



Addendum No.: 02

Date Of Addendum: April 12, 2021

CT DAS ● Construction Services ● Office of Legal Affairs, Policy, and Procurement

DEEP West District Headquarters  
Black Rock State Park  
2065 Thomaston Rd, Watertown, CT  
BI – T – 615

Original Bid Due Date / Time:

April 21, 2021

1:00 PM

Previous Addenda: Addendum 01, dated 03-29-21

**TO: Prospective Bid Proposers:**

This Addendum forms part of the "Contract Documents" and modifies or clarifies the original "Contract Documents" for this Project dated May 15, 2020. Prospective Bid Proposers **shall** acknowledge receipt of the total number the Addenda issued for this Project on the space provided on Section 00 41 00 Bid Proposal Form.

**Failure to acknowledge receipt of the total number the Addenda issued for this Project on the space provided on Section 00 41 00 Bid Proposal Form shall subject Bid Proposers to disqualification.**

The following clarifications are applicable to drawings and specifications for the project referenced above.

**Item 1:**

A. Drawing CU-101:

Add Note: "Ensure minimum 24" Vertical Separation distance is maintained between top of water piping and bottom of Geothermal Pipe trench bedding. See Detail 2 on Sheet SU-1"

For Clarification: Drawing CU-101 is reissued for clarity, as some bidders noted that call-out symbols are obscured when printing. There are no other changes, except as note above. See revised CU-101, dated 04/08/21.

B. Drawing CU-102:

For Clarification: Drawing CU-102 is reissued for clarity, as some bidders noted that call-out symbols are obscured when printing. There are no other changes to this drawing.

**Item 2:**

A. Drawings 'C'-series, 'L'-series, EP-101 and SE-1:

Change: Refer to RFI Response 29 (below) for relocation of MTS with Camlock Connectors, from north patio to location south of lower parking lot.

**Item 3:**

A. Drawing AA506 :

For Clarification: Additional call-out notes provided for drawing clarity. At Owner-provided equipment, provide blocking as required for mounting.

**Item 4:**

A. Drawing 13/AA601 :

Change: At Doors B1, B2, B5, B11 and B13, change Frame Type from Type 'D' to Type 'D1'.

B. Drawing 13/AA601 :

Add: Add frame Type 'D1' to be a 3'4" wide x 7'-4" high frame (for 3' x 7' door).



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**Item 5:**

Specification Section 099646 Intumescent Painting”

Add: Section 099646 Intumescent Painting” in its entirety.

**Item 6:**

Specification Section 099123 “Interior Painting”; Paragraph 3.6

Add: Clear Concrete Sealer as follows:

3.6, I: Concrete indicated to receive clear sealer:

1. Single coat Silane Siloxane Water Repellent Sealer. Available Manufacturer include:
  - a. Foundation Armor; SX5000 WB
  - b. Sika; Sikagard – 740W
  - c. Prosoco, Siloxane PD

**Item 7:**

Specification Section 232113 – Hydronic Piping. At Paragraph 2.1-C, add the following subparagraph #4:

4. Manufacturers: Viega Pro-Press or approved equal by:
  - a. Apollo.
  - b. Watts.

**Item 8:**

Specification Section 232116 – Hydronic Piping Specialties. Replace Paragraph 2.6 with the following paragraph:

2.6 STRAINERS

A. Manufacturers:

1. Spirax Sarco Models listed below or approved equal by:
2. Armstrong.
3. Yarway.
4. Mueller.

B. Size 2 inch and Under: Screwed cast iron body for 175 psig working pressure, Y pattern with 20 Mesh, stainless steel Type 304 perforated screen. Spirax Sarco Model IT.

C. Size 2-1/2 inch and Larger: Flanged cast iron body for 200 psig working pressure, Y pattern with 20 Mesh, stainless steel Type 304 perforated screen. Spirax Sarco Model CI.

**Item 9 – Bid Phase RFI's:**

1. Can Douglas Fir glue-laminated timber be considered in order to satisfy the FSC requirements?

**Response:** Structural properties of Douglas Fir are lower than those of Southern Yellow Pine (SYP) and would likely result in an increase in member sizes and require modifications of connectors. Provide FSC certified SYP as specified.



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2. Can the list of acceptable glulam manufacturers include or equal products? The list of manufacturers is very limited and some of the listed ones do not specialize in architectural appearance grade glue-laminated timber.

**Response:** Substitution requests need to be made in accordance with Section 01 25 00 Substitution Procedures. Since the period has passed to consider pre-bid substitutions, they shall only be considered after Award of Contract in accordance with Article 15, Materials: Standards of Section 00 72 13 General Conditions.

3. We ask that The Murus Company, Inc. 3234 Route 549, Mansfield, PA 16933 be added to the list of acceptable structural insulated panel manufacturers.

**Response:** Substitution requests need to be made in accordance with Section 01 25 00 Substitution Procedures. Since the period has passed to consider pre-bid substitutions, they shall only be considered after Award of Contract in accordance with Article 15, Materials: Standards of Section 00 72 13 General Conditions.

4. Will the general contractor be required to apply and pay for general building permits from the Town of Watertown and/or the Town of Thomaston?

**Response:** There are no Town Building Permits or Building Permit Fees required. The Building Permits are issued by the State of CT.

5. Will billing for stored materials be permitted if materials are stored on site?

**Response:** Materials properly stored and protected on site will be subject to payment.

6. Select construction materials are anticipated to require deposits. Please confirm if the deposits would be funded via requisition before the materials are installed.

**Response:** No payment for materials will be allowed prior to delivery and either being properly stored and protected on site, or installed.

7. Alternate #3 requests pricing for (2) EV chargers. The site plan and site utility plan indicate (5) EV chargers. Which (2) are the alternate? Are the remaining three chargers to be included in the base bid?

**Response:** Refer to Addendum 01. (Referencing Drawing SE-1, the two single-port charging stations (E6) at the upper lot, the one, single-port charging station (E6) at the lower lot and the two dual-port charging stations (E7) at the lower lot are all hard-wired and included in the base Bid. The two solar charging stations included as a Supplemental Bid are in addition to these and free-standing and can be located anywhere in the park, at the discretion of DEEP.)

8. Drawing S1.1, Mechanical Room 122 and Training Room 204 shows a CMU wall at the exterior but when you follow all the details and sections, that wall is either not shown or shown as a SIP wall. Please provide clarification on this wall, is the wall a SIP wall with a CMU backup wall, only a SIP wall or only a CMU wall?

**Response:** CMU is not shown at the locations mentioned on plan. The hatch pattern of vertical and horizontal lines indicates SIP whereas diagonal up and down lines indicates CMU. The hatch pattern orientation is irrespective of the wall orientation. The pattern at those locations is vertical and horizontal thus showing SIP.

9. Please re-issue drawing S1.2, the drawing provided in this set is blank.

**Response:** Drawing S1.2 was reissued in Addendum 01.

10. It appears that col's are missing from grids D-4,E-2 & H-10 for connections to steel framing.

**Response:** RFI is unclear. Drawings S1.1, S1.2, and S1.3 show columns at those locations.

11. Upper Level Framing S1.1 find (4) W14X callouts- no info as to what this signifies.

**Response:** Beams shall be W14x30.



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12. Detail 14A on AA503 indicates an epoxy countertop for the areas with the metal casework, for the countertops without casework underneath will these also be epoxy counters?

**Response:** All reference to “Epoxy Countertops” shall be changed to “Phenolic Resin Countertops” All countertops in Laboratory 113 and Fish Aging 114 are to be Phenolic Resin Countertops, whether on metal casework or with open knee space below, as specified in Section 123553 “Metal Casework”; 2.1D.

13. Please provide a spec for the epoxy countertops.

**Response:** All reference to “Epoxy Countertops” shall be changed to “Phenolic Resin Countertops” All countertops in Laboratory 113 and Fish Aging 114 are to be Phenolic Resin Countertops, whether on metal casework or with open knee space below, as specified in Section 123553 “Metal Casework”; 2.1D.

14. Section 2.2 of 064023 seems to indicate all wood products for finish carpentry will be provided by owner. Please confirm which wood products will be provided by owner.

**Response:** Owner-furnished wood products are listed in Sections 033300 “Architectural Concrete”; 2.3A for Trombe Wall board forms; and Section 064023 “Interior Architectural Woodwork”; 2.2A for paneling, running and standing trim. Note, shoe mold for base is provided by Contractor. All wood is delivered to the site in lengths to be cut, installed and finished by Contractor.

15. If more wood is needed for the job, will the owner provide more wood upon request?

**Response:** DEEP will provide a 10% overage for waste. Additional product can be considered, provided that the installer is working efficiently and not unnecessarily wasting wood materials.

16. Window sills calls for a hardwood material, nothing in the spec mentions what type of wood. Please provide this information.

**Response:** Window sills are to be provided by the Contractor in a species that matches wood products within the room (for example the Training Room is Cherry, Open Office is maple, etc.) Finish is to be transparent finish as specified in Section 099300 “Staining and Transparent Finishing”.

17. Is the ice and water shield a warrantable condition under the new standing seam metal roof on the SIP roof panels?

**Response:** Underlayment at SIPs panels is 15# asphalt felt with a rosin paper slip sheet (Re: roof details and Specs). DO NOT USE ICE & WATER AT SIPS.

18. Who is responsible for providing the hardware for the Aluminum Entrance doors? I.E. exit devices, door closers, locksets? Glass sub or will these items be provided directly from the manufacturer?

**Response:** It is the Contractor’s responsibility to coordinate all aspects of the Work. The products specified in Section 084213 “Aluminum-Framed Entrances” must be coordinated with the hardware specified in Section 087100 “Door Hardware”.

19. Please clarify Hardware items such as closers and panic devices. There are many different levels and prices can vary greatly. See below for more specifics:

- a. ALL Hardware items-Basis of design model for items, especially panic devices, locksets, and closers would be helpful in guiding pricing.
- b. Hardware #1 calls for a “Panic Rail’ device with lever trim at the exterior- it also calls for an “Electromechanical Lock with Electric Strike” It wouldn’t make sense to have a lockset and panic, plus an Electromechanical Lock and Electric Strike would be redundant. Please clarify which is needed, a panic device, or an electric lockset, or an electric strike with either a mortised panic or lever lockset, as well as basis of design.

**Response:** a. All hardware products have their description and Grade referenced by BHMA referenced standards, as well as listing of acceptable manufacturers. Function is identified in the Hardware Sets.



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- b. The electromechanical lockset is the lockset, and is it operated on the exterior by a lever. The intent is free egress at all times and controlled access at all times.

20. HW #2 please clarify Closer and panic basis of design

**Response:** See item 19, above.

21. HW #6 please clarify basis of design for the closer and lockset

**Response:** See Item 19, above.

22. HW #14 please clarify basis of design of lockset and closer

**Response:** See item 19, above.

23. Aluminum door frames appear to be 2"x 6", is this correct, or should they be 2" x 4 1/2"?

**Response:** Door frames are 1 3/4" x 6" as specified in Section 084213 "Aluminum-Framed Entrances"; 2.4B and as shown in Details.

24. Window Types E1 and L1 are listed as aluminum- are these to be a standard 2"x 4 1/2" thermally broken storefront, or other system?

**Response:** (Clarification, we assume you mean Windows E1 and I1): Window Types E1 and I1 are aluminum sidelights and are the same 1 3/4" x 6" frames as the doors (Section 084213 "Aluminum-Framed Entrances"). Window Types E2 and I2 are Hollow-Metal frames used at interior locations (Section 081113 "Hollow Metal Doors and Frames").

25. Please provide a spec for the intumescent coatings.

**Response:** See Item 5, above.

26. On Drawings E502 & E503, there is no "1 line diagram" showing the point of interconnection & switch gear specs all spelled out.

**Response:** Refer to Drawing E501.

27. We would like to request that Distech Controls be considered an acceptable Building Automation Controls supplier for this project. Connecticut Temperature Controls (CTC) is the System Integrator for this product. Distech Controls is a BACnet DDC Web-based system that can be accessed from any internet browser. The Distech Control System is built on the Tridium Niagara 4 open platform using an HTML5 interface and meets or exceeds the project specification.

**Response:** Substitution requests need to be made in accordance with Section 01 25 00 Substitution Procedures. Since the period has passed to consider pre-bid substitutions, they shall only be considered after Award of Contract in accordance with Article 15, Materials: Standards of Section 00 72 13 General Conditions.

27. Power to the new water meter pit (required per detail) is not indicated on site electrical plan. Please indicate.

**Response:** There are no requirements for electrical power in the meter pit.

28. Main building secondaries – it's a 1000A service with main switch gear having 1200A rating but their one line diagram calls for 4 sets of 600 copper which is sized for a 1600A service. Would like to confirm that they want that sized for the 1600A or bid for the 1000A.

**Response:** Confirmed they are sized for 1600A, due to voltage drop.

29. Location of main building Camlock backup – Drawings show the MTS for the camlock backup system on the lower level patio of the north side of building and also calls for it to be mounted to side of building. Spec'd out MTS is not wall mount for a 1000A rated, it's a pad mount and it is not very good looking, it looks like

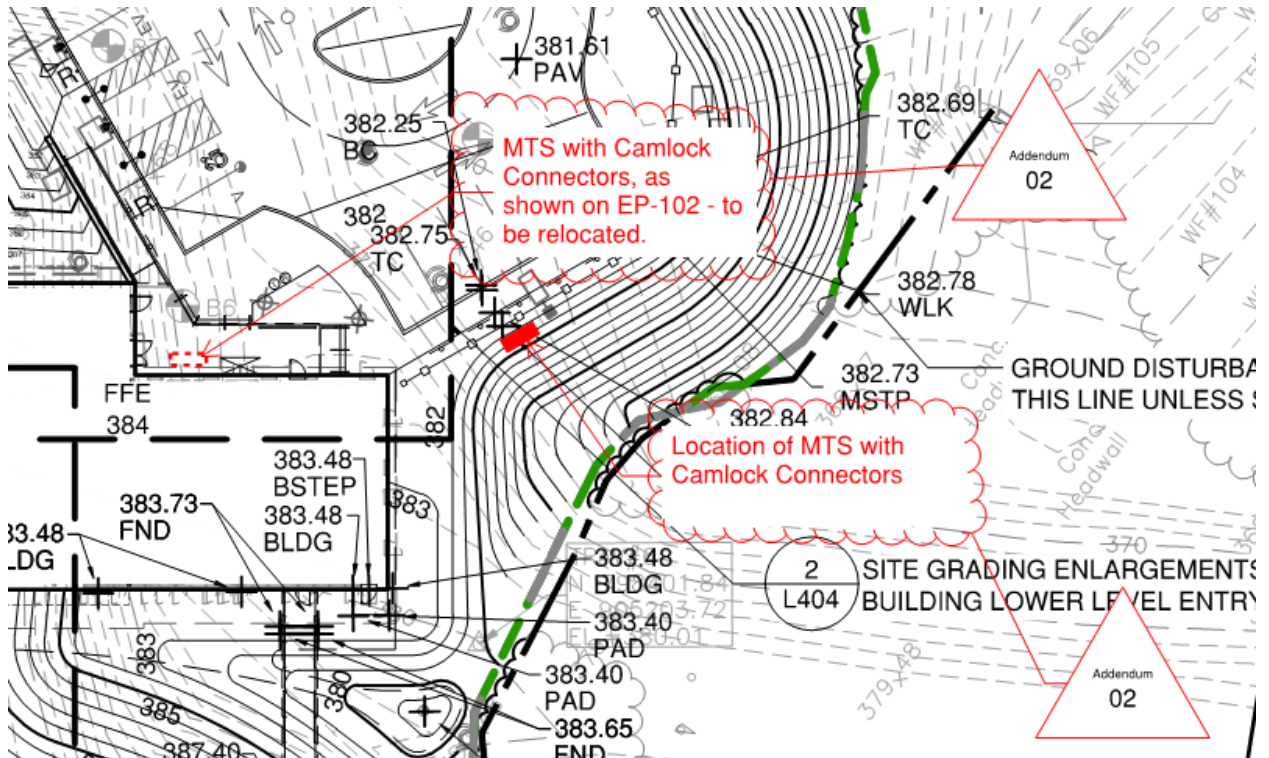


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switchgear. Would like to confirm that's where it is going.

**Response:** The MTS for the Camlock backup shall be relocated to the south side of the lower parking lot. Provide 2-foot thick concrete pad on 12" crushed stone to accommodate grade change. Extend conduit through new pad to MDS. Location to be as follows (Note drawing excerpt from Drawing L104; also reference drawings EP-102, SE-1 and Civil Drawings):



30. Ceiling fans – Please provide specification.

**Response:** Refer to Section 233400 "HVAC Fans"; 2.4.

31. What is the vertical separation distance required between the new fire and water mains and the horizontal geothermal piping?

**Response:** The minimum vertical separation distance is 24" from the top of the fire and water mains and the base of the bedding for the horizontal geothermal piping. See attached sheet CU-101 with the latest revision.

32. The geothermal test pit indicates 80' of casing required. The specification section indicates casing to be provided as needed "as per site conditions." Please confirm quantity of casing to be assumed in base bid.

**Response:** Bid shall include an average of 80' of casing per bore.

33. Specification section 502000 indicates actions that are "recommended" or "will help" to minimize risk to the threatened species. Please confirm the provisions of these items are required to be included within the GC bid. If so, and if possible, please confirm quantities and durations to be included (i.e., how many herpetologist visits are to be included during each phase, etc.).

**Response:** Yes. The items listed in section 502000 are required to be included within the GC bid. The items listed in this section are conditions of approval for Flood Management Certification and General Permit for Water Resource Construction Activities. See Section 508000 Additional Information Subsection 508000.2 CT



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DEEP license and Flood Management Certification Approval, General Permit for Resource Construction Activities - Approval of Authorization at the very end of the Project Manual package (Volume 2). These licenses are subject to several terms and conditions regarding the threatened and endangered species. The herpetologist is required for the duration of the project construction.

Protections for Hairy-Fruited Sedge (*Carex trichocarpa*):

The contractor shall engage a qualified botanist to perform the site survey to located and assess whether there will be any adverse impacts to this plant species. If the plants are found, they have to be field identified and information presented to the Owner. If plants are affected by the construction, the botanist shall prepare and execute the protective measures or mitigation. If no plants are found, no action is required.

Protections for Northern Spring Salamander (*Gyrinophilus porphyriticus*):

- a. The contractor shall engage a qualified herpetologist/biologist to do an assessment of the area and provide a protection and/or conservation plan for the State Threatened species.
- b. The Contractor to maintain a qualified herpetologist on-site to oversee the implementation of Salamander protection measures and procedures for the duration of the project construction.

Protection of Wood Turtles (*Glyptemys insculpta*):

- a. The contractor shall engage a qualified herpetologist/biologist to do an assessment of the area and provide a protection and/or conservation plan for the State Listed Species of Concern.
- b. The qualified herpetologist/biologist shall oversee the implementation of Wood Turtle protection measures and procedures for the duration of the project construction.
- c. A search for turtles within the work area shall be completed each workday prior to the start of any work activities. The search shall be performed by the qualified herpetologist/biologist during the month of June. Outside the month of June, the search may be conducted by a designated employee(s) of the contractor, provided that the designated employee(s) has been appropriately trained by the qualified herpetologist/biologist to perform this function.

Protection for the Smooth Green Snake (*Opheodrys vernalis*):

- a. The contractor shall engage a qualified herpetologist/biologist to do an assessment of the area and provide a protection and/or conservation plan for the State Listed Species of Concern.
- b. The qualified herpetologist/biologist shall oversee the implementation of Smooth Green Snake protection measures and procedures for the duration of the project construction.
- c. The area shall be searched each day prior to commencing construction activities.

34. The drawings call for epoxy resin countertops, the specs call for phenolic. Please confirm which is to be carried.

**Response:** All reference to "Epoxy Countertops" shall be changed to "Phenolic Resin Countertops" All countertops in Laboratory 113 and Fish Aging 114 are to be Phenolic Resin Countertops, whether on metal casework or with open knee space below, as specified in Section 123553 "Metal Casework"; 2.1D.

35. A mock up window is required. Please identify what Window Type should be included in the bids.

**Response:** The mock-up shall be for the aluminum clad casement unit, but is not specific to any particular Window Type. The intent of the mock-up is to demonstrate the profiles, materials, means of construction, assembly and installation and glazing. The mock-up can be a window to be used in the final construction (subject to approval) or a separate window used to establish acceptable standard of quality.

36. In Spec Section 085200/2.4/H/7, Op O Lock Hardware is required for Electric Operators. Is the Op O Lock Hardware required on pole operated windows with crank hardware?

**Response:** Op-O-Lock is required for electrically operated windows only.

37. Are any Type I1,I2,E1 or E2 windows included in the Wood Window Scope? What are the glazing specifications for the Interior Windows?

**Response:** See Item 24 above. Interior glazing is Tempered glass, as noted on Window Schedule and specified in Section 088000, 3.8A.

38. Is Window #11 the only window requiring a Sash Limiter per the Window Schedule on 5/AA601?



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Response: Yes, due to proximity to Door A15. All other windows need full opening to maximize natural ventilation.

39. In Spec Section 0852002.4/D/1B, the full range of options for exterior color is specified. Should the bid include the cost for premium finishes Liberty Bronze, Copper and Bright Silver?

**Response:** Color will be selected from the manufacturer's range of standard colors. Premium colors will not be selected.

40. In Spec Section 0852002.5/B/1, the full range of options for mesh color is specified. Should the bid include the possible cost for Bright Bronze mesh?

**Response:** Color will be selected from the manufacturer's range of standard colors. Premium colors will not be selected.

41. Specification Sections 061200 and 061800 each reference spec. section 06100 Rough Carpentry as a related document however this spec. section was not included in the bid documents. Please provide.

**Response:** Omit reference. Section 06100 Rough Carpentry is not required.

42. Specification Sections 064116 and 064023 each reference spec. section 061053 Misc. Rough Carpentry as a related document however this spec. section was not included in the bid documents. Please provide.

**Response:** Omit reference. Section 06053 Miscellaneous Rough Carpentry is not required.

43. On Drawings AA401 Detail 1 and AA510 Detail 13 / 14 in the locker rooms, shower stall are shown. Please advice manufacture and model number.

**Response:** Refer to Shower SH1 in Plumbing Fixture Schedule on Drawing P601 (and Drawing P701 for riser diagram).

44. On Drawing AA 302 Detail 13 south wall section. Premanufactured Metal Solar Chimney are shown. Please advice manufacture and model number.

**Response:** The premanufactured solar chimney is a Penthouse Louver, as specified in Section 089119 "Fixed Louvers"; 2.5.

45. On Drawing AA 203 Detail 15 south elevation. Penthouse Louvers, Typ. Are shown. Please advice manufacture and model number.

Response: Refer to Section 089119 "Fixed Louvers"; 2.5.

46. Spec section 013216.13 CPM Schedules 1.4.B. mentions of providing (1) licensed copy of scheduling software to the Owner's CA. Please clarify what software to provide.

**Response:** Provide whatever software the CPM Schedule is created in, so CA is able to access files and features of software.

47. Spec Section 014523.13 TESTING FOR INDOOR AIR QUALITY, BASELINE IAQ, & MATERIALS requires the contractor to hire an independent contractor to perform testing at different locations for contaminant levels. Does this only apply to the Headquarters Building or also to include the Garage building?

**Response:** Specification Section 014523.13 Testing for Indoor Air Quality, Baseline IAQ, & Materials shall apply to both buildings. Section 018119 "Construction IAQ Requirements" shall apply to the LEED Headquarters Building only, and not to the Garage Building.

48. Enclosure fencing is mentioned in spec section 015000 Temporary Facilities and Controls, there in no layout for any temporary enclosure fence on the drawings, please provide. Also, will it be also required on 422 Watertown Road?

**Response:** The Contractor shall provide temporary construction fencing at the perimeter of all active areas of work, disturbed areas or areas of storage, with sufficient access for construction and emergency personnel, including work at the 422 Watertown Road site, as well as protections related to utilities or other miscellaneous site work. Fencing layout must allow for continued public use of roadways and drives.





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49. Spec section 015000 mentions of providing temporary heating, cooling and ventilating, may we request approximate start date of construction so we can price temporary heating accordingly?

**Response:** It is anticipated to issue a GC contract award and construction start date by August of 2021.

50. Spec section 017700 Closeout Procedures 3.2.C requires the contractor to engage licensed exterminator. Is this service to be provided for the buildings only?

**Response:** The exterminator services shall apply to both buildings only.

51. Spec section 004100 BID PROPOSAL FORM has mentioned Inland Marine/Transit Insurance (Transportation Insurance). Please confirm that this is required for this project.

**Response:** To the extent the Contractors builders risk coverage does not cover the inland marine/transit type exposures, then yes, it is required separately.

52. Spec section 311000 SITE CLEARING - has mentioned Removal of invasive species from within the project site but we could not find any information or location from the bid documents. Please clarify.

**Response:** "In order to pursue the LEED SS credit: Protect and Restore Habitat, best practices require the continual monitoring of the project area to prevent and remove invasive species as they are detected.

To establish the procedures to be used for the removal of invasive species, the Contractor is to submit as part of Section 311000 Site Clearing an invasive species removal program based on recommendations and best practices of the Connecticut Invasive Plant Working Group (CIPWG) <https://cipwg.uconn.edu> and the Invasive Plant Atlas of New England (IPANE) <https://invasiveplantatlas.org/weedcd/html/ipane.htm> , and other sources as approved. This will prepare the contractor to be aware of potential invasive species within the project area, and how to address when detected.

At this time, invasive species have not been identified on the site. When/if detected within the project area, Invasive species will be removed based on the procedures established in the above submittal. This will be an ongoing task throughout the construction period and for the maintenance period of the turf, grasses and plants.

When any invasive species are removed, it will be documented for inclusion in the LEED project DATA to support the Protect and Restore Habitat Credit".

53. Will the town or state park accept excess topsoil and excavated materials surplus from construction site? If yes, please provide area.

**Response:** The State will accept excess topsoil and excavated materials, provided they are separated by type (topsoil, earth, stone, etc.) and are free of debris and other deleterious or hazardous substances or materials. The Contractor shall haul materials to a location of DEEP's choice within Black Rock State Park or at the adjacent Thomaston Facility.

54. Per DEEP General Permit for the Discharge of Stormwater, the Contractor shall assume responsibility for storm water pollution control and conform to the General Permit obligations and requirements. Would this also apply to the other site as shown on drawing CG302?

**Response:** Yes. CT DEEP Stormwater Construction GP includes both CT DEEP properties - 2065 Thomaston Road Watertown and 422 Watertown Road, Thomaston. See STORMWATER POLLUTION CONTROL PLAN FOR CT DEEP West District Headquarters Black Rock State Park, dated June 2020.

55. Drawing detail 12/CX503 calls for GRAVEL PARKING SECTION (TYPICAL) but we could not find it on drawings, please provide locations.

**Response:** This detail is for a restoration of the existing gravel parking areas on 422 Watertown Road, Thomaston (CT DEEP Maintenance Garage) property, from directional drilling, watermain, and sanitary sewer forcemain installation activities. See sheet CU102.

56. Drawing S1.1 Upper Level Plan, Foundation Notes #8 and drawing S1.0 Lower Level Note # 10 calls for 3/8" stone aggregates to all interior slabs, Please provide thickness.



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**Response:** There is no thickness to provide - the 3/8" stone aggregate note simply states the size of the course aggregate to be used in the concrete mix

57. Drawing 5/AA305 shows R-20 Rigid insulation under slab on grade. Specs also calls for full coverage of rigid insulation for slab on grade. Please confirm that this rigid insulation is for the entire upper-level slab on grade only.

**Response:** Full coverage rigid insulation is required at all slabs-on-grade at both the upper and lower level of the Headquarters Building.

58. Question: There are bid documents that are provided on the website. In the specs volume 1, some of those documents have been revised to include items with yellow highlights. Please advise which forms we must use.

**Response:** You must use the revised documents with the yellow highlights.

59. Drawings AA808 note calls for "snow retention system fence style". Please provide specifications.

**Response:** Refer to Section 077253 "Snow Guards".

60. Nucor Building systems is listed in the specifications as an approved manufacturer for the pre-engineered metal building, their warranty has been attached for reference. Nucor is concerned that the weathertightness warranty "to repair and replace" will be an issue, Nucor's weathertightness warranty covers .50C a sq ft., Please advise if this will be acceptable?

**Response:** The Nucor 20-Year Warranty appears to provide the required 20-year period. The limit if not filled in on the sample warranty, but must be sufficient to cover warranted repairs for the 20-year period. .50C/sf may or may not be adequate.

61. With regard to the window package, the window types are numbered on the building elevations, and also assigned letter values to the window types on the window elevation page. Please provide clarification on the window types in order to prevent confusion.

**Response:** The Window Schedule on Drawing 5/AA601 identifies which Window Type (per 15/AA602) applies to which Window Number. Each Window has a number, but in many cases, there are more than one of each Window Type.

62. Reference Drawing AA6001 Window Schedule, Please confirm that there are (6) total windows noted to receive shades. Please also confirm that these are the only windows receiving shades? And finally please confirm Inside Mount or Outside Mount Installation?

**Response:** Yes, Windows 21,23,52,53 and 55 have motorized shades and window 35 has a manual shade. Re: Window schedule and Section 122413 "Roller Window Shades".

63. Please provide a spec for S.CONC - Sealed Concrete. We need to know what product they are looking to have installed and how many coats.

**Response:** See Item 6, above.

64. Frame elevation 'D' on page AA602 shows a transom, the exterior elevations (page AB201) do not seem to depict a transom. Please confirm if transom is needed, if it is the transom glass or metal? This applies to openings located in the garage, B1, B2, B5, B11, and B13.

**Response:** Omit transom at Doors B1, B2, B5, B11 and B13. Frame to be Frame Type D1 (see item 4, above).



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**Item 10 – Bid Phase Proposed Substitutions:**

**Substitution 10A:** Specification Section 323300 – “Site Furnishings”. Proposed substitutions:

1. Site Bench from Landscape Elements Mode FGB to Jamestown Advanced Products IPE Empire Bench.

**Response:** Substitution is rejected, as IPE is not sustainably forested, compared to the specified Ash and the warranty is for a shorter duration than the specified warranty.

2. Bike Rack from Landscape Forms “Loop to Jamestown Advanced Products IPE Bile Rack.

**Response:** Substitution is rejected, as IPE is not sustainably forested, compared to the specified bike rack which is free of wood products. The warranty is for a shorter duration than the specified warranty.

3. Trash Receptacles from Landscape Forms “Lakeside” to Jamestown Advanced Products “Decorative Grass trash Receptacle, Part Number TBD”.

**Response:** Substitution is rejected, there is insufficient information to make a decision. Submitted warranty is for a shorter duration than the specified warranty.

**Substitution 10B:** Specification 230923 “Direct Digital Control System for HVAC”. Proposed Siemens Talon as Equal to Alerton Control System (BOD).

**Response:** Substitution request is rejected as the information provided is general brochure data and is not project specific. Detailed information, cut sheets, graphics displays, etc. have not been provided and as such we cannot confirm they meet all the criteria stated in Specification Sections 23 0923 and 23 0993 and related sections such as commissioning; Section 01 9113.

**List of Attachments:**

1. Specification Section 099646 “Intumescent Painting” (Addendum 02, 04/12/21) (6 pages)
2. Drawings: :
  - a. CU-101: Revision Date 04/08/21
  - b. CU-102: No change to Drawing or Date, issued due to reported trouble opening drawing.
  - c. AA506: Interior Elevations, Revision Date 4/7/21

All questions must be **emailed** (not **verbal** or by **phone**) to the consulting Architect/Engineer, TLB Architecture, LLC, Email: [mfortuna@tlbarchitecture.com](mailto:mfortuna@tlbarchitecture.com) with copies sent to the DAS/CS Project Manager (Ira Henowitz, R.A.), Email: [ira.henowitz@ct.gov](mailto:ira.henowitz@ct.gov) and Construction Manager (Atane), Email: [rhewey@ataneconsulting.com](mailto:rhewey@ataneconsulting.com)

**End of Addendum 02**

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**Alison Kulas, Paralegal Specialist**  
**State of Connecticut**  
**Department of Administrative Services, Construction Services**  
**Office of Legal Affairs, Policy, and Procurement**  
**450 Columbus Boulevard, Suite 1302**  
**Hartford, CT 06103**

## SECTION 099646 - INTUMESCENT PAINTING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Intumescent paint for interior items and surfaces.

- B. Related Requirements:

- 1. Section "Interior Painting" for primers and finish coats that may be used with intumescent paint finishes.
  - 2. Section 099300 "Staining and Transparent Finishing" for primers, finish coats, and wood stains that may be used with intumescent paint finishes.

#### 1.3 SUSTAINABLE DESIGN REQUIREMENTS

- A. The Owner requires the Contractor to implement practices and procedures to meet the Project's environmental performance goals, which include achieving LEED v4 Certification and demonstrating compliance with the State of Connecticut's High-Performance Building Standards. Refer to Section 018113 - SUSTAINABLE DESIGN REQUIREMENTS for the Project's target certification level and specific LEED requirements. The Contractor shall ensure that the requirements related to the Project's sustainability design goals are implemented to the fullest extent. Substitutions, or other changes to the work proposed by the Contractor or their Subcontractors, shall not be allowed if such changes compromise the Project's sustainability goals and LEED certification.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- 1. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
  - 2. Indicate VOC content.

- B. Sustainable Design Submittals:

1. LEED v4 Submittals: For all permanently installed products and materials related to the work of this Section, submit product and material documentation to comply with and contribute to the Project's LEED requirements, as outlined in the Submittals article of Section 018113 – Sustainable Design Requirements.
- C. Samples for Initial Selection: For each intumescent paint finish indicated.
- D. Samples for Verification: For each type of coating system and each color and gloss of intumescent paint finish indicated.
  1. Submit Samples on rigid backing, not less than 8 inches square.
  2. Apply coats on Samples in steps to show each coat required for system.
  3. Label each coat of each Sample.
  4. Label each Sample for location and application area.
- E. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules. Include color designations.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Material Test Reports: For each intumescent paint.

#### 1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that are from same production run (batch mix) as materials applied and that are packaged with protective covering for storage and identified with labels describing contents.
  1. Quantity: Furnish an additional 5 percent of each color applied, but not less than 1 gal. of each material and color applied.

#### 1.7 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  1. Architect will select one surface to represent surfaces and conditions for application of each coating system.
    - a. Wall and Ceiling Surfaces: Provide samples of at least 100 sq. ft..
    - b. Other Items: Architect will designate items or areas required.
  2. Final approval of color selections will be based on mockups.
    - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  1. Maintain containers in clean condition, free of foreign materials and residue.
  2. Remove rags and waste from storage areas daily.

#### 1.9 FIELD CONDITIONS

- A. Apply waterborne intumescent paints only when temperatures of surfaces to be painted and ambient air temperatures are between 50 and 90 deg F.
- B. Do not apply intumescent paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.
- C. Allow wet surfaces to dry thoroughly and to attain temperature and conditions specified before starting or continuing coating operation.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  1. Benjamin Moore & Co.
  2. Insl-X Products; Benjamin Moore & Co.
  3. PPG Paints.
  4. Sherwin-Williams Company (The) [Basis of Design; Firetex FX5120]
- B. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to products listed in the Interior Intumescent Painting Schedule for the paint category indicated.

## 2.2 INTUMESCENT PAINT

- A. Surface-Burning Characteristics of Fire-Retardant Systems: As tested according to ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Flame-Spread Index: 25 or less.
  - 2. Smoke-Developed Index: 450 or less.
- B. UL Listing: UL D981, 1-hour protection – Beam Design.
- C. Material Compatibility:
  - 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 2. For each material or coat, products and spreading rates shall be as recommended in writing by intumescent paint manufacturer for use on substrate indicated. Comply with requirements for fire-retardant coating classification and surface-burning characteristics indicated.
- D. Colors and Gloss: As selected by Architect from manufacturer's range of standard colors.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with manufacturer's requirements for surface treatments, shop-primed surfaces, maximum moisture content, and other conditions affecting performance of the Work.
- B. Begin coating no sooner than 28 days after substrate is constructed and is visually dry on both sides.
- C. Verify suitability of substrates, including surface conditions, and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected and surfaces are dry.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions applicable to substrates and coating systems indicated.
- B. Remove hardware and hardware accessories, plates, machined surfaces, light fixtures, and similar items already installed that are not to be coated. If removal is impractical or impossible

because of size or weight of item, provide surface-applied protection before surface preparation and coating.

1. After completing coating operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of coatings, including dust, dirt, oil, grease, and incompatible paints and encapsulants. Do not coat surfaces if surface moisture content or alkalinity exceeds that permitted in manufacturer's written instructions.
1. Remove incompatible primers, and reprime substrate with compatible primers as required to produce coating systems indicated.
  2. Perform cleaning and coating application so dust and other contaminants from cleaning process do not fall on wet, newly coated surfaces.

### 3.3 INSTALLATION

- A. Apply intumescent paints according to manufacturer's written instructions and to comply with requirements for listing and labeling for surface-burning characteristics specified.
1. Use equipment and techniques best suited for substrate and type of material being applied.
  2. Coat surfaces behind movable items the same as similar exposed surfaces.
  3. Apply each coat separately according to manufacturer's written instructions.
- B. Apply coatings to prepared surfaces as soon as practical after preparation and before subsequent surface soiling or deterioration.
- C. Apply coatings to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Produce sharp lines and color breaks.
1. Pigmented Finishes: If undercoats or other conditions show through pigmented topcoat/overcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

### 3.4 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from coating application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.



- D. At completion of construction activities of other trades, touch up and restore damaged or defaced coated surfaces.

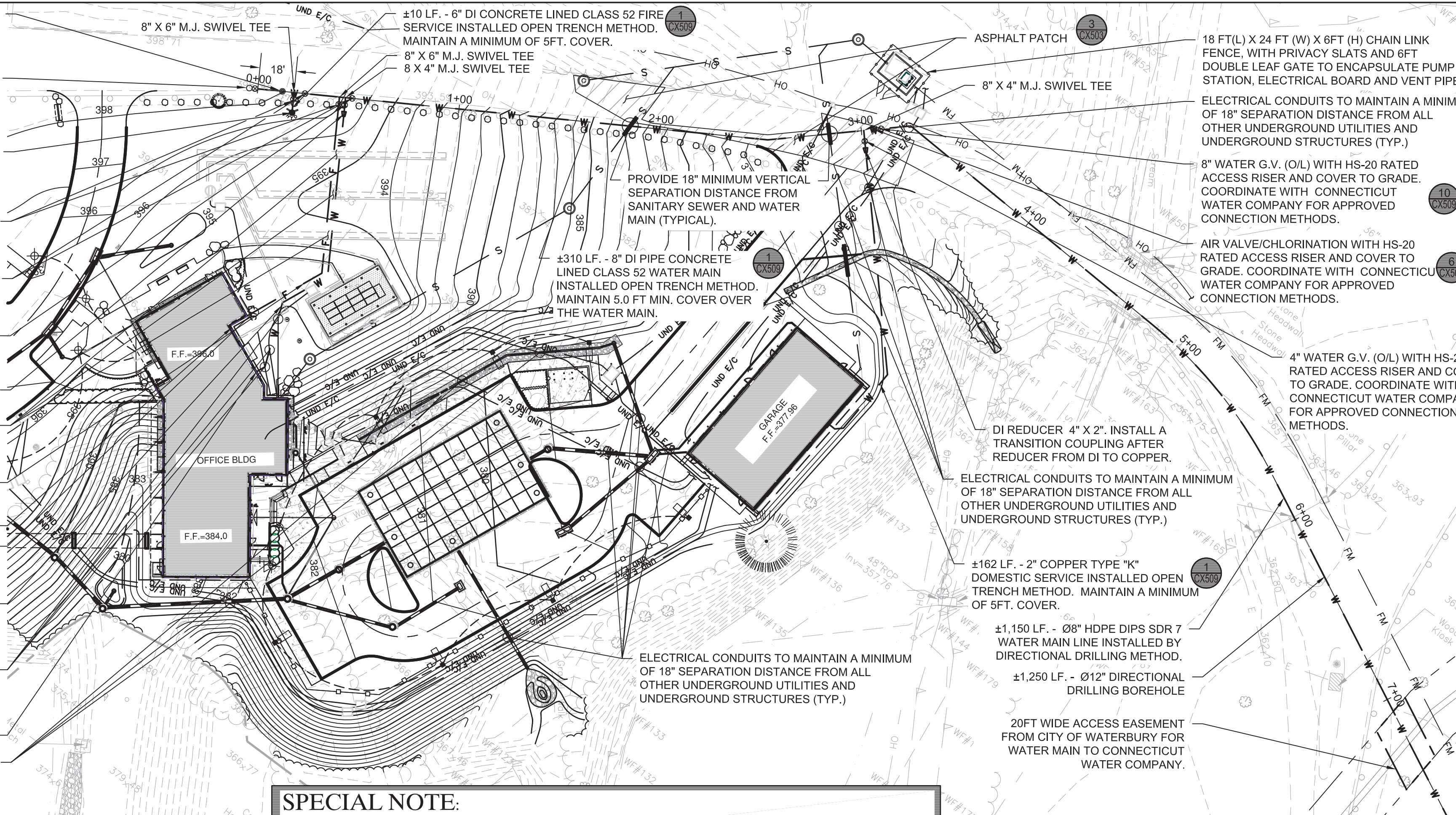
### 3.5 INTERIOR INTUMESCENT PAINTING SCHEDULE

#### A. Steel Substrates:

- 1. Pigmented, Fire-Retardant, Water-based Intumescent Coating System (Basis of Design, Sherwin Williams):
  - a. Prime Coat:
    - 1) Basis of Design, Sherwin Williams Kem-Bond HS
  - b. Intermediate Coat:
    - 1) Basis of Design: Sherwin Williams Firetex FX5120
  - c. Topcoat:
    - 1) Fire-retardant coating, latex, interior, flat.
    - 2) Basis of Design: Sherwin Williams Firetex FX5120

END OF SECTION 099646

- 6 AIR VALVE/CHLORINATION WITH HS-20 RATED ACCESS RISER AND COVER TO GRADE. COORDINATE WITH CONNECTICUT WATER COMPANY FOR APPROVED CONNECTION METHODS.
- CONNECTICUT WATER COMPANY BLOW OFF ASSEMBLY: 8" G.V. (O/L), FULL STICK 8" MAIN, 8"x2" TAPPED TYTON PLUG, 2"x24" BRASS NIPPLE, 2" THREADED G.V. (O/L), 2"x24" GALV. NIPPLE, 2" GALV. ELBOW, 2"x48" GALV. RISER, 2" GALV. COUPLING, 2" PVC THREADED PLUG
- 5-0" BURY MUELLER FIRE HYDRANT, ORIENTATION AS APPROVED BY THE STATE OF CT FIRE MARSHALL OFFICE AND CONNECTICUT WATER COMPANY. COORDINATE WITH CONNECTICUT WATER COMPANY AND CT FIRE MARSHALL OFFICE FOR APPROVED CONNECTION METHODS.
- 6" WATER G.V. (O/L) WITH HS-20 RATED ACCESS RISER AND COVER TO GRADE. COORDINATE WITH CONNECTICUT WATER COMPANY FOR APPROVED CONNECTION METHODS.
- 8" WATER G.V. (O/L) WITH HS-20 RATED ACCESS RISER AND COVER TO GRADE. COORDINATE WITH CONNECTICUT WATER COMPANY FOR APPROVED CONNECTION METHODS.
- 4" WATER G.V. (O/L) WITH HS-20 RATED ACCESS RISER AND COVER TO GRADE. COORDINATE WITH CONNECTICUT WATER COMPANY FOR APPROVED CONNECTION METHODS.
- DI REDUCER 4" X 2". INSTALL A TRANSITION COUPLING AFTER REDUCER FROM DI TO COPPER.
- ENSURE 24" VERTICAL SEPARATION DISTANCE IS MAINTAINED BETWEEN TOP OF WATER PIPING AND BOTTOM OF GEOTHERMAL PIPE TRENCH BEDDING. SEE DETAIL 2 ON SHEET SU-1.
- ±142 LF. - 6" DI CONCRETE LINED CLASS 52 FIRE SERVICE INSTALLED OPEN TRENCH METHOD. MAINTAIN A MINIMUM OF 5FT. COVER.
- 6" DI CONCRETE FIRE SERVICE LINE INV. OUT: 386.0'
- ELECTRICAL CONDUITS TO MAINTAIN A MINIMUM OF 18" SEPARATION DISTANCE FROM ALL OTHER UNDERGROUND UTILITIES AND UNDERGROUND STRUCTURES (TYP.)
- ±157 LF. - 2 1/2" COPPER TYPE "K" DOMESTIC SERVICE INSTALLED OPEN TRENCH METHOD. MAINTAIN A MINIMUM OF 5FT. COVER.
- ELECTRICAL CONDUITS TO MAINTAIN A MINIMUM OF 18" SEPARATION DISTANCE FROM ALL OTHER UNDERGROUND UTILITIES AND UNDERGROUND STRUCTURES (TYP.)
- 2.5" COPPER DOMESTIC WATER INV. OUT: 386.0'
- ELECTRICAL CONDUITS TO MAINTAIN A MINIMUM OF 18" SEPARATION DISTANCE FROM ALL OTHER UNDERGROUND UTILITIES AND UNDERGROUND STRUCTURES (TYP.)



- ### WATER INSTALLATION NOTES:
- JOINT RESTRAINTS ARE TO BE INSTALLED ON A MINIMUM OF TWO PIPE JOINTS EITHER SIDE OF THE FITTINGS (25 FT. MINIMUM EACH SIDE). THRUST BLOCKS, SOLID CONCRETE BLOCKS WITH OAK WEDGES, ARE TO BE INSTALLED AT ALL BENDS AND TEES AGAINST UNDISTURBED EARTH.
  - INSPECTION OF THE INSTALLATION FOR ALL WATER PIPING AND ALL JOINT RESTRAINT METHODS ARE TO BE WITNESSED BY THE OFFICE OF STATE FIRE MARSHAL AND CONNECTICUT WATER COMPANY.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY AND EXPENSE TO PROVIDE ANY FITTINGS, JOINTS AND RESTRAINTS THAT ARE NOT SHOWN ON THIS PLAN, BUT REQUIRED TO ACHIEVE THE INSTALLATION.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY AND EXPENSE TO INSTALL AND MAINTAIN EROSION AND SEDIMENTATION DEVICES AS REQUIRED BY THESE PLANS. SEE SHEETS CG301, CG303, CX501, CX502.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY AND EXPENSE TO CUT BITUMINOUS CONCRETE AND CURBING AND DISPOSE OFF OF THE SITE.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY AND EXPENSE TO GRUB AND CLEAR THE STAGING AREA, AND DISPOSE OFF DEBRIS OF THE SITE.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY AND EXPENSE TO PATCH THE BITUMINOUS CONCRETE PAVEMENT AND CURBING, AND RESTORE STRIPING. SEE SHEET CX503.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY AND EXPENSE TO REPAIR ANY GRAVEL AREA IF IT WAS DISTURBED DURING THE CONSTRUCTION OR FROM CONTRACTION EQUIPMENT.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY AND EXPENSE TO PROVIDE TOPSOIL AND SEED THE DISTURBED AREAS.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY AND EXPENSE TO REMOVE ALL EROSION AND SEDIMENTATION DEVICES WHEN GROUND COVER IS ESTABLISHED AND DISPOSE OFF OF THE SITE.
- ### UTILITY NOTES:
- CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY EXISTING UNDERGROUND UTILITIES LOCATIONS AND ELEVATIONS WITHIN THE CONSTRUCTION AREA PRIOR TO EXCAVATION.
  - DOMESTIC AND FIRE WATER SERVICE LINES AND WATER MAIN SHALL MAINTAIN A MINIMUM 18" SEPARATION DISTANCE FROM ALL OTHER UNDERGROUND UTILITIES AND STRUCTURES. IF THE REQUIREMENT CANNOT BE ACHIEVED, THE WATER PIPE SHALL BE SLEEVED.
  - CONTRACTOR IS TO ENSURE CARE IS TAKEN TO PROTECT KNOWN ANY UNDERGROUND UTILITIES. IF ANY UTILITIES BECOME DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR IS RESPONSIBLE TO NOTIFY AN APPROPRIATE AGENCY FOR IMMEDIATE REPAIR AT THE CONTRACTOR'S EXPENSE.
  - CONTRACTOR IS TO REFER TO THE LATEST MEP SERIES DRAWINGS FOR ALL UTILITY OUTLET LOCATIONS AND CONNECTIONS.
  - ALL WORK AND MATERIALS FOR WATER MAIN AND SERVICE LINE INSTALLATION TO CONFORM TO THE CONNECTICUT HEALTH CODE AND CT WATER COMPANY RULES AND REGULATIONS.
  - THE PROPOSED UTILITIES THAT ARE NOT DEPENDENT UPON GRAVITY FLOW MUST BE INSTALLED TO AVOID CONFLICT WITH GRAVITY FED UTILITIES. EACH TRADE CONTRACTOR MUST COORDINATE WITH EACH UTILITY THAT HAS BEEN INSTALLED AND THE UTILITIES THAT REMAIN TO BE INSTALLED. THIS INCLUDES THE NEED TO DETERMINE VERTICAL AND HORIZONTAL LOCATION OF OTHER UTILITIES AND TO ANTICIPATE THE CORRECT LOCATION FOR ALL UNDERGROUND UTILITIES, PIPES, STRUCTURES, AND ANY OTHER FEATURES, WHILE MAINTAINING MINIMUM REQUIRED COVER AND VERTICAL SEPARATION DISTANCES. NOT ALL POTENTIAL CONFLICTS HAVE BEEN NOTED ON THE DRAWINGS.
  - REFER TO DRAWING SHEET CX-509 FOR PROPOSED UNDERGROUND UTILITY DETAILS.
- ### WATER MAIN INSTALLATION REQUIREMENTS:
- PROJECT MUST BE CONSTRUCTED TO ALL CT WATER COMPANY (CWC) SPECIFICATIONS.
  - CLASS 52 DUCTILE IRON PIPE REQUIRED.
  - COPPER AND/OR DUCTILE IRON SERVICE LATERAL MATERIAL REQUIRED.
  - GATE VALVES (G.V.) OPEN LEFT (O/L).
  - FIRE HYDRANTS OPEN LEFT, 5' BURY DEPTH. CWC WILL FURNISH MATERIALS INCLUDING TEE, VALVE, PIPE, HYDRANT AND ACCESSORIES FOR FIRE HYDRANTS THAT TO BE LOCATED ON CWC THE WATER MAIN EXTENSION WITHIN TOWN OF THOMASTON. FIRE HYDRANTS TO BE INSTALLED WITH FACE OF HYDRANT 3-FEET OFF FACE OF CURB. HYDRANTS ARE NOT TO BE INSTALLED IN SIDEWALKS, WHERE 3-FEET CANNOT BE OBTAINED, INSTALL HYDRANT BEHIND SIDEWALK UNLESS OTHERWISE NOTED OR AS DIRECTED BY A CT WATER COMPANY PROJECT MANAGER. 10-FEET HORIZONTAL SEPARATION REQUIRED BETWEEN HYDRANTS, SEWER MANHOLES AND STORM DRAINS. \*\*\*FIRE HYDRANTS MUST BE INSTALLED WITH FINISH GRADE AT THE BURY LINE CAST INTO THE LOWER BARREL. CONTRACTOR IS RESPONSIBLE FOR ADJUSTMENTS OF WATER MAIN AND LATERAL ELEVATION TO ACHIEVE PROPER BURY DEPTH. ANY COSTS RELATED TO ADJUSTMENTS REQUIRED BY CT WATER COMPANY WILL BE THE RESPONSIBILITY OF THE INSTALLATION CONTRACTOR AND/OR APPLICANT OF RECORD.
  - ALL WATER MAIN PIPING AND APPURTENANCES MUST BE POLYETHYLENE ENCASED IN ACCORDANCE WITH AWWA ANS-AWWA C105/A21.5-99(10)
  - MEGALUG RESTRAINTS REQUIRED ON ALL FITTINGS, BENDS, OFFSETS, TEES, GATE VALVES AND HYDRANTS.
  - FIELD LOK (U.S. PIPE) OR SURE STOP 350 (MCWANE) RESTRAINING GASKETS ARE REQUIRED 2 PIPE JOINTS ON BOTH SIDES OF EACH FITTING AND ON THE LAST 3 PIPE LENGTHS ON DEAD ENDS.
  - THRUST BLOCKING IS REQUIRED ON ALL BENDS, TEES, OFFSETS, HYDRANTS AND DEAD ENDS.
  - ALL WATER MAINS SHALL BE INSTALLED TO A DEPTH OF 4-FEET OF COVER BASED ON THE ROADWAY GRADE, EXCEPT AS NOTED.
  - 3-FT MINIMUM HORIZONTAL SEPARATION REQUIRED BETWEEN WATER AND ANY OTHER UTILITY/UNDERGROUND STRUCTURE. 10-FT MINIMUM HORIZONTAL SEPARATION REQUIRED BETWEEN WATER AND SEWER/SEPTIC (SEWER). SEWER MUST BE SLEEVED WHERE WATER CROSSES SEWER IF WATER IS BELOW AND/OR WHEN 18" VERTICAL SEPARATION CANNOT BE ACHIEVED.

**SPECIAL NOTE:**  
DURING CONSTRUCTION, ANY UNDOCUMENTED OR UNIDENTIFIED EXISTING UNDERGROUND UTILITIES THAT ARE FOUND TO BE IN CONFLICT WITH THE PROPOSED INSTALLATION OR ARE DAMAGED BY THE CONTRACTOR DURING THE CONSTRUCTION ARE TO BE IMMEDIATELY REPORTED TO THE PROJECT CONSTRUCTION MANAGER AND APPROPRIATE AGENCIES. PAYMENT WILL BE ACCORDING TO THE CONTRACT DOCUMENTS.

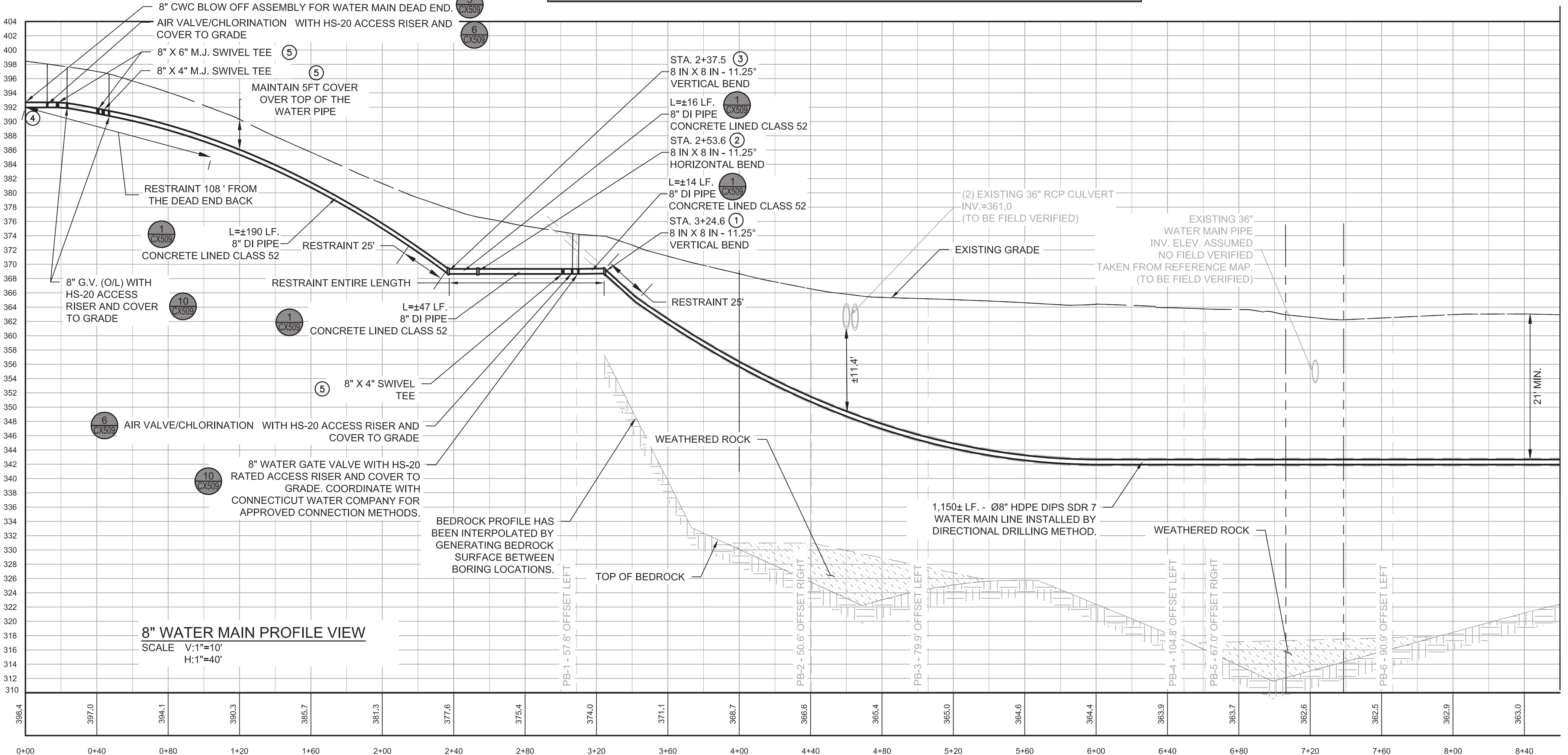
**NOTE:**  
INDICATED UNDERGROUND UTILITIES ARE BASED ON INDICATED MAP REFERENCES. THE LOCATIONS ARE TO BE CONSIDERED APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. PRIOR ANY CONSTRUCTION THE CONTRACTOR SHALL CALL 1-800-922-4455 AND HAVE ALL UTILITIES MARKED ON THE GROUND.

**MAP REFERENCES:**

- TOPOGRAPHIC/BOUNDARY SURVEY, LAND SURVEY FOR DESIGN AND CONSTRUCTION PURPOSES AT BLACK ROCK STATE PARK PREPARED BY MARTINEZ COUCH & ASSOCIATES, LLC, DATED: 07/13/2016; SCALE: 1"=40'

**8" WATER MAIN PLAN VIEW**  
SCALE 1"=40'

MATCH LINE - PLAN VIEW SHEET CU102



**8" WATER MAIN PROFILE VIEW**  
SCALE V:1"=10'  
H:1"=40'

MATCH LINE - PROFILE - SHEET CU102

THRUST BLOCK (SEE DETAIL 8 SHEET CX-509)						
DESIGNED PRESSURE 250 LB/SQ. INCH.						
BEND ANGLE	BEND	DEPTH (FT.)	THRUST BLOCK AREA (SQ. FT.)	MINIMUM VOLUME (CU. YD.)	L (INCH)	W (INCH)
① 45°	VERTICAL	5.0	8.0	0.60	24	49
② 11.25°	HORIZONTAL	5.5	2.1	0.16	24	13
③ 11.25°	VERTICAL	5.5	2.1	0.16	24	13
④ 8" DEAD END		5.0	10.5	0.78	24	63
⑤ 8"x6" SWIVEL TEE		5.0	10.5	0.78	24	63

**UTILITIES NOTES:**  
ELECTRICAL, COMMUNICATION, LIGHTING CONDUITS, AND ALL STRUCTURES ARE SHOWN ON THIS PLAN FOR INFORMATION ONLY. FOR THE ABOVE REFERENCED UTILITY DESIGN INFORMATION SEE SHEET SE-1.

SYMBOLS LEGEND	
EXISTING	NEW WORK
—	MONUMENT
—	PROPERTY LINE
—	CONTOUR LINE
—	SPOT GRADE
—	WATER LINE
—	DRAIN LINE
—	SANITARY LINE
—	SANITARY FORCE MAIN
—	ELECTRIC LINE (OVER HEAD)
—	ELECTRIC COMMUNICATION
—	UNDERGROUND FENCE LINE
—	CATCH BASIN
—	STORM WATER CLEAN OUT
—	YARD DRAIN
—	DRAINAGE MANHOLE
—	WATER QUALITY DEVICE
—	WATER MANHOLE
—	SANITARY MANHOLE
—	SANITARY SEWER CLEAN OUT
—	HYDRANT
—	WATER GATE VALVE
—	AIR VALVE/CHLORINATION
—	METAL POST/BOLLARD
—	SIGN
—	LIGHT POLE
—	UTILITY POLE
—	GUY WIRE
—	MONITORING WELL
—	TREE
—	STUMP
—	PB-1 TEST BORING

SCALE: 1" = 40' - 0"

drawing title <b>WATER MAIN PLAN AND PROFILE</b>		STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
REVISIONS		drawing prepared by <b>MARTINEZ COUCH &amp; ASSOCIATES, LLC</b>	
No.	date	description	date
Δ	04/08/21	ADDENDUM 2	05/15/2020
project <b>DEEP WEST DISTRICT HEAD QUARTERS</b>		scale 1"=40'	
BLACK ROCK STATE PARK 2065 THOMASTON ROAD WATERTOWN, CONNECTICUT 06795		drawing no. <b>CU101</b>	
CAD no. 2017-240 MCA UTILITIES041121		project no. BL-T-615	

Richard Couch, I am signing for sheet CU101

### WATER MAIN INSTALLATION REQUIREMENTS:

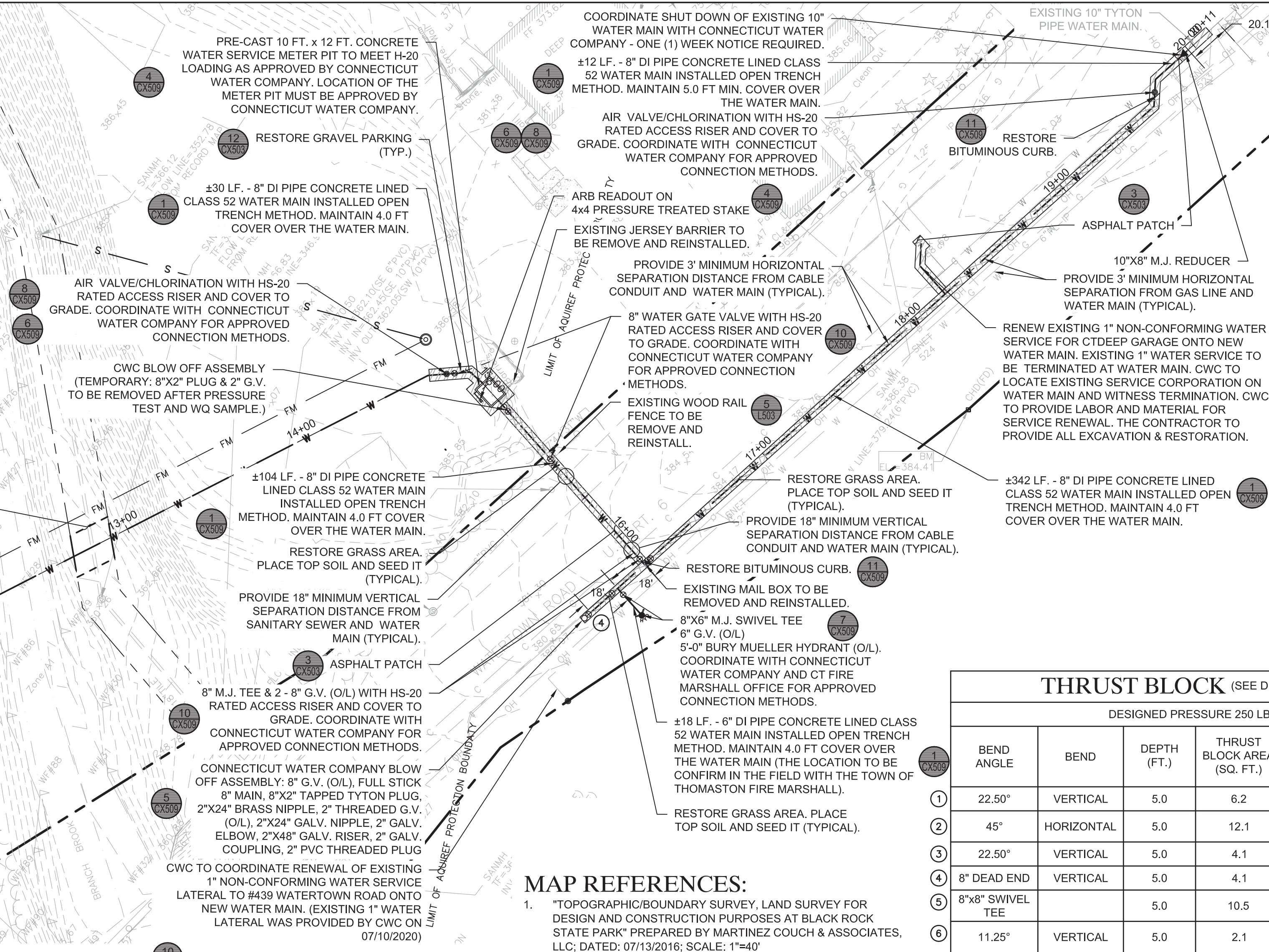
- PROJECT MUST BE CONSTRUCTED TO ALL CT WATER COMPANY (CWC) SPECIFICATIONS.
- CLASS 52 DUCTILE IRON PIPE REQUIRED.
- COPPER AND/OR DUCTILE IRON SERVICE LATERAL MATERIAL REQUIRED.
- GATE VALVES (G.V.) OPEN LEFT (OIL).
- FIRE HYDRANTS OPEN LEFT, 5' BURY DEPTH. CWC WILL FURNISH MATERIALS INCLUDING TEE, VALVE, PIPE, HYDRANT AND ACCESSORIES FOR FIRE HYDRANTS THAT TO BE LOCATED ON CWC THE WATER MAIN EXTENSION WITHIN TOWN OF THOMASTON. FIRE HYDRANTS TO BE INSTALLED WITH FACE OF HYDRANT 3-FEET OFF FACE OF CURB. HYDRANTS ARE NOT TO BE INSTALLED IN SIDEWALKS. WHERE 3-FEET CANNOT BE OBTAINED, INSTALL HYDRANT BEHIND SIDEWALK UNLESS OTHERWISE NOTED OR AS DIRECTED BY A CT WATER COMPANY PROJECT MANAGER. 10-FEET HORIZONTAL SEPARATION REQUIRED BETWEEN HYDRANTS, SEWER MANHOLES AND STORM DRAINS. \*\*FIRE HYDRANTS MUST BE INSTALLED WITH FINISH GRADE AT THE BURY LINE CAST INTO THE LOWER BARREL. CONTRACTOR IS RESPONSIBLE FOR ADJUSTMENTS OF WATER MAIN AND LATERAL ELEVATION TO ACHIEVE PROPER BURY DEPTH. ANY COSTS RELATED TO ADJUSTMENTS REQUIRED BY CT WATER COMPANY WILL BE THE RESPONSIBILITY OF THE INSTALLATION CONTRACTOR AND/OR APPLICANT OF RECORD.
- ALL WATER MAIN PIPING AND APPURTENANCES MUST BE POLYETHYLENE ENCASED IN ACCORDANCE WITH AWWA ANSI-AWWA C105/A21.5-99(10)
- MEGALUG RESTRAINTS REQUIRED ON ALL FITTINGS, BENDS, OFFSETS, TEES, GATE VALVES AND HYDRANTS.
- FIELD LOK (U.S. PIPE) OR SURE STOP 350 (MCWANE) RESTRAINING GASKETS ARE REQUIRED 2 PIPE JOINTS ON BOTH SIDES OF EACH FITTING AND ON THE LAST 3 PIPE JOINTS ON DEAD ENDS.
- THRUST BLOCKING IS REQUIRED ON ALL BENDS, TEES, OFFSETS, HYDRANTS AND DEAD ENDS.
- ALL WATER MAINS SHALL BE INSTALLED TO A DEPTH OF 4-FEET OF COVER BASED ON THE ROADWAY GRADE, EXCEPT AS NOTED.
- 3-FT MINIMUM HORIZONTAL SEPARATION REQUIRED BETWEEN WATER AND ANY OTHER UTILITY UNDERGROUND STRUCTURE. 10-FT MINIMUM HORIZONTAL SEPARATION REQUIRED BETWEEN WATER AND SEWER/SEPTIC ("SEWER"). SEWER MUST BE SLEEVED WHERE WATER CROSSES SEWER IF WATER IS BELOW AND/OR WHEN 18" VERTICAL SEPARATION CANNOT BE ACHIEVED.

20FT WIDE ACCESS EASEMENT FROM WPCA THOMASTON FOR WATER MAIN.

Ø12" DIRECTIONAL DRILLING BOREHOLE

Ø8" HDPE DIPS SDR 7 WATER MAIN LINE INSTALLED BY DIRECTIONAL DRILLING METHOD.

8" WATER MAIN PLAN VIEW  
SCALE 1"=40'



### MAP REFERENCES:

- "TOPOGRAPHIC/BOUNDARY SURVEY, LAND SURVEY FOR DESIGN AND CONSTRUCTION PURPOSES AT BLACK ROCK STATE PARK" PREPARED BY MARTINEZ COUCH & ASSOCIATES, LLC, DATED: 07/13/2016; SCALE: 1"=40'

### THRUST BLOCK (SEE DETAIL 8 SHEET CX-509)

DESIGNED PRESSURE 250 LB/SQ. INCH.						
BEND ANGLE	BEND	DEPTH (FT.)	THRUST BLOCK AREA (SQ. FT.)	MINIMUM VOLUME (CU. YD.)	L (INCH)	W (INCH)
① 22.50°	VERTICAL	5.0	6.2	0.54	28	32
② 45°	HORIZONTAL	5.0	12.1	1.06	28	63
③ 22.50°	VERTICAL	5.0	4.1	0.37	28	22
④ 8° DEAD END	VERTICAL	5.0	4.1	0.37	28	22
⑤ 8"X8" SWIVEL TEE		5.0	10.5	0.78	24	63
⑥ 11.25°	VERTICAL	5.0	2.1	0.16	24	13

### SPECIAL NOTE:

DURING CONSTRUCTION, ANY UNDOCUMENTED OR UNIDENTIFIED EXISTING UNDERGROUND UTILITIES THAT ARE FOUND TO BE IN CONFLICT WITH THE PROPOSED INSTALLATION OR ARE DAMAGED BY THE CONTRACTOR DURING THE CONSTRUCTION ARE TO BE IMMEDIATELY REPORTED TO THE PROJECT CONSTRUCTION MANAGER AND APPROPRIATE AGENCIES. PAYMENT WILL BE ACCORDING TO THE CONTRACT DOCUMENTS.

### NOTE:

INDICATED UNDERGROUND UTILITIES ARE BASED ON INDICATED MAP REFERENCES. THE LOCATIONS ARE TO BE CONSIDERED APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. PRIOR ANY CONSTRUCTION THE CONTRACTOR SHALL CALL 1-800-922-4455 AND HAVE ALL UTILITIES MARKED ON THE GROUND.

### UTILITIES NOTES:

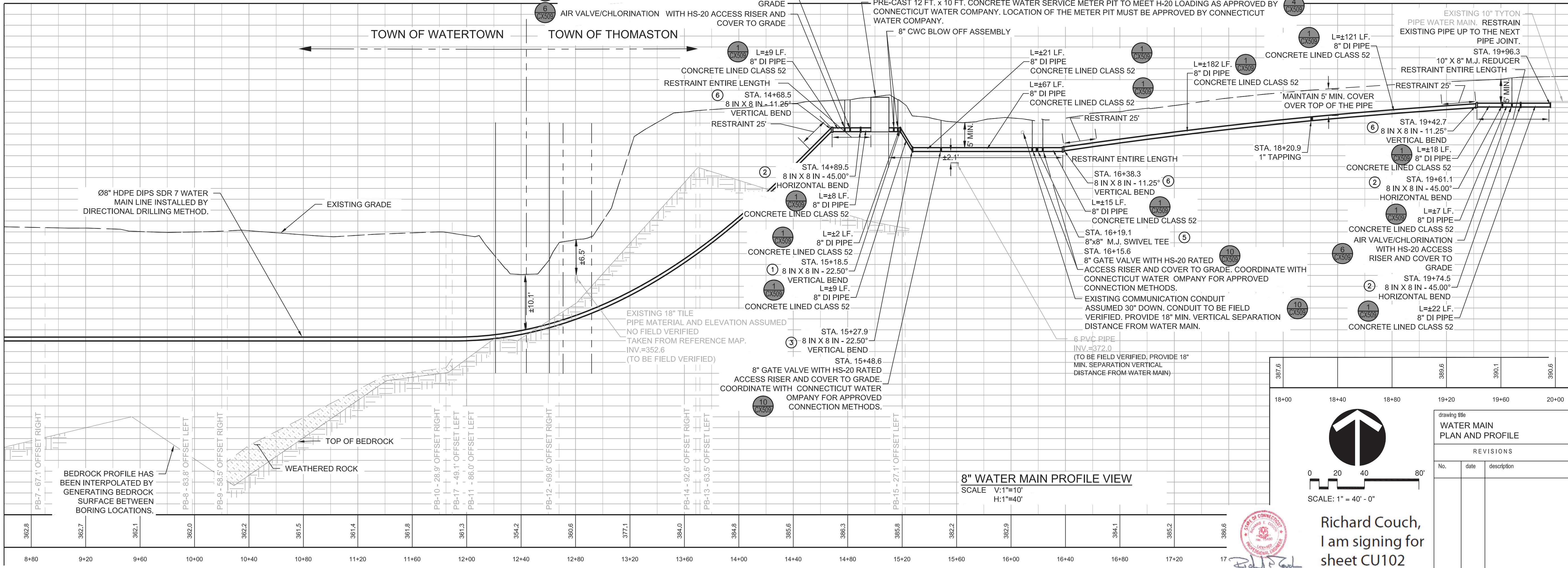
ELECTRICAL, COMMUNICATION, LIGHTING CONDUITS, AND ALL STRUCTURES ARE SHOWN ON THIS PLAN FOR INFORMATION ONLY. FOR THE ABOVE REFERENCED UTILITY DESIGN INFORMATION SEE SHEET SE-1.

### SYMBOLS LEGEND

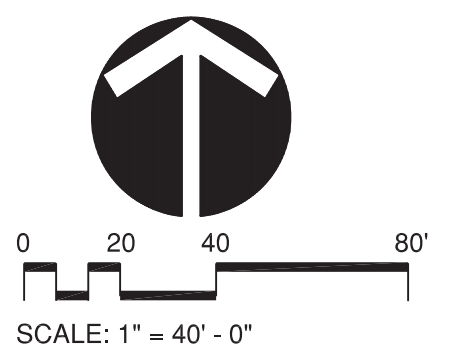
EXISTING	NEW WORK
MONUMENT	MONUMENT
PROPERTY LINE	PROPERTY LINE
CONTOUR LINE	CONTOUR LINE
SPOT GRADE	SPOT GRADE
WATER LINE	WATER LINE
DRAIN LINE	DRAIN LINE
SANITARY LINE	SANITARY LINE
SANITARY FORCE MAIN	SANITARY FORCE MAIN
ELECTRIC LINE (OVER HEAD)	ELECTRIC LINE (OVER HEAD)
UNDERGROUND ELECTROCOMMUNICATION FENCE LINE	UNDERGROUND ELECTROCOMMUNICATION FENCE LINE
CATCH BASIN	CATCH BASIN
STORM WATER CLEAN OUT	STORM WATER CLEAN OUT
YARD DRAIN	YARD DRAIN
DRAINAGE MANHOLE	DRAINAGE MANHOLE
WATER QUALITY DEVICE	WATER QUALITY DEVICE
WATER MANHOLE	WATER MANHOLE
SANITARY MANHOLE	SANITARY MANHOLE
SANITARY SEWER CLEAN OUT	SANITARY SEWER CLEAN OUT
HYDRANT	HYDRANT
WATER GATE VALVE	WATER GATE VALVE
AIR VALVE/CHLORINATION	AIR VALVE/CHLORINATION
METAL POST/ BOLLARD	METAL POST/ BOLLARD
SIGN	SIGN
LIGHT POLE	LIGHT POLE
UTILITY POLE	UTILITY POLE
GUY WIRE	GUY WIRE
MONITORING WELL	MONITORING WELL
TREE	TREE
STUMP	STUMP
PB-1	TEST BORING

TOWN OF WATERTOWN

TOWN OF THOMASTON



8" WATER MAIN PROFILE VIEW  
SCALE V:1"=10'  
H:1"=40'



REVISIONS		
No.	date	description

**STATE OF CONNECTICUT**  
DEPARTMENT OF ADMINISTRATIVE SERVICES

drawing prepared by  
**MARTINEZ COUCH & ASSOCIATES, LLC**  
1084 CROMWELL AVENUE  
ROCKY HILL CT. 06067

date  
05/15/2020

scale  
1"=40'

drawn by  
FV

approved by  
RL

drawing no.  
**CU102**

project  
**DEEP WEST DISTRICT HEAD QUARTERS**  
BLACK ROCK STATE PARK  
2065 THOMASTON ROAD  
WATERTOWN, CONNECTICUT 06795

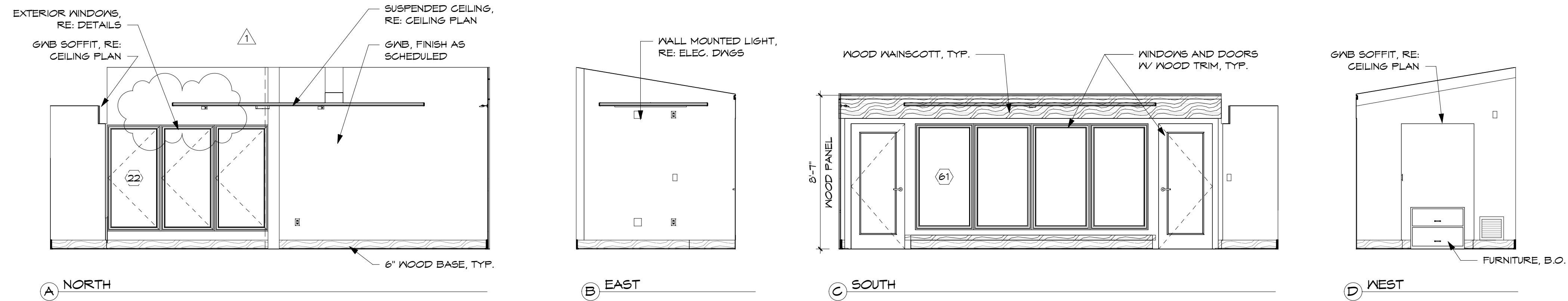
CAD no.  
2017-240 MCA  
UTILITIES041121

project no.  
BL-T-615

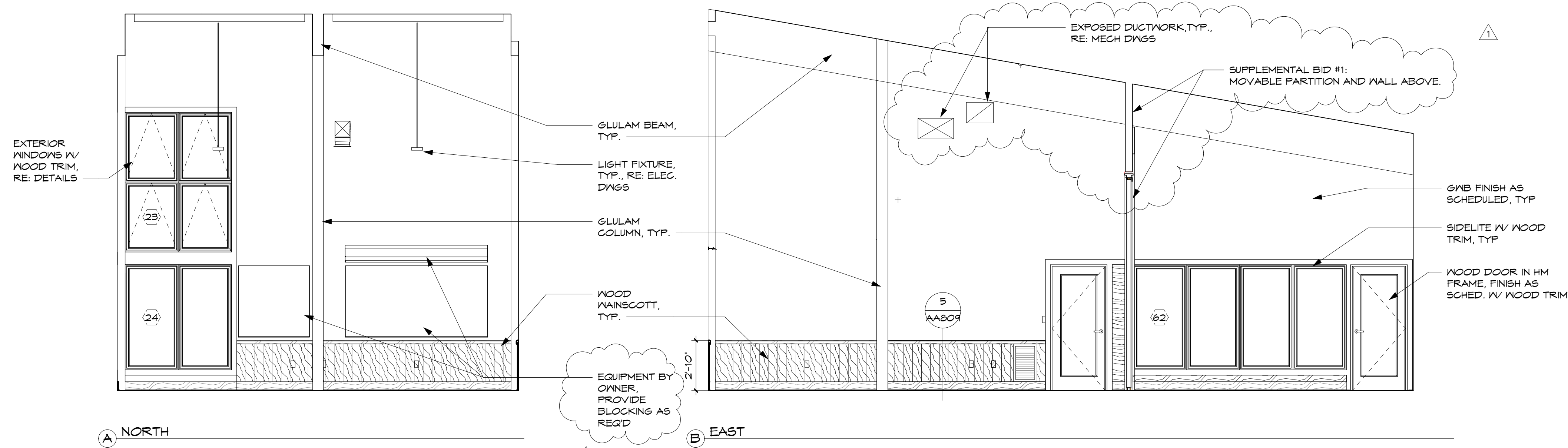
Richard Couch,  
I am signing for  
sheet CU102

MATCH LINE PLAN VIEW - SHEET CU101

MATCH LINE - PROFILE - SHEET CU101

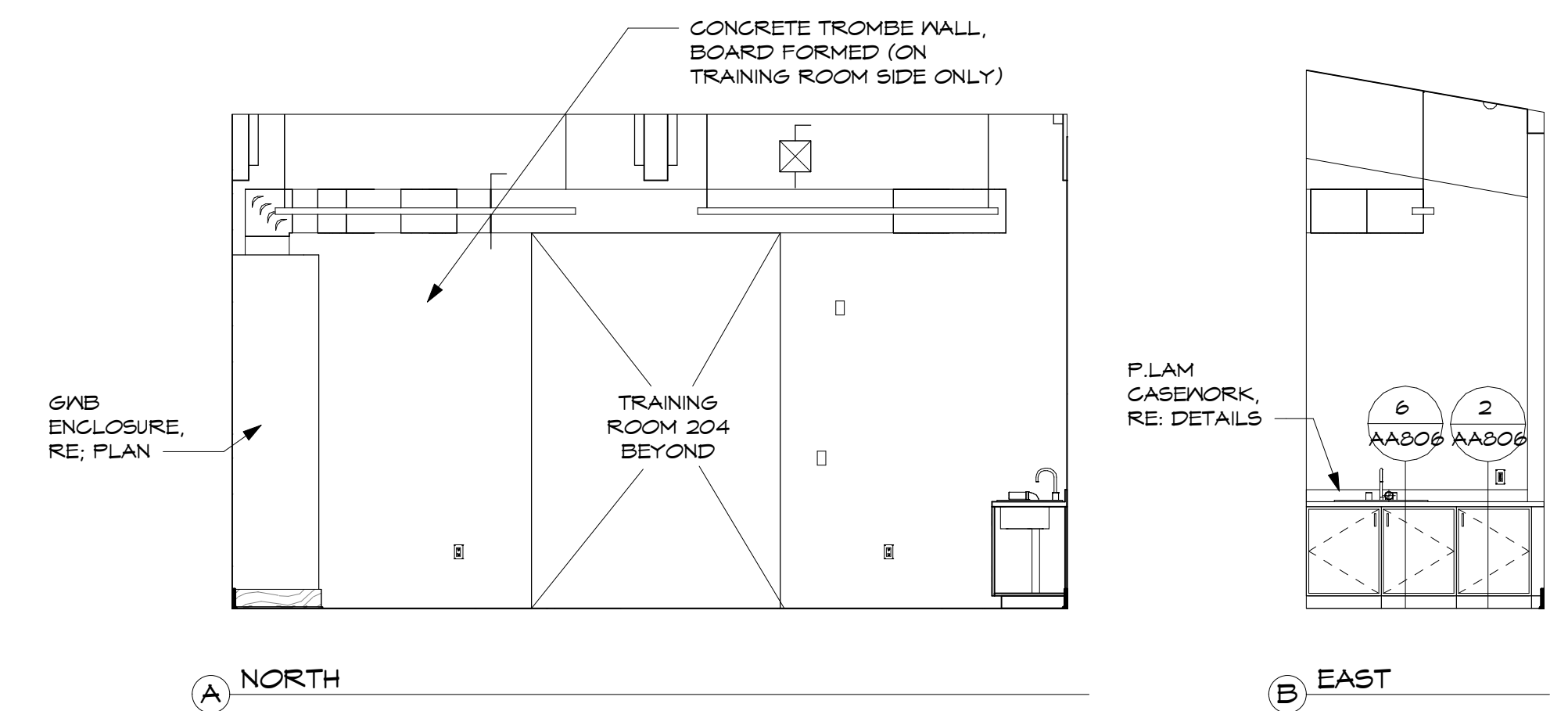


**15 CONFERENCE 205**  
1/4" = 1'-0"

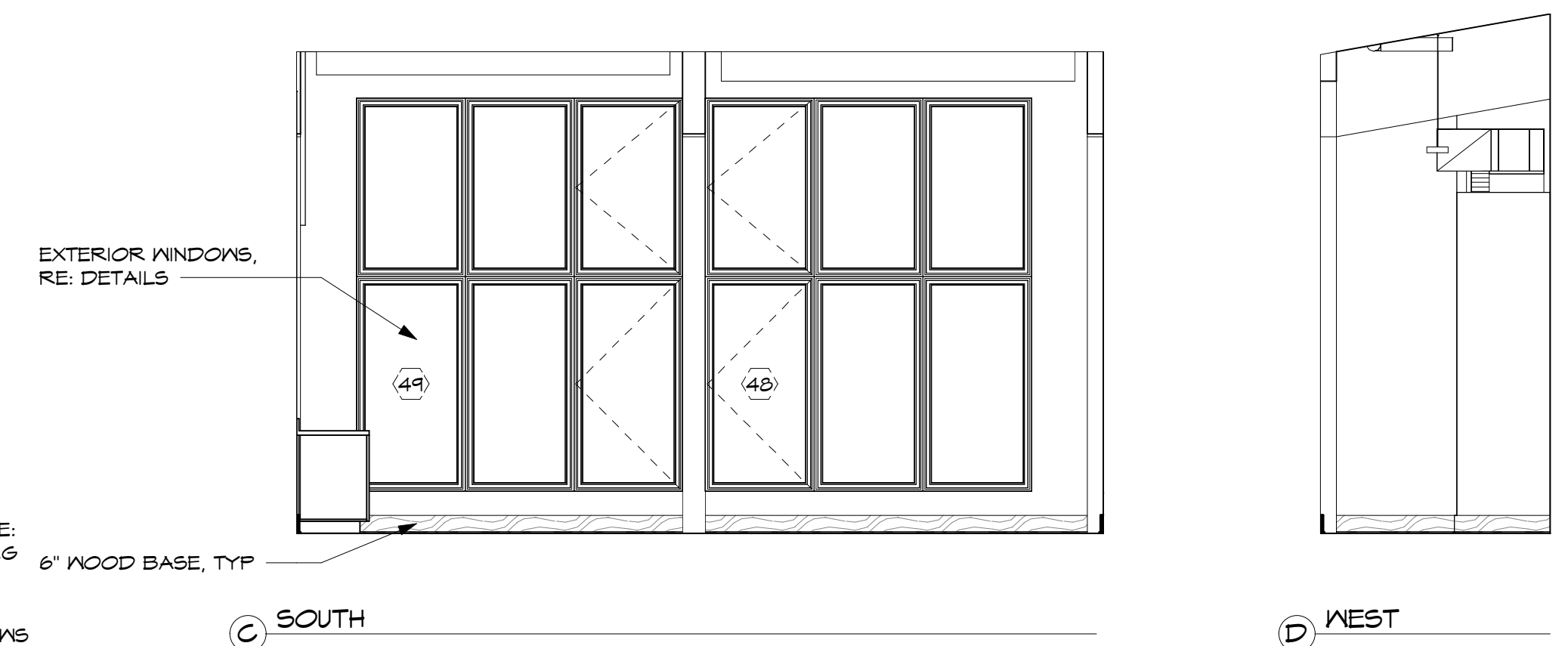


**13 TRAINING ROOM 204**  
1/4" = 1'-0"

**13 TRAINING ROOM 204**  
1/4" = 1'-0"



**6 STORAGE / KITCHEN 203**  
1/4" = 1'-0"



drawing title			STATE OF CONNECTICUT	
INTERIOR ELEVATIONS			DEPARTMENT OF ADMINISTRATIVE SERVICES	
REVISIONS				
mark	date	description	drawing prepared by	date
1	4/7/21	APPENDIX 02	TLB ARCHITECTURE, LLC 92 WEST MAIN STREET CHESTER, CT	5/15/2020
			project	scale
			DEEP WEST DISTRICT HEADQUARTERS	AS NOTED
			drawn by	drawn by
			AF/KZ/JM	AF/KZ/JM
			approved by	approved by
			MF	MF
			drawing no.	drawing no.
			AA506	AA506