

PROJECT NAME:
WEST SIDE CORP. SITE OPERABLE UNIT 2 JAMAICA, NY
 NYSDEC SITE NO. 241026
 CALL OUT CONTRACT NOS. 134802, 136709, 139246
 JAMAICA, QUEENS COUNTY, NEW YORK

Engineer:
 AECOM
 257 WEST GENESEE STREET, STE. 400
 BUFFALO, NY 14202
 T: 716.856.5636

Seal and Signature:

[Handwritten Signature]

REV. NO.	DATE	REVISION

Owner's Information:
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 625 Broadway, Albany, New York 12233

Sheet title:
COVER

Scale: NONE

Date: JULY 2020
 Project No.: 60629262
 Dwg By: RMC
 Chk By: CED

Dwg No:
T-001

Pg No: 1 of 19

REMEDIAL ACTION CONTRACT DRAWINGS

**FOR
 WEST SIDE CORP. SITE OPERABLE UNIT 2
 JAMAICA, NEW YORK
 NYSDEC SITE 241026
 CONTRACT D009803, WA #14**



Department of Environmental Conservation

Prepared for:

**NEW YORK STATE
 DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 625 Broadway, Albany, New York 12233**

Basil Seggos, Acting Commissioner

DIVISION OF ENVIRONMENTAL REMEDIATION

JULY 2020



New York

257 West Genesee Street, Suite 400
 Buffalo, New York 14202
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PROJECT NAME: WEST SIDE CORP. SITE OPERABLE UNIT 2 JAMAICA, NY
NYSDEC SITE NO. 241026
CALL OUT CONTRACT NOS. 134802, 136709, 139246
JAMAICA, QUEENS COUNTY, NEW YORK

TREE PROTECTION AND TRIMMING:

- 1. THE CALL OUT CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR TREE PROTECTION AND TRIMMING SERVICES AS REQUIRED BY THE CONTRACT DOCUMENTS.
2. THE CALL OUT CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM NYCDPR RELATED TO TREE, SHRUB, AND LANDSCAPING WORK...
3. DEFINITION OF TREE PROTECTION ZONE: AREA SURROUNDING INDIVIDUAL TREES OR GROUPS OF TREES TO REMAIN DURING CONSTRUCTION AND DEFINED BY THE DRIP LINE OF INDIVIDUAL TREES OR THE PERIMETER DRIP LINE OF GROUPS OF TREES, UNLESS OTHERWISE INDICATED OR APPROVED.

TREE PROTECTION AND TRIMMING: CONT'D

- 15. THE CALL OUT CONTRACTOR SHALL ADHERE TO THE FOLLOWING PROCEDURES FOR ROOT CLEARING:
- REDIRECT ROOTS IN BACKFILL AREAS WHERE POSSIBLE. IF ENCOUNTERING LARGE, MAIN LATERAL ROOTS, EXPOSE ROOTS BEYOND EXCAVATION LIMITS AS REQUIRED TO BEND AND REDIRECT THEM WITHOUT BREAKING...
- DO NOT ALLOW EXPOSED ROOTS TO DRY OUT BEFORE PLACING PERMANENT BACKFILL. PROVIDE TEMPORARY EARTH COVER OR PACK WITH PEAT MOSS AND WRAP WITH BURLAP, WATER AND MAINTAIN IN A MOIST CONDITION...
16. TREE PRUNING SHALL BE DONE IN A MANNER AS TO PRESERVE THE NATURAL SHAPE AND INTEGRITY OF THE TREE ACCORDING TO ITS SPECIES AND ACTUAL GROWING ENVIRONMENT AND NOT ENDANGER THE HEALTH OF THE TREE.

RESTORATION OF SURFACES:

- 1. ALL TYPES OF SURFACES, STREETS, DRIVEWAYS, SIDEWALKS, CURBS, GUTTERS, CULVERTS AND OTHER FEATURES DISTURBED, DAMAGED OR DESTROYED DURING THE PERFORMANCE OF THE WORK UNDER OR AS A RESULT OF THE OPERATIONS OF THE CALL OUT, SHALL BE RESTORED AND MAINTAINED BY THE CALL OUT CONTRACTOR AT THE CALL OUT CONTRACTOR'S EXPENSE.
2. THE QUALITY OF MATERIALS AND THE PERFORMANCE OF WORK USED IN THE RESTORATION SHALL PRODUCE A SURFACE OR FEATURE EQUAL TO OR BETTER THAN THE CONDITION OF EACH BEFORE THE WORK BEGAN. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE APPROPRIATE AGENCY OR MUNICIPALITY WITH PRIOR APPROVAL.
3. SIDEWALK FLAGS SHALL BE REPLACED IMMEDIATELY AFTER WELL CONSTRUCTION AND IMMEDIATELY AFTER INJECTION WELLS ARE REMOVED, AND WHEN THE PROJECT DAMAGES THE SIDEWALK IN ANY WAY.

RESTORATION OF SURFACES: CONT'D

- 10. THE PERMANENT AND FINAL REPAVING OF ALL STREETS, DRIVEWAYS AND SIMILAR SURFACES WHERE PAVEMENT HAS BEEN REMOVED, DISTURBED, SETTLED OR DAMAGED BY OR AS A RESULT OF PERFORMANCE OF THE CALL OUT SHALL BE REPAIRED AND REPLACED BY THE CALL OUT CONTRACTOR WITH A NEW AND SIMILAR PAVEMENT. THE TOP SURFACE SHALL CONFORM WITH THE GRADE OF EXISTING ADJACENT PAVEMENT AND THE ENTIRE REPLACEMENT SHALL MEET THE CURRENT SPECIFICATIONS OF THE NYCDOT AND ANY OTHER APPLICABLE LOCAL COMMUNITY REQUIREMENTS...
11. PREPARATION FOR PERMANENT PAVEMENT: WHEN SCHEDULED AND WITHIN THE TIME SPECIFIED, THE TEMPORARY PAVEMENT SHALL BE REMOVED AND A BASE PREPARED, TO THE DEPTH REQUIRED BY THE LOCAL COMMUNITY OR HIGHWAY PERMIT, TO RECEIVE THE PERMANENT PAVEMENT.
- THE BASE SHALL BE BROUGHT TO THE REQUIRED GRADE AND CROSS SECTION AND THOROUGHLY COMPACTED BEFORE PLACING THE PERMANENT PAVEMENT.
- ANY BASE MATERIAL WHICH HAS BECOME UNSTABLE FOR ANY REASON SHALL BE REMOVED AND REPLACED WITH COMPACTED BASE MATERIALS.

RESTORATION OF SURFACES: CONT'D

- 17. TREES, SHRUBS AND LANDSCAPE ITEMS DAMAGED OR DESTROYED AS A RESULT OF THE CONSTRUCTION OPERATIONS SHALL BE REPLACED BY THE CALL OUT CONTRACTOR IN LIKE SPECIES AND SIZE AND IN ACCORDANCE WITH ALL APPLICABLE PERMIT REQUIREMENTS. ALL PLANTING AND CARE THEREOF SHALL MEET THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
18. THE FINISHED PRODUCTS OF RESTORATION SHALL BE MAINTAINED BY THE CALL OUT CONTRACTOR IN AN ACCEPTABLE CONDITION FOR AND DURING A PERIOD OF ONE YEAR FOLLOWING THE DATE OF COMPLETION OR OTHER SUCH DATE AS SET FORTH ELSEWHERE IN THE CONTRACT DOCUMENTS.
INJECTION WELL INSTALLATION:
1. THE CALL OUT CONTRACTOR SHALL PROVIDE THE LABOR, EQUIPMENT, MATERIALS, TOOLS, AND SUPPLIES REQUIRED TO INSTALL 48 INJECTION WELLS. WELLS SHALL BE CONSTRUCTED TO THE DIMENSIONS, DETAILS, AND DEPTHS SHOWN ON THESE CALL OUT DRAWINGS, AND APPROVED BY THE ENGINEER. THE CALL OUT CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STATUTES REGARDING THE INSTALLATION OF THESE SUBSURFACE STRUCTURES.
2. PRIOR TO WELL CONSTRUCTION, THE CALL OUT CONTRACTOR SHALL SUBMIT THE FOLLOWING:
- WELL CONSTRUCTION PLAN: THE WELL CONSTRUCTION PLAN SHALL INCLUDE, AT A MINIMUM, VENDOR PRODUCT DATA FOR EACH WELL COMPONENT, SKETCHES SHOWING THE PROPOSED WELL CONSTRUCTION, AND A DESCRIPTION OF THE METHODS AND EQUIPMENT USED TO INSTALL THE WELLS AND STAGE ANY DRILL CUTTINGS AND WATER. INCLUDE PROPOSED WELL LOCATION MAP THAT SHOWS PROPOSED WELL LOCATIONS IN RELATION TO UNDERGROUND AND OVERHEAD UTILITIES AND FACILITIES. WELL LOCATION MAP SHALL BE COORDINATED WITH AND SHOWN ON THE UTILITY MAPPING DESCRIBED IN PROTECTION OF EXISTING UTILITIES NOTE SECTION. INCLUDE PROPOSED SOFT DIG METHOD NECESSARY FOR MANUAL PRE-CLEARING AS SPECIFIED BELOW IN NOTE 9.
- PROPOSED WELL DRILLER AND GEOLOGIST QUALIFICATIONS. PROVIDE RESUMES THAT DISPLAY EXPERIENCE DIRECTLY APPLICABLE TO THE REQUIRED WORK.

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Table with columns: REV. NO., DATE, REVISION.

Owner's Information: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION 625 Broadway, Albany, New York 12233

SPECIFICATIONS (SHEET 5 OF 6)

Scale: NONE
Date: JULY 2020
Project No.: 60629262
Dwg By: RMC
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Dwg No:
Pg No: 7 of 19

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INJECTION WELL INSTALLATION: CONT'D FROM G-006

- 19. UPON COMPLETION OF A WELL, THE CALL OUT CONTRACTOR SHALL DEMONSTRATE TO THE ENGINEER/GEOLOGIST THAT THE FULL DEPTH OF THE WELL IS FREE FROM ANY OBSTRUCTIONS AND CLEAR OF ANY FORMATION MATERIALS, OR THE WELL SHALL BE DEEMED UNACCEPTABLE AND SHALL BE ABANDONED AND RE-DRILLED BY THE CALL OUT CONTRACTOR IN ACCORDANCE WITH THEIR NYSDEC CALL OUT CONTRACT.
20. THE GEOLOGIST SHALL RECORD ALL DRILLING ACTIVITIES ON A LOG. THE LOG SHALL CONTAIN THE FOLLOWING INFORMATION:
- A RECORD OF THE SOIL MATERIALS PENETRATED AND THE DEPTH TO WHICH THEY WERE ENCOUNTERED IN ACCORDANCE WITH 6 NYCRR 360-2.11(A)(10).
- A RECORD SHOWING LENGTHS OF EACH DIAMETER OF CASING AND SCREEN USED AND THE LOCATION OF PACKERS, PLUGS AND SEALS.
- STATIC GROUNDWATER LEVEL, IN THE NEW WELL AND THE LEVELS AT WHICH WATER WAS ENCOUNTERED DURING DRILLING.
21. VERTICAL AND HORIZONTAL COORDINATES OF NEWLY INSTALLED WELLS (AND ANY ABANDONED BORINGS) SHALL BE DETERMINED BY A STATE-LICENSED LAND SURVEYOR. EACH WELL SHALL BE SURVEYED FROM THE PERMANENT MEASURING POINT SCRIBED ONTO THE WELL RISER. VERTICAL MEASUREMENTS (ELEVATIONS) SHALL BE MEASURED TO WITHIN +/-0.01 FEET AND HORIZONTAL MEASUREMENTS WITHIN 0.1 FEET. MEASUREMENTS SHALL BE TIED INTO THE HORIZONTAL AND VERTICAL CONTROL ESTABLISHED FOR THE SITE. SURVEYING SHALL BE PROVIDED BY THE CALL OUT CONTRACTOR IN ACCORDANCE WITH SURVEY NOTE SECTION.
22. THE CALL OUT CONTRACTOR SHALL NOT USE, REUSE, OR REMOVE ANY EQUIPMENT, MATERIALS, SAMPLES, OR OTHER GOODS AT OR FROM THE SITE UNTIL THEY ARE CERTIFIED TO BE UNCONTAMINATED. DECONTAMINATION SHALL CONSIST OF WASHING AND STEAM CLEANING ALL EQUIPMENT AND MATERIALS THAT MAY BE REQUIRED AS SPECIFIED ABOVE OR AT THE REQUEST OF THE ENGINEER/GEOLOGIST. THE DRILLING CREW SHALL UNDERTAKE THE DECONTAMINATION OF THE GIVEN EQUIPMENT OR MATERIALS UNDER THE ENGINEER/GEOLOGISTS' SUPERVISION. THE CALL OUT CONTRACTOR SHALL COMPLY WITH ALL REQUEST AND PROCEDURES OF THE ON-SITE ENGINEER/GEOLOGIST REGARDING DECONTAMINATION DURING THE COURSE OF THE WORK, CLOSE OF THE WORKDAY, AND UPON COMPLETION OF THE PROJECT.

INJECTION WELL DECOMMISSIONING:

- 1. THE CALL OUT CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR DECOMMISSIONING WELLS AS REQUIRED BY THE CONTRACT DOCUMENTS.
2. THE CALL OUT CONTRACTOR'S WELL DECOMMISSIONING PLAN SHALL IDENTIFY THE CALL OUT CONTRACTOR'S PROPOSED METHODS AND MATERIALS FOR WELL DECOMMISSIONING.
3. EXCEPT AS OTHERWISE SPECIFIED OR INDICATED, ALL PROCEDURES AND MATERIALS SHALL COMPLY WITH CP-43, NYSDEC GROUNDWATER MONITORING WELL DECOMMISSIONING PROCEDURES, NOVEMBER 2009, OR LATEST REVISION.
4. GROUT: GROUT MIXTURE SHALL BE AS FOLLOWS: ONE 94 POUND BAG TYPE I PORTLAND CEMENT, 3.9 POUNDS POWDERED BENTONITE, AND 7.8 GALLONS POTABLE WATER.
5. AT THE CONCLUSION OF THE WORK AND ONLY WHEN SPECIFICALLY AUTHORIZED IN WRITING BY THE ENGINEER OR NYSDEC, THE CALL OUT CONTRACTOR SHALL DECOMMISSION ALL INJECTION WELLS THAT THE CALL OUT CONTRACTOR INSTALLED UNDER THIS CALL OUT.
6. WELLS SHALL BE GROUTED IN PLACE UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER. THE CALL OUT CONTRACTOR SHALL CUT THE WELL CASING AT A 5-FOOT DEPTH AND REMOVE ALL WELL MATERIALS.
7. THE CALL OUT CONTRACTOR SHALL DECONTAMINATE DRILL RIGS AND TOOLS IN ACCORDANCE WITH THE CALL OUT DOCUMENT HEALTH AND SAFETY REQUIREMENTS AND CP-43, NYSDEC GROUNDWATER MONITORING WELL DECOMMISSIONING PROCEDURES, NOVEMBER 2009, OR LATEST VERSION. SAMPLING AND DOWNHOLE EQUIPMENT SHALL BE DECONTAMINATED BEFORE USE ON THE SITE.
8. WASTE MATERIALS ANTICIPATED TO BE GENERATED DURING WELL DECOMMISSIONING INCLUDE DECONTAMINATION FLUIDS, PERSONAL PROTECTIVE EQUIPMENT, DRILL CUTTINGS, AND WELL CONSTRUCTION MATERIALS. DISPOSAL OF WASTE MATERIALS SHALL BE IN ACCORDANCE WITH TRANSPORTATION AND DISPOSAL NOTE SECTION.
9. THE CALL OUT CONTRACTOR SHALL RESTORE ALL SURFACES IMPACTED BY WELL DECOMMISSIONING IN ACCORDANCE WITH RESTORATION OF SURFACES NOTE SECTION.

- GENERAL DECONTAMINATION PROCEDURES AND REQUIREMENTS:
- ALL DRILLING EQUIPMENT SHALL BE INSPECTED FOR INTEGRITY OF HYDRAULIC AND OIL FLUID HANDLING SYSTEMS AND GENERAL OVERALL CLEANLINESS. LEAKING HOSES, TANKS, HYDRAULIC LINES, ETC., SHALL BE REPLACED OR REPAIRED PRIOR TO BEGINNING WORK.
- ALL WELL CASING, SCREENS, AND OTHER CONSTRUCTION MATERIALS SHALL BE IN NEW CONDITION. USED MATERIALS WILL NOT BE PERMITTED IN WELL CONSTRUCTION.
- INITIAL CLEANING REQUIREMENTS - ALL DRILLING EQUIPMENT AND ASSOCIATED TOOLS SHALL BE STEAM CLEANED UPON ARRIVAL AT THE SITE. EQUIPMENT SHALL INCLUDE AT A MINIMUM, BUT NOT BE LIMITED TO:
- DRILLING RODS AND BITS.
- AUGERS (CLIPS, PINS, AND ASSOCIATED HARDWARE).
- SAMPLERS (I.E. SPLIT SPOON, HYDROPUNCH).
- CASING MATERIALS (BOTH TEMPORARY AND PERMANENT).
- WRENCHES.
- HAMMERS.
- OTHER HAND TOOLS AND TOOLBOXES.
- HOSES AND TANKS.
- CABLE CLAMPS AND OTHER HOLDING DEVICES IN DIRECT CONTACT WITH DRILLING RODS.
- DRILL RIG AND UNDERCARRIAGE, WHEEL WELLS, AND CHASSIS.
ON-SITE CLEANING REQUIREMENTS:
- FOLLOWING USE, ALL EQUIPMENT WITH THE EXCEPTION OF THE CARRIER TRUCK AND UNDERCARRIAGE, SHALL BE STEAM-CLEANED BETWEEN BORINGS.
- DOWN HOLE SAMPLING EQUIPMENT SHALL BE WASHED IN LABORATORY GRADE DETERGENT AND WATER, AND RINSED IN CLEAN, POTABLE MUNICIPAL WATER BETWEEN CONSECUTIVE SAMPLES AND/OR EACH BORING, AS APPROPRIATE.
- IF IMMISCIBLE PRODUCTS ARE ENCOUNTERED DURING DRILLING, THE DRILLING AND SAMPLING EQUIPMENT SHALL BE CLEANED.

PERFORMANCE MONITORING SCHEDULE table with columns: ACTIVITY, FIELD ANALYSIS (MONTH 1, 2, 3, WEEK 2, 4, 6, 8, 12), SAMPLE COLLECTION AND LABORATORY ANALYSIS FOR EVALUATION (PRIOR TO 2ND AND 3RD INJECTION EVENT, POST-REMEDIATION, FOLLOWING 3RD INJECTION EVENT). Includes rows for GROUNDWATER MWs, INJECTION WELLS, and MONITORING WELLS FOR LABORATORY SAMPLING AND ANALYSIS.

NOTE: THE CALL OUT CONTRACTOR SHALL ALSO PERFORM THE PRE-INJECTION SAMPLING EVENT DESCRIBED IN NOTE 28 (3RD BULLET) OF THE IN-SITU CHEMICAL OXIDATION NOTE SECTION.

EXISTING MONITORING WELL CONSTRUCTION DATA SCHEDULE

Table with 4 columns: WELL ID, DEPTH TO WATER (FEET)*, WELL DEPTH PER WELL CONSTRUCTION LOG (FEET), WELL DIAMETER (INCHES). Lists wells MW-24-4D through W-21S with their respective depths and diameters.

NOTE: INFORMATION IN THE ABOVE SCHEDULE WAS TAKEN FROM URS CORPORATION 2019 PLUME DELINEATION LETTER REPORT, DATED DECEMBER 2019.

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NYSDEC SITE NO. 241026
CALL OUT CONTRACT NOS. 134802, 136709, 139246
JAMAICA, QUEENS COUNTY, NEW YORK

Engineer: AECOM
257 WEST GENESEE STREET, STE. 400
BUFFALO, NY 14202
T: 716.856.5636

Seal and Signature:



Table with columns: REV. NO., DATE, REVISION.

Owner's Information: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 Broadway, Albany, New York 12233

Sheet title: SPECIFICATIONS (SHEET 6 OF 6)

Scale: NONE
Date: JULY 2020
Project No.: 60629262
Dwg By: RMC
Chk By: CED

Dwg No: G-007



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Sheet title:
KEY PLAN

Scale: AS SHOWN

Date: JULY 2020
Project No.: 60629262
Dwg By: RMC
Chk By: CED

Dwg No:
C-001

PROJECT NAME:
**WEST SIDE CORP.
SITE OPERABLE UNIT 2
JAMAICA, NY**
NYSDEC SITE NO. 241026
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JAMAICA, QUEENS COUNTY, NEW YORK

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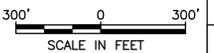
REV. NO.	DATE:	REVISION:

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NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
625 Broadway, Albany, New York 12233

Sheet title:
**EXISTING SITE
CONDITIONS**

Scale: AS SHOWN
Date: JULY 2020
Project No.: 60629262
Dwg By: RMC
Chk By: CED

Dwg No:
C-002
Pg No: 10 of 19



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REV. NO. DATE: REVISION:

Owner's Information:
 NEW YORK STATE DEPARTMENT
 OF ENVIRONMENTAL CONSERVATION
 625 Broadway, Albany, New York 12233

Sheet title:
**NEW INJECTION
 WELL LOCATION PLAN
 (SHEET 1 OF 6)**

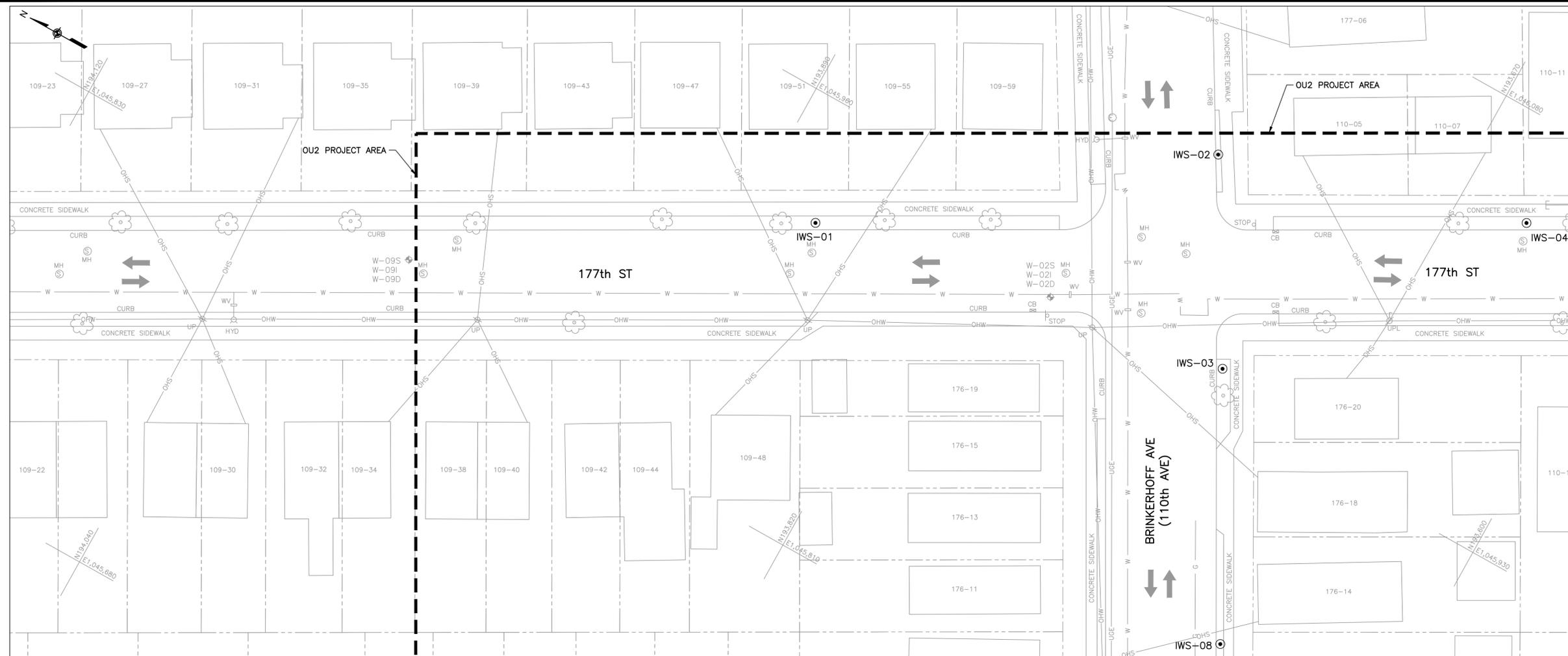
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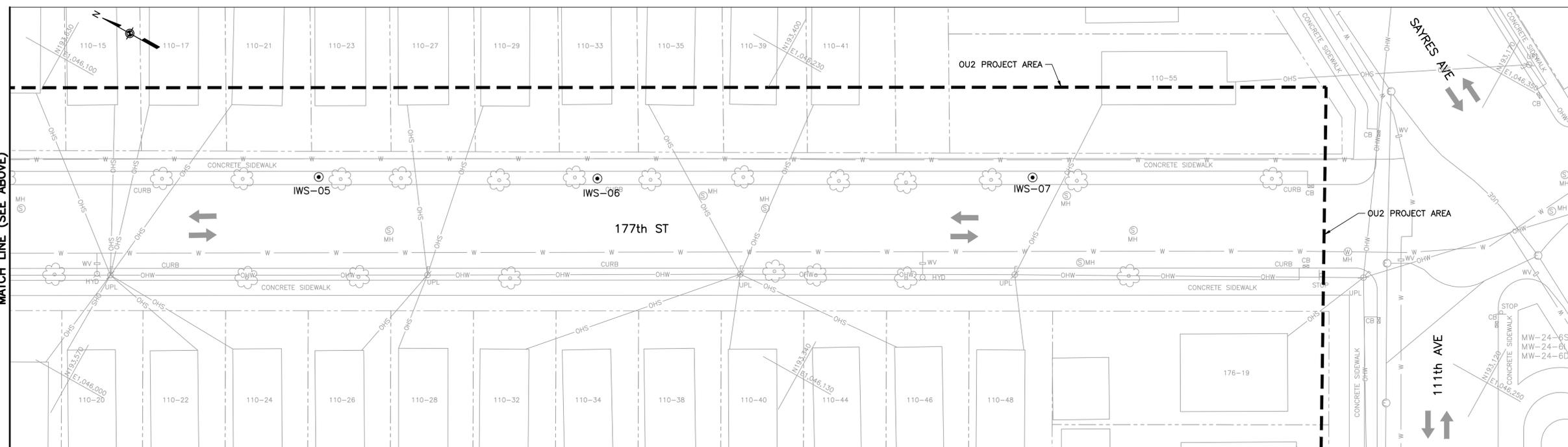
Dwg No:

C-003

Pg No: 11 of 19



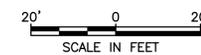
MATCH LINE (SEE BELOW)



MATCH LINE (SEE ABOVE)

NOTES:

1. THE CALL OUT CONTRACTOR SHALL LOCATE ALL INJECTION WELLS IN GRASS AREA BETWEEN CURB AND SIDEWALKS (WHERE POSSIBLE). OTHERWISE, LOCATE WELLS IN SIDEWALKS. ALL WELL LOCATIONS SHALL AVOID UTILITIES. THE CALL OUT CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN ACCORDANCE WITH ACCEPTABLE PRACTICES BEFORE BEGINNING WORK.
2. INJECTION WELL LOCATIONS SHOWN SHALL BE MODIFIED BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER AND NYSDEC.
3. THE CALL OUT CONTRACTOR SHALL PROTECT AND TRIM TREES AS NECESSARY TO EXECUTE THE WORK IN ACCORDANCE WITH TREE PROTECTION AND TRIMMING NOTE SECTION ON DRAWING NO. G-006.
4. AFTER COMPLETION OF ALL INJECTIONS, THE CALL OUT CONTRACTOR SHALL DECOMMISSION ALL EXISTING AND NEW INJECTION WELLS IN ACCORDANCE WITH INJECTION WELL DECOMMISSIONING NOTE SECTION ON DRAWING NO. G-007, AND SHALL REPLACE SIDEWALK FLAGS AND OTHER FACILITIES IMPACTED BY THE WORK IN ACCORDANCE WITH RESTORATION OF SURFACES NOTE SECTION ON DRAWING NO. G-006.
5. TREE LOCATIONS ARE APPROXIMATE.
6. INJECTION WELL LOCATIONS WILL BE FIELD VERIFIED DURING THE FIELD PRE-CONSTRUCTION MEETING.



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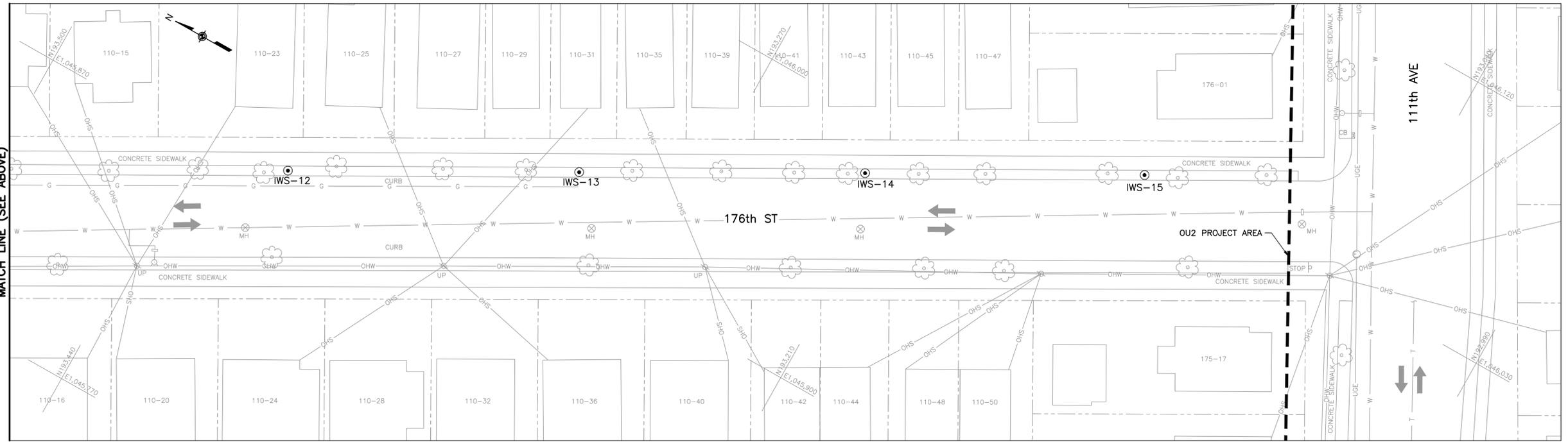
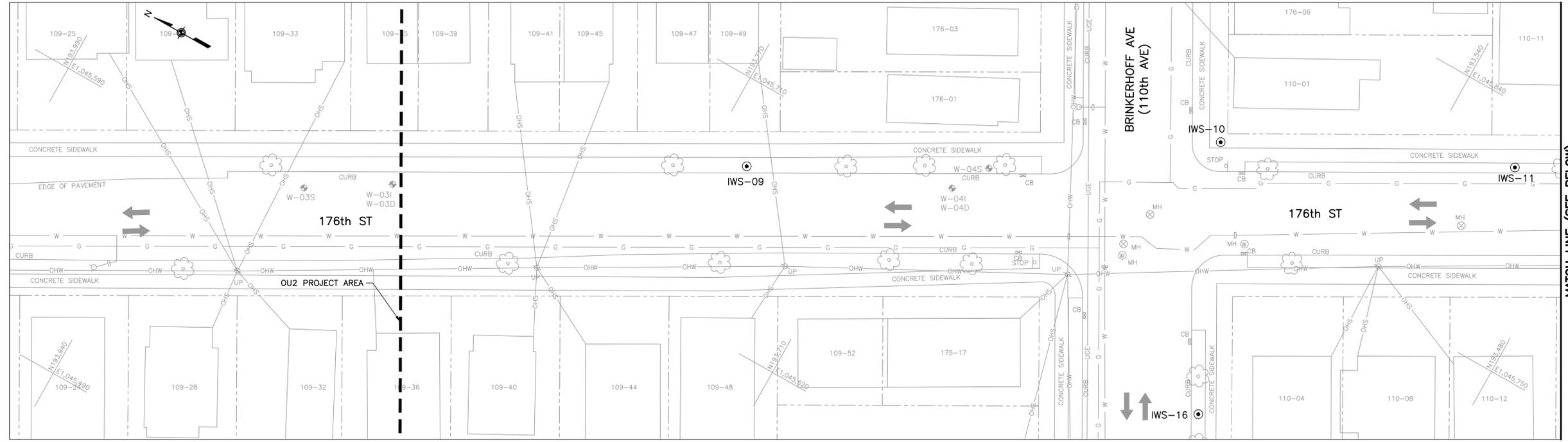
Owner's Information:
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 625 Broadway, Albany, New York 12233

Sheet title:
**NEW INJECTION
 WELL LOCATION PLAN
 (SHEET 2 OF 6)**

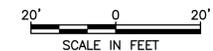
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Date: JULY 2020
 Project No.: 60629262
 Dwg By: RMC
 Chk By: CED

Dwg No:
C-004
 Pg No: 12 of 19



- NOTES:**
1. THE CALL OUT CONTRACTOR SHALL LOCATE ALL INJECTION WELLS IN GRASS AREA BETWEEN CURB AND SIDEWALKS (WHERE POSSIBLE). OTHERWISE, LOCATE WELLS IN SIDEWALKS. ALL WELL LOCATIONS SHALL AVOID UTILITIES. THE CALL OUT CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN ACCORDANCE WITH ACCEPTABLE PRACTICES BEFORE BEGINNING WORK.
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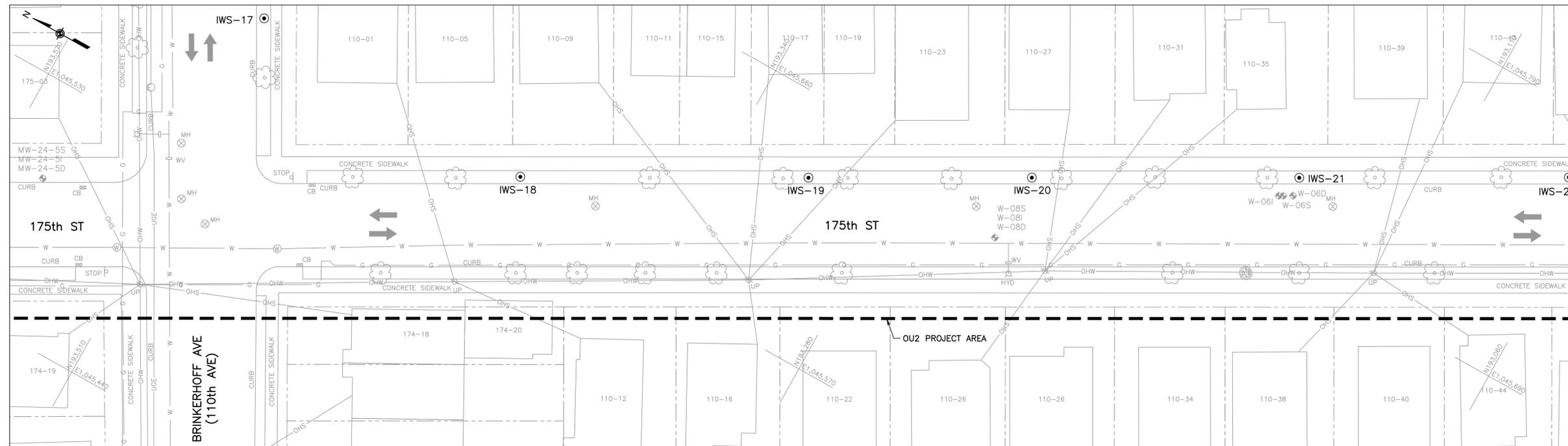
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Sheet title:
**NEW INJECTION
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 (SHEET 3 OF 6)**

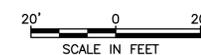
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 Chk By: CED

Dwg No:
C-005
 Pg No: 13 of 19



NOTES:

1. THE CALL OUT CONTRACTOR SHALL LOCATE ALL INJECTION WELLS IN GRASS AREA BETWEEN CURB AND SIDEWALKS (WHERE POSSIBLE). OTHERWISE, LOCATE WELLS IN SIDEWALKS. ALL WELL LOCATIONS SHALL AVOID UTILITIES. THE CALL OUT CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN ACCORDANCE WITH ACCEPTABLE PRACTICES BEFORE BEGINNING WORK.
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NYSDEC SITE NO. 241026
CALL OUT CONTRACT NOS. 134802,
136709, 139246
JAMAICA, QUEENS COUNTY, NEW YORK

Engineer:
AECOM
257 WEST GENESEE STREET, STE. 400
BUFFALO, NY 14202
T: 716.856.5636

Seal and Signature:



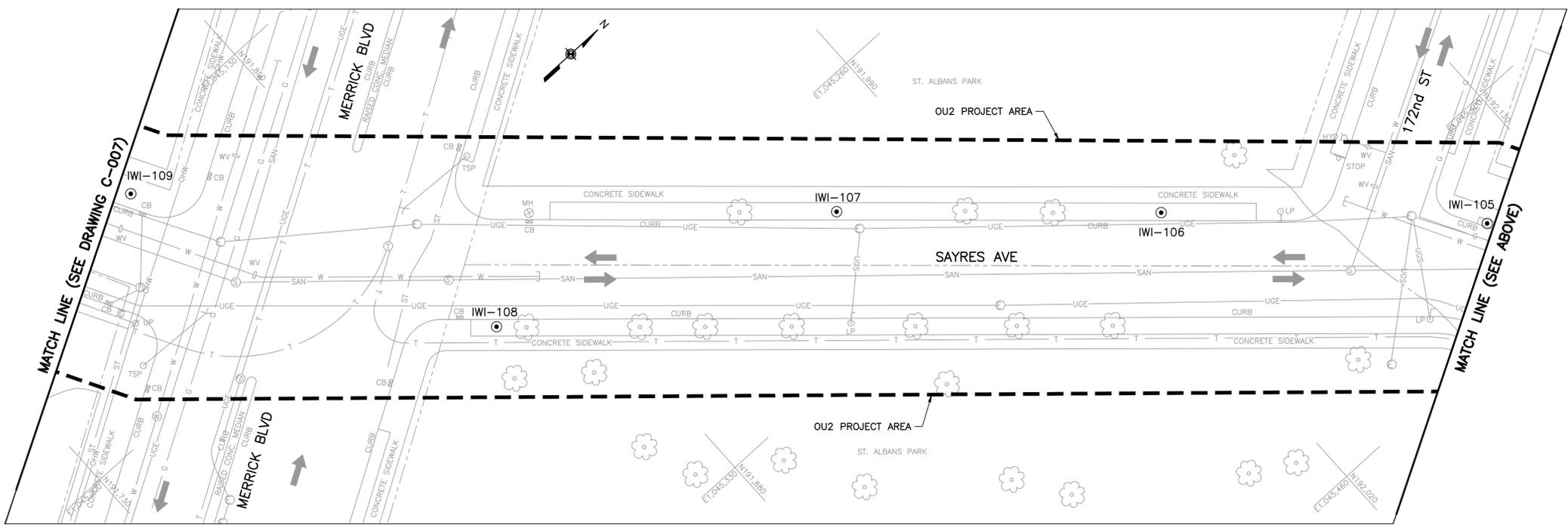
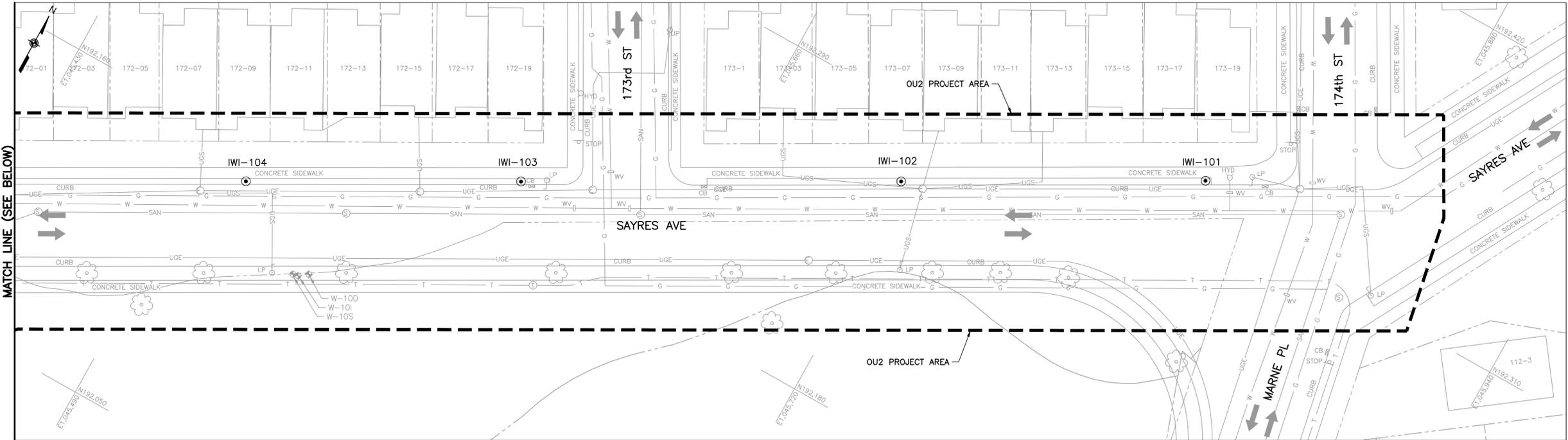
REV. NO.	DATE	REVISION:

Owner's Information:
NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
625 Broadway, Albany, New York 12233

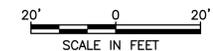
Sheet title:
**NEW INJECTION
WELL LOCATION PLAN
(SHEET 4 OF 6)**

Scale: AS SHOWN
Date: JULY 2020
Project No.: 60629262
Dwg By: RMC
Chk By: CED

Dwg No:
C-006
Pg No: 14 of 19



- NOTES:**
1. THE CALL OUT CONTRACTOR SHALL LOCATE ALL INJECTION WELLS IN GRASS AREA BETWEEN CURB AND SIDEWALKS (WHERE POSSIBLE). OTHERWISE, LOCATE WELLS IN SIDEWALKS. ALL WELL LOCATIONS SHALL AVOID UTILITIES. THE CALL OUT CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN ACCORDANCE WITH ACCEPTABLE PRACTICES BEFORE BEGINNING WORK.
 2. INJECTION WELL LOCATIONS SHOWN SHALL BE MODIFIED BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER AND NYSDEC.
 3. THE CALL OUT CONTRACTOR SHALL PROTECT AND TRIM TREES AS NECESSARY TO EXECUTE THE WORK IN ACCORDANCE WITH TREE PROTECTION AND TRIMMING NOTE SECTION ON DRAWING NO. G-006.
 4. AFTER COMPLETION OF ALL INJECTIONS, THE CALL OUT CONTRACTOR SHALL DECOMMISSION ALL EXISTING AND NEW INJECTION WELLS IN ACCORDANCE WITH INJECTION WELL DECOMMISSIONING NOTE SECTION ON DRAWING NO. G-007, AND SHALL REPLACE SIDEWALK FLAGS AND OTHER FACILITIES IMPACTED BY THE WORK IN ACCORDANCE WITH RESTORATION OF SURFACES NOTE SECTION ON DRAWING NO. G-006.
 5. TREE LOCATIONS ARE APPROXIMATE.
 6. INJECTION WELL LOCATIONS WILL BE FIELD VERIFIED DURING THE FIELD PRE-CONSTRUCTION MEETING.



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PROJECT NAME:
**WEST SIDE CORP.
 SITE OPERABLE UNIT 2
 JAMAICA, NY**
 NYSDEC SITE NO. 241026
 CALL OUT CONTRACT NOS. 134802,
 136709, 139246
 JAMAICA, QUEENS COUNTY, NEW YORK

Engineer:
 AECOM
 257 WEST GENESEE STREET, STE. 400
 BUFFALO, NY 14202
 T: 716.856.5636

Seal and Signature:



REV. NO.	DATE	REVISION

Owner's Information:
 NEW YORK STATE DEPARTMENT
 OF ENVIRONMENTAL CONSERVATION
 625 Broadway, Albany, New York 12233

Sheet title:
**NEW INJECTION
 WELL LOCATION PLAN
 (SHEET 5 OF 6)**

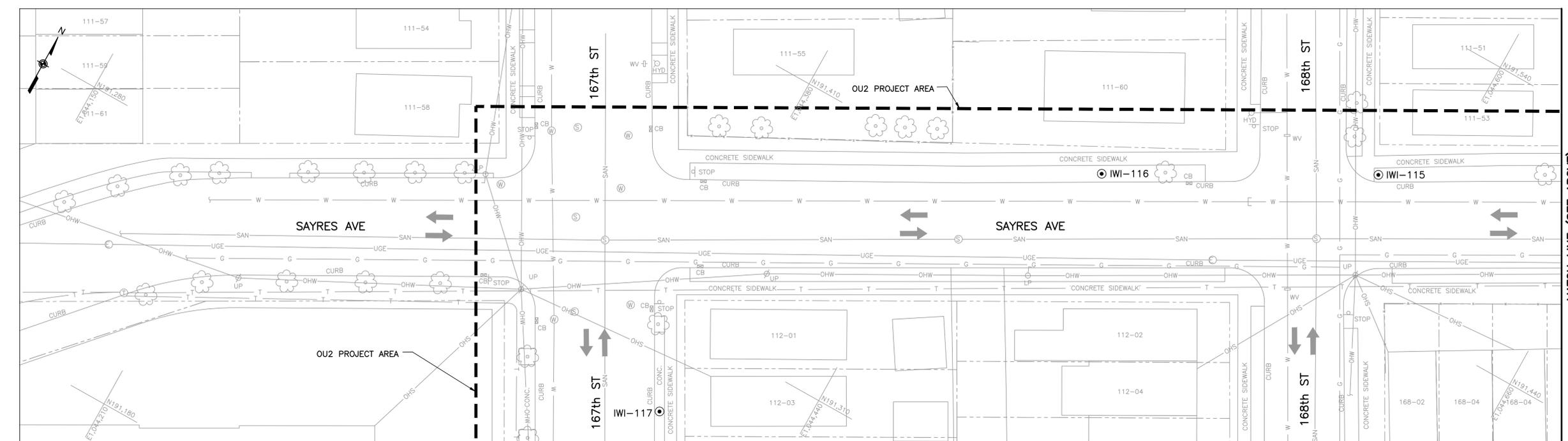
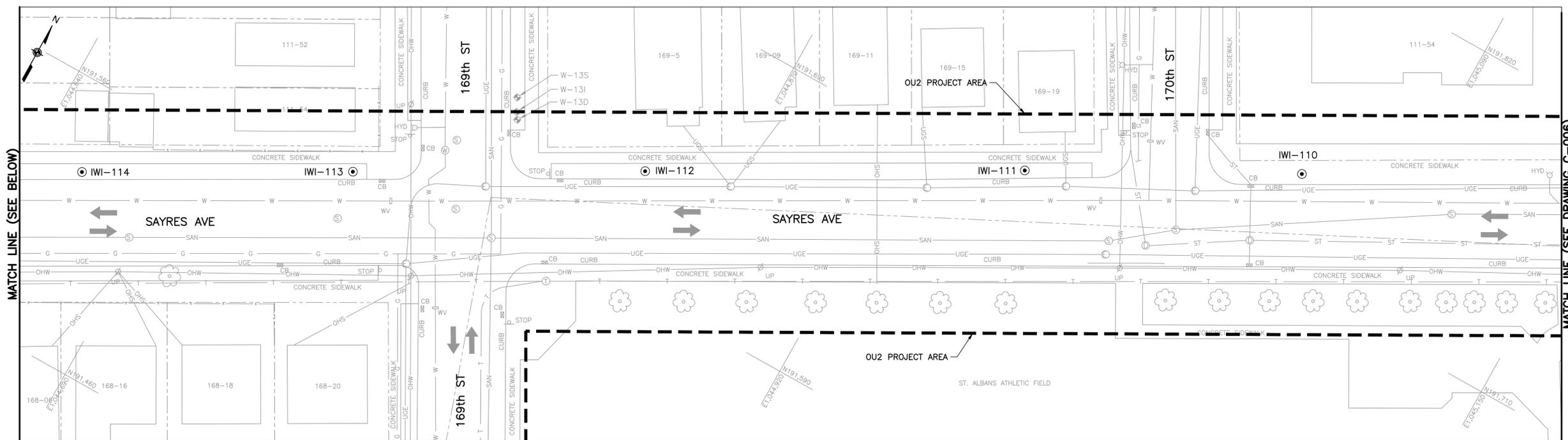
Scale: AS SHOWN

Date: JULY 2020
 Project No.: 60629262
 Dwg By: RMC
 Chk By: CED

Dwg No:

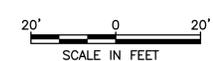
C-007

Pg No: 15 of 19



MATCH LINE (SEE DRAWING C-008)

- NOTES:**
- THE CALL OUT CONTRACTOR SHALL LOCATE ALL INJECTION WELLS IN GRASS AREA BETWEEN CURB AND SIDEWALKS (WHERE POSSIBLE). OTHERWISE, LOCATE WELLS IN SIDEWALKS. ALL WELL LOCATIONS SHALL AVOID UTILITIES. THE CALL OUT CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN ACCORDANCE WITH ACCEPTABLE PRACTICES BEFORE BEGINNING WORK.
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 - TREE LOCATIONS ARE APPROXIMATE.
 - INJECTION WELL LOCATIONS WILL BE FIELD VERIFIED DURING THE FIELD PRE-CONSTRUCTION MEETING.



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PROJECT NAME:
**WEST SIDE CORP.
 SITE OPERABLE UNIT 2
 JAMAICA, NY**
 NYSDEC SITE NO. 241026
 CALL OUT CONTRACT NOS. 134802,
 136709, 139246
 JAMAICA, QUEENS COUNTY, NEW YORK

Engineer:
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Seal and Signature:



REV. NO.	DATE	REVISION

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Sheet title:
**NEW INJECTION
 WELL LOCATION PLAN
 (SHEET 6 OF 6)**

Scale: AS SHOWN
 Date: JULY 2020
 Project No.: 60629262
 Dwg By: RMC
 Chk By: CED

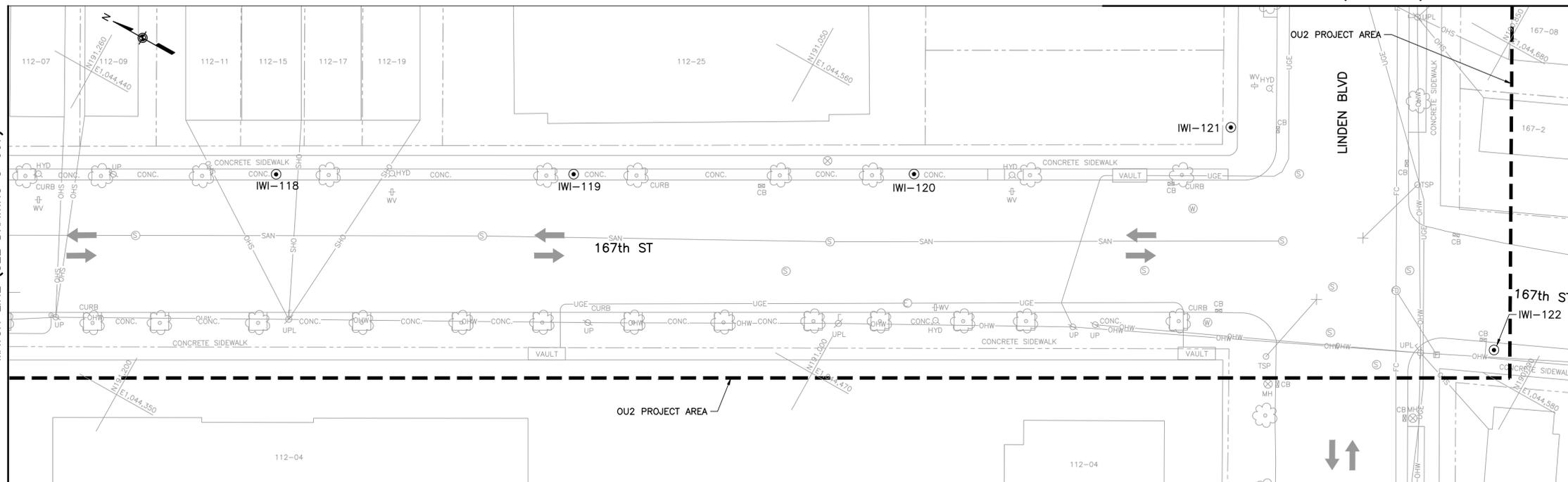
Dwg No:
C-008
 Pg No: 16 of 19

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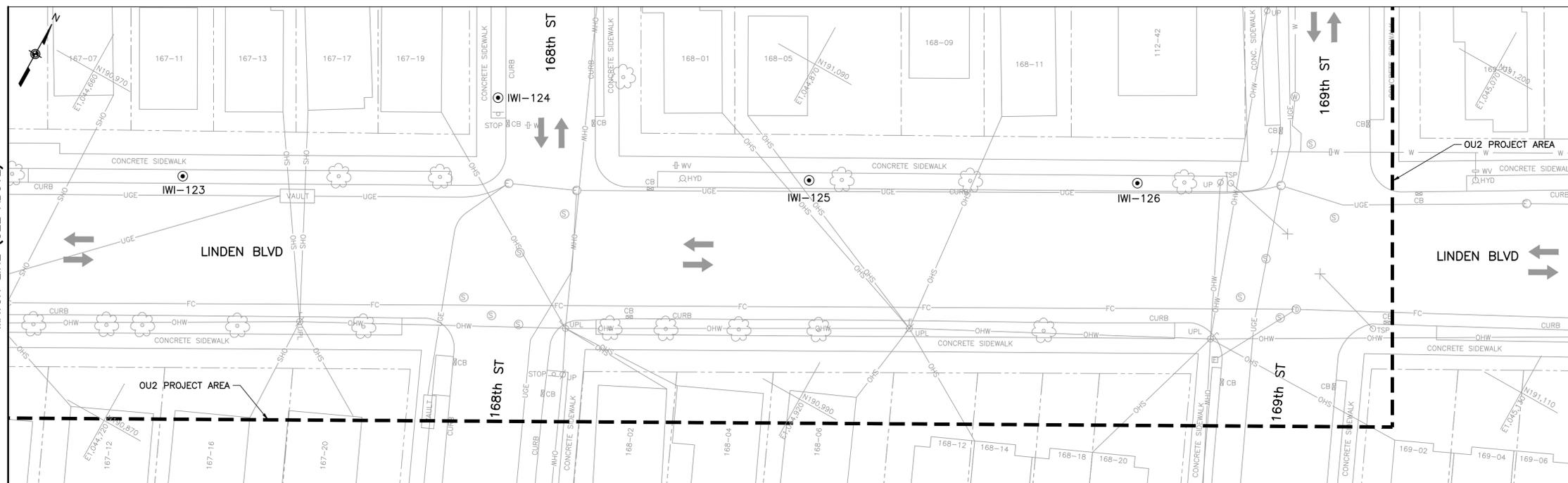
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MATCH LINE (SEE BELOW)

MATCH LINE (SEE DRAWING C-007)



MATCH LINE (SEE ABOVE)



NOTES:

- THE CALL OUT CONTRACTOR SHALL LOCATE ALL INJECTION WELLS IN GRASS AREA BETWEEN CURB AND SIDEWALKS (WHERE POSSIBLE). OTHERWISE, LOCATE WELLS IN SIDEWALKS. ALL WELL LOCATIONS SHALL AVOID UTILITIES. THE CALL OUT CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN ACCORDANCE WITH ACCEPTABLE PRACTICES BEFORE BEGINNING WORK.
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- TREE LOCATIONS ARE APPROXIMATE.
- INJECTION WELL LOCATIONS WILL BE FIELD VERIFIED DURING THE FIELD PRE-CONSTRUCTION MEETING.

SCALE IN FEET
 0 20'

PROJECT NAME:
**WEST SIDE CORP.
SITE OPERABLE UNIT 2
JAMAICA, NY**
NYSDEC SITE NO. 241026
CALL OUT CONTRACT NOS. 134802,
136709, 139246
JAMAICA, QUEENS COUNTY, NEW YORK

Engineer:
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257 WEST GENESEE STREET, STE. 400
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T: 716.856.5636

Seal and Signature:

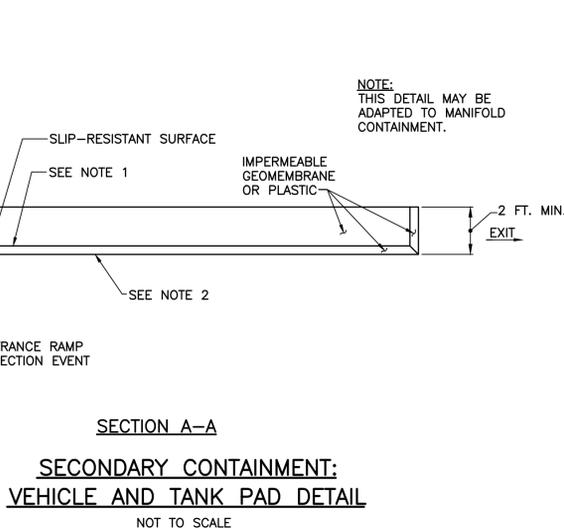
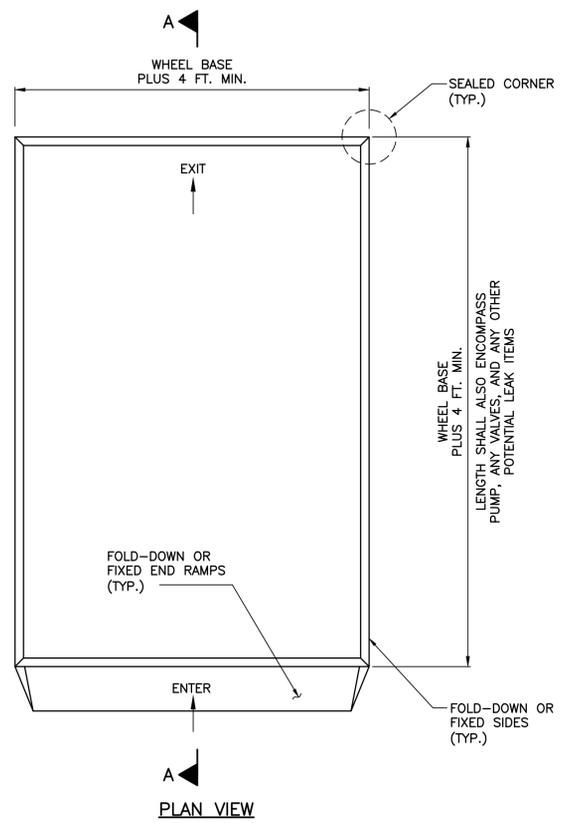

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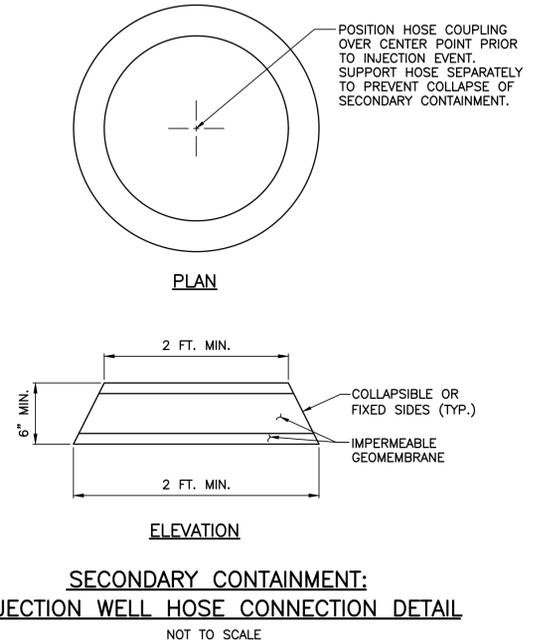
Sheet title:
**CONSTRUCTION
DETAILS
(SHEET 1 OF 2)**

Scale: AS SHOWN
Date: JULY 2020
Project No.: 60629262
Dwg By: RMC
Chk By: CED

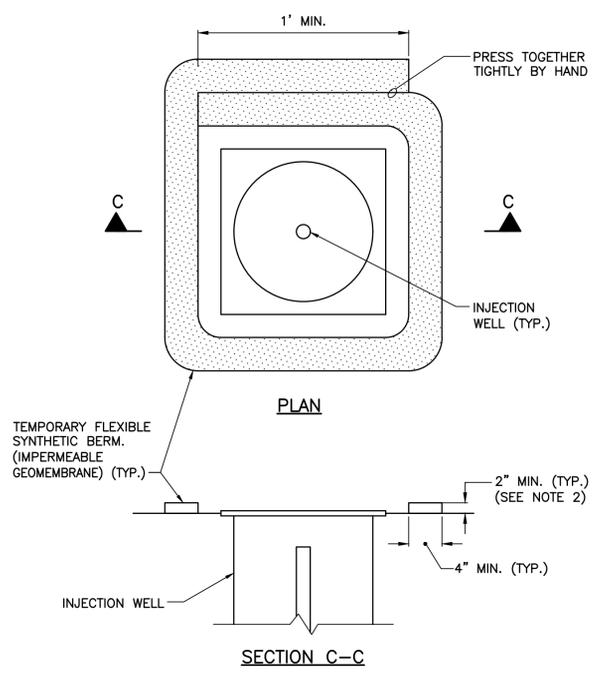
Dwg No:
C-009
Pg No: 17 of 19



- NOTES:
- INTERIOR SURFACE: PLACE HEAVY-DUTY MAT ON TRUCK PAD TO PREVENT PUNCTURE. OTHERWISE, REMOVE STONES FROM TRUCK TIRES.
 - SUBGRADE PREPARATION: REMOVE STONES LARGER THAN 1/4 INCH FROM SUBGRADE PRIOR TO TRUCK PAD PLACEMENT, OR USE HEAVY-DUTY MAT OR PLACE 3 INCHES OF SAND.
 - GROUND SLOPE UNDER PAD SHALL BE MAXIMUM FOUR (4) PERCENT. ANY VOLUME REDUCTION IN CONTAINMENT CAPACITY SHALL BE EXCLUDED FROM LEVEL-GROUND VOLUME COMPUTATIONS.

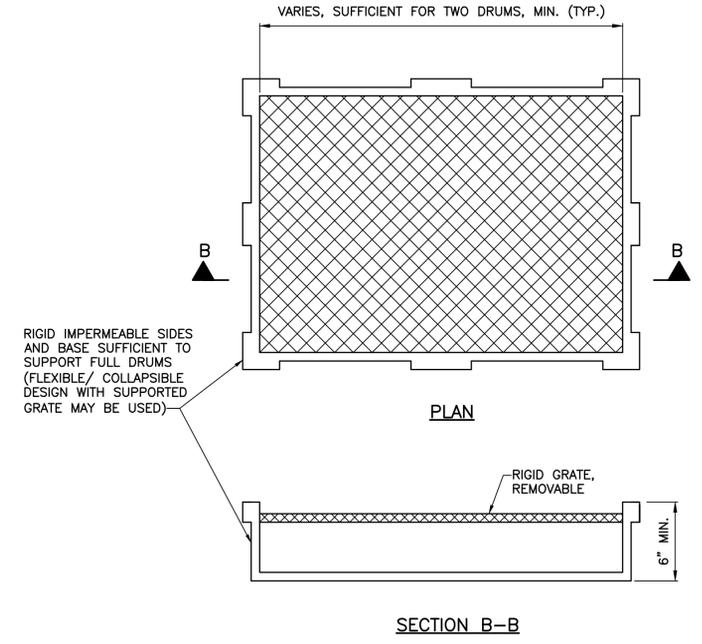


**SECONDARY CONTAINMENT:
INJECTION WELL HOSE CONNECTION DETAIL**
NOT TO SCALE

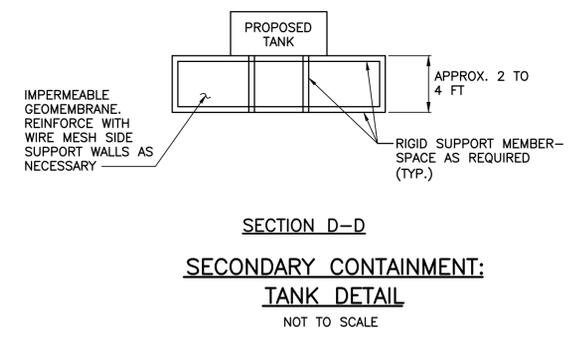
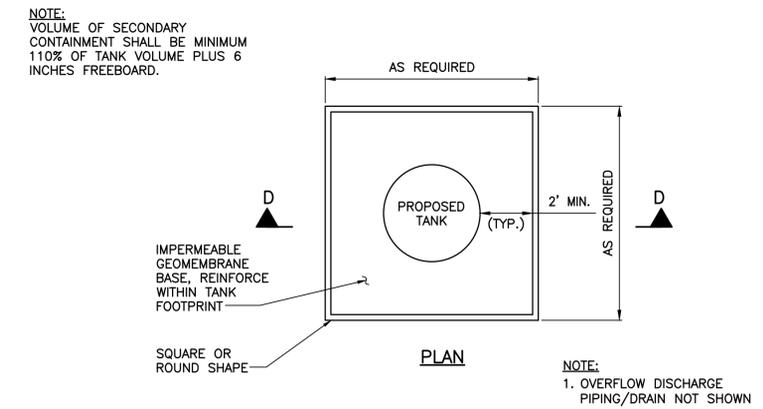


**SECONDARY CONTAINMENT:
INJECTION WELL BERM DETAIL**
NOT TO SCALE

- NOTE:
- PLACE BERM JUST PRIOR TO INJECTION EVENT AND REMOVE PROMPTLY.
 - SHOWN DEPTH APPLIES TO FLAT GROUND. ON SLOPING GROUND, PROVIDE MINIMUM 1-INCH LIQUID CONTAINMENT ON ALL SIDES.



**SECONDARY CONTAINMENT:
DRUM CONTAINMENT PAD DETAIL**
NOT TO SCALE

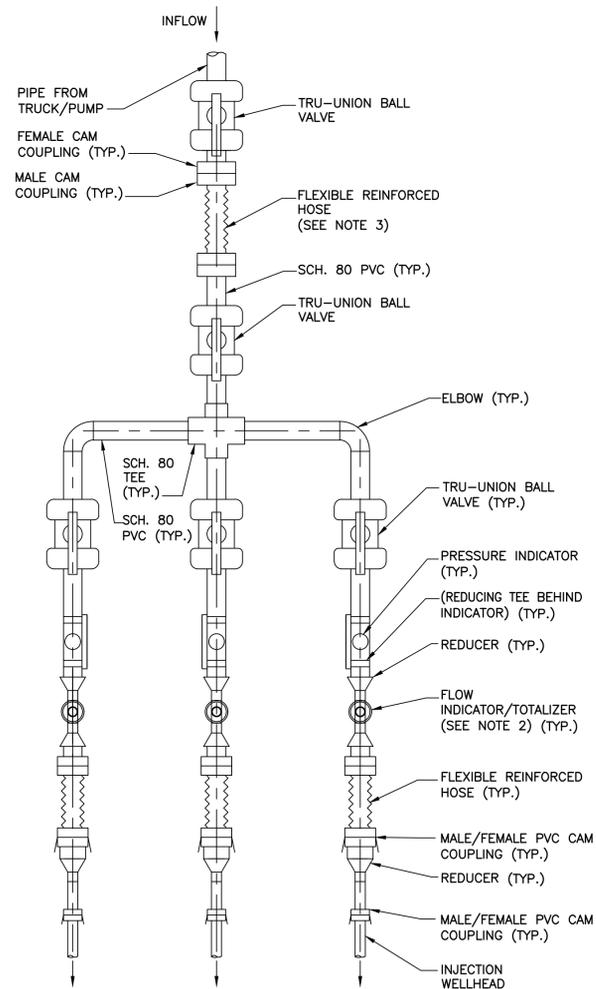


**SECONDARY CONTAINMENT:
TANK DETAIL**
NOT TO SCALE

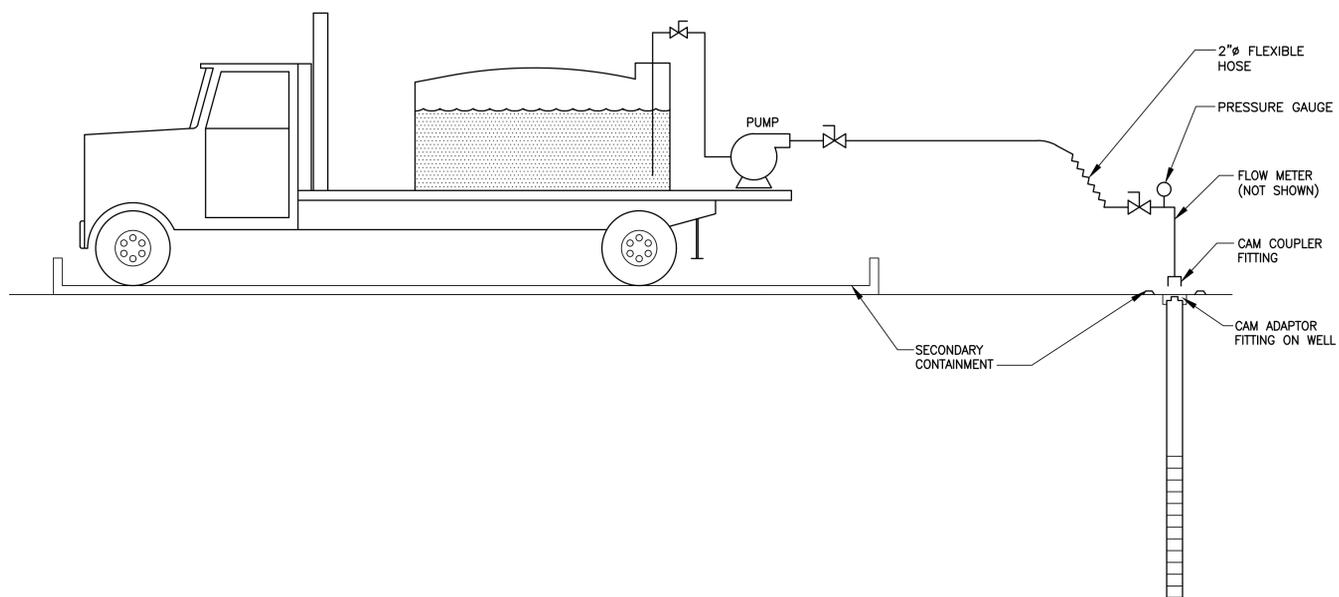
NOTE:
VOLUME OF SECONDARY CONTAINMENT SHALL BE MINIMUM 110% OF TANK VOLUME PLUS 6 INCHES FREEBOARD.

NOTE:
1. OVERFLOW DISCHARGE PIPING/DRAIN NOT SHOWN

- NOTES:**
1. SECURELY ATTACH MANIFOLD TO RIGID FRAMING (NOT SHOWN) FOR DURABILITY AND EASE OF TRANSPORT, EXCEPT AT POINTS WHERE ANY FLEXIBLE HOSES MAY PREVENT SUCH.
 2. MANIFOLD SHALL BE POSITIONED SO THAT FLOW OUT OF FLOW INDICATOR/TOTALIZER SHALL BE UPWARD.
 3. PROVIDE RIGID PIPE OR FLEXIBLE HOSE BETWEEN MALE/FEMALE CAM CONNECTIONS, OF LENGTH(S) TO SUIT FIELD CONDITIONS.



MANIFOLD DETAIL
 NOT TO SCALE



SCHEMATIC OF INJECTION SYSTEM DETAIL
 NOT TO SCALE

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Sheet title:
**CONSTRUCTION
 DETAILS
 (SHEET 2 OF 2)**

Scale: NONE
 Date: JULY 2020
 Project No.: 60629262
 Dwg By: RMC
 Chk By: CED

Dwg No:
C-010

Pg No: 18 of 19

