

**FISHKILL AVENUE  
SEWER & WATER REPLACEMENT  
ADDENDUM No. 1**

**CITY OF BEACON  
DUTCHESS COUNTY, NEW YORK**

**COB Bid No. 2025-007  
COB Contract No. 2025-**



**Consulting Engineers  
Lanc & Tully  
Engineering and Surveying, P.C.  
P.O. Box 687  
Goshen, NY 10924**

**June 3, 2025**

**\*\*\* NOTICE TO BIDDERS \*\*\***

The following Addendum No. 1 to the Contract Documents, Technical Specifications, and Drawings for ***Fishkill Avenue Sewer & Water Replacement Main*** project supersedes contained specified items only to the extent listed and/or shown on drawings herein or contained within the contract documents.

Such additions and/or deletions should be considered by all Bidders in preparation of their initial bids for proposed project and shall not be used as a basis for later claims for extra compensation.

**Contractor shall mark on page C-1 of the Bid Form of the contract the date this addendum was received.**

- I. The following are changes to the Contract Documents and Technical Specifications:
  - The original Bid Form pages C-4 through C-17 shall be deleted in their entirety and replaced with the attached Bid Form pages dated June 3, 2025, consisting of Pages C-4 through C-17.
  - Existing specification 02641 – Valves, Meters & Appurtenances – Water, consisting of pages 1 through 4, shall be deleted in its entirety and replaced with the attached specification 02641 consisting of pages 1 through 4, with the date of June 3, 2025. Technical specification was revised to include valve boxes.
- II. The following are changes to the Contract Plans:
  - Sheet 3 of 9, with the latest revision date of April 17, 2025, shall be deleted in its entirety and replaced with the attached Sheet 3 of 9 with the latest revision date of June 3, 2025. The plan sheet was updated to reflect the following:
    - a. The location of the sections of lines to be removed or grouted in place has been further clarified.
  - Sheets 4, 5, and 6 of 9, with the latest revision date of April 17, 2025, shall be deleted in its entirety and replaced with the attached Sheets 4, 5, and 6 of 9 with the latest revision date of June 3, 2025. The plan sheets have been updated to reflect the following:
    - a. Revised to remove duplication from items listed on demolition plan.

- Sheet 7 of 9, with the latest revision date of April 17, 2025, shall be deleted in its entirety and replaced with the attached Sheet 7 of 9 with the latest revision date of June 3, 2025. The plan sheet was updated to reflect the following:
  - a. "Utility Trench Cross Section" detail was revised to remove reference to milling, and thicknesses of proposed pavements for trench restoration depending upon location.
  - b. Sidewalk and Curbing details were revised to include a note with regards to the required sealing of the concrete, and curbing adjacent to sidewalk, on sidewalk detail, was removed.
- Sheet 8 of 9, with the latest revision date of April 17, 2025, shall be deleted in its entirety and replaced with the attached Sheet 8 of 9 with the latest revision date of June 3, 2025. The plan sheet was updated to reflect the following:
  - a. Water Trench Cross Section detail was removed so as not create conflict between Utility Trench Cross Section detail on Sheet 7 of 9.
  - b. Hydrant detail was revised to note the use of stainless-steel tie-rods.

III. The following are additional clarifications to the contract and specifications based upon received RFI's:

- 1) The bid form was revised to include a quantity for the 3" of top course used for restoration of driveways and parking lots.
- 2) The pavement restoration details that are part of the trench cross section detail on Sheet 7 of 9 have been revised to reflect the pavement thicknesses noted in the bid form.
- 3) The 1 ½" top course pavement previously shown on the trench restoration detail has been removed. The only top course pavement for the project would be that in driveways and parking lots.
- 4) The amount of trench allowed open at a given time is 100 feet per Section 02221, Paragraph 3.1.3 of the technical specifications.

- 5) Per Section 02221, Paragraph 3.2.1 notes that all excavations are to be completely backfilled by the end of the day. The plating of the end of the trench will be allowed were utility work is to resume, but the contractor shall have plugs for the end of the pipeline to ensure that rock, dirt, mud, or other deleterious material does not enter the pipes. Plugs shall be properly anchored, and road plate(s) shall be properly anchored so that they do not shift.
- 6) The only “Domestically Made” material required on the project are manhole castings per Section 02601, Paragraph 2.1.1.1., and valve boxes per Section 02641, Paragraph 2.1.3.1.

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All items are *complete items* & include furnishing, installation, excavation, backfilling, labor, etc., unless mentioned otherwise in this Bid Form.

BIDDER will complete the BASE BID work on **Fishkill Ave. Sewer & Water Replacement** using the following unit prices:

Item #	Item Description	Unit	Est. Qty  (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount  (= Column "D" x Column "F")
1	Bonds and Insurance	LS	1			
2	Test Pits to allow for verification of existing utilities at crossings for new water and sewer mains, and to verify existing water & sewer service sizes	LS	1			
3	Contractor to perform GPS location of new sewer main and water main at end of each length of pipe (horizontal & vertical location), all fittings and connection on the new sewer and water mains, along each of the sewer and water service lines, and at all utility crossings uncovered during the installation of the water and sewer utilities. Contractor shall provide all GPS data to Project Engineer for preparation of as-built for all new utilities.	LS	1			
4	Traffic Control for the duration of the project. Includes development of traffic control plans for all work.	LS	1			
5	Sawcutting and removal of blacktop and concrete road for new utilities	SY	3,750			

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6	Removal of water main where indicated on plans. Includes excavation, removal of water line, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes. This work to be completed after new water line has been installed and service lines have been switched over.	LS	1			
7	Abandonment of existing water main in place where noted on plan by filling existing line with low density cellular concrete (LDCC), after new water line has been installed and service lines have been switched over. Includes removal of valve boxes along section of line to be abandoned in place.	LS	1			
8	Removal of existing hydrants and capping of existing connections. Includes excavation, capping, backfilling with Select Material No. 4, disposal of all wastes, and return of hydrants to City of Beacon Water Department	Each	2			
9	Installation of new 10" Class 52 ductile iron pipe. Includes excavation, installation of pipe, backfilling with Select Material No. 4 for entire trench depth, compaction of backfill in lifts, and disposal of all wastes.	LF	1,915			

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10	Installation of new 8" Class 52 ductile iron pipe. Includes excavation, installation of pipe, backfilling with Select Material No. 4 for entire trench depth, compaction of backfill in lifts, and disposal of all wastes.	LF	25			
11	Installation of new 6" Class 52 ductile iron pipe. Includes excavation, installation of pipe, backfilling with Select Material No. 4 for entire trench depth, compaction of backfill in lifts, and disposal of all wastes.	LF	80			
12	Installation of new 4" Class 52 ductile iron pipe. Includes excavation, installation of pipe, backfilling with Select Material No. 4 for entire trench depth, compaction of backfill in lifts, and disposal of all wastes.	LF	60			
13	10"x10"x10" wet tap. Includes wet tap tee, wet tap valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
14	6"x6"x6" wet tap. Includes wet tap tee, wet tap valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			

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15	10" gate valve. Includes gate valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	4			
16	8" gate valve. Includes gate valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
17	6" gate valve. Includes gate valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	3			
18	4" gate valve. Includes gate valve, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
19	Installation of new fire hydrant. Includes hydrant, restraining systems, stainless steel rods, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	3			



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20	10"x10"x10" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
21	10"x10"x8" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
22	10"x10"x6" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	3			
23	10"x10"x4" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
24	8"x8"x6" tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
25	2" mechanical joint tapped tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			

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26	1 ½" mechanical joint tapped tee. Includes tee, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
27	10" 45-degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
28	10" 22 ½ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
29	10" 11 ¼ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	2			
30	8" 45-degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			

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31	8" 22 ½ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
32	8" 11 ¼ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
33	6" 45-degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
34	6" 22 ½ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
35	6" 11 ¼ -degree bend. Includes bend, restraining systems, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	EA	1			
36	Installation of "Domestically Made" valve box set to final grade.	EA	20			

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Item #	Item Description	Unit	Est. Qty (Column "D")	Material Cost Only Per Unit	Total Price Per Unit (Material, Labor, Installation, etc.) (Column "F")	Total Amount (= Column "D" x Column "F")
37	3/4" k-copper water service line. Includes copper, all fittings necessary for connection, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	LF	50			
38	1" k-copper water service line. Includes copper, all fittings necessary for connections, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	LF	150			
39	1-1/2" k-copper water service line. Includes copper, all fittings necessary for connection, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	LF	30			
40	2" k-copper water service line. Includes copper, all fittings necessary for connection, excavation, backfilling with Select Material No. 4, compaction of backfill in lifts, and disposal of all wastes.	LF	30			
41	Installation of 10" ductile iron cap with restraints.	EA	7			
42	Installation of 8" ductile iron cap with restraints.	EA	1			
43	Installation of 6" ductile iron cap with restraints.	EA	2			
44	Installation of 4" ductile iron cap with restraints.	EA	1			

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45	Installation of ¾" corporation valve.	EA	2			
46	Installation of 1" corporation valve.	EA	6			
47	Installation of ¾" curb stop.	EA	2			
48	Installation of 1" curb stop.	EA	6			
49	Installation of 1-1/2" curb stop.	EA	1			
50	Installation of 2" curb stop.	EA	1			
51	Installation of curb stop box.	EA	10			
52	Installation of 12" SDR-35 PVC sewer pipe. Includes excavation, pipe, installation of pipe, backfilling with Select Material No. 4, compaction of backfill in lift, and disposal of all wastes.	LF	1,387			
53	Installation of 8" SDR-35 PVC sewer pipe. Includes excavation, pipe, installation of pipe, backfilling with Select Material No. 4, compaction of backfill in lift, and disposal of all wastes.	LF	20			
54	Installation of 6" SDR-35 PVC sewer pipe. Includes excavation, pipe, installation of pipe, backfilling with Select Material No. 4, compaction of backfill in lift, and disposal of all wastes.	LF	185			

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55	Installation of 4" SDR-35 PVC sewer pipe. Includes excavation, pipe, installation of pipe, backfilling with Select Material No. 4, compaction of backfill in lift, and disposal of all wastes.	LF	110			
56	6" Romac Industries stainless steel Style LSS1 repair clamp for connection of PVC pipe to PVC pipe where pipe cannot be connected at bell.	EA	3			
57	4" Romac Industries stainless steel Style LSS1 repair clamp for connection of PVC pipe to PVC pipe where pipe cannot be connected at bell.	EA	3			
58	6" Romac Industries stainless steel Style SS1 transition clamp for connection of new PVC lateral to existing sewer lateral that is not PVC.	EA	3			
59	4" Romac Industries stainless steel Style SS1 transition clamp for connection of new PVC lateral to existing sewer lateral that is not PVC.	EA	3			
60	Installation of 12"x 6" SDR 35 PVC Tee-Wye for service connection	EA	6			
61	Installation of 12"x 4" SDR 35 PVC Tee-Wye for service connection	EA	6			
62	6" SDR 35 45-degree bend for service reconnection where needed	EA	2			

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63	4" SDR 35 45-degree bend for service reconnection where needed	EA	2			
64	6" SDR 35 22 ½ degree bend for service reconnection where needed	EA	3			
65	4" SDR 35 22 ½ degree bend for service reconnection where needed	EA	3			
66	Installation of new sewer manhole - 4' I.D., includes backfilling with Select Material No. 4 and compaction (no frame and cover)	VLF	78			
67	Installation of "Domestically Made" sewer manhole frame & cover set to final grade. Casting is to be fully grouted to new manhole structure on the interior and exterior of the casting.	EA	7			
68	Sanitary Sewer By-Pass pumping, as needed, to allow for installation of new sanitary sewer lines	LS	1			
69	3" binder course for temporary pavement installed on trench in Fishkill Avenue at the end of each day. Includes removal of temporary pavement prior to final paving.	SY	3,750			
70	8" base course, Type 1, installed and compacted in two (2) 4" lifts on Fishkill Avenue	SY	3,750			
71	4" binder course, Type 3, installed on Fishkill Avenue	SY	3,750			

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72	5" binder course, Type 3, installed on side roads off of Fishkill Avenue	SY	150			
73	Installation of 3" of top course, Type 6FX, for restoration of driveways and parking lots.	SY	450			
74	Removal of curbing, and disposal of all wastes, where curbing is damaged for installation of new mains and service lines as directed by Engineer.	LF	300			
75	Removal of sidewalk, and disposal of all wastes, where sidewalk is damaged for installation of new service lines.	LF	125			
76	Installation of new concrete curb where damaged curbing was removed.	LF	300			
77	Installation of new 4" thick concrete sidewalk. Sidewalk shall be 6" thick in driveway aprons.	SF	650			
78	Abandonment in place of existing sanitary sewer line where noted on plans. Sewer lines to be abandoned in place shall be filled completely with Low Density Cellular Concrete (LDCC), backfilling of excavation(s) with Select Material No. 4, compaction, and disposal of all wastes.	LS	1			



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79	Abandonment of existing manholes in place where noted on plans. Includes removal of existing manhole frames & covers, upper 4 feet of existing sanitary sewer manhole structure, backfilling of remaining structure, compaction of fill in lifts, and disposal of all wastes. Manhole castings to be returned to City of Beacon.	EA	4			
80	Removal of complete sanitary sewer manholes and sanitary sewer main where noted on plan, backfilling of excavation with Select Material No. 4 in lifts, compaction of lifts, and disposal of all wastes. Sanitary Sewer Manhole castings to be returned to City of Beacon.	LS	1			
81	Double yellow line center line striping of Fishkill Avenue	LF	1,760			
82	Single white edge of pavement line along Fishkill Avenue	LF	1,760			
83	Grading, top-soiling, and seeding all disturbed areas.	LS	1			
84	Additional Select Material NYSDOT Item 304.12, as ordered by Engineer, installed and compacted.	CY	150			
85	Rock Excavation	CY	75			
86	Repair of unlocated damaged sewer service (up to and including 6" diameter)	EA	2			

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87	Repair of unlocated damaged water service (up to and including 2" diameter)	EA	1			
<b>TOTAL (BASE BID)</b>						

Total BASE BID *(in words)* Price for ***Fishkill Ave. Sewer & Water Main Replacement*** (Item Nos. 1 - 87):

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*( in words )*

SECTION 02641  
VALVES, METER AND APPURTENANCES - WATER

PART 1 GENERAL

1.1. SECTION INCLUDES

1.1.1. Requirements for gate valves, meters and air release valves.

1.2. SYSTEM DESCRIPTION

1.2.1. GATE VALVES

1.2.1.1. Gate valve smaller than 3" shall be all bronze solid wedge type with rising spindle.

1.2.1.2. Gate valves shall be iron body resilient-seat type with non-rising stems. Valves shall be furnished with "O" ring type packing. **Valves shall be Mueller resilient-seat gate valves. Substitutions or equals are not allowed.**

1.2.1.3. All gate valves shall open to the left (counter-clockwise).

1.2.1.4. All gate valves shall be proportional for working pressures of 200 psi hydrostatically tested at 400 psi.

1.2.1.5. Gate valve shall be supplied with a cast iron telescoping valve box and cover. Cover shall have the word "**WATER**" cast in top.

1.3. REFERENCES

1.3.1. ASTM A 126 - Specifications for Grey Iron Castings for Valves, Flanges and Pipe Fittings, Class B.

1.3.2. ASTM A 240 - Specifications for Heat-Resisting Chromium and Chromium-nickel Stainless Steel Plate, Sheet and Strip for Fusion-Welded Pressure Vessels.

1.3.3. ANSI B16.1 - Standard for Cast Iron Pipe Flanges and Flanged Fittings, Class 125.

1.3.4. AWWA C110 (latest revision) - Standard for Grey Iron Ductile Iron Fittings 3-inch through 48-inch for Water and Other Liquids.

1.3.5. AWWA C111 (latest revision) - Standard for Rubber Gasket Joints for Cast Iron and Ductile Iron Pressure Pipe and Fittings.

1.3.6. AWWA C509 (latest revision) - Standard for Resilient Seated Gate Valves 3 through 12 NPS for Water and Other Liquids.

1.3.7. NSF Standard 61 - Drinking Water System Components.

#### 1.4. SUBMITTALS

1.4.1. Shop drawings shall be submitted in accordance with the Section "Shop Drawings and Samples", Division 1.

1.4.2. Operation and maintenance data shall be submitted.

### PART 2 PRODUCTS

#### 2.1. MATERIALS

##### 2.1.1. GATE VALVES

2.1.1.1. 3-inch and larger valves shall be as follows:

1. The valve body and bonnets shall be fabricated of cast iron meeting the requirement of ASTM A 126.
2. The valve stem shall be fabricated of bronze.
3. Bolts shall be electro-plated steel with hex heads and hex nuts in accordance with ASTM A 307.
4. The operating nut shall be fabricated of cast iron.

##### 2.1.2. HYDRANT

2.1.2.1. Hydrant to conform to AWWA C502 (latest revision), AWWA Standard for Dry Barrel Fire Hydrants.

2.1.2.2. Hydrants shall be Mueller Super Centurion 250. No substitutions or equals are allowed.

2.1.2.3. Hydrant shall have 5¼" valve opening with compression shut off, opening against water pressure and breakaway traffic flange construction.

2.1.2.4. Inlet construction shall be 6" mechanical joint.

2.1.2.5. Bury length to be a minimum of 5 feet.

2.1.2.6. Nozzles: (2) 2½ " nozzles and (1) 4½" nozzle with national standard threads.

- 2.1.2.7. Hydrant shall open counterclockwise.
- 2.1.2.8. Hydrant nut size shall be national standard pentagon shaped operating nut measuring 1½" from point to float or come with matching cap and chain.
- 2.1.2.9. Hydrant to be painted to Owner's specifications.

### 2.1.3. VALVE BOXES

- 2.1.3.1. Valve box shall be 5¼" diameter, 2- or 3-piece sliding type figure 664-A as manufactured by Charlotte Manufacturing or approved equal. Cover shall have the word "Water" cast in top. Valve boxes shall be "Domestically Made".

## 2.3. FABRICATION

- 2.3.1. All valves and operators shall be fabricated complete and ready for installation when delivered.
- 2.3.2. All valves shall be marked to show name of manufacturer, the year of manufacture, maximum working pressure, and size of valve.
- 2.3.3. Valves 3-inch and larger shall be shop primed at the place of manufacture with an epoxy-polyamide primer compatible with the paint to be used in the field.

## PART 3 EXECUTION

### 3.1. INSPECTION

- 3.1.1. All valves shall be inspected for damage or defects prior to their incorporation in the work. All valves found to be defective will be removed from site.

### 3.2. PREPARATION

- 3.2.1. Prior to installation of the valves, concrete and other surfaces shall be protected from jointing compounds, oil and other material used to install this work.
- 3.2.2. Prior to installation of the valves, the Contractor shall clean the body of all foreign material and operate the valve to insure it is not frozen in position.

### 3.3 INSTALLATION

- 3.3.1. All valves and meters shall be installed at the location and in the positions and configurations shown on the drawings.
- 3.3.2. Anchor blocks and/or clamp shall be provided as directed by the Engineer for the gate valves.

- 3.3.3. Valve boxes shall be adequate for the trench depth so that when set on the valve, the cover is level with the pavement or the completed surrounding ground, whichever is applicable.
- 3.3.4. Where ground water rises to within 2' of a fire hydrant base, the drain port shall be plugged. Any hydrant that is plugged shall be labeled in a manner satisfactory to the local Fire Department and Water Department to ensure that the hydrant is pumped out after each use.

#### 3.4. FIELD QUALITY CONTROL

- 3.4.1. Valves, meters, hydrants, and appurtenances shall be field tested to determine that the valves operate as specified.

### PART 4 MEASUREMENT AND PAYMENT

#### 4.1. Measurement

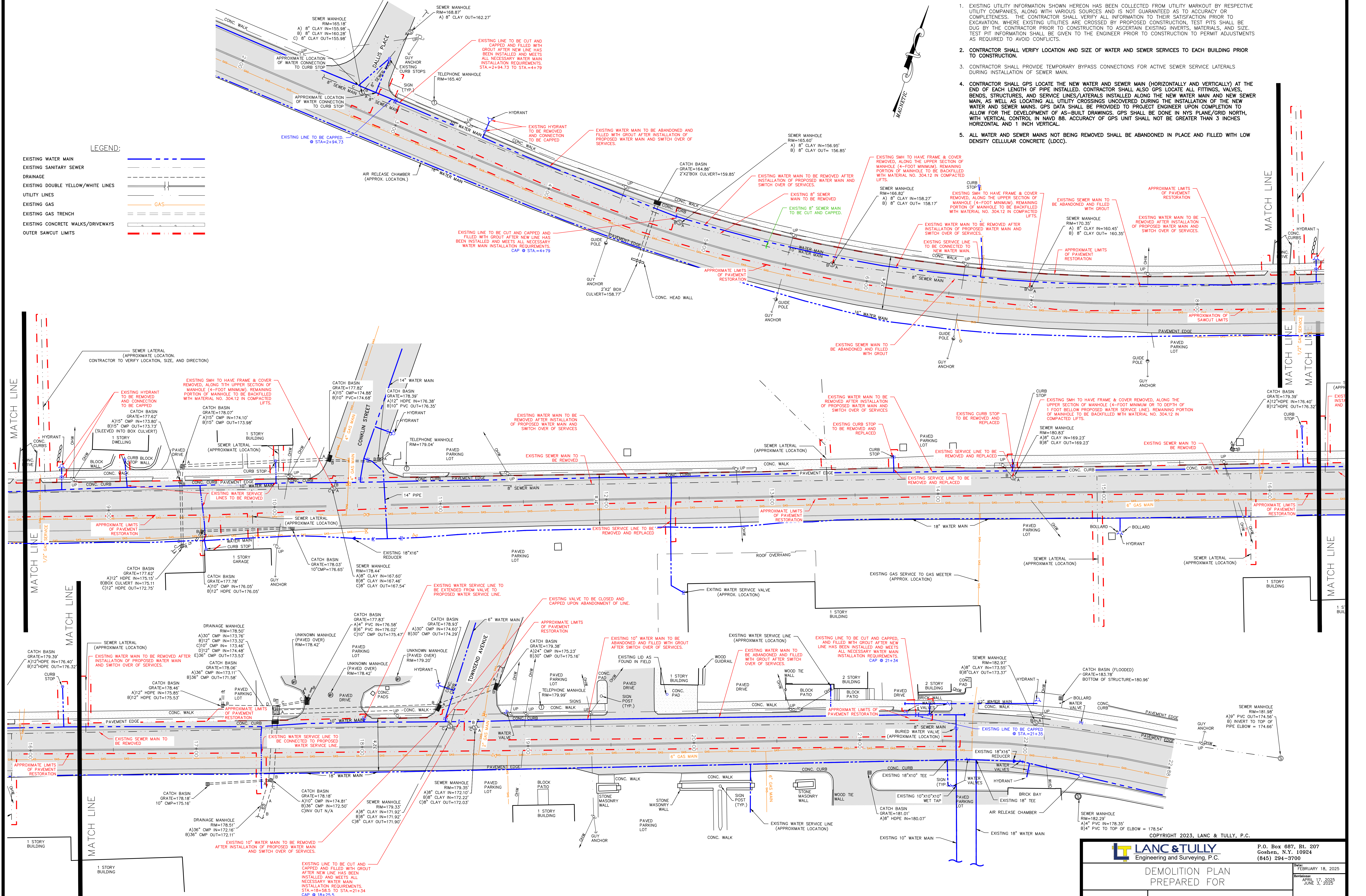
- 4.1.1. Measurement of Gate Valves shall be by the unit.
- 4.1.2. Measurement of Hydrant shall be by the unit.
- 4.1.3. Measurement of Valve Box shall be by the unit.

#### 4.2. PAYMENT

- 4.2.1. Unit price for gate valve includes clearing; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; valve and specials; coatings and linings; restraints and thrust blocks; backfilling and compaction; backfill material (other than crushed stone bedding, select, or suitable material from off site); subbase coarsing; disposal of surplus and unsuitable material; restoration (other than pavement); and, all else incidental and necessary to complete the work.
- 4.2.2. Unit price for hydrant includes clearing; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; valve and specials; coatings and linings; backfilling and compaction; select material #4 for backfill; concrete thrust block; subbase coarsing; disposal of surplus and unsuitable material; restoration (other than pavement); and, all else incidental and necessary to complete the work.
- 4.2.3. Unit price for valve box includes clearing; excavation (other than rock); dewatering; protecting and shoring of trench walls; protecting existing utilities, structures, and property; saw cutting of pavement; valve box; backfilling and compaction; select material #4 for backfill; disposal of surplus and unsuitable material; restoration (other than pavement); and, all else incidental and necessary to complete the work.

\*\* END OF SECTION \*\*



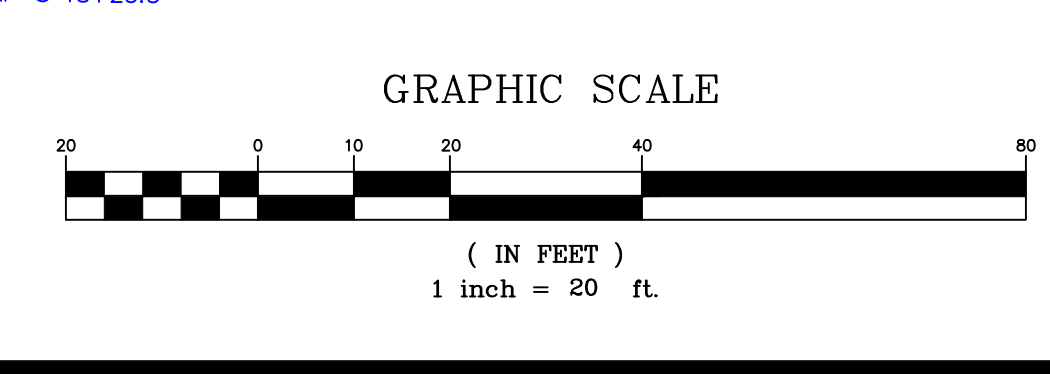


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- CONTRACTOR SHALL VERIFY LOCATION AND SIZE OF WATER AND SEWER SERVICES TO EACH BUILDING PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE TEMPORARY BYPASS CONNECTIONS FOR ACTIVE SEWER SERVICE LATERALS DURING INSTALLATION OF SEWER MAIN.
- CONTRACTOR SHALL GPS LOCATE THE NEW WATER AND SEWER MAIN (HORIZONTALLY AND VERTICALLY) AT THE END OF EACH LENGTH OF PIPE INSTALLED. CONTRACTOR SHALL ALSO GPS LOCATE ALL FITTINGS, VALVES, BENDS, STRUCTURES AND SERVICE LINES/LATERALS INSTALLED ALONG THE NEW WATER MAIN AND NEW SEWER MAIN, AS WELL AS LOCATING ALL UTILITY CROSSINGS UNCOVERED DURING THE INSTALLATION OF THE NEW WATER AND SEWER MAINS. GPS DATA SHALL BE PROVIDED TO PROJECT ENGINEER UPON COMPLETION TO ALLOW FOR THE DEVELOPMENT OF AS-BUILT DRAWINGS. GPS SHALL BE DONE IN NYS PLANE/GRID NORTH, WITH VERTICAL CONTROL IN NAVD 88. ACCURACY OF GPS UNIT SHALL NOT BE GREATER THAN 3 INCHES HORIZONTAL AND 1 INCH VERTICAL.
- ALL WATER AND SEWER MAINS NOT BEING REMOVED SHALL BE ABANDONED IN PLACE AND FILLED WITH LOW DENSITY CELLULAR CONCRETE (LDCC).

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DEMOLITION PLAN  
PREPARED FOR

**FISHKILL AVENUE  
SEWER REPLACEMENT**

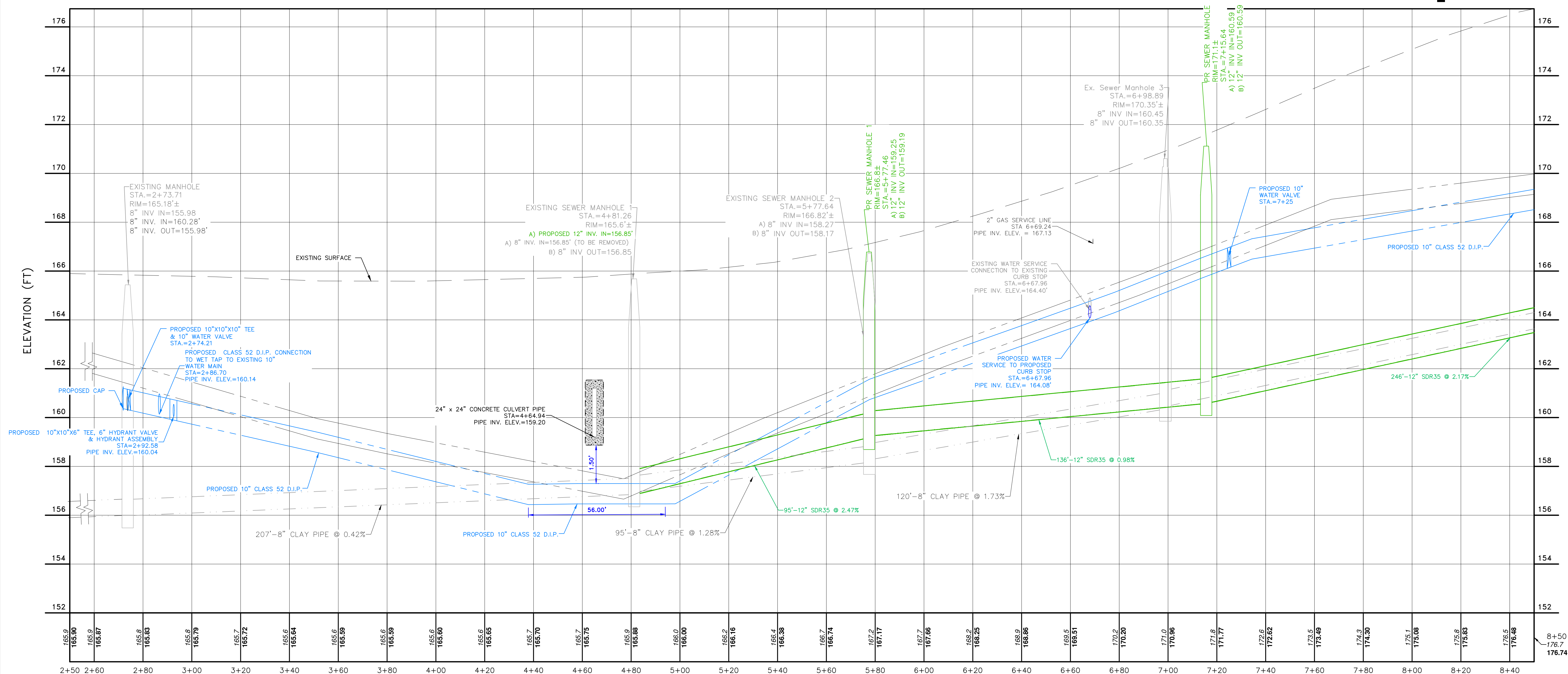
CITY OF BEACON  
DUTCHESS COUNTY, NEW YORK

Date: FEBRUARY 18, 2025  
Revision: 17, 2025  
JUNE 3, 2025

Drawn By: POLS  
Checked By:  
Scale: 1" = 20'  
Task Map No.: N/A

3 OF 9  
Drawing No.: C307  
A- 23 = 6642 = 01

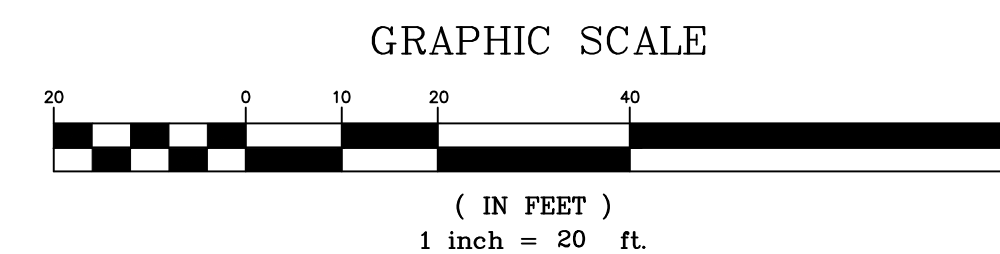




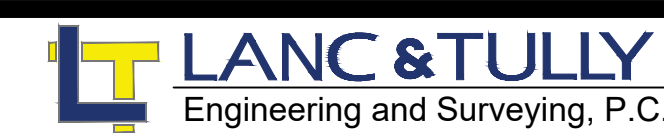
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PROPOSED WATER AND SEWER REPLACEMENT  
ST 2+50 THRU ST 8+50  
SCALE: HORIZONTAL 1"=20'  
VERTICAL 1"=2'



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SEWER AND WATER REPLACEMENT PLAN  
PREPARED FOR

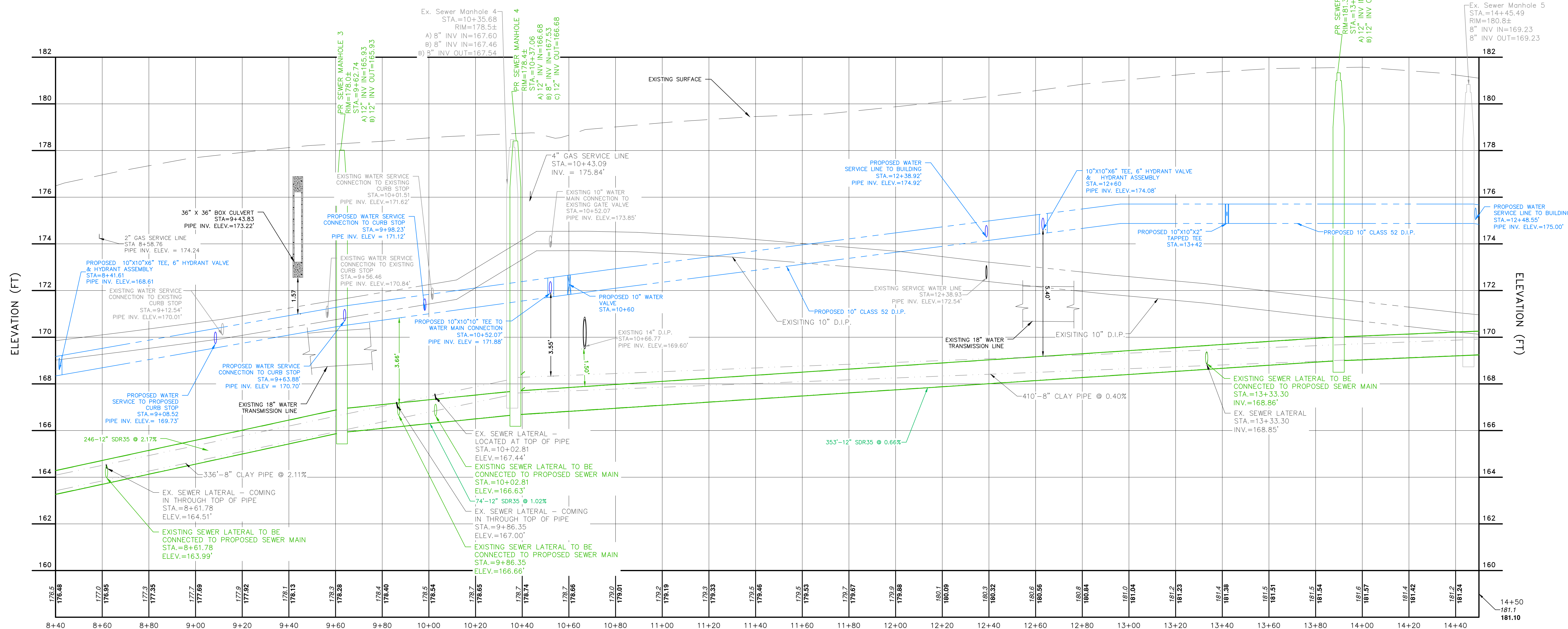
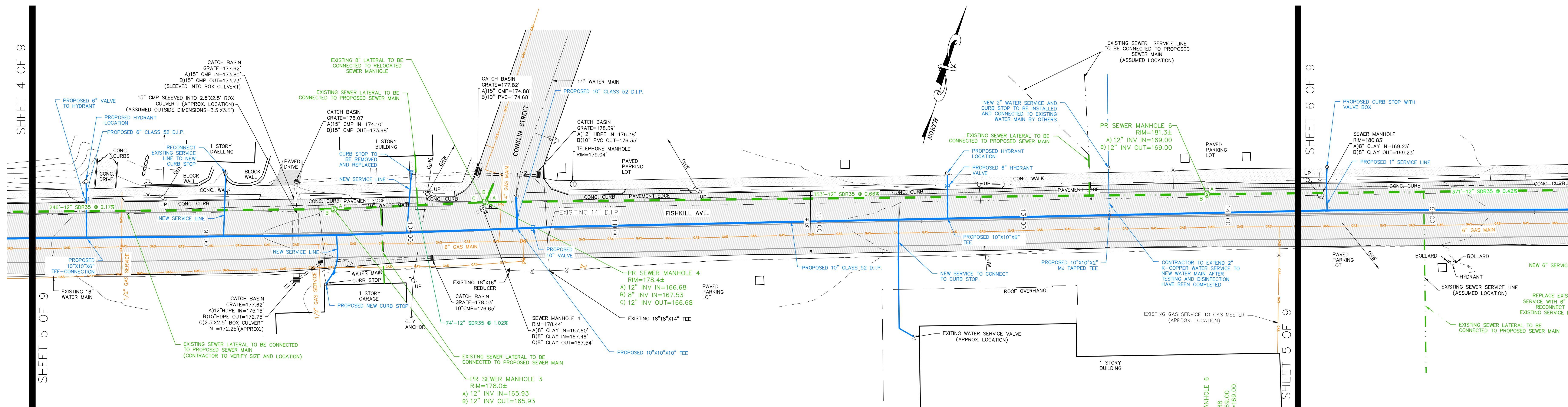
# FISHKILL AVENUE SEWER REPLACEMENT

CITY OF BEACON  
DUTCHESS COUNTY, NEW YORK

Drawn By: RDIS	Checked By:	Scale: 1" = 20'	Tax Map No.: N/A
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CAD File:	236642-LAYOUT BASE
Layout:	PLAN-PROFILE-1
Sheet No.:	4 OF 9
Drawing No.:	C3
	A- 23 - 6642 - 0





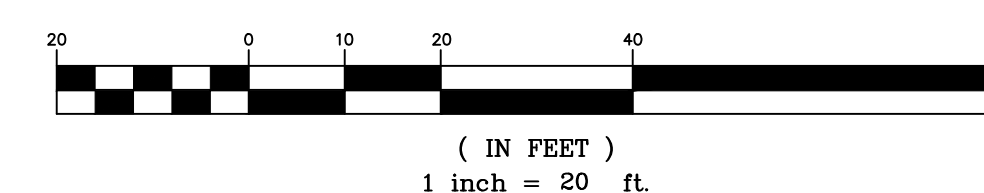
PROPOSED WATER AND SEWER REPLACEMENT (1)  
ST 8+40 THRU ST 14+50  
SCALE: HORIZONTAL 1"=20'  
VERTICAL 1"=2'

## LEGEND:

EXISTING WATER MAIN	---
EXISTING SANITARY SEWER	---
DRAINAGE	---
EXISTING DOUBLE YELLOW/WHITE LINES	---
UTILITY LINES	---
EXISTING GAS	---
EXISTING CONCRETE WALKS/DRIVEWAYS	---
MAJOR CONTOUR	---
MINOR CONTOUR	---
EXISTING CONCRETE SEWER	---
PROPOSED SANITARY SEWER	---
PROPOSED WATER MAIN	---

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GRAPHIC SCALE



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SEWER AND WATER REPLACEMENT PLAN  
PREPARED FOR

**FISHKILL AVENUE  
SEWER REPLACEMENT**

CITY OF BEACON  
DUTCHESS COUNTY, NEW YORK

Drawn By: PDS Checked By: Scale: 1" = 20' Tax Map No.: N/A

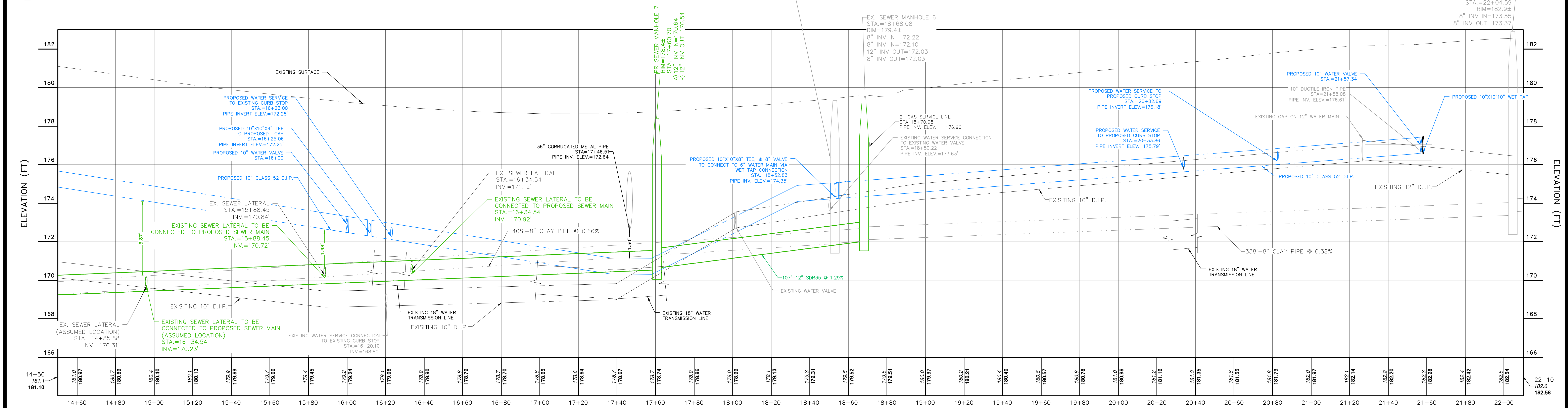
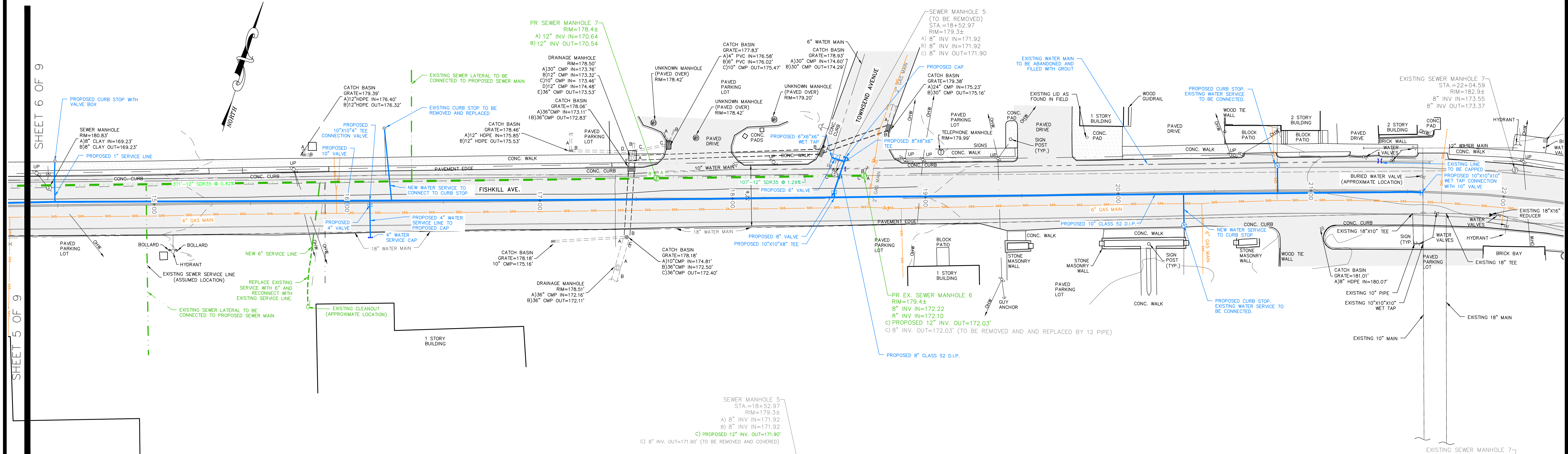
Date: FEBRUARY 18, 2025  
Revision: APRIL 17, 2025  
Sheet No.: 5 OF 9  
Drawing No.: C30  
A- 23 - 6642 - 01

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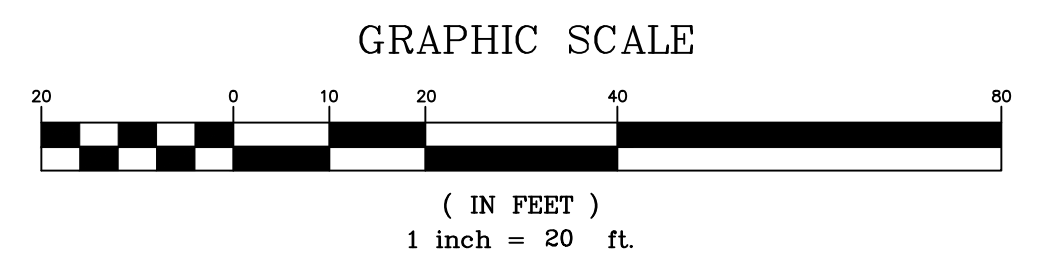




# LEGEND:

EXISTING WATER MAIN	---
EXISTING SANITARY SEWER	---
DRAINAGE	---
EXISTING DOUBLE YELLOW/WHITE LINES	---
UTILITY LINES	---
EXISTING GAS	---
EXISTING CONCRETE WALKS/DRIVEWAYS	---
MAJOR CONTOUR	---
MINOR CONTOUR	---
PROPOSED SANITARY SEWER	---
PROPOSED WATER MAIN	---

## PROPOSED WATER AND SEWER REPLACEMENT (2) ST 14+50 THRU ST 22+10 SCALE: HORIZONTAL 1"=20' VERTICAL 1"=2'



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Date: FEBRUARY 18, 2025  
Revision: APRIL 17, 2025  
Sheet No: 6 OF 9

**SEWER AND WATER REPLACEMENT PLAN  
PREPARED FOR**

**FISHKILL AVENUE  
SEWER REPLACEMENT**

CITY OF BEACON  
DUTCHESS COUNTY, NEW YORK

Drawn By: PDS  
Checked By:  
Scale: 1" = 20'  
Tax Map No.: N/A  
Drawing No.: C30  
A- 23 - 6642 - 01



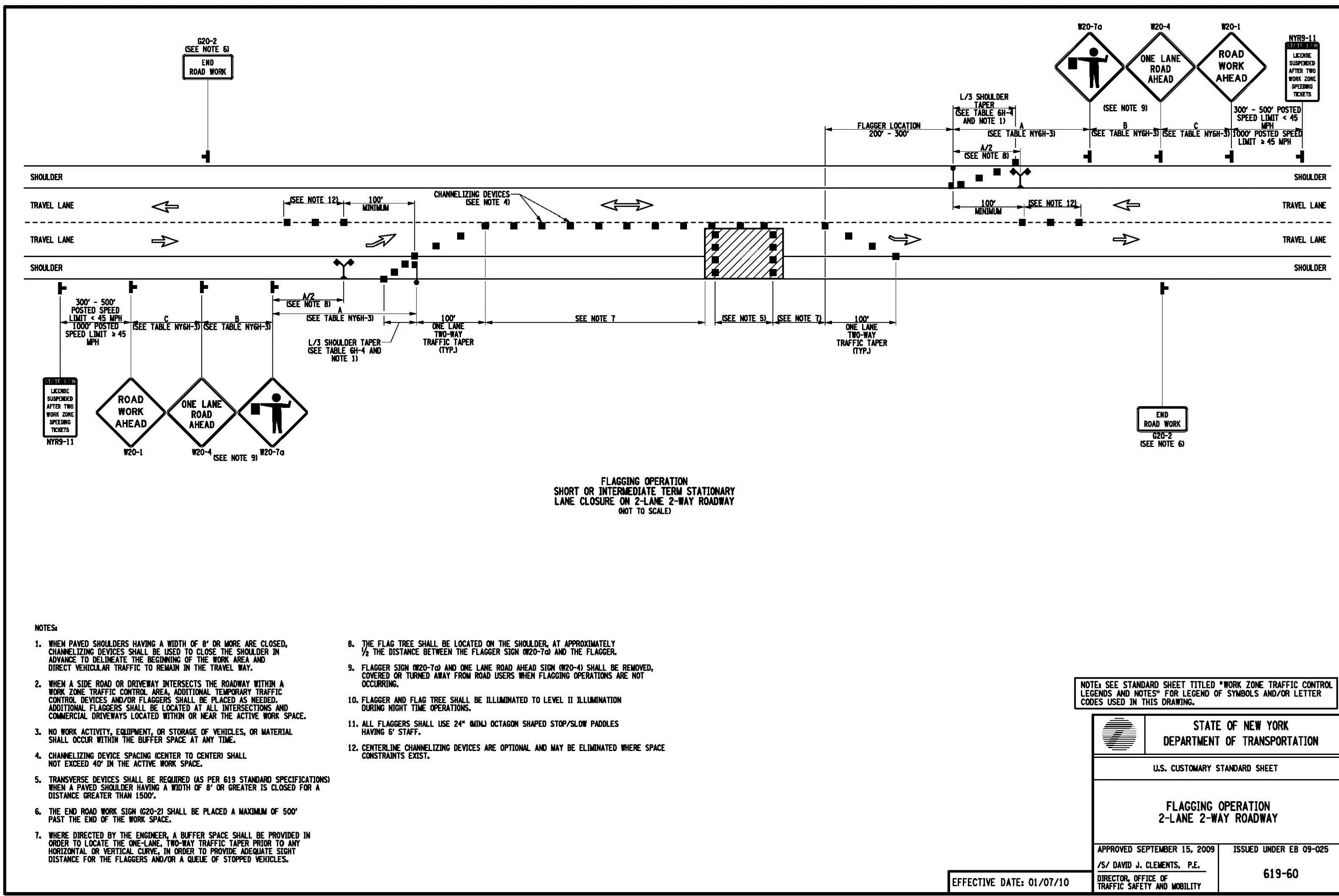
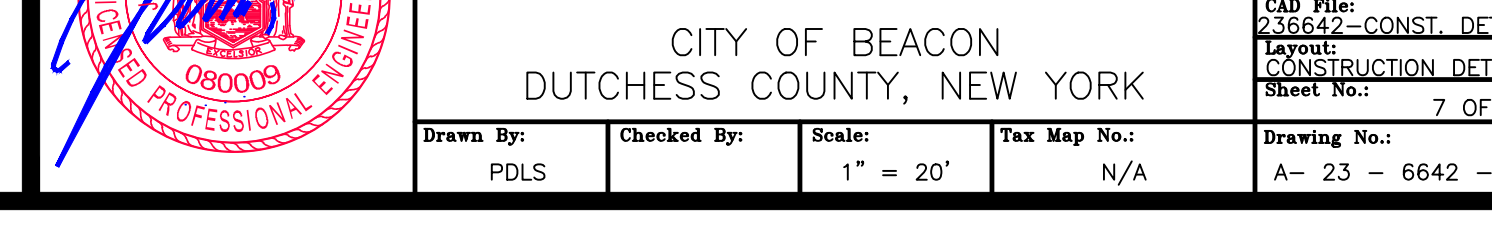
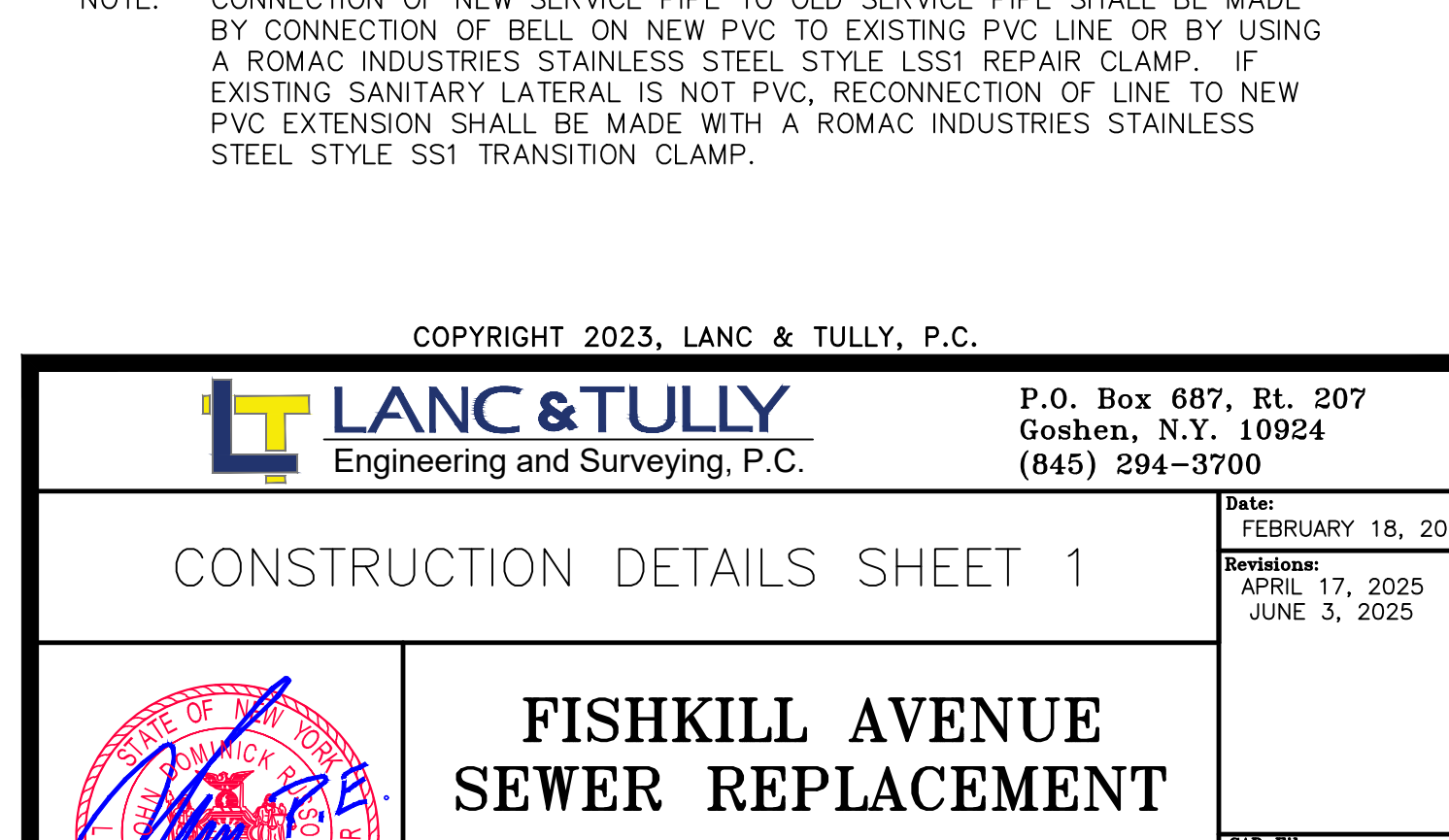
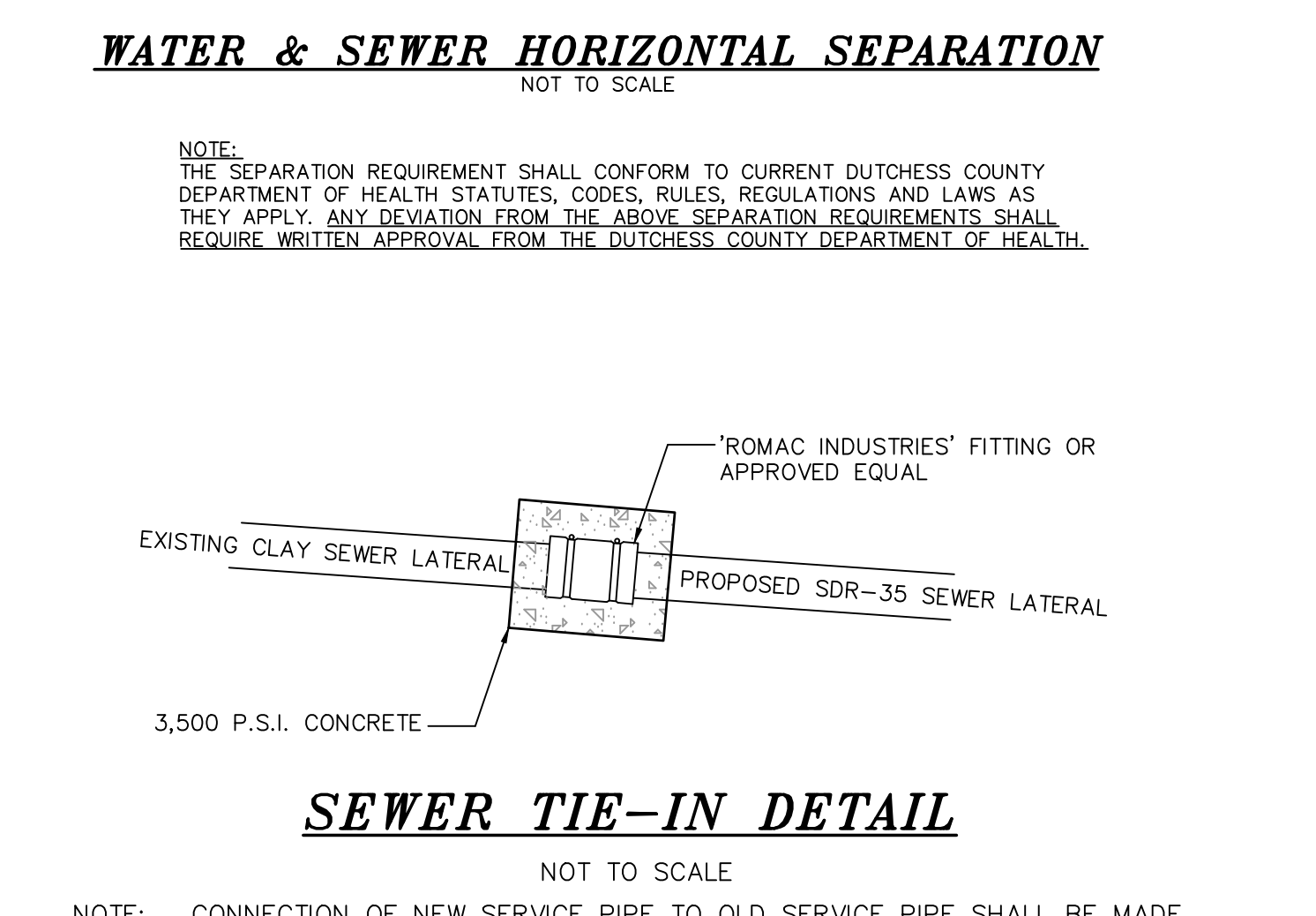
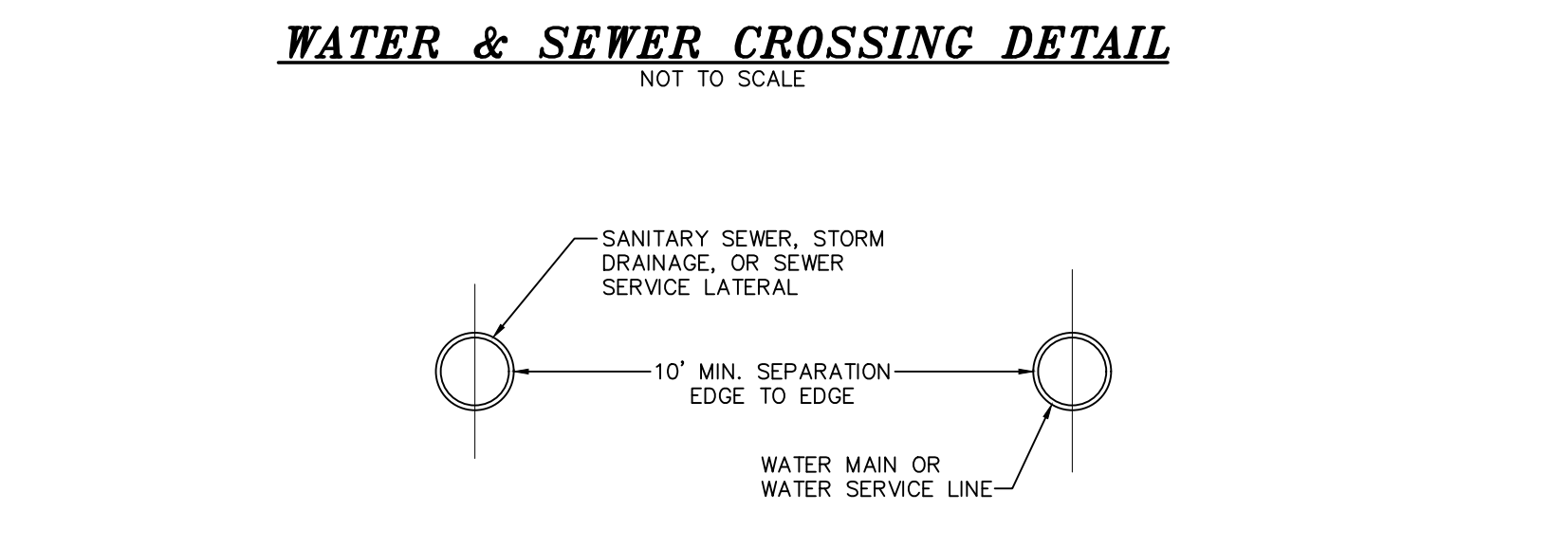
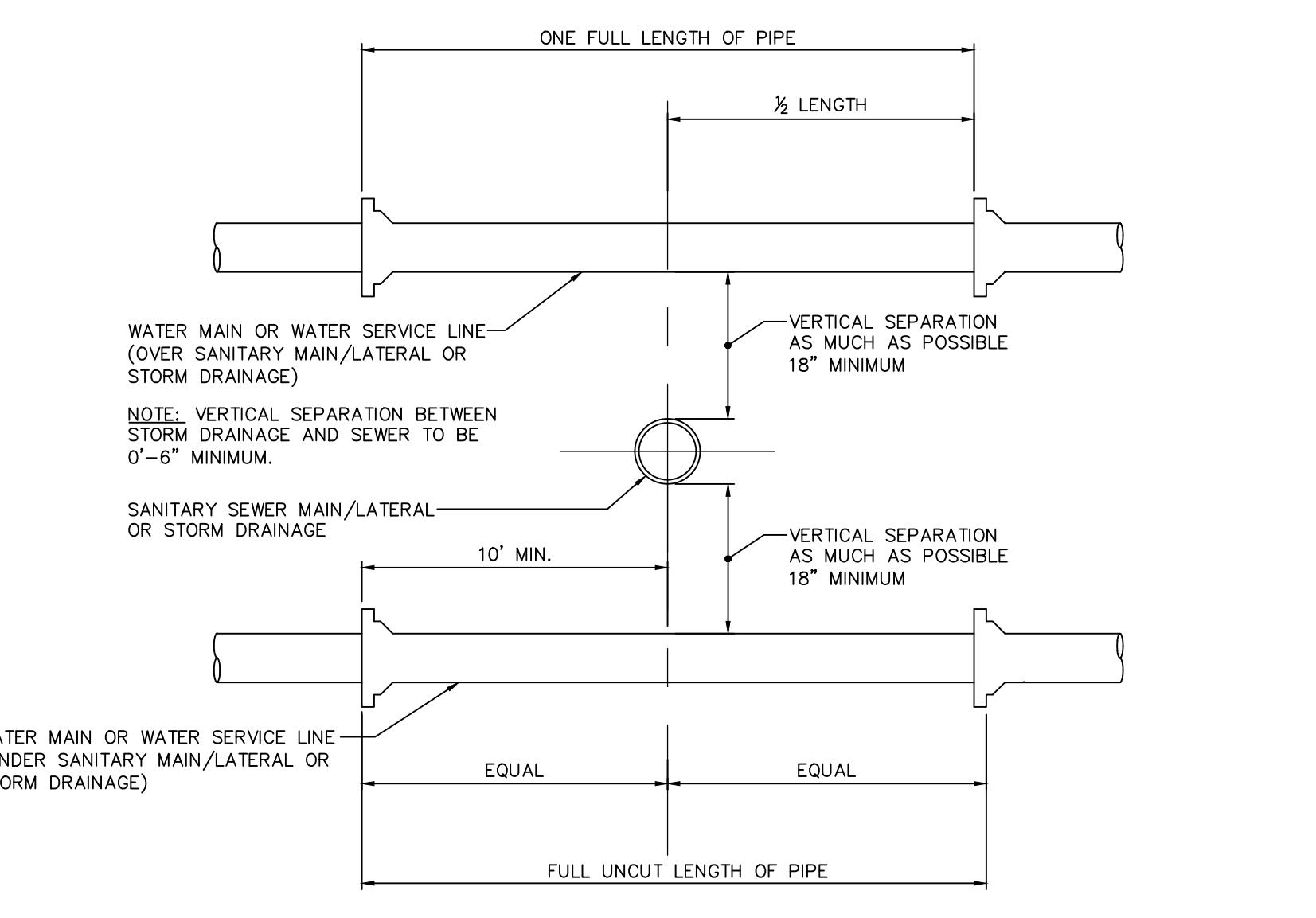
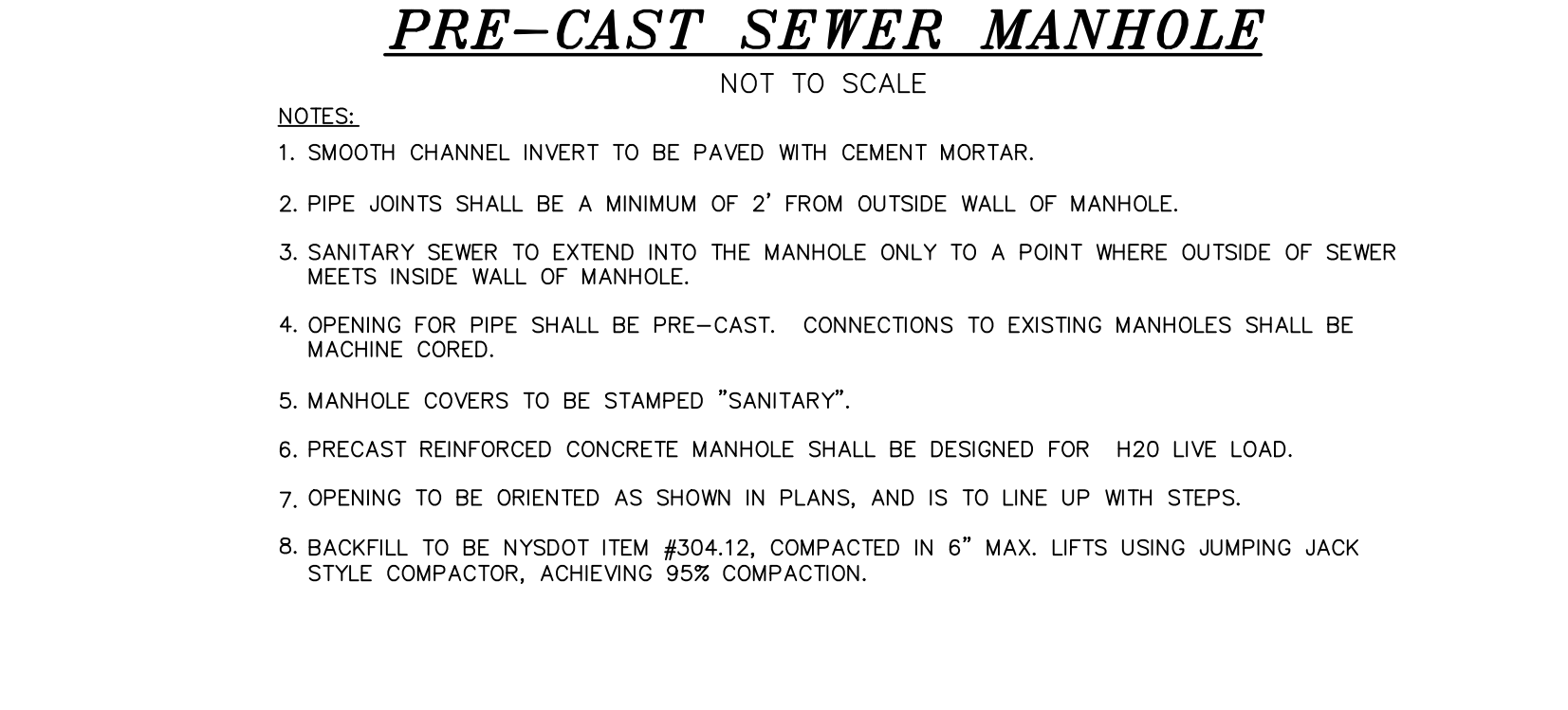
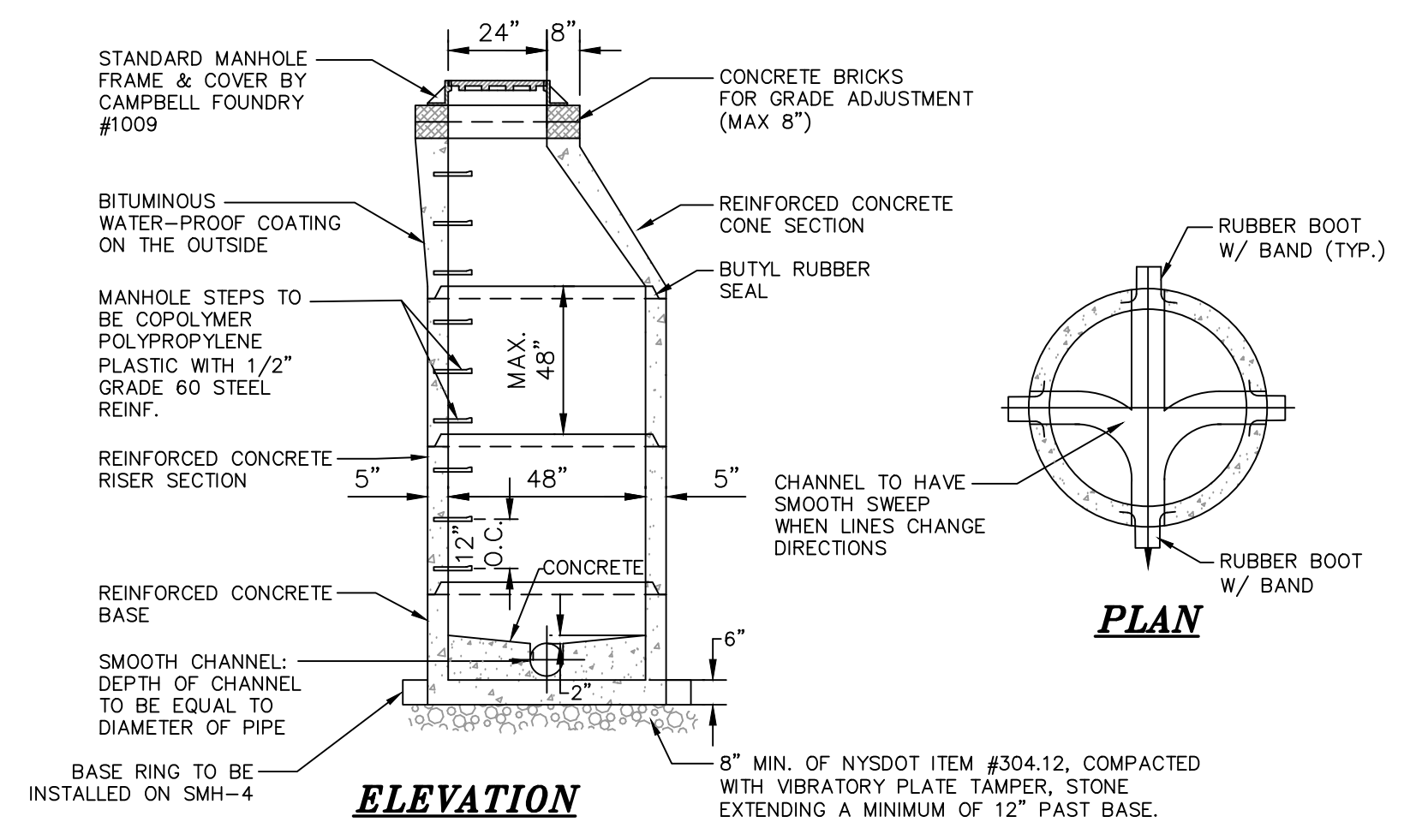
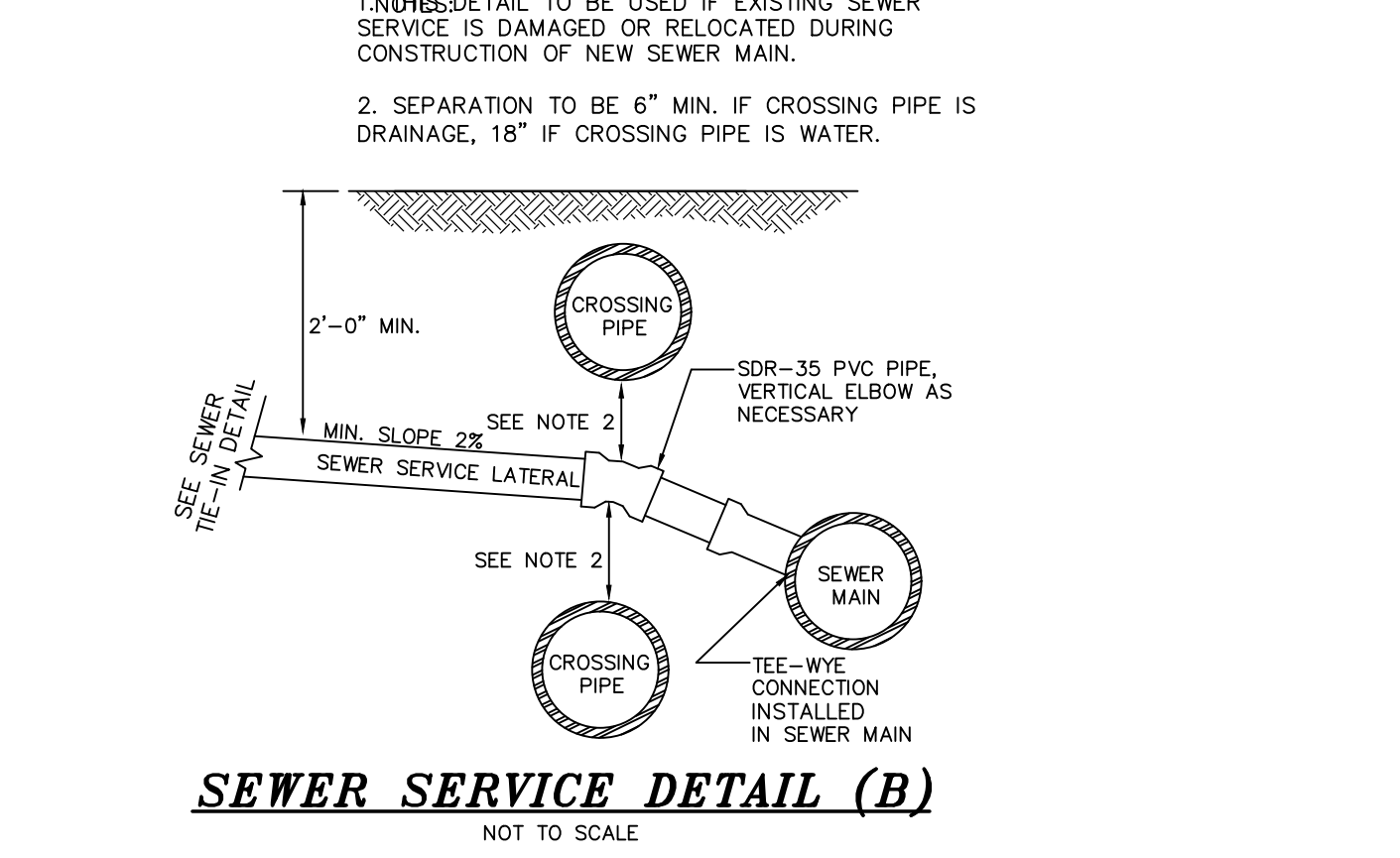
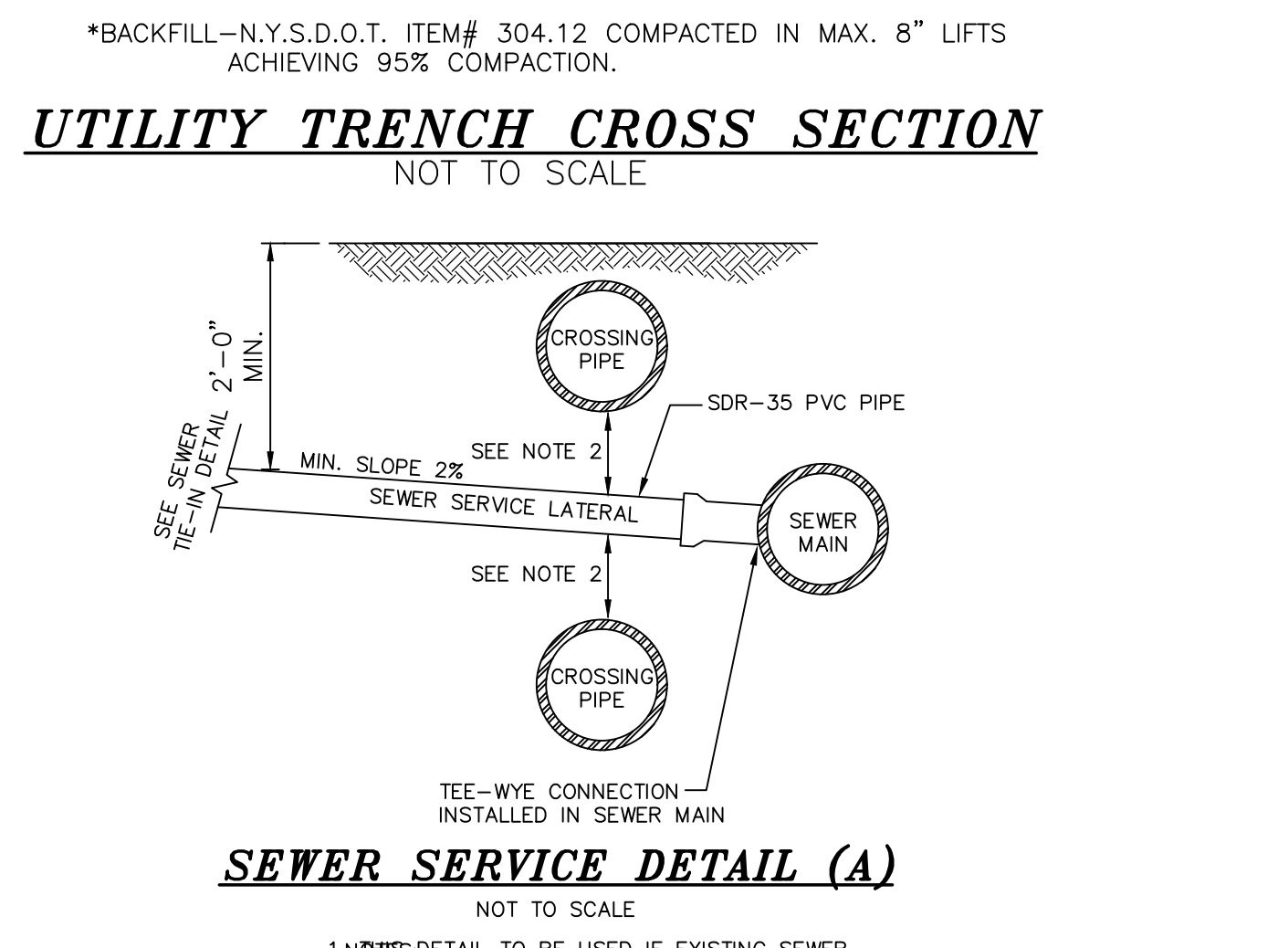
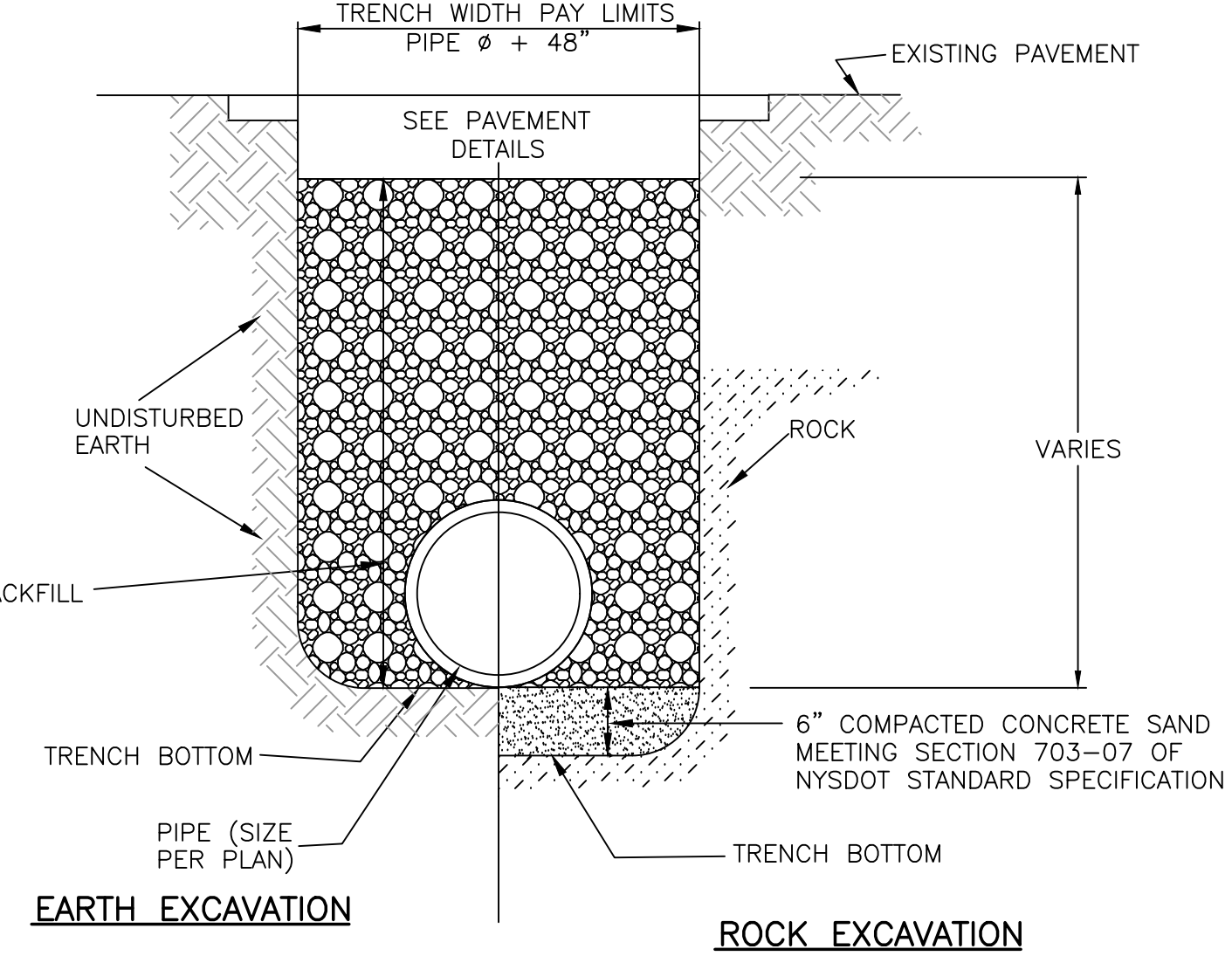
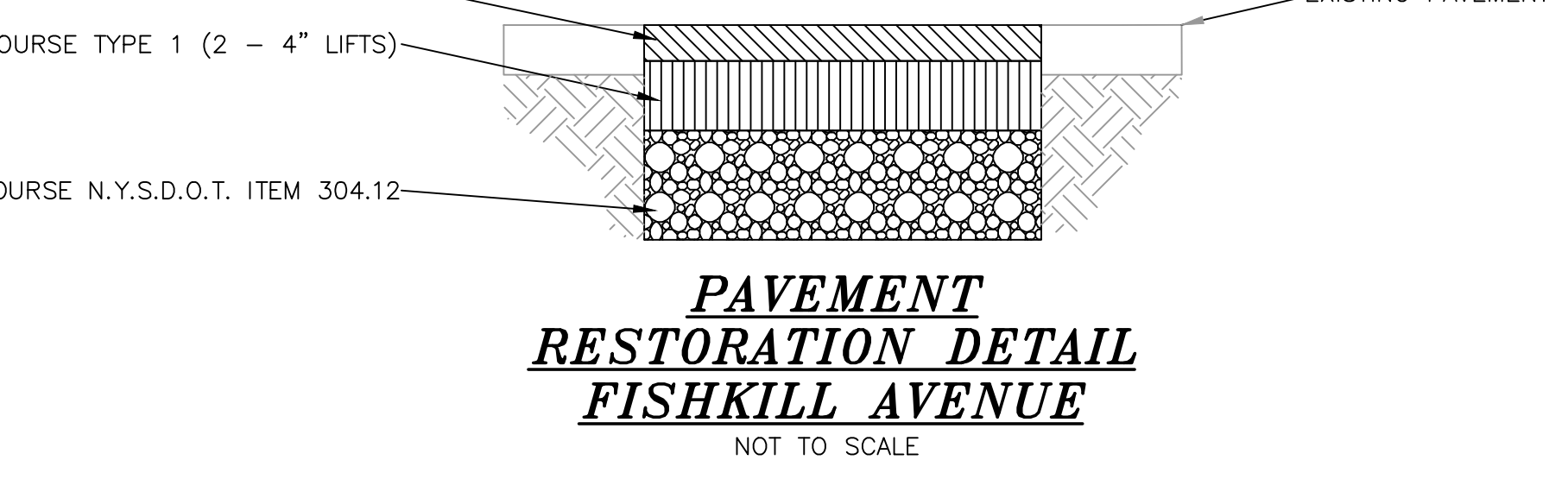
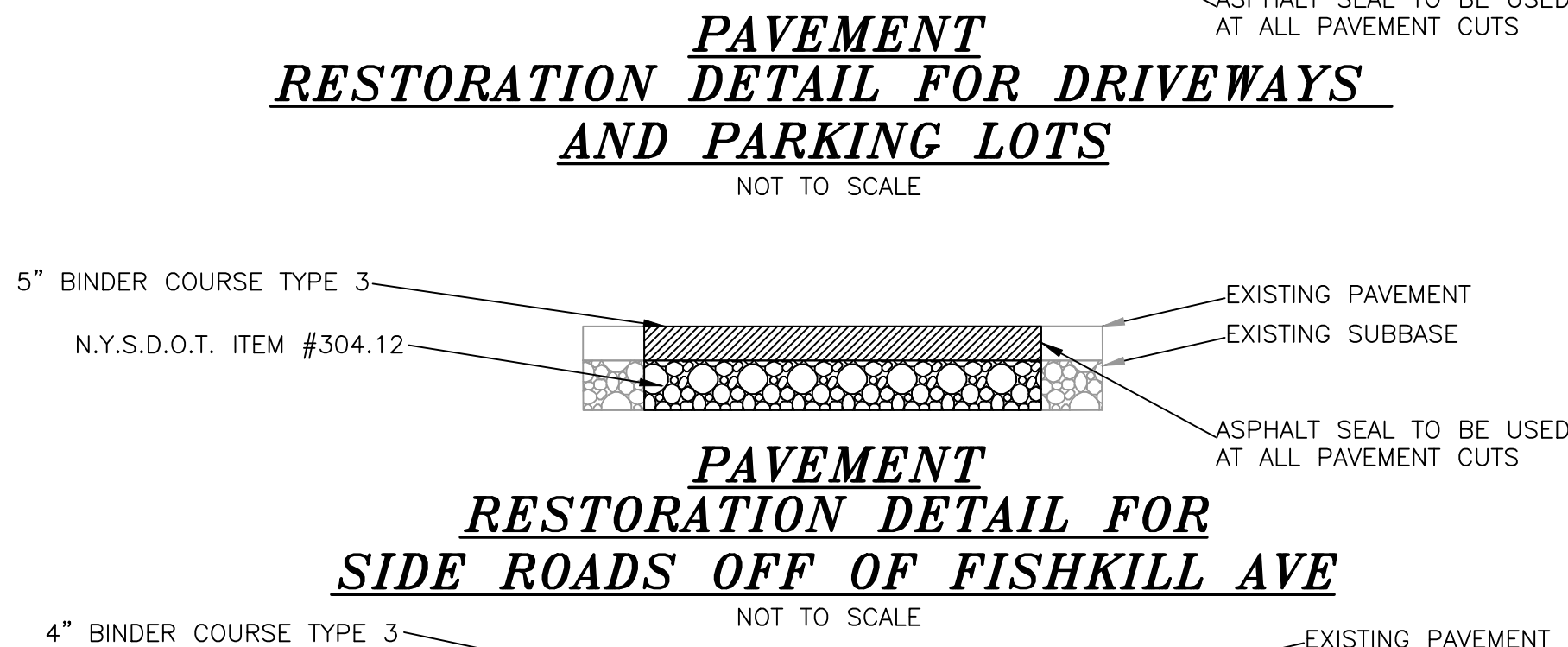
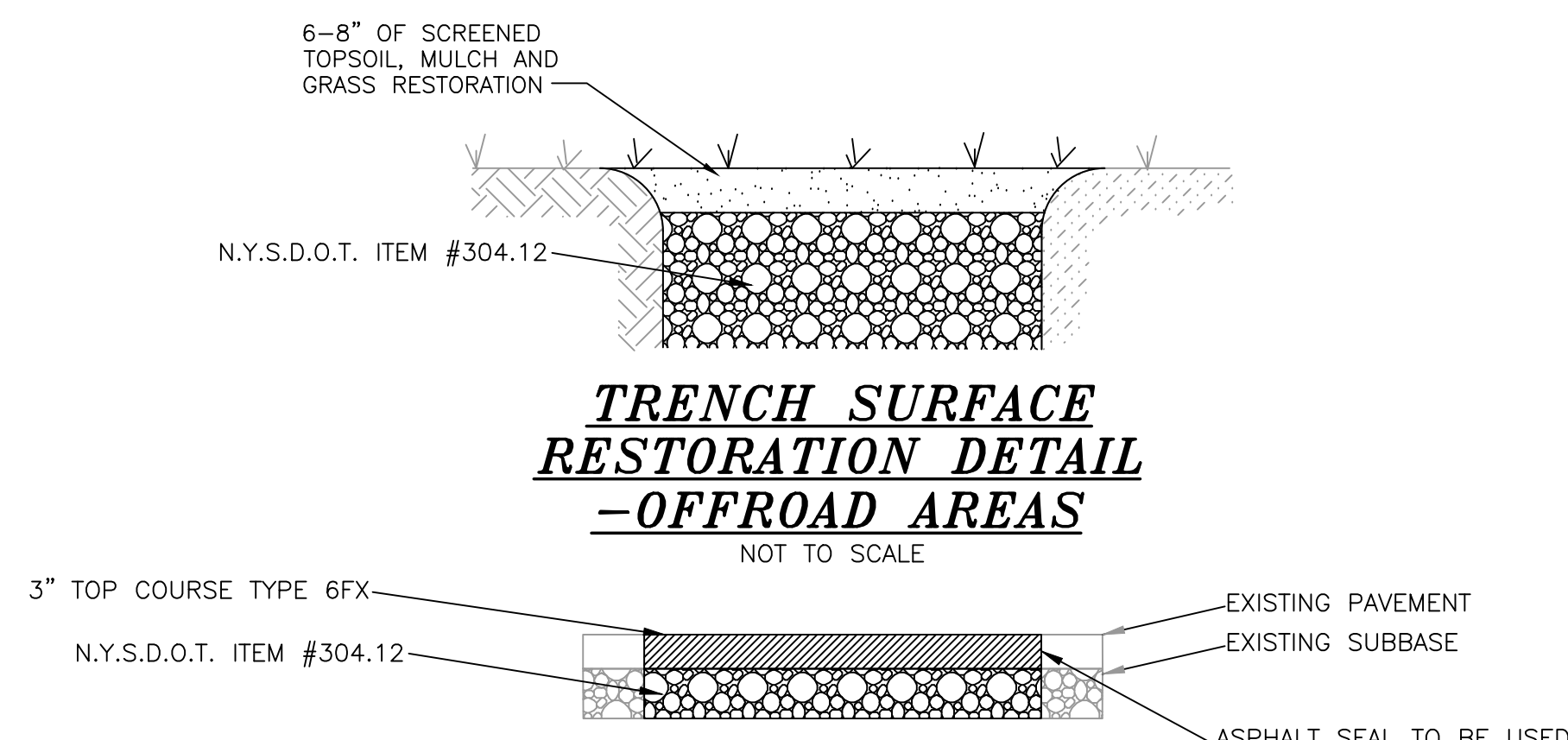
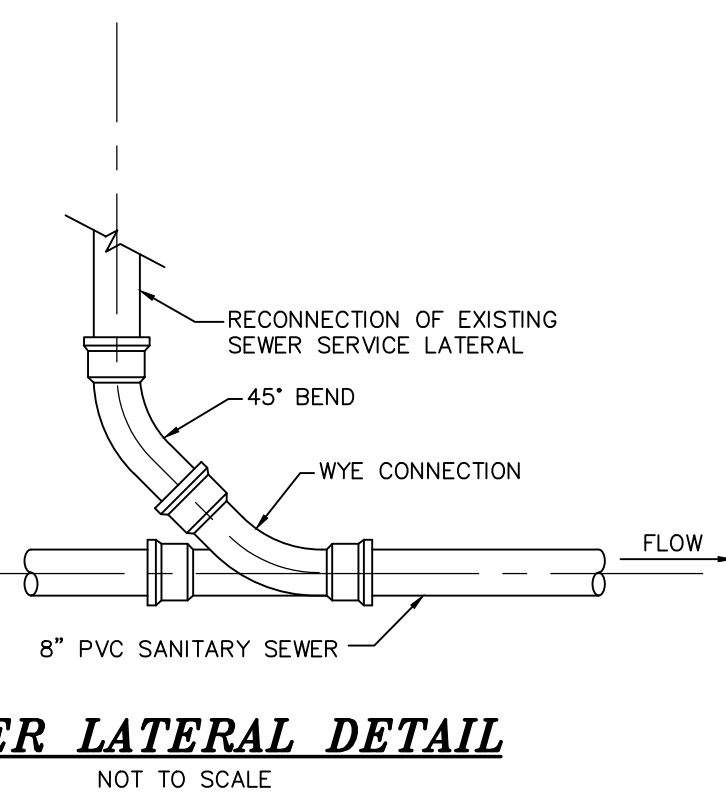
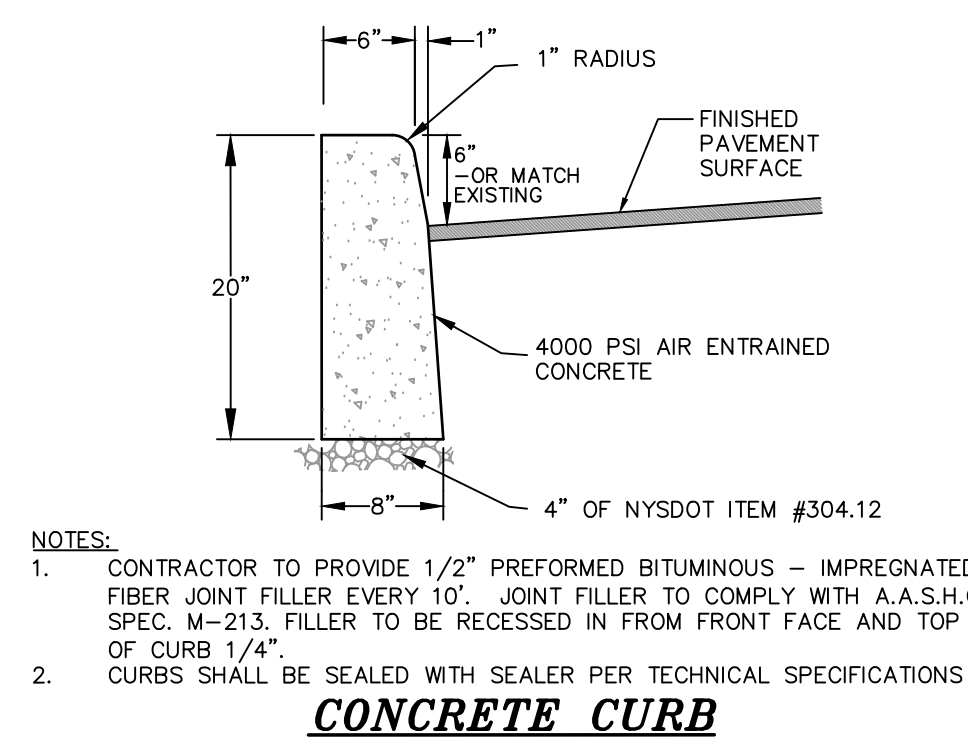
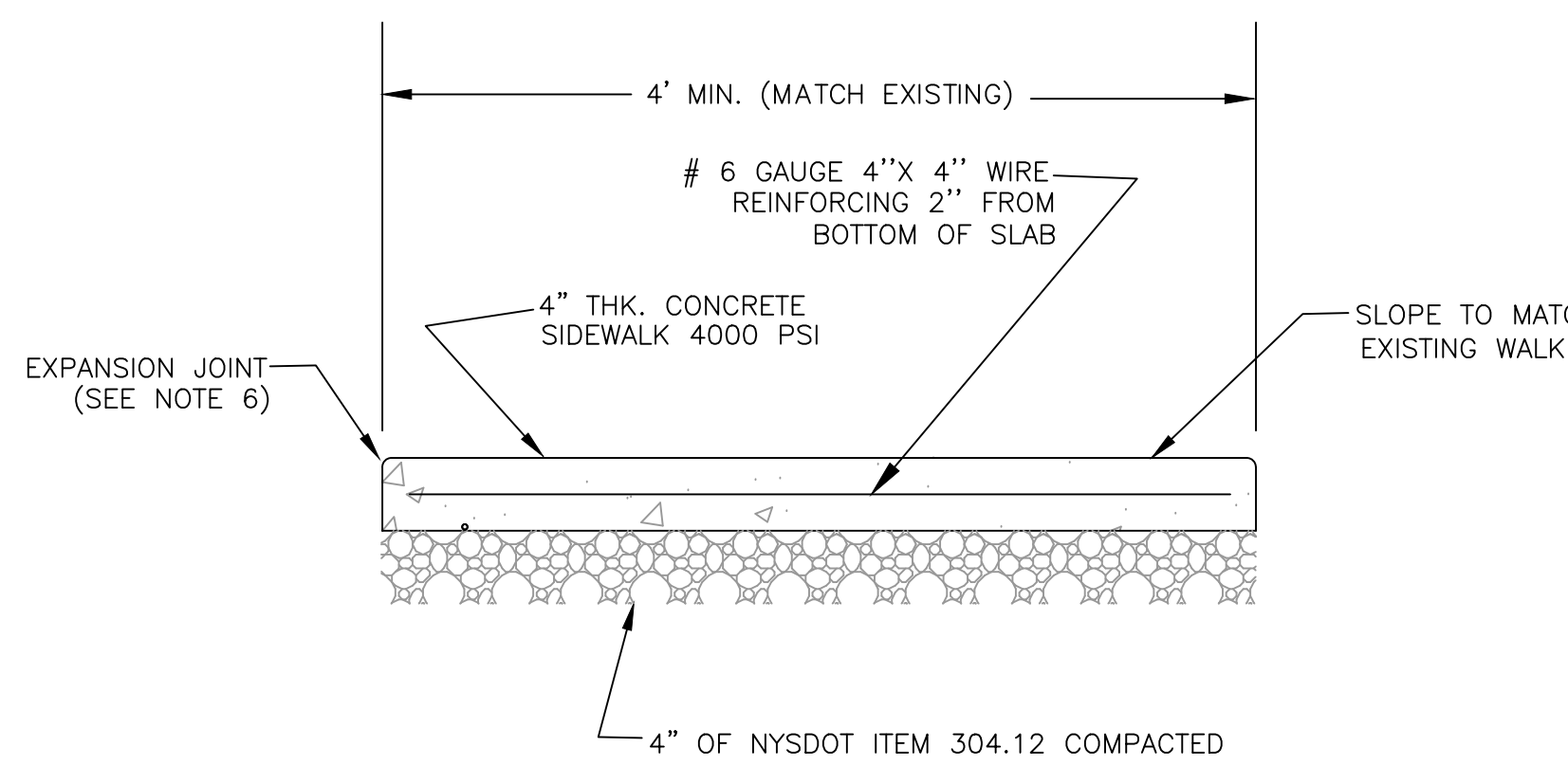
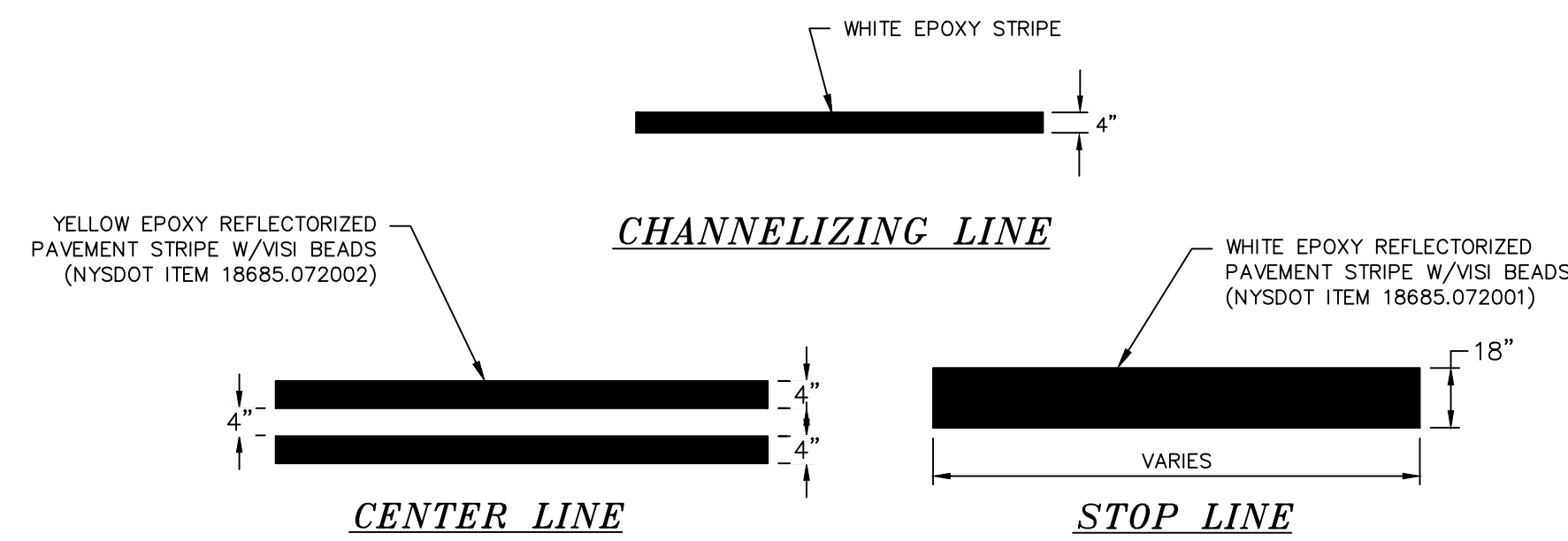


TABLE 6H-4 FORMULAS FOR DETERMINING TAPER LENGTHS									
SPEED LIMIT (S) MPH	TAPER LENGTH (L) FT	L = TAPER LENGTH B = WIDTH OF OFFSET (FT) S = PRECONSTRUCTION POSTED SPEED LIMIT MPH							
40 MPH OR LESS	$L = 8S^2 / 60$								
45 MPH OR MORE	$L = 8S$								

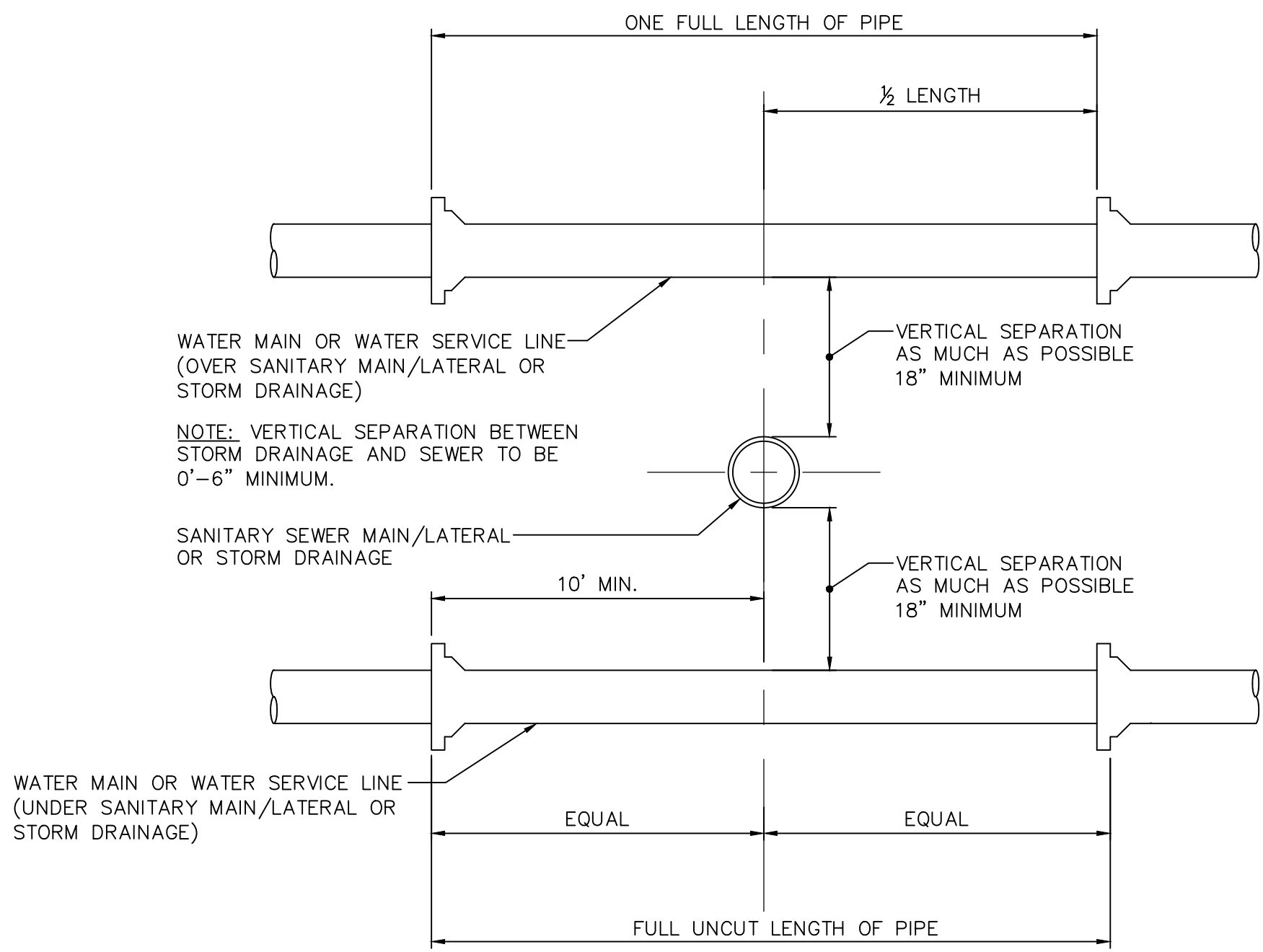
  

STANDARD TAPER LENGTHS									
LATERAL SHIFT OF TRAFFIC FLOW PATH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	75 MPH	80 MPH	85 MPH
4	45	60	85	110	135	160	185	210	235
5	55	75	105	135	165	195	225	255	285
6	65	90	125	160	195	230	265	300	335
7	75	105	145	190	235	280	325	370	415
8	85	120	165	215	265	315	365	415	465
9	95	135	185	240	295	345	395	445	495
10	105	150	205	270	330	390	450	510	570
11	115	165	225	295	365	435	505	575	645
12	125	180	245	320	395	470	545	620	695

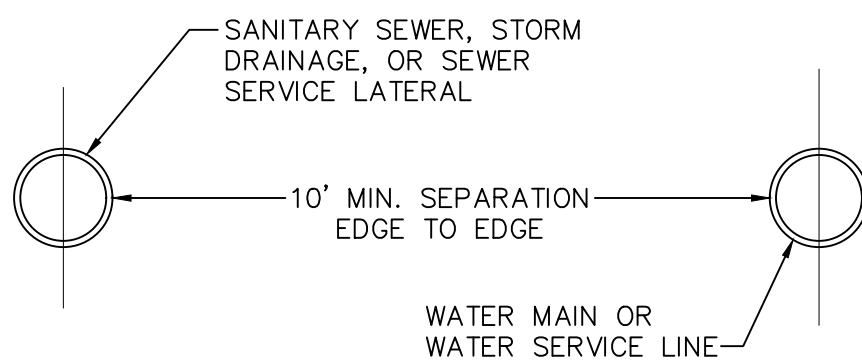
TABLE NYGH-3 ADVANCE WARNING SIGN SPACING									
ROAD TYPE	A (FT)	B (FT)	C (FT)	XX	YY				
URBAN (35 MPH)	100	100	100	AHEAD	AHEAD				
URBAN (35-45 MPH)	200	200	200	AHEAD	AHEAD				
URBAN (45 MPH)	350	350	350	1000 FT	AHEAD				
RURAL	500	500	500	1500 FT	1000 FT				
EXPRESSWAY / FREEWAY	1000	1500	2400	1 MILE	1/2 MILE				





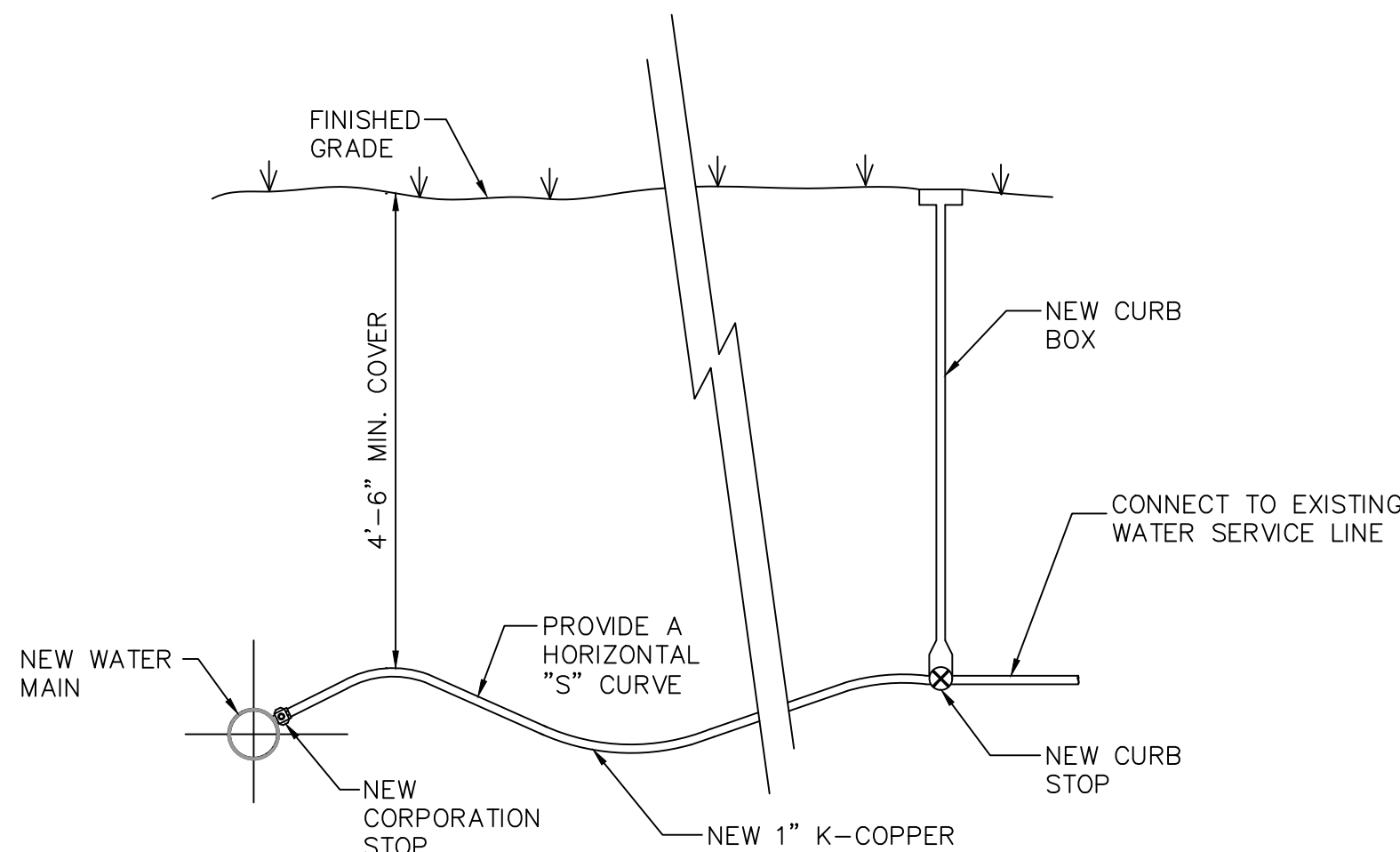


**WATER & SEWER CROSSING DETAIL**  
NOT TO SCALE

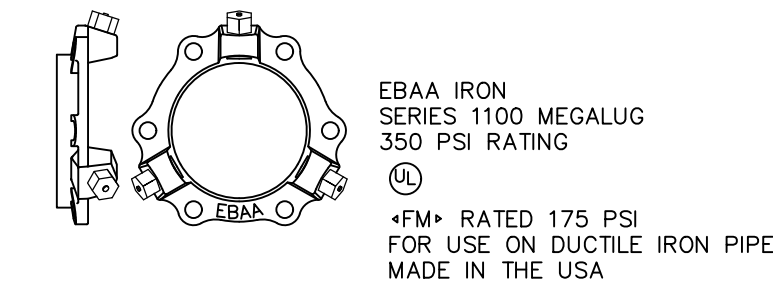
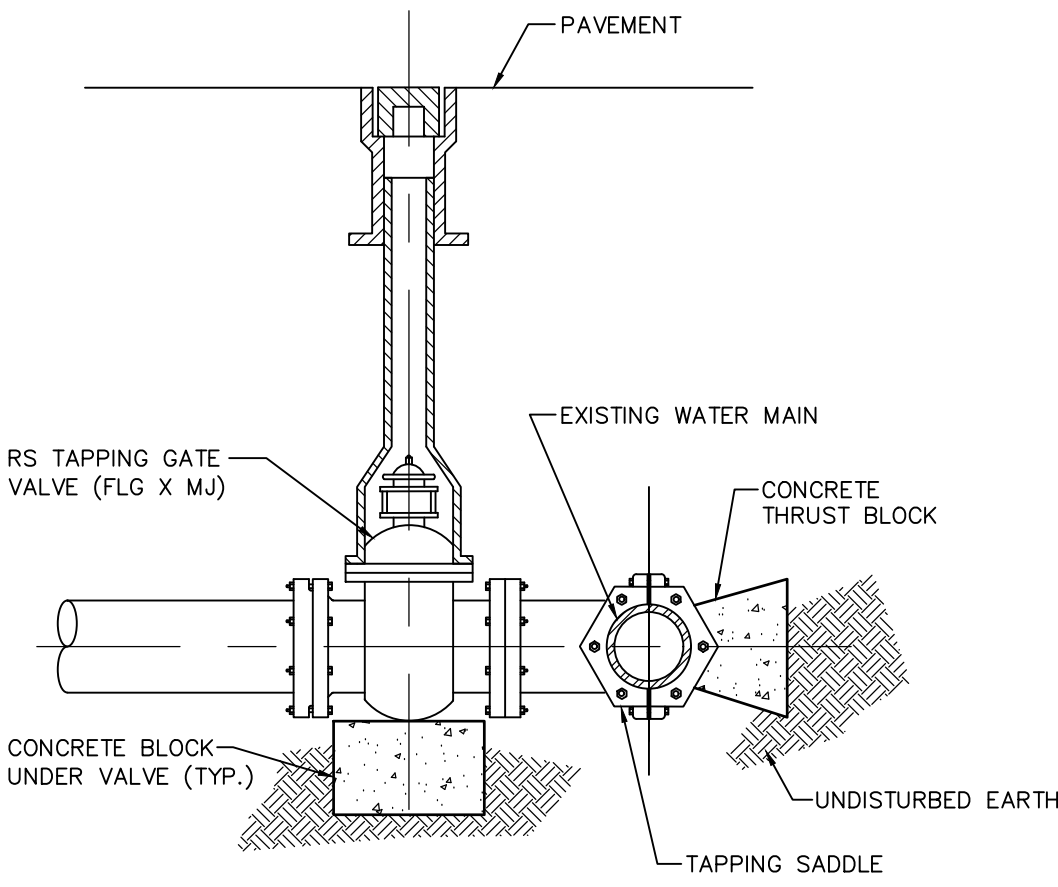


**WATER & SEWER HORIZONTAL SEPARATION**  
NOT TO SCALE

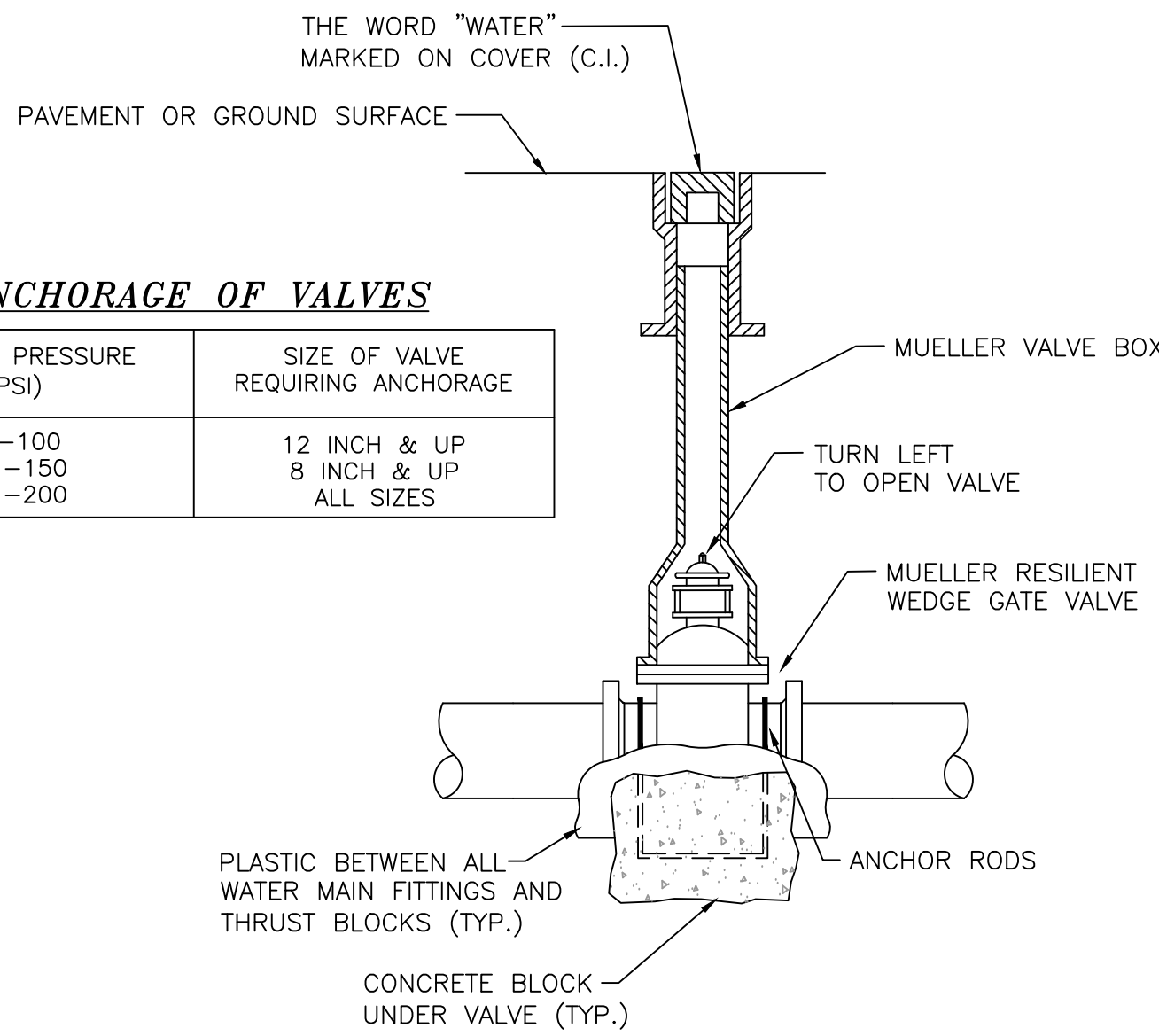
NOTE:  
THE SEPARATION REQUIREMENT SHALL CONFORM TO CURRENT DUTCHESS COUNTY DEPARTMENT OF HEALTH STATUTES, CODES, RULES, REGULATIONS AND LAWS AS THEY APPLY. ANY DEVIATION FROM THE ABOVE SEPARATION REQUIREMENTS SHALL REQUIRE WRITTEN APPROVAL FROM THE DUTCHESS COUNTY DEPARTMENT OF HEALTH.



**WATER SERVICE DETAIL**  
NOT TO SCALE

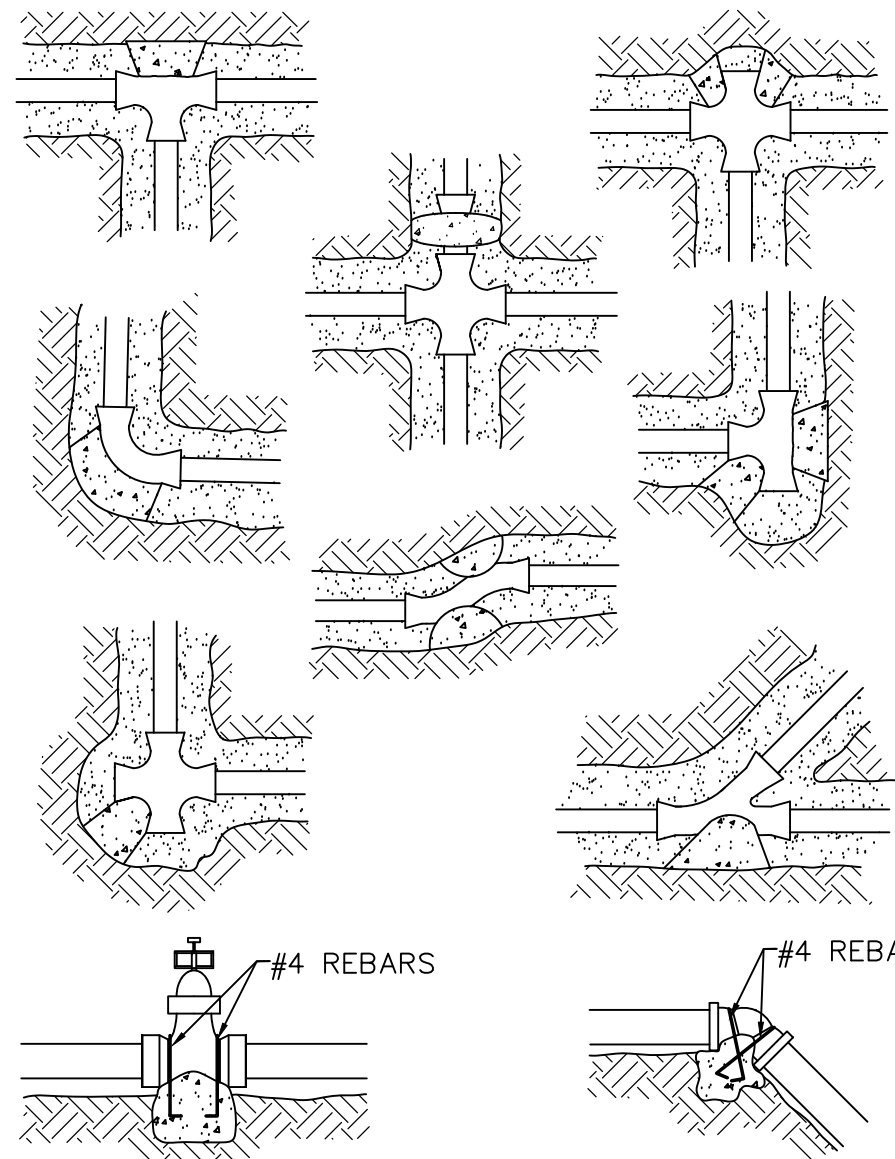


**MECHANICAL JOINT RESTRAINT DETAIL**  
NOT TO SCALE



**ANCHORAGE OF VALVES**

WORKING PRESSURE (PSI)	SIZE OF VALVE REQUIRING ANCHORAGE
50-100	12 INCH & UP
101-150	8 INCH & UP
151-200	ALL SIZES

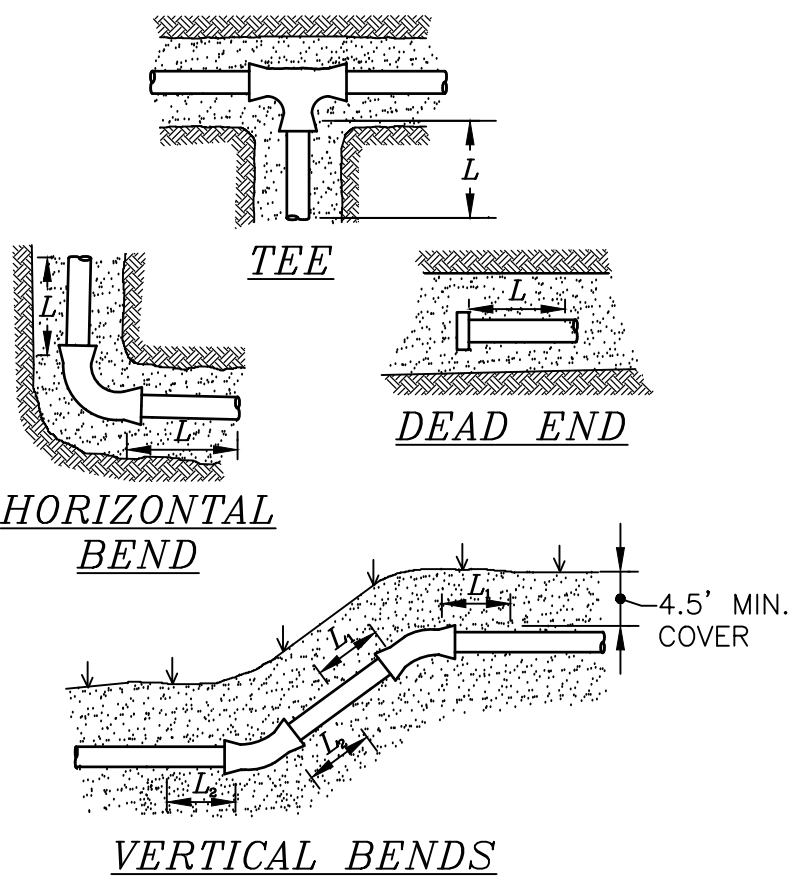


FOR VALVES 12" AND LARGER ANCHOR VALVE AS ABOVE

- NOTES:
- KEEP NUTS AND BOLTS FREE OF CONCRETE THROUGH THE USE OF PLASTIC COVERS.
  - ANCHORING OF VALVES AND VERTICAL BENDS SHALL BE DONE WITH #4 REBARS WITH A MINIMUM ENGAGEMENT DEPTH OF 3" INCHES AND 3 INCHES OF THE TERMINUS END OF THE REBAR BEING BENT AT 90° ORIENTATION AS SHOWN.

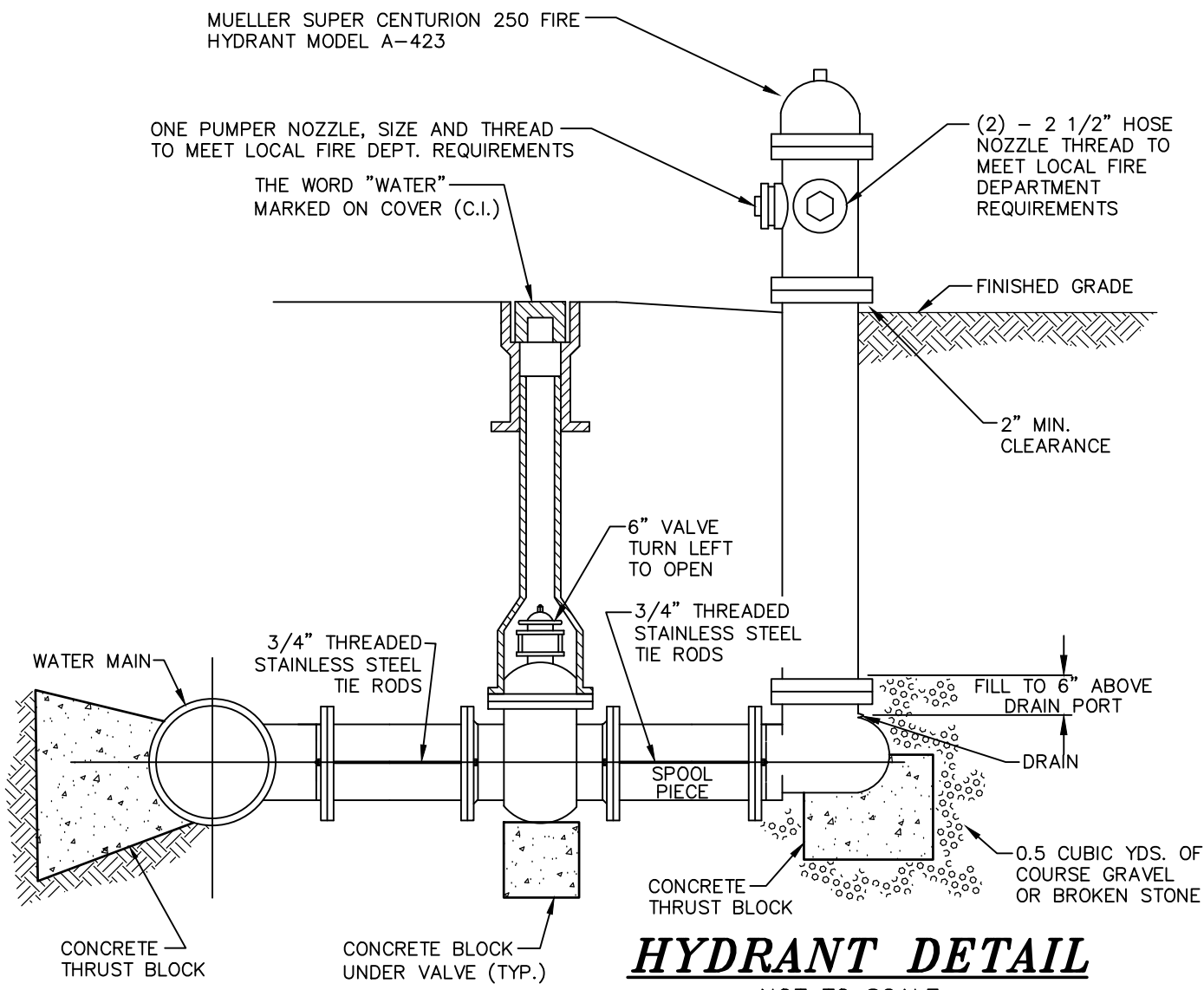
**THRUST BLOCK DETAILS**  
NOT TO SCALE

NOTE:  
LENGTH OF RESTRAINED JOINTS BASED UPON:  
a. 4.5' MINIMUM COVER  
b. TEST PRESSURE = 150 PSI  
c. TYPE 5 TRENCH  
d. 1.5 TO 1 SAFETY FACTOR



ALL REQUIRED JOINT RESTRAINT SHALL BE MEGALUG RETAINING GLANDS AS MANUFACTURED BY EBAA IRON, OR APPROVED EQUAL.

**RESTRAINED JOINT DETAILS**  
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CONSTRUCTION DETAILS - 2

**FISHKILL AVENUE  
SEWER REPLACEMENT**

CITY OF BEACON  
DUTCHESS COUNTY, NEW YORK

Drawn By: PDLs Checked By: Scale: 1" = 20' Tax Map No.: N/A Drawing No.: A- 23 - 6642 - 01

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