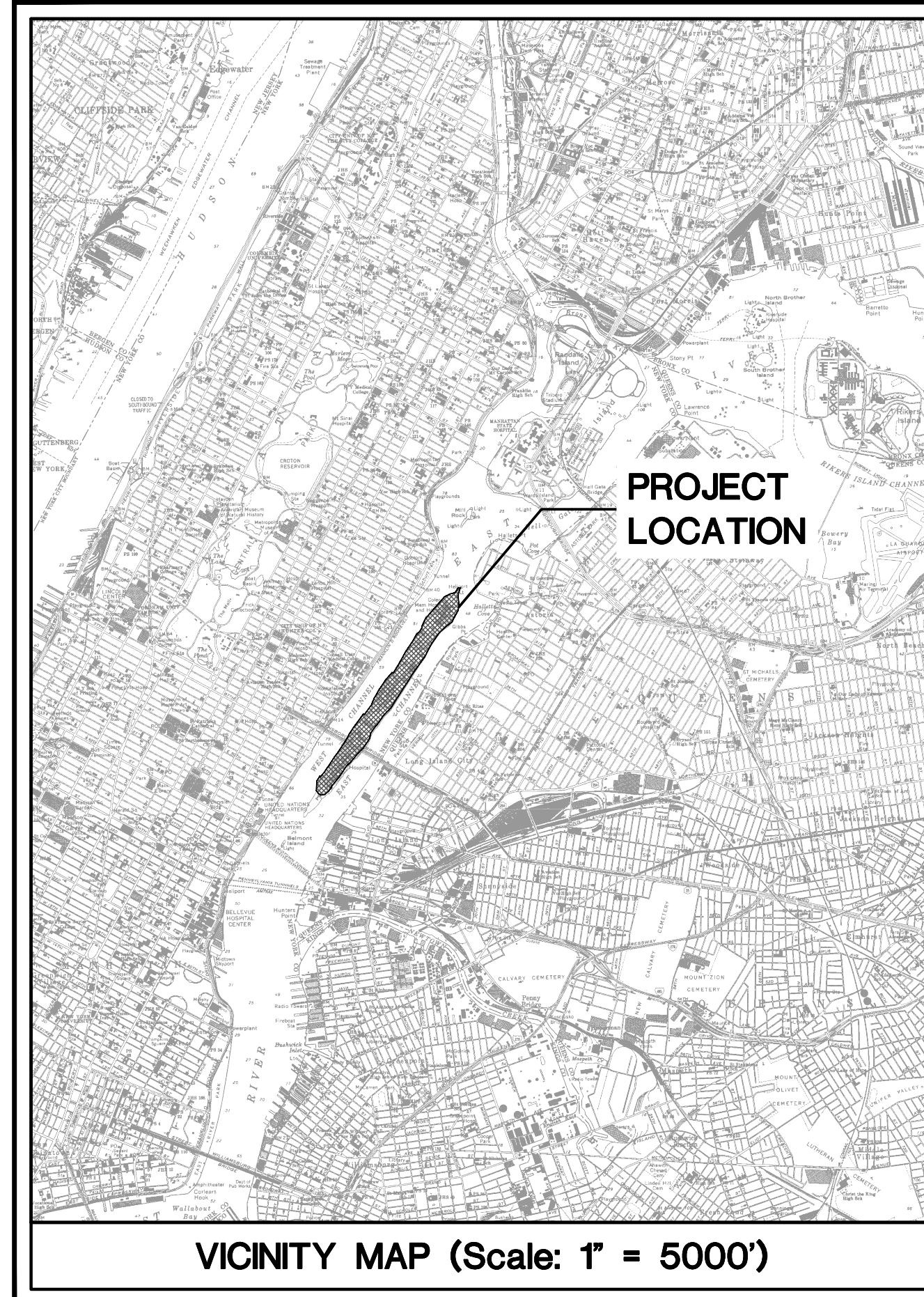


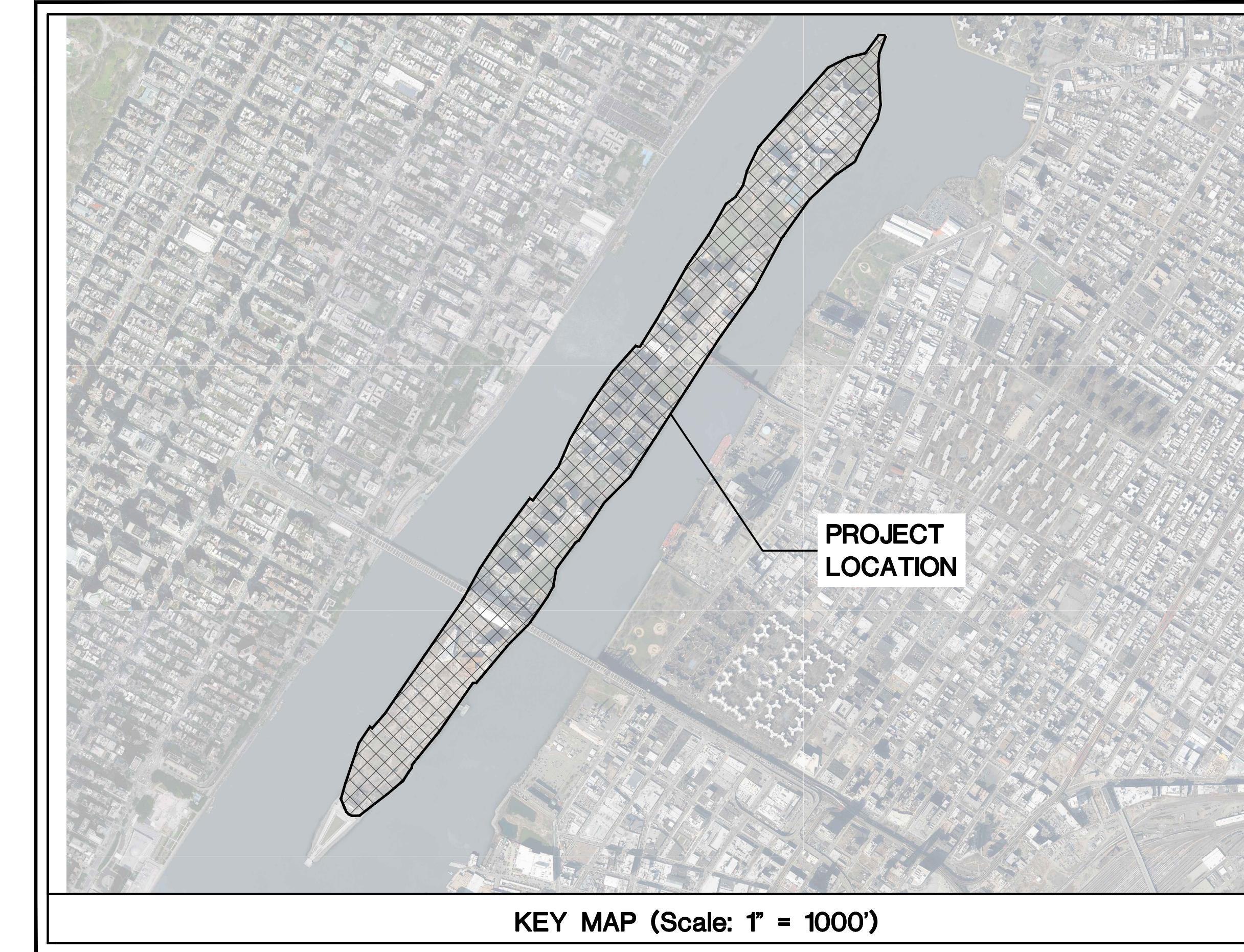
ROOSEVELT ISLAND BACKFLOW PREVENTION

DEVICE UPGRADES

ROOSEVELT ISLAND NEW YORK, NY 10044



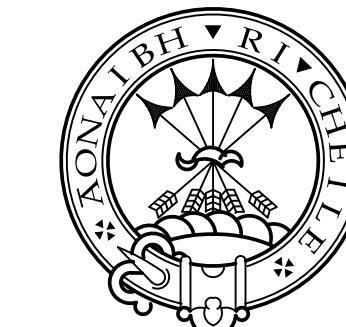
NORTH



Sheet List Table

Sheet Number	Sheet Title
--	COVER
C-001.00	GENERAL NOTES
C-002.00	LIGHTHOUSE PARK
C-003.00	BLACKWELL PARK
C-004.00	MEDITATION STEPS (RIVER-CROSS LAWN)
C-005.00	MEDITATION STEPS MTA
C-006.00	FIREFIGHTER SHED
C-007.00	CAPOBIANCO BUILDING
C-008.00	OCTAGON FIELD
C-009.00	PONY FIELD
C-010.00	SITE DETAILS PLAN

PREPARED BY:



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FEBRUARY 2019

DEMOLITION NOTES

1. ANY EXCAVATION RESULTING FROM DEMOLITION SHALL BE PROPERLY BACKFILLED WITH CLEAN, GRANULAR MATERIAL, COMPACTED TO 95% PROCTOR DENSITY AND BACKFILLED TO MEET EXISTING ADJACENT GRADES. BACKFILL MATERIAL SHALL BE PLACED WITH MAXIMUM 9" LOOSE LIFTS. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPACTION TESTING AND SHALL SUBMIT SUCH REPORTS AND VERIFICATION TO THE ENGINEER.
2. BOUNDARY AND TOPOGRAPHIC/UTILITY INFORMATION REFERENCES A SURVEY (DATED 8/20/92), PROVIDED BY TOPO-METRICS INC. (60 ENTER LANE, HAUPPAUGE, NY 11749). GENERAL CONTRACTOR TO VERIFY EXISTING CONDITIONS. IF EXISTING CONDITIONS DIFFER FROM THIS PLAN, GENERAL CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY.
3. DAILY, DURING DEMOLITION AND DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL REMOVE ALL RUBBISH AND EXCESS MATERIAL ACCUMULATED AS A RESULT OF HIS OPERATIONS AND/OR THE OPERATIONS OF HIS SUBCONTRACTORS. THE CONTRACTOR IS RESPONSIBLE FOR FINAL AND THOROUGH CLEANING OF ALL SURFACES, FINISHES AND EQUIPMENT BEFORE FINAL ACCEPTANCE BY THE OWNER.
4. ALL CONSTRUCTION DEBRIS, ETC. SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL UNSUITABLE MATERIAL SHALL BE PROPERLY REMOVED & DISPOSED OF LEGALLY OFF-SITE IN ACCORDANCE WITH ALL LOCAL (TOWN/CITY), COUNTY, STATE AND FEDERAL CODES, ORDINANCES & LAWS.
5. NO MATERIAL IS PERMITTED TO BE STORED OUTSIDE OF THE SUBJECT SITE PERIMETER.
6. GENERAL CONTRACTOR SHALL COMPLY WITH THE N.Y.S. INDUSTRIAL CODE RULE 53.
7. GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES, PIPING, DRYWELLS, ETC. PRIOR TO THE START OF WORK. THE GENERAL CONTRACTOR MUST CONTACT THE "ONE CALL" SYSTEM TO ENSURE THAT ALL UTILITIES ARE PROPERLY AND COMPLETELY MARKED OUT IN THE FIELD PRIOR TO ANY WORK AT THE SITE. ANY DISCREPANCIES BETWEEN THE FIELD LOCATIONS AND THE PLANS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. THE GENERAL CONTRACTOR IS ADVISED THAT UTILITY INFORMATION SHOWN ON THIS PLAN IS A COMPILED OF FIELD LOCATIONS AND RECORD DRAWINGS AND MUST BE CONFIRMED ACCORDINGLY. THE CONTRACTOR IS ALSO ADVISED THAT ALL SUCH UTILITIES DISTURBED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
8. IF ANY ITEMS DAMAGED SCHEDULED TO REMAIN ARE DAMAGED DURING CONSTRUCTION, THEY SHOULD BE REPAIRED AND/OR REPLACED AT THE GENERAL CONTRACTOR'S EXPENSE.
9. GENERAL CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO BUILDINGS/WALLS/STRUCTURES/UTILITIES TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES AS NECESSARY TO ENSURE THE STRUCTURAL STABILITY OF FOUNDATIONS/WALLS/SIDEWALKS AND PAVEMENT TO REMAIN AND PROVIDE A SAFE WORK AREA.
10. REMOVAL SHALL INCLUDE ALL FOOTINGS, UNDERGROUND PIPING AND STRUCTURES, UNLESS OTHERWISE NOTED.
11. REFER TO SITE PLAN FOR ADDITIONAL INFORMATION CONCERNING CURRENT IMPROVEMENTS, GRADES, ETC.
12. GENERAL CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT PEDESTRIANS AND VEHICULAR TRAFFIC DURING DEMOLITION.
13. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS & APPROVALS HAVE BEEN OBTAINED PRIOR TO STARTING DEMOLITION.
14. GENERAL CONTRACTOR MUST CONTACT THE N.Y.C.B.E.S.T. SQUAD AT (718) 802-3713 AT LEAST 24 HOURS PRIOR TO COMMENCEMENT OF DEMOLITION.

UTILITIES NOTES

THE CONTRACTOR SHALL NOTIFY APPROPRIATE UTILITY COMPANIES 48 HOURS BEFORE EXCAVATING, CUTTING, REMOVING OR TAPPING INTO ANY EXISTING UTILITY SERVICE.

THE CROSSING OF WATER AND SEWER LINES SHALL BE AS FOLLOWS:

- A. SEWER LINES SHALL BE LAID BELOW THE WATER LINE AND PROVIDE A SEPARATION OF AT LEAST EIGHTEEN INCHES BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE SEWER LINE; AND
- B. SEWER LINE JOINTS SHALL BE AT LEAST TEN FEET FROM THE POINT OF CROSSING. WHEN THE LOCAL CONDITIONS PREVENT PLACEMENT OF THE WATER LINE ABOVE THE SEWER LINE, THE FOLLOWING ADDITIONAL CONDITIONS APPLY:
 - a. VERTICAL SEPARATION OF AT LEAST EIGHTEEN INCHES SHALL BE PROVIDED BETWEEN THE BOTTOM OF THE SEWER LINE AND THE TOP OF THE WATER LINE;
 - b. WATER LINE JOINTS SHALL BE AT LEAST TEN FEET FROM THE POINT OF CROSSING;
 - c. SEWER LINES SHALL BE CONSTRUCTED OF MATERIALS AND JOINTS THAT ARE IN ACCORDANCE WITH WATER MAIN STANDARDS OF CONSTRUCTION AND SHALL BE PRESSURE TESTED TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.

WATER SERVICE MUST BE MINIMUM 4.5 FEET BELOW GRADE.

GENERAL CONTRACTOR SHALL ENSURE ALL REQUIRED APPLICATIONS/APPROVALS/PERMITS ARE OBTAINED PRIOR TO COMMENCEMENT OF WORK FOR ALL WATER SERVICES AND BACK FLOW PREVENTION DEVICES.

THE CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED ELEVATIONS IN THE FIELD.

COMPACTING OF BACKFILL AROUND ALL PIPE TRENCH AREAS WILL BE REQUIRED.

AREAS BELOW PROPOSED UTILITY PIPES, DUCTS, RAMPS, STAIRS, RETAINING WALLS, STRUCTURES, ETC. SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY. IN AREAS WHERE THIS DENSITY IS NOT ACHIEVABLE, A GEOTEXTILE SUCH AS MIRAFI HP370 OR EQUAL SHOULD BE PLACED IN THE BOTTOM OF THE TRENCH AND UP THE SIDE WALLS TO A HEIGHT EQUAL TO THREE FEET ABOVE THE BOTTOM OF THE EXCAVATION. A CRUSHED STONE OR GRAVEL SUBBASE MATERIAL SHOULD BE PLACED IN THE TRENCH TO A HEIGHT OF THREE FEET AND COMPACTED. THE GEOTEXTILE SHOULD THEN BE BROUGHT OVER THE TOP OF THE AGGREGATE SUBBASE, TO MEET THE OUTSIDE OF THE PIPE OR STRUCTURE, OR OVER THE PIPE WHERE THE PIPE DIAMETER IS TWELVE INCHES OR LESS.

GENERAL CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO STRUCTURES TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES AS NECESSARY TO ENSURE THE STRUCTURAL STABILITY OF ALL EXISTING STRUCTURES TO REMAIN, INCLUDING BUT NOT LIMITED TO FOUNDATIONS, WALLS, SIDEWALKS AND PAVEMENT, AND PROVIDE A SAFE WORK AREA.

ALL WORK, MATERIALS, SPECIFICATIONS, REGULATIONS, RULES, PERMITS, ETC., OF ALL FEDERAL, STATE AND CITY GOVERNMENTS AND ALL UTILITY AGENCIES SHALL BE FOLLOWED BY THE CONTRACTOR.

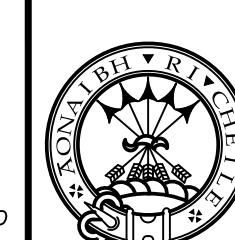
THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ABANDONED UTILITY SERVICE CONNECTIONS AND THE INSTALLATION OF NEW SERVICE CONNECTIONS, AND SHALL COORDINATE ALL WORK WITH THE APPROPRIATE UTILITY COMPANY. REMOVAL OF EXISTING STRUCTURES SHALL BE IN CONFORMANCE WITH THE REGULATIONS OF ALL APPROPRIATE AGENCIES AND UTILITY COMPANIES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS FOR DEMOLITION AND DISPOSAL OF EXISTING STRUCTURES AND MATERIALS.

GENERAL BACKFLOW PREVENTER NOTES

1. PROVIDE FULL PORT BALL VALVES ON RPZ DEVICE.
2. ALL DEVICES SHALL BE INSTALLED SO THAT THEY ARE NOT SUBJECT TO FLOODING OR FREEZING.
3. TEST COCKS MUST HAVE 30" CLEARANCE.
4. DRAINAGE TO BE SIZED FOR MAX. FLOW.
5. DISCHARGE END OF THE GRAVITY DRAIN SHALL BE VISIBLE SO THAT IT CAN BE CHECKED AS A MATTER OF DAILY ROUTINE AND MAINTENANCE.
6. RPZ DEVICES MUST BE TESTED ANNUALLY BY A NYSHD CERTIFIED TESTER.
7. RPZ DEVICES MUST BE FROM NEW YORK STATE APPROVED LIST.
8. IN NO CASE SHALL THE INSTALLATION OF THE BACKFLOW PREVENTER INCLUDE UNPROTECTED BY-PASS PIPING. CLOSED VALVES ON BY-PASS SHALL NOT CONSTITUTE PROTECTION.
9. ALL INSTALLATIONS SHALL CONFORM TO THE RULES AND REGULATIONS OF THE WATER AUTHORITY HAVING JURISDICTION, PLUMBING CODES, AND NEW YORK STATE HEALTH DEPARTMENT REQUIREMENTS.
10. LAYOUT SHOWN IS APPROXIMATE. ADJUSTMENTS CAN BE MADE TO FIT FIELD CONDITIONS AND JOB REQUIREMENTS UPON THE ENGINEERS APPROVAL. MINIMUM CLEARANCES MUST BE MAINTAINED. ORDER OF PARTS MUST BE MAINTAINED.
11. TEST REPORTS MUST BE SUBMITTED TO THE DEPARTMENT OF HEALTH.
12. THE INSTALLATION SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR.
13. THE WATER AUTHORITY HAVING JURISDICTION SHALL HAVE UNRESTRICTED ACCESS TO THE BACKFLOW PREVENTER.
14. CONTRACTOR IS RESPONSIBLE FOR ALL FEE'S AND PERMITS AND INITIAL TESTING OF BACKFLOW PREVENTER BY A CERTIFIED NYS INSPECTOR.
15. PROVIDE AS-BUILT DRAWING SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER.
16. BACKFLOW PREVENTER DEVICE MUST BE LEAD FREE.
17. INSTALL RPZ ENCLOSURES PER MANUFACTURER'S RECOMMENDATIONS.
18. DRAWINGS SUBJECT TO CHANGE PENDING NYCDEP REVISION AND APPROVAL.
19. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL BACKFLOW PREVENTION DEVICES AND ENCLOSURES.
20. PROVIDE FULL PORT VALVES ON RPZ DEVICE.
21. DISCHARGE END OF THE GRAVITY DRAIN SHALL BE VISIBLE SO THAT IT CAN BE CHECKED AS A MATTER OF DAILY ROUTINE AND MAINTENANCE.
22. LAYOUT SHOWN IS APPROXIMATE. ADJUSTMENTS CAN BE MADE TO FIT FIELD CONDITIONS AND JOB REQUIREMENTS UPON THE ENGINEERS APPROVAL. MINIMUM CLEARANCES MUST BE MAINTAINED. ORDER OF PARTS MUST BE MAINTAINED.
23. NO LEAD SOLDER SHALL BE USED FOR THE INSTALLATION.
24. PROVIDE AS-BUILT DRAWING SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER.
25. CONTRACTOR SHALL PROVIDE PIPE SUPPORTS WITH SADDLE AND BASE PLATE ANCHORED IN PLACE FOR BACKFLOW ASSEMBLY.
26. BALL VALVES FOR WATER SYSTEM SHALL BE BRONZE BODY WITH CHROME PLATED BRONZE BALL, STAINLESS STEEL HANDLE. DURAFILL SEATS AND SEALS RATED 600 PSIG WOG.
27. PROVIDE DIE-ELECTRIC FLANGES OR UNIONS WHEN PIPING OF DISSIMILAR METALS.
28. PROVIDE NEW PIPING AND METER SUPPORTS.
29. THE LOCAL WATER AUTHORITY SHALL HAVE UNRESTRICTED ACCESS TO METER, BACKFLOW PREVENTOR AND DOUBLE DETECTOR CHECK ASSEMBLY.

GENERAL NOTES

1. CONTRACTOR TO RECONNECT ALL EXISTING ELECTRICAL IRRIGATION CONTROL SYSTEMS.
2. CONTRACTOR TO OBTAIN REQUIRED PERMIT FROM NYCDEP FOR ALL PROPOSED WATER SERVICE TAPS ON THE NYCDEP WATER MAINS.
3. CONTRACTOR SHALL FOLLOW ALL NYCDEP SPECIFICATIONS AND STANDARDS FOR NEW WATER MAIN CONSTRUCTION.
4. CONTRACTOR TO PROVIDE 120V, 1500W HEAT TRACE TAPE FOR ALL RPZ COMPONENTS AND PIPING LOCATED IN HOTBOX ENCLOSURES.



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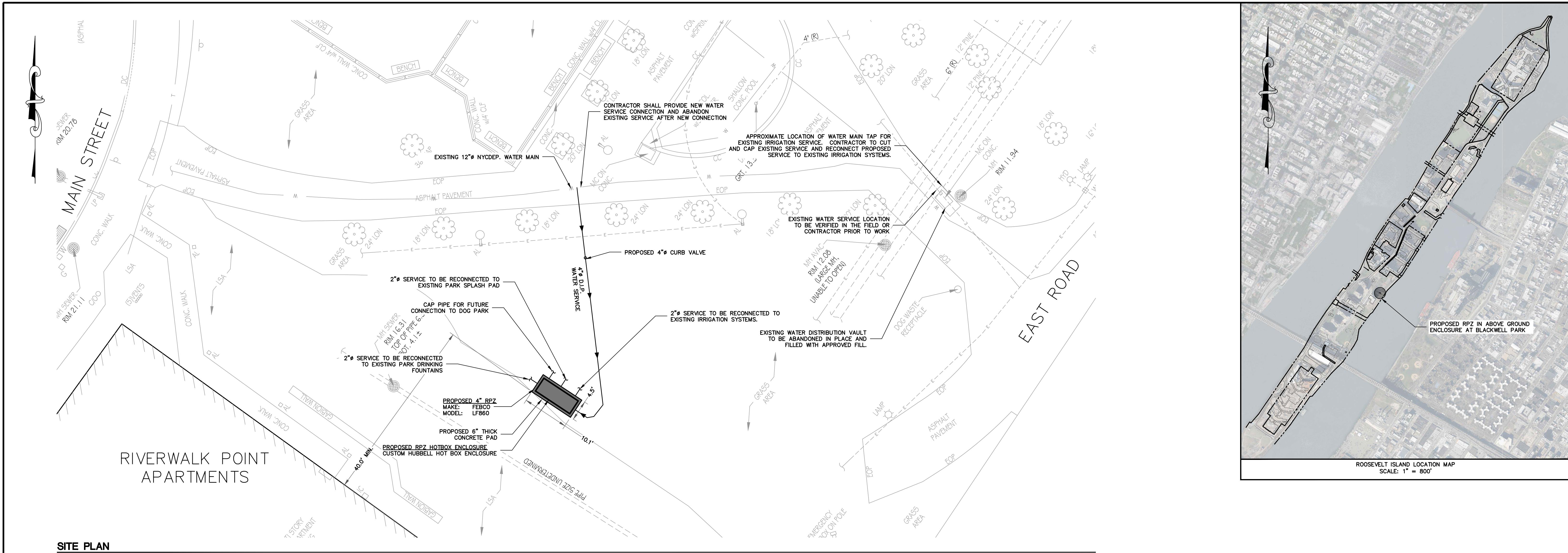
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**ROOSEVELT ISLAND BACKFLOW PREVENTION
DEVICE UPGRADES**

PROJECT LOCATION:
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NEW YORK, NY 10044**

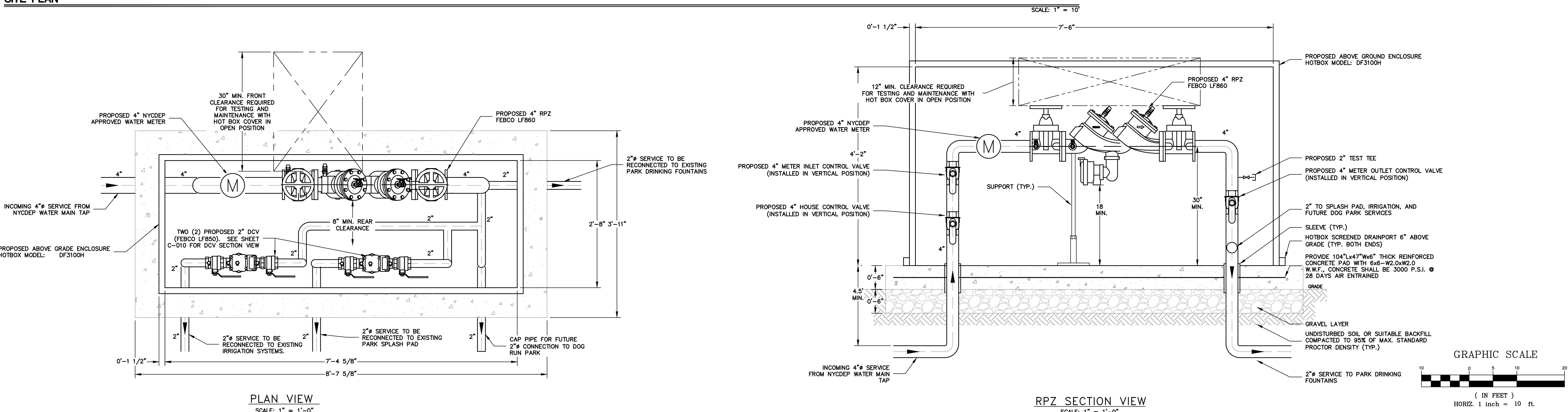
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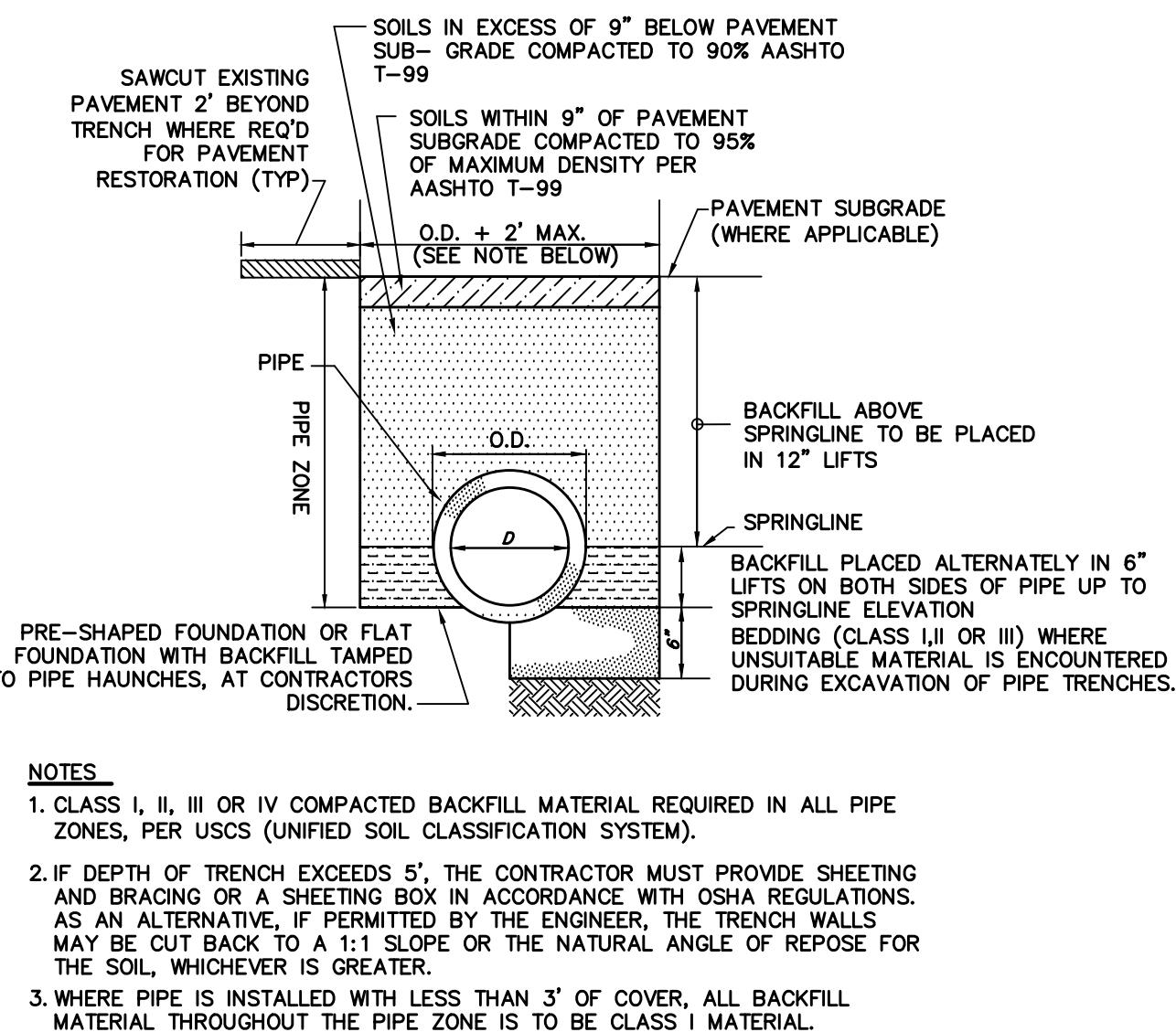
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DESIGNED BY: OC	JOB NO. CE2879	DRAWING 1 of 10
DRAWN BY: EB	DATE: FEB. 2019	
CHECKED BY: AN	SCALE: AS SHOWN	
NYC DOB NO.		



SITE PLAN

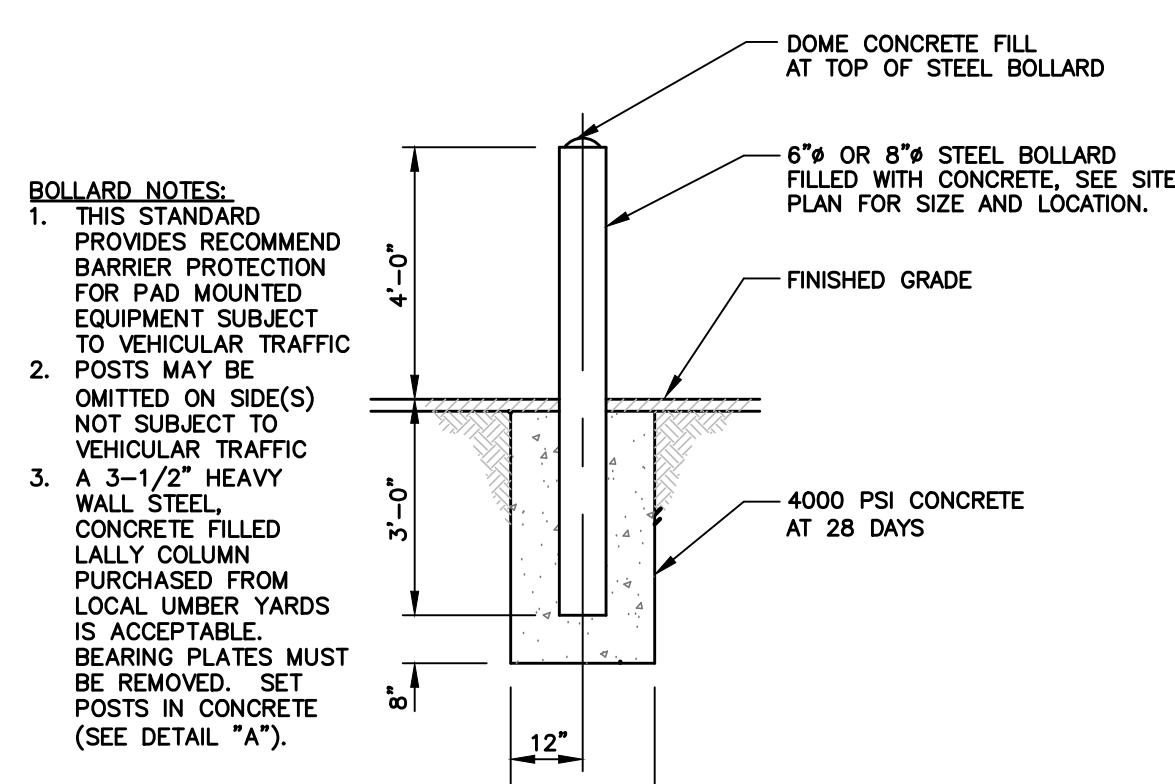


GRADING SCALE



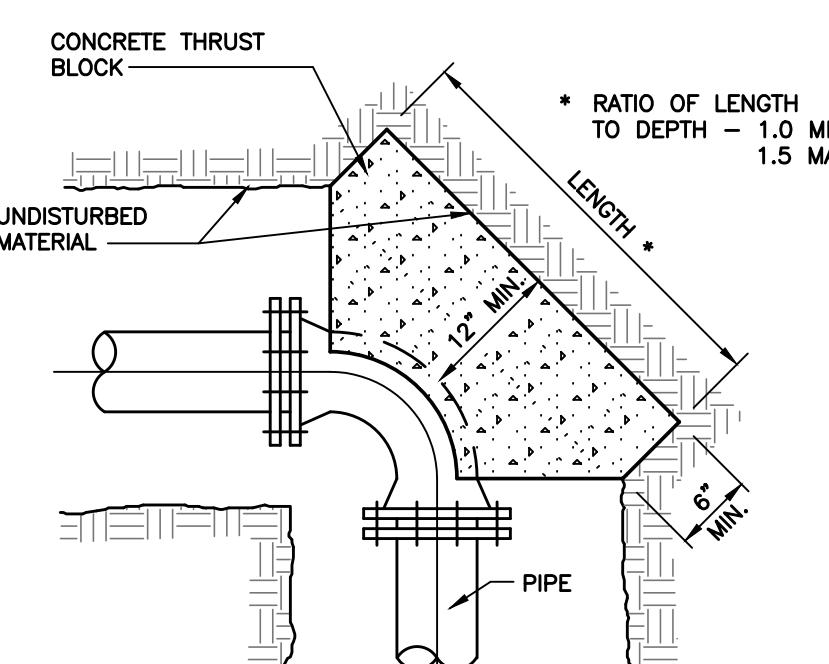
PIPE TRENCH

SCALE: NTS



BOLLARD DETAIL

SCALE: NTS



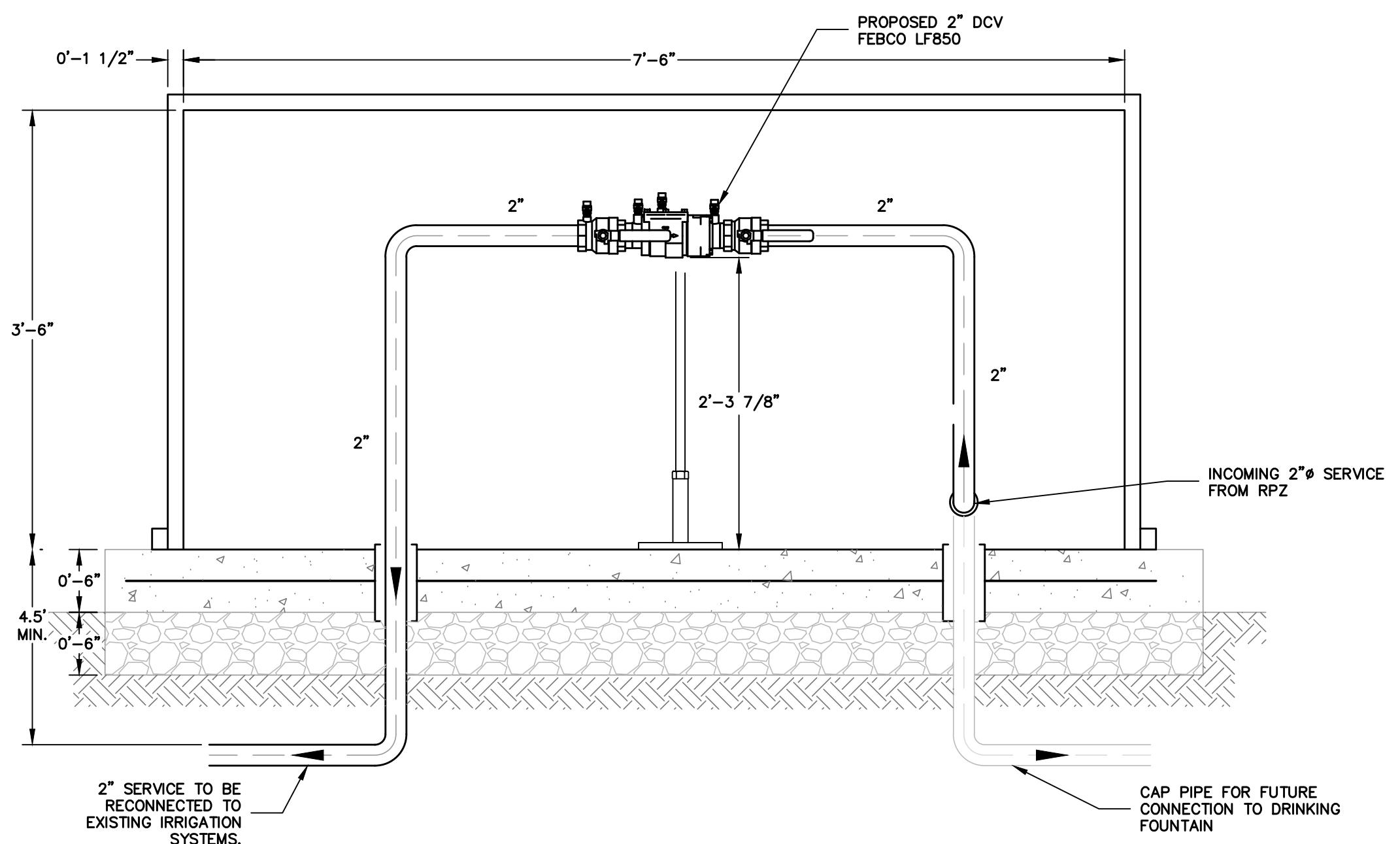
THRUST BLOCK BEARING AREA REQUIRED IN SQUARE FEET

PIPE SIZE	FITTING TYPE				
	11-1/4"	22-1/2"	45°	90°	TEE
4"-6"	1.0	1.0	2.0	3.0	2.0
8"	2.0	2.0	3.0	5.0	4.0
10"	2.5	2.5	4.5	8.5	6.0
12"	2.5	3.5	6.5	12.0	8.5
14"	3.0	4.0	7.5	13.5	10.0
16"	3.0	4.5	8.5	15.0	11.0

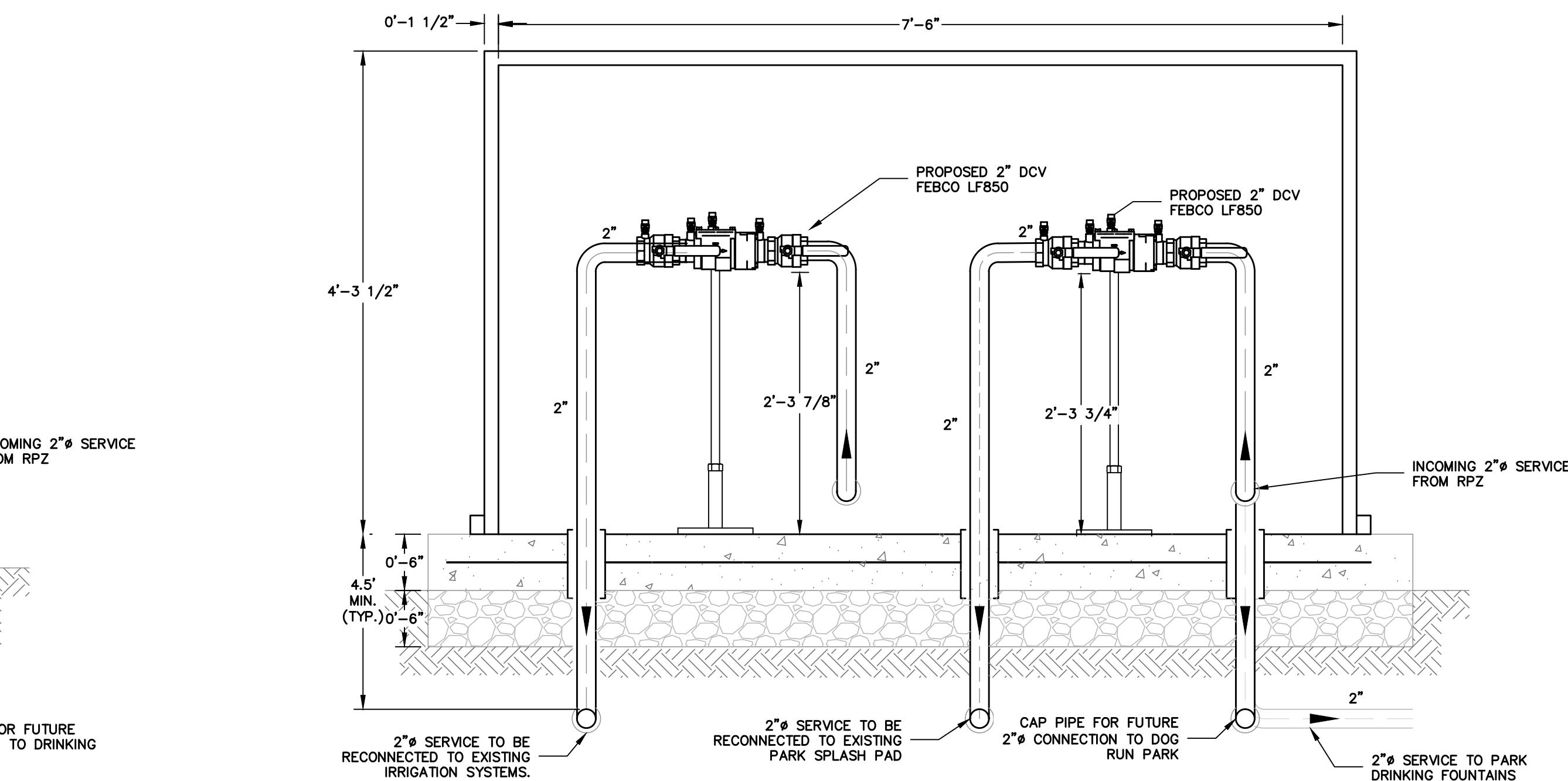
NOTE:
THRUST BLOCKS SHALL BE PROVIDED PER SPECIFICATIONS AND SHALL OCCUR AT ALL CHANGES IN DIRECTION, HORIZONTAL OR VERTICAL, PLUGS, WEIRAPS, VALVES, AND ALL OTHER POINTS REQUIRING RESISTANCE TO PRESSURE.

CONCRETE THRUST BLOCKS

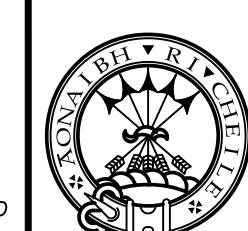
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LIGHHOUSE PARK DCV SECTION VIEW



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CIVIL

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