



April 18, 2024

Ronnie E. Lee, P.E.
New York State Department of Environmental Conservation
Department of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

RE: RAWP & RAWP Addendum Update
737 4th Avenue, Brooklyn, New York 11232
BCP #C224332

Dear Mr. Lee:

P.W. Grosser Consulting Engineer & Hydrogeologist, P.C. (PWGC) has prepared this letter to summarize recent progress of the remedial activities and discuss some proposed field modifications.

Construction of the barrier wall (RAWP Addendum #4) along the southeast perimeter of the site has been completed. During construction of the barrier wall, grout was found to have migrated west into several of the sentinel wells and ISCO wells, including SEN003, SEN004, SEN005, ISCO05, and ISCO06, which in result sealed the screened intervals at the water table. Based upon this observation, several test borings were performed further west to evaluate the extent of solidification from the permeation grouting. As shown on **Attachment 1**, three of the five soil borings encountered refusal at or near the water table interface suggesting potential presence of grout solidification.

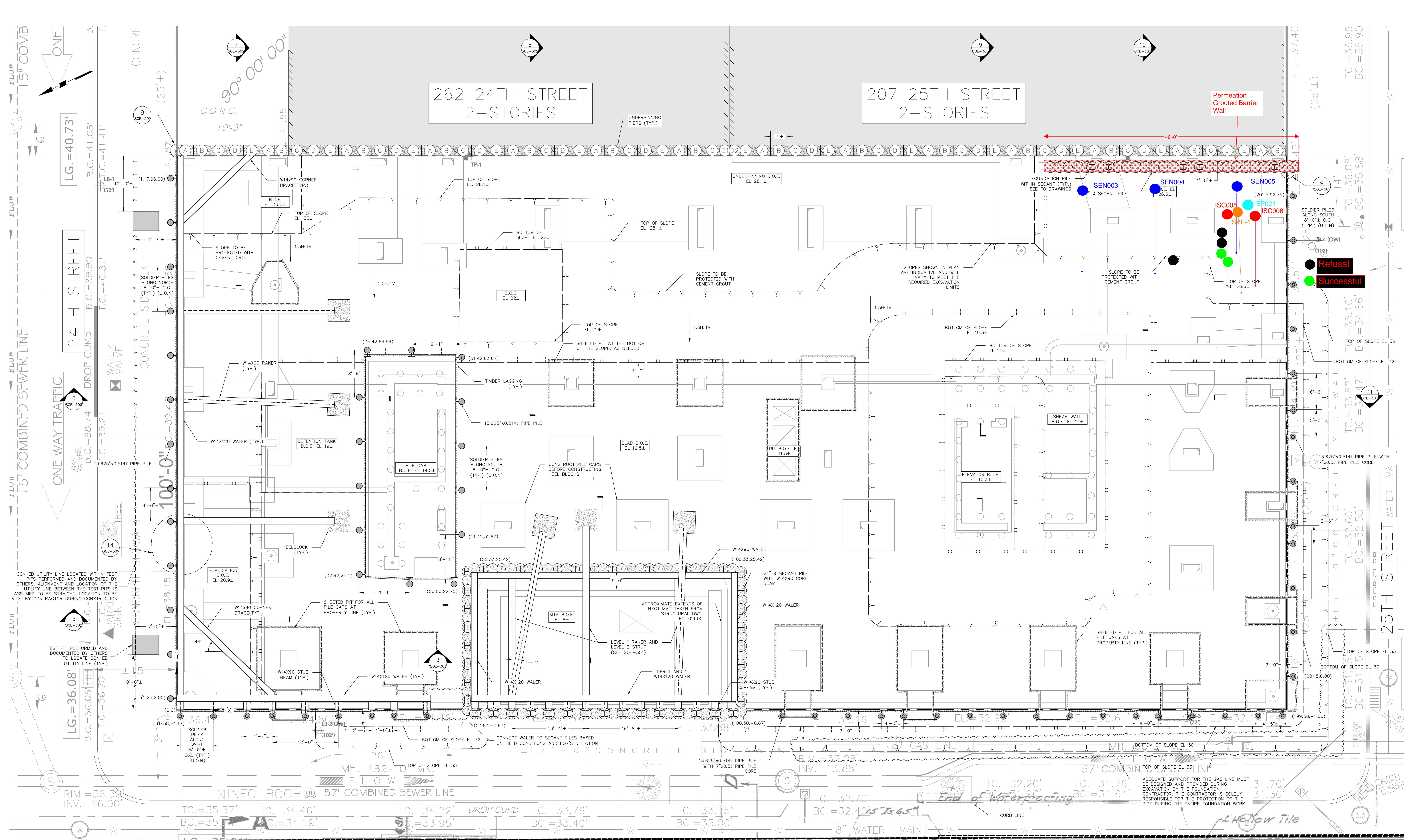
Based upon the findings, PWGC recommends reinstalling SEN003, SEN004, SEN005, ISCO05, and ISCO06 further to the west outside of the barrier wall as shown on **Attachment 1**. Construction will match the previous design. In addition, several additional test borings will be performed in the vicinity of EP021 and SVE-1 to determine if these locations need to be relocated further to the west or if they can be installed as designed as the contamination in this area is located in the vadose zone.





ATTACHMENT 1





CON ED UTILITY LINE LOCATED WITHIN TEST PITS PERFORMED AND DOCUMENTED BY OTHERS. ALIGNMENT AND LOCATION OF THE UTILITY LINE BETWEEN THE TEST PITS IS ASSUMED TO BE STRAIGHT. LOCATION TO BE V.I.F. BY CONTRACTOR DURING CONSTRUCTION

TEST PIT PERFORMED AND DOCUMENTED BY OTHERS TO LOCATE CON ED UTILITY LINE (TYP.)

ADDITIONAL NOTES:
 1. SURVEY BACKGROUND TAKEN FROM DRAWING TITLED "ARCHITECTURAL SURVEY, JOB NO. 210235", BY APPLE SURVEYING, DATED 5 MAY 2021.
 2. STRUCTURAL BACKGROUND TAKEN FROM DRAWING NO. FO-011.01 TITLED "FOUNDATION FRAMING PLAN (CELLAR)" BY ROSENWASSER/GROSSMAN CONSULTING ENGINEERS, P.C., DATED 1 FEBRUARY 2023.
 3. LIMITS OF THE NEW YORK CITY TRANSIT (NYCT) STRUCTURES ARE TAKEN FROM PLANS TITLED:
 3.1. "ROUTE NO. 116/102, FOURTH AVENUE BROOKLYN DETAILS OF CONSTRUCTION SECTION D-D, ST. 119.24 TO STA. 136+76.5 & STA. 141+86.5 TO STA. 160+14.69" FILE NO. 13, DRAWING NO. 6, REVISED 8 OCTOBER 1910.
 3.2. DRAWING TITLED "PLATFORM EXTENSIONS - GROUP XXX BROADWAY - 4TH AVE. LINE - BMT DIVISION PACIFIC STREET, UNION STREET, 9TH STREET PROSPECT AVENUE, 25TH STREET AND 36TH STREET STATIONS" FILE NO. 8931, DRAWING NO. C-193-F-14.
 3.4. DRAWING TITLED "PLATFORM EXTENSIONS - GROUP XXX BROADWAY - 4TH AVE. LINE - BMT DIVISION PACIFIC STREET, UNION STREET, 9TH STREET PROSPECT AVENUE, 25TH STREET AND 36TH STREET STATIONS" FILE NO. 8931, DRAWING NO. C-193-C-15.
 4. ELEVATIONS SHOWN ON THIS DRAWING ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) WHICH IS 1.1 FEET ABOVE MEAN SEA LEVEL AT SANDY HOOK, NJ, U.S.C. & G. SURVEY DATUM.
 5. ALL BORINGS AND TEST PIT LOCATIONS ARE APPROXIMATE.
 6. SEE SOE-110 FOR MONITORING PLAN.
 7. SEE SOE-300 SERIES DRAWINGS FOR SUPPORT OF EXCAVATION SECTIONS.
 8. SEE SOE-500 SERIES DRAWINGS FOR SUPPORT OF EXCAVATION DETAILS.

LEGEND:
 LB-# LANGAN BORING
 (OW) OBSERVATION WELL IN COMPLETED BORING
 TP-# LANGAN TEST PIT
 --- PROPERTY LINE

dWA
 dencityworks

TOTEM

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SUPPORT OF EXCAVATION PLAN
737 FOURTH AVENUE
BROOKLYN, NEW YORK 11232

No.	DESCRIPTION	DATE
1	FOUNDATION SUBMISSION #1	10/06/21
2	FOUNDATION SUBMISSION #2	12/08/21
3	FOUNDATION SUBMISSION #3	01/11/22
3	FOUNDATION BID SET	08/12/22
4	DOB RESUBMISSION	08/17/22
5	ISSUED FOR 50% CD	11/4/2022
6	ISSUED FOR 60% CD	12/22/2022
7	NYCT AND DOB REFLING	02/13/2023

GENERAL NOTES:

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8. SEE SOE-500 SERIES DRAWINGS FOR SUPPORT OF EXCAVATION DETAILS.

SUPPORT OF EXCAVATION FILED UNDER DOB NOW# B00580365-S2. FOR SUPPORT OF EXCAVATION FILING UNDER DOB NOW# B00580365-S2. FOR UNDERPINNING FILING UNDER DOB NOW# B00580365-S4. FOR UNDERPINNING FILING UNDER DOB NOW# B00580365-S4. FOR UNDERPINNING FILING UNDER DOB NOW# B00580365-S2. FOR SUPPORT OF EXCAVATION FILING UNDER DOB NOW# B00580365-S2.

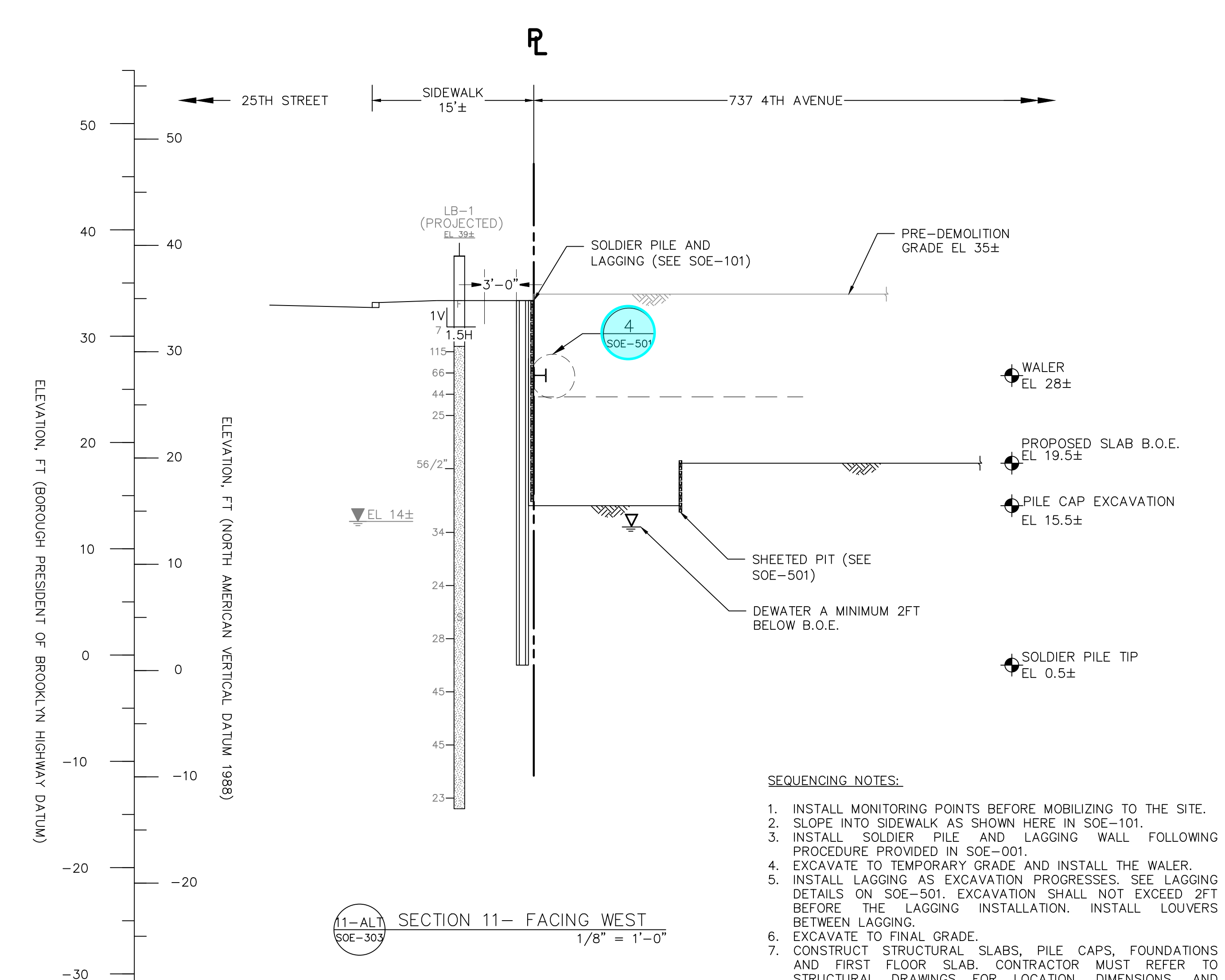
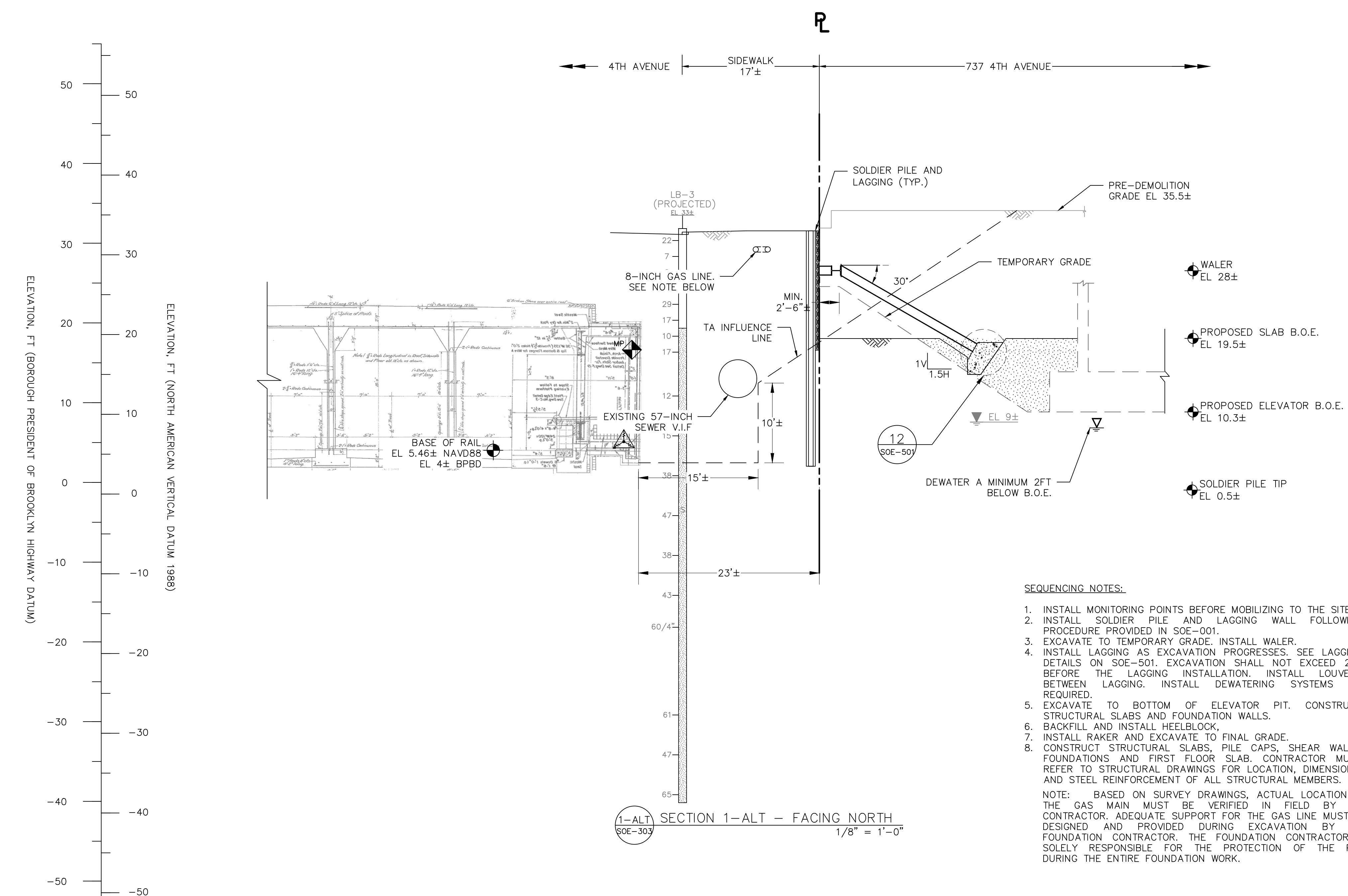
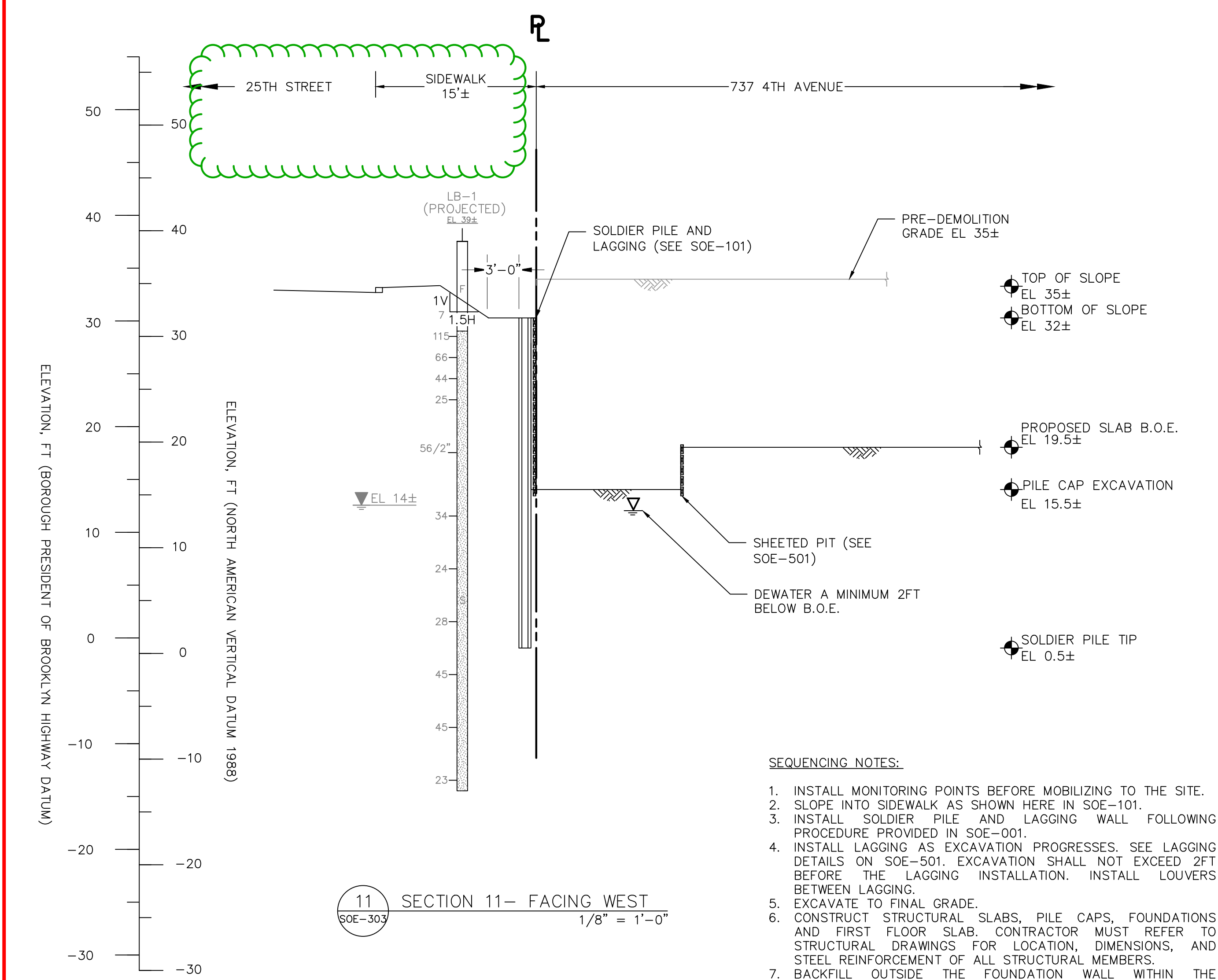
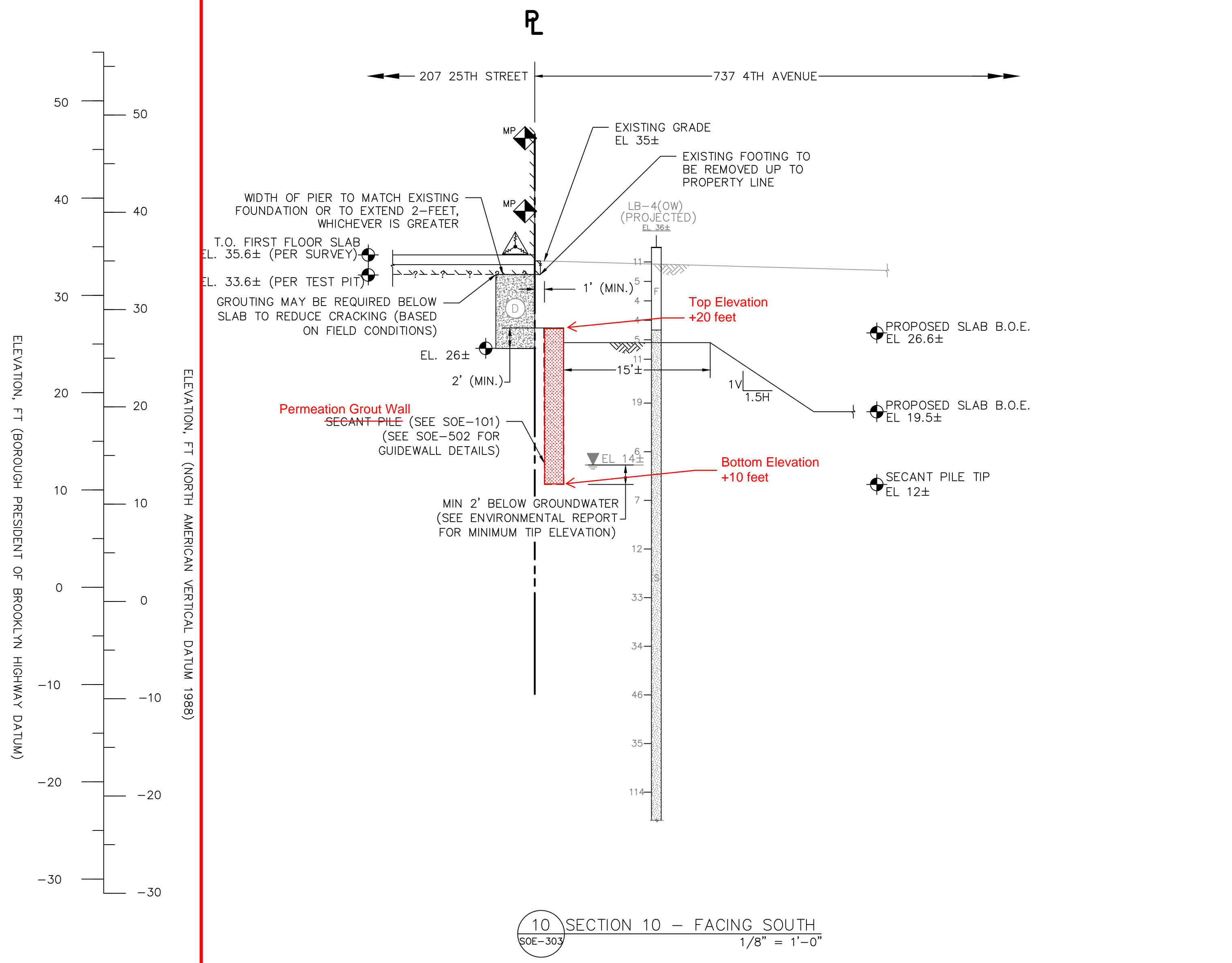
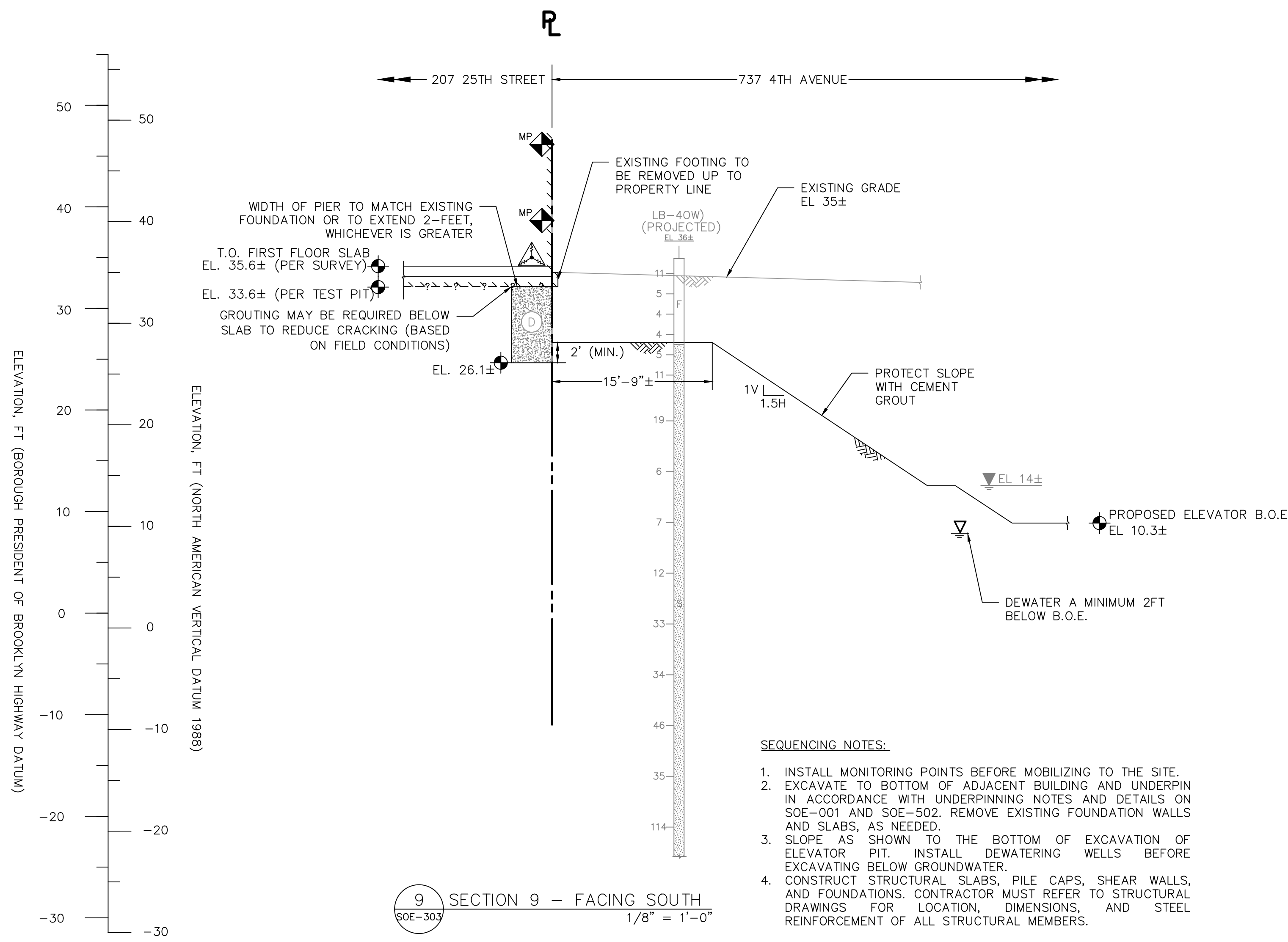
SCALE: 3/16" = 1'-0"

SUPPORT OF EXCAVATION PLAN
 DATE: 02.13.2023
 PROJECT No.: 21.002

SCALE: 3/16" = 1'-0"

DOB NOW# B00580365-S2 (UNDERPINNING)
 DOB NOW# B00580365-S4 (SUPPORT OF EXCAVATION)





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737 FOURTH AVENUE
BROOKLYN, NEW YORK 11232

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SUPPORT OF EXCAVATION FILED UNDER DOB NOW# B00580365-S2. FOR SUPPORT OF EXCAVATION FILING, UNDERPINNING SCOPE SHOWN FOR REFERENCE ONLY. FOR UNDERPINNING FILING SEE DOB FILING NUMBER DOB NOW# B00580365-S4.

UNDERPINNING FILED UNDER DOB NOW# B00580365-S4. FOR UNDERPINNING FILING, SUPPORT OF EXCAVATION SCOPE SHOWN FOR REFERENCE ONLY. FOR SUPPORT OF EXCAVATION FILING SEE DOB NOW# B00580365-S2.

FOUNDATIONS (STRUCTURAL) FILED UNDER DOB NOW# B00580365-S8.

SCALE: 1/8" = 1'-0"

DOB NOW# B00580365-S8 (UNDERPINNING)
DOB NOW# B00580365-S2 (SUPPORT OF EXCAVATION)