

**Drawing Reference**

This plan based on the drawing provided by SA7/A Architects and the survey performed by Robert Survey, Professional Land Surveyors.  
City of Newton Bench Marks Used:

All utility design shall be installed in accordance with the requirements of the City of Newton Department of Public Works.

**Owner Address**  
23 Johnson Place  
Newton, MA 02466  
Conrad Peterson - Michael Lohin  
(617) 721-8553

**Owner of Record**  
23 Johnson Place Realty Trust  
Book 30756, Page 545

**Map ID**  
0383SW  
**Property ID**  
410070014

**Project Information**

Construction of Two Residential Dwellings containing Three Units total  
4 Bedrooms per unit - 12 Bedrooms Total

1. Anticipated Daily Sewage Flow = 1320 gpd
2. (P) 6" SDR35 Sanitary Sewer Connection
3. (E) 1-1/2" Domestic Water Service with a 1" Master Meter.
4. Building Drainage: Rain leaders connected to 4" PVC subsurface piping that is directed into a drainage system consisting of a 6" ADS N-12 perforated piping embedded in a 12 x 6 x 2' field of 1-1/2" crushed, washed stone located at the left side of the property.
5. Driveway Drainage: A 48" dia. Concrete Catch Basin located at the driveway entrance will direct stormwater flows into a drainage system consisting of 8" perforated ADS N-12 piping embedded in a 50' x 5' x 2' field of 1-1/2" crushed, washed stone located at the front of the property under the lawn area.

**General Notes**

1. The new building sewer shall be constructed in conformance with current City of Newton standards and specifications, the Uniform State Plumbing Code, 248 CMR 2.00 and any other governing agency with authority in this area.
2. The installing contractor shall call Digstate at 1-888-DIGSAFE at least 72 hours, Saturdays, Sundays and Holidays/Excluded, prior to excavating at any location. A copy of the Digstate Project Reference Number(s) shall be maintained on site.
3. The City of Newton Engineering Division shall have the right to inspect the installation of the building utility installation at any reasonable time while such construction is underway.
4. Utility work performed within a Public Street that has been paved or reconstructed within the past five (5) years will require the contractor to mill a minimum of 1-1/2" off the existing surface 2 ft on both sides of the trench(es) from curb line to curb line and paved with Type I-1 Bituminous Concrete.
5. The contractor is responsible for contacting the Engineering Division and scheduling an appointment 48 hours prior to the date when the utilities will be made available for an inspection of water services, sewer service, and drainage system installation. The utility is question shall be fully exposed for the inspector to view; backfilling shall only take place when the City's Inspector has given their approval.
6. The applicant will have to apply for a Street opening, Sidewalk Crossing, Utility Connecting permits with the City of Newton Department of Public Works prior to any construction.
7. The applicant will have to apply for a Building permits with the Department of Inspectional Services prior to any construction.
8. Prior to an Occupancy permit being issued, an As-Built Plan should be submitted to the Engineering Division in both digital format and in hard copy. The plan should show all utilities and drainage (utilizing swing ties) any easements and final grading.
9. If a Certificate of Occupancy is requested prior to all site work being completed, the applicant will be required to post a Certified Bank Check in the amount to cover the remaining work. The City Engineer shall determine the value of the uncompleted work.
10. No work is allowed within the City of Newton right-of-way between November 15th and April 15th. If an emergency exists or there are extenuating circumstances, Applicant may seek permission for such work from the City DPW Commissioner via the City Engineer. If permission is granted, special construction standards will be applied. Applicant of Applicant's representative must contact the City of Newton Engineering Department prior to start of work for clarification.
11. As of January 1, 2009, all trench excavation contractors shall comply with Massachusetts General Law Chapter 82A, Trench Excavation Safety Requirements, to protect the general public from unauthorized access to unattended trenches. Trench Excavation Permit is required. This applies to all trenches on public or private property.
12. With the exception of gas services, all utility trenches within the City of Newton right-of-way will be backfilled with Type IE (excavatable) controlled density fill, as specified by the City of Newton Engineering Specifications.
13. On-site erosion controls shall be provided as needed, to the satisfaction of the City of Newton Inspector.
14. A copy of the approved plans and a permit shall be kept at the construction site at all times.
15. The new sewer service and/or structures shall be pressure tested or video taped after final installation is complete. Method of final inspection shall be determined solely by the construction Inspector from the City Engineering Division. The sewer service will NOT be accepted until one of the two methods stated above is complete. A Certificate of Occupancy will not be recommended until this test is completed and the City Engineer receives a written report.

**Material Specifications**

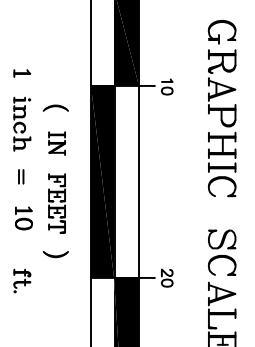
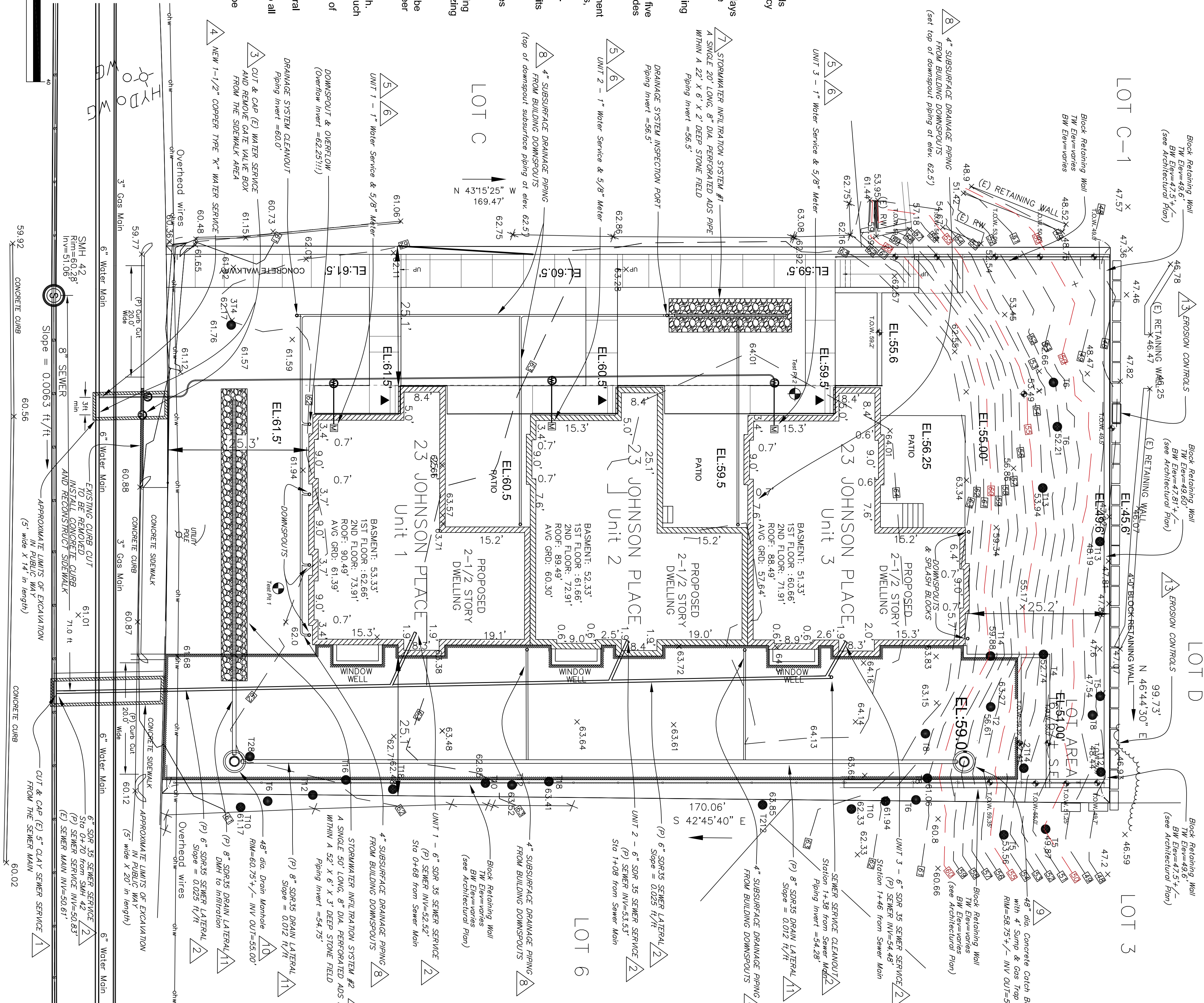
INSPECTION CHECKLIST	
1	CUT & CAP (E) 5" CLAY SEWER SERVICE AT MAIN DATE: _____ INSPECTOR: _____
2	INSTALL (P) 6" SDR35 SEWER SERVICE TO MAIN DATE: _____ INSPECTOR: _____
3	CUT & CAP (E) DOMESTIC WATER SERVICE AT MAIN DATE: _____ INSPECTOR: _____
4	INSTALL 1-1/2" CU DOMESTIC SERVICE DATE: _____ INSPECTOR: _____
5	INSTALL 1" WATER SERVICE TO EACH UNIT (4 total) DATE: _____ INSPECTOR: _____
6	INSTALL 5/8" WATER METER IN EACH UNIT (4 total) DATE: _____ INSPECTOR: _____
7	INSTALL STORMWATER INFILTRATION SYSTEM 1 DATE: _____ INSPECTOR: _____
8	INSTALL STORMWATER INFILTRATION SYSTEM 2 DATE: _____ INSPECTOR: _____
9	INSTALL SUBSURFACE PIPING FROM RAIN LEADERS DATE: _____ INSPECTOR: _____
10	INSTALL CATCH BASIN FOR DRIVEWAY DRAINAGE SYSTEM DATE: _____ INSPECTOR: _____
11	INSTALL DRAIN MANHOLE FOR DRIVEWAY DRAINAGE SYSTEM DATE: _____ INSPECTOR: _____
12	INSTALL (P) 8" SDR35 DRAIN SERVICE DATE: _____ INSPECTOR: _____
13	INSTALL STORMWATER INFILTRATION SYSTEM 2 DATE: _____ INSPECTOR: _____
14	INSTALL & MAINTAIN ON SITE EROSION CONTROLS DATE: _____ INSPECTOR: _____
	SUBMIT AS-BUILT DRAWINGS OF COMPLETED WORK DATE: _____ INSPECTOR: _____

**Material Specifications**

1. The following size and type of pipe shall be used for all building sewer and building storm drain connections. The minimum size is 6-inches. The material shall be Polyvinyl chloride pipe for the building sewer connections. Polyvinyl chloride pipe and fittings shall conform to ASTM standard specifications D3034 for pipes 6-inches to 15 inches. The PVC pipe shall have pipe diameter to wall thickness ratio (SDR) of a maximum of 35.
2. All water services up to and including 2-inch shall be copper Type K.
3. The subsurface drainage piping from the buildings downspouts shall consist of ADS 3000 Triple Wall HDPE pipe and fittings. The Stormwater Infiltration Systems shall consist of ADS N-12 HDPE perforated piping as manufactured by Advanced Drainage Systems, Inc. of Hilliard OH or approved equal.
4. The Catch Basin and Drain Manhole shall consist of 48" diameter concrete structures as manufactured by Shea Concrete Products of Amesbury, MA with a Strout Structure composite hood device as manufactured by Nyloglast of 3130 Verona Avenue, Buford, Georgia (see details sheet # 3) as distributed by ADS of 4640 Truman Blvd, Hilliard, OH or approved equal.
5. Drain Cleanout / Inspection Ports shall be installed for the subsurface piping at changes in direction of the piping and as indicated on the plans. The inspection ports shall consist of 4" ADS 3000 Triple Wall HDPE pipe extended up from the invert of the drainage piping to within 4" of grade and topped with a cleanout cap. A frame and grate shall be provided in paved areas.

**Special Conditions**

The onsite drainage system must be inspected by the Engineer of Record - Hayes & Associates during construction in order to certify system installation. Upon completion of the work, the Developer shall prepare and submit a complete set of "As-Built" drawings prepared by a Massachusetts Registered Professional Engineer. The "As-Built" plans must be submitted before the water services is activated. The location of the proposed Retaining Walls as shown are approximate and are to be designed by others.



<p><b>PROPOSED CONSTRUCTION</b> 23 JOHNSON PLACE NEWTON, MA 02466 SEPTEMBER 3, 2020</p>	<p>SCALE 1"=10'</p>	<p>REVISIONS 1 ISSUED FOR REVIEW 2 REVISED PER ENGINEERING REVIEW COMMENTS</p>	<p>II-12-20</p>
	<p>SHEET 1 OF 4</p>	<p>HA 20-563 SITEPLAN#</p>	<p>LAURANCE HAYES CIVIL No. 40015</p>



**Drawing Reference**

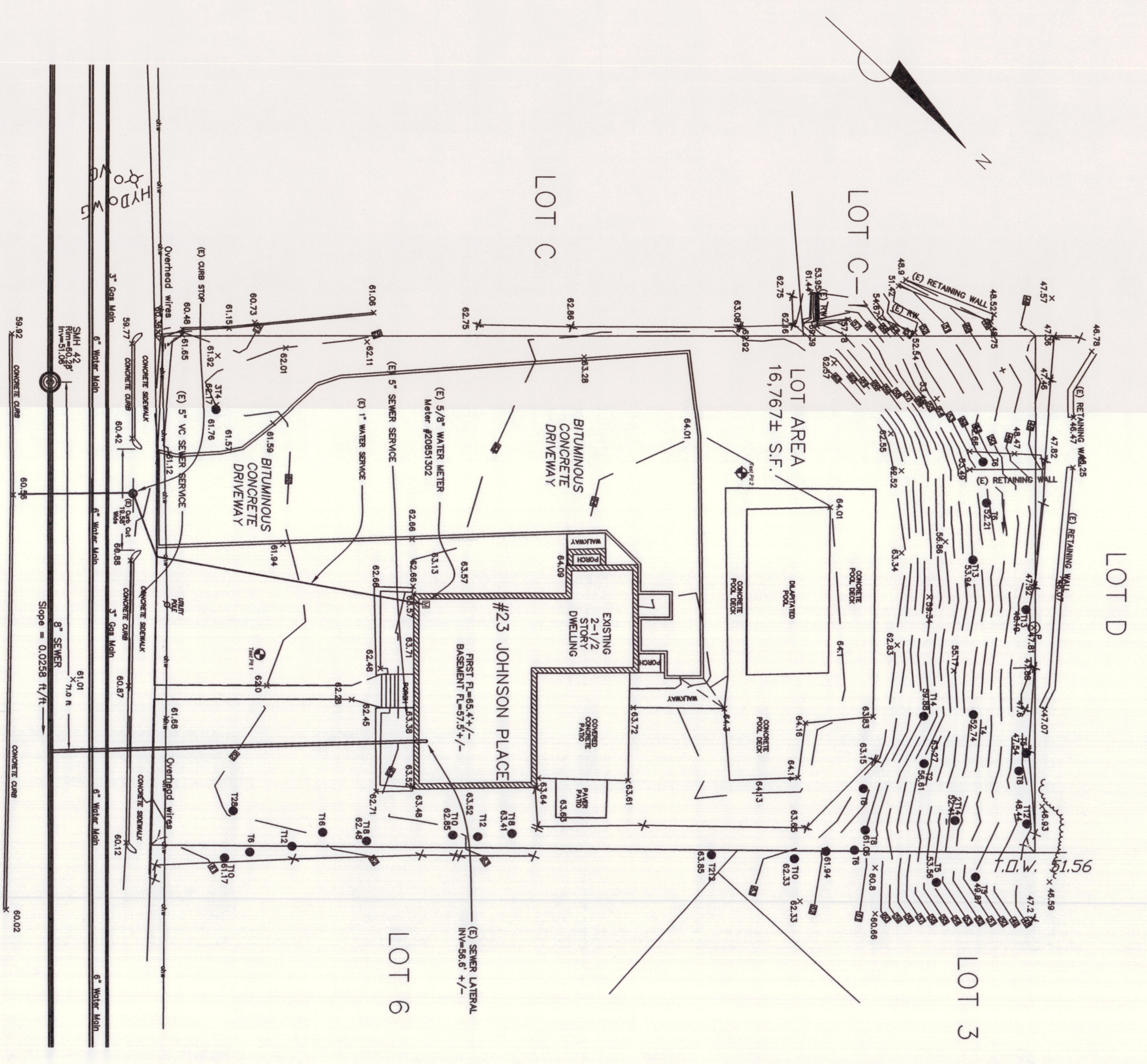
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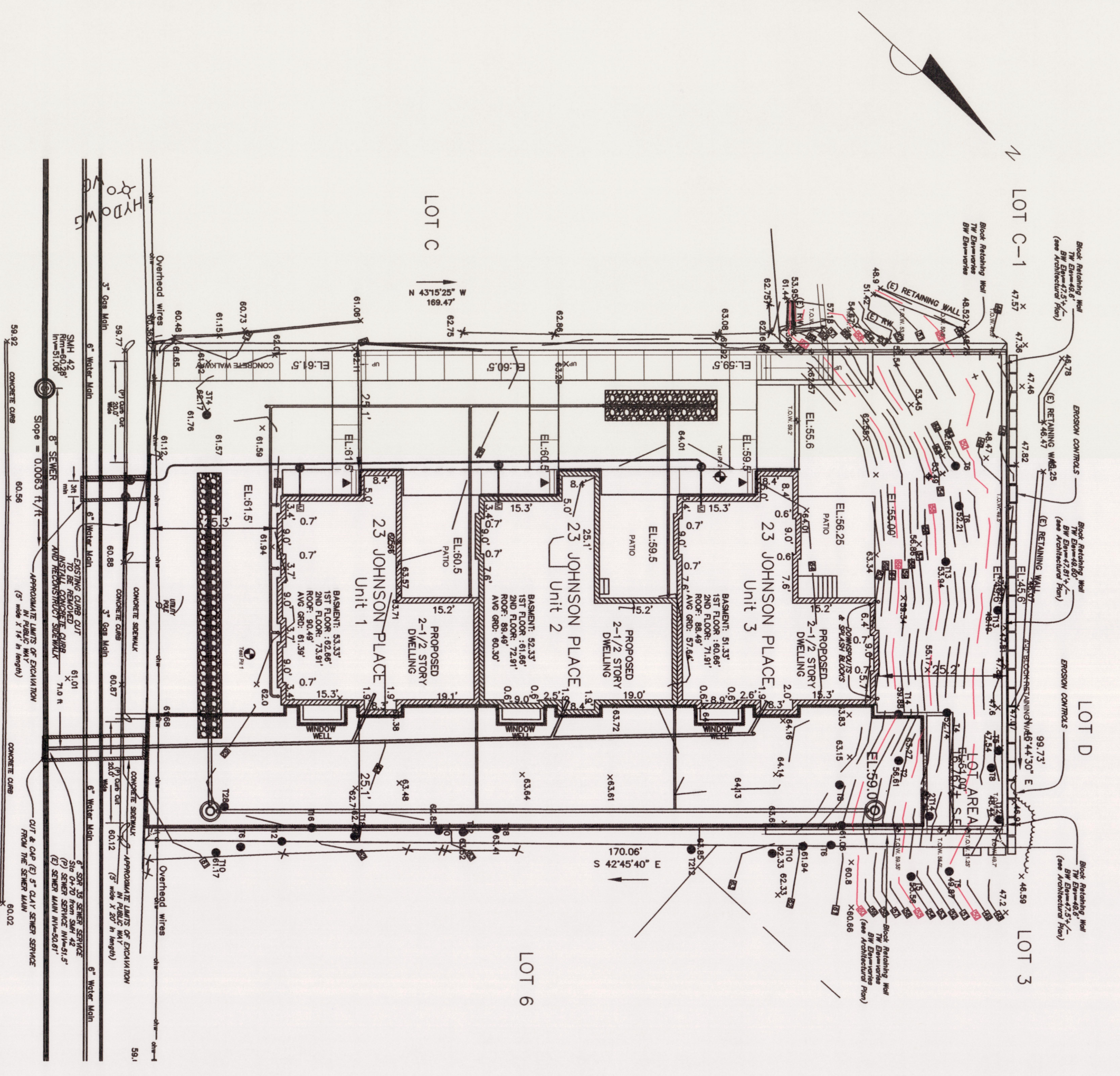
**Owner Address**  
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Newton, MA 02466  
Contact Person - Michael Lohin  
(617) 721-8533

**Owner of Record**  
23 Johnson Place Realty Trust  
Book 30756, Page 545

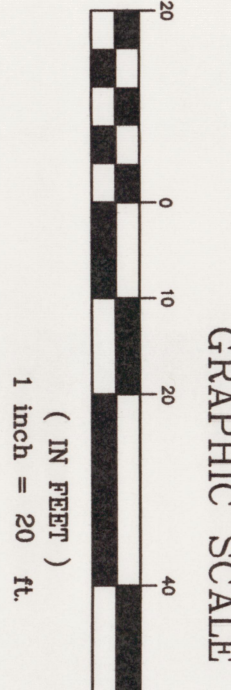
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**Property ID**  
410070014



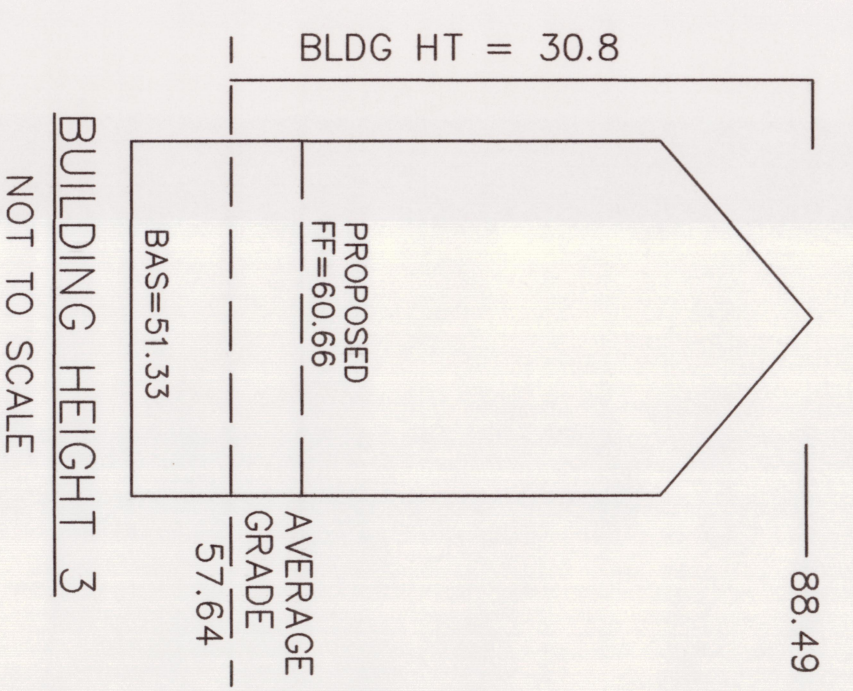
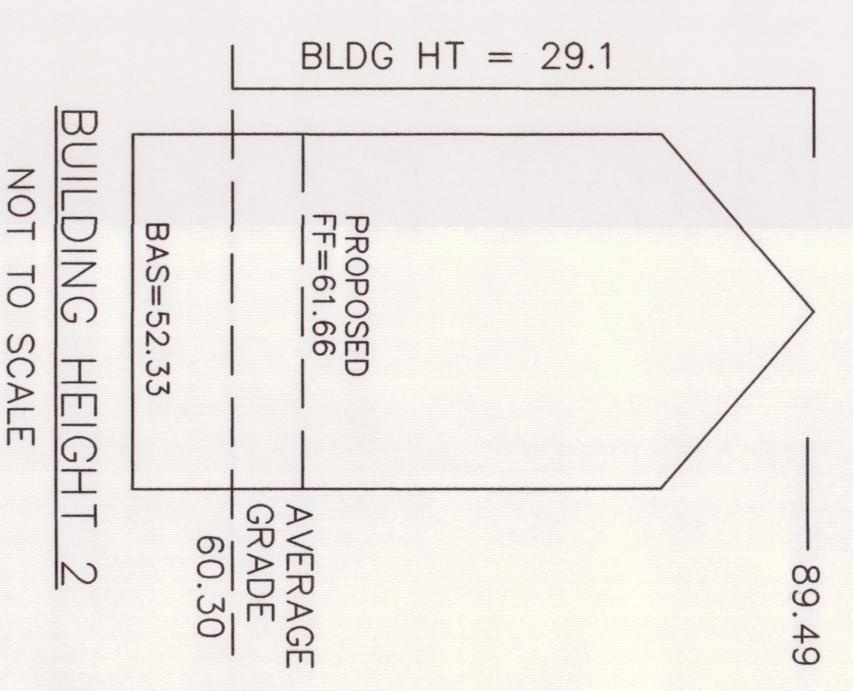
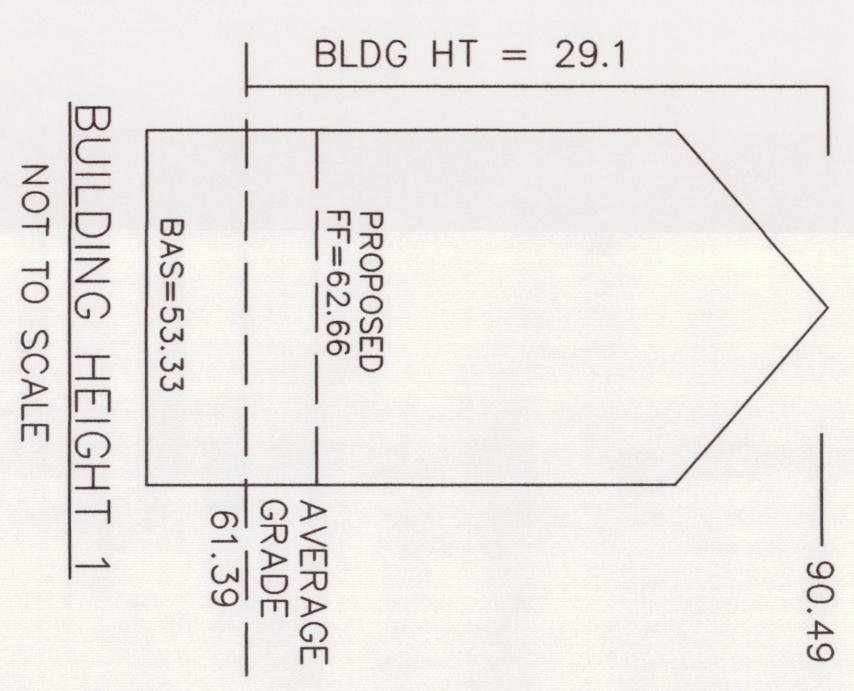
**Existing Grading Conditions**



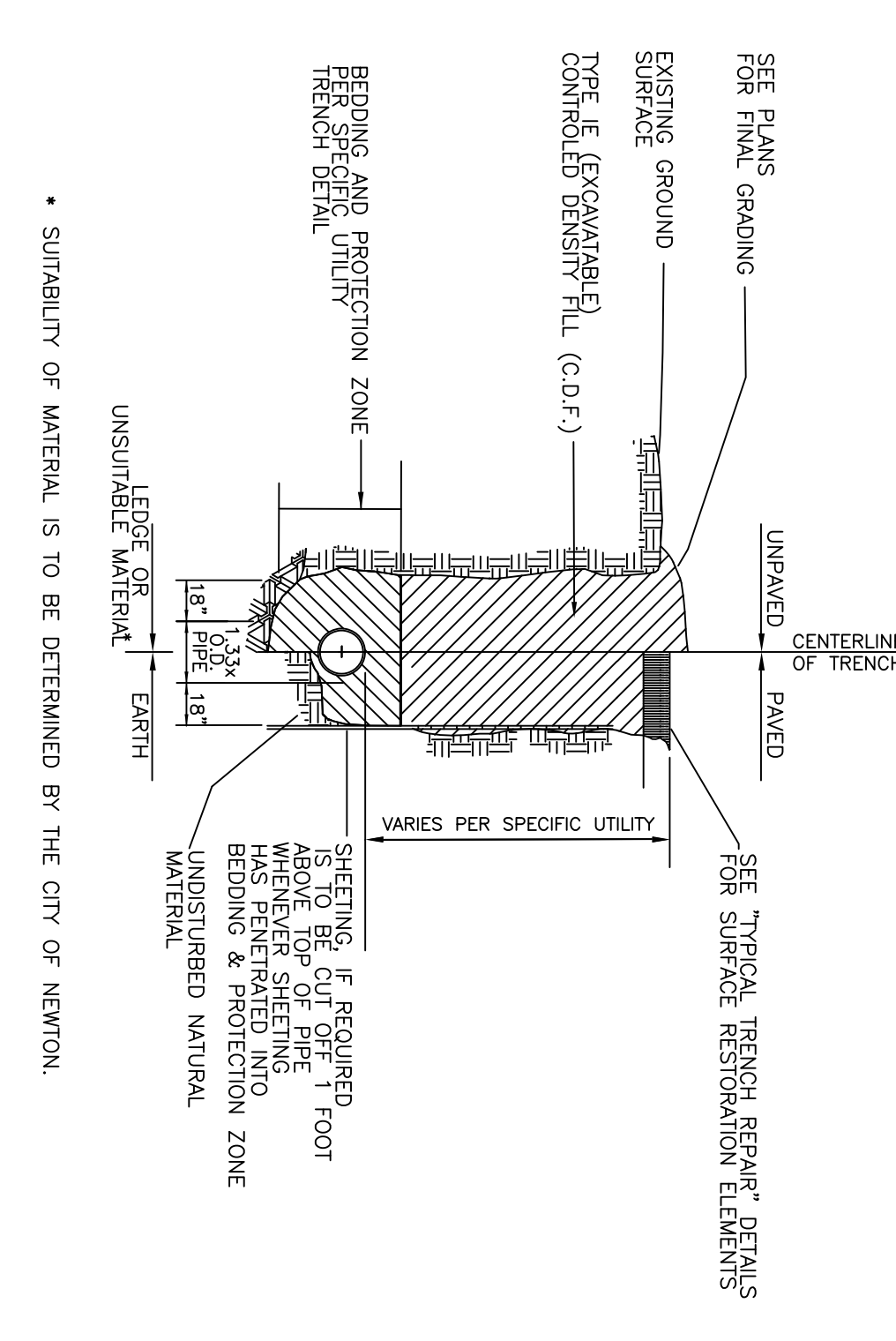
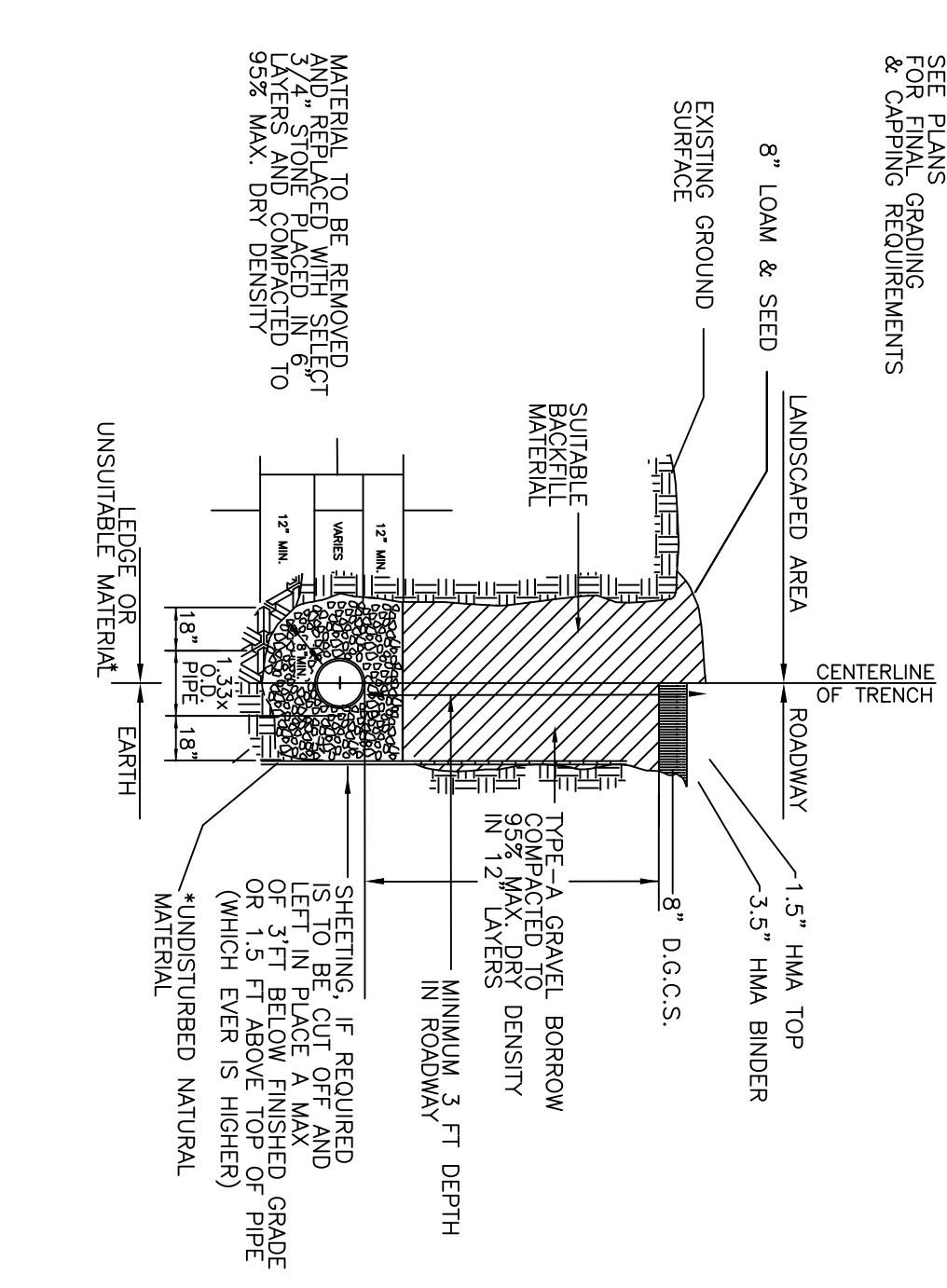
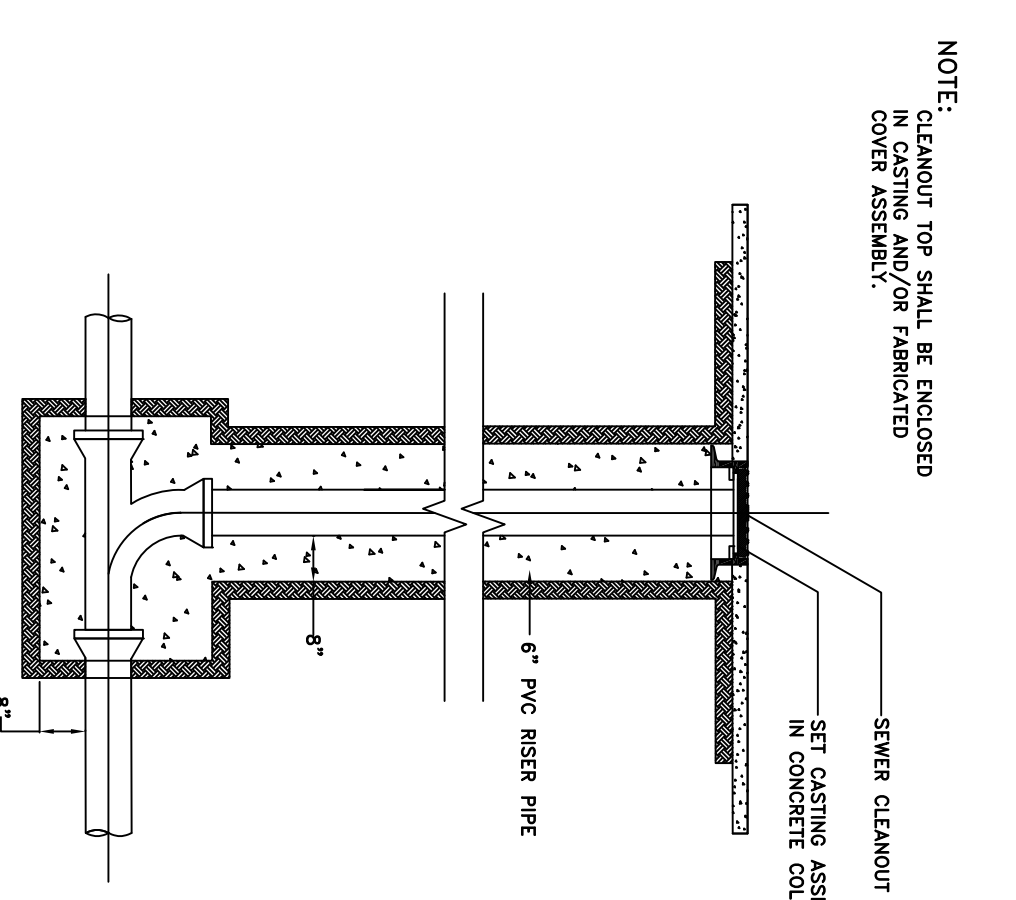
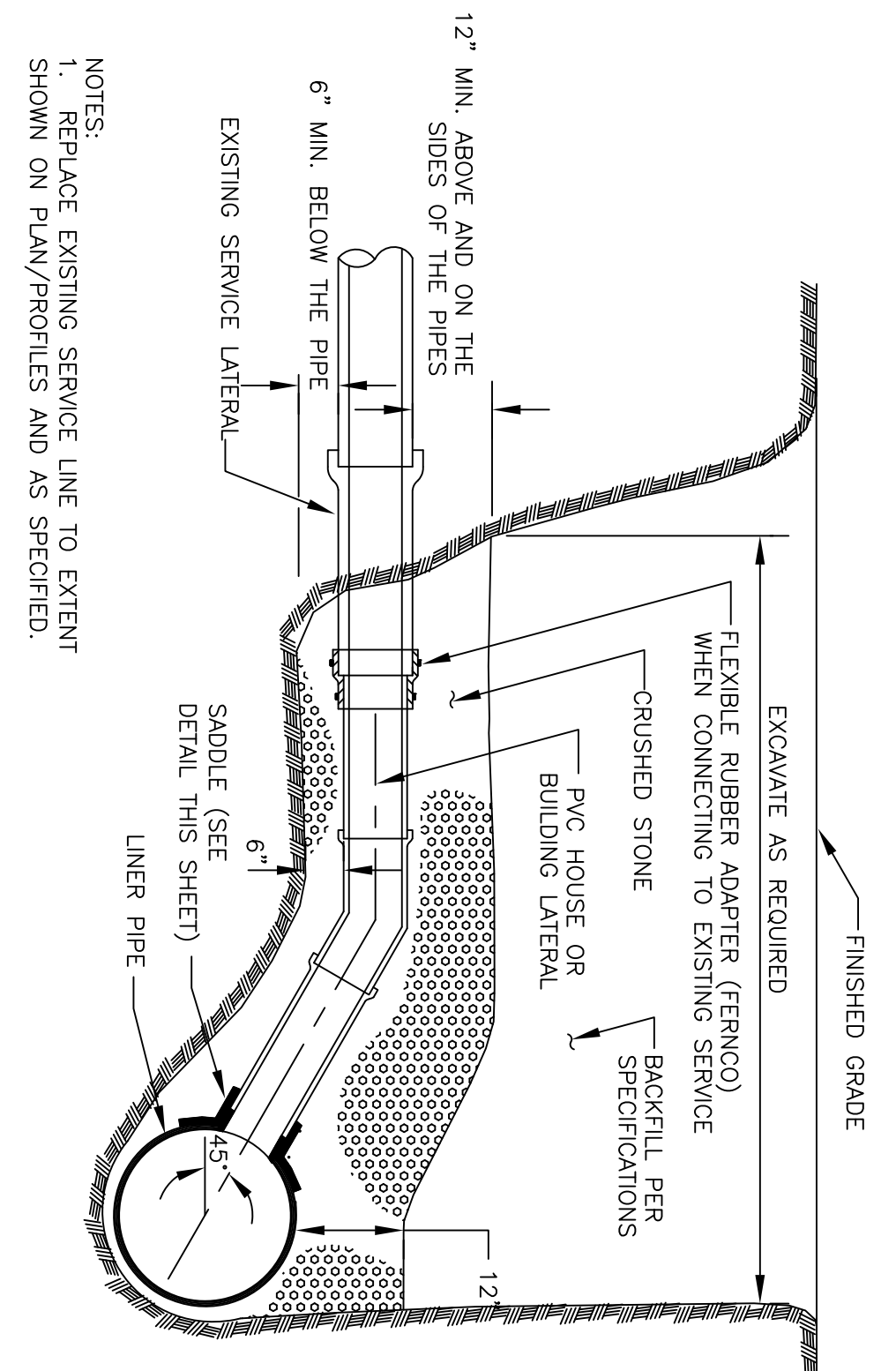
**Proposed Grading Conditions**



FAR Calculations for Regulations Effective As Of October 15, 2011	
Input (Square Feet)	Output
1. First story	2,232'
2. Attached garage	1,005'
3. Second story	3,975'
4. Area open walls, and other vertical space (if not counted in first/second story)	8,600'
5. Enclosed porch(es) above the second story	0'
6. Enclosed porch(es) on 1st floor	0'
7. Mass below first story	NA
8. Detached garage	NA
9. Other enclosed vertical space (if not counted in first/second story)	NA
10. Other enclosed vertical space (if not counted in first/second story) (e.g. enclosed porch(es) attached to detached building up to 120 sq. ft. is exempt)	NA
<b>FAR of Proposed Structure(s)</b>	<b>8,265'</b>
A. Total gross floor area (sum of rows 1-9 above)	15,767'
B. FAR = A/B	.49
C. FAR = A/B	.48
D. FAR = A/B	.07
E. FAR = A/B	.07
Allowable FAR	.48
Ratio of FAR Allowed	.07
(0.07/0.48) Allowed FAR	.15







**Sewer Service Connection to (E) Sewer Manhole**

**In-line Sewer Cleanout**

**Typical Sewer Trench Detail**

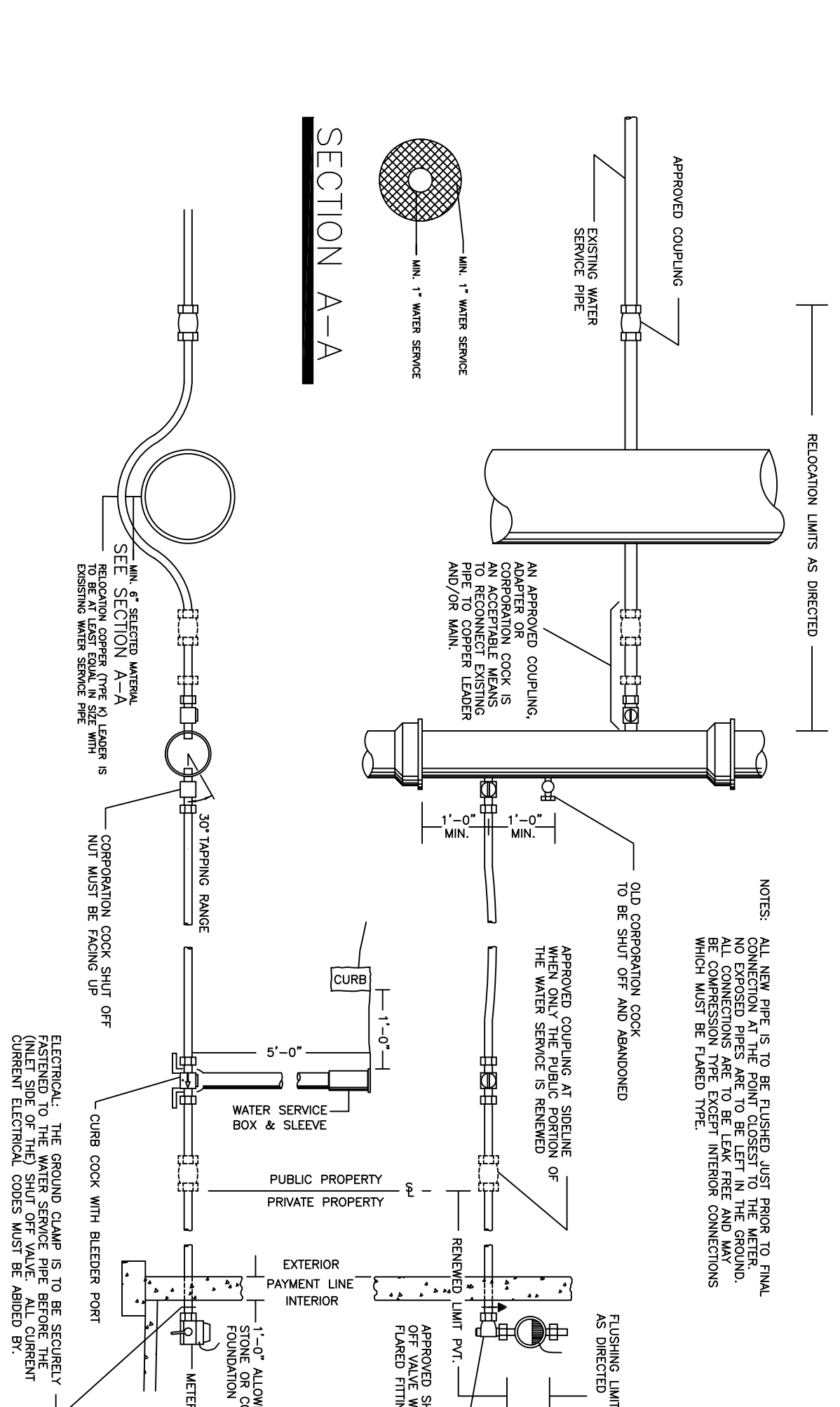
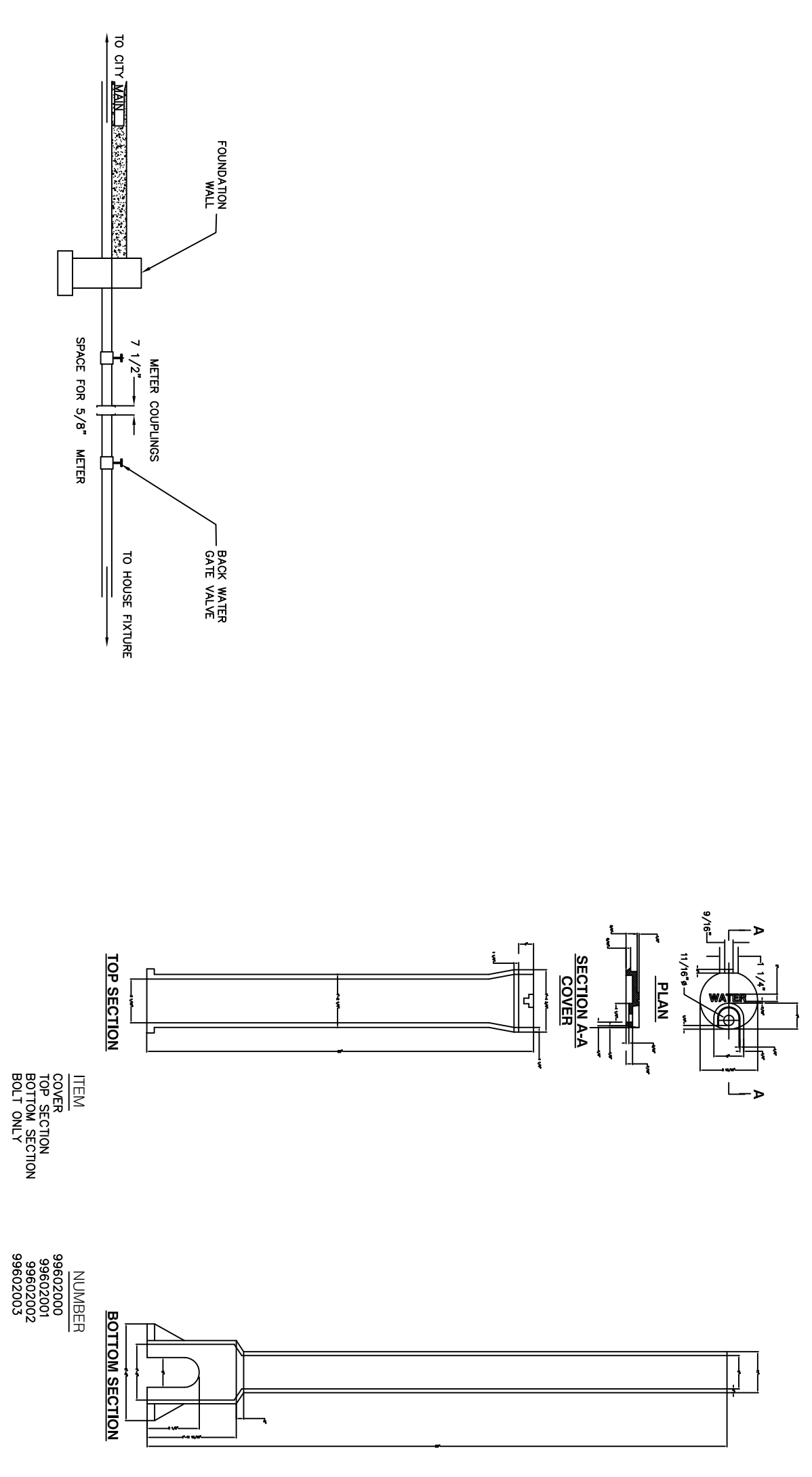
**Typical C.D.F. Trench Detail (Installed in Public Way)**

NOTES:  
1. REPLACE EXISTING SERVICE LINE TO EXTENT SHOWN ON PLAN/PROFILES AND AS SPECIFIED.

NOTE:  
CLEANOUT TOP SHALL BE ENCLOSED IN CASTING AND/OR FABRICATED COVER ASSEMBLY.

SEE PLANS GRADING & CAPPING REQUIREMENTS

\* SUITABILITY OF MATERIAL IS TO BE DETERMINED BY THE CITY OF NEWTON.

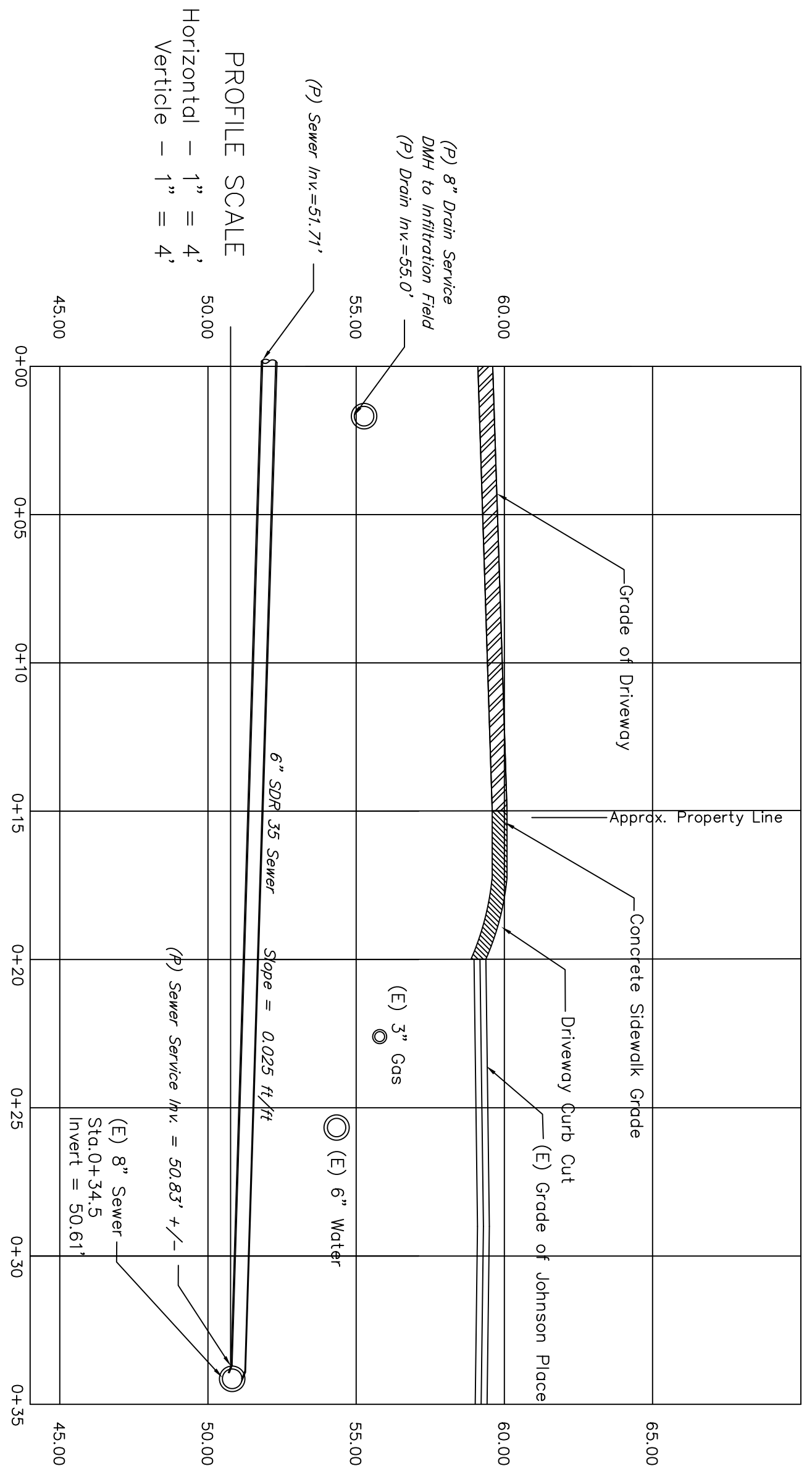


**Water Meter Plumbing Details**

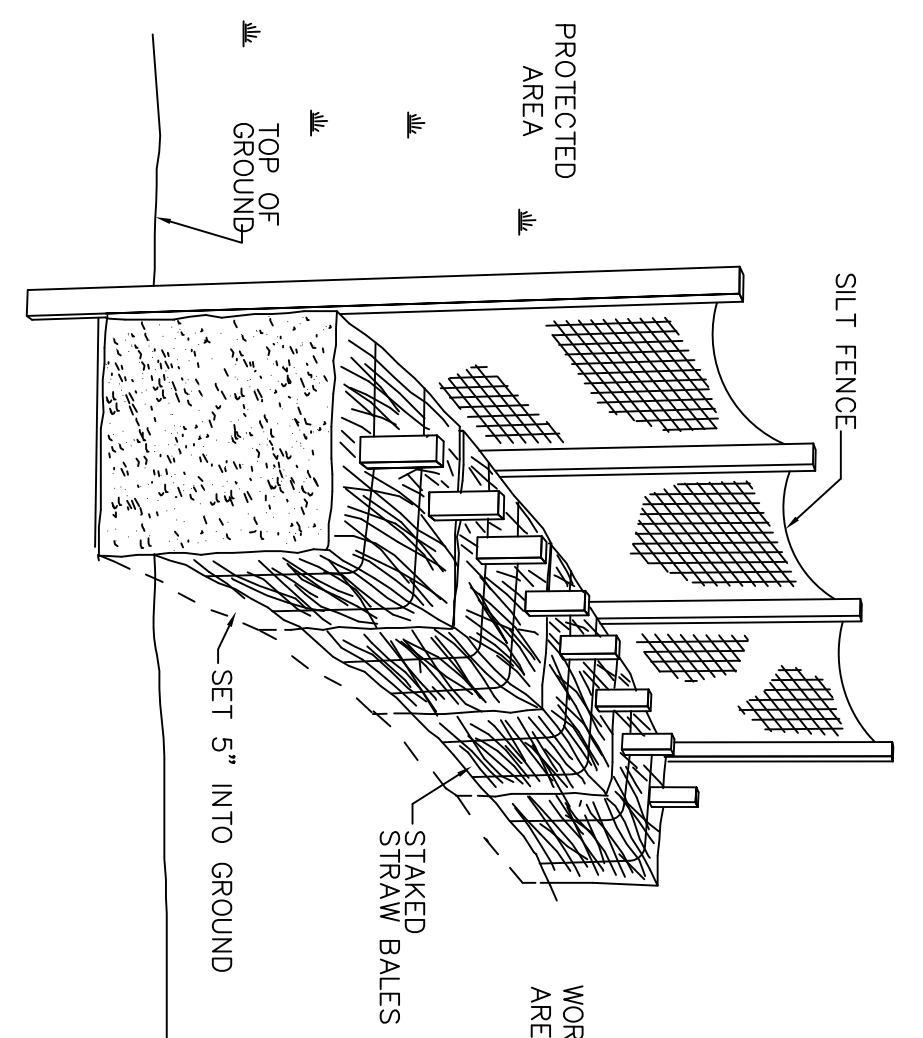
**Curb Box Details**

**Typical Water Service Configuration**

**Typical Water Trench Detail**

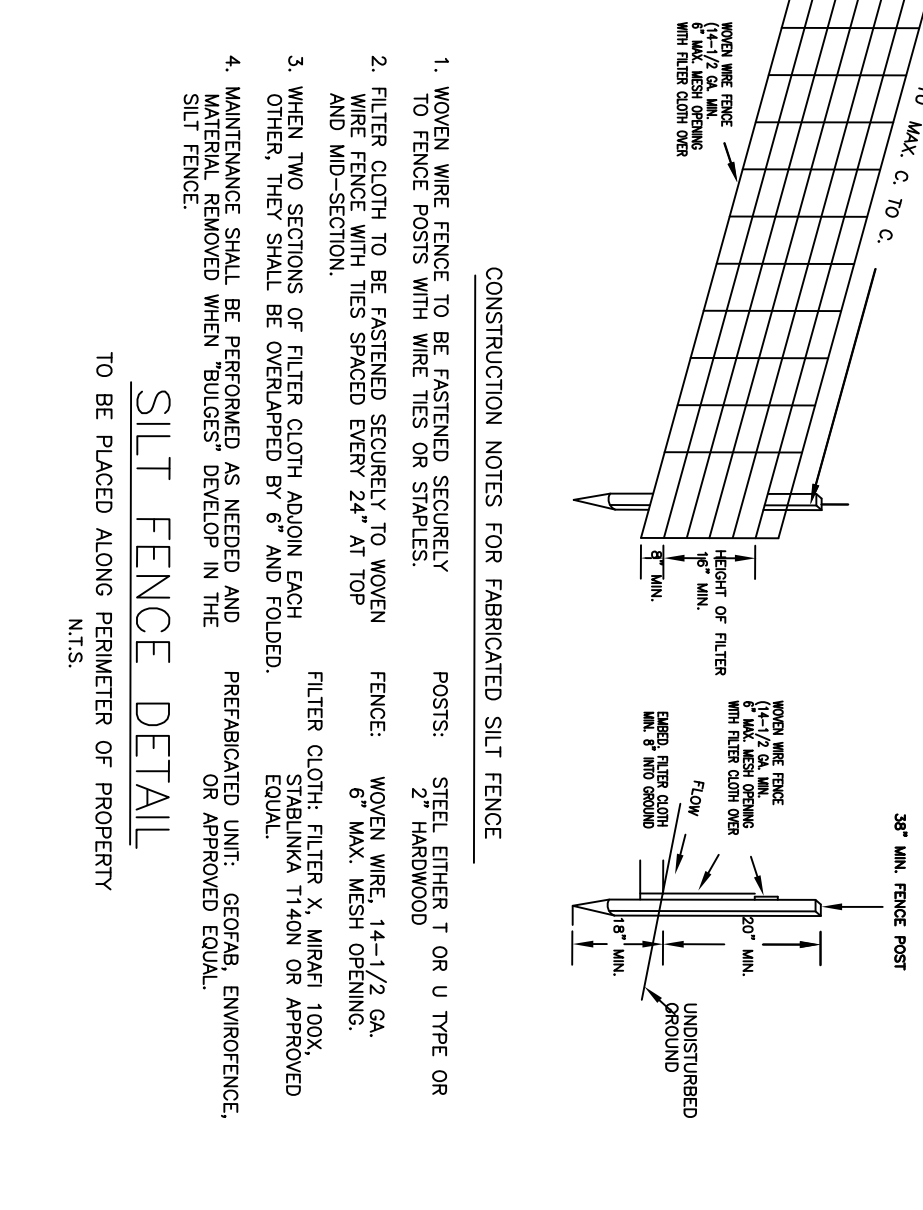


**Sewer Service Connections to Main**



**Typical Erosion Control Detail**

**Erosion Control Notes**  
The Site Contractor shall be responsible for Erosion and Sedimentation Control measures during construction, as outlined in the Erosion Control Plan and as requested by the City of Newton.  
Erosion controls shall be inspected and repaired as necessary on a monthly basis and before and after major storm events.  
Seeding of disturbed areas should be performed as work activities and weather conditions permit in order to minimize the erosion of soils on site.



**SILT FENCE DETAIL**  
TO BE PLACED ALONG PERIMETER OF PROPERTY  
N.T.S.

<p><b>PROPOSED CONSTRUCTION</b> 23 JOSEPH PLACE NEWTON, MA 02466 SEPTEMBER 3, 2020</p>	<p>SCALE NTS</p>	<p>REVISIONS 1 ISSUED FOR REVIEW 2 REVISED PER ENGINEER'S COMMENTS</p>	<p>11-12-20</p>
	<p>DATE 1 2 3 4 5 6 7 8 9 0</p>	<p>HA 20-563 SITEPLAN#</p>	<p>3 OF 4 SHEETS</p>



