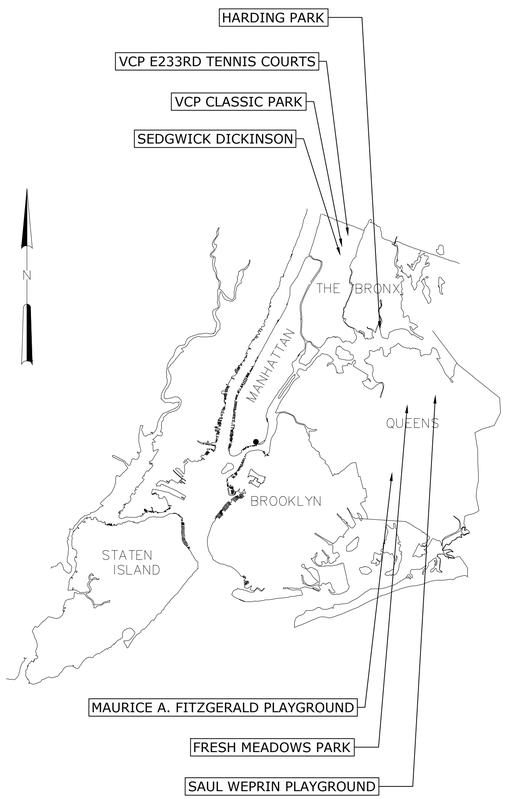
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS

NYC Parks

ON-SITE GREEN INFRASTRUCTURE
DEP CAPITAL CONTRACT NO. GI-CONS-7
VOLUME 1 - BID SETS
NOVEMBER 2026



PARK NAME	PARK ID	RESPONSIBLE DESIGN FIRM	ADDRESS
FRESH MEADOWS PARK	Q223	HAZEN	1-90 HORACE HARDING EXPY, FRESH MEADOWS, NY 11365
MAURICE A. FITZGERALD PLAYGROUND	Q337	HAZEN	93-41 106TH ST., OZONE PARK, NY 11416
SAUL WEPRIN PLAYGROUND	Q293	HAZEN	201-202 ST. BETWEEN 53RD & 56TH AVE., BAYSIDE, NY 11364
SEDGWICK DICKINSON	N/A	HAZEN	3991 SEDGWICK AVE., BRONX, NY 10463
VCP CLASSIC PLAYGROUND	X092	HAZEN	90 VAN CORTLANDT PARK S, BRONX, NY, 10463
VCP E233RD TENNIS COURTS	X092	HAZEN	4200 JEROME AVE., BRONX, NY, 10470
HARDING PARK	X262	ARCADIS	GILDERSLEEVE AVE. & LELAND AVE., BRONX, NY, 10473

John McLaughlin
Digitally signed by John McLaughlin
Date: 2026.11.02 16:40:26 -05'00'

JOHN MCLAUGHLIN
MANAGING DIRECTOR
OFFICE OF ECOSYSTEM SERVICES, GREEN INFRASTRUCTURE AND RESEARCH
BUREAU OF ENVIRONMENTAL PLANNING, NYCDEP

Lisa F. Garcia
Digitally signed by Lisa F. Garcia
Date: 2026.10.30 14:57:09 -04'00'

LISA F. GARCIA
COMMISSIONER
NYCDEP

20260602 5:10P O:\9336-NYC\Contract Management\1000 - Construction\1096->7 Documents\0-SHEETS\0-1 - BID PACKAGE COVER.dwg By:THOMAS Last Saved By: THomas XREFs=
PLOT DATE: 6/2/2026 5:10 PM BY: THOMAS

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NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL

STATE OF NEW YORK · DEEP MEHROTRA · 109926 · LICENSED PROFESSIONAL ENGINEER

Hazen

BLOCK

LOT

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
TABLE OF CONTENTS

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	O-2	GI-CONS-7
	DATE NOV 2026		SHEET No. 2 OF 134 SHEETS

PARK NAME	CONSULTANT	NYC PARKS SITE (7 AM - 5 PM)	JOINTLY OPERATED PLAYGROUND (9AM - 6PM)	RESTRICTED MONTHS FOR CONSTRUCTION WITHIN JOINTLY OPERATED PLAYGROUNDS	
				APRIL-JUNE (PUBLIC ELEMENTARY SCHOOLS)	JANUARY, MARCH - JUNE, AUGUST (PUBLIC HIGH SCHOOL)
FRESH MEADOWS PARK	HAZEN	X			
MAURICE A. FITZGERALD PLAYGROUND	HAZEN	X			
SAUL WEPRIN PLAYGROUND	HAZEN		X	X	
SEDGWICK DICKINSON	HAZEN				
VCP CLASSIC PLAYGROUND	HAZEN	X			
VCP E233RD TENNIS COURTS	HAZEN	X			
HARDING PARK	ARCADIS	X			

NYC Environmental Protection

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ENVIRONMENTAL PROTECTION
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NYC Parks

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PARKS & RECREATION
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Hazen

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PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
WORK RESTRICTIONS TABLE

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	O-3	GI-CONS-7
	DATE NOV 2026		SHEET No. 3 OF 134 SHEETS

THE FOLLOWING SHEET SETS WERE DEVELOPED BY HAZEN.
ANY DETAILS WITHIN THIS SHEET SET ARE ONLY APPLICABLE TO THE SITES DESIGNED BY HAZEN, AS LISTED BELOW:

- FRESH MEADOWS PARK
- MAURICE A. FITZGERALD PLAYGROUND
- SAUL WEPRIN PLAYGROUND
- SEDGWICK DICKINSON
- VAN CORTLANDT PARK (VCP) CLASSIC PLAYGROUND
- VAN CORTLANDT PARK (VCP) E233RD TENNIS COURTS

NYC Environmental Protection
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks
CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

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Hazen

BLOCK

LOT

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
DIVIDER SHEET - HAZEN

DESIGNED BY	DRAWN BY		CHECKED BY
J. BRENNAN	D. THOMAS		A. EASON
B-SCAN	SCALE: N/A	DRAWING NO.: O-4	CONTRACT NO.: GI-CONS-7
	DATE: NOV 2026		SHEET No. 4 OF 134 SHEETS

GENERAL NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK AND VERIFY ALL SITE CONDITIONS, BOTH ABOVE AND BELOW THE SURFACE, PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING, PRIOR TO THE COMMENCEMENT OF WORK.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS.
3. WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL SAFETY AND OCCUPATIONAL HEALTH LAWS AND REGULATIONS. WHERE THE REQUIREMENTS OF THE SPECIFICATIONS, APPLICABLE LAWS, CRITERIA, ORDINANCES, REGULATIONS, AND REFERENCED DOCUMENTS VARY, THE OWNER SHALL BE CONTACTED AND WILL PROVIDE AN INTERPRETATION FOR THE CONTRACTOR.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THEIR WORK AND NEWLY INSTALLED WORK, AND PROVIDE APPROPRIATE BARRIERS AND SAFETY GUARD RAILS, AS REQUIRED.
5. ALL STREETS, ROADWAYS, AND ACCESS AREAS SHALL REMAIN UNOBSTRUCTED DURING CONSTRUCTION. THE NEED TO TEMPORARILY BLOCK OR CLOSE OFF THESE AREAS SHALL BE COORDINATED WITH THE ENGINEER AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCDEP). ADDITIONAL COORDINATION AND PERMITTING WITH NYC DOT AND/OR NYPD MAY BE REQUIRED AND IS THE RESPONSIBILITY OF THE CONTRACTOR, PER GENERAL NOTE 9.
6. ALL AREAS OF THE SITE IMPACTED BY TEMPORARY FACILITIES SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER, BY THE CONTRACTOR, AS DETERMINED BY THE ENGINEER.
7. THE CONTRACTOR SHALL MAINTAIN, AT THE JOB SITE, ONE SET OF FULL-SIZE CONTRACT DRAWINGS MARKED TO SHOW ANY DEVIATIONS THAT HAVE BEEN MADE FROM THE CONTRACT DRAWINGS, INCLUDING BURIED OR CONCEALED CONSTRUCTION AND UTILITY FEATURES REVEALED DURING THE COURSE OF CONSTRUCTION. THESE DRAWINGS SHALL BE AVAILABLE FOR REVIEW BY THE ENGINEER AT ALL TIMES. UPON COMPLETION OF THE INSTALLATION OF NEW WORK THE CONTRACTOR SHALL TURN OVER TO OWNER AND ENGINEER ONE (1) SET OF REPRODUCIBLE AS-BUILT DRAWINGS AND ONE (1) SET OF PRINTS OF AS-BUILT DRAWINGS INCLUDING ALL APPROVED FIELD CHANGES AND DESIGN DEVIATIONS PRIOR TO REQUEST FOR FINAL PAYMENT.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE DEPARTMENT OF PARKS AND RECREATION (NYCDPR) DETAILS BEING USED FOR CONSTRUCTION ARE IN THE MOST RECENT VERSION ISSUED.
9. THE CONTRACTOR SHALL FILE PLANS WITH GOVERNING LOCAL AND STATE AUTHORITIES HAVING JURISDICTION AND SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR INSTALLATION OF THEIR WORK, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ANY SPECIAL INSPECTIONS REQUIRED, INCLUDING ANY ASSOCIATED COSTS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPROPRIATE AGENCIES PRIOR TO COMMENCING WORK.
10. THE CONTRACTOR SHALL INDEMNIFY NYCDEP, THEIR REPRESENTATIVES, AND THE ENGINEER FROM ANY CLAIMS OR SUITS RESULTING FROM NEGLIGENCE ON THE PART OF THE CONTRACTOR FOR FAILING TO EXECUTE THEIR WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
11. WORK SHALL BE PERFORMED BY LICENSED CONTRACTORS AND WORKERS EXPERIENCED IN THE TRADE HAVING JURISDICTION. WORK SHALL BE SUPERVISED AT ALL TIMES.
12. ANY DEVIATION OR CHANGE IN DESIGN SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER. WORK INSTALLED WITHOUT PRIOR APPROVAL OF THE ENGINEER OR NYCDEP OR FOUND TO BE DEFECTIVE OR OF POOR QUALITY SHALL BE REPLACED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
13. ALL CONSTRUCTION WORK SHALL BE CONFINED TO THE CONTRACT LIMIT LINE INDICATED ON THE DRAWINGS.
14. ALL WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS: 9:00 A.M. TO 6:00 P.M. MONDAY THROUGH FRIDAY EXCEPT LEGAL HOLIDAYS OR FOR EMERGENCY REPAIRS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
15. NO WORK SHALL OCCUR DURING STATE TESTING UNLESS AUTHORIZED IN BY A SCHOOL REPRESENTATIVE A MINIMUM OF TWO WEEKS IN ADVANCE.
16. WORK AREA SHALL BE LEFT BROOM CLEAN AT THE END OF EACH DAY. DISCARDED AND DEMOLISHED MATERIAL AND RUBBISH SHALL BE REMOVED FROM PREMISES DAILY AND DISPOSED IN A LEGAL AND APPROVED MANNER.
17. ALL WORK SHOWN ON ALL DRAWINGS IS NEW UNLESS OTHERWISE NOTED.
18. THE CONTRACTOR SHALL COORDINATE WITH NYCDEP THE SUPPLY OF TEMPORARY POWER, POTABLE WATER, AND LIGHTING, AS REQUIRED TO PERFORM THE WORK. OBTAINING AND PAYING FOR SUCH TEMPORARY UTILITIES ARE THE CONTRACTOR'S RESPONSIBILITY.
19. STAGING AREA TO BE DESIGNATED PRIOR TO MOBILIZATION AND TO BE APPROVED BY THE ENGINEER AND NYCDEP.
20. CONTRACTOR SHALL COORDINATE AND SCHEDULE CONSTRUCTION ACTIVITIES WITH SITE ACTIVITIES, AS TO NOT INTERFERE WITH NORMAL SITE OPERATION, AND AS REQUIRED TO NOT IMPEDE THE PROGRESS OF RELATED PROJECT WORK.
21. COORDINATION OF ALL WORK UNDER THIS CONTRACT SHALL BE MAINTAINED TO ENSURE THE QUALITY AND TIMELY COMPLETION OF THE WORK.
22. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHEETING AND BRACING IN ALL TRENCHES OR EXCAVATIONS FOR STRUCTURES, WHERE NECESSARY FOR THE PROPER PROTECTION OF PERSONS OR PROPERTY. WHERE THE DEPTH OF EXCAVATION EXCEEDS FIVE (5) FEET, SHEETING AND NECESSARY BRACING MUST BE INSTALLED FOR THE DEPTH EXCEEDING FIVE (5) FEET AND WILL BE PAID FOR UNDER TEMPORARY SHEETING. BENCHED EXCAVATION MAY BE USED TO REDUCE THE AMOUNT OF SHEETING REQUIRED. ALL SHORING WORK SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEW YORK STATE DEPARTMENT OF LABOR, INDUSTRIAL CODE RULE 23 AND TITLE 29 CODE OF FEDERAL REGULATIONS PART 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION (OSHA). THE TYPE OF SHEETING AND BRACING SHALL BE SATISFACTORY TO THE ENGINEER AND SUBJECT TO THEIR APPROVAL, BUT THE APPROVAL OF THE ENGINEER OF A METHOD TO BE USED DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROTECTION AND SAFETY. WHEN SHEETING IS USED IN TRENCHES OR EXCAVATIONS FOR STRUCTURES OF LESS THAN FIVE (5) FEET IN DEPTH, THE COST OF SUCH SHEETING AND BRACING, UNLESS ORDERED LEFT IN PLACE, SHALL BE INCLUDED IN THE PRICE BID FOR UNCLASSIFIED EXCAVATION, AND PAYMENT WILL BE MADE FOR SUCH EXCAVATION AS SHOWN ON THE DRAWINGS.
23. THE CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE WORK OR TO MAKE ITS PARTS FIT TOGETHER PROPERLY WITHOUT COMPROMISING THE QUALITY OF THE WORK.
24. ADDITIONAL NOTES THAT ARE APPLICABLE TO THIS PROJECT MAY BE FOUND THROUGHOUT THE CONTRACT DRAWINGS.
25. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EXISTING STORMWATER FLOW THROUGH THE SYSTEM THROUGHOUT DURATION OF THE WORK. THE CONTRACTOR SHALL NOT DIRECT FLOW DIRECTLY TO THE GREEN INFRASTRUCTURE PRACTICE PRIOR TO COMPLETION OF THE WORK.

REMOVAL NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THIS WORK. THE CONTRACTOR SHALL COORDINATE DEMOLITION WITH APPLICABLE AGENCIES, UTILITY COMPANIES, AND/OR SUB-CONTRACTORS.
2. IT IS MANDATORY, AS PER NYS INDUSTRIAL CODE RULE 53, FOR THE CONTRACTOR TO NOTIFY NEW YORK 811, 60 KNICKERBOCKER AVENUE, BOHEMIA NY 11716, TEL. 800.272.4480 PRIOR TO THE START OF EXCAVATION. THE ONE-CALL CENTER IS ALWAYS OPEN. THE ONE-CALL CENTER WILL THEN NOTIFY MEMBER FIRMS WITH OPERATIONS IN THE SITE AREA OF THE CONTRACTOR'S PENDING EXCAVATION OPERATIONS. THE CONTRACTOR WILL RECEIVE A NOTIFICATION TICKET FROM THE ONE-CALL CENTER WHICH SHOULD BE PRESENTED TO THE ENGINEER AS PROOF OF THE CALL. THERE IS NO CHARGE FOR THIS SERVICE. THIS PROCESS ENSURES THAT UTILITY SERVICE LINES ARE PROPERLY MARKED PRIOR TO EXCAVATION TO MINIMIZE FACILITY DAMAGE, ON THE JOB INJURIES, AND CONTRACTOR'S LIABILITY. IN ADDITION, ALL UNDERGROUND FACILITY OPERATORS IN THE AREA WHO ARE NOT ONE-CALL MEMBERS SHALL BE NOTIFIED NOT LESS THAN TWO (2) FULL BUSINESS DAYS AND NOT MORE THAN TEN (10) FULL BUSINESS DAYS BEFORE COMMENCING EXCAVATION.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY DAMAGE AND/OR RESTORE ANY INTERRUPTION TO ANY UTILITY SERVICE THAT MAY BE CAUSED BY THE CONTRACTOR'S CONSTRUCTION OR EQUIPMENT, AT THE CONTRACTOR'S EXPENSE, WITH NO ADDITIONAL EXPENSE TO THE CITY OF NEW YORK OR UTILITY COMPANY.
4. THE CONTRACTOR IS TO USE CARE DURING CONSTRUCTION TO AVOID DISTURBING OR DAMAGING ADJACENT ABOVE-GRADE OR SUBGRADE STRUCTURES, FACILITIES, CURBS, PAVEMENTS, AND PERIMETER FENCING. ANY DAMAGE RESULTING FROM THIS WORK WILL BE RESTORED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
5. WHERE NEW CONSTRUCTION ABUTS EXISTING PAVEMENTS, CURBS, OR WALLS, THE EXISTING MATERIALS SHALL BE CLEANLY SAWCUT TO PROVIDE A CLEAN, NEAT MATCH AND A SMOOTH, FLUSH TRANSITION, AS DIRECTED BY THE ENGINEER. ALL SAWCUTTING SHALL BE DONE TO NEAT, STRAIGHT, AND ACCURATE LINES. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE OLD AND NEW CURBS MEET.
6. THE CONTRACTOR SHALL DISPOSE OF ALL ITEMS AND MATERIALS REMOVED AND NOT SALVAGED, INCLUDING ALL EXCAVATED MATERIAL, OFF-SITE AND IN A LEGAL MANNER. THE CONTRACTOR SHALL REMOVE, EXCAVATE, AND DISPOSE OF ALL MATERIALS ACCORDING TO CONTRACT SPECIFICATIONS.
7. ALL EXISTING PIPING TO BE MAINTAINED EXCEPT FOR WITHIN 3 FEET OF PROPOSED DRAINAGE STRUCTURES AND AS SHOWN. IF EXISTING PIPING BEYOND 3 FEET FROM THE PROPOSED STRUCTURES IS OBSERVED TO BE DAMAGED AT NO FAULT OF THE CONTRACTOR, THE ENGINEER SHALL PROVIDE DIRECTION AS TO EXTENTS OF REPLACEMENT.
8. THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT THE ROOT SYSTEMS OF EXISTING TREES. BULK MATERIAL, EQUIPMENT, OR VEHICLES SHALL NOT BE STOCKPILED OR PARKED WITHIN THE TREE PROTECTION ZONE.

LAYOUT & MATERIAL NOTES

1. NO CHANGES SHALL BE MADE TO THE DESIGN OR LAYOUT WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. LAYOUT THE WORK AS DIMENSIONED ON THE PLANS. WRITTEN DIMENSIONS SHALL GOVERN. DO NOT SCALE DISTANCES.
2. CONTRACTOR SHALL STAKE LOCATION OF ALL GREEN INFRASTRUCTURE PRACTICES FOR APPROVAL BY THE ENGINEER PRIOR TO EXCAVATION WORK.
3. CONTRACTOR SHALL LAYOUT IN THE FIELD THE ALIGNMENT AT ALL PATHS, PAVEMENTS, CURBLINES FOR REVIEW BY THE ENGINEER PRIOR TO THE START OF WORK. ADJUSTMENTS MAY BE MADE ONLY AS DIRECTED BY THE ENGINEER. CONTRACTOR MAY NOT PROCEED WITH CONSTRUCTION OF IMPROVEMENTS UNTIL THEY HAVE RECEIVED THE FINAL APPROVAL OF THE LAYOUT FROM THE ENGINEER.
4. ALL NEW PAVEMENTS AND CURBS AND EXISTING PAVEMENTS AND CURBS TO REMAIN SHALL MEET IN SMOOTH FLUSH CONDITION UNLESS NOTED OTHERWISE.
5. NEW CURBS, WALLS, AND PAVEMENTS SHALL BE BUILT TO A SMOOTH EVEN FINISH WITH A CONSISTENT TOP AND PROFILE WITHOUT WAVES OR IRREGULARITIES. ANY WORK NOT MEETING THIS QUALITY STANDARD SHALL BE RECONSTRUCTED AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL EXERCISE CARE DURING EXCAVATION OPERATIONS TO AVOID DISTURBING ADJACENT FACILITIES, SUB GRADE STRUCTURES AND TREES. ALL DAMAGE RESULTING FROM THE CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REPAIRED AT NO EXPENSE TO THE CITY AND THE AGENCY. ALL REPAIR WORK SHALL BE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
7. IN AREAS WHERE NEW PAVEMENTS FALL WITHIN THE TREE PROTECTION ZONE OF EXISTING TREES, THE CONTRACTOR SHALL MINIMIZE EXCAVATIONS AT TREE ROOTS BY REDUCING THE AMOUNT OF FOUNDATION MATERIAL AS DIRECTED BY THE ENGINEER.
8. CONTRACTOR SHALL REFER TO NYCDEP'S NYC GREEN INFRASTRUCTURE ON-SITE DESIGN MANUAL (MAY 2019) FOR THE CONSTRUCTION OF ALL GREEN INFRASTRUCTURE PRACTICES.

TREE PROTECTION NOTES

1. NO LAND DISTURBANCE, DEMOLITION, OR CONSTRUCTION ACTIVITIES SHALL BEGIN UNTIL ALL TREE PROTECTION MEASURES HAVE BEEN INSTALLED AS SHOWN ON THE CONTRACT DRAWINGS.
2. CONSTRUCTION ACCESS ROUTE IS DIAGRAMMATIC. FINAL ROUTE SHALL BE ESTABLISHED ON SITE AND APPROVED BY THE RESIDENT ENGINEER, IN CONSULTATION WITH THE BOROUGH FORESTER OR THEIR REPRESENTATIVE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND PRESERVATION OF ALL EXISTING TREES NOT LISTED FOR REMOVAL THAT ARE LOCATED COMPLETELY OR PARTIALLY WITHIN THE CONTRACT LIMIT LINE.
4. THE CONTRACTOR SHALL NOTIFY THE BOROUGH FORESTER A MINIMUM OF 48 HOURS IN ADVANCE OF ANY WORK ON OR IMPACTING EXISTING TREES, INCLUDING BUT NOT LIMITED TO TREE PROTECTION, PRUNING, TREE REMOVAL, EXCAVATION WITHIN TREE PROTECTION ZONES, DECOMPACTION, TOPSOIL, AND PLANTING WORK.
5. THE TREE PROTECTION ZONE (TPZ) SHALL CONSIST OF THE CRITICAL ROOT ZONE AND/OR THE CANOPY DRIPLINE; WHICHEVER EXTENT IS GREATER.
6. THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT THE ROOT SYSTEMS OF EXISTING TREES. MATERIAL, EQUIPMENT, OR VEHICLES SHALL NOT BE STOCKPILED OR PARKED WITHIN THE TPZ OF ANY TREE COMPLETELY OR PARTIALLY WITHIN THE CONTRACT LIMIT LINE TO MINIMIZE SURFACE AND SUBSURFACE ROOT AND SOIL COMPACTION. IF STOCKPILING OCCURS WITHIN THE TPZ, A STOP WORK ORDER SHALL BE ISSUED IMMEDIATELY, AND WORK SHALL NOT RE-COMMENCE UNTIL ALL STOCKPILED MATERIAL IS REMOVED FROM THE TPZ AND MITIGATION MEASURES ARE PERFORMED TO THE SATISFACTION OF THE RESIDENT ENGINEER IN CONSULTATION WITH THE BOROUGH FORESTER OR THEIR REPRESENTATIVE.
7. IF DIRECTED, THE TPZ SHALL BE COVERED WITH WOOD CHIPS TO A DEPTH OF AT LEAST SIX (6) INCHES, WITH PLYWOOD OR GROUND PROTECTION MATS, OR A COMBINATION THEREOF. SUCH COVERING SHALL BE MAINTAINED FOR THE DURATION OF THE CONTRACT AND IS NOT TO BE REMOVED UNTIL DIRECTED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE. REMOVAL SHALL BE BY HAND OR AS SPECIFIED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE (ITEM "PROTECT EXIST. TREE ROOTS W/ WOOD CHIPS 6" DEPTH" AND "PROTECT EXIST. TREE ROOTS W/ PLYWOOD").
8. TEMPORARY WOODEN TREE GUARDS WITH WRAP FOR INDIVIDUAL TREES, TEMPORARY WOODEN TREE GUARD FOR GROVES, AND TEMPORARY SNOW FENCE BOUNDARY SHALL BE MAINTAINED FOR THE DURATION OF THE CONTRACT AND ARE NOT TO BE REMOVED UNTIL DIRECTED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE.
9. ALL TREES COMPLETELY OR PARTIALLY WITHIN THE CONTRACT LIMIT LINE ARE TO RECEIVE AT LEAST ONE (1) INCH (THE EQUIVALENT OF 750 GALLONS OF WATER PER 1,000 SQUARE FEET OF TREE PROTECTION ZONE) OF WATER PER WEEK BETWEEN THE MONTHS OF MARCH AND OCTOBER. IF RAINWATER IN ANY GIVEN WEEK IS BELOW THIS QUANTITY, THE CONTRACTOR MUST SUPPLEMENT THE AMOUNT RECEIVED BY A METHOD APPROVED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
10. ALL TREE PRUNING AND TREE REMOVAL IS TO BE PERFORMED IN ACCORDANCE WITH ANSI A300 STANDARDS BY AN ARBORIST HOLDING CERTIFICATION FROM THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) OR EQUIVALENT EDUCATION AND EXPERIENCE. ANSI PRUNING TYPES SPECIFIED ON TREE PROTECTION SCHEDULE AND TREE DIAMETERS AT BREAST HEIGHT ARE TO BE CONFIRMED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE BEFORE PRUNING WORK IS PERFORMED.
11. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN REMOVING CONCRETE OR ASPHALT WITHIN THE DRIPLINE OF EXISTING TREES - LIFTING RATHER THAN DRAGGING PIECES OF PAVING. TOOLS FOR THIS ACTIVITY SHALL BE APPROVED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE PRIOR TO THE START OF EXCAVATION.
12. ALL EXCAVATION AND PLANT INSTALLATION WITHIN THE TPZ SHALL BE PERFORMED BY HAND OR PNEUMATICALLY, WITH MINIMAL SOIL DISTURBANCE, AND UNDER THE SUPERVISION OF THE BOROUGH FORESTER OR THEIR REPRESENTATIVE. PLANTS SHALL NOT BE PLACED WITHIN THREE (3) FEET OF THE TREE TRUNK UNLESS APPROVED.
13. NO ROOTS SHALL BE CUT WITHOUT THE WRITTEN AUTHORIZATION OF THE BOROUGH FORESTER OR THEIR REPRESENTATIVE.
14. EXCAVATED AREAS WITHIN THE TPZ SHALL BE BACKFILLED IMMEDIATELY OR ROOTS SHALL BE KEPT CONSTANTLY MOIST WITH BURLAP COVERED WITH WHITE PLASTIC AND CHECKED A MINIMUM OF TWO (2) TIMES A DAY, ONCE IN THE MORNING AND ONCE IN THE AFTERNOON, FOR A MAXIMUM OF FORTY-EIGHT (48) HOURS, UNTIL BACKFILL IS COMPLETE. IF DIRECTED, SOAKER HOSES SHALL BE INSTALLED TO FACILITATE PROPERLY MOIST CONDITIONS. NO POOLING OF OR CONTINUOUS RUNNING WATER SHALL OCCUR WITHIN THE TPZ OTHER THAN THAT DURING THE IRRIGATION PROCESS. IF ROOTS ARE TO BE EXPOSED FOR A PERIOD GREATER THAN 48-HOURS, THE EXPOSED AREA SHALL BE COVERED WITH AT LEAST 6-INCHES OF MULCH AND MAINTAINED DURING THE COURSE OF CONSTRUCTION UNTIL THE AREA CAN BE PROPERLY BACKFILLED.
15. WHEN A TREE PROTECTION DEFICIENCY, AS DETERMINED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE, IS IDENTIFIED, IT MUST BE REMEDIED WITHIN 24-HOURS OF NOTIFICATION BY THE AGENCY. FAILURE TO CORRECT THE DEFICIENCY WITHIN THIS TIMEFRAME WILL RESULT IN A STOP WORK ORDER, LIQUIDATED DAMAGES, OR BOTH.
16. ANY DAMAGE TO EXISTING TREES DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL MITIGATE SUCH DAMAGE AS DIRECTED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
17. THE CONTRACTOR SHALL BE ASSESSED RESTITUTION, AS SOLELY DETERMINED BY THE DEPARTMENT OF PARKS AND RECREATION (NYCDPR), FOR TREES THAT ARE INJURED, IRREPARABLY DAMAGED, DESTROYED, OR REMOVED WITHOUT AUTHORIZATION.

DRAINAGE NOTES

1. ALL PROPOSED DRAINAGE WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS OF THE NYCDEP AND THE LATEST STANDARDS OF THE NYCDPR. DISCREPANCIES BETWEEN THE STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
2. ALL EXISTING SEWER MANHOLES TO BE RETAINED WITHIN THE CONTRACT LIMIT LINE SHALL BE ADJUSTED AS NECESSARY, SO THAT THEY WILL BE FLUSH WITH THE FINISHED GRADES AFTER COMPLETION OF THE WORK. ANY OF THESE MANHOLES WHICH HAVE DAMAGED, WORN OR NON-STANDARD FRAMES AND COVERS SHALL BE PROVIDED WITH NEW 27" DIA. CASTINGS IN ACCORDANCE WITH THE LATEST STANDARDS OF NYC PARKS INCLUDING ANY NECESSARY MODIFICATIONS OF THE MANHOLE MASONRY. ANY DAMAGE TO THE MANHOLES CAUSED BY THIS WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AND AT NO COST TO THE CITY.
3. CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING SEWERS DURING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER, AT NO EXTRA COST TO THE CITY.
4. WHERE THE HEIGHT OF AN EXISTING MANHOLE PERMITS MORE THAN ONE BASIN CONNECTION TO BE MADE ON THE SAME WALL, SPECIAL PRECAUTION SHALL BE TAKEN TO PROTECT THE STRUCTURAL INTEGRITY OF THE MANHOLE. THE MINIMUM CLEARANCE BETWEEN THE OUTSIDE WALLS OF ANY TWO BASIN CONNECTIONS OR BETWEEN A BASIN CONNECTION AND A SEWER, VERTICALLY OR HORIZONTALLY, SHALL BE 12 INCHES.
5. THE COST OF RAISING OR LOWERING CITY-OWNED MANHOLES, BASINS AND INLET HEADS TO PROPOSED GRADES WILL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL THE SCHEDULED ITEMS WHEN THE VERTICAL UPWARD MOVEMENT OF ALL HEADS IS TWENTY-FOUR (24) INCHES OR LESS, WHEN THE VERTICAL DOWNWARD MOVEMENT OF MANHOLE HEADS IS SIX (6) INCHES OR LESS AND WHEN THE VERTICAL DOWNWARD MOVEMENT OF BASIN OR INLET HEADS IS THREE (3) INCHES OR LESS, UNLESS OTHERWISE PROVIDED OR DIRECTED, AND WHERE THE ADJUSTMENT IS WITHIN THE BRICK WORK LIMIT. WHEN THE EXISTING STRUCTURE CONSISTS OF A BRICK CHIMNEY OR A CONCRETE ROOF SLAB OR BRICK ON CONCRETE WALLS, THE MAXIMUM ALLOWABLE HEIGHT OF BRICK AFTER ADJUSTMENT SHALL BE TWENTY-FOUR (24) INCHES. ALL OTHER ADJUSTMENTS WILL BE PAID FOR UNDER THE APPROPRIATE MANHOLE, BASIN OR INLET MODIFICATION ITEMS.
6. ALL ABANDONED BASINS, INLETS AND DRAINAGE STRUCTURES AS SHOWN ON THE CONTRACT PLANS ARE TO BE BULK-HEADED AND CUT DOWN TO TWO (2) FEET BELOW THE SUBGRADE AND FILLED WITH COMPACTED CLEAN SAND. BASIN CONNECTIONS NOT REQUIRED SHALL BE PLUGGED AT BOTH ENDS. COST FOR THIS WORK SHALL BE DEEMED INCLUDED IN PRICES BID FOR ALL SCHEDULED ITEMS.
7. CATCH BASINS SHALL NOT, UNDER ANY CIRCUMSTANCES, BE CONNECTED TO SANITARY SEWERS.
8. ALL NEW CATCH BASIN CONNECTIONS SHALL BE CONNECTED TO EXISTING SEWERS AT MANHOLES, WITH DUCTILE IRON PIPE, CLASS 56, WITH INTERNALLY LOCKED "PUSH-ON" JOINTS LAID ON 6" OF BROKEN STONE FOR THE ENTIRE WIDTH OF THE TRENCH AND FOR ONE-HALF THE PIPE DIAMETER. THE BROKEN STONE SHALL BE HARD UNWEATHERED STONE UNIFORMLY GRADED FROM 1/4" TO 3/4"IN DIAMETER. IT SHALL CONFORM TO COMMERCIAL 1/4" TO 3/4" STONE. ALL NEW CATCH BASINS SHALL HAVE A HOOD ON THE OUTLET PIPE.
9. SLOPE ON ALL NEW CATCH BASIN CONNECTIONS SHALL BE A MINIMUM OF 1/2%.
10. CATCH BASINS IN THE PROJECT AREA SHALL BE MAINTAINED OPERABLE AT ALL TIMES. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID FILLING THE CATCH BASINS WITH DEBRIS WITHIN THE CONTRACT LIMIT LINE DURING THE CONTRACT OPERATIONS. IF, AS A RESULT OF CONSTRUCTION, A FLOODING CONDITION OCCURS, OR IN THE EVENT THE CONTRACTOR'S OPERATIONS DAMAGE OR BLOCK THE DRAINAGE SYSTEM, THE CONTRACTOR SHALL AT THEIR OWN EXPENSE IMMEDIATELY REPAIR OR RESTORE THE DRAINAGE SYSTEM AS DIRECTED BY THE ENGINEER AT NO EXTRA COST TO THE CITY.
11. CONTRACTOR SHALL PROVIDE TEMPORARY MEANS (PIPES, PUMPS, ETC.) TO DRAIN ANY STORMWATER WHICH MAY DEVELOP WITHIN THE CONTRACT LIMIT LINE FOR THE DURATION OF CONSTRUCTION. CONTRACTOR SHALL SUBMIT A DRAINAGE SCHEME WHICH MUST BE APPROVED BY THE ENGINEER PRIOR TO THE START OF EACH CONSTRUCTION STAGE. COST OF THIS WORK WILL BE DEEMED TO HAVE BEEN INCLUDED IN THE PRICE BID FOR ALL SCHEDULED ITEMS.
12. ALL EXISTING SEWERS AND SEWER HOUSE CONNECTIONS SHALL BE CONTINUOUSLY MAINTAINED DURING CONSTRUCTION BY THE CONTRACTOR. IF ANY SEWER OR SEWER HOUSE CONNECTION IS TO BE DISCONNECTED FOR CONSTRUCTION PURPOSES, FLOW SHALL BE MAINTAINED BY FLUMING OR OTHER SUITABLE MEANS AS DIRECTED BY THE ENGINEER AND IN SUCH A MANNER THAT NO BACK-UPS OCCUR. EXISTING SEWERS, HOUSE CONNECTIONS OR OTHER SEWER APPURTENANCES WHICH ARE TO REMAIN, AND WHICH MIGHT BE DISTURBED FOR CONSTRUCTION PURPOSES, SHALL BE RESTORED TO THEIR PRESENT CONDITION AFTER COMPLETION OF THE WORK, AND ANY DAMAGE DONE AS A RESULT OF THE WORK SHALL BE REPAIRED AT NO EXTRA COST TO THE CITY.

EROSION AND SEDIMENT CONTROL NOTES

1. NO LAND DISTURBANCE, DEMOLITION OR CONSTRUCTION ACTIVITIES SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING, BUT NOT LIMITED TO, SILT FENCING, INLET PROTECTION, AND TREE PROTECTION HAVE BEEN INSTALLED AS SHOWN ON THE CONTRACT DRAWINGS. IF CLEARING IS REQUIRED FOR INSTALLATION OF A PARTICULAR MEASURE, ALL MEASURES NOT REQUIRING CLEARING SHALL BE INSTALLED FIRST. CLEARING OF THE NECESSARY LAND FOR INSTALLATION OF THE PARTICULAR MEASURE MAY THEN PROCEED.
2. DUE TO THE NATURE OF THE WORK REQUIRED BY THIS CONTRACT, IT IS ANTICIPATED THE LOCATION AND NATURE OF EROSION AND SEDIMENT CONTROL MEASURES WILL BE ADJUSTED AS CONSTRUCTION PROGRESSES TO REFLECT THE CURRENT PHASE OF WORK. THE CONSTRUCTION SCHEDULE ADOPTED BY THE CONTRACTOR WILL IMPACT THE PLACEMENT AND NEED FOR SPECIFIC DEVICES REQUIRED FOR THE CONTROL OF EROSION. THE LOCATION AND EXTENT OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REVISED AT EACH PHASE OF CONSTRUCTION RESULTING IN A CHANGE OF EITHER THE QUANTITY OR DIRECTION OF SURFACE RUNOFF FROM THE CONSTRUCTION AREAS.
3. INLET PROTECTION IS REQUIRED FOR ALL CATCH BASINS AND MANHOLES WITH OPEN GRATES WITHIN THE CONTRACT LIMIT LINE.
4. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM THE ENGINEER AND REGULATORY AGENCIES FOR DEVIATIONS FROM THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
5. CLEARING SHALL BE LIMITED AS MUCH AS POSSIBLE TO AREAS REQUIRED FOR CURRENT CONSTRUCTION ACTIVITIES. MASS CLEARING AND GRADING SHALL BE AVOIDED.
6. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE ENGINEER WITHIN 24 HOURS FOLLOWING EVERY RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY SEVEN CALENDAR DAYS.
7. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REPAIRED OR REPLACED IMMEDIATELY AS REQUIRED TO MAINTAIN PERFORMANCE OF MEASURE. MEASURES SHALL BE CLEANED WHEN SEDIMENT VOLUME REACHES ½ OF TOTAL VOLUME OF MEASURE. REMOVED SEDIMENT SHALL BE DISPOSED OF IN SUCH A MANNER AND LOCATION AS TO INSURE FURTHER SEDIMENT TRANSPORT DOES NOT OCCUR.
8. CONTRACTOR SHALL INITIATE STABILIZATION MEASURES AS SOON AS PRACTICABLE ON STOCKPILES AND IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. THIS REQUIREMENT DOES NOT APPLY IN THE FOLLOWING INSTANCES:
   a. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE;
   b. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN FOURTEEN (14) DAYS, TEMPORARY STABILIZATION MEASURES NEED NOT BE INITIATED ON THAT PORTION OF THE SITE.
9. ALL DISTURBED AREAS SHALL DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBANCE ACTIVITIES AND UNTIL FINAL STABILIZATION IS ACHIEVED. SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORING, OR OTHER ACTIVITIES SHALL BE PUMPED INTO A SEDIMENT TRAPPING DEVICE PRIOR TO BEING DISCHARGED INTO A STREAM, POND, SWALE, OR CATCH BASIN.
10. SOIL STOCKPILE AND LAYDOWN AREAS SHALL HAVE PERIMETER SEDIMENT CONTROL MEASURES AND TEMPORARY OR PERMANENT STABILIZATION MEASURES INSTALLED AS SOON AS POSSIBLE AND AT COMPLETION OF STOCKPILING AND LAYDOWN ACTIVITIES. STOCKPILE SIDE SLOPES SHALL NOT EXCEED 3H ; 1V UNLESS APPROVED BY ENGINEER. TOP OF STOCKPILE SHALL BE GRADED WITH A MINIMUM 5% SLOPE TO INSURE PROPER DRAINAGE.
11. ALL DISTURBED AREAS, EXCEPT FOR CONCRETE AND PAVED AREAS, SHALL BE FERTILIZED, SEEDED AND MULCHED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE SEEDING SCHEDULE, AND RE-SEEDED AS NECESSARY, TO ESTABLISH AND MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
12. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED OFFSITE ROADWAYS. IF MATERIAL IS TRACKED ONTO OFFSITE ROADWAYS, IT SHALL BE REMOVED IMMEDIATELY. DO NOT UTILIZE A WATER HOSE TO CLEAN ROADS UNLESS THE RUNOFF IS DIRECTED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT CONTROL DEVICE. PROPER PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT MATERIALS DEPOSITED ONTO OFFSITE ROADWAYS ARE REMOVED SO THAT THEY DO NOT ENTER YARD INLETS, CATCH BASINS, SEWERS, WETLANDS, SURFACE WATER BODIES, OR ROADSIDE SWALES.
13. WHERE CONCRETE EQUIPMENT WASHING IS REQUIRED, THIS MUST BE DONE IN AN APPROVED “CONCRETE CONTAINMENT AREA”. CONTRACTOR SHALL NOT DISCHARGE ANY CONCRETE WASHOUT WATER INTO SEWERS, SURFACE WATER BODIES OR ONTO THE GROUND. ALL WASHOUT WATER MUST BE REMOVED FROM THE SITE(S) DAILY.
14. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST NEW YORK STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
15. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE, PERMANENT VEGETATION IS ESTABLISHED ON ALL DISTURBED AREAS, AND THE ENGINEER HAS GIVEN PERMISSION FOR REMOVAL.

NO.	DATE	ISSUED FOR	BY

NYC Environmental Protection
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks
CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL: STATE OF NEW YORK · SANDEEP MEHROTRA · 073828-1 · LICENSED PROFESSIONAL ENGINEER

Hazen

BLOCK

LOT

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
GENERAL NOTES

DESIGNED BY	DRAWN BY		CHECKED BY
J. BRENNAN	D. THOMAS		A. EASON
B-SCAN	SCALE N/A	DRAWING NO. G002	CONTRACT NO. GI-CONS-7
	DATE NOV 2026		SHEET No. 5 OF 134 SHEETS

ABBREVIATIONS

AS PER RECORD	(A)
ASPHALT	ASPH.
BOTTOM OF CURB	B.C.
BOTTOM OF WALL	B.W.
CAST IRON	C.I.
CATCH BASIN	C.B.
CHAIN LINK FENCE	C.L.F
COMBINED	COMB.
CONCRETE	CONC.
CONCRETE CURB	C.C.
CONCRETE SIDEWALK	C.S.W.
CONSTRUCTION LIMIT LINE	C.L.L.
COPPER TUBING	C.T.
CRITICAL ROOT ZONE	C.R.Z.
DROP CURB	D.C.
DEPARTMENT OF ENVIRONMENTAL PROTECTION	DEP
DEPARTMENT OF PARKS AND RECREATION	DPR
DIAMETER	DIA.
DUCTILE IRON PIPE	D.I.P.
ELEVATION	ELEV.
EXISTING	EXIST.
EXTRA STRENGTH STEEL PIPE	E.S.S.P.
EXTRA STRENGTH VITRIFIED PIPE	E.S.V.P.
FROM RECORD PLAN	F.R.P.
GRANITE CURB	GRAN C.
HIGH DENSITY POLYETHYLENE	H.D.P.E.
INNER DIAMETER	I.D.
INVERT	INV.
LINED CAST IRON PIPE	L.C.P.
METAL FENCE	M.F.
OUTER DIAMETER	O.D.
ON CENTER	O.C.
MANHOLE	M.H.
NOT TO SCALE	N.T.S.
PAVERS	PAV.
PERFORATED POLYETHYLENE CORRUGATED PIPE	P.P.C.P.
PIPE RAIL FENCE	P.R.F
POLYETHYLENE CORRUGATED PIPE	P.C.P.
POLYVINYL CHLORIDE PIPE	P.V.C.
REINFORCED CONCRETE PIPE	R.C.P.
SANITARY	SAN.
SEWER	SWR.
STEEL FACED CURB	S.F.C.
STEEL WICKET FENCE	S.W.F.
STORM	STM.
TOP OF CURB	T.C.
TOP OF HOOD	T.O.H.
TOP OF WALL	T.W.
TREE PROTECTION ZONE	T.P.Z.
UNKNOWN	UNK.
VITRIFIED TILE PIPE	V.T.P.
WROUGHT IRON FENCE	W.I.F.

	EXISTING	PROPOSED
ELECTRIC MANHOLE	E	E
TELEPHONE MANHOLE	T	T
GAS MANHOLE	G	G
WATER MANHOLE	W	W
FIRE DEPT. MANHOLE	F	F
STORM SEWER MANHOLE	STM	STM
COMBINED SEWER MANHOLE	COMB	COMB
SANITARY SEWER MANHOLE	SAN	SAN
UNIDENTIFIED MANHOLE (NO RECORD AVAILABLE)	MH	MH
RECORD MANHOLE	S	S
HARDWARE RIM EL. & INV. EL. (SEWER, ETC.)	61.23 INV.47.89	61.23 INV.47.89
CATCH BASIN		
INLET		
YARD DRAIN		
LOW PRESSURE HYDRANT		
HIGH PRESSURE HYDRANT		
WOOD UTILITY POLE		
WOOD UTILITY POLE WITH STREET LIGHT		
STREET LIGHT (METAL POLE)		
GAS VALVE	G	G
WATER VALVE	W	W
TREE (SIZE AS LABELED)	12"	7"
SHRUB		
SIGN (GROUND MOUNTED)		
DRINKING FOUNTAIN		
FLAGPOLE		
MAPPED PROPERTY LINE	PL	
WATER SERVICE (WITH SIZE - LESS THAN 5")	1" WATER	1" WATER
8" WATER MAIN	8" WATER	8" WATER
12" WATER MAIN	12" WATER	12" WATER
48" WATER MAIN	48" WATER	48" WATER
72" WATER MAIN	72" WATER	72" WATER
STORM SEWER (WITH SIZE - LESS THAN 24")	15" STM. SEWER	15" STM. SEWER
STORM SEWER (WITH SIZE - 24" OR GREATER)	24" STM. SEWER	24" STM. SEWER
SANITARY SEWER (WITH SIZE - LESS THAN 24")	15" SAN. SEWER	15" SAN. SEWER
SANITARY SEWER (WITH SIZE - 24" OR GREATER)	24" SAN. SEWER	24" SAN. SEWER
COMBINED SEWER (WITH SIZE - LESS THAN 24")	15" COMB. SEWER	15" COMB. SEWER
COMBINED SEWER (WITH SIZE - 24" OR GREATER)	24" COMB. SEWER	24" COMB. SEWER
GAS LINE (WITH SIZE)	4" GAS	4" GAS
ELECTRIC	ELECTRIC	ELECTRIC
TELEPHONE	TELEPHONE	TELEPHONE
CABLE	CABLE	CABLE
FIRE ALARM	FIRE ALARM	FIRE ALARM
OVERHEAD (AERIAL) UTILITY LINE	A/E,T,F	A/E,T,F
CURB (CONCRETE UNLESS OTHERWISE INDICATED)		
CHAIN LINK FENCE (W/ HEIGHT)	6'	6'
IRON PICKET FENCE (W/ HEIGHT)	5'	5'
WIRE FENCE (W/ HEIGHT)	5'	
IRON ON CONCRETE COPING		
WOOD PICKET FENCE (W/ HEIGHT)	4'	4'
GUARD POST	GP	GP
BEAM TYPE MALL BARRIER		
PORTABLE PRECAST CONCRETE BARRIER		
CAST IN PLACE CONCRETE BARRIER		
RETAINING WALL (W/TYPE)	RW (STN.)	RW (STN.)
RAILROAD/TROLLEY TRACK		
LOT & BLOCK NUMBER	39 BLOCK 2109	
ANGLE	0.00	

LEGEND

	EXISTING	PROPOSED
TREE DRIPLINE		
TREE CRITICAL ROOT ZONE		
TREE PROTECTION ZONE		
MAJOR CONTOUR LINE	35	36
MINOR CONTOUR LINE	35	36
CONSTRUCTION ACCESS/ENTRANCE		
STAGING AREA		
STABILIZED CONSTRUCTION ENTRANCE		
TEMPORARY ASPHALT ENTRANCE		
FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT		
MILLING AND PAVING		
FULL EXCAVATION LIMIT		
SAWCUT LIMIT		
PIPE REMOVAL		
POINT OF BEGINNING		
CONTRACT LIMIT LINE		CLL
SILT FENCE		SF SF
TEMPORARY CONSTRUCTION FENCE		CF
STRAW BALE DIKE		
TREE TO BE PROTECTED		7"
TREE TO BE TRANSPLANTED		7"
TREE TO BE REMOVED		7"
BORING LOCATION		B
PERMEABILITY TEST LOCATION		PT
GREEN INFRASTRUCTURE PRACTICE		
ISOLATOR ROW WITH WOVEN GEOTEXTILE		
COLOR SEAL COAT		
CLEANOUT/INSPECTION PORT		
ON-SITE GREEN INFRASTRUCTURE MANHOLE		
OUTLET CONTROL STRUCTURE		
DUAL CATCH BASIN		
MODIFIED CURB INLET		
PROPOSED STORM DRAIN (W/ FLOW DIRECTION)		
DRAINAGE AREA		
FLOW DIRECTION		FLOW
GREEN INFRASTRUCTURE CHARACTERISTICS		GI PRACTICE ID: TRIBUTARY AREA / VOLUME OF X.XX" STORM / CAPACITY MANAGED

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL: STATE OF NEW YORK — DUDLEEP MELWANI — 075826 — LICENSED PROFESSIONAL ENGINEER

Hazen

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
LEGEND AND ABBREVIATIONS

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	G003	GI-CONS-7
	DATE: NOV 2026		SHEET No. 6 OF 134 SHEETS

BLOCK

LOT

Environmental Protection

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS

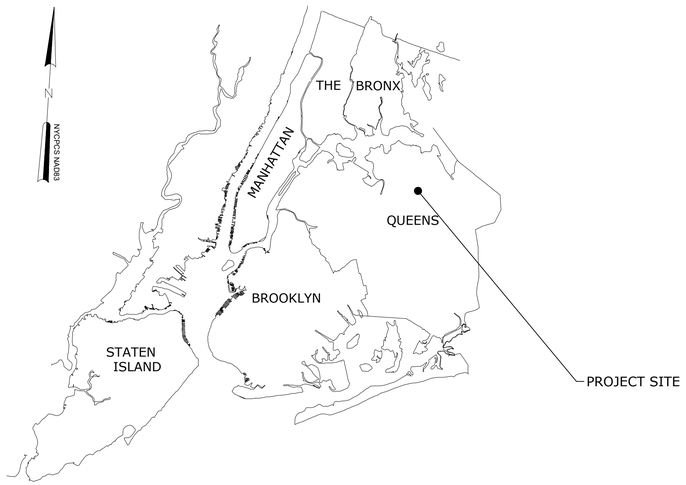
NYC Parks

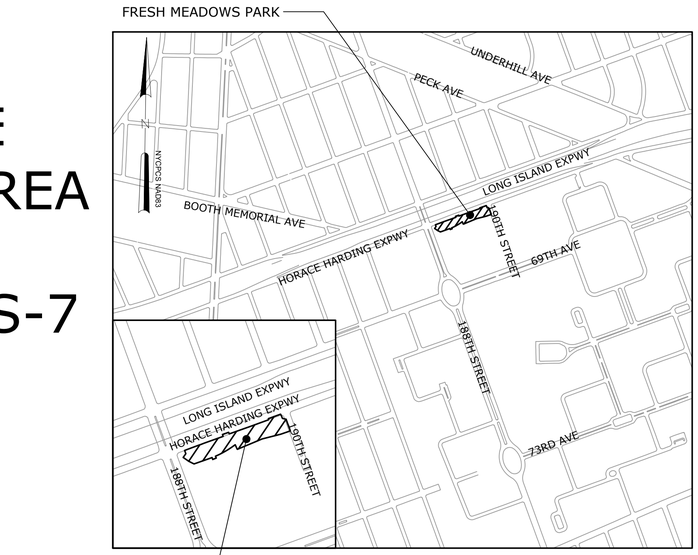
ON-SITE GREEN INFRASTRUCTURE
TALLMAN ISLAND CSO TRIBUTARY AREA
OUTFALL TI-010
DEP CAPITAL CONTRACT NO. GI-CONS-7

Q223 FRESH MEADOWS
BBL 4071170145

QUEENS, NY

BID SET
NOVEMBER 2026





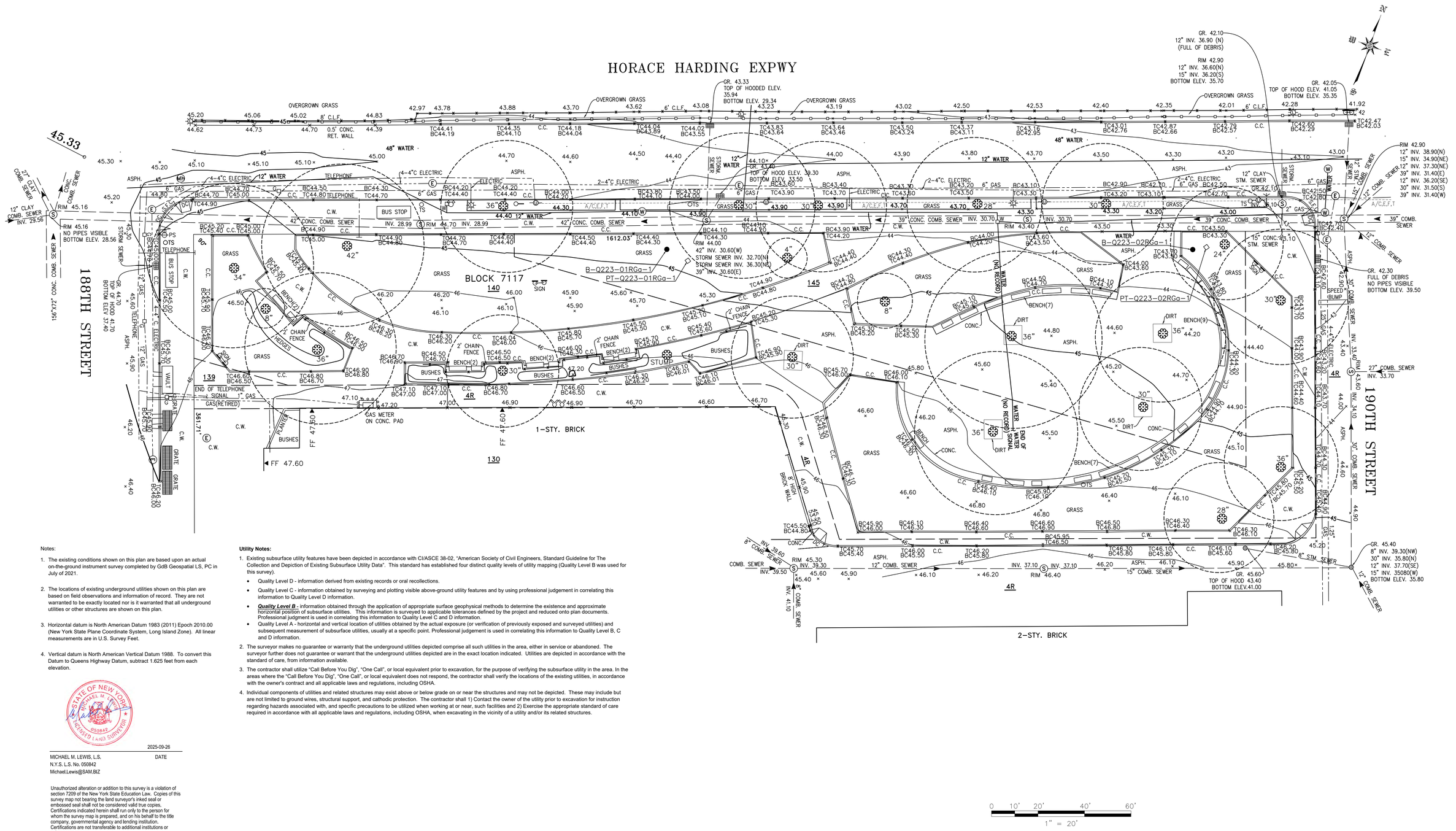
LOCATION PLAN

SHEET LIST TABLE	
DRAWING NUMBER	SHEET TITLE
G001	COVER
T-1	TOPOGRAPHIC & UTILITY SURVEY PLAN
C100	TREE PROTECTION PLAN, STAGING AND ACCESS
C101	REMOVAL AND DEMOLITION PLAN
C102	STAKING PLAN
C200	PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN
C201	MATERIALS PLAN
C300	SECTIONS AND PROFILES - 1
C301	SECTIONS AND PROFILES - 2
C302	SECTIONS AND PROFILES - 3
C303	SECTIONS AND PROFILES - 4
C304	SECTIONS AND PROFILES - 5
C305	SECTIONS AND PROFILES - 6
C500	DETAILS - 1

JOHN MCLAUGHLIN
MANAGING DIRECTOR
OFFICE OF ECOSYSTEM SERVICES, GREEN INFRASTRUCTURE AND RESEARCH
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS, NYCDEP

Lisa F. Garcia
Digitally signed by Lisa F. Garcia
Date: 2026.10.30 15:20:57 -04'00'

LISA F. GARCIA
COMMISSIONER
NYCDEP



Notes:

1. The existing conditions shown on this plan are based upon an actual on-the-ground instrument survey completed by GdB Geospatial LS, PC in July of 2021.
2. The locations of existing underground utilities shown on this plan are based on field observations and information of record. They are not warranted to be exactly located nor is it warranted that all underground utilities or other structures are shown on this plan.
3. Horizontal datum is North American Datum 1983 (2011) Epoch 2010.00 (New York State Plane Coordinate System, Long Island Zone). All linear measurements are in U.S. Survey Feet.
4. Vertical datum is North American Vertical Datum 1988. To convert this Datum to Queens Highway Datum, subtract 1.625 feet from each elevation.

STATE OF NEW YORK
MICHAEL M. LEWIS
050842
LICENSED LAND SURVEYOR

2025-09-26

MICHAEL M. LEWIS, L.S. — DATE
N.Y.S. L.S. No. 050842
Michael.Lewis@SAM.BIZ

Unauthorized alteration or addition to this survey is a violation of section 7209 of the New York State Education Law. Copies of this survey map not bearing the land surveyor's inked seal or embossed seal shall not be considered valid true copies. Certifications indicated herein shall run only to the person for whom the survey map is prepared, and on his behalf to the title company, governmental agency and lending institution. Certifications are not transferable to additional institutions or subsequent owners.

Utility Notes:

1. Existing subsurface utility features have been depicted in accordance with CI/ASCE 38-02, "American Society of Civil Engineers, Standard Guideline for The Collection and Depiction of Existing Subsurface Utility Data". This standard has established four distinct quality levels of utility mapping (Quality Level B was used for this survey).
   - Quality Level D - information derived from existing records or oral recollections.
   - Quality Level C - information obtained by surveying and plotting visible above-ground utility features and by using professional judgement in correlating this information to Quality Level D information.
   - ***Quality Level B*** - information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents. Professional judgment is used in correlating this information to Quality Level C and D information.
   - Quality Level A - horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Professional judgement is used in correlating this information to Quality Level B, C and D information.
2. The surveyor makes no guarantee or warranty that the underground utilities depicted comprise all such utilities in the area, either in service or abandoned. The surveyor further does not guarantee or warrant that the underground utilities depicted are in the exact location indicated. Utilities are depicted in accordance with the standard of care, from information available.
3. The contractor shall utilize "Call Before You Dig", "One Call", or local equivalent prior to excavation, for the purpose of verifying the subsurface utility in the area. In the areas where the "Call Before You Dig", "One Call", or local equivalent does not respond, the contractor shall verify the locations of the existing utilities, in accordance with the owner's contract and all applicable laws and regulations, including OSHA.
4. Individual components of utilities and related structures may exist above or below grade on or near the structures and may not be depicted. These may include but are not limited to ground wires, structural support, and cathodic protection. The contractor shall 1) Contact the owner of the utility prior to excavation for instruction regarding hazards associated with, and specific precautions to be utilized when working at or near, such facilities and 2) Exercise the appropriate standard of care required in accordance with all applicable laws and regulations, including OSHA, when excavating in the vicinity of a utility and/or its related structures.

NO.	DATE	ISSUED FOR	BY

DESIGNED _____
DRAWN _____
CHECKED _____
PROJ.ENGR. _____

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

GdB Geospatial

APPROVED FOR THE CITY OF NEW YORK

_____ P.E.
PROJECT MANAGER

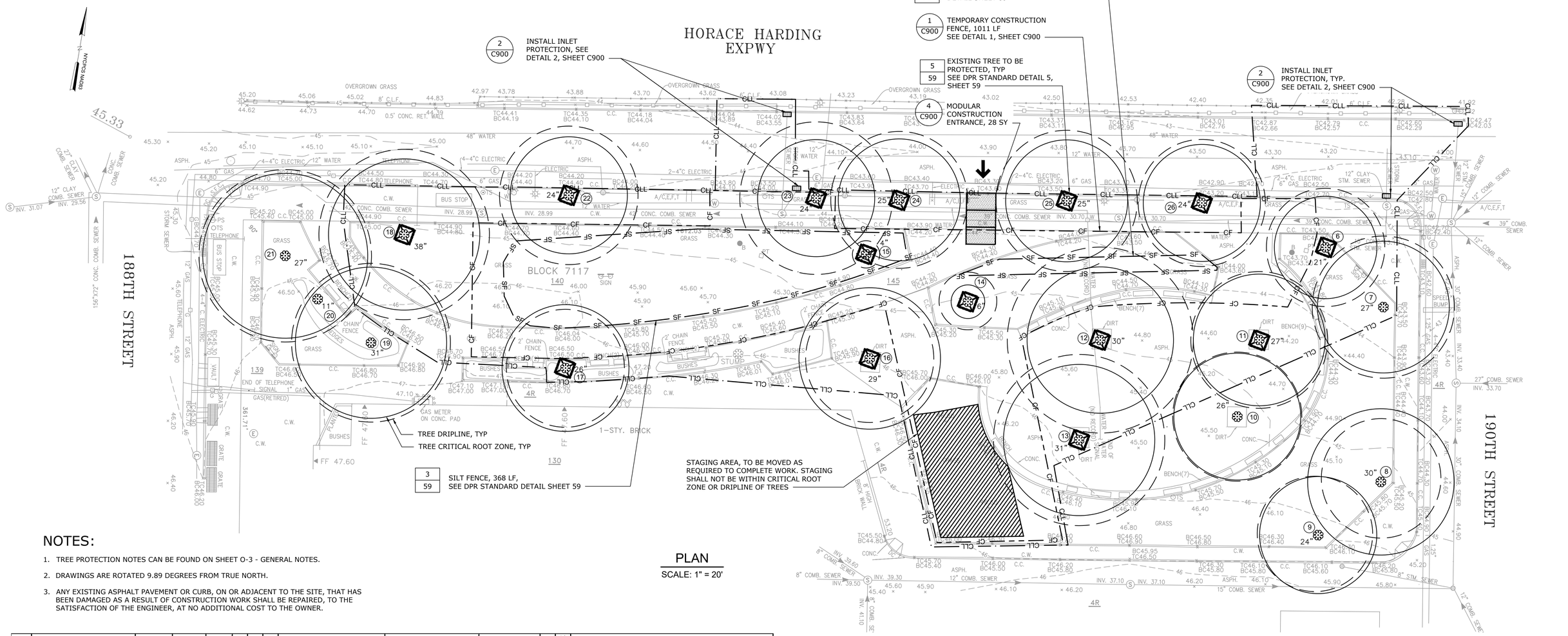
NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
OFFICE OF GREEN INFRASTRUCTURE
NYCDEP CAPITAL PROJECT WP-169

GI-CONS-7

GREEN INFRASTRUCTURE PRACTICES AT NYC-DPR SITES
FRESH MEADOWS PARK
TOPOGRAPHIC & UTILITY SURVEY PLAN

DATE	FEBRUARY 2022
PAGE	2 OF 2
SHEET NUMBER	T-1



NOTES:

1. TREE PROTECTION NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES.
2. DRAWINGS ARE ROTATED 9.89 DEGREES FROM TRUE NORTH.
3. ANY EXISTING ASPHALT PAVEMENT OR CURB, ON OR ADJACENT TO THE SITE, THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.

PLAN
SCALE: 1" = 20'

TREE #	SPECIES (common name)	DBH (inches)	CTLA CONDITION RATING	ISA CRITICAL ROOTZONE (CRZ) RADIUS (ft.)	TREE REMOVAL	STUMP REMOVAL	TRANSPLANT TREE	PREPARATORY PRUNING ANSI A-300: Cleaning	Raising	Reducing	Restoring	Structural	Thinning	Limb Tying	TREE PROTECTION: Temporary Wooden Tree Guard	Temporary Wooden Tree Guard For Groves	Temporary Fence Boundary	Protect Existing Tree Roots w/ Woodchips	Protect Ex. Tree Roots w/ Plywood or Mats	DECOMPACT: Air-Tilling 3 Ft Radius	Air-Tilling 5 Ft Radius	Radial Trench	Vertical Mulch	PREPARATORY FERTILIZE	TREE GROWTH REGULATOR	COMMENTS
6	MAPLE, OTHER	21	75%	21.0				X							X											Frass on trunk
7	MAPLE, OTHER	27	75%	27.0																						Slight oozing, Insect hole, Red/Silver maple hybrid
8	MAPLE, OTHER	30	75%	30.0																						Red/Silver maple hybrid
9	MAPLE, OTHER	24	78%	24.0																						Large area of bark missing from trunk, red/silver maple hybrid
10	OAK, PIN	26	97%	26.0																						
11	LONDON PLANETREE	27	100%	27.0											X											
12	LONDON PLANETREE	30	100%	30.0											X											Sycamore Tusick, Leaf defoliation
13	LONDON PLANETREE	31	94%	31.0											X											Evidence of insects, recently pruned
14	JAPANESE PAGODA TREE	6	100%	6.9											X											Buried root flare
15	JAPANESE PAGODA TREE	5	100%	5.6											X											Buried root flare
16	OAK, OTHER	29	94%	29.0				X							X											
17	MAPLE, SILVER	26	81%	26.0				X							X											Slightly girdling roots, recommend pruning
18	OAK, PIN	38	94%	38.0											X											Some dead twigs, leave alone
19	LONDON PLANETREE	31	19%	31.0																						
20	SWEETGUM	11	78%	10.5																						Exposed root system
21	SWEETGUM	27	94%	33.8																						Exposed and slightly girdling roots
22	LONDON PLANETREE	24	84%	24.0				X							X											Some witches broom and epicomic sprouts
23	LONDON PLANETREE	24	94%	24.0				X							X											Some witches broom and epicomic sprouts
24	LONDON PLANETREE	25	94%	25.0				X							X											Some witches broom and epicomic sprouts
25	LONDON PLANETREE	25	94%	25.0				X							X											Some witches broom and epicomic sprouts
26	LONDON PLANETREE	24	94%	24.0				X							X											

LEGEND

- (#) 12" - TREE TO BE PROTECTED
- TREE CRITICAL ROOT ZONE
- TREE DRIPLINE
- CONSTRUCTION ACCESS/ENTRANCE
- STAGING AREA
- CLL - CONTRACT LIMIT LINE
- CF - CONSTRUCTION FENCE
- SF - SILT FENCE

SCALE: 1" = 20' 20 10 0 20'

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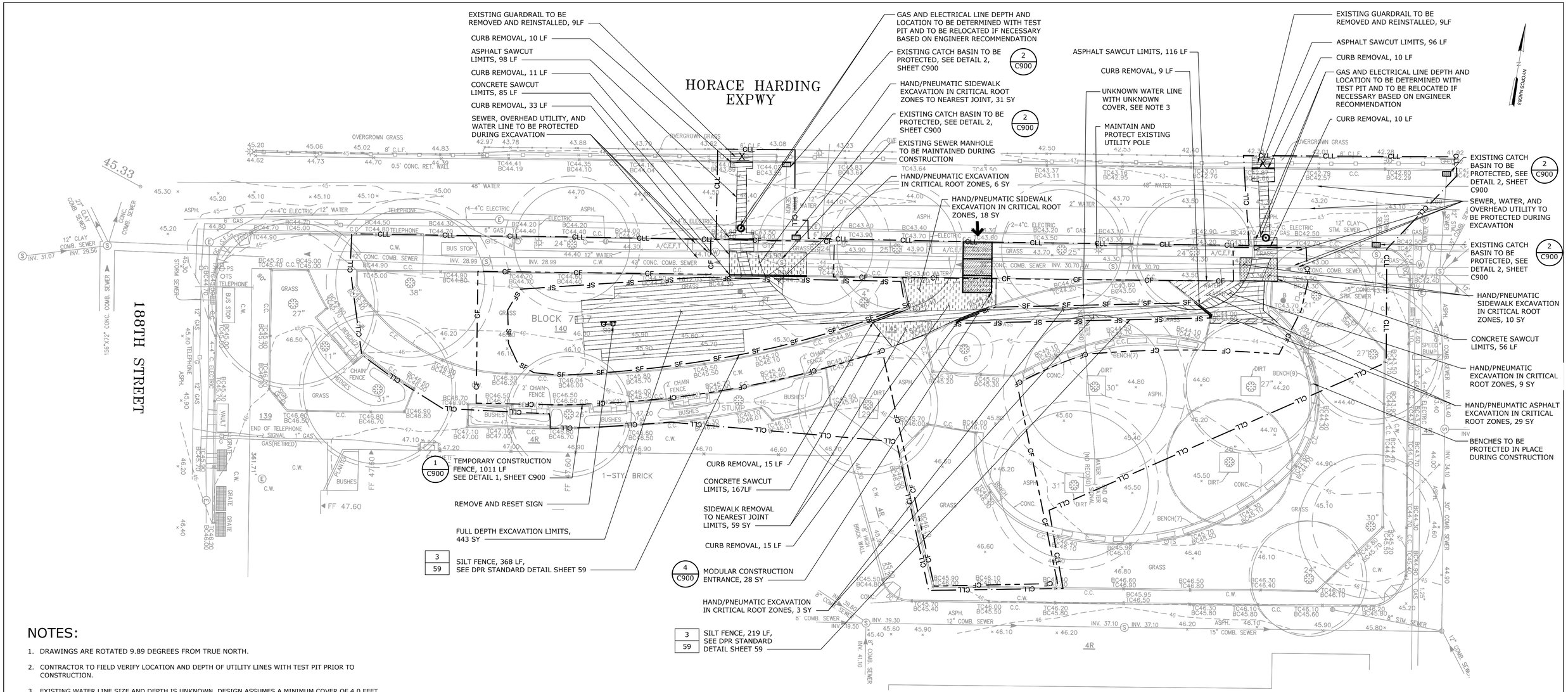
SEAL
STATE OF NEW YORK — SANDEEP MEHROTRA — LICENSED PROFESSIONAL ENGINEER
Hazen
BLOCK 7117
LOT 145

PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
TREE PROTECTION PLAN, STAGING AND ACCESS

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C100	GI-CONS-7
	DATE NOV 2026		SHEET No. 3 OF 14 SHEETS



PLAN

SCALE: 1" = 20'

SCALE: 1" = 20'

20 10 0 20'

NOTES:

1. DRAWINGS ARE ROTATED 9.89 DEGREES FROM TRUE NORTH.
2. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINES WITH TEST PIT PRIOR TO CONSTRUCTION.
3. EXISTING WATER LINE SIZE AND DEPTH IS UNKNOWN. DESIGN ASSUMES A MINIMUM COVER OF 4.0 FEET. CONTRACTOR SHALL FIELD VERIFY THE SIZE AND COVER OF THE LINE PRIOR TO SYSTEM EXCAVATION. IF A CONFLICT IS CONFIRMED, CONTRACTOR SHALL RELOCATE IN COORDINATION WITH ENGINEER AND BWSO.
4. ANY EXISTING ASPHALT PAVEMENT OR CURB, ON OR ADJACENT TO THE SITE, THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.

SUGGESTED SEQUENCE OF CONSTRUCTION:

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND UPON APPROVAL OF THE ENGINEER. ALL WORK SHALL BE DONE IN A MANNER TO MINIMIZE DISTURBANCE TO THE ADJACENT ROADWAY (HORACE HARDING EXPY AND 190TH STREET), SIDEWALK AND EXISTING VEGETATION. STAKE OUT AND RECEIVE APPROVAL FROM THE ENGINEER FOR THE LIMITS OF WORK BEFORE BEGINNING ANY CLEARING.

1. CONTRACTOR IS TO PERFORM A TEST PIT TO DETERMINE UTILITY LOCATION AND DEPTH AND SHARE RESULTS WITH ENGINEER PRIOR TO FURTHER EXCAVATION.
2. INLET PROTECTION SHOULD BE USED ON ALL DRAINAGE INLETS ADJACENT TO AND DOWNSTREAM OF CONSTRUCTION AREA.
3. INSTALL PERIMETER EROSION CONTROL MEASURES INCLUDING CONSTRUCTION LIMIT FENCING, AROUND THE WORK AREA. INSTALL ALL TREE PROTECTION.
4. PERFORM PAVEMENT AND DEBRIS REMOVAL.
5. EXCAVATION AND INSTALLATION OF GREEN INFRASTRUCTURE PRACTICES SHALL BE PERFORMED, ALONG WITH ALL ASSOCIATED APPURTENANCES.
7. INLET INSTALLATION SHOULD BE DONE IN SUCH A WAY TO MINIMIZE CONSTRUCTION IMPACTS TO ADJACENT ROADWAY AND THE ADJACENT RIGHT OF WAY.
8. BACKFILL THE PROJECT SITE WITH STONE, AS PER CONTRACT SPECIFICATIONS, TO THE FINAL ELEVATIONS SHOWN ON THE CONTRACT DRAWINGS.
9. ONCE ALL AREAS HAVE BEEN STABILIZED, REMOVE TEMPORARY PERIMETER EROSION AND SEDIMENT CONTROL MEASURES.

LEGEND

- CONSTRUCTION ACCESS/ENTRANCE
- FULL DEPTH EXCAVATION
- FULL DEPTH PAVEMENT REMOVAL
- HAND/PNEUMATIC EXCAVATION
- SIDEWALK REMOVAL
- SAWCUT LIMITS
- CLL - CONTRACT LIMIT LINE
- CF - CONSTRUCTION FENCE
- TEST PIT LOCATION
- X - GUARD RAIL TO BE REMOVED
- SF - SILT FENCE

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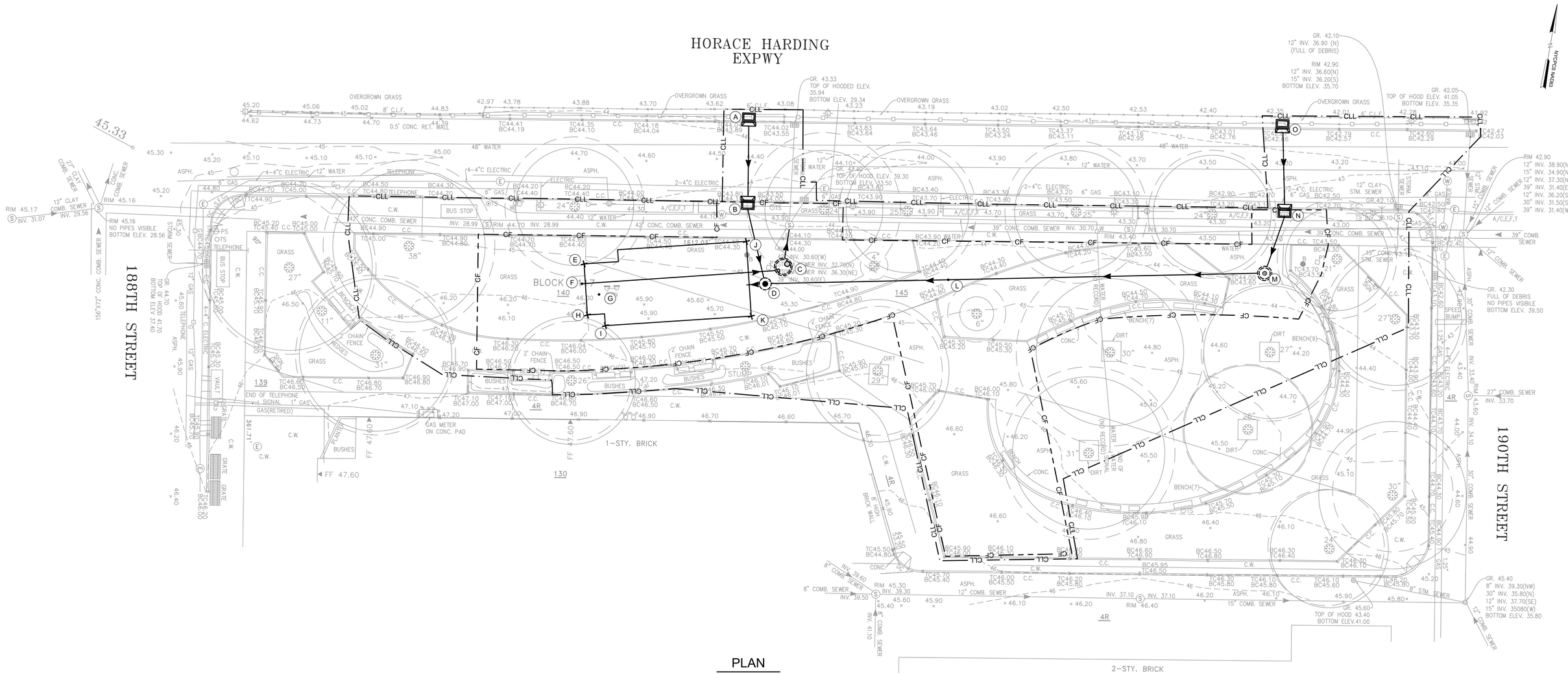
LOT 145

PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
REMOVAL AND DEMOLITION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C101	GI-CONS-7
	DATE NOV 2026		SHEET No. 4 OF 14 SHEETS



NOTES:

1. DRAWINGS ARE ROTATED 9.89 DEGREES FROM TRUE NORTH.

STAKING PLAN			
POINT	NORTHING	EASTING	DESCRIPTION
A	209277.15	1043622.92	CI#1
B	209243.41	1043635.19	CI#2
C	209225.06	1043657.55	OCS MH#2
D	209216.01	1043653.13	MH#3
E	209197.52	1043581.34	NORTHEAST CORNER GI PRACTICE
F	209189.66	1043583.35	GRASS CLEANOUT
G	209188.05	1043591.41	GRASS CLEANOUT
H	209178.58	1043589.94	SOURTHEAST CORNER GI PRACTICE - A
I	209177.06	1043598.34	SOURTHEAST CORNER GI PRACTICE - B
J	209229.49	1043639.83	NORTHWEST CORNER GI PRACTICE
K	209201.73	1043652.47	SOUTHWEST CORNER GI PRACTICE
L	209243.93	1043722.21	PAVEMENT CLEANOUT
M	209291.93	1043841.69	CB#1
N	209317.66	1043840.61	CI#4
O	209351.48	1043826.94	CI#3

LEGEND

- CF — CONSTRUCTION FENCE
- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- PROPOSED CLEANOUT
- FLOW — FLOW DIRECTION
- PROPOSED OUTLET CONTROL STRUCTURE
- DPR CATCH BASIN
- PROPOSED STORM PIPE
- CLL — CONTRACT LIMIT LINE
- PROPOSED DRAINAGE AREA
- MODIFIED TYPE-A CURB INLET
- PROPOSED MANHOLE

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Hazen

BLOCK 7117

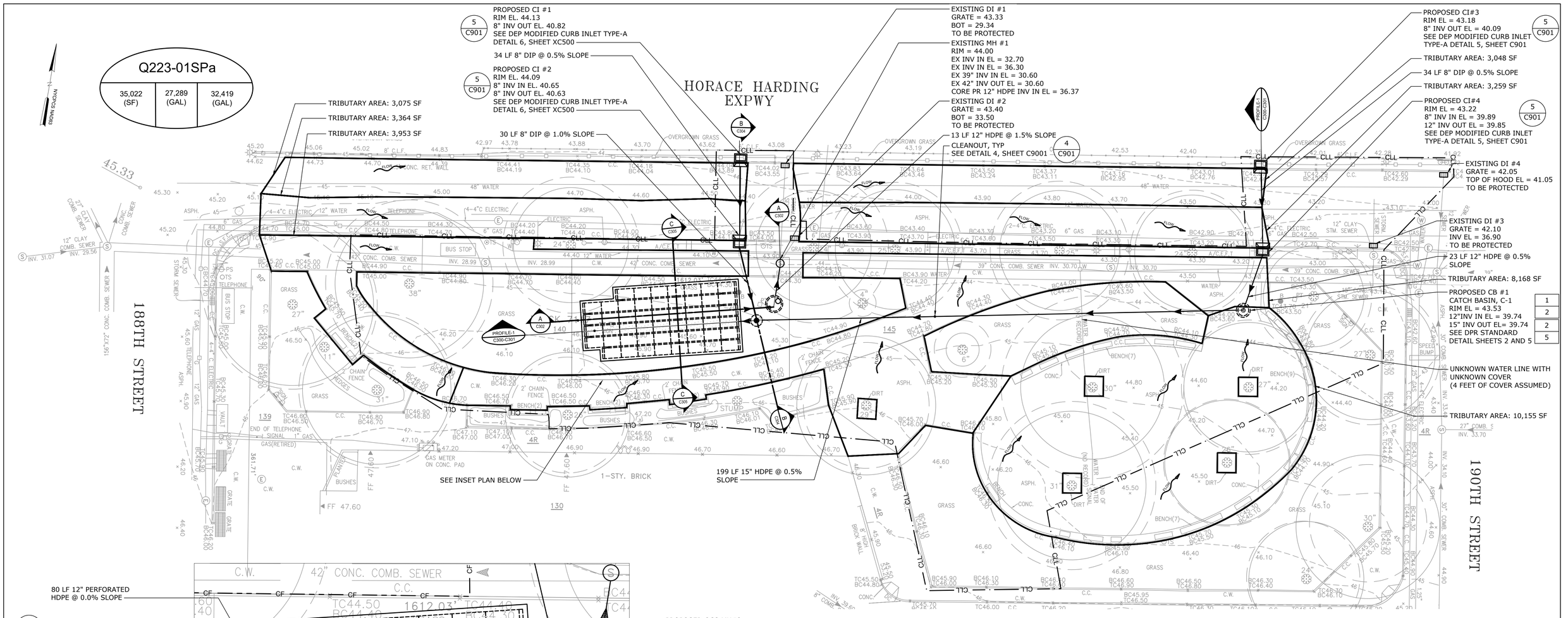
LOT 145

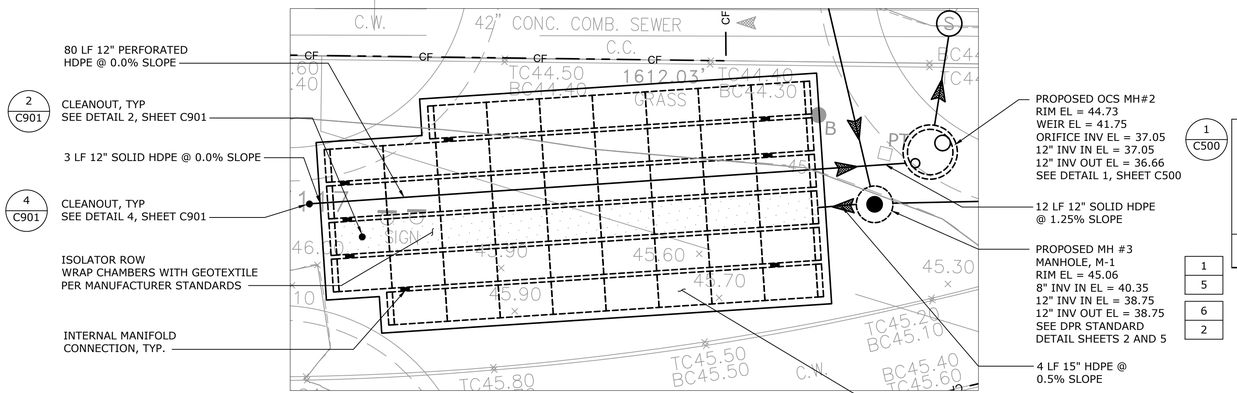
PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
STAKING PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C102	GI-CONS-7
	DATE NOV 2026		SHEET No. 5 OF 14 SHEETS





INSET PLAN
SCALE: 1" = 10'

PLAN
SCALE: 1" = 20'

SCALE: 1" = 10' 10 5 0 10'

SCALE: 1" = 20' 20 10 0 20'

GI ID	GI Asset Data					Stormwater Storage Calculations				Total Stormwater Managed (Infiltration + Storage)			
	Managed Impervious Tributary Area	Volume 1.25" Rainfall on Impervious Area	GI Footprint Surface Area	GI Perimeter	Permeability Coefficient	Stormwater chambers, pipes, tanks, etc. volume	Stone Subbase			Estimated Total Storage Volume	% Impervious Surface Managed	Calculated Volume of Rainfall Captured	Calculated Volume of Rainfall Captured
							Stone Depth	Stone Voids	Stormwater Captured by Stone Layer				
	sf	cf	sf	ft	in/hr	cf	ft	%	cf	cf	%	cf	gal
Q223-01SPa	35,022	3,648	1,927	194	0.01	2,663	3.55	40%	1,671	4,334	119%	4,334	32,419

NOTES:
1. DRAWINGS ARE ROTATED 9.89 DEGREES FROM TRUE NORTH.

LEGEND
- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- PROPOSED CLEANOUT
- FLOW DIRECTION
- PROPOSED OUTLET CONTROL STRUCTURE
- PROPOSED STORM PIPE
- CONTRACT LIMIT LINE
- PROPOSED DRAINAGE AREA
- MODIFIED CURB INLET TYPE-A
- ISOLATOR ROW
- PROPOSED MANHOLE
- PROPOSED CATCH BASIN

GI NAME | TRIBUTARY AREA | VOLUME OF 1.25" STORM | CAPACITY MANAGED

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NO.	DATE	ISSUED FOR	BY

SEAL: STATE OF NEW YORK, DEEP MEHROTRA, 076586, LICENSED PROFESSIONAL ENGINEER

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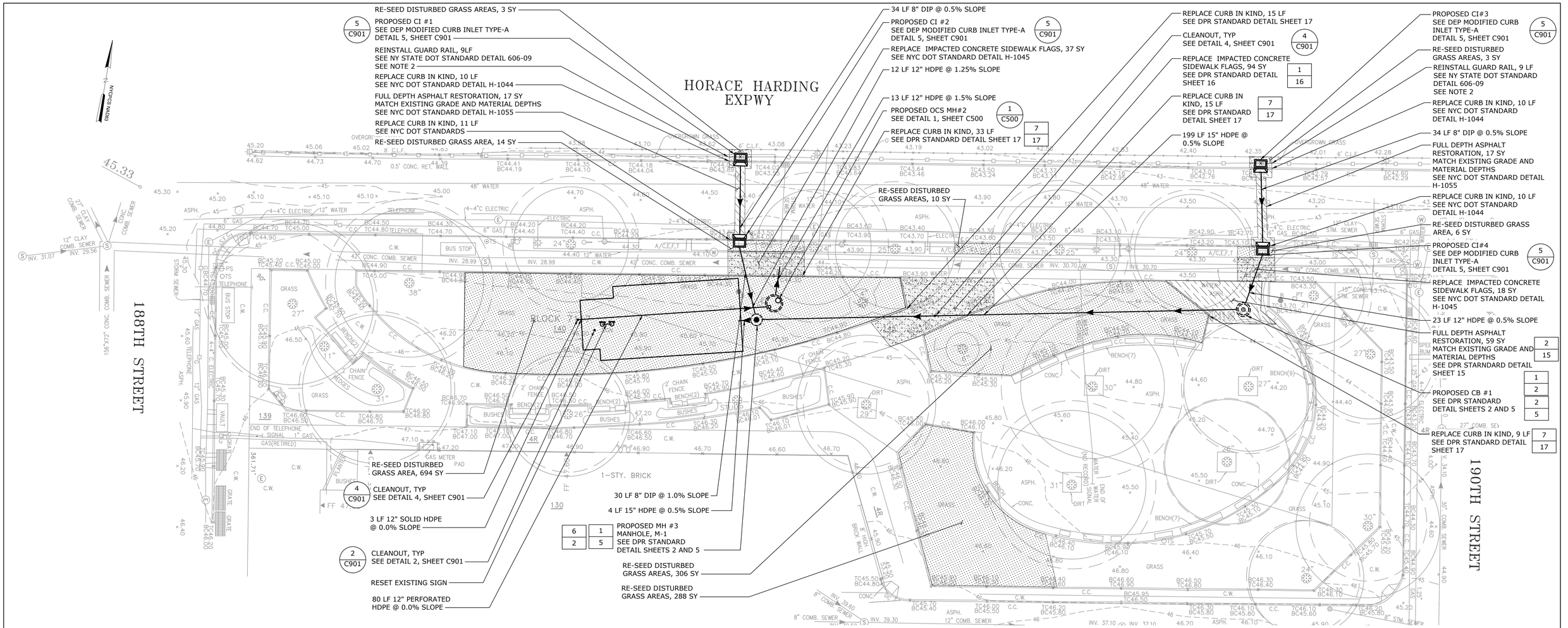
BLOCK 7117
LOT 145

PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C200	GI-CONS-7
	DATE NOV 2026		SHEET No. 6 OF 14 SHEETS



PLAN

SCALE: 1" = 20'

SCALE: 1" = 20' (20 10 0 20')

NOTES:

1. DRAWINGS ARE ROTATED 9.89 DEGREES FROM TRUE NORTH.
2. GUARD RAILS ARE TO BE INSTALLED IN A MANNER TO AVOID ADJACENT CATCH BASINS AND MAINTAIN EXISTING STRUCTURES.
3. ANY EXISTING ASPHALT PAVEMENT OR CURB, ON OR ADJACENT TO THE SITE, THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.
4. TOP SOIL SHALL BE ADDED TO THE STAGING AREA AND AREAS WHERE FULL DEPTH EXCAVATION OCCURRED, PRIOR TO THE USE OF RESTORATION SEED MIX. FOR ALL OTHER RESTORATION AREAS USE RESTORATION SEED MIX ONLY

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SEAL: STATE OF NEW YORK — ANDREW MELNYK — 075874 — LICENSED PROFESSIONAL ENGINEER

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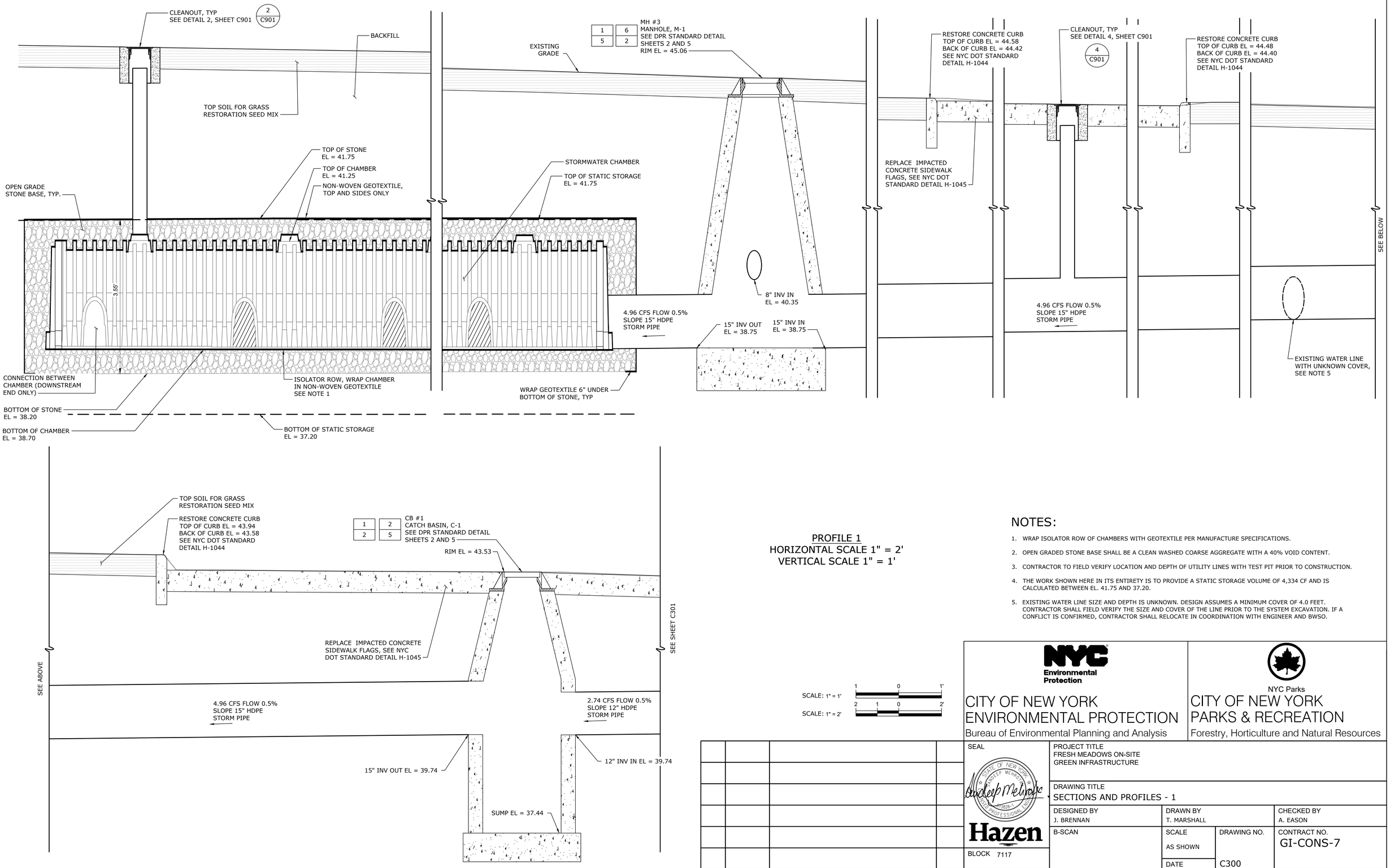
BLOCK 7117
LOT 145

PROJECT TITLE: FRESH MEADOWS ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE: MATERIALS PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C201	GI-CONS-7
	DATE: NOV 2026		SHEET No. 7 OF 14 SHEETS



PROFILE 1
HORIZONTAL SCALE 1" = 2'
VERTICAL SCALE 1" = 1'

SCALE: 1" = 1'
SCALE: 1" = 2'

NOTES:

1. WRAP ISOLATOR ROW OF CHAMBERS WITH GEOTEXTILE PER MANUFACTURE SPECIFICATIONS.
2. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT.
3. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINES WITH TEST PIT PRIOR TO CONSTRUCTION.
4. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE VOLUME OF 4,334 CF AND IS CALCULATED BETWEEN EL. 41.75 AND 37.20.
5. EXISTING WATER LINE SIZE AND DEPTH IS UNKNOWN. DESIGN ASSUMES A MINIMUM COVER OF 4.0 FEET. CONTRACTOR SHALL FIELD VERIFY THE SIZE AND COVER OF THE LINE PRIOR TO THE SYSTEM EXCAVATION. IF A CONFLICT IS CONFIRMED, CONTRACTOR SHALL RELOCATE IN COORDINATION WITH ENGINEER AND BWSO.

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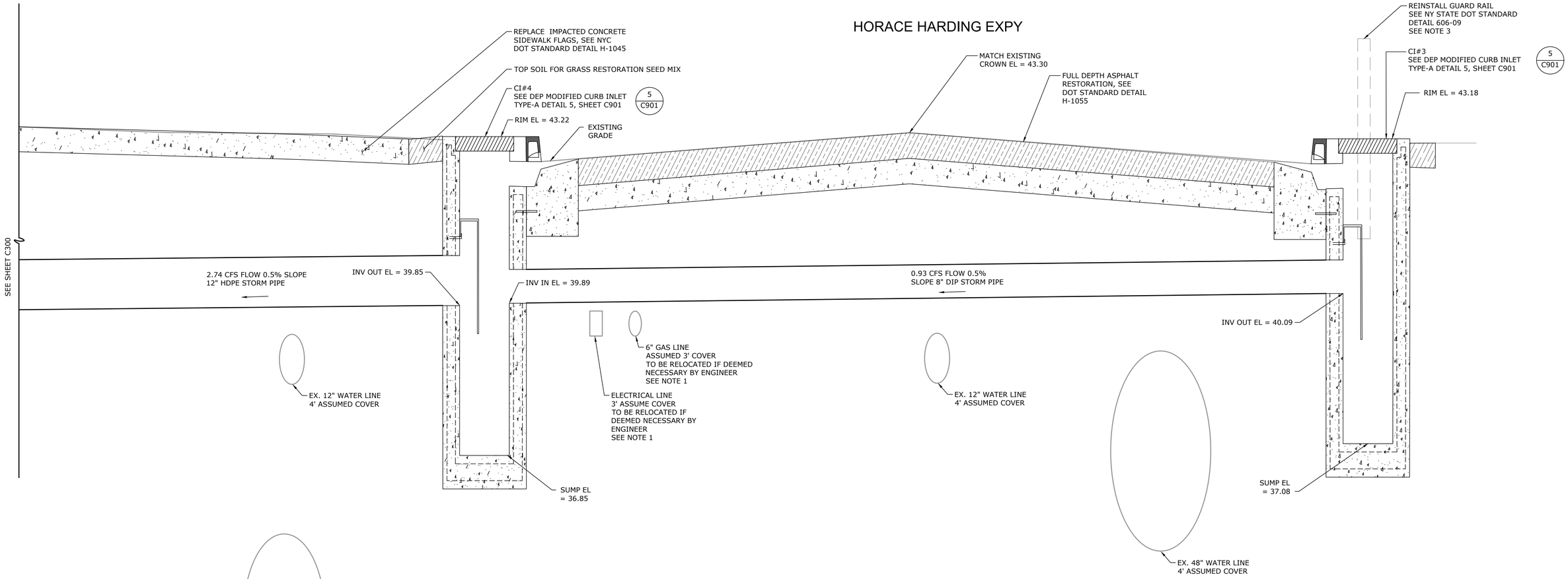
PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 1

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C300	GI-CONS-7

BLOCK 7117
LOT 145
DATE NOV 2026
SHEET No. 8 OF 14 SHEETS



PROFILE 1
HORIZONTAL SCALE 1" = 2'
VERTICAL SCALE 1" = 1'

SCALE: 1" = 1' 1 0 1'

SCALE: 1" = 2' 2 1 0 2'

NOTES:

1. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINES WITH TEST PIT PRIOR TO CONSTRUCTION.
2. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE VOLUME OF 4,334 CF AND IS CALCULATED BETWEEN EL. 41.75 AND 37.20.
3. GUARD RAILS ARE TO BE INSTALLED IN A MANNER TO AVOID ADJACENT CATCH BASINS AND MAINTAIN EXISTING STRUCTURES.

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STATE OF NEW YORK · SANDEEP MEHROTRA · 087826 · LICENSED PROFESSIONAL ENGINEER
Hazen

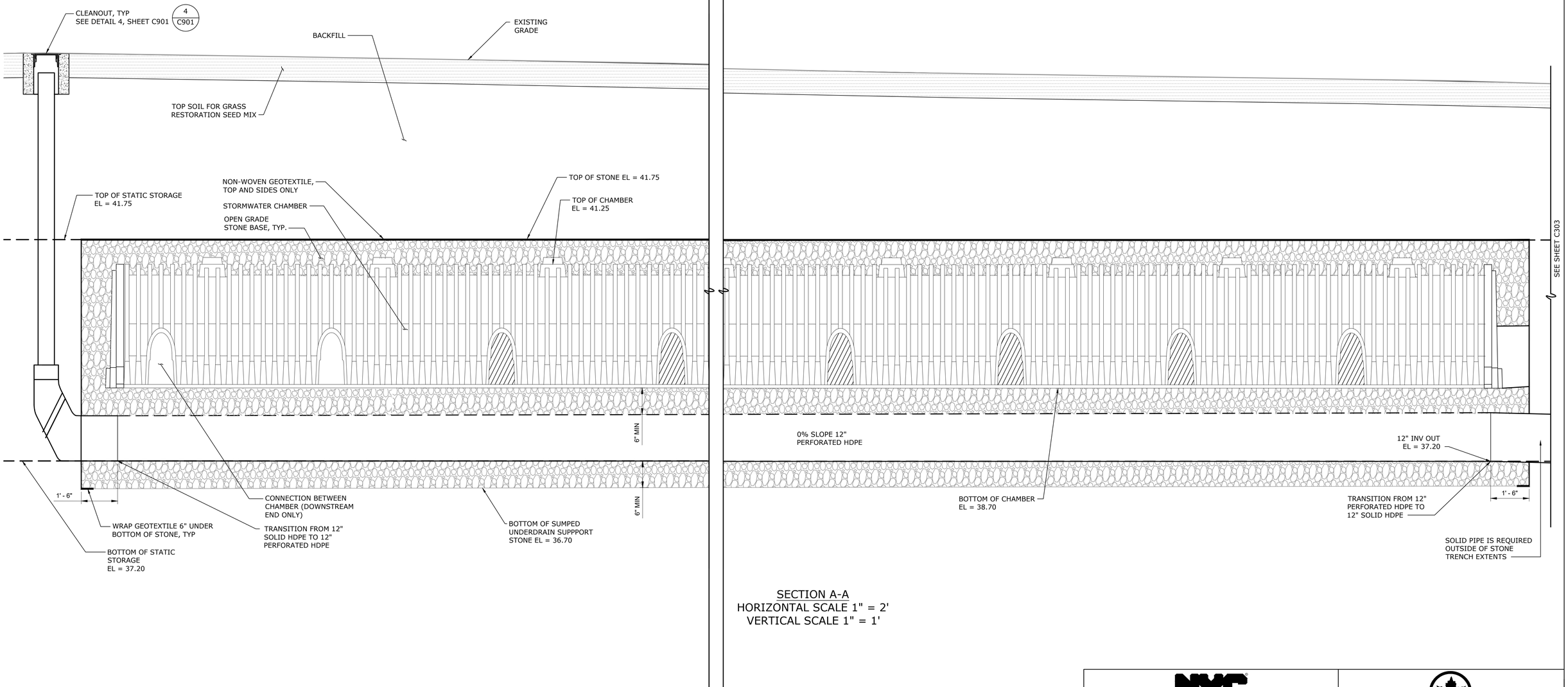
BLOCK 7117
LOT 145

PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 2

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE: AS SHOWN	DRAWING NO.: C301	CONTRACT NO.: GI-CONS-7
	DATE: NOV 2026		SHEET No. 9 OF 14 SHEETS



SECTION A-A
HORIZONTAL SCALE 1" = 2'
VERTICAL SCALE 1" = 1'

SCALE: 1" = 1'

SCALE: 1" = 2'

NOTES:

1. WRAP ISOLATOR ROW OF CHAMBERS WITH GEOTEXTILE PER MANUFACTURE SPECIFICATIONS.
2. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT.
3. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE VOLUME OF 4,334 CF AND IS CALCULATED BETWEEN EL. 41.75 AND 37.20.

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SEAL

Hazen

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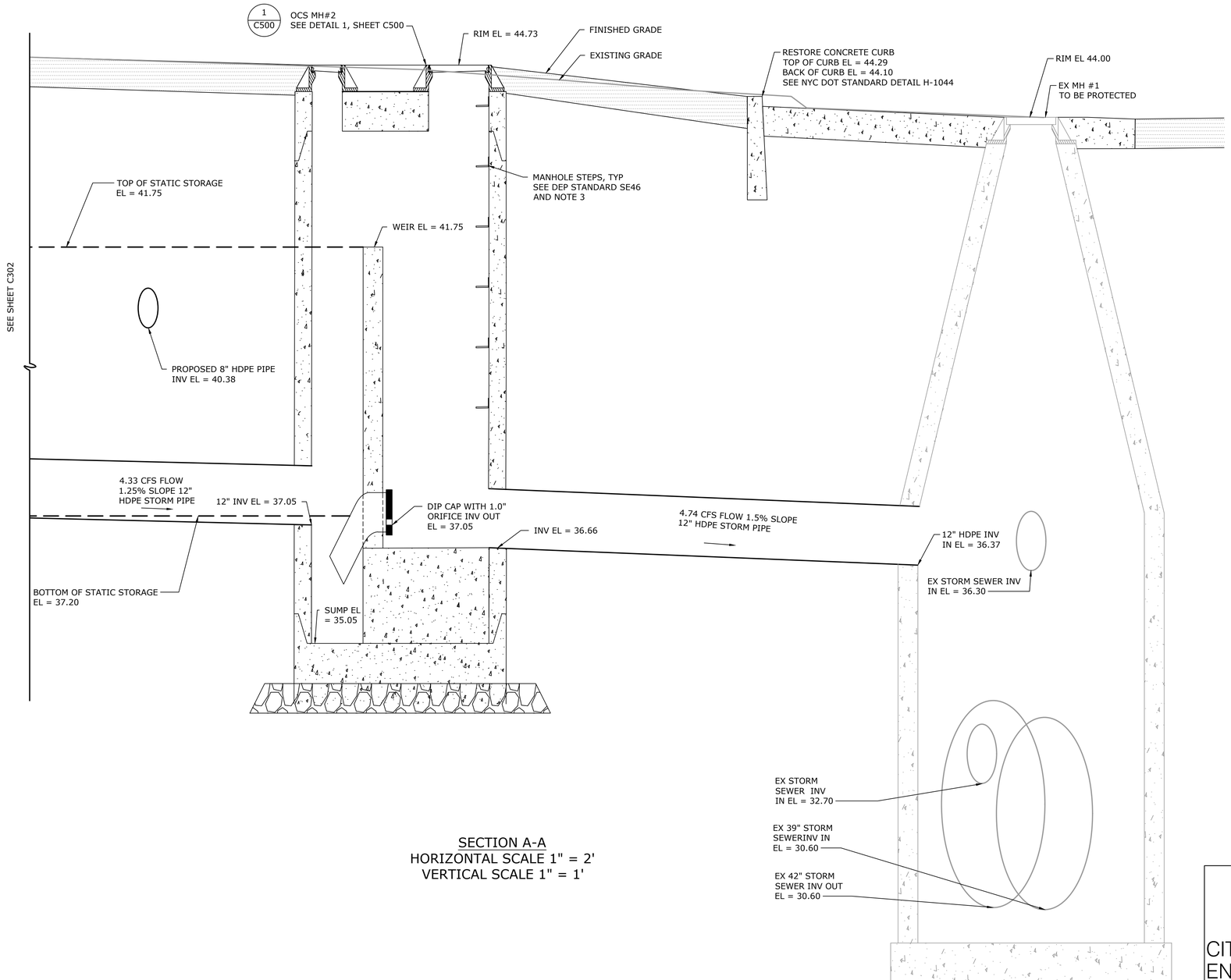
LOT 145

PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 3

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C302	GI-CONS-7
	DATE NOV 2026		SHEET No. 10 OF 14 SHEETS



SECTION A-A
HORIZONTAL SCALE 1" = 2'
VERTICAL SCALE 1" = 1'

SCALE: 1" = 1'

SCALE: 1" = 2'

NOTES:

1. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT.
2. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE VOLUME OF 4,334 CF AND IS CALCULATED BETWEEN EL. 41.75 AND 37.20.
3. RUNGS SHOULD BE LOCATED 3" OFFSET FROM THE TOP SLAB OF THE MANHOLE, AND REPEAT EVERY 12"

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NO.	DATE	ISSUED FOR	BY

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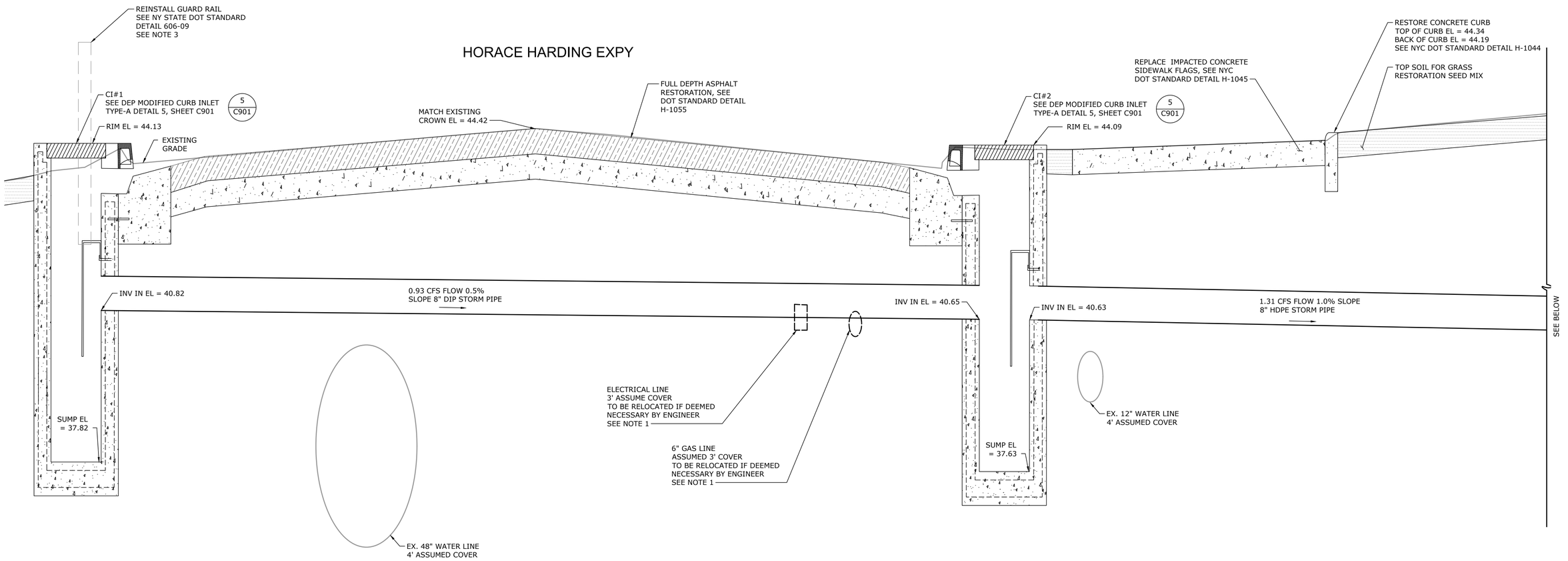
LOT 145

PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 4

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C303	GI-CONS-7
	DATE NOV 2026		SHEET No. 11 OF 14 SHEETS



NOTES:

1. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINES WITH TEST PIT PRIOR TO CONSTRUCTION.
2. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE VOLUME OF 4,334 CF AND IS CALCULATED BETWEEN EL. 41.75 AND 37.20.
3. GUARD RAILS ARE TO BE INSTALLED IN A MANNER TO AVOID ADJACENT CATCH BASINS AND MAINTAIN EXISTING STRUCTURES.

SECTION B-B
HORIZONTAL SCALE 1" = 2'
VERTICAL SCALE 1" = 1'

SCALE: 1" = 1' (1 0 1')

SCALE: 1" = 2' (2 1 0 2')

NO.	DATE	ISSUED FOR	BY

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SEAL: STATE OF NEW YORK · DUDLEY P. MELNICK · 076906 · LICENSED PROFESSIONAL ENGINEER

Hazen

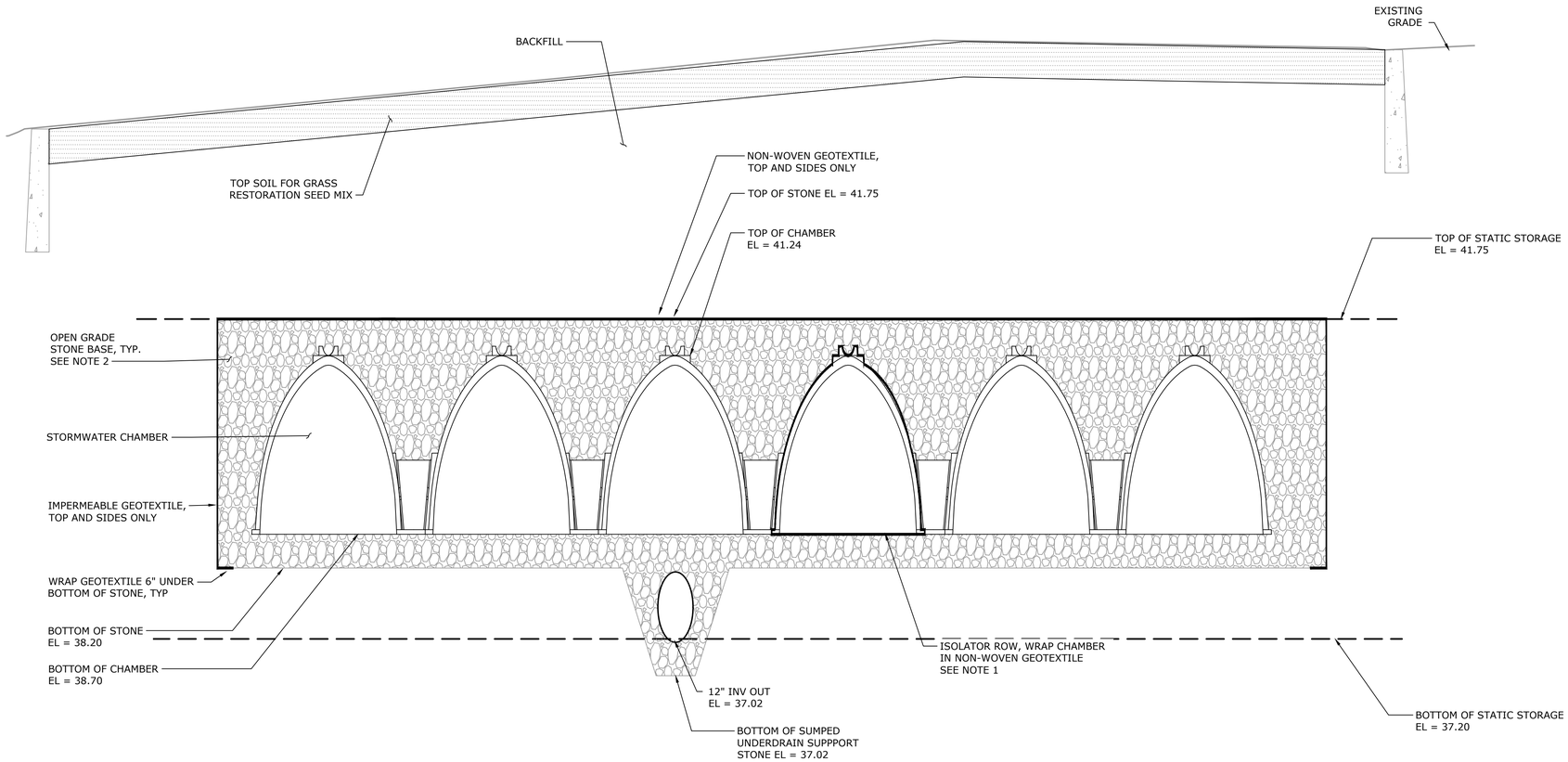
BLOCK 7117
LOT 145

PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 5

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C304	GI-CONS-7
	DATE NOV 2026		SHEET No. 12 OF 14 SHEETS



SCALE: 1" = 1'

SCALE: 1" = 2'

SECTION C-C
HORIZONTAL SCALE 1" = 2'
VERTICAL SCALE 1" = 1'

NOTES:

1. WRAP ISOLATOR ROW OF CHAMBERS WITH GEOTEXTILE PER MANUFACTURE SPECIFICATIONS.
2. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT.
3. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINES WITH TEST PIT PRIOR TO CONSTRUCTION.
4. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE VOLUME OF 4,334 CF AND IS CALCULATED BETWEEN EL. 41.75 AND 37.20.

NO.	DATE	ISSUED FOR	BY

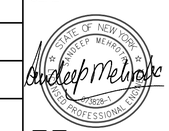
NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL



Hazen

BLOCK 7117

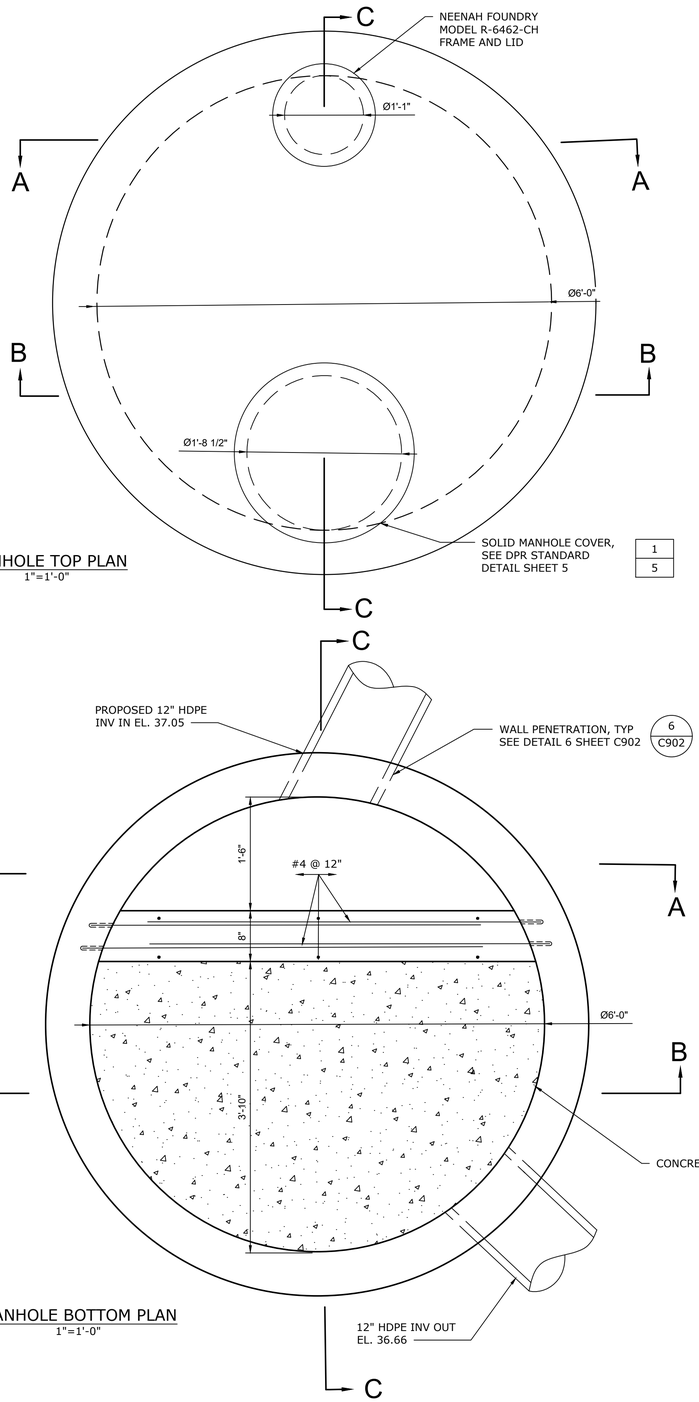
LOT 145

PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

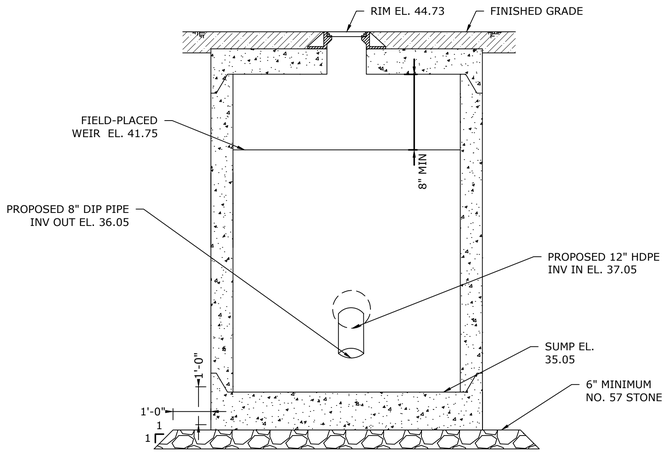
DRAWING TITLE
SECTIONS AND PROFILES - 6

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

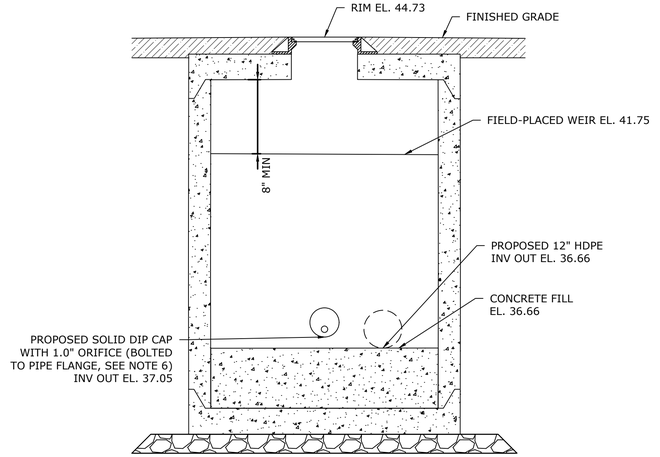
B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C305	GI-CONS-7
	DATE NOV 2026		SHEET No. 13 OF 14 SHEETS



MANHOLE TOP PLAN
1"=1'-0"

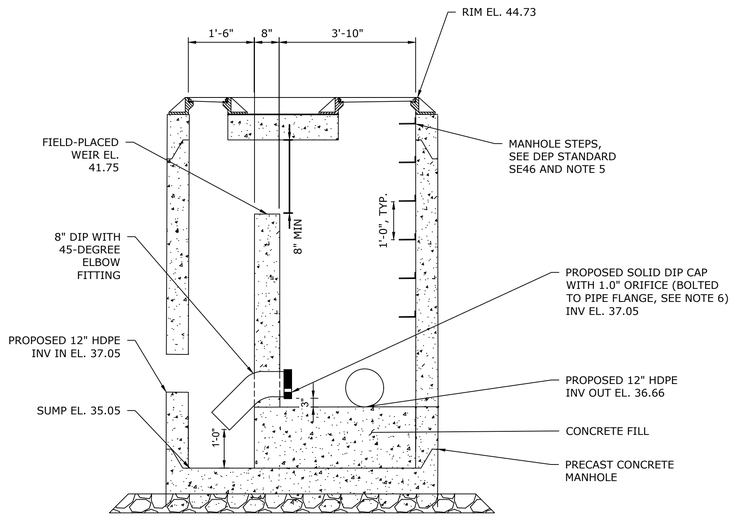


SECTION A-A
1"= 2'-0"

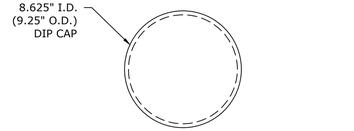


SECTION B-B
1"= 2'-0"

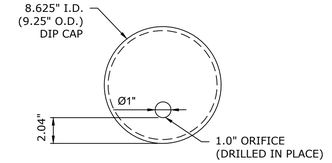
MANHOLE BOTTOM PLAN
1"=1'-0"



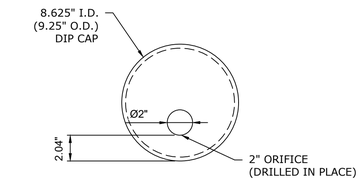
SECTION C-C
1"= 2'-0"



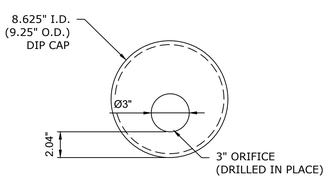
SOLID CAP
1"= 0'-6"
FURNISH AND DELIVER 2 - SOLID ORIFICE CAPS
INSTALL 1 SOLID CAP



ORIFICE CAP
1"= 0'-6"
DRILL 1 - 1.25" ORIFICE



ORIFICE CAP
1"= 0'-6"
PLACEMENT OF 1 - 2" ORIFICE CAP IF NECESSARY



ORIFICE CAP
1"= 0'-6"
PLACEMENT OF 1 - 3" ORIFICE CAP IF NECESSARY

NOTES:

1. CONTRACTOR SHALL SUPPLY TWO (2) SOLID ORIFICE CAPS FOR THE PROJECT. ONE (1) SOLID CAP SHALL BE INSTALLED IN THE FIELD. FOLLOWING INSTALLATION, THE 1.0" DIAMETER OPENING SHALL BE DRILLED AND TAPPED AS PER THE DETAILS ON THIS SHEET. THE REMAINING SOLID CAP SHALL BE TURNED OVER TO NYCDEP FOR FUTURE USE.
2. CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
3. REFER TO DETAILS 1-6 ON SHEET C902.
4. SEE GENERAL STRUCTURAL NOTES AND CONCRETE NOTES ON SHEET C902.
5. RUNGS SHOULD BE LOCATED 3" OFFSET FROM THE TOP SLAB OF THE MANHOLE, AND REPEAT EVERY 12".
6. BOLTS SHALL BE INSTALLED SO THAT THE BOLT HEAD IS ON THE WEIR WALL SIDE.

SCALE: 1" = 1'

SCALE: 1" = 2'

1 C500 OCS MH #2 - MANHOLE WITH WEIR AND ORIFICE CAP DETAILS
AS SHOWN

NO.	DATE	ISSUED FOR	BY

SEAL

BLOCK 7117

LOT 145

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

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PARKS & RECREATION
Forestry, Horticulture and Natural Resources

PROJECT TITLE
FRESH MEADOWS ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
DETAILS - 1

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	T. MARSHALL	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	C500	GI-CONS-7
	DATE NOV 2026		SHEET No. 14 OF 14 SHEETS

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS

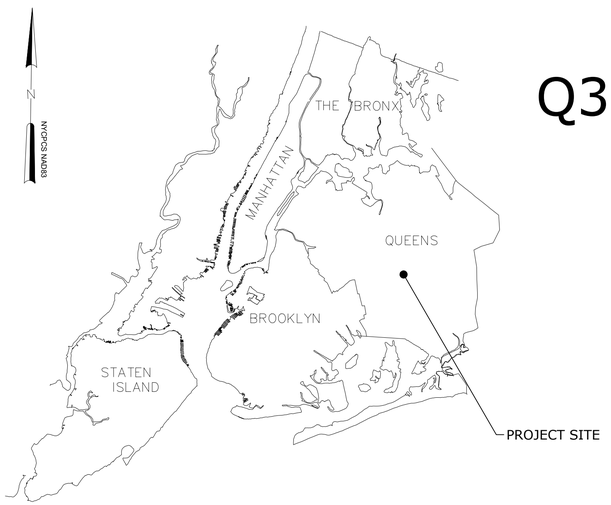
NYC Parks

ON-SITE GREEN INFRASTRUCTURE
JAMAICA CSO TRIBUTARY AREA
OUTFALL JAM-003
DEP CAPITAL CONTRACT NO. GI-CONS-7

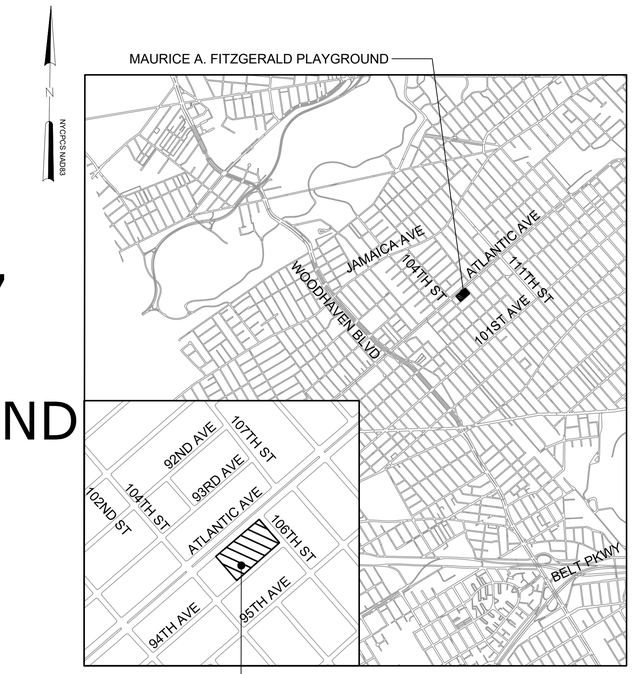
Q337 MAURICE A. FITZGERALD PLAYGROUND
BBL 4093840008

QUEENS, NY

BID SET
NOVEMBER 2026



LOCATION PLAN



LOCATION PLAN

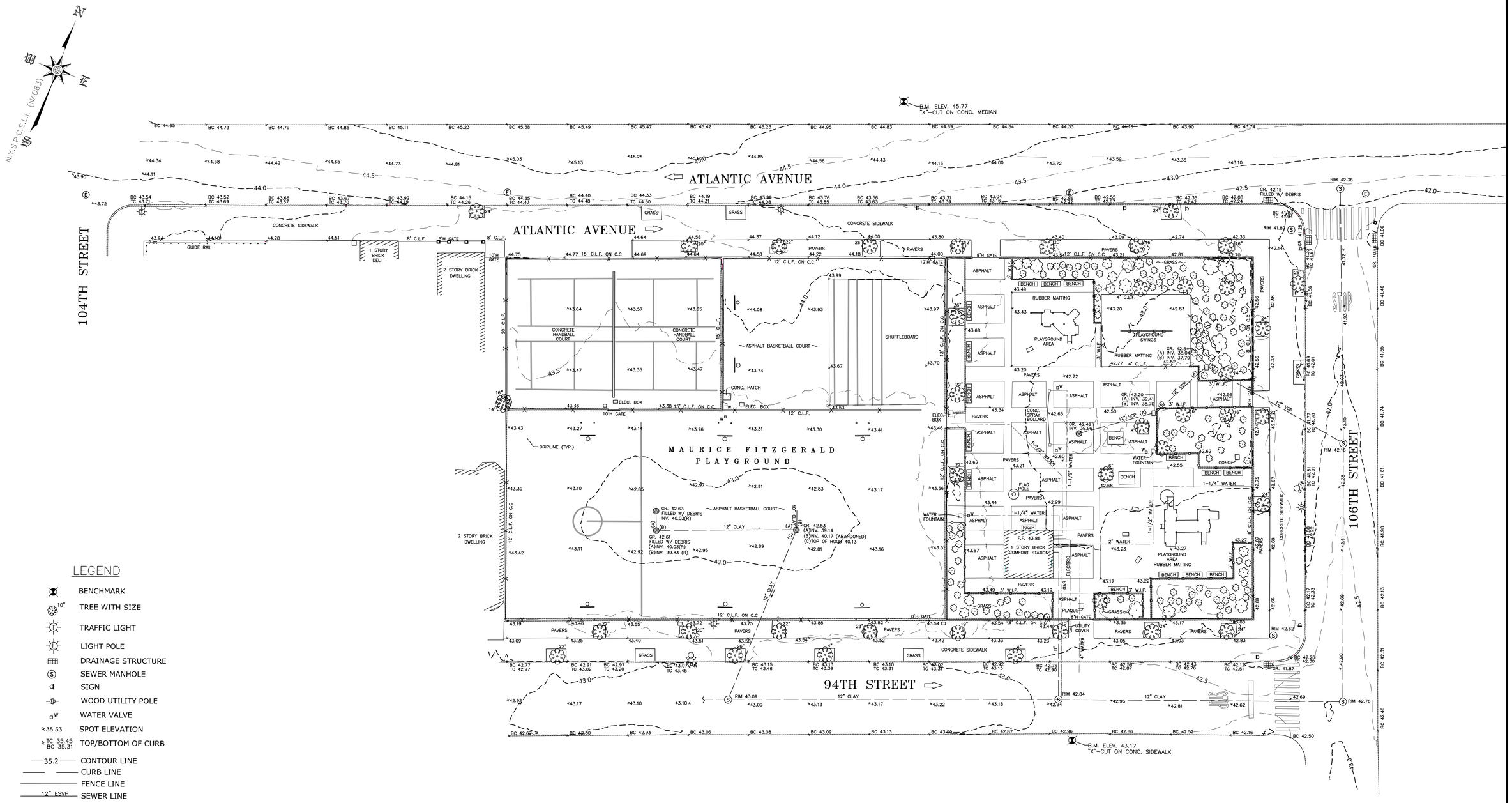
SHEET LIST TABLE	
DRAWING NUMBER	SHEET TITLE
G001	COVER SHEET
T-1	TOPOGRAPHIC SURVEY
C100	TREE PROTECTION, STAGING AND ACCESS PLAN
C101	REMOVAL AND DEMOLITION PLAN
C200	PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN
C201	GRADING AND DRAINAGE PLAN
C202	MATERIALS PLAN
C300	SECTIONS AND PROFILES - 1
C301	SECTIONS AND PROFILES - 2
C302	SECTIONS AND PROFILES - 3
C500	DETAILS - 1

John McLaughlin
Digitally signed by John McLaughlin
Date: 2026.11.02 17:03:11 -05'00'

JOHN MCLAUGHLIN
MANAGING DIRECTOR
OFFICE OF ECOSYSTEM SERVICES, GREEN INFRASTRUCTURE AND RESEARCH
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS, NYCDEP

Lisa F. Garcia
Digitally signed by Lisa F. Garcia
Date: 2026.10.30 15:24:06 -04'00'

LISA F. GARCIA
COMMISSIONER
NYCDEP



LEGEND

- BENCHMARK
- TREE WITH SIZE
- TRAFFIC LIGHT
- LIGHT POLE
- DRAINAGE STRUCTURE
- SEWER MANHOLE
- SIGN
- WOOD UTILITY POLE
- WATER VALVE
- SPOT ELEVATION
- TOP/BOTTOM OF CURB
- CONTOUR LINE
- CURB LINE
- FENCE LINE
- SEWER LINE
- STRIPING
- BUILDING LINE

1. HORIZONTAL DATUM: NEW YORK STATE PLANE COORDINATE SYSTEM LONG ISLAND ZONE, (NAD83), ESTABLISHED BY GLOBAL POSITIONING SYSTEM METHODOLOGY.
2. ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). TO CONVERT TO QUEENS BOROUGH VERTICAL DATUM FROM (NAVD88) SUBTRACT 1.625'
3. IT IS A VIOLATION OF THE STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY.

SCALE 1"=20'

20' 10' 0 20' 40'

NO.	DATE	ISSUED FOR	BY

DESIGNED ____
DRAWN LV
CHECKED TO
PROJ.ENGR. ____

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

K&E NEW YORK — Engineering · Surveying · Architecture · Landscape Architecture · Geomatics · Certificate of Authorization — 1140 Broadway, 14th Floor, New York, NY 10001 — Phone: (212) 532-1116 · Fax: (212) 532-1176 — www.kande.com — DAVID D. RUPNARAIN — No. 050861 — LICENSED PROFESSIONAL ENGINEER — STATE OF NEW YORK — 2020

APPROVED FOR THE CITY OF NEW YORK

_____ P.E.
PROJECT MANAGER

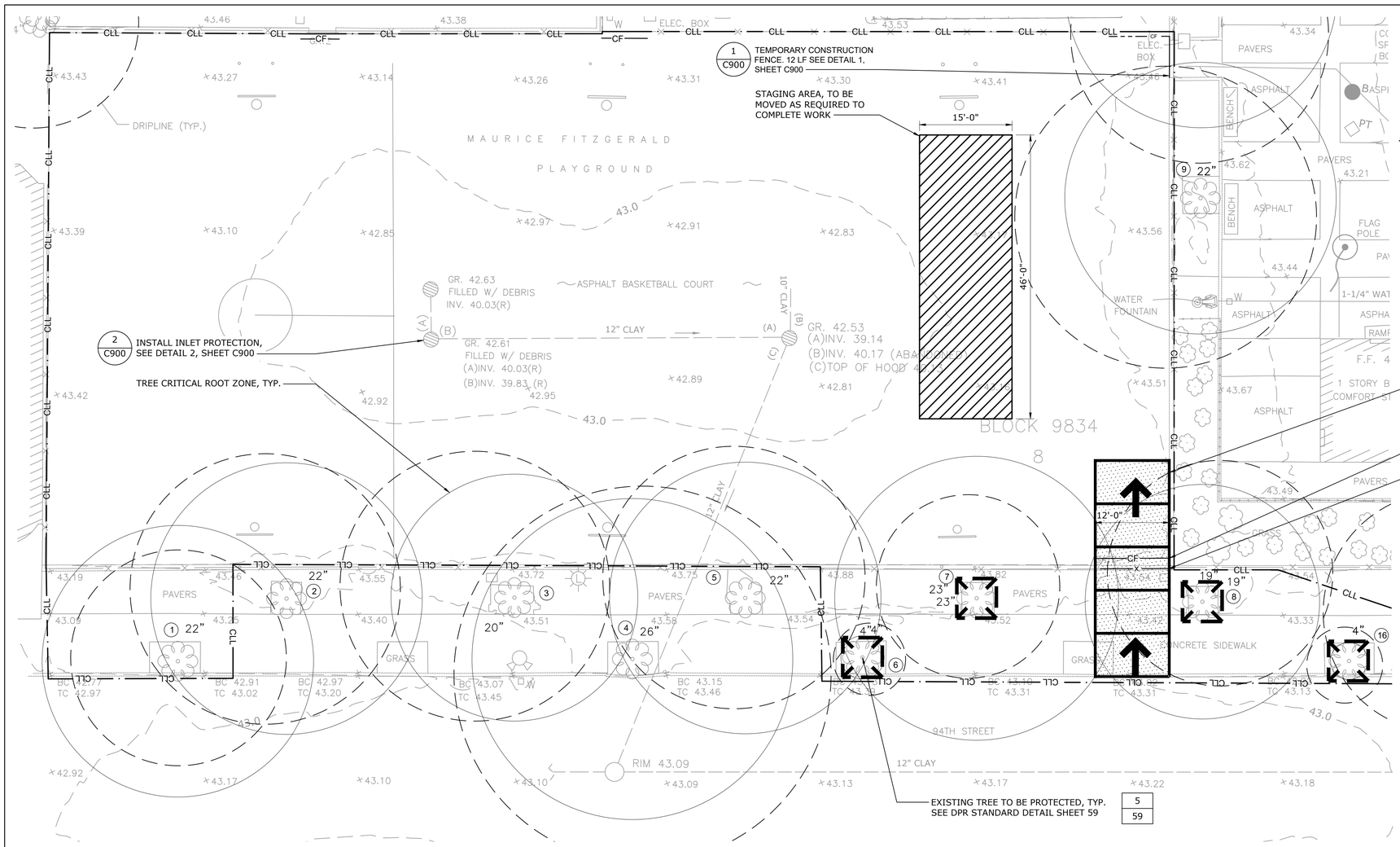
NYC Environmental Protection

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BUREAU OF ENVIRONMENTAL PLANNING AND ANALYSIS

TOPOGRAPHIC SURVEY
MAURICE A. FITZGERALD PLAYGROUND
QUEENS, NEW YORK

DATE	MARCH 24, 2020
PAGE	T-1
SHEET	1 OF 1

File = Z:\2018-2145-2\06 - Technical (Survey, Reports, Calc, CADD)\Survey\DWG\Final Mapping DWG\Final-Maurice A. Fitzgerald Playground Saved by ivelasquez Save date = 3/20/2020 3:17 PM
PLOT DATE: 3/24/2020 4:28 PM BY: LVELASQUEZ
XREFs=



NOTES:

1. TREE PROTECTION NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES.
2. DRAWINGS ARE ROTATED 23 DEGREES FROM TRUE NORTH
3. ANY EXISTING ASPHALT PAVEMENT OR CURB ON OR ADJACENT TO THE SITE THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.

LEGEND

- PROPOSED TREE TO BE PROTECTED
- TREE DRIPLINE
- TREE CRITICAL ROOT ZONE
- CONSTRUCTION ACCESS/ENTRANCE
- PROPOSED STAGING AREA
- CLL - CONTRACT LIMIT LINE
- CF - CONSTRUCTION FENCE
- MODULAR CONSTRUCTION ENTRANCE

PLAN
SCALE: 1" = 10'

SCALE: 1" = 10'

TREE #	SPECIES (common name)	DBH (inches)	CTLA CONDITION RATING	ISA CRITICAL ROOTZONE (CRZ) RADIUS (ft.)	TREE REMOVAL	STUMP REMOVAL	TRANSPLANT TREE	PREPARATORY PRUNING ANSI A-300: Cleaning	Raising	Reducing	Restoring	Structural	Thinning	Limb Tying	TREE PROTECTION: Temporary Wooden Tree Guard	Temporary Wooden Tree Guard For Gloves	Temporary Fence Boundary	Protect Existing Tree Roots w/ Woodchips	Protect Ex. Tree Roots w/ Plywood or Mats	DECOMPACT: Air-Tilling 3 Ft Radius	Air-Tilling 5 Ft Radius	Radial Trench	Vertical Mulch	PREPARATORY FERTILIZE	TREE GROWTH REGULATOR	COMMENTS
1	OAK, PIN	22	81%	22				X																		prune branch
2	OAK, PIN	22	100%	22																						
3	OAK, PIN	20	100%	20																						
4	OAK, PIN	26	100%	26																						
5	OAK, PIN	22	100%	22																						
6	GOLDENRAIN TREE	4	81%	3.5											X											root girdling
7	OAK, PIN	23	97%	23											X											
8	OAK, PIN	19	100%	19				X							X											possible pruning for contractor access
16	ELM, SIBERIAN	4	0%	3.0											X											not included in tree survey, unable to obtain all dimensions

NO.	DATE	ISSUED FOR	BY

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SEAL

Hazen

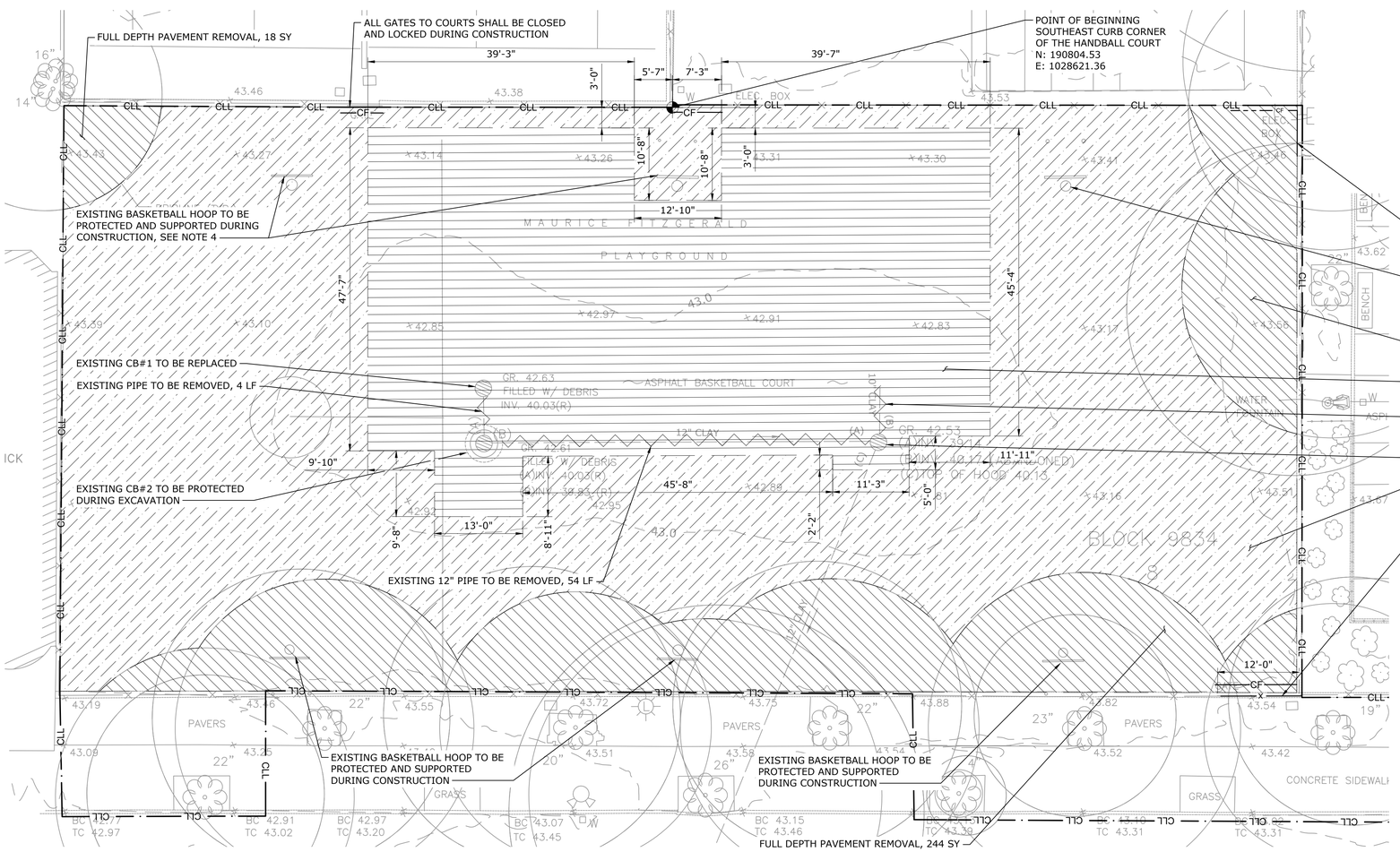
BLOCK 9384
LOT 8

PROJECT TITLE
MAURICE A. FITZGERALD PLAYGROUND ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
TREE PROTECTION, STAGING AND ACCESS PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. TAKADA	D. THOMPSON

B-SCAN	SCALE 1'=10"	DRAWING NO. C100	CONTRACT NO. GI-CONS-7
	DATE NOV 2026		SHEET No. 3 OF 11 SHEETS



PLAN

SCALE: 1"=10'

NOTES:

1. REMOVAL NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES
2. DRAWINGS ARE ROTATED 23 DEGREES FROM TRUE NORTH
3. ANY EXISTING ASPHALT PAVEMENT OR CURB ON OR ADJACENT TO THE SITE THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.
4. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT AND SUPPORT THE BASKETBALL HOOP POSTS ON-SITE. IN ADDITION, THE BASKETBALL BACKBOARDS AND HOOPS SHALL BE REMOVED AND STORED ON-SITE FOR REINSTALLATION FOLLOWING CONSTRUCTION. IF THE BASKETBALL HOOPS, POSTS, OR BACKBOARDS INCUR DAMAGE DURING CONSTRUCTION, THEY SHALL BE REPLACED AT NO COST TO NYC DEP OR NYC DPR.

1 / C900

LEGEND

- x — FENCE REMOVAL
- FULL DEPTH PAVEMENT REMOVAL
- FULL DEPTH EXCAVATION LIMIT
- HAND/PNEUMATIC EXCAVATION LIMIT
- PIPE REMOVAL
- CLL — CONTRACT LIMIT LINE
- CF — CONSTRUCTION FENCE
- POINT OF BEGINNING

SCALE: 1" = 10'

10 5 0 10'

SUGGESTED CONSTRUCTION SEQUENCING

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND UPON APPROVAL OF THE ENGINEER. ALL WORK SHALL BE DONE IN A MANNER TO MINIMIZE DISTURBANCE TO THE NATURAL AREA AND EXISTING VEGETATION. STAKE OUT AND RECEIVE APPROVAL FROM THE ENGINEER FOR THE LIMITS OF WORK BEFORE BEGINNING ANY CLEARING.

1. INSTALL PERIMETER EROSION CONTROL MEASURES INCLUDING CONSTRUCTION LIMIT FENCING, AND SILT FENCING AROUND THE WORK AREA. IF CLEARING IS REQUIRED FOR INSTALLATION OF A PARTICULAR MEASURE, ALL MEASURES NOT REQUIRING CLEARING SHALL BE INSTALLED FIRST. CLEARING OF THE NECESSARY LAND FOR INSTALLATION OF THE PARTICULAR MEASURE MAY THEN PROCEED. INSTALL ALL TREE PROTECTION.
2. INLET PROTECTION SHOULD BE USED ON ALL DRAINAGE INLETS ADJACENT TO AND DOWNSTREAM OF CONSTRUCTION AREA.
3. DRAINAGE INLETS AND MANHOLE STRUCTURES SHALL BE CLEANED AT THE START OF CONSTRUCTION AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. CLEANING SHALL OCCUR PER THE SPECIFICATIONS.
4. INSTALL STABILIZED CONSTRUCTION ENTRANCE. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE TO PREVENT THE DEPOSITION OF MATERIALS ONTO THE PUBLIC ROADWAY. ALL MATERIALS DEPOSITED ONTO THE PUBLIC ROADWAY SHALL BE REMOVED IMMEDIATELY.
5. PIPES WITHIN THE WORK AREA BETWEEN TWO DRAINAGE INLETS AND/OR MANHOLE STRUCTURES SHALL BE CLEANED AT THE START OF CONSTRUCTION AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. CLEANING SHALL OCCUR PER THE SPECIFICATIONS. THE CONTRACTOR SHALL CCTV EXISTING STORM SEWER PIPES THAT DIRECTLY CONVEY STORM WATER RUNOFF FROM GREEN INFRASTRUCTURE PRACTICES TO THE DOWNSTREAM SEWER, AT THE DIRECTION OF THE ENGINEER. PIPES SHALL BE CLEANED OF ALL RUBBISH, DIRT, DEBRIS, AND ANY OTHER MATERIALS.
6. EXCAVATION AND INSTALLATION OF GREEN INFRASTRUCTURE PRACTICES SHALL BE PERFORMED, ALONG WITH ALL ASSOCIATED APPURTENANCES. SHEETING AND BRACING SHALL BE INSTALLED FOR ALL EXCAVATIONS DEEPER THAN 5 FEET.
7. CONSTRUCTION FENCE SHOWN IS APPROXIMATE OUTER LIMITS. FENCED AREA SHALL BE REDUCED IF AN AREA IS COMPLETED TO ALLOW PEDESTRIAN ACCESS.
8. BACKFILL THE PROJECT SITE WITH CLEAN SOIL, AS PER CONTRACT SPECIFICATIONS, TO THE FINAL ELEVATIONS SHOWN ON THE CONTRACT DRAWINGS.
9. ONCE ALL AREAS HAVE BEEN STABILIZED, REMOVE TEMPORARY PERIMETER EROSION AND SEDIMENT CONTROL MEASURES.
10. UPON REMOVAL OF THE STABILIZED CONSTRUCTION ENTRANCE, AND BACKFILL WITH CLEAN SAND TO RESTORE EXISTING GRADE.
11. PAVING IN THE WORK AREAS SHALL BE RESTORED.
12. EROSION CONTROL MEASURES AND CONSTRUCTION FENCE SHALL BE REMOVED AFTER SITE IS RESTORED.

NO.	DATE	ISSUED FOR	BY

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SEAL: STATE OF NEW YORK — SANDEEP MELWANI — 076826 — LICENSED PROFESSIONAL ENGINEER

Hazen

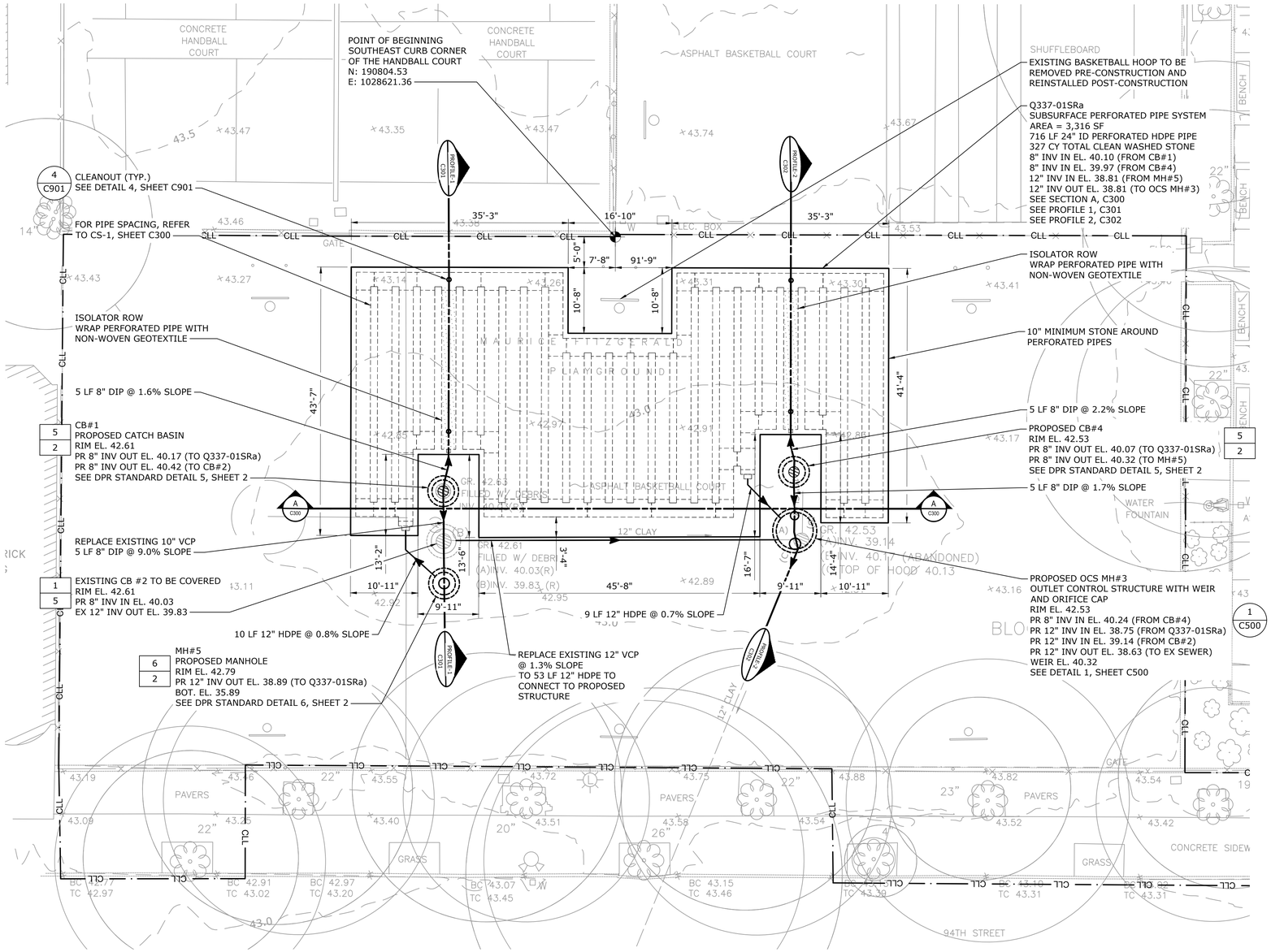
BLOCK 9384
LOT 8

PROJECT TITLE
MAURICE A. FITZGERALD PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
REMOVAL AND DEMOLITION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. TAKADA	D. THOMPSON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'	C101	GI-CONS-7
	DATE NOV 2026		SHEET No. 4 OF 11 SHEETS



PLAN

SCALE: 1" = 10'

NOTES:

1. DRAWINGS ARE ROTATED 23 DEGREES FROM TRUE NORTH.

SUGGESTED FITTINGS FOR PROPOSED LAYOUT		
FITTING	**QUANTITY**	**UNIT**
24" I.D. DIAMETER PERFORATED HDPE PIPE	716	LF
8" I.D. DIAMETER DUAL WALL FABRICATED 45° BENDS	1	EA
24" I.D. DIAMETER DUAL WALL FABRICATED 90° BENDS	13	EA
24" x 8" I.D. DIAMETER DUAL WALL FABRICATED REDUCERS - PLAIN END	2	EA
24" x 12" I.D. DIAMETER DUAL WALL FABRICATED REDUCERS - PLAIN END	2	EA
24" I.D. DIAMETER DUAL WALL TRIPLE MANIFOLD - PLAIN END	8	EA
24" I.D. DIAMETER DUAL WALL DOUBLE MANIFOLD - PLAIN END	3	EA
24" I.D. DIAMETER DUAL WALL SINGLE MANIFOLD - PLAIN END	12	EA

LEGEND

- GREEN INFRASTRUCTURE PRACTICE
- PROPOSED YARD DRAIN (WITH SUBSURFACE LIMITS SHOWN)
- PROPOSED MANHOLE (WITH SUBSURFACE LIMITS)
- OUTLET CONTROL STRUCTURE
- PROPOSED STORM DRAIN
- ISOLATOR ROW WITH GEOTEXTILE
- CLEANOUT

1" = 10' (10 5 0 10')

NYC Environmental Protection

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PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL: STATE OF NEW YORK — DEEP MEHROTRA — 097874 — LICENSED PROFESSIONAL ENGINEER

Hazen

BLOCK 9384

LOT 8

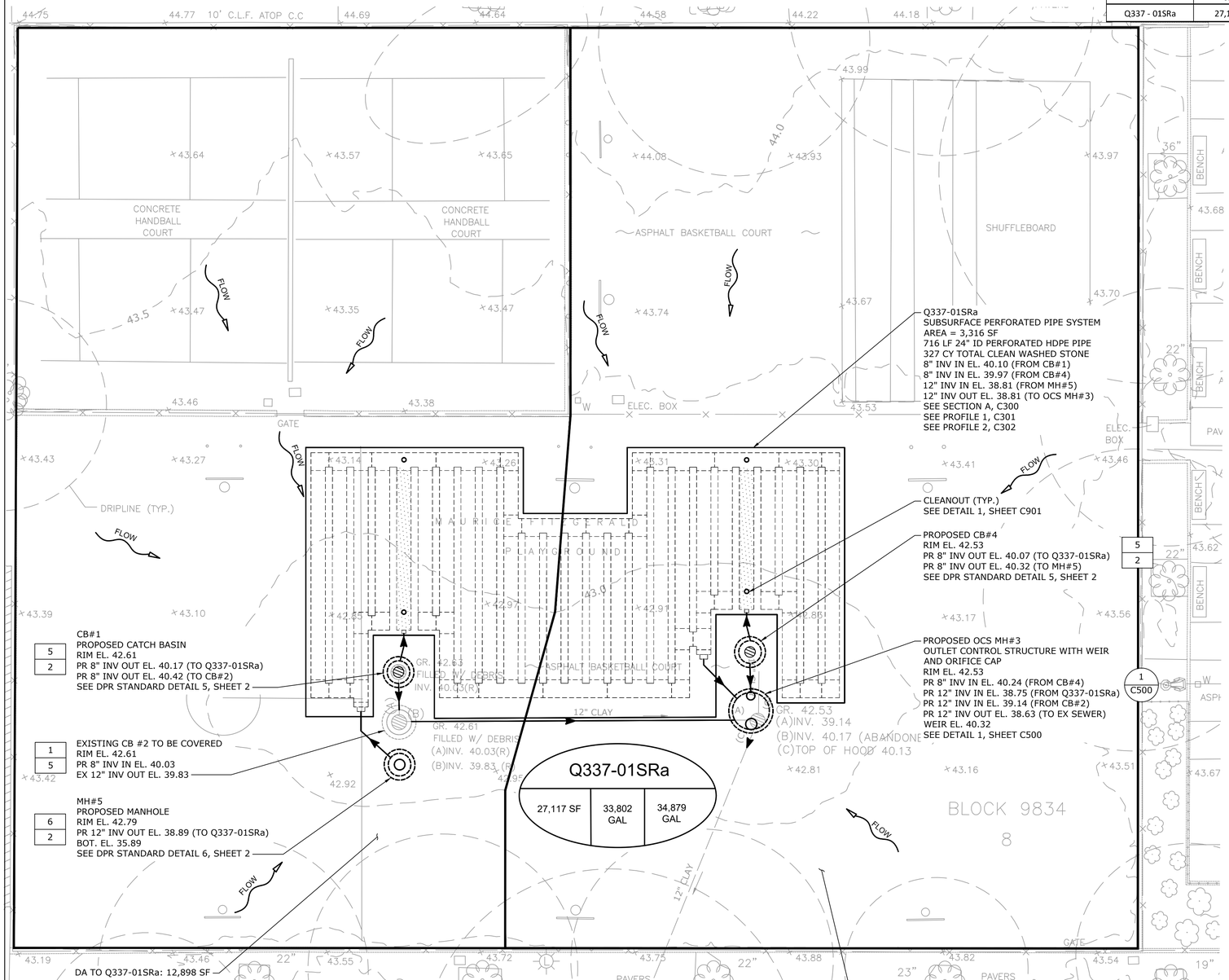
PROJECT TITLE
MAURICE A. FITZGERALD PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. TAKADA	D. THOMPSON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'	C200	GI-CONS-7
	DATE NOV 2026		SHEET No. 5 OF 11 SHEETS

GI ID	GI Asset Data					Stormwater Storage Calculations				Total Stormwater Managed (Static Storage)		
	Managed Impervious Tributary Area	Volume 2.0" Rainfall on Impervious Area	GI Footprint Surface Area	GI Perimeter	Permeability Coefficient	Stormwater chambers, pipes, tanks, etc. volume	Stone Subbase					
							Stone Depth	Stone Voids	Stormwater Captured by Stone Layer	% Impervious Surface Managed	Calculated Volume of Rainfall Captured	Calculated Volume of Rainfall Captured
	sf	cf	sf	ft	in/hr	cf	ft	%	cf	%	cf	gal
Q337 - 01SRa	27,117	4,519	3,316	339	1.06	2,312	2.68	40%	2,351	103%	4,663	34,879



Q337-01SRa
SUBSURFACE PERFORATED PIPE SYSTEM
AREA = 3,316 SF
716 LF 24" ID PERFORATED HDPE PIPE
327 CY TOTAL CLEAN WASHED STONE
8" INV IN EL. 40.10 (FROM CB#1)
8" INV IN EL. 39.97 (FROM CB#4)
12" INV IN EL. 38.81 (FROM MH#5)
12" INV OUT EL. 38.81 (TO OCS MH#3)
SEE SECTION A, C300
SEE PROFILE 1, C301
SEE PROFILE 2, C302

CLEANOUT (TYP.)
SEE DETAIL 1, SHEET C901

PROPOSED CB#4
RIM EL. 42.53
PR 8" INV OUT EL. 40.07 (TO Q337-01SRa)
PR 8" INV OUT EL. 40.32 (TO MH#5)
SEE DPR STANDARD DETAIL 5, SHEET 2

PROPOSED OCS MH#3
OUTLET CONTROL STRUCTURE WITH WEIR AND ORIFICE CAP
RIM EL. 42.53
PR 8" INV IN EL. 40.24 (FROM CB#4)
PR 12" INV IN EL. 38.75 (FROM Q337-01SRa)
PR 12" INV IN EL. 39.14 (FROM CB#2)
PR 12" INV OUT EL. 38.63 (TO EX SEWER)
WEIR EL. 40.32
SEE DETAIL 1, SHEET C500

CB#1
PROPOSED CATCH BASIN
RIM EL. 42.61
PR 8" INV OUT EL. 40.17 (TO Q337-01SRa)
PR 8" INV OUT EL. 40.42 (TO CB#2)
SEE DPR STANDARD DETAIL 5, SHEET 2

EXISTING CB #2 TO BE COVERED
RIM EL. 42.61
PR 8" INV IN EL. 40.03
EX 12" INV OUT EL. 39.83

MH#5
PROPOSED MANHOLE
RIM EL. 42.79
PR 12" INV OUT EL. 38.89 (TO Q337-01SRa)
BOT. EL. 35.89
SEE DPR STANDARD DETAIL 6, SHEET 2

PLAN
SCALE: 1" = 10'

NOTES:

1. DRAINAGE NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES.
2. DRAWINGS ARE ROTATED 23 DEGREES FROM TRUE NORTH.

LEGEND

- GREEN INFRASTRUCTURE PRACTICE
- PROPOSED YARD DRAIN (WITH SUBSURFACE LIMITS SHOWN)
- PROPOSED MANHOLE (WITH SUBSURFACE LIMITS)
- OUTLET CONTROL STRUCTURE
- PROPOSED STORM DRAIN
- ISOLATOR ROW WITH GEOTEXTILE
- CLEANOUT
- FLOW DIRECTION
- DRAINAGE AREA

GI NAME | TRIBUTARY AREA | VOLUME OF 2.0" STORM | CAPACITY MANAGED — GREEN INFRASTRUCTURE CHARACTERISTICS

SCALE: 1" = 10' (10 5 0 10')

NO.	DATE	ISSUED FOR	BY

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ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL: STATE OF NEW YORK — DEEP MEHROTRA — 075826 — LICENSED PROFESSIONAL ENGINEER

Hazen

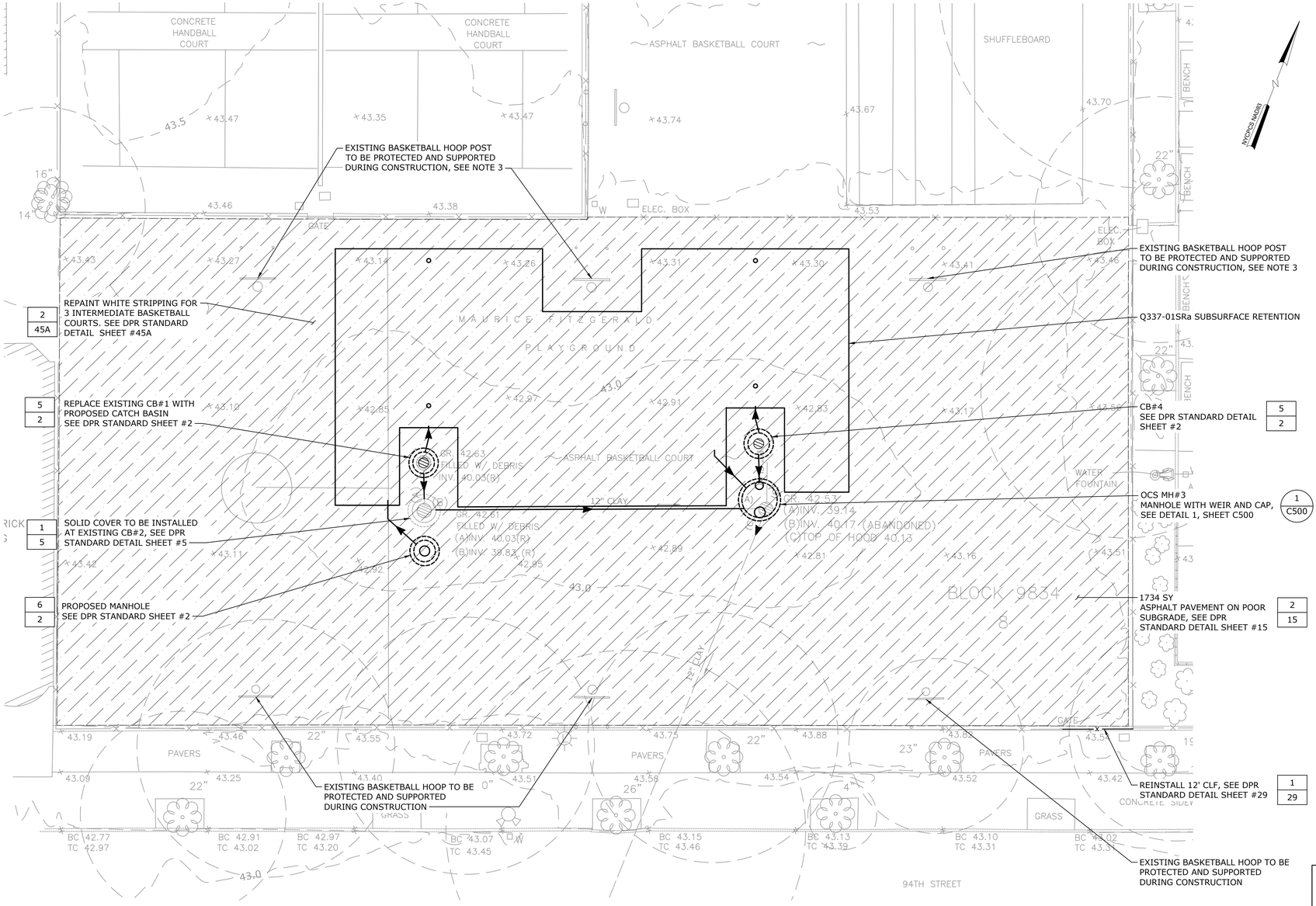
PROJECT TITLE
MAURICE A. FITZGERALD PLAYGROUND ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
GRADING AND DRAINAGE PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. TAKADA	D. THOMPSON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'	C201	GI-CONS-7
	DATE NOV 2026		SHEET No. 6 OF 11 SHEETS

BLOCK 9384
LOT 8



PLAN

SCALE: 1" = 10'

NOTES:

1. LAYOUT AND MATERIALS NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES.
2. DRAWINGS ARE ROTATED 23 DEGREES FROM TRUE NORTH.
3. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT AND SUPPORT THE BASKETBALL HOOP POSTS ON-SITE. IN ADDITION, THE BASKETBALL BACKBOARDS AND HOOPS SHALL BE REMOVED AND STORED ON-SITE FOR REINSTALLATION FOLLOWING CONSTRUCTION. IF THE BASKETBALL HOOPS, POSTS, OR BACKBOARDS INCUR DAMAGE DURING CONSTRUCTION, THEY SHALL BE REPLACED AT NO COST TO NYC DEP OR NYC DPR.

LEGEND

- FENCE REINSTALLATION
- FULL DEPTH ASPHALT RESTORATION WITH PAINT RESTORATION

SCALE: 1" = 10' 10 5 0 10'

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Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL

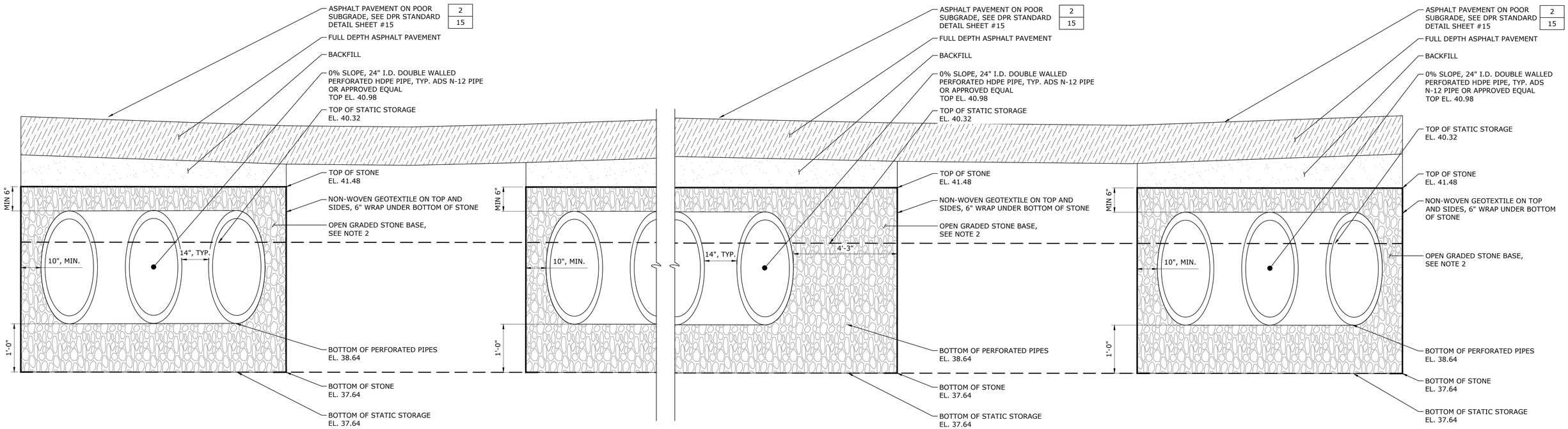
Hazen

BLOCK 9384
LOT 8

PROJECT TITLE
MAURICE A. FITZGERALD PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
MATERIALS PLAN

DESIGNED BY	DRAWN BY		CHECKED BY
A. EASON	S. TAKADA		D. THOMPSON
B-SCAN	SCALE 1'=10"	DRAWING NO. C202	CONTRACT NO. GI-CONS-7
	DATE NOV 2026		SHEET No. 7 OF 11 SHEETS



CROSS SECTION A
HORIZONTAL SCALE 1" = 2'
VERTICAL SCALE 1" = 1'

SCALE: 1" = 1'

SCALE: 1" = 2'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 4,663 CF AND IS CALCULATED BETWEEN EL. 40.32 AND EL. 37.64.
2. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT.

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NO.	DATE	ISSUED FOR	BY

SEAL

Hazen

BLOCK 9384

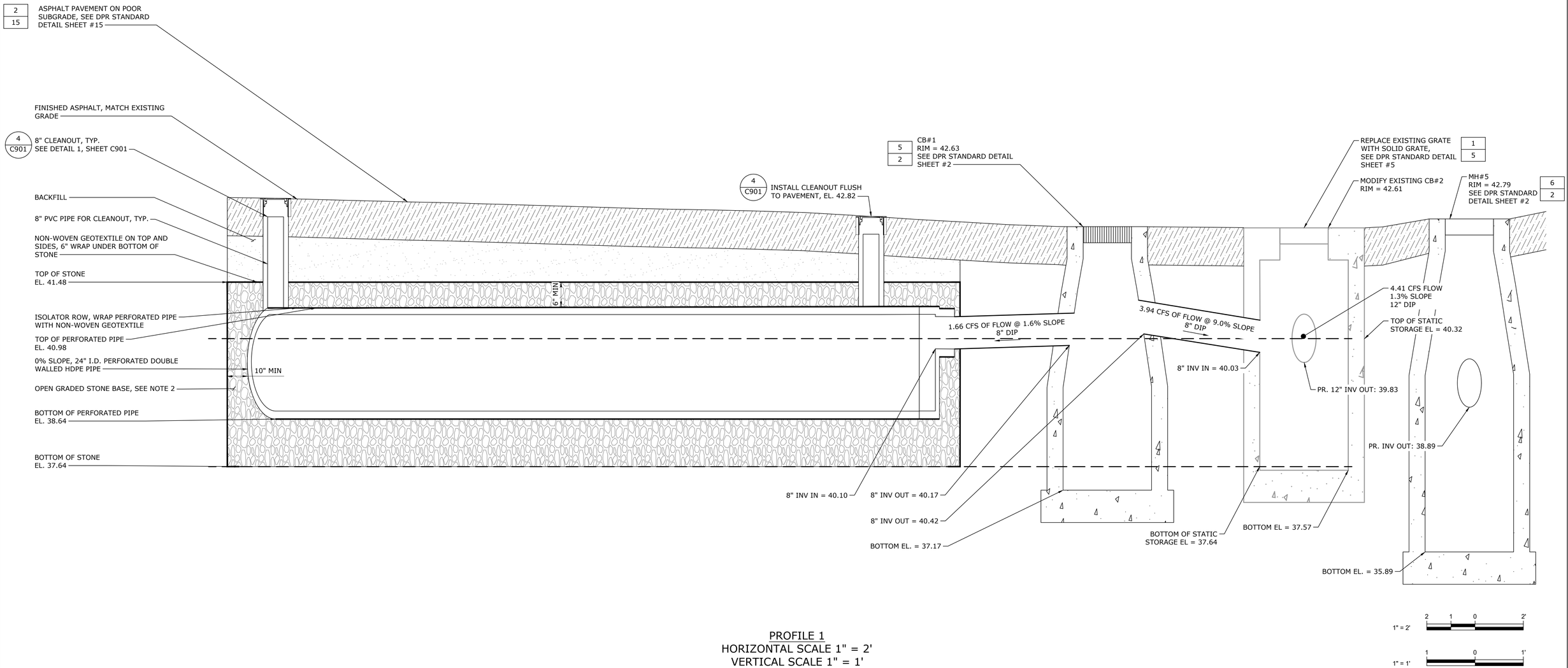
LOT 8

PROJECT TITLE
MAURICE A. FITZGERALD PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 1

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. TAKADA	D. THOMPSON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C300	GI-CONS-7
	DATE NOV 2026		SHEET No. 8 OF 11 SHEETS



PROFILE 1
HORIZONTAL SCALE 1" = 2'
VERTICAL SCALE 1" = 1'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 4,663 CF AND IS CALCULATED BETWEEN EL. 40.32 AND EL. 37.64.
2. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT

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NO.	DATE	ISSUED FOR	BY

SEAL
STATE OF NEW YORK · DUDEEP MEHROTRA · 076926 · LICENSED PROFESSIONAL ENGINEER

Hazen

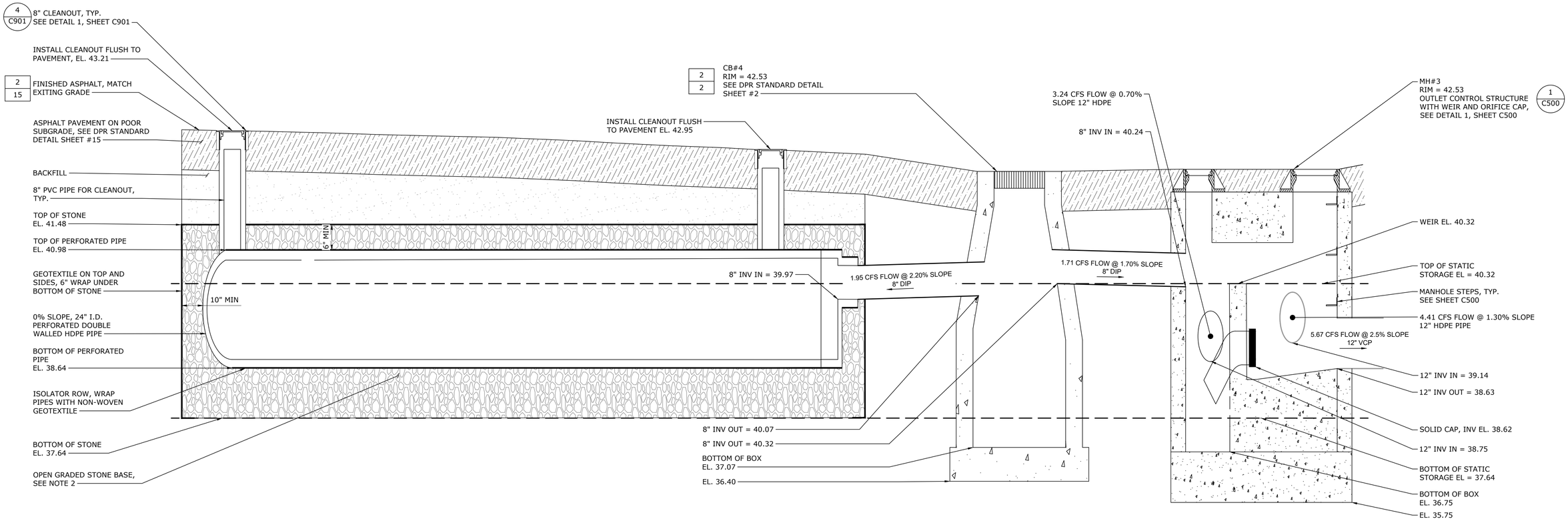
BLOCK 9384
LOT 8

PROJECT TITLE
MAURICE A. FITZGERALD PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 2

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. TAKADA	D. THOMPSON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C301	GI-CONS-7
	DATE NOV 2026		SHEET No. 9 OF 9 SHEETS



PROFILE 2
HORIZONTAL SCALE 1" = 2'
VERTICAL SCALE 1" = 1'

SCALE: 1" = 1'

SCALE: 1" = 2'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 4,663 CF AND IS CALCULATED BETWEEN EL. 40.32 AND EL. 37.64.
2. OPEN GRADED STONE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT.

NO.	DATE	ISSUED FOR	BY

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SEAL

Hazen

BLOCK 9384

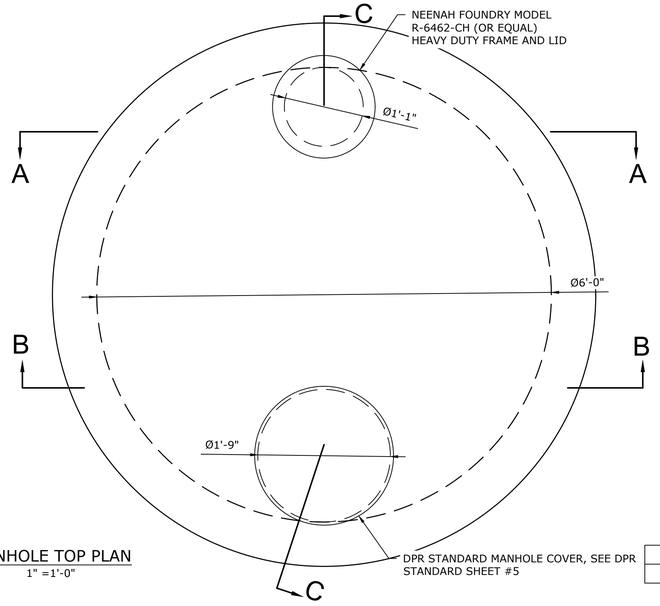
LOT 8

PROJECT TITLE
MAURICE A. FITZGERALD PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

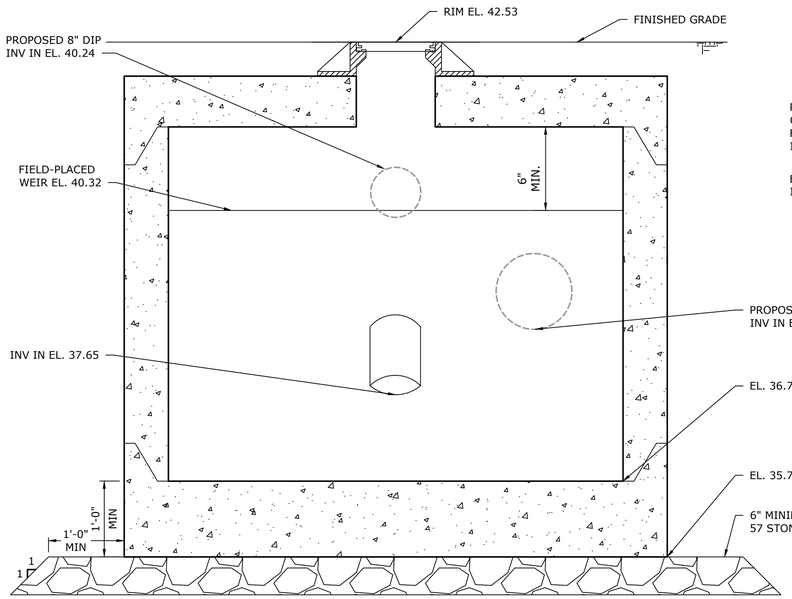
DRAWING TITLE
SECTIONS AND PROFILES - 3

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. TAKADA	D. THOMPSON

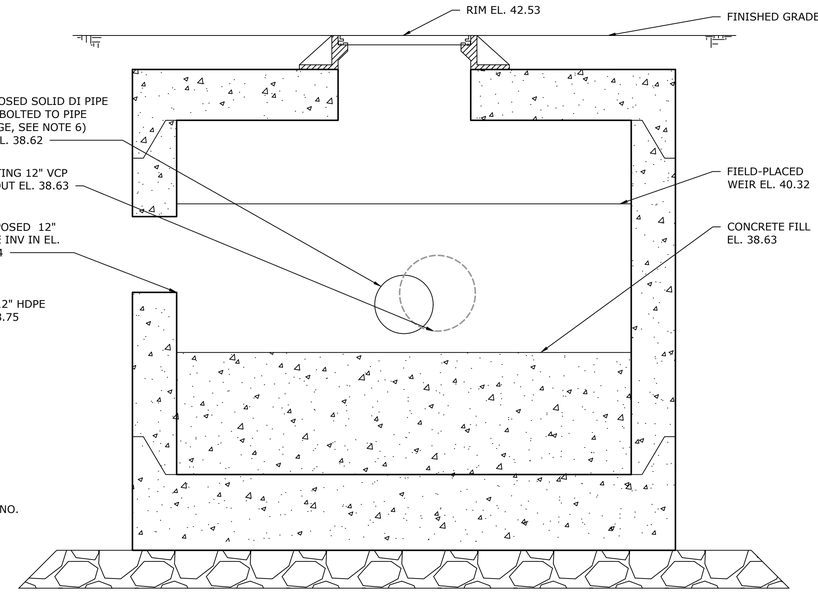
B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C302	GI-CONS-7
	DATE NOV 2026		SHEET No. 10 OF 11 SHEETS



MANHOLE TOP PLAN
1" =1'-0"

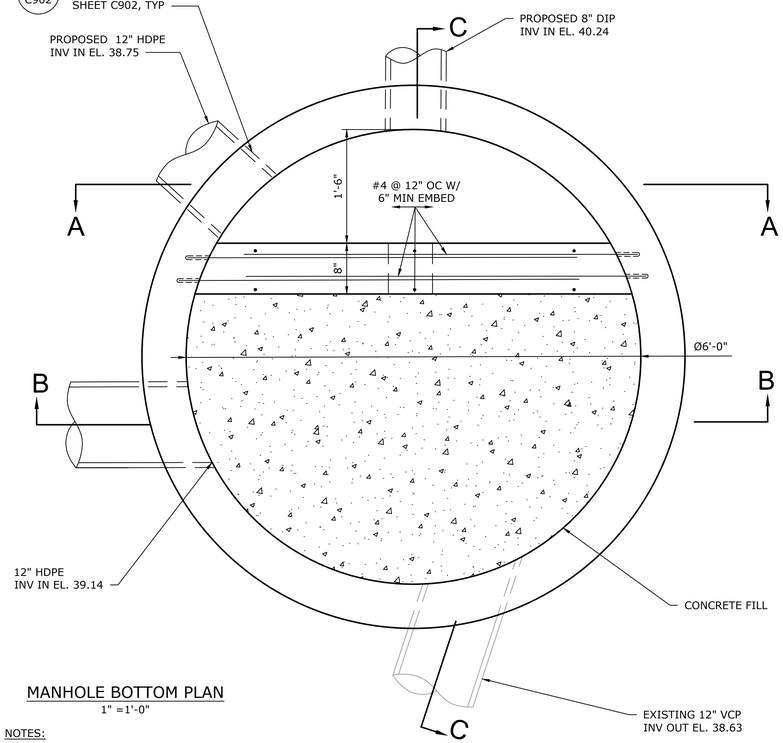


SECTION A-A
1"=1'-0"

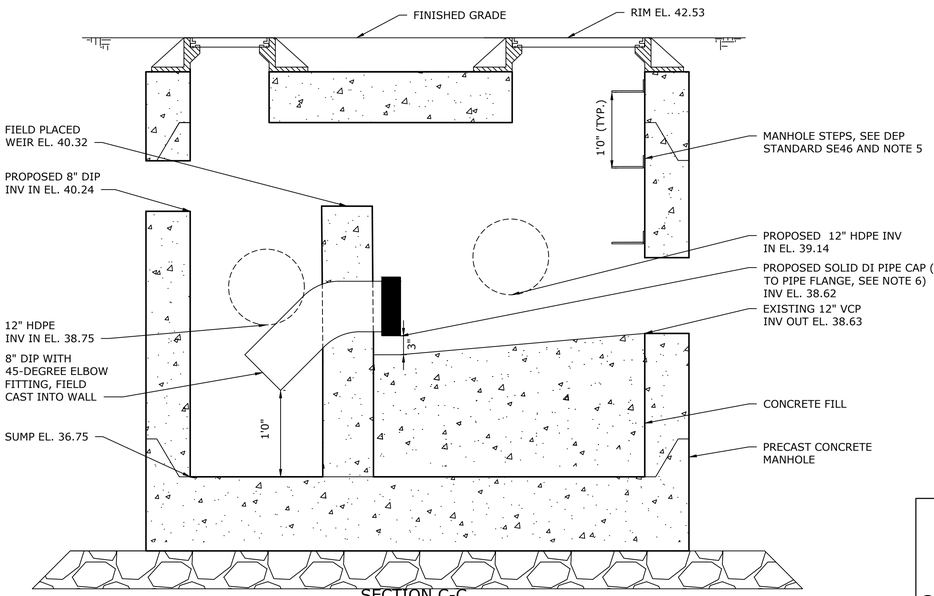


SECTION B-B
1"=1'-0"

6 / C902 WALL PENETRATION, SEE DETAIL 6, SHEET C902, TYP

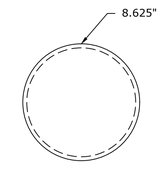


MANHOLE BOTTOM PLAN
1" =1'-0"

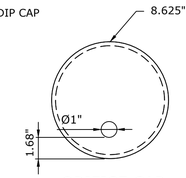


SECTION C-C
1"=1'-0"

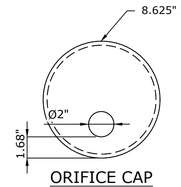
1 / C500 MH #3 - MANHOLE WITH WEIR AND ORIFICE CAP DETAILS
AS SHOWN



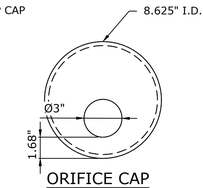
SOLID CAP
1"=0'-6"
FURNISH AND DELIVER 4 - SOLID ORIFICE CAPS
INSTALL 1 - SOLID ORIFICE CAP, SEE NOTE 1



ORIFICE CAP
1"=0'-6"
PLACEMENT OF 1 - 1" ORIFICE CAP IF NEEDED, SEE NOTE 1



ORIFICE CAP
1"=0'-6"
PLACEMENT OF 1 - 2" ORIFICE CAP IF NEEDED, SEE NOTE 1



ORIFICE CAP
1"=0'-6"
PLACEMENT OF 1 - 3" ORIFICE CAP IF NEEDED, SEE NOTE 1

NOTES:

1. CONTRACTOR SHALL SUPPLY TWO (2) SOLID ORIFICE CAPS FOR THE PROJECT. ONE (1) SOLID CAP SHALL BE INSTALLED IN THE FIELD. THE REMAINING SOLID CAP SHALL BE TURNED OVER TO NYCDEP FOR FUTURE USE.
2. CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
3. REFER TO DETAILS 1-6 ON SHEET C902.
4. SEE GENERAL STRUCTURAL NOTES AND CONCRETE NOTES ON SHEET C902.
5. RUNGS SHOULD BE LOCATED 3" OFFSET FROM THE TOP SLAB OF THE MANHOLE, AND REPEAT EVERY 12".
6. BOLTS SHALL BE INSTALLED SO THAT THE BOLT HEAD IS ON THE WEIR WALL SIDE.

NO.	DATE	ISSUED FOR	BY

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Forestry, Horticulture and Natural Resources

SEAL
STATE OF NEW YORK — DEEP MEHROTRA — 075986 — LICENSED PROFESSIONAL ENGINEER

Hazen

BLOCK 9384
LOT 8

PROJECT TITLE
MAURICE A. FITZGERALD PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
DETAILS - 1

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. TAKADA	D. THOMPSON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C500	GI-CONS-7
	DATE NOV 2026		SHEET No. 11 OF 11 SHEETS

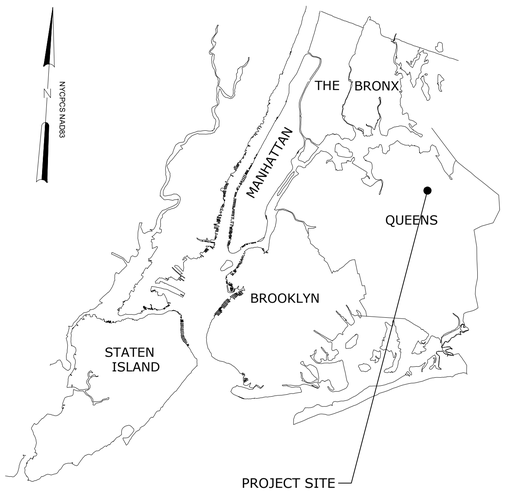
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS

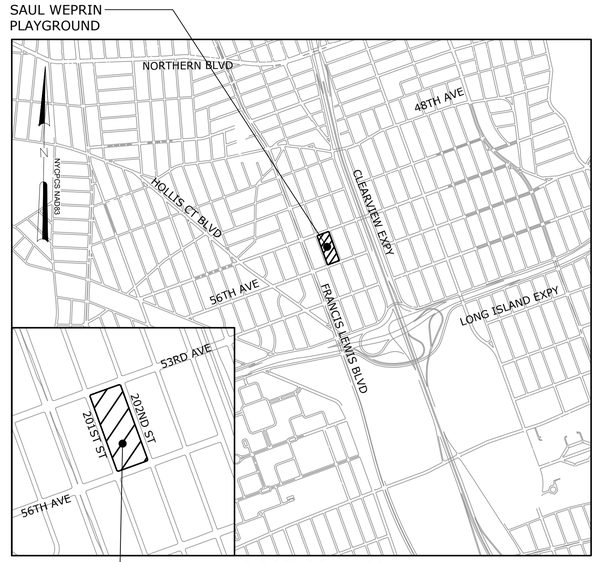
NYC Parks

ON-SITE GREEN INFRASTRUCTURE
TALLMAN ISLAND CSO TRIBUTARY AREA
OUTFALL TI-010
DEP CAPITAL CONTRACT NO. GI-CONS-7
Q293 SAUL WEPRIN PLAYGROUND
BBL 4074100001

QUEENS, NY

BID SET
NOVEMBER 2026





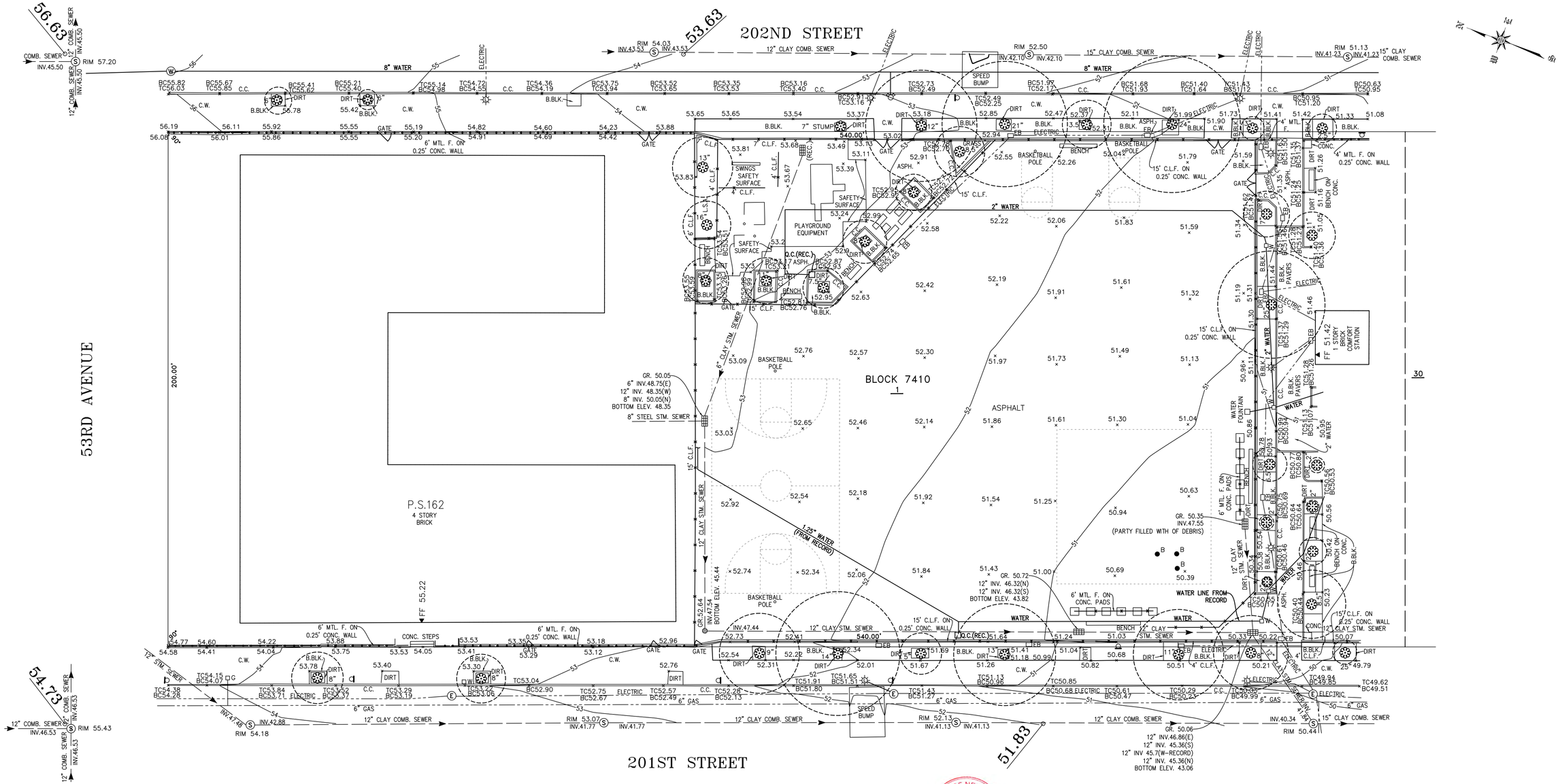
LOCATION PLAN

SHEET LIST TABLE	
Sheet Number	Sheet Title
G001	COVER - SAUL WEPRIN PLAYGROUND
T-1	EXISTING SITE AND DRAINAGE UTILITY PLAN
C000	EXISTING CONTRIBUTING DRAINAGE AREA PLAN
C100	TREE PROTECTION, CONSTRUCTION SEQUENCING, AND PLAN
C101	REMOVAL AND DEMOLITION PLAN
C200	PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN
C201	PROPOSED TRIBUTARY DRAINAGE AREA PLAN
C202	PROPOSED MATERIALS AND FINAL STABILIZATION PLAN
C203	PAINTING PLAN
C300	SECTIONS AND PROFILES - 1
C301	SECTIONS AND PROFILES - 2
C302	SECTIONS AND PROFILES - 3
C500	DETAILS - 1

JOHN MCLAUGHLIN
MANAGING DIRECTOR
OFFICE OF ECOSYSTEM SERVICES, GREEN INFRASTRUCTURE AND RESEARCH
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS, NYCDEP

Lisa F. Garcia
Digitally signed by Lisa F. Garcia
Date: 2026.10.30 15:27:24 -04'00'

LISA F. GARCIA
COMMISSIONER
NYCDEP



Notes:

1. The existing conditions shown on this plan are based upon an actual on-the-ground instrument survey completed by GdB Geospatial LS, PC in July of 2021.
2. The locations of existing underground utilities shown on this plan are based on field observations and information of record. They are not warranted to be exactly located nor is it warranted that all underground utilities or other structures are shown on this plan.
3. Horizontal datum is North American Datum 1983 (2011) Epoch 2010.00 (New York State Plane Coordinate System, Long Island Zone). All linear measurements are in U.S. Survey Feet.
4. Vertical datum is North American Vertical Datum 1988. To convert this Datum to Queens Highway Datum, subtract 1.625 feet from each elevation.

Utility Notes:

1. Existing subsurface utility features have been depicted in accordance with CI/ASCE 38-02, "American Society of Civil Engineers, Standard Guideline for The Collection and Depiction of Existing Subsurface Utility Data". This standard has established four distinct quality levels of utility mapping (Quality Level B was used for this survey).
   - Quality Level D - information derived from existing records or oral recollections.
   - Quality Level C - information obtained by surveying and plotting visible above-ground utility features and by using professional judgement in correlating this information to Quality Level D information.
   - ***Quality Level B*** - information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents. Professional judgment is used in correlating this information to Quality Level C and D information.
   - Quality Level A - horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Professional judgement is used in correlating this information to Quality Level B, C and D information.
2. The surveyor makes no guarantee or warranty that the underground utilities depicted comprise all such utilities in the area, either in service or abandoned. The surveyor further does not guarantee or warrant that the underground utilities depicted are in the exact location indicated. Utilities are depicted in accordance with the standard of care, from information available.
3. The contractor shall utilize "Call Before You Dig", "One Call", or local equivalent prior to excavation, for the purpose of verifying the subsurface utility in the area. In the areas where the "Call Before You Dig", "One Call", or local equivalent does not respond, the contractor shall verify the locations of the existing utilities, in accordance with the owner's contract and all applicable laws and regulations, including OSHA.
4. Individual components of utilities and related structures may exist above or below grade on or near the structures and may not be depicted. These may include but are not limited to ground wires, structural support, and cathodic protection. The contractor shall:
   A) Contact the owner of the utility prior to excavation for instruction regarding hazards associated with, and specific precautions to be utilized when working at or near, such facilities
   B) Exercise the appropriate standard of care required in accordance with all applicable laws and regulations, including OSHA, when excavating in the vicinity of a utility and/or its related structures.

STATE OF NEW YORK · MICHAEL M. LEWIS · 050842 · LICENSED LAND SURVEYOR

2025-09-26
DATE

MICHAEL M. LEWIS, L.S.
N.Y.S. L.S. No. 050842
MichaelLewis@SAM.BIZ

Unauthorized alteration or addition to this survey is a violation of section 7209 of the New York State Education Law. Copies of this survey map not bearing the land surveyor's inked seal or embossed seal shall not be considered valid true copies. Certifications indicated herein shall run only to the person for whom the survey map is prepared, and on his behalf to the title company, governmental agency and lending institution. Certifications are not transferable to additional institutions or subsequent owners.

0 10' 20' 40' 60'
1" = 20'

NO.	DATE	ISSUED FOR	BY

DESIGNED _____
DRAWN _____
CHECKED _____
PROJ.ENGR. _____

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

GdB Geospatial

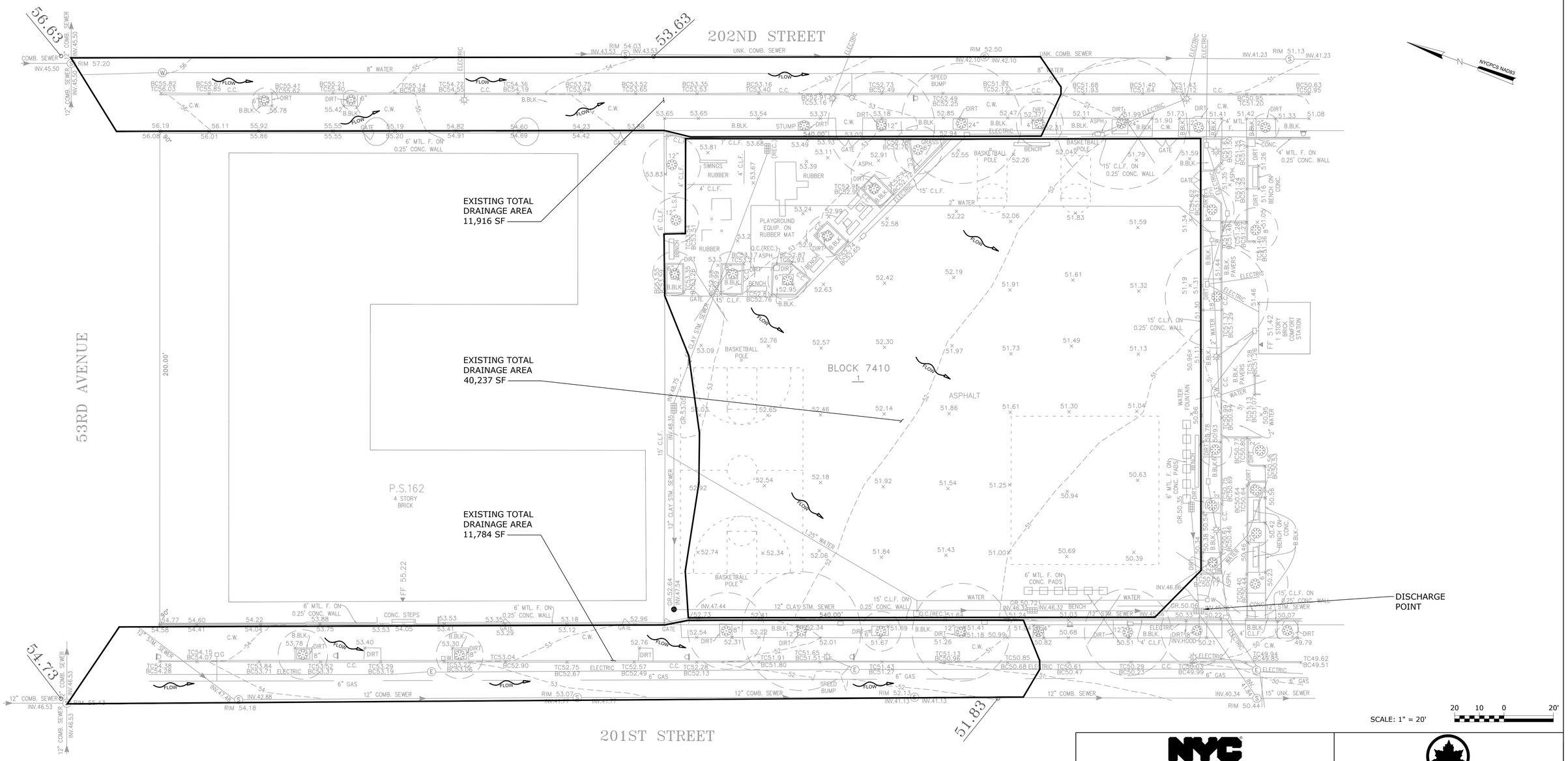
APPROVED FOR THE CITY OF NEW YORK
_____ P.E.
PROJECT MANAGER

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
OFFICE OF GREEN INFRASTRUCTURE
NYCDEP CAPITAL PROJECT WP-169

GI-CONS-7
GREEN INFRASTRUCTURE PRACTICES AT NYC-DPR SITES
SAUL WEPRIN PLAYGROUND
TOPOGRAPHIC & UTILITY SURVEY PLAN

DATE	MARCH 2022
PAGE	2
SHEET NUMBER	T-1



PLAN
SCALE: 1" = 20'

SCALE: 1" = 20'

NOTES

1. DRAWINGS ARE ROTATED 290 DEGREES FROM TRUE NORTH.

NO.	DATE	ISSUED FOR	BY

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Bureau of Environmental Planning and Analysis

NYC Parks

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PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL

Hazen

BLOCK 7410

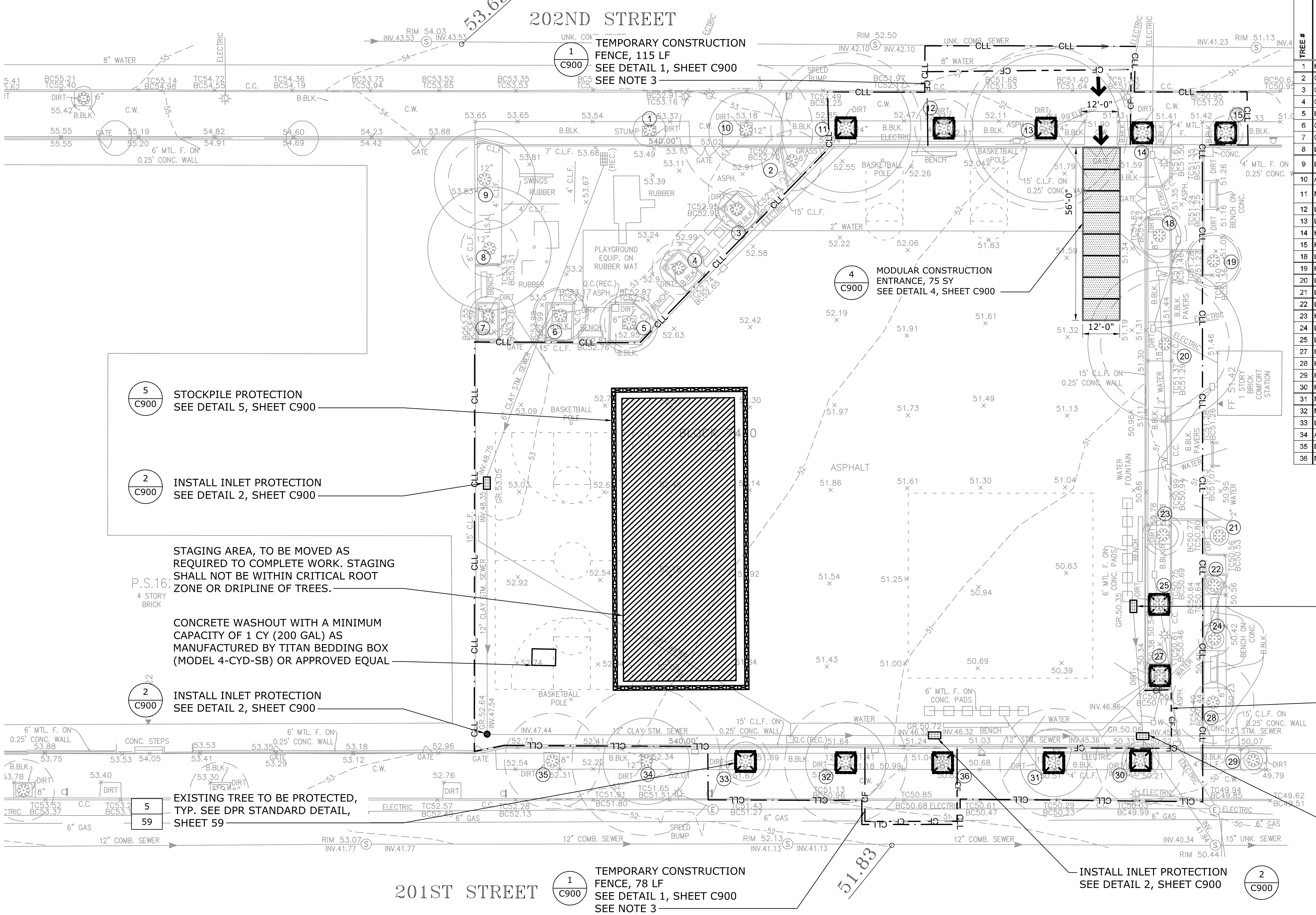
LOT 1

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
EXISTING CONTRIBUTING DRAINAGE AREA PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A.EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C000	GI-CONS-7
	DATE NOV 2026		SHEET No. 3 OF 13 SHEETS



TREE #	SPECIES (common name)	DBH (inches)	CTLA CONDITION RATING	ISA CRITICAL ROOTZONE (CRZ) RADIUS (ft.)	TREE REMOVAL	STUMP REMOVAL	TRANSPLANT TREE	PREPARATORY PRUNING – ANSI A-300: Cleaning	Raising	Reducing	Restoring	Structural	Thinning	Limb Tying	TREE PROTECTION: Temporary Wooden Tree Guard	Temporary Wooden Tree Guard For Groves	Temporary Fence Boundary	Protect Existing Tree Roots w/ Woodchips	Protect Ex. Tree Roots w/ Plywood or Mats	DECOMPACT: Air-Tilling 3 Ft Radius	Air-Tilling 5 Ft Radius	Radial Trench	Vertical Mulch	PREPARATORY FERTILIZE	TREE GROWTH REGULATOR	COMMENTS
1	HONEYLOCUST	7	94%	5.3																						
2	GINKGO	9	91%	6.4																						
3	GINKGO	8	75%	6.0																						Deep mechanical damage to trunk, buried root flare
4	GINKGO	8	88%	6.0																						
5	LINDEN, LITTLE LEAF	8	78%	9.4																						
6	GINKGO	11	91%	8.3																						Buried root flare
7	GINKGO	8	84%	6.0																						Large girdling roots
8	LINDEN, LITTLE LEAF	16	84%	20.0																						Large girdling roots
9	LINDEN, LITTLE LEAF	13	72%	16.3																						Deep bore holes, Deep cracks with decay, Splitting trunk, Bulbous trunk flare
10	ASH, OTHER	12	59%	12.0																						Many dead branches
11	MAPLE, SILVER	21	66%	21.0				X							X											Roots growing over belgium brick, many dead branches, prune
12	LONDON PLANETREE	4	100%	3.0											X											Check for girdling roots, prune if necessary
13	LONDON PLANETREE	24	94%	24.0											X											Don't limb up for construction
14	HONEYLOCUST	3	100%	3.0											X											
15	HONEYLOCUST	3	100%	3.0											X											
18	LONDON PLANETREE	7	88%	7.0																						
19	HONEYLOCUST	11	100%	8.3																						
20	LONDON PLANETREE	25	94%	25.0																						
21	LINDEN, AMERICAN	2	94%	3.0																						
22	LINDEN, AMERICAN	2	97%	3.0																						
23	HONEYLOCUST	7	100%	4.9																						
24	LINDEN, AMERICAN	2	100%	3.0																						
25	LINDEN, AMERICAN	2	100%	3.0											X											Some suckering damage
27	LINDEN, AMERICAN	2	100%	3.0											X											
28	HONEYLOCUST	9	100%	6.4																						
29	HONEYLOCUST	3	100%	3.0																						
30	HONEYLOCUST	8	100%	6.0											X											
31	MAPLE, RED	11	75%	11.0				X							X											Dead Branches
32	MAPLE, RED	13	72%	13.0											X											
33	LINDEN, LITTLE LEAF	5	100%	6.3											X											
34	ASH, OTHER	14	25%	14.0																						Dead.dying, likely Emerald Ash
35	DEAD TREE	9	-	3.0																						Dead
36	MAPLE, RED	3	-	-											X											

NYCPCS NAD83 N

LEGEND

- ## 12" - TREE TO BE PROTECTED
- TREE CRITICAL ROOT ZONE
- TREE DRIPLINE
- CONSTRUCTION ACCESS/ENTRANCE
- STAGING AREA
- CLL - CONTRACT LIMIT LINE
- CF - CONSTRUCTION FENCE
- STRAW BALE

SCALE: 1" = 20'   20 10 0 20'

TABLE 4.6(a) – CONSTRUCTION SEQUENCING			
PHASE # 1			
STAGE # 1: Tree Protection, Construction Sequencing, and ESC			
CONSTRUCTION ACTIVITY (in sequential order)	**PRACTICE(S) INSTALLED PRIOR TO ACTIVITY[1]**	**PRACTICE(S) INSTALLED DURING ACTIVITY**	**PRACTICE(S) INSTALLED WITHIN ONE BUSINESS DAY OF COMPLETING ACTIVTY[1]**
Protect existing vegetation		Tree Guards	
Install perimeter erosion control measures and fencing		Inlet Protection	
Establish Staging Area		Site Pollution Prevention Stockpile Protection	

NOTES

1. DRAWINGS ARE ROTATED 290 DEGREES FROM TRUE NORTH.
2. TREE PROTECTION NOTES CAN BE FOUND ON THE SHEET O-3 - GENERAL NOTES.
3. DELAY INSTALLATION OF TEMPORARY CONSTRUCTION FENCE IN THE RIGHT-OF-WAY TO A TIME THAT WILL MINIMIZE OBSTRUCTION OF TRAFFIC ALONG THE SIDEWALK AND IN THE ROADWAY.
4. ANY DAMAGE TO THE EXISTING ASPHALT PAVEMENT OR CONCRETE SIDEWALK ON OR ADJACENT TO THE SITE AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.

PLAN
SCALE: 1" = 20'

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Bureau of Environmental Planning and Analysis

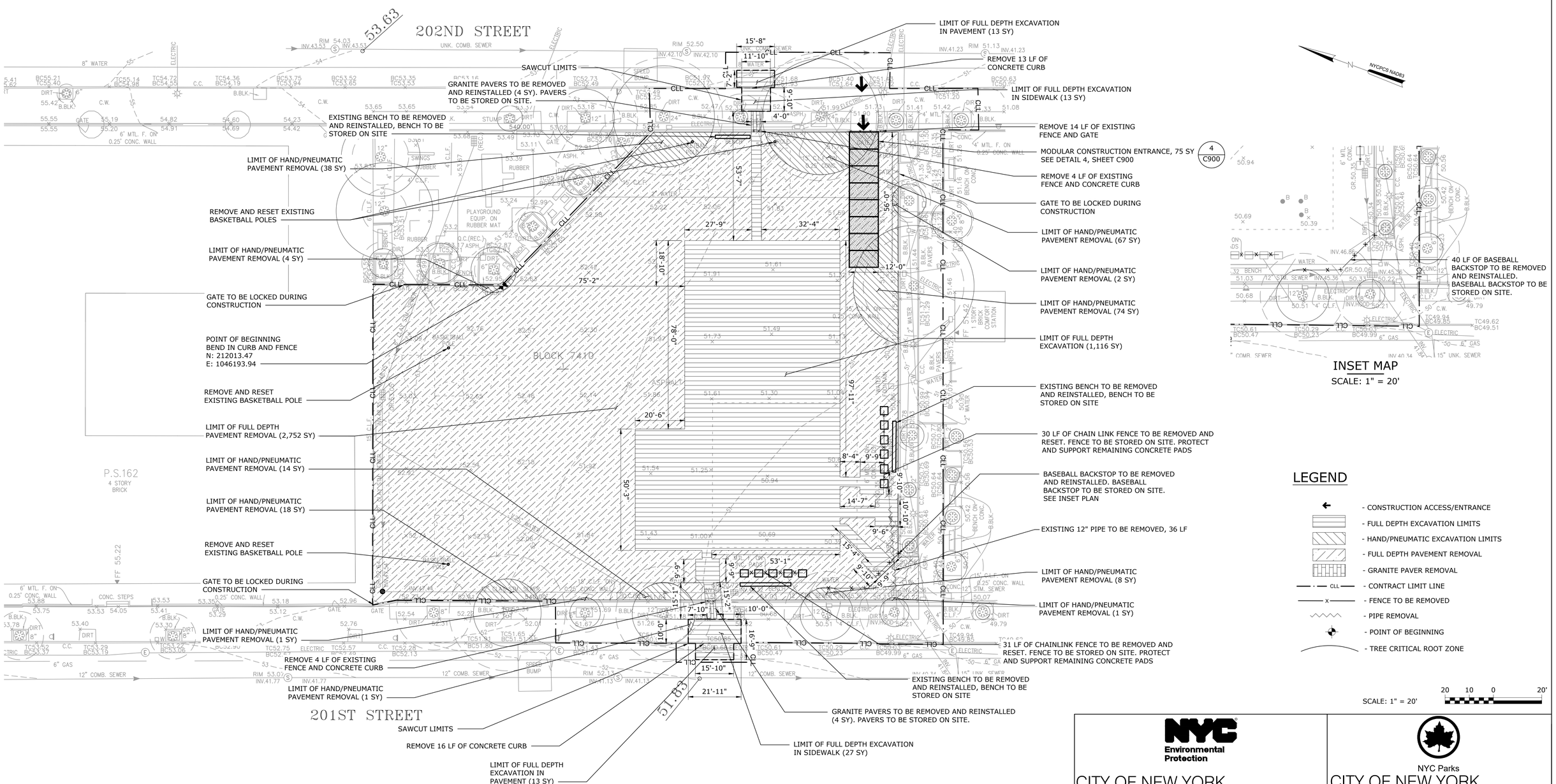
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CITY OF NEW YORK PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL: STATE OF NEW YORK · SANDEEP MEHROTRA · 073828-1 · LICENSED PROFESSIONAL ENGINEER

Hazen

PROJECT TITLE	SAUL WEPRIN PLAYGROUND ON-SITE GREEN INFRASTRUCTURE
DRAWING TITLE	TREE PROTECTION, CONSTRUCTION SEQUENCING, AND PLAN
DESIGNED BY	J. BRENNAN
DRAWN BY	D. THOMAS
CHECKED BY	A. EASON
B-SCAN	
SCALE	1" = 20'
DATE	NOV 2026
DRAWING NO.	C100
CONTRACT NO.	GI-CONS-7
BLOCK	7410
LOT	1
SHEET No.	4 OF 13 SHEETS



PLAN

SCALE: 1" = 20'

INSET MAP

SCALE: 1" = 20'

LEGEND

- CONSTRUCTION ACCESS/ENTRANCE
- FULL DEPTH EXCAVATION LIMITS
- HAND/PNEUMATIC EXCAVATION LIMITS
- FULL DEPTH PAVEMENT REMOVAL
- GRANITE PAVER REMOVAL
- CLL — CONTRACT LIMIT LINE
- FENCE TO BE REMOVED
- PIPE REMOVAL
- POINT OF BEGINNING
- TREE CRITICAL ROOT ZONE

SCALE: 1" = 20'

20 10 0 20'

TABLE 4.6(b) – CONSTRUCTION SEQUENCING

PHASE # 1

STAGE # 2: Removal and Demolition Plan

CONSTRUCTION ACTIVITY (in sequential order)	PRACTICE(S) INSTALLED PRIOR TO ACTIVITY[1]	PRACTICE(S) INSTALLED DURING ACTIVITY	PRACTICE(S) INSTALLED WITHIN ONE BUSINESS DAY OF COMPLETING ACTIVITY
Implement traffic maintenance & protection	Stabilized Construction Entrance (Modular/Stone)	Site pollution prevention, dust control	
Clearing and grubbing, remove debris offsite	All Stage 1 measures	Site pollution prevention, dust control	Temporary construciton area seeding and/or mulching
Pavement, sidewalk, and curb removal	All Stage 1 measures	Site pollution prevention, dust control	Temporary construciton area seeding and/or mulching
Excavation and earthwork	All Stage 1 measures	Site pollution prevention, dust control	Temporary construciton area seeding and/or mulching

NOTES:

1. REMOVAL NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES.
2. DRAWINGS ARE ROTATED 290 DEGREES FROM TRUE NORTH.
3. DELAY EXCAVATION OF SIDEWALK AND RIGHT-OF-WAY TO A TIME THAT WILL MINIMIZE OBSTRUCTION OF FOOT TRAFFIC ALONG THE SIDEWALK AND IN THE ROADWAY.
4. ANY EXISTING ASPHALT PAVEMENT OR CURB ON OR ADJACENT TO THE SITE THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.

NO.	DATE	ISSUED FOR	BY

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SEAL

Hazen

BLOCK 7410

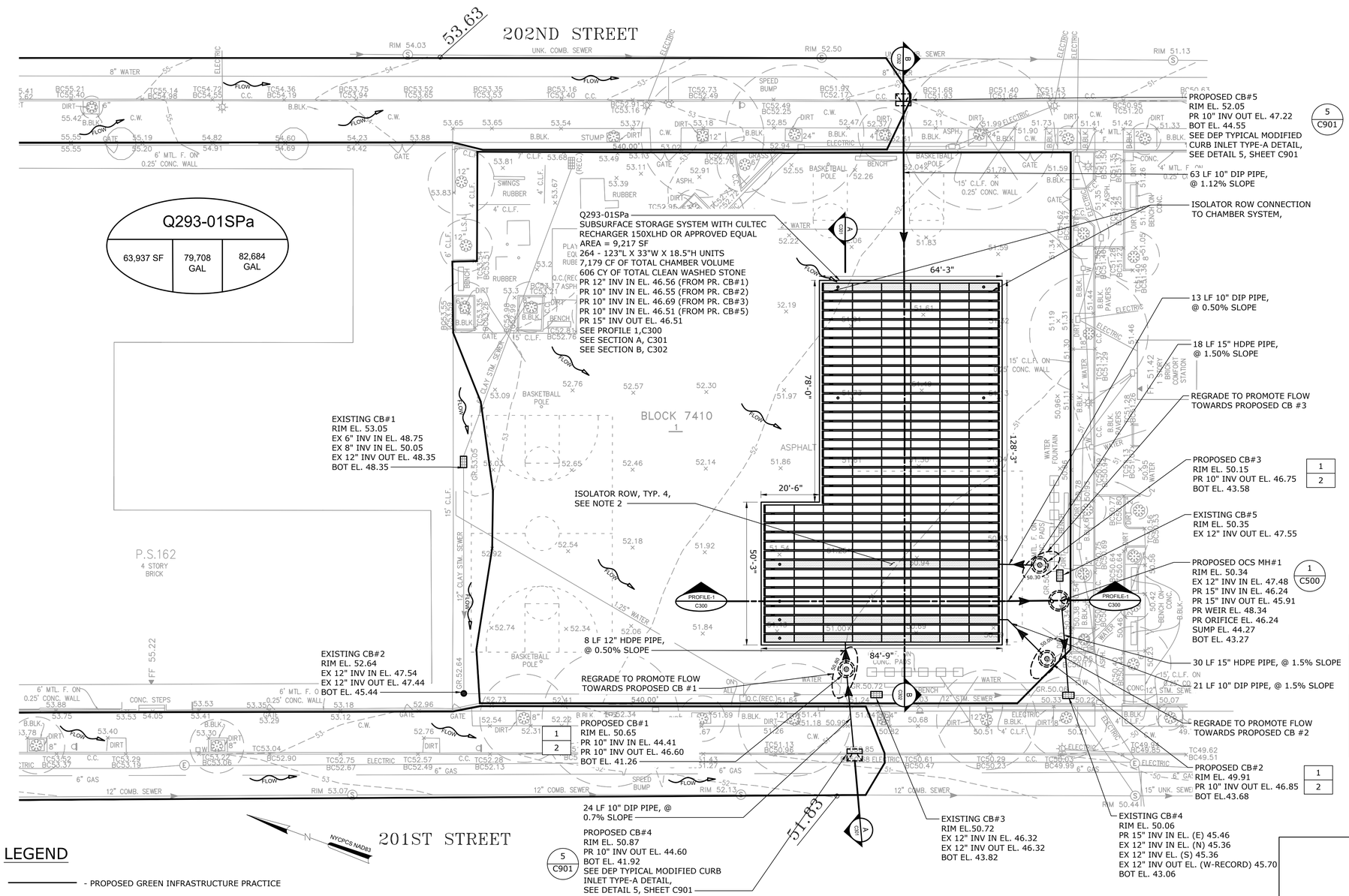
LOT 1

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
REMOVAL AND DEMOLITION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J.BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE 1" = 20'	DRAWING NO. C101	CONTRACT NO. GI-CONS-7
	DATE NOV 2026		SHEET No. 5 OF 13 SHEETS



PLAN

SCALE: 1" = 20'

NOTES:

1. PLAN VIEW DRAWING IS ROTATED 290 DEGREES FROM TRUE NORTH.
2. WRAP ISOLATOR CHAMBERS WITH GEOTEXTILE PER MANUFACTURER SPECIFICATIONS.

LEGEND

- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- CLL — CONTRACT LIMIT LINE
- CF — CONSTRUCTION FENCE
- PROPOSED CLEANOUT
- FLOW — FLOW DIRECTION
- DRAINAGE AREA
- ISOLATOR ROW WITH GEOTEXTILE
- PROPOSED STORM DRAIN
- PROPOSED DEP TYPICAL MODIFIED CURB INLET TYPE-A
- PROPOSED CATCH BASIN
- PROPOSED OUTLET CONTROL STRUCTURE

GI NAME

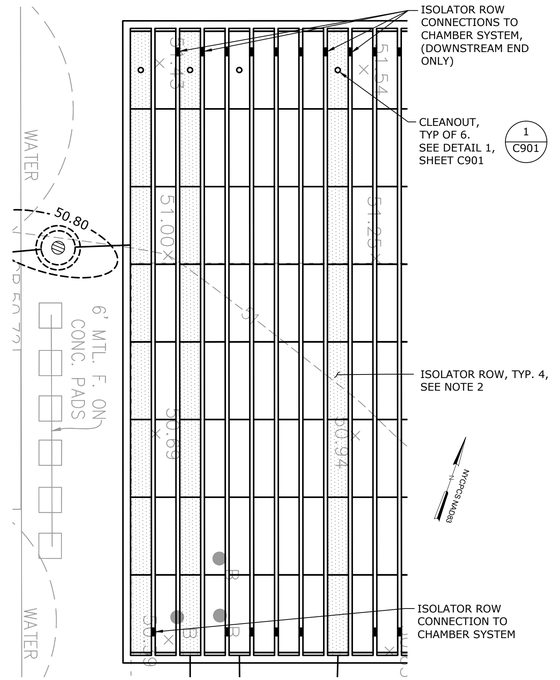
TRIBUTARY AREA	VOLUME OF 2" STORM	CAPACITY MANAGED

- GREEN INFRASTRUCTURE CHARACTERISTICS

GI ID	GI Asset Data					Stormwater Storage Calculations				Total Stormwater Managed (Static Storage)			
	Managed Impervious Tributary Area	Volume 2.0" Rainfall on Impervious Area	GI Footprint Surface Area	GI Perimeter	Permeability Coefficient	Stormwater chambers, pipes, tanks, etc. volume	Stone Subbase: Stone Depth	Stone Subbase: Stone Voids	Stone Subbase: Stormwater Captured by Stone Layer	Estimated Total Storage Volume	% Impervious Surface Managed	Calculated Volume of Rainfall Captured	Calculated Volume of Rainfall Captured
	sf	cf	sf	ft	in/hr	cf	ft	%	cf	cf	%	cf	gal
Q293-01SPa	63,937	10,656	9,217	426	0.00	7,179	1.83	40%	3,875	11,054	104%	11,054	82,684

NOTES:

1. CHAMBER LAYOUT PLAN IS ROTATED 20 DEGREES FROM TRUE NORTH.
2. WRAP ISOLATOR CHAMBERS WITH GEOTEXTILE PER MANUFACTURER SPECIFICATIONS.



CHAMBER LAYOUT PLAN

SCALE: 1" = 10'

TABLE 4.6(c) – CONSTRUCTION SEQUENCING

PHASE #1

STAGE # 3: Install Site, Grading and Proposed Drainage Elements

CONSTRUCTION ACTIVITY (in sequential order)	PRACTICE(S) INSTALLED PRIOR TO ACTIVITY[1]	PRACTICE(S) INSTALLED DURING ACTIVITY	PRACTICE(S) INSTALLED WITHIN ONE BUSINESS DAY OF COMPLETING ACTIVITY[1]
Install subsurface chambers and backfill	All Stage 1 and 2 measures	Site pollution prevention, dust control	
Install drainage pipes and backfill	All Stage 1 and 2 measures	Site pollution prevention, dust control	

SCALE: 1" = 10' 10 5 0 10'

SCALE: 1" = 20' 20 10 0 20'

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Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL: DEEP MEHROTRA, STATE OF NEW YORK, 079826, LICENSED PROFESSIONAL ENGINEER

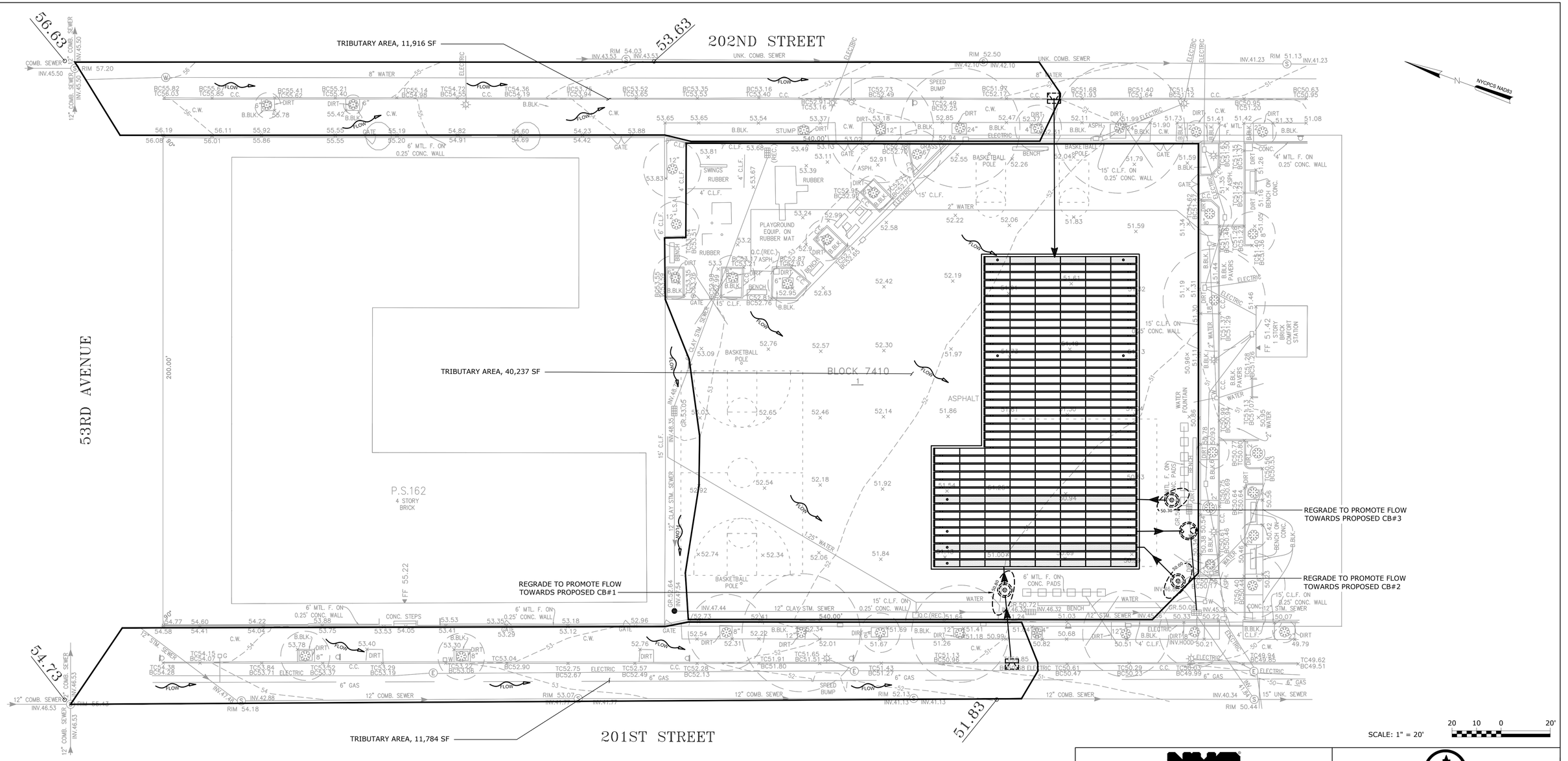
Hazen

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C200	GI-CONS-7
	DATE NOV 2026		SHEET No. 6 OF 13 SHEETS



SCALE: 1" = 20'

LEGEND

- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- FLOW DIRECTION
- PROPOSED STORM DRAIN
- PROPOSED DRAINAGE AREA

NOTES

1. DRAWINGS ARE ROTATED 290 DEGREES FROM TRUE NORTH

PLAN

SCALE: 1" = 20'

NO.	DATE	ISSUED FOR	BY

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Forestry, Horticulture and Natural Resources

SEAL

STATE OF NEW YORK — ANDREW P. MERRITT — 073828 — LICENSED PROFESSIONAL ENGINEER

Hazen

BLOCK 7410

LOT 1

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
PROPOSED TRIBUTARY DRAINAGE AREA PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C201	GI-CONS-7
	DATE NOV 2026		SHEET No. 7 OF 13 SHEETS

NOTES:

1. DRAWINGS ARE ROTATED 290 DEGREES FROM TRUE NORTH.

N — NYCPCS NAD83

TABLE 4.6(d) – CONSTRUCTION SEQUENCING

PHASE #1

STAGE # 4: Proposed Cover, Materials, and Final Stabilization

CONSTRUCTION ACTIVITY (in sequential order)	PRACTICE(S) INSTALLED PRIOR TO ACTIVITY[1]	PRACTICE(S) INSTALLED DURING ACTIVITY	PRACTICE(S) INSTALLED WITHIN ONE BUSINESS DAY OF COMPLETING ACTIVITY[1]
Restore pavement, curbs, and sidewalks	All Stage 1 and 2 measures Concrete washout	Site pollution prevention	
Repainting of basketball court color seal coat and painting in play area		Site pollution prevention	
Remove temporary erosion control measures and clean any sedimentation in the pavement and drainage pipes		Site pollution prevention	

202ND STREET

BLOCK 7410

P.S.162 4 STORY BRICK

Q293-01SPa SUBSURFACE CHAMBER SYSTEM

PROPOSED CB #5 SEE DEP TYPICAL MODIFIED CURB INLET TYPE-A DETAIL, SEE DETAIL 5, SHEET C901

FULL DEPTH ASPHALT PAVEMENT RESTORATION (13 SY), SEE NYC DOT STANDARD DETAIL H-1055

CONCRETE SIDEWALK REPLACEMENT (13 SY), SEE NYC DOT STANDARD DETAIL H-1045

REINSTALL GRANITE PAVERS (4 SY), SEE DPR STANDARD DETAIL SHEET 15 — 13 / 15

RESTORE 4 LF OF CONCRETE CURB AND RESET 4 LF OF CHAIN LINK FENCE, SEE DPR STANDARD DETAIL 17 AND 29 — 7 / 17 | 1 / 29

RESTORE 12 LF OF CONCRETE CURB, SEE NYC DOT STANDARD DETAIL H-1044

RESET 14 LF OF FENCE AND GATE SEE DPR STANDARD DETAIL 29 AND 32R — 1 / 29 | 5 / 32

REINSTALL BENCH

RESET BASKETBALL POLES AND FOUNDATIONS

1 / 15 FULL DEPTH PAVEMENT RESTORATION (4,092 SY), SEE DPR STANDARD DETAIL SHEET #15

RESET BASKETBALL POLE AND FOUNDATION

1 / C901 CLEANOUT, TYP., SEE DETAIL 1, SHEET C901

8 LF 12" HDPE PIPE, @ 0.50% SLOPE

RESET BASKETBALL POLE AND FOUNDATION

1 / 2 PROPOSED CB #1 SEE DPR STANDARD DETAIL 1, SHEET 2

24 LF 10" DIP PIPE, @ 0.7% SLOPE

13 / 15 REINSTALL GRANITE PAVERS (4 SY), SEE DPR STANDARD DETAIL SHEET 15

RESTORE 16 LF OF CONCRETE CURB, SEE NYC DOT STANDARD DETAIL H-1044

5 / C901 PROPOSED CB #4 SEE DEP TYPICAL MODIFIED CURB INLET TYPE-A DETAIL, SEE DETAIL 5, SHEET C901

63 LF 10" DIP PIPE, @ 0.70% SLOPE

13 LF 10" DIP PIPE, @ 0.50% SLOPE

PROTECT AND SUPPORT WATER FOUNTAIN

18 LF 15" HDPE PIPE, @ 1.50% SLOPE

REINSTALL BENCH

RESET 30 LF OF CHAIN LINK FENCE. PROTECT AND SUPPORT CONCRETE PADS DURING ASPHALT RESTORATION

1 / 2 PROPOSED CB #3 SEE DPR STANDARD DETAIL 1, SHEET 2

1 / C500 PROPOSED OCS MH #1 SEE DETAIL 1, SHEET C500

21 LF 10" DIP PIPE, @ 1.0% SLOPE

30 LF 15" HDPE PIPE @ 1.5% SLOPE

1 / 2 PROPOSED CB #2 SEE DPR STANDARD DETAIL 1, SHEET 2

RESET BASEBALL BACKSTOP

RESET 31 LF OF CHAIN LINK FENCE. PROTECT AND SUPPORT CONCRETE PADS DURING ASPHALT RESTORATION

REINSTALL BENCH

7 / 17 | 1 / 29 RESET 4 LF CHAIN LINK FENCE AND CONCRETE CURB, SEE DPR STANDARD DETAIL SHEET 17 AND 29

CONCRETE SIDEWALK REPLACEMENT (25 SY), SEE NYC DOT STANDARD DETAIL H-1045

FULL DEPTH ASPHALT PAVEMENT RESTORATION (13 SY), SEE NYC DOT STANDARD DETAIL H-1055

REGRADE TO PROMOTE FLOW TOWARDS PROPOSED CB#3

REGRADE TO PROMOTE FLOW TOWARDS PROPOSED CB#2

REGRADE TO PROMOTE FLOW TOWARDS PROPOSED CB#1

LEGEND

- PROPOSED OUTLET CONTROL STRUCTURE
- PROPOSED DEP TYPICAL MODIFIED CURB INLET TYPE-A
- PROPOSED CATCH BASIN
- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- CLL — CONTRACT LIMIT LINE
- CONCRETE SIDEWALK RESTORATION
- FULL DEPTH ASPHALT RESTORATION
- GRANITE PAVER REINSTALLATION
- PROPOSED CLEANOUT

FOR SWPPP PERMITTING PURPOSES, CONCRETE SIDEWALK RESTORATION, FULL DEPTH ASPHALT RESTORATION, AND GRANITE PAVERS REINSTALLATION SHALL BE CONSIDERED AN IMPERVIOUS SURFACE. RESTORATION SEED MIX AREAS SHALL BE CONSIDERED PERVIOUS. NO CHANGE IN IMPERVIOUS AND PERVIOUS COVER IS PROPOSED AS PART OF THIS PROJECT.

PLAN

SCALE: 1" = 20'

20 10 0 20'

INSET MAP

SCALE: 1" =10'

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Forestry, Horticulture and Natural Resources

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Hazen

BLOCK 7410

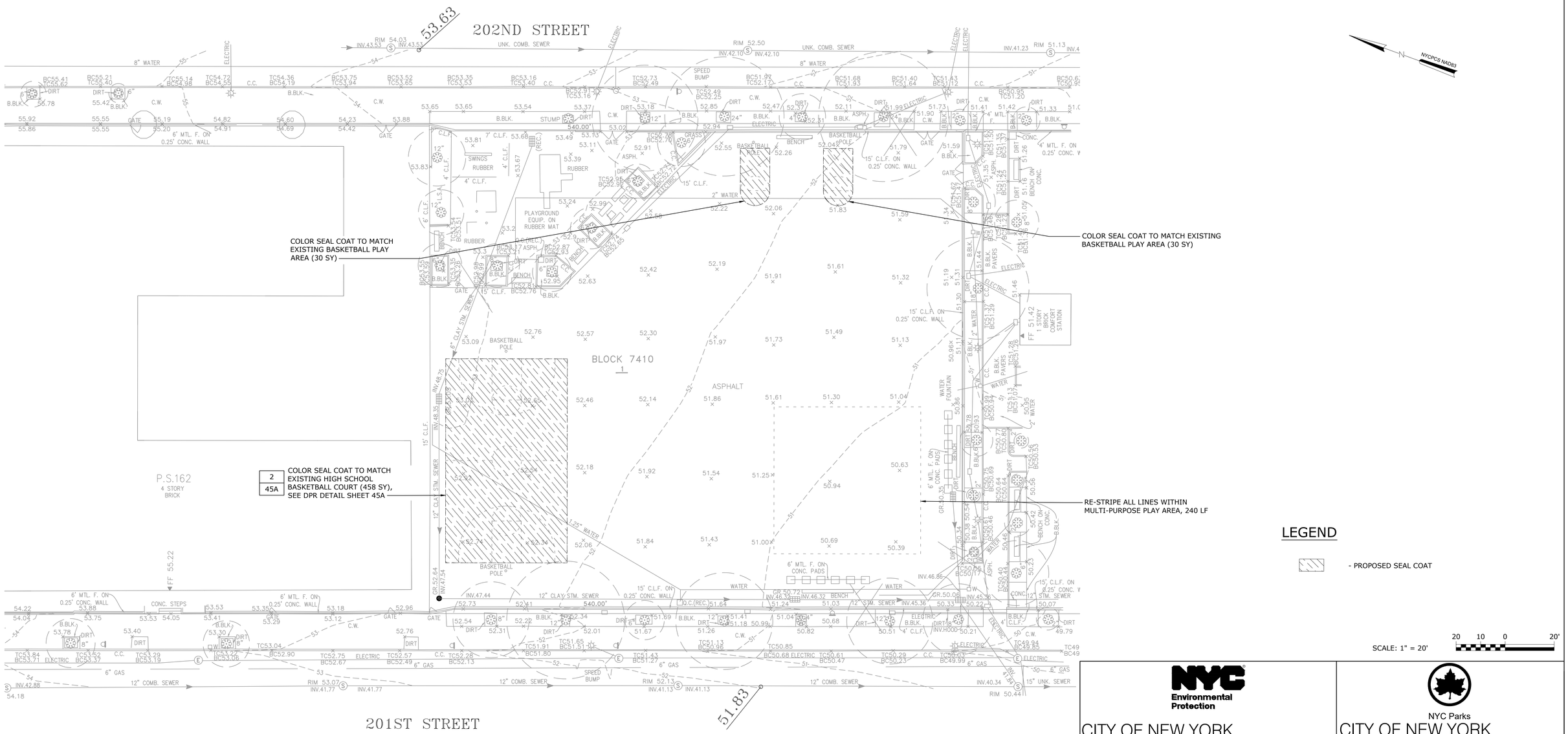
LOT 1

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
PROPOSED MATERIALS AND FINAL STABILIZATION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C202	GI-CONS-7
	DATE NOV 2026		SHEET No. 8 OF 13 SHEETS



PLAN

SCALE: 1" = 20'

LEGEND

- PROPOSED SEAL COAT

SCALE: 1" = 20'

20 10 0 20'

NOTES:

1. DRAWINGS ARE ROTATED 290 DEGREES FROM TRUE NORTH.

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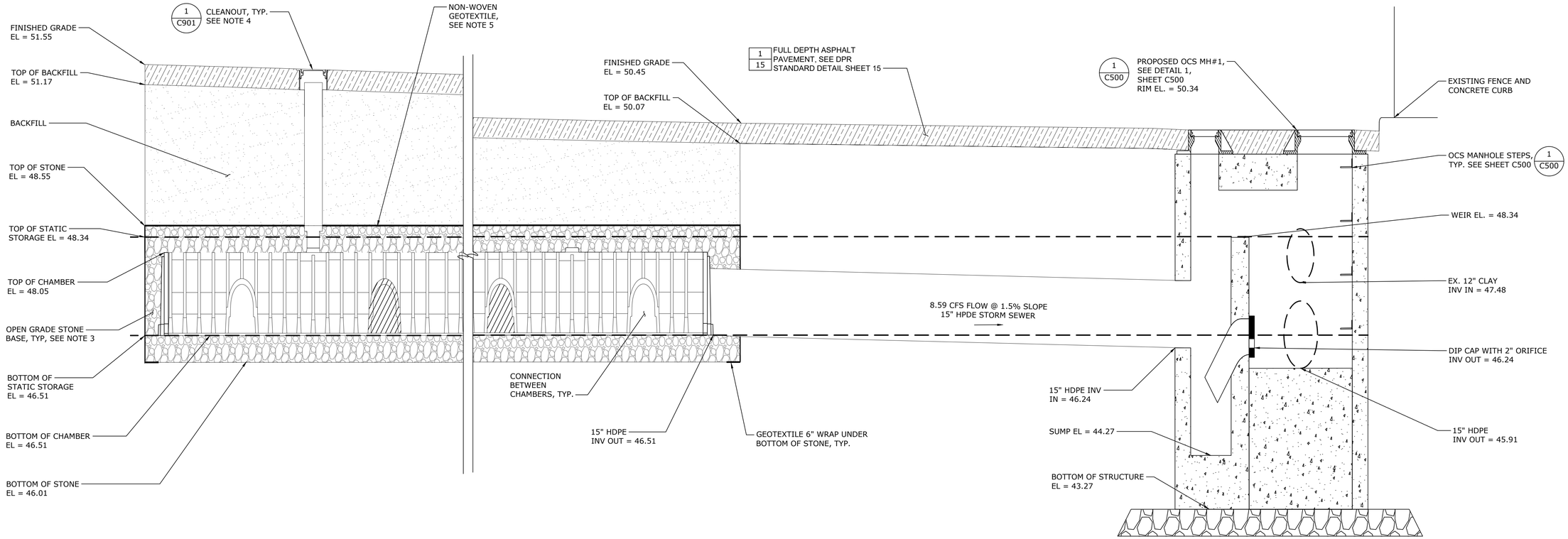
LOT 1

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
PAINTING PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A.EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C203	GI-CONS-7
	DATE NOV 2026		SHEET No. 9 OF 13 SHEETS



NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 11,054 CF AND IS CALCULATED BETWEEN EL 46.51 AND EL 48.34.
2. WRAP ISOLATOR ROW OF CHAMBER SYSTEM IN GEOTEXTILE PER MANUFACTURER'S SPECIFICATIONS
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COURSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL CLEANOUTS FLUSH TO PAVEMENT.
5. INSTALL NON WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.

PROFILE 1

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

HORIZONTAL SCALE 0 2' 4' 1"=2'

VERTICAL SCALE 0 1' 2' 1"=1'

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LOT 1

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 1

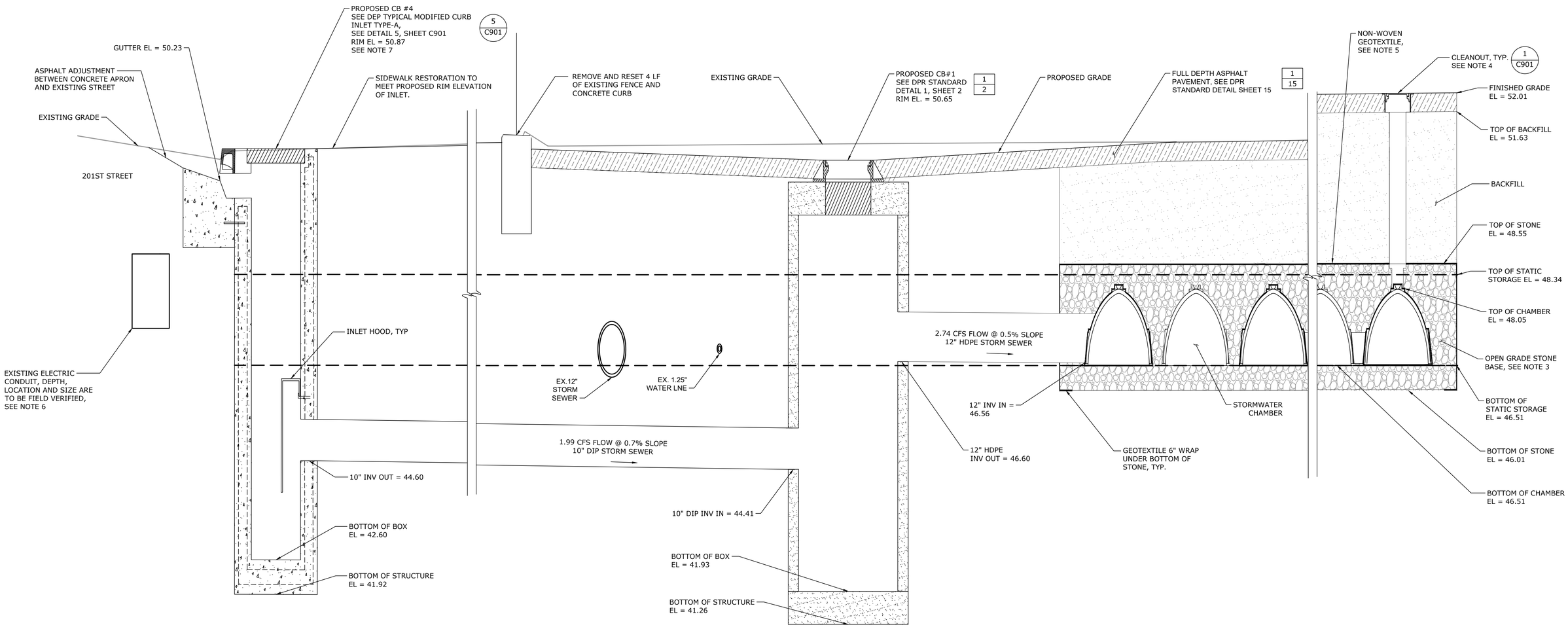
DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN

SCALE: AS SHOWN
DRAWING NO.: C300
DATE: NOV 2026

CONTRACT NO. GI-CONS-7

SHEET No. 10 OF 13 SHEETS



CROSS SECTION - A

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 11,054 CF AND IS CALCULATED BETWEEN EL 46.51 AND EL 48.34.
2. WRAP ISOLATOR ROW OF CHAMBER SYSTEM IN GEOTEXTILE PER MANUFACTURER'S SPECIFICATIONS
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COURSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL CLEANOUTS FLUSH TO PAVEMENT.
5. INSTALL NON WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.
6. DEPTH, SIZE, AND LOCATION OF EXISTING ELECTRIC CONDUIT ALONG 201ST ST FROM 53RD AVE TO 56TH AVE SHALL BE FIELD VERIFIED. CONTRACTOR SHALL SUBMIT FINDINGS TO ENGINEER AND OWNER FOR REVIEW PRIOR TO SOURCING DRAINAGE STRUCTURES AND PRIOR TO BEGINNING EXCAVATION.
7. TYPICAL MODIFIED CURB INLET TYPE-A SHALL BE A PRECAST CONCRETE STRUCTURE.

HORIZONTAL SCALE 0 2' 4' 1"=2'

VERTICAL SCALE 0 1' 2' 1"=1'

NO.	DATE	ISSUED FOR	BY

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Forestry, Horticulture and Natural Resources

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Hazen

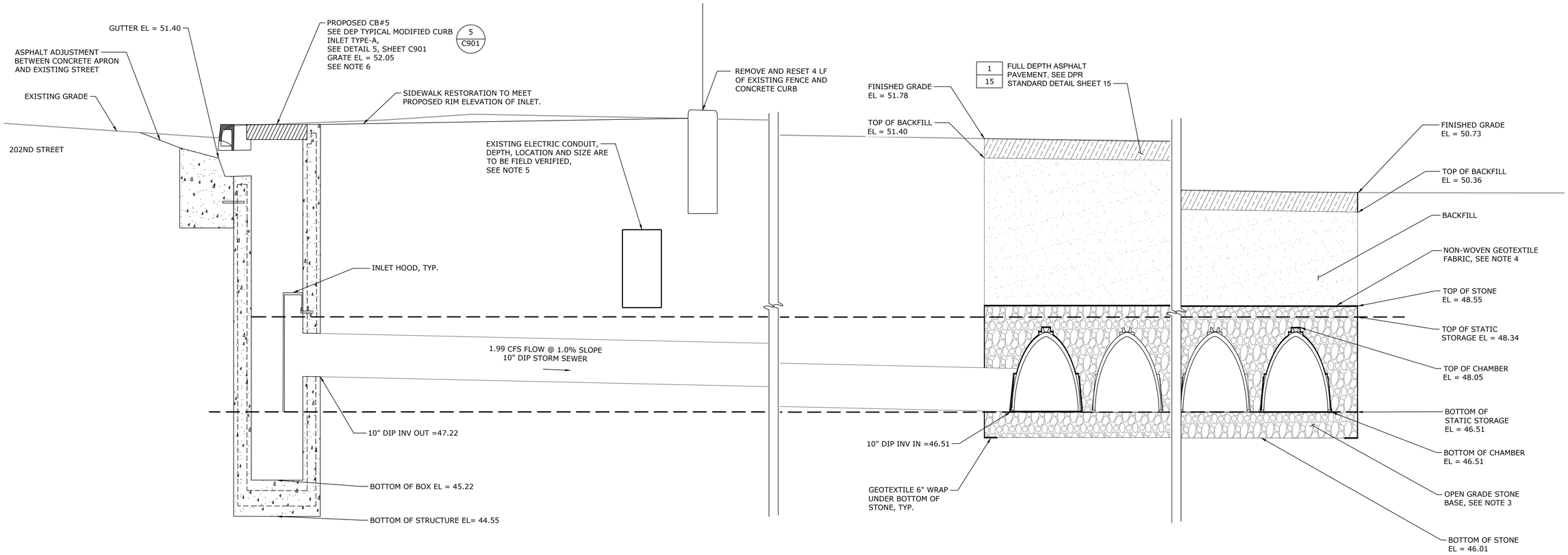
BLOCK 7410
LOT 1

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 2

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C301	GI-CONS-7
	DATE NOV 2026		SHEET No. 11 OF 13 SHEETS



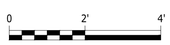
CROSS SECTION - B

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

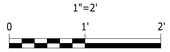
NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 11,054 CF AND IS CALCULATED BETWEEN EL 46.51 AND EL 48.34.
2. WRAP ISOLATOR ROW OF CHAMBER SYSTEM IN GEOTEXTILE PER MANUFACTURER'S SPECIFICATIONS
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COURSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL NON WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.
5. DEPTH, SIZE, AND LOCATION OF EXISTING ELECTRIC CONDUIT ALONG 202ND ST FROM 53RD AVE TO 56TH AVE SHALL BE FIELD VERIFIED. CONTRACTOR SHALL SUBMIT FINDINGS TO ENGINEER AND OWNER FOR REVIEW PRIOR TO SOURCING DRAINAGE STRUCTURES AND PRIOR TO BEGINNING EXCAVATION.
6. TYPICAL MODIFIED CURB INLET TYPE-A SHALL BE A PRECAST CONCRETE STRUCTURE.

HORIZONTAL SCALE



VERTICAL SCALE



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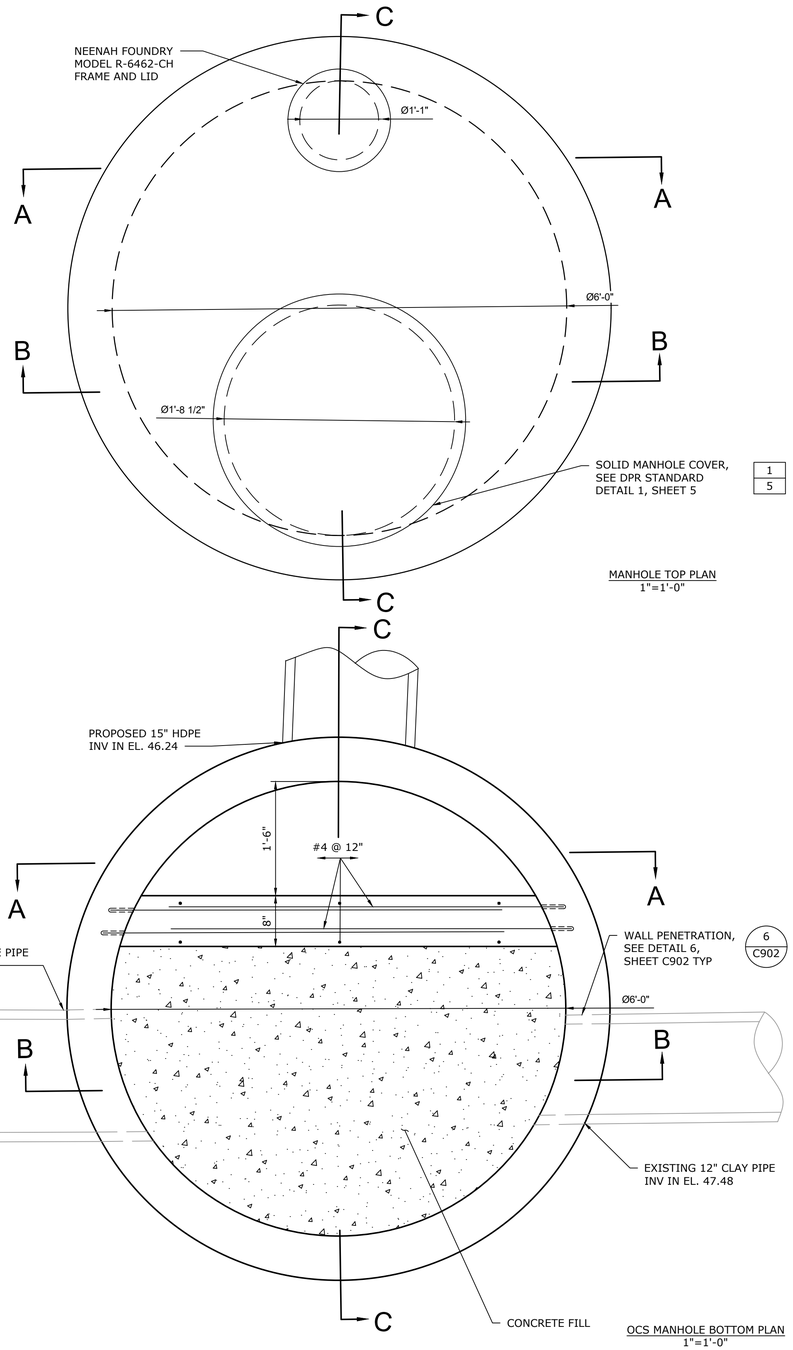
BLOCK 7410
LOT 1

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 3

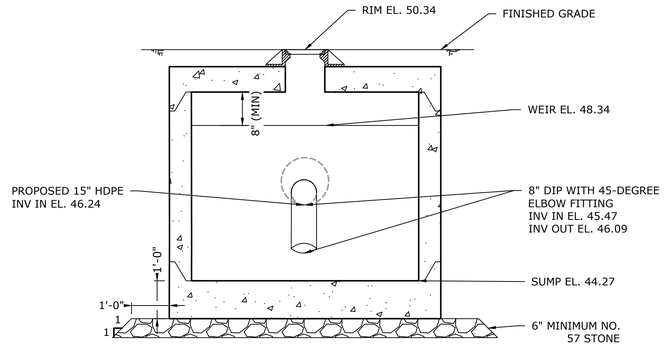
DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C302	GI-CONS-7
	DATE NOV 2026		SHEET No. 12 OF 13 SHEETS

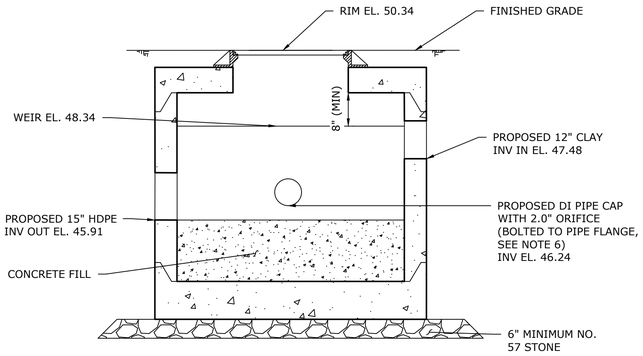


MANHOLE TOP PLAN
1"=1'-0"

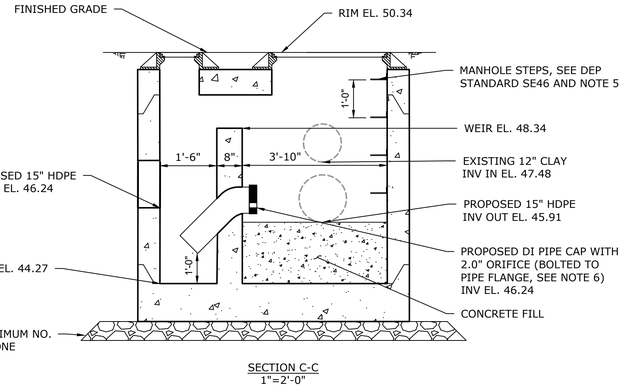
OCS MANHOLE BOTTOM PLAN
1"=1'-0"



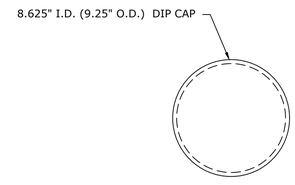
SECTION A-A
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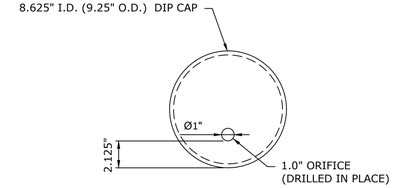
SECTION B-B
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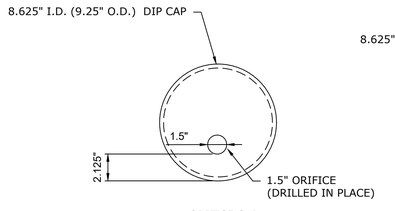
SECTION C-C
1"=2'-0"



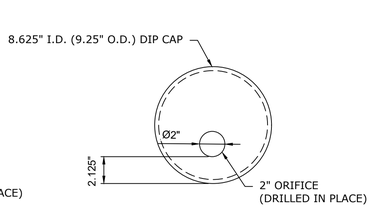
ORIFICE CAP
1"=0'-6"
FURNISH AND DELIVER 2 - SOLID ORIFICE CAPS
INSTALL 1 - SOLID ORIFICE CAP



ORIFICE CAP
1"=0'-6"
PLACEMENT OF 1 - 1" ORIFICE CAP IF NEEDED



ORIFICE CAP
1"=0'-6"
PLACEMENT OF 1 - 1.5" ORIFICE CAP IF NEEDED



ORIFICE CAP
1"=0'-6"
DRILL 1 - 2.0" ORIFICE

NOTES:

1. CONTRACTOR SHALL SUPPLY TWO(2) SOLID, BOLT-ON CAPS FOR THE PROJECT. ONE (1) SOLID CAP SHALL BE INSTALLED IN THE FIELD. FOLLOWING INSTALLATION, THE 2.0" DIAMETER ORIFICE SHALL BE DRILLED AT THE ORIENTATION AND LOCATION ON THE CAP SPECIFIED IN THE DETAILS ON THIS SHEET. THE REMAINING SOLID CAP SHALL BE TURNED OVER TO NYCDEP FOR FUTURE USE.
2. CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
3. REFER TO DETAILS 1-6 ON SHEET C902.
4. SEE GENERAL STRUCTURAL NOTES AND CONCRETE NOTES ON SHEET C902.
5. RUNGS SHOULD BE LOCATED 3" OFFSET FROM THE TOP SLAB OF THE MANHOLE, AND REPEAT EVERY 12".
6. BOLTS SHALL BE INSTALLED SO THAT THE BOLT HEAD IS ON THE WEIR WALL SIDE.

1 / C500 OCS MH #1 - MANHOLE WITH WEIR AND ORIFICE CAP DETAILS
AS SHOWN

NO.	DATE	ISSUED FOR	BY

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL
STATE OF NEW YORK · SANDEEP MEHROTRA · 102828 · LICENSED PROFESSIONAL ENGINEER
Hazen
BLOCK 7410
LOT 1

PROJECT TITLE
SAUL WEPRIN PLAYGROUND ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
DETAILS - 1

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C500	GI-CONS-7
	DATE NOV 2026		SHEET No. 13 OF 13 SHEETS

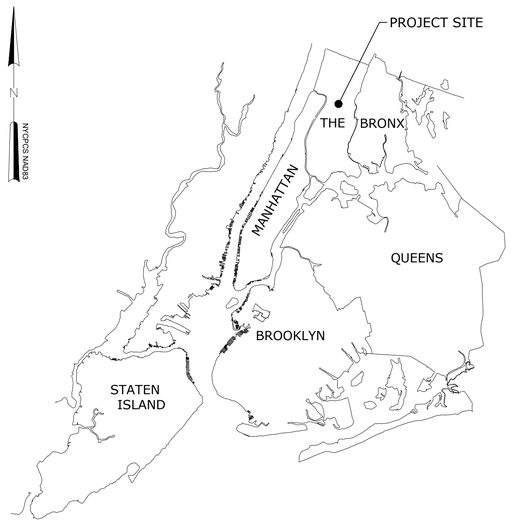
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS

ON-SITE GREEN INFRASTRUCTURE
DEP CAPITAL CONTRACT NO. GI-CONS-7

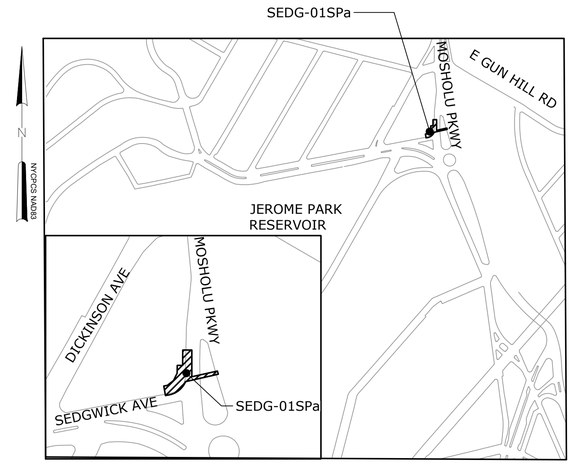
SEDGWICK AND DICKINSON
BBL 2032520001

BRONX, NY

BID SET
NOVEMBER 2026



LOCATION PLAN



LOCATION PLAN

Sheet List Table	
Sheet Number	Sheet Title
G001	COVER
T-1	TOPOGRAPHIC & UTILITY SURVEY PLAN
S001	EXISTING CONDITIONS
C100	TREE PROTECTION PLAN, STAGING AND ACCESS
C101	REMOVAL AND DEMOLITION PLAN
C200	PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN
C201	DRAINAGE PLAN
C202	GRADING PLAN
C203	MATERIALS PLAN
C204	PLANTING PLAN
C300	SECTIONS AND PROFILES - 1
C301	SECTIONS AND PROFILES - 2
C302	SECTIONS AND PROFILES - 3
C303	SECTIONS AND PROFILES - 4
C500	DETAILS - 1

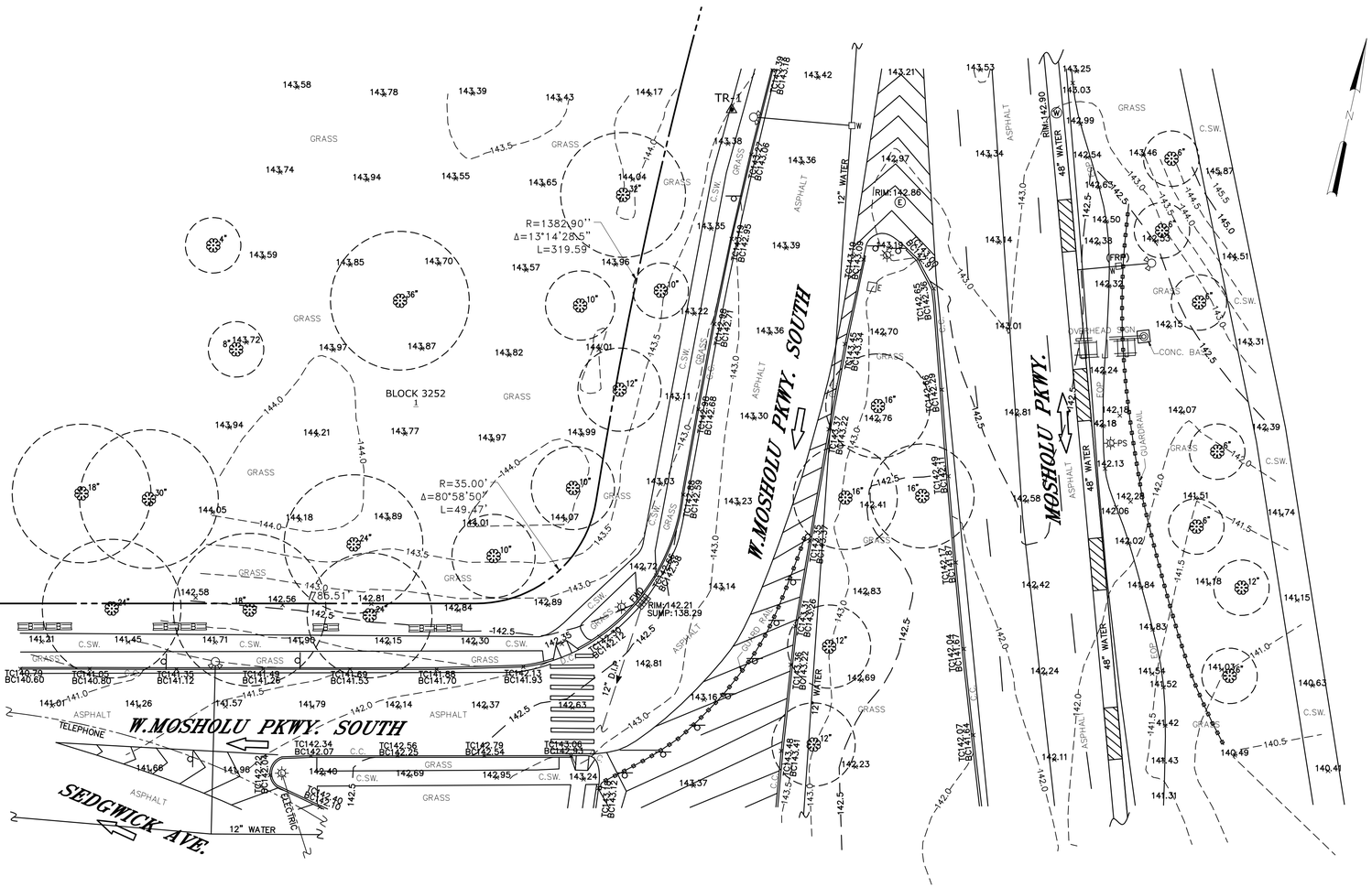
NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION WILL MAINTAIN ALL COMPONENTS OF THE GREEN INFRASTRUCTURE PRACTICE INCLUDING THE INLETS, PIPES, THE TRENCH DRAIN, SURFACE INLET, AND ALL APPURTENANCES OF THE BIORETENTION CELL.

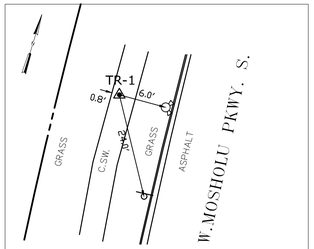
John McLaughlin
Digitally signed by John McLaughlin
Date: 2026.11.02 16:36:34 -05'00'

JOHN MCLAUGHLIN
MANAGING DIRECTOR
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS, NYCDEP

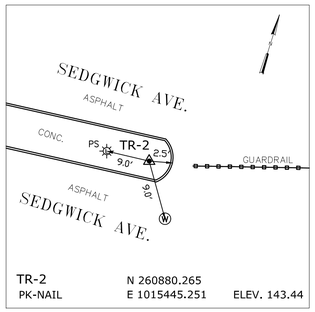
Lisa F. Garcia
Digitally signed by Lisa F. Garcia
Date: 2026.10.30 15:30:34 -04'00'

LISA F. GARCIA
COMMISSIONER
NYCDEP

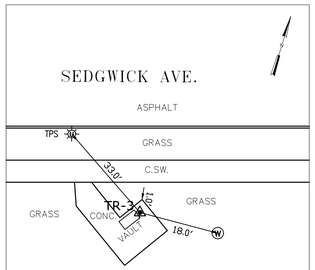




TR-1 N 261193.947
PK-NAIL E 1015440.375 ELEV. 143.46



TR-2 N 260880.265
PK-NAIL E 1015445.251 ELEV. 143.44



TR-3 N 260858.439
PK-NAIL E 1015081.409 ELEV. 139.61

TIES
N.T.S.

STATE OF NEW YORK
ANGELO JOHN FIORENZA
LICENSED LAND SURVEYOR
049468-1

NOTES:
1. ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. LOCATIONS, EXTENT AND SIZES OF UNDERGROUND UTILITIES AND SUBSTRUCTURES HAVE BEEN DETERMINED FROM RECORD INFORMATION, SUPPLEMENTED BY DATA OBTAINED IN THE FIELD. ACCURACY OF THIS UTILITY DATA IS NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES AND SUBSTRUCTURES, WHETHER FUNCTIONAL OR ABANDONED, ARE SHOWN ON THIS MAP.

0 10' 20' 40' 60'
1" = 20'

SURVEY PROVIDED BY
MUNOZ ENGINEERING & LAND SURVEYING, D.P.C.
APRIL / 2020
NAD83 NY LONG ISLAND STATE PLANE
NAVD88 IS 1.508 FEET ABOVE BRONX HIGHWAY DATUM

NO.	DATE	ISSUED FOR	BY

DESIGNED N/A
DRAWN M.A.
CHECKED J.J.
PROJ.ENGR. N/A

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

MUÑOZ ENGINEERING P.C.
505 EIGHTH AVENUE
NEW YORK, N.Y. 10018
TEL. (212) 967-6588

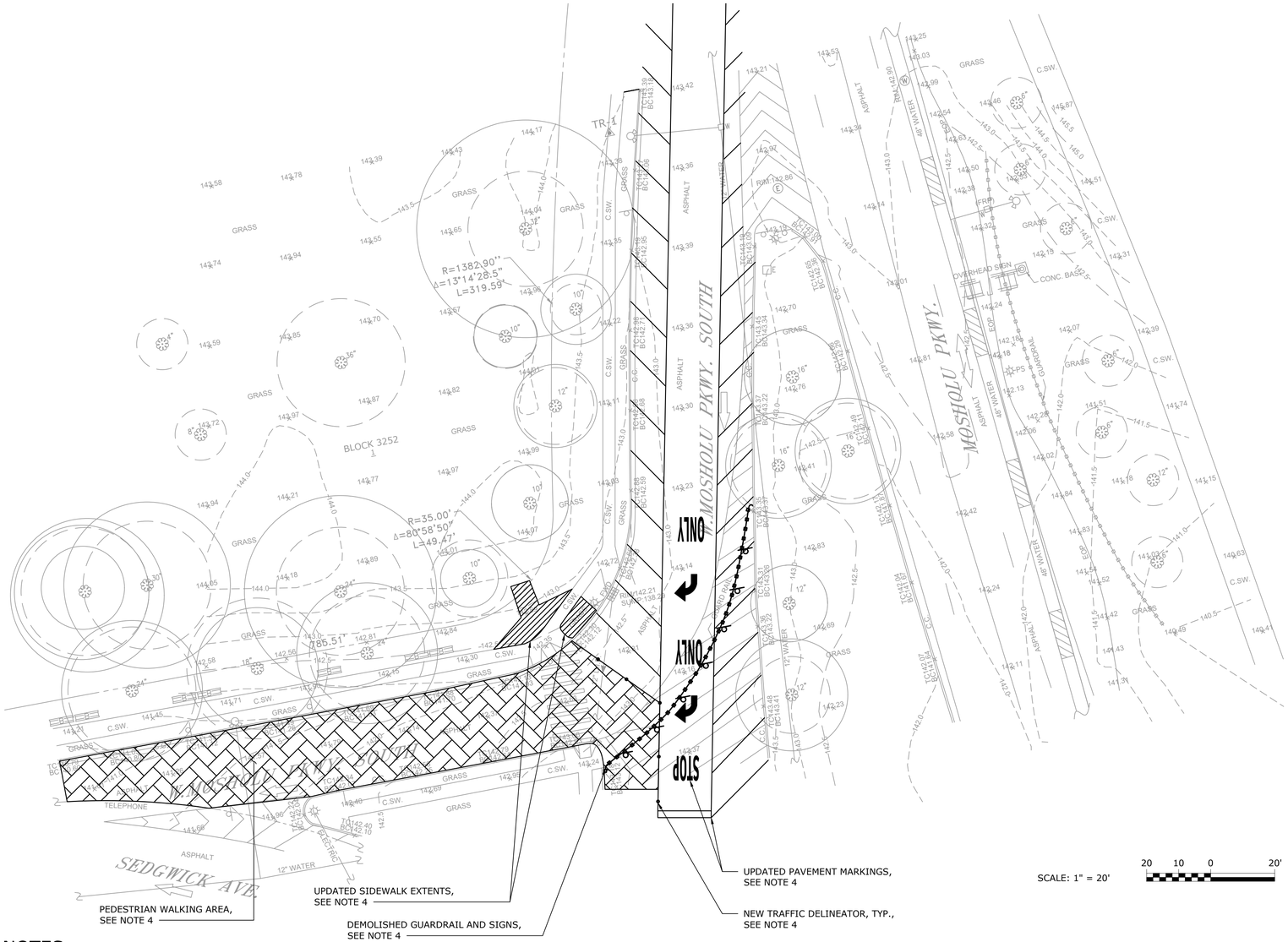
APPROVED FOR THE CITY OF NEW YORK
_____ P.E.
PROJECT MANAGER

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
OFFICE OF GREEN INFRASTRUCTURE
NYCDEP CAPITAL PROJECT WP-169

GI-CONS-7
GREEN INFRASTRUCTURE PRACTICES AT NYC-DPR SITES
SEDGWICK-DICKENSON SITE
TOPOGRAPHIC & UTILITY SURVEY PLAN

DATE	APRIL 2020
PAGE	2 OF 2
SHEET NUMBER	T-1



N

NYCDCS MAPS

SCALE: 1" = 20'

20 10 0 20'

NOTES:

1. THE USER OF THIS MAP IS CAUTIONED THAT THE UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT AREA, ARE SHOWN ON THIS MAP. EXACT LOCATIONS MUST BE FIELD MARKED BY THE RESPECTIVE UTILITY COMPANY.
2. THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVE GROUND STRUCTURES, PARKS RECORD DRAWINGS AND CITY RECORD MAPS. LOCATION OF UNDERGROUND UTILITY / STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES / STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATION WAS MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES. BEFORE COMMENCING EXCAVATION, CONTRACTORS SHOULD CALL 1-800-272-4480 CODE RULE 53.
3. THIS MAP WAS PREPARED FROM DATA COLLECTED BY AN ACTUAL FIELD SURVEY CONDUCTED DURING APRIL 2020, SEE SHEET S001 FOR ORIGINAL SITE CONDITIONS.
4. CONDITIONS HAVE CHANGED SINCE THE COMPLETION OF THIS SURVEY. UPDATED SIDEWALK EXTENTS AND PAVEMENT MARKINGS HAVE BEEN APPROXIMATED USING NYC DOT RECORD DRAWING MD-2098 DATED 8-22-2018 AND AERIAL IMAGERY. THESE UPDATED FEATURES SHALL BE FIELD-VERIFIED PRIOR TO CONSTRUCTION.
5. ALL EXISTING SURVEY AND TOPOGRAPHICAL DATA TAKEN FROM SURVEY BY MUNOZ ENGINEERING & LAND SURVEYING, D.P.C. ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD 88). NAVD88 IS 1.508 FEET ABOVE BRONX HIGHWAY DATUM.

PLAN
SCALE: 1" = 20'

NO.	DATE	ISSUED FOR	BY

DESIGNED _____
DRAWN _____
CHECKED _____
PROJ.ENGR. _____

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

Sandeep Mehrotra — 103676 — STATE OF NEW YORK — SANDEEP MEHROTRA — LICENSED PROFESSIONAL ENGINEER

Hazen

APPROVED FOR THE CITY OF NEW YORK

_____ P.E.
PROJECT MANAGER

NYC Environmental Protection

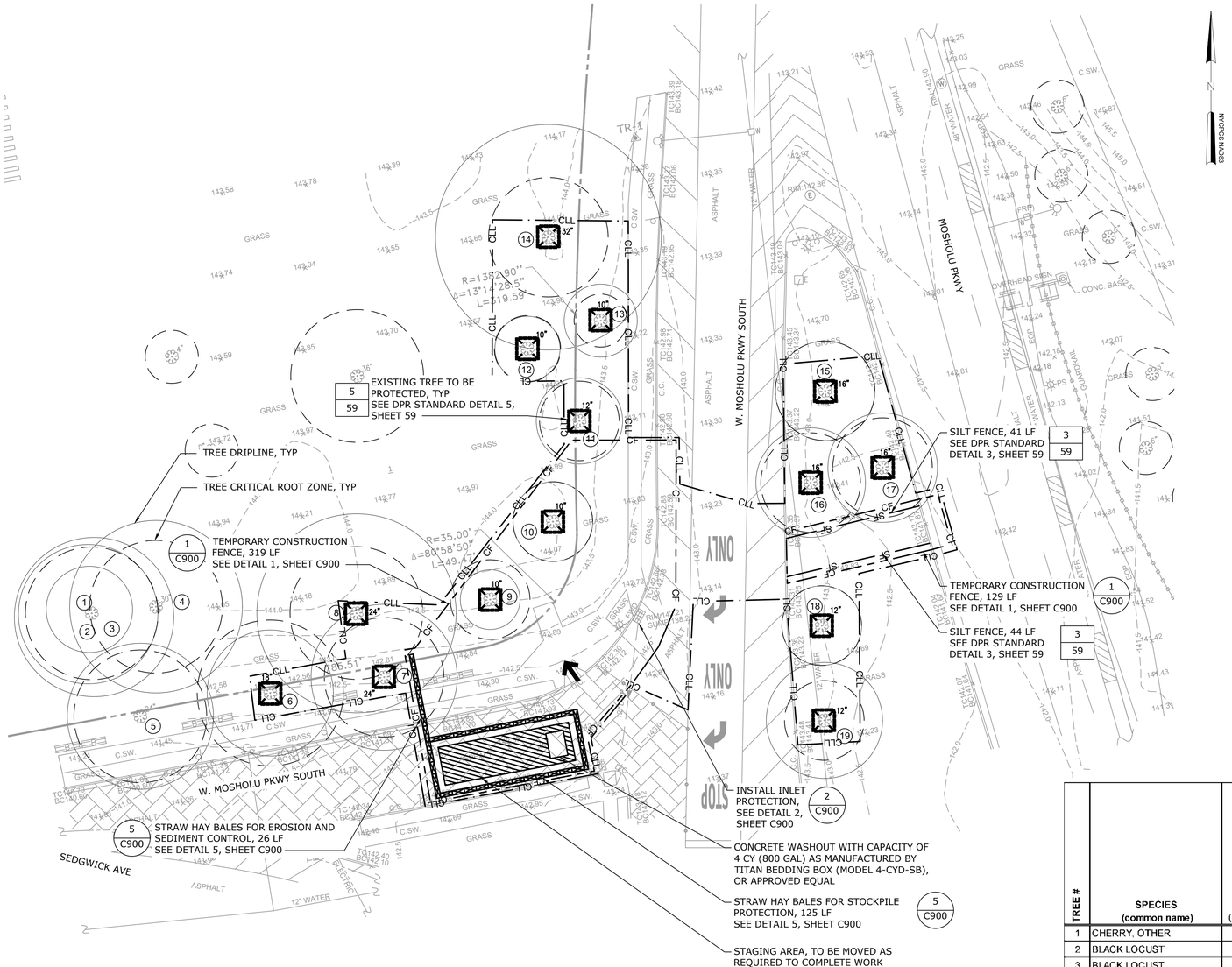
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING AND ANALYSIS

SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
EXISTING CONDITIONS

DATE	NOV 2026
PAGE	3 OF 15
SHEET	S001

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PLAN

SCALE: 1" = 20'

NOTES:

1. TRAFFIC PATTERN HAS BEEN MODIFIED SINCE DATE OF SURVEY IN APRIL OF 2020. CONDITIONS TO BE CONFIRMED BY THE CONTRACTOR.
2. NYC DOT APPROVAL REQUIRED FOR PROPOSED STAGING AREA. MODIFICATIONS MAY BE NEEDED IF TRAFFIC PATTERNS CHANGE IN ORDER TO RESTORE VEHICULAR TRAFFIC TO THE PORTION OF WEST MOSHOLU PARKWAY SOUTH, SOUTH OF PROJECT AREA.
3. TREE PROTECTION NOTES CAN BE FOUND ON O-3 - GENERAL NOTES.

LEGEND

- TREE TO BE PROTECTED
- TREE DRIPLINE
- TREE CRITICAL ROOT ZONE
- CONSTRUCTION ACCESS/ENTRANCE
- STAGING AREA
- CLL — CONTRACT LIMIT LINE
- CF — CONSTRUCTION FENCE
- SF — SILT FENCE
- STRAW BALE DIKE

SCALE: 1" = 20'

TREE #	SPECIES (common name)	DBH (inches)	CTLA CONDITION RATING	ISA CRITICAL ROOTZONE (CRZ) RADIUS (ft.)	TREE REMOVAL	STUMP REMOVAL	TRANSPLANT TREE	PREPARATORY PRUNING ANSI A-300: Cleaning	Raising	Reducing	Restoring	Structural	Thinning	Limb Tying	TREE PROTECTION: Temporary Wooden Tree Guard	Temporary Wooden Tree Guard For Groves	Temporary Fence Boundary	Protect Existing Tree Roots w/ Wood Chips	Protect Ex. Tree Roots w/ Plywood or Mats	DECOMPACT: Air-Tilling 3 Ft Radius	Air-Tilling 5 Ft Radius	Radial Trench	Vertical Mulch	PREPARATORY FERTILIZE	TREE GROWTH REGULATOR	COMMENTS
1	CHERRY, OTHER	13	66%	13.0																						Growing in 2 and 3.
2	BLACK LOCUST	21	66%	15.8																						Growing in 1 and 3, invasive.
3	BLACK LOCUST	24	66%	18.0																						Growing in 1 and 2, invasive.
4	LONDON PLANETREE	26	100%	26.0																						Invasive
5	MAPLE, NORWAY	22	91%	22.0																						Invasive
6	MAPLE, NORWAY	19	78%	19.0											X											Invasive
7	MAPLE, NORWAY	22	72%	22.0											X											Invasive, leaf die back.
8	LONDON PLANETREE	30	84%	30.0											X											
9	HONEYLOCUST	12	78%	9.0											X											Suckering from limbs, twigs in poor condition.
10	LONDON PLANETREE	12	91%	12.0											X											
11	LONDON PLANETREE	13	78%	13.0											X											Witches brooms and die back all along branches.
12	HONEYLOCUST	13	88%	9.8											X											
13	OAK, PIN	11	88%	11.0											X											
14	BLACK LOCUST	34	59%	34.0											X											Signs of decay at base.
15	ELM, OTHER	20	94%	15.0											X											Twig die back and suckering on limbs.
16	ELM, OTHER	22	91%	16.5											X											
17	ELM, OTHER	22	97%	16.5											X											
18	ELM, OTHER	16	88%	12.0											X											
19	SWEETGUM	14	100%	17.5											X											Bad trunk base, mechanical damage.

NO.	DATE	ISSUED FOR	BY

DESIGNED AE
DRAWN TM
CHECKED DT
PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

Hazen

APPROVED FOR THE CITY OF NEW YORK

_____ P.E.
PROJECT MANAGER

NYC Environmental Protection

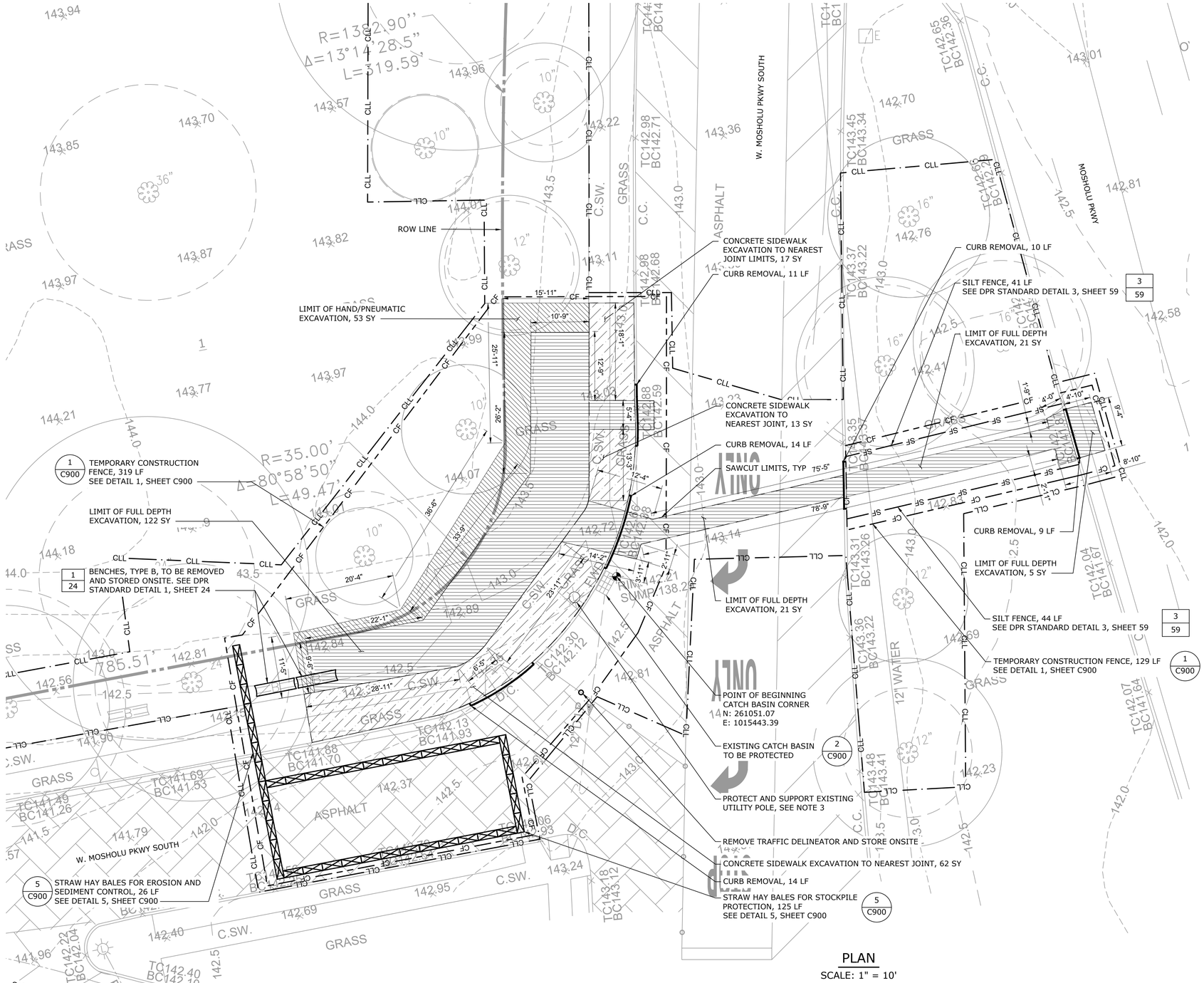
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING AND ANALYSIS

SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
TREE PROTECTION PLAN, STAGING AND ACCESS

DATE NOV 2026
PAGE 4 OF 15
SHEET C100

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PLAN

SCALE: 1" = 10'

NOTES:

1. TRAFFIC PATTERN HAS BEEN MODIFIED SINCE DATE OF SURVEY IN APRIL OF 2020. CONDITIONS TO BE CONFIRMED BY THE CONTRACTOR.
2. REMOVAL NOTES CAN BE FOUND ON O-3 - GENERAL NOTES.
3. UNMAPPED ELECTRICAL LINES ARE WITHIN THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS OF ALL SUBSURFACE UTILITIES PRIOR TO BEGINNING WORK.
4. IF TRAFFIC CONDUITS OR OTHER TRAFFIC SIGNAL INFRASTRUCTURES ARE IDENTIFIED OR ENCOUNTER DURING THE WORK, THE CONTRACTOR SHALL STOP WORK AND IMMEDIATELY NOTIFY THE ENGINEER. IF UNCOVERED DURING EXCAVATION, THE CONTRACTOR SHALL PROTECTED AND SUPPORTED THE TRAFFIC SIGNAL INFRASTRUCTURE FOR THE DURATION OF THE WORK.

SUGGESTED SEQUENCE OF CONSTRUCTION:

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND UPON APPROVAL OF THE ENGINEER. ALL WORK SHALL BE DONE IN A MANNER TO MINIMIZE DISTURBANCE TO THE ADJACENT ROADWAY (MOSHOLU PARKWAY), SIDEWALK AND EXISTING VEGETATION. STAKE OUT AND RECEIVE APPROVAL FROM THE ENGINEER FOR THE LIMITS OF WORK BEFORE BEGINNING ANY CLEARING.

1. INLET PROTECTION (SEE DETAIL 2, SHEET C900) SHOULD BE USED ON ALL DRAINAGE INLETS ADJACENT TO AND DOWNSTREAM OF CONSTRUCTION AREA.
2. INSTALL PERIMETER EROSION CONTROL MEASURES INCLUDING CONSTRUCTION LIMIT FENCING, AROUND THE WORK AREA. INSTALL ALL TREE PROTECTION.
3. PERFORM PAVEMENT AND DEBRIS REMOVAL.
4. EXCAVATION AND INSTALLATION OF GREEN INFRASTRUCTURE PRACTICES SHALL BE PERFORMED, ALONG WITH ALL ASSOCIATED APPURTENANCES.
7. INLET INSTALLATION AND OFFRAMP SHOULD BE DONE IN SUCH A WAY TO MINIMIZE CONSTRUCTION IMPACTS TO MOSHOLU PARKWAY AND THE ADJACENT RIGHT OF WAY.
8. BACKFILL THE PROJECT SITE WITH STONE, AS PER CONTRACT SPECIFICATIONS, TO THE FINAL ELEVATIONS SHOWN ON THE CONTRACT DRAWINGS.
9. ONCE ALL AREAS HAVE BEEN STABILIZED, REMOVE TEMPORARY PERIMETER EROSION AND SEDIMENT CONTROL MEASURES.

LEGEND

- FULL DEPTH EXCAVATION
- SIDEWALK DEMOLITION
- HAND/PNEUMATIC EXCAVATION
- CLL - CONTRACT LIMIT LINE
- CF - CONSTRUCTION FENCE
- SF - SILT FENCE
- STRAW BALE DIKE
- POINT OF BEGINNING

SCALE:1"=10'

10 5 0 10

NO.	DATE	ISSUED FOR	BY

DESIGNED AE
DRAWN TM
CHECKED DT
PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

Hazen

APPROVED FOR THE CITY OF NEW YORK

_____ P.E.
PROJECT MANAGER

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING AND ANALYSIS

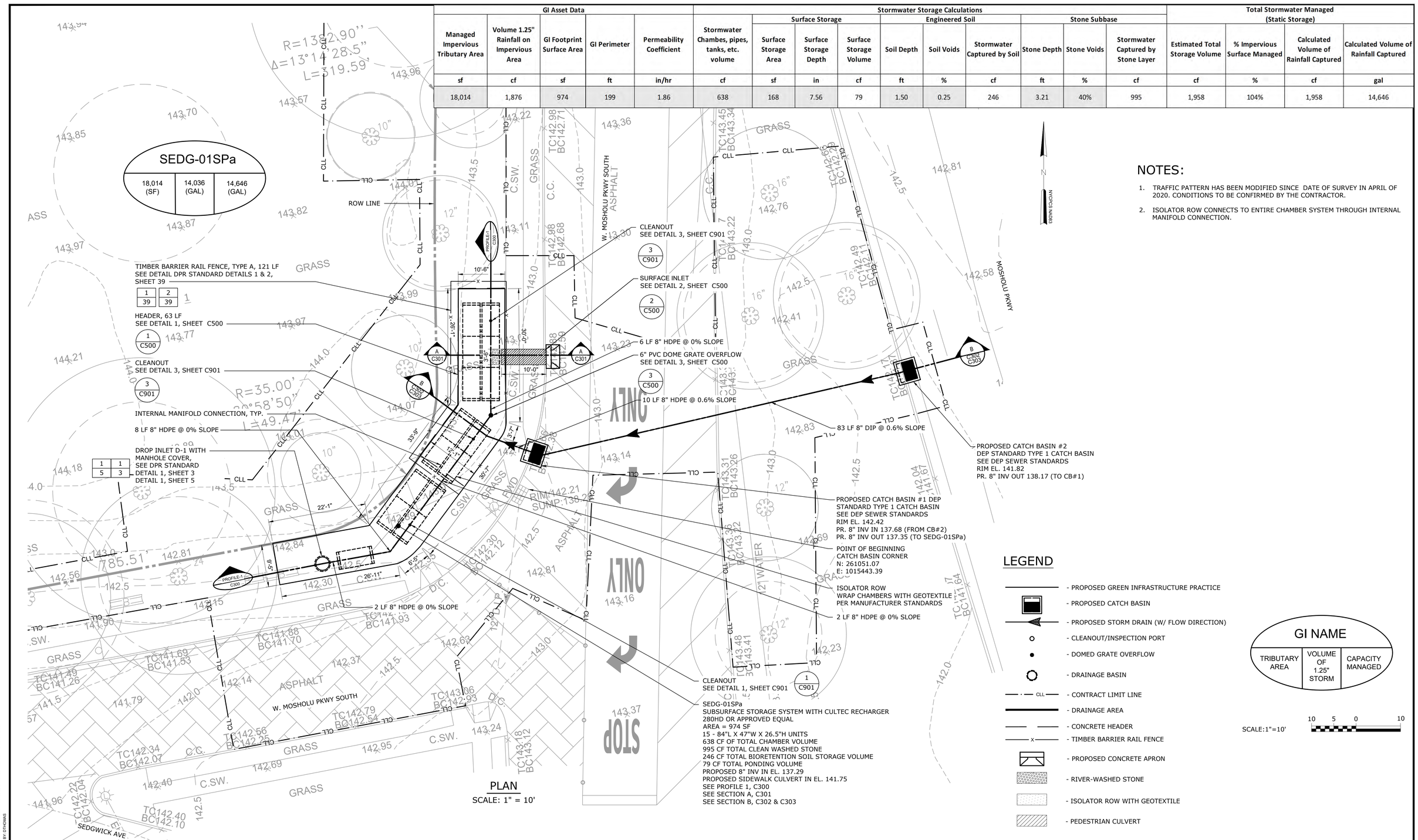
SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
REMOVAL AND DEMOLITION PLAN

DATE	NOV 2026
PAGE	5 OF 15
SHEET	C101

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GI Asset Data					Stormwater Storage Calculations											Total Stormwater Managed (Static Storage)			
						Surface Storage			Engineered Soil			Stone Subbase							
Managed Impervious Tributary Area	Volume 1.25" Rainfall on Impervious Area	GI Footprint Surface Area	GI Perimeter	Permeability Coefficient	Stormwater Chambes, pipes, tanks, etc. volume	Surface Storage Area	Surface Storage Depth	Surface Storage Volume	Soil Depth	Soil Voids	Stormwater Captured by Soil	Stone Depth	Stone Voids	Stormwater Captured by Stone Layer	Estimated Total Storage Volume	% Impervious Surface Managed	Calculated Volume of Rainfall Captured	Calculated Volume of Rainfall Captured
sf	cf	sf	ft	in/hr	cf	sf	in	cf	ft	%	cf	ft	%	cf	cf	%	cf	gal
18,014	1,876	974	199	1.86	638	168	7.56	79	1.50	0.25	246	3.21	40%	995	1,958	104%	1,958	14,646



PLAN
SCALE: 1" = 10'

NOTES:

1. TRAFFIC PATTERN HAS BEEN MODIFIED SINCE DATE OF SURVEY IN APRIL OF 2020. CONDITIONS TO BE CONFIRMED BY THE CONTRACTOR.
2. ISOLATOR ROW CONNECTS TO ENTIRE CHAMBER SYSTEM THROUGH INTERNAL MANIFOLD CONNECTION.

LEGEND

- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- PROPOSED CATCH BASIN
- PROPOSED STORM DRAIN (W/ FLOW DIRECTION)
- CLEANOUT/INSPECTION PORT
- DOMED GRATE OVERFLOW
- DRAINAGE BASIN
- CLL - CONTRACT LIMIT LINE
- DRAINAGE AREA
- CONCRETE HEADER
- TIMBER BARRIER RAIL FENCE
- PROPOSED CONCRETE APRON
- RIVER-WASHED STONE
- ISOLATOR ROW WITH GEOTEXTILE
- PEDESTRIAN CULVERT

GI NAME

TRIBUTARY AREA	VOLUME OF 1.25" STORM	CAPACITY MANAGED

SCALE:1"=10'

10 5 0 10

NO.	DATE	ISSUED FOR	BY

DESIGNED AE
DRAWN TM
CHECKED DT
PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

Hazen

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PROJECT MANAGER P.E.

NYC Environmental Protection

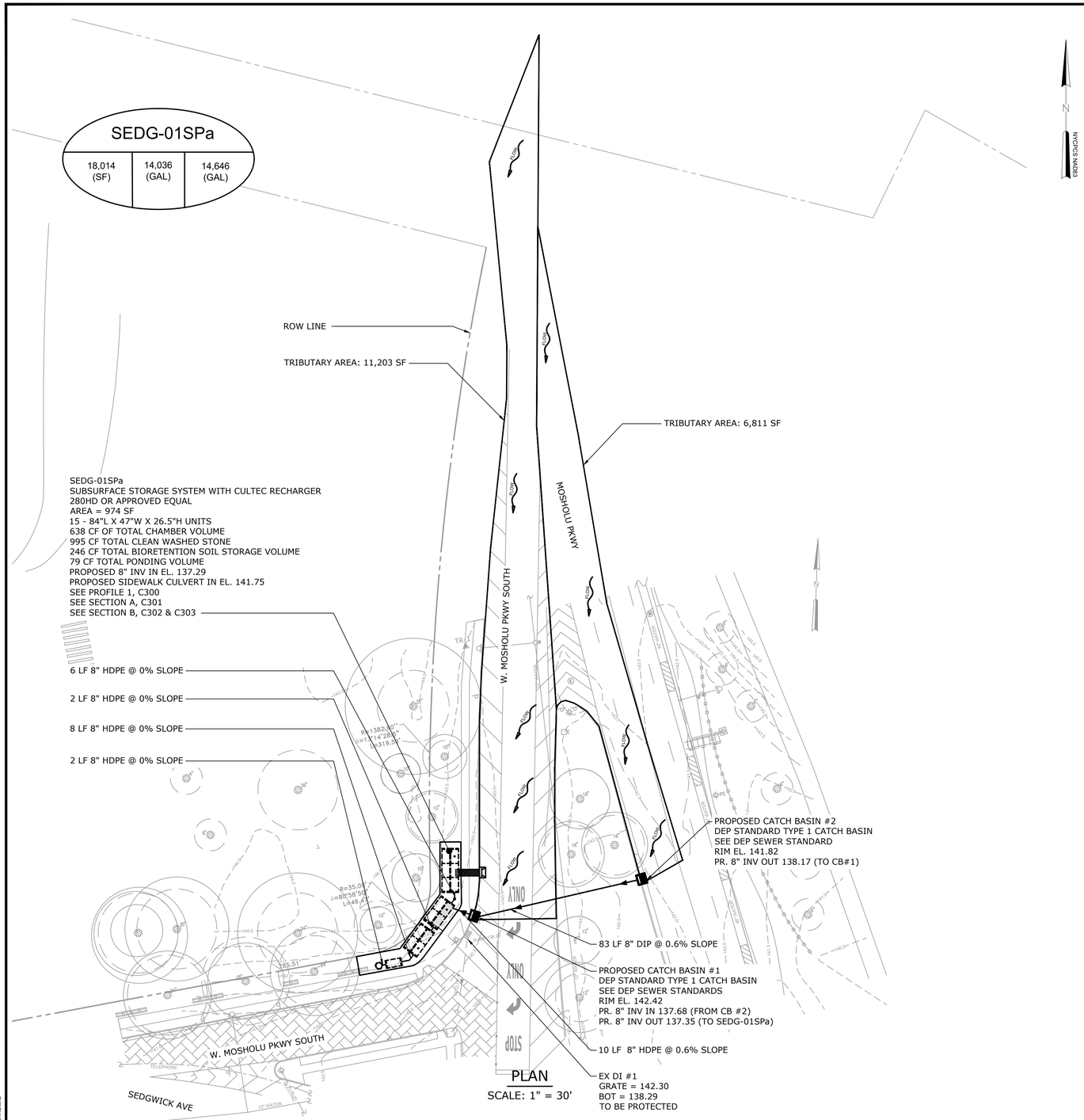
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BUREAU OF ENVIRONMENTAL PLANNING AND ANALYSIS

SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN

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SHEET	C200

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PLAN
SCALE: 1" = 30'

NOTES:

1. TRAFFIC PATTERN HAS BEEN MODIFIED SINCE DATE OF SURVEY IN APRIL OF 2020. CONDITIONS TO BE CONFIRMED BY THE CONTRACTOR.
2. DRAINAGE NOTES CAN BE FOUND ON O-3 - GENERAL NOTES.
3. ISOLATOR ROW CONNECTS TO ENTIRE CHAMBER SYSTEM THROUGH INTERNAL MANIFOLD CONNECTION.

LEGEND

- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- PROPOSED CATCH BASIN
- PROPOSED STORM DRAIN (W/ FLOW DIRECTION)
- FLOW DIRECTION
- DRAINAGE AREA
- CONCRETE HEADER
- PROPOSED CONCRETE APRON
- RIVER-WASHED STONE
- ISOLATOR ROW WITH GEOTEXTILE
- PEDESTRIAN CULVERT

GI NAME		
TRIBUTARY AREA	VOLUME OF 1.25" STORM	CAPACITY MANAGED

- GREEN INFRASTRUCTURE CHARACTERISTICS

SCALE:1"=30'

30 15 0 30

NO.	DATE	ISSUED FOR	BY

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PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

Hazen

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_____ P.E.
PROJECT MANAGER

NYC Environmental Protection

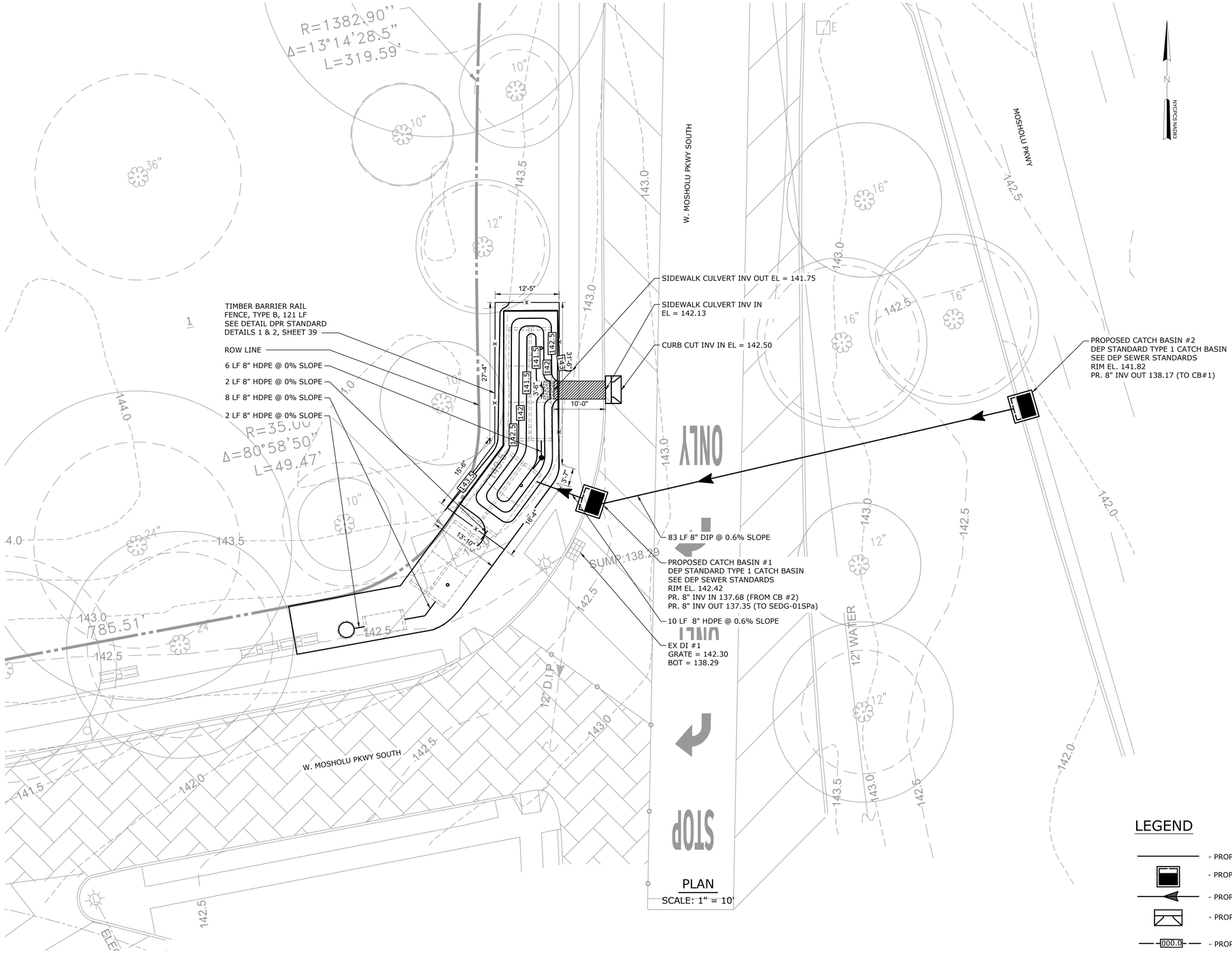
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SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
DRAINAGE PLAN

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PLAN

SCALE: 1" = 10'

NOTES:

1. TRAFFIC PATTERN HAS BEEN MODIFIED SINCE DATE OF SURVEY IN APRIL OF 2020. CONDITIONS TO BE CONFIRMED BY THE CONTRACTOR.
2. DRAINAGE NOTES CAN BE FOUND ON O-3 - GENERAL NOTES.
3. ISOLATOR ROW CONNECTS TO ENTIRE CHAMBER SYSTEM THROUGH INTERNAL MANIFOLD CONNECTION.

LEGEND

- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- PROPOSED CATCH BASIN
- PROPOSED STORM DRAIN (W/ FLOW DIRECTION)
- PROPOSED CONCRETE APRON
- 000.0 - PROPOSED CONTOURS

SCALE:1"=10'

10 5 0 10

NO.	DATE	ISSUED FOR	BY

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DRAWN TM
CHECKED DT
PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

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_____ P.E.
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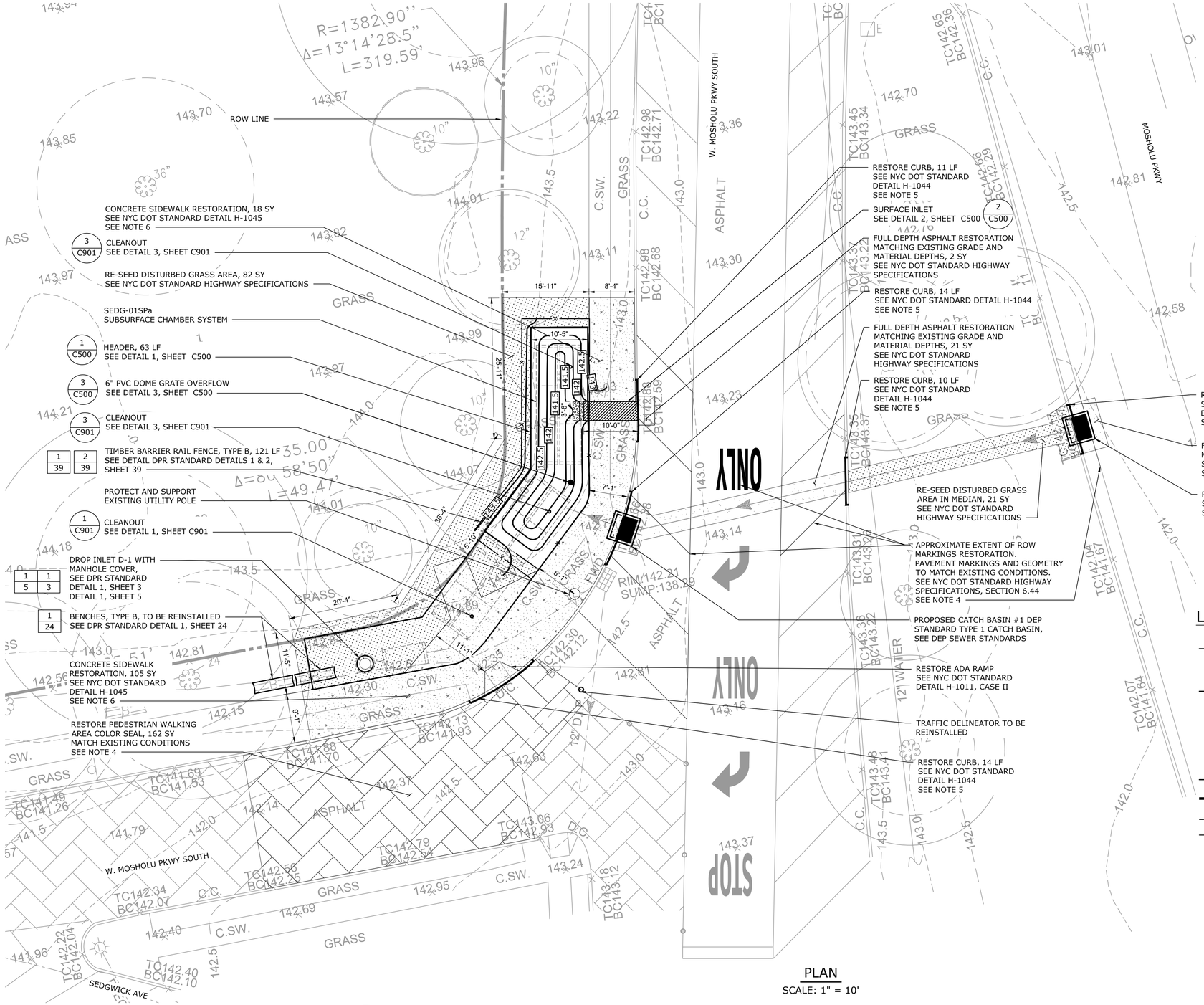
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SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
GRADING PLAN

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PLAN

SCALE: 1" = 10'

NOTES:

1. TRAFFIC PATTERN HAS BEEN MODIFIED SINCE DATE OF SURVEY IN APRIL OF 2020. CONDITIONS TO BE CONFIRMED BY THE CONTRACTOR.
2. LAYOUT & MATERIALS NOTES AND CAN BE FOUND ON THE SHEET O-3 - GENERAL NOTES.
3. THE CONTRACTOR MUST NOTIFY THE NEW YORK CITY DIVISION OF TRANSPORTATION PLANNING & MANAGEMENT, DESIGN & CONSTRUCTION UNIT AT GEOMETRICDESIGN@DOT.NYC.GOV TO VERIFY DESIGN OF ALL PAVEMENT MARKINGS TO BE INSTALLED THIRTY (30) CALENDAR DAYS PRIOR TO THE START OF WORK ON PAVEMENT MARKINGS. NOTIFICATION MUST INCLUDE CONTACT INFORMATION, DESCRIPTION OF PROJECT AREA, AND FINAL APPROVED MARKING DRAWINGS WITH ALL APPLICABLE FIELD CHANGES INCORPORATED. FUTHERMORE, THE CONTRACTOR SHALL CONTACT THE DIRECTOR OF GEOMETRIC DESIGN FOR THE BRONX, DOMINIC CAIAZZO AT dcaiazzo@dot.nyc.gov, PRIOR TO RESTORATION WORK, TO COORDINATE THE ASPHALT PAVEMENT MARKINGS RESTORATION.
4. ANY PAVEMENT MARKINGS OR COLOR SEAL AREAS DISTURBED OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED AT CONTRACTOR'S OWN EXPENSE.
5. CURB RESTORATION SHALL MATCH EXISTING CONDITIONS.
6. ALL SIDEWALK RESTORATION SHALL BE CONSTRUCTED WITH A TRANSVERSE SLOPE NOT EXCEEDING TWO PERCENT (2%). WHERE NEW SIDEWALK OR RAMP CONSTRUCTION ADJOINS EXISTING SIDEWALK WITH CROSS SLOPES EXCEEDING ADA LIMITS, THE NEW SIDEWALK MAY TRANSITION TO MATCH EXISTING CROSS SLOPES, PROVIDED THE TRANSITION IS MADE OVER A LENGTH THAT DOES NOT EXCEED A MAXIMUM LONGITUDINAL SLOPE OF 5%.

SEEDING NOTES:

1. SIX (6) WEEKS PRIOR TO SEEDING, GERMINATION AND PURITY TEST RESULTS FOR EACH SPECIES IN THE SEED MIX SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. ALL SEEDING OPERATIONS MUST BE SCHEDULED AND APPROVED AT LEAST FIVE (5) DAYS IN ADVANCE TO ENSURE THE ENGINEER IS PRESENT TO OBSERVE THE WORK.
3. FOUR (4) WEEKS PRIOR TO SEEDING SOIL NUTRIENT, SALINITY, AND PH TESTS SHALL BE TAKEN FROM SIX (6) REPRESENTATIVE LOCATIONS IN THE AREA TO BE SEEDED. TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE COMMENCEMENT OF SEEDING ACTIVITIES.
4. SEED MIXTURE SHALL BE AS SPECIFIED IN THE CONTRACT DRAWINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. SEED MATERIALS WILL BE INSPECTED BY THE ENGINEER UPON ARRIVAL AT THE JOB SITE AND PRIOR TO PLANTING. ANY MATERIALS NOT IN COMPLIANCE WITH SPECIFICATIONS WILL NOT BE ACCEPTED AND SHALL BE REMOVED FROM THE JOB SITE IMMEDIATELY.
6. ALL SEED MATERIALS SHALL BE PROTECTED FROM DRYING OUT AND FROM WIND DAMAGE DURING DELIVERY.
7. ACCEPTABLE SEEDING WILL BE WHEN 85% COVERAGE OF THE OPEN AREA WITH THE SEEDED SPECIES HAS BEEN ACHIEVED. ANY AREA NOT MEETING THIS REQUIREMENT SHALL BE RESEEDED WITH THE ORIGINAL SEED MIX.
8. ANY AREAS DISTURBED OUTSIDE BIORETENTION SHALL BE RESEEDED WITH RESTORATION SEED MIX AS PER SPECIFICATION.

LEGEND

- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- PROPOSED CATCH BASIN
- PROPOSED STORM DRAIN (W/ FLOW DIRECTION)
- CLEANOUT/INSPECTION PORT
- DOMED GRATE OVERFLOW
- DRAINAGE BASIN
- CLL — CONTRACT LIMIT LINE
- DRAINAGE AREA
- CONCRETE HEADER
- x — SPLIT RAIL FENCE
- PROPOSED CONCRETE APRON
- RIVER-WASHED STONE
- PEDESTRIAN CULVERT
- ASPHALT RESTORATION
- CONCRETE SIDEWALK
- GRASS RESEEDING
- PEDESTRIAN WALKING AREA

SCALE:1"=10'

10 5 0 10

NO.	DATE	ISSUED FOR	BY

DESIGNED AE
DRAWN TM
CHECKED DT
PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

Sandeep Mehrotra — STATE OF NEW YORK — SANDEEP MEHROTRA — 087808 — LICENSED PROFESSIONAL ENGINEER

Hazen

APPROVED FOR THE CITY OF NEW YORK

_____ P.E.
PROJECT MANAGER

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING AND ANALYSIS

SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
MATERIALS PLAN

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PLAN
SCALE: 1" = 4'

NOTES:

1. TRAFFIC PATTERN HAS BEEN MODIFIED SINCE DATE OF SURVEY IN APRIL OF 2020. CONDITIONS TO BE CONFIRMED BY THE CONTRACTOR.
2. LAYOUT & MATERIALS NOTES AND CAN BE FOUND ON THE SHEET O-3 - GENERAL NOTES.

SEEDING NOTES:

1. SIX (6) WEEKS PRIOR TO SEEDING, GERMINATION AND PURITY TEST RESULTS FOR EACH SPECIES IN THE SEED MIX SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. ALL SEEDING OPERATIONS MUST BE SCHEDULED AND APPROVED AT LEAST FIVE (5) DAYS IN ADVANCE TO ENSURE THE ENGINEER IS PRESENT TO OBSERVE THE WORK.
3. FOUR (4) WEEKS PRIOR TO SEEDING SOIL NUTRIENT, SALINITY, AND PH TESTS SHALL BE TAKEN FROM SIX (6) REPRESENTATIVE LOCATIONS IN THE AREA TO BE SEEDED. TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE COMMENCEMENT OF SEEDING ACTIVITIES.
4. SEED MIXTURE SHALL BE AS SPECIFIED IN THE CONTRACT DRAWINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. SEED MATERIALS WILL BE INSPECTED BY THE ENGINEER UPON ARRIVAL AT THE JOB SITE AND PRIOR TO PLANTING. ANY MATERIALS NOT IN COMPLIANCE WITH SPECIFICATIONS WILL NOT BE ACCEPTED AND SHALL BE REMOVED FROM THE JOB SITE IMMEDIATELY.
6. ALL SEED MATERIALS SHALL BE PROTECTED FROM DRYING OUT AND FROM WIND DAMAGE DURING DELIVERY.
7. ACCEPTABLE SEEDING WILL BE WHEN 85% COVERAGE OF THE OPEN AREA WITH THE SEEDED SPECIES HAS BEEN ACHIEVED. ANY AREA NOT MEETING THIS REQUIREMENT SHALL BE RESEEDED WITH THE ORIGINAL SEED MIX.
8. ANY AREAS DISTURBED OUTSIDE BIORETENTION SHALL BE RESEEDED WITH RESTORATION SEED MIX AS PER SPECIFICATION.

LEGEND

- ARONIA MELANOCARPA (BLACK CHOKEBERRY)
- CORNUS SERICEA (RED-OSIER DOGWOOD)
- PANICUM VIRGATUM (HEAVY METAL SWITCHGRASS)
- NEPETA FAASSENI (WALKER'S LOW CATMINT)
- EUPATORIUM DUBIUM (BABY JOE PYE WEED)

PLANTING SCHEDULE					
QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
SHRUBS					
13	AM	ARONIA MELANOCARPA	BLACK CHOKEBERRY	#3 CONTAINER	3' O.C.
28	CS	CORNUS SERICEA	RED-OSIER DOGWOOD	#3 CONTAINER	2' O.C.
PERENNIALS					
68	ED	EUPATORIUM DUBIUM	BABY JOE JOE PYE WEED	#2 CONTAINER	12" O.C.
84	NF	NEPETA FAASENIA	WALKER'S LOW CATMINT	#2 CONTAINER	12" O.C.
GRASSES					
82	PV	PANICUM VIRGATUM	HEAVY METAL SWITCHGRASS	#2 CONTAINER	18" O.C.

SCALE:1"=4'

4 2 0 4

NO.	DATE	ISSUED FOR	BY

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CHECKED DT
PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

NEW YORK STATE OF EDUCATION REGISTERED PROFESSIONAL ENGINEER 075826-1

Hazen

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P.E.
PROJECT MANAGER

NYC Environmental Protection

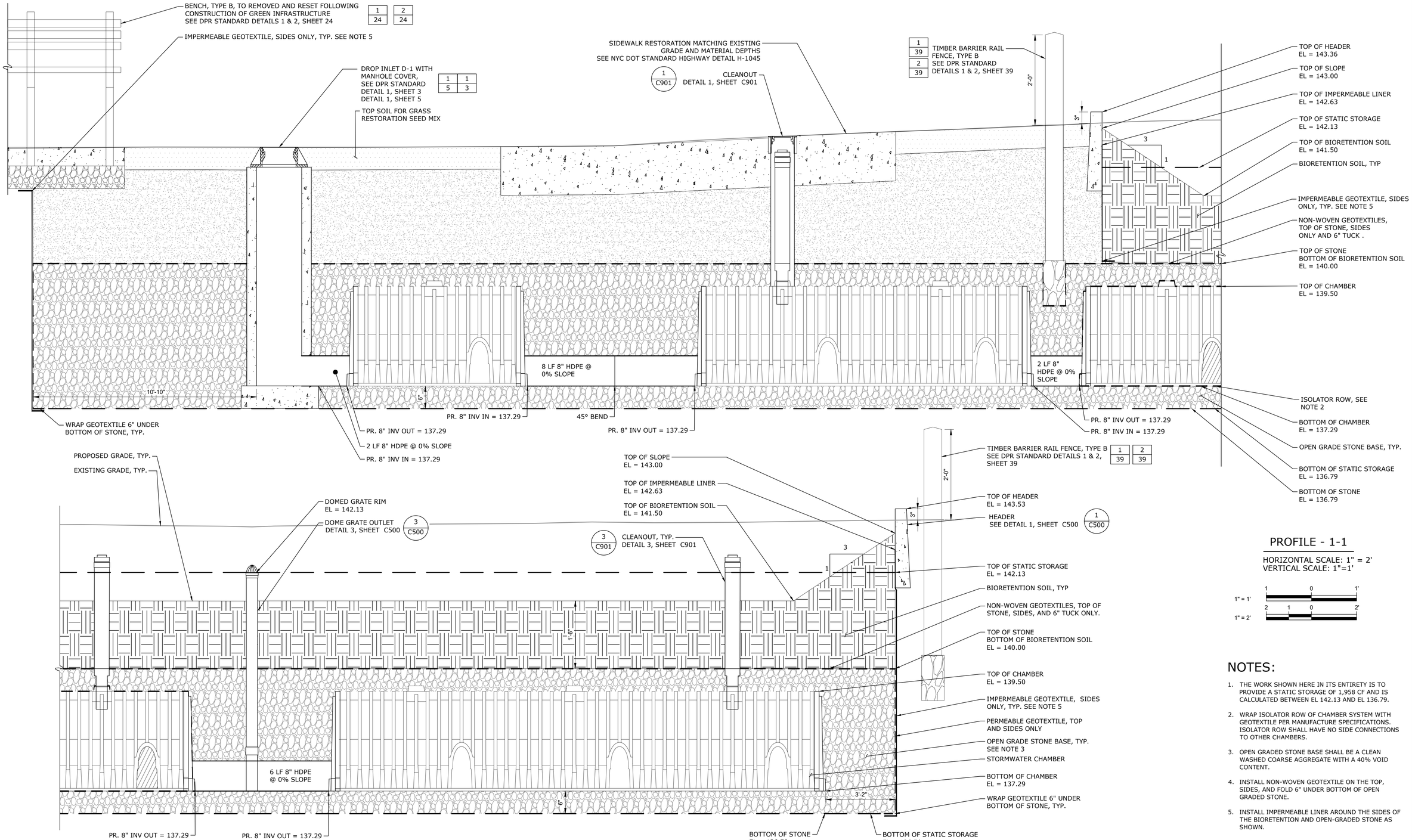
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SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
PLANTING PLAN

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PROFILE - 1-1

HORIZONTAL SCALE: 1" = 2'
VERTICAL SCALE: 1"=1'

1" = 1' 1 0 1'
1" = 2' 2 1 0 2'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 1,958 CF AND IS CALCULATED BETWEEN EL 142.13 AND EL 136.79.
2. WRAP ISOLATOR ROW OF CHAMBER SYSTEM WITH GEOTEXTILE PER MANUFACTURE SPECIFICATIONS. ISOLATOR ROW SHALL HAVE NO SIDE CONNECTIONS TO OTHER CHAMBERS.
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL NON-WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.
5. INSTALL IMPERMEABLE LINER AROUND THE SIDES OF THE BIORETENTION AND OPEN-GRADED STONE AS SHOWN.

NO.	DATE	ISSUED FOR	BY

DESIGNED AE
DRAWN TM
CHECKED DT
PROJ.ENGR. AE

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STATE OF NEW YORK — SANDEEP MEHROTRA — 072826 — LICENSED PROFESSIONAL ENGINEER

Hazen

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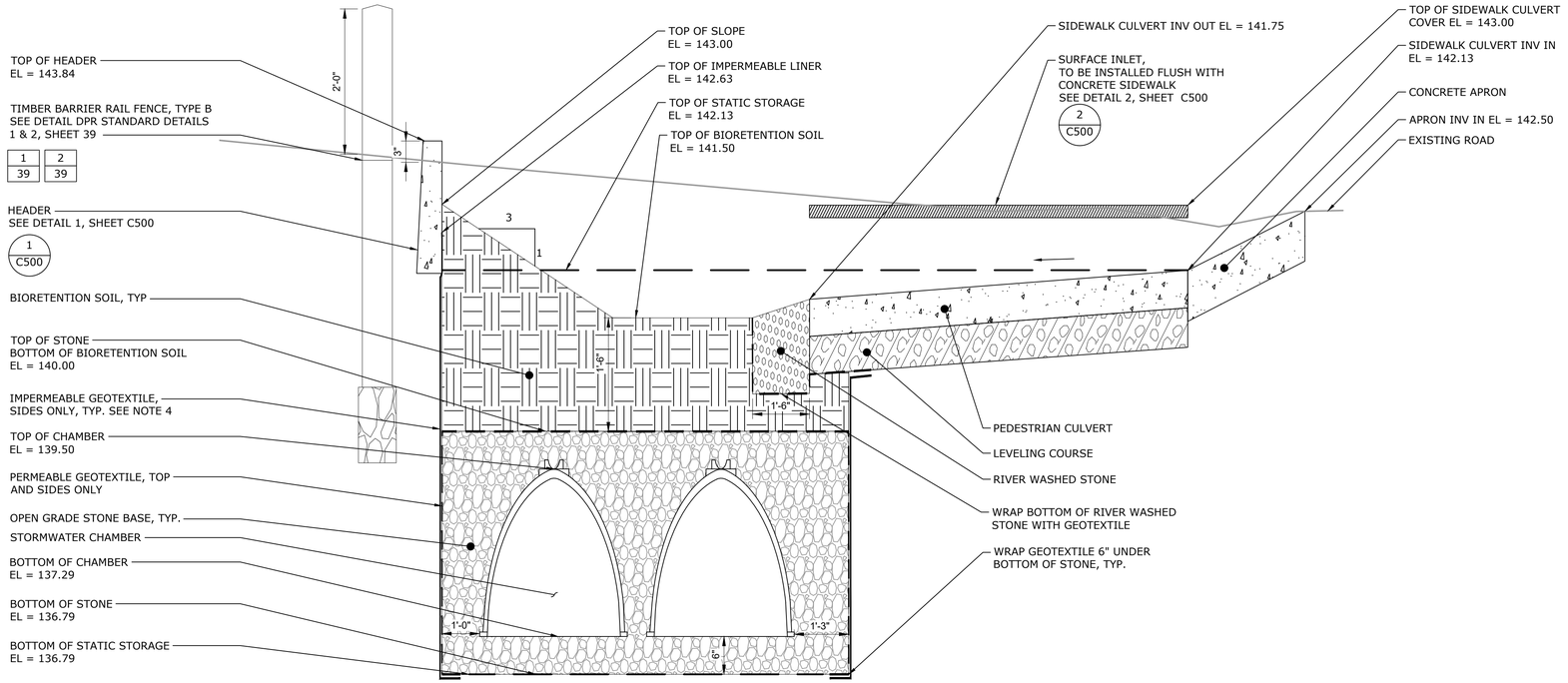
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SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
SECTIONS AND PROFILES - 1

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CROSS SECTION A-A

HORIZONTAL SCALE: 1" = 2'
VERTICAL SCALE: 1"=1'

1" = 1' (1 0 1')

1" = 2' (2 1 0 2')

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 1,958 CF AND IS CALCULATED BETWEEN EL 142.13 AND EL 136.79.
2. INSTALL NON-WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL IMPERMEABLE LINER AROUND THE SIDES OF THE BIORETENTION AND OPEN-GRADED STONE AS SHOWN.

NO.	DATE	ISSUED FOR	BY

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DRAWN TM
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PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

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NYC Environmental Protection

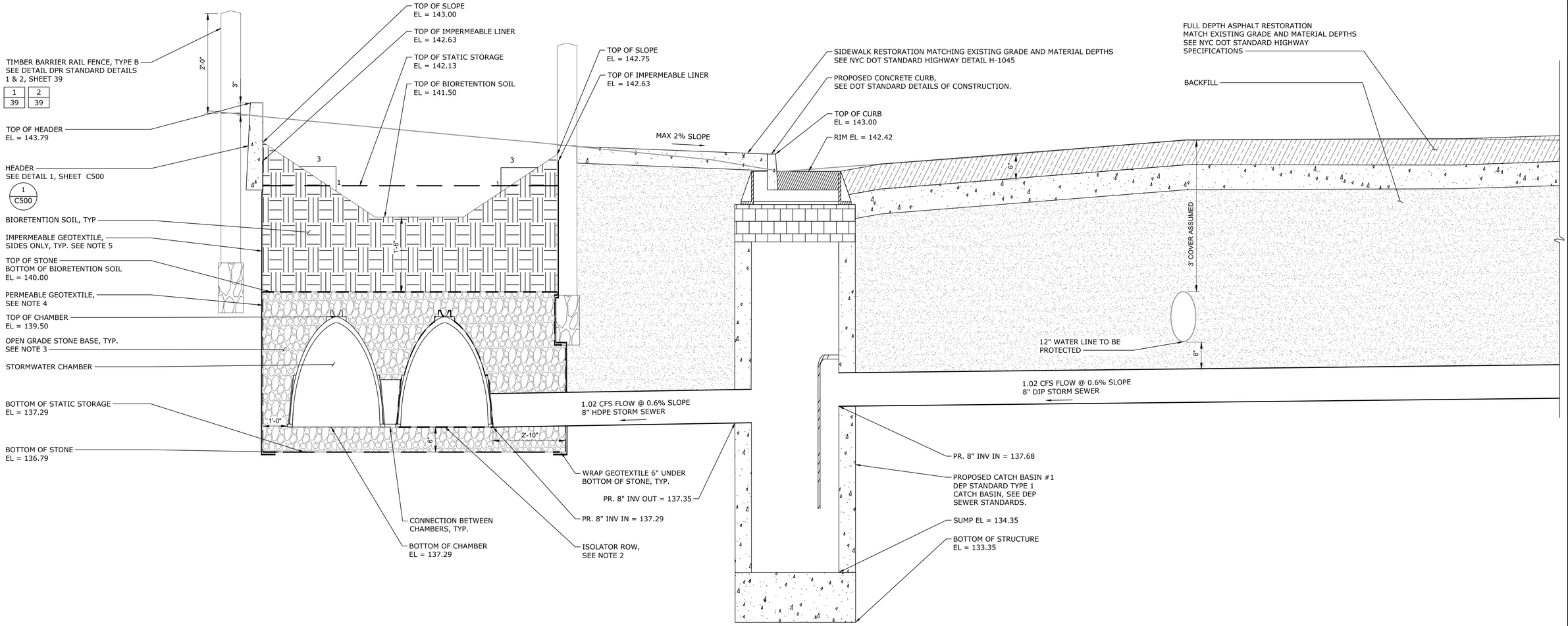
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SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
SECTIONS AND PROFILES - 2

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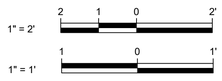
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CROSS SECTION B-B

HORIZONTAL SCALE: 1" = 2'
VERTICAL SCALE: 1"=1'



NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 1,947 CF AND IS CALCULATED BETWEEN EL 142.13 AND EL 136.79.
2. WRAP ISOLATOR ROW OF CHAMBER SYSTEM WITH GEOTEXTILE PER MANUFACTURE SPECIFICATIONS. ISOLATOR ROW SHALL HAVE NO SIDE CONNECTIONS TO OTHER CHAMBERS.
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COARSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL NON-WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.
5. INSTALL IMPERMEABLE LINER AROUND THE SIDES OF THE BIORETENTION AND OPEN-GRADED STONE AS SHOWN.

NO.	DATE	ISSUED FOR	BY

DESIGNED AE
DRAWN TM
CHECKED DT
PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

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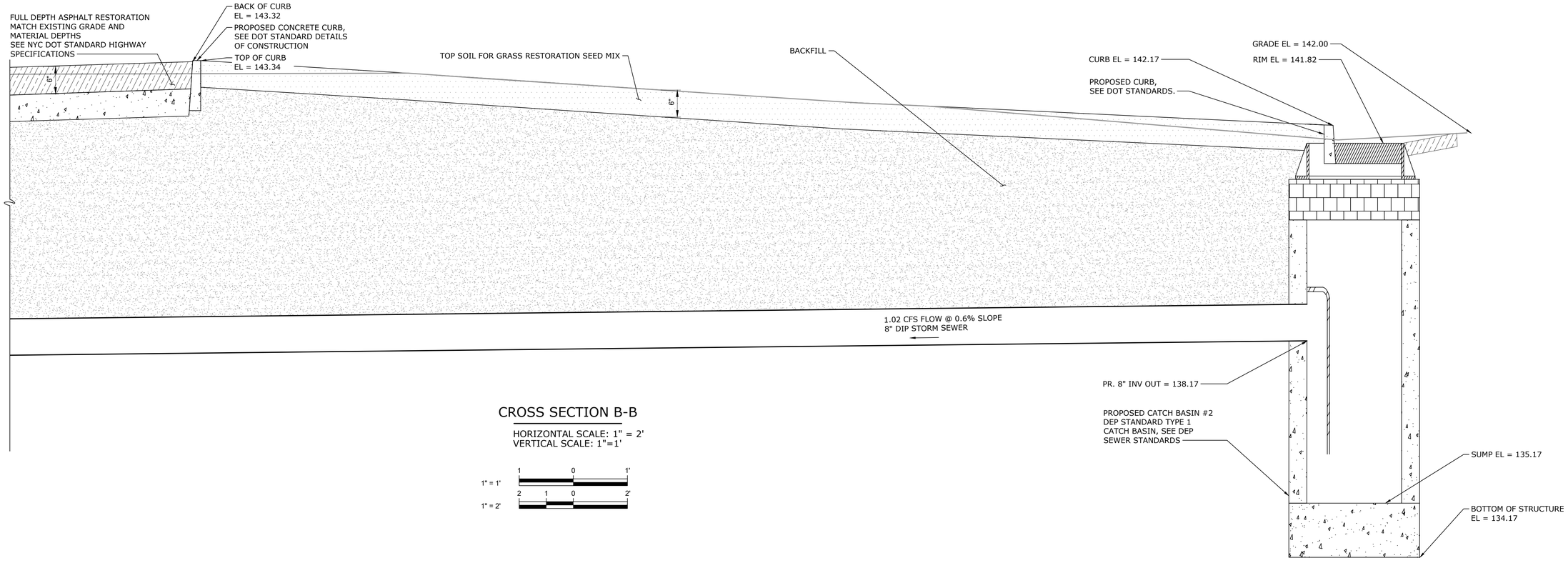
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SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
SECTIONS AND PROFILES - 3

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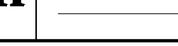
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CROSS SECTION B-B

HORIZONTAL SCALE: 1" = 2'
VERTICAL SCALE: 1"=1'

1" = 1'



1" = 2'



NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 1,947 CF AND IS CALCULATED BETWEEN EL 142.13 AND EL 136.79.

NO.	DATE	ISSUED FOR	BY

DESIGNED AE
DRAWN TM
CHECKED DT
PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

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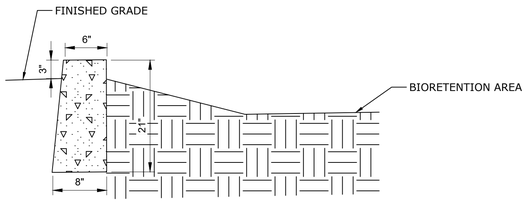
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SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
SECTIONS AND PROFILES - 4

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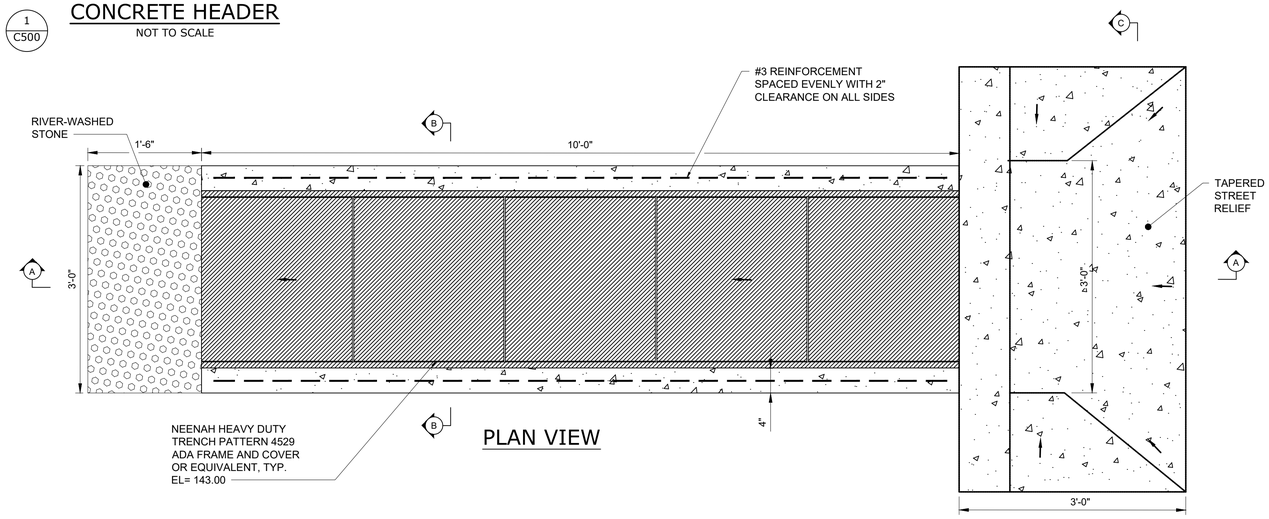
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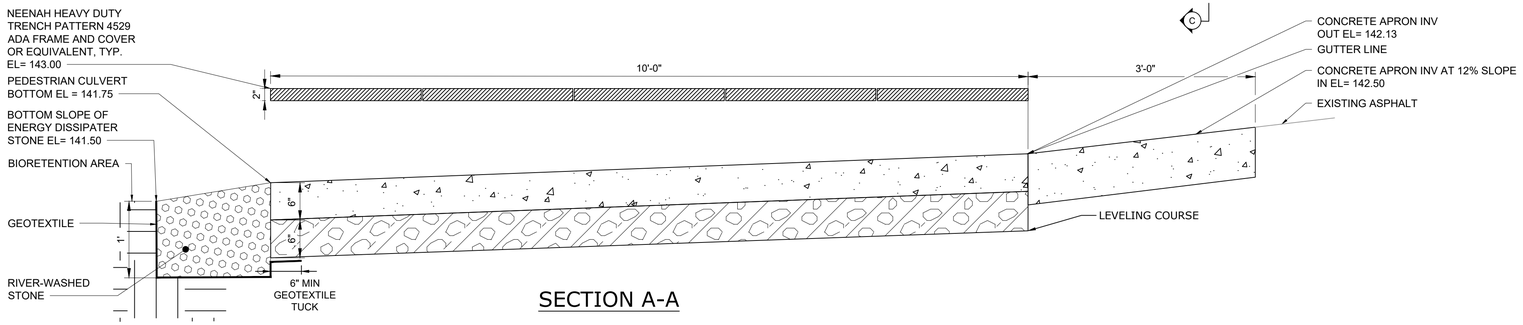


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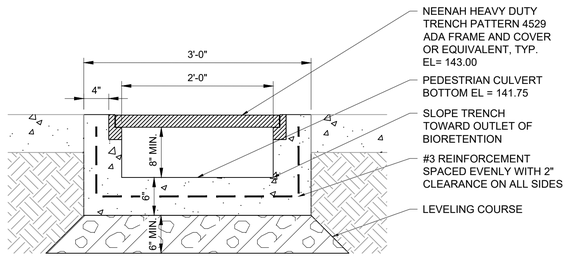
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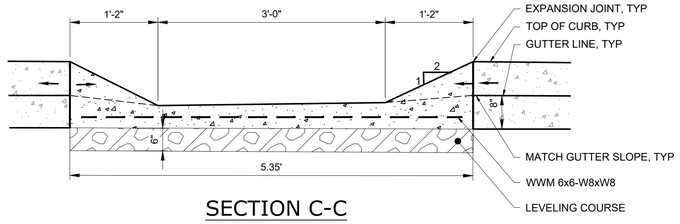
PLAN VIEW



SECTION A-A



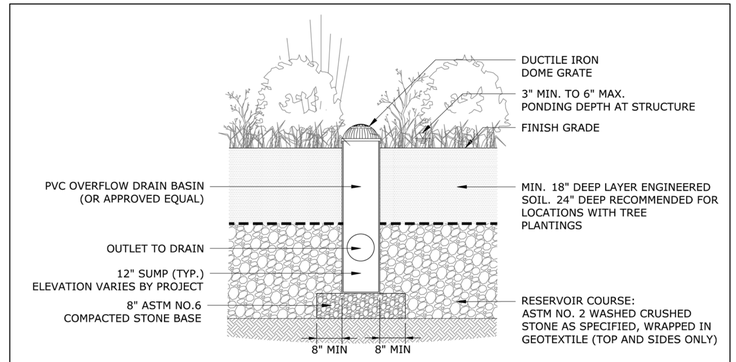
SECTION B-B



SECTION C-C

2 C500 **SURFACE INLET**

NOT TO SCALE



SECTION A

VEGETATED BIORETENTION OVERFLOW STRUCTURE

DETAIL 6
NTS

NYC Environmental Protection	ON-SITE GREEN INFRASTRUCTURE: GENERAL DESIGN GUIDELINES	DATE: MAY 2019 VERSION: 1.0 REVISED: MAY 2019	VEGETATED BIORETENTION OVERFLOW STRUCTURE	SCALE: N.T.S. PAGE: 8 OF 11 SHEET: GI-06

3 C500 **VEGETATED BIORETENTION OVERFLOW STRUCTURE**

NOT TO SCALE

NO.	DATE	ISSUED FOR	BY

DESIGNED AE
DRAWN TM
CHECKED DT
PROJ.ENGR. AE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

STATE OF NEW YORK — SANDEEP MEHROTRA — 075678 — PROFESSIONAL ENGINEER

Hazen

APPROVED FOR THE CITY OF NEW YORK

PROJECT MANAGER P.E.

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING AND ANALYSIS

SEDGWICK AND DICKINSON ON-SITE GREEN INFRASTRUCTURE
BRONX, NY
DETAILS - 1

DATE	NOV 2026
PAGE	15 OF 15
SHEET	C500

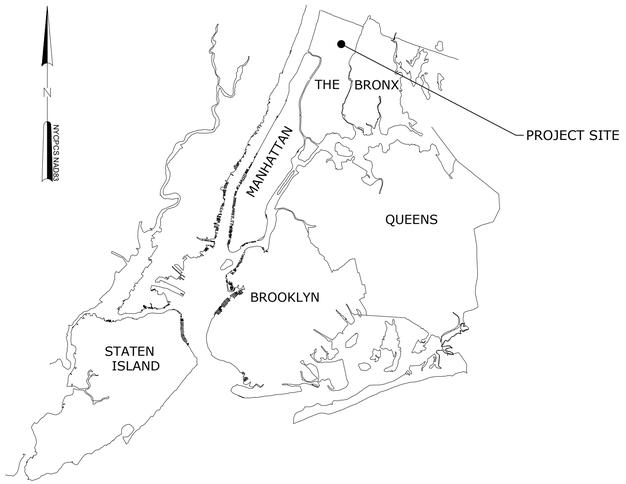
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NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS

NYC Parks

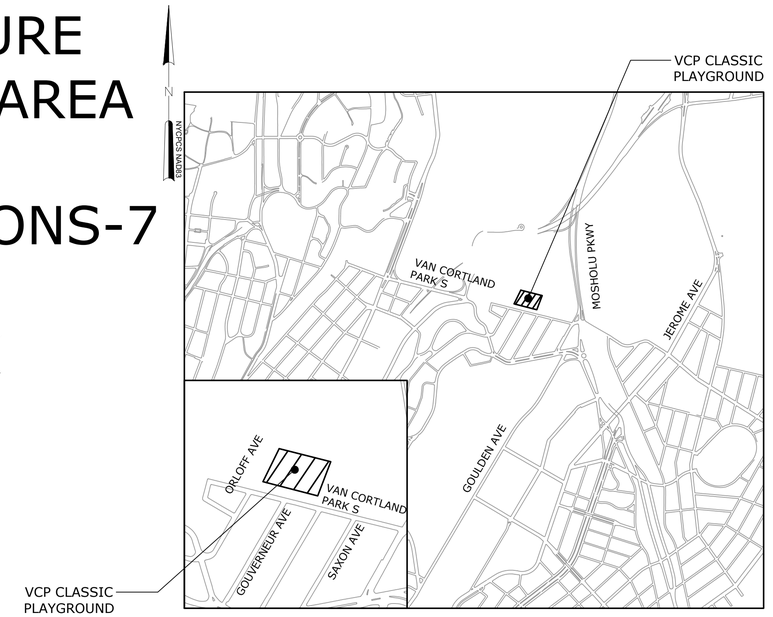
ON-SITE GREEN INFRASTRUCTURE
WARDS ISLAND CSO TRIBUTARY AREA
OUTFALL WI-056
DEP CAPITAL CONTRACT NO. GI-CONS-7



X092 VAN CORTLANDT PARK
CLASSIC PLAYGROUND
BBL 2059000001

BRONX, NY

BID SET
NOVEMBER 2026



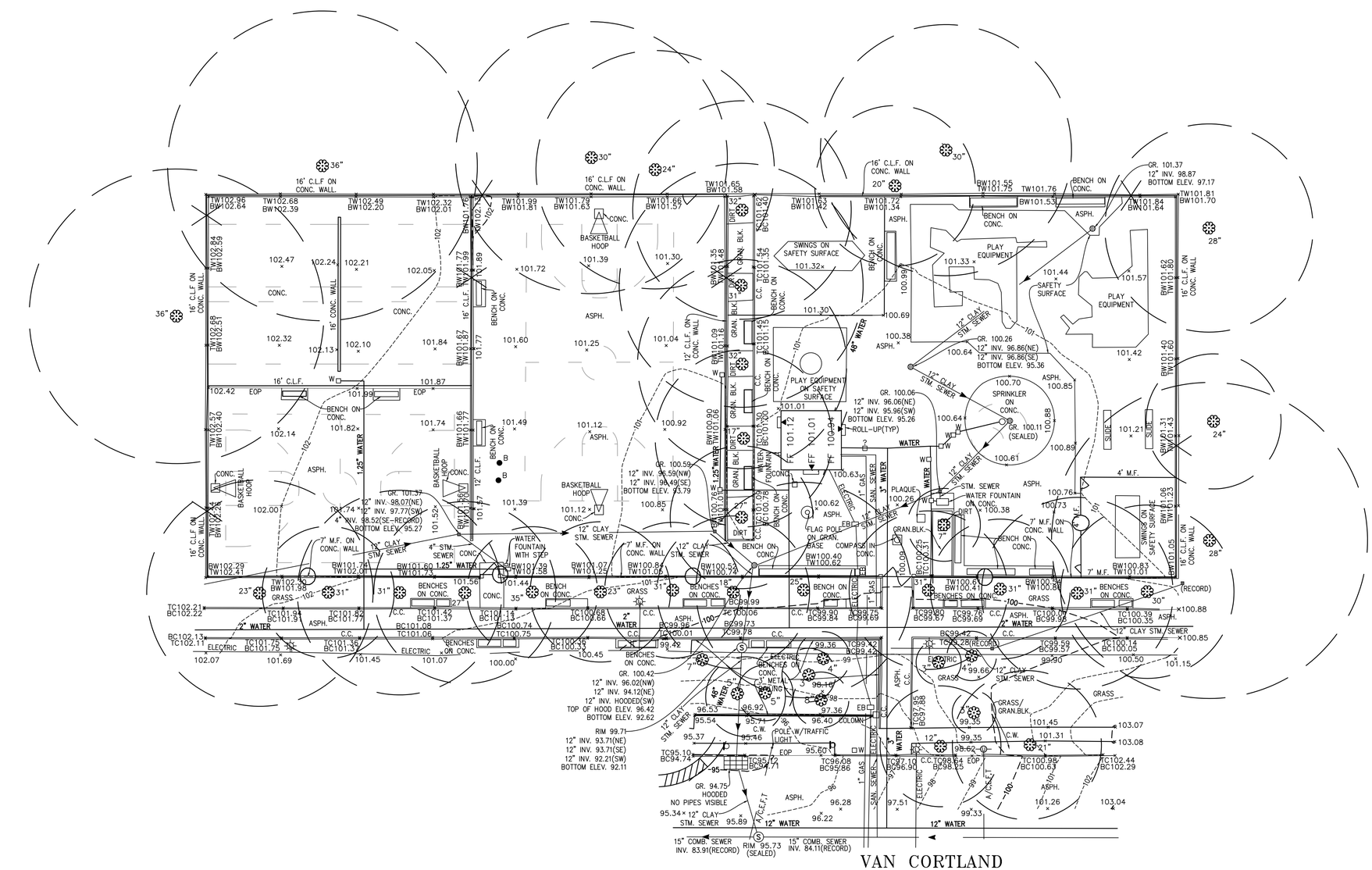
LOCATION PLAN

SHEET LIST TABLE	
DRAWING NUMBER	SHEET TITLE
G001	COVER
T-1	TOPOGRAPHIC & UTILITY SURVEY PLAN
C100	TREE PROTECTION PLAN, STAGING AND ACCESS
C101	REMOVAL AND DEMOLITION PLAN
C200	PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN
C201	MATERIAL PLAN
C300	SECTIONS AND PROFILES - 1
C301	SECTIONS AND PROFILES - 2
C302	SECTIONS AND PROFILES - 3
C303	SECTIONS AND PROFILES - 4
C500	DETAILS - 1

JOHN MCLAUGHLIN
MANAGING DIRECTOR
OFFICE OF ECOSYSTEM SERVICES, GREEN INFRASTRUCTURE AND RESEARCH
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS, NYCDEP

Lisa F. Garcia
Digitally signed by Lisa F. Garcia
Date: 2026.10.30 15:33:05 -04'00'

LISA F. GARCIA
COMMISSIONER
NYCDEP



Notes:

1. The existing conditions shown on this plan are based upon an actual on-the-ground instrument survey completed by GdB Geospatial LS, PC in July of 2021.
2. The locations of existing underground utilities shown on this plan are based on field observations and information of record. They are not warranted to be exactly located nor is it warranted that all underground utilities or other structures are shown on this plan.
3. Horizontal datum is North American Datum 1983 (2011) Epoch 2010.00 (New York State Plane Coordinate System, Long Island Zone). All linear measurements are in U.S. Survey Feet.
4. Vertical datum is North American Vertical Datum 1988. To convert this Datum to Bronx Highway Datum, subtract 1.508 feet from each elevation.

Utility Notes:

1. Existing subsurface utility features have been depicted in accordance with CI/ASCE 38-02, "American Society of Civil Engineers, Standard Guideline for The Collection and Depiction of Existing Subsurface Utility Data". This standard has established four distinct quality levels of utility mapping (Quality Level B was used for this survey).
   - Quality Level D - information derived from existing records or oral recollections.
   - Quality Level C - information obtained by surveying and plotting visible above-ground utility features and by using professional judgement in correlating this information to Quality Level D information.
   - ***Quality Level B*** - information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents. Professional judgment is used in correlating this information to Quality Level C and D information.
   - Quality Level A - horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Professional judgement is used in correlating this information to Quality Level B, C and D information.
2. The surveyor makes no guarantee or warranty that the underground utilities depicted comprise all such utilities in the area, either in service or abandoned. The surveyor further does not guarantee or warrant that the underground utilities depicted are in the exact location indicated. Utilities are depicted in accordance with the standard of care, from information available.
3. The contractor shall utilize "Call Before You Dig", "One Call", or local equivalent prior to excavation, for the purpose of verifying the subsurface utility in the area. In the areas where the "Call Before You Dig", "One Call", or local equivalent does not respond, the contractor shall verify the locations of the existing utilities, in accordance with the owner's contract and all applicable laws and regulations, including OSHA.
4. Individual components of utilities and related structures may exist above or below grade on or near the structures and may not be depicted. These may include but are not limited to ground wires, structural support, and cathodic protection. The contractor shall 1) Contact the owner of the utility prior to excavation for instruction regarding hazards associated with, and specific precautions to be utilized when working at or near, such facilities and 2) Exercise the appropriate standard of care required in accordance with all applicable laws and regulations, including OSHA, when excavating in the vicinity of a utility and/or its related structures.

STATE OF NEW YORK · MICHAEL M. LEWIS · 050842 · LICENSED LAND SURVEYOR

2025-09-26

MICHAEL M. LEWIS, L.S. — DATE
N.Y.S. L.S. No. 050842
Michael.Lewis@SAM.BIZ

Unauthorized alteration or addition to this survey is a violation of section 7209 of the New York State Education Law. Copies of this survey map not bearing the land surveyor's inked seal or embossed seal shall not be considered valid true copies. Certifications indicated herein shall run only to the person for whom the survey map is prepared, and on his behalf to the title company, governmental agency and lending institution. Certifications are not transferable to additional institutions or subsequent owners.

NO.	DATE	ISSUED FOR	BY

DESIGNED _____ DRAWN _____ CHECKED _____ PROJ.ENGR. _____

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

GdB Geospatial

APPROVED FOR THE CITY OF NEW YORK

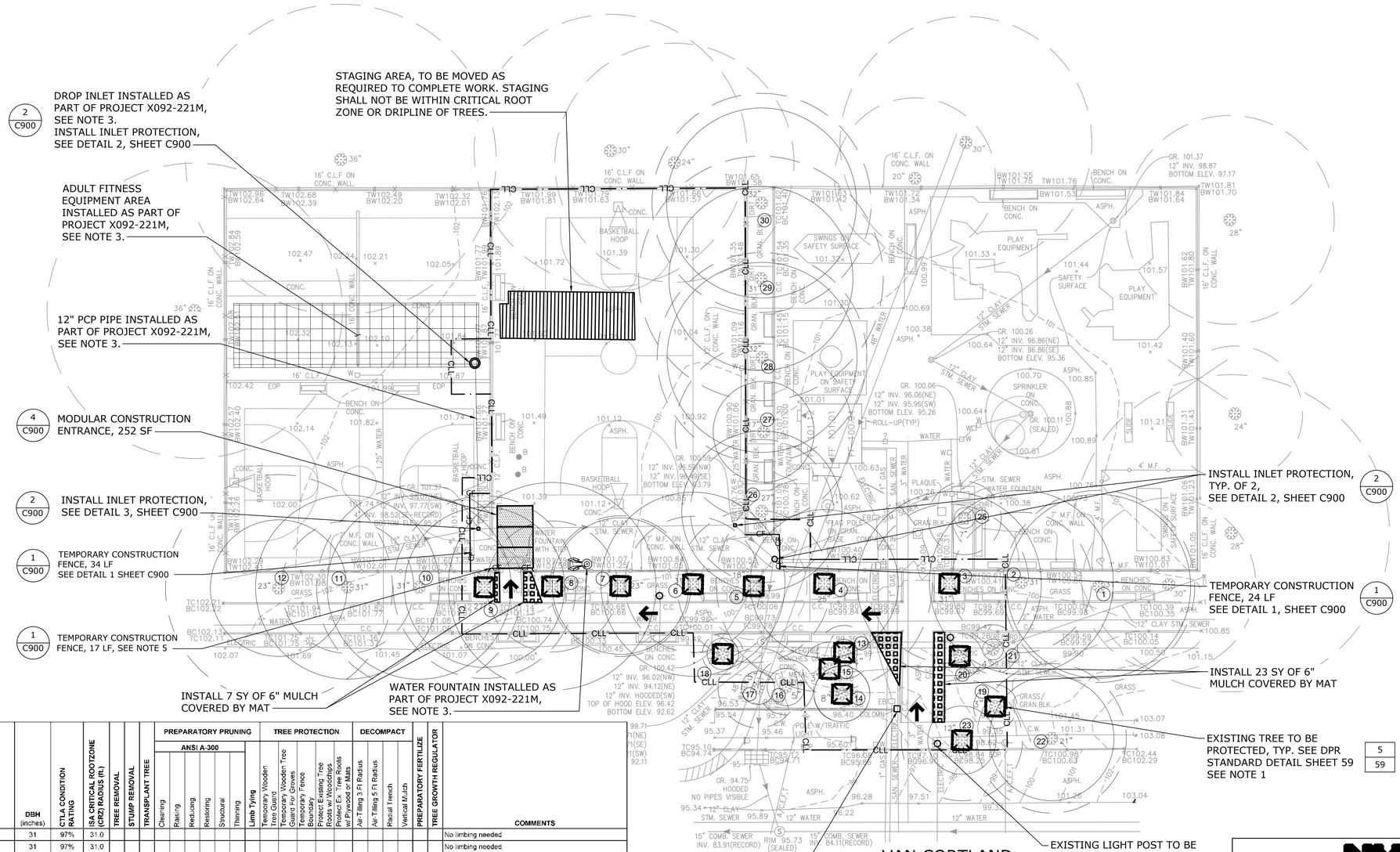
_____ P.E.
PROJECT MANAGER

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
OFFICE OF GREEN INFRASTRUCTURE
NYCDEP CAPITAL PROJECT WP-169

GI-CONS-7
GREEN INFRASTRUCTURE PRACTICES AT NYC-DPR SITES
CLASSIC PLAYGROUND
TOPOGRAPHIC & UTILITY SURVEY PLAN

DATE	AUGUST 2021
PAGE	2
SHEET NUMBER	T-1



PLAN

SCALE: 1" = 20'

NOTES:

1. CONTRACTOR SHALL CONFIRM THAT ALL TREES ALONG THE ACCESS ROUTE HAVE BEEN ACCOUNTED FOR AND PROTECTED AS NEEDED, IN ACCORDANCE WITH THE TREE PROTECTION NOTES, PRIOR TO THE BEGINNING OF CONSTRUCTION. TREE PROTECTION NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES.
2. DRAWINGS ARE ROTATED 14.65 DEGREES FROM TRUE NORTH.
3. SHOWN IS THE APPROXIMATE LOCATION OF SITE ALTERATIONS MADE AS PART OF DEPARTMENT OF PARKS AND RECREATION PROJECT X092-221M.
4. ANY EXISTING ASPHALT PAVEMENT OR CURB ON OR ADJACENT TO THE SITE THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.
5. THIS SECTION OF CONSTRUCTION FENCE SHALL BE MOVED AS NEEDED DURING CONSTRUCTION BUT SHALL BE REINSTALLED DURING NON-WORKING HOURS TO SECURE THE SITE.

LEGEND

- #@12" - TREE TO BE PROTECTED
- TREE CRITICAL ROOT ZONE
- TREE DRIPLINE
- CONSTRUCTION ACCESS/ENTRANCE
- STAGING AREA
- MULCH/MATTING
- CLL - CONTRACT LIMIT LINE
- CF - CONSTRUCTION FENCE
- WATER FOUNTAIN
- PROPOSED DROP INLET

SCALE: 1" = 20'

TREE #	SPECIES (common name)	DBH (inches)	CTLA CONDITION RATING	ISA CRITICAL ROOTZONE (CRZ) RADIUS (ft.)	TREE REMOVAL	STUMP REMOVAL	TRANSPLANT TREE	PREPARATORY PRUNING ANSI A-300: Cleaning	Raising	Reducing	Restoring	Structural	Thinning	TREE PROTECTION: Limb Tying	Temporary Wooden Tree Guard	Temporary Wooden Tree Stand for Gloves	Temporary Fence Boundary	Protect Existing Tree Roots w/ Woodchips	Protect Ex. Tree Roots w/ Plywood or Mats	DECOMPACT: Ae-Tilling 3 Ft Radius	Ae-Tilling 5 Ft Radius	Rasial Trench	Vertical Mulch	PREPARATORY FERTILIZE	TREE GROWTH REGULATOR	COMMENTS
1	OAK, NORTHERN RED	31	97%	31.0																						No limbing needed
2	OAK, NORTHERN RED	31	97%	31.0																						No limbing needed
3	OAK, NORTHERN RED	31	97%	31.0											X											No limbing needed
4	OAK, NORTHERN RED	25	97%	25.0											X											No limbing needed
5	OAK, PIN	18	91%	18.0											X											No limbing needed, Missing most structural limbs
6	OAK, NORTHERN RED	31	100%	31.0											X											No limbing needed
7	OAK, NORTHERN RED	23	100%	23.0											X											No limbing needed
8	OAK, NORTHERN RED	35	100%	35.0											X											No limbing needed
9	OAK, NORTHERN RED	27	100%	27.0											X											No limbing needed
10	OAK, NORTHERN RED	31	100%	31.0																						No limbing needed
11	OAK, NORTHERN RED	31	100%	31.0																						No limbing needed
12	OAK, NORTHERN RED	23	100%	23.0																						No limbing needed
13	CHERRY, CORNELIAN	4	75%	4.4				X							X											Chlorosis, nutrient deficiency, deep fissure in bark
14	CHERRY, CORNELIAN	8	91%	9.4				X							X											Epicormic sprouts, chlorosis, nutrient dificiency
15	CHERRY, CORNELIAN	3	91%	3.8											X											Epicormic sprouts, nutrient dificiency
16	CHERRY, CORNELIAN	5	72%	6.3																						Epicormic sprouts, nutrient dificiency
17	CHERRY, CORNELIAN	5	75%	5.6																						
18	SERVICEBERRY, OTHER	7	66%	5.3											X											Many dead branches
19	DOGWOOD, FLOWERING	3	81%	3.0											X											Split branch
20	CHERRY, OTHER	3	97%	3.0											X											
21	DOGWOOD, FLOWERING	4	94%	3.5																						Exposed root flare
22	OAK, PIN	21	88%	21.0																						
23	ASH, OTHER	12	78%	11.5				X							X											Missing bark, deep fissure, some defoliation, can remove small dead branches
25	HACKBERRY	7	94%	3.5																						
26	OAK, PIN	27	72%	27.0																						Mushrooms in base of trunk, high defoliation
27	OAK, NORTHERN RED	17	75%	17.0																						Decay in base of bark
28	OAK, PIN	32	91%	32.0																						Epicormic sprouts on limbs
29	OAK, NORTHERN RED	31	97%	31.0																						
30	OAK, NORTHERN RED	32	97%	32.0																						

NO.	DATE	ISSUED FOR	BY

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Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL

STATE OF NEW YORK — ANDEEP MELNOKE — 127826 — LICENSED PROFESSIONAL ENGINEER

Hazen

BLOCK 5900

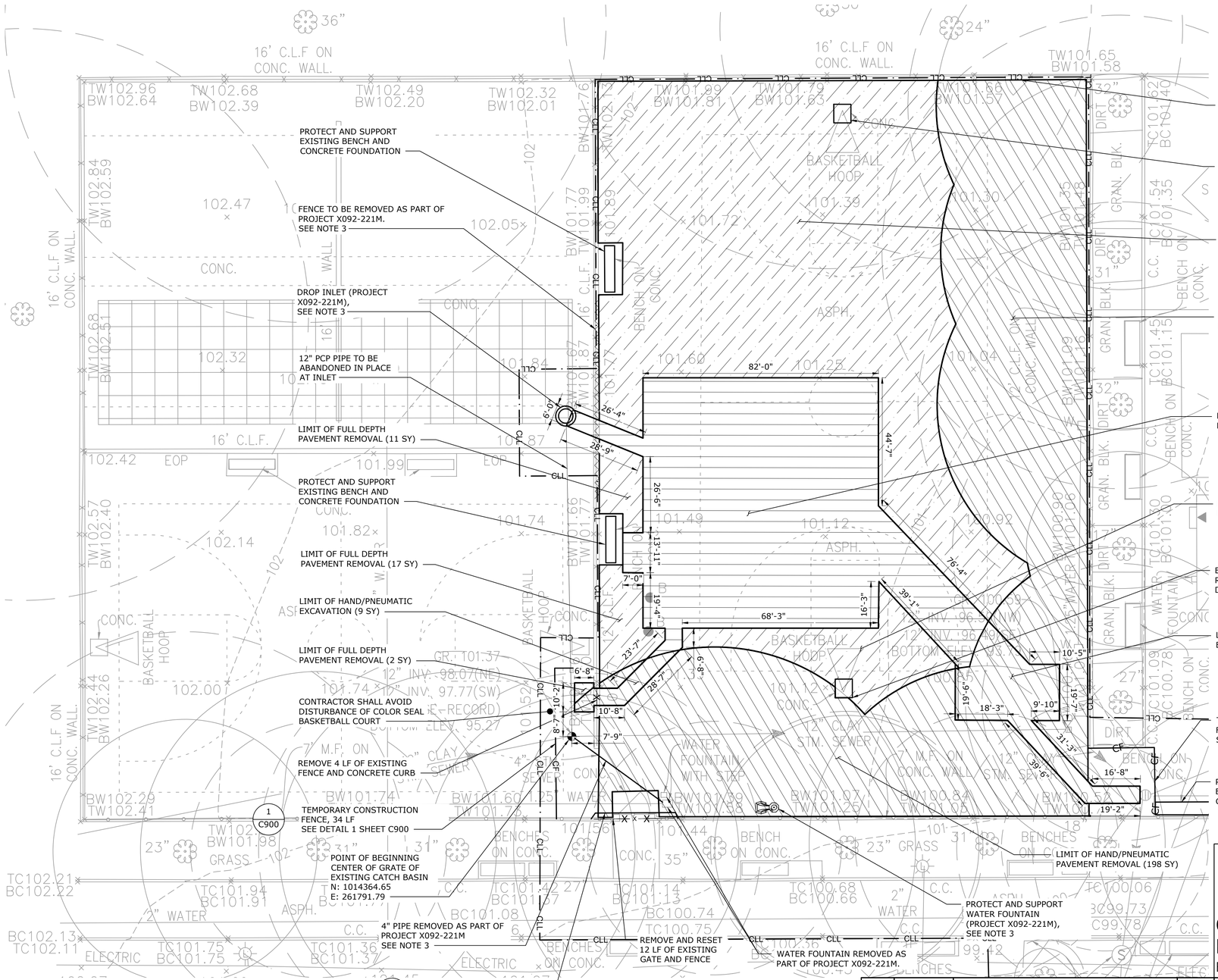
LOT 1

PROJECT TITLE
VAN CORTLANDT PARK CLASSIC PLAYGROUND
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
TREE PROTECTION PLAN, STAGING AND ACCESS

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C100	GI-CONS-7
	DATE NOV 2026		SHEET No. 3 OF 11 SHEETS



SUGGESTED SEQUENCE OF CONSTRUCTION:

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND UPON APPROVAL OF THE ENGINEER. ALL WORK SHALL BE DONE IN A MANNER TO MINIMIZE DISTURBANCE TO THE ADJACENT BASKETBALL COURT AND EXISTING VEGETATION. STAKE OUT AND RECEIVE APPROVAL FROM THE ENGINEER FOR THE LIMITS OF WORK BEFORE BEGINNING ANY CLEARING.

1. INLET PROTECTION SHOULD BE USED ON ALL DRAINAGE INLETS ADJACENT TO AND DOWNSTREAM OF CONSTRUCTION AREA.
2. INSTALL PERIMETER EROSION CONTROL MEASURES INCLUDING CONSTRUCTION LIMIT FENCING, AROUND THE WORK AREA. INSTALL ALL TREE PROTECTION.
3. PERFORM PAVEMENT AND DEBRIS REMOVAL.
4. EXCAVATION AND INSTALLATION OF GREEN INFRASTRUCTURE PRACTICES SHALL BE PERFORMED, ALONG WITH ALL ASSOCIATED APPURTENANCES.
5. BACKFILL THE PROJECT SITE WITH STONE, AS PER CONTRACT SPECIFICATIONS, TO THE FINAL ELEVATIONS SHOWN ON THE CONTRACT DRAWINGS.
6. RESURFACE PAVED PLAY AREA AS PER THE CONTRACT DRAWINGS.
7. ONCE ALL AREAS HAVE BEEN STABILIZED, REMOVE TEMPORARY PERIMETER EROSION AND SEDIMENT CONTROL MEASURES.

LEGEND

- FULL DEPTH PAVEMENT REMOVAL
- FULL DEPTH EXCAVATION LIMITS
- HAND/PNEUMATIC EXCAVATION LIMITS
- FENCE TO BE REMOVED
- CONTRACT LIMIT LINE
- CONSTRUCTION FENCE
- POINT OF BEGINNING
- WATER FOUNTAIN
- PROPOSED DROP INLET

SCALE: 1" = 10'

VAN CORTLAND PARK SOUTH

PLAN

SCALE: 1" = 10'

NOTES:

1. DRAWINGS ARE ROTATED 14.65 DEGREES FROM TRUE NORTH.
2. REMOVAL NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES.
3. SHOWN IS THE APPROXIMATE LOCATION OF SITE ALTERATIONS MADE AS PART OF DEPARTMENT OF PARKS AND RECREATION PROJECT X092-221M.
4. ANY EXISTING ASPHALT PAVEMENT OR CURB ON OR ADJACENT TO THE SITE THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL BE REPAIRED, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.
5. THIS SECTION OF CONSTRUCTION FENCE SHALL BE MOVED AS NEEDED DURING CONSTRUCTION BUT SHALL BE REINSTALLED DURING NON-WORKING HOURS TO SECURE THE SITE.

NO.	DATE	ISSUED FOR	BY

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Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL

Hazen

BLOCK 5900

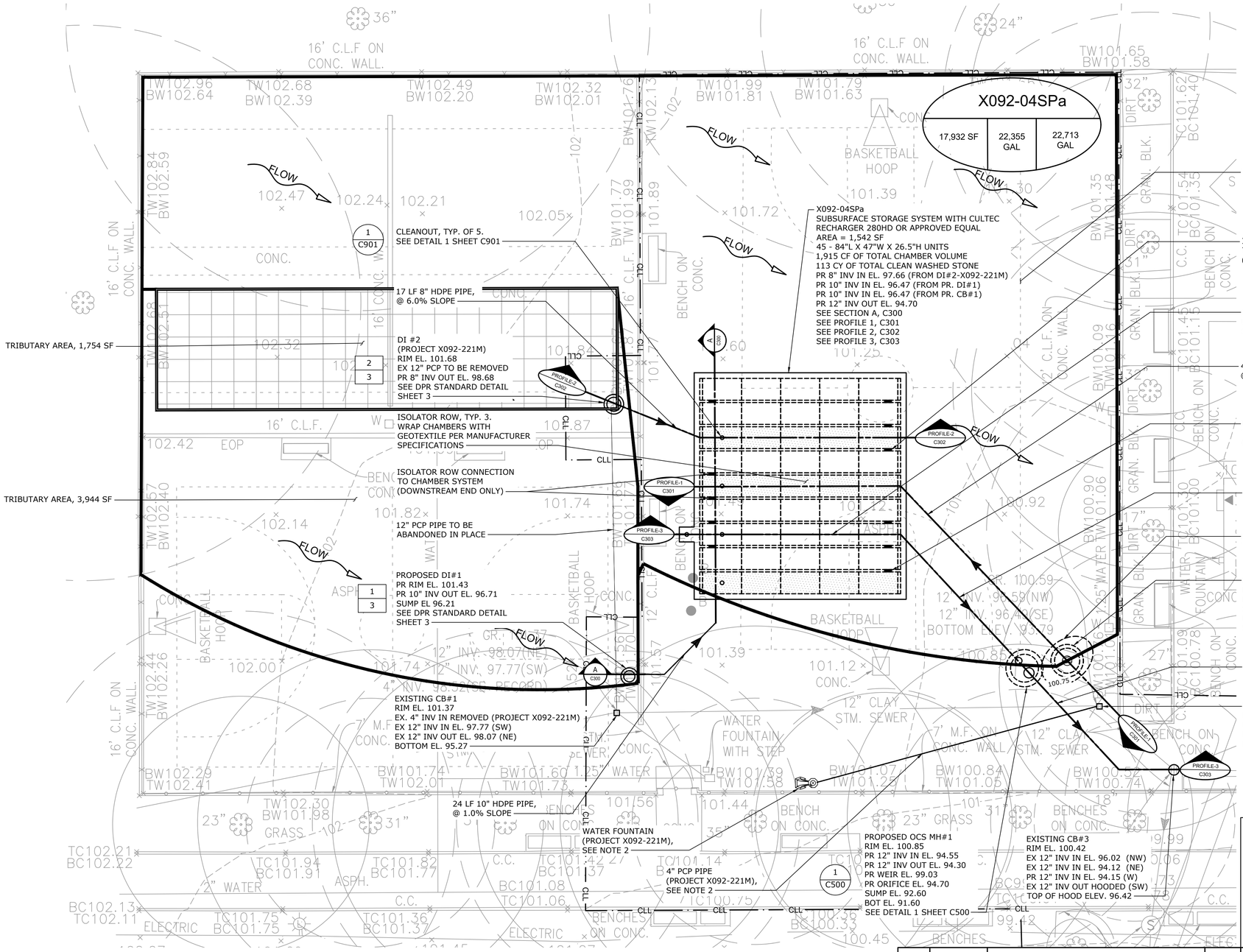
LOT 1

PROJECT TITLE
VAN CORTLANDT PARK CLASSIC PLAYGROUND
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
REMOVAL AND DEMOLITION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 10'	C101	GI-CONS-7
	DATE NOV 2026		SHEET No. 4 OF 11 SHEETS



VAN CORTLAND PARK SOUTH

PLAN
SCALE: 1" = 10'

NOTES:

1. DRAWINGS ARE ROTATED 14.65 DEGREES FROM TRUE NORTH.
2. SHOWN IS THE APPROXIMATE LOCATION OF SITE ALTERATIONS MADE AS PART OF DEPARTMENT OF PARKS AND RECREATION PROJECT X092-221M.

N
NYCDCS NAD83

GI NAME

TRIBUTARY AREA	VOLUME OF 2.0" STORM	CAPACITY MANAGED

GREEN INFRASTRUCTURE CHARACTERISTICS

LEGEND

- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- CLL - CONTRACT LIMIT LINE
- CF - CONSTRUCTION FENCE
- PROPOSED CLEANOUT
- FLOW - FLOW DIRECTION
- DRAINAGE AREA
- ISOLATOR ROW WITH GEOTEXTILE
- PROPOSED STORM DRAIN
- PROPOSED DROP INLET
- PROPOSED CATCH BASIN
- PROPOSED OUTLET CONTROL STRUCTURE
- WATER FOUNTAIN

SCALE: 1" = 10'
10 5 0 10'

GI ID	GI Asset Data					Stormwater Storage Calculations				Total Stormwater Managed (Infiltration + Storage)			
							Stone Subbase						
	Managed Impervious Tributary Area	Volume 2" Rainfall on Impervious Area	GI Footprint Surface Area	GI Perimeter	Permeability Coefficient	Stormwater chambers, pipes, tanks, etc. volume	Stone Depth	Stone Voids	Stormwater Captured by Stone Layer	Estimated Total Storage Volume	% Impervious Surface Managed	Calculated Volume of Rainfall Captured	Calculated Volume of Rainfall Captured
	sf	cf	sf	ft	in/hr	cf	ft	%	cf	cf	%	cf	gal
X092-04SPa	17,932	2,989	1,542	157	0.50	1,915	3.06	40%	1,122	3,037	102%	3,037	22,713

NO.	DATE	ISSUED FOR	BY

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Bureau of Environmental Planning and Analysis

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PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL
STATE OF NEW YORK · SANDEEP MEHROTRA · LICENSED PROFESSIONAL ENGINEER
Hazen

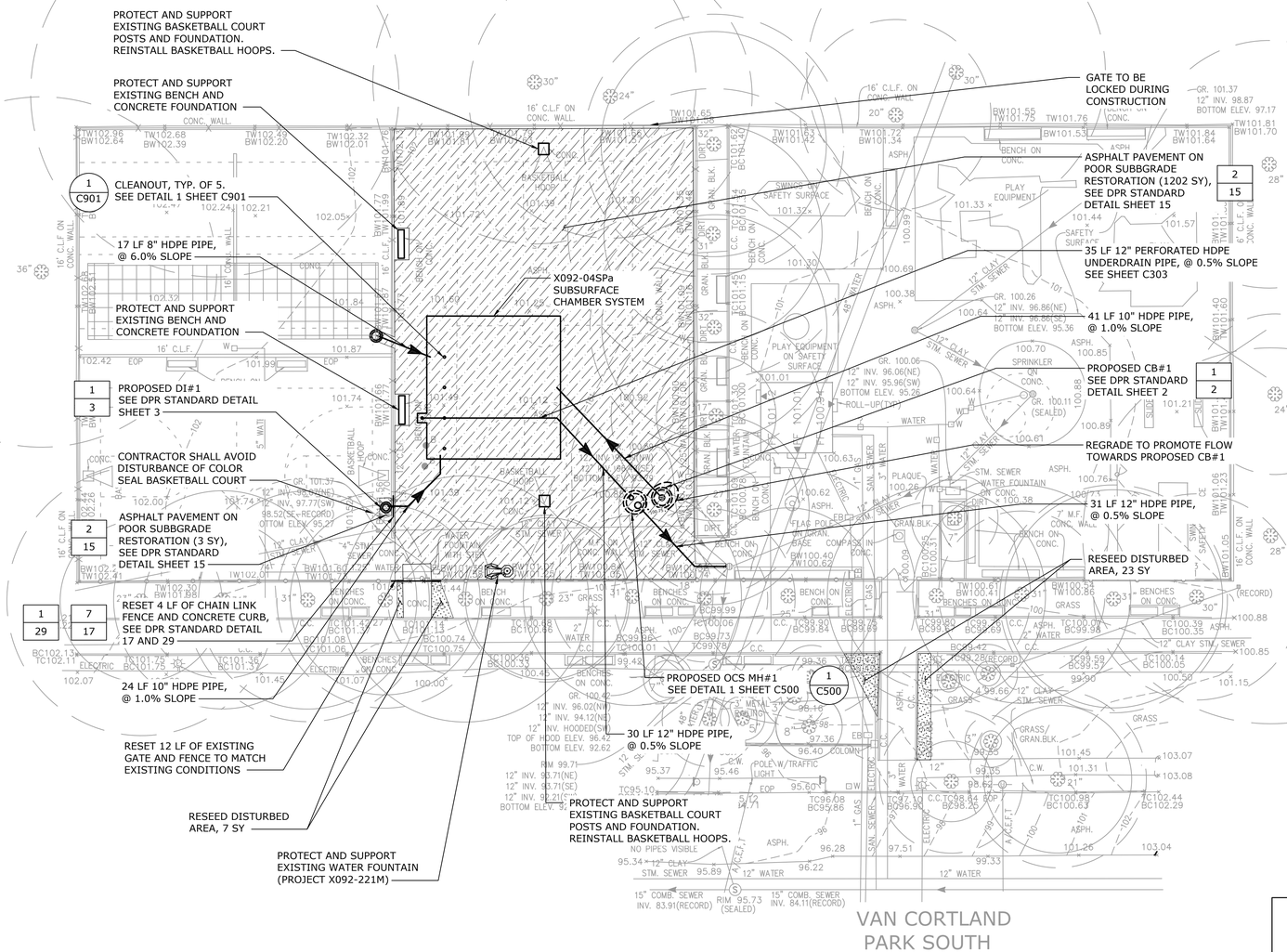
PROJECT TITLE
VAN CORTLANDT PARK CLASSIC PLAYGROUND
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

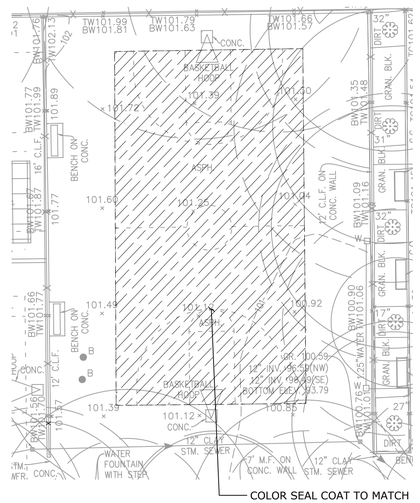
B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 10'	C200	GI-CONS-7

BLOCK 5900
LOT 1
DATE NOV 2026
SHEET No. 5 OF 11 SHEETS



PLAN

SCALE: 1" = 20'



PAINTING PLAN

SCALE: 1" = 20'

LEGEND

- CLL — CONTRACT LIMIT LINE
- X — FENCE TO BE RESTORED
- PROPOSED STORM DRAIN
- PROPOSED CLEANOUT
- PROPOSED FULL DEPTH PAVEMENT
- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- PROPOSED OUTLET CONTROL STRUCTURE
- PROPOSED DROP INLET
- PROPOSED CATCH BASIN
- WATER FOUNTAIN
- PROPOSED SEAL COAT
- GRASS SEED RESTORATION

SCALE: 1" = 20'

20 10 0 20'

NOTES:

1. LAYOUT AND MATERIAL NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES.
2. DRAWINGS ARE ROTATED 14.65 DEGREES FROM TRUE NORTH.

NO.	DATE	ISSUED FOR	BY

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Bureau of Environmental Planning and Analysis

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PARKS & RECREATION
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Hazen

BLOCK 5900

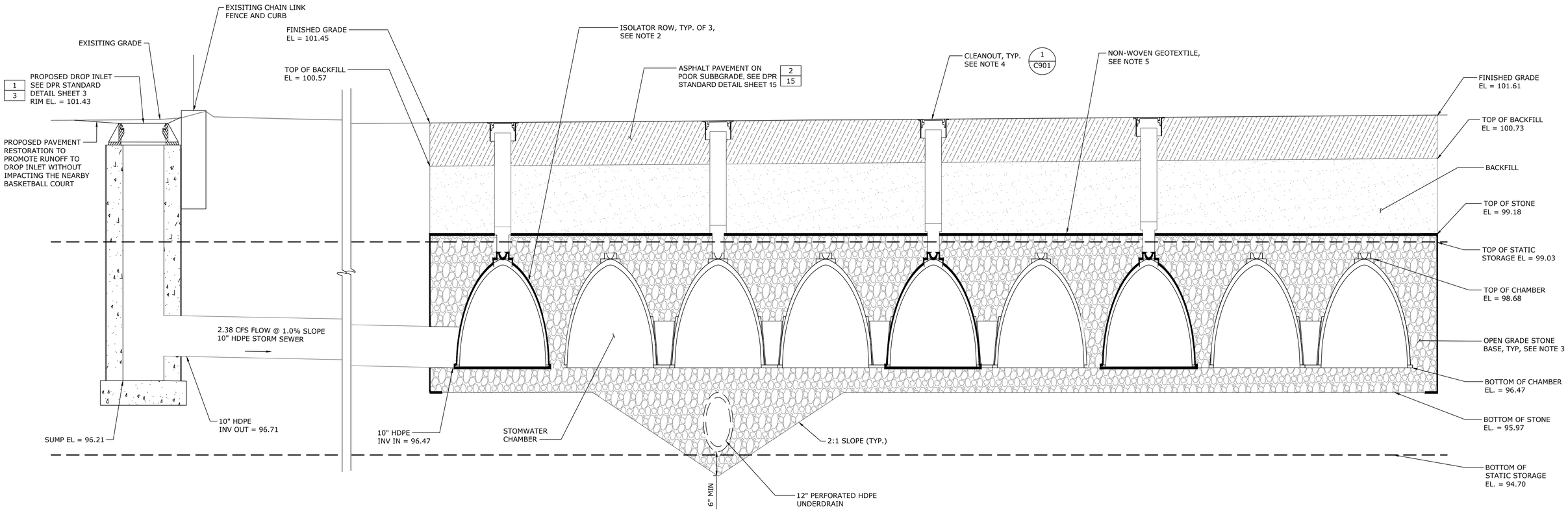
LOT 1

PROJECT TITLE
VAN CORTLANDT PARK CLASSIC PLAYGROUND
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
MATERIAL PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J.BRENNAN	D.THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C201	GI-CONS-7
	DATE NOV 2026		SHEET No. 6 OF 11 SHEETS



CROSS SECTION - A

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 3,037 CF AND IS CALCULATED BETWEEN EL 94.70 AND 99.03.
2. WRAP ISOLATOR ROWS OF CHAMBER SYSTEM IN GEOTEXTILE PER MANUFACTURER'S SPECIFICATION.
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COURSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL CLEANOUTS FLUSH TO PAVEMENT.
5. INSTALL NON WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.

HORIZONTAL SCALE 0 2' 4' 1"=2'

VERTICAL SCALE 0 1' 2' 1"=1'

NO.	DATE	ISSUED FOR	BY

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CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL

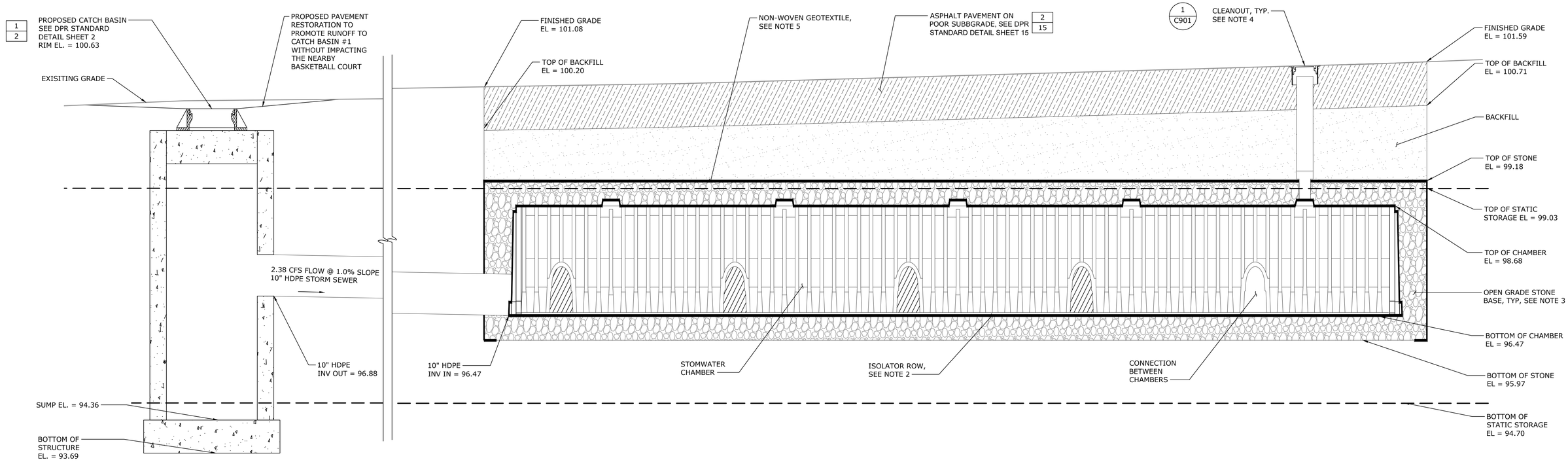
Hazen

PROJECT TITLE
VAN CORTLANDT PARK CLASSIC PLAYGROUND
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 1

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C300	GI-CONS-7
BLOCK 5900	DATE NOV 2026		SHEET No. 7 OF 11 SHEETS
LOT 1			



PROFILE 1

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 3,037 CF AND IS CALCULATED BETWEEN EL 94.70 AND EL 99.03.
2. WRAP ISOLATOR ROWS OF CHAMBER SYSTEM IN GEOTEXTILE PER MANUFACTURER'S SPECIFICATION.
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COURSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL CLEANOUTS FLUSH TO PAVEMENT.
5. INSTALL NON-WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.

HORIZONTAL SCALE
0 2' 4'
1"=2'

VERTICAL SCALE
0 1' 2'
1"=1'

NO.	DATE	ISSUED FOR	BY

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ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

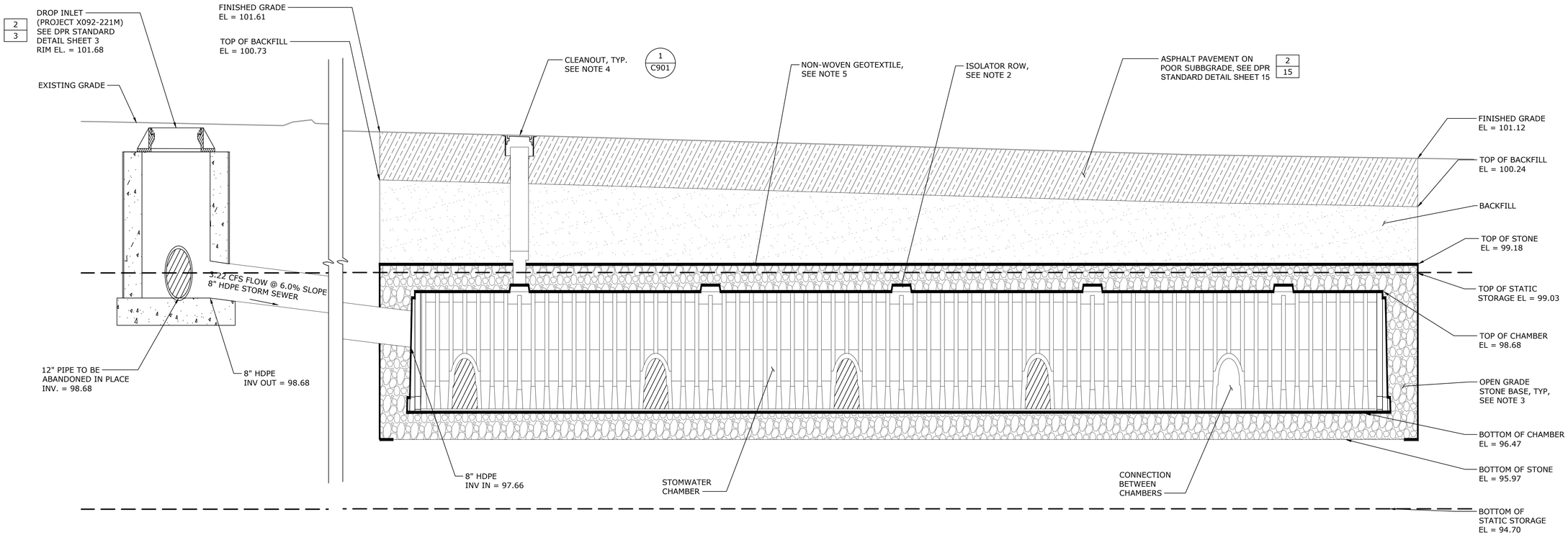
SEAL
STATE OF NEW YORK · SANDEEP MEHROTRA · 072626 · LICENSED PROFESSIONAL ENGINEER
Hazen
BLOCK 5900
LOT 1

PROJECT TITLE
VAN CORTLANDT PARK CLASSIC PLAYGROUND
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 2

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C301	GI-CONS-7
	DATE NOV 2026		SHEET No. 8 OF 11 SHEETS



PROFILE 2

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 3,037 CF AND IS CALCULATED BETWEEN EL 94.70 AND EL 99.03.
2. WRAP ISOLATOR ROWS OF CHAMBER SYSTEM IN GEOTEXTILE PER MANUFACTURER'S SPECIFICATION.
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COURSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL CLEANOUTS FLUSH TO PAVEMENT.
5. INSTALL NON-WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.

HORIZONTAL SCALE
0 2' 4'
1"=2'

VERTICAL SCALE
0 1' 2'
1"=1'

NO.	DATE	ISSUED FOR	BY

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STATE OF NEW YORK · SANDEEP MEHROTRA · LICENSED PROFESSIONAL ENGINEER
Hazen

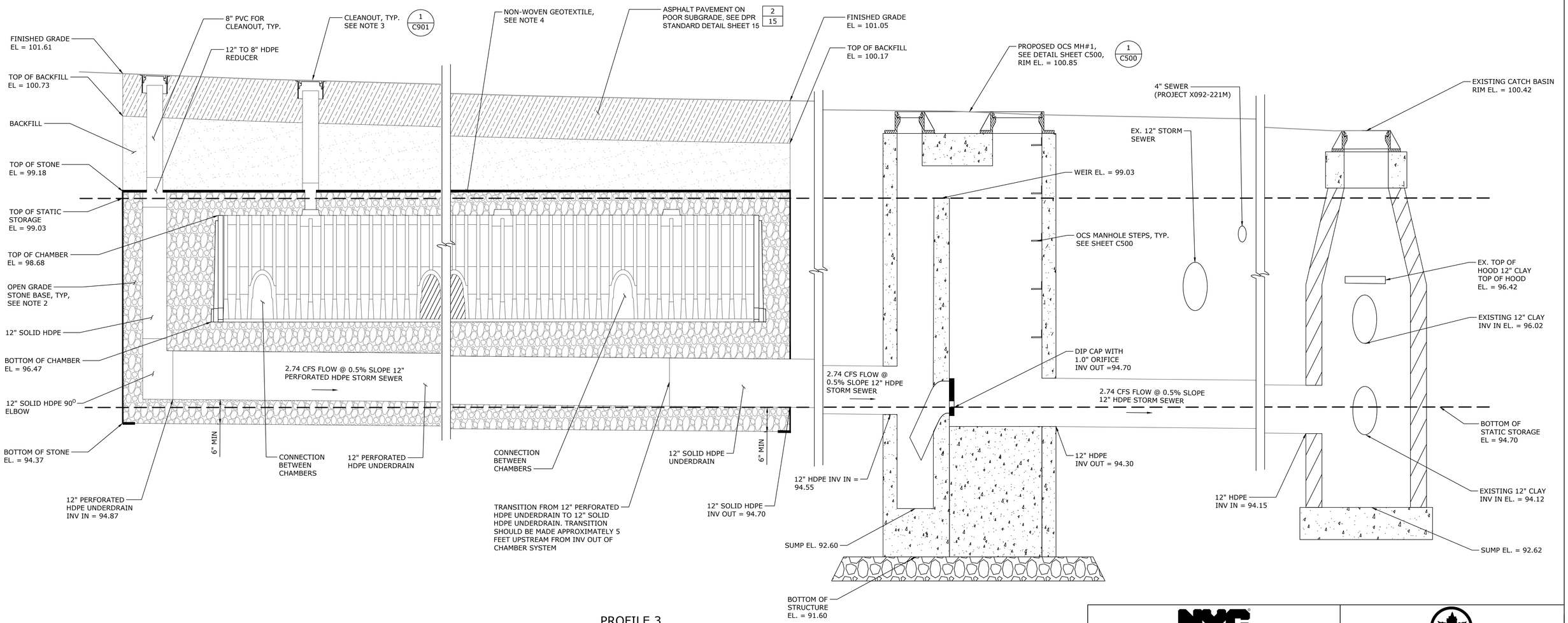
BLOCK 5900
LOT 1

PROJECT TITLE
VAN CORTLANDT PARK CLASSIC PLAYGROUND
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 3

DESIGNED BY	DRAWN BY	CHECKED BY
J.BRENNAN	D.THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C302	GI-CONS-7
	DATE NOV 2026		SHEET No. 9 OF 11 SHEETS



PROFILE 3

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 3,037 CF AND IS CALCULATED BETWEEN EL 94.70 AND EL 99.03.
2. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COURSE AGGREGATE WITH A 40% VOID CONTENT.
3. INSTALL CLEANOUTS FLUSH TO PAVEMENT.
4. INSTALL NON WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.

HORIZONTAL SCALE 0 2' 4' (1"=2')

VERTICAL SCALE 0 1' 2' (1"=1')

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL

Hazen

BLOCK 5900

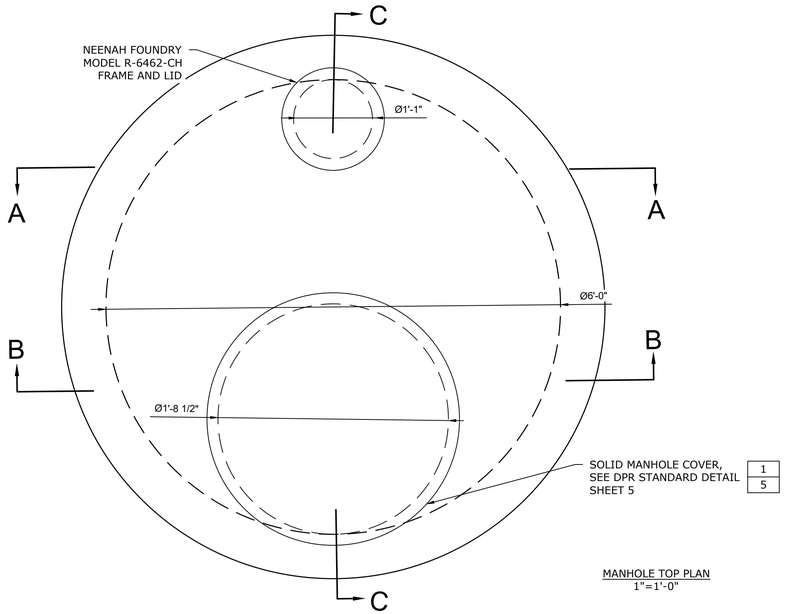
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PROJECT TITLE
VAN CORTLANDT PARK CLASSIC PLAYGROUND
ON-SITE GREEN INFRASTRUCTURE

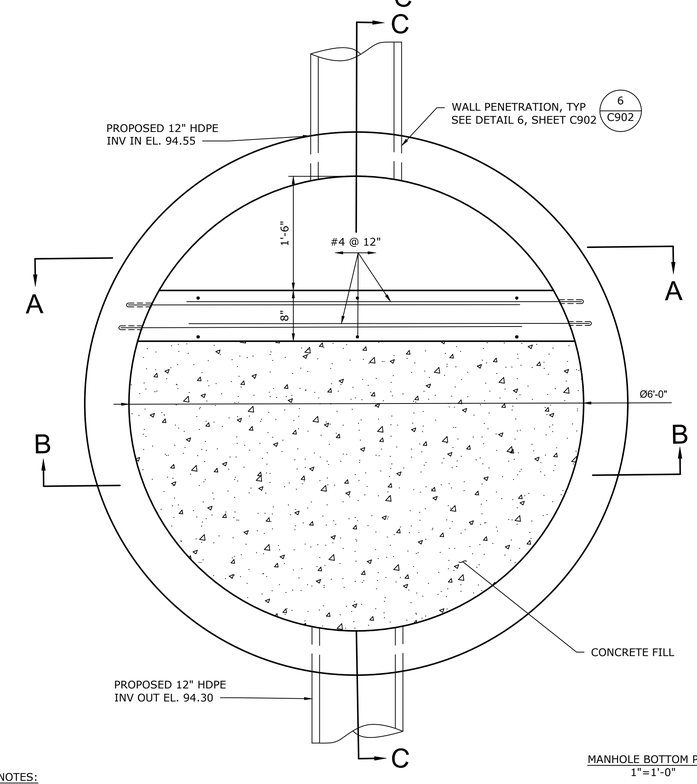
DRAWING TITLE
SECTIONS AND PROFILES - 4

DESIGNED BY	DRAWN BY	CHECKED BY
J.BRENNAN	D.THOMAS	A. EASON

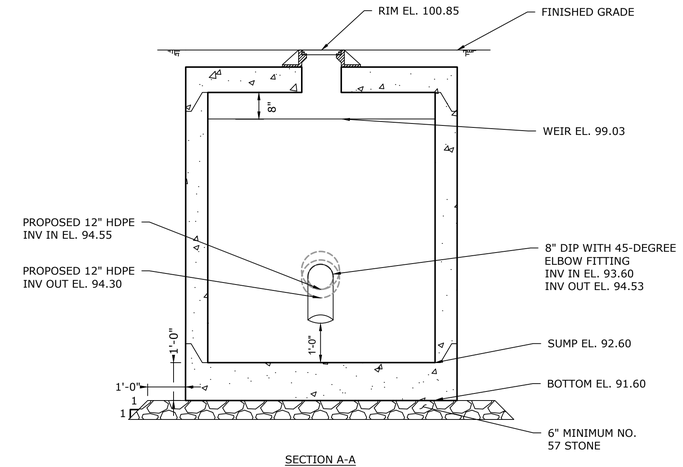
B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C303	GI-CONS-7
	DATE NOV 2026		SHEET No. 10 OF 11 SHEETS



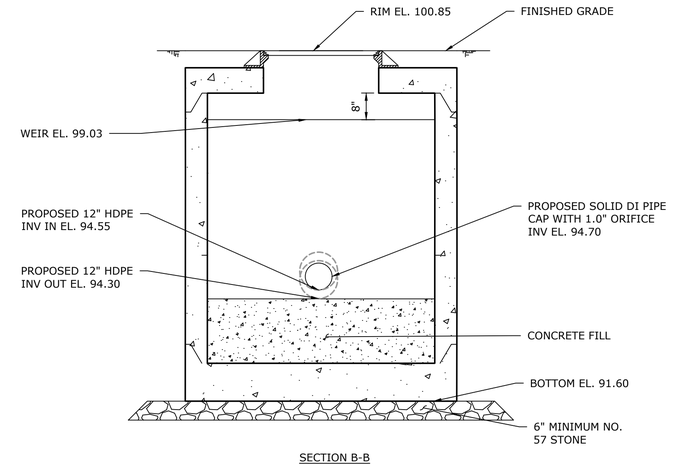
MANHOLE TOP PLAN
1"=1'-0"



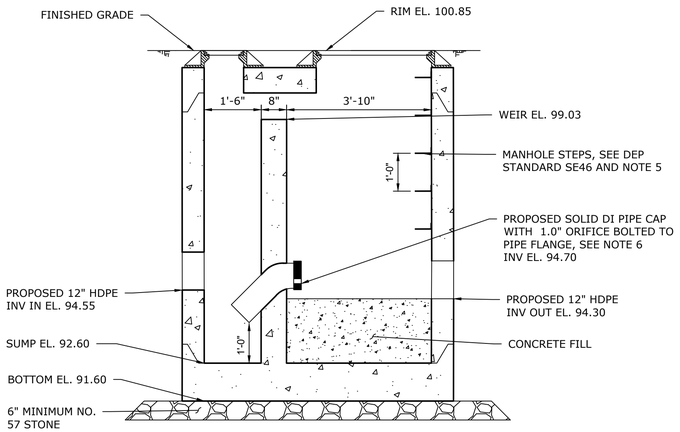
MANHOLE BOTTOM PLAN
1"=1'-0"



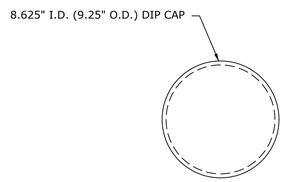
SECTION A-A
1"=2'-0"



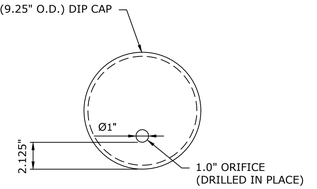
SECTION B-B
1"=2'-0"



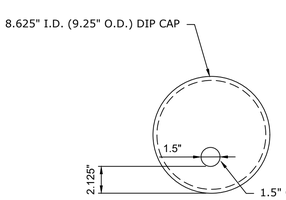
SECTION C-C
1"=2'-0"



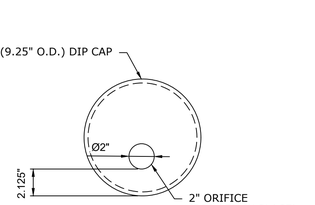
ORIFICE CAP
1"=0'-6"
FURNISH AND DELIVER 2 - SOLID ORIFICE CAPS
INSTALL 1 - SOLID ORIFICE CAP



ORIFICE CAP
1"=0'-6"
DRILL 1 - 1.0" ORIFICE



ORIFICE CAP
1"=0'-6"
PLACEMENT OF 1 - 1.5" ORIFICE IF NEEDED



ORIFICE CAP
1"=0'-6"
PLACEMENT OF 1 - 2" ORIFICE CAP IF NEEDED

NOTES:

1. CONTRACTOR SHALL SUPPLY TWO(2) SOLID ORIFICE CAPS FOR THE PROJECT. ONE (1) SOLID CAP SHALL BE INSTALLED IN THE FIELD. FOLLOWING INSTALLATION, THE 1.0" DIAMETER ORIFICE SHALL BE DRILLED AT THE ORIENTATION AND LOCATION ON THE CAP SPECIFIED IN THE DETAILS ON THIS SHEET. THE REMAINING SOLID CAP SHALL BE TURNED OVER TO NYCDEP FOR FUTURE USE.
2. CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
3. REFER TO DETAILS 1-6 ON SHEET C902.
4. SEE GENERAL STRUCTURAL NOTES AND CONCRETE NOTES ON SHEET C902.
5. RUNGS SHOULD BE LOCATED 3" OFFSET FROM THE TOP SLAB OF THE MANHOLE, AND REPEAT EVERY 12".
6. BOLTS SHALL BE INSTALLED SO THAT THE BOLT HEAD IS ON THE WEIR WALL SIDE.

1
C500

OCS MH #1 - MANHOLE WITH WEIR AND ORIFICE CAP DETAILS
AS SHOWN

NO.	DATE	ISSUED FOR	BY

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL
STATE OF NEW YORK
DEEP MEHROTRA
082874
LICENSED PROFESSIONAL ENGINEER
Hazen

BLOCK 5900
LOT 1

PROJECT TITLE
VAN CORTLANDT PARK CLASSIC PLAYGROUND
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
DETAILS - 1

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	C500	GI-CONS-7
	DATE NOV 2026		SHEET No. 11 OF 11 SHEETS

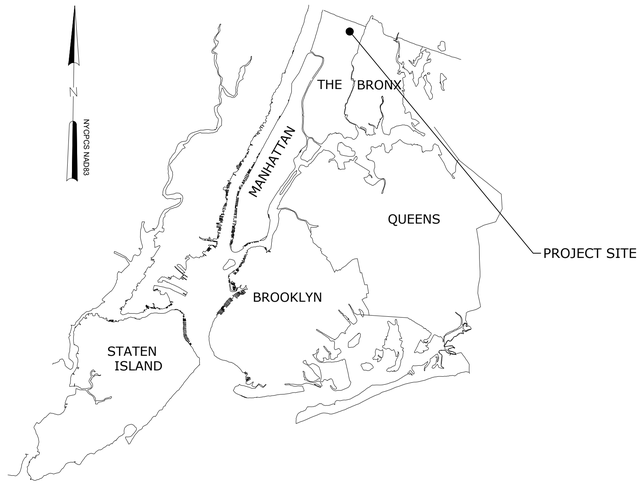
Environmental Protection

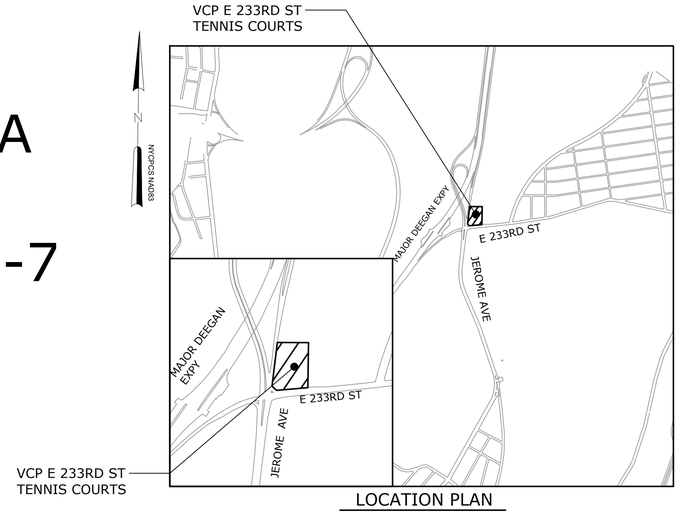
NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS

NYC Parks

ON-SITE GREEN INFRASTRUCTURE
WARDS ISLAND CSO TRIBUTARY AREA
OUTFALL WI-056
DEP CAPITAL CONTRACT NO. GI-CONS-7

X092 VAN CORTLANDT PARK
EAST 233RD ST TENNIS COURTS
BBL 2059000050





LOCATION PLAN

BRONX, NY

BID SET
NOVEMBER 2026

SHEET LIST TABLE	
DRAWING NUMBER	SHEET TITLE
G001	COVER
T-1	TOPOGRAPHIC & UTILITY SURVEY PLAN
T-2	TOPOGRAPHIC & UTILITY SURVEY PLAN
C000	EXISTING CONTRIBUTING DRAINAGE AREA PLAN
C100	TREE PROTECTION AND ESC PLAN
C101	REMOVAL AND DEMOLITION PLAN
C200	PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN
C201	MATERIALS AND FINAL STABILIZATION PLAN
C300	SECTIONS AND PROFILES -1
C301	SECTIONS AND PROFILES - 2
C302	SECTIONS AND PROFILES - 3
C500	DETAILS - 1
C501	DETAILS - 2
C502	DETAILS - 3

John McLaughlin
Digitally signed by John McLaughlin
Date: 2026.11.02 16:34:37 -05'00'

JOHN MCLAUGHLIN
MANAGING DIRECTOR
OFFICE OF ECOSYSTEM SERVICES, GREEN INFRASTRUCTURE AND RESEARCH
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS, NYCDEP

Lisa F. Garcia
Digitally signed by Lisa F. Garcia
Date: 2026.11.02 15:18:18 -05'00'

LISA F. GARCIA
COMMISSIONER
NYCDEP

MATCH LINE –SEE DWG T-2

MAJOR DEEGAN EXPW. EN
JEROME AVE. (100')
ASPHALT

OVERHEAD SIGN

BLOCK 5900
50

ASPH. TENNIS COURT
TENNIS NET (TYP)
TENNIS NET POLE (TYP)
PAINTED ASPH.

TUNNEL
TOP OF TUNNEL ELEVATION: -24.38
15' CIRCULAR CROSS-PASSAGE AQUEDUCT

FF219.19
1 STY BRICK
COMFORT
STATION
FF219.26

FF219.22

COMPASS
ROSE PLATE

FLAG

2.5' PIPE RAIL (TYP.)

2.5' PIPE RAIL ON
CONC. RET. WALL
(TYP.)

9' GATE

12' C.L.F.

GRASS AND GROUND UNDER FENCE

1X C.L.F. ON CONC. WALL

CONCRETE

ASPH.

GRASS

3864.301

722.844

12" GAS (R)

1¼" GAS (R)

1¼" WATER (R)

1" WATER (R) (ABANDONED)

2" WATER (R)

6" SEWER (R)

4" SEWER (R)

30" WATER

12" WATER

15" SEWER

ASPHALT

E. 233RD STREET (80')

TR-102

TR-103

N

STATE OF NEW YORK
ANGELO JOHN FIORENTINO
049468
LICENSED LAND SURVEYOR

NOTES:

1. ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). BOROUGH PRESIDENT OF BRONX DATUM = NAVD88 - 1.508 FEET.
2. LOCATIONS, EXTENT AND SIZES OF UNDERGROUND UTILITIES AND SUBSTRUCTURES HAVE BEEN DETERMINED FROM RECORD INFORMATION, SUPPLEMENTED BY DATA OBTAINED IN THE FIELD. ACCURACY OF THIS UTILITY DATA IS NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES AND SUBSTRUCTURES, WHETHER FUNCTIONAL OR ABANDONED, ARE SHOWN ON THIS MAP.
3. THIS MAP WAS PREPARED FROM DATA COLLECTED BY AN ACTUAL FIELD SURVEY CONDUCTED DURING AUGUST 2021.

0 10' 20' 40' 60'
1" = 20'

NO.	DATE	ISSUED FOR	BY

DESIGNED _____
DRAWN K.O.
CHECKED J.J.
PROJ.ENGR. _____

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

MUÑOZ ENGINEERING P.C.
505 EIGHTH AVENUE
NEW YORK, N.Y. 10018
TEL. (212) 967-6588

APPROVED FOR THE CITY OF NEW YORK
_____ P.E.
PROJECT MANAGER

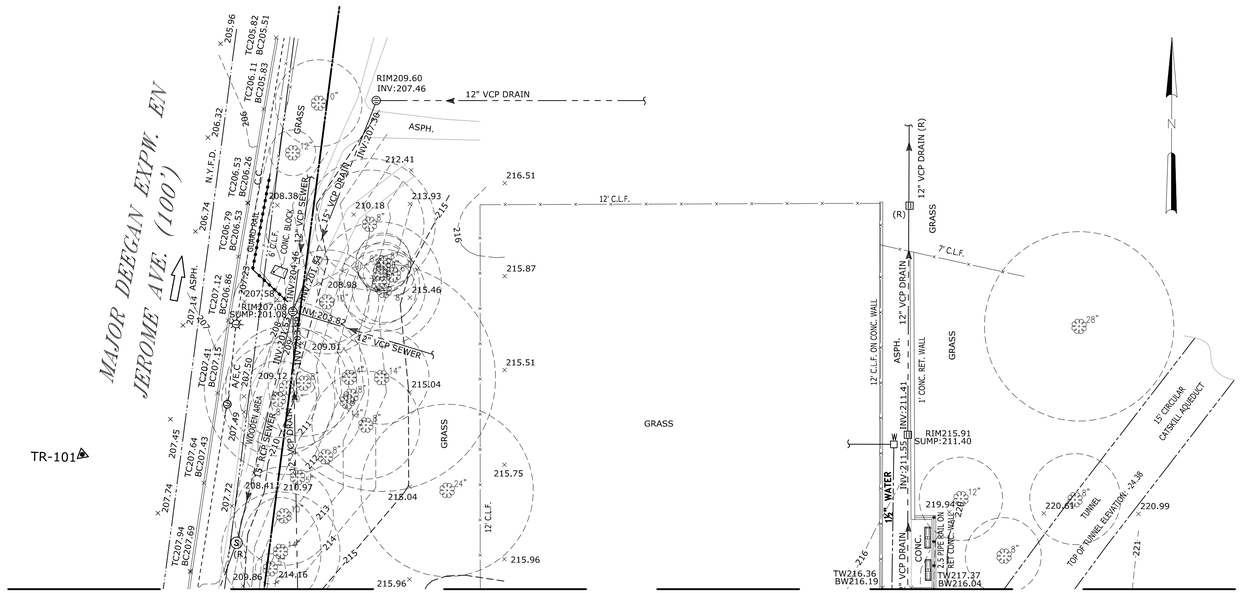
NYC Environmental Protection

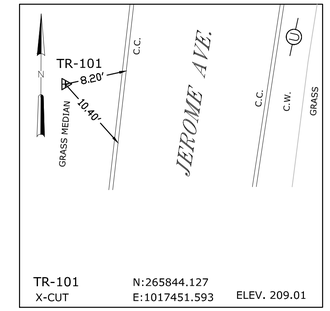
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
OFFICE OF GREEN INFRASTRUCTURE
NYCDEP CAPITAL PROJECT

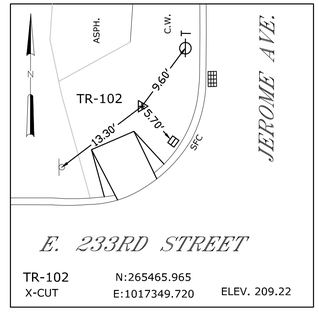
GREEN INFRASTRUCTURE PLANNING - GI-CONS-7
ON SITE GREEN INFRASTRUCTURE AT E 233RD STREET TENNIS COURTS
EXISTING SITE AND DRAINAGE UTILITY PLAN

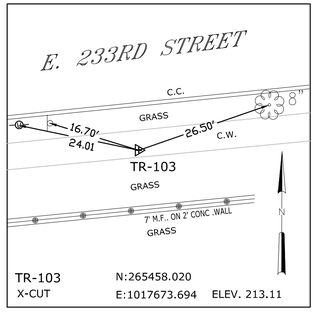
DATE: AUG. 2021
PAGE: 2
SHEET NO. T - 1

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XREFpm: F:\PROJECT\11825.20\DWG\working\11825.20 POINT EL dwg, \working\11825.20 POINT









TIES
N.T.S.

NOTES:

1. ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). BOROUGH PRESIDENT OF BRONX DATUM = NAVD88 - 1.508 FEET.
2. LOCATIONS, EXTENT AND SIZES OF UNDERGROUND UTILITIES AND SUBSTRUCTURES HAVE BEEN DETERMINED FROM RECORD INFORMATION, SUPPLEMENTED BY DATA OBTAINED IN THE FIELD. ACCURACY OF THIS UTILITY DATA IS NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES AND SUBSTRUCTURES, WHETHER FUNCTIONAL OR ABANDONED, ARE SHOWN ON THIS MAP.
3. THIS MAP WAS PREPARED FROM DATA COLLECTED BY AN ACTUAL FIELD SURVEY CONDUCTED DURING AUGUST 2021.

ANGELO JOHN FIORENZA
069458-1
LICENSED LAND SURVEYOR

0 10' 20' 40' 60'
1" = 20'

NO.	DATE	ISSUED FOR	BY

DESIGNED _____
DRAWN K.O.
CHECKED J.J.
PROJ.ENGR. _____

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

MUÑOZ ENGINEERING P.C.
505 EIGHTH AVENUE
NEW YORK, N.Y. 10018
TEL. (212) 967–6588

APPROVED FOR THE CITY OF NEW YORK
_____ P.E.
PROJECT MANAGER

NYC Environmental Protection

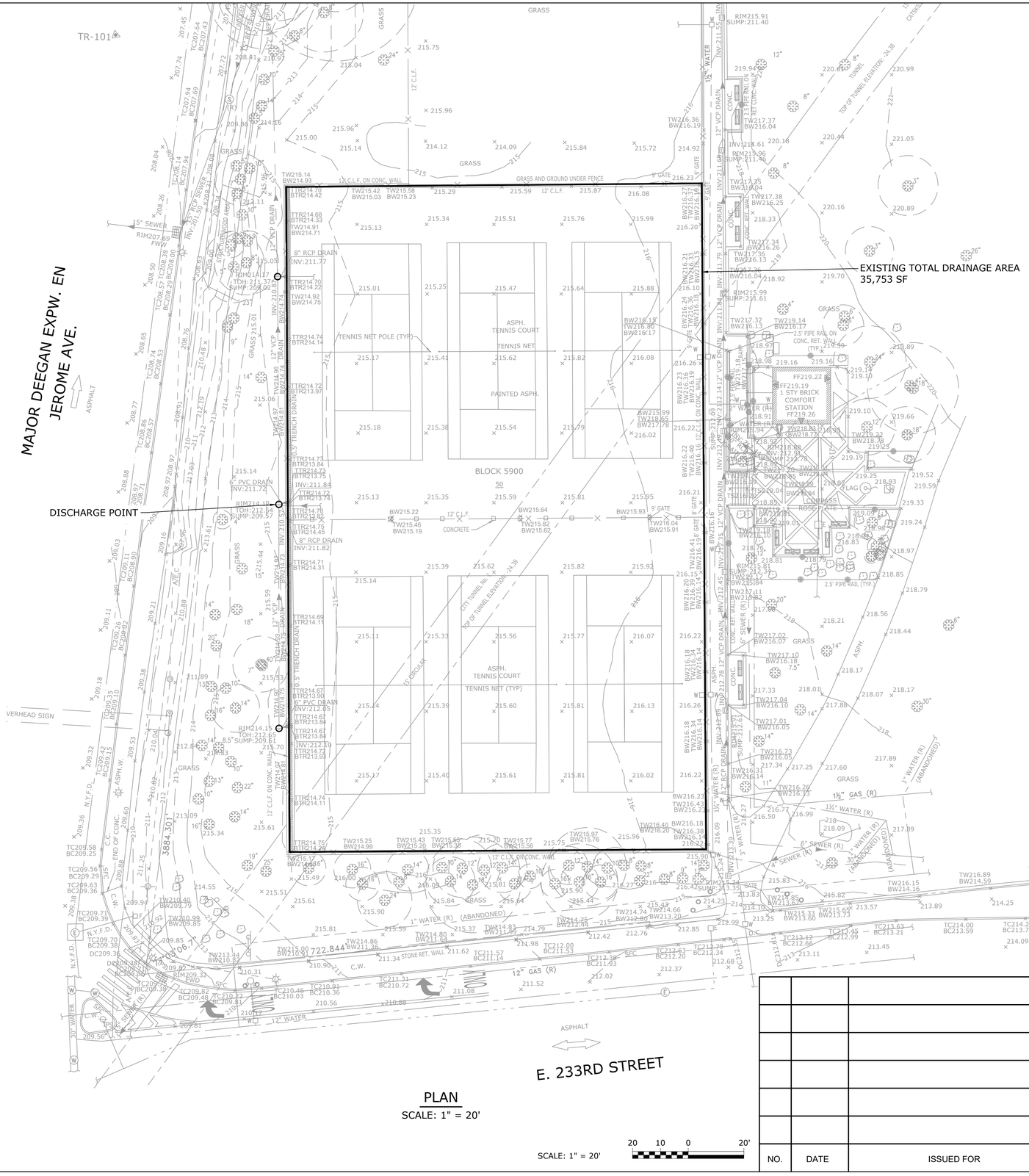
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
OFFICE OF GREEN INFRASTRUCTURE
NYCDEP CAPITAL PROJECT

GREEN INFRASTRUCTURE PLANNING - GI-CONS-7
ON SITE GREEN INFRASTRUCTURE AT E 233RD STREET TENNIS COURTS
TOPOGRAPHIC AND UTILITY SURVEY

DATE: AUG. 2021
PAGE: 3
SHEET: T - 2

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NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL

STATE OF NEW YORK — PRADEEP MEHROTRA — 079829 — LICENSED PROFESSIONAL ENGINEER

Hazen

BLOCK 5900
LOT 50

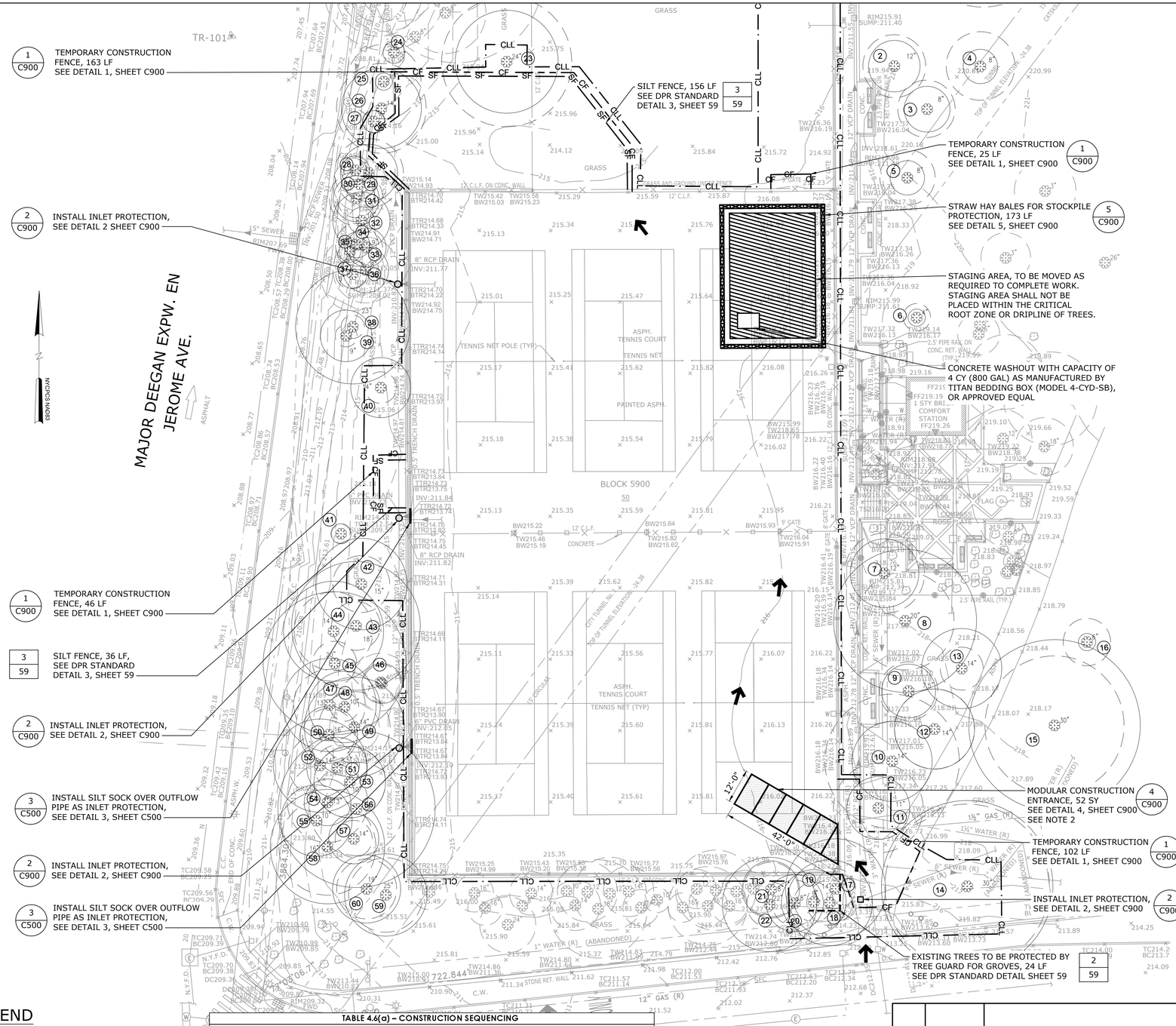
PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
EXISTING CONTRIBUTING DRAINAGE AREA PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN

SCALE: 1" = 20'
DRAWING NO.: C000
DATE: NOV 2026
CONTRACT NO.: GI-CONS-7
SHEET No. 4 OF 14 SHEETS



TREE #	SPECIES (common name)	DBH (inches)	CTLA CONDITION RATING	ISA CRITICAL ROOTZONE (CR2) RADIUS (ft.)	TREE REMOVAL	STUMP REMOVAL	TRANSPLANT TREE	PREPARATORY PRUNING ANSI A-300: Cleaning	Raising	Reducing	Restoring	Structural	Thinning	TREE PROTECTION: Limb Tying	Temporary Wooden Tree Guard	Temporary Wooden Tree Guard for Groves	Temporary Fence Boundary	Protect Existing Tree Roots W/ Mulch Beds	Protect Existing Tree Roots W/ Plywood or Mats	DECOMPACT: Air-Tilling 3 Ft Radius	Air-Tilling 5 Ft Radius	Radial Trench	Vertical Mulch	PREPARATORY FERTILIZE	TREE GROWTH REGULATOR	COMMENTS
2	HONEYLOCUST	12	100%	9.0																						MS(5,10,5), root mechanical damage
3	BIRCH, RIVER	8	100%	8.0																						MS(4,4.5,5)
4	HONEYLOCUST	8	100%	6.0																						
5	HONEYLOCUST	8	100%	6.0																						
6	HAWTHORN, OTHER	4	94%	3.0																						
7	REDBUD, EASTERN	12	78%	12.0																						MS(9,5,7), root girdling, included bark at base, compartmentalized wound on one trunk
8	LINDEN, LITTLE LEAF	20	88%	25.0																						
9	SWEETGUM	8	56%	9.4																						Heartwood decay, signs of possible decay on trunk, many dead branches
10	OAK, NORTHERN RED	14	91%	14.0																						
11	OAK, NORTHERN RED	11	66%	11.0					X																	Branch decay on large branches, mushroom next to base of tree. Recommend limbing trees up to 15 ft.
12	OAK, NORTHERN RED	14	84%	14.0																						Dead branch with possible fungus
13	OAK, NORTHERN RED	14	97%	14.0																						
14	MAPLE, NORWAY	30	75%	30.0				X				X														Root girdling, carpenter ants, dead branches need pruning
15	LONDON PLANETREE	30	88%	30.0																						Possible anthracnose
16	OAK, NORTHERN RED	6	72%	6.0																						Insect herbivory, leaf browning/scorch, insects living under bark
17	PINE, EASTERN WHITE	14	69%	17.5					X							X									Lots of sap. Recommend limbing trees up to 15 ft.
18	PINE, EASTERN WHITE	12	34%	15.0					X							X									Possible beetle holes, heavy defoliation, trunk mostly dead, needle browning. Recommend limbing trees up to 15 ft.
19	PINE, EASTERN WHITE	9	78%	11.3				X								X									Lots of sap, prune dead branches
20	PINE, EASTERN WHITE	8	75%	10.0				X																	Lots of sap
21	PINE, EASTERN WHITE	8	75%	10.0																					Lots of sap
22	PINE, AUSTRIAN	22	75%	16.5																					Healed wound at base, bored holes in bark
23	PINE, AUSTRIAN	24	78%	18.0					X																Poison ivy growing up tree
24	SASSAFRAS	5	84%	3.8																					Growing in stand, covered with poison ivy
25	UNKNOWN DEAD TREES	10	0%	3.0					X																Tree in dead/dying condition
26	CHERRY, BLACK	14	84%	14.0					X																Covered in poison ivy
27	ELM, OTHER	5	72%	3.8					X																Open trunk wound from branch rubbing, exposed would wood, tree in poor condition
28	MAPLE, NORWAY	5	75%	5.0																					Virginia creeper and poison ivy
29	MAPLE, NORWAY	10	78%	10.0					X																
30	SASSAFRAS	7	78%	5.3																					
31	CHERRY, BLACK	8	69%	8.0																					Leaning towards project site
32	CHERRY, BLACK	10	53%	10.0																					Porcelainberry vines, many dead branches
33	ELM, OTHER	9	63%	6.8				X																	Sapsucker holes, leaf browning, vine coverage, dead branches, leaning towards project site
34	SASSAFRAS	6	38%	4.5				X				X													Half dead
35	SASSAFRAS	5	38%	3.8				X				X													Half dead
36	CHERRY, BLACK	8	66%	8.0				X				X													Girdling by oriental bittersweet, remove vines, cut broken branches
37	ASH, OTHER	5	75%	5.0				X																	Girdling by oriental bittersweet and poison ivy, remove vines
38	OAK, PIN	20	84%	20.0																					Tree 38 is growing around tree 39, carpenter ants, crack in base of trunk
39	ASH, OTHER	9	69%	9.0																					Tree 38 is growing around tree 39, being shaded out by tree 38
40	PINE, AUSTRIAN	14	63%	10.5				X																	Multistem ash growing out of base and poison ivy; remove ash, vines, and dead branches
41	CHERRY	4	-	3.5																					
42	PINE, EASTERN WHITE	15	94%	18.8				X																	Prune dead branches
43	PINE, EASTERN WHITE	18	94%	22.5																					MS(11,14), prune dead branches, near 16' fence on curb
44	PINE, EASTERN WHITE	14	94%	17.5																					Near 16' fence on curb
45	PINE, EASTERN WHITE	20	94%	25.0																					Near 16' fence on curb
46	ASH, OTHER	7	50%	7.0																					MS(3,3.5,4,4), appears to be a sucker of a removed tree, near 16' fence on curb
47	PINE, EASTERN WHITE	13	100%	16.3																					Near 16' fence on curb
48	PINE, EASTERN WHITE	10	100%	12.5																					Near 16' fence on curb
49	PINE, EASTERN WHITE	14	100%	17.5																					Near 16' fence on curb
50	PINE, EASTERN WHITE	16	100%	20.0																					Near 16' fence on curb
51	PINE, EASTERN WHITE	9	100%	10.6																					Near 16' fence on curb
52	PINE, EASTERN WHITE	13	100%	16.3																					Near 16' fence on curb
53	PINE, EASTERN WHITE	10	100%	12.5																					MS(8,6), near 16' fence on curb
54	PINE, EASTERN WHITE	13	100%	16.3																					Near 16' fence on curb
55	PINE, EASTERN WHITE	10	100%	12.5																					Near 16' fence on curb
56	PINE, EASTERN WHITE	22	91%	27.5																					Mechanical damage to bark, exposed sapwood, near 16' fence on curb
57	PINE, EASTERN WHITE	14	78%	17.5																					Mechanical damage, near 16' fence on curb
58	PINE, EASTERN WHITE	16	94%	20.0																					Near 16' fence on curb
59	PINE, EASTERN WHITE	23	94%	28.8																					Near 16' fence on curb
60	PINE, EASTERN WHITE	19	81%	23.8																					Needle cast, mushrooms,near 16' fence on curb

NOTES

1. TREE PROTECTION NOTES CAN BE FOUND ON THE SHEET G002 - GENERAL NOTES
2. ALL CONSTRUCTION TRAFFIC SHALL DRIVE OVER THE MODULAR CONSTRUCTION ENTRANCE WHEN ENTERING OR EXITING THE SITE.

LEGEND

- #@12" — TREE TO BE PROTECTED
- TREE CRITICAL ROOT ZONE
- TREE DRIPLINE
- CONSTRUCTION ACCESS/ENTRANCE
- STAGING AREA
- CLL — CONTRACT LIMIT LINE
- CF — TEMPORARY CONSTRUCTION FENCE
- SF — SILT FENCE
- STRAW BALE DIKE

TABLE 4.6(a) – CONSTRUCTION SEQUENCING

PHASE # 1

STAGE # 1: Tree Protection and ESC Plan

CONSTRUCTION ACTIVITY (in sequential order)	PRACTICE(S) INSTALLED PRIOR TO ACTIVITY[1]	PRACTICE(S) INSTALLED DURING ACTIVTY	PRACTICE(S) INSTALLED WITHIN ONE BUSINESS DAY OF COMPLETING ACTIVTY[1]
Protect existing vegetation		Tree Guards	
		Tree Protection for Groves	
Install perimeter erosion control measures and fencing		Silt Fence	
		Inlet Protection	
Establish Staging Area		Site Pollution Prevention	
		Stockpile Protection	

NO.	DATE	ISSUED FOR	BY

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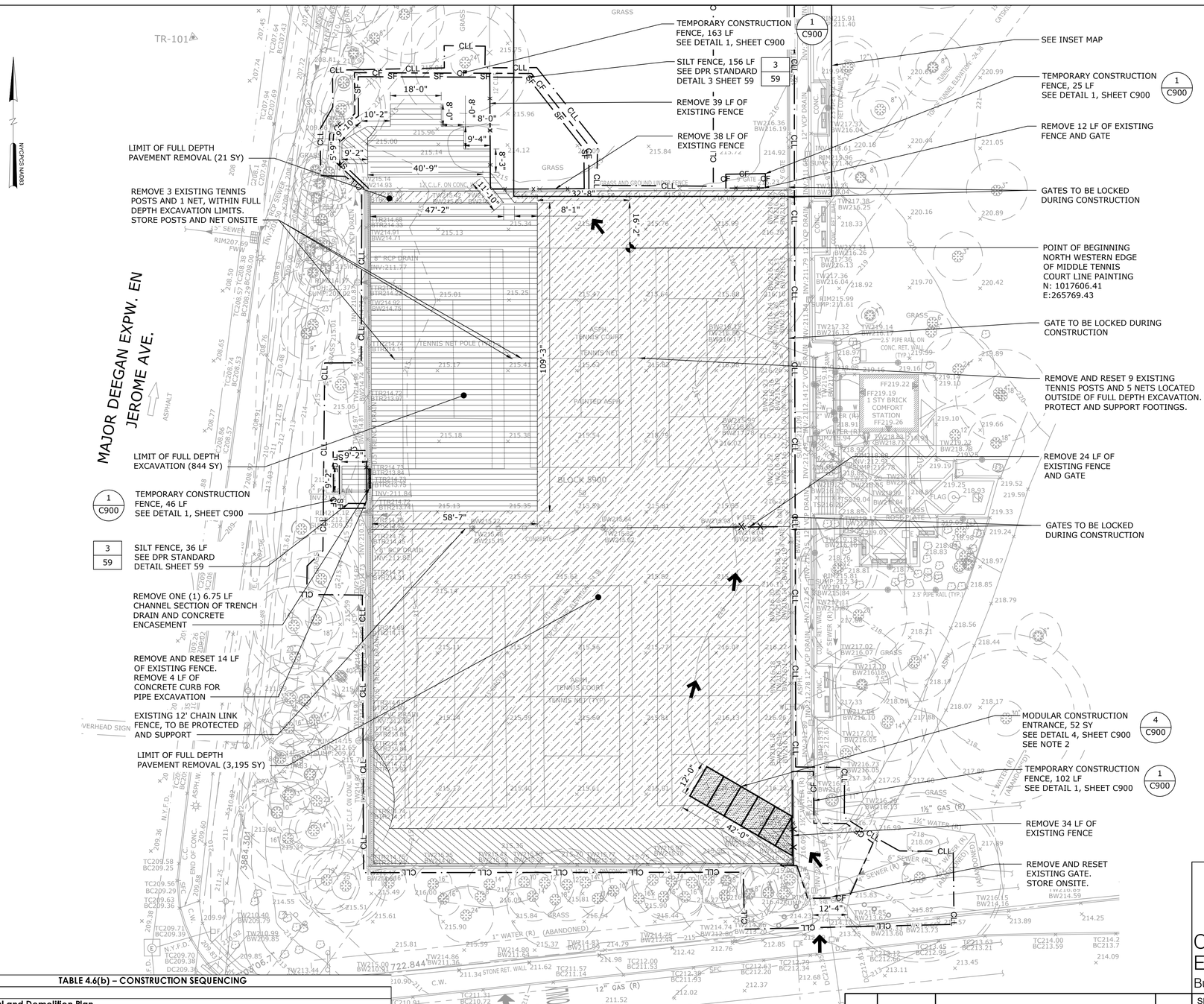
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PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

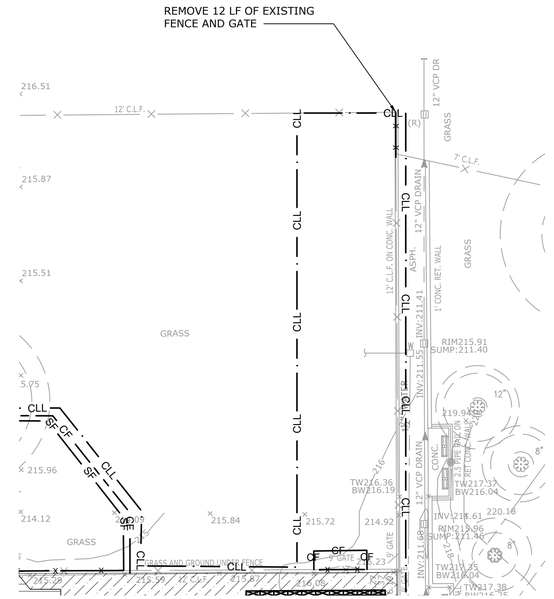
DRAWING TITLE
TREE PROTECTION AND ESC PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J.BRENNAN	D.THOMAS	A.EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C100	GI-CONS-7
BLOCK 5900	DATE NOV 2026		SHEET No. 5 OF 14 SHEETS
LOT 50			



PLAN
SCALE: 1" = 20'



INSET MAP
SCALE: 1" = 20'

LEGEND

- ← - CONSTRUCTION ACCESS/ENTRANCE
- ▨ - FULL DEPTH PAVEMENT REMOVAL
- ▭ - FULL DEPTH EXCAVATION LIMITS
- ▨ - HAND EXCAVATION EXCAVATION LIMITS
- x — x — FENCE TO BE REMOVED
- — · — CLL — CONTRACT LIMIT LINE
- — — — CF — TEMPORARY CONSTRUCTION FENCE
- — SF — SILT FENCE
- ✦ - POINT OF BEGINNING
- ⊥⊥⊥⊥⊥ - TRENCH DRAIN TO BE REMOVED

SCALE: 1" = 20'
20 10 0 20'

TABLE 4.6(b) – CONSTRUCTION SEQUENCING

PHASE # 1

STAGE # 2: Removal and Demolition Plan

CONSTRUCTION ACTIVITY (in sequential order)	PRACTICE(S) INSTALLED PRIOR TO ACTIVITY¹	PRACTICE(S) INSTALLED DURING ACTIVITY	PRACTICE(S) INSTALLED WITHIN ONE BUSINESS DAY OF COMPLETING ACTIVITY
Implement traffic maintenance & protection	Stabilized Construction Entrance	Site pollution prevention, dust control	
Clearing and grubbing, remove debris offsite	All Stage 1 measures	Site pollution prevention, dust control	Temporary construction area seeding, mulching
Pavement, sidewalk, curb, and guard rail removal	All Stage 1 measures	Site pollution prevention, dust control	Temporary construction area seeding, mulching
Excavation and earthwork, rough grading	All Stage 1 measures	Site pollution prevention, dust control	Temporary construction area seeding, mulching

NOTES
1. THE CONTRACTOR SHALL ENSURE THAT ALL GATES LEADING TO THE WORK AREA ARE LOCKED FOR THE DURATION OF CONSTRUCTION.
2. ALL CONSTRUCTION TRAFFIC SHALL DRIVE OVER THE MODULAR CONSTRUCTION ENTRANCE WHEN ENTERING OR EXITING THE SITE.

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Hazen

PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
REMOVAL AND DEMOLITION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J.BRENNAN	D.THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C101	GI-CONS-7
	DATE NOV 2026		SHEET No. 6 OF 14 SHEETS

BLOCK 5900
LOT 50

PROPOSED MODULAR SAND FILTER SYSTEM, SEE INSET MAP FOR LAYOUT PLAN

5 LF 12" HDPE PIPE, @ 1.5% SLOPE

PROPOSED MH#3
RIM EL. 214.59
PROPOSED 12" INV IN EL.207.70
ESTIMATED 12" INV IN EL. 207.74
ESTIMATED 12" INV OUT EL. 207.74
SUMP EL. 205.70
SEE DPR DETAIL 6, SHEET 2

ISOLATOR ROW CONNECTION TO CHAMBER SYSTEM (DOWNSTREAM END ONLY)

ISOLATOR ROW, WRAP CHAMBERS WITH GEOTEXTILE PER MANUFACTURER SPECIFICATIONS

EXISTING CB#3
RIM EL. 214.17
EXISTING 8" INV IN EL. 211.77 (ABANDONED)
EXISTING 12" INV IN EL. 210.87
EXISTING 12" TOP OF HOOD EL. 211.37
SUMP EL. 209.02

EXISTING TRENCH DRAIN, 120 LF

CHAMBER TO CHAMBER CONNECTION, TYP.

8 LF 10" DI PIPE, @ 3.5% SLOPE

PROPOSED MH#1
RIM EL. 214.76
WEIR EL. 211.72
PROPOSED 10" INV OUT EL. 210.47
ESTIMATED 12" INV IN EL.211.34
ESTIMATED 12" INV OUT EL. 211.29
SUMP EL. 208.47
SEE DPR STANDARD DETAIL 6, SHEET 2
SEE DETAIL 2, SHEET C500

EXISTING CB#2
RIM EL. 214.12
EX 6" INV IN EL. 211.82
EX 12" INV IN EL. 210.57
EX 12" TOP OF HOOD EL. 212.54
SUMP EL. 209.57

EXISTING TRENCH DRAIN, 120 LF

EXISTING CB#1
RIM EL. 214.15
EX 6" INV IN EL. 212.05
EX 12" TOP OF HOOD EL. 212.65
SUMP EL. 209.61

4 LF 12" HDPE PIPE, @ 0% SLOPE

PROPOSED MH#2
RIM EL. 215.03
PROPOSED 12" INV IN EL.210.22
PROPOSED 12" INV OUT EL. 210.22
SUMP EL. 208.22
SEE DPR DETAIL 6, SHEET 2

20 LF 12" HDPE PIPE, @ 0% SLOPE

CLEANOUT, TYP OF 3.
SEE DETAIL 1, SHEET C901

X092-02SPa
SUBSURFACE STORAGE SYSTEM WITH CULTEC RECHARGER 150XLHD OR APPROVED EQUAL
AREA = 5,631 SF
160 - 123"L X 33"W X 18.5"H UNITS
4,346 CF OF TOTAL CHAMBER VOLUME
370 CY TOTAL CLEAN WASHED STONE
PROPOSED 10" INV IN EL. 210.22
PROPOSED 12" INV OUT EL. 210.22
SEE PROFILE 1, C300 & C301
SEE SECTION A, C302

EXISTING CB#4
RIM EL. 215.24
EX 4" INV IN EL. UNKNOWN
EX 12" INV OUT EL. 213.39
SUMP EL. 213.35

MAJOR DEEGAN EXPW. EN
JEROME AVE.

TR-101

PROFILE-1 C300
PROFILE-2 C301
PROFILE-3 C301

53'-6"
53'-3"

ASPH. TENNIS COURT
TENNIS NET
PAINTED ASPH.
BLDG
FF219.22
1 STY BRICK COMFORT STATION FF219.26
ASPH. TENNIS COURT
TENNIS NET (TYP)
COMPASS ROSE

PLAN
SCALE: 1" = 20'

E. 233RD STREET

4'W x 3'H WINDOW, TYP.
INV EL. 208.64
REMOVE TERMADUCTS, TYP.

4'W X 4'H DOOR, TYP
INV EL. 207.64

OUTFLOW CONTROL WEIR,
EL. = 211.72

TRANSITION FROM PERFORATED TO SOLID UNDERDRAIN

4 LF OF 6" PVC SOLID UNDERDRAIN, @ 0% SLOPE

5 LF 12" HDPE PIPE, @ 1.5% SLOPE

PROPOSED MH#3
RIM EL. 214.59
PROPOSED 12" INV IN EL.207.70
ESTIMATED 12" INV IN EL. 207.74
ESTIMATED 12" INV OUT EL. 207.70
SUMP EL. 205.70
SEE DPR DETAIL 6, SHEET 2

PROPOSED PRECAST MODULAR SAND FILTER SYSTEM, OLDCASTLE STORMCAPTURE SAND FILTER SYSTEM OR APPROVED EQUAL
5 - 16'L X 8'W X 6'H UNITS
SURFACE AREA OF MEDIA = 558 SF
INFLOW WEIR EL. 210.22
OUTFLOW CONTROL WEIR EL. 211.72
PROPOSED 12" INV IN EL. 210.22
PROPOSED 12" INV OUT EL. 207.80

45 DEGREE BEND, TYP.

ASTM C-33 CONCRETE SAND FILTER MEDIA

65 LF OF 6" PVC PERFORATED UNDERDRAIN, @ 0% SLOPE

8" PVC UNDERDRAIN CLEANOUT, TYP.

INFLOW WEIR EL. 210.22

4 LF 12" HDPE PIPE, @ 0% SLOPE

PROPOSED MH#2
RIM EL. 215.03
PROPOSED 12" INV IN EL.210.22
PROPOSED 12" INV OUT EL. 210.22
SUMP EL. 208.22
SEE DPR DETAIL 6, SHEET 2

MANHOLE COVER, TYP OF 6
SEE DPR STANDARD DETAIL 1, SHEET 5

16'-0"
8'-0"
8'-0"
2'-0"
16'-0"
32'-0"
24'-0"
12" C.L.F.
12" VCP DRAIN
12" C.L.F. ON CONC. WALL
8" RCP DRAIN

SAND FILTER LAYOUT PLAN
SCALE: 1" = 10'

X092-02SPa

35,753 SF	44,937 GAL	54,638 GAL

LEGEND

- CLL — CONTRACT LIMIT LINE
- PROPOSED STORM DRAIN
- PROPOSED CLEANOUT
- FLOW — FLOW DIRECTION
- DRAINAGE AREA
- ISOLATOR ROW WITH GEOTEXTILE
- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- PROPOSED MANHOLE
- PROPOSED DROP INLET WITH MANHOLE COVER

GI NAME

TRIBUTARY AREA	VOLUME OF 2.12" STORM	CAPACITY MANAGED

- GREEN INFRASTRUCTURE CHARACTERISTICS

SCALE: 1" = 10' (10 5 0 10')

SCALE: 1" = 20' (20 10 0 20')

TABLE 4.6(c) – CONSTRUCTION SEQUENCING

PHASE # 1

STAGE # 3: Install Site, Grading and Proposed Drainage Elements

CONSTRUCTION ACTIVITY (in sequential order)	PRACTICE(S) INSTALLED PRIOR TO ACTIVITY[1]	PRACTICE(S) INSTALLED DURING ACTIVITY	PRACTICE(S) INSTALLED WITHIN ONE BUSINESS DAY OF COMPLETING ACTIVITY[1]
Install bioretention areas and backfill	All Stage 1 measures	Site pollution prevention, dust control	Temporary construction area seeding, mulching
Install drainage pipes and backfill	All Stage 1 measures	Site pollution prevention, dust control	Temporary construction area seeding, mulching
Final Grading	All Stage 1 measures	Site pollution prevention, dust control	Temporary construction area seeding, mulching, and/or permanent construction area seeding

GI ID	GI Asset Data					Stormwater Storage Calculations								Total Stormwater Managed (infiltration + Storage)			
							Sand Media			Stone Subbase							
	Managed Impervious Tributary Area	Volume 2.12" Rainfall on Impervious Area	GI Footprint Surface Area	GI Perimeter	Permeability Coefficient	Stormwater chambers, pipes, tanks, ponding above media, etc. volume	Sand Depth	Sand Voids	Stormwater Captured by Sand	Stone Depth	Stone Voids	Stormwater Captured by Stone Layer	Estimated Total Storage Volume	% Impervious Surface Managed	Calculated Volume of Rainfall Captured	Calculated Volume of Rainfall Captured
	sf	cf	sf	ft	in/hr	cf	ft	%	cf	ft	%	cf	cf	%	cf	gal
X092-02SPa	35,753	6,008	5,631	467	0.00	4,343	N/A	N/A	N/A	1.52	40%	1,687	6,030	122%	6,030	45,108
Sand Filter			640	112		837	1.5	30%	251	0.83	40%	186	1,274		1,274	9,530

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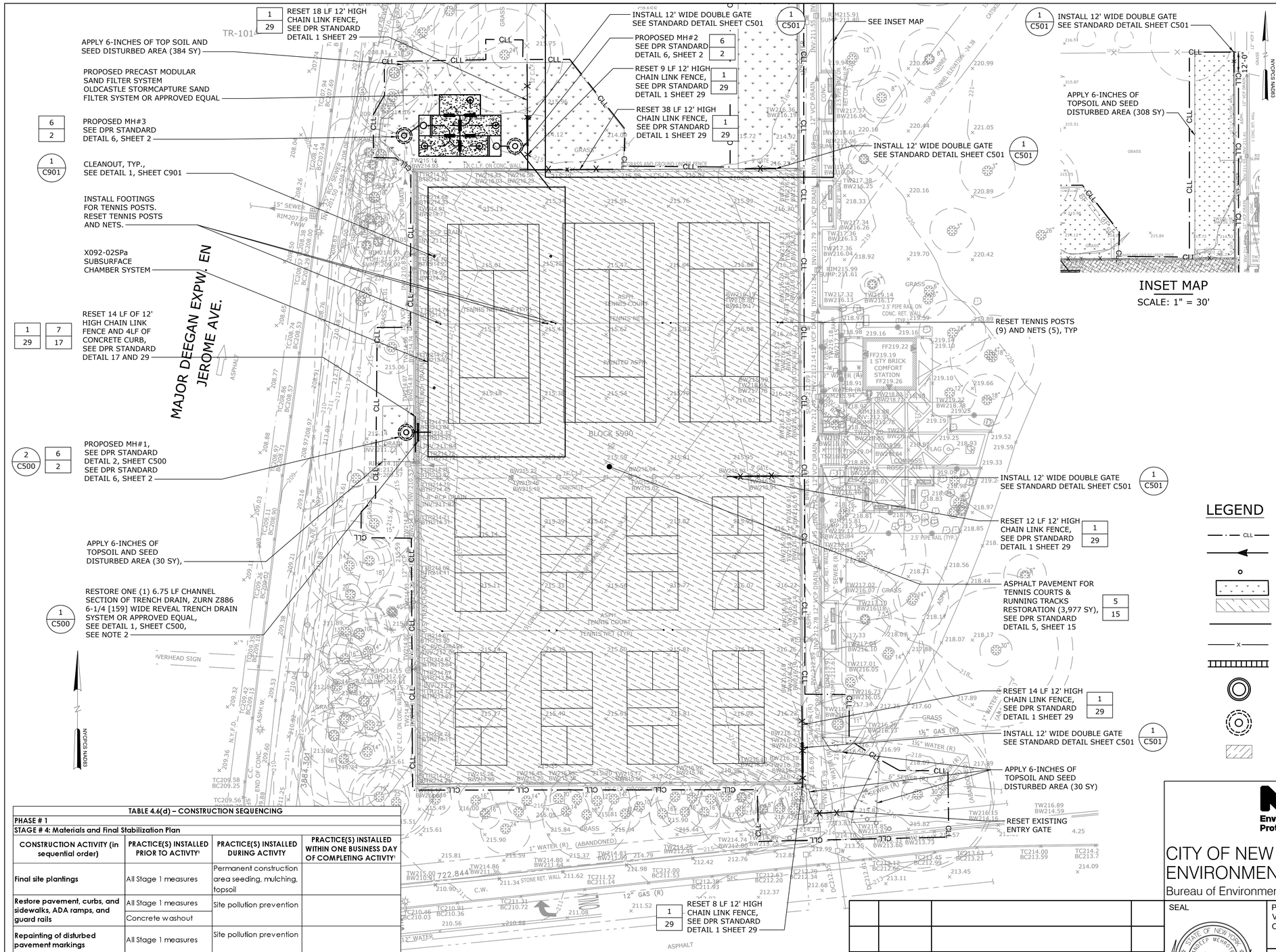
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PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN

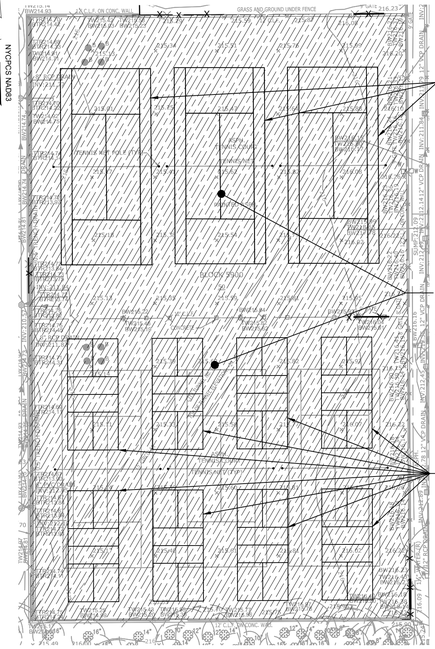
DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D.THOMAS	A. EASON

B-SCAN	SCALE 1" = 20'	DRAWING NO. C200	CONTRACT NO. GI-CONS-7
BLOCK 5900	DATE NOV 2026		SHEET No. 7 OF 14 SHEETS
LOT 50			



PLAN
SCALE: 1" = 20'

INSET MAP
SCALE: 1" = 30'



PAINTING PLAN
SCALE: 1" = 30'

LEGEND

- CLL - CONTRACT LIMIT LINE
- PROPOSED STORM DRAIN
- PROPOSED CLEANOUT
- RESTORATION SEED MIX
- PROPOSED FULL DEPTH PAVEMENT
- PROPOSED GREEN INFRASTRUCTURE PRACTICE
- FENCE TO BE RESTORED
- TRENCH DRAIN TO BE RESTORED
- PROPOSED DROP INLET WITH MANHOLE COVER
- PROPOSED MANHOLE
- PROPOSED COLOR SEAL COAT

FOR SWPPP PERMITTING PURPOSES, FULL DEPTH ASPHALT RESTORATION SHALL BE CONSIDERED AN IMPERVIOUS SURFACE. RESTORATION SEED MIX AREAS SHALL BE CONSIDERED PERVIOUS. NO CHANGE IN IMPERVIOUS AND PERVIOUS COVER IS PROPOSED AS PART OF THIS PROJECT.

SCALE: 1" = 30' 30 15 0 30'
SCALE: 1" = 20' 20 10 0 20'

TABLE 4.6(d) – CONSTRUCTION SEQUENCING

PHASE # 1
STAGE # 4: Materials and Final Stabilization Plan

CONSTRUCTION ACTIVITY (in sequential order)	PRACTICE(S) INSTALLED PRIOR TO ACTIVTY¹	PRACTICE(S) INSTALLED DURING ACTIVTY	PRACTICE(S) INSTALLED WITHIN ONE BUSINESS DAY OF COMPLETING ACTIVTY¹
Final site plantings	All Stage 1 measures	Permanent construction area seeding, mulching, topsoil	
Restore pavement, curbs, and sidewalks, ADA ramps, and guard rails	All Stage 1 measures Concrete washout	Site pollution prevention	
Repainting of disturbed pavement markings	All Stage 1 measures	Site pollution prevention	
Remove temporary erosion control measures and clean any sedimentation in the pavement, trench drains, structures, and drainage pipes within the contract area		Site pollution prevention	

LAYOUT AND MATERIALS NOTES

1. LAYOUT AND MATERIALS NOTES CAN BE FOUND ON SHEET O-3 - GENERAL NOTES.
2. THE TRENCH DRAINS SHALL BE INSTALLED TO MATCH EXISTING SLOPE IN ORDER TO MAINTAIN POSITIVE DRAINAGE TO DOWNSTREAM OUTLET PIPE.
3. COLOR SEAL COAT SHALL MATCH EXISTING FOR THE WORK AREA. REPAINT LINES FOR THREE (3) TENNIS COURTS TO MATCH EXISTING. PAINT LINES FOR EIGHT PICKLE BALL COURTS PER DETAIL (C502) TO MATCH LAYOUT SHOWN ON THIS SHEET.

NO.	DATE	ISSUED FOR	BY

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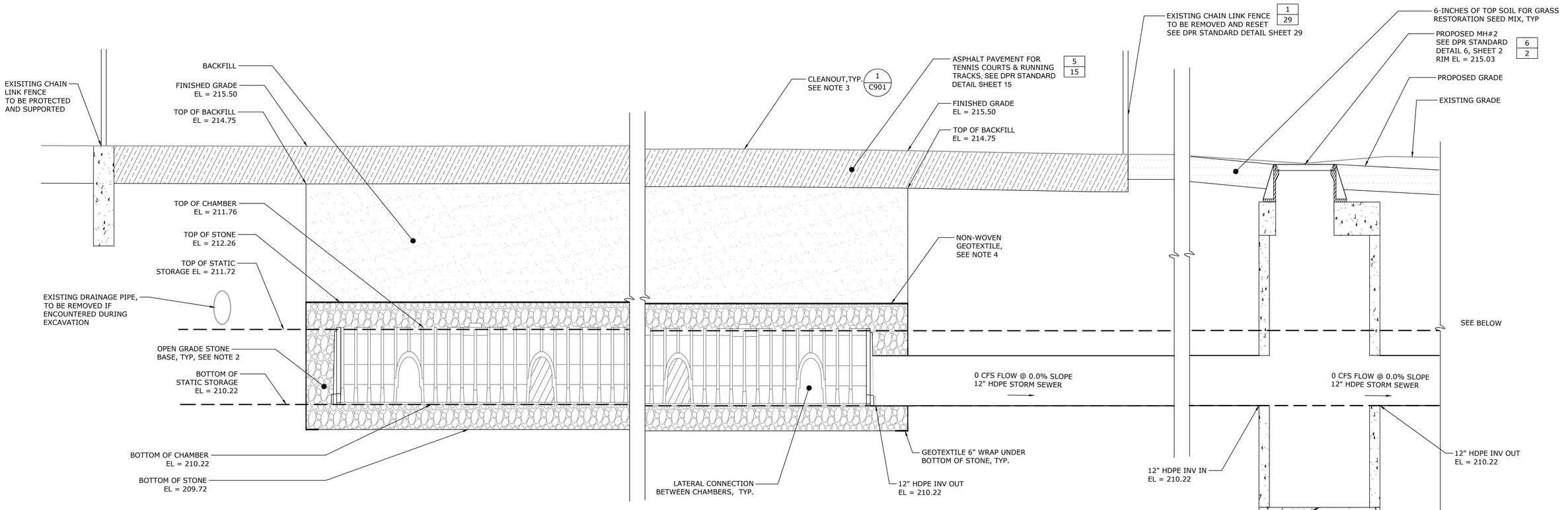
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STATE OF NEW YORK — DEEPP MEHTA — LICENSED PROFESSIONAL ENGINEER — 103896-1
Hazen

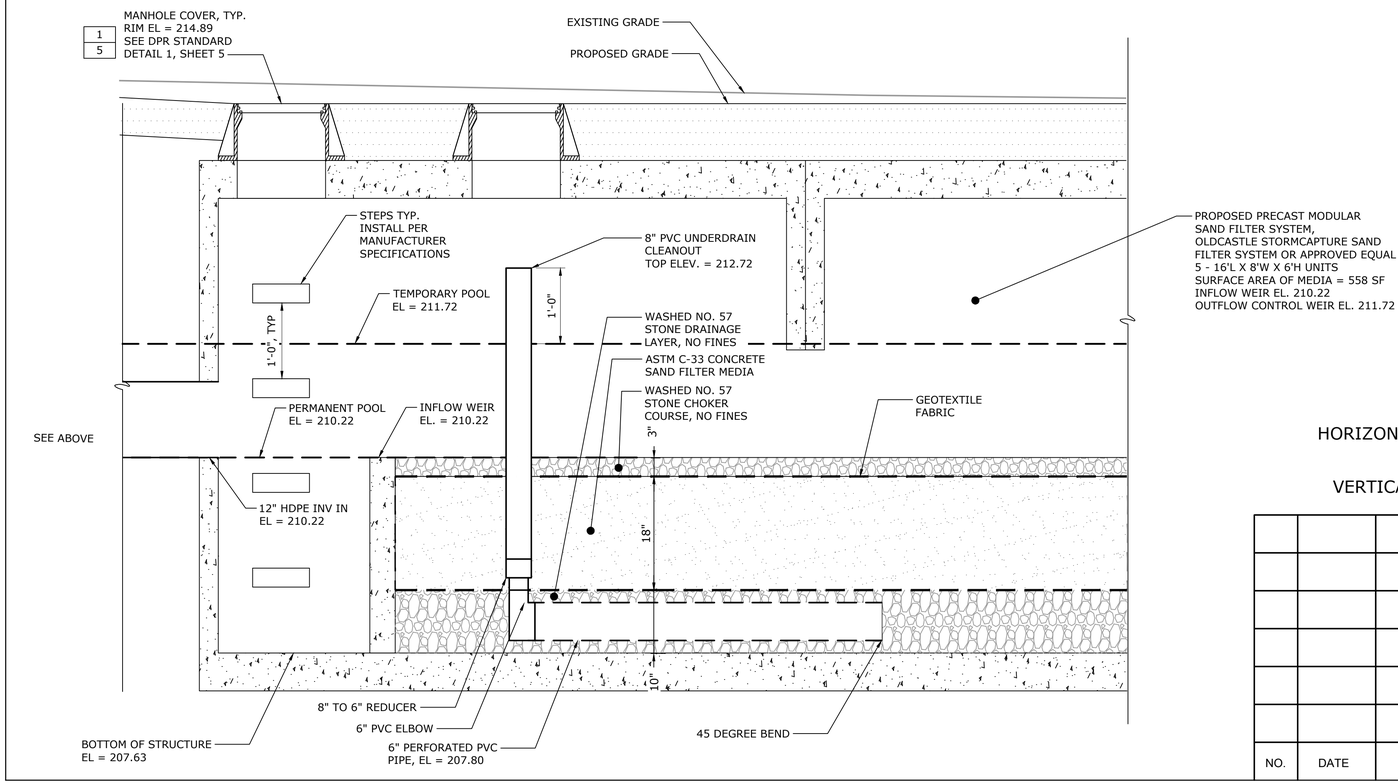
PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
MATERIALS AND FINAL STABILIZATION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D.THOMAS	A. EASON

B-SCAN	SCALE 1" = 20'	DRAWING NO. C201	CONTRACT NO. GI-CONS-7
BLOCK 5900	DATE NOV 2026		SHEET No. 8 OF 14 SHEETS
LOT 50			





PROFILE 1

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 7,304 CF AND IS CALCULATED BETWEEN EL 210.22 AND EL 211.72.
2. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COURSE AGGREGATE WITH A 40% VOID CONTENT.
3. INSTALL CLEANOUTS FLUSH TO PAVEMENT.
4. INSTALL NON-WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.

HORIZONTAL SCALE 0 2' 4' (1"=2')

VERTICAL SCALE 0 1' 2' (1"=1')

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NO.	DATE	ISSUED FOR	BY

SEAL: STATE OF NEW YORK — DEEPAK MEHROTRA — 075828 — LICENSED PROFESSIONAL ENGINEER

Hazen

BLOCK 5900
LOT 50

PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 1

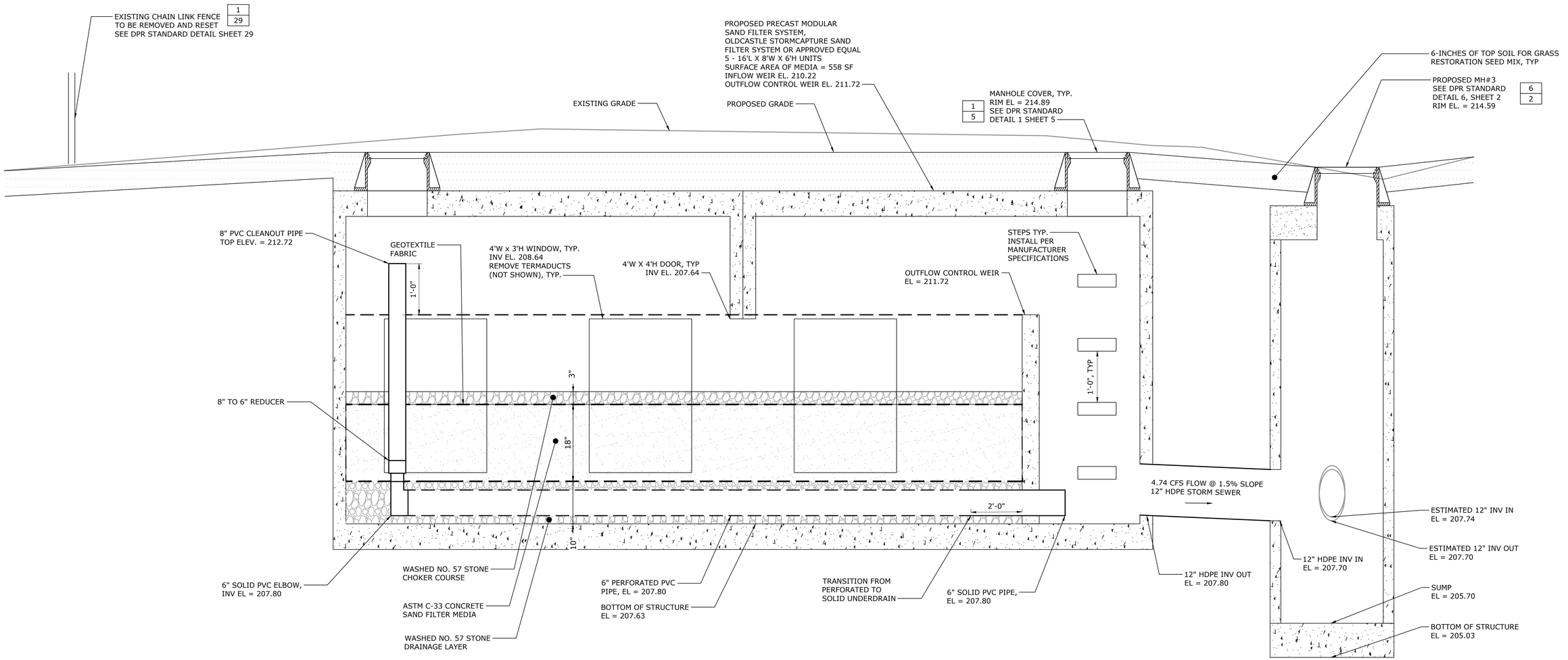
DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN

SCALE: AS SHOWN
DRAWING NO.: C300
DATE: NOV 2026

CONTRACT NO.: GI-CONS-7

SHEET No. 9 OF 14 SHEETS



PROFILE 2

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 7,304 CF AND IS CALCULATED BETWEEN EL 211.72 AND EL 210.22.

HORIZONTAL SCALE 0 2' 4' 1"=2'

VERTICAL SCALE 0 1' 2' 1"=1'

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SEAL: STATE OF NEW YORK — DEEP MEHROTRA — 082674 — LICENSED PROFESSIONAL ENGINEER

Hazen

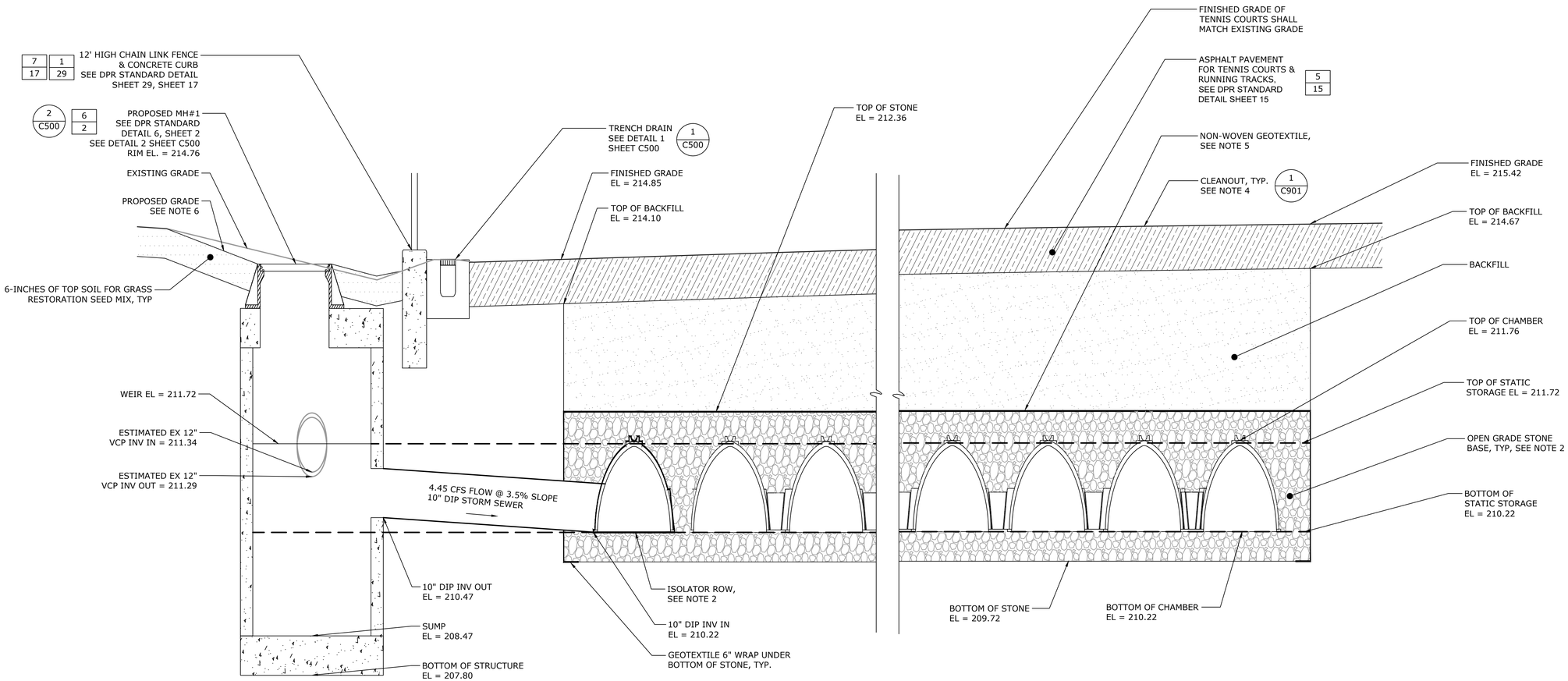
BLOCK 5900
LOT 50

PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
SECTIONS AND PROFILES - 2

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C301	GI-CONS-7
	DATE NOV 2026		SHEET No. 10 OF 14 SHEETS



CROSS SECTION - A

HORIZONTAL SCALE: 1"=2'
VERTICAL SCALE: 1"=1'

NOTES:

1. THE WORK SHOWN HERE IN ITS ENTIRETY IS TO PROVIDE A STATIC STORAGE OF 7,304 CF AND IS CALCULATED BETWEEN EL 211.72 AND EL 210.22
2. WRAP ISOLATOR ROW OF CHAMBER SYSTEM IN GEOTEXTILE PER MANUFACTURER'S SPECIFICATIONS
3. OPEN GRADED STONE BASE SHALL BE A CLEAN WASHED COURSE AGGREGATE WITH A 40% VOID CONTENT.
4. INSTALL CLEANOUTS FLUSH TO PAVEMENT.
5. INSTALL NON WOVEN GEOTEXTILE ON THE TOP, SIDES, AND FOLD 6" UNDER BOTTOM OF OPEN GRADED STONE.
6. FINISHED GRADE SHALL BE DONE IN A MANNER THAT MAINTAINS THE EXISTING DRAINAGE PATTERNS IN THE GRASSED AREA OUTSIDE OF TENNIS COURT.

HORIZONTAL SCALE 0 2' 4' 1"=2'

VERTICAL SCALE 0 1' 2' 1"=1'

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NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL

Hazen

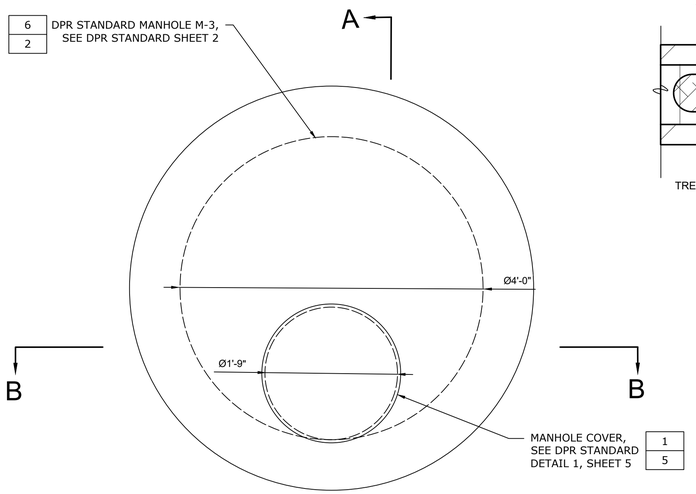
BLOCK 5900
LOT 50

PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

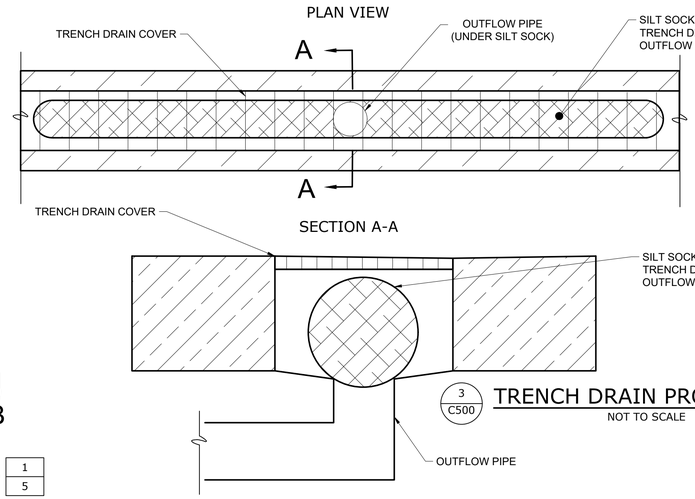
DRAWING TITLE
SECTIONS AND PROFILES - 3

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

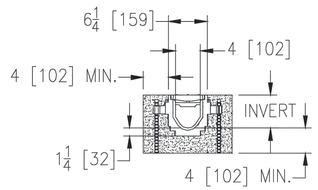
B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C302	GI-CONS-7
	DATE NOV 2026		SHEET No. 11 OF 14 SHEETS



MANHOLE TOP PLAN
1"=1'-0"

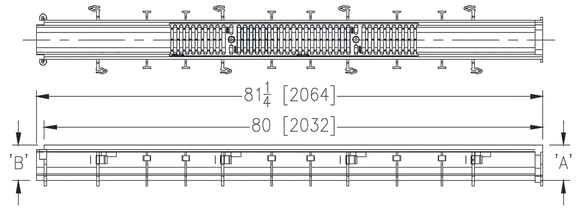


3 C500 TRENCH DRAIN PROTECTION
NOT TO SCALE



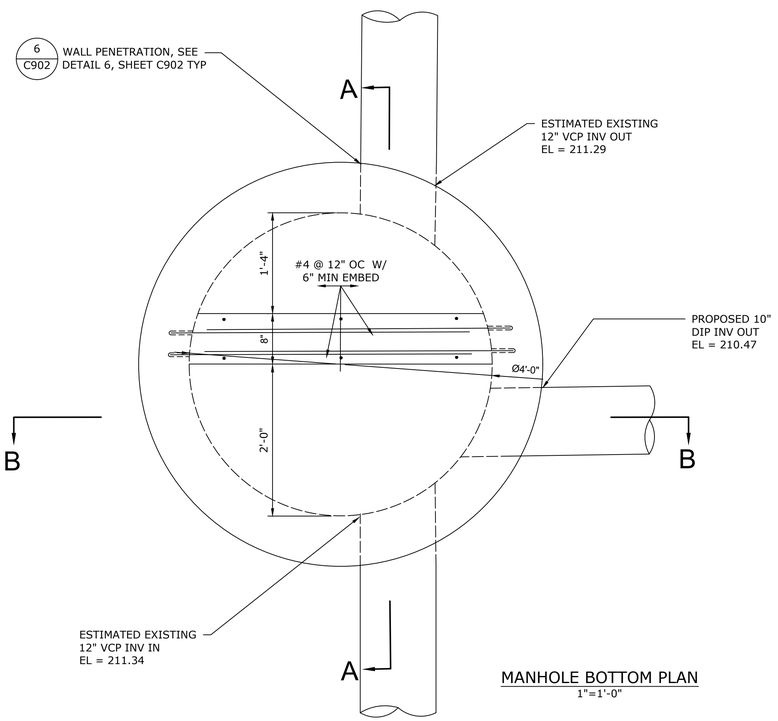
NOTES:

1. TRENCH DRAIN SHALL BE ZURN 7886 6-1/4 [159] WIDE REVEAL TRENCH SYSTEM OR APPROVED EQUAL.
2. UNITS: INCHES [MM].

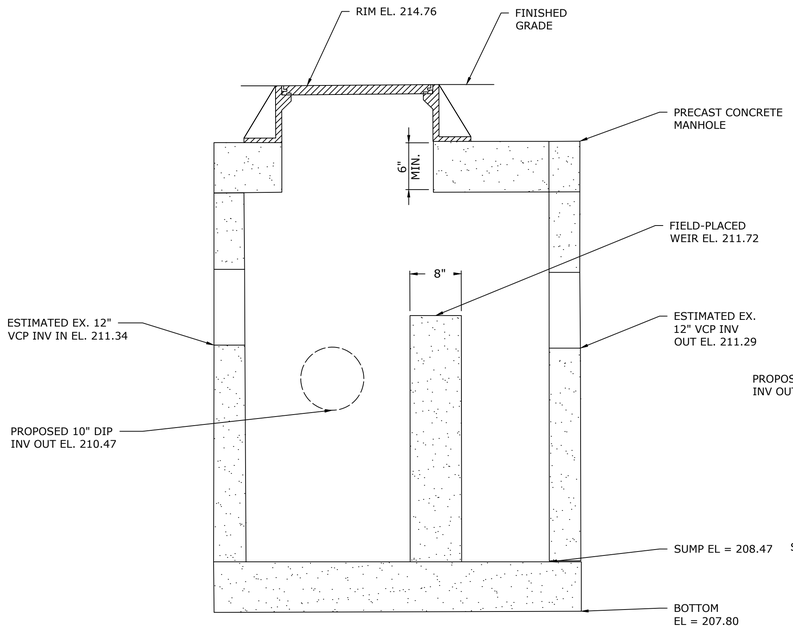


NOTE: + Actual Channel length is 81¼ [2064] to allow for overlap.

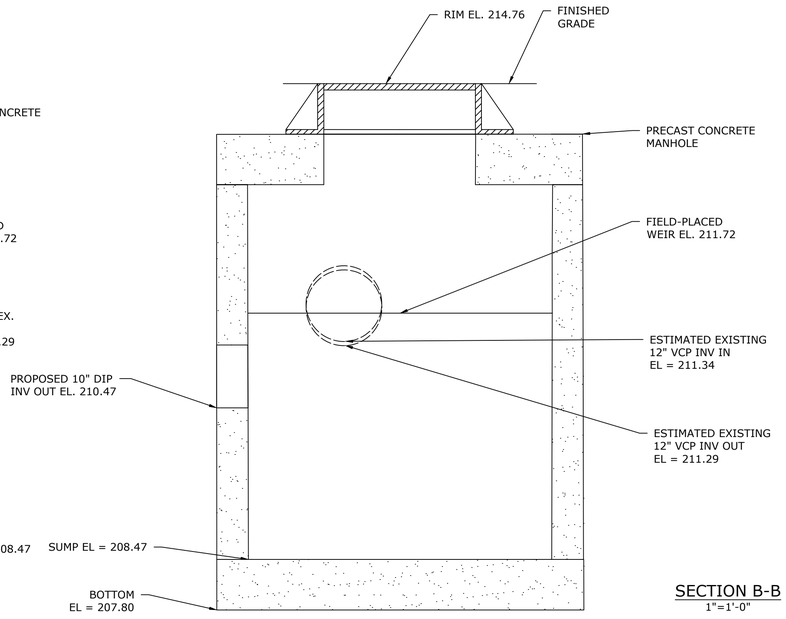
1 C500 TRENCH DRAIN
NOT TO SCALE



MANHOLE BOTTOM PLAN
1"=1'-0"



SECTION A-A
1"=1'-0"



SECTION B-B
1"=1'-0"

2 C500 MH #1 - MANHOLE WITH WEIR
AS SHOWN

NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
2. REFER TO DETAILS 1-6 ON SHEET C902.
3. SEE GENERAL STRUCTURAL NOTES AND CONCRETE NOTES ON SHEET C902.
4. CONTRACTOR TO OMIT TWO COURSES OF BRICK UNDER CAST IRON FRAME SHOWN ON MANHOLE M-3 DPR STANDARD DETAIL SHEET #2.

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STATE OF NEW YORK
DEEP P. METROPOLIS
LICENSED PROFESSIONAL ENGINEER
Hazen

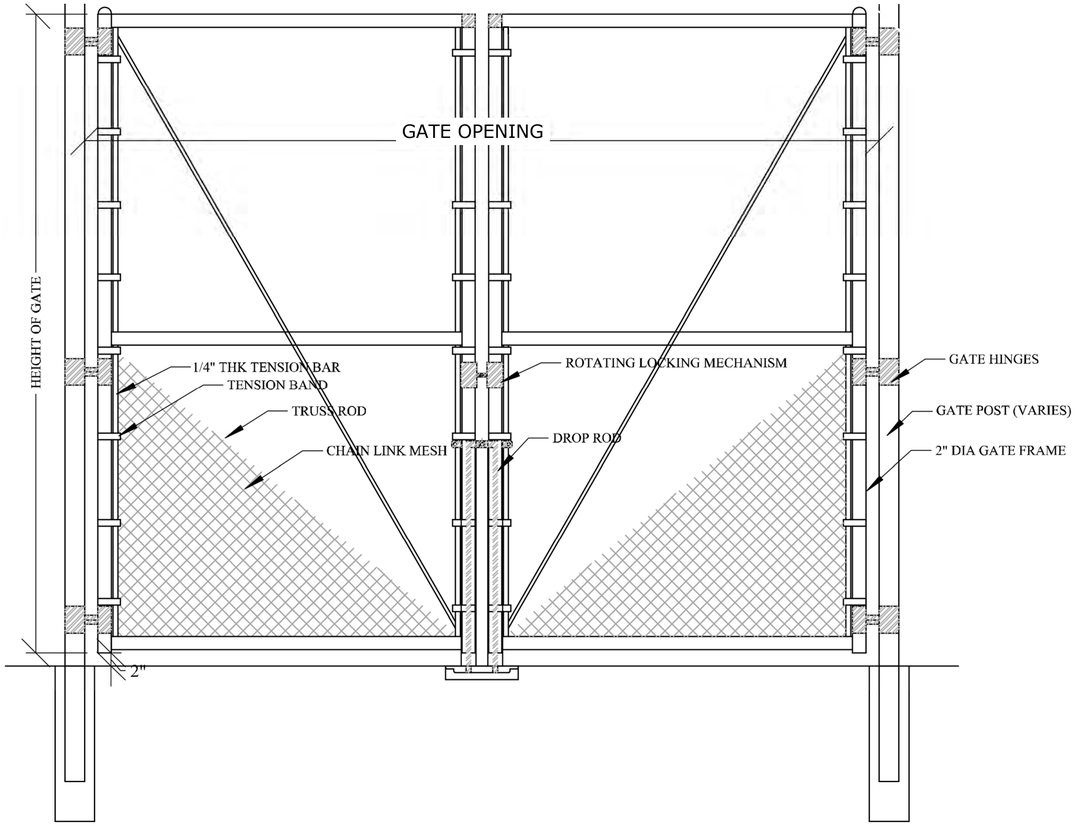
BLOCK 5900
LOT 50

PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
DETAILS - 1

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	C500	GI-CONS-7
	DATE NOV 2026		SHEET No. 12 OF 14 SHEETS

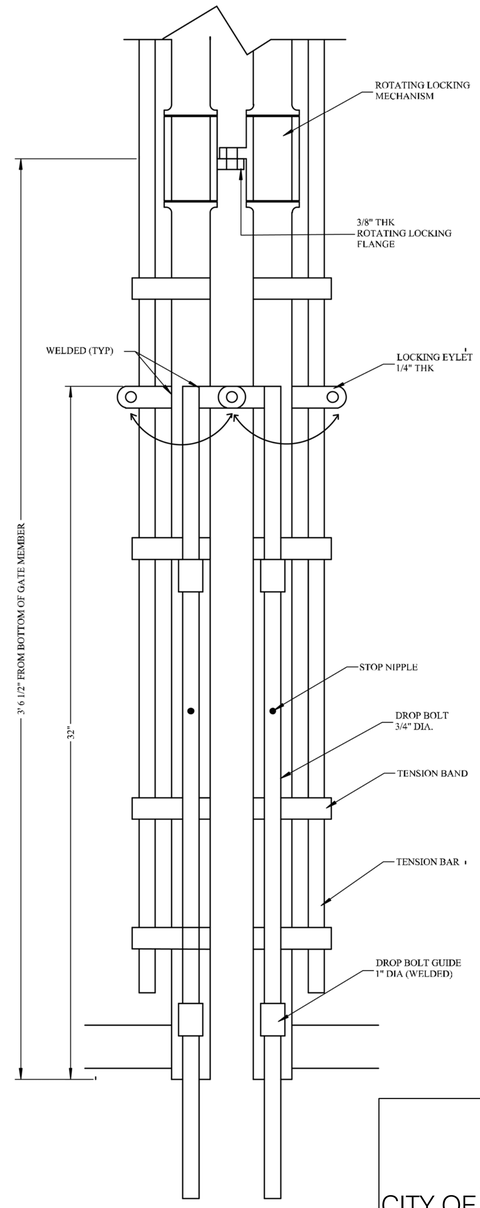


NOTES:

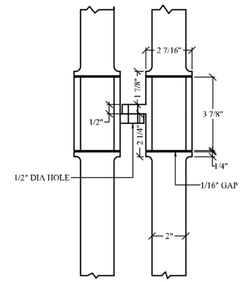
1. 12' WIDE DOUBLE GATE SHALL BE AS MANUFACTURED BY SHANNON GATES INC., DEER PARK, NY, OR APPROVED EQUAL.
2. NO HEADERS SHALL BE INSTALLED FOR 12' WIDE DOUBLE GATES.

1 / C501 — 12' DOUBLE GATE
NOT TO SCALE

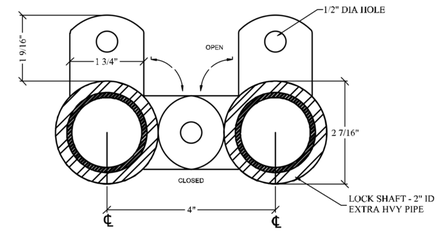
GATE LOCK SYSTEM



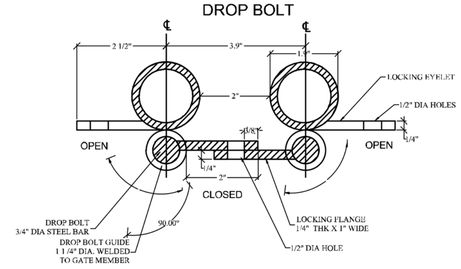
ROTATING LOCK SHAFT



ROTATING MECHANISM



DROP BOLT



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SEAL — STATE OF NEW YORK — SANDEEP MELWANI — 032826 — LICENSED PROFESSIONAL ENGINEER

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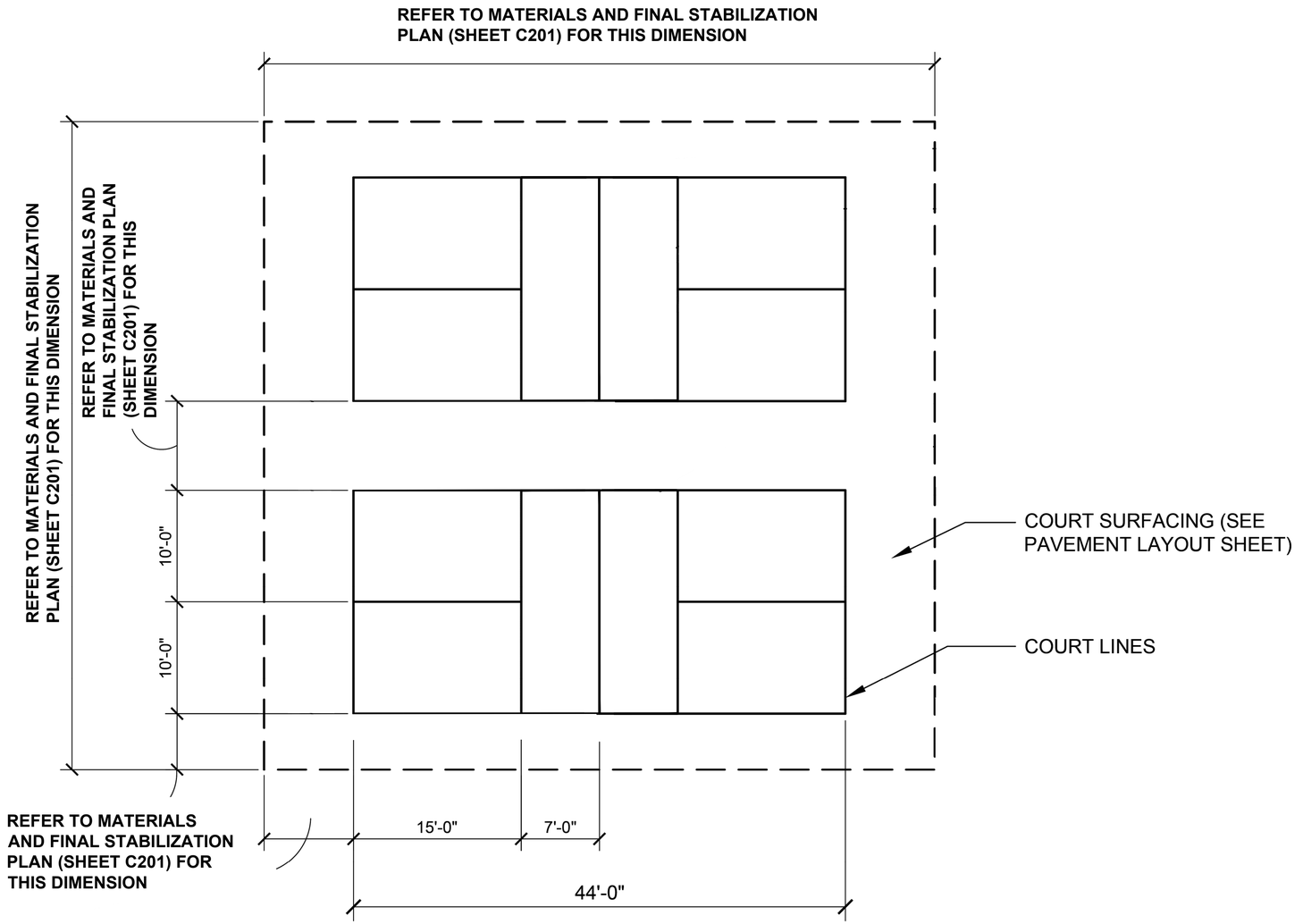
BLOCK 5900
LOT 50

PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
DETAILS - 2

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	C501	GI-CONS-7
	DATE NOV 2026		SHEET No. 13 OF 14 SHEETS



1 / C502 PICKLEBALL COURT DETAIL
NOT TO SCALE

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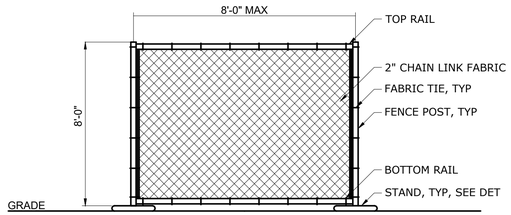
SEAL
STATE OF NEW YORK · DEEP MEHROTRA · 073826 · LICENSED PROFESSIONAL ENGINEER
Hazen
BLOCK 5900
LOT 50

PROJECT TITLE
VAN CORTLANDT PARK EAST 233RD STREET TENNIS COURTS
ON-SITE GREEN INFRASTRUCTURE

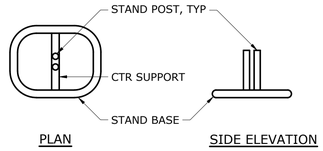
DRAWING TITLE
DETAILS - 3

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	C502	GI-CONS-7
	DATE NOV 2026		SHEET No. 14 OF 14 SHEETS



ELEVATION

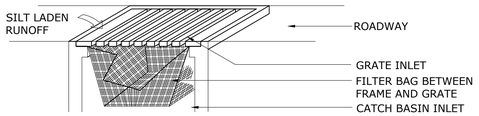


PLAN SIDE ELEVATION

STAND DETAIL

NOTES:
1. CONTRACTOR SHALL PROVIDE, AT A MINIMUM, TEMPORARY FENCE WITH DIMENSIONS AND APPURTENANCES AS SHOWN.
2. ALL OTHER DIMENSIONS, MATERIAL SIZES, MATERIAL TYPES, ACCESSORIES, ETC PER MANUFACTURER.
3. TEMPORARY FENCE SHALL REMAIN IN PLACE UNTIL CONCLUSION OF CONSTRUCTION.
4. SAND BAGS SHALL BE USED FOR POST SUPPORT IN ACCORDANCE WITH THE SPECIFICATIONS.

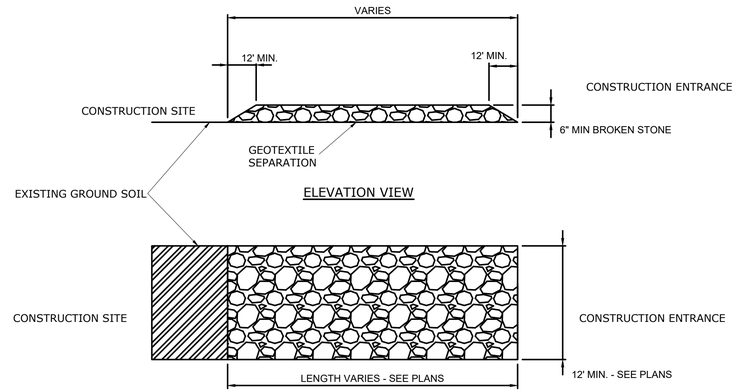
1 / C900 **TEMPORARY CONSTRUCTION FENCE**
NOT TO SCALE



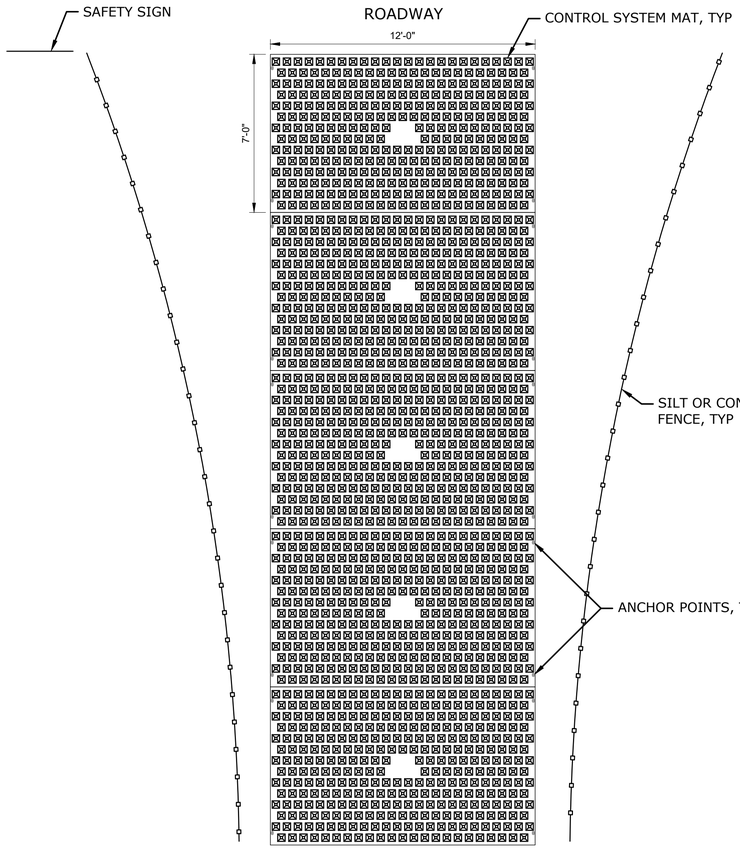
NOTE:
1. IN PAVED AREAS, USE FILTER BAG FOR INLET PROTECTION (NO MESH, BOX STONE REQUIRED).
2. FILTER BAG SHALL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE GEOTEXTILE AND SEWN BY A DOUBLE NEEDLE MACHINE USING A HIGH STRENGTH NYLON THREAD.
3. BAG SHALL BE DANDY SACK® BY DANDY PRODUCTS INC., OR EQUAL, AS APPROVED BY THE ENGINEER.
4. WHEN INSTALLED, FILTER BAG SHALL BE SUCH THAT A MINIMUM OF 50% OF THE OPEN, UNOBSTRUCTED, DESIGN FLOW AREA OF THE STORM DRAIN INLET IS PRESERVED.
5. OUTFLOW PORTS ARE REQUIRED.

MAINTENANCE REQUIREMENTS:
1. INSPECT FILTER BAG ON A DAILY BASIS AND REMOVE ANY VISIBLE SEDIMENT OR DEBRIS. INLET PROTECTION SHALL BE MAINTAINED SUCH THAT A MINIMUM OF 50% OF THE OPEN, UNOBSTRUCTED, DESIGN FLOW AREA OF THE STORM DRAIN INLET IS PRESERVED.
2. DAMAGE TO THE BAG SHALL BE REPAIRED IMMEDIATELY.
3. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, THE BAG IS FULL AND SHOULD BE EMPTIED.
4. USE 1" DIAMETER REBAR TO SLIDE THROUGH THE LIFTING LOOPS/POCKETS ON EACH SIDE OF THE BAG TO FACILITATE LIFTING.
5. REMOVE SEDIMENT FROM BAG AND DISPOSE OFF-SITE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS.

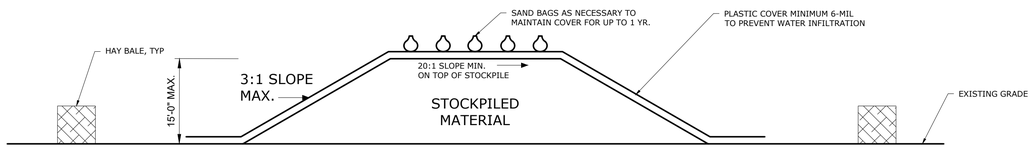
2 / C900 **INLET PROTECTION**
NOT TO SCALE



3 / C900 **STABILIZED CONSTRUCTION ENTRANCE**
NOT TO SCALE



4 / C900 **MODULAR CONSTRUCTION ENTRANCE DETAIL**
NOT TO SCALE



NOTES:
POLYETHYLENE SHEETING SHALL OVERLAP A MINIMUM OF 12-INCHES AND SHALL BE ANCHORED USING SANDBAGS OR EQUIVALENT (NON-PUNCTURING) WEIGHTS. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING COVERS ESPECIALLY IN PREPARATION FOR WINDY OR STORMY WEATHER. CONTRACTOR MUST MAINTAIN COVER ON STOCKPILE MATERIALS UNTIL REMOVED FROM SITE.

5 / C900 **STOCKPILE PROTECTION**
NOT TO SCALE

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Hazen

BLOCK

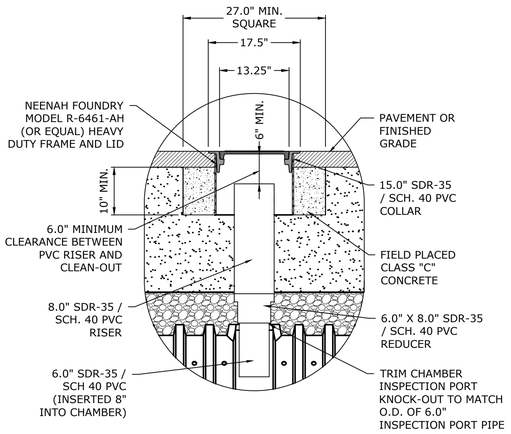
LOT

PROJECT TITLE
GI-P DESIGN ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
STANDARD DETAILS - 1

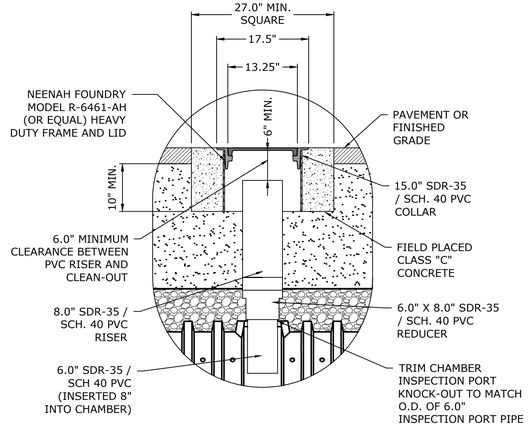
DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. KANE	J. BRENNAN

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C900	GI-CONS-7
	DATE NOV 2026		SHEET No. 1 OF 3 SHEETS



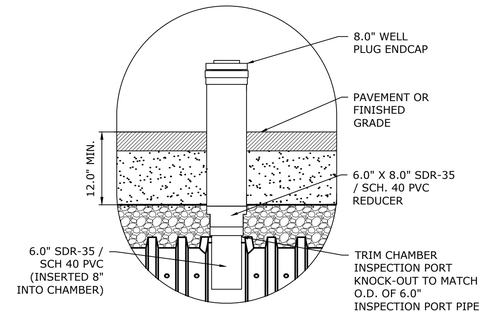
1 C901 **PAVED SURFACE CLEANOUT TO CHAMBERS**

NOT TO SCALE



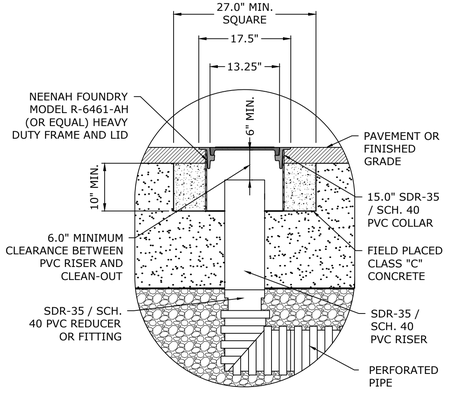
2 C901 **GRASSED SURFACE CLEANOUT TO CHAMBERS**

NOT TO SCALE



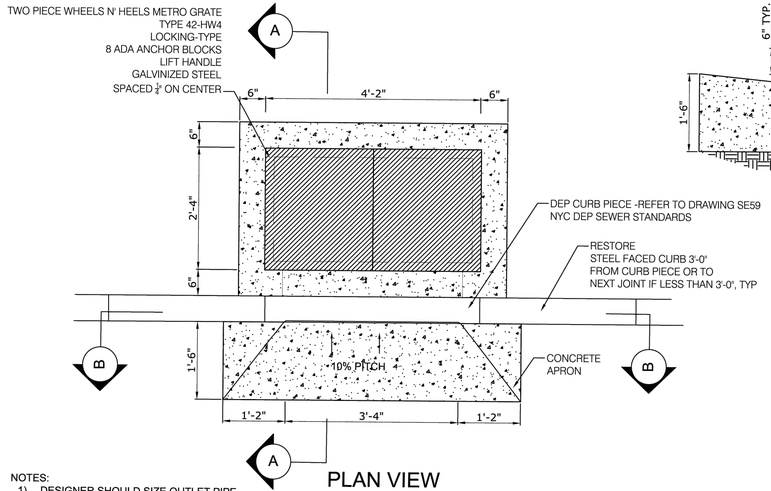
3 C901 **PONDING SURFACE CLEANOUT TO CHAMBERS**

NOT TO SCALE

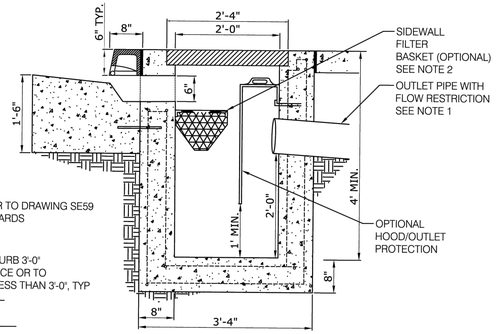


4 C901 **PAVED SURFACE CLEANOUT TO PERFORATED PIPES**

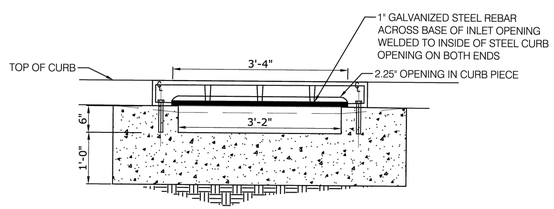
NOT TO SCALE



PLAN VIEW



SECTION A-A



SECTION B-B

NOTES:
1) DESIGNER SHOULD SIZE OUTLET PIPE ACCORDING TO SYSTEM CAPACITY.
2) ATTACH SIDEWALL FILTER 2" BELOW OPENING WITH BOLTS, OR PER MANUFACTURER INSTRUCTIONS

5 C901 **TYPICAL MODIFIED CURB INLET TYPE-A**

N.T.S.

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NO.	DATE	ISSUED FOR	BY

SEAL: STATE OF NEW YORK · SANDEEP MEHROTRA · 071826 · LICENSED PROFESSIONAL ENGINEER

Hazen

BLOCK

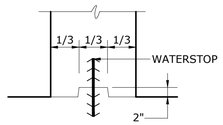
LOT

PROJECT TITLE
GI-P DESIGN ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
STANDARD DETAILS - 2

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S.KANE	J. BRENNAN

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C901	GI-CONS-7
	DATE NOV 2026		SHEET No. 2 OF 3 SHEETS



1 / C902 TYPICAL KEYWAY
N.T.S.

BASIC DEVELOPMENT LENGTH AND SPLICE LENGTH
FOR UNCOATED BARS IN TENSION

** BASED ON MATERIALS AND CONDITIONS AS FOLLOWS:
fy = 60,000 psi — fc' = 4000 psi OR GREATER
CLEAR COVER≥ 1.5 INCHES — NORMAL WEIGHT CONCRETE

BASIC DEVELOPMENT LENGTH ℓd				BAR SIZE	CLASS B SPLICE LENGTH 1.3 x ℓd			
CLEAR SPACING≥ 3"		CLEAR SPACING <3"			CLEAR SPACING≥ 3"		CLEAR SPACING <3"	
BASIC	TOP *	BASIC	TOP *		BASIC	TOP *	BASIC	TOP *
1'-0"	1'-0"	1'-0"	1'-4"	# 3	1'-0"	1'-3"	1'-4"	1'-8"
1'-0"	1'-3"	1'-7"	2'-1"	# 4	1'-3"	1'-8"	2'-1"	2'-9"
1'-3"	1'-7"	2'-4"	3'-0"	# 5	1'-7"	2'-0"	3'-0"	3'-11"
1'-6"	1'-11"	3'-1"	4'-0"	# 6	1'-11"	2'-5"	4'-0"	5'-2"
2'-5"	3'-1"	4'-11"	6'-4"	# 7	3'-1"	4'-0"	6'-4"	8'-3"
3'-0"	3'-11"	6'-0"	7'-9"	# 8	3'-11"	5'-1"	7'-9"	10'-1"
3'-8"	4'-9"	6'-9"	8'-9"	# 9	4'-9"	6'-3"	8'-9"	11'-4"
4'-6"	5'-10"	7'-7"	9'-10"	# 10	5'-10"	7'-7"	9'-10"	12'-9"
5'-5"	7'-0"	8'-5"	10'-11"	# 11	7'-0"	9'-1"	10'-11"	14'-2"

* TOP REINFORCEMENT IS ANY HORIZONTAL REINFORCEMENT SO PLACED THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.

** FOR MATERIALS OR CONDITIONS DIFFERENT FROM THOSE STATED, LENGTHS SHOWN IN CHART SHALL BE MODIFIED TO CONFORM TO THE PROVISIONS OF ACI 318-14, SECTION 25.3.

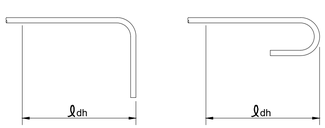
3 / C902 BASIC DEVELOPMENT LENGTH AND SPLICE LENGTH
N.T.S.

DEVELOPMENT LENGTH OF STANDARD HOOKS
FOR UNCOATED BARS IN TENSION

fy = 60,000 psi — fc' = 4000 psi OR GREATER

BAR SIZE	DEVELOPMENT LENGTH, ℓdh	
	BASIC	W/ CONC COVER *
#3	8"	6"
#4	10"	7"
#5	1'-0"	9"
#6	1'-3"	11"
#7	1'-5"	1'-0"
#8	1'-7"	1'-2"
#9	1'-10"	1'-4"
#10	2'-1"	1'-6"
#11	2'-3"	1'-7"

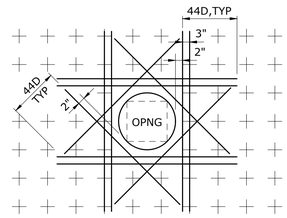
* SIDE COVER NORMAL TO PLANE OF HOOK AT LEAST 2 1/2", AND FOR 90° HOOK, END COVER BEYOND OUTSIDE END OF HOOK AT LEAST 2".



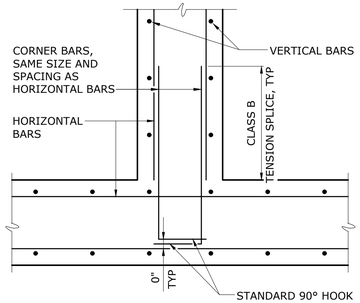
4 / C902 DEVELOPMENT LENGTH OF STANDARD HOOKS
N.T.S.

NOTES:

1. THIS DETAIL APPLIES FOR OPENINGS 8"Ø AND LARGER. FOR SMALLER OPENINGS, BEND BARS OR ADJUST SPACING OF REINFORCEMENT TO AVOID OPENING.
2. PLACE EXTRA BARS OF THE SAME SIZE AS THE INTERRUPTED BARS AT EACH SIDE OF OPENING. QUANTITY OF EXTRA BARS AT EACH SIDE SHALL EQUAL HALF THE QUANTITY OF INTERRUPTED BARS EXCEPT WHERE NOTED OTHERWISE.
3. PROVIDE ONE DIAGONAL BAR EACH SIDE OF OPENING WITH SIZE EQUAL TO MAIN REINFORCEMENT, TYPICAL EACH FACE.
4. WHERE INVERT OF OPENING IN WALL IS LESS THAN 44 BAR DIAMETERS FROM TOP OF SLAB, EXTRA REINFORCEMENT ON EACH SIDE SHALL INCLUDE DOWELS EMBEDDED INTO SLAB WITH STANDARD 90 DEGREE HOOKS TO SPLICE WITH EXTRA VERTICAL REINFORCEMENT. DOWELS SHALL ALSO STILL BE PROVIDED BELOW OPENING.
5. WHERE INVERT OF OPENING IN WALL OR SLAB IS CLOSER THAN 44 BAR DIAMETERS TO EDGE OF SLAB OR BOTTOM OF WALL, EXTRA DIAGONAL BARS MAY BE TERMINATED TWO INCHES FROM EDGE OF SLAB OR BOTTOM OF WALL. DOWELS DO NOT HAVE TO BE PROVIDED TO SPLICE WITH DIAGONAL BARS.

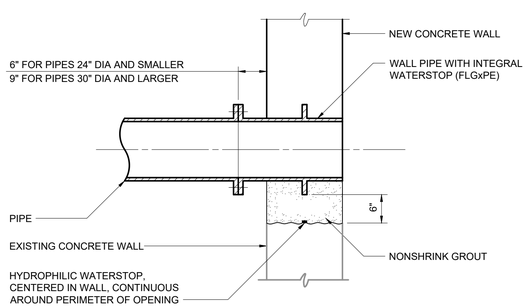


2 / C902 TYPICAL REINFORCEMENT AT OPENINGS
N.T.S.



* = STD 90° HOOK LENGTH

5 / C902 INTERSECTION TYPICAL WALL REINFORCING
N.T.S.



6 / C902 TYPICAL WALL PIPE
N.T.S.

GENERAL STRUCTURAL NOTES:

1. THESE NOTES ARE GENERAL AND SUPPLEMENT THE SPECIFICATIONS. THESE NOTES APPLY TO THE ENTIRE PROJECT UNLESS MODIFIED OR NOTED OTHERWISE IN THE CONTRACT DOCUMENTS.
2. STANDARD DETAILS SHALL BE USED WHEN REFERRED TO OR WHEN NO MORE RESTRICTIVE OR DIFFERENT DETAILS ARE SHOWN ON THE DRAWINGS.
3. DESIGN SHALL BE ACCORDANCE WITH AND CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF NEW YORK CITY BUILDING CODE. THE DESIGN LOADS AND OTHER DESIGN VALUES GIVEN IN NOTES WERE USED FOR DESIGN OF STRUCTURES UNLESS NOTED OTHERWISE ON THE DRAWINGS.
4. LIVE LOAD:

STRUCTURE	ROOF
MANHOLE	HS-20

5. STRUCTURAL DIMENSIONS NOT SHOWN BUT CONTROLLED BY OR RELATED TO EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR WITH THE MANUFACTURER PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION IN THE FIELD AS REQUIRED FOR NEW WORK.
7. IF A CONFLICT IS FOUND BETWEEN DIFFERENT PORTIONS OF THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. CONTINUED CONSTRUCTION OF THE AREA IN CONFLICT SHALL BE AT THE CONTRACTOR'S OWN RISK UNTIL THE CONFLICT IS RESOLVED.
8. EQUIPMENT ANCHOR BOLT SIZES, TYPES, EMBEDMENT AND PATTERNS SHALL BE VERIFIED WITH THE MANUFACTURER. ALL BOLT PATTERNS SHALL BE TEMPLATED TO INSURE ACCURACY OF PLACEMENT.
9. STRUCTURAL DRAWINGS SHALL BE USED IN COORDINATION WITH OTHER CONTRACT DRAWINGS AND MANUFACTURER'S SHOP DRAWINGS.
10. STRUCTURES SHALL BE DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURE. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND TEMPORARY SUPPORTS WHEREVER EXCESSIVE CONSTRUCTION LOADS MAY OCCUR. OVERSTRESSING ANY STRUCTURAL ELEMENT IS PROHIBITED.
11. IF CONTRACTOR DESIRES TO TEMPORARILY PLACE OR MOVE LOADS ON OR ADJACENT TO EXISTING STRUCTURES OR UTILITIES DURING CONSTRUCTION PROCESS, CONTRACTOR IS EXCLUSIVELY RESPONSIBLE FOR MAINTAINING STRUCTURAL INTEGRITY AND AVOIDING OVERSTRESSING AND DAMAGING EXISTING STRUCTURES AND UTILITIES. CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS AND DRAWINGS VERIFYING PROPOSED CONSTRUCTION INCLUDING APPLICATION OF TEMPORARY CONSTRUCTION LOADS WILL NOT OVERSTRESS OR DAMAGE EXISTING STRUCTURES AND UTILITIES. DRAWINGS AND CALCULATIONS SHALL BE SEALED BY A PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE STATE OF NEW YORK.
12. NO BACKFILL SHALL BE PLACED AGAINST ANY SUBSTRUCTURE WALLS UNLESS ALL ADJACENT SUPPORTING ELEMENTS HAVE ACHIEVED DESIGN STRENGTH, OR WALLS HAVE BEEN PROPERLY BRACED, AND IN ANY CASE NOT SOONER THAN 28 DAYS AFTER THE PLACING OF CONCRETE UNLESS APPROVED BY THE ENGINEER. SUPPORTING ELEMENTS SHALL INCLUDE ADJACENT WALLS, SLABS, BEAMS AND COLUMNS.
13. LEAKAGE TESTING OF HYDRAULIC STRUCTURES SHALL NOT BEGIN UNTIL ALL STRUCTURAL ELEMENTS HAVE REACHED THE SPECIFIED MINIMUM CONCRETE STRENGTH. BACKFILL SHALL NOT BE PLACED AROUND ANY HYDRAULIC STRUCTURE UNTIL THE LEAKAGE TEST HAS BEEN COMPLETED UNLESS APPROVED BY THE ENGINEER.

PRECAST CONCRETE:

1. PRECAST VAULTS AND MANHOLES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW YORK. STRUCTURAL DRAWINGS SHALL INDICATE DESIGN IS IN COMPLIANCE WITH THE NEW YORK CITY BUILDING CODE.
2. PRECAST CONCRETE STRUCTURES SHALL BE IN ACCORDANCE WITH THE CONTRACT SPECIFICATION 33 05 61, 03 04 00, 03 48 00, AND 33 46 16. ALL JOINTS SHALL BE SEALED IN ACCORDANCE TO SPECIFICATION.

CONCRETE

1. DESIGN OF CONCRETE ELEMENTS INCLUDING WALLS, FORMED SLABS, BEAMS, AND COLUMNS IS IN ACCORDANCE WITH ACI 318 (CODE REQUIREMENTS FOR STRUCTURAL CONCRETE) AND 350 (CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES).
2. FOR CONCRETE MIX DESIGN SEE SPECIFICATION SECTION 03300.
3. CONCRETE STRENGTH CLASSES (28-DAY COMPRESSIVE STRENGTH):
   A) CLASS 50 PRECAST (5,000 PSI) : ALL PRECAST ELEMENTS AND STRUCTURES.
   B) CLASS 25 CONCRETE (3000 PSI): NORMAL WEIGHT STRUCTURAL CONCRETE USED FOR CONCRETE FILL.
4. ALL BAR REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60. WHERE REINFORCEMENT IS TO BE WELDED IN ACCORDANCE WITH AWS D1.4, ASTM A706 GRADE 60 SHALL BE USED. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
5. CONCRETE COVER FOR REINFORCING (UNLESS NOTED OTHERWISE ON THE DRAWINGS):
   A) CONCRETE DEPOSITED DIRECTLY AGAINST SOIL: 3"
   B) ALL OTHER LOCATIONS: 2"
6. SPLICES SHALL B CLASS "B" CONFORMING TO THE PROVISIONS OF ACI 318 UNLESS NOTED OTHERWISE. SPLICE LENGTH FOR TWO DIFFERENT SIZED BARS TO BE LAP SPLICED TOGETHER SHALL BE THE LENGTH OF THE LARGER BAR UNLESS NOTED OTHERWISE.
7. CONSTRUCTION JOINTS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS. CONSTRUCTION JOINTS NOT SHOWN SHALL BE SUBMITTED BY THE CONTRACTOR FOR THE APPROVAL OF THE ENGINEER PRIOR TO SUBMITTING REBAR SHOP DRAWINGS.
8. ALL JOINTS WHICH ARE IN MEMBERS IN CONTACT WITH LIQUID OR BELOW GRADE SHALL HAVE A WATERSTOP. CONSTRUCTION JOINTS SHALL HAVE A 6" PVC RIBBED WATERSTOP.
9. SLABS WITH SLOPING SURFACES SHALL HAVE THE INDICATED SLAB THICKNESS MAINTAINED AS THE MINIMUM SLAB BOTTOMS CAN EITHER SLOPE WITH THE TOP SURFACE OR BE LEVEL. REINFORCEMENT IN SLABS WITH SLOPING SURFACES SHALL BE PLACED AT THE REQUIRED CLEARANCE FROM THE SLAB SURFACE.
10. ALL EXPOSED CORNERS SHALL HAVE A ¾" CHAMFER OR A ½" RADIUS TOOLED CORNER.
11. EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES AND REVEALS NOT SHOWN ON THE STRUCTURAL DRAWINGS BUT REQUIRED BY OTHER CONTRACT DOCUMENTS, SHALL BE PROVIDED FOR PRIOR TO PLACING CONCRETE.
12. REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY MENTAL PIPE, PIPE FLANGE, METAL CONDUIT, OR OTHER METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM CLEARANCE OF 2" SHALL BE PROVIDED.
13. DOWELS, ANCHOR BOLTS, PIPES, WATERSTOPS AND OTHER EMBEDDED ITEMS SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.
14. CONDUITS AND OTHER SIMILAR ITEMS EMBEDDED IN OR PENETRATING THROUGH CONCRETE SHALL BE SPACED ON CENTER NOT LESS THAN 3 TIMES THEIR OUTSIDE DIMENSION, NOT LESS THAN 2 ½" CLEAR. WHEN SUCK ITEMS ARE EMBEDDED IN WALLS OR SLABS, THEY SHALL NOT OCCUPY MORE THAN 1/3 OF THE MEMBER THICKNESS.
15. DRILLED ADHESIVE DOWELS AND CONCRETE ANCHORS (WHERE DOWELS OR ANCHORS ARE SHOWN TO BE PLACED INTO HARDENED CONCRETE):
   A) THE HOLE DIAMETER SHALL BE NO LARGER THAN 1/8" GREATER THAN THE DIAMETER OF THE REINFORCING BAR AT THE DEFORMATIONS FOR DOWELS. THE HOLE DIAMETER SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR ANCHORS.
   B) THE DEPTH OF EMBEDMENT SHALL BE 12 BAR DIAMETERS, UNLESS NOTED OTHERWISE.
   C) ADJUST THE DOWEL OR ANCHOR LOCATIONS AS NEEDED TO AVOID DRILLING THROUGH ANY REINFORCING BARS. IF THE LOCATION NEEDS TO BE MODIFIED, CONTACT THE ENGINEER. CONTRACTOR SHALL USE NON-DESTRUCTIVE MEANS TO FIELD LOCATE REINFORCEMENT PRIOR TO DRILLING HOLES FOR DOWELS OR ANCHORS.
16. CLEAR DISTANCE FROM ANCHOR RODS TO ANY CONCRETE EDGE SHALL BE 4" MINIMUM UNLESS NOTED OTHERWISE.
17. CONCRETE COMPRESSIVE STRENGTH TESTS SHALL BE AVAILABLE ON THE JOB SITE FOR REVIEW BY THE ENGINEER.

NYC Environmental Protection
CITY OF NEW YORK ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks
CITY OF NEW YORK PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL — STATE OF NEW YORK — SANDEEP MEHROTRA — 102878 — LICENSED PROFESSIONAL ENGINEER
Hazen

PROJECT TITLE
GI-P DESIGN ON-SITE
GREEN INFRASTRUCTURE

DRAWING TITLE
STANDARD DETAILS - 3

DESIGNED BY	DRAWN BY	CHECKED BY
A. EASON	S. KANE	J. BRENNAN

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	AS SHOWN	C902	GI-CONS-7
	DATE: NOV 2026		SHEET No. 3 OF 3 SHEETS

BLOCK
LOT

THE FOLLOWING SHEET SET WAS DEVELOPED BY ARCADIS.
ANY DETAILS WITHIN THIS SHEET SET ARE ONLY APPLICABLE TO THE SITE DESIGNED BY ARCADIS, AS LISTED BELOW:

- HARDING PARK

NYC Environmental Protection
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks
CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL
STATE OF NEW YORK · DEEP P. METROPOLIS · 073826 · LICENSED PROFESSIONAL ENGINEER
Hazen

BLOCK
LOT

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE

DRAWING TITLE
DIVIDER SHEET - ARCADIS

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	O-5	GI-CONS-7
	DATE NOV 2026		SHEET No. 88 OF 133 SHEETS

NEW YORK CITY ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS

NYC Parks

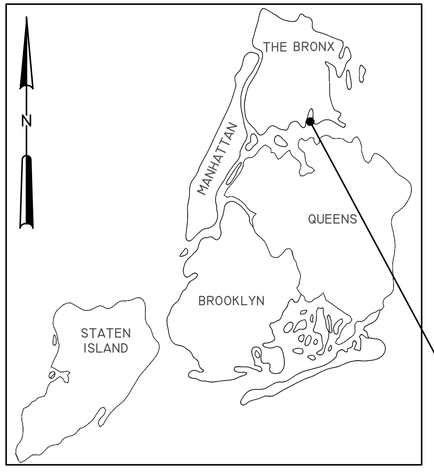
ON-SITE GREEN INFRASTRUCTURE
HUNTS POINT CSO TRIBUTARY AREA
OUTFALL HP-011

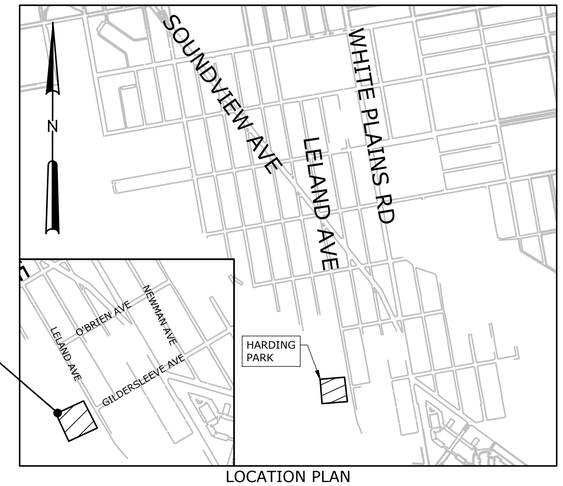
DEP CAPITAL CONTRACT NO. GI-CONS-7

X262 HARDING PARK
GILDERSLEEVE AVE. & LELAND AVE.
BBL# 2034510001
BID SET

BRONX, NY

NOVEMBER 2026





LOCATION PLAN

SHEET LIST	
Sheet Number	Sheet Title
G001	COVER SHEET
G002	GENERAL NOTES
G003	LEGEND AND ABBREVIATIONS
S001	TOPOGRAPHIC SURVEY - 1
S002	TOPOGRAPHIC SURVEY - 2
S003	TOPOGRAPHIC SURVEY - 3
S004	TOPOGRAPHIC SURVEY - 4
S005	TOPOGRAPHIC SURVEY - 5
S006	TOPOGRAPHIC SURVEY - 6
S007	TOPOGRAPHIC SURVEY - 7
B100	BORING PLAN
B101	BORING LOGS
C100	TREE PROTECTION STAGING AND ACCESS PLAN - 1
C101	TREE PROTECTION STAGING AND ACCESS PLAN - 2
C102	REMOVAL AND DEMOLITION PLAN
C200	TRIBUTARY AREA DRAINAGE KEY PLAN
C201	PROPOSED GREEN INFRASTRUCTURE LAYOUT PLAN
C202	MATERIALS PLAN
C203	PLANTING PLAN
C204	PLANTING PLAN - 2
C300	SECTIONS & PROFILES - 1
C301	SECTIONS & PROFILES - 2
C500	DETAILS - 1
C501	DETAILS - 2

John McLaughlin
Digitally signed by John McLaughlin
Date: 2026.11.02 16:32:38 -05'00'

JOHN MCLAUGHLIN
MANAGING DIRECTOR
OFFICE OF ECOSYSTEM SERVICES, GREEN INFRASTRUCTURE AND RESEARCH
BUREAU OF ENVIRONMENTAL PLANNING & ANALYSIS, NYCDEP

Lisa F. Garcia
Digitally signed by Lisa F. Garcia
Date: 2026.11.02 15:21:05 -05'00'

LISA F. GARCIA
COMMISSIONER & CHIEF CLIMATE OFFICER
NYCDEP

File = G:\Projects\500000\510000 - gi\c4-3 design\CAD\final bid documents (dep)\Sheets\Harding park\General\T-1 Saved Date = 6/1/2026 5:09 PM
PLOT DATE: 6/1/2026 5:10 PM BY: AKOPEKIL

GENERAL NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK AND VERIFY ALL SITE CONDITIONS, BOTH ABOVE AND BELOW THE SURFACE, PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING, PRIOR TO THE COMMENCEMENT OF WORK.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS.
3. WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL SAFETY AND OCCUPATIONAL HEALTH LAWS AND REGULATIONS. WHERE THE REQUIREMENTS OF THE SPECIFICATIONS, APPLICABLE LAWS, CRITERIA, ORDINANCES, REGULATIONS, AND REFERENCED DOCUMENTS VARY, THE OWNER SHALL BE CONTACTED AND WILL PROVIDE AN INTERPRETATION FOR THE CONTRACTOR.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THEIR WORK AND NEWLY INSTALLED WORK, AND PROVIDE APPROPRIATE BARRIERS AND SAFETY GUARD RAILS, AS REQUIRED.
5. ALL STREETS, ROADWAYS, AND ACCESS AREAS SHALL REMAIN UNOBSTRUCTED DURING CONSTRUCTION. THE NEED TO TEMPORARILY BLOCK OR CLOSE OFF THESE AREAS SHALL BE COORDINATED WITH THE ENGINEER AND NYC DEP. ADDITIONAL COORDINATION AND PERMITTING WITH NYC DOT AND/OR NYPD MAY BE REQUIRED AND IS THE RESPONSIBILITY OF THE CONTRACTOR, PER GENERAL NOTE 9.
6. ALL AREAS OF THE SITE IMPACTED BY TEMPORARY FACILITIES SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER, BY THE CONTRACTOR, AS DETERMINED BY THE ENGINEER.
7. THE CONTRACTOR SHALL MAINTAIN, AT THE JOB SITE, ONE SET OF FULL-SIZE CONTRACT DRAWINGS MARKED TO SHOW ANY DEVIATIONS THAT HAVE BEEN MADE FROM THE CONTRACT DRAWINGS, INCLUDING BURIED OR CONCEALED CONSTRUCTION AND UTILITY FEATURES REVEALED DURING THE COURSE OF CONSTRUCTION. THESE DRAWINGS SHALL BE AVAILABLE FOR REVIEW BY THE ENGINEER AT ALL TIMES. UPON COMPLETION OF THE INSTALLATION OF NEW WORK THE CONTRACTOR SHALL TURN OVER TO OWNER AND ENGINEER ONE (1) SET OF REPRODUCIBLE AS-BUILT DRAWINGS AND ONE (1) SET OF PRINTS OF AS-BUILT DRAWINGS INCLUDING ALL APPROVED FIELD CHANGES AND DESIGN DEVIATIONS PRIOR TO REQUEST FOR FINAL PAYMENT.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE NYC DPR DETAILS BEING USED FOR CONSTRUCTION ARE IN THE MOST RECENT VERSION ISSUED.
9. THE CONTRACTOR SHALL FILE PLANS WITH GOVERNING LOCAL AND STATE AUTHORITIES HAVING JURISDICTION AND SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR INSTALLATION OF THEIR WORK, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ANY SPECIAL INSPECTIONS REQUIRED, INCLUDING ANY ASSOCIATED COSTS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPROPRIATE AGENCIES PRIOR TO COMMENCING WORK.
10. THE CONTRACTOR SHALL INDEMNIFY NYC DEP, THEIR REPRESENTATIVES, AND THE ENGINEER FROM ANY CLAIMS OR SUITS RESULTING FROM NEGLIGENCE ON THE PART OF THE CONTRACTOR FOR FAILING TO EXECUTE THEIR WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
11. WORK SHALL BE PERFORMED BY LICENSED CONTRACTORS AND WORKERS EXPERIENCED IN THE TRADE HAVING JURISDICTION. WORK SHALL BE SUPERVISED AT ALL TIMES.
12. ANY DEVIATION OR CHANGE IN DESIGN SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER. WORK INSTALLED WITHOUT PRIOR APPROVAL OF THE ENGINEER OR NYC DEP OR FOUND TO BE DEFECTIVE OR OF POOR QUALITY SHALL BE REPLACED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
13. ALL CONSTRUCTION WORK SHALL BE CONFINED TO THE CONTRACT LIMIT LINE INDICATED ON THE DRAWINGS.
14. **OPTION 1 (FOR JOP SITES):** ALL WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS: 9:00 A.M. TO 6:00 P.M. MONDAY THROUGH FRIDAY EXCEPT LEGAL HOLIDAYS OR FOR EMERGENCY REPAIRS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
OPTION 2 (FOR REGULAR PARK SITES): ALL WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS: 7:00 A.M. TO 3:00 P.M. MONDAY THROUGH FRIDAY EXCEPT LEGAL HOLIDAYS OR FOR EMERGENCY REPAIRS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
IF OPTION 1 IS CHOSEN, ADD THE FOLLOWING AS NOTE 15 AND RENUMBER THE SUBSEQUENT NOTES:
15. STATE TESTING OCCURS AT <NAME OF SCHOOL> DURING <DURATION OF TESTING>. NO WORK SHALL OCCUR DURING STATE TESTING UNLESS AUTHORIZED IN BY A SCHOOL REPRESENTATIVE A MINIMUM OF TWO WEEKS IN ADVANCE.
15. WORK AREA SHALL BE LEFT BROOM CLEAN AT THE END OF EACH DAY. DISCARDED AND DEMOLISHED MATERIAL AND RUBBISH SHALL BE REMOVED FROM PREMISES DAILY AND DISPOSED IN A LEGAL AND APPROVED MANNER.
16. ALL WORK SHOWN ON ALL DRAWINGS IS NEW UNLESS OTHERWISE NOTED.
17. THE CONTRACTOR SHALL COORDINATE WITH NYC DEP THE SUPPLY OF TEMPORARY POWER, POTABLE WATER, AND LIGHTING, AS REQUIRED TO PERFORM THE WORK. OBTAINING AND PAYING FOR SUCH TEMPORARY UTILITIES ARE THE CONTRACTOR'S RESPONSIBILITY.
18. STAGING AREA TO BE DESIGNATED PRIOR TO MOBILIZATION AND TO BE APPROVED BY THE ENGINEER AND NYC DEP.
19. CONTRACTOR SHALL COORDINATE AND SCHEDULE CONSTRUCTION ACTIVITIES WITH SITE ACTIVITIES, AS TO NOT INTERFERE WITH NORMAL SITE OPERATION, AND AS REQUIRED TO NOT IMPEDE THE PROGRESS OF RELATED PROJECT WORK.
20. COORDINATION OF ALL WORK UNDER THIS CONTRACT SHALL BE MAINTAINED TO ENSURE THE QUALITY AND TIMELY COMPLETION OF THE WORK.
21. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHEETING AND BRACING IN ALL TRENCHES OR EXCAVATIONS FOR STRUCTURES, WHERE NECESSARY FOR THE PROPER PROTECTION OF PERSONS OR PROPERTY. WHERE THE DEPTH OF EXCAVATION EXCEEDS FIVE (5) FEET, SHEETING AND NECESSARY BRACING MUST BE INSTALLED FOR THE DEPTH EXCEEDING FIVE (5) FEET AND WILL BE PAID FOR UNDER TEMPORARY SHEETING. BENCHED EXCAVATION MAY BE USED TO REDUCE THE AMOUNT OF SHEETING REQUIRED. ALL SHORING WORK SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEW YORK STATE DEPARTMENT OF LABOR, INDUSTRIAL CODE RULE 23 AND TITLE 29 CODE OF FEDERAL REGULATIONS PART 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION (OSHA). THE TYPE OF SHEETING AND BRACING SHALL BE SATISFACTORY TO THE ENGINEER AND SUBJECT TO THEIR APPROVAL, BUT THE APPROVAL OF THE ENGINEER OF A METHOD TO BE USED DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROTECTION AND SAFETY. WHEN SHEETING IS USED IN TRENCHES OR EXCAVATIONS FOR STRUCTURES OF LESS THAN FIVE (5) FEET IN DEPTH, THE COST OF SUCH SHEETING AND BRACING, UNLESS ORDERED LEFT IN PLACE, SHALL BE INCLUDED IN THE PRICE BID FOR UNCLASSIFIED EXCAVATION, AND PAYMENT WILL BE MADE FOR SUCH EXCAVATION AS SHOWN ON THE DRAWINGS.
22. THE CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE WORK OR TO MAKE ITS PARTS FIT TOGETHER PROPERLY WITHOUT COMPROMISING THE QUALITY OF THE WORK.
23. ADDITIONAL NOTES THAT ARE APPLICABLE TO THIS PROJECT MAY BE FOUND THROUGHOUT THE CONTRACT DRAWINGS.

REMOVAL NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK AND VERIFY ALL SITE CONDITIONS, BOTH ABOVE AND BELOW THE SURFACE, PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND ACTUAL FIELD CONDITIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING, PRIOR TO THE COMMENCEMENT OF WORK.
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THIS WORK. THE CONTRACTOR SHALL COORDINATE DEMOLITION WITH APPLICABLE AGENCIES, UTILITY COMPANIES, AND/OR SUB-CONTRACTORS.
3. IT IS MANDATORY, AS PER NYS INDUSTRIAL CODE RULE 53, FOR THE CONTRACTOR TO NOTIFY NEW YORK 811, 60 KNICKERBOCKER AVENUE, BOHEMIA NY 11716, TEL. 800.272.4480 PRIOR TO THE START OF WORK. THE ONE-CALL CENTER IS ALWAYS OPEN. THE ONE-CALL CENTER WILL THEN NOTIFY MEMBER FIRMS WITH OPERATIONS IN THE SITE AREA OF THE CONTRACTOR'S PENDING EXCAVATION OPERATIONS. THE CONTRACTOR WILL RECEIVE A NOTIFICATION TICKET FROM THE ONE-CALL CENTER WHICH SHOULD BE PRESENTED TO THE ENGINEER AS PROOF OF THE CALL. THERE IS NO CHARGE FOR THIS SERVICE. THIS PROCESS ENSURES THAT UTILITY SERVICE LINES ARE PROPERLY MARKED PRIOR TO EXCAVATION TO MINIMIZE FACILITY DAMAGE, ON THE JOB INJURIES, AND CONTRACTOR'S LIABILITY. IN ADDITION, ALL UNDERGROUND FACILITY OPERATORS IN THE AREA WHO ARE NOT ONE-CALL MEMBERS SHALL BE NOTIFIED NOT LESS THAN TWO (2) FULL BUSINESS DAYS AND NOT MORE THAN TEN (10) FULL BUSINESS DAYS BEFORE COMMENCING EXCAVATION.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY DAMAGE AND/OR RESTORE ANY INTERRUPTION TO ANY UTILITY SERVICE THAT MAY BE CAUSED BY THE CONTRACTOR'S CONSTRUCTION OR EQUIPMENT, AT THE CONTRACTOR'S EXPENSE, WITH NO ADDITIONAL EXPENSE TO THE CITY OF NEW YORK OR UTILITY COMPANY.
5. THE CONTRACTOR IS TO USE CARE DURING CONSTRUCTION TO AVOID DISTURBING OR DAMAGING ADJACENT ABOVE-GRADE OR SUBGRADE STRUCTURES, FACILITIES, CURBS, PAVEMENTS, AND PERIMETER FENCING. ANY DAMAGE RESULTING FROM THIS WORK WILL BE RESTORED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
6. WHERE NEW CONSTRUCTION ABUTS EXISTING PAVEMENTS, CURBS, OR WALLS, THE EXISTING MATERIALS SHALL BE CLEANLY SAWCUT TO PROVIDE A CLEAN, NEAT MATCH AND A SMOOTH, FLUSH TRANSITION, AS DIRECTED BY THE ENGINEER. ALL SAWCUTTING SHALL BE DONE TO NEAT, STRAIGHT, AND ACCURATE LINES. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE OLD AND NEW CURBS MEET.
7. THE CONTRACTOR SHALL DISPOSE OF ALL ITEMS AND MATERIALS REMOVED AND NOT SALVAGED, INCLUDING ALL EXCAVATED MATERIAL, OFF-SITE AND IN A LEGAL MANNER. THE CONTRACTOR SHALL REMOVE, EXCAVATE, AND DISPOSE OF ALL MATERIALS ACCORDING TO CONTRACT SPECIFICATIONS.
8. ALL EXISTING PIPING TO BE MAINTAINED EXCEPT FOR WITHIN 3 FEET OF PROPOSED DRAINAGE STRUCTURES AND AS SHOWN. IF EXISTING PIPING BEYOND 3 FEET FROM THE PROPOSED STRUCTURES IS OBSERVED TO BE DAMAGED AT NO FAULT OF THE CONTRACTOR, THE ENGINEER SHALL PROVIDE DIRECTION AS TO EXTENTS OF REPLACEMENT.
9. THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT THE ROOT SYSTEMS OF EXISTING TREES. BULK MATERIAL, EQUIPMENT, OR VEHICLES SHALL NOT BE STOCKPILED OR PARKED WITHIN THE TREE PROTECTION ZONE.

LAYOUT & MATERIAL NOTES

1. NO CHANGES SHALL BE MADE TO THE DESIGN OR LAYOUT WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. LAYOUT THE WORK AS DIMENSIONED ON THE PLANS. WRITTEN DIMENSIONS SHALL GOVERN. DO NOT SCALE DISTANCES.
2. CONTRACTOR SHALL STAKE LOCATION OF ALL GREEN INFRASTRUCTURE PRACTICES FOR APPROVAL BY THE ENGINEER PRIOR TO EXCAVATION WORK.
3. CONTRACTOR SHALL LAYOUT IN THE FIELD THE ALIGNMENT AT ALL PATHS, PAVEMENTS, CURBLINES FOR REVIEW BY THE ENGINEER PRIOR TO THE START OF WORK. ADJUSTMENTS MAY BE MADE ONLY AS DIRECTED BY THE ENGINEER. CONTRACTOR MAY NOT PROCEED WITH CONSTRUCTION OF IMPROVEMENTS UNTIL THEY HAVE RECEIVED THE FINAL APPROVAL OF THE LAYOUT FROM THE ENGINEER.
4. ALL NEW PAVEMENTS AND CURBS AND EXISTING PAVEMENTS AND CURBS TO REMAIN SHALL MEET IN SMOOTH FLUSH CONDITION UNLESS NOTED OTHERWISE.
5. NEW CURBS, WALLS, AND PAVEMENTS SHALL BE BUILT TO A SMOOTH EVEN FINISH WITH A CONSISTENT TOP AND PROFILE WITHOUT WAVES OR IRREGULARITIES. ANY WORK NOT MEETING THIS QUALITY STANDARD SHALL BE RECONSTRUCTED AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL EXERCISE CARE DURING EXCAVATION OPERATIONS TO AVOID DISTURBING ADJACENT FACILITIES, SUB GRADE STRUCTURES AND TREES. ALL DAMAGE RESULTING FROM THE CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REPAIRED AT NO EXPENSE TO THE CITY AND THE AGENCY. ALL REPAIR WORK SHALL BE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
7. IN AREAS WHERE NEW PAVEMENTS FALL WITHIN THE TREE PROTECTION ZONE OF EXISTING TREES, THE CONTRACTOR SHALL MINIMIZE EXCAVATIONS AT TREE ROOTS BY REDUCING THE AMOUNT OF FOUNDATION MATERIAL AS DIRECTED BY THE ENGINEER.
8. CONTRACTOR SHALL REFER TO NYC DEP'S NYC GREEN INFRASTRUCTURE ON-SITE DESIGN MANUAL (MAY 2019) FOR THE CONSTRUCTION OF ALL GREEN INFRASTRUCTURE PRACTICES.

TREE PROTECTION NOTES

1. NO LAND DISTURBANCE, DEMOLITION, OR CONSTRUCTION ACTIVITIES SHALL BEGIN UNTIL ALL TREE PROTECTION MEASURES HAVE BEEN INSTALLED AS SHOWN ON THE CONTRACT DRAWINGS.
2. CONSTRUCTION ACCESS ROUTE IS DIAGRAMMATIC. FINAL ROUTE SHALL BE ESTABLISHED ON SITE AND APPROVED BY THE RESIDENT ENGINEER, IN CONSULTATION WITH THE BOROUGH FORESTER OR THEIR REPRESENTATIVE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND PRESERVATION OF ALL EXISTING TREES NOT LISTED FOR REMOVAL THAT ARE LOCATED COMPLETELY OR PARTIALLY WITHIN THE CONTRACT LIMIT LINE.
4. THE CONTRACTOR SHALL NOTIFY THE BOROUGH FORESTER A MINIMUM OF 48 HOURS IN ADVANCE OF ANY WORK ON OR IMPACTING EXISTING TREES, INCLUDING BUT NOT LIMITED TO TREE PROTECTION, PRUNING, TREE REMOVAL, EXCAVATION WITHIN TREE PROTECTION ZONES, DECOMPACTION, TOPSOIL, AND PLANTING WORK.
5. THE TREE PROTECTION ZONE (TPZ) SHALL CONSIST OF THE CRITICAL ROOT ZONE AND/OR THE CANOPY DRIPLINE; WHICHEVER EXTENT IS GREATER.
6. THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT THE ROOT SYSTEMS OF EXISTING TREES. MATERIAL, EQUIPMENT, OR VEHICLES SHALL NOT BE STOCKPILED OR PARKED WITHIN THE TPZ OF ANY TREE COMPLETELY OR PARTIALLY WITHIN THE CONTRACT LIMIT LINE TO MINIMIZE SURFACE AND SUBSURFACE ROOT AND SOIL COMPACTION. IF STOCKPILING OCCURS WITHIN THE TPZ, A STOP WORK ORDER SHALL BE ISSUED IMMEDIATELY, AND WORK SHALL NOT RE-COMMENCE UNTIL ALL STOCKPILED MATERIAL IS REMOVED FROM THE TPZ AND MITIGATION MEASURES ARE PERFORMED TO THE SATISFACTION OF THE RESIDENT ENGINEER IN CONSULTATION WITH THE BOROUGH FORESTER OR THEIR REPRESENTATIVE.
7. IF DIRECTED, THE TPZ SHALL BE COVERED WITH WOOD CHIPS TO A DEPTH OF AT LEAST SIX (6) INCHES, WITH PLYWOOD OR GROUND PROTECTION MATS, OR A COMBINATION THEREOF. SUCH COVERING SHALL BE MAINTAINED FOR THE DURATION OF THE CONTRACT AND IS NOT TO BE REMOVED UNTIL DIRECTED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE. REMOVAL SHALL BE BY HAND OR AS SPECIFIED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE (ITEM "PROTECT EXIST. TREE ROOTS W/ WOOD CHIPS 6" DEPTH" AND "PROTECT EXIST. TREE ROOTS W/ PLYWOOD").
8. TEMPORARY WOODEN TREE GUARDS WITH WRAP FOR INDIVIDUAL TREES, TEMPORARY WOODEN TREE GUARD FOR GROVES, AND TEMPORARY SNOW FENCE BOUNDARY SHALL BE MAINTAINED FOR THE DURATION OF THE CONTRACT AND ARE NOT TO BE REMOVED UNTIL DIRECTED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE.
9. ALL TREES COMPLETELY OR PARTIALLY WITHIN THE CONTRACT LIMIT LINE ARE TO RECEIVE AT LEAST ONE (1) INCH (THE EQUIVALENT OF 750 GALLONS OF WATER PER 1,000 SQUARE FEET OF TREE PROTECTION ZONE) OF WATER PER WEEK BETWEEN THE MONTHS OF MARCH AND OCTOBER. IF RAINWATER IN ANY GIVEN WEEK IS BELOW THIS QUANTITY, THE CONTRACTOR MUST SUPPLEMENT THE AMOUNT RECEIVED BY A METHOD APPROVED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
10. ALL TREE PRUNING AND TREE REMOVAL IS TO BE PERFORMED IN ACCORDANCE WITH ANSI A300 STANDARDS BY AN ARBORIST HOLDING CERTIFICATION FROM THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) OR EQUIVALENT EDUCATION AND EXPERIENCE. ANSI PRUNING TYPES SPECIFIED ON TREE PROTECTION SCHEDULE AND TREE DIAMETERS AT BREAST HEIGHT ARE TO BE CONFIRMED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE BEFORE PRUNING WORK IS PERFORMED.
11. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN REMOVING CONCRETE OR ASPHALT WITHIN THE DRIPLINE OF EXISTING TREES - LIFTING RATHER THAN DRAGGING PIECES OF PAVING. TOOLS FOR THIS ACTIVITY SHALL BE APPROVED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE PRIOR TO THE START OF EXCAVATION.
12. ALL EXCAVATION AND PLANT INSTALLATION WITHIN THE TPZ SHALL BE PERFORMED BY HAND OR PNEUMATICALLY, WITH MINIMAL SOIL DISTURBANCE, AND UNDER THE SUPERVISION OF THE BOROUGH FORESTER OR THEIR REPRESENTATIVE. PLANTS SHALL NOT BE PLACED WITHIN THREE (3) FEET OF THE TREE TRUNK UNLESS APPROVED.
13. NO ROOTS SHALL BE CUT WITHOUT THE WRITTEN AUTHORIZATION OF THE BOROUGH FORESTER OR THEIR REPRESENTATIVE.
14. EXCAVATED AREAS WITHIN THE TPZ SHALL BE BACKFILLED IMMEDIATELY OR ROOTS SHALL BE KEPT CONSTANTLY MOIST WITH BURLAP COVERED WITH WHITE PLASTIC AND CHECKED A MINIMUM OF TWO (2) TIMES A DAY, ONCE IN THE MORNING AND ONCE IN THE AFTERNOON, FOR A MAXIMUM OF FORTY-EIGHT (48) HOURS, UNTIL BACKFILL IS COMPLETE. IF DIRECTED, SOAKER HOSES SHALL BE INSTALLED TO FACILITATE PROPERLY MOIST CONDITIONS. NO POOLING OF OR CONTINUOUS RUNNING WATER SHALL OCCUR WITHIN THE TPZ OTHER THAN THAT DURING THE IRRIGATION PROCESS. IF ROOTS ARE TO BE EXPOSED FOR A PERIOD GREATER THAN 48-HOURS, THE EXPOSED AREA SHALL BE COVERED WITH AT LEAST 6-INCHES OF MULCH AND MAINTAINED DURING THE COURSE OF CONSTRUCTION UNTIL THE AREA CAN BE PROPERLY BACKFILLED.
15. WHEN A TREE PROTECTION DEFICIENCY, AS DETERMINED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE, IS IDENTIFIED, IT MUST BE REMEDIED WITHIN 24-HOURS OF NOTIFICATION BY THE AGENCY. FAILURE TO CORRECT THE DEFICIENCY WITHIN THIS TIMEFRAME WILL RESULT IN A STOP WORK ORDER, LIQUIDATED DAMAGES, OR BOTH.
16. ANY DAMAGE TO EXISTING TREES DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL MITIGATE SUCH DAMAGE AS DIRECTED BY THE BOROUGH FORESTER OR THEIR REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
17. THE CONTRACTOR SHALL BE ASSESSED RESTITUTION, AS SOLELY DETERMINED BY THE DEPARTMENT OF PARKS AND RECREATION (NYCDPR), FOR TREES THAT ARE INJURED, IRREPARABLY DAMAGED, DESTROYED, OR REMOVED WITHOUT AUTHORIZATION.

DRAINAGE NOTES

1. ALL PROPOSED DRAINAGE WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCDEP) AND THE LATEST STANDARDS OF THE DEPARTMENT OF PARKS AND RECREATION (NYCDPR). DISCREPANCIES BETWEEN THE STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
2. ALL EXISTING SEWER MANHOLES TO BE RETAINED WITHIN THE CONTRACT LIMIT LINE SHALL BE ADJUSTED AS NECESSARY, SO THAT THEY WILL BE FLUSH WITH THE FINISHED GRADES AFTER COMPLETION OF THE WORK. ANY OF THESE MANHOLES WHICH HAVE DAMAGED, WORN OR NON-STANDARD FRAMES AND COVERS SHALL BE PROVIDED WITH NEW 27" DIA. CASTINGS IN ACCORDANCE WITH THE LATEST STANDARDS OF NYC PARKS INCLUDING ANY NECESSARY MODIFICATIONS OF THE MANHOLE MASONRY. ANY DAMAGE TO THE MANHOLES CAUSED BY THIS WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AND AT NO COST TO THE CITY.
3. CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING SEWERS DURING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER, AT NO EXTRA COST TO THE CITY.
4. WHERE THE HEIGHT OF AN EXISTING MANHOLE PERMITS MORE THAN ONE BASIN CONNECTION TO BE MADE ON THE SAME WALL, SPECIAL PRECAUTION SHALL BE TAKEN TO PROTECT THE STRUCTURAL INTEGRITY OF THE MANHOLE. THE MINIMUM CLEARANCE BETWEEN THE OUTSIDE WALLS OF ANY TWO BASIN CONNECTIONS OR BETWEEN A BASIN CONNECTION AND A SEWER, VERTICALLY OR HORIZONTALLY, SHALL BE 12 INCHES.
5. THE COST OF RAISING OR LOWERING CITY-OWNED MANHOLES, BASINS AND INLET HEADS TO PROPOSED GRADES WILL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL THE SCHEDULED ITEMS WHEN THE VERTICAL UPWARD MOVEMENT OF ALL HEADS IS TWENTY-FOUR (24) INCHES OR LESS, WHEN THE VERTICAL DOWNWARD MOVEMENT OF MANHOLE HEADS IS SIX (6) INCHES OR LESS AND WHEN THE VERTICAL DOWNWARD MOVEMENT OF BASIN OR INLET HEADS IS THREE (3) INCHES OR LESS, UNLESS OTHERWISE PROVIDED OR DIRECTED, AND WHERE THE ADJUSTMENT IS WITHIN THE BRICK WORK LIMIT. WHEN THE EXISTING STRUCTURE CONSISTS OF A BRICK CHIMNEY OR A CONCRETE ROOF SLAB OR BRICK ON CONCRETE WALLS, THE MAXIMUM ALLOWABLE HEIGHT OF BRICK AFTER ADJUSTMENT SHALL BE TWENTY-FOUR (24) INCHES. ALL OTHER ADJUSTMENTS WILL BE PAID FOR UNDER THE APPROPRIATE MANHOLE, BASIN OR INLET MODIFICATION ITEMS.
6. ALL ABANDONED BASINS, INLETS AND DRAINAGE STRUCTURES AS SHOWN ON THE CONTRACT PLANS ARE TO BE BULK-HEADED AND CUT DOWN TO TWO (2) FEET BELOW THE SUBGRADE AND FILLED WITH COMPACTED CLEAN SAND. BASIN CONNECTIONS NOT REQUIRED SHALL BE PLUGGED AT BOTH ENDS. COST FOR THIS WORK SHALL BE DEEMED INCLUDED IN PRICES BID FOR ALL SCHEDULED ITEMS.
7. CATCH BASINS SHALL NOT, UNDER ANY CIRCUMSTANCES, BE CONNECTED TO SANITARY SEWERS.
8. ALL NEW CATCH BASIN CONNECTIONS SHALL BE CONNECTED TO EXISTING SEWERS AT MANHOLES, WITH DUCTILE IRON PIPE, CLASS 56, WITH INTERNALLY LOCKED "PUSH-ON" JOINTS LAID ON 6" OF BROKEN STONE FOR THE ENTIRE WIDTH OF THE TRENCH AND FOR ONE-HALF THE PIPE DIAMETER. THE BROKEN STONE SHALL BE HARD UNWEATHERED STONE UNIFORMLY GRADED FROM 1/4" TO 3/4"IN DIAMETER. IT SHALL CONFORM TO COMMERCIAL 1/4" TO 3/4" STONE. ALL NEW CATCH BASINS SHALL HAVE A HOOD ON THE OUTLET PIPE.
9. SLOPE ON ALL NEW CATCH BASIN CONNECTIONS SHALL BE A MINIMUM OF 1/2% AND A MAXIMUM OF 4% PROVIDED THE TOTAL DROP BETWEEN THE BASIN AND THE BASIN/MANHOLE IS AT LEAST 6 INCHES.
10. CATCH BASINS IN THE PROJECT AREA SHALL BE MAINTAINED OPERABLE AT ALL TIMES. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID FILLING THE CATCH BASINS WITH DEBRIS WITHIN THE CONTRACT LIMIT LINE DURING THE CONTRACT OPERATIONS. IF, AS A RESULT OF CONSTRUCTION, A FLOODING CONDITION OCCURS, OR IN THE EVENT THE CONTRACTOR'S OPERATIONS DAMAGE OR BLOCK THE DRAINAGE SYSTEM, THE CONTRACTOR SHALL AT THEIR OWN EXPENSE IMMEDIATELY REPAIR OR RESTORE THE DRAINAGE SYSTEM AS DIRECTED BY THE ENGINEER AT NO EXTRA COST TO THE CITY.
11. CONTRACTOR SHALL PROVIDE TEMPORARY MEANS (PIPES, PUMPS, ETC.) TO DRAIN ANY STORMWATER WHICH MAY DEVELOP WITHIN THE CONTRACT LIMIT LINE FOR THE DURATION OF CONSTRUCTION. CONTRACTOR SHALL SUBMIT A DRAINAGE SCHEME WHICH MUST BE APPROVED BY THE ENGINEER PRIOR TO THE START OF EACH CONSTRUCTION STAGE. COST OF THIS WORK WILL BE DEEMED TO HAVE BEEN INCLUDED IN THE PRICE BID FOR ALL SCHEDULED ITEMS.
12. ALL EXISTING SEWERS AND SEWER HOUSE CONNECTIONS SHALL BE CONTINUOUSLY MAINTAINED DURING CONSTRUCTION BY THE CONTRACTOR. IF ANY SEWER OR SEWER HOUSE CONNECTION IS TO BE DISCONNECTED FOR CONSTRUCTION PURPOSES, FLOW SHALL BE MAINTAINED BY FLUMING OR OTHER SUITABLE MEANS AS DIRECTED BY THE ENGINEER AND IN SUCH A MANNER THAT NO BACK-UPS OCCUR. EXISTING SEWERS, HOUSE CONNECTIONS OR OTHER SEWER APPURTENANCES WHICH ARE TO REMAIN, AND WHICH MIGHT BE DISTURBED FOR CONSTRUCTION PURPOSES, SHALL BE RESTORED TO THEIR PRESENT CONDITION AFTER COMPLETION OF THE WORK, AND ANY DAMAGE DONE AS A RESULT OF THE WORK SHALL BE REPAIRED AT NO EXTRA COST TO THE CITY.

EROSION AND SEDIMENT CONTROL NOTES

1. NO LAND DISTURBANCE, DEMOLITION OR CONSTRUCTION ACTIVITIES SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING, BUT NOT LIMITED TO, SILT FENCING, INLET PROTECTION, AND TREE PROTECTION HAVE BEEN INSTALLED AS SHOWN ON THE CONTRACT DRAWINGS. IF CLEARING IS REQUIRED FOR INSTALLATION OF A PARTICULAR MEASURE, ALL MEASURES NOT REQUIRING CLEARING SHALL BE INSTALLED FIRST. CLEARING OF THE NECESSARY LAND FOR INSTALLATION OF THE PARTICULAR MEASURE MAY THEN PROCEED.
2. DUE TO THE NATURE OF THE WORK REQUIRED BY THIS CONTRACT, IT IS ANTICIPATED THE LOCATION AND NATURE OF EROSION AND SEDIMENT CONTROL MEASURES WILL BE ADJUSTED AS CONSTRUCTION PROGRESSES TO REFLECT THE CURRENT PHASE OF WORK. THE CONSTRUCTION SCHEDULE ADOPTED BY THE CONTRACTOR WILL IMPACT THE PLACEMENT AND NEED FOR SPECIFIC DEVICES REQUIRED FOR THE CONTROL OF EROSION. THE LOCATION AND EXTENT OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REVISED AT EACH PHASE OF CONSTRUCTION RESULTING IN A CHANGE OF EITHER THE QUANTITY OR DIRECTION OF SURFACE RUNOFF FROM THE CONSTRUCTION AREAS.
3. INLET PROTECTION IS REQUIRED FOR ALL CATCH BASINS AND MANHOLES WITH OPEN GRATES WITHIN THE CONTRACT LIMIT LINE.
4. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM THE ENGINEER AND REGULATORY AGENCIES FOR DEVIATIONS FROM THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
5. CLEARING SHALL BE LIMITED AS MUCH AS POSSIBLE TO AREAS REQUIRED FOR CURRENT CONSTRUCTION ACTIVITIES. MASS CLEARING AND GRADING SHALL BE AVOIDED.
6. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE ENGINEER WITHIN 24 HOURS FOLLOWING EVERY RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY SEVEN CALENDAR DAYS.
7. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REPAIRED OR REPLACED IMMEDIATELY AS REQUIRED TO MAINTAIN PERFORMANCE OF MEASURE. MEASURES SHALL BE CLEANED WHEN SEDIMENT VOLUME REACHES ½ OF TOTAL VOLUME OF MEASURE. REMOVED SEDIMENT SHALL BE DISPOSED OF IN SUCH A MANNER AND LOCATION AS TO INSURE FURTHER SEDIMENT TRANSPORT DOES NOT OCCUR.
8. CONTRACTOR SHALL INITIATE STABILIZATION MEASURES AS SOON AS PRACTICABLE ON STOCKPILES AND IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. THIS REQUIREMENT DOES NOT APPLY IN THE FOLLOWING INSTANCES:
   a. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE;
   b. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN FOURTEEN (14) DAYS, TEMPORARY STABILIZATION MEASURES NEED NOT BE INITIATED ON THAT PORTION OF THE SITE.
9. ALL DISTURBED AREAS SHALL DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBANCE ACTIVITIES AND UNTIL FINAL STABILIZATION IS ACHIEVED. SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORING, OR OTHER ACTIVITIES SHALL BE PUMPED INTO A SEDIMENT TRAPPING DEVICE PRIOR TO BEING DISCHARGED INTO A STREAM, POND, SWALE, OR CATCH BASIN.
10. SOIL STOCKPILE AND LAYDOWN AREAS SHALL HAVE PERIMETER SEDIMENT CONTROL MEASURES AND TEMPORARY OR PERMANENT STABILIZATION MEASURES INSTALLED AS SOON AS POSSIBLE AND AT COMPLETION OF STOCKPILING AND LAYDOWN ACTIVITIES. STOCKPILE SIDE SLOPES SHALL NOT EXCEED 3H ; 1V UNLESS APPROVED BY ENGINEER. TOP OF STOCKPILE SHALL BE GRADED WITH A MINIMUM 5% SLOPE TO INSURE PROPER DRAINAGE.
11. ALL DISTURBED AREAS, EXCEPT FOR CONCRETE AND PAVED AREAS, SHALL BE FERTILIZED, SEEDED AND MULCHED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE SEEDING SCHEDULE, AND RE-SEEDED AS NECESSARY, TO ESTABLISH AND MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
12. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED OFFSITE ROADWAYS. IF MATERIAL IS TRACKED ONTO OFFSITE ROADWAYS, IT SHALL BE REMOVED IMMEDIATELY. DO NOT UTILIZE A WATER HOSE TO CLEAN ROADS UNLESS THE RUNOFF IS DIRECTED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT CONTROL DEVICE. PROPER PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT MATERIALS DEPOSITED ONTO OFFSITE ROADWAYS ARE REMOVED SO THAT THEY DO NOT ENTER YARD INLETS, CATCH BASINS, SEWERS, WETLANDS, SURFACE WATER BODIES, OR ROADSIDE SWALES.
13. WHERE CONCRETE EQUIPMENT WASHING IS REQUIRED, THIS MUST BE DONE IN AN APPROVED “CONCRETE CONTAINMENT AREA”. CONTRACTOR SHALL NOT DISCHARGE ANY CONCRETE WASHOUT WATER INTO SEWERS, SURFACE WATER BODIES OR ONTO THE GROUND. ALL WASHOUT WATER MUST BE REMOVED FROM THE SITE(S) DAILY.
14. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST NEW YORK STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
15. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE, PERMANENT VEGETATION IS ESTABLISHED ON ALL DISTURBED AREAS, AND THE ENGINEER HAS GIVEN PERMISSION FOR REMOVAL.

NYC Environmental Protection

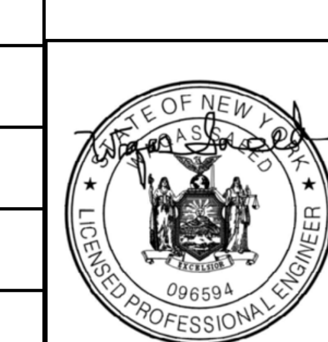
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL



BLOCK 3451

LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
GENERAL NOTES

DESIGNED BY	DRAWN BY		CHECKED BY
SF/AK	SF/AK		WS
B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
		G002	GI-CONS-7
	DATE: NOV 2026		SHEET No. 2 OF 24 SHEETS

ABBREVIATIONS

AS PER RECORD	(A)
ASPHALT	ASPH.
BOTTOM OF CURB	B.C.
BOTTOM OF WALL	B.W.
CAST IRON	C.I.
CATCH BASIN	C.B.
CHAIN LINK FENCE	C.L.F
COMBINED	COMB.
CONCRETE	CONC.
CONCRETE CURB	C.C.
CONCRETE SIDEWALK	C.S.W.
CONSTRUCTION LIMIT LINE	C.L.L.
COPPER TUBING	C.T.
CRITICAL ROOT ZONE	C.R.Z.
DROP CURB	D.C.
DIAMETER	DIA.
DUCTILE IRON PIPE	D.I.P.
ELEVATION	ELEV.
EXISTING	EXIST.
EXTRA STRENGTH STEEL PIPE	E.S.S.P.
EXTRA STRENGTH VITRIFIED PIPE	E.S.V.P.
FROM RECORD PLAN	F.R.P.
GRANITE CURB	GRAN C.
HIGH DENSITY POLYETHYLENE	H.D.P.E.
INNER DIAMETER	I.D.
INVERT	INV.
LINED CAST IRON PIPE	L.C.P.
METAL FENCE	M.F.
OUTER DIAMETER	O.D.
ON CENTER	O.C.
MANHOLE	M.H.
NOT TO SCALE	N.T.S.
PAVERS	PAV.
PERFORATED POLYETHYLENE CORRUGATED PIPE	P.P.C.P.
PIPE RAIL FENCE	P.R.F
POLYETHYLENE CORRUGATED PIPE	P.C.P.
POLYVINYL CHLORIDE PIPE	P.V.C.
REINFORCED CONCRETE PIPE	R.C.P.
SANITARY	SAN.
SEWER	SWR.
STEEL FACED CURB	S.F.C.
STEEL WICKET FENCE	S.W.F.
STORM	STM.
TOP OF CURB	T.C.
TOP OF HOOD	T.O.H.
TOP OF WALL	T.W.
TREE PROTECTION ZONE	T.P.Z.
UNKNOWN	UNK.
VITRIFIED TILE PIPE	V.T.P.
WROUGHT IRON FENCE	W.I.F.

	EXISTING	PROPOSED
ELECTRIC MANHOLE	E E	E E
TELEPHONE MANHOLE	T	T
GAS MANHOLE	G	G
WATER MANHOLE	W	W
FIRE DEPT. MANHOLE	F	F
STORM SEWER MANHOLE	S	STM
COMBINED SEWER MANHOLE	S	COMB
SANITARY SEWER MANHOLE	S	SAN
UNIDENTIFIED MANHOLE (NO RECORD AVAILABLE)	MH	MH
RECORD MANHOLE		S
HARDWARE RIM EL. & INV. EL. (SEWER, ETC.)	S 61.23 INV.47.89	S 61.23 INV.47.89
CATCH BASIN		
INLET		
YARD DRAIN		
LOW PRESSURE HYDRANT		
HIGH PRESSURE HYDRANT		
WOOD UTILITY POLE		
WOOD UTILITY POLE WITH STREET LIGHT		
STREET LIGHT (METAL POLE)		
GAS VALVE	G	G
WATER VALVE	W	W
TREE (SIZE AS LABELED)		7"
SHRUB		
SIGN (GROUND MOUNTED)		
DRINKING FOUNTAIN		
FLAGPOLE		
MAPPED PROPERTY LINE	PL	
WATER SERVICE (WITH SIZE - LESS THAN 5")	1" WATER	1" WATER
8" WATER MAIN	8" WATER	8" WATER
12" WATER MAIN	12" WATER	12" WATER
48" WATER MAIN	48" WATER	48" WATER
72" WATER MAIN	72" WATER	72" WATER
STORM SEWER (WITH SIZE - LESS THAN 24")	15" STM. SEWER	15" STM. SEWER
STORM SEWER (WITH SIZE - 24" OR GREATER)	24" STM. SEWER	24" STM. SEWER
SANITARY SEWER (WITH SIZE - LESS THAN 24")	15" SAN. SEWER	15" SAN. SEWER
SANITARY SEWER (WITH SIZE - 24" OR GREATER)	24" SAN. SEWER	24" SAN. SEWER
COMBINED SEWER (WITH SIZE - LESS THAN 24")	15" COMB. SEWER	15" COMB. SEWER
COMBINED SEWER (WITH SIZE - 24" OR GREATER)	24" COMB. SEWER	24" COMB. SEWER
GAS LINE (WITH SIZE)	4" GAS	4" GAS
ELECTRIC	ELECTRIC	ELECTRIC
TELEPHONE	TELEPHONE	TELEPHONE
CABLE	CABLE	CABLE
FIRE ALARM	FIRE ALARM	FIRE ALARM
OVERHEAD (AERIAL) UTILITY LINE	A/E,T,F	A/E,T,F
CHAIN LINK FENCE (W/ HEIGHT)	6'	6'
IRON PICKET FENCE (W/ HEIGHT)	5'	5'
WIRE FENCE (W/ HEIGHT)	5'	
IRON ON CONCRETE COPING		
WOOD PICKET FENCE (W/ HEIGHT)	4'	4'
GUARD POST	GP	GP
BEAM TYPE MALL BARRIER		
PORTABLE PRECAST CONCRETE BARRIER		
CAST IN PLACE CONCRETE BARRIER		
RETAINING WALL (W/TYPE)	RW (STN.)	RW (STN.)
RAILROAD/TROLLEY TRACK		

LOT & BLOCK NUMBER 39 BLOCK 2109

ANGLE 0.00

LEGEND

	EXISTING	PROPOSED
TREE DRIPLINE		
TREE CRITICAL ROOT ZONE		
TREE PROTECTION ZONE		
MAJOR CONTOUR LINE	35	36
MINOR CONTOUR LINE	35	36
CONSTRUCTION ACCESS/ENTRANCE		
STAGING AREA		
STABILIZED CONSTRUCTION ENTRANCE		
TEMPORARY ASPHALT ENTRANCE		
FULL DEPTH PAVEMENT REMOVAL		
FULL DEPTH ASPHALT INSTALLATION		
FULL EXCAVATION LIMIT		
SAWCUT LIMIT		
PIPE REMOVAL		
POINT OF BEGINNING		
CONSTRUCTION LIMIT LINE		CLL
SILT FENCE		SF SF
TEMPORARY CONSTRUCTION FENCE		CF
STRAW BALE DIKE		
TREE TO BE PROTECTED		## 7"
TREE TO BE TRANSPLANTED		## 7"
TREE TO BE REMOVED		## 7"
BORING LOCATION		B
PERMEABILITY TEST LOCATION		PT
GREEN INFRASTRUCTURE PRACTICE		
CLEANOUT		
ON-SITE GREEN INFRASTRUCTURE MANHOLE		
OUTLET CONTROL STRUCTURE		
DUAL CATCH BASIN		
MODIFIED CURB INLET		
PROPOSED STORM DRAIN (W/ FLOW DIRECTION)		
DRAINAGE AREA		
FLOW DIRECTION		FLOW
GREEN INFRASTRUCTURE CHARACTERISTICS		GI PRACTICE ID: TRIBUTARY AREA / VOLUME OF X.XX" STORM / CAPACITY MANAGED

NYC Environmental Protection

CITY OF NEW YORK
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Bureau of Environmental Planning and Analysis

NYC Parks
CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL: STATE OF NEW YORK · DAVID A. KOLLAR · 096594 · LICENSED PROFESSIONAL ENGINEER

BLOCK 3451
LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
LEGEND AND ABBREVIATIONS

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	NTS	G003	GI-CONS-7
	DATE: NOV 2026		SHEET No. 3 OF 24 SHEETS

MATCHLINE - SHEET 4 OF 8

MATCHLINE - SHEET 3 OF 8

LELAND AVENUE
(50'-WIDE R.O.W. NYC PLANNING STREET MAP)
(27'-WIDE ROADWAY)
ASPH. PVMT.

BRONX RIVER AVENUE
(R.O.W. VARIES NYC PLANNING STREET MAP)

8" WATER (REF. 1)

RIM 13.33

RIM 13.91
INV. A -2.4
INV. B -2.4

8'-9" X 8'-0" RC BOX SEWER (REF. 2)

PNT No. 6394
N: 233796.564
E: 1023548.497
Z: 13.594'
MAG SET

FLOW

EDGE OF PAVEMENT

5.5' HT CLF

8' HT CLF

PNT No. 6276
N: 233833.381
E: 1023517.865
Z: 13.027'
MAG SET

PNT No. 6275
N: 233875.803
E: 1023492.804
Z: 11.796'
REBAR CAR SET

6" CIP SEWER (REF. 2)

1" PE(B) GAS (REF. 3)

EDGE OF ASPHALT

ASPHALT PAVEMENT

N:233797.47
E:1023486.03

OVERGROWN VEGETATION

ROCKS

ROCKS AREA

PNT No. 6395
N: 233762.057
E: 1023475.847
Z: 7.848'
RBC

STUMP
(TYP.)

PNT No. 6210
N: 233957.485
E: 1023437.007
Z: 8.829'
REBAR CAP SET

BLOCK 3440
207
N/F (NYC PARKS)
PER NYC D.O.F.
RECORDED
IN (ACRIS)

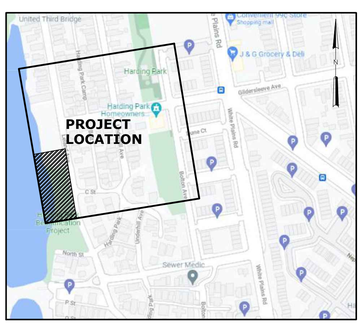
BLOCK 3440
12
N/F (NYC PARKS)
PER NYC D.O.F.
RECORDED
IN (ACRIS)

BLOCK 3440
205
N/F (NYC PARKS)
PER NYC D.O.F.
RECORDED
IN (ACRIS)

BLOCK 3440
12
N/F (NYC PARKS)
PER NYC D.O.F.
RECORDED
IN (ACRIS)

BRONX RIVER

BRONX RIVER



GOOGLE MAP *NOT TO SCALE*

NOTES

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3. GAS: CONSOLIDATED EDISON CO. OF N.Y. - BRONX PLATE NO. 4-5 & 5-S
4. ELECTRIC:
   NOTE: LOW TENSION MAINS PLATES UNAVAILABLE AT TIME OF INITIAL SURVEY ISSUANCE.
5. CABLE: UTILITY PLATE PROVIDED BY CABLE VISION

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5. DIGITAL NYC TAX MAP EFFECTIVE DATE: 12-05-2008 END DATE: CURRENT.

GRAPHIC SCALE
1 inch=10 feet

NO.	DATE	ISSUED FOR	BY

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Bureau of Environmental Planning and Analysis

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SEAL

STATE OF NEW YORK · DAVID STEPHEN WYGNESS · 049314 · LICENSED LAND SURVEYOR

BLOCK

LOT

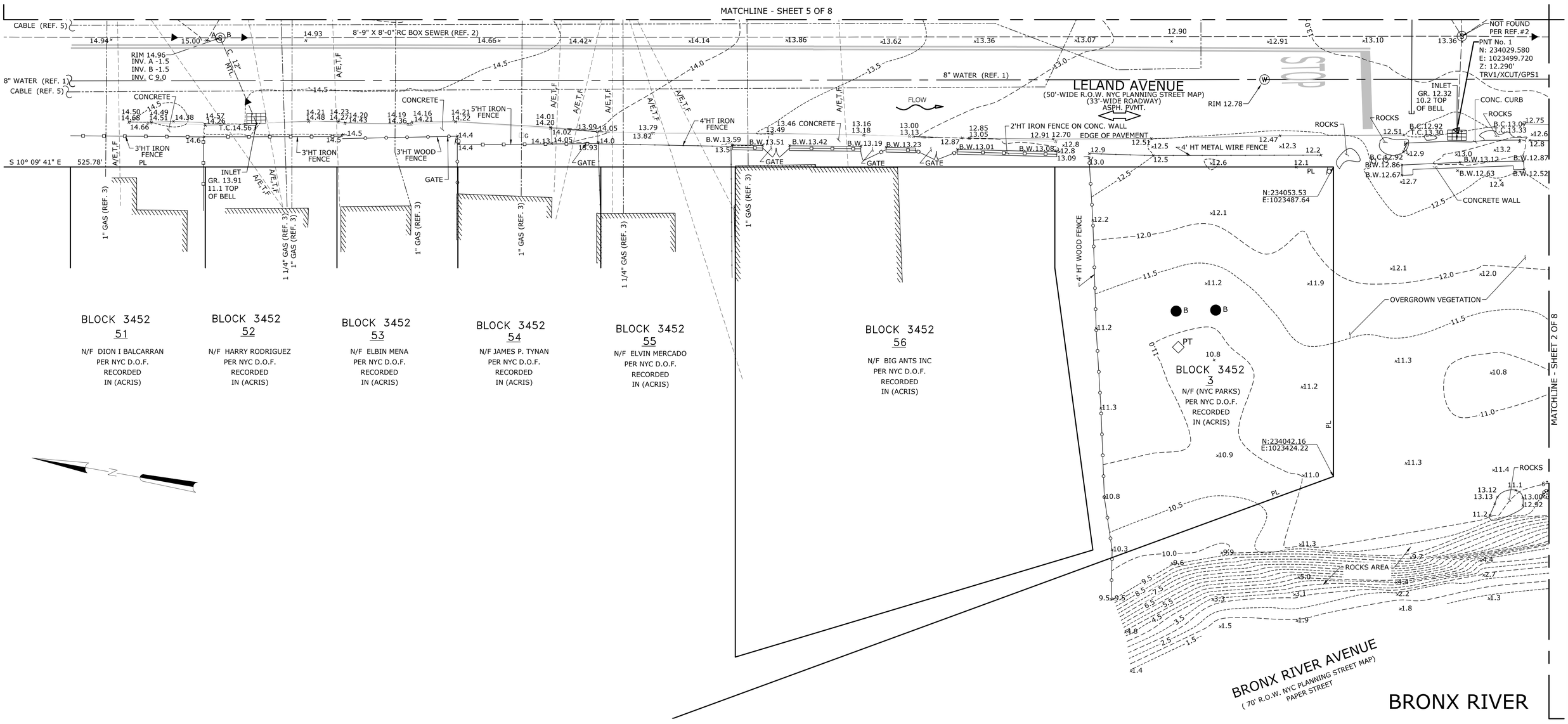
PROJECT TITLE HARDING PARK-LELAND AVE & GILDERSLEEVE AVE

DRAWING TITLE TOPOGRAPHIC & BOUNDARY SURVEY OF HARDING PARK-LELAND AVE & GILDERSLEEVE AVE PLAYGROUND

DESIGNED BY	DRAWN BY	CHECKED BY
NA	H.ZAHIRI	B.WYNESS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'		
	DATE 6-15-2026		Sheet 2 of 8

MATCHLINE - SHEET 5 OF 8



BLOCK 3452
51
N/F DION I BALCARRAN
PER NYC D.O.F.
RECORDED
IN (ACRIS)

BLOCK 3452
52
N/F HARRY RODRIGUEZ
PER NYC D.O.F.
RECORDED
IN (ACRIS)

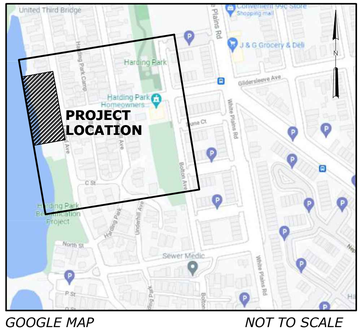
BLOCK 3452
53
N/F ELBIN MENA
PER NYC D.O.F.
RECORDED
IN (ACRIS)

BLOCK 3452
54
N/F JAMES P. TYNAN
PER NYC D.O.F.
RECORDED
IN (ACRIS)

BLOCK 3452
55
N/F ELVIN MERCADO
PER NYC D.O.F.
RECORDED
IN (ACRIS)

BLOCK 3452
56
N/F BIG ANTS INC
PER NYC D.O.F.
RECORDED
IN (ACRIS)

MATCHLINE - SHEET 2 OF 8



GOOGLE MAP *NOT TO SCALE*

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4. ELECTRIC:
NOTE: LOW TENSION MAINS PLATES UNAVAILABLE AT TIME OF INITIAL SURVEY ISSUANCE.
5. CABLE: UTILITY PLATE PROVIDED BY CABLE VISION

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5. DIGITAL NYC TAX MAP EFFECTIVE DATE: 12-05-2008 END DATE: CURRENT.

10 5 0 10 20 30
GRAPHIC SCALE
1 inch=10 feet

NO.	DATE	ISSUED FOR	BY

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL
STATE OF NEW YORK · DAVID STEPHEN WORONOV · 049815 · LICENSED LAND SURVEYOR

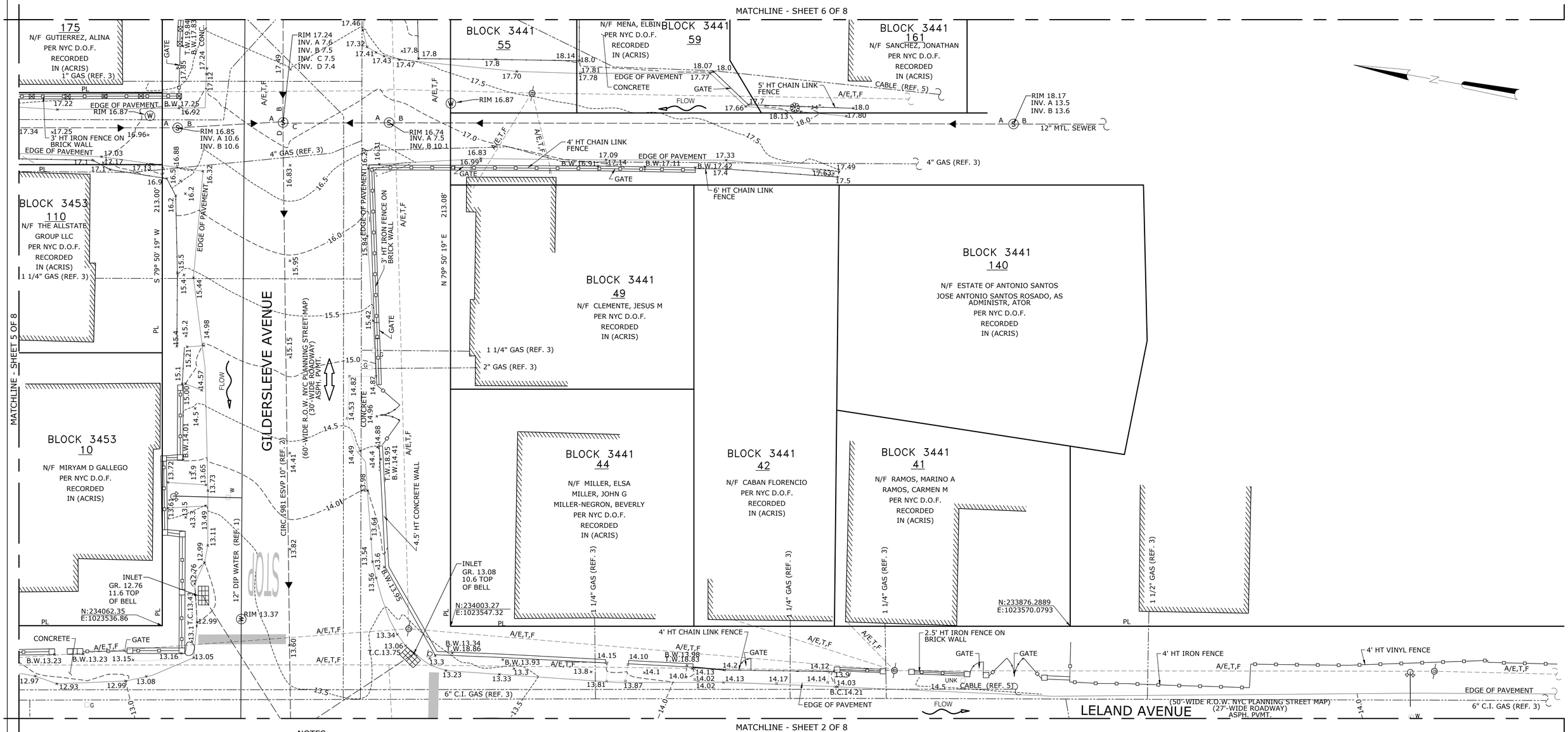
PROJECT TITLE HARDING PARK-LELAND AVE & GILDERSLEEVE AVE

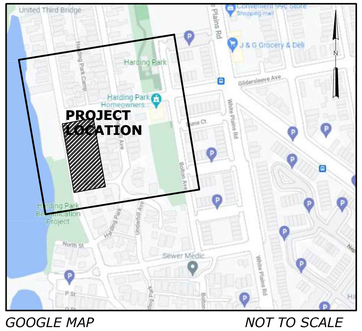
DRAWING TITLE TOPOGRAPHIC & BOUNDARY SURVEY OF HARDING PARK-LELAND AVE & GILDERSLEEVE AVE PLAYGROUND

DESIGNED BY	DRAWN BY	CHECKED BY
NA	H.ZAHIRI	B.WYNESS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'		
BLOCK	DATE 6-15-2026		Sheet 3 of 8
LOT			

MATCHLINE - SHEET 6 OF 8





GOOGLE MAP *NOT TO SCALE*

NOTES

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3. GAS: CONSOLIDATED EDISON CO. OF N.Y. - BRONX PLATE NO. 4-5 & 5-S
4. ELECTRIC:
   NOTE: LOW TENSION MAINS PLATES UNAVAILABLE AT TIME OF INITIAL SURVEY ISSUANCE.
5. CABLE: UTILITY PLATE PROVIDED BY CABLE VISION

BOUNDARY REFERENCES

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5. DIGITAL NYC TAX MAP EFFECTIVE DATE: 12-05-2008 END DATE: CURRENT.

10 5 0 10 20 30

GRAPHIC SCALE
1 inch=10 feet

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL

STATE OF NEW YORK
DAVID STEPHEN WINOGRON
049810
LICENSED LAND SURVEYOR

BLOCK

LOT

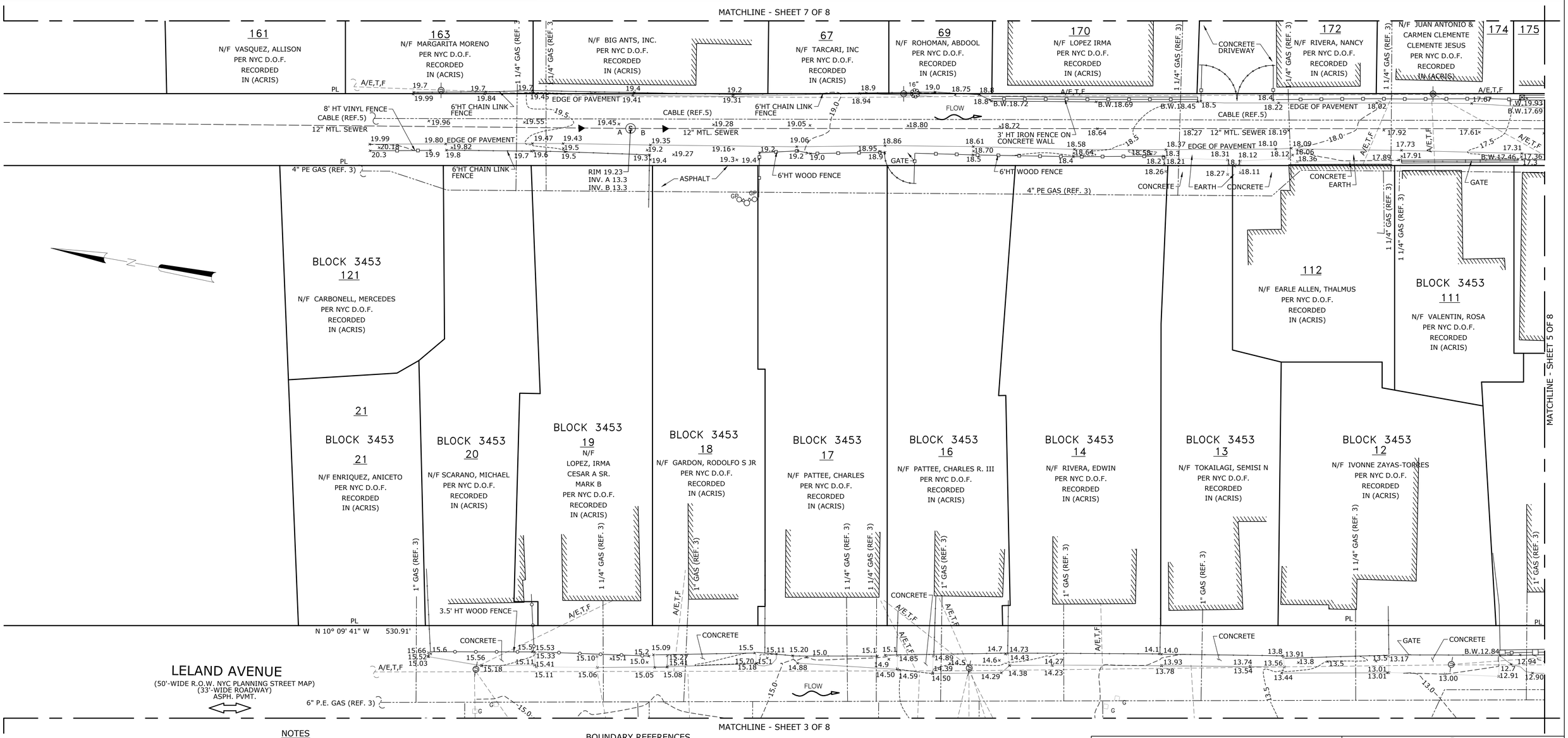
PROJECT TITLE HARDING PARK-LELAND AVE & GILDERSLEEVE AVE

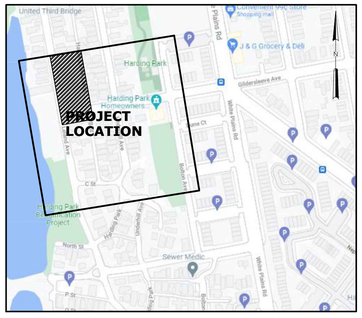
DRAWING TITLE TOPOGRAPHIC & BOUNDARY SURVEY OF HARDING PARK-LELAND AVE & GILDERSLEEVE AVE PLAYGROUND

DESIGNED BY	DRAWN BY	CHECKED BY
NA	H.ZAHIRI	B.WYNESS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'		
	DATE 6-15-2026		Sheet 4 of 8

MATCHLINE - SHEET 7 OF 8





GOOGLE MAP *NOT TO SCALE*

NOTES

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10 5 0 10 20 30

GRAPHIC SCALE
1 inch=10 feet

NO.	DATE	ISSUED FOR	BY

NYC Environmental Protection

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Forestry, Horticulture and Natural Resources

SEAL: STATE OF NEW YORK · DONALD STEPHEN WYNESS · 049915 · LICENSED LAND SURVEYOR

BLOCK

LOT

PROJECT TITLE HARDING PARK-LELAND AVE & GILDERSLEEVE AVE

DRAWING TITLE TOPOGRAPHIC & BOUNDARY SURVEY OF HARDING PARK-LELAND AVE & GILDERSLEEVE AVE PLAYGROUND

DESIGNED BY	DRAWN BY	CHECKED BY
NA	H.ZAHIRI	B.WYNESS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'		
	DATE 6-15-2026		Sheet 5 of 8

MATCHLINE - SHEET 8 OF 8

MATCHLINE - SHEET 7 OF 8

MATCHLINE - SHEET 4 OF 8

N/F ARTHUR, EVANS
PER NYC D.O.F.
RECORDED
IN (ACRIS)
11

BLOCK 3442
47

BLOCK 3442
45

N/F OWL ASSETS INC
PER NYC D.O.F.
RECORDED
IN (ACRIS)

N/F PENA, JESUS AQUINO
GONZALEZ, ELIZABETH
PER NYC D.O.F.
RECORDED
IN (ACRIS)

UNDERHILL AVENUE
(50'-WIDE R.O.W. NYC PLANNING STREET MAP)
(30'-WIDE ROADWAY)
ASPH. PVMT.

UNDERHILL AVENUE
(50'-WIDE R.O.W. NYC PLANNING STREET MAP)
(XX'-WIDE ROADWAY)
ASPH. PVMT.

GILDERSLEEVE AVENUE
(60'-WIDE R.O.W. NYC PLANNING STREET MAP)
(30'-WIDE ROADWAY)
ASPH. PVMT.

N:234108.74
E:1023795.73

N:234049.69
E:1023806.32

N:234040.86
E:1023757.06

N:234099.92
E:1023746.52

RIM 22.88
INV. A 11.0
INV. B 11.0
INV. C 11.0

RIM 23.55
INV. 11.6

RIM 22.48

RIM 23.01

RIM 23.25
INV. A 10.1
INV. B 9.9

CIRC 1981 ESVP 10" (REF. 2)

12" DIP WATER (REF. 1)

8" DIP WATER (REF. 1)

6" ST(C) GAS (REF. 3)

1 1/4" GAS (REF. 3)

2" GAS (REF. 3)

EDGE OF PAVEMENT

4' HT IRON FENCE
CONCRETE

8' HT VINYL FENCE

4.5 HT IRON FENCE

3' HT CL FENCE
EDGE OF PAVEMENT

4' HT IRON FENCE
EDGE OF PAVEMENT

4' HT IRON FENCE ON
CONC. WALL

3' HT IRON FENCE ON
BRICK WALL

CONC RAMP
GATE

WATER METER

GATE

FLOW

A/E,T,F

CABLE (REF. 5)

1" GAS (REF. 3)

CONCRETE

EDGE OF PAVEMENT

CONC.

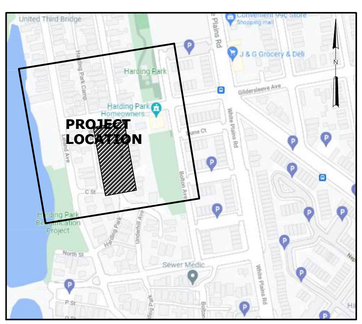
75
N/F PEREZ, ADOLFO
PER NYC D.O.F.
RECORDED
IN (ACRIS)

174

61
N/F ANAZAGASTY, ANA
PER NYC D.O.F.
RECORDED
IN (ACRIS)

BLOCK 3441
59
N/F MENA, ELBIN
PER NYC D.O.F.
RECORDED
IN (ACRIS)

BLOCK 3441
55
N/F DALITZA J. RODRIGUEZ,
CO-TRUSTEE
YADIRA RODRIGUEZ, CO-TRUSTEE
MARIA T. LOPEZ 2021 IRREVOCABLE
TRUST
PER NYC D.O.F.
RECORDED
IN (ACRIS)



GOOGLE MAP *NOT TO SCALE*

NOTES

1. VERTICAL DATUM - NAVD 1988 AND HORIZONTAL DATUM - NY LONG ISLAND STATE PLANE COORDINATE SYSTEM NAD83 (2011); BASED ON GPS OBSERVATIONS BY MATRIX NEW WORLD ON AUGUST 20, 2021 AND REFERRING TO LEICA SMARTNET CONTINUOUSLY OPERATING REFERENCE STATION (CORS) NETWORK, NATIONAL GEODETIC SURVEY MONUMENT: CORS STATION "NYCI, NYBR, NYVH & RVDI".
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UTILITIES REFERENCES

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2. SEWER: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION SEWER MAPPING, MAP PLOTTED: AUG 31, 2011.
3. GAS: CONSOLIDATED EDISON CO. OF N.Y. - BRONX PLATE NO. 4-5 & 5-S
4. ELECTRIC:
NOTE: LOW TENSION MAINS PLATES UNAVAILABLE AT TIME OF INITIAL SURVEY ISSUANCE.
5. CABLE: UTILITY PLATE PROVIDED BY CABLE VISION

BOUNDARY REFERENCES

MAP REFERENCE:

1. BOUNDARY SURVEY IS PREPARED WITHOUT A TITLE REPORT. BOUNDARY LINE SHOWN ARE BASED ON CITY RECORD MAP PER NOTES 2, 3.
2. ROADS – VESTING PER CITY OF NEW YORK OFFICE OF THE PRESIDENT, BOROUGH OF THE BRONX BUREAU OF ENGINEERING - TOPOGRAPHICAL DIVISION MAP. TITLE MAP 20.
3. FINAL SECTION MAP NO. 49, OFFICE OF THE PRESIDENT OF THE BOROUGH OF BRONX TOPOGRAPHICAL BUREAU MAP OF THE BOROUGH OF BRONX CITY OF NEW YORK DATED 2-08-1909, AMENDED AND CORRECTED TO 1-22-1931, UPDATED DATE 2-26, 1971.
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5. DIGITAL NYC TAX MAP EFFECTIVE DATE: 12-05-2008 END DATE: CURRENT.

10 5 0 10 20 30
GRAPHIC SCALE
1 inch=10 feet

NO.	DATE	ISSUED FOR	BY

NYC Environmental Protection
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks
CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL
STATE OF NEW YORK
DAVID STEPHEN WORONOFF
049819
LICENSED LAND SURVEYOR

BLOCK
LOT

PROJECT TITLE HARDING PARK-LELAND AVE & GILDERSLEEVE AVE

DRAWING TITLE TOPOGRAPHIC & BOUNDARY SURVEY OF HARDING PARK-LELAND AVE & GILDERSLEEVE AVE PLAYGROUND

DESIGNED BY	DRAWN BY	CHECKED BY
NA	H.ZAHIRI	B.WYNESS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'		
	DATE 6-15-2026		Sheet 6 of 8

MATCHLINE - SHEET 8 OF 8

BLOCK 3454

22 — N/F BAEZ, STEVEN PER NYC D.O.F. RECORDED IN (ACRIS)

20 — N/F TOMAS CEDENO PER NYC D.O.F. RECORDED IN (ACRIS)

19 — N/F CEDENO TOMAS S PER NYC D.O.F. RECORDED IN (ACRIS)

18 — N/F RIVERA IRENE N PER NYC D.O.F. RECORDED IN (ACRIS)

17 — N/F BONILLA AIDA PER NYC D.O.F. RECORDED IN (ACRIS)

16 — N/F MORENO, JOEL ROMERO PER NYC D.O.F. RECORDED IN (ACRIS)

15 — N/F SOPRANOS DEVELOPMENT LLC PER NYC D.O.F. RECORDED IN (ACRIS)

14 — N/F LOEHMANN, PATRICIA PER NYC D.O.F. RECORDED IN (ACRIS)

13 — N/F EDUARDO MALDONADO PER NYC D.O.F. RECORDED IN (ACRIS)

PL

N 10° 09' 41" W 557.88'

1 1/2" GAS (REF. 3)

A/E,T,F

MAIL BOX

ASPHALT

CONCRETE

STEPS

GATE

BRICK WALL

PLANTER

FLOW

4.5' HT IRON FENCE

4.5 HT IRON FENCE

EDGE OF PAVEMENT

6" ST(C) GAS (REF. 3)

CABLE (REF. 5)

UNDERHILL AVENUE

(50'-WIDE R.O.W. NYC PLANNING STREET MAP)
(30'-WIDE ROADWAY)
ASPH. PVMT.

RIM 22.77
INV. A 12.9
INV. B 12.8

CIRC 1981 ESVP 10" (REF. 2)

8" DIP WATER (REF. 1)

INLET
GR. 21.95
FULL OF DEBRIS

INLET
GR. 21.99
FULL OF DEBRIS

INLET
GR. 21.42
FULL OF DEBRIS

4 HT IRON FENCE

GATE/DRIVEWAY

B.W.23.17 B.W.22.77 B.W.22.71 B.W.23.19 B.W.22.34 B.W.22.04 B.W.22.01 B.W.21.97 B.W.21.88

PL

N 10° 09' 41" W 552.75'

1 1/4" GAS (REF. 3)

60 — N/F PERILLA, JAVIER PER NYC D.O.F. RECORDED IN (ACRIS)

61 — N/F ORIOL EVANGELINE PER NYC D.O.F. RECORDED IN (ACRIS)

66 — N/F HERNANDEZ, FELIX PER NYC D.O.F. RECORDED IN (ACRIS)

67 — N/F TARCARI, INC PER NYC D.O.F. RECORDED IN (ACRIS)

69 — N/F ROHOMAN, ABDOOL PER NYC D.O.F. RECORDED IN (ACRIS)

70 — N/F ACEVEDO R VICTORIA PER NYC D.O.F. RECORDED IN (ACRIS)

71 — N/F ESTRELLA , ROSA PER NYC D.O.F. RECORDED IN (ACRIS)

72 — N/F ORTIZ FELIX PER NYC D.O.F. RECORDED IN (ACRIS)

75 — N/F PEREZ, ADOLFO PER NYC D.O.F. RECORDED IN (ACRIS)

MATCHLINE - SHEET 6 OF 8

BLOCK 3453

161 — N/F VASQUEZ, ALLISON PER NYC D.O.F. RECORDED IN (ACRIS)

62 — N/F MARGARITA MORENO PER NYC D.O.F. RECORDED IN (ACRIS)

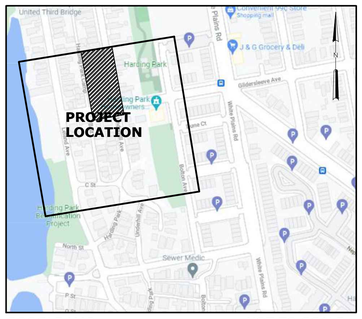
165 — N/F BIG ANTS, INC. PER NYC D.O.F. RECORDED IN (ACRIS)

170 — N/F LOPEZ IRMA PER NYC D.O.F. RECORDED IN (ACRIS)

172 — N/F RIVERA, NANCY PER NYC D.O.F. RECORDED IN (ACRIS)

174 — N/F JUAN ANTONIO & CARMEN CLEMENTE CLEMENTE JESUS PER NYC D.O.F. RECORDED IN (ACRIS)

MATCHLINE - SHEET 5 OF 8



GOOGLE MAP *NOT TO SCALE*

NOTES

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10 5 0 10 20 30

GRAPHIC SCALE
1 inch=10 feet

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL — STATE OF NEW YORK · RICHARD STEPHEN WERDEIN · 049814 · LICENSED LAND SURVEYOR

BLOCK

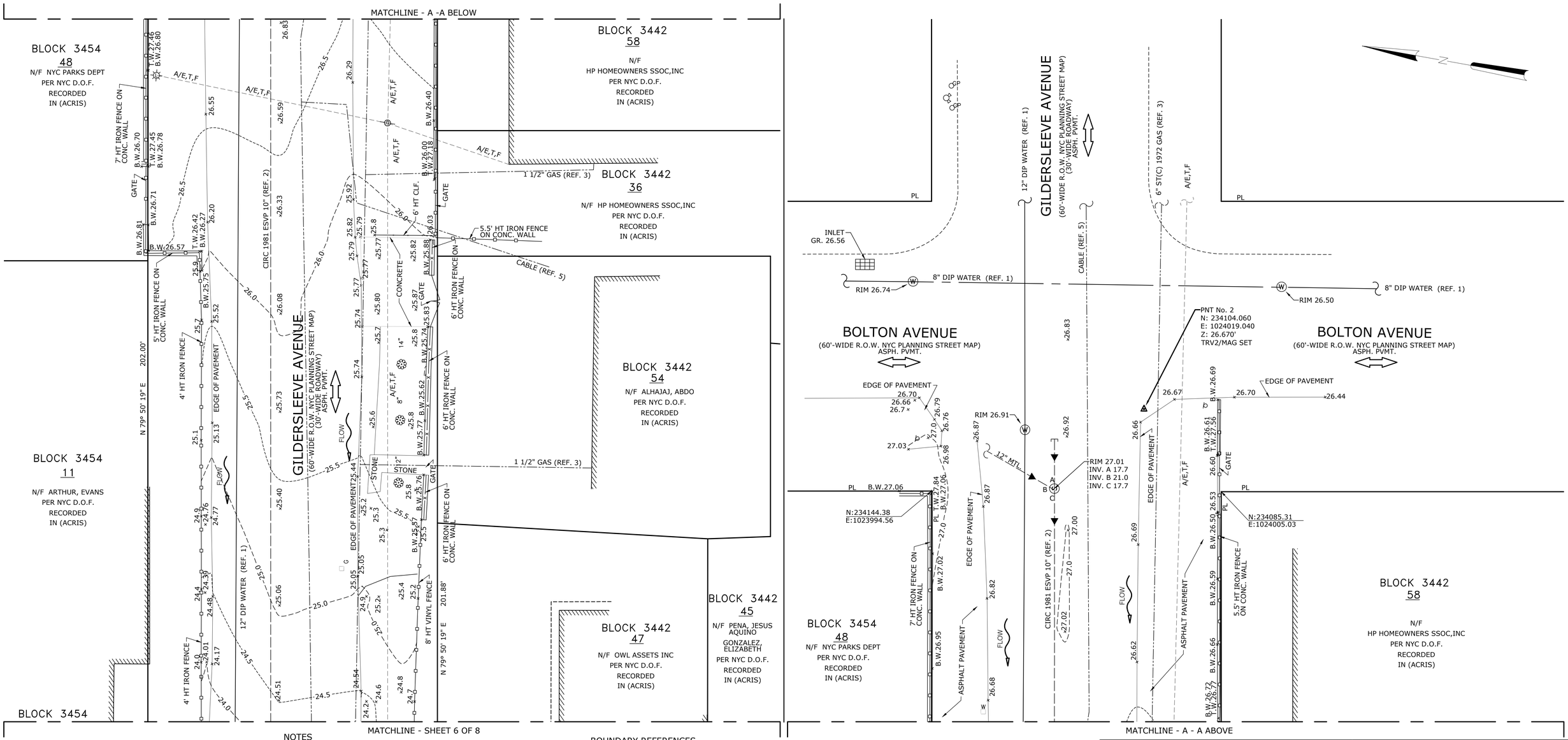
LOT

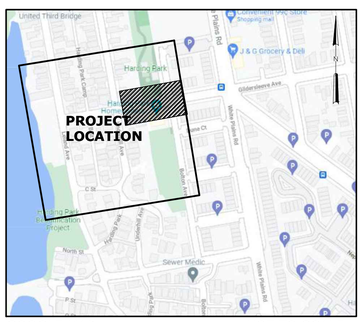
PROJECT TITLE HARDING PARK-LELAND AVE & GILDERSLEEVE AVE

DRAWING TITLE TOPOGRAPHIC & BOUNDARY SURVEY OF HARDING PARK-LELAND AVE & GILDERSLEEVE AVE PLAYGROUND

DESIGNED BY	DRAWN BY	CHECKED BY
NA	H.ZAHIRI	B.WYNESS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'		
	DATE 6-15-2026		Sheet 7 of 8





GOOGLE MAP *NOT TO SCALE*

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10 5 0 10 20 30
GRAPHIC SCALE
1 inch=10 feet

NO.	DATE	ISSUED FOR	BY

BLOCK
LOT

NYC Environmental Protection
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks
CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

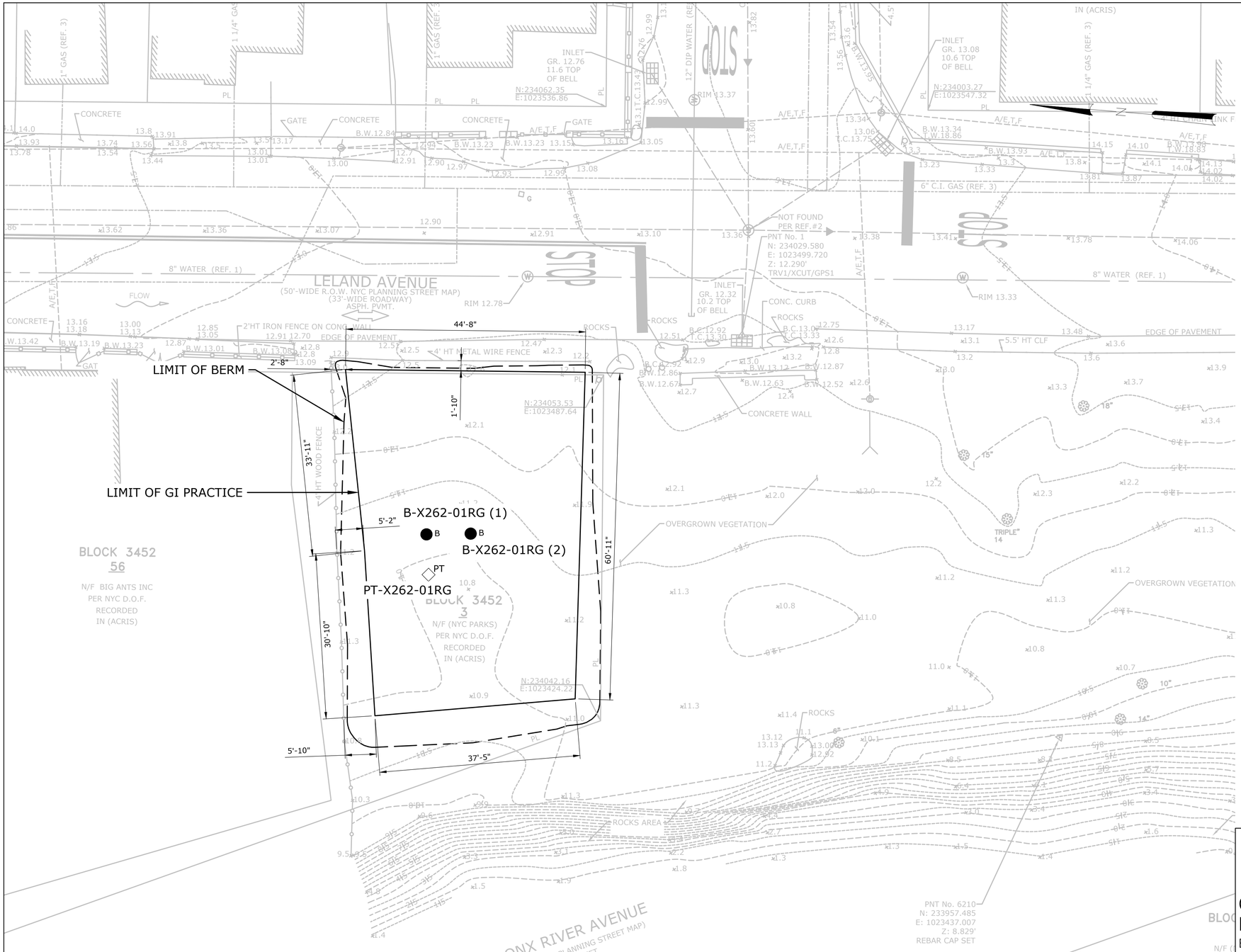
SEAL
STATE OF NEW YORK
DONALD STEPHEN MORRIS
049819
LICENSED LAND SURVEYOR

PROJECT TITLE HARDING PARK-LELAND AVE & GILDERSLEEVE AVE

DRAWING TITLE TOPOGRAPHIC & BOUNDARY SURVEY OF HARDING PARK-LELAND AVE & GILDERSLEEVE AVE PLAYGROUND

DESIGNED BY	DRAWN BY	CHECKED BY
NA	H.ZAHIRI	B.WYNESS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1"=10'		
	DATE 6-15-2026		Sheet 8 of 8



LEGEND

BORING LOCATION — B

PERMEABILITY TEST LOCATION — PT

LIMIT OF GI PRACTICE

LIMIT OF BERM

5 0 5 10

SCALE: 1" = 10'

NOTES:

1. GEOTECHNICAL INVESTIGATIONS WERE PERFORMED IN MARCH 2019 UNDER THE GI-DCM-TOC TASK ORDER CONTRACT. BORING LOCATION ID WAS B-1 AND B-1A.
2. PERMEABILITY TEST WAS PERFORMED IN MARCH 2019 UNDER THE GI-DCM-TOC TASK ORDER CONTRACT. PERMEABILITY TESTING LOCATION ID WAS PT-1A.

NO.	DATE	ISSUED FOR	BY

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

SEAL

STATE OF NEW YORK — ANDREW KOTT — 096594 — LICENSED PROFESSIONAL ENGINEER

BLOCK 3451

LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
BORING PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 10'	B100	GI-CONS-7
	DATE NOV 2026		SHEET No. 11 OF 24 SHEETS

Project: Harding Park Shoreline Restoration — **Proj. No.:** 1048-99-121EC

Location: Underhill Avenue, Borough of The Bronx, Bronx County, New York — **Client:** Island Pump & Tank Corp.

Surface Elevation:	Not Surveyed	**Date Started:**	3/28/19	**Groundwater Data**	**Depth (ft)** / **El. (mse)**
Termination Depth:	3.5 feet	**Date Completed:**	3/28/19		
Proposed Location:	Stormwater Management Facility	**Logged by:**	S. Hume	**While Drilling:** ▽	5.0 / --
Drill/Test Method:	Direct Push	**Contractor:**	IP&T	**At Completion:** ▼	5.0 / --
Hammer Type:	Automatic	**Rig Type:**	Geoprobe	**Additional Groundwater Data**	**Depth (ft)** / **El. (mse)**

Sample Information: Depth (Feet)	Number	Type	Rec (in)	NYC Class	Blows per 6" or drill time (min/ft)	N	Depth (ft)	Strata	DESCRIPTION OF MATERIALS (Classification)	Remarks
								Surface Cover	12" Topsoil	
1-3	S-1	SS	3	7	W.O.H. W.O.H. / W.O.H. W.O.H.	W.O.H. /12"		Fill	Brown and black coarse to fine sand, little silt, moist (FILL)	
3-5	S-2	SS	6	7	W.O.H. W.O.H. / W.O.H. 1	W.O.H. /12"	▽5▼		Brown and black medium to fine sand, some silt, moist (FILL)	
5-7	S-3	SS	12	7	W.O.H. 2 / 12 15	14			Brown medium to fine sand, some white coarse to fine gravel, trace silt, wet (FILL)	
7-8.4	S-4	SS	12	7	10 42 / 50/11"	92/11"			Brown medium to fine sand, and coarse to fine gravel, trace silt, wet (FILL)	
							10		Boring B-1 encountered refusal at approxiamtely 8.4 feet below the ground surface on apparent boulder.	

B-X262-01RG

Project: Harding Park Shoreline Restoration — **Proj. No.:** 1048-99-121EC

Location: Underhill Avenue, Borough of The Bronx, Bronx County, New York — **Client:** Island Pump & Tank Corp.

Surface Elevation:	Not Surveyed	**Date Started:**	3/28/19	**Groundwater Data**	**Depth (ft)** / **El. (mse)**
Termination Depth:	7.9 feet	**Date Completed:**	3/28/19		
Proposed Location:	Stormwater Management Facility	**Logged by:**	S. Hume	**While Drilling:** ▽	5.0 / --
Drill/Test Method:	Direct Push	**Contractor:**	IP&T	**At Completion:** ▼	5.0 / --
Hammer Type:	Automatic	**Rig Type:**	Geoprobe	**Additional Groundwater Data**	**Depth (ft)** / **El. (mse)**

Sample Information: Depth (Feet)	Number	Type	Rec (in)	NYC Class	Blows per 6" or drill time (min/ft)	N	Depth (ft)	Strata	DESCRIPTION OF MATERIALS (Classification)	Remarks
								Surface Cover		
0-7.9		--					▽5▼	Fill	Same as boring B-14	
							10		Boring B-1A encountered refusal at approximately 7.9 feet below the ground surface.	

B-X262-02RG

Location	PEREMEABILITY TEST SUMMARY			
	Test Depth (ft)	Average Permeability for In-Situ Testing 1 (inches/hour)	Average Permeability for In-Situ Testing 2 (inches/hour)	Average of Tests 1 & 2 (inches/hour)
PT-X262-01RG	3'	0.0820	0.0477	0.0649

PT-X262-01RG, PERMEABILITY TEST

Boring ID	LABORATORY SAMPLE RESULTS		
	Depth (ft)	USCS Symbol	% Passing No 200 Sieve
B-X262-01RG	3'-5'	SC	16.90%
	5'-7'	SM	15.40%
	7'-9'	SM	12.40%

B-X262-01RG, LAB SAMPLE RESULTS

NOTES:
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2. PERMEABILITY TEST WAS PERFORMED IN MARCH 2019 UNDER THE GI-DCM-TOC TASK ORDER CONTRACT. PERMEABILITY TESTING LOCATION ID WAS PT-1A.

NYC Environmental Protection

CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
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NYC Parks

CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL — STATE OF NEW YORK — 096594 — LICENSED PROFESSIONAL ENGINEER

BLOCK 3451

LOT 12

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
BORING LOGS

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN | SCALE | DRAWING NO. B101 | DATE NOV 2026 | CONTRACT NO. GI-CONS-7 | SHEET No. 12 OF 24 SHEETS

TEMPORARY CONSTRUCTION FENCE
40 LF TOTAL,
SEE DETAIL 2, SHEET C500

LOCATION OF CONSTRUCTION
SIGN ON FENCE

TEMPORARY CONSTRUCTION FENCE
280 LF TOTAL,
SEE DETAIL 2, SHEET C500

REMOVE AND RESET STOP SIGN.
CONTRACTOR SHALL INSTALL A
TEMPORARY STOP SIGN FOR THE
DURATION OF CONSTRUCTION.

REMOVE BOULDERS

INLET PROTECTION (TYP.)
SEE DETAIL 1, SHEET C500

REMOVE 49 LF OF 4 FT
METAL WIRE FENCE

CONSTRUCTION LIMIT LINE

REMOVE 84 LF OF 4' HT
WOOD FENCE

LIMIT OF BERM

LIMIT OF GI PRACTICE

STAGING AREA

CONTRACTOR SHALL FIELD
VERIFY TREE LOCATION
ON LOT 56

APPROXIMATE
LOCATION OF HAND
EXCAVATED TEST PIT TO
LOCATE TREE ROOTS.
SEE NOTE 1.

STAGING AREA

PNT No. 6210
N: 233957.485
E: 1023437.007
Z: 8.829'
REBAR CAP SET

SCALE: 1" = 10'

LEGEND

- TREE DRIPLINE
- TREE CRITICAL ROOT ZONE
- STAGING AREA
- CONSTRUCTION ACCESS/ENTRANCE
- CONSTRUCTION LIMIT LINE — CLL
- TEMPORARY CONSTRUCTION FENCE — CF
- TREE TO BE PROTECTED
- LIMIT OF GI PRACTICE
- LIMIT OF GI BERM
- INLET PROTECTION
- TEST PIT

NOTES:
1. CONTRACT SHALL FIELD VERIFY THE LOCATION OF THE TREE ON THE ADJACENT LOT 56 AND PERFORM A HAND EXCAVATED TEST PIT AS SHOWN ON THIS DRAWING WITHIN THE CONSTRUCTION LIMIT LINE TO DETERMINE THE LOCATION AND EXTENTS OF THIS TREE'S CRITICAL ROOT ZONE. TEST PIT SHALL BE 6' X 3' AND DOWN TO ELEVATION 7.90. CONTRACTOR SHALL RELAY THIS INFORMATION TO THE ENGINEER PRIOR TO FULL EXCAVATION OF THE PRACTICE.

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NYC Parks
CITY OF NEW YORK
PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

SEAL

STATE OF NEW YORK — ANKUR — 096594 — LICENSED PROFESSIONAL ENGINEER

BLOCK 3451
LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
TREE PROTECTION, STAGING AND, ACCESS PLAN - 1

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN

SCALE: 1" = 10'
DRAWING NO.: C100
CONTRACT NO.: GI-CONS-7
DATE: NOV 2026
SHEET No. 13 OF 24 SHEETS

TREE PROTECTION SCHEDULE

TREE #	SPECIES (common name)	DBH (inches)	CTLA CONDITION RATING	ISA CRITICAL ROOTZONE (CRZ) RADIUS (ft.)	TREE REMOVAL	STUMP REMOVAL	TRANSPLANT TREE	PREPARATORY PRUNING						TREE PROTECTION						DECOMPACT			
								ANSI A-300															
								Cleaning	Raising	Reducing	Restoring	Structural	Thinning	Limb Tying	Temporary Wooden Tree Guard	Temporary Wooden Tree Guard For Groves	Temporary Fence Boundary	Protect Existing Tree Roots w/ Woodchips	Protect Ex. Tree Roots w/ Plywood or Mats	Air-Tilling 3 Ft Radius	Air-Tilling 5 Ft Radius	Radial Trench	Vertical Mulch
128	MULBERRY, WHITE	23	69%	23.0																			
129	MAPLE, NORWAY -CR KNG	13	66%	12.5																			
130	MAPLE, NORWAY -CR KNG	8	91%	8.0																			
131	MAPLE, NORWAY -CR KNG	16	81%	15.5				X															
132	TREE OF HEAVEN	21	69%	15.8																			
133	TREE OF HEAVEN	22	69%	16.5																			
134	MAPLE, OTHER	17	66%	17.0				X															
135	CHERRY, BLACK	14	63%	14.0				X							X								
136	MAPLE, OTHER	13	75%	13.0											X								
137	MAPLE, OTHER	20	75%	20.0											X								
138	TREE OF HEAVEN	6	72%	4.1								X			X								
139	MAPLE, OTHER	15	72%	15.0				X															
140	UNKNOWN DEAD TREES	9	0%	3.0	X																		
141	TREE OF HEAVEN	17	44%	12.8																			
142	MAPLE, OTHER	11	75%	11.0																			
143	CHERRY, BLACK	17	50%	17.0				X															
144	CHERRY, BLACK	15	56%	15.0																			
145	MAPLE, OTHER	7	56%	6.5				X															
146	MAPLE, OTHER	15	47%	15.0				X															
147	MAPLE, OTHER	16	63%	16.0																			
148	MAPLE, OTHER	18	25%	17.5	X			X															
149	UNKNOWN DEAD TREES	7	0%	3.0	X																		
150	MAPLE, OTHER	6	56%	6.0				X															
151	MULBERRY, WHITE	11	69%	11.0				X															
152	MAPLE, OTHER	11	56%	11.0																			
153	MAPLE, OTHER	7	88%	7.0																			
154	MULBERRY, WHITE	3	91%	3.0																			
155	CHERRY, BLACK	12	63%	12.0				X															
156	MAPLE, OTHER	7	81%	6.5																			
157	OAK, PIN	6	84%	5.5																			
158	MAPLE, OTHER	10	63%	9.5																			
159	MAPLE, OTHER	11	63%	10.5				X															
160	MAPLE, OTHER	9	81%	9.0																			
161	MAPLE, OTHER	21	69%	21.0				X															
162	MAPLE, OTHER	12	53%	12.0				X															
163	MAPLE, OTHER	7	84%	7.0								X											
164	MAPLE, OTHER	9	75%	9.0				X															
165	MAPLE, OTHER	7	75%	7.0				X															
166	MAPLE, OTHER	5	91%	4.5				X															
167	MAPLE, OTHER	10	75%	10.0				X															
168	BLACK LOCUST	15	78%	11.3																			
169	BLACK LOCUST	15	25%	10.9	X																		
170	UNKNOWN DEAD TREES	7	0%	3.0	X																		
171	MULBERRY, WHITE	17	47%	17.0						X													
172	BLACK LOCUST	12	81%	8.6				X															
173	BLACK LOCUST	12	88%	9.0				X															
174	POPLAR, OTHER	9	88%	6.4				X															
175	BLACK LOCUST	10	88%	7.5				X															
176	BLACK LOCUST	4	88%	3.0				X															
177	BLACK LOCUST	7	88%	5.3				X															
178	BLACK LOCUST	7	88%	4.9				X															
179	BLACK LOCUST	7	88%	5.3				X															
180	BLACK LOCUST	8	88%	6.0				X															

TREE PROTECTION SCHEDULE (CONT.)

TREE #	SPECIES (common name)	DBH (inches)	CTLA CONDITION RATING	ISA CRITICAL ROOTZONE (CRZ) RADIUS (ft.)	TREE REMOVAL	STUMP REMOVAL	TRANSPLANT TREE	PREPARATORY PRUNING						TREE PROTECTION						DECOMPACT			
								ANSI A-300															
								Cleaning	Raising	Reducing	Restoring	Structural	Thinning	Limb Tying	Temporary Wooden Tree Guard	Temporary Wooden Tree Guard For Groves	Temporary Fence Boundary	Protect Existing Tree Roots w/ Woodchips	Protect Ex. Tree Roots w/ Plywood or Mats	Air-Tilling 3 Ft Radius	Air-Tilling 5 Ft Radius	Radial Trench	Vertical Mulch
181	BLACK LOCUST	6	88%	4.5				X															
182	BLACK LOCUST	6	88%	4.5				X															
183	BLACK LOCUST	9	88%	6.4				X															
184	BLACK LOCUST	10	88%	7.5				X															
185	BLACK LOCUST	7	88%	5.3				X															
186	UNKNOWN DEAD TREES	7	0%	3.0	X																		
187	BLACK LOCUST	6	88%	4.5				X															
188	BLACK LOCUST	10	88%	7.1				X															
189	BLACK LOCUST	7	88%	4.9				X															
190	BLACK LOCUST	9	88%	6.4				X															
191	BLACK LOCUST	9	88%	6.4				X															
192	BLACK LOCUST	9	88%	6.4				X															
193	BLACK LOCUST	15	88%	11.3				X															
194	POPLAR, OTHER	36	59%	36.0				X															
195	POPLAR, OTHER	25	59%	18.8				X															
196	POPLAR, OTHER	19	53%	13.9				X															
197	POPLAR, OTHER	25	59%	18.4				X															
198	BLACK LOCUST	10	91%	7.5				X															
199	POPLAR, OTHER	18	75%	13.5				X															
200	POPLAR, OTHER	27	47%	20.3				X															
301	POPLAR, OTHER	18	56%	13.5				X															
302	BLACK LOCUST	13	53%	9.8				X															
303	POPLAR, OTHER	17	0%	12.8	X																		
304	BLACK LOCUST	12	84%	8.6				X															
305	POPLAR, OTHER	32	69%	32.0				X															
306	POPLAR, OTHER	30	81%	30.0				X															
307	BLACK LOCUST	8	84%	3.8				X															
308	BLACK LOCUST	5	100%	3.0																			
309	BLACK LOCUST	8	84%	4.0				X															
310	BLACK LOCUST	6	91%	3.0				X															
311	UNKNOWN DEAD TREES	5	0%	3.0	X																		
312	BLACK LOCUST	4	100%	3.0																			
313	BLACK LOCUST	11	91%	7.9				X															
314	POPLAR, OTHER	27	78%	20.3				X															

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BLOCK 3451

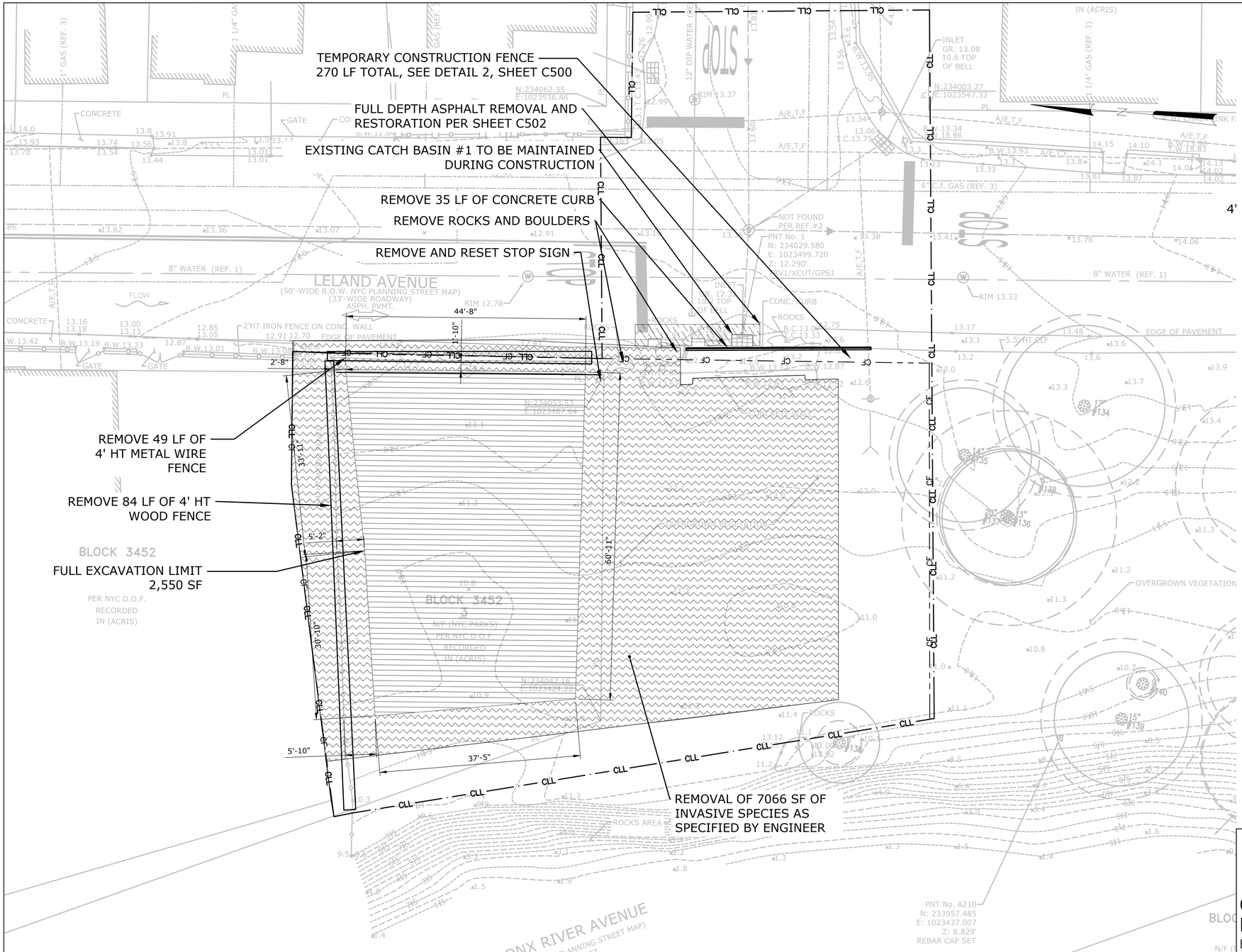
LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
TREE PROTECTION, STAGING AND, ACCESS PLAN -2

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 10'	C101	GI-CONS-7
	DATE NOV 2026		SHEET No. 14 OF 24 SHEETS



SCALE: 1" = 10'

LEGEND

TEMPORARY CONSTRUCTION FENCE — — — CF — — — CF —

CONSTRUCTION LIMIT LINE —— · —— CLL —— · —— CLL

FULL EXCAVATION LIMIT AND HERBICIDE APPLICATION AREA

HERBICIDE APPLICATION AREA

FULL DEPTH PAVEMENT REMOVAL AND RESTORATION

CONSTRUCTION SEQUENCING:

1. INSTALL TEMPORARY CONSTRUCTION FENCE (SEE DETAIL 2, SHEET C500)
2. INLET DRAIN PROTECTION (SEE DETAIL 1, SHEET C500) SHALL BE USED ON ALL INLET DRAINS ADJACENT TO AND DOWNSTREAM OF CONSTRUCTION AREA.
3. SHEETING AND BRACING SHALL BE INSTALLED FOR ALL EXCAVATIONS DEEPER THAN 5 FEET.
4. CONSTRUCTION FENCE SHOWN IS APPROXIMATE OUTER LIMITS. FENCED AREA SHALL BE REDUCED IF AN AREA IS COMPLETED TO ALLOW PEDESTRIAN ACCESS.
5. EXCAVATION AND INSTALLATION OF GREEN INFRASTRUCTURE PRACTICES SHALL BE PERFORMED, ALONG WITH ALL ASSOCIATED APPURTENANCES. HAND/PNUEMATIC EXCAVATION SHALL BE PERFORMED IN AREAS WHERE PAVEMENT NEEDS TO BE REMOVED WITHIN THE CRITICAL ROOT ZONES OF TREES.
6. PAVING IN THE WORK AREA SHALL BE RESTORED. PAINT MARKINGS IN WORK AREAS SHALL BE REPLACED IN KIND.
7. EROSION AND CONTROL MEASURES AND CONSTRUCTION FENCE SHALL BE REMOVED.
8. EXISTING UNDERGROUND SITE DRAINAGE AND SEWER PIPES SHALL BE CLEANED OUT UPON COMPLETION OF THE CONTRACT WORK.

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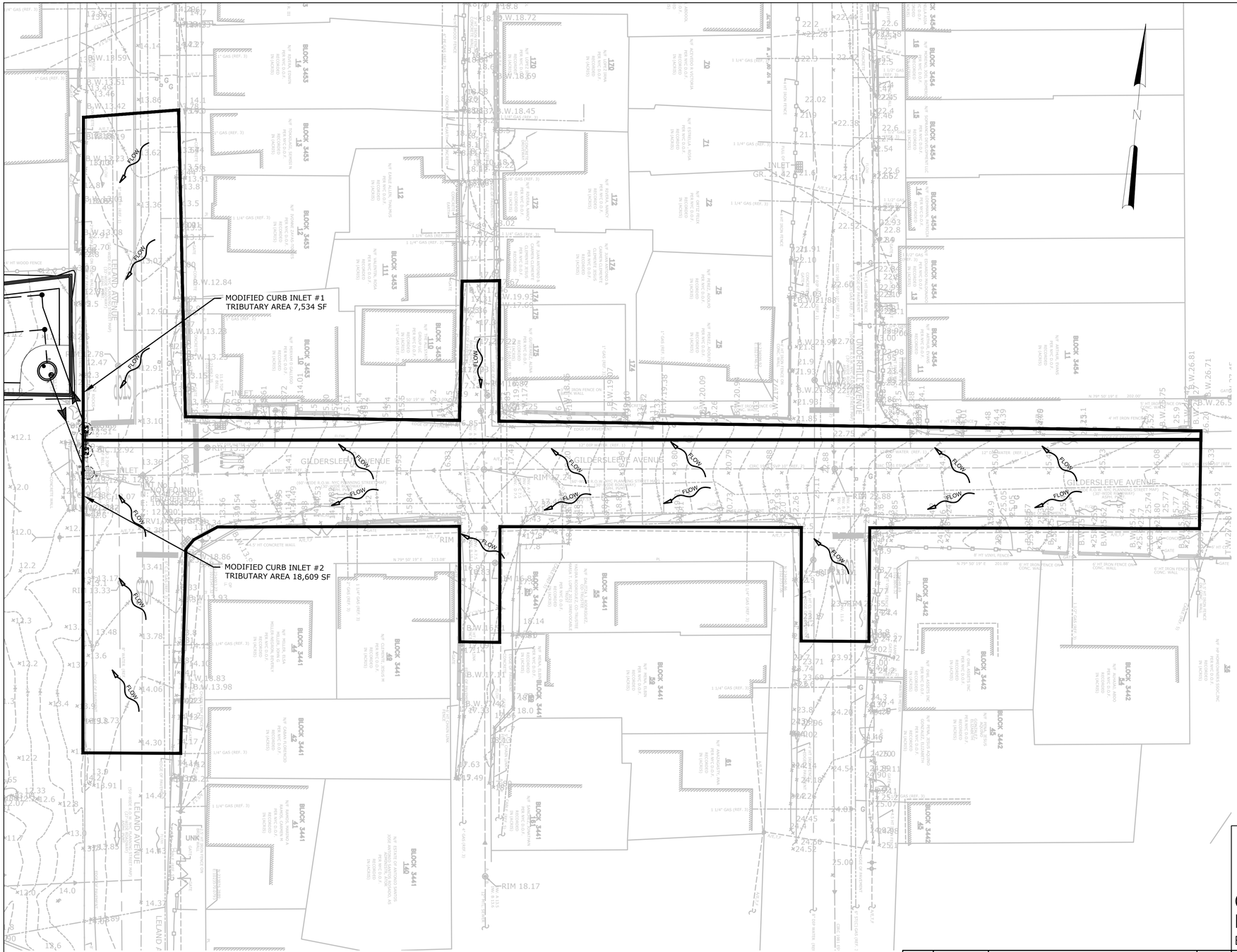
PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
REMOVAL AND DEMOLITION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 10'	C102	GI-CONS-7
	DATE: NOV 2026		SHEET No. 15 OF 23 SHEETS

BLOCK 3451
LOT 1



LEGEND

- GREEN INFRASTRUCTURE PRACTICE
- PROPOSED STORM DRAIN
- DRAINAGE AREA
- PROPOSED PERFORATED STORM DRAIN
- CLEANOUT
- FLOW DIRECTION
- SOLID CATCH BASIN COVER
- OUTLET CONTROL STRUCTURE
- MODIFIED CURB INLET
- PVC MANHOLE

10 0 10 20
SCALE: 1" = 20'

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STATE OF NEW YORK — 096594 — LICENSED PROFESSIONAL ENGINEER

BLOCK 3451
LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
TDA PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 20'	C200	GI-CONS-7
	DATE NOV 2026		SHEET No. 16 OF 24 SHEETS

12" HDPE PIPE,
6' LENGTH @ 0.5% SLOPE

MODIFIED CURB INLET #1
TRIBUTARY AREA = 7,534 SF

MODIFIED CURB INLET #1
RIM EL. 12.32'
INV A IN EL. 9.22'
INV B OUT EL. 9.22'

GRADE TO TOP OF BERM

12" HDPE PIPE,
47' LENGTH @ 1.0% SLOPE

GRADE 3:1 TO EL. 11.25

12" PERFORATED HDPE PIPE
4.5' LENGTH @ 0.0% SLOPE,
INV 8.75'

12" PERFORATED HDPE PIPE,
44' LENGTH @ 0.0% SLOPE,
INV 8.75'

18" DIAM. ADS NYLOPLAST W. 3
STUBS OR APPROVED EQUAL
DOME OPENING INV. El. 11.50
SEE DETAIL 3, SHEET C501.

X262-01RG, AREA = 2,550 SF
TOP OF PONDING STORAGE EL. 11.50'
TOP OF SOIL EL. 11.25'
BOTTOM OF SOIL EL. 10.25'
TOP OF STONE EL. 10.25'
BOTTOM OF STONE EL. 7.90'
HDPE IMPERMEABLE LAYER EL. 8.25'

X262-01RG		
26,143 SF	20,371 GAL	21,114 GAL

MODIFIED CURB INLET #2
TRIBUTARY AREA = 18,609 SF

MODIFIED CURB INLET #2
RIM EL. 12.32'
INV A OUT EL. 9.25'

EXISTING CATCH BASIN #1
RIM EL. 12.32'
TOP OF HOOD EL. 10.2'
INV A OUT EL. UNKNOWN (CONTRACTOR
TO VERIFY IN FIELD)
INV B IN EL. 7.95'

PROVIDE POSITIVE DRAINAGE
TOWARDS MODIFIED CURB
INLETS

12" HDPE PIPE,
37' LENGTH @ 1.8% SLOPE

OUTLET CONTROL STRUCTURE
WITH WEIR AND 2" ORIFICE
WEIR WALL EL. 11.5'
ORIFICE EL. 8.6'
RIM EL. 13.3'
INV A OUT EL. 8.6'
INV B IN EL. 8.6'

12" PERFORATED HDPE PIPE,
12.0' LENGTH @ 1.3% SLOPE

18" DIAM. ADS NYLOPLAST W. 1 STUB OR APPROVED EQUAL (TYP.)
DOME OPENING INV. El. 11.50
SEE DETAIL 3, SHEET C501

12" PERFORATED HDPE PIPE.
26' LENGTH @ 0.0% SLOPE, INV 8.75'

18" DIAM. ADS NYLOPLAST W. 2 STUBS OR APPROVED EQUAL (TYP.)
DOME OPENING INV. El. 11.50
SEE DETAIL 3, SHEET C501

12" PERFORATED HDPE PIPE.
11.5' LENGTH @ 0.0% SLOPE, INV 8.75'

TOP OF BERM EL. 12.50

3:1 SLOPE TO ELEVATION 11.25 (TYP.)

3:1 SLOPE TO MEET EXISTING
GRADE (TYP.)

LEGEND

- LIMIT OF GI PRACTICE STORAGE
- LIMIT OF GI PRACTICE
- PROPOSED STORM DRAIN
- DRAINAGE AREA
- PROPOSED PERFORATED STORM DRAIN
- CLEANOUT
- FLOW DIRECTION
- SOLID CATCH BASIN COVER
- OUTLET CONTROL STRUCTURE
- MODIFIED CURB INLET
- MANHOLE
- PVC MANHOLE
- GREEN INFRASTRUCTURE CHARACTERISTICS

GI NAME		
TRIBUTARY AREA	VOLUME OF 1.25" STORM	CAPACITY MANAGED

5 0 5 10
SCALE: 1" = 10'

GI ID	GI Asset Data					Stormwater Storage Calculations										Total Stormwater Managed (Infiltration + Storage)				
							Surface Storage			Engineered Soil				Stone Subbase						
	Managed Impervious Tributary Area	Volume 1.25" Rainfall on Impervious Area	GI Footprint Surface Area	GI Perimeter	Permeability Coefficient	Stormwater chambers, pipes, tanks, etc. volume	Surface Storage Area	Surface Storage Depth	Surface Storage Volume	Soil Depth	Soil Voids	Stormwater Captured by Soil	Stone Depth	Stone Voids	Stormwater Captured by Stone Layer	Estimated Total Infiltration Volume	Estimated Total Storage Volume	% Impervious Surface Managed	Calculated Volume of Rainfall Captured	Calculated Volume of Rainfall Captured
	sf	cf	sf	ft	in/hr	cf	sf	in	cf	ft	%	cf	ft	%	cf	cf	cf	%	cf	gal
01RG	26,143	2,723.2	2,549	217	0.00	121.28	1,305.0	3	326.3	1.00	25	326.3	1.65	50	2,042.3	0.0	2,816.1	103%	2,816.1	21,114.0

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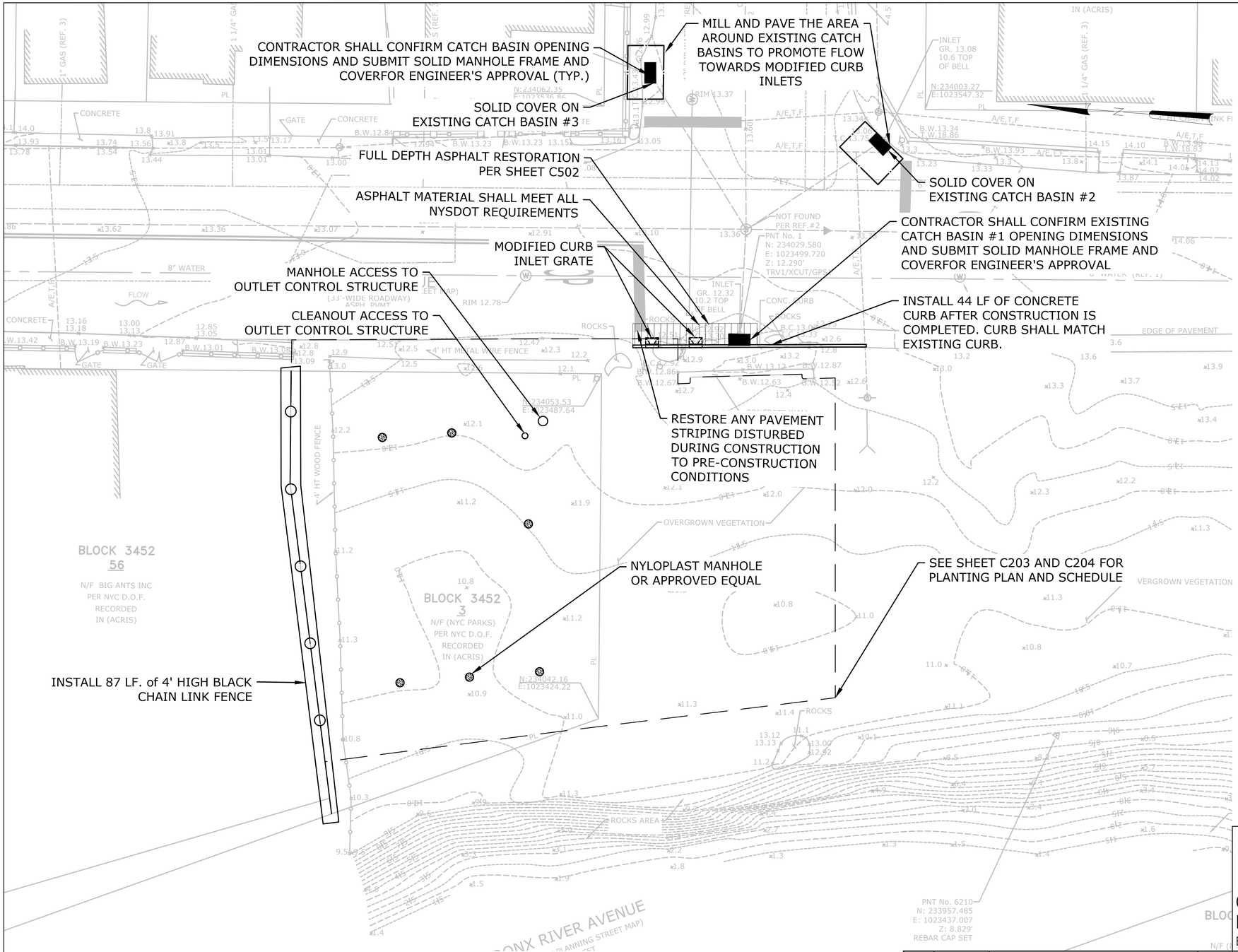
SEAL

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
PROPSED GREEN INFRASTRUCTURE LAYOUT PLAN

DESIGNED BY	DRAWN BY		CHECKED BY
SF/AK	SF/AK		WS
B-SCAN	SCALE 1" = 10'	DRAWING NO. C201	CONTRACT NO. GI-CONS-7
	DATE NOV 2026		SHEET No. 17 OF 24 SHEETS

BLOCK 3451
LOT 1



LEGEND

- CLEANOUT
- SOLID CATCH BASIN COVER
- MODIFIED CURB INLET GRATE
- MANHOLE COVER
- MILLING AND PAVING EXTENTS
- PVC MANHOLE
- 4' HIGH BLACK CHAIN LINK FENCE
- FULL DEPTH ASPHALT RESTORATION

5 0 5 10
SCALE: 1" = 10'

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STATE OF NEW YORK — SARAH FOLD — 096594 — LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
MATERIALS PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 10'	C202	GI-CONS-7
	DATE: NOV 2026		SHEET No. 18 OF 24 SHEETS

BLOCK 3451
LOT 1

CA(4)
DC(4)
CS(4)
HM(4)
CS(4)
DC(4)
CA(4)

SEE NOTE 2
ON THIS PAGE

SEE DETAILS 5, 6, 7 AND 8
ON SHEET C500

OUTLET CONTROL STRUCTURE
SEE DETAIL 3, SHEET C501.

1600 SF OF COIR EROSION
CONTROL FABRIC ON THE
BERM.

1740 SF OF WETLAND
MEADOW SEED MIX

18" DIAM. ADS NYLOPLAST
W. DOME OPENING (TYP.)
SEE DETAIL 3, SHEET C501.

5336 SF OF UPLAND
MEADOW SEED MIX

2.5 0 2.5 5
SCALE: 1" = 5'

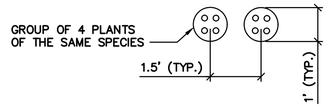
LEGEND

UPLAND MEADOW SEED MIX

WETLAND MEADOW SEED MIX

COIR EROSION CONTROL FABRIC

WETLAND PLANTING



NOTES:
1. SEE SHEET C-204 FOR UPLAND MEADOW SEED MIX, WETLAND MEADOW SEED MIX AND WETLAND PLANTINGS.
2. CONTRACTOR SHALL ALTERNATE BETWEEN THE 4 WETLAND PLANTING SPECIES SHOWN ON SHEET C-204.

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STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
096594

BLOCK
3451

LOT
1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
PLANTING PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	1" = 5'	C203	GI-CONS-7
	DATE NOV 2026		SHEET No. 19 OF 24 SHEETS

UPLAND MEADOW SEED MIX		
Scientific Name	**Common Name**	**Seed Mix Composition**
Elymus virginicus	Virginia Wildrye	20
Panicum virgatum	Switchgrass	15
Andropogon gerardii	Big Bluestem	15
Schizachyrium scoparium	Little Bluestem	15
Chamaecrista fasciculata	Partridge Pea	7
Asclepias syriaca	Common Milkweed	7
Euthamia graminifolia	Grass-leaved Goldenrod	5
Aster umbellatus	Flat-topped White Aster	5
Monarda fistulosa	Wild Bergamot	5
Pycnanthemum virginianum	Virginia Mountain Mint	3
Solidago juncea	Early Goldenrod	3

UPLAND MEADOW SEED MIX NOTES:
1. APPLY UPLAND MEADOW SEED MIX AT 20 LBS/ACRE TO BERM WITH A COVER CROP.
2. FOR COVER CROP, USE ONE OF THE FOLLOWING: GRAIN RYE (1 SEP TO 30 APR; 30 LBS/AC) OR JAPANESE MILLET (1 MAY TO 31 AUG; 10 LBS/ACRE).

WETLAND MEADOW SEED MIX (ERNMX-122)		
Scientific Name	**Common Name**	**Seed Mix Composition**
Carex annectens	Yellowfruit Sedge	15
Elymus virginicus	Virginia Wildrye	15
Dichanthelium clandestinum	Deertongue	7
Carex scoparia	Blunt Broom Sedge	7
Carex amphibola	Creek Sedge	7
Juncus tenuis	Path Rush	7
Schizachyrium scoparium	Little Bluestem	7
Hibiscus moscheutos	Swamp Rose Mallow	5
Symphyotrichum novae-angliae	New England Aster	5
Asclepias incarnata	Swamp Milkweed	3
Symphyotrichum novi-belgi	New York Aster	3
Helenium autumnale	Common Sneezeweed	3
Penstemon digitalis	Foxglove Beardtongue	3
Solidago sempervirens	Seaside Goldenrod	3
Euthamia graminifolia	Grass-Leaved Goldenrod	3
Zizia aurea	Golden Alexander	3
Verbena hastata	Blue Vervain	2
Verbena urticifolia	White Vervain	2

WETLAND MEADOW SEED MIX NOTES:
1. APPLY WETLAND MEADOW SEED MIX (ERNMX-122) AT 20 LBS/ACRE TO BASIN WITH A COVER CROP.
2. FOR COVER CROP, USE ONE OF THE FOLLOWING: GRAIN RYE (1 SEP TO 30 APR; 30 LBS/AC) OR JAPANESE MILLET (1 MAY TO 31 AUG; 10 LBS/ACRE).

WETLAND PLANTING					
Accronym	**Scientific Name**	**Common Name**	**Stratum**	**Container Size**	**Density (stems/acre)**
HM	*Hibiscus moscheutos*	Swamp Rose Mallow	Herbaceous	Tubeling	4840
CS	*Carex scoparia*	Blunt Broom Sedge	Herbaceous	Tubeling	4840
DC	*Dichanthelium clandestinum*	Deertongue	Herbaceous	Tubeling	4840
CA	*Carex annectens*	Yellowfruit Sedge	Herbaceous	Tubeling	4840
				Total:	773

WETLAND PLANTING NOTES:
PLANT HERBACEOUS TUBELINGS IN BASIN WITH ON CENTER SPACING = 1.5 FEET AND IN GROUPS OF 4 PLANTS.

GENERAL RESTORATION NOTES:
1. CONTRACTOR IS RESPONSIBLE FOR ACQUISITION OF ALL NECESSARY PLANT MATERIAL. ALL MATERIAL WILL BE REGIONALLY SOURCED (I.E. WITHIN 150 MILES OF SITE) AND REQUIRE APPROVAL UPON SUBMITTAL.
2. THE CONTRACTOR WILL PROVIDE ALL PLANTS OF QUANTITY, SIZE, GENUS, AND SPECIES AS PROVIDED ON PLANTING SPECIFICATION TABLES. THE CONTRACTOR WILL PROVIDE HEALTHY, VIGOROUS STOCK FROM A RECOGNIZED REGIONAL NURSEY. ALL PLANTS SHALL BE FREE FROM DISEASE AND INFESTATION. THE CONTRACTING ENGINEER RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL THAT IS DEEMED TO BE INFERIOR QUALITY OR IS DAMAGED. ANY REQUIRED SUBSTITUTIONS BASED ON AVAILABILITY OF NATIVE PLANT NURSERIES WILL REQUIRE APPROVAL FROM CONTRACTING ENGINEER.
3. INSTALL PLANTS MARCH 15 TO JUNE 1, UNLESS OTHERWISE AUTHORIZED BY CONTRACTING ENGINEER.
4. ALL PLANTINGS WILL BE PROTECTED WITH WATERFOWL EXCLUSION BARRIER CONSISTENT WITH DETAILS 6 & 7 ON SHEET C500. THE CONTRACTOR WILL REVIEW THE SELECTED APPROACH AND SUBMIT CHANGES FOR APPROVAL.
5. PLANT MATERIAL TO BE INSTALLED WITH 1.5 FOOT ON CENTER SPACING CONSISTENT WITH DETAIL 8 ON SHEET C500.
6. PRIOR TO PLANTING AND SEEDING, THE GROUND WILL BE SCARIFIED, HARROWED, RAKED, AND BROOMED UNTIL THE SURFACE IS SMOOTH AND OF UNIFORMLY FINE TEXTURE.
7. SPREAD WEED-FREE MULCH AS NEEDED TO LEAVE SEEDED SURFACE WITH MINIMUM AMOUNT OF DAMAGE.
8. ALL PLANTS TO BE WATERED EXACTLY FOUR DAYS AFTER COMPLETION OF SEEDING IF THERE IS ONLY A TRACE OF RAIN OR LESS AS DETERMINED BY THE RE WITHIN 3 DAYS OF COMPLETION OF SEEDING OPERATIONS.

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NO.	DATE	ISSUED FOR	BY

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STATE OF NEW YORK
ASHLEY KAY
096594
LICENSED PROFESSIONAL ENGINEER

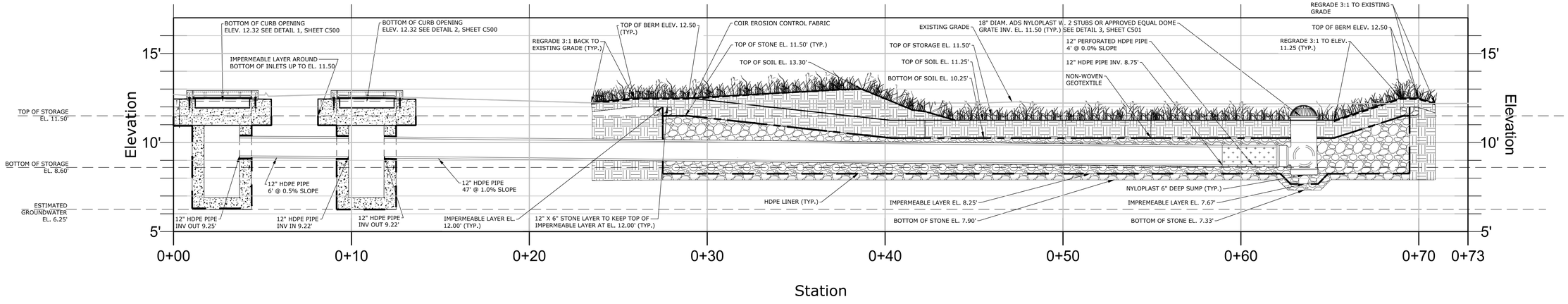
BLOCK 3451
LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

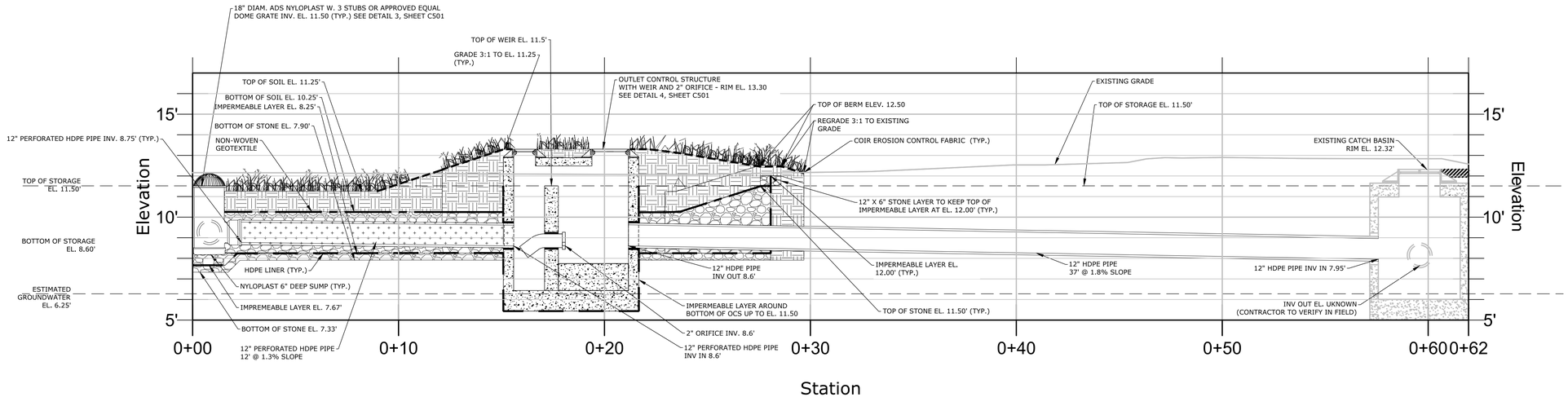
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PLANTING PLAN - 2

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	C204	GI-CONS-7
	DATE NOV 2026		SHEET No. 20 OF 24 SHEETS



PROFILE 1
Scale: 1" = 3'



PROFILE 2
Scale: 1" = 3'

LEGEND

COIR EROSION CONTROL FABRIC

NON-WOVEN GEOTEXTILE

HDPE IMPERMEABLE LINER

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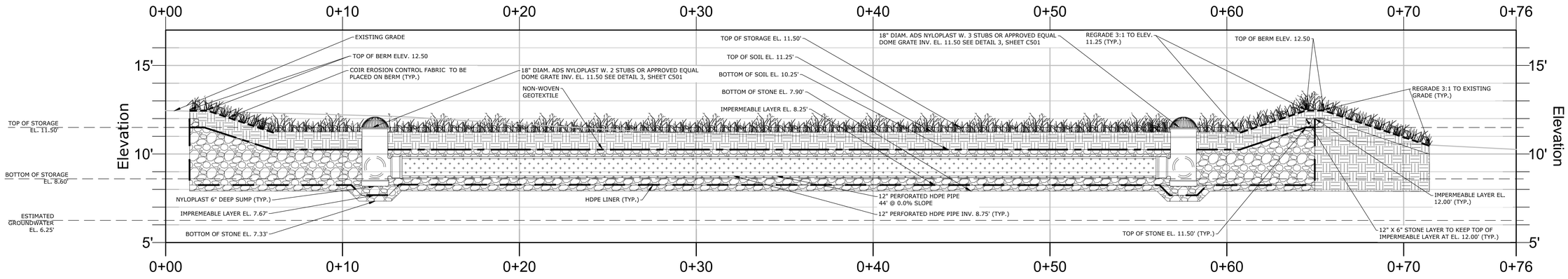
BLOCK 3451

LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
SECTIONS & PROFILES - 1

DESIGNED BY	DRAWN BY		CHECKED BY
SF/AK	SF/AK		WQ
B-SCAN	SCALE 1" = 3'	DRAWING NO. C300	CONTRACT NO. GI-CONS-7
	DATE NOV 2026		SHEET No. 21 OF 24 SHEETS



PROFILE 3
Scale: 1" = 3'

LEGEND

COIR EROSION CONTROL FABRIC

NON-WOVEN GEOTEXTILE

HDPE IMPERMEABLE LINER

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BLOCK 3451

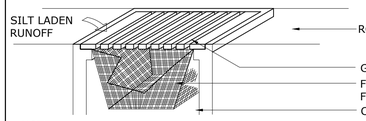
LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
SECTIONS & PROFILES - 2

DESIGNED BY	DRAWN BY	CHECKED BY
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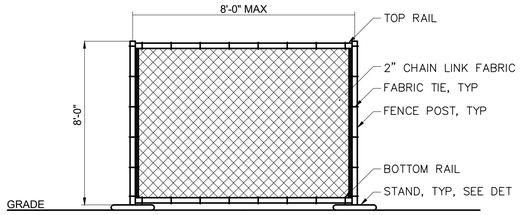
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	1" = 3'	C301	GI-CONS-7
	DATE NOV 2026		SHEET No. 22 OF 24 SHEETS



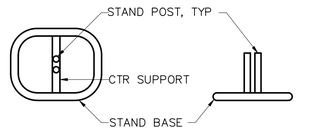
NOTE:
1. IN PAVED AREAS, USE FILTER BAG FOR INLET PROTECTION (NO MESH, BOX STONE REQUIRED).
2. FILTER BAG SHALL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE GEOTEXTILE AND SEWN BY A DOUBLE NEEDLE MACHINE USING A HIGH STRENGTH NYLON THREAD.
3. BAG SHALL BE SILTSACK® BY ACF ENVIRONMENTAL, OR EQUAL, AS APPROVED BY THE ENGINEER.

MAINTENANCE REQUIREMENTS:
1. INSPECT GRATE AND BAG ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT PRODUCING ½ INCH OR MORE OR RAIN. ANY DEBRIS OR SEDIMENT VISIBLE SHALL BE REMOVED IMMEDIATELY.
2. DAMAGE TO THE BAG SHALL BE REPAIRED IMMEDIATELY.
3. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, THE BAG IS FULL AND SHOULD BE EMPTIED.
4. USE 1" DIAMETER REBAR TO SLIDE THROUGH THE LIFTING LOOPS/POCKETS ON EACH SIDE OF THE BAG TO FACILITATE LIFTING.
5. REMOVE SEDIMENT FROM BAG AND DISPOSE OF OFF-SITE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS.

1 TEMPORARY INLET PROTECTION
SCALE:NTS



ELEVATION

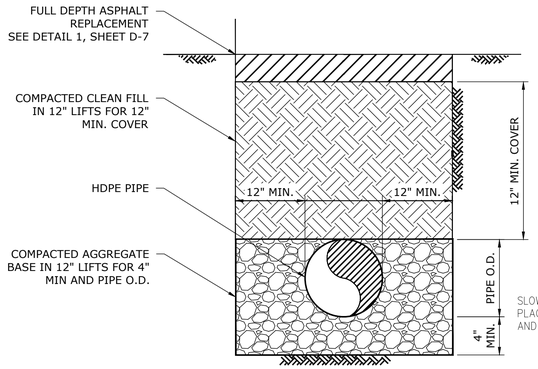


PLAN SIDE ELEVATION

STAND DETAIL

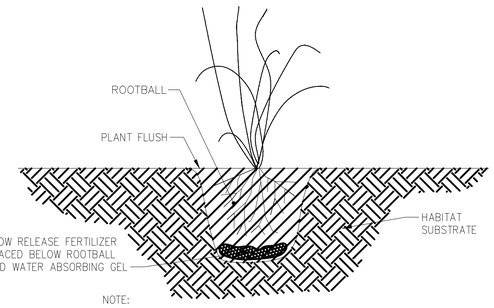
NOTES:
1. CONTRACTOR SHALL PROVIDE, AT A MINIMUM, TEMPORARY FENCE WITH DIMENSIONS AND APPURTENANCES AS SHOWN.
2. ALL OTHER DIMENSIONS, MATERIAL SIZES, MATERIAL TYPES, ACCESSORIES, ETC PER MANUFACTURER.
3. TEMPORARY FENCE SHALL REMAIN IN PLACE UNTIL CONCLUSION OF CONSTRUCTION.
4. SAND BAGS SHALL BE USED FOR POST SUPPORT IN ACCORDANCE WITH THE SPECIFICATIONS.

2 TEMPORARY CONSTRUCTION FENCE
SCALE:NTS



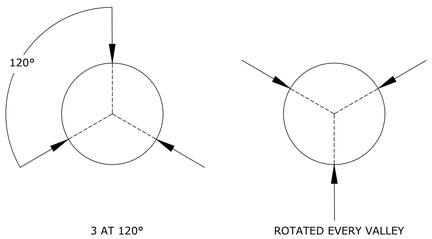
NOTE:
1. TRENCHING WITHIN EXISTING ASPHALT PAVEMENT REQUIRES FULL DEPTH ASPHALT PAVEMENT REPLACEMENT AND RESTORATION

3 TRENCH RESTORATION
SCALE:NTS



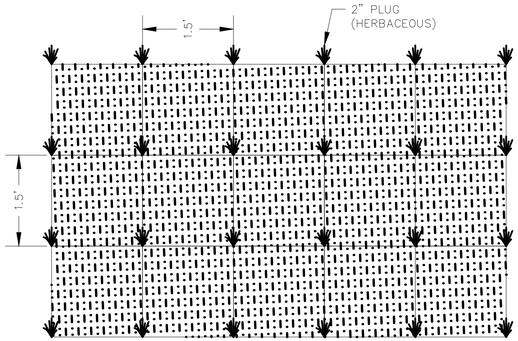
NOTE:
1. SEE SPECIFICATIONS FOR FERTILIZER REQUIREMENTS.

5 HERBACEAOUS SEEDLING DETAIL
SCALE:NTS



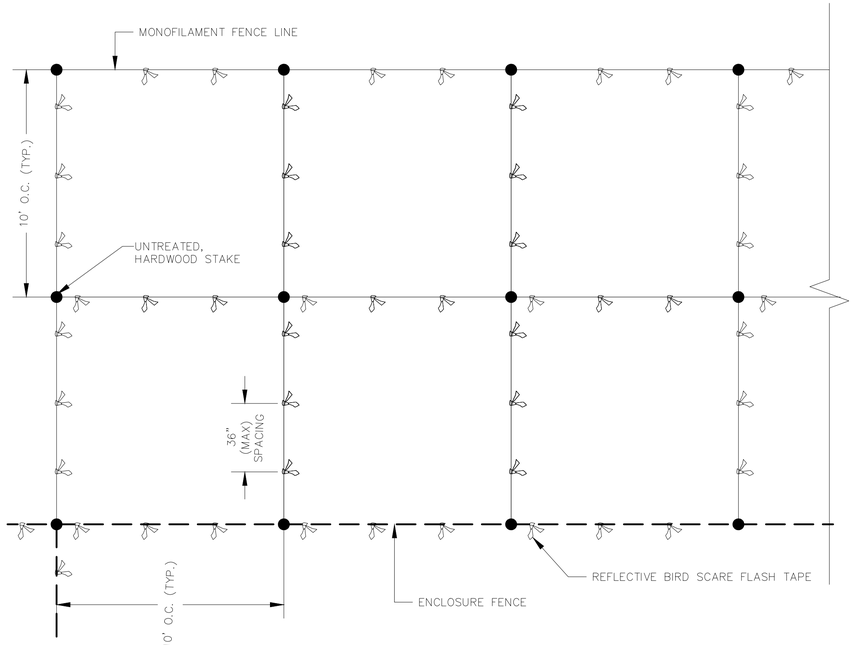
NOTE:
1. CLASS II PERFORATIONS SHALL BE LOCATED IN THE OUTSIDE VALLEYS OF CORRUGATED HDPE PIPE. PERFORATION PATTERN SHOWN FOR HDPE PIPE UP TO 10 INCHES IN DIAMETER.

4 AASHTO CLASS II PERFORATION PIPE
SCALE:NTS

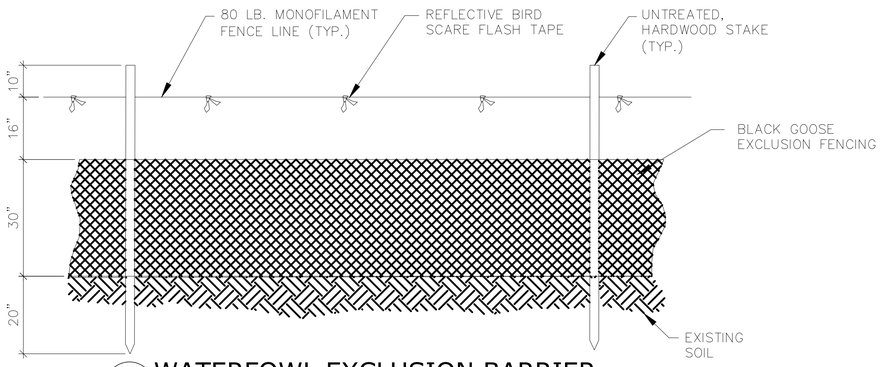


NOTES:
1. SPECIFIED PLANTINGS (2" PLUGS) SHALL BE PLANTED BY SPECIES IN GROUPS OF 4 (MINIMUM).
2. PLANTINGS WILL BE 1'-6" ON CENTER SPACING.

8 TYPICAL PLANTING DETAIL
SCALE:NTS



6 WATERFOWL EXCLUSION BARRIER PLAN
SCALE:NTS



7 WATERFOWL EXCLUSION BARRIER
SCALE:NTS

NOTES:
1. USE TWO HALF HITCHES TO FASTEN TAPE.
2. STAKES SHALL BE 2" X 2" X 8' STAKES OF POINTED TIPPED, UNTREATED FSC-CERTIFIED HARDWOOD TIMBER, OR EQUAL.
3. MONOFILAMENT FENCE LINE SHALL BE WHITE OR OTHER ACCEPTABLE COLOR. FENCE LINE SHALL NOT BE CLEAR.
4. GOOSE FENCING SHALL HAVE GRID SIZE OF 0.75" TO 1", OR APPROVED EQUAL.
5. INSTALL IN ALL PLANT COMMUNITIES THAT REQUIRE 2" HERBACEOUS PLUGS..

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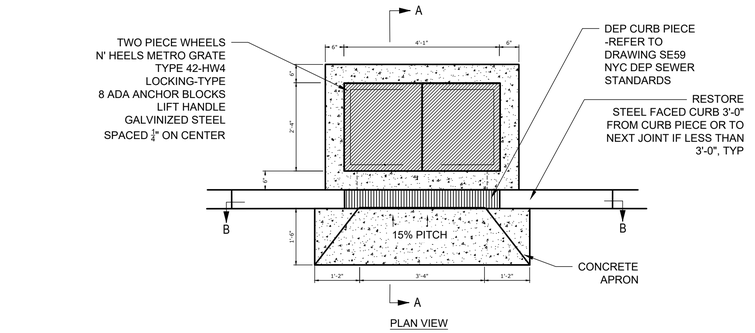
LOT 1

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

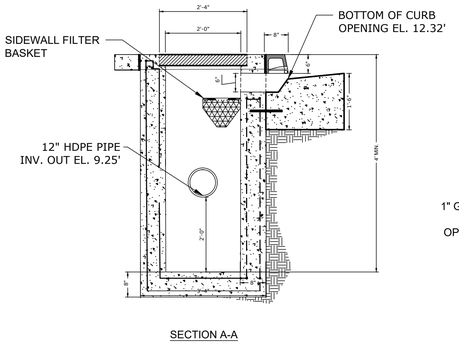
DRAWING TITLE
DETAILS - 1

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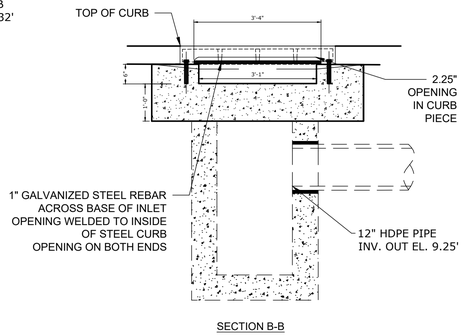
B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
		C500	GI-CONS-7
	DATE NOV 2026		SHEET No. 23 OF 24 SHEETS



PLAN VIEW

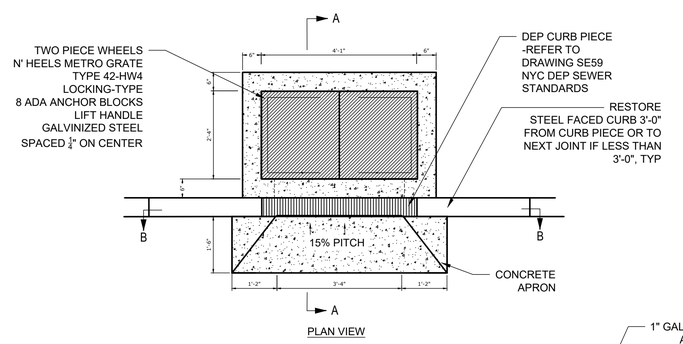


SECTION A-A

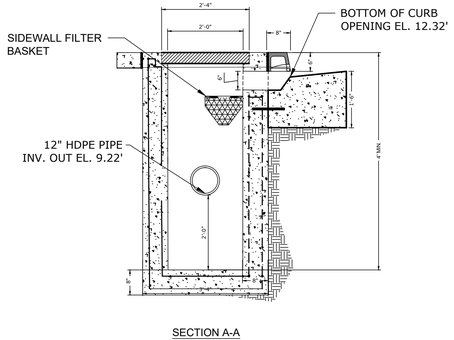


SECTION B-B

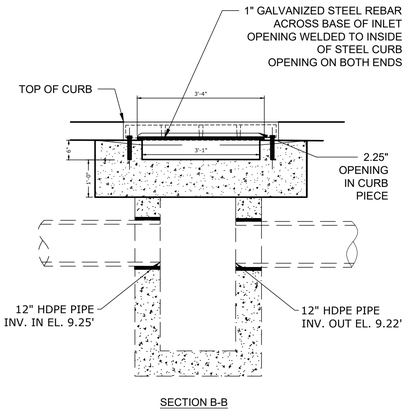
1 MODIFIED CURB INLET #2
SCALE: 1" = 2'



PLAN VIEW

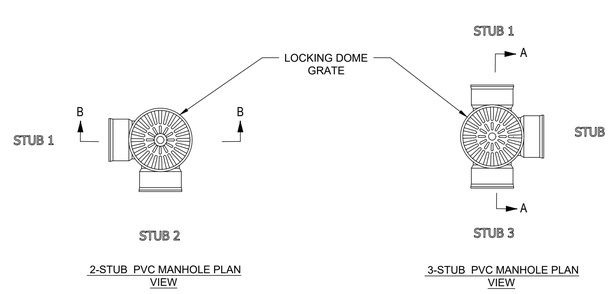


SECTION A-A



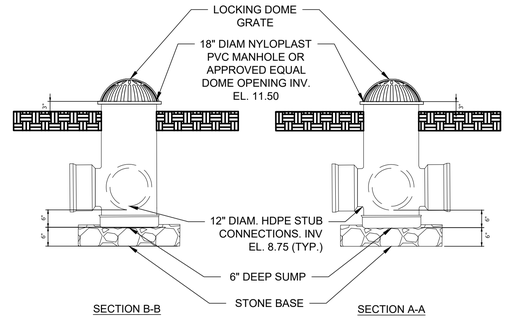
SECTION B-B

2 MODIFIED CURB INLET #1
SCALE: 1" = 2'



2-STUB PVC MANHOLE PLAN VIEW

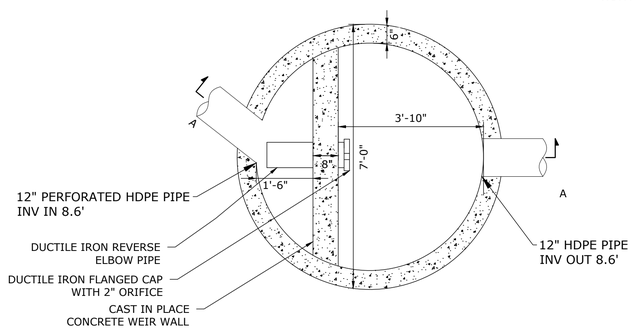
3-STUB PVC MANHOLE PLAN VIEW



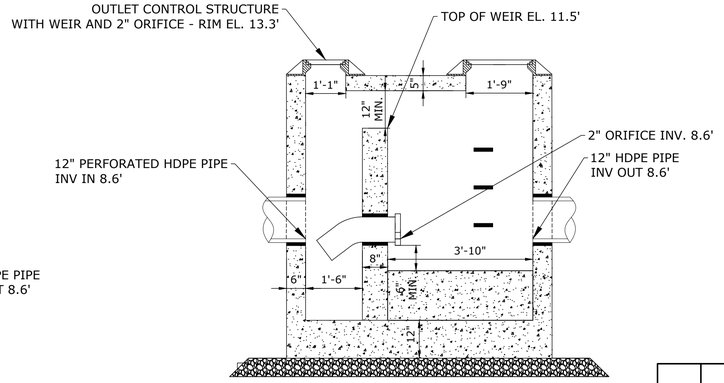
SECTION B-B

SECTION A-A

3 PVC MANHOLE
SCALE: 1" = 2'



PLAN VIEW



SECTION A-A

4 OUTLET CONTROL STRUCTURE
SCALE: 1" = 2'

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PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE DESIGN
HARDING PARK
NEAR GILDERSLEEVE AVE AND LELAND AVE

DRAWING TITLE
DETAILS - 2

DESIGNED BY	DRAWN BY	CHECKED BY
SF/AK	SF/AK	WS

B-SCAN

SCALE: 1" = 2'

DRAWING NO.: C501

CONTRACT NO.: GI-CONS-7

BLOCK: 3451

LOT: 1

DATE: NOV 2026

SHEET No. 24 OF 24 SHEETS

NYC Parks

THE FOLLOWING SHEETS ARE NYC PARKS STANDARD DETAILS, CURRENT AS OF DECEMBER 2025, AND INCLUDED FOR REFERENCE ONLY.
THE CONTRACTOR SHALL FOLLOW THE MOST CURRENT NYC PARKS STANDARD DETAILS AS APPLICABLE.

SHEET 1	CONSTRUCTION SIGN	DATED SEPTEMBER 1, 2020
SHEET 2	DRAINAGE DETAILS - NO 1	DATED SEPTEMBER 1, 2020
SHEET 3	DRAINAGE DETAILS - NO 2	DATED SEPTEMBER 1, 2020
SHEET 5	PARKS LEAF MANHOLE AND CATCH BASIN COVERS	DATED SEPTEMBER 1, 2020
SHEET 15	PAVEMENT DETAILS - NO 1	DATED SEPTEMBER 1, 2020
SHEET 16	PAVEMENT DETAILS - NO 2	DATED SEPTEMBER 1, 2020
SHEET 17	CURBS AND PIERS	DATED SEPTEMBER 1, 2020
SHEET 29	CHAIN LINK FENCE - DETAILS	DATED SEPTEMBER 1, 2020
SHEET 32	CHAIN LINK FENCE - DOUBLE GATE	DATED SEPTEMBER 1, 2020
SHEET 45	BASKETBALL BACKSTOP - DOUBLE POST	DATED SEPTEMBER 1, 2020
SHEET 45A	BASKETBALL COURTS LAYOUT	DATED SEPTEMBER 1, 2020
SHEET 47	TENNIS COURT LAYOUT AND DETAILS	DATED SEPTEMBER 1, 2020
SHEET 59	TREE PROTECTION & SEDIMENT CONTROL	DATED SEPTEMBER 1, 2020
SHEET 64	ADA SIGNAGE & PAVEMENT MARKINGS	DATED SEPTEMBER 1, 2020

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PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE

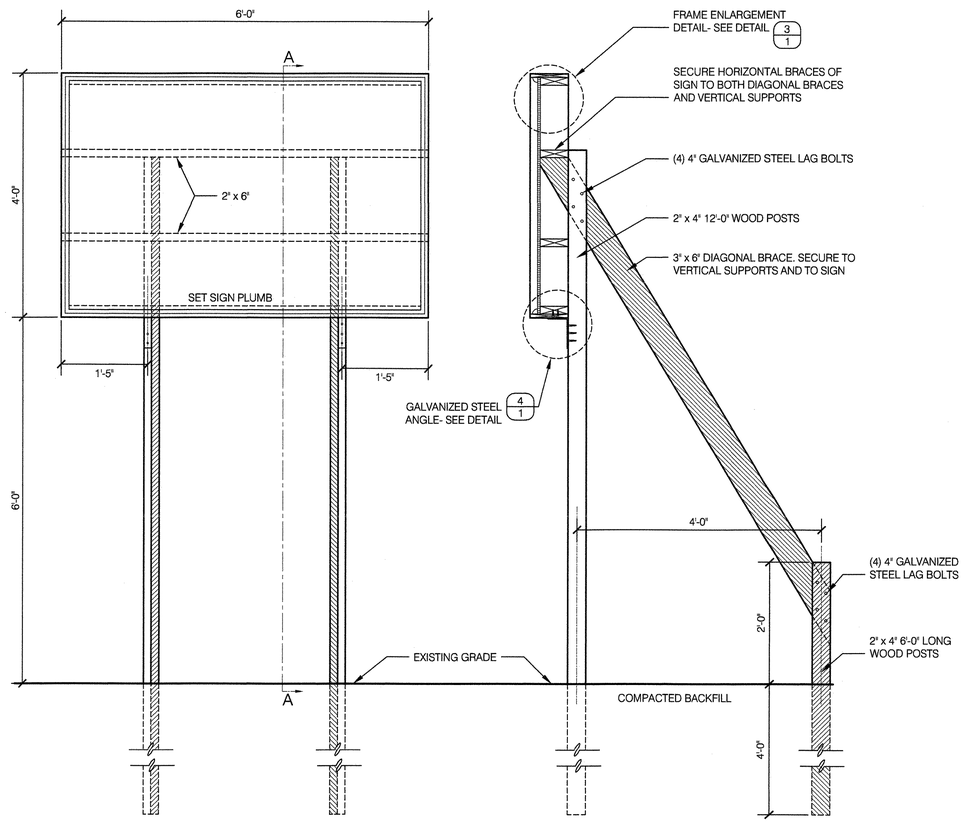
DRAWING TITLE
DIVIDER SHEET - NYC PARKS DETAILS

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	O-6	GI-CONS-7
	DATE NOV 2026		SHEET No. 113 OF 133 SHEETS

1 CONSTRUCTION SIGN ON FRAME

0 1' 2'
SCALE 1"= 1'-0"

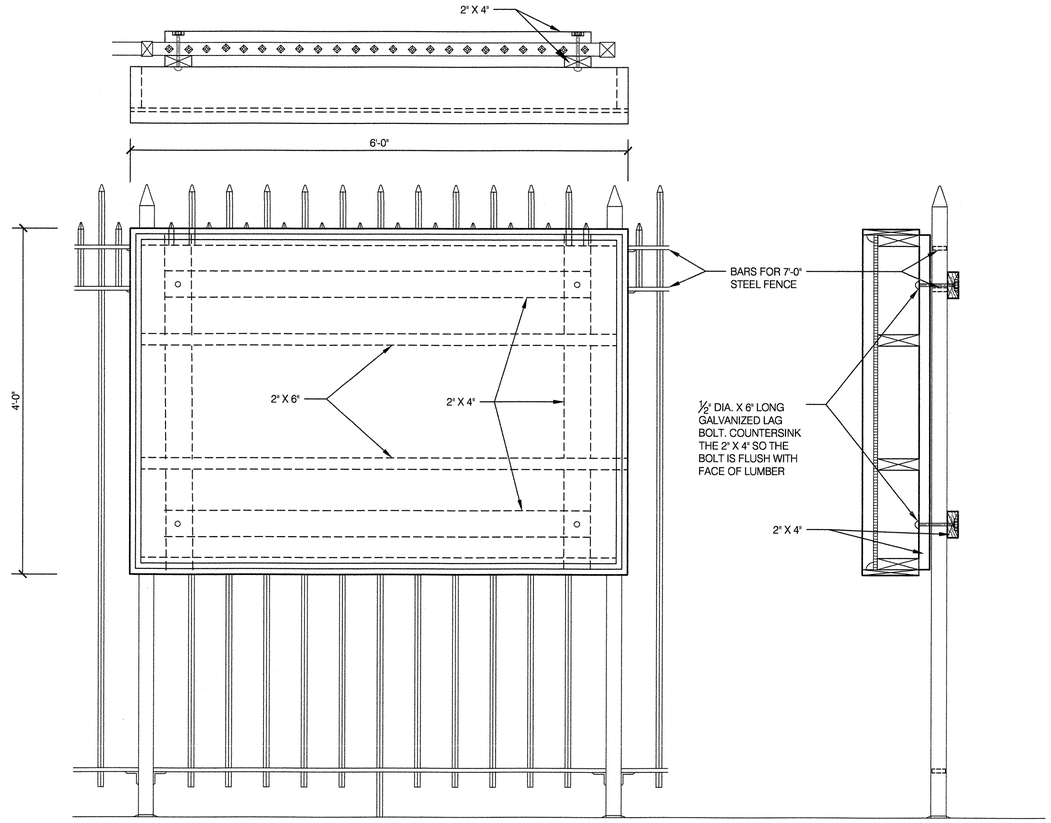


ELEVATION

SECTION A-A

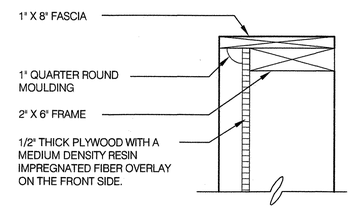
2 CONSTRUCTION SIGN ON FENCE

SCALE: NOT TO SCALE



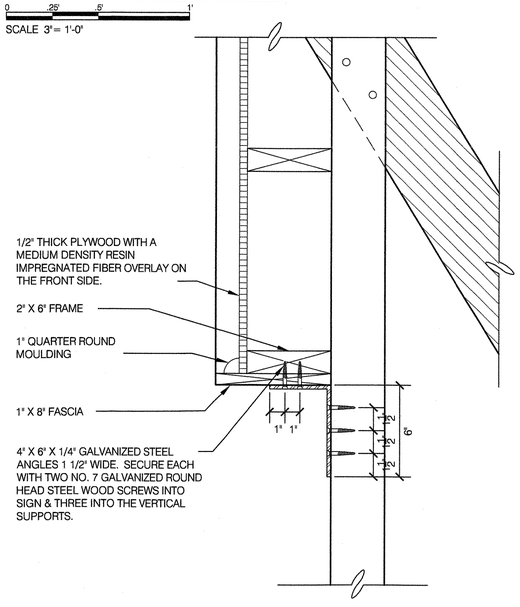
3 CONSTRUCTION SIGN FRAME ENLARGEMENT DETAIL

0 25' 5' 1'
SCALE 3"= 1'-0"



4 CONSTRUCTION SIGN STEEL ANGLE DETAIL

0 25' 5' 1'
SCALE 3"= 1'-0"



NOTES:

1. DPR WILL PROVIDE COMPACT DISC SHOWING TEXT AND OVERALL DIMENSIONS.

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FLUSHING, NEW YORK 11368

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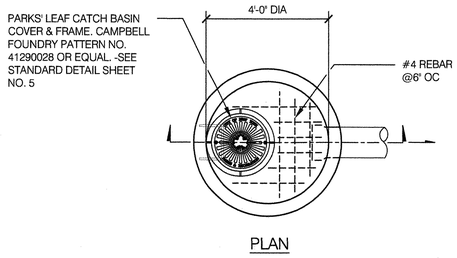
DRAWING TITLE
CONSTRUCTION SIGN

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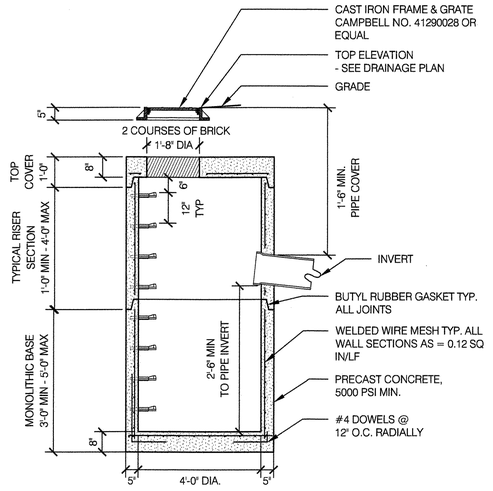
DRAWN BY: STAFF	CHECKED BY: RUBY WEI, PE
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: RUBY WEI, PE	SHEET NO.: 1
DATE: 09-01-2020	SCALE: AS SHOWN

1 CATCH BASIN C-1

SCALE ½"= 1'-0"



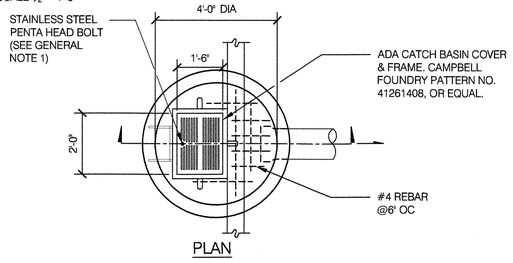
PLAN



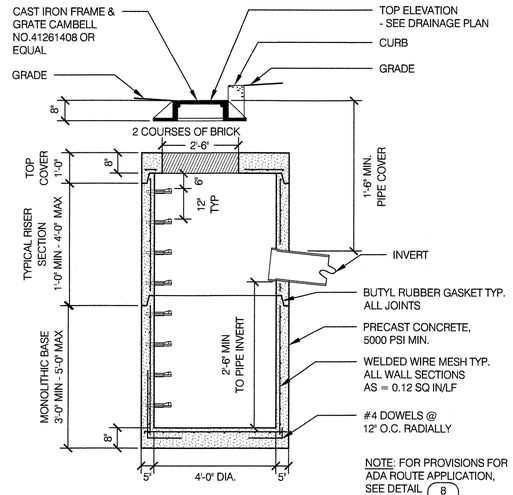
SECTION

2 CATCH BASIN C-2

SCALE ½"= 1'-0"



PLAN

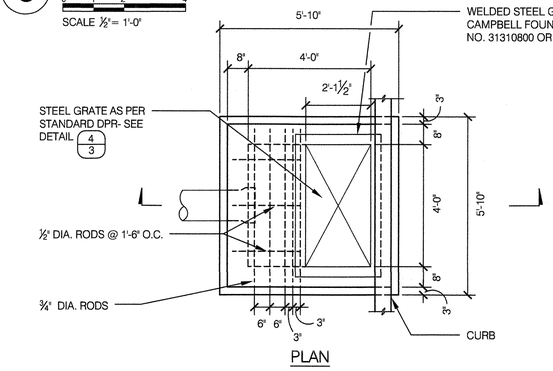


NOTE: FOR PROVISIONS FOR ADA ROUTE APPLICATION, SEE DETAIL 8/2

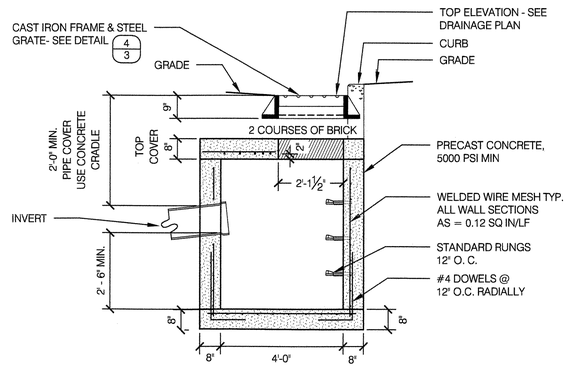
SECTION

3 CATCH BASIN C-3

SCALE ½"= 1'-0"



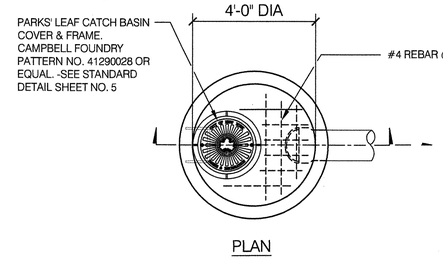
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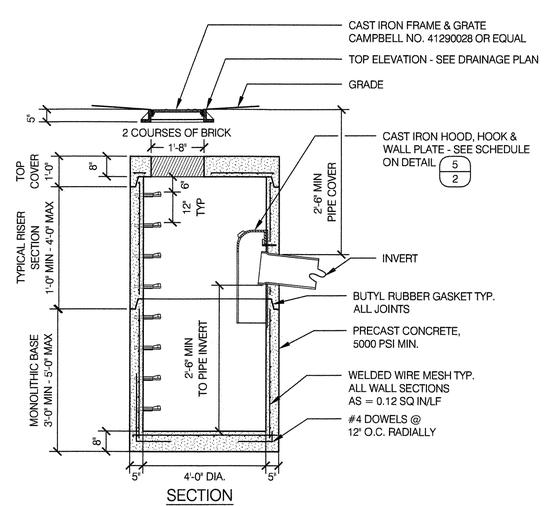
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4 CATCH BASIN C-5

SCALE ½"= 1'-0"



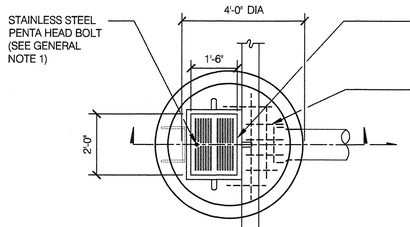
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SECTION

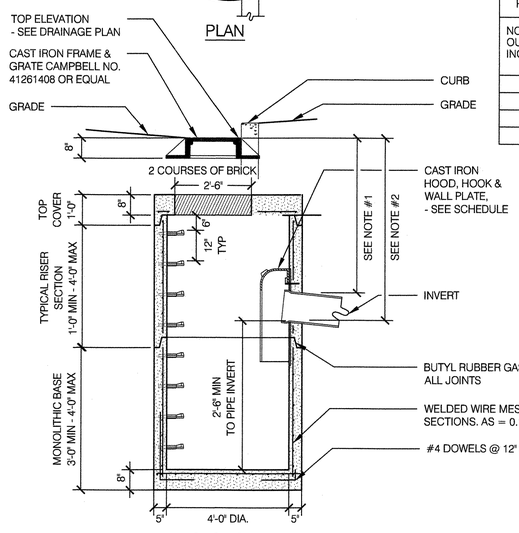
5 CATCH BASIN C-6, C-7

SCALE ½"= 1'-0"



PLAN

SCHEDULE OF CAST IRON HOODS, HOOKS & WALL PLATES	
NOMINAL OUTLET DIA. INCHES	PATTERN NUMBERS THIS COLUMN, CAMPBELL FOUNDERY CO., OR EQUAL
8	2561
10	2562
12	2563
15	2564



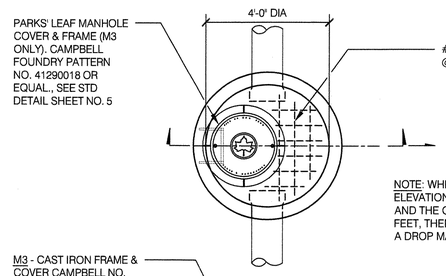
NOTES:

1. MINIMUM PIPE COVERAGE
   FOR C-6 2'-1"
   FOR C-7 2'-10"
2. STANDARD DIMENSION
   FOR C-6 3'- 6"
   FOR C-7 4'- 0"
3. CAST IRON HOOD, HOOK & WALL PLATE REQUIRED FOR C7 ONLY. SEE SCHEDULE.

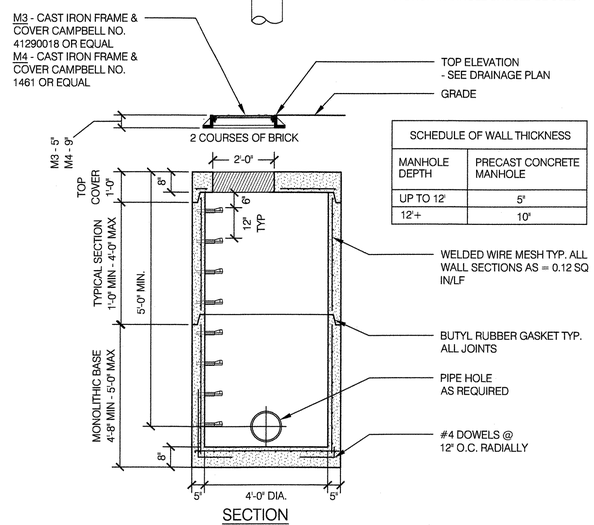
SECTION

6 MANHOLE M-3, M-4

SCALE ½"= 1'-0"



NOTE: WHEN THE DIFFERENCE IN ELEVATION BETWEEN THE INCOMING PIPE AND THE OUTGOING PIPE IS MORE THAN 4 FEET, THEN THIS DETAIL DOES NOT APPLY. A DROP MANHOLE SHOULD BE USED.



SCHEDULE OF WALL THICKNESS	
MANHOLE DEPTH	PRECAST CONCRETE MANHOLE
UP TO 12'	5"
12'+	10"

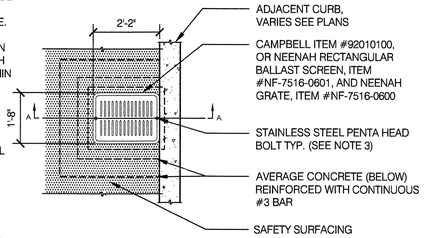
SECTION

7 CATCH BASIN COVER AND FRAME WITH BALLAST SCREEN

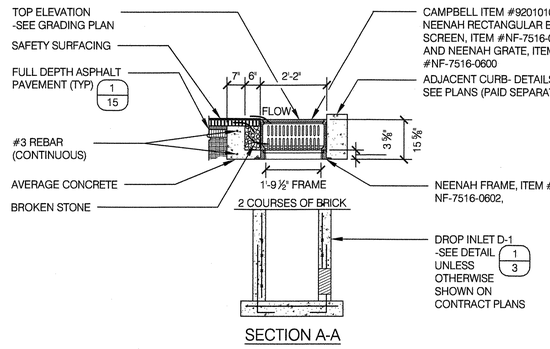
SCALE ½"= 1'-0"

NOTES:

1. INSTALL ADDITIONAL CONCRETE FOOTINGS AS REQUIRED TO ANCHOR SAFETY SURFACING. CONCRETE FOOTINGS SHALL BE 6" DIA. X 12' DEPTH MINIMUM, 3,200 PSI AVERAGE CONCRETE.
2. CONTRACTOR SHALL VERIFY IN FIELD THAT CATCH BASIN WITH BALLAST SCREEN IS NOT WITHIN THE USE ZONE OF THE PLAY EQUIPMENT OR WITHIN THE CLEARANCE ZONE OF THE ADULT FITNESS AREA.
3. PENTA-HEAD STAINLESS STEEL BOLT, ½" DIA., TWO (2) PER GRATE, AS SUPPLIED BY CAMPBELL FOUNDRY CO, 800 BERGEN ST, HARRISON, NJ 07029, (973) 483-5480, OR APPROVED EQUAL. TYPICAL PLASTIC END CAPS ARE TO BE SUPPLIED WITH HARDWARE AND INSTALLED ON PENTA-HEAD BOLTS.



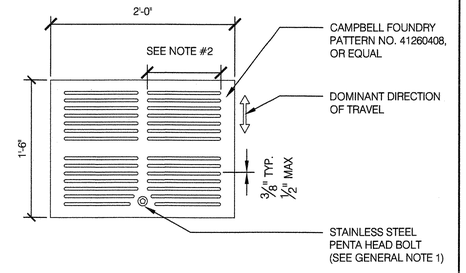
PLAN



SECTION A-A

8 ADA CATCH BASIN COVER

SCALE 1½"= 1'-0"



NOTES:

A. ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

B. CAMPBELL FOUNDRY PATTERN 41260408 ADA COVER, OR APPROVED EQUAL FOR CATCHBASINS C-2, C-6, C-7, AND DROP INLET D-2 (SHEET 3)

GENERAL NOTES:

1. PENTA-HEAD STAINLESS STEEL BOLT, ½" DIA., ONE (1) PER COVER, AS SUPPLIED BY CAMPBELL FOUNDRY CO, 800 BERGEN ST, HARRISON, NJ 07029, (973) 483-5480, OR APPROVED EQUAL. TYPICAL PLASTIC END CAPS ARE TO BE SUPPLIED WITH HARDWARE AND INSTALLED ON PENTA-HEAD BOLTS.

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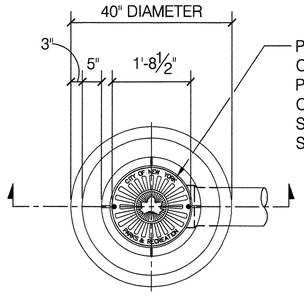
DRAWING TITLE
DRAINAGE DETAILS - NO. 1

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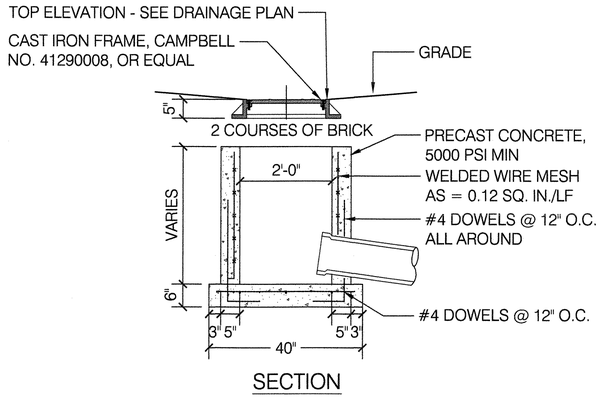
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APPROVED BY DIRECTOR: RUBY WEI, PE	SHEET NO.: 2
DATE: 09-01-2020	SCALE: AS SHOWN

1 DROP INLET D-1

SCALE ¾"= 1'-0"



PLAN

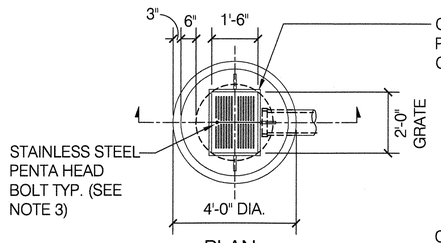


SECTION

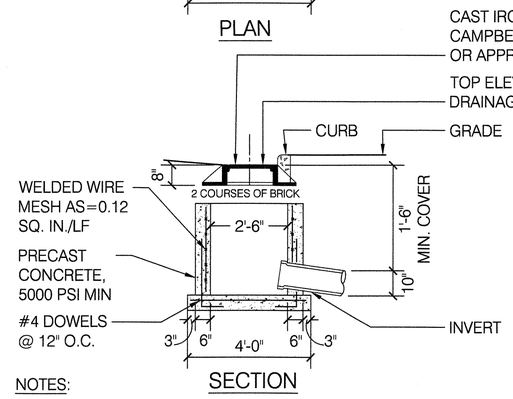
NOTE: FOR DROP INLETS D1, 10" PIPE PERMITTED ON RUNS OF 30 FEET OR LESS, OTHERWISE USE 12" DIAMETER PIPE AS THE MINIMUM SIZE.

2 DROP INLET D-2

SCALE ½"= 1'-0"



PLAN



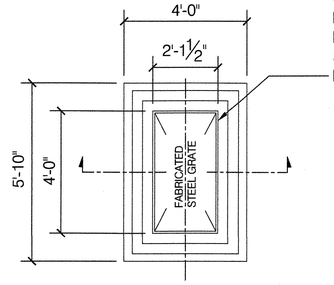
SECTION

NOTES:

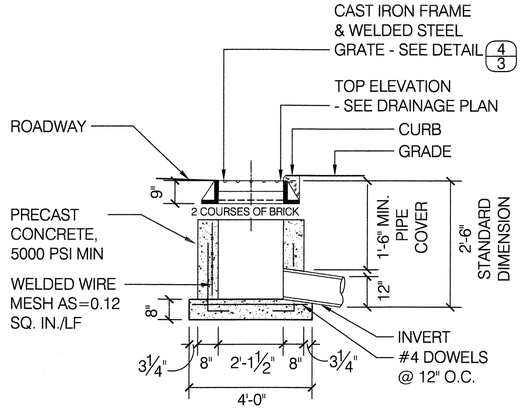
1. FOR DROP INLETS D2, 10" PIPE PERMITTED ON RUNS OF 30 FEET OR LESS, OTHERWISE USE 12" DIAMETER PIPE AS THE MINIMUM SIZE.
2. SEE SHEET 2, DETAIL 8 "ADA CATCH BASIN COVER" FOR PROVISIONS FOR ADA ROUTE APPLICATION.
3. PENTA-HEAD STAINLESS STEEL BOLT, ½" DIA., ONE (1) PER COVER, AS SUPPLIED BY CAMPBELL FOUNDRY CO, 800 BERGEN ST, HARRISON, NJ 07029, (973) 483-5480, OR APPROVED EQUAL. TYPICAL PLASTIC END CAPS ARE TO BE SUPPLIED WITH HARDWARE AND INSTALLED ON PENTA-HEAD BOLTS.

3 DROP INLET HIGHWAY DRAIN D-3

SCALE ½"= 1'-0"



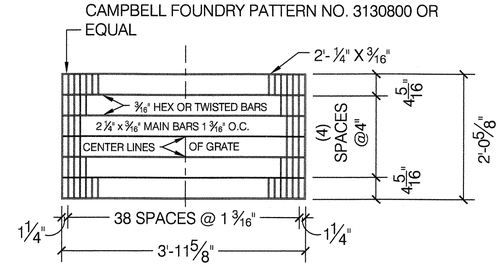
PLAN



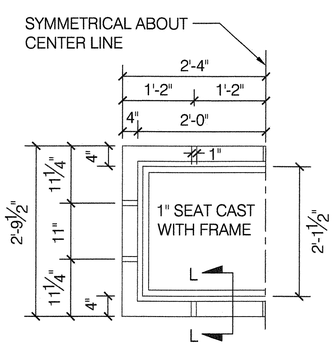
SECTION

4 CAST IRON FRAME AND WELDED STEEL GRATE

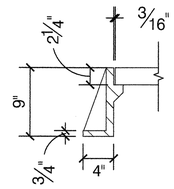
SCALE 1"= 1'-0"



DETAIL OF WELDED STEEL GRATE



HALF PLAN OF CAST IRON FRAME FOR WELDED STEEL GRATE



SECTION L-L

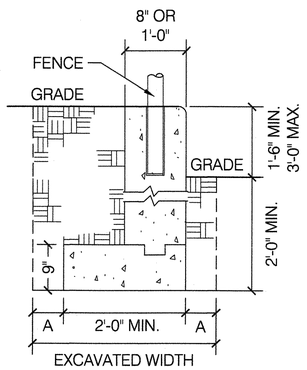
SCALE: 1½" = 1'-0"

5 MAXIMUM PAYMENT LINES FOR EXCAVATION

SCALE 1"= 1'-0"

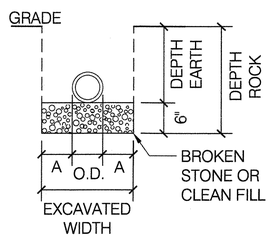
NOTES:

1. DIMENSION "A" SHALL APPLY TO THE FOLLOWING STRUCTURES:
   - DRAINAGE STRUCTURES AND VALVE BOXES (ALL SIDES)
   - BUILDING FOUNDATION (EXTERIOR SIDE ONLY)
   - TYPE 8 CURB OR GREATER - SEE SHEET 17 FOR CURB DETAIL (BOTH SIDES)
2. ALL OTHER EXCAVATION PAYMENT LINE TO NEAT LINES.
3. DEPTH TO BE MEASURED FROM EITHER EXISTING GRADE OR FINISHED SUBGRADE, WHICHEVER IS LOWER.



TYPE 8 CURB

ITEM	DIMENSION "A" DEPTH	
	UNDER 2'-6'	2'-6" OR OVER**
UNCLASSIFIED EXCAVATION OR ROCK EXCAVATION	6"	12"



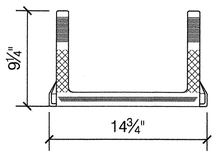
PIPES* (ONLY APPLIES TO ONE PIPE PER TRENCH)

* EXCEPT DUCTILE IRON PIPE, SEE DETAIL 8/3

** SHORING REQUIRED PER OSHA AT DEPTH EXCEEDING 5'-0"

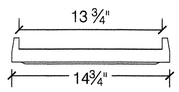
6 STANDARD RUNGS FOR MANHOLES & CATCH BASINS

SCALE 1½"= 1'-0"

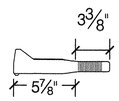


PLAN

LADDER RUNGS SHALL BE CONSTRUCTED OF STEEL REINFORCED, CO-POLYMER POLYPROPYLENE PLASTIC, AS MANUFACTURED BY M.A. INDUSTRIES, PEACHTREE CITY, GA, OR APPROVED EQUAL. LADDER RUNGS SHALL BE DESIGNED FOR EITHER PRECAST CONCRETE OR BRICK MASONRY STRUCTURES DEPENDING ON THE EXISTING MATERIAL OF THE DRAINAGE STRUCTURE.



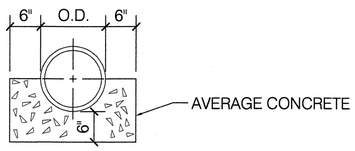
FRONT ELEVATION



SIDE ELEVATION

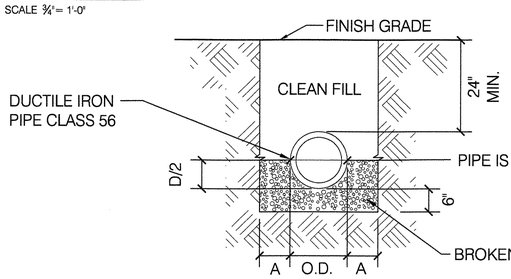
7 CONCRETE CRADLE

SCALE 1"= 1'-0"



8 BEDDING FOR DUCTILE IRON PIPE

SCALE ¾"= 1'-0"



DIMENSION "A"	
IN EARTH	IN ROCK
8"	18"

DRAINAGE, EXISTING UTILITIES & WATER SUPPLY NOTES

1. LOCATIONS OF ALL UTILITIES SHOWN ARE APPROXIMATE. WHERE SEWER OR WATER LINES CROSS EXISTING UTILITIES, THE CONTRACTOR SHALL MAKE PRELIMINARY INVESTIGATIONS INCLUDING ALL NECESSARY EXCAVATION TO DETERMINE IF WORK CAN BE DONE AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING UTILITY LINES MAY NOT BE SHOWN ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ANY UTILITY LINES HE MAY ENCOUNTER AND PROTECT ALL LINES.
3. MINIMUM COVER FOR PIPE TO BE 1'-6" COMPUTED FROM FINISHED GRADE, EXCEPT WHERE OTHERWISE NOTED ON PLAN.
4. MAXIMUM COVER TO BE DETERMINED BY DRAINAGE PITCH REQUIREMENTS AND THE LOCATION OF DRAINS.
5. ALL WATER PIPE TO BE PITCHED 1/2 PERCENT MINIMUM, AS INDICATED BY ARROWS, WITHOUT POCKETS,TO DRY WELLS.
6. EXACT LOCATIONS OF DRY WELLS TO BE AS DETERMINED BY THE ENGINEER.
7. PROVIDE PIPE SUPPORTS UNDER WATER AND DRAIN PIPES IN UNSETTLED FILL AS DIRECTED BY THE ENGINEER.
8. WHEN LAYING PIPE, WHEREVER POSSIBLE, AVOID ALL TREES, BENCHES AND FOOTINGS. WHERE NECESSARY, PROVIDE PIPE SLEEVES THOUGH WALLS, TREE PITS AND/OR FOOTINGS.
9. ALL CONNECTIONS TO CITY WATER MAINS ARE TO BE MADE IN ACCORDANCE WITH PERMITS ISSUED BY THE DIVISION OF PERMITTING AND CONNECTION, BUREAU OF WATER AND SEWER OPERATION.
10. THE LOCATION OF DRAINAGE BASINS TO BE AT THE LOW POINT OF THEIR RESPECTIVE AREAS AS DETERMINED IN THE FIELD. LOCATIONS ON PLAN ARE DIAGRAMATIC AND SHALL NOT BE SCALED.
11. FOR DRAINAGE AND WATER SUPPLY SEE GRADING AND UTILITY PLAN.
12. ALL CONCRETE SHOWN TO BE "AVERAGE" (3,200 psi) CONCRETE.

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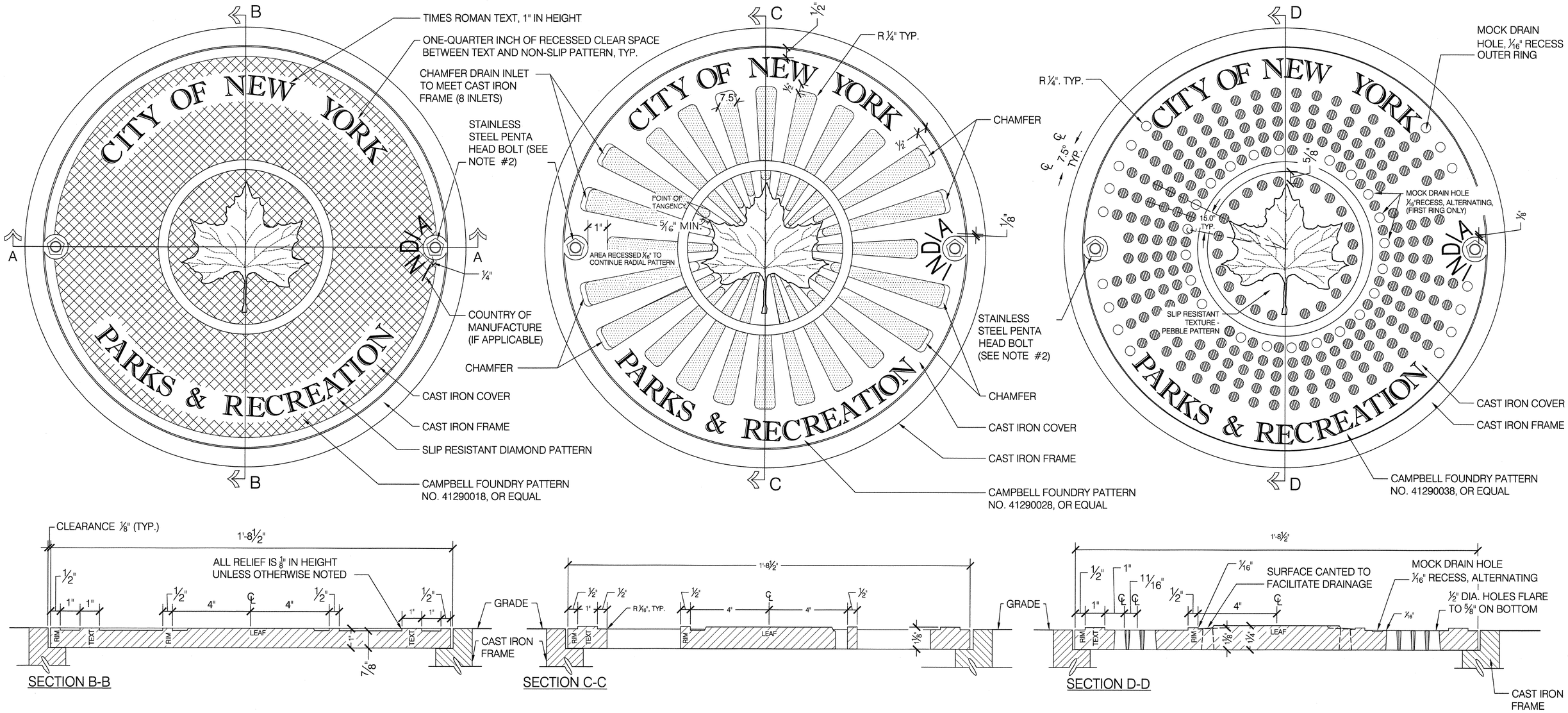
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FLUSHING, NEW YORK 11368

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DRAWING TITLE
DRAINAGE DETAILS - NO. 2

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APPROVED BY DIRECTOR: RUBY WEI, PE	SHEET NO.: 3
DATE: 09-01-2020	SCALE: AS SHOWN



1 MANHOLE COVER

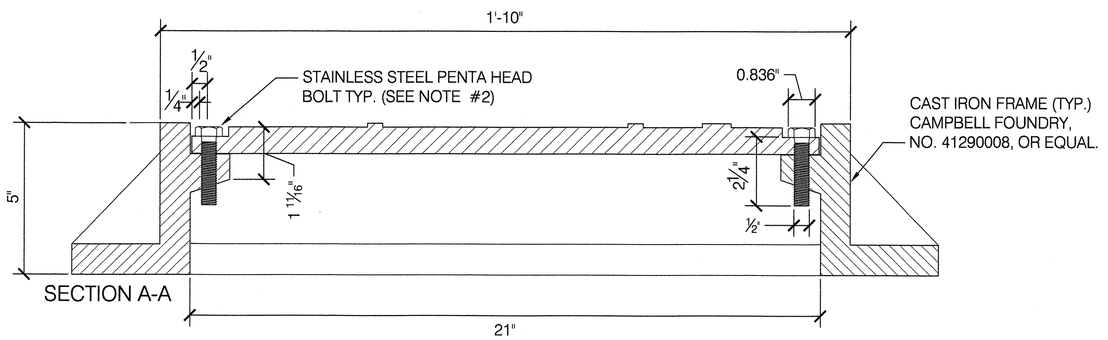
SCALE ½"= 1'-0"

2 CATCH BASIN COVER

SCALE ½"= 1'-0"

3 CATCH BASIN COVER FOR SPRAY AREA

SCALE ½"= 1'-0"



4 MANHOLE FRAME

SCALE ½"= 1'-0"

NOTES:

1. ALL COVERS SHALL PASS REQUIREMENTS FOR H-20 HIGHWAY LOADING, AS PER AASHTO.
2. PENTA-HEAD STAINLESS STEEL BOLT, ½" DIA. X 2-¼" LENGTH, TWO (2) PER COVER, AS SUPPLIED BY CAMPBELL FOUNDRY CO, 800 BERGEN ST, HARRISON, NJ 07029, (973) 483-5480, OR APPROVED EQUAL. TYPICAL PLASTIC END CAPS ARE TO BE SUPPLIED WITH HARDWARE AND INSTALLED ON PENTA-HEAD BOLTS.
3. SEE STANDARD DETAIL SHEETS "WATER SUPPLY DETAILS" AND "DRAINAGE DETAILS" FOR INSTALLATION DETAILS.

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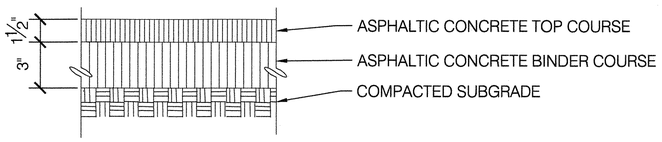
DRAWING TITLE
PARKS LEAF MANHOLE AND CATCH BASIN COVERS

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APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: R. WEI, PE	SHEET NO.: 5
DATE: 09-01-2020	SCALE: AS SHOWN

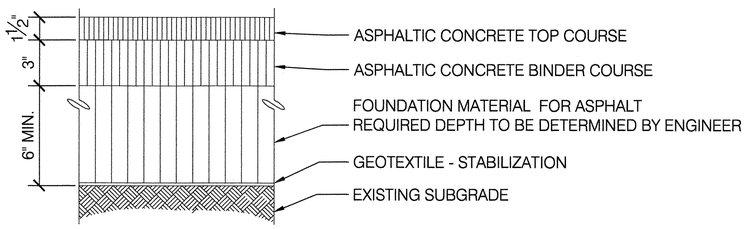
1 FULL DEPTH ASPHALT PAVEMENT

SCALE 3"= 1'-0"



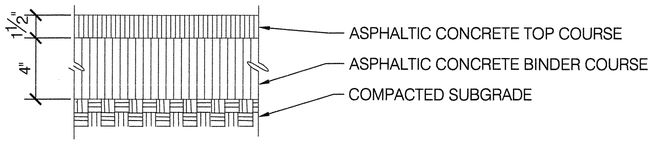
2 ASPHALT PAVEMENT ON POOR SUBGRADE

SCALE 3"= 1'-0"



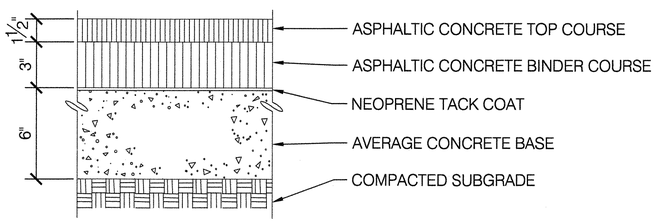
3 ASPHALT PAVEMENT FOR PARKING LOTS AND MINOR PAVED ROADS

SCALE 3"= 1'-0"



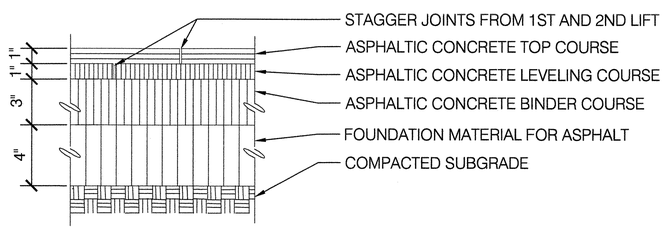
4 ASPHALT PAVEMENT FOR PARK ROADS AND PATHS

SCALE 3"= 1'-0"



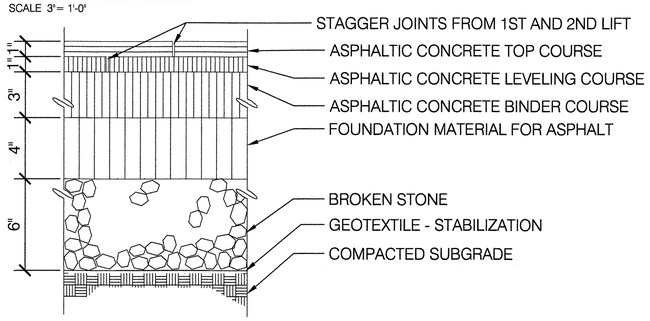
5 ASPHALT PAVEMENT FOR TENNIS COURTS & RUNNING TRACKS

SCALE 3"= 1'-0"



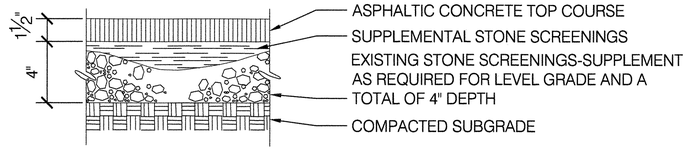
6 ASPHALT FOR TENNIS COURTS ON POOR SUBGRADE

SCALE 3"= 1'-0"



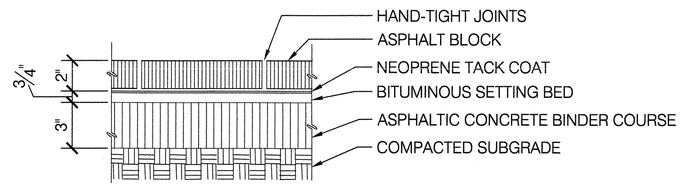
7 ASPHALT TOP COURSE ON EX. STONE SCREENINGS

SCALE 3"= 1'-0"



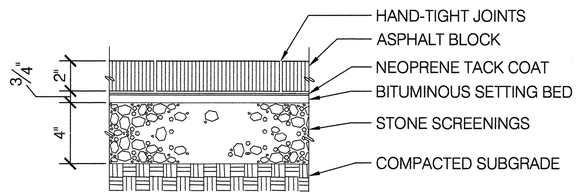
8 ASPHALT BLOCK ON ASPHALT CONCRETE BASE

SCALE 3"= 1'-0"



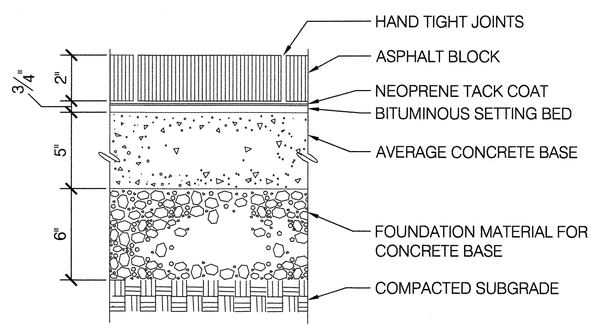
9 ASPHALT BLOCK ON STONE SCREENINGS

SCALE 3"= 1'-0"



10 ASPHALT BLOCK ON CONCRETE BASE

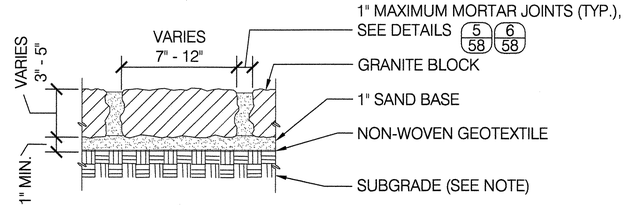
SCALE 3"= 1'-0"



NOTE: 3" THICK ASPHALT BLOCK REQUIRED FOR ROADS.

11 GRANITE BLOCK ON SAND FOR TREE PITS

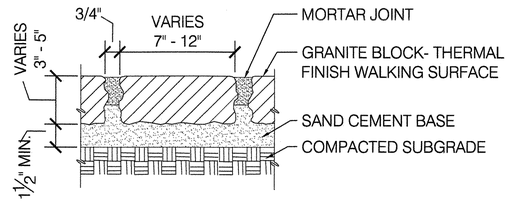
SCALE 3"= 1'-0"



NOTES:
1. FOR TREE PITS SEE STD. DETAIL SHEET "PLANTING DETAILS".
2. AROUND NEW TREES SUBGRADE TO BE COMPACTED.
3. AROUND EXISTING TREES; MIN. EXCAVATION. MIN. COMPACTION.
4. SEE SECTION C, ARTICLE 14.

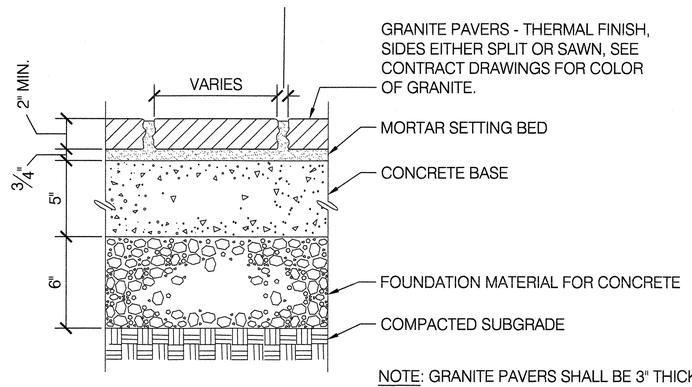
12 GRANITE BLOCK PAVEMENT ON SAND- ACCESSIBLE

SCALE 3"= 1'-0"



13 GRANITE PAVERS ON CONCRETE

SCALE 3"= 1'-0"



NOTE: GRANITE PAVERS SHALL BE 3" THICK MINIMUM FOR ROADS.

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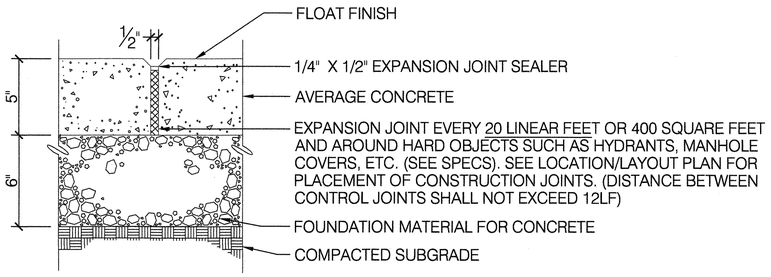
DRAWING TITLE
PAVEMENT DETAILS - NO.1

STATE OF NEW YORK · RUBY S WEI · 091042 · LICENSED PROFESSIONAL ENGINEER

DRAWN BY: STAFF	CHECKED BY: RUBY WEI, PE
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: RUBY WEI, PE	SHEET NO.: 15
DATE: 09-01-2020	SCALE: AS SHOWN

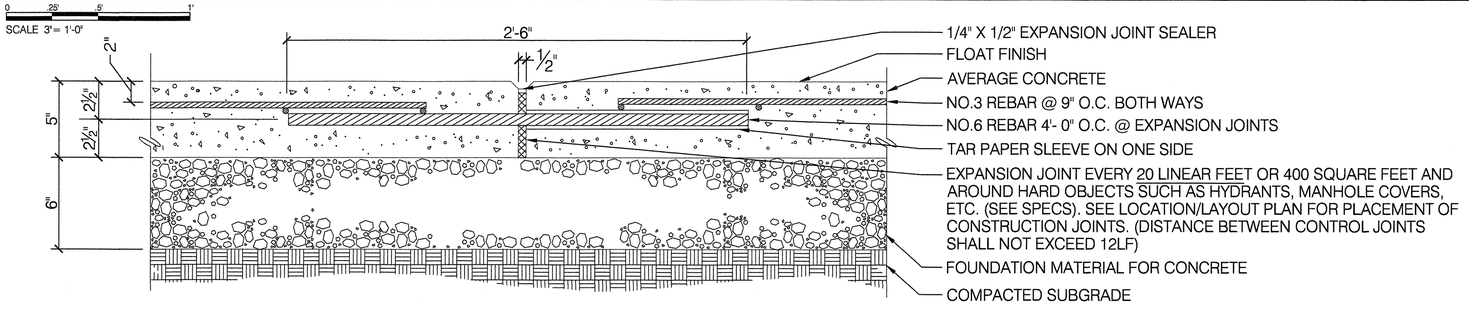
1 CEMENT CONCRETE PAVEMENT

SCALE 3"= 1'-0"



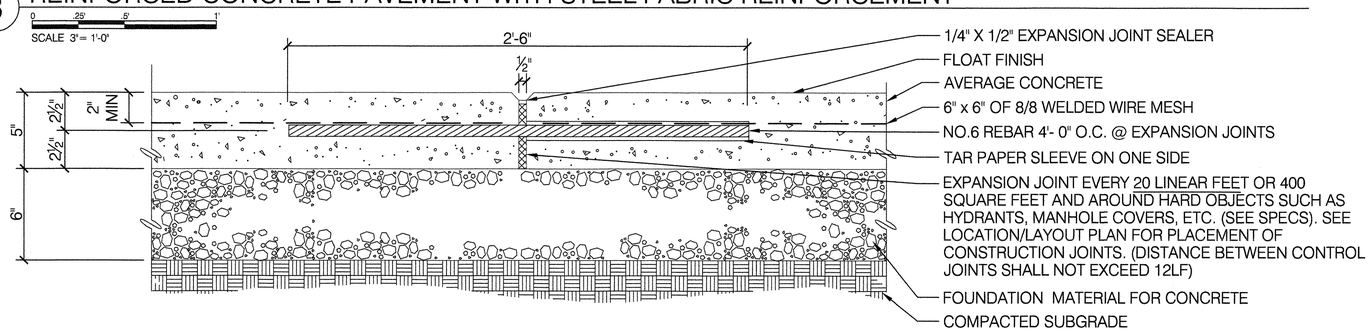
2 REINFORCED CONCRETE PAVEMENT WITH STEEL BAR REINFORCEMENT

SCALE 3"= 1'-0"



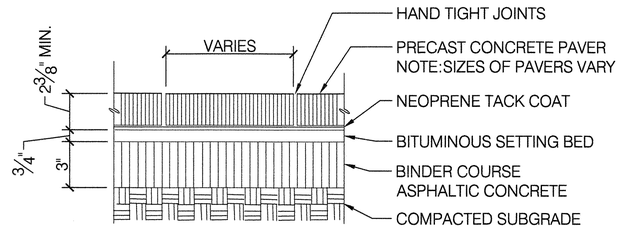
3 REINFORCED CONCRETE PAVEMENT WITH STEEL FABRIC REINFORCEMENT

SCALE 3"= 1'-0"



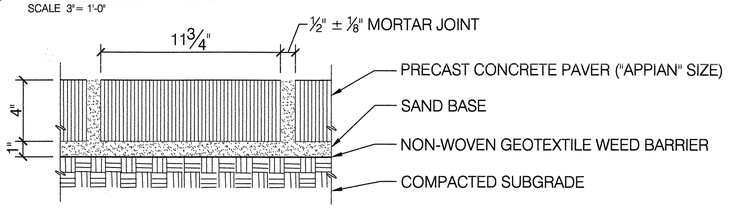
4 CONCRETE PAVERS ON ASPHALT BASE

SCALE 3"= 1'-0"



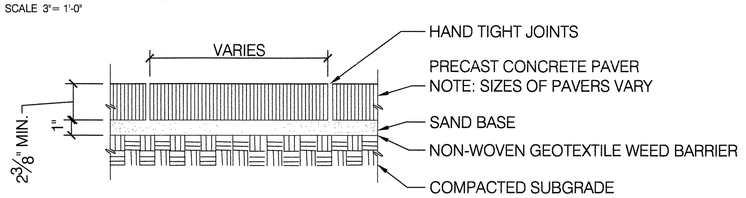
5 CONCRETE PAVERS FOR TREE PITS

SCALE 3"= 1'-0"



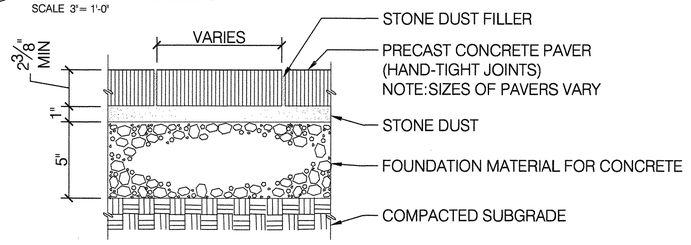
6 CONCRETE PAVERS ON SAND BASE

SCALE 3"= 1'-0"



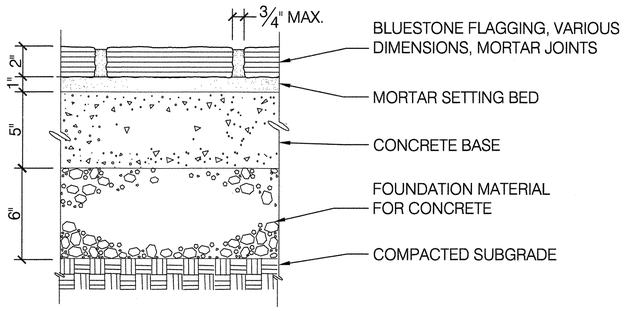
7 CONCRETE PAVERS ON STONE DUST BASE

SCALE 3"= 1'-0"



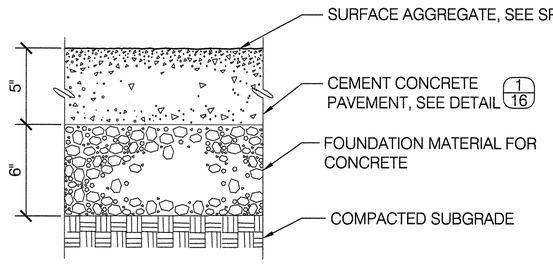
8 BLUESTONE PAVEMENT ON CONCRETE

SCALE 3"= 1'-0"



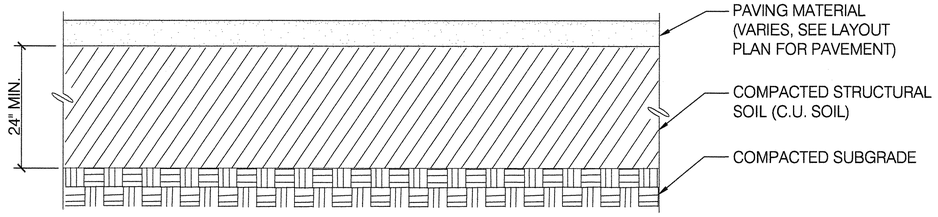
9 EXPOSED AGGREGATE ON CONCRETE BASE

SCALE 3"= 1'-0"



10 STRUCTURAL SOIL FOUNDATION MATERIAL

SCALE 1"= 1'-0"



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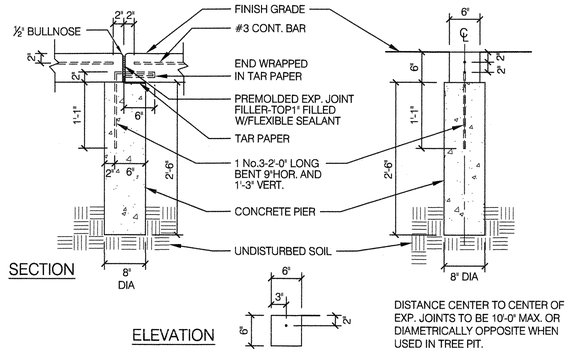
DRAWING TITLE
PAVEMENT DETAILS - NO. 2

STATE OF NEW YORK · RUBY S WEI · 091042 · LICENSED PROFESSIONAL ENGINEER

DRAWN BY: STAFF	CHECKED BY: RUBY WEI, PE
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: RUBY WEI, PE	SHEET NO.: 16
DATE: 09-01-2020	SCALE: AS SHOWN

1 CONCRETE CURB - 6" (FLUSH)

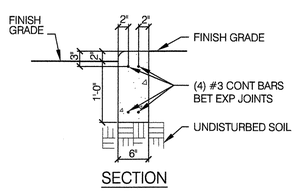
SCALE 1"= 1'-0"



DISTANCE CENTER TO CENTER OF EXP. JOINTS TO BE 10'-0" MAX. OR DIAMETRICALLY OPPOSITE WHEN USED IN TREE PIT.

2 CONCRETE CURB - 6"

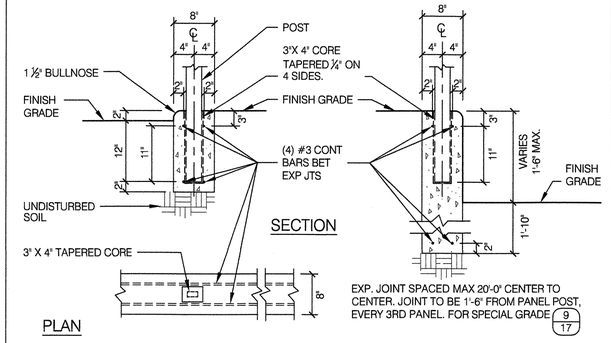
SCALE 1"= 1'-0"



NOTE:
1. FOR FLUSH CONDITIONS ELIMINATE 2" REVEAL. ALL OTHER DIMENSIONS SAME (6'X 14').
2. EXP. JOINT SPACED MAX 20'-0" CENTER TO CENTER- SEE DETAIL 9/17

3 CONCRETE CURB FOR 2'-6", 3'-0" & 4'-0" STEEL FENCE

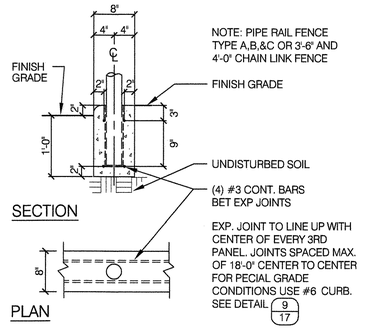
SCALE 1"= 1'-0"



EXP. JOINT SPACED MAX 20'-0" CENTER TO CENTER. JOINT TO BE 1'-6" FROM PANEL POST, EVERY 3RD PANEL. FOR SPECIAL GRADE 9/17

4 CONCRETE CURB FOR PIPE RAIL FENCE & 3'-6"/ 4'-0" CLF

SCALE 1"= 1'-0"

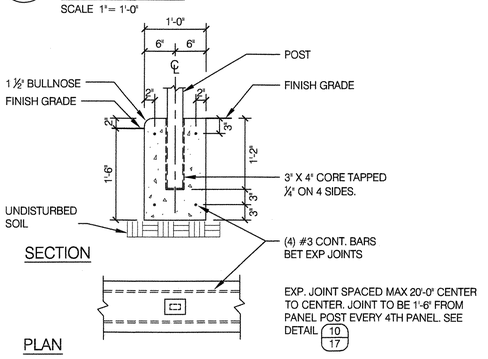


NOTE: PIPE RAIL FENCE TYPE A,B,&C OR 3'-6" AND 4'-0" CHAIN LINK FENCE

EXP. JOINT TO LINE UP WITH CENTER OF EVERY 3RD PANEL. JOINTS SPACED MAX. OF 18'-0" CENTER TO CENTER FOR PECIAL GRADE CONDITIONS USE #6 CURB. SEE DETAIL 9/17

5 CONCRETE CURB FOR 7'-0" STEEL FENCE

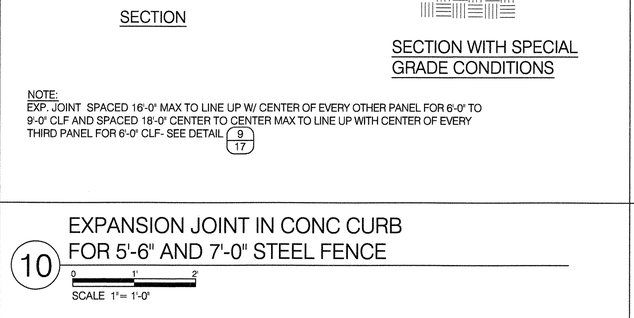
SCALE 1"= 1'-0"



EXP. JOINT SPACED MAX 20'-0" CENTER TO CENTER. JOINT TO BE 1'-6" FROM PANEL POST EVERY 4TH PANEL. SEE DETAIL 10/17

6 CONCRETE CURB 6'-0" TO 9'-0" CLF

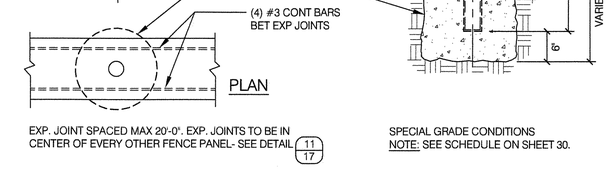
SCALE 1"= 1'-0"



NOTE:
EXP. JOINT SPACED 16'-0" MAX TO LINE UP W/ CENTER OF EVERY OTHER PANEL FOR 6'-0" TO 9'-0" CLF AND SPACED 18'-0" CENTER TO CENTER MAX TO LINE UP WITH CENTER OF EVERY THIRD PANEL FOR 6'-0" CLF- SEE DETAIL 9/17

7 CONCRETE CURB FOR 10'-0" TO 20'-0" CLF

SCALE 1"= 1'-0"

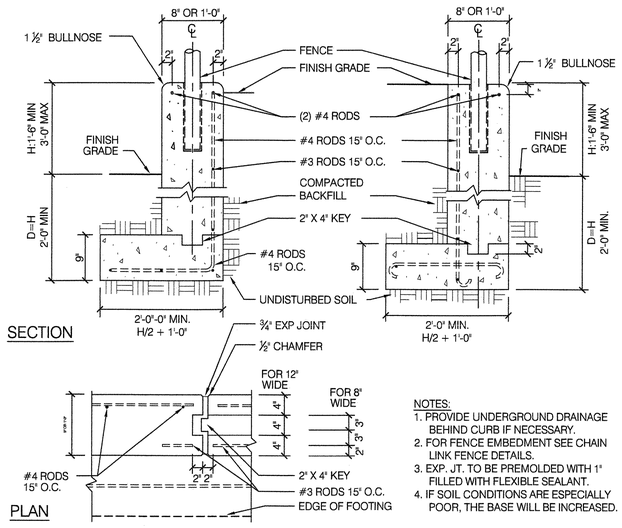


EXP. JOINT SPACED MAX 20'-0". EXP. JOINTS TO BE IN CENTER OF EVERY OTHER FENCE PANEL- SEE DETAIL 11/17

SPECIAL GRADE CONDITIONS
NOTE: SEE SCHEDULE ON SHEET 30.

8 CONCRETE CURB FOR GRADE DIFFERENCES OF 1'-6" TO 3'-0"

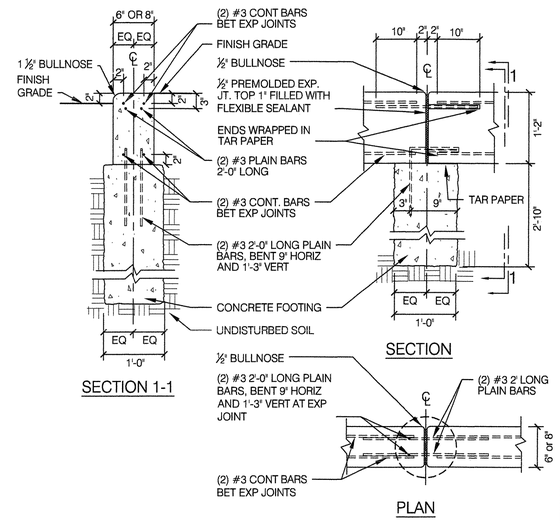
SCALE 1"= 1'-0"



NOTES:
1. PROVIDE UNDERGROUND DRAINAGE BEHIND CURB IF NECESSARY.
2. FOR FENCE EMBEDMENT SEE CHAIN LINK FENCE DETAILS.
3. EXP. JT. TO BE PREMOLDED WITH 1" FILLED WITH FLEXIBLE SEALANT.
4. IF SOIL CONDITIONS ARE ESPECIALLY POOR, THE BASE WILL BE INCREASED.

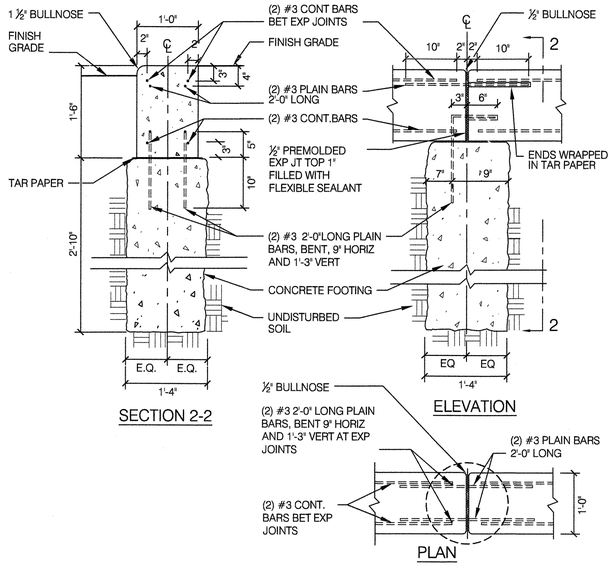
9 EXPANSION JOINT IN CONC CURB / GENERAL

SCALE 1"= 1'-0"



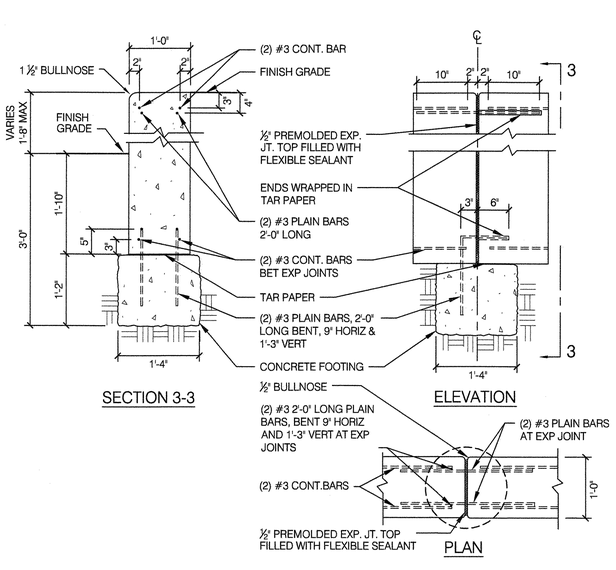
10 EXPANSION JOINT IN CONC CURB FOR 5'-6" AND 7'-0" STEEL FENCE

SCALE 1"= 1'-0"



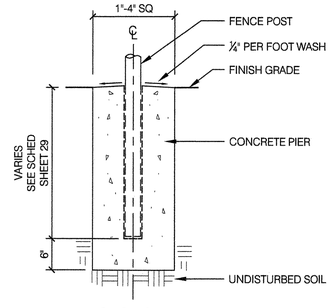
11 EXPANSION JOINT IN CONCRETE CURB FOR 10'-0" TO 20'-0" CLF

SCALE 1"= 1'-0"



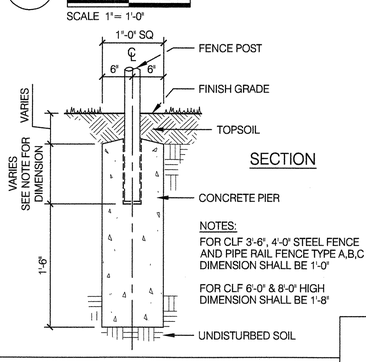
12 PIER FOR 10'-0" TO 20'-0" CLF

SCALE 1"= 1'-0"



13 PIER FOR STEEL FENCE, PIPE RAIL & 3'-6" TO 8'-0" CLF

SCALE 1"= 1'-0"



NOTES:
FOR CLF 3'-6", 4'-0" STEEL FENCE AND PIPE RAIL FENCE TYPE A,B,C DIMENSION SHALL BE 1'-0"

FOR CLF 6'-0" & 8'-0" HIGH DIMENSION SHALL BE 1'-8"

14 GENERAL NOTES

WHERE CONCRETE CURB MEETS AN ADJACENT CURB OF DIFFERENT WIDTH, TYPICAL CURB TRANSITIONS, DETAIL 15 WILL APPLY.

DEPTHS OF FOOTINGS MAY VARY AND SHALL BE DETERMINED BY THE RESIDENT ENGINEER.

FOOTINGS FOR CURBS AND FOOTINGS FOR FENCE POSTS IN CURBS WILL BE PAID FOR UNDER ITEM 'CONCRETE CURB'. PIERS FOR FENCE WILL BE PAID FOR UNDER ITEM "AVERAGE CONCRETE' 3200 PSI.

WHEREVER THE GRADE ADJACENT TO CURB IS FLUSH WITH TOP OF CURB, BULLNOSE IS TO BE OMITTED ON THAT SIDE AND EDGE FINISHED WITH A REGULAR CORNER TOOL.

ALL FENCE POSTS ARE TO BE SET IN GROUT. FOR SPACING OF FENCE POSTS, SEE CHAIN LINK FENCE DETAILS.

FOR SPACING OF EXPANSION JOINTS SEE EACH CURB DETAIL.

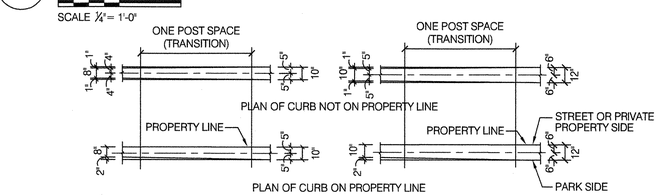
USE ROUGH FLOAT FINISH ON ALL EXPOSED CURBS AND WALLS ALONG PROPERTY LINE FACING THE STREET.

ALL REBARS SHALL BE DEFORMED, EXCEPT AS NOTED.

REBARS SHALL BE SUPPORTED WITH CONCRETE BRICKS AT BOTTOM OF FORM WORK.

15 TYPICAL CURB TRANSITIONS

SCALE ¼"= 1'-0"



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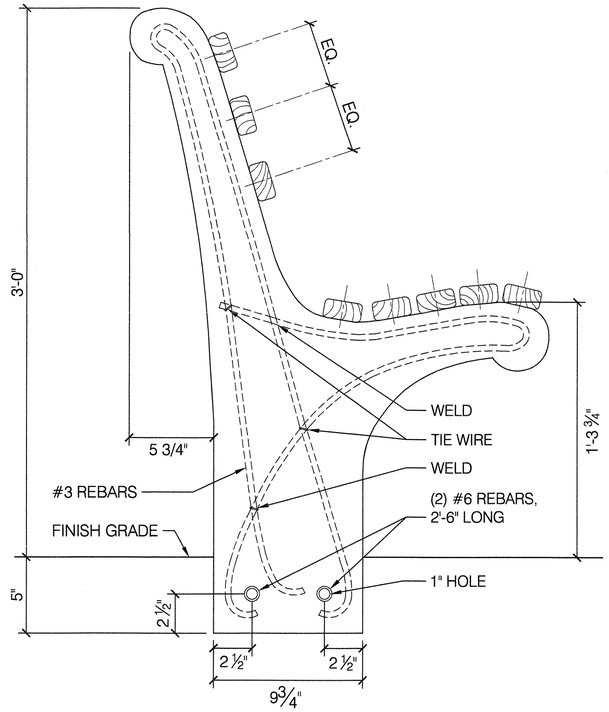
DRAWING TITLE
CURBS AND PIERS

DRAWN BY: STAFF	CHECKED BY: RUBY WEI, PE
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: RUBY WEI, PE	SHEET NO.: 17
DATE: 09-01-2020	SCALE: AS SHOWN

STATE OF NEW YORK · RUBY S WEI · 091042 · LICENSED PROFESSIONAL ENGINEER

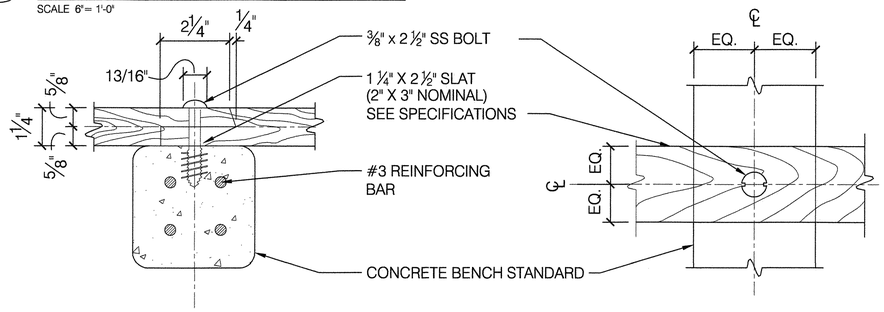
1 CONCRETE BENCH STANDARD - SECTION

SCALE 3"= 1'-0"



2 DETAIL OF SPLICE FOR CONTINUOUS BENCH

SCALE 6"= 1'-0"



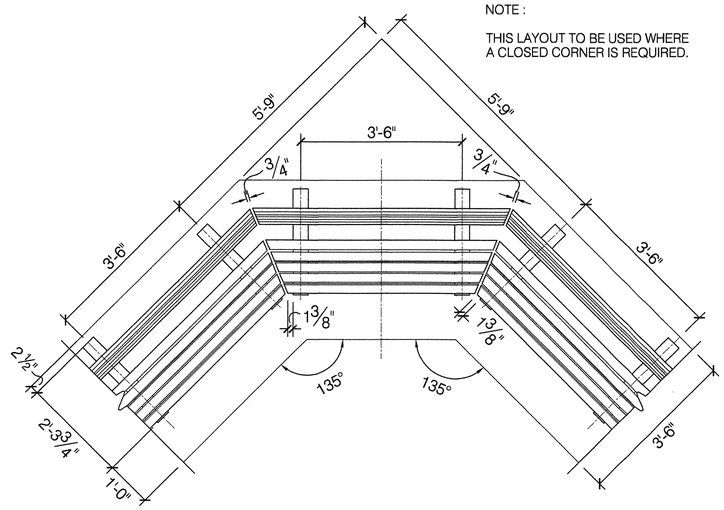
SECTION ELEVATION

NOTES:

1. GALVANIZED STEEL ANCHORS AND 18-8 STAINLESS STEEL TRUSS TYPE VANDAL- RESISTANT BOLTS WITH SIDE SLOTS OR APPROVED EQUAL.
2. NOT MORE THAN 4 SLATS (ONE HALF OF TOTAL) TO BE SPLICED AT ANY ONE CONTINUOUS BENCH SUPPORT.
3. SLATS FOR CONTINUOUS BENCHES TO BE MIN. 8'-0" LENGTHS - STAGGERED JOINTS.

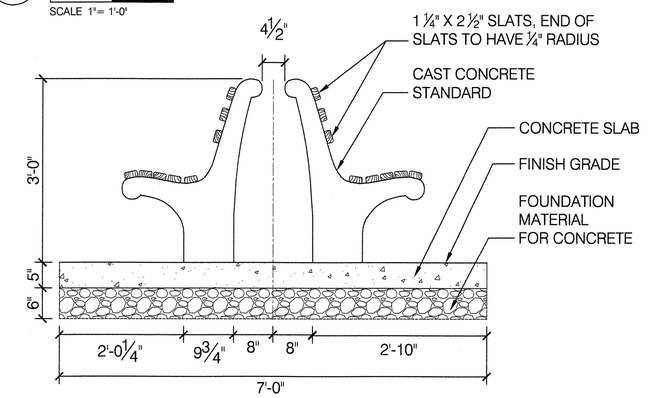
3 BENCHES SET ON A RIGHT ANGLE

SCALE 3/4"= 1'-0"



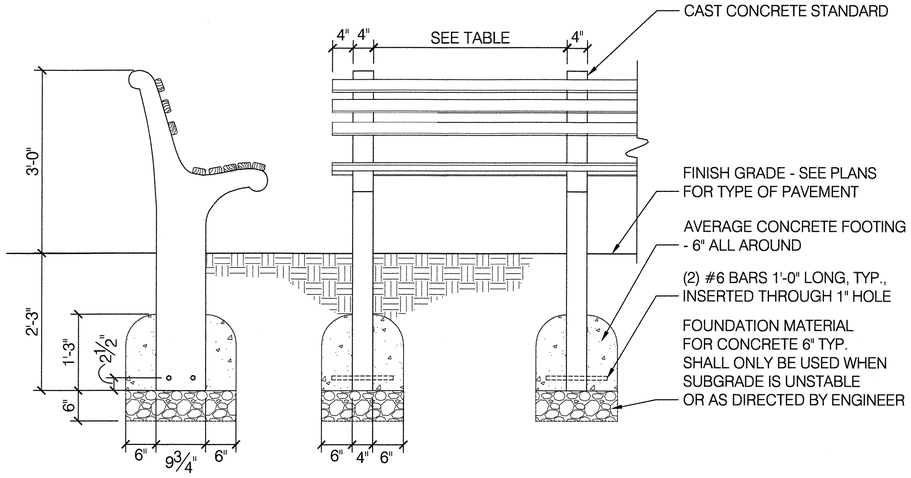
4 DOUBLE ROW BENCHES

SCALE 1"= 1'-0"



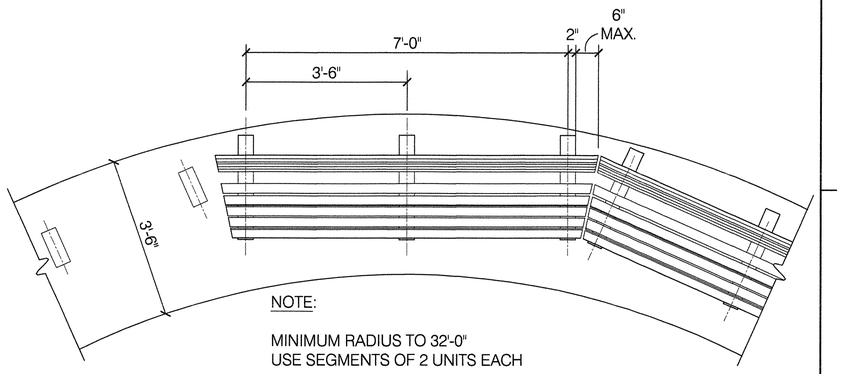
5 BENCH ON PIERS

SCALE 1"= 1'-0"



6 BENCHES SET ON A CURVE - TYPICAL PLAN

SCALE 3/4"= 1'-0"



NOTE:

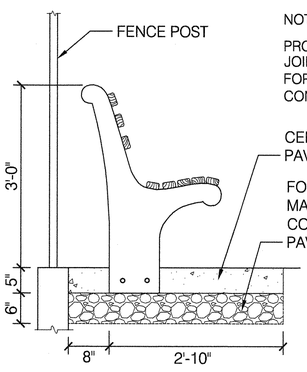
MINIMUM RADIUS TO 32'-0"
USE SEGMENTS OF 2 UNITS EACH

32'-0" RADIUS TO 68'-0"
USE SEGMENTS OF 3 UNITS EACH

68'-0" RADIUS TO 120'-0"
USE SEGMENTS OF 4 UNITS EACH

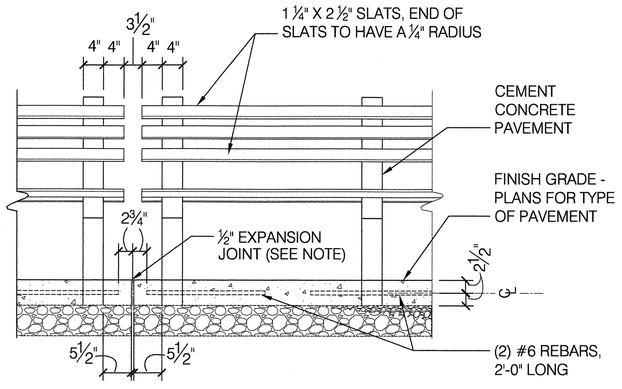
7 BENCH ON SLAB AT EXPANSION JOINT

SCALE 1"= 1'-0"



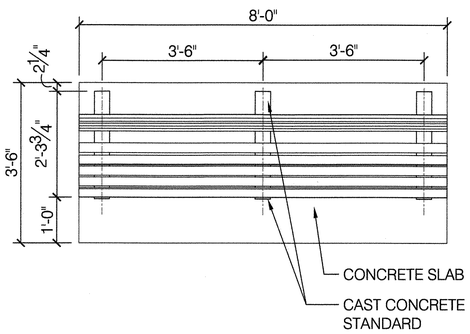
NOTE:

PROVIDE A ½" EXPANSION JOINT IN CONCRETE SLAB FOR EVERY 15 UNITS OF CONTINUOUS BENCHES



8 BENCH ON SLAB - PLAN

SCALE 3/4"= 1'-0"



9 GENERAL NOTES

1. CONCRETE SLAB OR PIERS POURED AFTER STANDARDS ARE SET IN PLACE.
2. ON ALL SLOPES UP TO 2%, SET BENCHES PARALLEL TO SLOPES. ON SLOPES BETWEEN 2% AND 4%, SET BENCHES AT 2%.
3. NO BENCHES SHALL BE PLACED ON SLOPES EXCEEDING 4%.
4. A UNIT IS 3'- 6" (C. TO C. OF STANDARDS) ALL EDGES AND CORNERS OF STANDARDS TO HAVE 1/4" RADIUS.
5. WHEN UNIT PAVERS ARE USED AS THE PAVEMENT FINISHING MATERIAL UNDER BENCH, THE CAST CONCRETE BENCH STANDARD SHALL BE PIER TYPE.
6. SLATS SHALL BE WOOD. SEE SPECIFICATIONS FOR WOOD INFORMATION. BENCH NOT DESIGNED FOR RECYCLED PLASTIC LUMBER.

TABLE OF BENCH LENGTHS

BENCH LENGTH	NUMBER OF LEGS	CENTER TO CENTER CONC. STANDARDS	OVERHANG (EACH END)
4'-0"	2	3'-0"	4"
5'-0"	2	4'-0"	4"
6'-0"	3	2'-5"	4"
7'-0"	3	3'-0"	4"
8'-0"	3	3'-6"	4"

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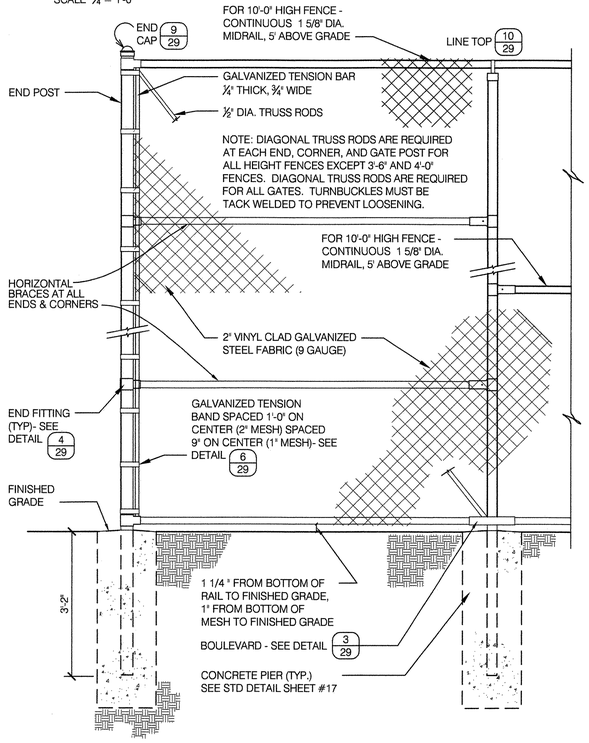
DRAWING TITLE
BENCH, TYPE 'B'

STATE OF NEW YORK · HUEY S. WEI · LICENSED PROFESSIONAL ENGINEER · 091042

DRAWN BY: STAFF	CHECKED BY: R. WEI, PE
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: R. WEI, PE	SHEET NO.: 24
DATE: 09-01-2020	SCALE: AS SHOWN

1 10'-0" HIGH CHAIN LINK FENCE *

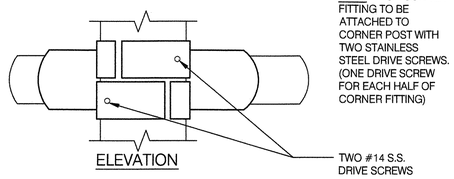
SCALE ¾"= 1'-0"



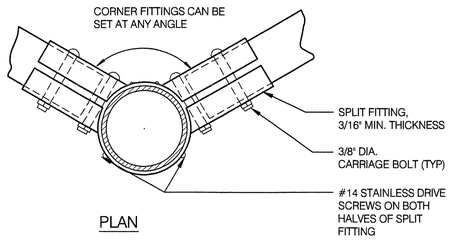
* FOR OTHER HEIGHT FENCES, SEE SCHEDULE BELOW

2 CORNER FITTING

SCALE 6"= 1'-0"

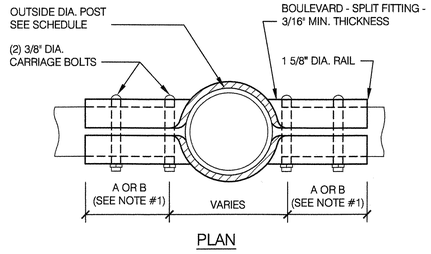


NOTE: EACH CORNER FITTING TO BE ATTACHED TO CORNER POST WITH TWO STAINLESS STEEL DRIVE SCREWS. (ONE DRIVE SCREW FOR EACH HALF OF CORNER FITTING)



3 BOULEVARD

SCALE 6"= 1'-0"

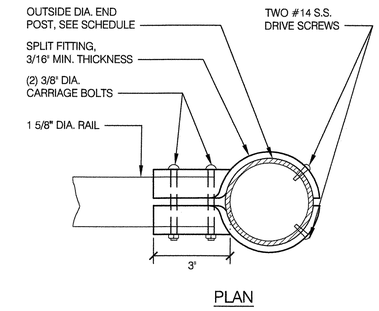


NOTES:
1. A= 1 3/4" FOR 1 7/8" - 41/2" O.D. POST
   B= 1 5/8" FOR 1 7/8" O.D. OR SMALLER POST
2. ALL CORNERS TO BE ROUNDED

EXCEPTION:
FOR POSTS LESS THAN 2 3/8" O.D. (SEE SCHEDULE OF SIZES OF MEMEBERS), ONLY ONE (1) CHARRIAGE BOLT IS REQUIRED FOR EACH SIDE OF BOULEVARD.

4 END FITTING

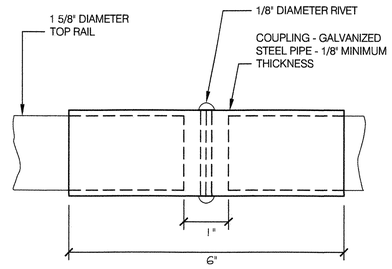
SCALE 6"= 1'-0"



NOTE: MINIMUM WIDTH OF END FITTING TO BE 2 1/4"

5 TOP RAIL COUPLING

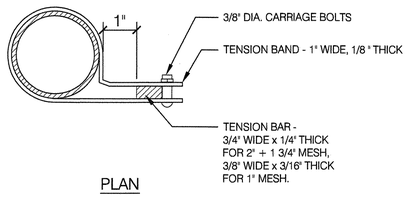
SCALE 9"= 1'-0"



NOTE: FURNISH ONE COUPLING FOR EACH LENGTH OF PIPE IN TOP RAIL - FULL LENGTH OF PIPE EQUALS 21'-0"

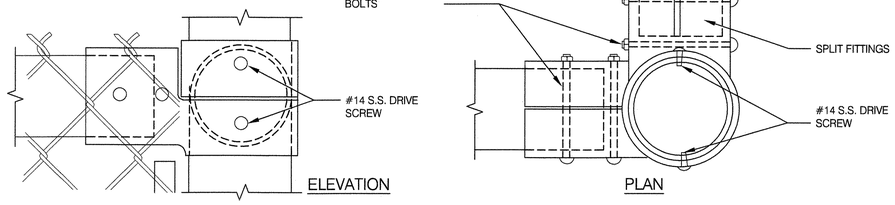
6 TENSION MEMBERS

SCALE 6"= 1'-0"



7 CORNER SPLIT FITTING

SCALE 3'= 1'-0"



BOLT AND FABRIC NOTES

PEEN END OF ALL BOLTS.

BOLTS WHICH ARE INSTALLED 6' OR LESS ABOVE GRADE SHALL NOT PROTRUDE MORE THAN1/4" BEYOND THE NUT AFTER TIGHTENING. ALL ROUGH EDGES SHALL BE FILED SMOOTH TO THE SATISFACTION OF THE ENGINEER.

ON FENCES OVER 12 FEET HIGH WHERE THE TWO WIDTHS OF FABRIC ARE REQUIRED, THE BOTTOM PIECE SHALL BE KNUCKLED TOP AND BOTTOM AND THE TOP PIECE KNUCKLED AT BOTTOM AND BARBED AT TOP.

THE TWO PIECES SHALL BE SPLICED IN SUCH A WAY AS TO GIVE A FINISHED NEAT APPEARANCE.

FABRIC TO BE KNUCKLED AT TOP AND BOTTOM RAILS ON FENCES UP TO AND INCLUDING 6'-0" HIGH AND BARBED AT TOP RAIL ON FENCES OVER 6'-0" HIGH.

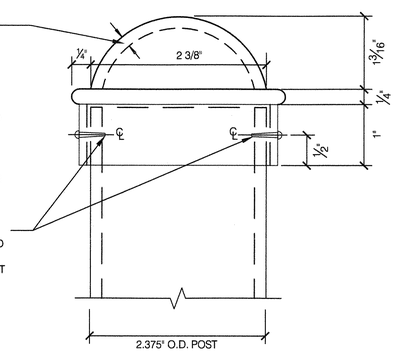
WIRE FABRIC NOTES

THE MESH SHALL BE PLACED ON THE OUTSIDE OF THE POSTS OF ALL EXTERIOR CHAINLINK FENCES INCLUDING HOODED BACKSTOPS AND HANDBALL COURT FENCES WHERE THESE ARE AN INTEGRAL PART OF THE EXTERIOR FENCE.

WHERE HOODED BACKSTOPS, HANDBALL COURT FENCES, AND SKATEPARKS ARE IN INTERIOR AREAS, THE MESH SHALL BE PLACED ON THE INSIDE OF THE POSTS.

8 SMALL POST CAP

SCALE 1'-0"= 1'-0"



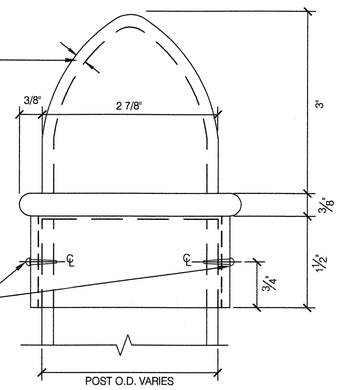
NOTE: POST CAP IS TO BE OF MALLEABLE IRON OR PRESSED STEEL.

CAP TOP FOR 3'-6" AND 4'-0" HIGH FENCE TO BE A SMOOTH "DOME" SHAPE. FOR 6'-0" HIGH FENCES, POST CAPS CAN BE "DOME" OR "BULLET" SHAPED.

POST CAP IS TO FIT SNUGLY OVER POST AND IS TO BE FIXED IN PLACE WITH TWO #14 STAINLESS STEEL DRIVE OR SET SCREWS.

9 END, CORNER, & GATE POST CAP

SCALE 1'-0"= 1'-0"



WALL THICKNESS TO BE 3/16" THROUGHOUT

NOTE: POST CAP IS TO BE OF MALLEABLE IRON.

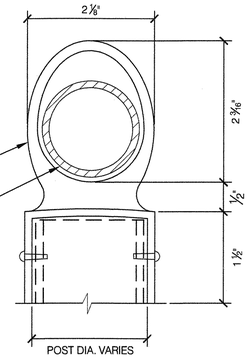
FOR 4" OUTSIDE DIAMETER POST, POST CAP SHALL POSSESS DIMENSIONS THAT ARE IN PROPORTION TO DIMENSIONS BELOW FOR 2 7/8" OUTSIDE DIA. POST CAP

CAP TOPS FOR 3" OUTSIDE DIA. AND 4" OUTSIDE DIA/ POSTS ARE TO POSSESS A SMOOTH "BULLET" SHAPE FOR 2 ⅜" OUTSIDE DIA. POST CAP - SEE DETAIL 8/29

POST CAP IS TO FIT SNUGLY OVER POST AND IS TO BE FIXED IN PLACE WITH TWO # 14 STAINLESS STEEL DRIVE QR SET SCREWS.

10 POST LINE TOP

SCALE 1'-0"= 1'-0"



NOTE: WIDTH OF LINE TOP OVAL TO BE MINIMUM OF 5/8" AND A MAXIMUM OF 7/8". LINE TOP IS TO BE OF MALLEABLE IRON.

INSIDE OF LINE TOP OVAL IS TO BE ALIGNED WITH OUTSIDE WALL' OF LINE POST. CHAIN LINK MESH MUST BE STRAIGHT FROM LINE POST TO TOP RAIL.

WALL THICKNESS TO BE ⅜" THROUGHOUT

1⅝" DIA TOP RAIL

POST CAP IS TO FIT SNUGLY OVER POST AND IS TO BE FIXED IN PLACE WITH TWO # 14 STAINLESS STEEL DRIVE OR SET SCREWS.

SCHEDULE OF SIZES OF MEMBERS*

HEIGHT OF FENCE	DIAMETER OF LINE POSTS*	POST SPACING MAX.	CORNER & END POST	TOP RAIL	MID RAILS	BOTTOM RAIL	DEPTH OF POST INTO CURB AND FTG AT: LINE POST	DEPTH OF POST INTO CURB AND FTG AT: END/CORNER/ GATE POST	HORIZONTAL BRACES AT CORNER & END POST	DIAGONAL BRACES
3'-6" & 4'-0"	1 7/8"	6'-0"	2 3/8"	1 5/8"	0	1 5/8"	1'-0"	1'-6"	0	0
6'-0"	1 7/8"	6'-0"	2 3/8"	1 5/8"	0	1 5/8"	1'-8"	2'-0"	0	1/2" DIA.
8'-0"	2 3/8"	8'-0"	2 7/8"	1 5/8"	0	1 5/8"	1'-8"	2'-0"	1 AT 1 5/8"	1/2" DIA.
10'-0"	2 7/8"	10'-0"	4"	1 5/8"	(1)-1 5/8"	1 5/8"	3'-2"	3'-2"	2 AT 1 5/8"	1/2" DIA.
12'-0"	2 7/8"	10'-0"	4"	1 5/8"	(2)-1 5/8"	1 5/8"	3'-2"	4'-2"	2 AT 1 5/8"	1/2" DIA.
14'-0"	3 1/2"	10'-0"	4"	1 5/8"	(2)-1 5/8"	1 5/8"	3'-2"	4'-2"	2 AT 1 5/8"	1/2" DIA.
16'-0"	3 1/2"	10'-0"	4"	1 5/8"	(2)-1 5/8"	1 5/8"	3'-2"	4'-2"	2 AT 1 5/8"	1/2" DIA.
18'-0"	3 1/2"	10'-0"	4"	1 5/8"	(2)-1 5/8"	1 5/8"	3'-2"	4'-2"	2 AT 1 5/8"	1/2" DIA.
20'-0"	4 1/2"	10'-0"	4 1/2"	1 5/8"	(3)-1 5/8"	1 5/8"	4'-2"	4'-6"	3 AT 1 5/8"	1/2" DIA.

*ALL PIPE DIAMETERS ARE TRADE SIZE DIAMETERS AS SPECIFIED IN ASTM F1043, TABLE 1. SEE 'PIPE THICKNESS CHARTS' FOR ACTUAL O.D. AND THICKNESS OF PIPE.

FABRIC WIDTHS

HEIGHT OF FENCE	WIDTH OF BOTTOM FABRIC	WIDTH OF TOP FABRIC
3'-6" - 4'-0"	3'-6" - 4'-0"	0
6'-0"	6'-0"	0
8'-0"	8'-0"	0
10'-0"	10'-0"	0
12'-0"	8'-0"	4'-0"
14'-0"	10'-0"	4'-0"
16'-0"	10'-0"	6'-0"
18'-0"	10'-0"	8'-0"
20'-0"	10'-0"	10'-0"

PIPE THICKNESS CHARTS

SS-40

TRADE SIZE DIAMETER	ACTUAL O.D. SIZE	ACTUAL I.D. SIZE	PIPE WALL THICKNESS	WEIGHT (LBS/FOOT)
1 5/8"	1.660	1.438	0.111	1.84
1 7/8"	1.900	1.660	0.120	2.28
2 3/8"	2.375	2.115	0.130	3.12
2 7/8"	2.875	2.555	0.160	4.64
3 1/2"	3.500	3.180	0.160	5.71
4"	4.000	3.680	0.160	6.56

SCHEDULE 40

TRADE SIZE DIAMETER	ACTUAL O.D. SIZE	ACTUAL I.D. SIZE	PIPE WALL THICKNESS	WEIGHT (LBS/FOOT)
1 5/8"	1.660	1.380	0.140	2.27
1 7/8"	1.900	1.610	0.145	2.72
2 3/8"	2.375	2.067	0.154	3.65
2 7/8"	2.875	2.469	0.203	5.79
3 1/2"	3.500	3.068	0.216	7.58
4"	4.000	3.548	0.226	9.11

POST & RAIL NOTES

FENCE POSTS AND RAILS SHALL BE EITHER TYPE I OR TYPE II:

TYPE I - ROUND MEMBERS SHALL BE HOT DIPPED GALVANIZED CONFORMING TO ASTM F1083 STANDARD WEIGHT SCHEDULE 40.

TYPE II - ROUND MEMBERS SHALL BE MANUFACTURED FROM STEEL CONFORMING TO ASTM A1011/A1011M COLD ROLLED WELDED AND HAVE TENSILE STRENGTH OF 50,000 PSI AND GIVEN CORROSION PROTECTION PER ASTM F1043 TYPE B FOR EXTERNAL COATING AND TYPE D FOR INTERNAL COATING, SUCH AS SS-40.

PROVIDE ADDITIONAL RAIL IN LOWER THIRD OF FENCE AT BASKETBALL BACKSTOPS, AT EACH END OF BASKETBALL COURTS AND ALL AROUND HANDBALL COURTS.

SEE STANDARD DETAIL SHEETS #44, #45 AND #48.

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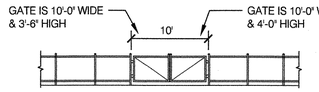
DRAWING TITLE
CHAIN LINK FENCE - DETAILS

STATE OF NEW YORK · ROBERT S. WEI · 091042 · LICENSED PROFESSIONAL ENGINEER

DRAWN BY: STAFF	CHECKED BY: R. WEI, PE
APPROVED BY	STANDARD D.P.R. DETAIL: TLYA / 146-R10
APPROVED BY DIRECTOR: R. WEI, PE	SHEET NO.: 29
DATE: 09-01-2020	SCALE: AS SHOWN

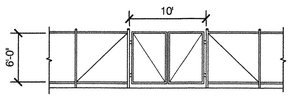
1 3'-6" & 4'-0" FENCE

SCALE ⅛"= 1'-0"



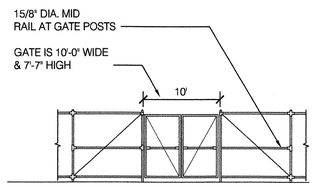
2 6'-0" FENCE

SCALE ⅛"= 1'-0"



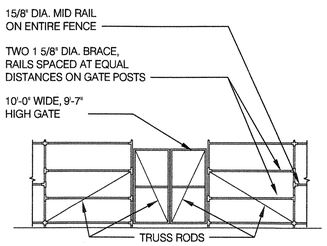
3 8'-0" FENCE

SCALE ⅛"= 1'-0"



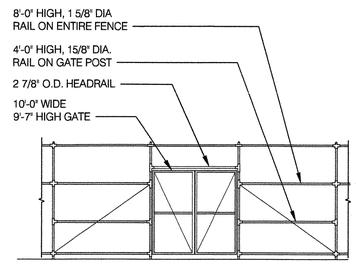
4 10'-0" FENCE

SCALE ⅛"= 1'-0"



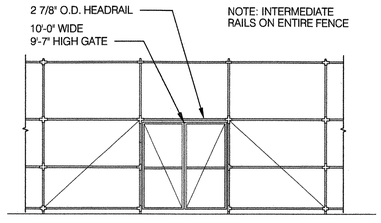
5 12'-0" FENCE

SCALE ⅛"= 1'-0"



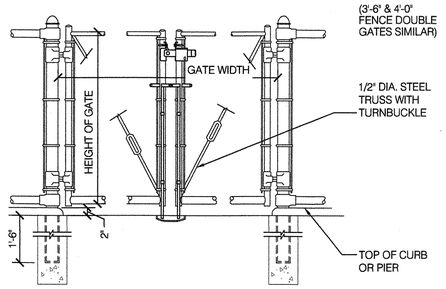
6 16'-0" FENCE

SCALE ⅛"= 1'-0"



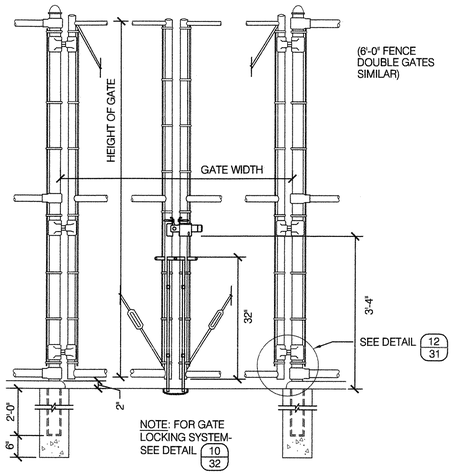
7 4'-0" DOUBLE GATE FENCE

SCALE ¾"= 1'-0"



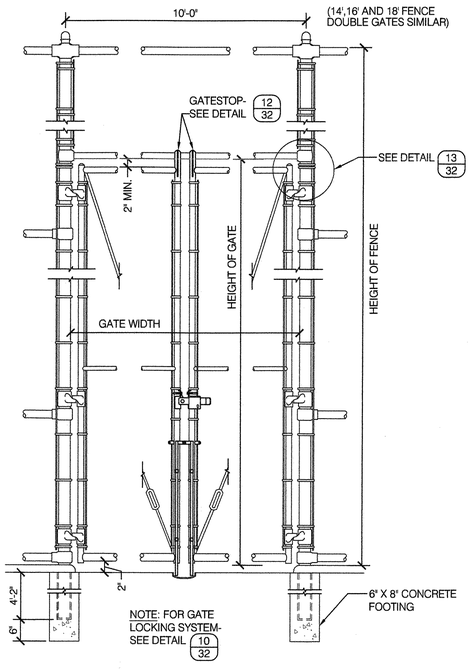
8 8'-0" DOUBLE GATE FENCE

SCALE ¾"= 1'-0"



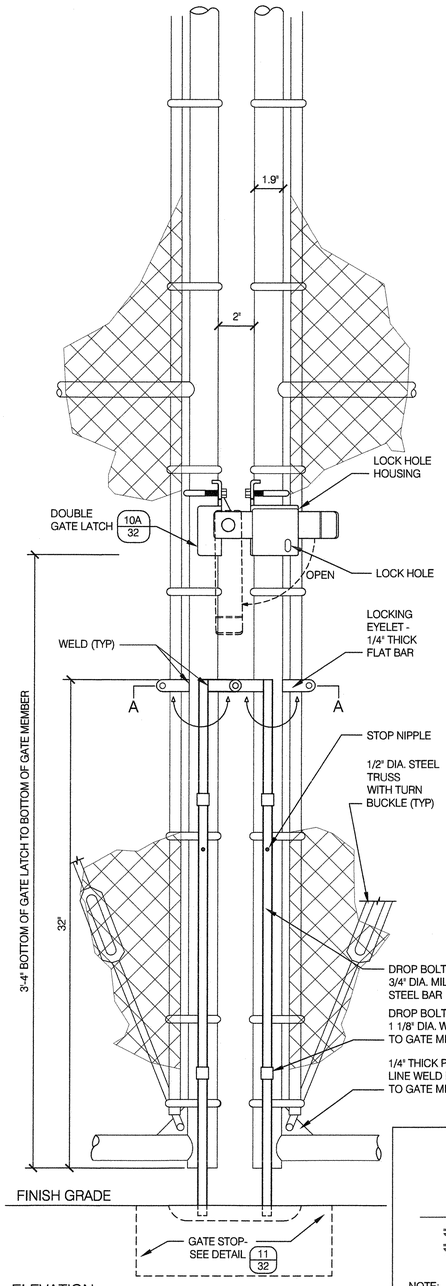
9 12'-0" DOUBLE GATE FENCE

SCALE ¾"= 1'-0"



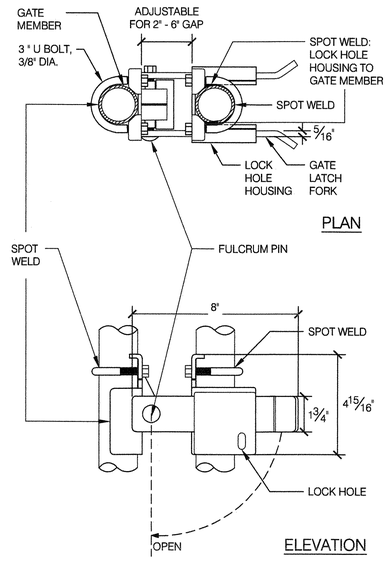
10 GATE LOCKING SYSTEM - DOUBLE GATE

SCALE: AS SHOWN



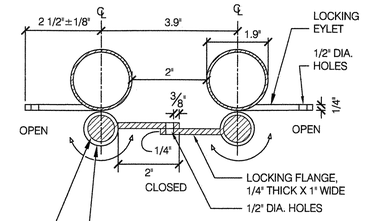
ELEVATION

SCALE 3"=1'-0"



10A DOUBLE GATE LATCH

SCALE 4"= 1'-0"

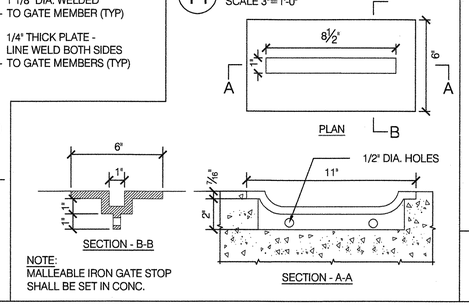


SECTION A-A - DROP BOLTS

NOT TO SCALE

11 GATE STOP

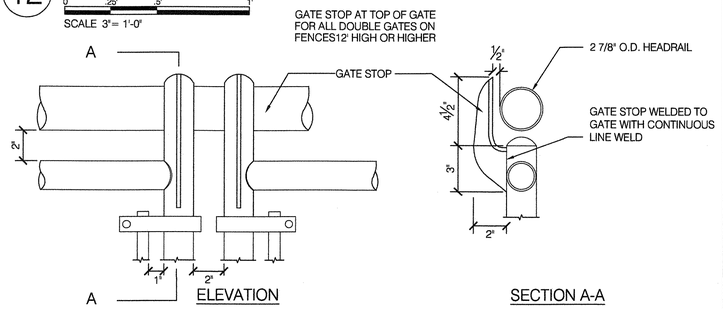
SCALE 3"=1'-0"



NOTE:
MALLEABLE IRON GATE STOP SHALL BE SET IN CONC.

12 GATE STOP - TOP

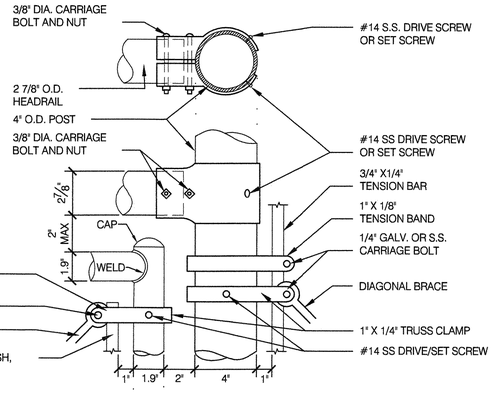
SCALE 3"= 1'-0"



13 HEAD RAIL AND TENSIONING ELEMENTS

SCALE 3"= 1'-0"

PLAN VIEW OF FITTING AT 4" GATE POST

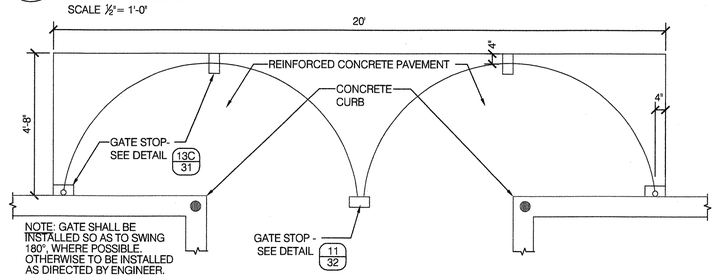


PLAN VIEW OF TENSION BAND AND BAR ON 2" GATE MEMBER

NOTE: DIAGONAL BRACES SHALL BE INSTALLED ON ALL GATES AND ON ALL FENCE PANELS DIRECTLY ADJACENT TO GATES. DIAGONAL BRACES SHALL BE TENSIONED USING TURNBUCKLES (SHOWN), TURNBUCKLES SHALL BE TACK WELDED TO PREVENT LOOSENING OF SET SCREWS.

14 CONCRETE PAVEMENT - DOUBLE GATE

SCALE ½"= 1'-0"



NOTES:
1. ALL EDGES AND WELDS SHALL BE GROUND SMOOTH. APPLY TOUCH-UP PAINT TO WELDS IN FIELD.
2. INSTALL DROP BOLTS TO FACE THE FENCED IN AREA.
3. CUT DROP BOLTS IN FIELD AS REQUIRED TO ENSURE CORRECT ELEVATION AT GATE STOPS.
4. GATE LATCH SHALL BE COMMERCIAL DOUBLE GATE LATCH BY DAC INDUSTRIES, GRAND RAPIDS, MI, OR APPROVED EQUAL.

SCHEDULES OF MEMBER SIZES*

PIPE POSTS & RAILS SHALL BE TYPE I OR TYPE II

TYPE I: ROUND MEMBERS SHALL BE HOT DIPPED GALVANIZED CONFORMING WITH ASTM F1083 STANDARD WEIGHT SCHEDULE 40.

TYPE II: ROUND MEMBERS SHALL BE MANUFACTURED FROM STEEL CONFORMING TO ASTM-A1011/A1011M COLD ROLLED WELDED, HAVE A TENSILE STRENGTH OF 50,000 P.S.I. AND BE GIVEN CORROSION PROTECTION PER ASTM F1043 EXTERNAL COATING AND TYPE D FOR INTERNAL COATING.

HEIGHT OF FENCE	DIAMETER OF LINE POSTS	POST SPACING MAXIMUM	GATE POST	HORIZ BRACE AT GATE POST	SIZE OF GATE MEMBERS	HORIZ BRACE ON GATES	DOUBLE GATE HEIGHT	DOUBLE GATE WIDTH	DIAG. TRUSS ON GATE	DIAG. TRUSS-FENCE PANELS	PORTAL	HEAD RAIL	DEPTH OF POST FOOTING
3'-6"	1 7/8"	6'-0"	2 7/8"	0	1 7/8"	0	3'-6"	10'-0"	0	0	NO	0	1'-6"
4'-0"	1 7/8"	6'-0"	2 7/8"	0	1 7/8"	0	4'-0"	10'-0"	0	0	NO	0	1'-6"
6'-0"	1 7/8"	6'-0"	2 7/8"	0	1 7/8"	0	6'-0"	10'-0"	1/2" DIA.	1/2" DIA.	NO	0	2'-0"
8'-0"	2 3/8"	8'-0"	2 7/8"	(1) -1 5/8"	1 7/8"	1 5/8"	7'-7"	10'-0"	1/2" DIA.	1/2" DIA.	NO	0	2'-0"
10'-0"	2 7/8"	10'-0"	4"	(2) -1 5/8"	1 7/8"	1 5/8"	9'-7"	10'-0"	1/2" DIA.	1/2" DIA.	NO	0	3'-2"
12'-0"	2 7/8"	10'-0"	4"	(2) -1 5/8"	1 7/8"	1 5/8"	9'-7"	10'-0"	1/2" DIA.	1/2" DIA.	YES	2 7/8"	4'-2"
14',16',18'	3 1/2"	10'-0"	4"	(2) -1 5/8"	1 7/8"	1 5/8"	9'-7"	10'-0"	1/2" DIA.	1/2" DIA.	YES	2 7/8"	4'-2"
20'-0"	4 1/2"	10'-0"	4 1/2"	(3) -1 5/8"	1 7/8"	1 5/8"	9'-7"	10'-0"	1/2" DIA.	1/2" DIA.	YES	2 7/8"	4'-6"

*ALL PIPE DIAMETERS ARE TRADE SIZE DIAMETERS AS SPECIFIED IN ASTM F1043, TABLE 1. SEE "PIPE THICKNESS CHARTS" ON SHEET NO. 29 FOR ACTUAL O.D. AND THICKNESS OF PIPE.

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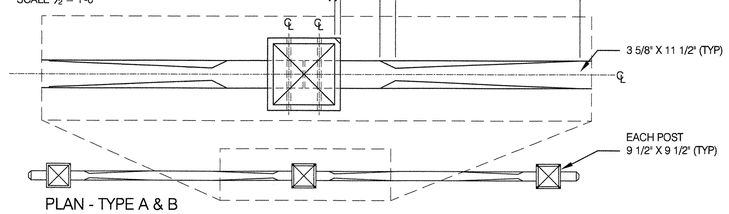
DRAWING TITLE
CHAIN LINK FENCE - DOUBLE GATE

STATE OF NEW YORK RUBY S WEI LICENSED PROFESSIONAL ENGINEER 091042

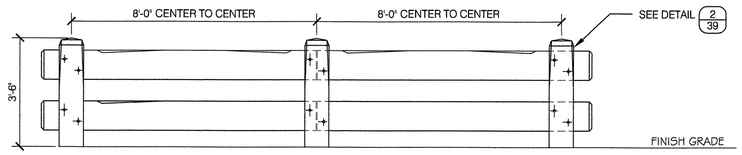
DRAWN BY F. SIEW	CHECKED BY R. WEI, PE
APPROVED BY	STANDARD D.P.R. DETAIL TYLA / 146-R10
APPROVED BY DIRECTOR RUBY S. WEI, PE	SHEET NO. 32
DATE 09-01-2020	SCALE AS SHOWN

1 BARRIER RAIL -TYPE 'A'&'B'

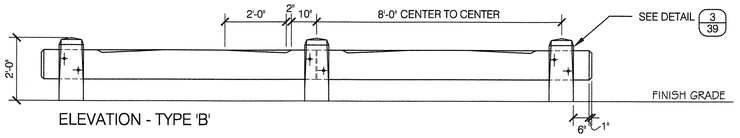
SCALE ½"= 1'-0"



PLAN - TYPE A & B



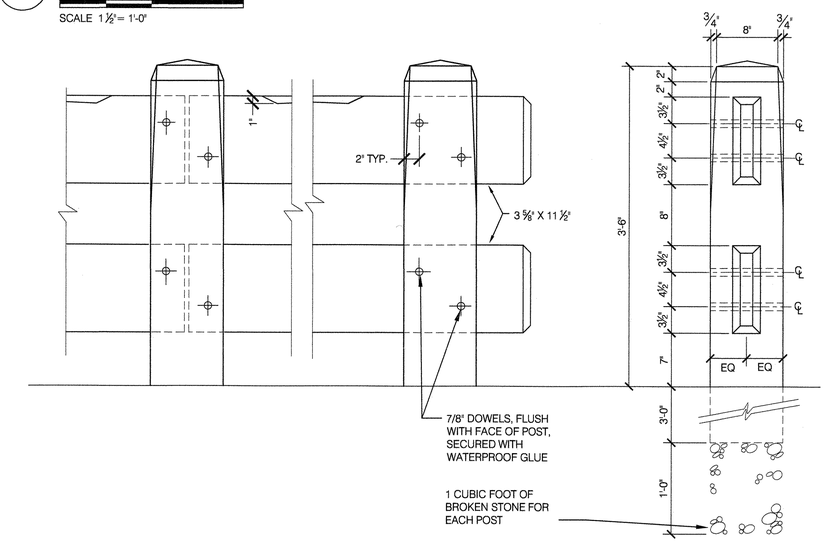
ELEVATION - TYPE 'A'



ELEVATION - TYPE 'B'

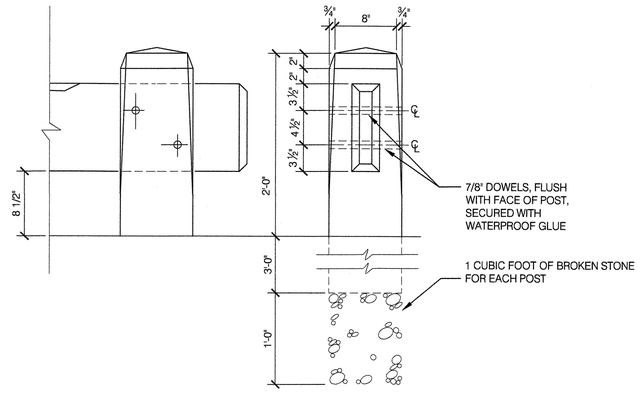
2 BARRIER RAIL - TYPE 'A'

SCALE 1 ½"= 1'-0"



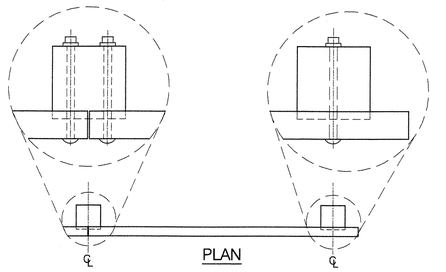
3 BARRIER RAIL - TYPE 'B'

SCALE 1 ½"= 1'-0"

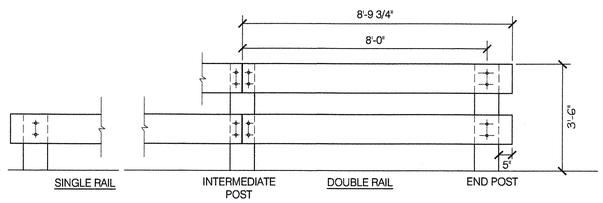


4 BARRIER RAIL - TYPE 'C'

SCALE ½"= 1'-0"



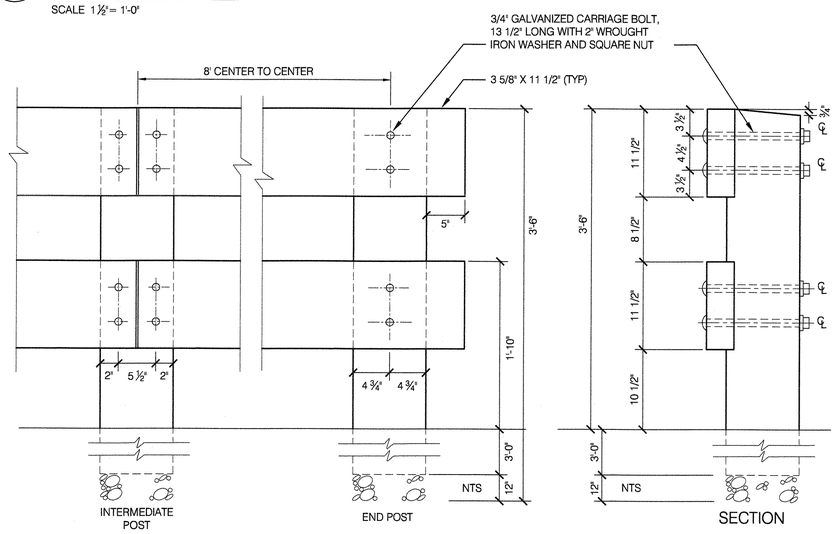
PLAN



ELEVATIONS

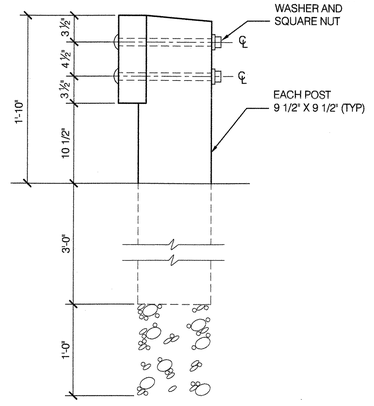
5 BARRIER RAIL-TYPE 'C' (DOUBLE RAIL)

SCALE 1 ½"= 1'-0"



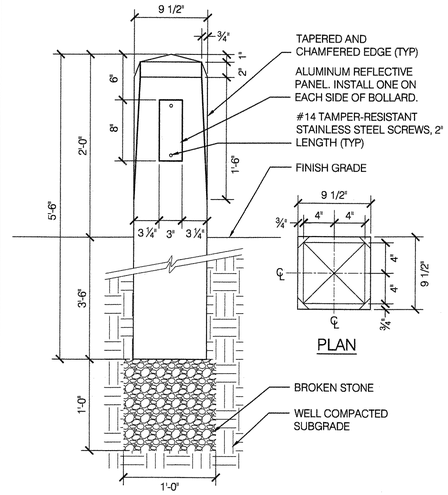
6 BARRIER RAIL- TYPE 'C' (SINGLE RAIL)

SCALE 1 ½"= 1'-0"



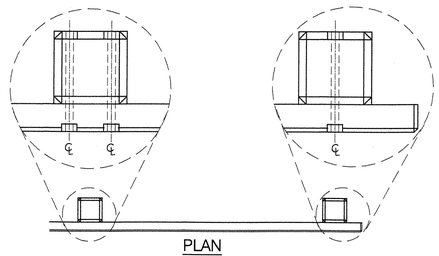
7 FIXED WOOD BOLLARD

SCALE 1 ½"= 1'-0"

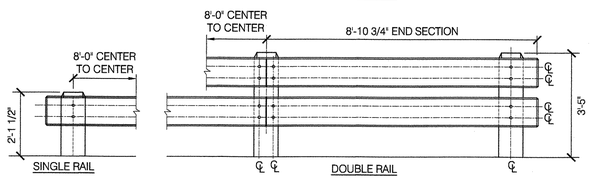


8 BARRIER RAIL -TYPE 'D'

SCALE ½"= 1'-0"



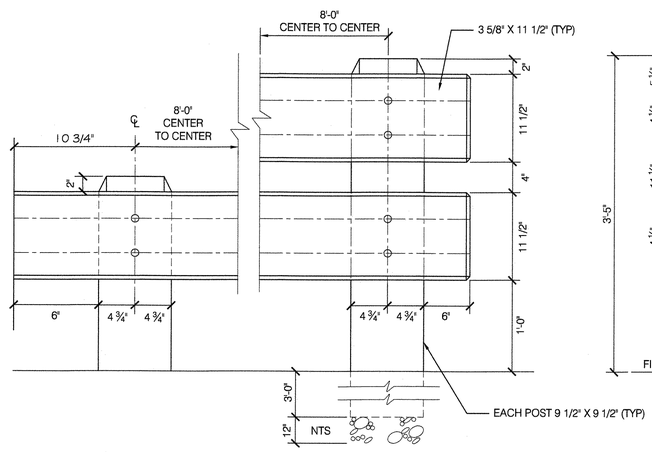
PLAN

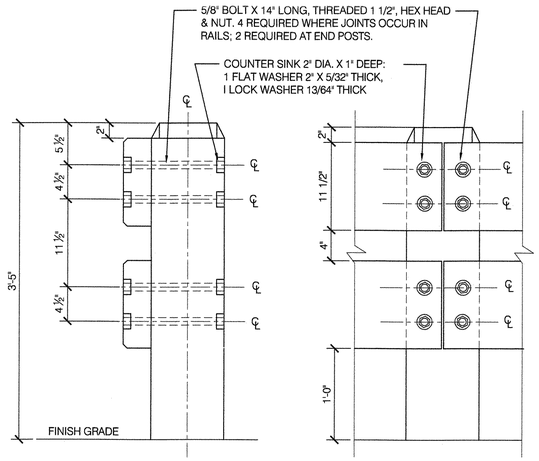


ELEVATIONS

9 BARRIER RAIL -TYPE 'D'

SCALE 1 ½"= 1'-0"





NOTE:
ALL BOLTS SHALL BE CUT AND PEENED TO 1/4" AFTER INSTALLATION

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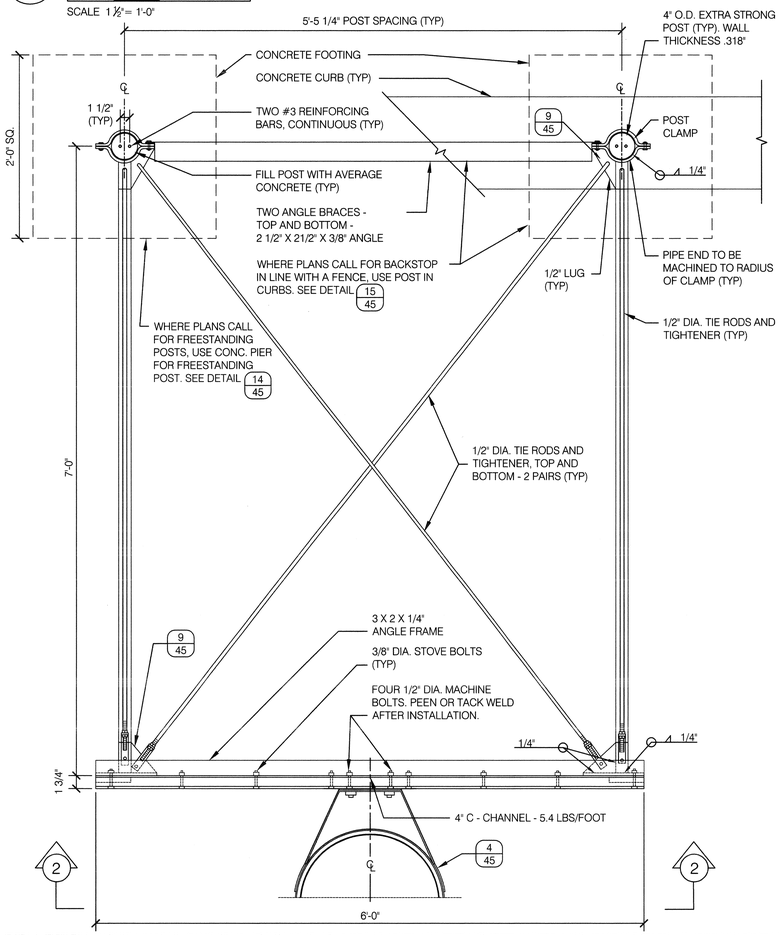
DRAWING TITLE
TIMBER BARRIER RAIL/ BOLLARD DETAILS

STATE OF NEW YORK · RUBY S WEI · 081042 · LICENSED PROFESSIONAL ENGINEER

DRAWN BY: M. MERIC	CHECKED BY: R. WEI, PE
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: RUBY WEI, PE	SHEET NO.: 39
DATE: 09-01-2020	SCALE: AS SHOWN

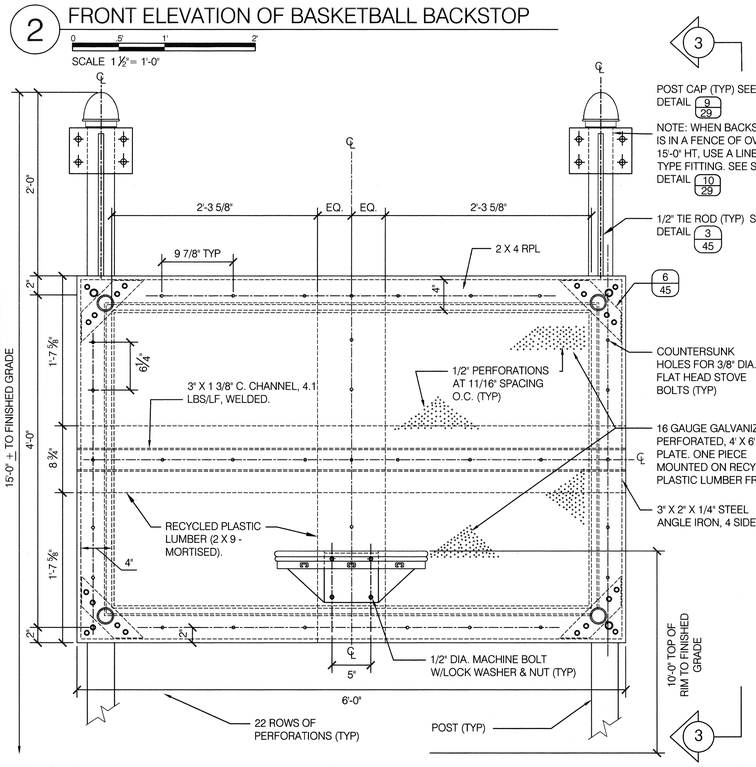
1 PLAN OF BASKETBALL BACKSTOP (FREESTANDING OR AT FENCE)

SCALE 1½"= 1'-0"



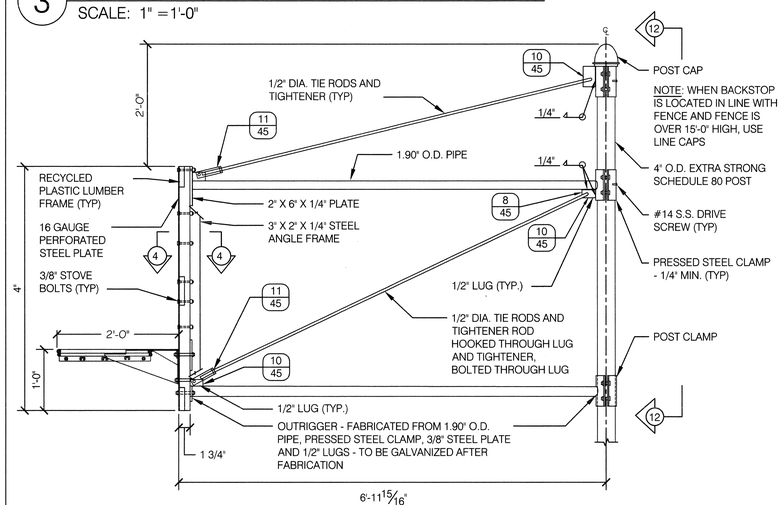
2 FRONT ELEVATION OF BASKETBALL BACKSTOP

SCALE 1½"= 1'-0"



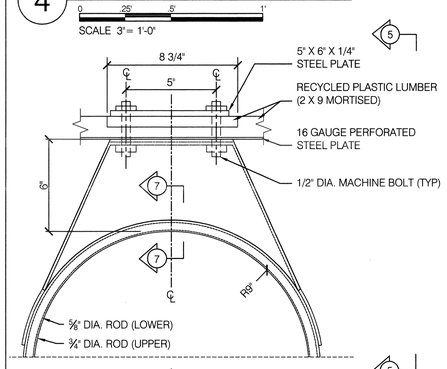
3 SIDE ELEVATION OF BASKETBALL BACKSTOP

SCALE: 1" =1'-0"



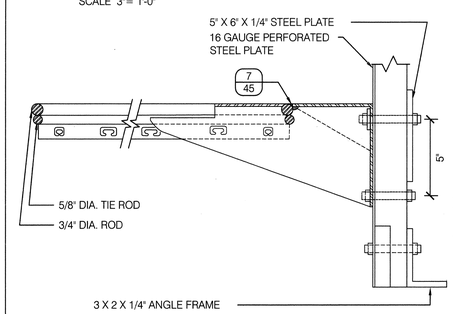
4 PLAN OF GOAL & BRACKET

SCALE 3"= 1'-0"



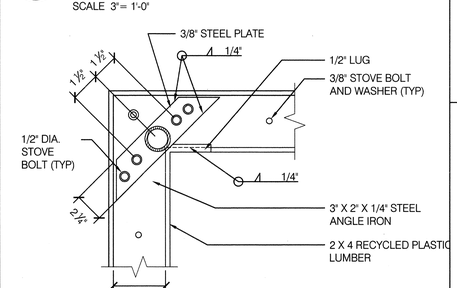
5 ELEVATION OF GOAL & BRACKET

SCALE 3"= 1'-0"



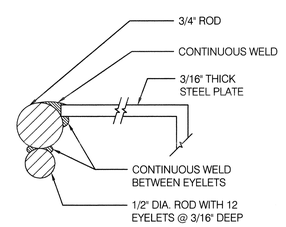
6 BACKBOARD CORNER ENLARGEMENT - REAR VIEW

SCALE 3"= 1'-0"



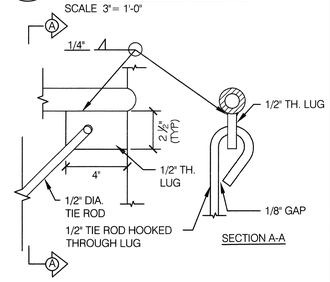
7 DETAIL OF RIM WELDING

SCALE 1"= 1'-0"



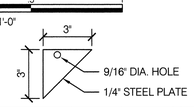
8 ELV. TIE ROD FASTENING

SCALE 3"= 1'-0"



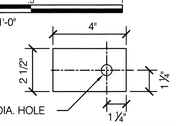
9 TRIANGULAR TIE ROD BRACKET

SCALE 3"= 1'-0"



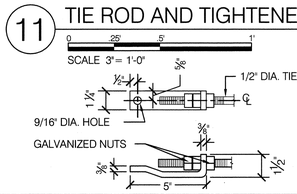
10 RECT. TIE ROD BRACKET

SCALE 3"= 1'-0"



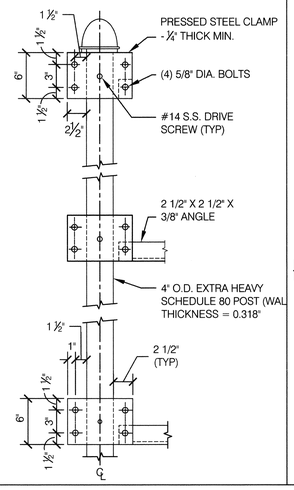
11 TIE ROD AND TIGHTENER

SCALE 3"= 1'-0"



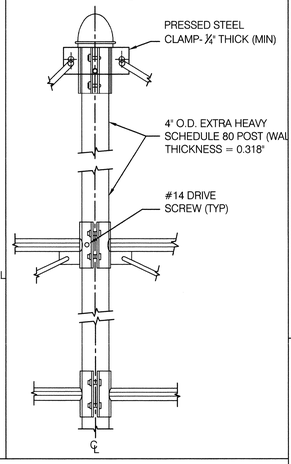
12 POST CONNECT.-BACK VIEW

SCALE 1½"= 1'-0"



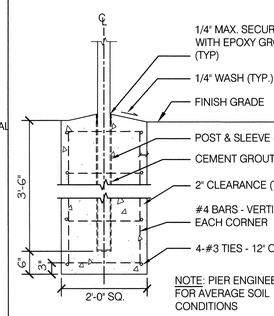
13 BACK-TO-BACK BACKSTOPS

SCALE 1½"= 1'-0"



14 PIER FOR FREE STANDING POST

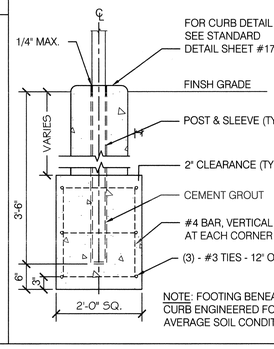
SCALE ¾"= 1'-0"



NOTE: PIER ENGINEERED FOR AVERAGE SOIL CONDITIONS

15 POST IN CURB AT FENCE

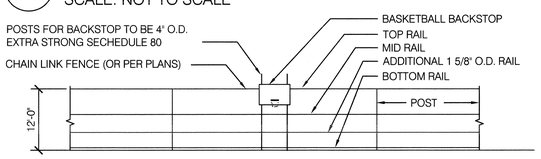
SCALE ¾"= 1'-0"



NOTE: FOOTING BENEATH CURB ENGINEERED FOR AVERAGE SOIL CONDITIONS

16 BACKSTOP ELEVATION IN LINE WITH FENCE

SCALE: NOT TO SCALE



NOTES: (ALSO SEE THE DPR STANDARD SHEET #29 "CHAIN LINK FENCE- DETAILS")

1. TOP OF BACKSTOP POSTS TO BE 15'-0" ABOVE PAVEMENT.
2. THE ADDITIONAL RAIL SHALL EXTEND THE LENGTH OF TWO FENCE PANELS IN EACH DIRECTION BEYOND A SINGLE BACKSTOP. WHERE THERE IS A BATTERY OF BACKSTOPS ON FENCE, THE ADDITIONAL RAILS ARE TO BE CONTINUOUS AND EXTEND TWO FENCE PANELS BEYOND FIRST AND LAST BACKSTOP.
3. ADDITIONAL RAILS ARE TO BE USED FOR ALL BACKSTOPS IN LINE WITH FENCES 12'-0" HEIGHT OR TALLER.

NOTES:

1. ALL PIPE MEASUREMENTS ARE OUTSIDE DIAMETER, FOR OTHER DIMENSIONS SEE ASTM A-53.
2. POSTS FOR BASKETBALL BACKSTOP AND ALL BOLTS AND NUTS SHALL BE GALVANIZED STEEL;
3. DRIVE SCREWS SHALL BE STAINLESS STEEL.
4. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED STEEL; OUTRIGGERS SHALL BE GALVANIZED AFTER FABRICATION;
5. ALL GALVANIZED STEEL COMPONENTS SHALL BE POWDERCOATED PER SPECIFICATION, EXCEPT BACKBOARD AND HARDWARE;
6. FOR POLYCARBONATE BACKBOARD SEE STANDARD DETAIL SHEET 44A.
7. FOR LAYOUT SEE STANDARD DETAIL "BASKETBALL COURT LAYOUTS" SHEET 45A.
8. STANDARD ARC AND GAS WELDING IS SHOWN AS FOLLOWS:

1/4" — THE ADJACENT SYMBOL INDICATES A 1/4 INCH FILLET WELD. THE NUMBER (1/4") EQUALS THE LENGTH OF SIDE AND FACE OF WELD. THIS SYMBOL MEANS FILLET WELD. THE WELD IS ALSO ASSUMED TO HAVE 45-DEGREE ANGLE UNLESS OTHERWISE SPECIFIED. CIRCLE MEANS "WELD ALL AROUND".

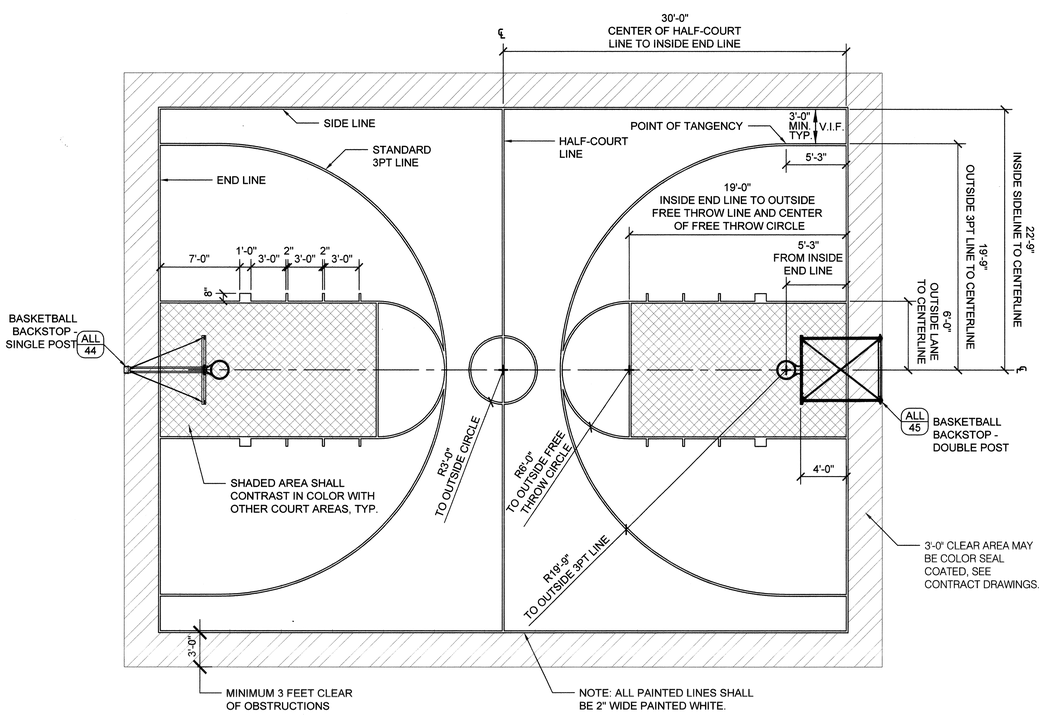
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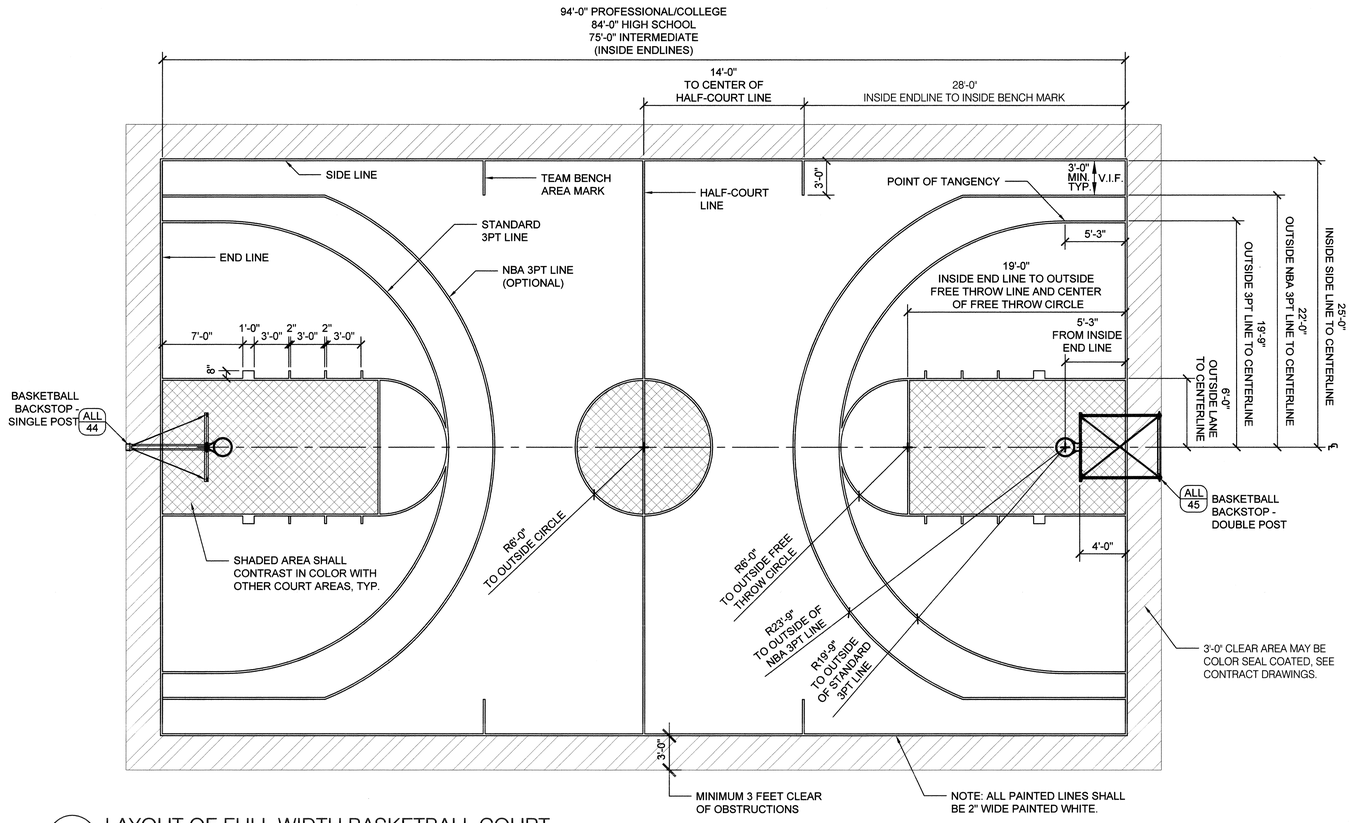
DRAWING TITLE
BASKETBALL BACKSTOP - DOUBLE POST

DRAWN BY: M. MERIC	CHECKED BY: R. WEI, PE
APPROVED BY	STANDARD D.P.R. DETAIL: TYLA/186-R9
APPROVED BY DIRECTOR: CELIA M. PETERSEN, RLA	SHEET NO.: 45
DATE: 05-07-2018	SCALE: AS SHOWN



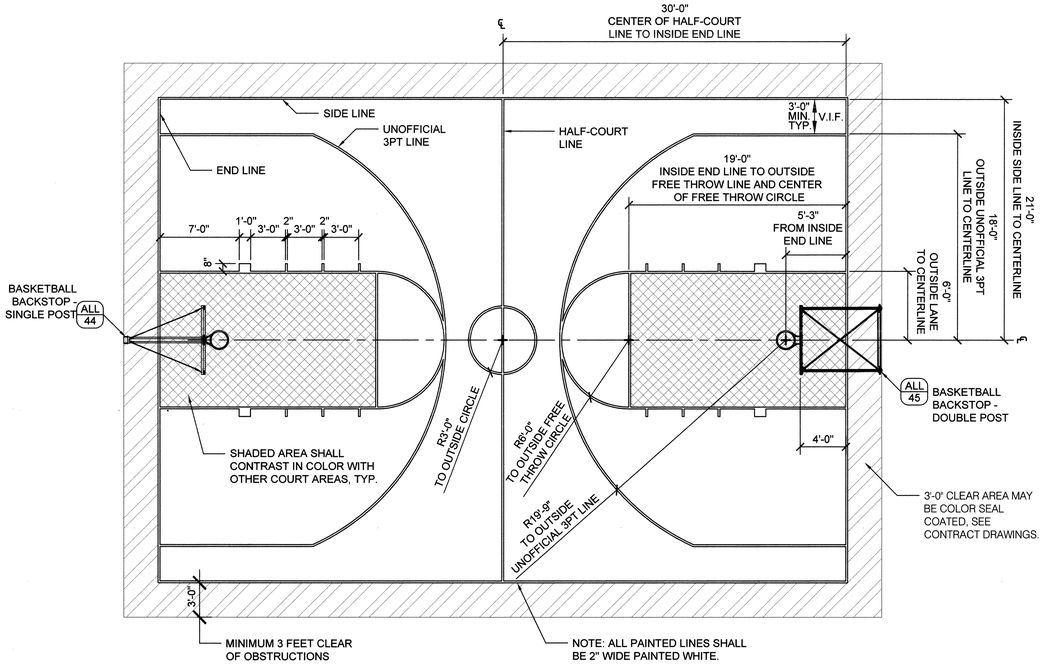
1 LAYOUT OF JUNIOR BASKETBALL COURT

SCALE 3/16"= 1'-0"



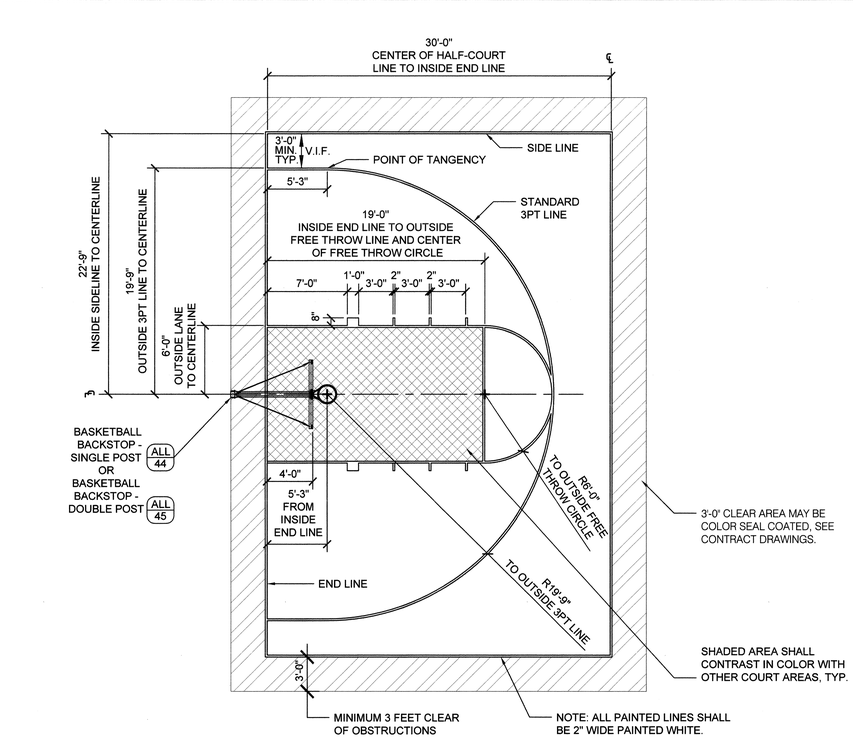
2 LAYOUT OF FULL WIDTH BASKETBALL COURT

SCALE 3/16"= 1'-0"



3 LAYOUT OF UNOFFICIAL BASKETBALL COURT FOR SMALL SPACES

SCALE 3/16"= 1'-0"



4 LAYOUT OF BASKETBALL HALF-COURT

SCALE 3/16"= 1'-0"

OVERALL BASKETBALL COURT LAYOUT DIMENSIONS (LENGTH x WIDTH)

1.	PROFESSIONAL/COLLEGE	94'-0" x 50'-0"
2.	HIGH SCHOOL	84'-0" x 50'-0"
3.	INTERMEDIATE	75'-0" x 50'-0"
4.	JUNIOR	60'-0" x 45'-6"
5.	UNOFFICIAL	60'-0" x 42'-0"
6.	HALF-COURT	30'-0" x 45'-6"

NOTES:

1. SEE CONTRACT DRAWINGS FOR COLOR AND AREAS TO BE SEAL COATED.
2. ALL PAINTED LINES SHALL BE WHITE AND 2" WIDE, UNLESS OTHERWISE NOTED.
3. BASKETBALL BACKSTOPS MAY BE SINGLE OR DOUBLE POSTS, SEE CONTRACT DRAWINGS FOR TYPE.
4. COURT SURFACE RECOMMENDED GRADE RANGE: 0.5% - 1.5%
5. NBA 3PT LINE IS OPTIONAL FOR 50'-0" WIDE COURTS, SEE CONTRACT DRAWINGS.

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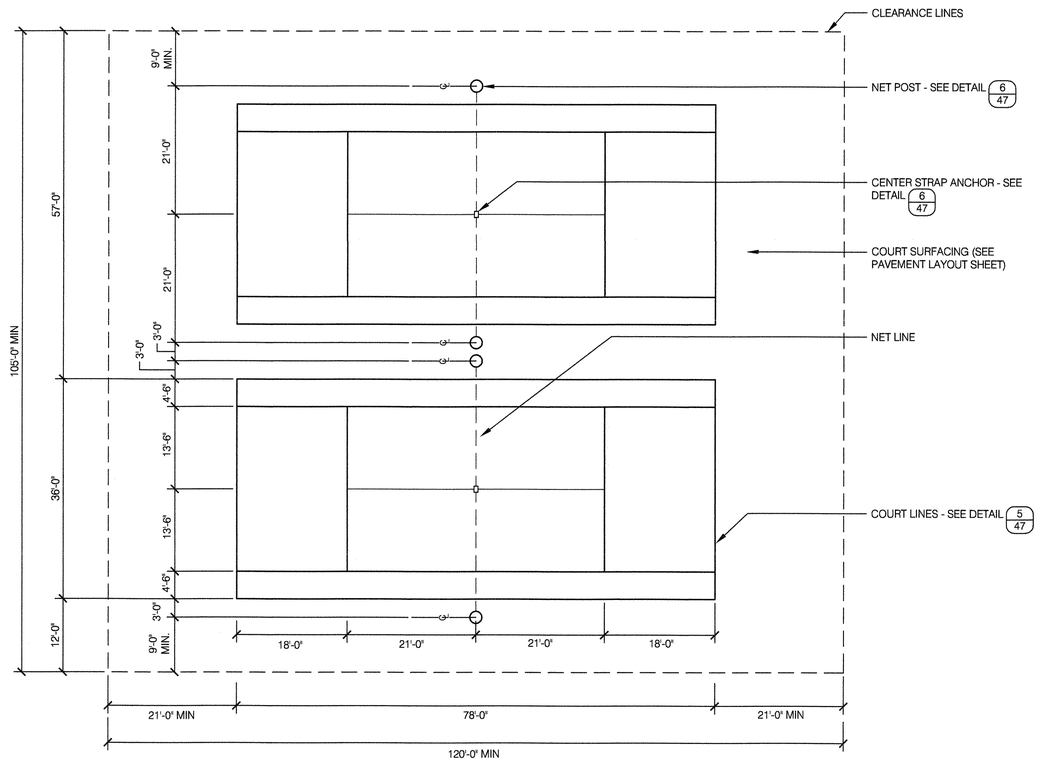
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DRAWING TITLE
BASKETBALL COURT LAYOUTS

DRAWN BY: T. PORTO, RLA	CHECKED BY: N. PRINCE, RLA
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA/186-R9
APPROVED BY DIRECTOR: NANCY PRINCE, RLA	SHEET NO.: 45A
DATE: 05-07-2018	SCALE: AS SHOWN

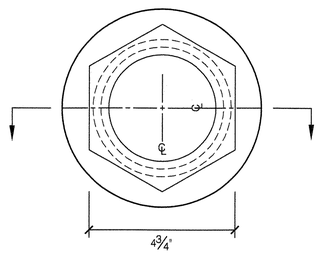
1 PLAN - BATTERY OF TENNIS COURTS

SCALE 1"= 10'-0"

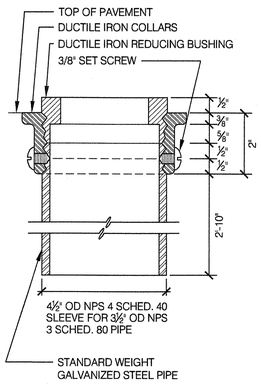


2 REDUCING BUSHING

SCALE 6"= 1'-0"



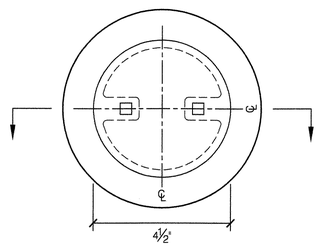
PLAN



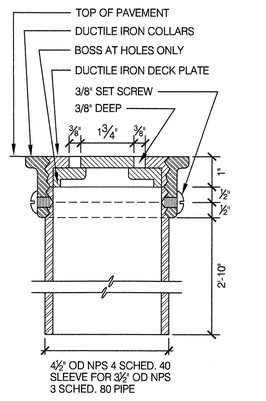
SECTION

3 DECK PLATE

SCALE 6"= 1'-0"



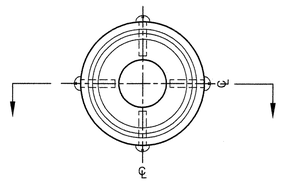
PLAN



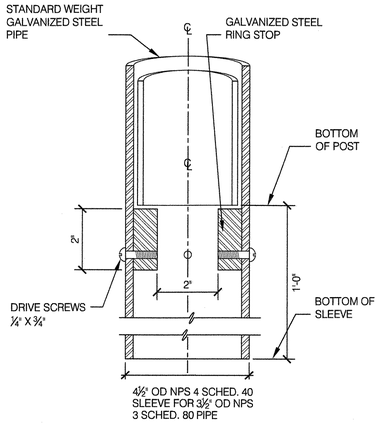
SECTION

4 RING STOP FITTING

SCALE 6"= 1'-0"



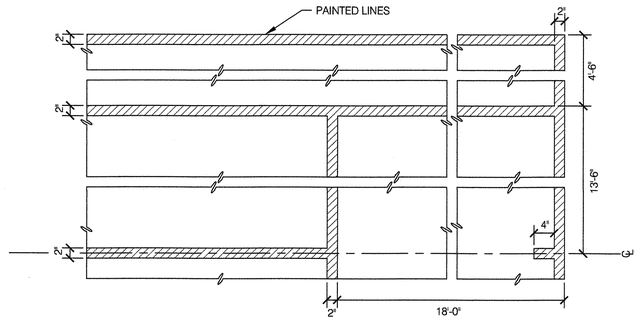
PLAN



SECTION

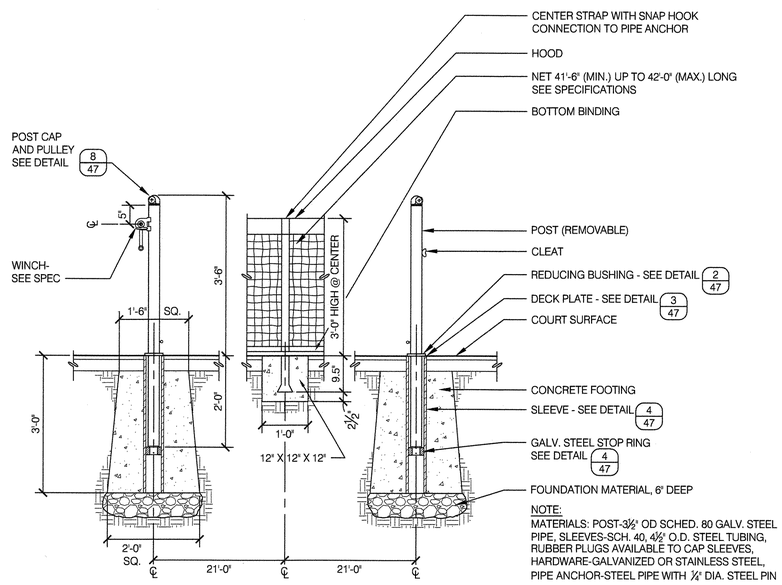
5 DIMENSIONING OF COURT LINES

SCALE 1"= 1'-0"



6 TENNIS NET POST AND CENTER STRAP ANCHOR-FRONT ELEVATION

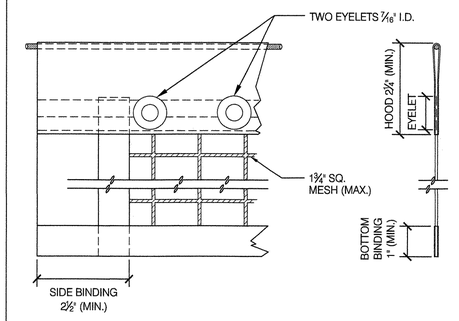
SCALE ¾"= 1'-0"



NOTE:
MATERIALS: POST-3½" OD SCHED. 80 GALV. STEEL PIPE, SLEEVES-SCH. 40, 4½" O.D. STEEL TUBING, RUBBER PLUGS AVAILABLE TO CAP SLEEVES, HARDWARE-GALVANIZED OR STAINLESS STEEL, PIPE ANCHOR-STEEL PIPE WITH ¼" DIA. STEEL PIN

7 DETAIL OF HOOD AND NET

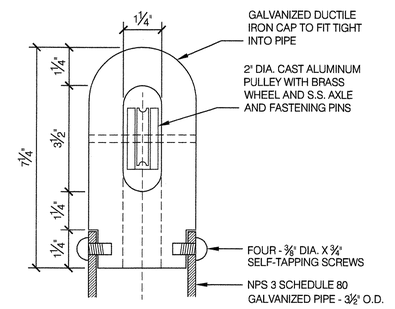
SCALE 6"= 1'-0"



ELEVATION SECTION

8 POST CAP AND PULLEY

SCALE 6"= 1'-0"



SIDE ELEVATION

NOTE: HEIGHT OF POST SHALL BE MEASURED FROM FINISHED GRADE TO TOP OF PULLEY

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FLUSHING, NEW YORK 11368

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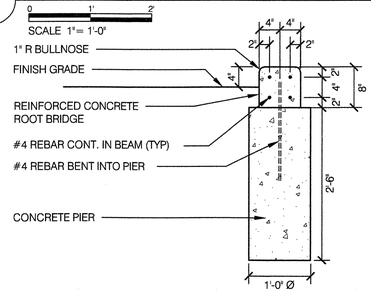
DRAWING TITLE
TENNIS COURT LAYOUT AND DETAILS

STATE OF NEW YORK RUBY S. WEI 091042 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: STAFF	CHECKED BY: R. WEI, PE
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: RUBY S. WEI, PE	SHEET NO.: 47
DATE: 09-01-2020	SCALE: AS SHOWN

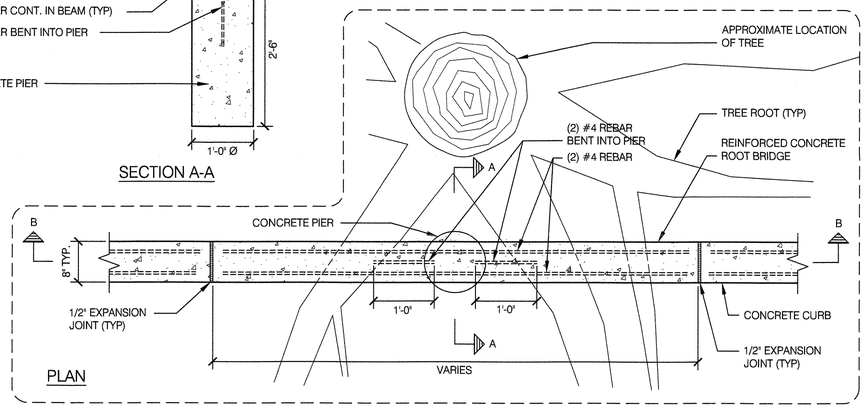
1 TREE ROOT BRIDGE

SCALE 1"= 1'-0"

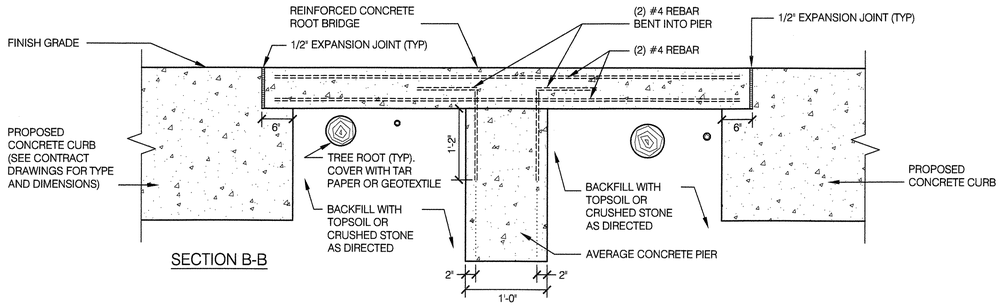


SECTION A-A

NOTE:
1. USE CONCRETE PIER INTERMEDIATE FOR SPANS OVER 12'; NO PIER FOR SPANS UNDER 12', LOCATE TO AVOID CUTTING MAJOR ROOTS.
2. SEE STANDARD DETAIL (1/17) FOR 6' WIDE CURBS



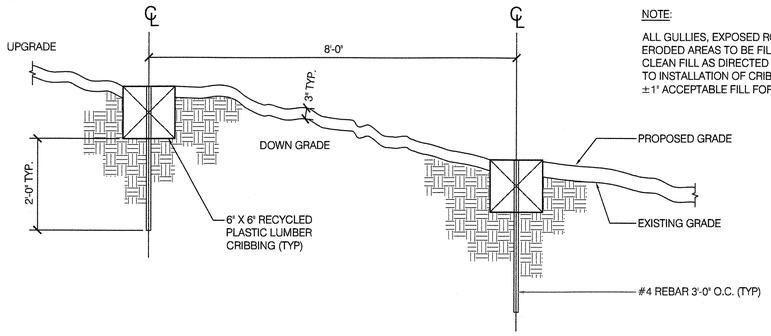
PLAN



SECTION B-B

4 TYPICAL CRIBBING

SCALE: NOT TO SCALE

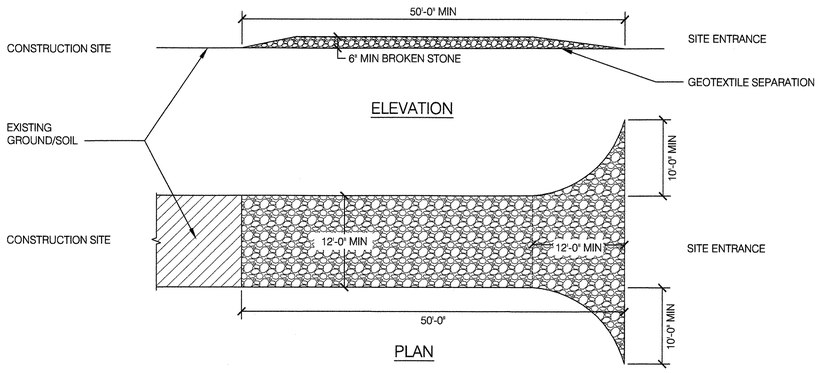


NOTE:

ALL GULLIES, EXPOSED ROOTS, AND SEVERELY ERODED AREAS TO BE FILLED WITH TOPSOIL OR CLEAN FILL AS DIRECTED BY THE ENGINEER PRIOR TO INSTALLATION OF CRIBBING: APPROXIMATELY 4" (±1" ACCEPTABLE FILL FOR PLANTING AREAS).

7 STABILIZED CONSTRUCTION ENTRANCE

SCALE: NOT TO SCALE

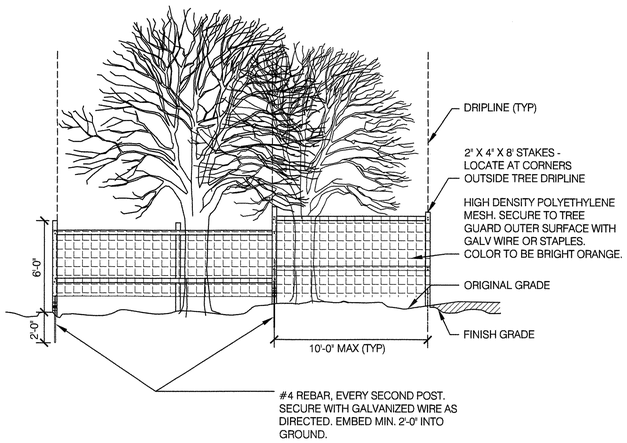


ELEVATION

PLAN

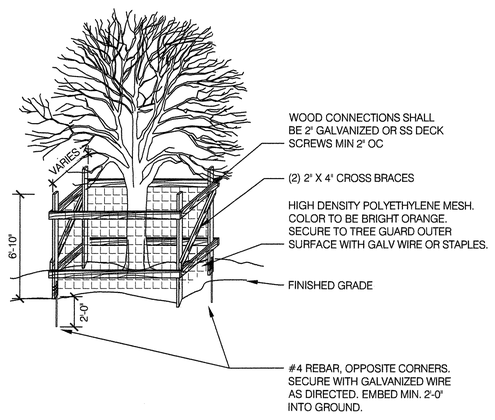
2 TREE GUARD FOR GROVES

SCALE ¼"= 1'-0"

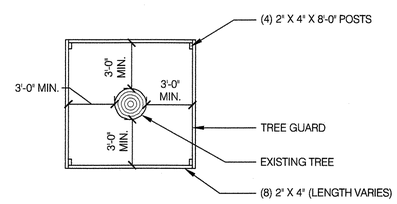


5 TREE GUARD

SCALE ¼"= 1'-0"



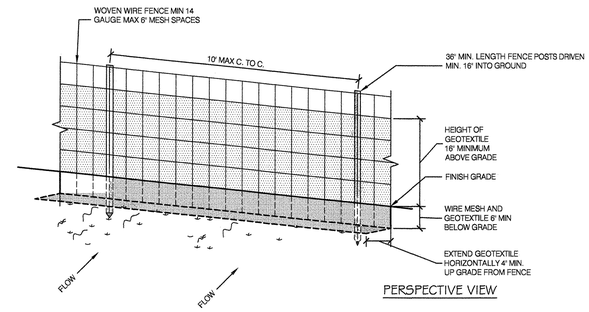
SECTION VIEW



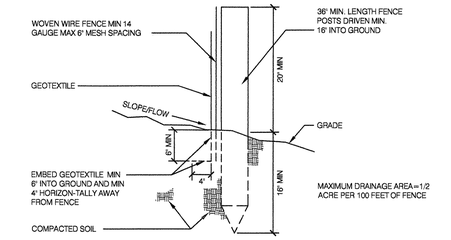
PLAN VIEW

3 SILT FENCE DETAILS

SCALE: NOT TO SCALE



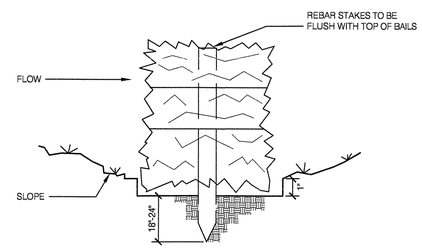
PERSPECTIVE VIEW



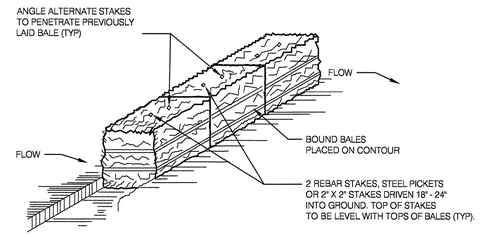
SECTION VIEW

6 STRAW BALE DIKE DETAILS

SCALE: NOT TO SCALE



BEDDING DETAIL



ANCHORING DETAIL

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FLUSHING, NEW YORK 11368

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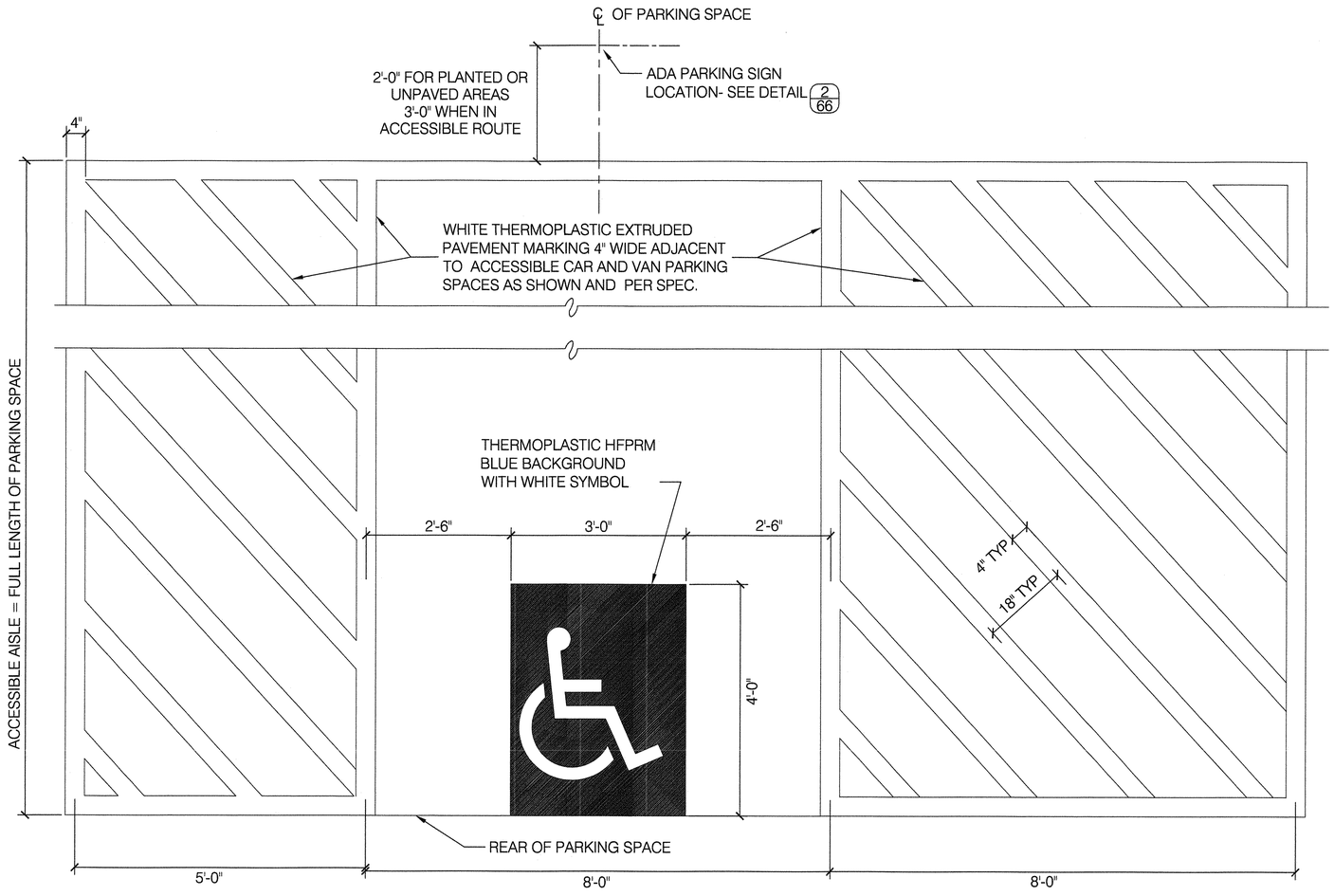
DRAWING TITLE
TREE PROTECTION AND SEDIMENT CONTROL

STATE OF NEW YORK · RUBY S. WEI · 091042 · LICENSED PROFESSIONAL ENGINEER

DRAWN BY: STAFF	CHECKED BY: R. WEI, PE
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: RUBY S. WEI, PE	SHEET NO.: 59
DATE: 09-01-2020	SCALE: AS SHOWN

1 ADA PARKING SPACE WITH CAR AND VAN ACCESS AISLES

SCALE: NOT TO SCALE

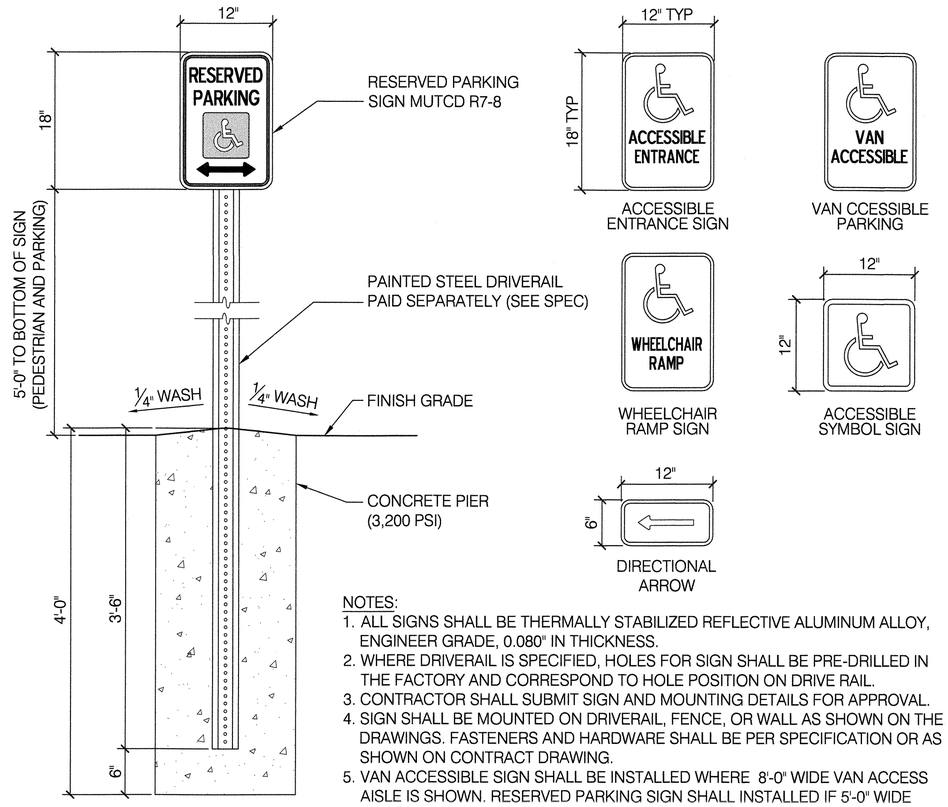


PLAN

NOTES:
1. SEE TABLE 1 FOR ADA PARKING SPACE REQUIREMENTS
2. THERMOPLASTIC HFPRM (HEAT FUSED PREFORMED PAVEMENT RELFECTIVE MARKING) SYMBOL SHALL BE STANDARD NYC DOT ADA MARKING FOR ACCESSIBLE PARKING

2 ADA SIGNS AND DRIVERAIL

SCALE: NOT TO SCALE



NOTES:
1. ALL SIGNS SHALL BE THERMALLY STABILIZED REFLECTIVE ALUMINUM ALLOY, ENGINEER GRADE, 0.080" IN THICKNESS.
2. WHERE DRIVERAIL IS SPECIFIED, HOLES FOR SIGN SHALL BE PRE-DRILLED IN THE FACTORY AND CORRESPOND TO HOLE POSITION ON DRIVE RAIL.
3. CONTRACTOR SHALL SUBMIT SIGN AND MOUNTING DETAILS FOR APPROVAL.
4. SIGN SHALL BE MOUNTED ON DRIVERAIL, FENCE, OR WALL AS SHOWN ON THE DRAWINGS. FASTENERS AND HARDWARE SHALL BE PER SPECIFICATION OR AS SHOWN ON CONTRACT DRAWING.
5. VAN ACCESSIBLE SIGN SHALL BE INSTALLED WHERE 8'-0" WIDE VAN ACCESS AISLE IS SHOWN. RESERVED PARKING SIGN SHALL INSTALLED IF 5'-0" WIDE ACCESS AISLE IS SHOWN.
6. SEE PLANS FOR SIGN LOCATION.

3 TABLE 1

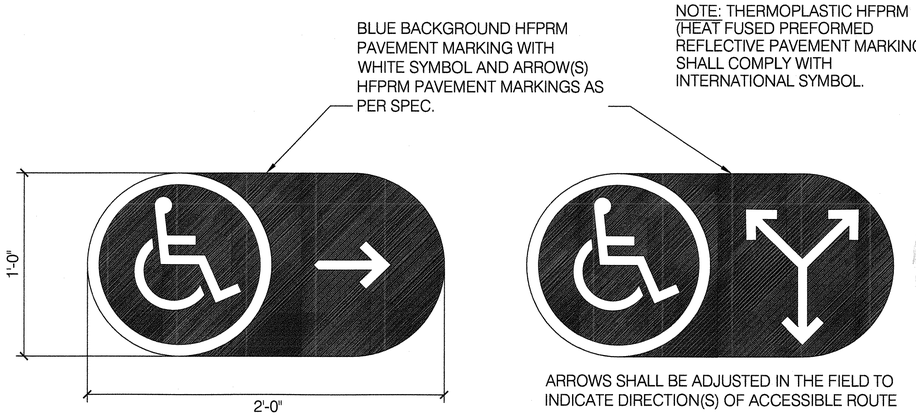
MINIMUM NUMBER OF ACCESSIBLE PARKING SPACES
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN 208.2.4

TOTAL NUMBER OF PARKING SPACES PROVIDED	MINIMUM NUMBER OF ACCESSIBLE PARKING SPACES (CARS AND VANS)	NUMBER OF VAN SPACES WITH 8'-0" ACCESS AISLE	NUMBER OF CAR SPACES WITH 5'-0" ACCESS AISLE
1 TO 25	1	1	0
26 TO 50	2	1	1
51 TO 76	3	1	2
76 TO 100	4	1	3
101 TO 150	5	1	4
151 TO 200	6	1	5
201 TO 300	7	2	5
301 TO 400	8	2	6
401 TO 500	9	2	7
501 TO 1000	2 % OF TOTAL PARKING SPACES PROVIDED IN EACH LOT	1/6 OF COLUMN A *	5/6 OF COLUMN A **
501 TO 1000	20, PLUS 1 FOR EACH 100, OR FRACTION THEREOF, OVER 1000	1/6 OF COLUMN A *	5/6 OF COLUMN A **

* 1 OUT OF EVERY 6 SPACES ** 5 OUT OF EVERY 6 SPACES

4 THERMOPLASTIC HFPRM A.D.A. ROUTE SYMBOL

SCALE 3"= 1'-0"



NOTE:
ADA REFERS TO THE AMERICANS WITH DISABILITIES ACT OF 1991.

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DRAWING TITLE
ADA SIGNAGE AND PAVEMENT MARKINGS

STATE OF NEW YORK · RUBY S WEI · 091042 · LICENSED PROFESSIONAL ENGINEER

DRAWN BY: S. MARCIONA	CHECKED BY: R. WEI, PE
APPROVED BY:	STANDARD D.P.R. DETAIL: TYLA / 146-R10
APPROVED BY DIRECTOR: RUBY WEI, PE	SHEET NO.: 64
DATE: 09-01-2020	SCALE: AS SHOWN

NEW YORK CITY DOT

THE FOLLOWING SHEETS ARE NYC DEPARTMENT OF TRANSPORTATION (DOT) STANDARD DETAILS, CURRENT AS OF DECEMBER 2025, AND ARE INCLUDED FOR REFERENCE ONLY.
THE CONTRACTOR SHALL FOLLOW THE MOST CURRENT NYC DOT STANDARD DETAILS AS APPLICABLE.

SHEET H-1042A	STANDARD TRENCH OR HOLE RESTORATION FOR STREETS PROTECTED BY NYC ADMINISTRATIVE CODE 19-144	DATED MARCH 15, 2016
SHEET H-1044	CONCRETE CURB	DATED JULY 1, 2010
SHEET H-1045	CONCRETE SIDEWALK	DATED JULY 1, 2010
SHEET H-1055	PAVEMENT KEY TYPE A, B-1, B-2, C	DATED JULY 1, 2010

NYC Environmental Protection
CITY OF NEW YORK
ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis

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PARKS & RECREATION
Forestry, Horticulture and Natural Resources

NO.	DATE	ISSUED FOR	BY

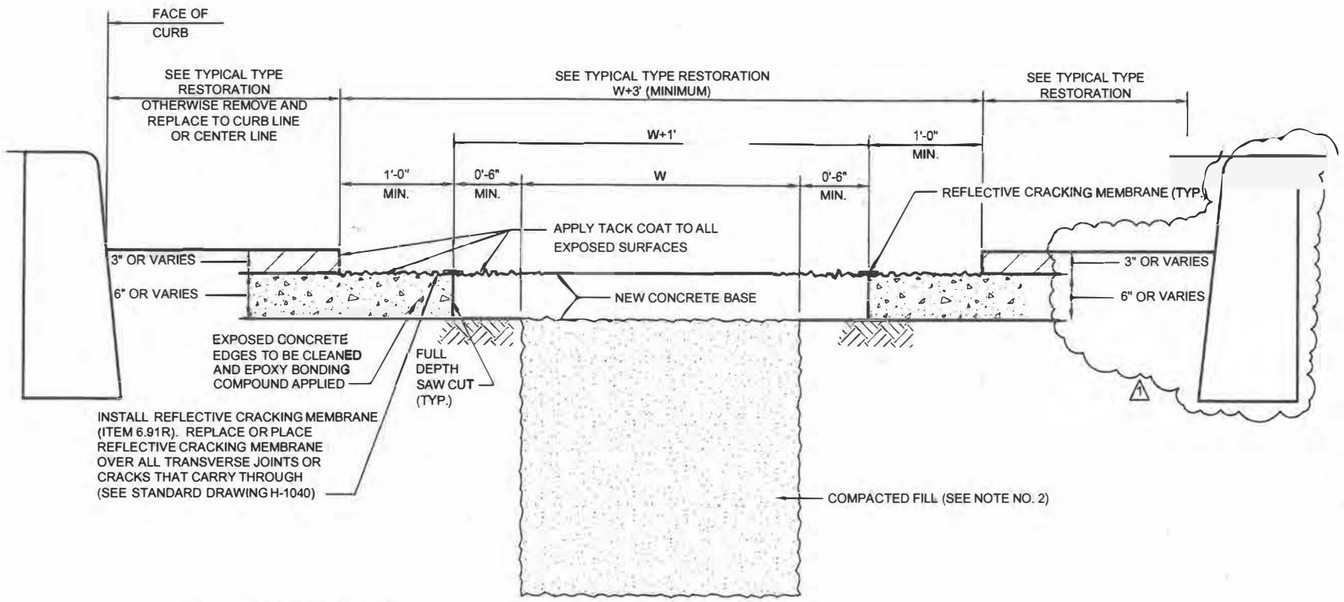
SEAL
STATE OF NEW YORK · DEEP METHOTA · 075826 · LICENSED PROFESSIONAL ENGINEER
Hazen
BLOCK
LOT

PROJECT TITLE
ON-SITE GREEN INFRASTRUCTURE

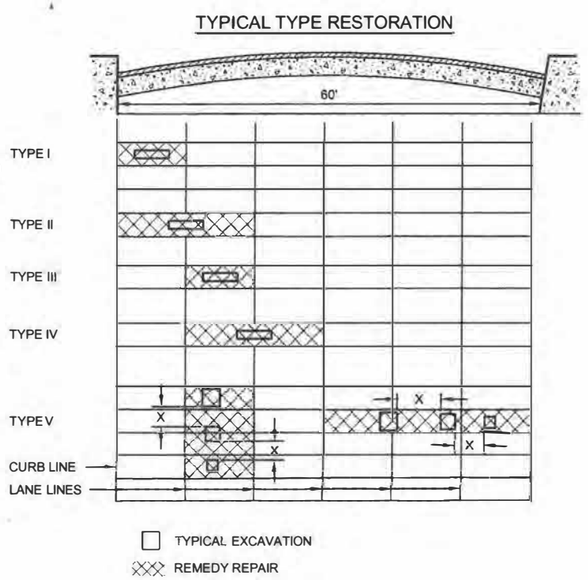
DRAWING TITLE
DIVIDER SHEET - NYC DOT DETAILS

DESIGNED BY	DRAWN BY	CHECKED BY
J. BRENNAN	D. THOMAS	A. EASON

B-SCAN	SCALE	DRAWING NO.	CONTRACT NO.
	N/A	O-7	GI-CONS-7
	DATE NOV 2026		SHEET No. 130 OF 133 SHEETS



RESTORATION DETAIL ⚠1
N.T.S.



CRITICAL ROADWAYS AND PROTECTED STREETS

NOTES:

⚠1 1. ALL UNDERMINED, DISTURBED OR UNSTABLE SUB BASE MATERIAL SHALL BE REMOVED PRIOR TO BACKFILLING. IT SHALL BE FULLY RESTORED AND COMPACTED WHILE THE TRENCH IS BEING FULLY BACKFILLED AND COMPACTED.

⚠1 2. ALL TRENCHES SHALL BE BACKFILLED AS PER SECTION 4.11 OF NYCDOT STANDARD HIGHWAY SPECIFICATIONS.

⚠1 3. ALL TRENCH RESTORATIONS SHALL BE SQUARE OR RECTANGULAR SHAPED. SAW CUTTING BACK EXISTING ASPHALT PAVEMENT AND CONCRETE BASE, SQUARING AND ALIGNING OF CUT LIMITS TO BE PERFORMED ONLY AFTER COMPLETION OF THE COMPACTION OF THE BACKFILL TO THE BOTTOM OF THE BASE.

4. BACKFILL MATERIAL SHALL BE DEPOSITED IN HORIZONTAL LAYERS NOT EXCEEDING 12" IN THICKNESS PRIOR TO COMPACTION. A MINIMUM OF 95% OF STANDARD PROCTOR MAXIMUM DENSITY WILL BE REQUIRED. WHEN PLACING BACKFILL AROUND PIPES, LAYERS SHALL BE DEPOSITED TO PROGRESSIVELY BURY THE PIPE TO EQUAL DEPTHS ON BOTH SIDES. COMPACTION SHALL BE ACHIEVED BY THE USE OF IMPACT RAMMERS, PLATE OR SMALL DRUM VIBRATORS OR PNEUMATIC BUTTON HEAD COMPACTION EQUIPMENT. HAND TAMPING IS NOT PERMITTED EXCEPT IN THE IMMEDIATE AREA OF THE UNDERGROUND FACILITY.

5. ALL RESTORATION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF NYC DEPARTMENT OF TRANSPORTATION AND IN PROCESS INSPECTION AND TESTING SHALL BE CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.

⚠1 6. WHEN THE EXISTING PAVEMENT IS ASPHALT ON CONCRETE BASE THEN THE RESTORATION SHALL BE AS SHOWN ON RESTORATION DETAIL. CONCRETE SHALL BE REMOVED TO A WIDTH OF W + 1 FOOT BY FULL DEPTH SAW CUTTING FOR CRITICAL ROADWAYS AND FOR PROTECTED STREETS, AND FOR NON-PROTECTED STREETS CONCRETE SHALL BE REMOVED TO A WIDTH OF W + 1 FOOT BY EITHER FULL DEPTH SAW CUTTING OR OTHER METHODS. ASPHALT SHALL BE REMOVED TO A WIDTH OF NOT LESS THAN W + 3 FEET BY SAW CUTTING AND GRINDING OR PEELING SO AS NOT TO DAMAGE CONCRETE BASE. THE SAW CUTTING SHALL ALIGN WITH THE LANE MARKING OR DIRECTION OF TRAFFIC IF THERE ARE NO LANE MARKINGS, AND PERPENDICULAR THERETO.

⚠1 7. APPLY BITUMOUS CURING COMPOUND OVER NEWLY PLACED CONCRETE BASE (SECTION 2.14 NYCDOT HIGHWAY SPECIFICATION).

8. WHEN THE EXISTING PAVEMENT IS ASPHALT MACADAM WITHOUT CONCRETE BASE. THE CONTRACTOR SHALL SAWCUT A WIDTH OF NOT LESS THAN W + 1' OF THE EXISTING PAVEMENT AND RESTORE THIS TO CONFORM TO THE EXISTING PAVEMENT AND SUB-BASE MATERIAL BUT MUST PLACE NOT LESS THAN 6" OF ASPHALT MACADAM ON 6" OF CRUSHED STONE AGGREGATE SIZED TO 1" TO 3". THE RESTORATION SHALL CONFORM TO THE TYPICAL TYPE RESTORATION ABOVE. WHERE NO MARKINGS EXIST THE ALIGNMENT SHALL BE SO THAT SAWCUT DOES NOT FALL UNDER A WHEEL TRACK.

9. WHEN X DISTANCE BETWEEN HOLES IS GREATER THAN 10 FT. FROM EDGE TO ABUTTING EDGE. THE CONCRETE BASE SHALL BE OPENED SEPARATE FOR EACH HOLE. A SERIES OF SMALL HOLES SPACED 10 FT. OR LESS FROM EDGE TO ABUTTING EDGE SHALL BE OPENED TO A CONTINUOUS TRENCH. SEE TYPE V RESTORATION.

10. ALL REPAIRS SHALL CONFORM TO TYPICAL TYPE RESTORATION I THRU V ABOVE.

⚠1 11. FOR TRENCH OR HOLE RESTORATION AT BUS STOPS OF FULL DEPTH CONCRETE OR ANY FULL DEPTH CONCRETE PAVEMENT, SEE STANDARD DRAWING H-1050 FOR CONSTRUCTION DETAILS AND STANDARD DRAWING 1042B FOR RESTORATION DETAILS.

12. FOR RESTORATION OF CONCRETE COLLARS AROUND STEAM MANHOLES SEE STANDARD DRAWING H-1041. FOR BUS STOPS REFER TO STANDARD DRAWING H-1005 AND H-1005A.

⚠1 13. NOTWITHSTANDING THE REQUIREMENTS SET FORTH PER THIS DRAWING, IT SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ADDITIONAL REQUIREMENTS THAT MAY BE STIPULATED IN THE DOT PERMIT.

REVISION NO.	DESCRIPTION	DATE	APPROVED
⚠1	REVISED NON-PROTECTED STREETS TO PROTECTED. REVISED NOTES 1,3,7	3/1/16	D. NG
⚠1	REVISED AND CLASSIFIED ROADWAY RESTORATION DETAIL. ADDED NEW NOTES 7 & 13. REVISED NOTES 2, 6 & 11.	3/1/16	D. NG

NEW YORK CITY DOT

New York City Department of Transportation

STANDARD TRENCH OR HOLE RESTORATION FOR STREETS PROTECTED BY NYC ADMINISTRATIVE CODE § 19-144

Approved:
Chief Engineer
Department of Transportation

Approved:
Associate Commissioner
Infrastructure/Design
Department of Design + Construction

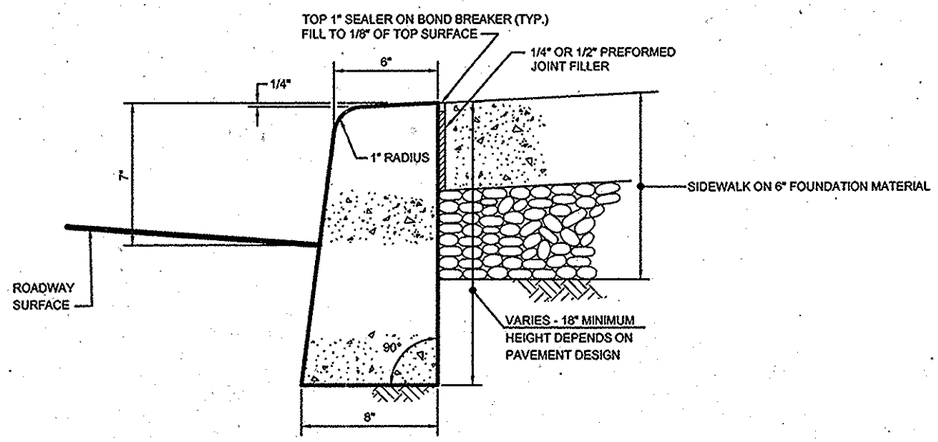
Date Issued: 3/15/16

Scale: None

Drawing # H-1042A

CHECKED BY: M.Z

HWS-H1042A



DETAIL
N.T.S.

NOTES:

1. ALL MATERIALS AND CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTION #4.08 OF THE NYC DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS.

REVISION NO.	DESCRIPTION	DATE	APPROVED

CHECKED BY: MZ

HWS-H1044

NEW YORK CITY DOT

New York City
Department of Transportation

CONCRETE CURB

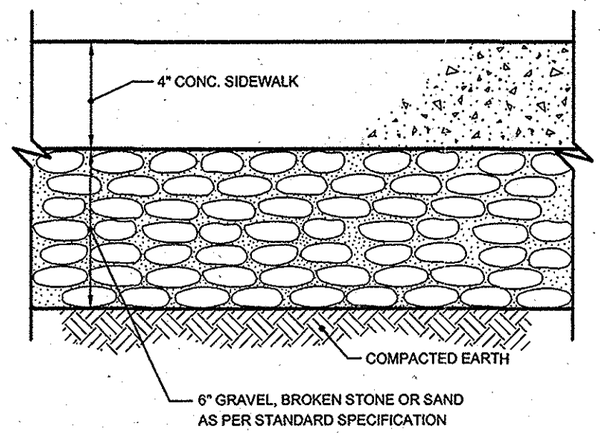
Approved:
Chief Engineer
Department of Transportation

Approved:
Associate Commissioner
Infrastructure/Design
Department of Design + Construction

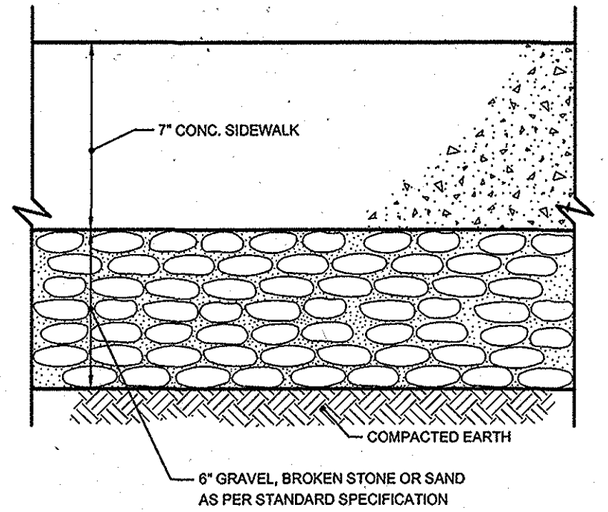
Date Issued: 7/1/10

Scale: None

Drawing # H-1044



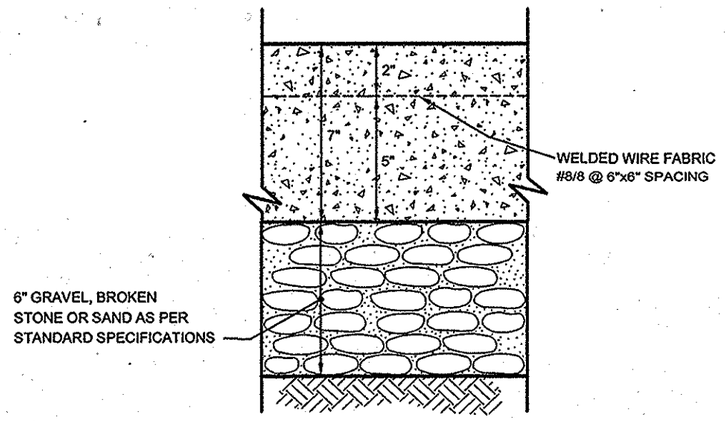
TYPE I - SIDEWALK, OUTSIDE DRIVEWAY AND CORNER QUADRANTS
N.T.S.



TYPE II - SIDEWALK, IN DRIVEWAY AND IN CORNER QUADRANTS
N.T.S.

NOTES:

1. ALL MATERIALS AND CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTION #4.13 OF THE NYC DEPARTMENT OF TRANSPORTATION (DOT) STANDARD HIGHWAY SPECIFICATIONS.
2. WELDED WIRE FABRIC, WHERE SPECIFIED, SHALL BE ASTM DESIGNATION A-185, GAUGE # 8/8 AT 6"x6" SPACING, AND CONFORM TO SECTION # 2.25 OF THE NYCDOT STANDARD HIGHWAY SPECIFICATIONS.



TYPE III - SIDEWALK WITH WELDED WIRE FABRIC
N.T.S.

CHECKED BY: MB

RWS-H1045

REVISION NO.	DESCRIPTION	DATE	APPROVED

NEW YORK CITY DOT — New York City Department of Transportation

CONCRETE SIDEWALK

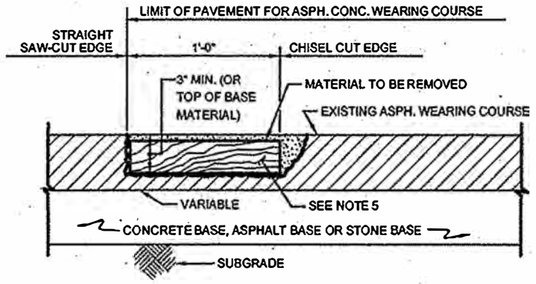
Approved:
Chief Engineer
Department of Transportation

Approved:
Associate Commissioner
Infrastructure/Design
Department of Design + Construction

Date Issued: 7/1/10

Scale: None

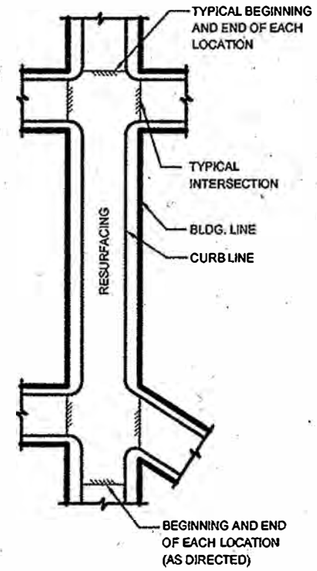
Drawing # H-1045



PAVEMENT KEY-TYPE A
ITEM 6.51A
N.T.S.

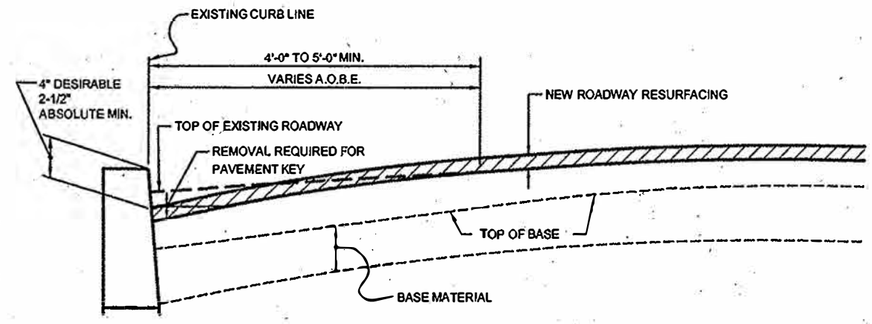
NOTES:

1. THICKNESS OF ASPHALTIC CONCRETE WEARING COURSE OVER SAW-CUT EDGE SHALL BE ZERO INCHES.
2. THICKNESS OF ASPHALTIC CONCRETE WEARING COURSE OVER CHISEL-CUT EDGE SHALL BE A MINIMUM OF ONE INCH.
3. MATERIAL USED TO FILL WITHIN LIMITS OF PAVEMENT KEY TYPE A SHALL BE PAID FOR UNDER ITEM 6.51A TYPE A KEY.
4. PAYMENT FOR FEATHERED ASPHALTIC CONCRETE WEARING COURSE ITEMS OVER PAVEMENT KEY. TYPE A SHALL BE FOR FULL THICKNESS OF ASPHALTIC CONCRETE WEARING COURSE AS ORDERED BY THE ENGINEER.
5. 2"x12" PLANK TO BE PLACED IN KEY WHEN STREET IS OPENED TO TRAFFIC. PLANK TO BE REMOVED PRIOR TO PAVING.



LEGEND:
PAVEMENT KEY

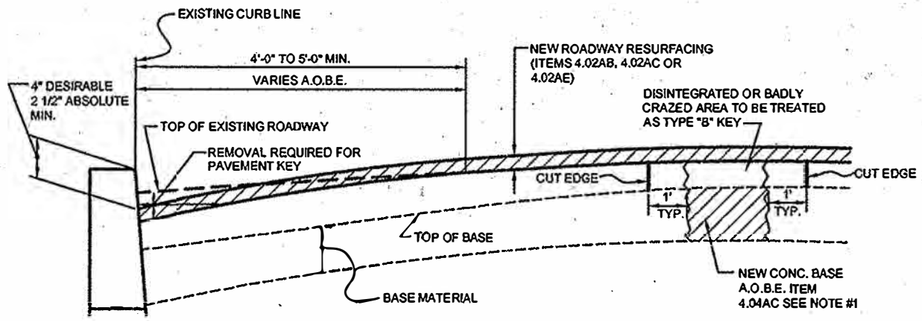
PLAN
TYPICAL LOCATION
N.T.S.



PAVEMENT KEY - TYPE B-1
ITEM 6.51 B-1
N.T.S.

NOTES:

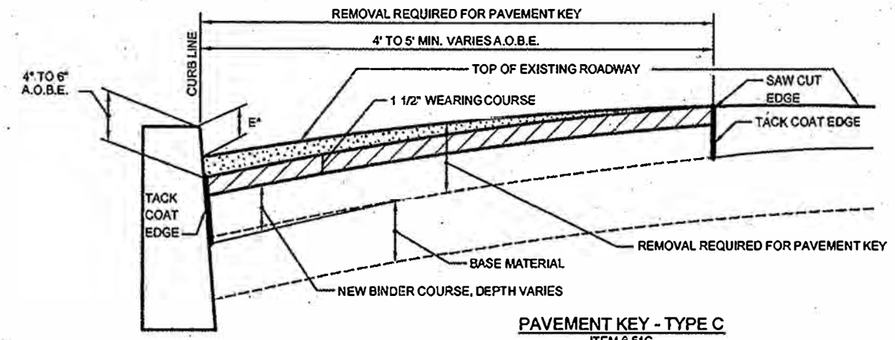
1. WHERE THERE IS NO CONCRETE BASE, OR WHERE IT IS NECESSARY TO REMOVE CONCRETE BASE SUBSEQUENT TO INSTALLING TYPE "B" PAVEMENT KEY, PAYMENT FOR DEPTHS GREATER THAN 3" WILL BE MADE UNDER ITEM 6.02AA, UNCLASSIFIED EXCAVATION.
2. CONTRACTOR MAY AT HIS OPTION, EITHER STRIP OR GRIND THE AREA TO THE REQUIRED DEPTH. IF THE CONTRACTOR CHOOSES TO STRIP THERE WILL BE NO ADDITIONAL PAYMENT FOR OVER-CUTTING OR ADDITIONAL BINDER.
3. THIS ITEM WHEN ORDERED BY THE ENGINEER WILL BE USED TO ELIMINATE HIGH POINTS IN THE EXISTING PAVEMENT PRIOR TO RESURFACING.
4. (A.O.B.E.) AS ORDERED BY ENGINEER.



PAVEMENT KEY - TYPE B-2
ITEM 6.51 B-2
N.T.S.

NOTES:

1. WHERE THERE IS NO CONCRETE BASE, OR WHERE IT IS NECESSARY TO REMOVE CONCRETE BASE SUBSEQUENT TO INSTALLING TYPE "B" PAVEMENT KEY, PAYMENT FOR DEPTHS GREATER THAN 3" WILL BE MADE UNDER THE UNCLASSIFIED EXCAVATION ITEM.
2. THE CONTRACTOR IS TO GRIND THE AREAS TO THE REQUIRED DEPTH USING AN ACCEPTABLE GRINDING METHOD.
3. THIS ITEM WHEN ORDERED BY THE ENGINEER WILL BE USED TO ELIMINATE HIGH POINTS IN THE EXISTING PAVEMENT PRIOR TO RESURFACING.
4. (A.O.B.E.) AS ORDERED BY ENGINEER.



PAVEMENT KEY - TYPE C
ITEM 6.51C
N.T.S.

NOTES:

1. IF THE EXISTING CURB REVEAL E* IS GREATER THAN 2-1/2" THIS PAVEMENT KEY WILL NOT BE REQUIRED.
2. PAYMENT FOR THIS ITEM SHALL BE THE NUMBER OF TONS OF BOTH THE WEARING COURSE AND BINDER MIXTURE INCORPORATED INTO THE WORK. PAYMENT SHALL INCLUDE, SAW CUTTING, EXCAVATION (INCLUDING CONCRETE BASE REMOVAL IF REQUIRED), TACK COATING AND PLACING OF THE NEW BINDER MIXTURE AND 1 1/2" WEARING COURSE.
3. (A.O.B.E.) AS ORDERED BY THE ENGINEER.
4. THE CONTRACTOR MAY AT HIS OPTION, EITHER STRIP, EXCAVATE OR GRIND THE AREA TO THE REQUIRED DEPTH.

REVISION NO.	DESCRIPTION	DATE	APPROVED

CHECKED BY: MB

NYS-H1055

NEW YORK CITY DOT

New York City
Department of Transportation

PAVEMENT KEY
TYPE A, B-1, B-2, C

Approved:
Chief Engineer
Department of Transportation

Approved:
Associate Commissioner
Infrastructure/Design
Department of Design + Construction

Date Issued: 7/1/10

Scale: None

Drawing # H-1055