2024 5:19 PM PLOT DATE: 5/22/2024 5:25 PM BY: JLU

REV	ISSUED FOR	DATE	BY
2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

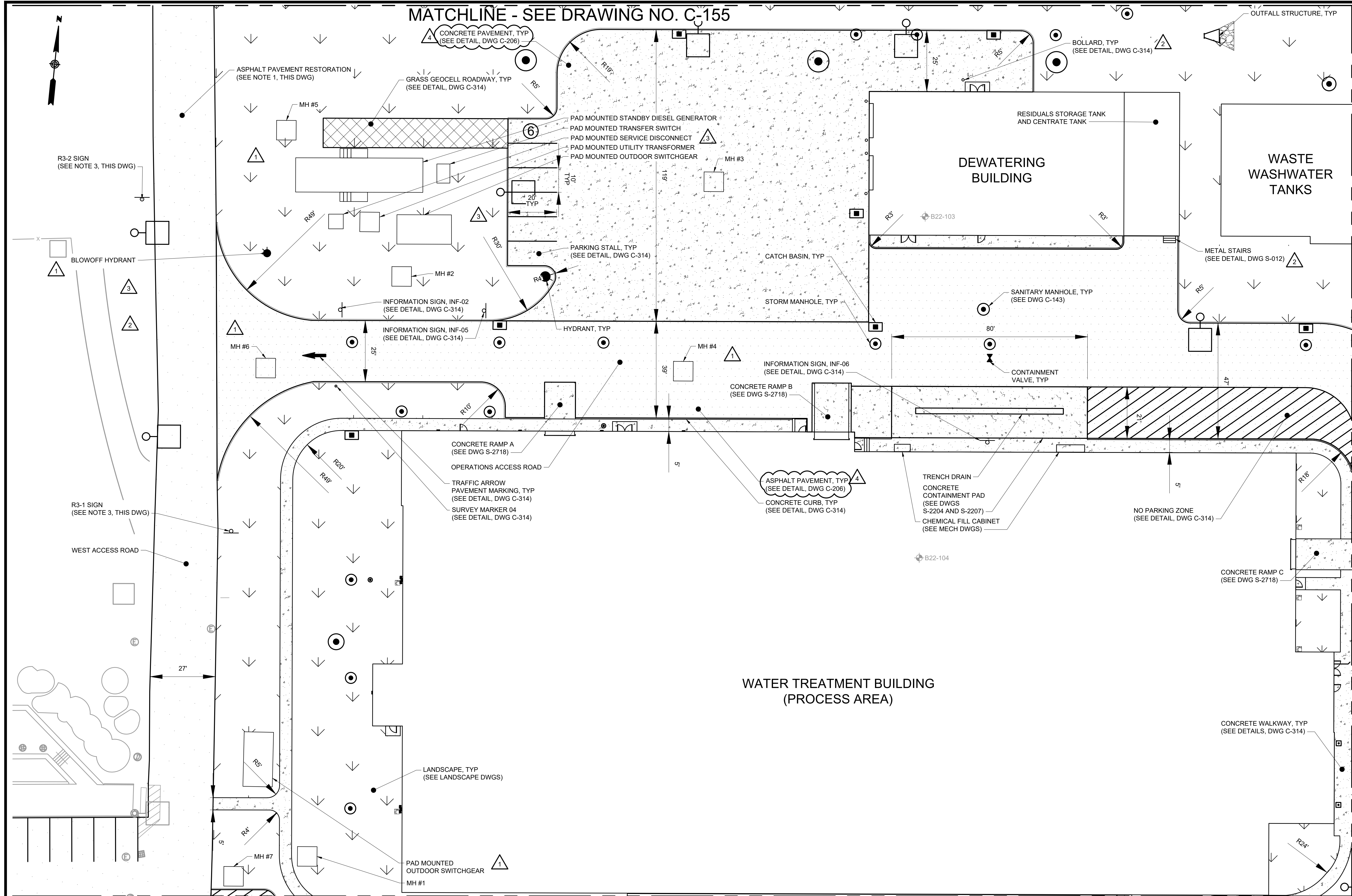
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

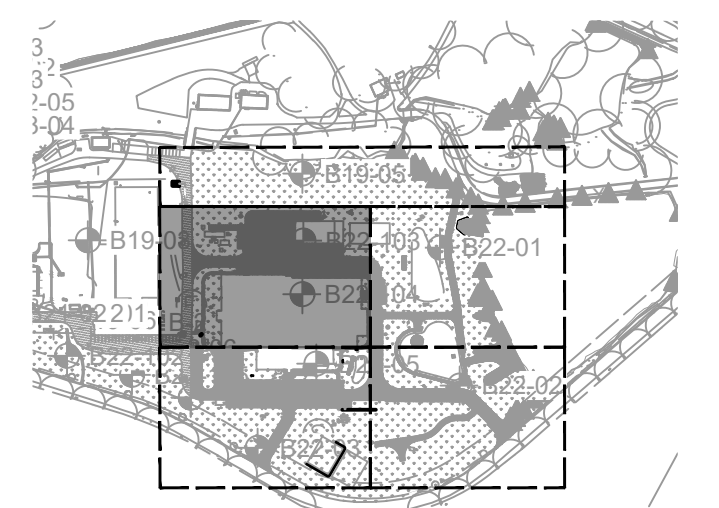
CIVIL FINAL SITE PLAN SHEET 2

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-152



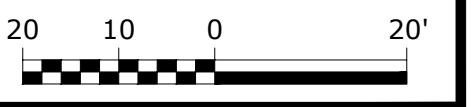
- NOTES:**
- EXISTING PAVEMENT SHALL BE MILLED TO A MINIMUM OF 1.5" AND SHALL BE OVERLAID TO FINAL GRADES.
 - BELOW GRADE INFRASTRUCTURE, YARD PIPING, AND TOPOGRAPHIC INFORMATION NOT SHOWN FOR CLARITY. SEE GRADING AND DRAINAGE DRAWINGS C-130 TO C-136 AND YARD PIPING DRAWINGS C-140 TO C-145.
 - NEW SIGNS SHALL CONFORM TO THE 2009 MUTCD FOR SIZE, COLOR, AND TEXT DIMENSION. SEE DWG C-314 FOR MUTCD SIGN SCHEDULE.

MATCHLINE - SEE DRAWING NO. C-154



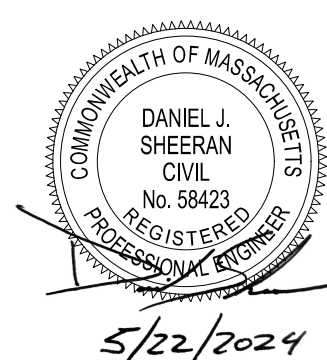
**KEY MAP
NTS**

SCALE: 1" = 20'



File: C:\USERS\JLUDCACC\DCS\HAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-153 Saved by: JLU Save date: 5/20/2024 5:20 PM PLOT DATE: 5/22/2024 5:28 PM BY: JLU

PROJECT ENGINEER:	K. BARRETT		
DESIGNED BY:	J. RIVAS		
DRAWN BY:	K. ROBBINS		
CHECKED BY:	D. SHEERAN		
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0	1/2"	1"
REV	ISSUED FOR	DATE	BY
4	ADDENDUM NO. 12	MAY 24	MWM
3	ADDENDUM NO. 4	APR 24	MWM
2	ADDENDUM NO. 3	MAR 24	MWM
1	ADDENDUM NO. 2	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM



Hazen
HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION
WEST PARISH WATER TREATMENT PLANT

CIVIL FINAL SITE PLAN SHEET 3

DATE: FEBRUARY 2024
HAZEN NO.: 90398-004
CONTRACT NO.: 24-51
DRAWING NUMBER:
C-153

MATCHLINE - SEE DRAWING NO. C-155

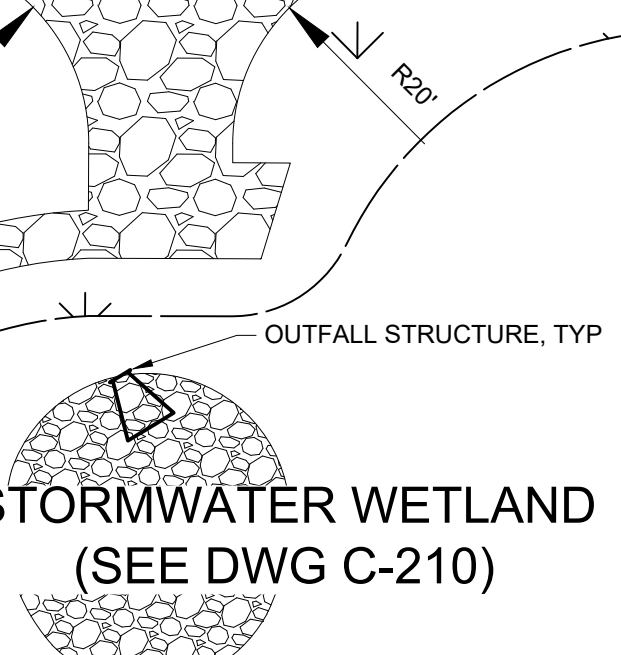
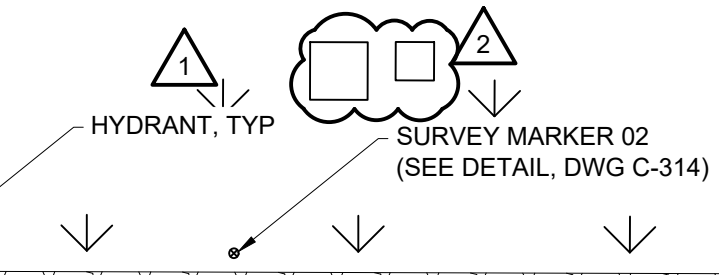
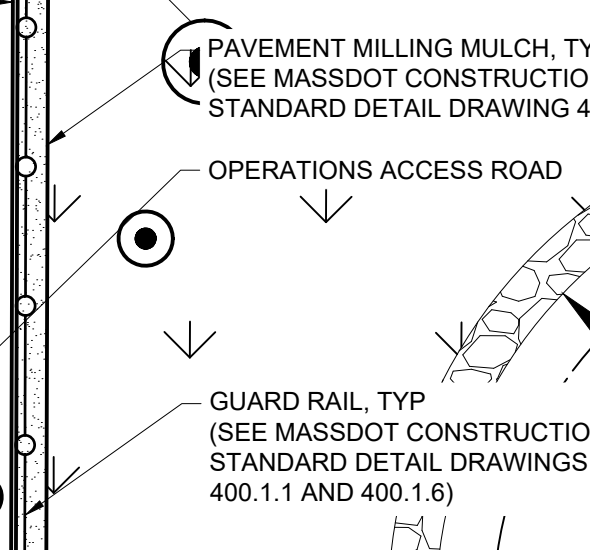
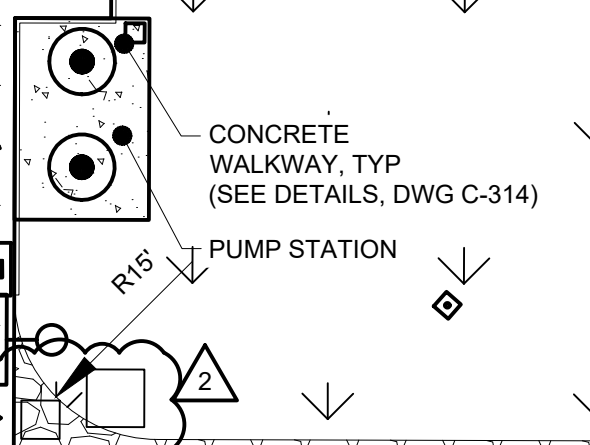
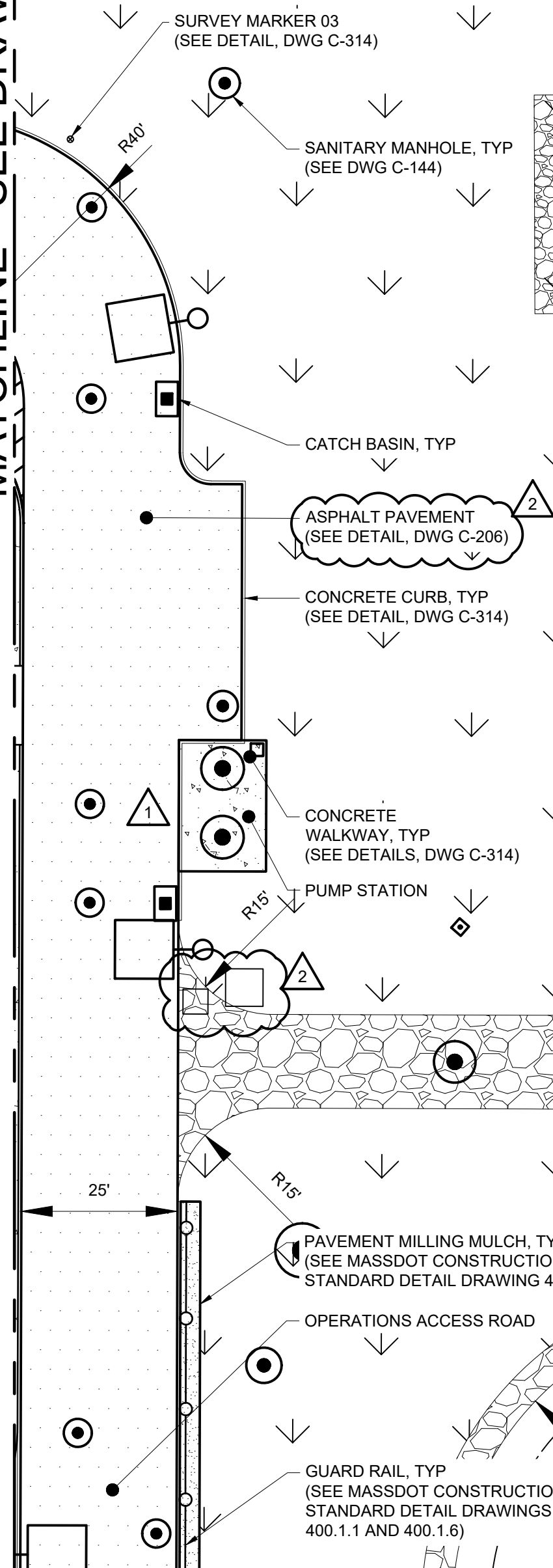
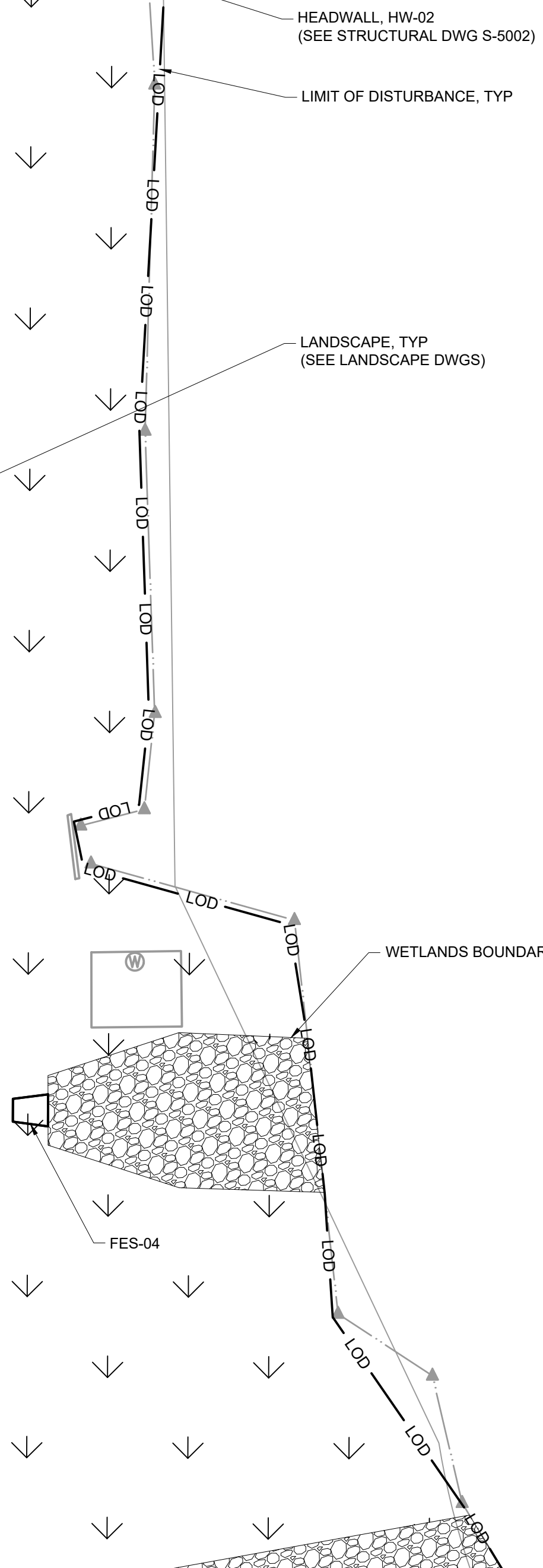
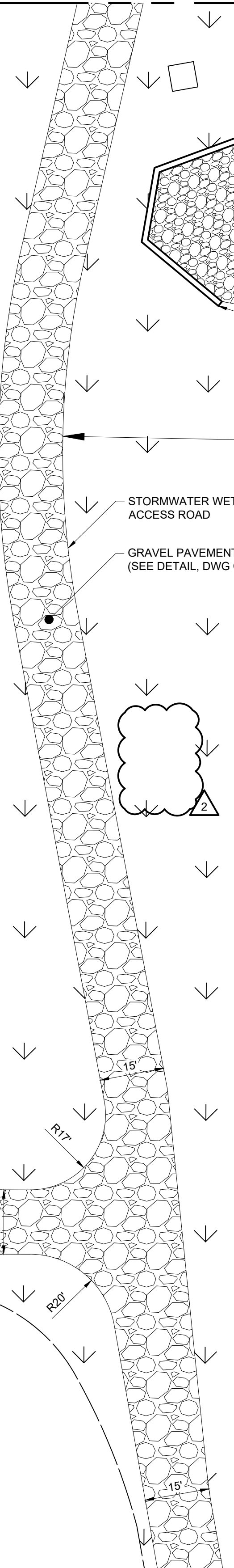
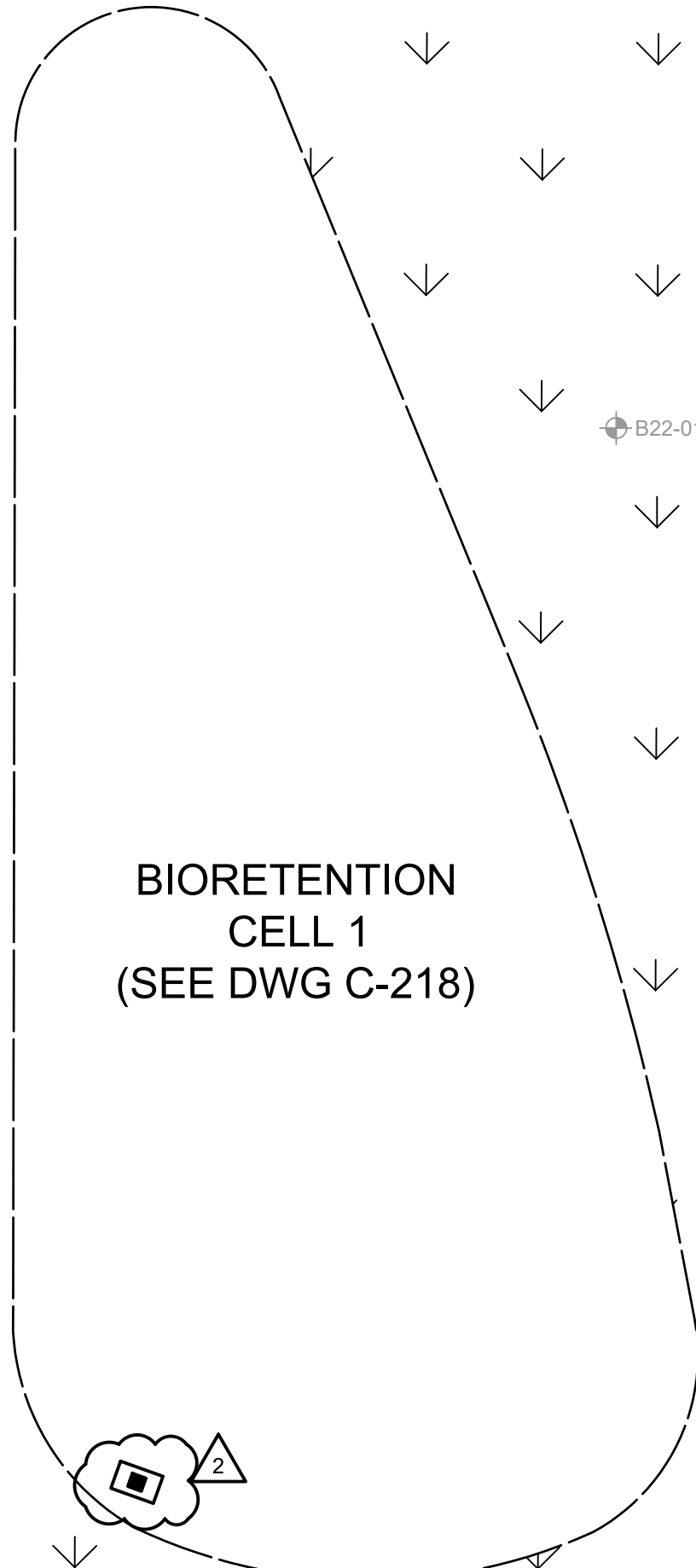
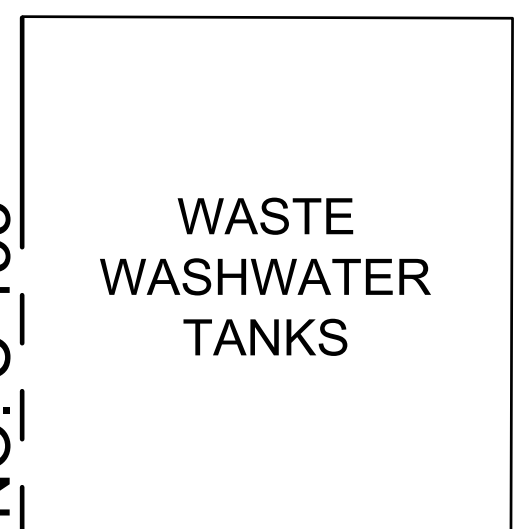
NOTES:

- EXISTING PAVEMENT SHALL BE MILLED TO A MINIMUM OF 1.5" AND SHALL BE OVERLAID TO FINAL GRADES.
- BELOW GRADE INFRASTRUCTURE, YARD PIPING, AND TOPOGRAPHIC INFORMATION NOT SHOWN FOR CLARITY. SEE GRADING AND DRAINAGE DRAWINGS C-130 TO C-136 AND YARD PIPING DRAWINGS C-140 TO C-145.



MATCHLINE - SEE DRAWING NO. C-153

MATCHLINE - SEE DRAWING NO. C-152

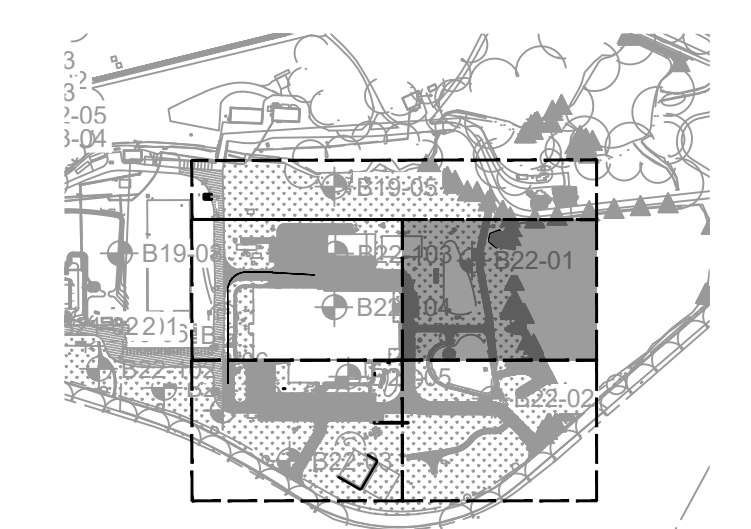


HEADWALL, HW-02 (SEE STRUCTURAL DWG S-5002)

LIMIT OF DISTURBANCE, TYP

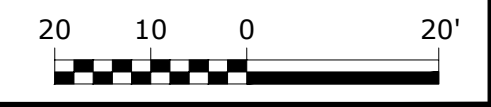
LANDSCAPE, TYP (SEE LANDSCAPE DWGS)

WETLANDS BOUNDARY, TYP



KEY MAP
NTS

SCALE: 1" = 20'



File: C:\USERS\JLUDCACC\DCS\HAZEN AND SAWYER\0398-004_WEST PARISH FILTER WTP\PROJECT FILES\CIVIL\C-154 Saved by: JLU Save date: 5/20/2024 5:21 PM PLOT DATE: 5/22/2024 5:27 PM BY: JLU

REV	ISSUED FOR	DATE	BY
2	ADDENDUM NO. 12	MAY 24	MWM
1	ADDENDUM NO. 3	MAR 24	MWM
0	ISSUED FOR BIDS	FEB 24	MWM

PROJECT ENGINEER:	K. BARRETT
DESIGNED BY:	J. RIVAS
DRAWN BY:	K. ROBBINS
CHECKED BY:	D. SHEERAN
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	

5/22/2024

Hazen

HAZEN AND SAWYER
100 GREAT MEADOW ROAD, SUITE 702
WETHERSFIELD, CT 06109

SPRINGFIELD WATER AND SEWER COMMISSION

WEST PARISH WATER TREATMENT PLANT

CIVIL FINAL SITE PLAN SHEET 4

DATE:	FEBRUARY 2024
HAZEN NO.:	90398-004
CONTRACT NO.:	24-51
DRAWING NUMBER:	C-154