COUNTY OF WESTCHESTER
NEW YORK

DIVISION OF ENGINEERING

ADDENDUM NO. 5

CONTRACT NO. 17-519

BLUE MOUNTAIN RESERVATION
SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT AND CITY OF PEEKSKILL, NEW YORK

The attention of the bidders is directed to the following changes, additions, and/or substitutions affecting the above referenced contract.

I. RE: GENERAL CONTRACT INFORMATION:

Item 1: Bidder Questions and Responses
Attached hereto.

II. RE: THE SPECIFICATIONS:

Item 1: TOC - Technical Specifications i and ii shall be deleted and the revised TOC - Technical Specifications i and ii are attached hereto.

Item 2: Specification section 01 11 00 shall be deleted and the revised specification section 01 11 00 is attached hereto.

Item 3: Specification section 01 20 00 shall be deleted and the revised specification section 01 20 00 is attached hereto.

Item 4: Specification section 31 11 00 is attached hereto.

Item 5: Specification section 33 05 19 shall be deleted and the revised specification section 33 05 19 is attached hereto.

III. RE: THE PLANS:

Item 1: Drawing C-01 shall be deleted and the revised drawing C-01 is attached hereto.

Item 2: Drawing C-04 shall be deleted and the revised drawing C-04 is attached hereto.

Item 3: Drawing C-06 shall be deleted and the revised drawing C-06 is attached hereto.

Item 4: Drawing C-16 shall be deleted and the revised drawing C-16 is attached hereto.

Item 5: Drawing E-02 shall be deleted and the revised drawing E-02 is attached hereto.

Item 6: Drawing E-07 shall be deleted and the revised drawing E-07 is attached hereto.

Item 7: Drawing E-08 Shall be deleted and the revised drawing E-08 is attached hereto.

Item 8: Drawing E-09 shall be deleted and the revised drawing E-09 is attached hereto.

Item 9: Drawing E-11 shall be deleted and the revised drawing E-11 is attached hereto.

All provisions of the contract not affected by the foregoing shall remain in full force and effect.

COUNTY OF WESTCHESTER
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

By: Hugh J. Greechan Jr., P.E.
Commissioner

Dated: Monday, July 19, 2021
WHITE PLAINS, NEW YORK

BIDDER QUESTIONS AND RESPONSES

COUNTY OF WESTCHESTER
NEW YORK

DIVISION OF ENGINEERING

CONTRACT NO. 17-519

BLUE MOUNTAIN RESERVATION
SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT AND CITY OF PEEKSKILL, NEW YORK

The attention of all bidders is directed to the following responses to questions with regards to the above referenced Contract. These responses are presented for information purposes only and are not intended to modify the Contract. All provisions of the Contract remain in full force and effect. Where modification is required, the bidder's attention is directed to the addenda.

QUESTION NUMBER	QUESTION	RESPONSE
1	QUESTION: Spec page 32 12 16-4 specifies top course as follows: "Provide a wearing surface for permanent pavement, consisting of a top course. Top course shall conform to County Standard for Asphalt Concrete Type lA Top Courses." a. Please provide County Standard for Asphalt Type 1A top course. Is NYSDOT Type 6F an acceptable equivalent to this? b. Does County 1A only apply to path resurfacing, or is it also for trench restoration as well? both c. If not, what is final top course spec for trench restoration?	County standard Asphalt Type 1A top course is equivalent to NYSDOT Type 6F and shall apply to both the path resurfacing and trench restoration.
2	QUESTION: In regard to pavement replacement: Can 7" Asphalt base be placed at trench width, then for final pavement, mill 3-1/2"to achieve cut back width shown for binder and top?	Yes

3	QUESTION: Page 33 05 19-1 of the specification, paragraph J states: "The contractor shall retain, at the contractor's cost, a Licensed Professional Engineer to witness all testing and perform the necessary certifications and filings for acceptance of the completed works." Is a licensed Professional Engineer required to supervised installation of utilities being certified? Please clarify this paragraph and the extent to which a licensed professional engineer is required for this project.	A Licensed Professional Engineer is not required with regard to specification 33 05 19. See updated Specification 33 05 19.
4	QUESTION: 0n sheet C-06, is it the intention to transition proposed 4" DIP to 1" copper at the 45 were noted at existing line? If yes, how is this going to be done? Please provide detail.	The water supply system to Restroom #2 and Restroom #3 has been redesigned. See updated sheet C-6.
5	QUESTION: Can 4" DIP be substituted where 3" DIP is indicated? (Four-inch DIP is cheaper and more readily available.)	Yes, reducing fittings will be needed to connect to existing piping.
6	QUESTION: What is the grade of SS for the 1-1/2" pipe rail at the stairs on sheet 17?	Grade 316 Stainless Steel.
7	QUESTION: Where are benches as mentioned in scope of work? What landscaping is required? Please provide details for both if applicable.	Park benches have been removed from the scope, see updated specification 01 11 00 and 01 20 00. Only restoration landscaping is required.
8	QUESTION: What are specs on pumps being replaced in MH 3? Details?	The pumps are DAYTON 4LE17 as shown on C-5.
9	QUESTION: What is spec on hot box for 4" double ck valve?	See updated sheet C-4 and C-16 for hot box make and model numbers.
10	QUESTION: What are work hours?	Construction can begin at 8am.
11	QUESTION: Are recycled aggregate materials permitted?	No, clean fill only. All fill shall consist of clean soil, sand and/or gravel that is free of the following substances: asphalt, slag, fly ash, broken concrete, demolition debris, garbage, household refuse, tires, woody materials including tree or landscape debris, and metal objects.
12	QUESTION: Is any night work required?	No
13	QUESTION: Please provide minutes of pre-bid meeting.	There are no minutes from the pre-bid meeting
14	QUESTION: Can you provide a recommended supplier for timber bridges?	The supplier is listed within specification 32 34 13.
15	QUESTION: Is a licensed surveyor required? Stamped as-builts?	No, please see General Clauses, paragraph 53, Record Drawings in ITB-17-519
16	QUESTION: Can the bridge abutments be precast?	Yes, additional design and submittals will be required for precast structures. No additional payment shall be made.

17	QUESTION: What are the special requirements if any for work at stream crossings?	The work must comply with the Nationwide Permit General Conditions, New York District General Regional Conditions, and Permit Specific Conditions of the following USACE Nationwide Permits: • Sanitary force main: NWP #58 Utility Line Activities for Water and Other Substances • Footbridges: NWP #3 Maintenance
18	QUESTION: Are any tree removals required?	Only minor tree removal is expected and is included as part of general clearing and grubbing in the base bid.
19	QUESTION: What are the volumes/dimensions of septic tank and distribution box to be cleaned out?	This information will need to be determined in the field.
20	QUESTION: Where will contractor's staging area be located?	Contractor shall coordinate the staging area with an authorized parks representative.
21	QUESTION: What is the M/W/DBE requirements?	Refer to Special Notice Minority Participation Policy and Information for Bidders, Paragraph 36 in ITB-17-519
22	QUESTION: Can the force main be place just off the edge of roadway rather than in the pavement?	Yes, however no extra payment shall be made.
23	QUESTION: Is there a project estimate available?	No
24	QUESTION: Are boring logs available?	Boring logs are located on sheet C-11 and C-12
25	QUESTION: Are foreign fittings and castings permitted?	Yes, all fittings and castings will need to be submitted for review.
26	QUESTION: Are compact Ductile Iron fittings permitted?	Compact fitting locations to be approved by engineer.
27	QUESTION: What is backfill for electrical duct banks?	Provide clean backfill, soil, seed to match existing landscape.
28	QUESTION: What is concrete class for electrical duct banks?	Contractor shall use 4000 PSI concrete Class A encasement 3" all around.
29	QUESTION: What permits are required at contractor's expense?	At this time there are no permits required at the contractor's expense.
30	QUESTION: Please provide specific information about the extent of asbestos testing and abatement required. Where is the alternate pay item for this abatement as referenced in Plan notes?	There is no alternate pay item for abatement. See revised note 11 and 12 on sheet C-01.
31	QUESTION: Is any temporary water required on this project?	No, water shutdowns shall be minimized and coordinated with an authorized parks representative.
32	QUESTION: Regarding the sewage pumps to be replaced at manhole 3, is a bypass required? Can restroom 2 be closed during this work?	No, sewage shutdowns shall be minimized and coordinated with an authorized parks representative.

WESTCHESTER COUNTY

BLUE MOUNTAIN

TABLE OF CONTENTS

DIVISION 1 – GENERAL REQUIREMENTS

01 11 00 Summary of Work
01 20 00 Price and Payment Procedures
01 33 00 Submittal Procedures
01 45 00 Quality Control
01 55 26 Traffic Control
01 57 19 Temporary Environmental Controls
01 60 00 Product Requirements
01 71 23 Field Engineering
01 73 29 Cutting and Patching
01 74 00 Cleaning and Waste Management
01 77 00 Closeout Procedures

DIVISION 2 – EXISTING CONDITIONS

02 40 00 Demolition

DIVISION 3 – CONCRETE

03 11 00 Concrete Formwork
03 20 00 Concrete Reinforcing
03 30 00 Cast-in-Place Concrete
03 60 00 Grouting

DIVISION 5 – METALS

05 56 00 Metal Castings

DIVISION 6 - WOOD AND PLASTICS

06 10 00 Rough Carpentry

DIVISION 26 – ELECTRICAL

26 05 00 General Electrical Requirements
26 05 10 Utility Service Entrance
26 05 13 5 KV Medium Voltage Cable
26 05 19 Low Voltage Electrical Power Conductors and Cables
26 05 26 Grounding and Bonding for Electrical Systems
26 05 29 Hangars and Supports for Electrical Systems
26 05 33 Raceways and Boxes for Electrical Services
26 05 44 Sleeves and Sleeve Seals for Electrical Raceway and Cabling
26 05 53 Identification for Electrical Systems

TABLE OF CONTENTS (continued)

DIVISION 26 – ELECTRICAL (continued)

26 08 00 Testing and Inspection
26 11 80 Ductbank
26 24 16 Panelboards
26 27 13 Electrical Metering
26 27 26 Wiring Devices
26 28 16 Enclosed Switched and Circuit Breakers
26 32 13 30 KW Packaged Engine Generator Systems – Diesel Outdoor
26 32 14 50 KW Packaged Engine Generator Systems – Diesel Outdoor
26 36 00 Automatic Transfer Switches

DIVISION 31 – EARTHWORK

31 00 00 Earthwork
31 11 00 Clearing and Grubbing
31 23 33 Trenching and Backfilling
31 25 13 Erosion and Sedimentation Control

DIVISION 32 – EXTERIOR IMPROVEMENTS

32 12 16 Asphalt Pavements
32 16 00 Curbs, Gutters, Sidewalks and Driveways
32 34 13 Fabricated Pedestrian Bridges
32 91 20 Topsoil
32 92 19 Seeding

DIVISION 33 – UTILITIES

33 01 10 Operation and Maintenance of Water Utilities
33 05 05 Buried Pipe Installation
33 05 19 Ductile Iron Utility Piping
33 05 31 Thermo Plastic Utility Pipe
33 05 33 Polyethylene Utility Pipe
33 14 17 Site Water Utility Services
33 31 13 Site Sanitary Sewerage Gravity Piping
33 32 16 Packaged Wastewater Grinder Pump Assemblies

SECTION 01 11 00

SUMMARY OF WORK

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. The Work to be performed under the Contract and in accordance with these Specifications consists of, but is not limited to, furnishing of all equipment, superintendents, labor, skill, material and all other items necessary for the Site Work Improvements located at Blue Mountain Reservation; Town of Cortlandt, City of Peekskill, New York. The Contractor shall perform all Work required for such construction in accordance with the Contract Documents and subject to the terms and conditions of the Contract, complete and ready for use.

B. The Contractor shall furnish all labor, materials, equipment and appurtenant work necessary to construct all work as shown, specified and required for the Site Work Improvements at Blue Mountain Reservation.

1. General Project Requirements

a. Locate existing utilities, retain an independent contractor to assist in locating all on-site utilities.

1) NOTE: The Montrose Improvement District 16” water main must be protected. Shutdowns of this water main are not permitted.

b. Installation of erosion control measures.

c. Sawcut trench, excavation.

d. Removal of existing sanitary sewer and water utilities.

e. Installation of new sanitary sewer, water, buried electrical utilities and associated appurtenances (generator, power panels/outlets, sanitary sewer manhole, sewage grinder pumps, valves, water fountains, etc.).

f. Removal of existing electrical utilities.

g. Trench backfill and compaction. Either topsoil and seed or pavement restoration; base, binder, and top course.

h. Removal of one (1) existing wood bridge and concrete foundations, and one (1) exterior wood stairs.

i. Installation of one (1) new wood bridge and concrete foundations, and one (1) new exterior wood stairs.

j. Paving of asphalt top course for walking paths.

k. Installation of concrete sidewalk ramp.

l. General site improvements: Parking striping, overlay ¾" stone in parking area.

m. Final site restoration and seeding.

1.2 GENERAL

A. The Instructions for Bidders, General Conditions, Supplementary Conditions and Division 1 of the Technical Specifications, shall apply equally to all Work under the Contract for this Project.

B. Where the words "Contract" and "Contractor" are used in Sections of Division 1, they shall apply equally to all parties entering into agreements with the Owner to perform Work specified herein and to all Contracts derived from said agreements.

C. Where the word "Owner" is used in these Specifications, it shall refer to the Westchester County Parks Department and Westchester County Department of Public Works.

1.3 CONTRACT DOCUMENTS

A. The Work to be done is shown on the set of Contract Drawings entitled Site Work Improvements, Blue Mountain Reservation.

1.4 GENERAL ARRANGEMENT

A. The Contract Drawings indicate the extent and general arrangement of the Work. The specific equipment proposed for use by the Contractor on the Project may require changes in the construction detailed on the Contract Drawings, and all such changes shall be performed in accordance with the requirements of the Supplementary Conditions and shall be made without additional cost to the District and shall include the increase in costs of the other Contracts.

1.5 TIME OF WORK

A. Overtime work shall conform to the requirements of Division 1, Supplementary Conditions, shall be considered as normal procedure under this Contract, and the Contractor shall make no claims for extra compensation as a result thereof.

B. Unless otherwise specifically permitted, all work that would be subject to damage shall be stopped during inclement, stormy or freezing weather. Only such work as will not suffer injury to workmanship or materials will be permitted. The Contractor shall carefully protect his Work against damage or injury from the weather, and when work is permitted during freezing weather shall provide and maintain approved facilities for heating the materials and for protecting the finished Work.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 20 00

PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 DESCRIPTION

A. The items listed below beginning with Article 1.3, refer to and are the same pay items listed in the Proposal. They constitute all the pay items for the completion of the Work. No direct or separate payment will be made for providing miscellaneous temporary or accessory works, plant services, layout surveys, job signs, sanitary requirements, testing, reparation of damages produced by Contractor, safety devices, approval and Record Drawings, water supplies, power, maintaining traffic, removal of waste, watchmen, Bonds, insurance, and all other requirements of the Contract, General and Supplementary Conditions. Compensation for all such services, things and materials shall be included in the price stipulated for the lump sum listed herein.

1.2 RELATED PROVISIONS SPECIFIED ELSEWHERE

A. Payments to Contractor: Refer to Contract, General Conditions and Supplementary Conditions.

1.3 CONTRACT - GENERAL CONSTRUCTION

A. For providing all mobilization, temporary systems, surveying, demobilization, permitting, traffic control, dewatering, restoration, etc. and all labor, material and equipment necessary to complete all work as shown on the contract drawings and in accordance with the project manual and specifications. Demolition and legal disposal of all brush and tree debris, and other material not otherwise defined herein shall be included in the lump sum price.

1.4 BID PROPOSAL ITEMS

A. The Contract consists of the Base Bid, Rock Removal and Alternates 1, 2, and 3

B. Item 1 – Base Bid

Payment for Item 1 will be a lump sum bid. Work to be performed under this Contract and in accordance with these Specifications consists of, but is not limited to, furnishing of all equipment, superintendents, labor, skill, material, sanitary services, electric services, water services, site work, clearing and grubbing, site restoration including pavement, walkways, sidewalks, railings, finish grading, plantings, and all other items necessary for the Base Bid located at Blue Mountain Reservation; Town of Cortlandt, City of Peekskill, New York. This lump sum bid

price shall be calculated based on the contract drawings and technical specifications divisions 1 through 35.

C. Item 2 – Rock Removal

Payment for Item 2 will be a unit price bid of a quantity of 500 cubic yards of Rock Removal. Work to be performed under this Contract and in accordance with these Specifications consists of, but is not limited to, furnishing of all equipment, superintendents, labor, skill, and all other items necessary for the Rock Removal located at Blue Mountain Reservation; Town of Cortlandt, City of Peekskill, New York. This unit price bid shall be calculated based on the contract drawings and technical specifications divisions 1 through 35.

D. Item 3 – Contract Bonds and Insurance

This item provides payment for Contract Bonds and Insurances which must not exceed 3% of the subtotal of Bid Items 1 and 2.

E. Item W800 – Miscellaneous Additional Work

This item provides for miscellaneous additional work to be accomplished as ordered by the Owner as described in Article 14 of the Information for Bidders (W-800). The cost of this item shall be included in the total amount bid for the project.

F. Alternate Bid Item 1 – Lower Bridge - Not in Bid Contract

G. Alternate Bid Item 2 – Upper Bridge

Payment for Alternate Bid Item 2 will be a lump sum bid. Work to be performed under this Contract and in accordance with these Specifications consists of, but is not limited to, furnishing of all equipment, superintendents, labor, skill, material and all other items necessary for the Upper Bridge located at Blue Mountain Reservation; Town of Cortlandt, City of Peekskill, New York. This lump sum bid price shall be calculated based on the contract drawing sheet C-12 and technical specifications divisions 1 through 35.

H. Alternate Bid Item 3 – Parking Lot Staircase

Payment for Alternate Bid Item 3 will be a lump sum bid. Work to be performed under this Contract and in accordance with these Specifications consists of, but is not limited to, furnishing of all equipment, superintendents, labor, skill, material and all other items necessary for the Parking Lot Staircase located at Blue Mountain Reservation; Town of Cortlandt, City of Peekskill, New York. This lump sum bid price shall be calculated based on the contract drawing sheet C-13 and technical specifications divisions 1 through 35.

1.5 DAMAGES BY CONTRACTOR

A. No payments shall be made for reparation of damages caused by Contractor.

1.6 CONTRACTOR PAY REQUISITIONS

A. The Contractors shall submit monthly payment requisitions, prepared as directed by the Engineer. A maximum of one payment requisition shall be submitted each month.

B. The Contractor may, at the approval of the Engineer, submit payment for unit cost items based upon agreed upon estimated amounts each month prior to completion of as built surveys.

END OF SECTION

SECTION 31 11 00

CLEARING AND GRUBBING

PART 1 - GENERAL

1.1 SUMMARY

A. Scope: Contractor shall furnish all labor, materials, equipment and incidentals required to perform all clearing and grubbing and disposal as shown and specified.

B. Related Work Specified Elsewhere:

1. Section 02 40 00, Demolition, Removals and Modifications.

2. Section 31 00 00, Earthwork.

C. The Work covered by this Section consists of removing and disposing of all trees, stumps, bushes, roots, shrubs, vegetation, logs, rubbish, and other objectionable material from the site to perform the work. Work under this Section also includes stripping and stockpiling of topsoil which may be reused.

1.2 QUALITY ASSURANCE

A. Codes and Standards: State and local laws and code requirements shall govern the hauling and disposal of trees, shrubs, stumps, roots, rubbish, debris and other matter.

1.3 JOB CONDITIONS

A. Protection:

1. Streets, roads, adjacent property and other works and structures shall be protected throughout the entire project. Contractor shall return to original condition, satisfactory to the Engineer, facilities damaged by the Contractor's operations.

2. Trees, shrubs and grassed areas which are to remain shall be protected by fences, barricades, wrapping or other methods. Equipment storage, material stockpiles, etc., shall not be permitted within tree branch spread.

3. Topsoil stripped for new construction shall be stockpiled and shall not be mixed with other soils.

4. No trees, shrubs, roots, branches, wood, concrete, or other debris shall be buried in fills, embankments or stock piles.

5. No cleared matter, debris or soils shall be stored where active construction work is being performed.

1.4 GUARANTEE

A. Contractor shall guarantee that Work performed under this Contract will not permanently damage trees, shrubs, turf or plants designated to remain, or other adjacent work or facilities. If damage resulting from Contractor's operations appears during the period up to 12 months after completion of the project, the Contractor shall replace damaged items at his expense.

B. Damage to any existing items, not shown in Contract Documents to be removed, such as pavement, grassed areas, utilities, structures or other facilities shall be repaired by the Contractor immediately at his own expense to the satisfaction of the Engineer and Owner. All asphalt pavements, grassed areas and landscaping that are damaged or disturbed shall be restored in accordance with applicable sections of the Contract Specifications.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 CLEARING AND GRUBBING

A. Clearing and grubbing shall be confined to areas within the Contract limit lines except as otherwise shown. Damages outside these limits caused by the Contractor's operations shall be corrected at the Contractor's expense.

B. Except as noted below, Contractor shall remove from the site and satisfactorily dispose of all trees, shrubs, stumps, roots, brush, masonry, rubbish, scrap, debris, pavement, curbs, fences and miscellaneous other structures not covered under other Sections as shown, specified or otherwise required to permit construction of the new Work.

C. Burning of materials is expressly forbidden.

D. Trees and shrubs to be removed: Remove trees and shrubs in such a manner to avoid damage to trees and shrubs designated to remain. Removal of trees and shrubs shall include their respective stumps and roots.

E. Trees and shrubs to be saved:

1. Protect all other trees and shrubs from defacement, injury and destruction. Preserve trees within the contract limits that are so delineated on the Plans

or as marked in the field by the Engineer. Also, all trees to be saved shall be protected in accordance with the Contract Documents.

2. Do not cut roots unnecessarily; handwork or otherwise prevent damage to roots which extend into grading limits or limits of excavation. Disturb roots as little as possible when tunneling under trees. Backfilling around tree roots shall be done immediately after completion of construction in the vicinity of trees.

3. The Contractor shall be responsible for the protection of all vegetation from damage resulting from emissions from motorized equipment.

4. During working operation, protect the trunk, foliage, and root system of all trees to be saved with boards or other guards and as required to prevent damage, injury and defacement. Do not pile excavated material adjacent to the base of any trees. Do not allow runoff to accumulate around base of trees. Do not fasten or attach ropes, cable, or guy wires to trees without permission of the Engineer. When such permission is granted, protect the tree before making fastening or attachments by providing burlap wrapping and softwood cleats. The Contractor shall be held responsible for damage resulting from these actions. Use of axes or climbing spurs for trimming will not be permitted. Provide climbing ropes during trimming.

5. Remove shrubs to be saved, taking a sufficient earth ball at the roots to maintain the shrub. Temporarily replant if required, and replace at the completion of construction in condition equaling the original.

6. Tree and shrub repair where required shall be performed by a tree surgeon.

7. Trees and shrubs intended to remain which are damaged beyond repair by construction, shall be replaced by the Contractor at no expense to the Owner.

3.2 TOPSOIL REMOVAL

A. Topsoil is defined as friable clay loam surface soil found in a depth of not less than 4 inches. Topsoil shall be substantially free of subsoil, clay lumps, stones, and other objects over 2 inches in diameter, and without weeds, roots, and other objectionable material.

B. Strip topsoil which is satisfactory to whatever depths are encountered, and in such manner as to prevent intermingling with the underlying subsoil or other objectionable material. Remove heavy growths of grass from areas before stripping. Where trees are shown or directed to be left standing, stop topsoil stripping a sufficient distance from such trees to prevent damage to the main root system.

C. Stockpile topsoil in storage piles, or where otherwise approved by Engineer. Construct storage piles to freely drain surface water. Cover storage piles to prevent windblown dust. Topsoil in excess of quantity required shall remain the property of the Owner. The Contractor shall stockpile and cover stripped topsoil in the area approved by the Engineer.

END OF SECTION

SECTION 33 05 19

DUCTILE IRON UTILITY PIPING

PART 1 GENERAL

1.1 RELATED WORK SPECIFIED ELSEWHERE

A. Concrete for thrust blocks: Section 03 30 00, Cast-in-Place Concrete

B. Section 33 05 20, Buried Piping Installation

C. Section 33 14 17, Site Water Utility Services

1.2 REFERENCES

A. AWWA C104 - Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water

B. AWWA C105 - Polyethylene Encasement for Ductile-Iron Pipe Systems.

C. AWWA C110 - Ductile-Iron and Gray-Iron Fittings, 3 inches through 48 inches, for Water and Other Liquids

D. AWWA C111 - Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings

E. AWWA C115 - Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges

F. AWWA C150/ANSI A21.50 - Thickness Design of Ductile Iron Pipe

G. AWWA C151/ANSI A21.51 - Ductile-Iron Pipe, Centrifugally Cast, for Water

H. AWWA C153 - Ductile-Iron Compact Fittings, 3 inches through 24 inches and 54 through 64 inches, for Water Service

I. AWWA C606 - Grooved and Shouldered Joints

J. ASTM A307 - Carbon Steel Externally Threaded Standard Fasteners

K. ASTM B98 - Copper Silicon Alloy Rod, Bar and Shapes

L. ASTM C283 - Resistance of Porcelain Enameled Utensils to Boiling Acid

M. DIPRA - Handbook of Ductile Iron Pipe

N. NY Spec 24-C-38 – Caulking

1.3 DESIGN AND MANUFACTURING REQUIREMENTS

A. Ductile iron pipe shall conform to the American National Standards Institute (ANSI) and American Water Works Association (AWWA) Standards specified herein and recommendations as given in the Ductile Iron Pipe Research Association (DIPRA) "Handbook of Ductile Iron Pipe."

1.4 SUBMITTALS

A. Contractor shall submit Shop Drawings for approval of the Engineer. Submittals shall include, but not limited to, the following:

1. Shop Drawings.

2. Results of Certified Shop Tests.

3. Certified Letters of Compliance.

B. Shop Drawings shall include, but not be limited to:

1. Catalog data consisting of specifications, illustrations and a parts schedule that identifies the materials to be used for the various piping components and accessories. The illustrations shall be in sufficient detail to serve as a guide for assembly and disassembly.

2. Complete layout and installation drawings, including plans, sections and cross-sections showing elevations with clearly marked dimensions. Piece numbers which are coordinated with the tabulated pipe layout schedule shall be clearly marked. Scale and size of the drawings shall conform to the Contract Documents. Piping layout drawings shall indicate information on pipe supports, location, support type, hanger rod size, insert type and the load in pounds.

3. Details of pipe lining, coating, wrapping, insulation and painting of all pipe.

4. Weights of all component parts.

5. Tabulated pipe layout schedule shall include the following information for all pipe and fittings: service, pipe size, working pressure, joint type, wall thickness, piece number, and laying length.

6. Flexible couplings, with harness details if required.

7. Locations where pipe and valve identification signs will be placed.

1.5 QUALITY ASSURANCE

A. The pipe and fittings covered by these specifications shall be provided by the Contractor through qualified manufacturers experienced in the fabrication, castings

and manufacture of the pipe materials specified herein. The pipe and fittings shall be designed, fabricated and installed in accordance with standards specified herein.

1.6 DELIVERY, STORAGE AND HANDLING

A. The Contractor shall deliver, store and handle all pipe, fittings and couplings as specified in Contract Documents. Special care in handling shall be exercised during delivery, storage and handling of pipe to avoid damage and setting up stresses. Damaged pipe will be rejected and shall be replaced at the Contractor's expense. Pipe and specials stored prior to use shall be stored in such a manner as to keep the interior free from dirt and foreign matter.

B. No material furnished under this Section shall be shipped to the job site until all submittals have been approved.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Ductile iron pipe and fittings shall be as manufactured by the following:

1. American Cast Iron Pipe Co., Birmingham, AL

2. McWane, Inc., Birmingham, AL

3. United States Pipe and Foundry (U.S. Pipe), Birmingham, AL.

4. Or approved equal.

2.2 DUCTILE IRON PIPE AND FITTINGS

A. Pipe shall be in accordance with AWWA C151 for push-on or mechanical joint pipe and AWWA C115 for flanged pipe and shall be of grade 60 42 10 ductile iron. The above standards cover ductile iron pipe with nominal pipe sizes from three (3) inches up to and including sixty four (64) inches in diameter. Working pressure for the pipe shall be as called for in these Standards.

B. Pipe

1. All ductile iron pipe to be supplied under these specifications shall be manufactured in accordance with ANSI Specification A 21.51/AWWA C 151, latest revision. The thickness class for all ductile iron pipe up to and including 12" shall be class 56. Pipe is to be furnished with push on type joints per ANSI Specification A 21.11/AWWA C 111, latest revision, complete with gaskets and lubricant..

2. All ductile iron pipe furnished under this contract shall be factory applied double cement lined in accordance with ANSI Specification A21.4/AWWA C 10, latest revision, and seal coated inside and out. Minimum thickness of cement lining shall be as follows: 3" through 12" (inclusive) 1/8" cement lining; 14" through 24" (inclusive) 3/16" cement lining; 30" through 36" (inclusive) 1/4" cement lining.

C. Fittings

1. All fittings shall be "full-bodied" mechanical joint, shall be cement mortar and lined, and fittings of all sizes shall be class 250. All fittings shall be made in accordance with ANSI/AWWA; A21.11/C110, A21.11/C111, latest revision. Sealing gaskets, follower glands, lubricant, tee head bolts and hexagonal nuts shall be provided in sufficient quantities for each fitting. All fittings to be cement lined , NSF61 approved seal coat.

2. Concrete thrust blocks to be provided at all bends and tees in accordance with the detailed drawings.

3. Where compact fittings are shown or indicated, items shall be in accordance with AWWA C153.

D. Joints:

1. Unless otherwise specified, all joints for Ductile Iron Pipe shall be Push-On Joints, 2 degrees maximum deflection.

The following type joints shall be used as specified:

2. PUSH-ON JOINTS - Push-on joints shall be the Super Bell-Tite Joint of Amstead Industries, the Tyton Joint of U.S. Pipe and Foundry Company, the Fastite Joint of the American Cast Iron Company or such other joint as may be approved as equal by Westchester County. For each bell, there shall be furnished a rubber gasket. All of the above shall conform with the applicable provisions of ANSI Specification A21.11.

3. MECHANICAL JOINTS - The joint material shall conform to requirements of ANSI Specification A21.11. The mechanical joint installation shall conform to the latest ANSI Specifications. Surface of joint in contact with rubber gasket seal shall be brushed thoroughly with a wire brush just prior to assembly and all loose rust or foreign material shall be removed. The cleaned surface shall be brushed with soapy water just prior to slipping with torque indicating wrenches. The applied torque shall be within the ranges shown below:

SIZE OF BOLT	TORQUE (Foot-Pounds)
5/8”	40-60
3/4”	50-90
1”	70-100

When tightening bolts, the flanges shall be brought up toward the pipe flanges evenly by partially tightening first the bottom bolt, then the top bolt, then the side bolts and repeating the cycle until all bolts are within the specified torque range. Over stressing of bolts to obtain tightening will not be permitted.

Mechanical joints showing visible leakage at the maximum permitted torque shall be disassembled, thoroughly cleaned and reassembled.

4. FIELD LOK GASKET SYSTEM - Field Lok Gasket Systems shall be as manufactured by the U.S. Pipe and Foundry Company or approved equal.

These gaskets shall be installed on Tyton Joint Pipe (4" thru 12") and Fittings.

5. JOINT RESTRAINT SYSTEMS - The Contractor shall provide joint restraint systems to prevent against joint separation of joints on the water main and hydrant connections where restrained pipe is indicated on the Contract Drawings. The materials shall be the Meg-A-Lug restrained joint system as manufactured by EBBA IRON SALES, INC., or approved equal in lieu of the rodding system. The mechanical joint restraint system shall incorporate a restraining mechanism in the follower gland which shall impart a multiple wedging action against the pipe. Glands shall be manufactured of ductile iron conforming to ASTM A536-80. Restraining devices shall be of ductile iron heat treated to a minimum hardness of 370 BHN. All dimensions of each gland shall be such that it can be used with the standardized mechanical joint bell and tee-head bolts conforming to ANSI/AWWA A21.11 and ANSI/AWWA C153/A21.53 of latest revision. Twist-off nuts shall be used to insure proper actuating of the restraining devices. If TR Flex pipe is utilized, pipe and fittings to be restrained shall be TR Flex restrained push-on joint type as manufactured by U.S. Pipe and Foundry Co., or approved equal Restraint for field cut pipe shall be with TR Flex Gripper Rings or approved equal. Where Gripper Rings are to be installed on pipe in the field, the instructions of the pipe manufacturer shall be followed. In addition to the Gripper Rings, the Contractor will install tie-rodding to the first bell on each side of the fittings, or valves.

Where tie rods are used, the manufacturer's recommendation for the number of rods for size and pressure will be followed.

PART 3 - EXECUTION

3.1 INSTALLATION

A. All ductile iron pipe and fittings shall be installed in accordance with the manufacturer's recommendations, approved shop drawings and as specified in the Contract Documents.

B. Where insulation is shown or specified in the Contract Documents, it shall be installed after the installation and testing of the pipe.

C. Where ductile iron pipe is in contact with soils, the pipe shall be encased in polyethylene film in accordance with AWWA C105 to isolate the pipe surface from contact with the soils.

D. Where field cutting of ductile iron pipe is permitted by the Engineer, ductile iron pipe shall be cut only by means of abrasive saws, hack saws, wheel type cutters or milling type cutters. The use of "squeeze" type pipe cutters and cutting torches will not be permitted. Also, the use of diamond points and dog chisels will not be permitted.

E. Temporary Bulkheads:

1. Temporary bulkheads shall be furnished at the ends of pipe sections where adjoining pipe have not been completed and are not ready to be connected.

2. All temporary bulkheads shall be removed when they are no longer needed.

3.2 HANDLING AND DISTRIBUTION OF PIPE

A. Special care in handling shall be exercised during delivery and distribution of pipe to avoid damage. Damaged pipe shall be rejected and replaced at the Contractor's expense. The pipe shall be stored prior to use in such a manner as to keep the interior free from dirt and foreign matter. Any pipe that becomes contaminated shall be mechanically cleaned and then swabbed with a 1% chlorine solution before it is incorporated in the work. It must be stressed that contamination in the line will prolong and impede the disinfection operation. Flushing cannot be too heavily relied upon for cleaning.

3.3 PIPE MARKINGS

A. Each length of pipe shall be marked with its weight, pressure class, the year it was made, and the word "Ductile".

3.4 CONNECTIONS TO EXISTING SYSTEM

A. Permanent connections are to be made to the existing distribution system at the locations shown on the Contract Drawings and shall be made up to conform to the details as shown. The Contractor shall verify by test pit excavation the location of the existing pipe where excavations are to be made. No pipe laying will be started until required test pits have been excavated where connections are to be made or at the direction of the Engineer.

3.5 PIPE BEDDING

A. All pipes shall be laid on 6 inches of clean crushed stone which has been hand trimmed and compacted. The crushed stone shall be carried to the mid-diameter of the pipe, compacting in 6-inch layers. Bell holes shall be excavated in the bedding to provide the pipe with full length bearing. The material shall be well graded and the nominal size shall be 1/4 to 3/4-inch range. No recycled concrete shall be used for bedding.

3.6 LAYING PIPE

A. Proper and suitable tools and appliances for the safe and convenient handling and laying of pipe and fittings shall be used, and shall in general agree with the manufacturer's recommendations. Deflections, however, shall not exceed 50 percent of the maximum amounts recommended. Deflections are to be performed after the pipe has been brought home in straight alignment. Care shall be taken to prevent the bell and cementing lining from being damaged. Any damaged pipe shall be repaired or replaced by the Contractor to the satisfaction of the Engineer.

B. The pipe and fittings shall be thoroughly cleaned and carefully examined at the time of laying and no pipe or fitting shall be installed which is known to be defective. If any such pipe or fitting shall be discovered to be defective after being laid, it shall be removed and replaced with a sound pipe or fitting by the Contractor at his expense.

C. The Contractor shall lay the pipe to conform to the lines and grades shown on the Contract Drawings or as directed by the Engineer. Following preparation of the subgrade, the pipe or fitting shall be carefully lowered into the trench so as to prevent dirt and other foreign substances from gaining entrance into the pipe. The pipe shall be clean inside, and both bell and spigot rings shall be examined carefully and burrs or spelter which might cut the rubber ring shall be removed.

D. When it is necessary to cut ductile iron pipe in the field, such cuts shall be made carefully in a neat workmanlike manner using approved methods to produce a clean square cut. The outside edge of the cut end shall be conditioned for use by filing or grindings a small taper, at an angle of about 30°. If it is necessary to cut TR-Flex pipe in the field, such cuts shall be made to allow for one end to have the manufacture's "weldment" for installation into TR¬Flex pipe or fittings. This requirement will also be necessary for the use of Gripper Rings or equal.

E. At the close of work each day, the end of the pipeline shall be tightly sealed with a cap or plug so that no water, dirt or other foreign substance may enter the pipeline and this plug shall be kept in place until pipe laying is resumed.

3.7 THRUST BLOCKING

A. Concrete blocking shall be provided at plugs, tees, bends, hydrants and at other locations as may be designated by the Engineer where a sizable unbalanced thrust will be developed. The blocking shall be, in general, of such shape and form that the load due to the thrust shall not exceed 2 tons per square foot against earth or 5 tons per square foot against rock when the water pressure in the line is carried at the test pressure. The excavation at such locations shall receive special attention with such hand trimming as may be required to provide a good bearing against undisturbed materials within as short a distance as possible from the pipe or fitting.

B. Where reactions are in the vertical plane, provisions to restrain the thrust shall be made to meet the existing field conditions by concrete anchorages.

C. Concrete shall conform to Item 03 30 00, "Cast-in-place Concrete", for thrust blocks are shown on the Contract Drawings and additional concrete thrust blocks ordered by the Engineer.

3.8 REMOVAL AND DISPOSAL OF WATER

A. The Contractor shall provide and maintain ample means and equipment for dewatering and properly disposing of all water and sewage flows entering the trenches and other parts of the work. The excavation shall be maintained in a dry condition and no foundation materials, pipe or concrete shall be placed in water unless approved by the Engineer. Water and sewage flows shall be disposed of in a manner avoiding injury to property or inconvenience to the public with the approval of the Engineer. All costs for dewatering as specified will be included under this Item for payment. Costs shall also include continuous pumping and all labor to maintain a continuous system. Any disposal of water to existing storm systems or waterways shall be filtered by the use of hay bales or other filtering systems (See 1.40). Absolutely no silt will be allowed to enter these systems.

3.9 EXISTING STRUCTURES

A. With exception of water, gas and sewer service connections, all known structures, including piping for water, sewers and drains, manholes, pavements, sidewalks, walls, fences, hydrants, poles and similar structures located on, or adjacent to, the proposed work are shown on the Contract Drawings. Such information is shown for the convenience of the contractor but is not guaranteed to be correct or complete. The location of underground structures shown may be inaccurate, and obstructions other than those shown may be encountered. The Contractor shall hereby distinctly understand that the Owner is not responsible for the correctness or sufficiency of the information given; that he shall have no claim for delay or extra compensation on account of incorrectness, insufficiency or absence of information regarding

obstructions revealed or not revealed by the Contract Drawings; and that he shall have no claim for relief from any obligation or responsibility under the contract because the extent, location, size or character of any pipe or other underground structure is incorrectly shown or has been omitted from the Contract Drawings.

B. The location of the pipe to be laid as shown on the Contract Drawings is in accordance with the best information available as to the obstructions to be avoided, but can be considered only as approximate and may be changed by the Engineer if the progress of the work reveals other obstructions.

3.10 INTERRUPTED SERVICES

A. The Contractor shall notify affected property owners at least forty-eight (48) hours in advance of his intent to open a trench or interrupt any public service. The Contractor shall again notify such affected owners at least three hours in advance of the contemplated operation.

3.11 TEMPORARY WATER SERVICES

A. During the removal and replacement of the watermain, the contractor shall provide temporary water service to the buildings within George's Island Park as follows:

1. Residence and Maintenance Buildings: The contractor shall provide temporary water service at all times.

2. Lower and Upper Comfort Stations: The contractor shall provide temporary water service during the period from April 15th through November 1st.

B. The contractor shall prepare a plan of the temporary water service and submit it to the engineer for approval, prior to construction.

3.12 MAINTENANCE OF OPERATIONS

A. It is essential to the public health and safety that the operation of any public and private water supply, sanitary sewer and storm sewer services be maintained. The Contractor will be required to work in close cooperation and coordination with the Owner and its duly authorized agents to ensure that a minimum of interruptions of operations and nuisances result from his procedures. Only such interruptions of operations as are approved by the Engineer will be permitted.

3.13 MAINTENANCE OF UTILITY SERVICES

A. Utility services to customers shall be maintained at all times except when interruptions are specifically permitted by the Owner or the authority having jurisdiction thereover.

B. Gas, electric, water and any other services with the exception of drains which are found, in the opinion of the Engineer, to require relocation either in alignment or

elevation shall be so relocated by the Utility at the Owner's request. The Contractor shall coordinate each relocation with the Owner and shall have no claim for delay.

C. Existing storm drains where noted on the Contract Drawings that require relocation in elevation, including modification of inlets or catch basins shall be included for payment under this item.

D. Storm drains or drains (not noted on the Contract Drawings) that are found, in the opinion of the Engineer, to require relocation either by alignment or elevation shall be so relocated by the Contractor and paid for as extra work.

E. Services which are damaged by the Contractor during construction and which do not require relocation shall be repaired or replaced at the expense of the Contractor.

F. Sanitary sewers may require bypass pumping at water main crossings and locations where the sewers run parallel to the new water mains. The Contractor shall be responsible for bypassing. All costs associated with bypassing shall be included for payment under this Item.

3.14 PROTECTION OF PROPERTY AND STRUCTURES

A. The Contractor shall, at his own expense, sustain in their places and protect from direct or indirect injury all pipes, poles, conduits, walls, buildings and other structures, utilities and property in the vicinity of his work. Such sustaining and protecting shall be carefully done by the Contractor and as required by the company or party owning the structure or department controlling it. The Contractor shall take all risks attending the presence or proximity of pipes, poles, conduits, walls, buildings and other structures, utilities and property in the vicinity of his work and he shall be responsible for all damage and assume all expense for direct or indirect injury, caused by his work, or to any person or property by reason of injury to them whether such structures are or are not shown on the Contract Drawings.

3.15 CONNECTION TO EXISTING MAINS

A. Where connections are to be made to existing pipe, the locations of the existing mains are approximate. The Contractor shall verify by test pit excavation the location of the existing pipe where connections are to be made. The existing pipe is active and all precautions shall be made to prevent pipe separation when excavating in the vicinity of the thrust blocks and when removing the thrust block to make the connections. The cost to excavate, backfill and restore the test pit shall be included under this item.

B. The Contractor's attention is directed to the possibility that compressed air may be present behind plugs and caps to be removed. Before removing thrust blocks at ends of plugs and caps, or before loosening plugs and caps on restrained pipe, the pressure behind the plugs and caps must be relieved by operation of existing corporation stops, house service connections, hydrants, or other positive means. The cost for making connections to existing mains shall be included under this Item.

3.16 FLUSHING AND TESTING

A. The Contractor shall flush, hydrostatic test, and disinfect in this sequence the pipeline as follows:

B. Keep Pipe Clean and Dry - Precautions shall be taken to protect pipe interiors, fittings and valves against contamination. Pipe delivered for construction shall be strung so as to minimize entrance of foreign material. When pipe laying is not in progress, as, for example, at the close of the day's work, all openings in the pipeline shall be closed by watertight plugs. Joints of all pipes in the trench shall be completed before work is stopped. If water accumulated in the trench, the plugs shall remain in place until the trench is dry.

C. If dirt that, in the opinion of the Engineer will not be removed by the flushing operation enters the pipe, the interior of the pipe shall be cleaned and swabbed as necessary with a 5 percent hypochlorite disinfecting solution.

D. Flushing - The Contractor shall flush the pipeline in sections governed by the sources of clean water and suitable discharge points. The pipe section shall be flushed until the water runs clear. The Contractor is advised that flushing does not create sufficient velocities to clear the pipeline of matter that may cause an unsatisfactory bacteriological test. Permission of the Engineer to stop flushing or directions to continue flushing shall involve no responsibility for the results of the bacteriological tests.

E. Hydrostatic Tests - The Contractor shall make hydrostatic tests upon all sections of the pipeline in the presence of the Engineer. The hydrostatic tests shall-be made in accordance with Westchester County Department of Health and AWWA Standard C600, Section 4-Hydrostatic Tests, and latest Edition and to the test gradients shown on the Contract Drawings.

F. The Contractor shall furnish, install, complete with reaction blocking, necessary plugs and caps required for this operation. Main line valves shall be utilized wherever possible to segregate test sections except as directed by the Engineer.

G. The Contractor shall furnish all test equipment including pumps, gages and meters. The test equipment shall be approved by the Engineer. Calibration tests shall be furnished.

H. The line shall be filled with water for a period of no less than 24 hours then subjected to test pressure of 150 psi. During this test, the measured leakage over a period of 2 hours shall not exceed 50% of the allowable quantities as indicated in AWWA Standard C600, Section, 4, Hydrostatic Testing, for the size of pipe being tested. All air shall be purged from the line before testing.

I. The contractor shall notify the Westchester County and the Engineer at least 48 hours prior to performing any testing.

3.17 DISINFECTION

A. Disinfect pipe and fittings in accordance with Section 331300 after completion of pressure and leakage tests.

END OF SECTION

NOTES:

1. LOCATIONS OF EXISTING UTILITIES, STRUCTURES, AND EQUIPMENT ARE APPROXIMATE. CONTRACTOR SHALL FIELD–VERIFY ALL LOCATIONS NECESSARY FOR CONSTRUCTION OF PROPOSED WORK.
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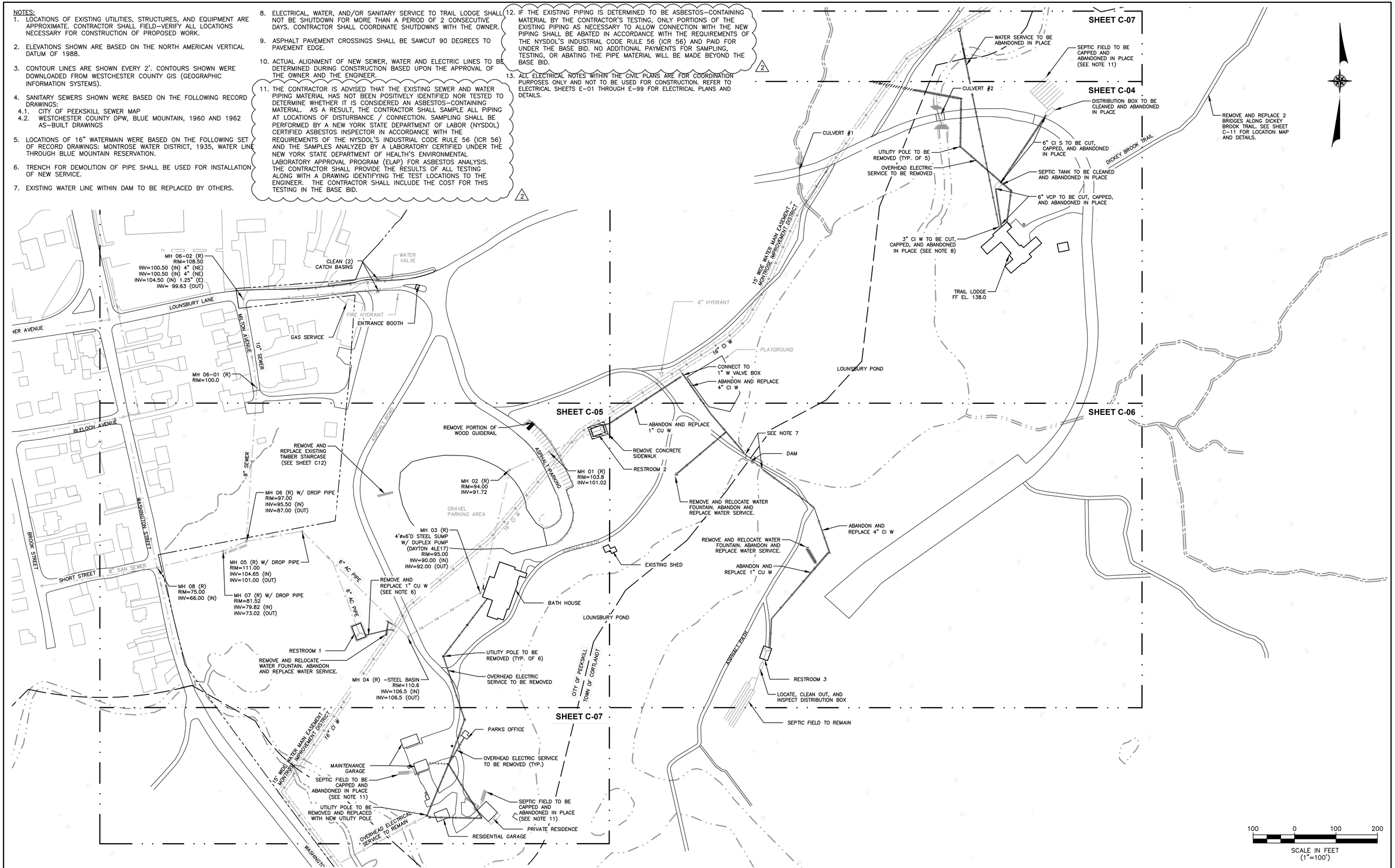
3. CONTOUR LINES ARE SHOWN EVERY 2'. CONTOURS SHOWN WERE DOWNLOADED FROM WESTCHESTER COUNTY GIS (GEOGRAPHIC INFORMATION SYSTEMS).
4. SANITARY SEWERS SHOWN WERE BASED ON THE FOLLOWING RECORD DRAWINGS:
   - 4.1. CITY OF PEEKSKILL SEWER MAP
   - 4.2. WESTCHESTER COUNTY DPW, BLUE MOUNTAIN, 1960 AND 1962 AS–BUILT DRAWINGS
5. LOCATIONS OF 16" WATERMAIN WERE BASED ON THE FOLLOWING SET OF RECORD DRAWINGS: MONTROSE WATER DISTRICT, 1935, WATER LINE THROUGH BLUE MOUNTAIN RESERVATION.
6. TRENCH FOR DEMOLITION OF PIPE SHALL BE USED FOR INSTALLATION OF NEW SERVICE.
7. EXISTING WATER LINE WITHIN DAM TO BE REPLACED BY OTHERS.
8. ELECTRICAL, WATER, AND/OR SANITARY SERVICE TO TRAIL LODGE SHALL NOT BE SHUTDOWN FOR MORE THAN A PERIOD OF 2 CONSECUTIVE DAYS. CONTRACTOR SHALL COORDINATE SHUTDOWNS WITH THE OWNER.
9. ASPHALT PAVEMENT CROSSINGS SHALL BE SAWCUT 90 DEGREES TO PAVEMENT EDGE.
10. ACTUAL ALIGNMENT OF NEW SEWER, WATER AND ELECTRIC LINES TO BE DETERMINED DURING CONSTRUCTION BASED UPON THE APPROVAL OF THE OWNER AND THE ENGINEER.
11. THE CONTRACTOR IS ADVISED THAT THE EXISTING SEWER AND WATER PIPING MATERIAL HAS NOT BEEN POSITIVELY IDENTIFIED NOR TESTED TO DETERMINE WHETHER IT IS CONSIDERED AN ASBESTOS–CONTAINING MATERIAL. AS A RESULT, THE CONTRACTOR SHALL SAMPLE ALL PIPING AT LOCATIONS OF DISTURBANCE / CONNECTION. SAMPLING SHALL BE PERFORMED BY A NEW YORK STATE DEPARTMENT OF LABOR (NYSDOL) CERTIFIED ASBESTOS INSPECTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE NYSDOL'S INDUSTRIAL CODE RULE 56 (ICR 56) AND THE SAMPLES ANALYZED BY A LABORATORY CERTIFIED UNDER THE NEW YORK STATE DEPARTMENT OF HEALTH'S ENVIRONMENTAL LABORATORY APPROVAL PROGRAM (ELAP) FOR ASBESTOS ANALYSIS. THE CONTRACTOR SHALL PROVIDE THE RESULTS OF ALL TESTING ALONG WITH A DRAWING IDENTIFYING THE TEST LOCATIONS TO THE ENGINEER. THE CONTRACTOR SHALL INCLUDE THE COST FOR THIS TESTING IN THE BASE BID. 2
12. IF THE EXISTING PIPING IS DETERMINED TO BE ASBESTOS–CONTAINING MATERIAL BY THE CONTRACTOR'S TESTING, ONLY PORTIONS OF THE EXISTING PIPING AS NECESSARY TO ALLOW CONNECTION WITH THE NEW PIPING SHALL BE ABATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NYSDOL'S INDUSTRIAL CODE RULE 56 (ICR 56) AND PAID FOR UNDER THE BASE BID. NO ADDITIONAL PAYMENTS FOR SAMPLING, TESTING, OR ABATING THE PIPE MATERIAL WILL BE MADE BEYOND THE BASE BID. 2
13. ALL ELECTRICAL NOTES WITHIN THE CIVIL PLANS ARE FOR COORDINATION PURPOSES ONLY AND NOT TO BE USED FOR CONSTRUCTION. REFER TO ELECTRICAL SHEETS E–01 THROUGH E–99 FOR ELECTRICAL PLANS AND DETAILS.



D&B ENGINEERS AND ARCHITECTS, P.C.
4 WEST RED OAK LANE
WHITE PLANES, NY,
10604
(914) 467–5300

CONSULTANT SEAL

IN CHARGE OF RAL
CHECKED BY MPF
MADE BY RJC

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION
2	07/09/2021	MPF	RJC	ISSUED WITH BID ADDENDUM #5
1	06/09/2021	MPF	RJC	ISSUED WITH BID ADDENDUM #3

RECORD DRAWING CERTIFICATION

☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF ENGINEERING

BLUE MOUNTAIN RESERVATION SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT, CITY OF PEEKSKILL, NY
CIVIL
EXISTING CONDITIONS AND DEMOLITION PLAN

CONTRACT NUMBER 17–519
SHEET NUMBER C–01
SHEET NO. 5 OF 35
SCALE: 1"=100'
DATE: APRIL 2021
DPW FILE NO. 24–86–C–8
REV. NO. 2

F:\3980 - Blue Mountain\DWG\Addendum 5\3980_C-01 to C-11 ADDENDUM 5.dwg, C-01, 7/14/2021 5:31:06 PM, mferraro

NOTES:

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9. ASPHALT PAVEMENT CROSSINGS SHALL BE SAWCUT 90 DEGREES TO PAVEMENT EDGE.
10. ALL EXISTING SEWERS TO BE CLEANED OUT UP TO MH-08.
11. AS PER NYSDEC STANDARDS.
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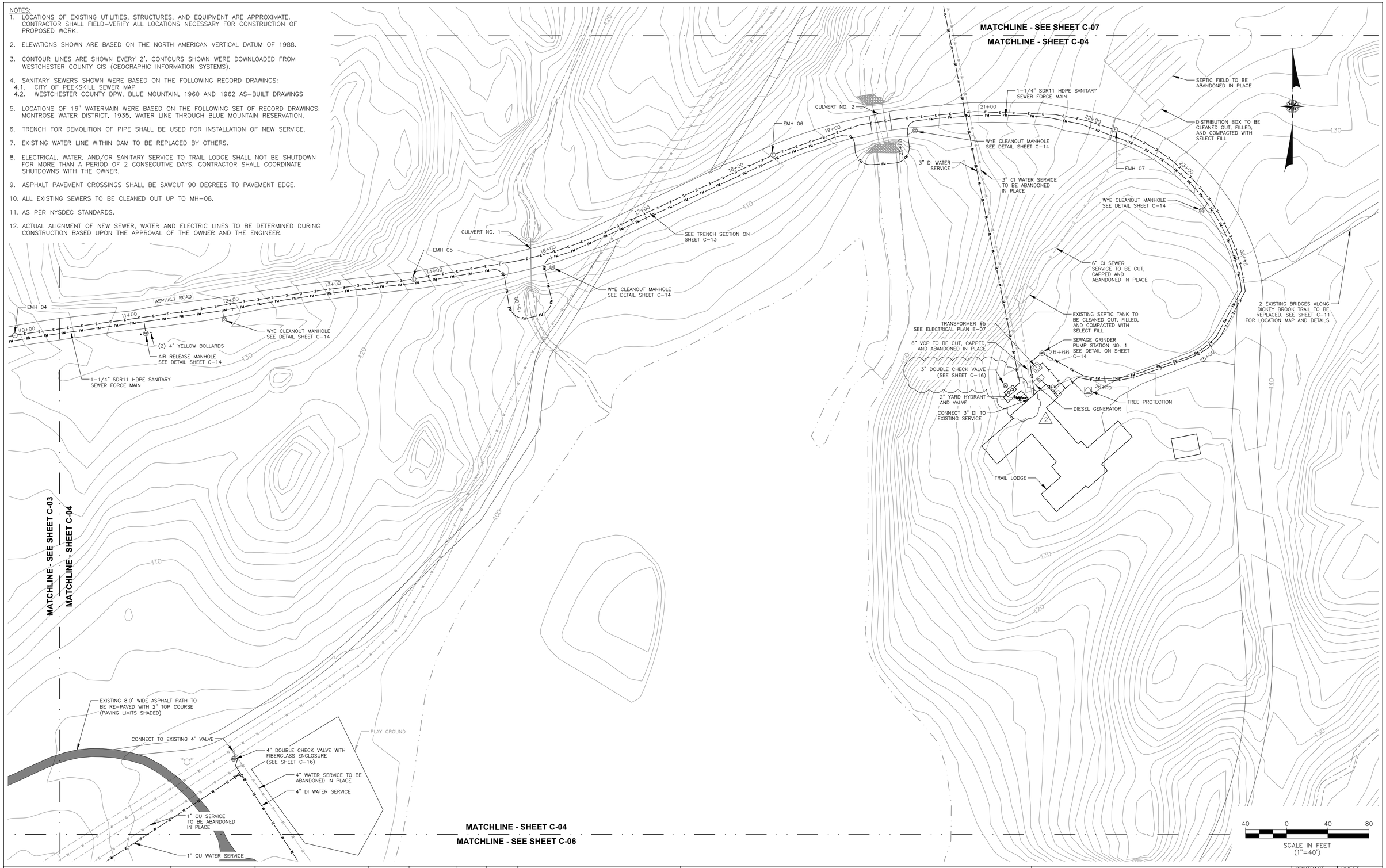

D&B ENGINEERS AND ARCHITECTS, P.C.
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(914) 467-5300

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IN CHARGE OF RAL
CHECKED BY MPF
MADE BY RJC

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION
2	07/09/2021	MPF	RJC	ISSUED WITH BID ADDENDUM #5
1	06/09/2021	MPF	RJC	ISSUED WITH BID ADDENDUM #3

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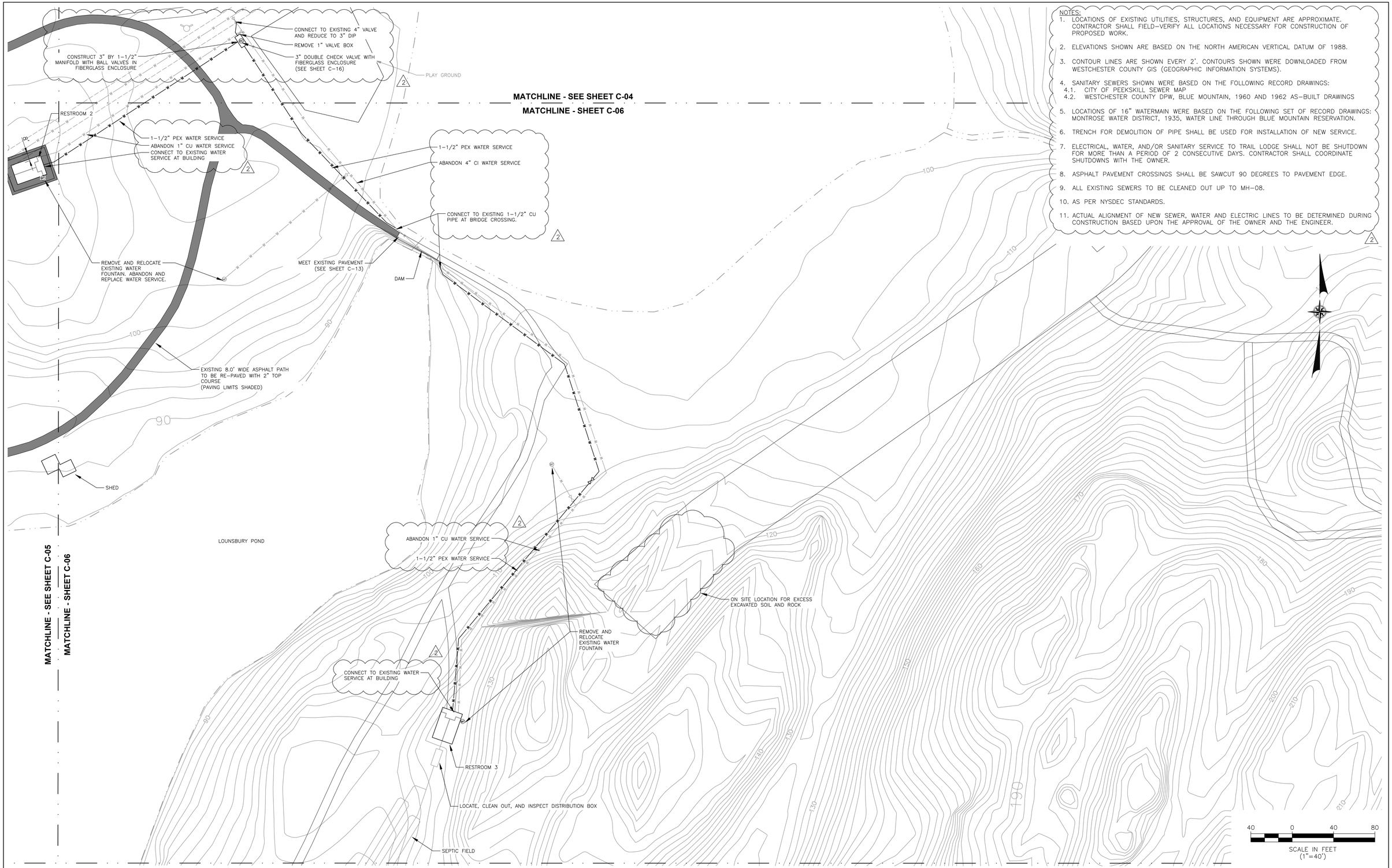
WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF ENGINEERING

BLUE MOUNTAIN RESERVATION SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT, CITY OF PEEKSKILL, NY
CIVIL
SITE PLAN NO. 2

CONTRACT NUMBER 17-519
SHEET NUMBER C-04
SHEET NO. 8 OF 35
SCALE: 1"=40'
DATE: APRIL 2021
DPW FILE NO. 24-86-G-11
REV. NO. 2



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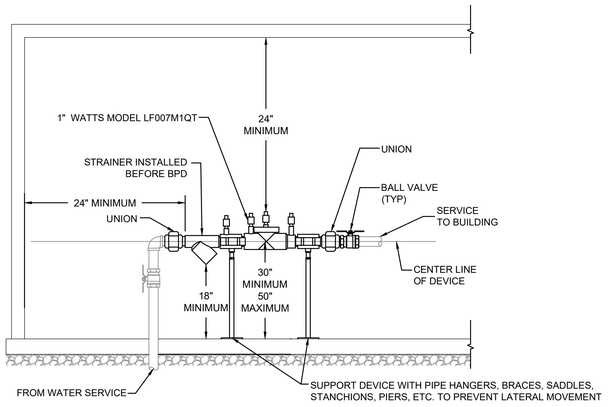
WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF ENGINEERING

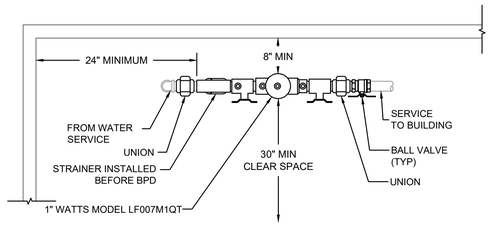
BLUE MOUNTAIN RESERVATION SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT, CITY OF PEEKSKILL, NY
CIVIL
SITE PLAN NO. 4

CONTRACT NUMBER 17-519
SHEET NUMBER C-06
SHEET NO. 10 OF 35
SCALE: 1"=40'
DATE: APRIL 2021
DPW FILE NO. 24-86-G-13
REV. NO. 2



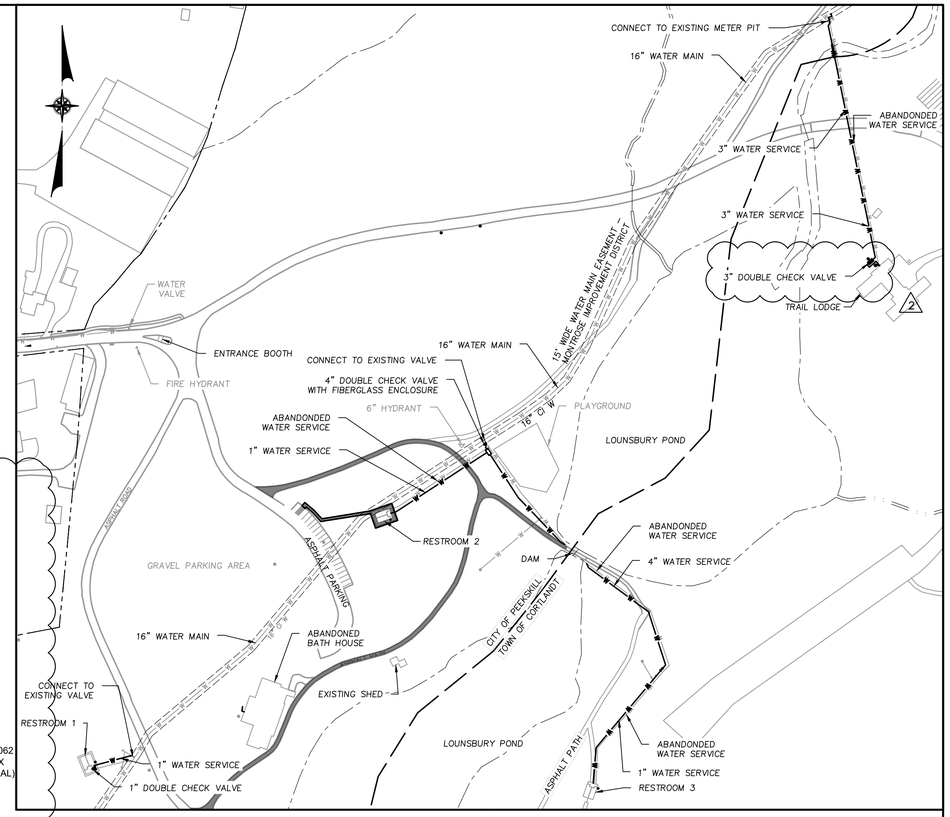
RESTROOM #1 1" DOUBLE CHECK VALVE ELEVATION

N.T.S.



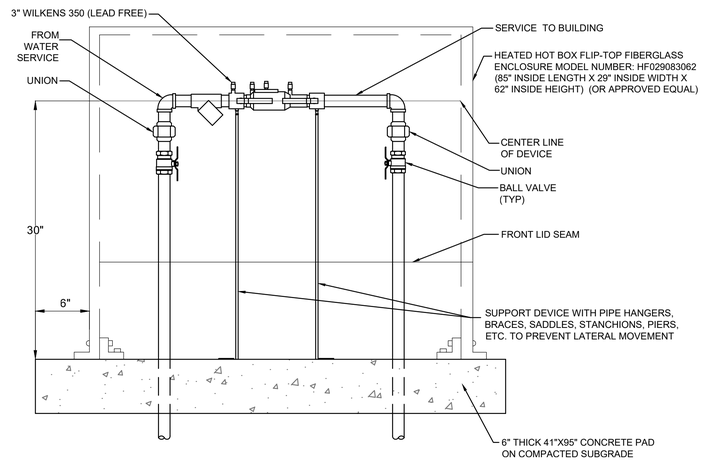
RESTROOM #1 1" DOUBLE CHECK VALVE PLAN

N.T.S.



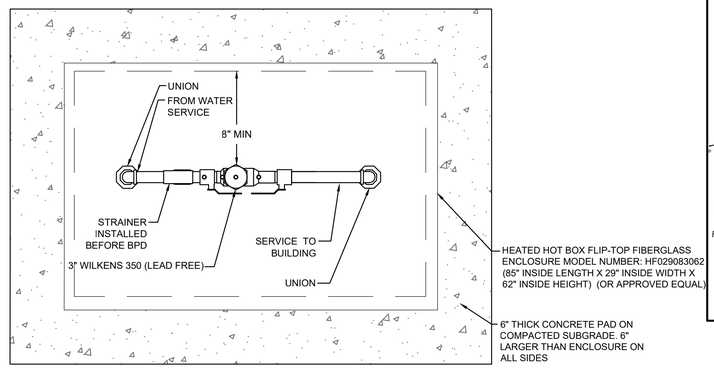
SITE PLAN

SCALE: 1"=140'



TRAIL LODGE 3" DOUBLE CHECK VALVE ELEVATION

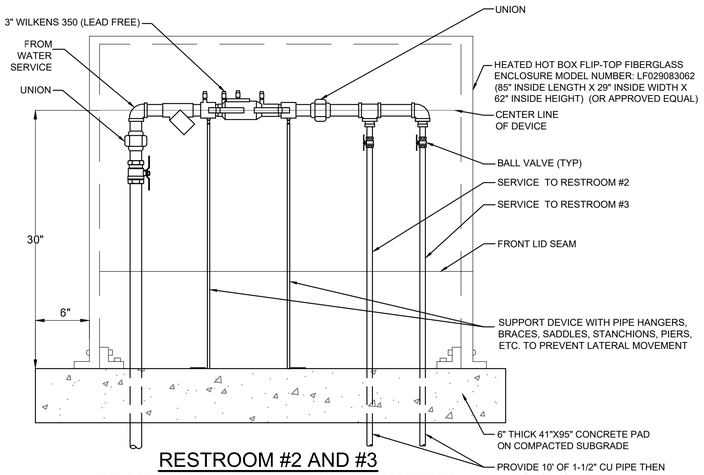
N.T.S.



ENCLOSURE NOTES:
1. INSULATION TO BE POLYISOCYANURATE FOAM.
2. ENCLOSURE TO BE CERTIFIED BY NSF

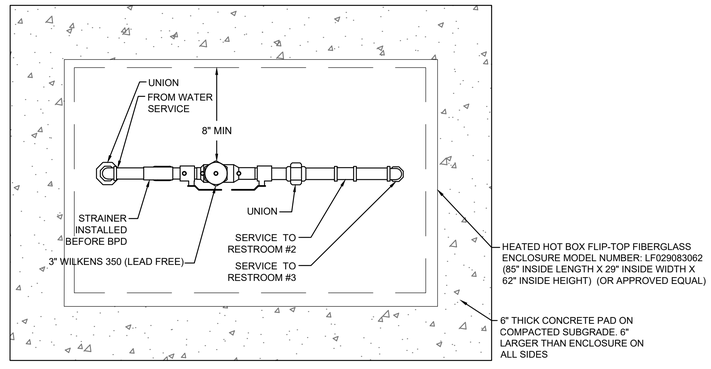
TRAIL LODGE 3" DOUBLE CHECK VALVE PLAN

N.T.S.



RESTROOM #2 AND #3 3" DOUBLE CHECK VALVE ELEVATION

N.T.S.



ENCLOSURE NOTES:
1. INSULATION TO BE POLYISOCYANURATE FOAM.
2. ENCLOSURE TO BE CERTIFIED BY NSF

4" DOUBLE CHECK VALVE PLAN

N.T.S.

NOTES:

1. ALL PROPOSED INSTALLATIONS OF BACKFLOW PREVENTION DEVICES(S) TO BE UTILIZED ON ALL DOMESTIC WATER SERVICES FOR HUMAN CONSUMPTION MUST BE LEAD–FREE IN COMPLIANCE WITH THE AMENDED SAFE DRINKING WATER ACT (SECTION 1417).
2. THE DEPARTMENT OF HEALTH WILL ONLY ACCEPT THOSE BACKFLOW PREVENTION DEVICES/ASSEMBLIES WHICH APPEAR ON THE CURRENT EDITION OF THE LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES GENERATED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS– CONNECTION CONTROL AND HYDRAULIC RESEARCH BYPASS PIPING WITHOUT CROSS–CONNECTION PROTECTION IS PROHIBITED. IF A BYPASS IS NECESSARY, A BACKFLOW PREVENTION DEVICE MUST BE INSTALLED ON SUCH.
3. THE BACKFLOW PREVENTER MUST BE INSTALLED A MINIMUM OF THIRTY INCHES (30") ABOVE THE FLOOR LEVEL OR EIGHTEEN INCHES (18") FROM THE FLOOR TO THE BOTTOM OF DISCHARGE PORT (WHICHEVER IS GREATER). DEVICES MUST BE INSTALLED SO THAT THERE IS ACCESS FOR SERVICING AND TESTING. ANY DEVICES INSTALLED AT GREATER THAN 5'–0" OFF THE FLOOR MUST INCLUDE AN OSHA APPROVED SAFETY PLATFORM FOR TEST PROCEDURES.
4. A DEVICE CANNOT BE INSTALLED CLOSER THAN TWENTY–FOUR INCHES (24") FROM A CEILING OR ANY VERTICAL OBSTRUCTION(S).
5. A MINIMUM OF TWELVE INCHES (12") OF CLEAR SPACE SHALL BE MAINTAINED ABOVE THE SHUT OFF VALVE.
6. A MINIMUM OF THIRTY INCHES (30") IS REQUIRED IN FRONT OF THE BACKFLOW PREVENTER. A MINIMUM OF EIGHT INCHES (8") IS REQUIRED BEHIND THE BACKFLOW PREVENTER. DEVICES IN PARALLEL MUST BE THIRTY INCHES (30") APART.
7. VALVES MUST BE SITUATED ON BOTH SIDES OF THE BACKFLOW PREVENTION DEVICE. A STRAINER MUST BE PLACED ON THE FEED SIDE OF ALL DEVICES OTHER THAN FIRE SERVICES UTILIZING DOUBLE CHECK VALVES.
8. DOUBLE CHECK VALVES SHALL BE INSTALLED AND CERTIFIED BY A CERTIFIED BACKFLOW TESTER. DOUBLE CHECK VALVES SHALL BE UNINSTALLED AND WINTERIZED PRIOR TO FREEZING SEASON. FOLLOWING THE FREEZING SEASON THE DOUBLE CHECK VALVE WILL BE INSTALLED AND CERTIFIED BY A CERTIFIED BACKFLOW TESTER PRIOR TO WATER SERVICE USE.
9. ADEQUATE LIGHTING FOR TESTING WILL BE PROVIDED.

2

D&B ENGINEERS AND ARCHITECTS, P.C.
4 WEST RED OAK LANE
WHITE PLANES, NY, 10604
(914) 467–5300

CONSULTANT SEAL

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CHECKED BY MPF
MADE BY RJC

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION
2	07/09/2021	MPF	RJC	ISSUED WITH BID ADDENDUM #5
1	06/09/2021	MPF	RJC	ISSUED WITH BID ADDENDUM #3

RECORD DRAWING CERTIFICATION
☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF ENGINEERING

BLUE MOUNTAIN RESERVATION SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT, CITY OF PEEKSKILL, NY
CIVIL
BACKFLOW PREVENTION DEVICE DETAILS

CONTRACT NUMBER 17–519
SHEET NUMBER C–16
SHEET NO. 20 OF 35
SCALE: AS NOTED
DATE: APRIL 2021
DPW FILE NO. 24–86–G–23
REV. NO. 2

F:\3980 - Blue Mountain\DWG\Addendum 5\3980 C-14 to C-16 DETAILS - ADDENDUM 5.dwg, C-16, 7/15/2021 4:52:34 PM, mferraro

WASHINGTON STREET
LOUNSBURY LANE
WELCHER AVENUE
MILTON AVENUE
BLELOCH AVENUE
BROOK STREET
SHORT STREET
MH 08 (EXISTING)
DICKEY BROOK TRAIL

SEE SHEET E-06 FOR WORK IN THIS AREA

SEE TRENCH DETAIL 1 SHEET E-09
ASPHALT ROAD (TYP.)
APPROXIMATE LOCATION OF PARKS BOUNDARY
PARK ENTRANCE
UNDERGROUND ELECTRICAL AND COMMUNICATIONS SERVICE (TYP.)
ENTRANCE TICKET BOOTH
COMMUNICATION HANDHOLE HH-9
COMMUNICATION HANDHOLE HH-10
EMH 05
EMH 06
UNDERGROUND ELECTRICAL AND COMMUNICATIONS SERVICE (TYP.)
COMMUNICATION HANDHOLE HH-11
CULVERT NO. 2
COMMUNICATION HANDHOLE HH-12
EMH 07
EMH 08

SEE SHEET E-07 FOR WORK IN THIS AREA

SEE SHEET E-07 FOR HOT BOX DETAILS
TRAIL LODGE FF EL. 138.0
UNDERGROUND ELECTRICAL AND COMMUNICATIONS SERVICE (TYP.)

COMMUNICATION HANDHOLE HH-6
PROVIDE ELECTRIC MANHOLE MH 04. TYPICAL FOR ALL 8 EMH.

SEE THIS SHEET WORK IN THIS AREA

COMMUNICATION HANDHOLE HH-5
EXISTING ASPHALT ROAD (TYP.)
UNDERGROUND ELECTRICAL AND COMMUNICATIONS SERVICE (TYP.)
RESTROOM NO. 2
EMH 03
ASPHALT PARKING
EMH 02
COMMUNICATION HANDHOLE HH-4
DAM
ASPHALT PATH

SEE SHEET E-05 FOR WORK IN THIS AREA

RESTROOM NO. 1
EMH 01
UNDERGROUND ELECTRICAL AND COMMUNICATIONS SERVICE (TYP.)

SEE SHEET E-04 FOR WORK IN THIS AREA

FUTURE MAINTENANCE GARAGE
UNDERGROUND ELECTRICAL AND COMMUNICATIONS SERVICE (TYP.)
ASPHALT ROAD
VALVE PIT
UNDERGROUND ELECTRICAL AND COMMUNICATIONS SERVICE (TYP.)
UTILITY POLE
EXISTING OVERHEAD ELECTRICAL SERVICE. EXTEND TO NEW POLE.
RESIDENTIAL GARAGE
PRIVATE RESIDENCE

SEE TRENCH DETAIL 1A SHEET E-09
SEE TRENCH DETAIL 1C SHEET E-09
SEE TRENCH DETAIL 5 SHEET E-09
SEE TRENCH DETAIL 6 SHEET E-09
STUB UP CONDUITS. SEE SHEET E-08.
EMH-3
MH
HH-5
XFMR
T-TAP BOX
RR-2
WP
GFI
FUTURE BOLLARD (TYPICAL)
3 - 3/4"C STUB COMMUNICATION
3 - 3/4"C SCHEDULE 80 WITH PULL ROPE
HH-14
EHH
2 - 3/4"C STUB
2 - 1"C STUB
(2) CAR CHARGER POWER
(2) RECEPTACLES
1 - 1"C
1 - 3/4"C
CAR CHARGER POWER RECEPTACLE
FUTURE EV DUAL CAR CHARGER

2 CAR CHARGER POWER PLAN

SCALE: 1" = 20'-0"

100 0 100 200
SCALE IN FEET
(1"=100')

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CONSULTANT SEAL

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CHECKED BY GRL
MADE BY GD

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION
2	07/09/2021	GD	LSE	ISSUED WITH BID ADDENDUM #5
1	06/09/2021	GD	LSE	ISSUED WITH BID ADDENDUM #3

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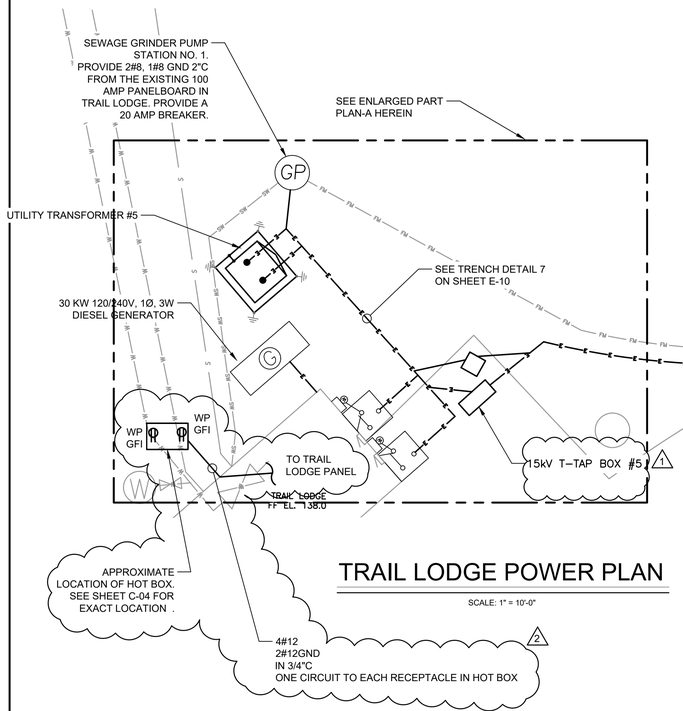
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF ENGINEERING

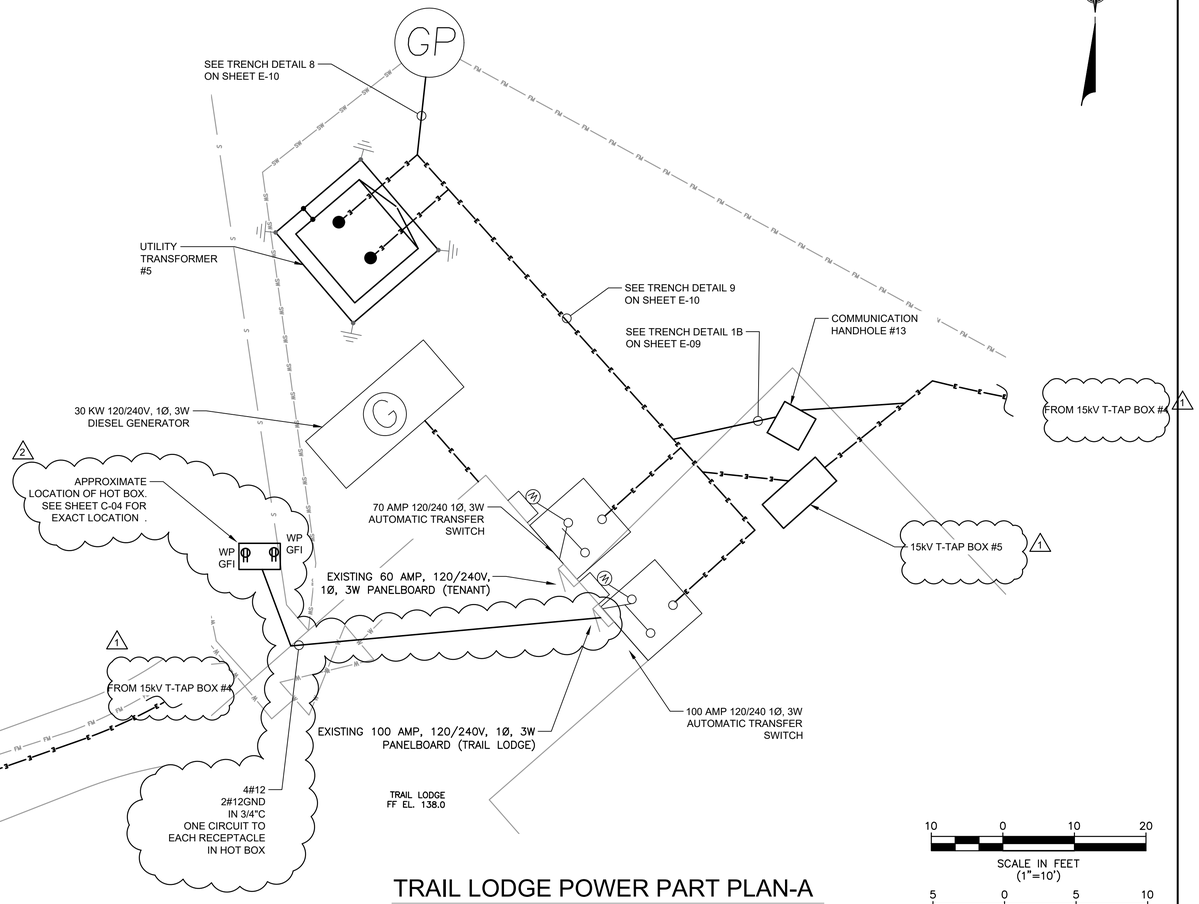
BLUE MOUNTAIN RESERVATION SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT, CITY OF PEEKSKILL, NY
ELECTRICAL
OVERALL SITE PLAN – POWER PLAN

CONTRACT NUMBER 17-519
SHEET NUMBER E-02
SHEET NO. 23 OF 35
SCALE: AS NOTED
DATE: APRIL 2021
DPW FILE NO. 24-86-G-32
REV. NO. 2



TRAIL LODGE POWER PLAN

SCALE: 1" = 10'-0"



TRAIL LODGE POWER PART PLAN-A

SCALE: 1" = 5-0"

10 0 10 20
SCALE IN FEET (1"=10')

5 0 5 10
SCALE IN FEET (1"=5')

10 0 10 20
SCALE IN FEET (1"=10')

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STATE OF NEW YORK · BARRY R. LYNCH · 55526 · LICENSED PROFESSIONAL ENGINEER

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MADE BY GD

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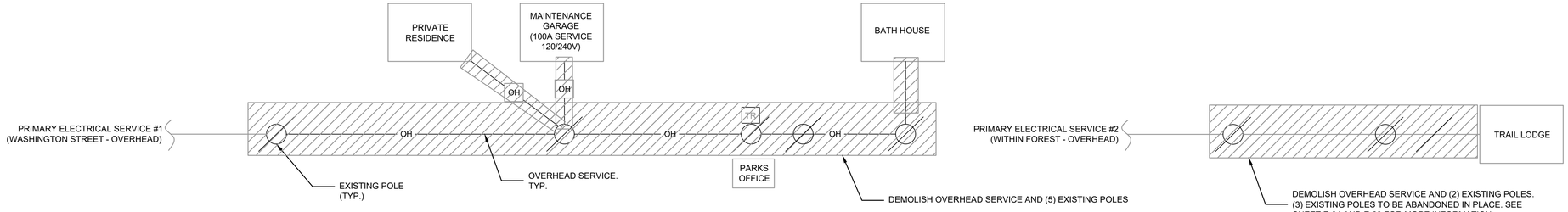
WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF ENGINEERING

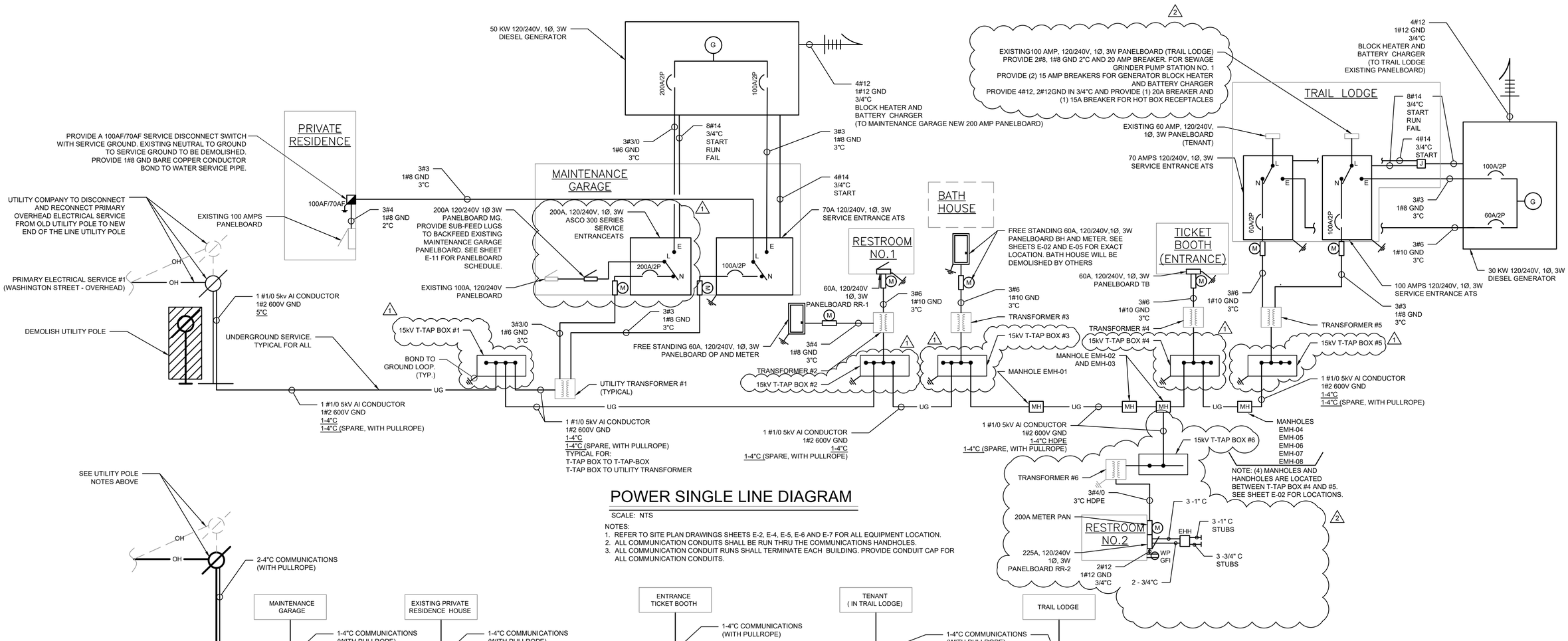
BLUE MOUNTAIN RESERVATION SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT, CITY OF PEEKSKILL, NY
ELECTRICAL
TRAIL LODGE POWER PLAN

CONTRACT NUMBER 17-519
SHEET NUMBER E-07
SHEET NO. 28 OF 35
SCALE: AS NOTED
DATE: APRIL 2021
DPW FILE NO. 24-86-G-31
REV. NO. 2



EXISTING POWER SINGLE LINE DIAGRAM

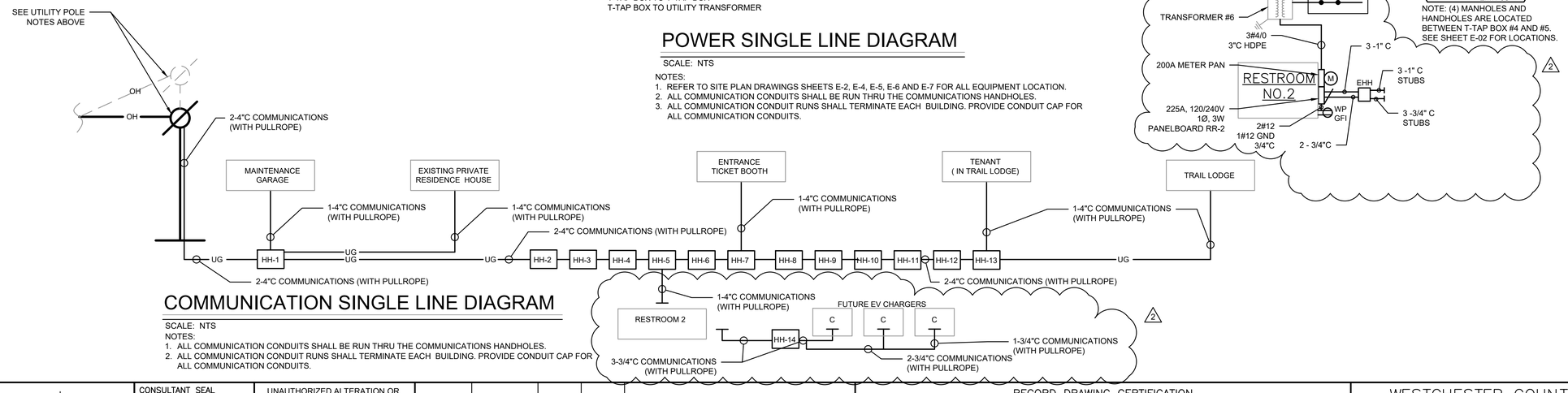
SCALE: NTS



POWER SINGLE LINE DIAGRAM

SCALE: NTS

NOTES:
1. REFER TO SITE PLAN DRAWINGS SHEETS E-2, E-4, E-5, E-6 AND E-7 FOR ALL EQUIPMENT LOCATION.
2. ALL COMMUNICATION CONDUITS SHALL BE RUN THRU THE COMMUNICATIONS HANDHOLES.
3. ALL COMMUNICATION CONDUIT RUNS SHALL TERMINATE EACH BUILDING. PROVIDE CONDUIT CAP FOR ALL COMMUNICATION CONDUITS.



COMMUNICATION SINGLE LINE DIAGRAM

SCALE: NTS

NOTES:
1. ALL COMMUNICATION CONDUITS SHALL BE RUN THRU THE COMMUNICATIONS HANDHOLES.
2. ALL COMMUNICATION CONDUIT RUNS SHALL TERMINATE EACH BUILDING. PROVIDE CONDUIT CAP FOR ALL COMMUNICATION CONDUITS.

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STATE OF NEW YORK — HENRY R. LYNCH — 55626 — LICENSED PROFESSIONAL ENGINEER

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2	07/09/2021	GD	LSE	ISSUED WITH BID ADDENDUM #5
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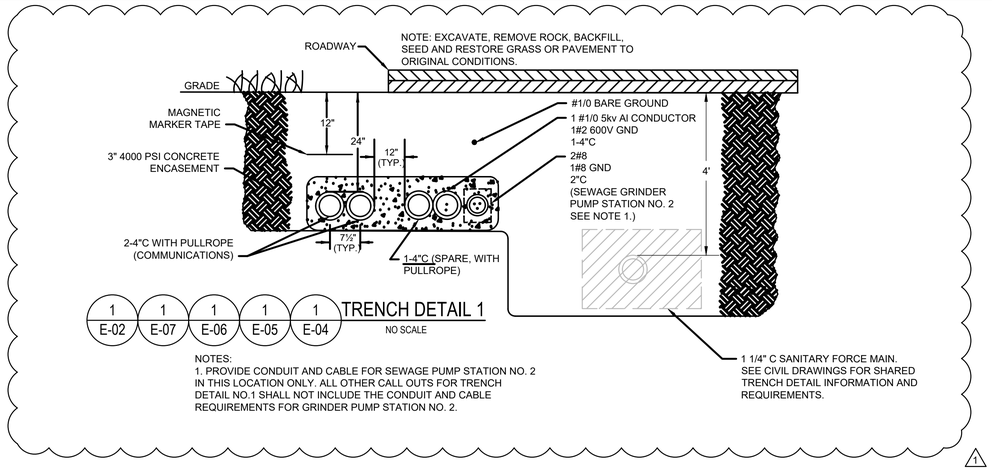
WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF ENGINEERING

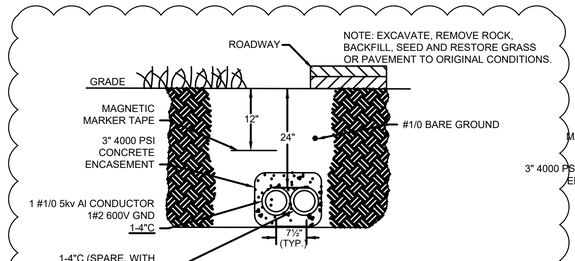
BLUE MOUNTAIN RESERVATION SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT, CITY OF PEEKSKILL, NY
ELECTRICAL
POWER AND COMMUNICATION SINGLE LINE DIAGRAM

CONTRACT NUMBER 17-519
SHEET NUMBER E-08
SHEET NO. 29 OF 35
SCALE: AS NOTED
DATE: APRIL 2021
DPW FILE NO. 24-86-G-32
REV. NO. 2

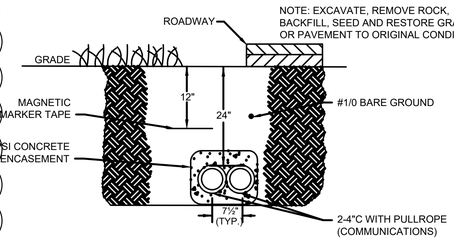


1 E-02 | 1 E-07 | 1 E-06 | 1 E-05 | 1 E-04 — TRENCH DETAIL 1 — NO SCALE

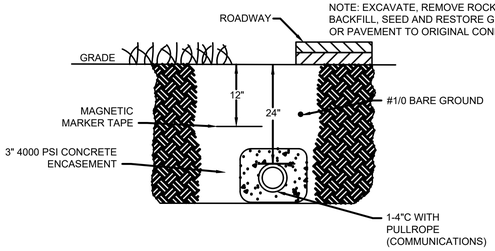
NOTES:
1. PROVIDE CONDUIT AND CABLE FOR SEWAGE PUMP STATION NO. 2 IN THIS LOCATION ONLY. ALL OTHER CALL OUTS FOR TRENCH DETAIL NO.1 SHALL NOT INCLUDE THE CONDUIT AND CABLE REQUIREMENTS FOR GRINDER PUMP STATION NO. 2.



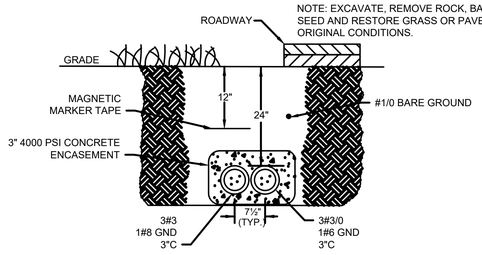
1A E-02 | 1A E-04 — TRENCH DETAIL 1A — NO SCALE



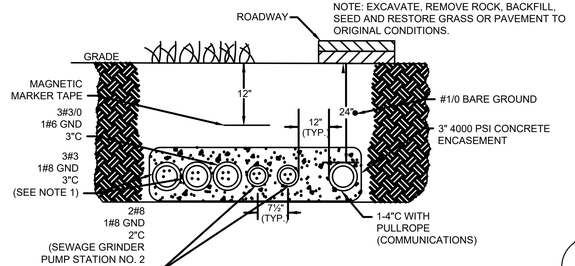
1B E-04 — TRENCH DETAIL 1B — NO SCALE



1C E-02 | 1C E-04 — TRENCH DETAIL1C — NO SCALE

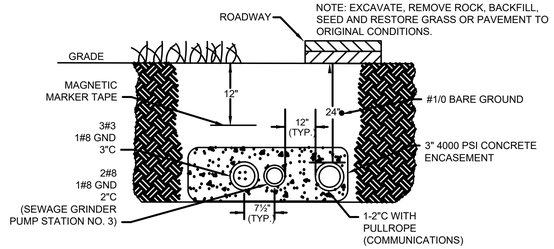


2 E-04 — TRENCH DETAIL 2 — NO SCALE

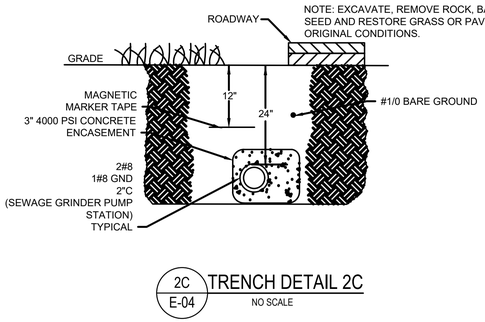


2A E-04 — TRENCH DETAIL 2A — NO SCALE

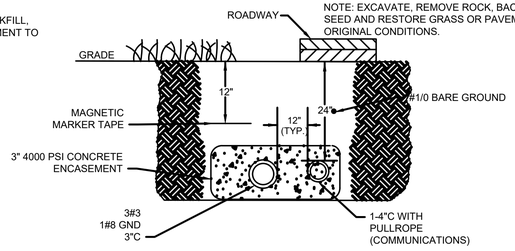
NOTES:
1. ONE 3" CONDUIT IS FROM THE UTILITY TRANSFORMER #1 TO METER AND THE OTHER 3" CONDUIT IS FROM ATS LOAD SIDE TO PRIVATE RESIDENCE.



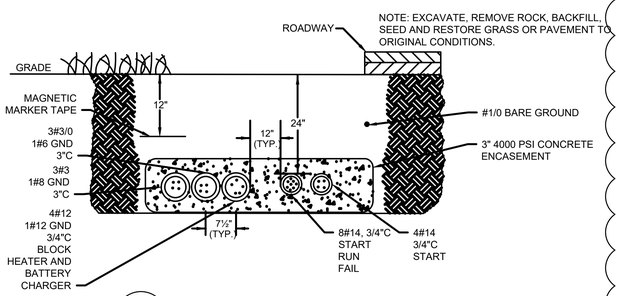
2B E-04 — TRENCH DETAIL 2B — NO SCALE



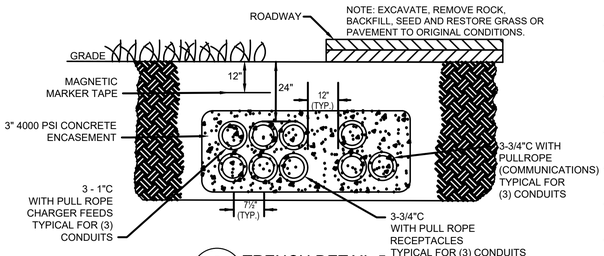
2C E-04 — TRENCH DETAIL 2C — NO SCALE



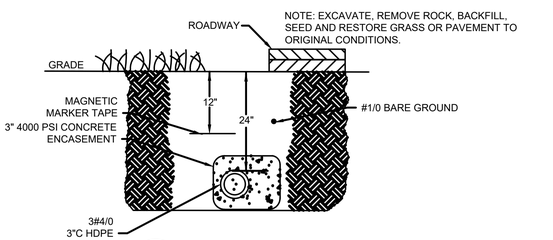
3 E-04 — TRENCH DETAIL 3 — NO SCALE



4 E-04 — TRENCH DETAIL 4 — NO SCALE



5 E-02 — TRENCH DETAIL 5 — NO SCALE



6 E-02 — TRENCH DETAIL 5 — NO SCALE

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CONSULTANT SEAL

STATE OF NEW YORK — HARRY R. LYNCH — 55626 — LICENSED PROFESSIONAL ENGINEER

IN CHARGE OF JGD
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MADE BY GD

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RECORD DRAWING CERTIFICATION
☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

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SIGNATURE
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SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF ENGINEERING

BLUE MOUNTAIN RESERVATION SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT, CITY OF PEEKSKILL, NY
ELECTRICAL
TRENCH DETAILS I

CONTRACT NUMBER 17-519
SHEET NUMBER E-09
SHEET NO. 30 OF 35
SCALE: AS NOTED
DATE: APRIL 2021
DPW FILE NO. 24-86-G-33
REV. NO. 2

PANELBOARD "MG"

MAIN BUS RATINGS: 200, 120/240 VOLTS, 1 PHASE, 3 WIRE
MINIMUM SHORTCIRCUIT INTERRUPTION RATING: 22,000 AIC
MAIN BREAKER TRIP:200A
ESTIMATED CONNECTED LOAD: 30 KW

FED FROM: ATS/TRANSFORMER #1
INCOMING FEED: 1-3/0 PER PHASE
ENCLOSURE: NEMA 1

DESCRIPTION	LOAD KW	CB TRIP/POLE	CIR. NO	A B	CIR. NO	CB TRIP/POLE	LOAD KW	DESCRIPTION
SPARE	0.0	20A/1P	1		2	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	3		4	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	5		6	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	7		8	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	9		10	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	11		12	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	13		14	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	15		16	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	17		18	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	19		20	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	21		22	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	23		24	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	25		26	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	27		28	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	29		30	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	31		32	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	33		34	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	35		36	20A/1P	0.0	SPARE
BLOCK HEATER	1	20A/1P	37		38	20A/1P	1	BATTERY CHARGER
GRINDER PS #2	3	20A/2P	39		40	20A/2P	3	GRINDER PS #3
			41		42			

NOTES:
1. PROVIDE SUB-FEED LUGS TO BACKFEED EXISTING PANELBOARD IN MAINTENANCE GARAGE.
2. PROVIDE 2#12, 1#12 GND 1"C FROM PANELBOARD TO GRINDER PS #2.
3. PROVIDE 2#12, 1#12 GND 2"C FROM PANELBOARD TO GRINDER PS #3.
4. PROVIDE 2#12, 1#12 GND 3/4"C FROM PANELBOARD TO GENERATOR BLOCK HEATER.
5. PROVIDE 2#12, 1#12 GND 3/4"C FROM PANELNOARD TO GENERATOR BATTERY CHARGER.

PANELBOARD "BH"

MAIN BUS RATINGS: 100, 120/240 VOLTS, 1 PHASE, 3 WIRE
MINIMUM SHORTCIRCUIT INTERRUPTION RATING: 22,000 AIC
MAIN BREAKER TRIP:60A
ESTIMATED CONNECTED LOAD: 10 KW

FED FROM: TRANSFORMER #3
INCOMING FEED: 1-6 PER PHASE
ENCLOSURE: NEMA 4

DESCRIPTION	LOAD KW	CB TRIP/POLE	CIR. NO	A B	CIR. NO	CB TRIP/POLE	LOAD KW	DESCRIPTION
SPARE	0.0	20A/1P	1		2	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	3		4	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	5		6	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	7		8	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	9		10	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	11		12	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	13		14	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	15		16	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	17		18	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	19		20	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	21		22	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	23		24	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	25		26	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	27		28	20A/2P	3	GRINDER PS #1
SPARE	0.0	20A/1P	29		30			

PANELBOARD "RR2"

MAIN BUS RATINGS: 225 120/240 VOLTS, 1 PHASE, 3 WIRE
MINIMUM SHORTCIRCUIT INTERRUPTION RATING: 22,000 AIC
MAIN BREAKER TRIP:225A
ESTIMATED CONNECTED LOAD: -- KW

FED FROM: TRANSFORMER #6
INCOMING FEED: 1-4/0 PER PHASE
ENCLOSURE: NEMA 4

DESCRIPTION	LOAD KW	CB TRIP/POLE	CIR. NO	A B	CIR. NO	CB TRIP/POLE	LOAD KW	DESCRIPTION
SPARE	0.0	40A/2P	1		2	40A/2P	0.0	SPARE
			3		4			
SPARE	0.0	40A/2P	5		6	40A/2P	0.0	SPARE
			7		8			
RECEP SPARE	0.0	20A/1P	9		10	20A/1P	0.0	RECEP SPARE
CONV. RECEPTACLE	0.2	20A/1P	11		12	20A/1P	0.0	RECEP SPARE
SPARE	0.0	20A/1P	13		14	40A/2P	0.0	SPARE
SPARE	0.0	20A/1P	15		16			
SPARE	0.0	20A/1P	17		18	40A/2P	0.0	SPARE
SPARE	0.0	20A/1P	19		20			
SPARE	0.0	20A/1P	21		22	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	23		24	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	25		26	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	27		28	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	29		30	20A/1P	0.0	SPARE

2

PANELBOARD "RR-1"

MAIN BUS RATINGS: 100, 120/240 VOLTS, 1 PHASE, 3 WIRE
MINIMUM SHORTCIRCUIT INTERRUPTION RATING: 22,000 AIC
MAIN BREAKER TRIP:60A
ESTIMATED CONNECTED LOAD: 10 KW

FED FROM: TRANSFORMER #2
INCOMING FEED: 1-6 PER PHASE
ENCLOSURE: NEMA 1

DESCRIPTION	LOAD KW	CB TRIP/POLE	CIR. NO	A B	CIR. NO	CB TRIP/POLE	LOAD KW	DESCRIPTION
SPARE	0.0	20A/1P	1		2	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	3		4	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	5		6	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	7		8	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	9		10	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	11		12	20A/1P	0.0	SPARE

PANELBOARD "TB"

MAIN BUS RATINGS: 100, 120/240 VOLTS, 1 PHASE, 3 WIRE
MINIMUM SHORTCIRCUIT INTERRUPTION RATING: 22,000 AIC
MAIN BREAKER TRIP:60A
ESTIMATED CONNECTED LOAD: 10 KW

FED FROM: TRANSFORMER #4
INCOMING FEED: 1-6 PER PHASE
ENCLOSURE: NEMA 1

DESCRIPTION	LOAD KW	CB TRIP/POLE	CIR. NO	A B	CIR. NO	CB TRIP/POLE	LOAD KW	DESCRIPTION
SPARE	0.0	20A/1P	1		2	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	3		4	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	5		6	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	7		8	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	9		10	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	11		12	20A/1P	0.0	SPARE

PANELBOARD "OP"

MAIN BUS RATINGS: 100, 120/240 VOLTS, 1 PHASE, 3 WIRE
MINIMUM SHORTCIRCUIT INTERRUPTION RATING: 22,000 AIC
MAIN BREAKER TRIP:60A
ESTIMATED CONNECTED LOAD: 10 KW

FED FROM: TRANSFORMER #2
INCOMING FEED: 1-4 PER PHASE
ENCLOSURE: NEMA 4

DESCRIPTION	LOAD KW	CB TRIP/POLE	CIR. NO	A B	CIR. NO	CB TRIP/POLE	LOAD KW	DESCRIPTION
SPARE	0.0	20A/1P	1		2	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	3		4	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	5		6	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	7		8	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	9		10	20A/1P	0.0	SPARE
SPARE	0.0	20A/1P	11		12	20A/1P	0.0	SPARE

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CONSULTANT SEAL

STATE OF NEW YORK · HARRY R. LYNCH · 55626 · LICENSED PROFESSIONAL ENGINEER

IN CHARGE OF JGD
CHECKED BY GRL
MADE BY GD

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION
2	07/09/2021	GD	LSE	ISSUED WITH BID ADDENDUM #5
1	06/09/2021	GD	LSE	ISSUED WITH BID ADDENDUM #3

RECORD DRAWING CERTIFICATION
☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF ENGINEERING

BLUE MOUNTAIN RESERVATION SITE WORK IMPROVEMENTS
TOWN OF CORTLANDT, CITY OF PEEKSKILL, NY
ELECTRICAL
PANELBOARD SCHEDULES

CONTRACT NUMBER 17-519
SHEET NUMBER E-11
SHEET NO. 32 OF 35
SCALE: AS NOTED
DATE: APRIL 2021
DPW FILE NO. 24-86-G-32
REV. NO. 2