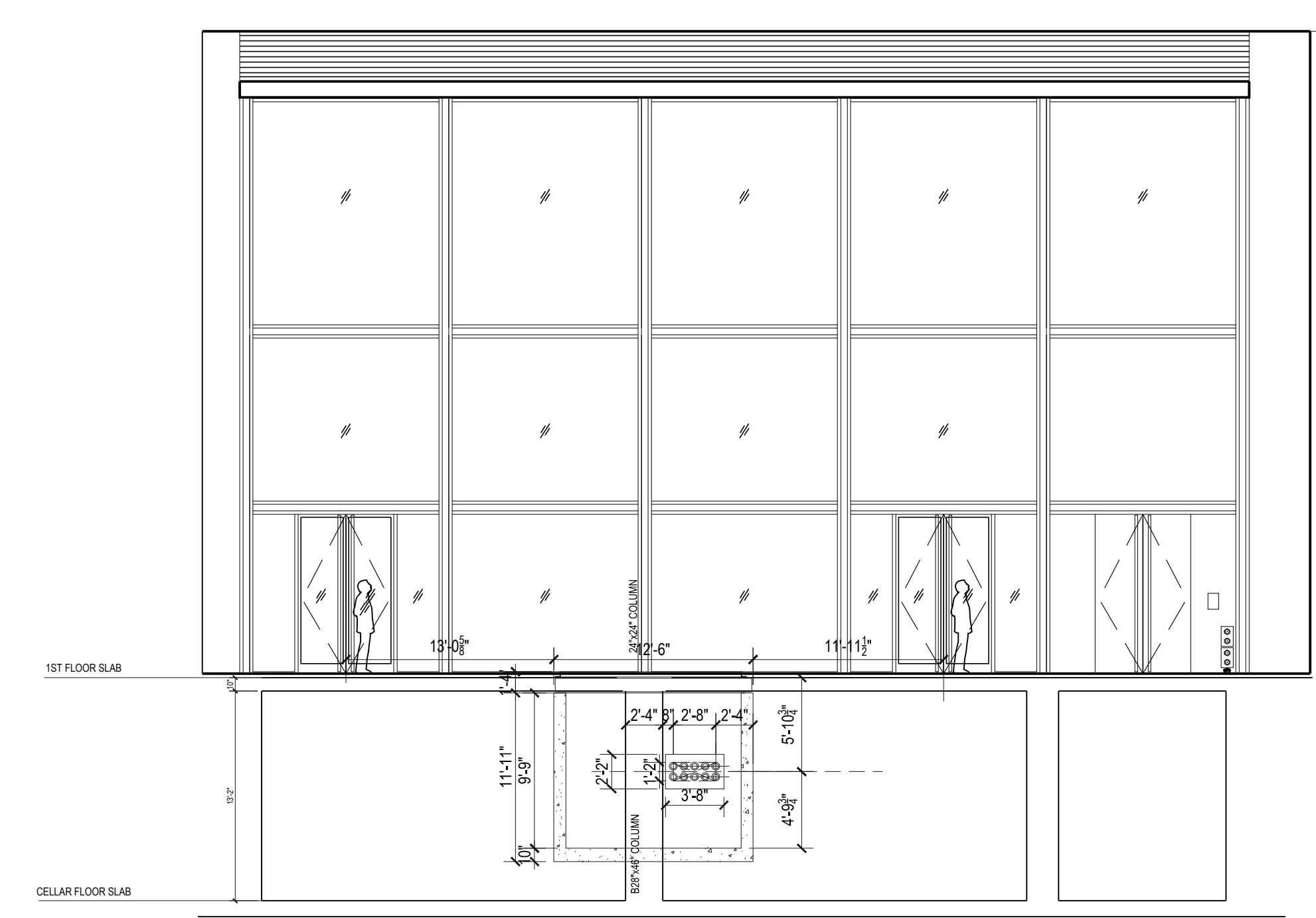
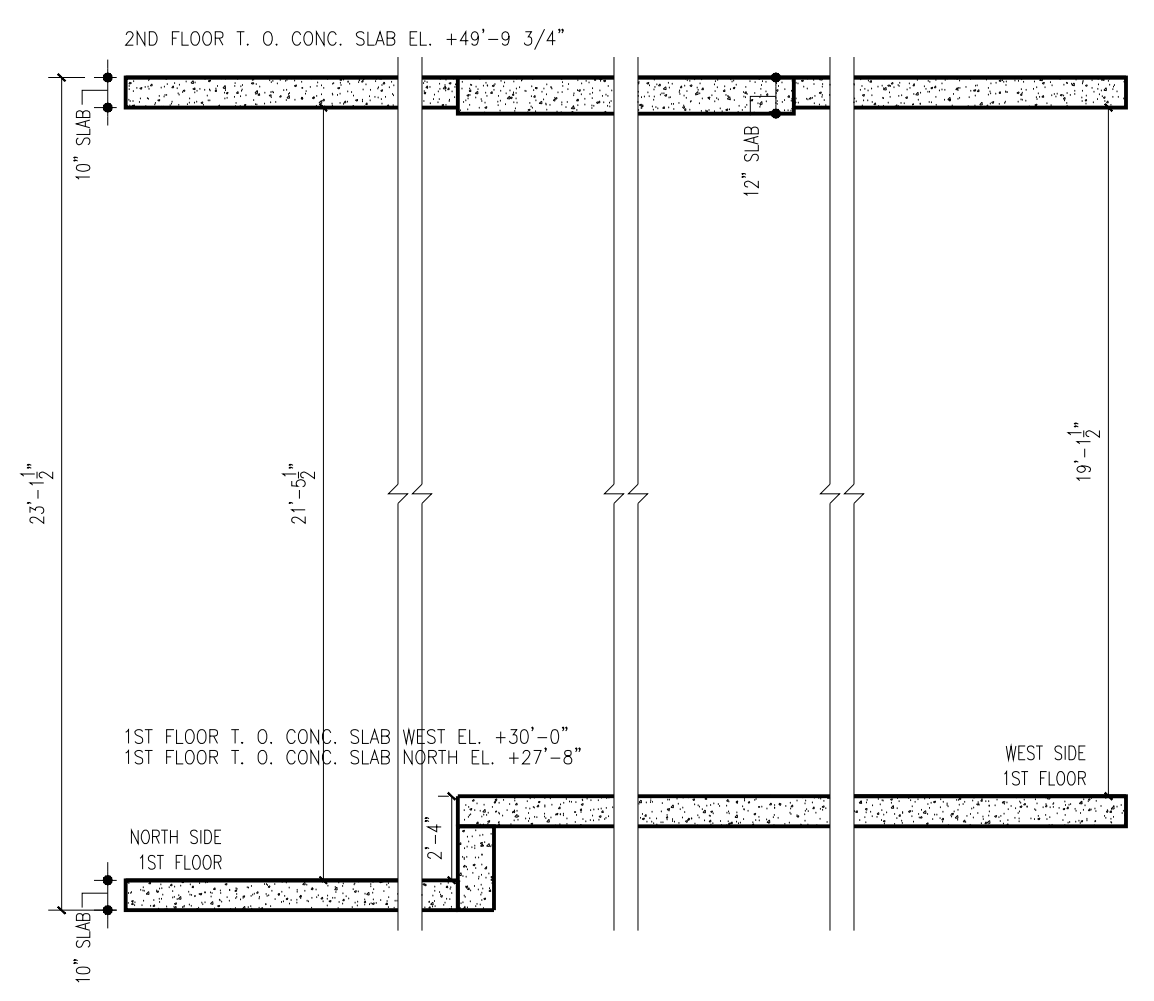


1 1ST FLOOR PLAN
SCALE: 1/8" = 1'-0"

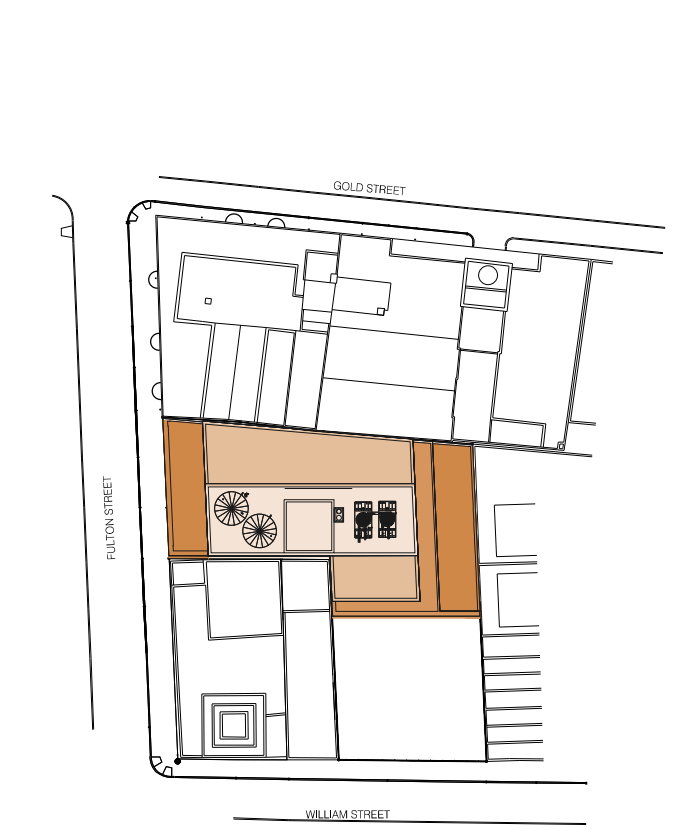


3 Con Ed POE
SCALE: 1/8" = 1'-0"



2 HEIGHT DIAGRAM
SCALE: 3/16" = 1'-0"

NOTES



Number	Date	Revised
1	01/06/17	DOB RE-SUBMISSION
2	11/17/16	DOB RE-SUBMISSION
3	07/06/16	DOB RE-SUBMISSION
4	06/02/16	DOB RE-SUBMISSION
5	06/10/16	DOB RE-SUBMISSION
6	04/02/16	DOB RE-SUBMISSION
7	02/25/16	DOB RE-SUBMISSION

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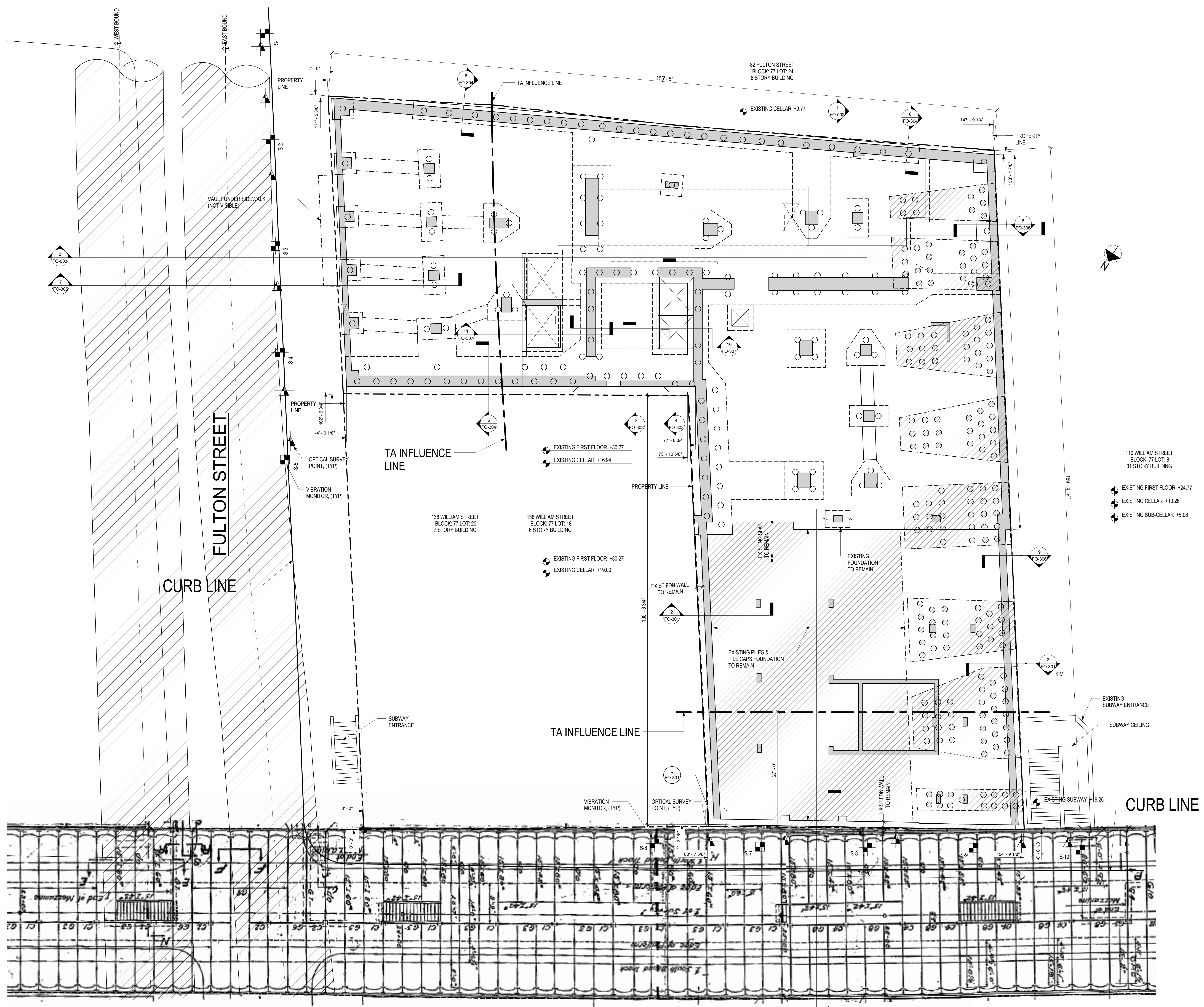
BRIAN ORTER LIGHTING DESIGN
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DOB REVIEW



DWG TITLE: 1ST FLOOR PLAN OVERALL
NB# 121192903

SCALE & SIGNATURE	DATE
	01/06/17
PROJECT #	14428
SCALE	1/8" = 1'-0"
DWG NO.	A-101A.00



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

- NOTES:**
1. PLAN EXTRACTED FROM RA CONSULTANTS DRAWINGS DATED 03/21/2016.
 2. ALL SUBWAY LOCATIONS ARE ESTIMATED.
 3. PROJECT ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD88)

- LEGENDS:**
1. - - - - - INDICATES 130 WILLIAM STREET SITE PROPERTY LINE
 2. - - - - - INDICATES EDGE OF SUBWAY/TUBE
 3. - - - - - INDICATES CURB
 4. X INDICATES TOP OF SIDEWALK ELEVATION
 5. - - - - - INDICATES TA INFLUENCE LINE
 6. FOR BALANCE OF LEGEND, SEE FO-100

WILLIAM STREET

NOTES

Number	Date	Revision
9	01/06/2017	HUB SUBMISSION
8	11/17/2016	CORE AND SHELL BUY SET
7	10/19/2016	MEP APPROVAL
6	10/01/2016	CORE AND SHELL BID SET
5	09/09/2016	MEP APPROVAL
4	07/28/2016	FOUNDATION BID SET
3	07/06/2016	ISSUED TO DOB
2	06/24/2016	MEP APPROVAL
1	06/20/2016	100% DD SUBMISSION

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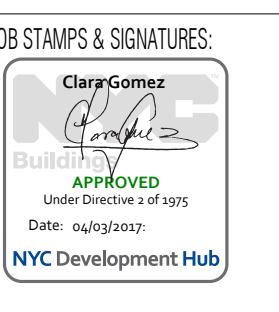
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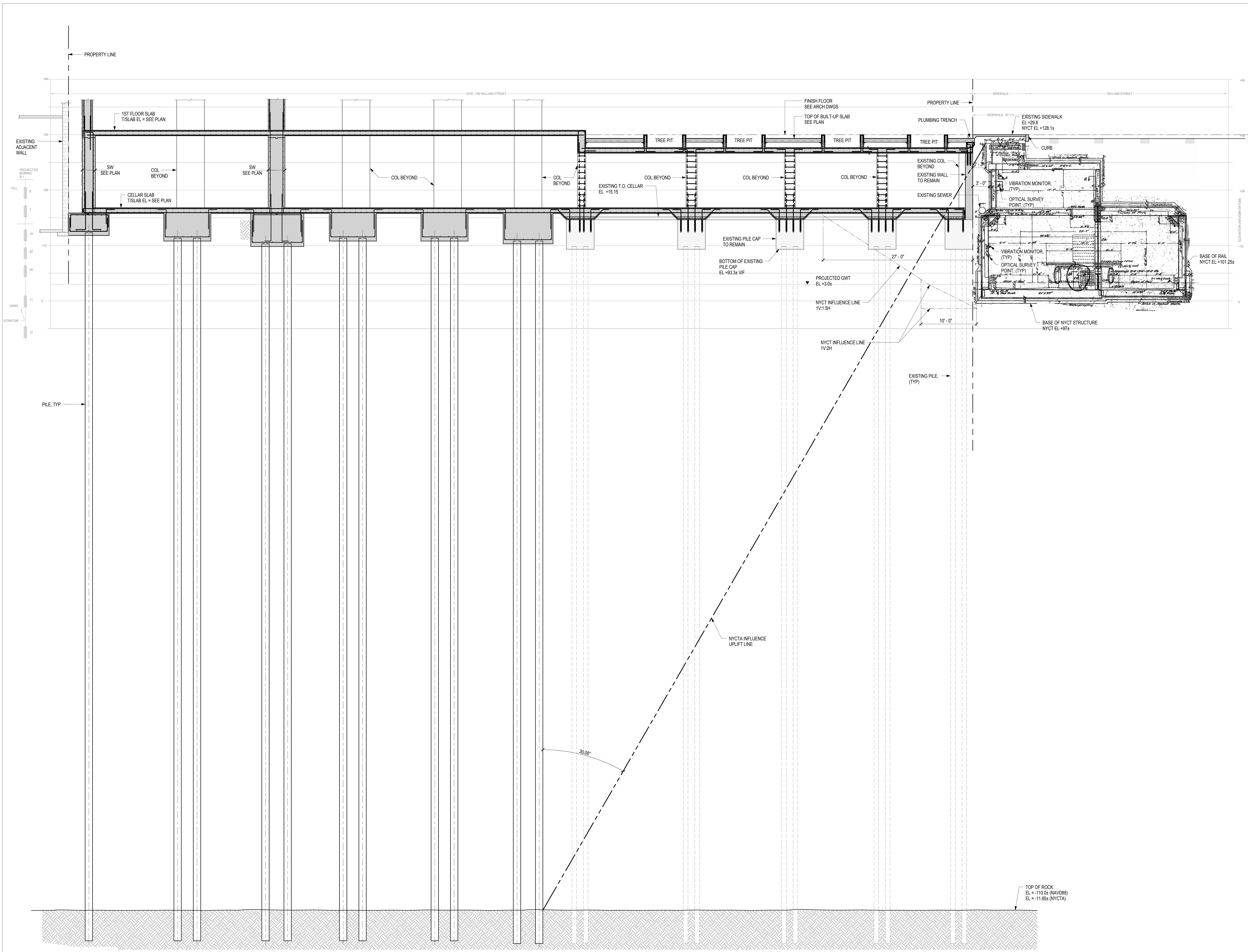
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DOB BCR:



DATE: X/0/XX
PROJECT #: 16118.00
SCALE: 1/8" = 1'-0"
DWG TITLE: **SITE PLAN**
NB#121192903

SEAL & SIGNATURE: [Signature]
DATE: X/0/XX
PROJECT #: 16118.00
SCALE: 1/8" = 1'-0"
DWG NO: **FO-001.00**
OF 000



NOTES

Number	Date	Revision
5	01/06/2017	HUB SUBMISSION
4	11/11/2016	CORE AND SHELL BUY SET
3	10/19/2016	DATA APPROVAL
2	10/01/2016	CORE AND SHELL BID SET
1	09/03/2016	DATA APPROVAL

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DOB BSCAR:

DOB STAMPS & SIGNATURES:

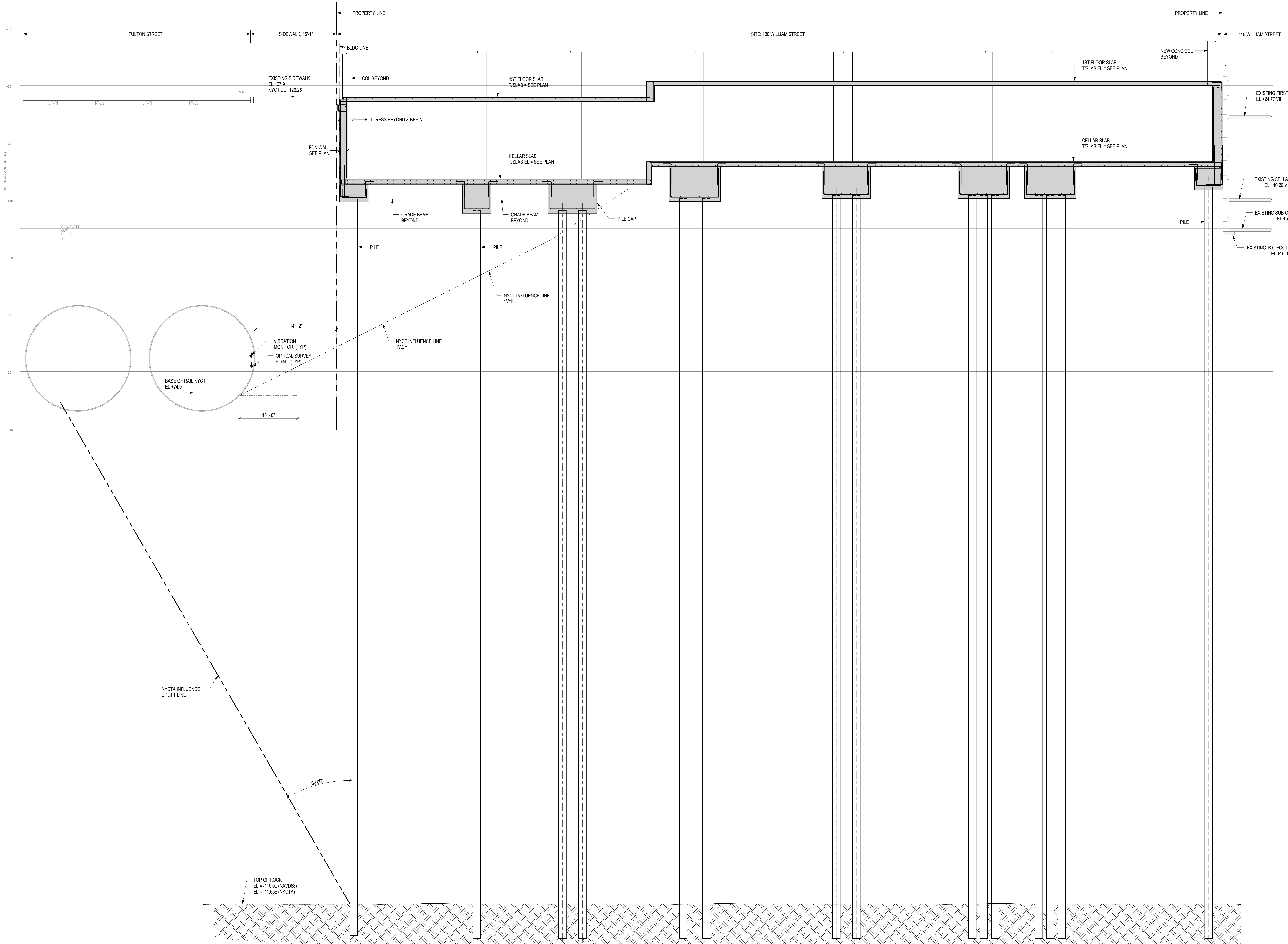
DOB TITLE:

SITE SECTION I
 NB#121192903

SEAL & SIGNATURE:

DATE: xx/xx/xx
 PROJECT #: 16118.00
 SCALE: 3/16" = 1'-0"
 DWG NO. FO-002.00
 OF 000

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



NOTES

Number	Date	Revision
5	01/06/2017	HUB SUBMISSION
4	11/11/2016	CORE AND SHELL BUY SET
3	10/19/2016	META APPROVAL
2	10/01/2016	CORE AND SHELL BID SET
1	09/09/2016	META APPROVAL

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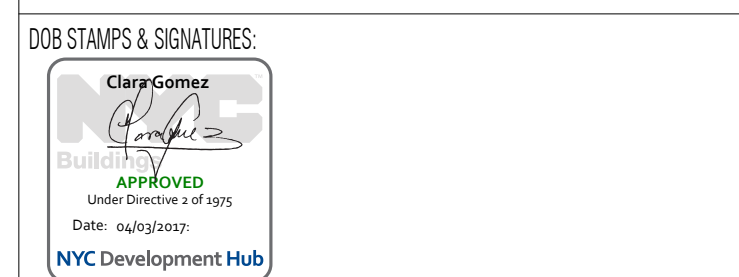
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DOB BSCAR



DOB STAMPS & SIGNATURES

DWG TITLE: **SITE SECTION II**
NB#121192903

DATE: xx/xx/xx
 PROJECT #: 16118.00
 SCALE: 3/16" = 1'-0"
 DWG NO: **FO-003.00**
 OF 003

2 SITE SECTION
 SCALE: 3/16" = 1'-0"

NYC TRANSIT AUTHORITY GENERAL NOTES:

NOTE: THE APPROPRIATE NOTES ARE TO BE MADE PART OF THE PROJECT'S CONTRACT DRAWINGS.

- 1. THE NYC TRANSIT (NYCT) RESERVES THE RIGHT TO PLACE INSPECTORS, FLAGMEN OR OTHER PERSONNEL IN THE SUBWAY STRUCTURES DURING CONSTRUCTION OF THE PROJECT LINKED BY A TELEPHONE SYSTEM, IF DEEMED NECESSARY, TO OBSERVE THE EFFECTS OF THE CONSTRUCTION ON THE TRANSIT FACILITIES. NYCT FURTHER RESERVES THE RIGHT TO PLACE SUCH PERSONNEL WHENEVER, IN ITS OPINION, THE PROJECT CONDITIONS WARRANT SUCH PLACEMENT, REGARDLESS OF DISTANCE. THE COST OF SUCH PERSONNEL, TELEPHONE INSTALLATION AND ANY RE-ROUTES, DIVERSIONS OF SERVICE, WORK TRAINS, ETC., MADE NECESSARY BY THE PROJECT, MUST BE BORNE BY THE PROJECT OR THE RESPONSIBLE NEW YORK CITY/STATE AGENCY.
2. ALL ROCK EXCAVATION ADJACENT TO THE TRANSIT STRUCTURE IS TO BE CHANNEL DRILLED TWO FEET BELOW SUBGRADE.
3. IF TOP OF ROCK IS FOUND BELOW SUBWAY STRUCTURE, THE SUBWAY STRUCTURE MUST BE UNDERPINNED IN ACCORDANCE WITH DRAWINGS TO BE SUBMITTED TO NYCT FOR APPROVAL.
4. IF ROCK IS SOFT OR SEAMY, LATERAL SUPPORTS MUST BE PROVIDED BELOW THE SUBWAY STRUCTURE IN ACCORDANCE WITH DRAWINGS TO BE SUBMITTED TO NYCT FOR APPROVAL.
5. BLASTING WILL BE PERMITTED ONLY WITH LIGHT CHARGES SUBJECT TO THE APPROVAL OF NYCT'S ENGINEER AND IN ACCORDANCE WITH THE REGULATIONS OF THE FIRE DEPARTMENT. THE CONTRACTOR SHALL PROVIDE A DETAILED MONITORING PLAN, PROVIDING FOR MEASUREMENTS OF BOTH PARTICLE VELOCITY AND DISPLACEMENTS AT CRITICAL LOCATIONS OF THE NYCT STRUCTURE. THE MONITORING PLAN SHALL INCLUDE THRESHOLD AND UPSET LEVELS OF BOTH PARTICLE VELOCITY AND SETTLEMENT TOGETHER WITH AN ACTION PLAN FOR THEIR IMPLEMENTATION. THE CONTRACTOR SHALL SECURE AN APPROVED SEISMOLOGIST TO INSTALL AND OPERATE SUITABLE VELOCITY GAUGES TO CONTINUOUSLY MONITOR PARTICLE VELOCITY AND AN INDEPENDENT LICENSED SURVEYOR TO MONITOR DISPLACEMENTS. THE PRESENCE OF A QUALIFIED TECHNICIAN FROM MONITORING COMPANY IS NECESSARY TO PROVIDE THE VIBRATION READING UPON REQUEST OF NYCT ENGINEER. THE THRESHOLD MAXIMUM PARTICLE VELOCITY ABOVE AMBIENT CAUSED BY THE BLASTING WILL BE 0.5 INCH PER SECOND. VALUES EXCEEDING THIS LEVEL WILL BE REVIEWED AND EVALUATED BY NYCT'S ENGINEER. IN NO CASE WILL PARTICLE VELOCITIES EXCEED THE UPSET LEVEL OF 2.0 INCHES PER SECOND.
6. BEFORE PLACING CONCRETE, THE SUBGRADE OF THE FOUNDATIONS IN THE VICINITY OF THE SUBWAY STRUCTURE IS TO BE INSPECTED AND APPROVED BY NYCT'S ENGINEER.
7. IF ANY PORTION OF THE SUBWAY STRUCTURE OR FINISH IS DAMAGED, IT SHALL BE REPAIRED OR REPLACED WITH THE SAME MATERIALS IN PLACE, SUBJECT TO THE APPROVAL OF NYCT'S ENGINEER AND AT THE EXPENSE OF THE PROJECT.
8. EXCAVATION EMBANKMENTS ARE TO BE SHORED AND BRACED. DRAWINGS INDICATING A SUGGESTED METHOD OF CONSTRUCTION ARE TO BE SUBMITTED TO NYCT FOR APPROVAL IN CONJUNCTION WITH THE PROJECT'S CONTRACT DRAWINGS. IN CASE OF EXCAVATION UNDERMINING THE SUBWAY STRUCTURE, UNDERPINNING MAY BE REQUIRED. DRAWINGS FOR UNDERPINNING ARE TO BE SUBMITTED TO NYCT FOR APPROVAL.
9. TEMPORARY SHORING MAY BE PLACED IN DIRECT CONTACT WITH NYCT STRUCTURES ONLY IF THE NYCT STRUCTURE IS SHOWN TO BE ABLE TO SUPPORT ALL ANTICIPATED LOADS THAT CAN BE TRANSFERRED THROUGH THE TEMPORARY STRUCTURES WITHOUT DAMAGING THE EXISTING STRUCTURE. AT THE COMPLETION OF THE PROJECT, THESE TEMPORARY SHORING AND BRACING SYSTEMS ARE TO BE REMOVED OR CUT-OFF AS APPROVED BY NYCT.
10. WHEN PILES ARE TO BE DRIVEN OR DRILLED ADJACENT TO THE SUBWAY STRUCTURE, BORING DATA, PILE LAYOUTS, SPECIFICATIONS AND INSTALLATION PROCEDURES ARE TO BE SUBMITTED TO NYCT FOR APPROVAL. VELOCITY METERS ARE TO BE INSTALLED IN THE SUBWAY TUNNEL AT CRITICAL LOCATIONS TO MONITOR INDUCED VIBRATIONS. INDUCED DISPLACEMENTS ALONG THE TUNNEL STRUCTURE AND TRACK INVERT ARE TO BE MONITORED DURING DRIVING OR DRILLING. THE THRESHOLD MAXIMUM PARTICLE VELOCITY ABOVE AMBIENT CAUSED BY THE DRIVING OR DRILLING WILL BE 0.5 INCH PER SECOND. VALUES EXCEEDING THIS LEVEL WILL BE REVIEWED AND EVALUATED BY NYCT'S ENGINEER. IN NO CASE WILL PARTICLE VELOCITIES EXCEED THE UPSET LEVEL OF 2.0 INCHES PER SECOND.
11. NO PILES ARE PERMITTED TO BE INSTALLED BY ANY METHOD WITHIN THREE FEET OF SUBWAY STRUCTURE, MEASURED FROM THE EDGE OF THE PILE OR CASING TO THE WALL. CLOSED-END PILES WILL NOT BE PERMITTED TO BE DRIVEN WITHIN TEN FEET OF THE SUBWAY STRUCTURE.
12. ALL PILES ARE TO BE PLACED WITHIN A PREAUGERED CASED HOLE TO THE INFLUENCE LINE. THE CASING SHALL BE CLEANED WITHOUT DISTURBING THE SOIL OUTSIDE THE CASING AND THE PILE TO BE PLACED WITHIN THE CASING FOR INSTALLATION. THE PILES MAY THEN BE DRIVEN BEYOND THE INFLUENCE LINE WITHIN THE CASING.
13. THE INFLUENCE LINE SHALL START AT THE BOTTOM OF THE SUBWAY STRUCTURE AND EXTEND FROM 1H:1V TO 2H:1V SLOPE DEPENDING ON THE SOIL PROPERTIES AND GROUND WATER TABLE. FOR PILES INSTALLED WITHIN TEN FEET OF THE SUBWAY STRUCTURE, THE CASING SHALL BE EXTENDED UP TO THE BOTTOM OF THE SUBWAY STRUCTURE.
14. ALL PILES ARE TO BE DRIVEN OR DRILLED A MINIMUM OF TEN FEET BELOW THE INTERSECTION OF THE PILE CENTERLINE AND THE INFLUENCE LINE OF THE SUBWAY STRUCTURE.
15. THE USE OF 'DOWN-THE-HOLE -HAMMERS' FOR INSTALLATION OF PILES THROUGH OVERBURDEN AND FILL WILL BE PERMITTED ONLY TO REMOVE BOULDERS. IT WILL NOT BE PERMITTED AS A MATTER OF COURSE TO AVOID THE HOLE. THEIR USE TO CONSTRUCT ROCK SOCKETS WILL NOT BE ALLOWED WITHIN 5 FEET OF THE NYCT STRUCTURE. THE USE OF MACHINE UTILIZING AIR FOR SOIL REMOVAL WILL NOT BE ALLOWED.
16. VIBRATORY HAMMERS WILL NOT BE PERMITTED WITHIN 75 FEET OF SUBWAY STRUCTURES. HOERAMS WILL NOT BE PERMITTED WITHIN 25 FEET OF SUBWAY STRUCTURES.
17. DYNAMIC COMPACTION METHODS USING DROPPED HEAVY WEIGHTS CANNOT BE CONDUCTED WITHIN 1000 FEET OF ANY NYCT STRUCTURE UNLESS IT IS SHOWN THAT INDUCED SETTLEMENTS AND VIBRATIONS WILL NOT DAMAGE THESE STRUCTURES. A SUITABLE MONITORING PLAN INCLUDING SETTLEMENT AND VIBRATION MEASUREMENTS MUST BE APPROVED BY NYCT'S ENGINEER FOR ALL SUCH OPERATIONS WITHIN THESE DISTANCES.
18. THERE SHALL BE NO MACHINE EXCAVATION WITHIN 3 FEET OF NYCT STRUCTURES, POWER DUCT LINES, OR ANY OTHER FACILITIES UNTIL THEY HAVE BEEN CAREFULLY EXPOSED BY HAND EXCAVATION.
19. ALL DEWATERING OPERATIONS CONDUCTED WITHIN 500 FEET OF THE NYCT STRUCTURE MUST BE PERFORMED IN ACCORDANCE WITH DRAWINGS AND PROCEDURES SUBMITTED TO NYCT FOR APPROVAL. THE DISTANCE FROM THE STRUCTURE TO THE DEWATERING OPERATION CAN BE REDUCED PROVIDED THAT SOIL CONDITIONS AT THE SITE INDICATE THAT THE RADIUS OF INFLUENCE OF THE DEWATERING IS LESS THAN 500 FEET. FOR DEWATERING WITHIN THE RADIUS OF INFLUENCE, THE DEWATERING PROGRAM MUST BE SHOWN TO HAVE NEGLIGIBLE INFLUENCE ON SETTLEMENTS OF THE NYCT STRUCTURE.
20. SUBWAY ENTRANCES (VENTILATORS, ETC.) ARE TO BE UNDERPINNED OR SHORED AND BRACED IF DIRECTED BY NYCT'S ENGINEER.
21. NYCT, AT ITS DISCRETION, RESERVES THE RIGHT TO REQUIRE THE PROJECT TO CLOSE OR MAINTAIN AND PROTECT EXISTING SUBWAY ENTRANCES, VENTILATORS, ETC. ADJACENT TO THE PROJECT DURING CONSTRUCTION. SUCH CONSTRUCTION MAY INCLUDE UNDERPINNING, SHORING, BRACING AND ERECTION OF SUITABLE BARRICADES AND/OR CANOPIES AND SHIELDS. SUCH PROTECTION SHALL BE IN ACCORDANCE WITH DRAWINGS SUBMITTED TO NYCT FOR APPROVAL.
22. IF SHIELDS ARE TO BE INSTALLED TO PROTECT NYCT FACILITIES AND/OR THE PUBLIC, PLANS SHOWING THE LOCATION, TYPE AND METHOD OF ATTACHMENT TO THE TRANSIT STRUCTURE MUST BE SUBMITTED TO NYCT FOR APPROVAL.
23. ALL LUMBER AND PLYWOOD USED FOR PROTECTION OF SUBWAY FACILITIES MUST BE FIRE RETARDANT.
24. SUBWAY EMERGENCY EXITS MUST BE KEPT CLEAR AT ALL TIMES.
25. IN EXCAVATING OVER OR NEAR THE SUBWAY ROOF, SPECIAL CARE SHALL BE EXERCISED SO THAT THE THIN CONCRETE PROTECTION OF THE SUBWAY WATERPROOFING IS NOT DAMAGED.
26. BURNING OF WELDING TO OR DRILLING THROUGH EXISTING STEEL STRUCTURES WILL NOT BE PERMITTED EXCEPT AS SHOWN ON DRAWINGS APPROVED BY NYCT.
27. HORIZONTAL AND VERTICAL CONTROL SURVEY DATA OF THE EXISTING NYCT STRUCTURE IS TO BE TAKEN BY A LICENSED LAND SURVEYOR TO MONITOR ANY MOVEMENTS THAT OCCUR DURING CONSTRUCTION AND TO SHOW THAT THE INDUCED MOVEMENTS ARE WITHIN ALLOWABLES NOTED BELOW. IF ANY MOVEMENTS EXCEED ALLOWABLES, REMEDIATION AS APPROVED BY NYCT SHALL BE PERFORMED.
STRUCTURE ELEVATED SUBWAY NOTIFY NYCT ENGINEER 1/8 INCH 1/4 INCH STOP WORK 1/4 INCH 1/2 INCH

28. BUS ROUTES AFFECTED BY THE PROJECT WILL OR MAY REQUIRE BUS DIVERSIONS. THESE ARRANGEMENTS SHALL BE MADE THROUGH: MS. SARAH WYSS ACTING DIRECTOR, OPERATIONS PLANNING NEW YORK CITY TRANSIT 2 BROADWAY, ROOM A17.82 NEW YORK, NEW YORK 10004 TELEPHONE NUMBER 646/252-5517 WHEN IMPACTING ANY BUS STOP, SPECIAL OPERATIONS MUST BE NOTIFIED TWO WEEKS IN ADVANCE.

- 29. DUCT LINES MUST BE MAINTAINED AND PROTECTED DURING CONSTRUCTION. ANY INTERFERENCE WITH DUCT LINES SHOULD BE REPORTED TO NYCT INSPECTOR. WHEN A DUCT LINE CONTAINING CABLES IS TO BE REMOVED, OR WHEN MASONRY ADJACENT THERETO IS TO BE REMOVED, PENETRATED, OR DRILLED, THE WORK SHALL BE DONE WITH HAND LABOR ENTIRELY, USING HAMMER AND CHISEL. JACKHAMMERS, BULL POINTS OR OTHER POWER EQUIPMENT SHALL NOT BE USED.
30. WHERE MANHOLES ARE ENCOUNTERED: a) THEY SHALL BE PROTECTED AND RAISED OR LOWERED AS REQUIRED, TO MATCH THE NEW STREET GRADE. b) IF MANHOLE COVERS ARE RAISED OR LOWERED, PROTECT CABLES IN MANHOLE BY WOOD SHEETING OF 2" NOMINAL THICKNESS. c) PRIOR TO THE START OF CONSTRUCTION OPERATIONS AFFECTING MANHOLES AND DUCT LINES, SEVEN DAYS NOTICE MUST BE GIVEN TO MR. JOHN MALVASIO, P.E., ASSISTANT CHIEF ENGINEERING OFFICER, MAINTENANCE OF WAY, AT 718/694-1358.
31. CONSTRUCTION WORK DONE NEAR VENT GRATINGS AND HATCHES SHALL BE AS FOLLOWS: a) UNLESS APPROVED BY THE NYCT'S ENGINEER, ALL VENT GRATINGS AND HATCHES SHOULD REMAIN OUTSIDE THE CONSTRUCTION SITE, SEPARATED BY A CONSTRUCTION FENCE. PROTECTIVE SHIELDS MUST BE PROVIDED OVER VENT GRATINGS AS REQUIRED BY NYCT'S ENGINEER. b) NO BUILDING MATERIAL, VEHICLES OR CONSTRUCTION EQUIPMENT IS TO BE STORED OR RUN OVER VENT, GRATINGS, HATCHES OR EMERGENCY EXITS. c) DETAILS OF SIDEWALK RECONSTRUCTION AROUND VENT GRATINGS, HATCHES AND EMERGENCY EXITS ARE TO BE SUBMITTED TO NYCT FOR APPROVAL.
32. TRACTORS, CRANES, EXCAVATORS, ETC. USED IN THE VICINITY OF THE ELEVATED STRUCTURES SHALL BE ISOLATED FROM THE GROUND. SINCE THE ELEVATED STRUCTURE IS USED AS A NEGATIVE RETURN PATH, WITH A CONSEQUENT POTENTIAL BETWEEN IT AND THE GROUND, ANY CONTACT BETWEEN THE STRUCTURE AND GROUNDED EQUIPMENT COULD RESULT IN BURNING OF THE STEEL.
33. TEMPORARY CONSTRUCTION SHEDS, BARRICADES OR PLYWOOD PARTITIONS MUST BE A MINIMUM OF 5'-0" FROM EDGE OF FINISHED PLATFORM.
34. STATION AREAS OR STAIRWAY/CLOSINGS: THE GENERAL REQUIREMENTS FOR STATION AREAS OR STAIRWAY/CLOSINGS ARE AS FOLLOWS: a) ONLY ONE STAIRWAY AT EACH STATION WILL BE PERMITTED TO BE CLOSED AT THE SAME TIME. APPROVALS FOR CLOSING ANY STAIRWAY MUST BE OBTAINED FROM THE DIVISION OF STATION OPERATIONS AT LEAST THREE WEEKS IN ADVANCE. b) MR. ASHOK PATEL, DIRECTOR, OFFICE OF STATION PROGRAMS; TELEPHONE 718/694-1695 OF THE DIVISION OF STATIONS MUST BE NOTIFIED ONE WEEK PRIOR TO THE ACTUAL CLOSING AND REOPENING OF THE ENTRANCE. c) SIGNAGE MUST BE SUPPLIED AND POSTED AT LEAST ONE WEEK IN ADVANCE, ADVISING THE PUBLIC OF THE PROPOSED SUBWAY STAIR CLOSING. HOWEVER, IF IT IS AN ENTIRE ENTRANCE CLOSING, SIGNAGE MUST BE POSTED TWO WEEKS IN ADVANCE. d) THE STREET ENTRANCE STAIRWAY SHOULD NOT BE CLOSED UNLESS MANPOWER AND MATERIALS ARE AVAILABLE TO COMMENCE WORK ON DATES PERMITTED. e) ONCE THE CLOSING IS EFFECTED, CONSTRUCTION SIGNS MUST BE PLACED AT APPROPRIATE LOCATIONS ON THE BARRICADES AT THE STREET AND MEZZANINE LEVELS, STATING THE CONTRACTOR'S NAME, 24 HOUR EMERGENCY TELEPHONE NUMBER, CONTRACT NUMBER, THE DURATION OF THE CLOSING, DIRECTION TO AN ALTERNATE ENTRANCE/EXIT, AND AN APOLOGY FOR THE INCONVENIENCE TO OUR CUSTOMERS. f) EXISTING STATION SIGNAGE MUST BE ADJUSTED TO REFLECT ANY CHANGES IN ACCESS/EGRESS. g) BARRICADES ARE TO BE PAINTED AND KEPT GRAFFITI FREE AT ALL TIMES. THE CONTRACTOR MUST MAINTAIN THE BARRICADED AREA CLEAN OF ALL DEBRIS. h) ALL MATERIALS ARE TO BE PROPERLY STORED AND SECURED AWAY FROM PASSENGER TRAFFIC. i) THE CONTRACTOR MUST REMOVE ALL WASTE MATERIAL AND BARRICADES FROM ALL STATION AREAS WHEN CONSTRUCTION IS COMPLETED. j) INSPECTION OF THE AREA UNDER CONSTRUCTION BY AUTHORIZED STATION DEPARTMENT EMPLOYEES SHALL NOT BE INHIBITED. k) IF STREETLIGHTS ON THE SIDEWALKS ARE AFFECTED, TEMPORARY LIGHTS SHALL BE PROVIDED.
35. IF NEW CONCRETE CONSTRUCTION IS JOINED TO EXISTING CONCRETE, DOWELS AND KEYWAYS ARE TO BE USED IN ACCORDANCE WITH NYCT STANDARDS.
36. IF THE PROJECT INVOLVES CONSTRUCTION OR ALTERATION OF A SUBWAY FACILITY ON PRIVATE PROPERTY, THE PROPERTY OWNERS WILL BE REQUIRED TO ENTER INTO AN AGREEMENT WITH NYCT PERTAINING TO ALL WORK AFFECTING THE TRANSIT FACILITIES AND CLEARLY DEFINING LIMITS AND RESPONSIBILITY FOR MAINTENANCE AND LIABILITY.
37. WHEREVER A NEW SIDEWALK IS BEING PLACED ADJACENT TO NYCT STRUCTURES THE FOLLOWING WILL BE REQUIRED: a) THE TOP OF THE NEW SIDEWALK SHALL BE FLUSH WITH THE SUBWAY VENT GRATINGS, HATCHES AND EMERGENCY EXITS. b) THE SLOPE OF THE NEW SIDEWALK SHALL BE SUCH THAT THE DRAINAGE BE AWAY FROM THESE STRUCTURES. c) A 1/2" PREMOLDED FILLER SHALL BE INSTALLED BETWEEN THE NEW SIDEWALK AND NYCT STRUCTURE. d) WHERE SIDEWALK ELEVATIONS ARE BEING CHANGED DETAILS OF PROPOSED WORK AROUND NYCT STRUCTURES ARE TO BE SUBMITTED FOR APPROVAL.
38. BEFORE ENTERING NYCT PROPERTY, CONTRACTOR OR SUBCONTRACTOR'S PERSONNEL SHALL HAVE ATTENDED NYCT TRACK SAFETY TRAINING AND EXPECT TO FOLLOW NYCT RULES AND REGULATIONS AS PER TRAINING AND ENGINEER INSTRUCTIONS
39. BEFORE THE START OF ANY WORK, THE CONTRACTOR SHALL MAKE AN EXAMINATION, IN THE PRESENCE OF NYCT'S ENGINEER, OF THE INTERIOR AND EXTERIOR OF NYCT SUBWAY OR OTHER STRUCTURE ADJACENT TO THE PROPOSED WORK. THE PERSON OR PERSONS AUTHORIZED BY THE CONTRACTOR TO MAKE THESE EXAMINATIONS SHALL BE APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL TAKE ALL PHOTOGRAPHS AS MAY BE NECESSARY OR ORDERED TO INDICATE THE EXISTING CONDITION OF NYCT STRUCTURE. ONE COPY OF EACH PHOTOGRAPH, EIGHT INCHES BY TEN INCHES IN SIZE, AND THE NEGATIVE IS TO BE SUBMITTED TO MR. JOHN MALVASIO, P.E., ASSISTANT CHIEF ENGINEERING OFFICER, MAINTENANCE-OF-WAY, 130 LIVINGSTON STREET, ROOM 804-40, BROOKLYN, NEW YORK 11201, TELEPHONE 718/694-1358 BEFORE THE START OF CONSTRUCTION.
40. ALL ARCHITECTURAL DETAILS (TOKEN BOOTHS, RAILINGS, DOORS, ETC.) ARE TO CONFORM TO THE LATEST NYCT STANDARDS. THESE STANDARDS ARE AVAILABLE AT NYCT.
41. STANDARD NYCT INSURANCE CLAUSES ARE TO BE MADE PART OF THE PROJECT'S CONTRACT DRAWINGS. PROOF THAT THE NECESSARY INSURANCE IS IN EFFECT WILL BE REQUIRED BEFORE WORK CAN COMMENCE.
42. AT THE CLOSE OF ANY PROJECT INVOLVING CONSTRUCTION OR ALTERATIONS TO TRANSIT FACILITIES, ONE SET OF VELLUMS OR MYLARS, FIVE SETS OF 35MM MICROFILM, AND ELECTRONIC COPIES COMPLYING TO MICROSTATION.DGN FORMAT OF APPROVED AS-BUILTS MUST BE PROVIDED TO NYCT FOR ITS RECORDS. FOR DETAILS OF SPECIFIC REQUIREMENTS CONTACT NYCT OUTSIDE PROJECTS.
43. AT LEAST SEVEN WORKING DAYS PRIOR TO THE START OF CONSTRUCTION OPERATIONS, NOTIFICATION MUST BE GIVEN TO MR. JOHN MALVASIO, P.E., ASSISTANT CHIEF ENGINEERING OFFICER, MAINTENANCE-OF-WAY, AT 718/694-1358. THE CONTRACTOR TO PROVIDE TEMPORARY QUARTERS NEAR THE JOB SITE FOR NYCT INSPECTORS CONTAINING A DESK AND TELEPHONE.

NYCT "NOT FOR BENEFIT" INSURANCE REQUIREMENTS:

SECTION A: INSURANCE REQUIREMENTS

THE PERMITEE AT ITS SOLE COST AND EXPENSE SHALL CARRY AND MAINTAIN POLICIES OF INSURANCE AT ALL TIMES DURING THE PERIOD OF PERFORMANCE UNDER THIS AGREEMENT AS HEREIN SET FORTH BELOW:

- 1. WORKERS' COMPENSATION: INCLUDING EMPLOYER'S LIABILITY INSURANCE WITH LIMITS OF LIABILITY NOT LESS THAN \$2,000,000 WHICH MAY BE MET BY A COMBINATION OF PRIMARY AND EXCESS INSURANCE MEETING THE STATUTORY LIMITS OF NEW YORK STATE.
2. COMMERCIAL GENERAL LIABILITY: (ISO 2001 FORM OR EQUIVALENT) APPROVED BY PERMITTOR IN THE PERMITEE'S NAME WITH LIMITS OF LIABILITY IN THE AMOUNT OF NOT LESS THAN \$3,000,000 FOR EACH OCCURRENCE ON A COMBINED SINGLE LIMIT BASIS FOR INJURIES TO PERSONS (INCLUDING DEATH) AND DAMAGE TO PROPERTY, \$3,000,000 GENERAL AGGREGATE AND \$3,000,000 IN THE AGGREGATE WITH RESPECT TO PRODUCTS/COMPLETED OPERATIONS. THE LIMITS MAY BE PROVIDED IN THE FORM OF A PRIMARY POLICY OR COMBINATION OF PRIMARY AND UMBRELLA/EXCESS POLICY. WHEN THE MINIMUM CONTRACT AMOUNTS CAN ONLY BE MET WHEN APPLYING THE UMBRELLA/EXCESS POLICY, THE UMBRELLA/EXCESS POLICY MUST FOLLOW FORM OF THE UNDERLYING POLICY AND BE EXTENDED TO "DROP DOWN" TO BECOME PRIMARY IN THE EVENT PRIMARY LIMITS ARE REDUCED OR AGGREGATE LIMITS ARE EXHAUSTED. SUCH INSURANCE SHALL BE PRIMARY AND NON-CONTRIBUTORY TO ANY OTHER VALID AND COLLECTIBLE INSURANCE AND MUST BE EXHAUSTED BEFORE IMPLICATING ANY PERMITTOR/MTA POLICY AVAILABLE.

SUCH POLICY SHOULD BE WRITTEN ON AN OCCURRENCE FORM, AND SHALL INCLUDE THE FOLLOWING COVERAGES:

- ADDITIONAL INSURED ENDORSEMENT (I.S.O. FORM CG 20 26 07/04) VERSION OR EQUIVALENT APPROVED BY THE PERMITTOR, SHALL NAME THE INDEMNITEES AS REFERENCED UNDER SECTION B OF THIS AGREEMENT AS ADDITIONAL INSUREDS.
• CONTRACTUAL LIABILITY ASSUMED BY THE PERMITEE UNDER THIS AGREEMENT;
• PERSONAL AND ADVERTISING INJURY;
• PRODUCTS-COMPLETED OPERATIONS;
• INDEPENDENT CONTRACTORS;
• "XCU" (EXPLOSION, COLLAPSE, AND UNDERGROUND HAZARDS) WHERE NECESSARY;
• CONTRACTUAL LIABILITY EXCLUSION, APPLICABLE TO CONSTRUCTION OR DEMOLITION OPERATIONS TO BE PERFORMED WITHIN 50 FEET OF RAILROAD TRACKS, MUST BE REMOVED, WHERE NECESSARY;

- 3. BUSINESS AUTOMOBILE LIABILITY: (ISO FORM CA 00 01 10 01 OR EQUIVALENT) APPROVED BY THE PERMITTOR IS REQUIRED IF PERMITEE'S VEHICLE ENTERS PERMITTOR'S PROPERTY. THE INSURANCE MUST BE IN THE NAME OF THE PERMITEE OR ITS CONTRACTOR ENTERING THE PERMITTOR PROPERTY WITH LIMITS OF LIABILITY IN THE AMOUNT OF NOT LESS THAN \$2,000,000 EACH ACCIDENT FOR CLAIMS FOR BODILY INJURIES (INCLUDING DEATH) TO PERSONS AND FOR DAMAGE TO PROPERTY ARISING OUT OF THE OWNERSHIP, MAINTENANCE OR USE OF ANY OWNED, HIRED OR NON-OWNED MOTOR VEHICLE.

- 4. RAILROAD PROTECTIVE LIABILITY: (ISO-RIMA OR EQUIVALENT FORM) APPROVED BY PERMITTOR COVERING THE WORK TO BE PERFORMED AT THE DESIGNATED JOB SITE AND AFFORDING PROTECTION FOR DAMAGES ARISING OUT OF BODILY INJURY OR DEATH, PHYSICAL DAMAGE TO OR DESTRUCTION OF PROPERTY, INCLUDING DAMAGE TO THE INSURED'S OWN PROPERTY AND CONFORMING TO THE FOLLOWING:

- THE POLICY SHALL BE ISSUED TO THE "NAMED INSUREDS" LISTED UNDER SECTION B.
• THE LIMIT OF LIABILITY SHALL BE NOT LESS THAN \$2,000,000 PER OCCURRENCE, SUBJECT TO A \$6,000,000 ANNUAL AGGREGATE;
• POLICY MUST BE ENDORSED TO PROVIDE COVERAGE FOR CLAIMS ARISING FROM INJURY TO EMPLOYEES COVERED BY FEDERAL EMPLOYER'S LIABILITY ACT (FELA).
• INDICATE THE NAME AND ADDRESS OF THE DESIGNATED CONTRACTOR, PROJECT LOCATION AND DESCRIPTION OF WORK, AND PERMIT NUMBER IF APPLICABLE.
• EVIDENCE OF RAILROAD PROTECTIVE LIABILITY INSURANCE MUST BE PROVIDED IN THE FORM OF A POLICY, A DETAILED INSURANCE BINDER (ACORD OR MANUSCRIPT FORM) WILL BE ACCEPTED PENDING ISSUANCE OF THE POLICY, WHICH MUST BE PROVIDED WITHIN 30 DAYS FROM THE EFFECTIVE DATE.

- 5. ENVIRONMENTAL INSURANCE: IN THE EVENT ENVIRONMENTAL OR POLLUTION EXPOSURES EXIST, THE PERMITEE SHALL REQUIRE THE ENVIRONMENTAL CONTRACTOR OR SUB-CONTRACTOR TO PROVIDE THE APPLICABLE INSURANCE COVERING SUCH EXPOSURE. THE LIMITS AND TYPES OF INSURANCE PROVIDED MUST BE SATISFACTORY TO THE PERMITTOR AND APPROVED PRIOR TO THE START OF THE WORK.

SECTION B: INDEMNITEES (ADDITIONAL INSUREDS / NAMED INSUREDS)

NEW YORK CITY TRANSIT AUTHORITY ("NYCT"), THE MANHATTAN AND BRONX SURFACE TRANSIT OPERATING AUTHORITY ("MABSTOA"), THE STATEN ISLAND RAPID TRANSIT OPERATING AUTHORITY ("SIRTOA"), THE METROPOLITAN TRANSPORTATION AUTHORITY ("MTA") INCLUDING ITS SUBSIDIARIES AND AFFILIATES, MTA CAPITAL CONSTRUCTION ("MTACC"), MTA BUS COMPANY ("MTA BUS"), AND THE CITY OF NEW YORK ("CITY" AS OWNER) AND THE RESPECTIVE AFFILIATES AND SUBSIDIARIES EXISTING CURRENTLY OR IN THE FUTURE OF AND SUCCESSORS TO EACH INDEMNIFIED PARTIES LISTED HEREIN.

SECTION C: GENERAL INSURANCE REQUIREMENTS

- 1. INSURANCE COMPANIES: ALL OF THE INSURANCE REQUIRED BY THIS ARTICLE SHALL BE WITH COMPANIES LICENSED OR AUTHORIZED TO DO BUSINESS IN THE STATE OF NEW YORK WITH AN A.M. BEST COMPANY RATING OF NOT LESS THAN A-/VII OR BETTER AND REASONABLY APPROVED BY THE PERMITTOR/MTA.
2. FORMS: ALL FORMS SHALL COMPLY WITH THE INSURANCE SERVICES OFFICE, INC. ("ISO") OR ITS EQUIVALENT APPROVED BY THE INSURANCE DEPARTMENT OF THE STATE OF NEW YORK.
3. POLICY DEDUCTIBLE / SELF INSURED RETENTION: INSURANCE MAY CONTAIN A DEDUCTIBLE AND OR SELF-INSURED RETENTION AND SHALL NOT EXCEED \$100,000. THE PERMITEE SHALL BE RESPONSIBLE FOR ALL CLAIM EXPENSES AND LOSS PAYMENTS WITHIN THE DEDUCTIBLE OR SELF-INSURED RETENTION.
4. POLICY TERMS: THESE POLICIES MUST: (I) BE WRITTEN IN ACCORDANCE WITH THE REQUIREMENTS OF THE PARAGRAPHS ABOVE, AS APPLICABLE; (II) BE ENDORSED IN FORM ACCEPTABLE TO INCLUDE A PROVISION THAT SHOULD THE POLICY BE CANCELED, MATERIALLY CHANGED, OR NOT RENEWED, NOTICE SHALL BE DELIVERED IN ACCORDANCE WITH THE INSURANCE POLICY PROVISIONS TO THE PERMITTOR, AND (III) STATE BE ENDORSED TO PROVIDE THAT THE COVERAGE AFFORDED UNDER THE PERMITEE'S POLICIES SHALL APPLY ON A PRIMARY AND NOT ON AN EXCESS OR CONTRIBUTING BASIS WITH ANY POLICIES WHICH MAY BE AVAILABLE TO THE PERMITTOR/MTA, AND ALSO THAT THE PERMITEE'S POLICIES, PRIMARY AND EXCESS, MUST BE EXHAUSTED BEFORE IMPLICATING ANY PERMITTOR/MTA POLICY AVAILABLE. (IV) IN ADDITION, PERMITEE'S POLICIES SHALL STATE OR BE ENDORSED TO PROVIDE THAT, IF A SUBCONTRACTOR'S POLICY CONTAINS ANY PROVISION THAT MAY ADVERSELY AFFECT WHETHER PERMITEE'S POLICIES ARE PRIMARY AND MUST BE EXHAUSTED BEFORE IMPLICATING ANY PERMITTOR/MTA POLICY AVAILABLE, PERMITEE'S AND SUBCONTRACTOR'S POLICIES SHALL NEVERTHELESS BE PRIMARY AND MUST BE EXHAUSTED BEFORE IMPLICATING ANY PERMITTOR/MTA POLICY AVAILABLE. AT LEAST TWO (2) WEEKS PRIOR TO THE EXPIRATION OF THE POLICIES, THE PERMITEE SHALL ENDEAVOR TO PROVIDE EVIDENCE OF RENEWAL OR REPLACEMENT POLICIES OF INSURANCE, WITH TERMS AND LIMITS NO LESS FAVORABLE THAN THE EXPIRING POLICIES.

SECTION D: SUBMISSION OF INSURANCE

CERTIFICATES OF INSURANCE MAY BE SUPPLIED AS EVIDENCE OF POLICIES EXCEPT FOR RAILROAD PROTECTIVE LIABILITY. HOWEVER, IF REQUESTED BY THE PERMITTOR, THE PERMITEE SHALL DELIVER TO THE PERMITTOR WITHIN FORTY-FIVE (45) DAYS A COPY OF SUCH POLICIES, CERTIFIED BY THE INSURANCE CARRIER AS BEING TRUE AND COMPLETE. IF A CERTIFICATE OF INSURANCE IS SUBMITTED, IT MUST: (1) BE PROVIDED ON THE PERMITTOR CERTIFICATE OF INSURANCE; (2) BE SIGNED BY AN AUTHORIZED REPRESENTATIVE OF THE INSURANCE CARRIER OR PRODUCER AND NOTARIZED; (3) DISCLOSE ANY DEDUCTIBLE, SELF-INSURED RETENTION, SUB-LIMIT, AGGREGATE LIMIT OR ANY EXCLUSIONS TO THE POLICY THAT MATERIALLY CHANGE THE COVERAGE; (4) INDICATE THE ADDITIONAL INSUREDS AS REQUIRED HEREIN UNDER SECTION B; THE PERMITEE MUST PROVIDE A COPY OF THE ADDITIONAL INSURED ENDORSEMENT (ISO) FORM CG 20 26 07/04 OR ITS EQUIVALENT AND MUST REFERENCE THE POLICY INFORMATION; (5) INDICATE PROJECT NAME AND LOCATION ON THE CERTIFICATE; AND (6) EXPRESSLY REFERENCE THE INCLUSION OF ALL REQUIRED ENDORSEMENTS.

THE PERMITEE OR ITS CONTRACTOR/SUBCONTRACTOR PERFORMING THE WORK SHALL FURNISH EVIDENCE OF ALL POLICIES BEFORE ANY WORK IS STARTED TO THE APPROPRIATE DEPARTMENT:

NEW AGREEMENTS: MTA/NYCT MOW ENGINEERING ATTENTION: MR. JOHN MALVASIO 130 LIVINGSTON STREET BROOKLYN, NY 11201 RENEWAL INSURANCE: MTA RISK INSURANCE MANAGEMENT ATTENTION: RUTH APOSTOL 2 BROADWAY - 21ST FLOOR NEW YORK, NY 10004

SECTION E: NO LIMIT OF LIABILITY THE MINIMUM AMOUNTS OF INSURANCE REQUIRED IN THE DETAIL DESCRIPTION OF POLICIES ABOVE SHALL NOT BE CONSTRUED TO LIMIT THE EXTENT OF THE PERMITEE'S LIABILITY UNDER THIS AGREEMENT.

SECTION F: RIGHT TO REQUEST ADDITIONAL INSURANCE PERMITEE FURTHER AGREES TO PROVIDE, AT PERMITEE'S SOLE COST AND EXPENSE, SUCH INCREASED OR EXPANDED INSURANCE COVERAGE AS PERMITTOR MAY FROM TIME TO TIME AS DEEM APPROPRIATE.

SECTION G: EVENT OF DEFAULT IF, AT ANY TIME DURING THE PERIOD OF THIS AGREEMENT, INSURANCE AS REQUIRED IS NOT IN EFFECT, OR PROOF THEREOF IS NOT PROVIDED TO THE PERMITTOR, THE PERMITTOR SHALL HAVE THE OPTIONS TO: (I) DIRECT THE PERMITEE TO SUSPEND WORK OR OPERATION WITH NO ADDITIONAL COST OR EXTENSION OF TIME DUE ON ACCOUNT THEREOF; OR (II) TREAT SUCH FAILURE AS AN EVENT OF DEFAULT.

SECTION H: NOTICE OF CLAIM THE PERMITEE SHALL IMMEDIATELY FILE WITH NYCT/MTA'S TORT DIVISION (WITH A COPY TO THE PROJECT MANAGER), 130 LIVINGSTON STREET, 11TH FLOOR, BROOKLYN, NEW YORK 11201, A NOTICE OF ANY OCCURRENCE LIKELY TO RESULT IN A CLAIM AGAINST NYCT/MTA AND SHALL ALSO FILE WITH THE TORTS DIVISION DETAILED SWORN PROOF OF INTEREST AND LOSS WITH THE CLAIM. THIS PARAGRAPH SHALL SURVIVE THE EXPIRATION OR EARLIER TERMINATION OF THE CONTRACT.

NOTES

Table with 3 columns: Number, Date, Revision. Contains revision history for the drawing.

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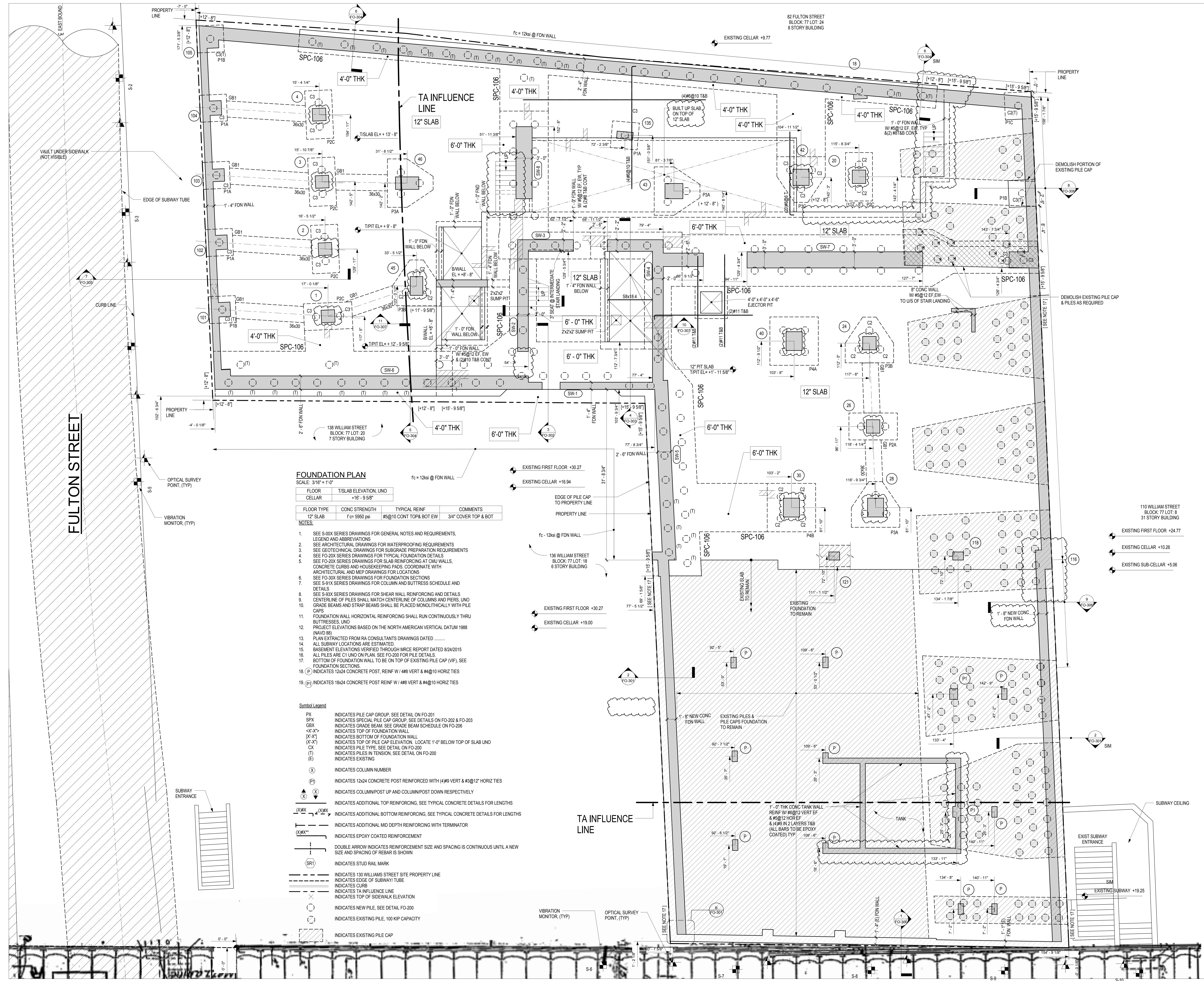
DOCS: DOCS STAMPS & SIGNATURES. Includes a professional seal for the project engineer and a stamp for NYC Development Hub.

DWG TITLE: TA NOTES AND INSURANCE CLAUSES

NO: NB#121192903

Table with 4 columns: SEAL & SIGNATURE, DATE, PROJECT #, SCALE. Includes a professional seal for the project engineer and a stamp for NYC Development Hub.

DWG NO: FO-004.00



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

FLOOR	TISLAB ELEVATION UNO
CELLAR	+16'-9.58"

FLOOR TYPE	CONC STRENGTH	TYPICAL REINF	COMMENTS
12' SLAB	f _c = 5950 psi	#5@10 CONT TOP & BOT EW	3/4" COVER TOP & BOT

NOTES:

- SEE S-00X SERIES DRAWINGS FOR GENERAL NOTES AND REQUIREMENTS, LEGEND AND ABBREVIATIONS
- SEE ARCHITECTURAL DRAWINGS FOR WATERPROOFING REQUIREMENTS
- SEE GEOTECHNICAL DRAWINGS FOR SUBGRADE PREPARATION REQUIREMENTS
- SEE FO-20X SERIES DRAWINGS FOR TYPICAL FOUNDATION DETAILS
- SEE FO-20X SERIES DRAWINGS FOR SLAB REINFORCING AT CMU WALLS, CONCRETE CURBS AND HOUSEKEEPING PAIS. COORDINATE WITH ARCHITECTURAL AND MEP DRAWINGS FOR LOCATIONS
- SEE FO-30X SERIES DRAWINGS FOR FOUNDATION SECTIONS
- SEE S-91X SERIES DRAWINGS FOR COLUMN AND BUTTRISS SCHEDULE AND DETAILS
- SEE S-93X SERIES DRAWINGS FOR SHEAR WALL REINFORCING AND DETAILS
- CENTERLINE OF PILES SHALL MATCH CENTERLINE OF COLUMNS AND PIERS, UNO GRADE BEAMS AND STRAP BEAMS SHALL BE PLACED MONOLITHICALLY WITH PILE CAPS
- FOUNDATION WALL HORIZONTAL REINFORCING SHALL RUN CONTINUOUSLY THRU BUTTRISSES, UNO
- PROJECT ELEVATIONS BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)
- PLAN EXTRACTED FROM RA CONSULTANTS DRAWINGS DATED _____
- ALL SUBWAY LOCATIONS ARE ESTIMATED
- BASEMENT ELEVATIONS VERIFIED THROUGH MRCE REPORT DATED 8/24/2015
- ALL PILES ARE C1 UNO ON PLAN. SEE FO-200 FOR PILE DETAILS
- BOTTOM OF FOUNDATION WALL TO BE ON TOP OF EXISTING PILE CAP (VIF). SEE FOUNDATION SECTIONS.
- (P) INDICATES 12x24 CONCRETE POST, REINF W/ 4#8 VERT & #4@10 HORIZ TIES
- (P) INDICATES 18x24 CONCRETE POST REINF W/ 4#8 VERT & #4@10 HORIZ TIES

- Symbol Legend**
- PK INDICATES PILE CAP GROUP. SEE DETAIL ON FO-201
 - SPX INDICATES SPECIAL PILE CAP GROUP. SEE DETAILS ON FO-202 & FO-203
 - GBX INDICATES GRADE BEAM. SEE GRADE BEAM SCHEDULE ON FO-206
 - <X-X> INDICATES TOP OF FOUNDATION WALL
 - (X-X) INDICATES BOTTOM OF FOUNDATION WALL
 - (X-X) INDICATES TOP OF PILE CAP ELEVATION. LOCATE 1'-0" BELOW TOP OF SLAB UNO
 - CX INDICATES PILE TYPE. SEE DETAIL ON FO-200
 - (T) INDICATES PILES IN TENSION. SEE DETAIL ON FO-200
 - (E) INDICATES EXISTING
 - (X) INDICATES COLUMN NUMBER
 - P1 INDICATES 12x24 CONCRETE POST REINFORCED WITH (4)#9 VERT & #3@12' HORIZ TIES
 - (X) INDICATES COLUMN/POST UP AND COLUMN/POST DOWN RESPECTIVELY
 - (X) INDICATES ADDITIONAL TOP REINFORCING. SEE TYPICAL CONCRETE DETAILS FOR LENGTHS
 - (X) INDICATES ADDITIONAL BOTTOM REINFORCING. SEE TYPICAL CONCRETE DETAILS FOR LENGTHS
 - (X) INDICATES ADDITIONAL MID DEPTH REINFORCING WITH TERMINATOR
 - (X) INDICATES EPOXY COATED REINFORCEMENT
 - DOUBLE ARROW INDICATES REINFORCEMENT SIZE AND SPACING IS CONTINUOUS UNTIL A NEW SIZE AND SPACING OF REBAR IS SHOWN
 - (SR) INDICATES STUD RAIL MARK
 - INDICATES 130 WILLIAMS STREET SITE PROPERTY LINE
 - - - INDICATES EDGE OF SUBWAY/TUBE
 - - - INDICATES CURB
 - - - INDICATES TA INFLUENCE LINE
 - - - INDICATES TOP OF SIDEWALK ELEVATION
 - INDICATES NEW PILE. SEE DETAIL FO-200
 - INDICATES EXISTING PILE, 100 KIP CAPACITY
 - INDICATES EXISTING PILE CAP

NOTES

9 01/06/2017 HUB SUBMISSION
 8 11/11/2016 CORE AND SHELL BID SET
 7 10/01/2016 MTA APPROVAL
 6 10/01/2016 CORE AND SHELL BID SET
 5 09/09/2016 MTA APPROVAL
 4 07/28/2016 FOUNDATION BID SET
 3 07/06/2016 ISSUED TO DOB
 2 06/24/2016 MTA APPROVAL
 1 06/20/2016 100% DOB SUBMISSION

Number: _____ Date: _____ Revision: _____

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 Lighting Consultant
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 New York, NY 10001
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DOB BCAR: _____

DOB STAMPS & SIGNATURES: _____

DATE: _____
 PROJECT #: 16118.00
 SCALE: As indicated
 DWS NO: FO-100.00

CAISSON INSTALLATION NOTES:

- ALL CAISSONS SHALL BE INSTALLED AT LOCATIONS AS SHOWN ON CONTRACT DRAWINGS.
- UTILITY IDENTIFICATION AND EXPLORATION AS NECESSARY BY OTHERS.
- THE DIAMETER OF THE CUTTING SHOE SHALL NOT EXTEND MORE THAN A 1/4-INCH BEYOND THE DIAMETER OF THE CASING.
- "GROUT" SHALL BE A MIXTURE OF CEMENT AND WATER OR SAND, CEMENT AND WATER TO ATTAIN SPECIFIED STRENGTH.
- GROUT SAMPLES SHALL BE TAKEN BY A LICENSED CONCRETE TESTING LAB IN ACCORDANCE WITH CODE REQUIREMENTS.
- ALL DRILLED CAISSONS SHALL BE VIDEO INSPECTED WITH A DOWN-THE-HOLE CAMERA TO VERIFY ROCK INTEGRITY IN LIEU OF LOAD TESTS.
- CAISSONS SHALL BE INSPECTED BY RA CONSULTANTS LLC.

- ROCK SOCKETS FOR CAISSONS SHOULD BE VIDEO INSPECTED AND APPROVED BY THE ENGINEER OF RECORD PRIOR TO PLACING THREADED BAR OR GROUT.
- INTRODUCE REINFORCING THREADED BAR WITH SPACERS TO THE BOTTOM OF THE CAISSON.
- TREMIE GROUT THE CAISSON FROM THE BOTTOM UP TO DISPLACE THE DRILLING FLUID AND SOIL CUTTINGS. CONTINUE GROUTING UNTIL CLEAR GROUT FLOWS OUT THE TOP OF THE CAISSON.
- WAIT UNTIL GROUT HAS CURED FOR 24 HOURS OR MORE BEFORE DRILLING WITHIN 5 CAISSON DIAMETERS. UNLESS APPROVED BY RA CONSULTANTS LLC ENGINEER.

MINI-CAISSON DESIGN CRITERIA

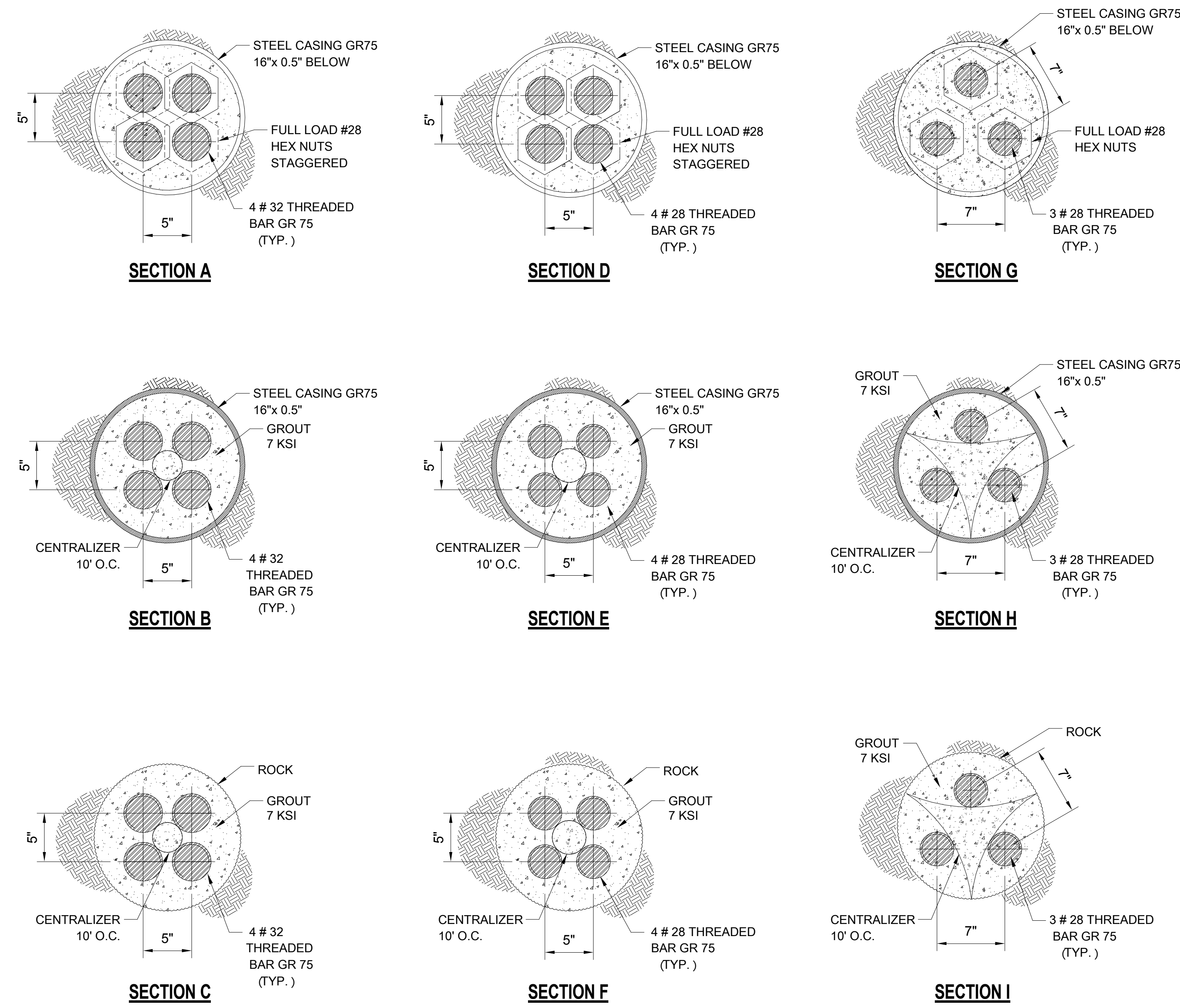
- CAISSONS DESIGNED PER 2014 NYC BUILDING CODE.
- THE DESIGN IS BASED IN PART ON GEOTECHNICAL ENGINEERING REPORT PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES AND DATED.

REQUIRED SPECIAL INSPECTIONS

- CONCRETE - CAST-IN-PLACE (BC 1704.4).
- CONCRETE - SAMPLING AND TESTING (BC 1905.6 BC 1913.10).
- CONCRETE - DESIGN MIX (BC 1905.5 BC 1913.5).
- DEEP FOUNDATION ELEMENTS (BC 1704.8).

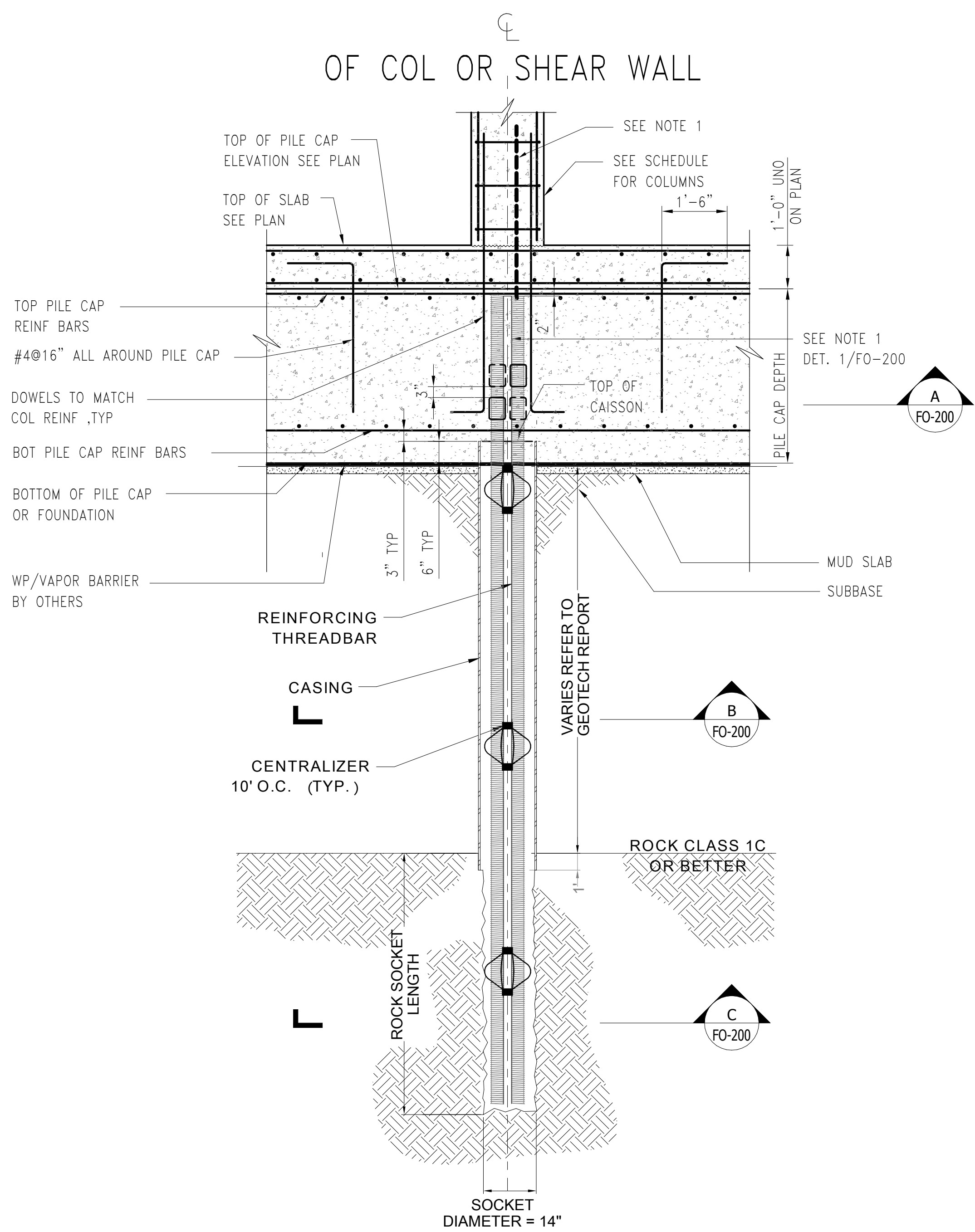
CAISSON INSTALLATION PROCEDURE:

- MOBILIZE TO SITE.
- SET UP RIG ON PROPER LOCATION AND PLUMB MAST.
- DRILL CAISSONS USING INTERNAL FLUSH DUPLEX DRILLING METHODS.
- MAINTAIN BOTTOM OF BIT FLUSH WITH BOTTOM OF CAISSON WITHIN 3-INCHES.
- CONTRACTOR SHALL ADJUST DRILLING PROCEDURE AS REQUIRED TO PREVENT LOSS OF GROUND, SETTLEMENT, AND/OR LATERAL MOVEMENT OF BUILDINGS, UTILITIES, AND OTHER STRUCTURES.
- EMBED CASING INTO COMPETENT ROCK AS INDICATED ON DRAWINGS.
- DRILL ROCK SOCKET AS INDICATED ON DRAWINGS.
- FLUSH HOLE CLEAN OF SPOILS. MAINTAIN POSITIVE HEAD AT ALL TIMES.
- PERFORM THE FOLLOWING UNDER OBSERVATION OF RA CONSULTANTS LLC.

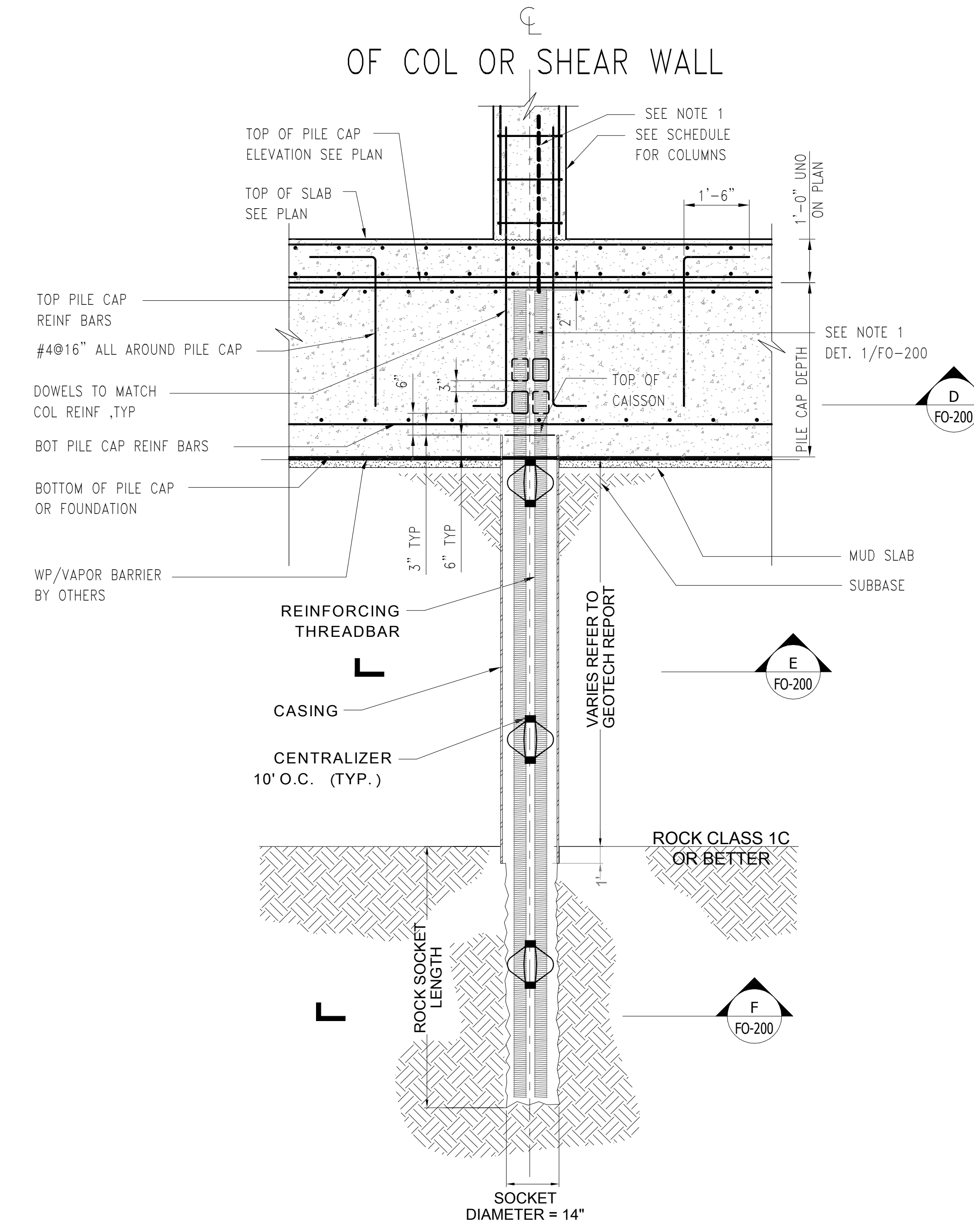


NOTES:
 1. FOR PILES/CAISSONS MARKED WITH (T) ON PLAN LOCATED BELOW WALL, EXTEND (1) #28 7'-0" ABOVE TOP OF PILE/CAISSON. ALL OTHER THREADED BARS SHALL EXTEND UP TO 2' BELOW TOP OF PILE CAP.

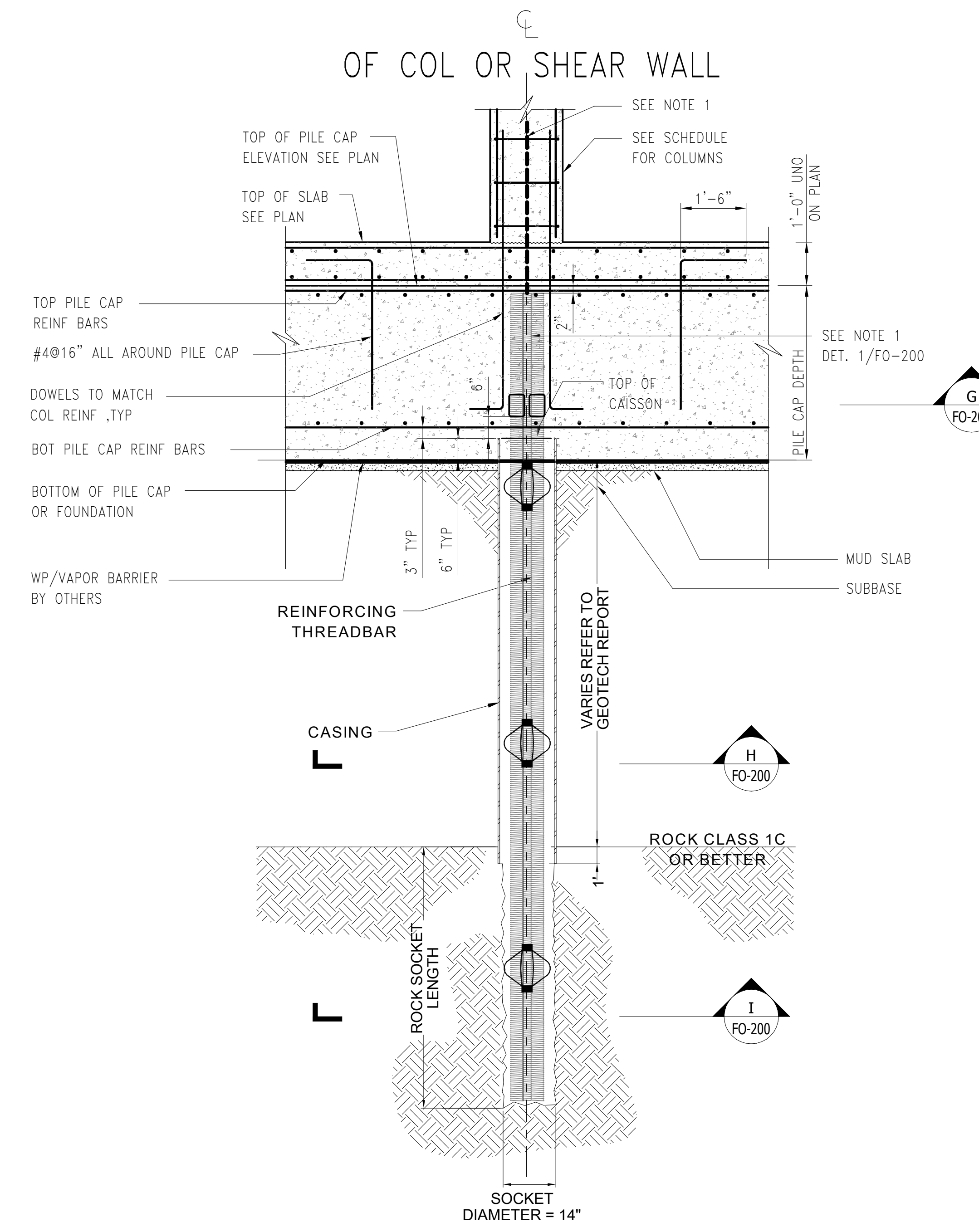
TYPE	COMPRESSION (KIPS)	TENSION (KIPS)	LATERAL CAPACITY (KIPS)	
			WITHIN NYCT INFLUENCE	AWAY FROM NYCT INFLUENCE
C1	1700	600	0	40
C2	1400	600	0	40
C3	1200	600	0	40



CAISSON C1 DETAIL



CAISSON C2 DETAIL



CAISSON C3 DETAIL

NOTES

Number	Date	Revision
9	01/06/2017	HUB SUBMISSION
8	11/17/2016	CORE AND SHELL BUY SET
7	10/19/2016	DATA APPROVAL
6	10/01/2016	CORE AND SHELL BID SET
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4	07/28/2016	FOUNDATION BID SET
3	07/06/2016	ISSUED TO DOB
2	06/24/2016	DATA APPROVAL
1	06/23/2016	100% DD SUBMISSION

Number: _____ Date: _____ Revision: _____

THE LIGHTSTONE GROUP
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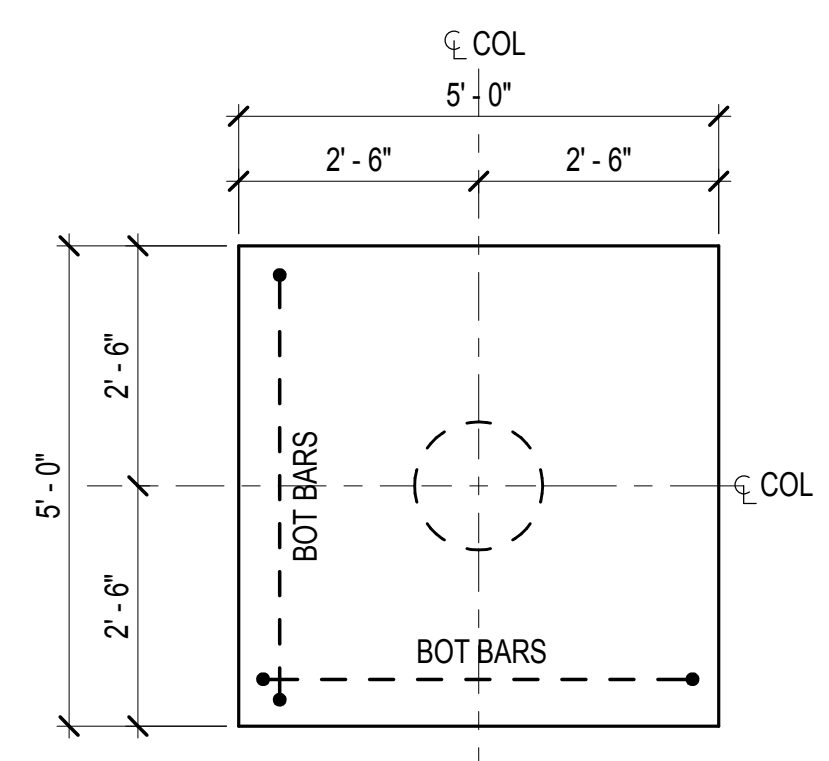
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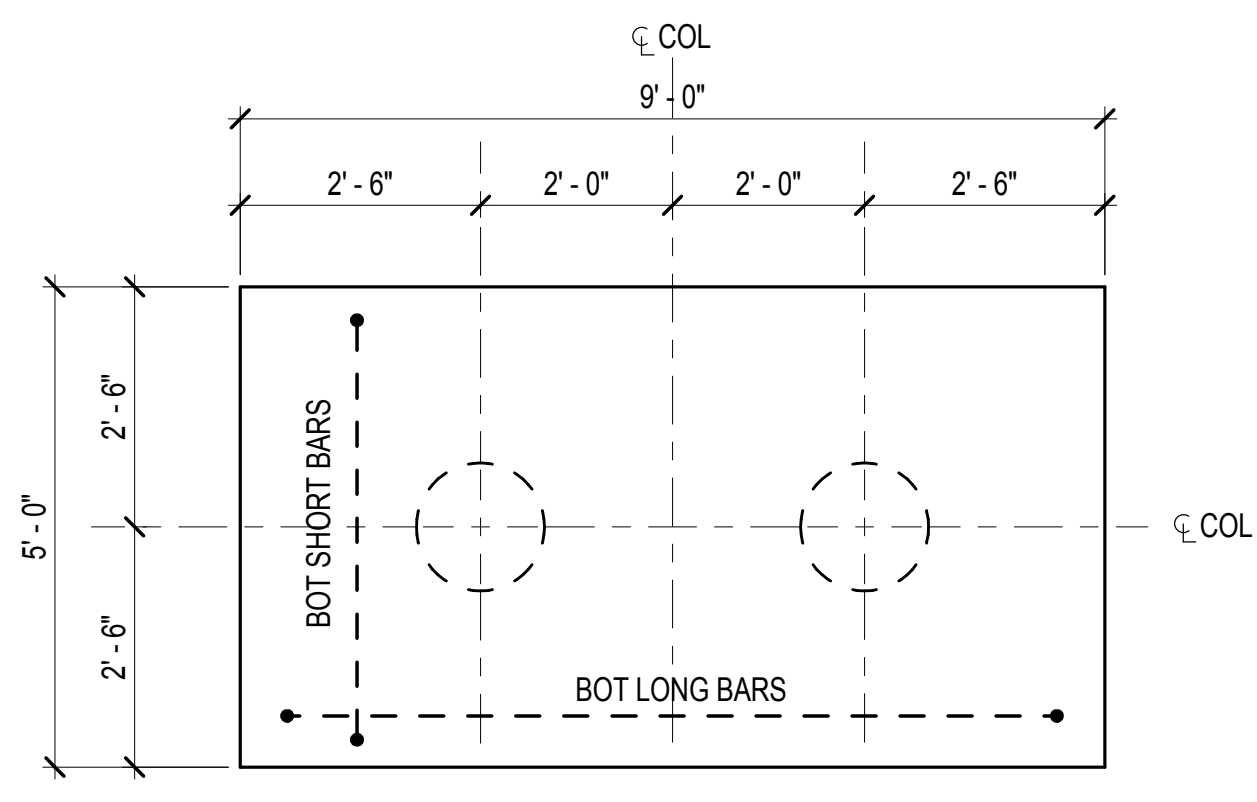
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DOB STAMPS & SIGNATURES:

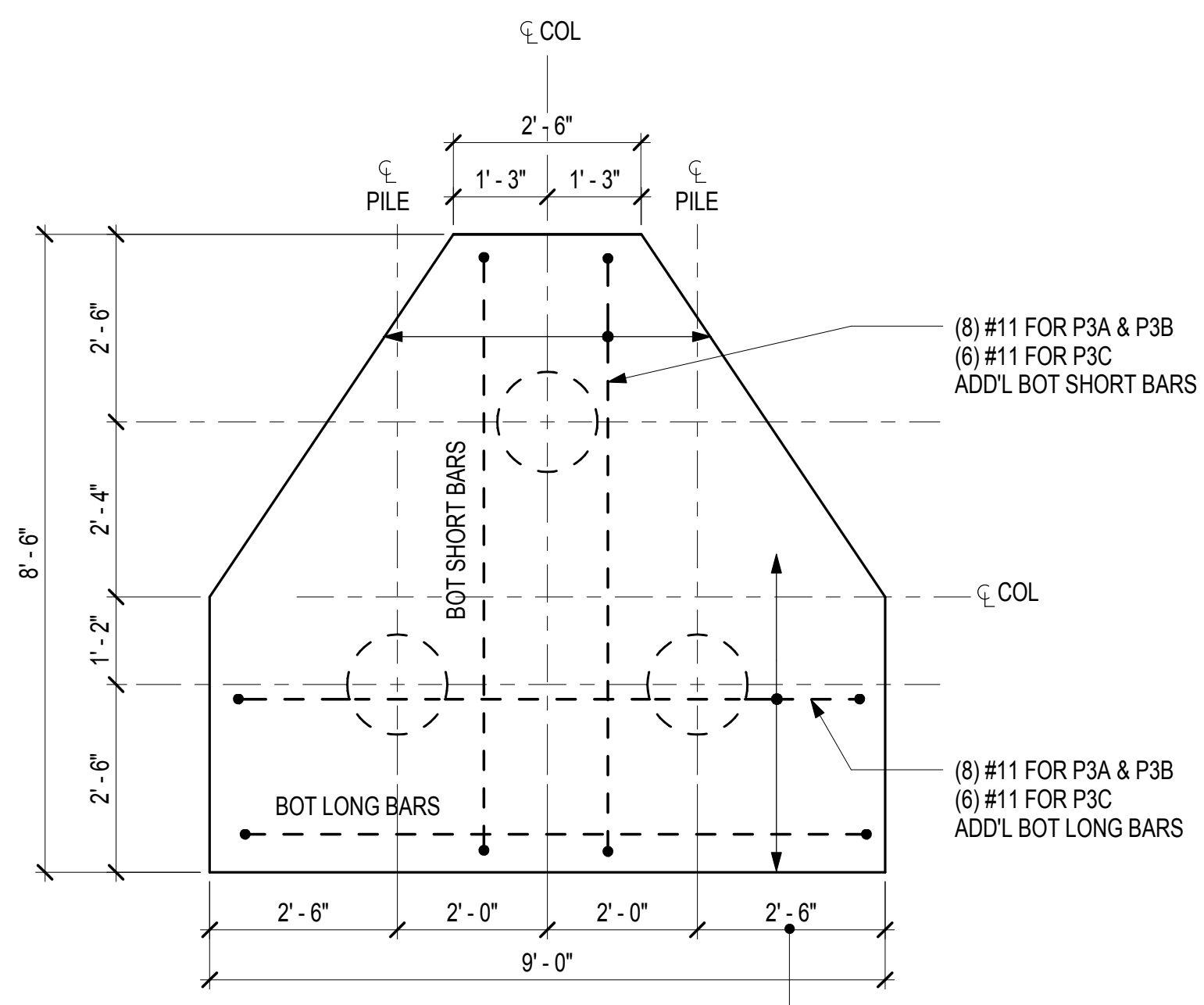
DATE: _____
 PROJECT #: 16118.00
 SCALE: As indicated
 DWS NO. FO-200.00
 OF 100



MARK	PILE CAPACITY	DEPTH	REINFORCING BARS	
			EACH WAY	
P1A	1200 KIPS	36"	(5)#9	<input type="checkbox"/>
P1B	1200 KIPS	48"	(5)#10	<input type="checkbox"/>
P1C	1400 KIPS	48"	(5)#10	<input type="checkbox"/>

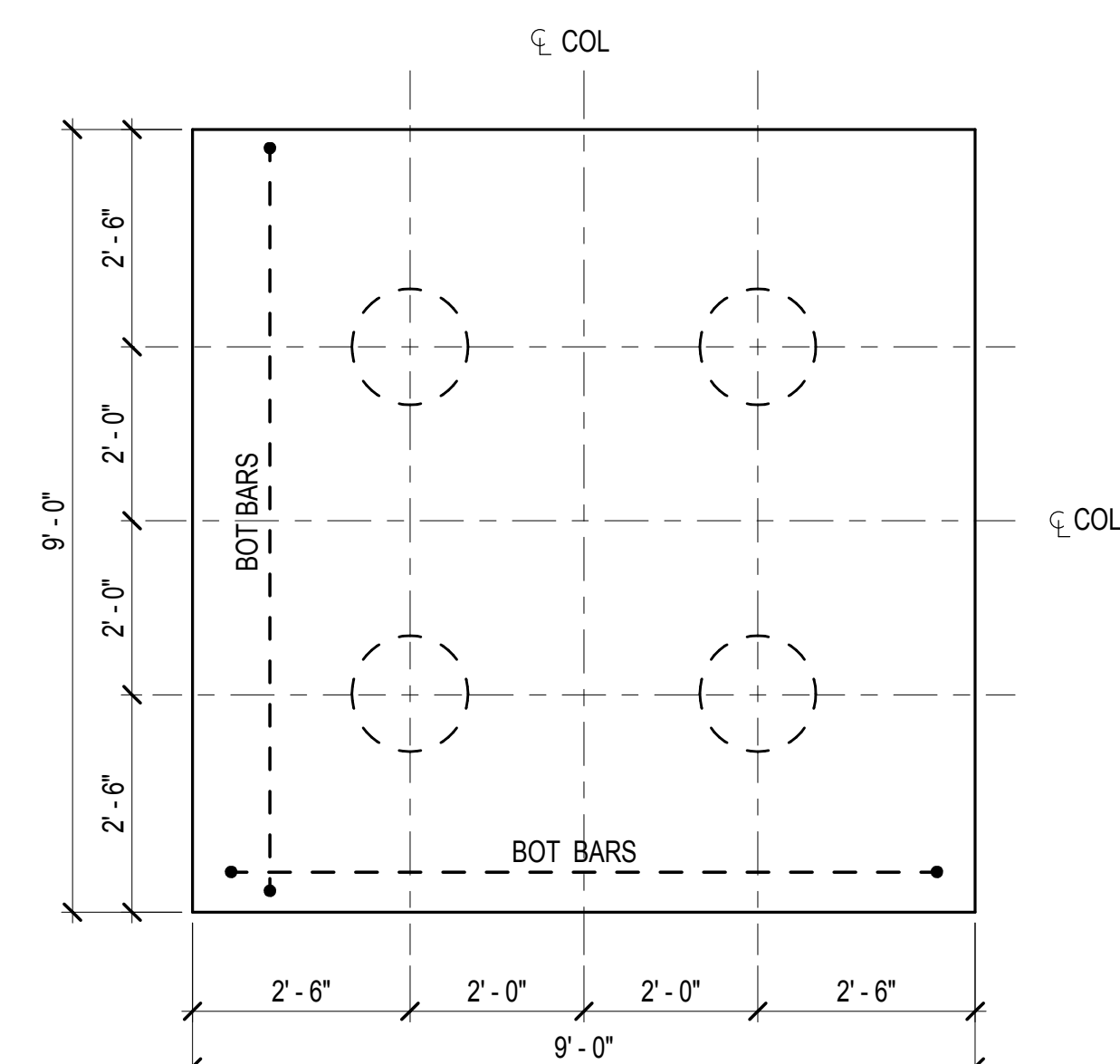


MARK	PILE CAPACITY	DEPTH	REINFORCING BARS	
			LONG	SHORT
P2A	1700 KIPS	72"	(11)#11	(9)#11
P2B	1400 KIPS	60"	(10)#11	(8)#11
P2C	1200 KIPS	54"	(10)#11	(7)#11



MARK	PILE CAPACITY	DEPTH	REINFORCING BARS	
			LONG	SHORT
P3A	1700 KIPS	66"	(14)#11	(17)#11
P3B	1400 KIPS	60"	(13)#11	(16)#11
P3C	1200 KIPS	54"	(11)#11	(14)#11

2'-7" @ COL 45
TO ALIGN W INNER
FACE OF PIT WALL



MARK	PILE CAPACITY	DEPTH	REINFORCING BARS	
			EACH WAY	
P4A	1700 KIPS	78"	(22)#11	<input type="checkbox"/>
P4B	1400 KIPS	72"	(20)#11	<input type="checkbox"/>

- NOTES:
 1. ALL ADDITIONAL BARS SHALL BE PLACED @ 2ND LAYER WITH SAME SPACING WITH 1ST LAYER
 2. ALL ADDITIONAL BARS SHALL BE CENTERED ON PILE

NOTES

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9	01/06/2017	HUB SUBMISSION
8	11/11/2016	CORE AND SHELL BUY SET
7	10/19/2016	MTA APPROVAL
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2	06/24/2016	MTA APPROVAL
1	06/03/2016	100% DD SUBMISSION

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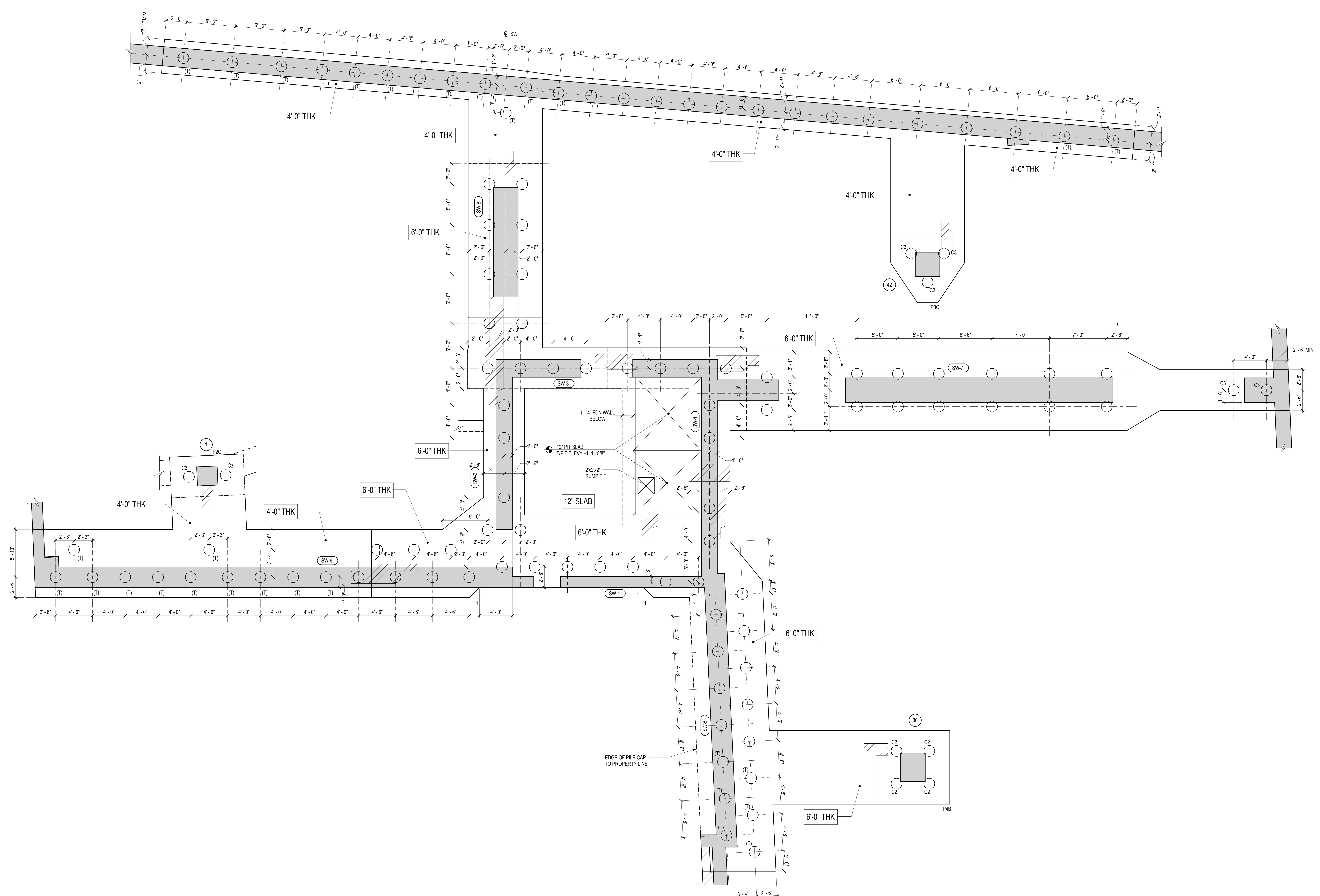
BRIAN ORTER LIGHTING DESIGN
 Lighting Consultant
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DOB BCR:



DWG TITLE
PILE CAP DETAILS
 NB#121192903

DATE: X/0/XX
 PROJECT #: 16118.00
 SCALE: 1/2" = 1'-0"
 DWS NO. FO-201.00
 OF 000



SPECIAL PILE CAP (SPC-106) DETAIL
SCALE: 1/4" = 1'-0"

- NOTES:
 1. FOR BALANCE OF NOTES SEE DWG FO-100.
 2. FOR PILE CAP REINF SEE DWG FO-203
 3. (T) INDICATES TENSION PILES

NOTES

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9	01/06/2017	HUB SUBMISSION
8	11/11/2016	CORE AND SHELL BUY SET
7	10/19/2016	META APPROVAL
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2	06/24/2016	META APPROVAL
1	06/23/2016	100% DD SUBMISSION

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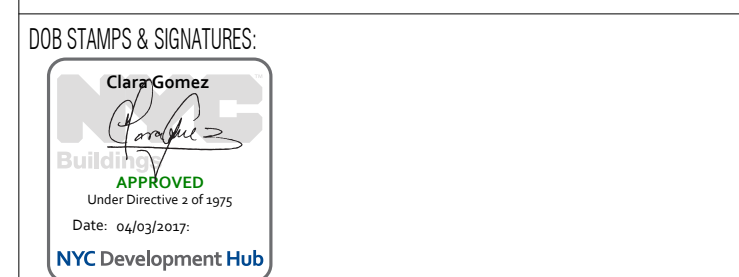
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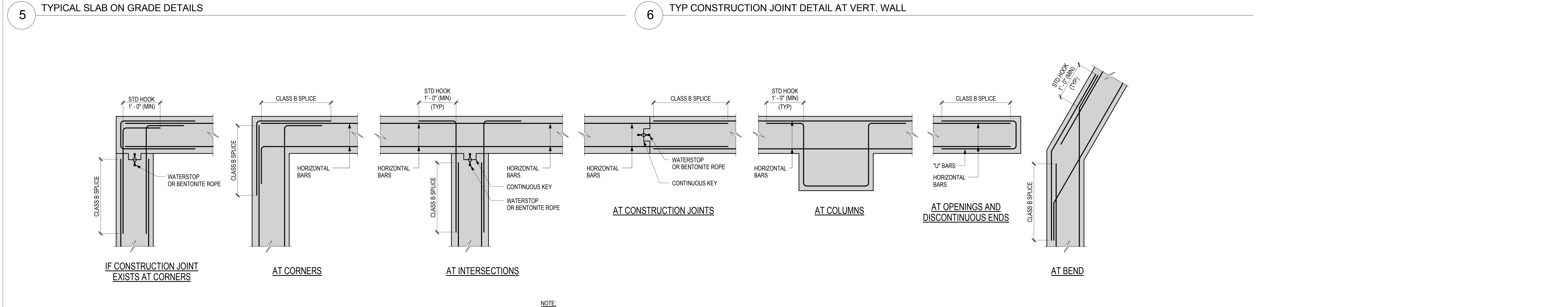
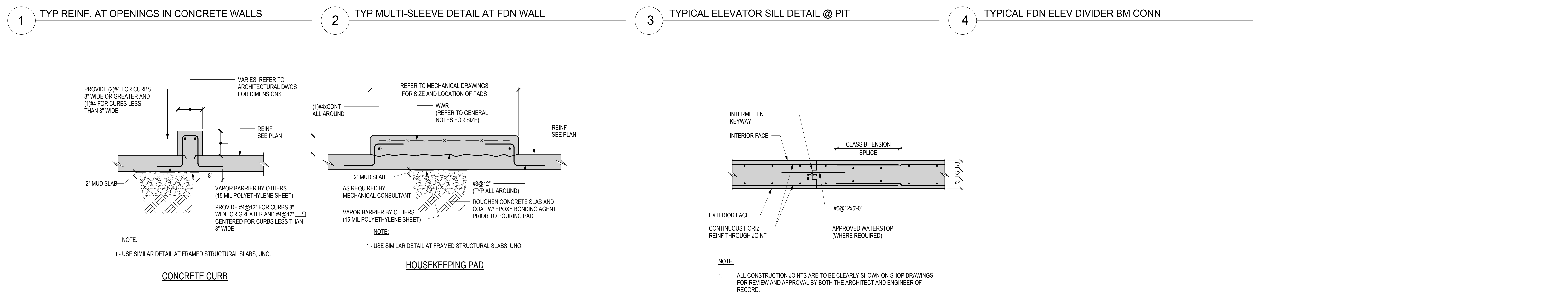
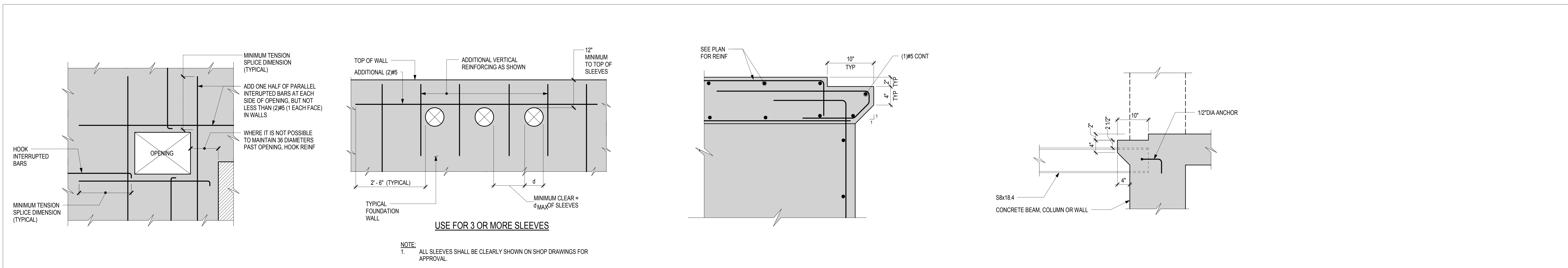
BRIAN ORTER LIGHTING DESIGN
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DOB BSCAR:



DWG TITLE: **SPECIAL PILE CAP DETAILS**
 NB#121192903

DATE: xx/xx/xx
 PROJECT #: 16118.00
 SCALE: 1/4" = 1'-0"
 DWG NO: **FO-202.00**
 OF 000



NOTES

Number	Date	Revision
9	01/06/2017	HUB SUBMISSION
8	11/11/2016	CORE AND SHELL BUY SET
7	10/19/2016	META APPROVAL
6	10/01/2016	CORE AND SHELL BID SET
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1	06/23/2016	100% DD SUBMISSION

Number: _____ Date: _____ Revision: _____

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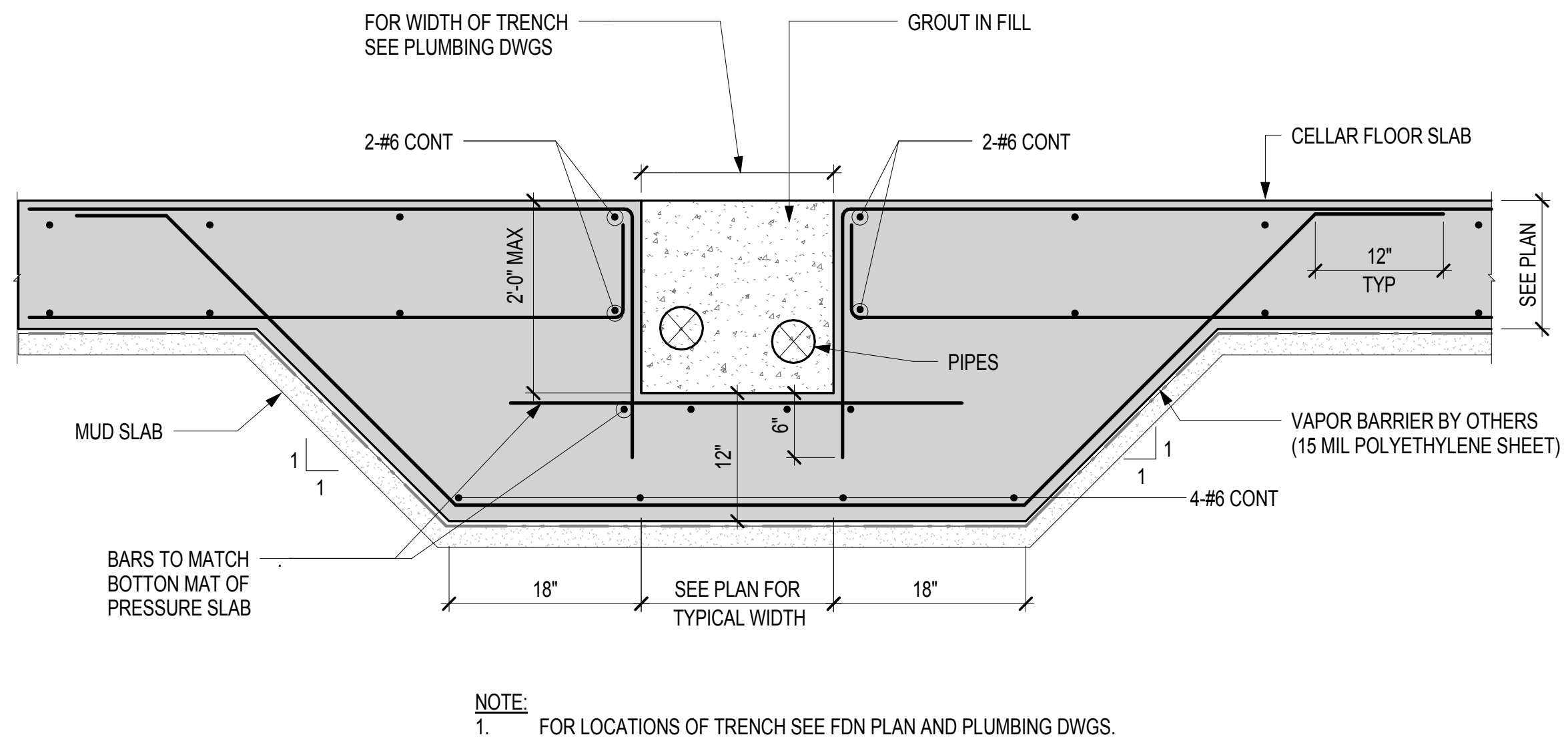
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DOB BSCAR: _____

DOB STAMPS & SIGNATURES:

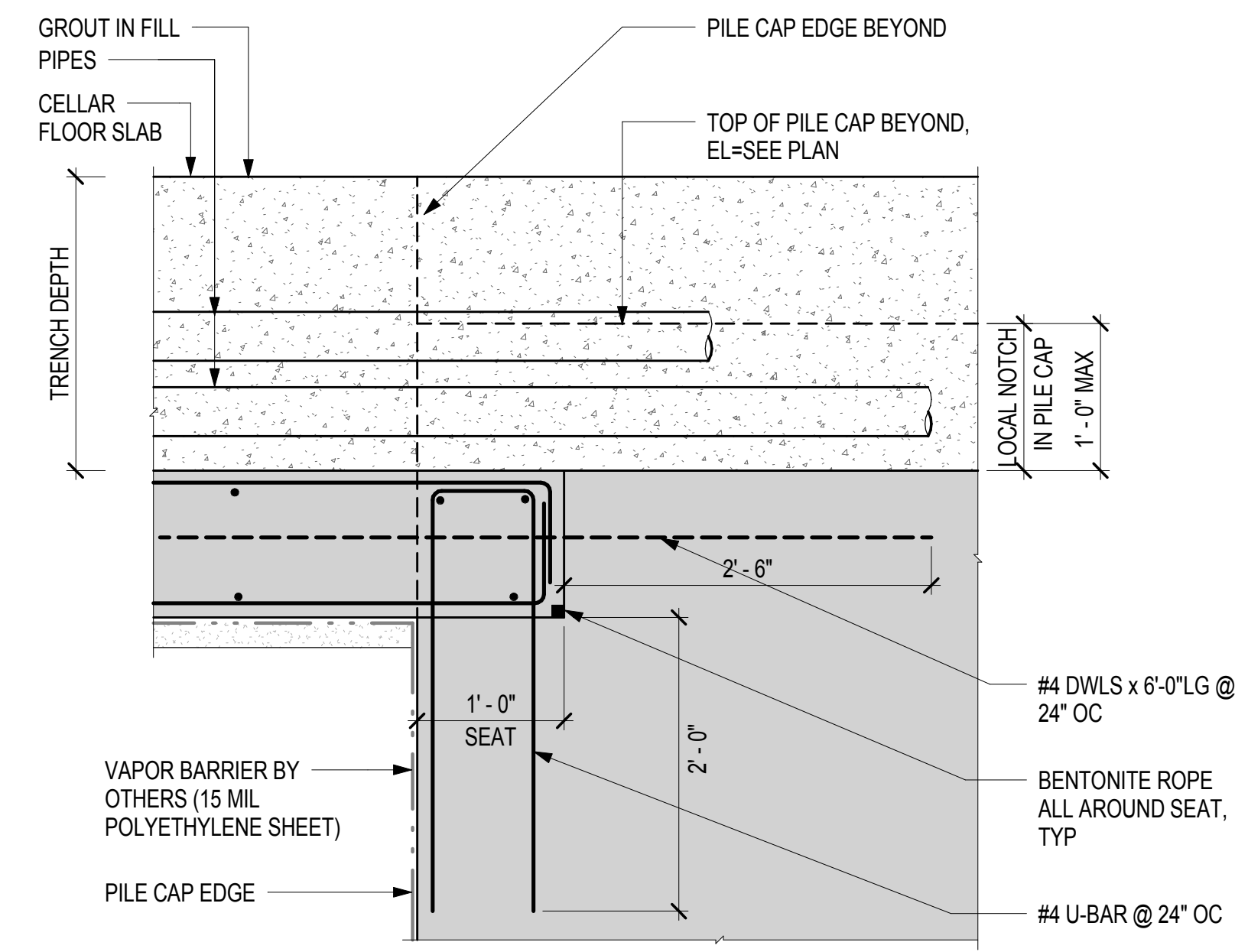
DWG TITLE: **TYPICAL FOUNDATION DETAILS**
 NB#121192903

SCALE & SIGNATURE: _____ DATE: _____
 PROJECT #: _____ SCALE: As indicated
 DWS NO. FO-204.00 OF 000



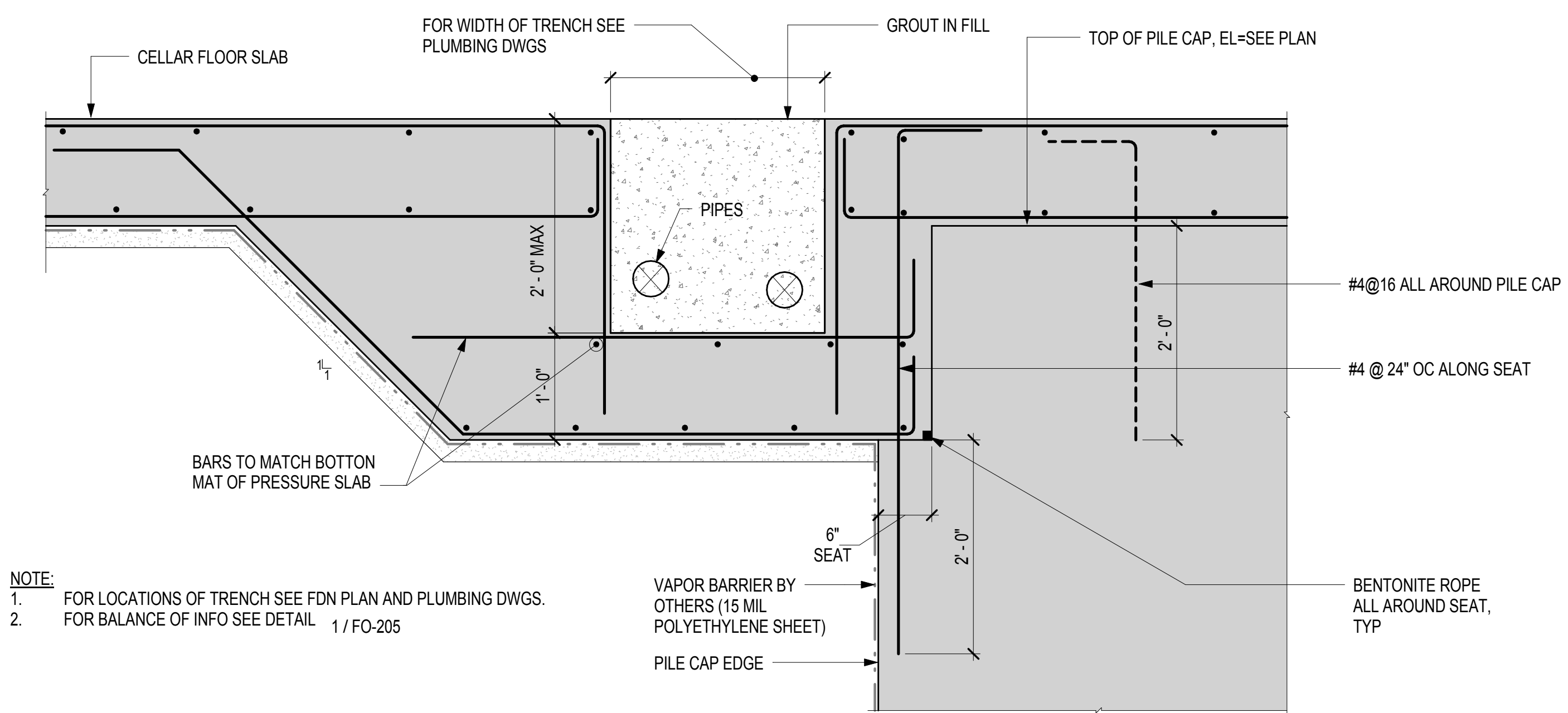
NOTE:
 1. FOR LOCATIONS OF TRENCH SEE FDN PLAN AND PLUMBING DWGS.

1 TYPICAL UNDERGROUND PLUMBING TRENCH



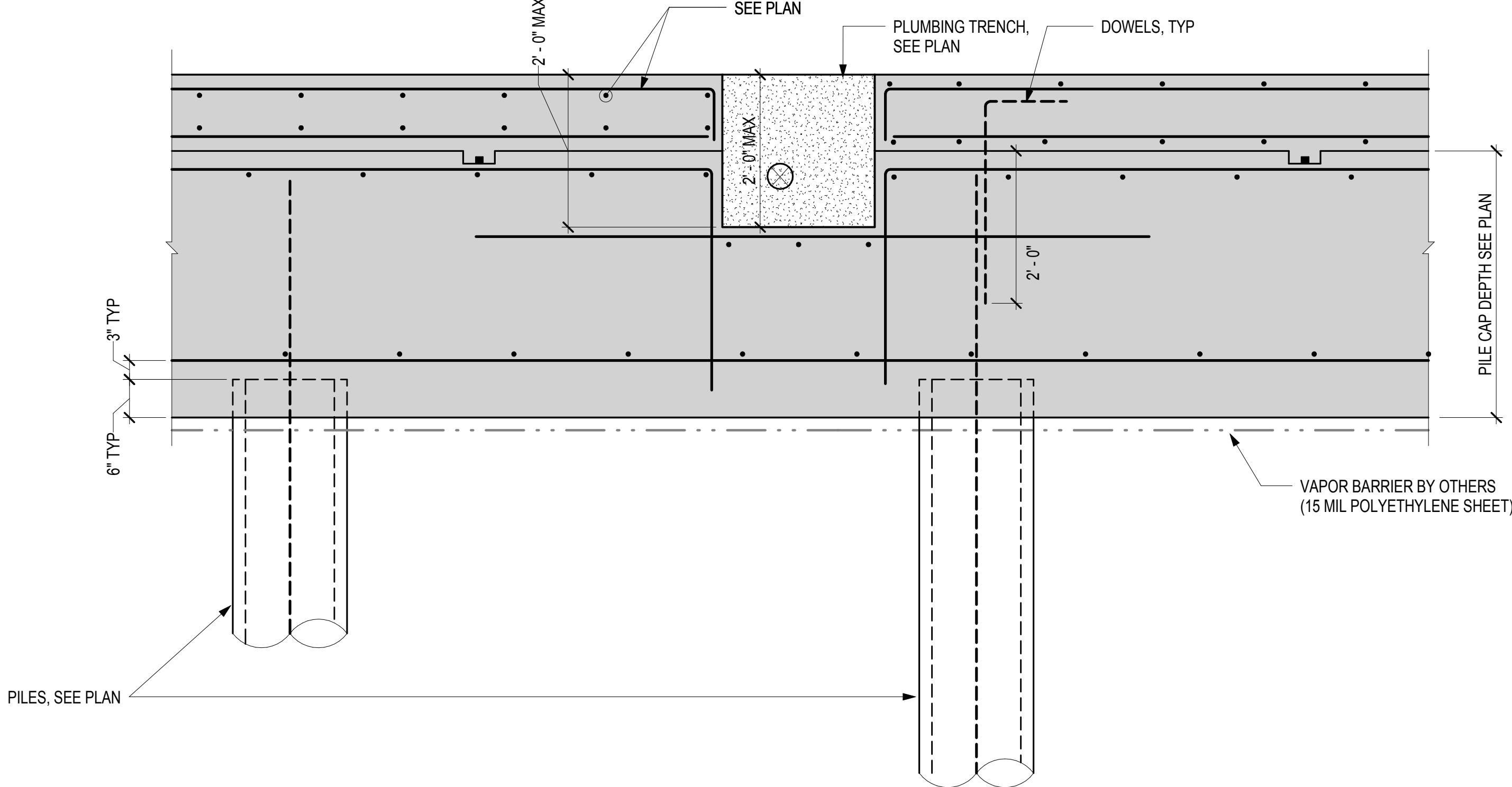
NOTE:
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 2. FOR BALANCE OF INFO SEE DETAIL 1/F0-205

2 TYP PLUMBING TRENCH SEAT AT PILE CAP

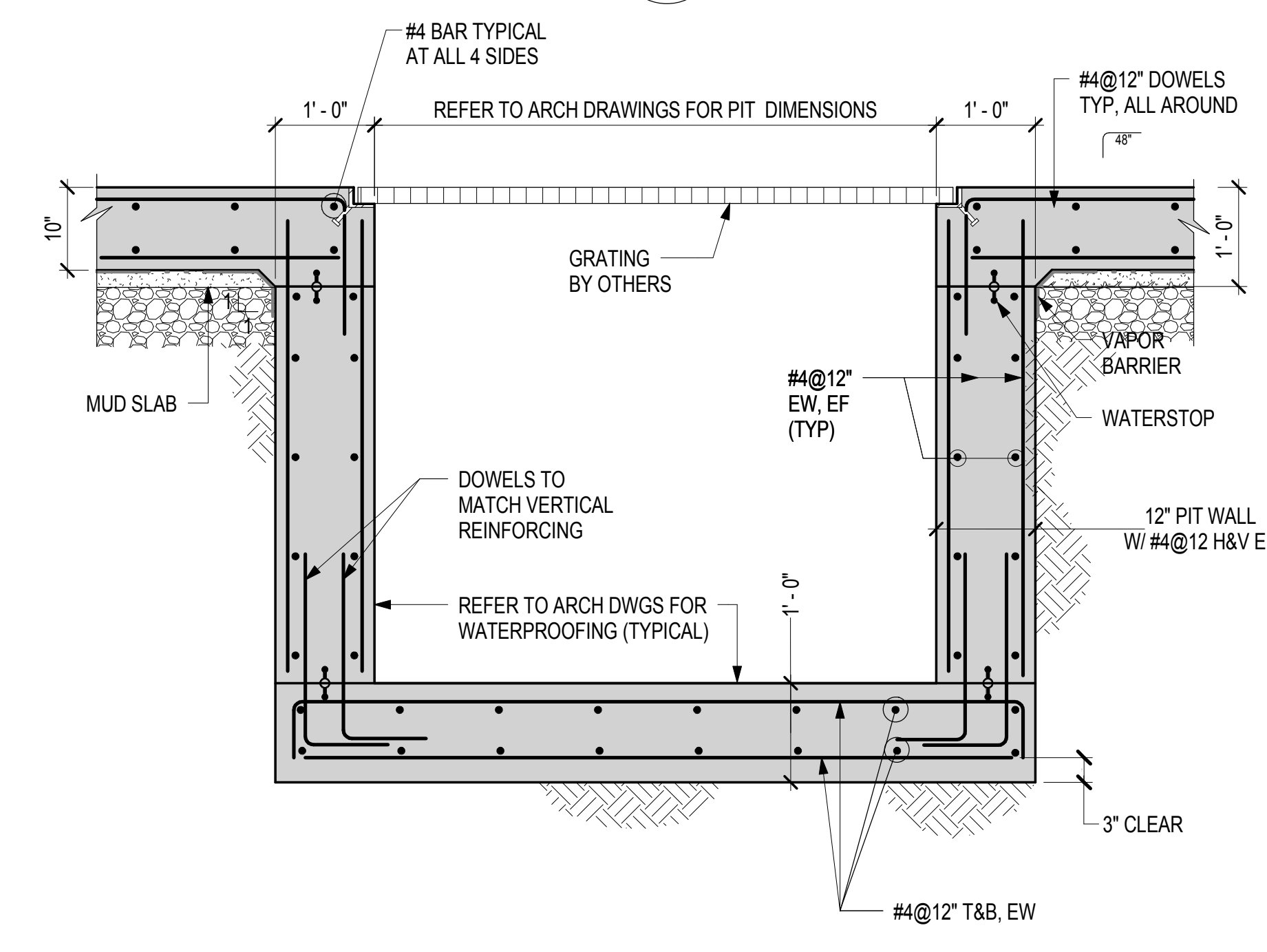


NOTE:
 1. FOR LOCATIONS OF TRENCH SEE FDN PLAN AND PLUMBING DWGS.
 2. FOR BALANCE OF INFO SEE DETAIL 1/F0-205

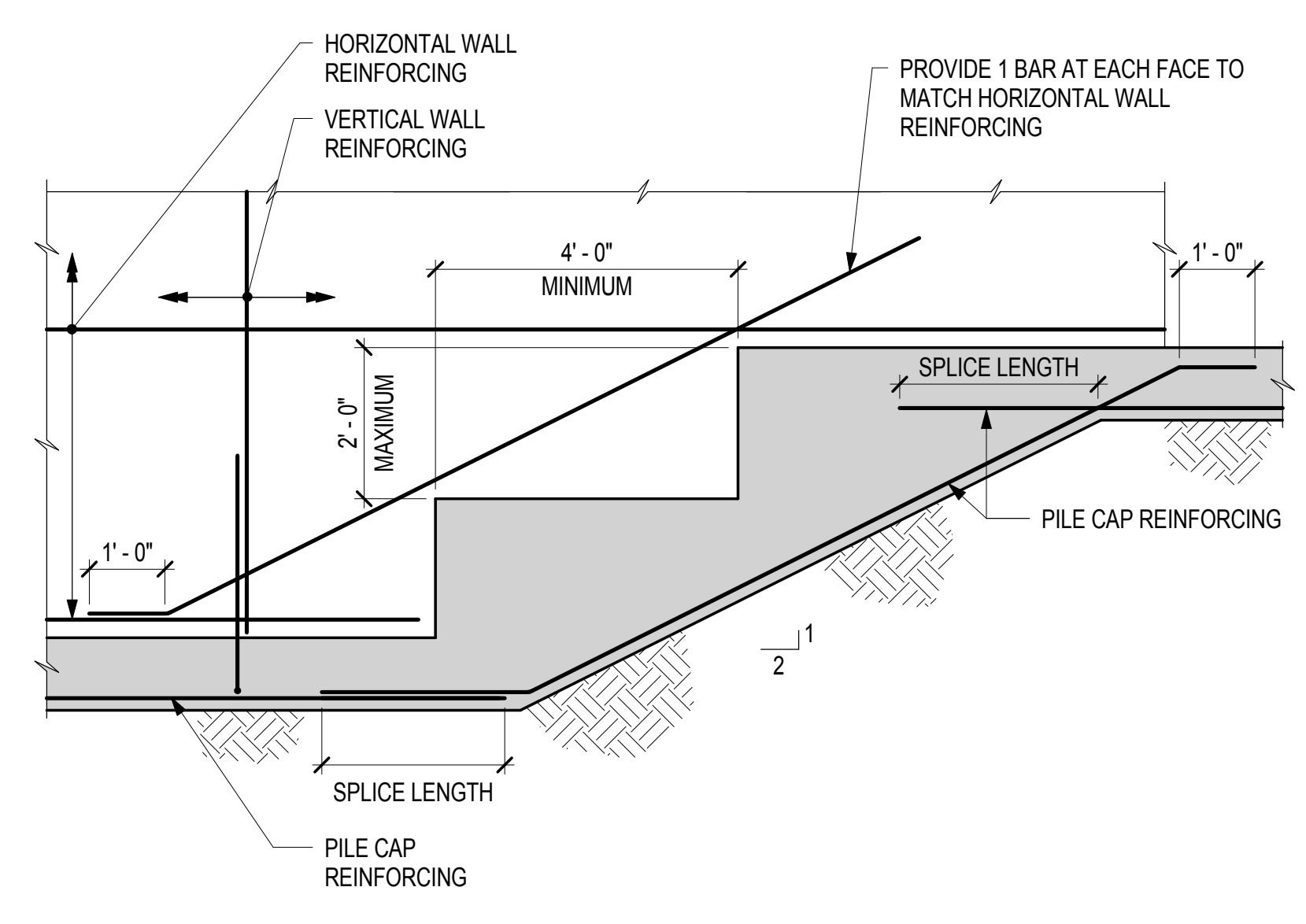
3 TYP PLUMBING TRENCH NEAR PILE CAP EDGE



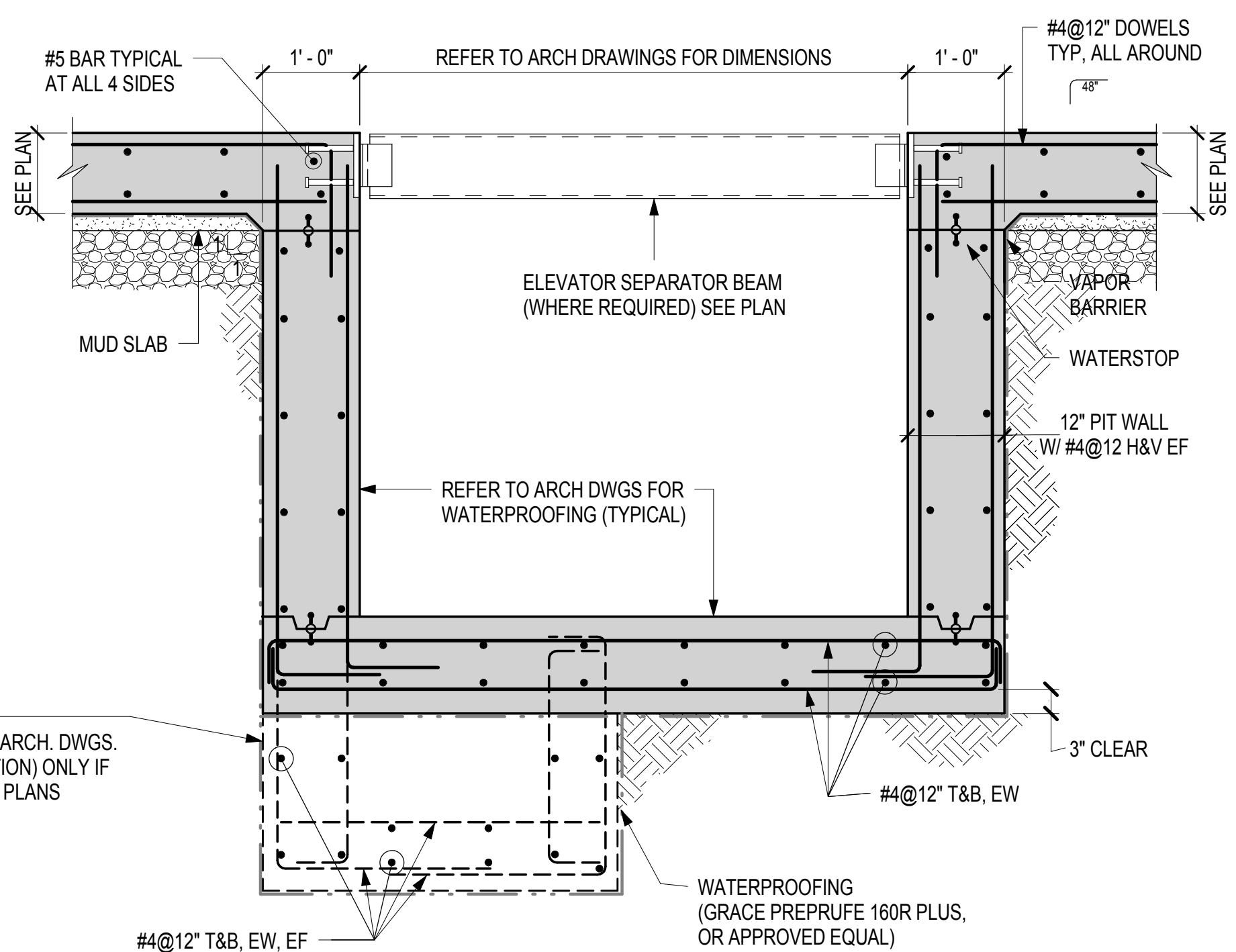
4 TYPICAL PLUMBING TRENCH OVER PILE CAP



5 TYPICAL SECTION AT SUMP/EJECTOR PIT



6 TYPICAL ELEVATION OF CONTINUOUS STEPPED WALL PILE CAP



7 TYPICAL SECTION AT ELEVATOR PIT

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1	06/20/2016	100% DD SUBMISSION

Number Date Revision
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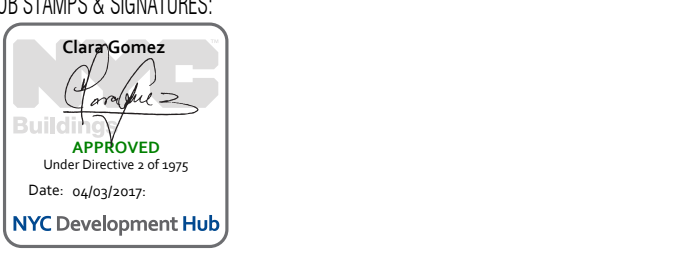
AKRF ENGINEERING PC
 Civil Engineer &
 Acoustic Consultant
 440 Park Avenue South, 7th Fl.
 New York, NY 10016
 Tel (800) 899-2573

INTEGRATED AQUATICS
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BRIAN ORTER LIGHTING DESIGN
 Lighting Consultant
 227 West 29th Street, 8th Fl.
 New York, NY 10001
 Tel (212) 674-6500

DOB BSCA:

DOB STAMPS & SIGNATURES:

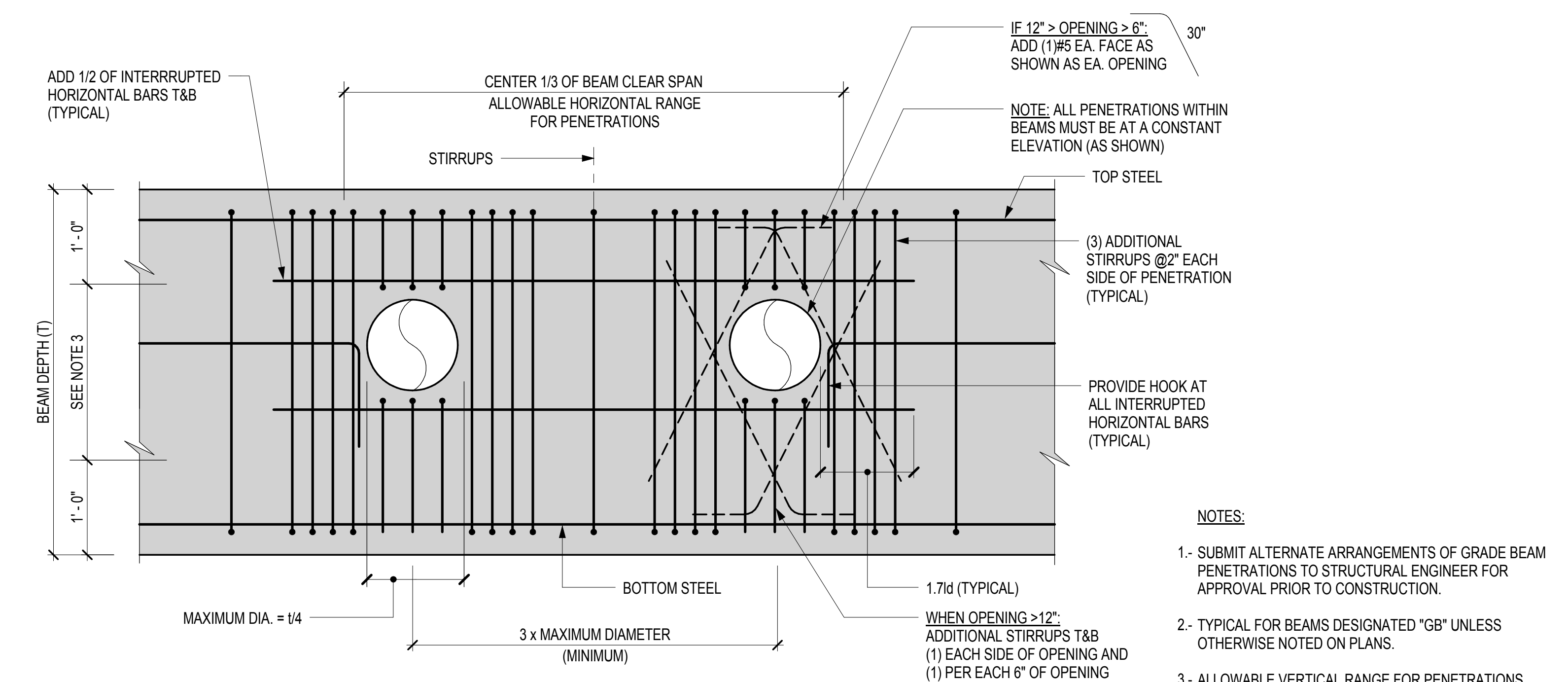


DWG TITLE
 TYPICAL FOUNDATION DETAILS

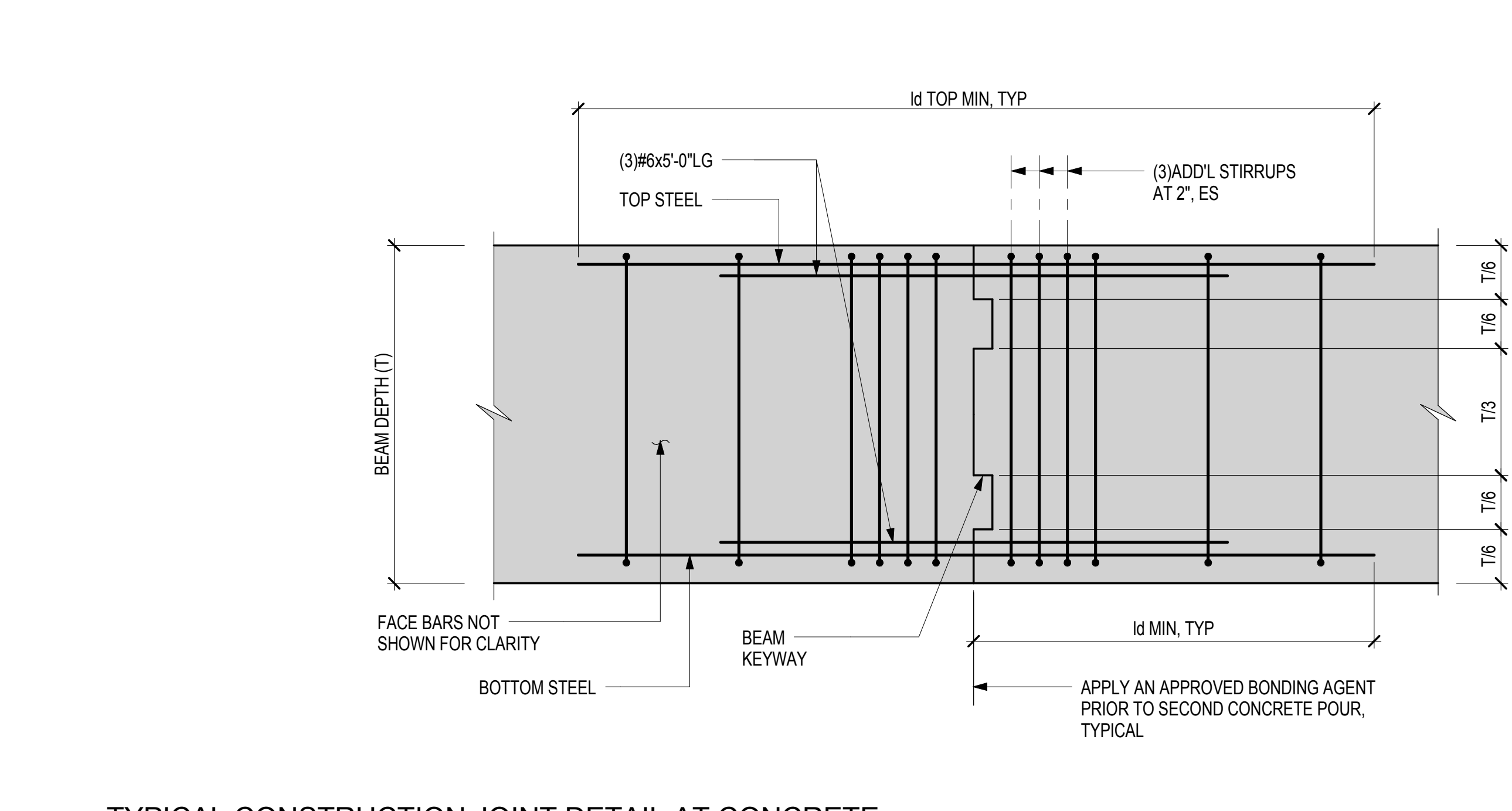
NB#121192903

DATE: xx/xx/xx
 PROJECT #: 16118.00
 SCALE: As indicated

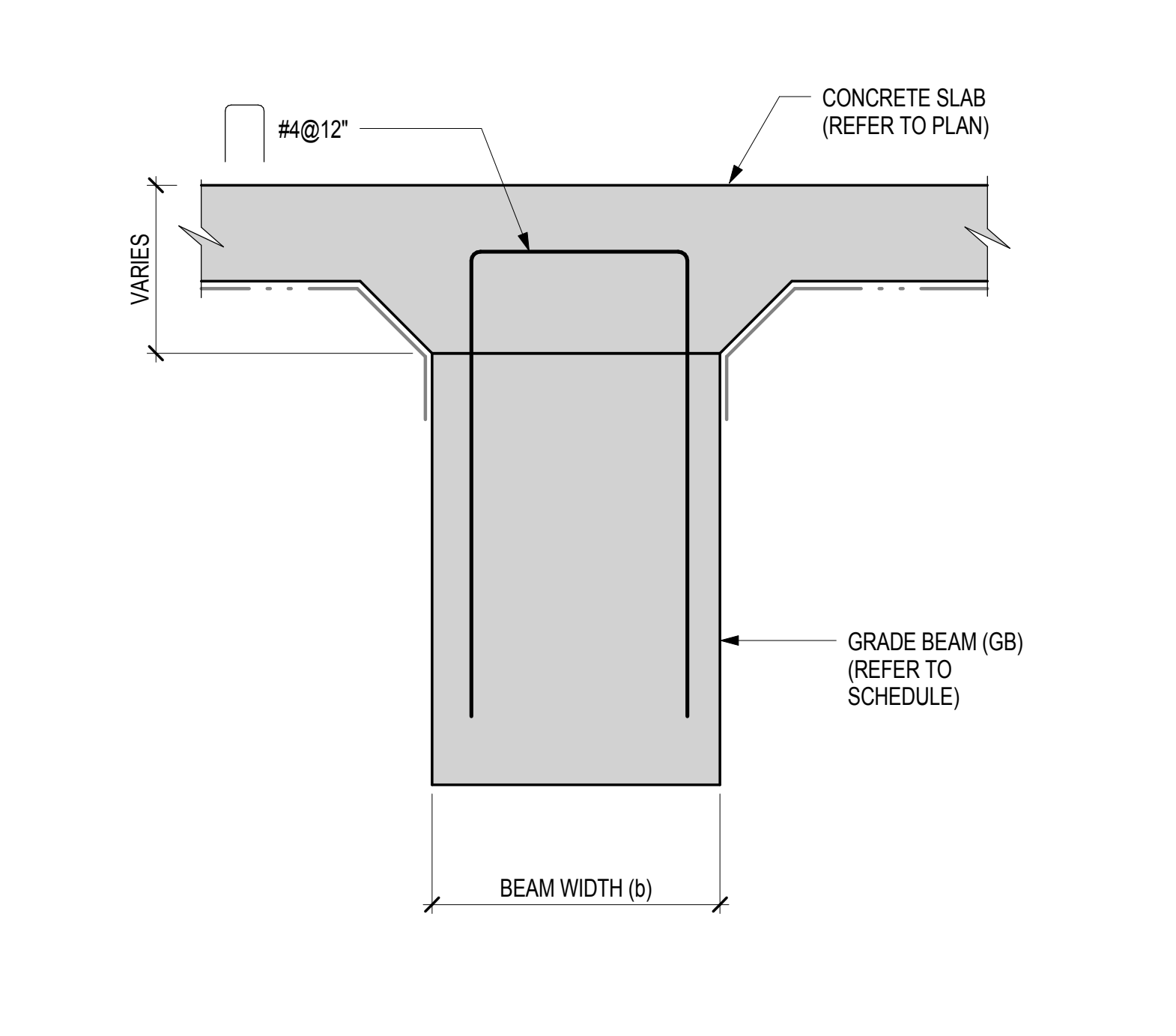
DWG NO. FO-205.00
 OF 000



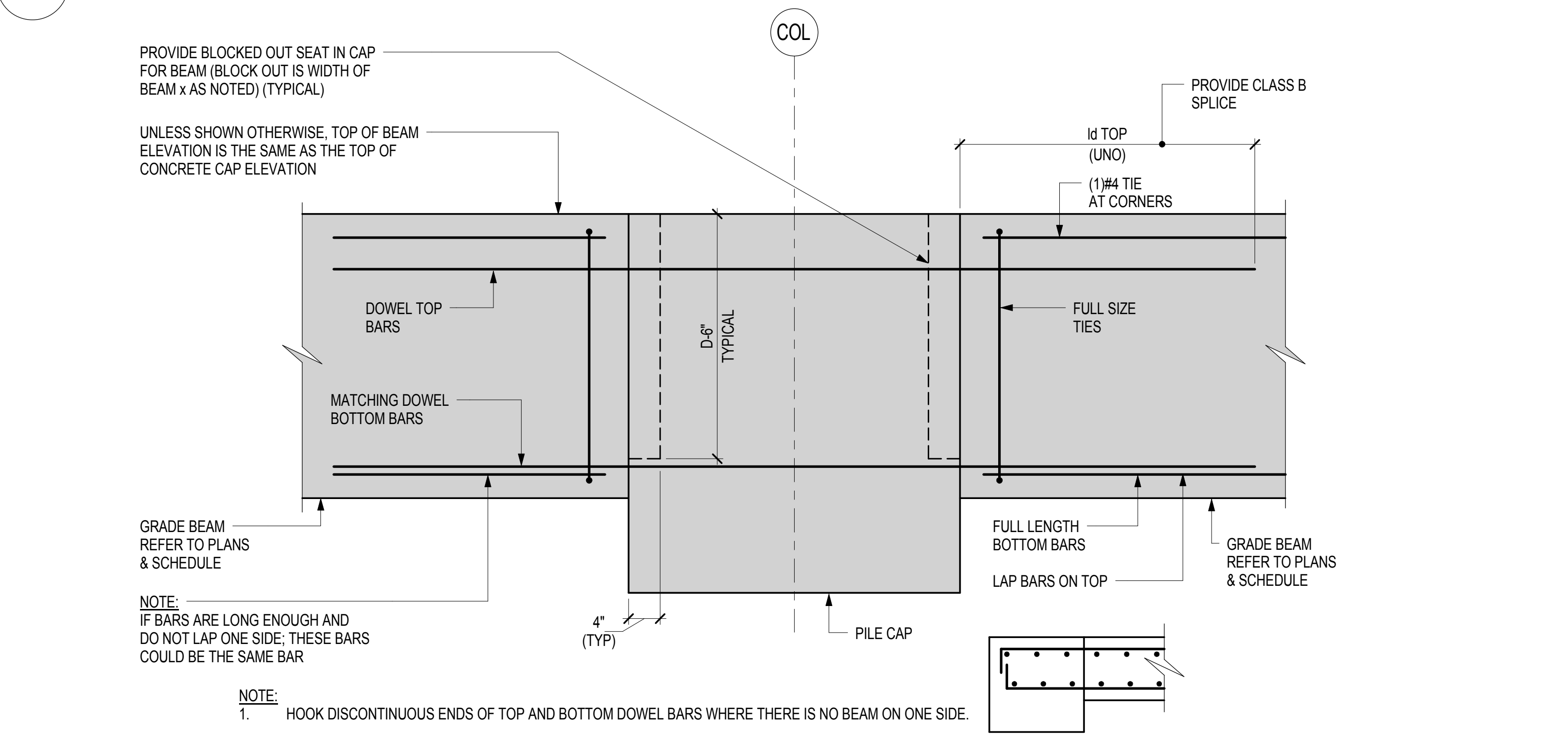
1 TYPICAL DETAIL AT GRADE BEAM & CAPS PENETRATIONS



2 TYPICAL CONSTRUCTION JOINT DETAIL AT CONCRETE GRADE BEAMS & CAPS



3 TYPICAL SLAB CONNECTION TO GRADE BEAM



4 TYPICAL GRADE BEAM DETAIL AT PILE CAP

GRADE BEAM SCHEDULE								
BEAM MARK	SIZE (in) WxD	REINFORCING			STIRRUPS OR TIES			REMARKS
		BOTTOM	TOP	SKIN EF	SIZE	SPACING	TYPE	
GB1	36x30	(10)-#11 (IN 2 LAYERS)	(10)-#11 (IN 2 LAYERS)		#4	9	2	

5 GRADE BEAM SCHEDULE

NOTES

Number	Date	Revision
9	01/06/2017	HUB SUBMISSION
8	11/11/2016	CORE AND SHELL BUY SET
7	10/19/2016	MTA APPROVAL
6	10/01/2016	CORE AND SHELL BID SET
5	09/09/2016	MTA APPROVAL
4	07/28/2016	FOUNDATION BID SET
3	07/06/2016	ISSUED TO DOB
2	06/24/2016	MTA APPROVAL
1	06/03/2016	100% DD SUBMISSION

PROJECT NAME: THE LIGHTSTONE GROUP
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PROPERTY OWNER LLC
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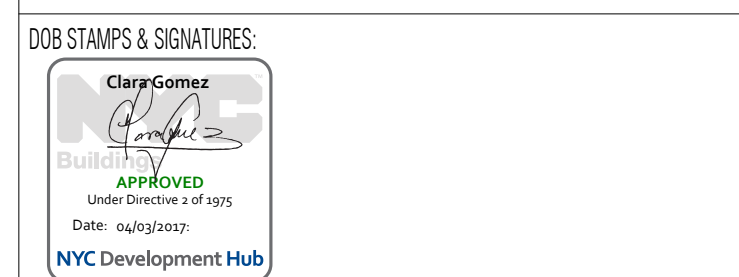
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DOB BSCAR:



DWG TITLE: TYPICAL FOUNDATION DETAILS
NB#121192903

DATE: x/0/xx
PROJECT #: 16118.00
SCALE: As indicated
DMS NO. FO-206.00
OF 000

COMPRESSION DEVELOPMENT LENGTH AND COMPRESSION LAP SPICE LENGTH (inches)
(UNLESS NOTED OTHERWISE)

$f_c = 4000$ PSI, NORMAL WEIGHT CONCRETE

BAR SIZE	LENGTH TYPE	REINFORCING GRADE (Fy)	
		Fy=40 ksi	Fy=75 ksi
		UNCOATED	EPOXY-COATED
#3	COMPRESSION DEVELOPMENT	12	12
	COMPRESSION LAP SPICE	12	17
#4	COMPRESSION DEVELOPMENT	12	12
	COMPRESSION LAP SPICE	15	22
#5	COMPRESSION DEVELOPMENT	12	15
	COMPRESSION LAP SPICE	19	28
#6	COMPRESSION DEVELOPMENT	14	18
	COMPRESSION LAP SPICE	23	33
#7	COMPRESSION DEVELOPMENT	17	21
	COMPRESSION LAP SPICE	27	39
#8	COMPRESSION DEVELOPMENT	19	24
	COMPRESSION LAP SPICE	30	44
#9	COMPRESSION DEVELOPMENT	21	27
	COMPRESSION LAP SPICE	34	50
#10	COMPRESSION DEVELOPMENT	24	30
	COMPRESSION LAP SPICE	38	56
#11	COMPRESSION DEVELOPMENT	27	33
	COMPRESSION LAP SPICE	42	62

COMPRESSION DEVELOPMENT LENGTH AND COMPRESSION LAP SPICE LENGTH (inches)
(UNLESS NOTED OTHERWISE)

$f_c = 5000$ PSI OR GREATER, NORMAL WEIGHT CONCRETE

BAR SIZE	LENGTH TYPE	REINFORCING GRADE (Fy)	
		Fy=60 ksi	Fy=75 ksi
		UNCOATED	EPOXY-COATED
#3	COMPRESSION DEVELOPMENT	12	12
	COMPRESSION LAP SPICE	12	17
#4	COMPRESSION DEVELOPMENT	12	12
	COMPRESSION LAP SPICE	15	22
#5	COMPRESSION DEVELOPMENT	12	13
	COMPRESSION LAP SPICE	19	28
#6	COMPRESSION DEVELOPMENT	13	16
	COMPRESSION LAP SPICE	23	33
#7	COMPRESSION DEVELOPMENT	15	19
	COMPRESSION LAP SPICE	27	39
#8	COMPRESSION DEVELOPMENT	17	21
	COMPRESSION LAP SPICE	30	44
#9	COMPRESSION DEVELOPMENT	19	24
	COMPRESSION LAP SPICE	34	50
#10	COMPRESSION DEVELOPMENT	22	27
	COMPRESSION LAP SPICE	38	56
#11	COMPRESSION DEVELOPMENT	24	30
	COMPRESSION LAP SPICE	42	62

TYPICAL REINFORCING BAR DEVELOPMENT LENGTH/LAP SPICE LENGTH SCHEDULES, U.N.O.

- NOTES:**
- TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.
 - CLEAR BAR SPACING = CENTER TO CENTER SPACING - BAR DIAMETER.
 - AVOID SPLICES IN REGIONS OF MAXIMUM MOMENT. IF THIS IS NOT POSSIBLE, STAGGER SPLICES SO THAT SPLICES DO NOT REQUIRE MORE THAN 50% OF THE BARS ARE SPLICED WITHIN L_d REQUIRED. SPLICE LENGTH OTHERWISE INCREASE SPLICE LENGTH BY 50%.
 - FOR GRADE 75, REINFORCING BARS SPLICE LENGTHS SHOWN ABOVE SHALL BE INCREASED BY L_d FACTOR = 1.25.

TENSION DEVELOPMENT LENGTH (L_d) AND TENSION LAP SPICE LENGTH (Lap Class B OR 1.3Ld) FOR GRADE 60 DEFORMED REINFORCING BARS (inches)
(UNLESS NOTED OTHERWISE)

$f_c = 4000$ PSI, NORMAL WEIGHT CONCRETE

BAR SIZE	LENGTH TYPE	CONCRETE COVER ≥ 0.75 in		CONCRETE COVER ≥ 1.0 in		CONCRETE COVER ≥ 1.25 in		CONCRETE COVER ≥ 1.50 in		CONCRETE COVER ≥ 2.00 in		CONCRETE COVER ≥ 3.00 in	
		CLEAR BAR SPACING ≥ 1.50 in		CLEAR BAR SPACING ≥ 2.0 in		CLEAR BAR SPACING ≥ 2.50 in		CLEAR BAR SPACING ≥ 3.0 in		CLEAR BAR SPACING ≥ 4.0 in		CLEAR BAR SPACING ≥ 6.0 in	
		UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED
#3	L_d	12	12	12	12	12	12	12	12	12	12	12	12
	B	15	12	19	17	15	12	19	17	15	12	19	17
#4	L_d	14	12	18	17	15	12	20	18	15	12	18	14
	B	25	19	32	28	20	15	28	23	20	15	24	18
#5	L_d	28	21	36	32	23	17	29	26	19	15	25	22
	B	36	28	47	41	29	23	38	34	25	19	32	28
#6	L_d	37	29	49	43	31	24	40	35	26	20	34	30
	B	49	37	63	56	40	31	52	46	34	26	44	39
#7	L_d	46	35	59	50	38	29	47	42	33	25	43	38
	B	79	60	102	90	64	50	84	74	55	42	72	63
#8	L_d	74	57	97	86	62	48	81	72	53	41	70	61
	B	97	74	128	111	81	62	105	93	69	53	90	80
#9	L_d	90	69	118	104	76	58	99	87	65	50	85	75
	B	117	90	153	135	96	76	128	113	85	65	111	98
#10	L_d	106	83	141	125	92	71	120	106	80	61	104	92
	B	141	108	184	162	119	92	156	137	103	80	135	119
#11	L_d	127	98	166	146	109	83	142	125	95	73	124	109
	B	166	127	216	190	141	108	184	162	123	95	160	142

TENSION DEVELOPMENT LENGTH (L_d) AND TENSION LAP SPICE LENGTH (Lap Class B OR 1.3Ld) FOR GRADE 60 DEFORMED REINFORCING BARS (inches)
(UNLESS NOTED OTHERWISE)

$f_c = 5000$ PSI, NORMAL WEIGHT CONCRETE

BAR SIZE	LENGTH TYPE	CONCRETE COVER ≥ 0.75 in		CONCRETE COVER ≥ 1.0 in		CONCRETE COVER ≥ 1.25 in		CONCRETE COVER ≥ 1.50 in		CONCRETE COVER ≥ 2.00 in		CONCRETE COVER ≥ 3.00 in	
		CLEAR BAR SPACING ≥ 1.50 in		CLEAR BAR SPACING ≥ 2.0 in		CLEAR BAR SPACING ≥ 2.50 in		CLEAR BAR SPACING ≥ 3.0 in		CLEAR BAR SPACING ≥ 4.0 in		CLEAR BAR SPACING ≥ 6.0 in	
		UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED
#3	L_d	12	12	12	12	12	12	12	12	12	12	12	12
	B	13	12	17	15	13	12	17	15	13	12	16	12
#4	L_d	13	12	18	16	14	12	18	16	14	12	16	12
	B	22	17	29	25	18	14	23	20	16	14	21	16
#5	L_d	25	19	32	29	20	16	26	23	17	13	22	20
	B	32	25	42	37	26	20	34	30	22	17	29	25
#6	L_d	34	26	44	39	27	21	36	32	23	18	30	27
	B	44	34	57	50	36	28	47	41	30	23	39	35
#7	L_d	54	42	70	62	45	34	58	51	38	29	50	44
	B	70	54	91	81	58	45	75	67	49	38	64	57
#8	L_d	67	51	87	77	56	43	74	64	48	37	62	55
	B	87	67	113	100	72	56	94	83	62	48	81	71
#9	L_d	81	62	105	93	68	52	89	78	59	45	76	67
	B	105	81	137	121	88	68	115	101	76	59	99	88
#10	L_d	97	75	126	112	82	63	107	95	71	55	93	82
	B	126	97	164	145	107	82	139	123	93	71	121	107
#11	L_d	114	87	148	131	97	75	127	112	85	65	111	98
	B	147	114	193	170	126	97	164	145	110	85	144	127

TENSION DEVELOPMENT LENGTH (L_d) AND TENSION LAP SPICE LENGTH (Lap Class B OR 1.3Ld) FOR GRADE 60 DEFORMED REINFORCING BARS (inches)
(UNLESS NOTED OTHERWISE)

$f_c = 6000$ PSI, NORMAL WEIGHT CONCRETE

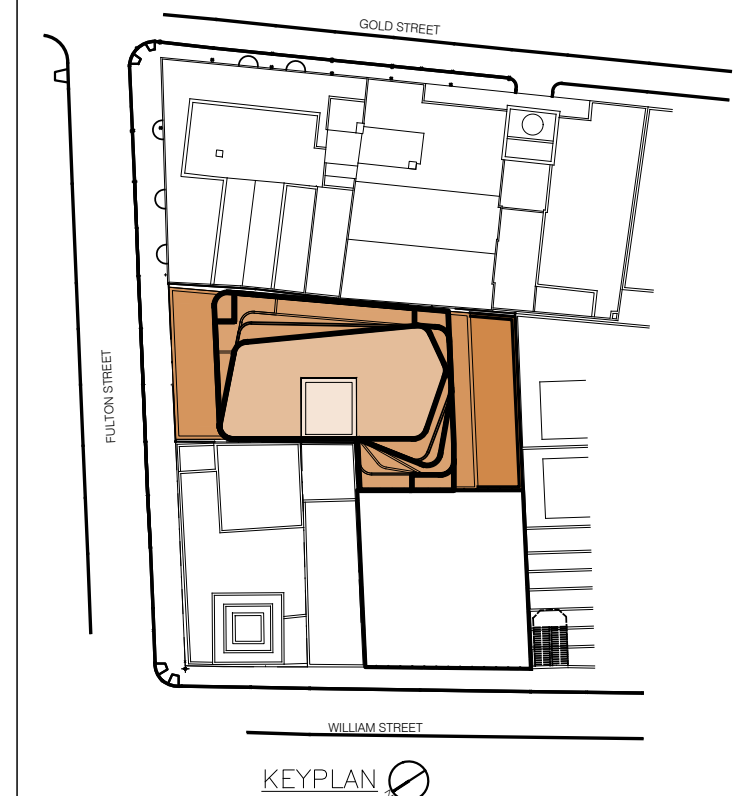
BAR SIZE	LENGTH TYPE	CONCRETE COVER ≥ 0.75 in		CONCRETE COVER ≥ 1.0 in		CONCRETE COVER ≥ 1.25 in		CONCRETE COVER ≥ 1.50 in		CONCRETE COVER ≥ 2.00 in		CONCRETE COVER ≥ 3.00 in	
		CLEAR BAR SPACING ≥ 1.50 in		CLEAR BAR SPACING ≥ 2.0 in		CLEAR BAR SPACING ≥ 2.50 in		CLEAR BAR SPACING ≥ 3.0 in		CLEAR BAR SPACING ≥ 4.0 in		CLEAR BAR SPACING ≥ 6.0 in	
		UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED
#3	L_d	12	12	12	12	12	12	12	12	12	12	12	12
	B	12	12	16	14	12	12	16	14	12	12	16	12
#4	L_d	16	12	20	18	13	12	16	14	13	12	16	12
	B	20	16	26	23	16	13	21	19	16	13	19	15
#5	L_d	23	18	30	26	18	14	24	21	18	12	20	18
	B	29	23	38	34	24	18	31	27	20	16	26	23
#6	L_d	31	24	40	35	25	20	33	29	21	17	28	25
	B	40	31	52	45	33	25	43	38	28	21	36	32
#7	L_d	49	38	64	57	41	31	53	47	35	27	45	40
	B	64	49	83	74	53	41	69	61	45	35	59	52
#8	L_d	61	47	80	70	51	39	66	59	44	34	57	50
	B	79	61	103	91	66	51	86	76	57	44	74	65
#9	L_d	74	57	96	85	62	48	81	71	53	41	70	62
	B	96	74	125	110	80	62	105	93	69	53	91	80
#10	L_d	88	68	116	102	75	58	98	86	65	50	85	75
	B	115	88	150	132	97	75	127	112	85	65	110	97
#11	L_d	104	80	135	120	89	68	116	102	77	60	101	89
	B	135	104	176	155	115	89	150	133	100	77	131	116

TENSION DEVELOPMENT LENGTH (L_d) AND TENSION LAP SPICE LENGTH (Lap Class B OR 1.3Ld) FOR GRADE 60 DEFORMED REINFORCING BARS (inches)
(UNLESS NOTED OTHERWISE)

$f_c = 7000$ PSI, NORMAL WEIGHT CONCRETE

BAR SIZE	LENGTH TYPE	CONCRETE COVER ≥ 0.75 in		CONCRETE COVER ≥ 1.0 in		CONCRETE COVER ≥ 1.25 in		CONCRETE COVER ≥ 1.50 in		CONCRETE COVER ≥ 2.00 in		CONCRETE COVER ≥ 3.00 in	
		CLEAR BAR SPACING ≥ 1.50 in		CLEAR BAR SPACING ≥ 2.0 in		CLEAR BAR SPACING ≥ 2.50 in		CLEAR BAR SPACING ≥ 3.0 in		CLEAR BAR SPACING ≥ 4.0 in		CLEAR BAR SPACING ≥ 6.0 in	
		UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED	UNCOATED	EPOXY-COATED
#3	L_d	12	12	12	12	12	12	12	12	12	12	12	12
	B	12	12	15	13	12	12	15	13	12	12	15	12
#4	L_d	14	12	18	17	12	12	15	13	12	12	14	12
	B	19	14	24	21	15	12	20	17	15	12	20	15
#5	L_d	21	16	27	24	17	13	22	20	14	12	19	17
	B	27	21	35	31	22	17	29	25	19	14	24	21
#6	L_d	28	22	37	33	23	18	30	27	20	15	28	23
	B	37	28	48	42	30	23	39	35	26	20	33	28
#7	L_d	46	35	59	53	38	29	49	43	32	25	42	37
	B	59	46	77	68	49	38	64	56	42	32	54	48
#8	L_d	56	44	74	65	47	36	61	54	40			

NOTES



Number	Date	Revised
03/21/2017		COORDINATES SET
01/16/2017		FILE SET
10/09/2016		NYCT SUBMITTAL
09/09/2016		NYCT SUBMITTAL
06/22/2016		NYCT SUBMITTAL
03/21/2016		NYCT SUBMITTAL

PROJECT NAME: **130 WILLIAM STREET**
 ADDRESSES: 130 WILLIAM STREET
 NEW YORK, NEW YORK 11201

OWNER: **THE LIGHTSTONE GROUP**
 130 WILLIAMS STREET
 PROPERTY OWNER LLC
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 Structural Engineers
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 New York, NY 10036
 Tel: (212) 246-9900

LANDSCAPE ARCHITECT: **WEINTRAUD DIAZ, LLC**
 Landscape Architect
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 Bohemia, NY 11716
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- LEGEND:**
- APPROXIMATE SEISMOGRAPH LOCATION
 - APPROXIMATE SURVEY POINT LOCATION
 - EXISTING PILE
 - EXISTING PILE CAP
 - PROPOSED STRUCTURAL PILE
 - PROPOSED PILE CAP
 - PROPOSED PLAZA ABOVE EXISTING FOUNDATION

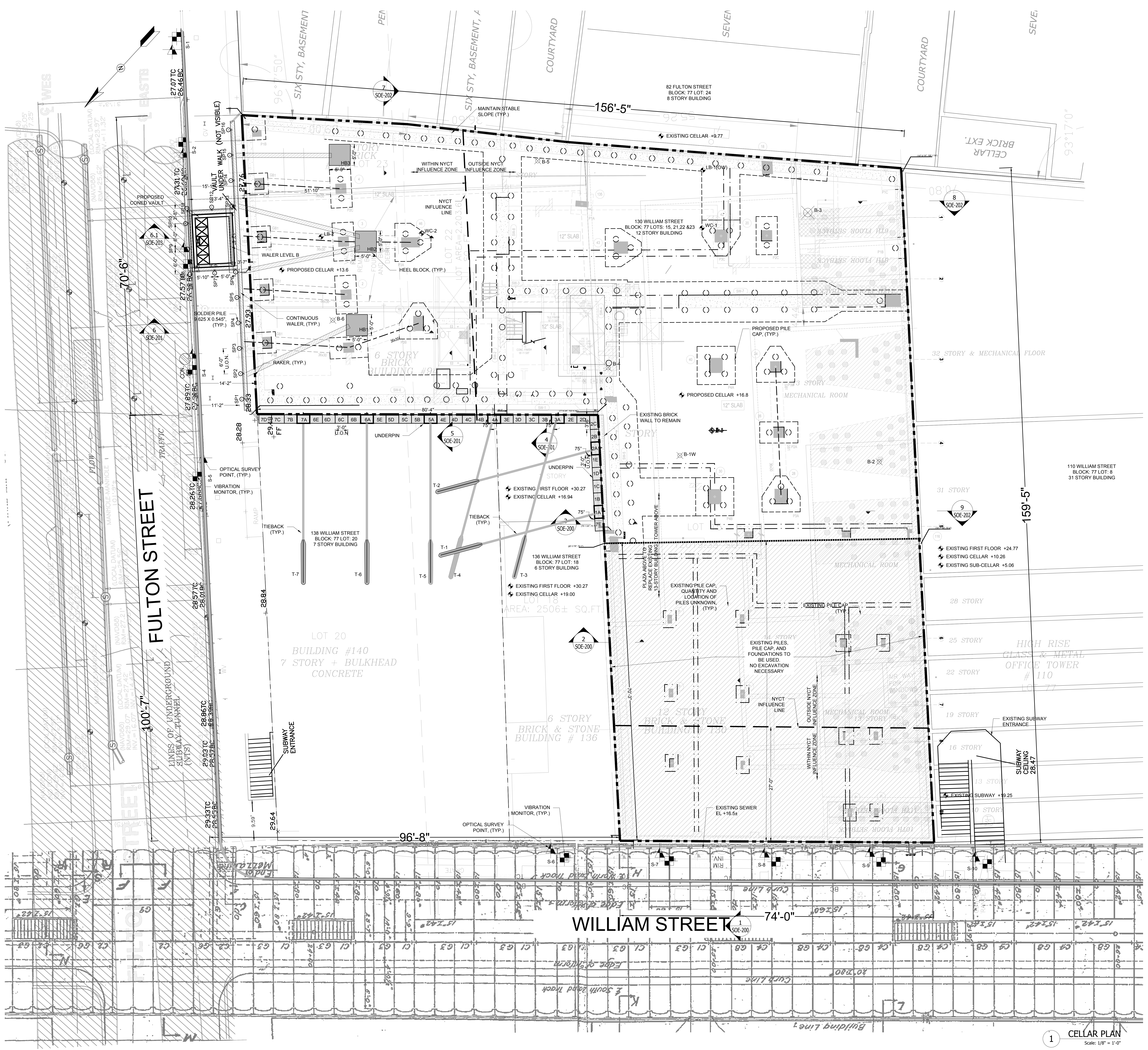
- UNDERPINNING SEQUENCE:**
1. UNDERPINNING SHALL BE CONSTRUCTED UNDER FULL TIME SUPERVISION OF RA CONSULTANTS LLC AND IN ACCORDANCE WITH PROCEDURES OUTLINED ON SHE-300.
 2. RA CONSULTANTS LLC MAY MODIFY THE UNDERPINNING SEQUENCE BASED ON FIELD CONDITIONS.
 3. CONSTRUCT "A" PIERS. LEAVE POCKETS AT PROPER TIE-BACK LOCATIONS.
 4. INSTALL TIE-BACK. WAIT 7 DAYS TO CURE AND TEST AND LOCK AT DESIGN LOAD.
 5. REDRIVE WEDGES AND DRYPACK "A" PIERS.
 6. CONSTRUCT "B" PIERS AND WAIT TO CURE.
 7. SHIM, WEDGE AND DRYPACK "B" PIERS.
 8. CONSTRUCT "C" PIERS AND WAIT TO CURE.
 9. SHIM, WEDGE AND DRYPACK "C" PIERS.
 10. CONSTRUCT "D" PIERS AND WAIT TO CURE.
 11. SHIM, WEDGE AND DRYPACK "D" PIERS.
 12. CONSTRUCT "E" PIERS AND WAIT TO CURE.
 13. SHIM, WEDGE AND DRYPACK "E" PIERS.

DOB BEAR:



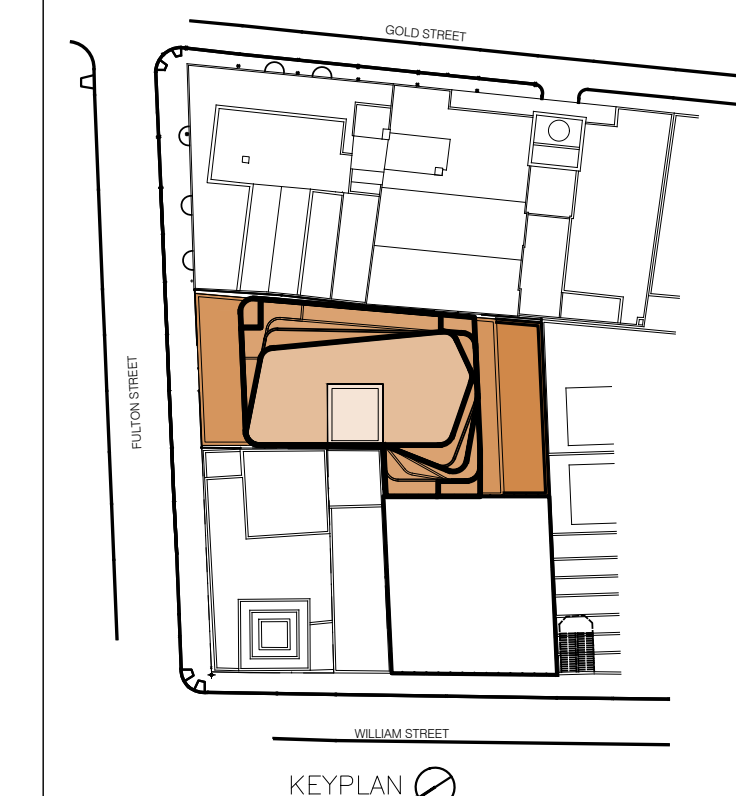
DWG TITLE: **SUPPORT OF EXCAVATION PLAN**

SEAL & SIGNATURE:	DATE:	11/23/15
	PROJECT #:	15C1077
	SCALE:	AS NOTED
	DWG NO:	SOE-100.00
		2



1 CELLAR PLAN
 Scale: 1/8" = 1'-0"

NOTES



Number	Date	Revision
03/21/2017		COORDINATED SET
01/06/2017		HUB SET
10/06/2016		NYCT SUBMITTAL
08/06/2016		NYCT SUBMITTAL
08/22/2016		NYCT SUBMITTAL
03/21/2016		NYCT SUBMITTAL

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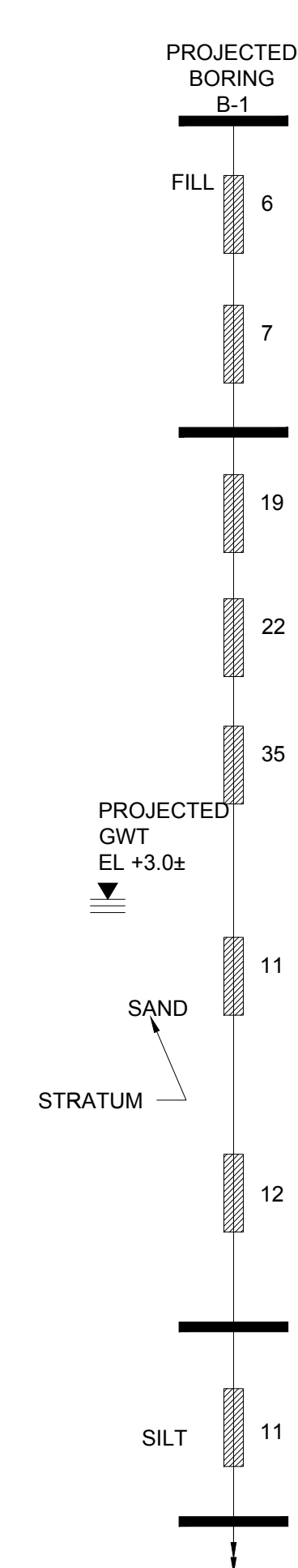
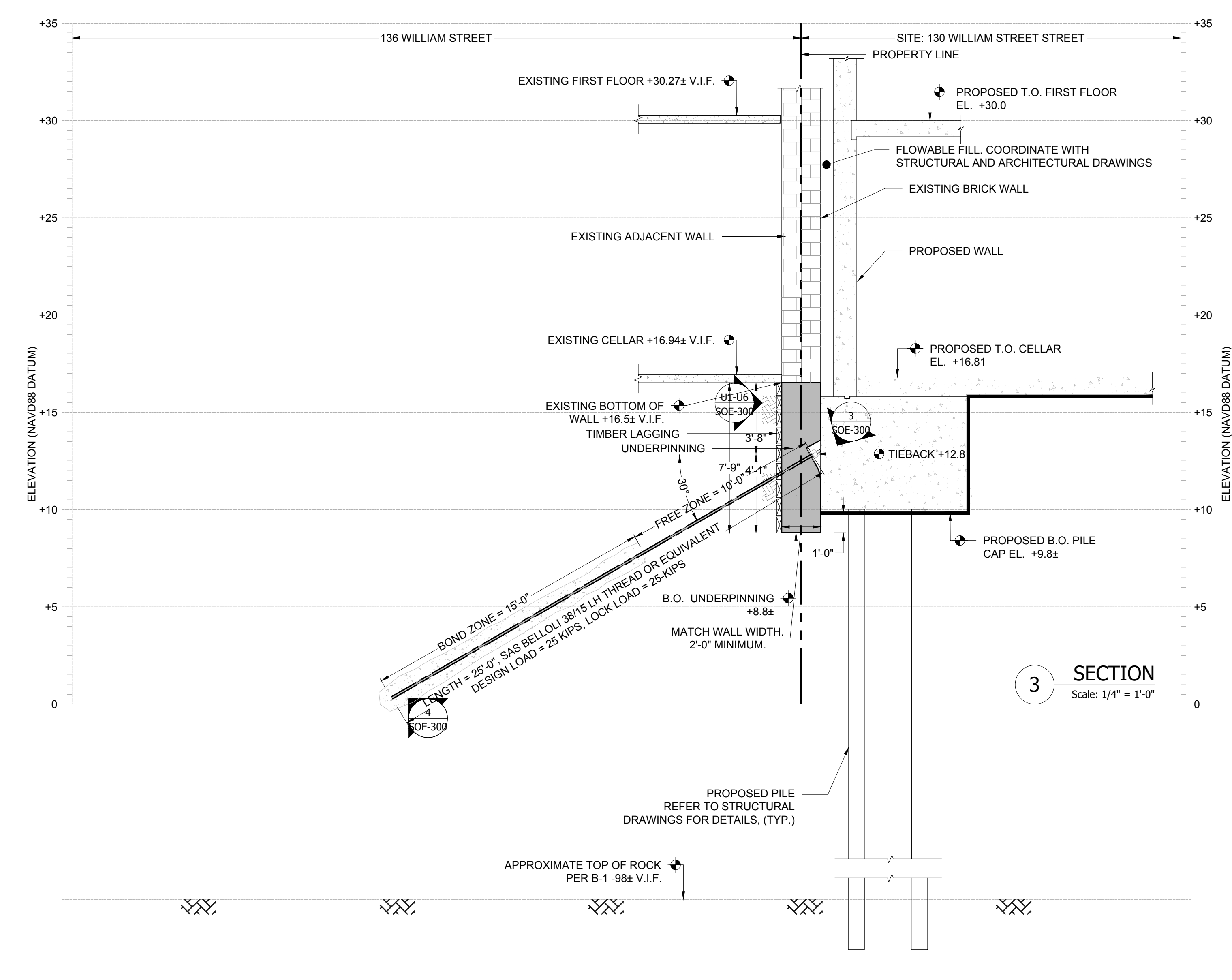
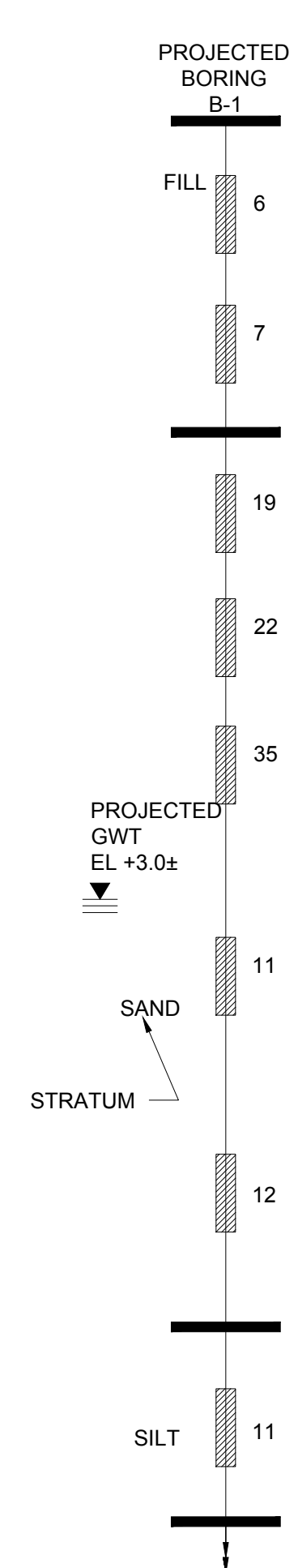
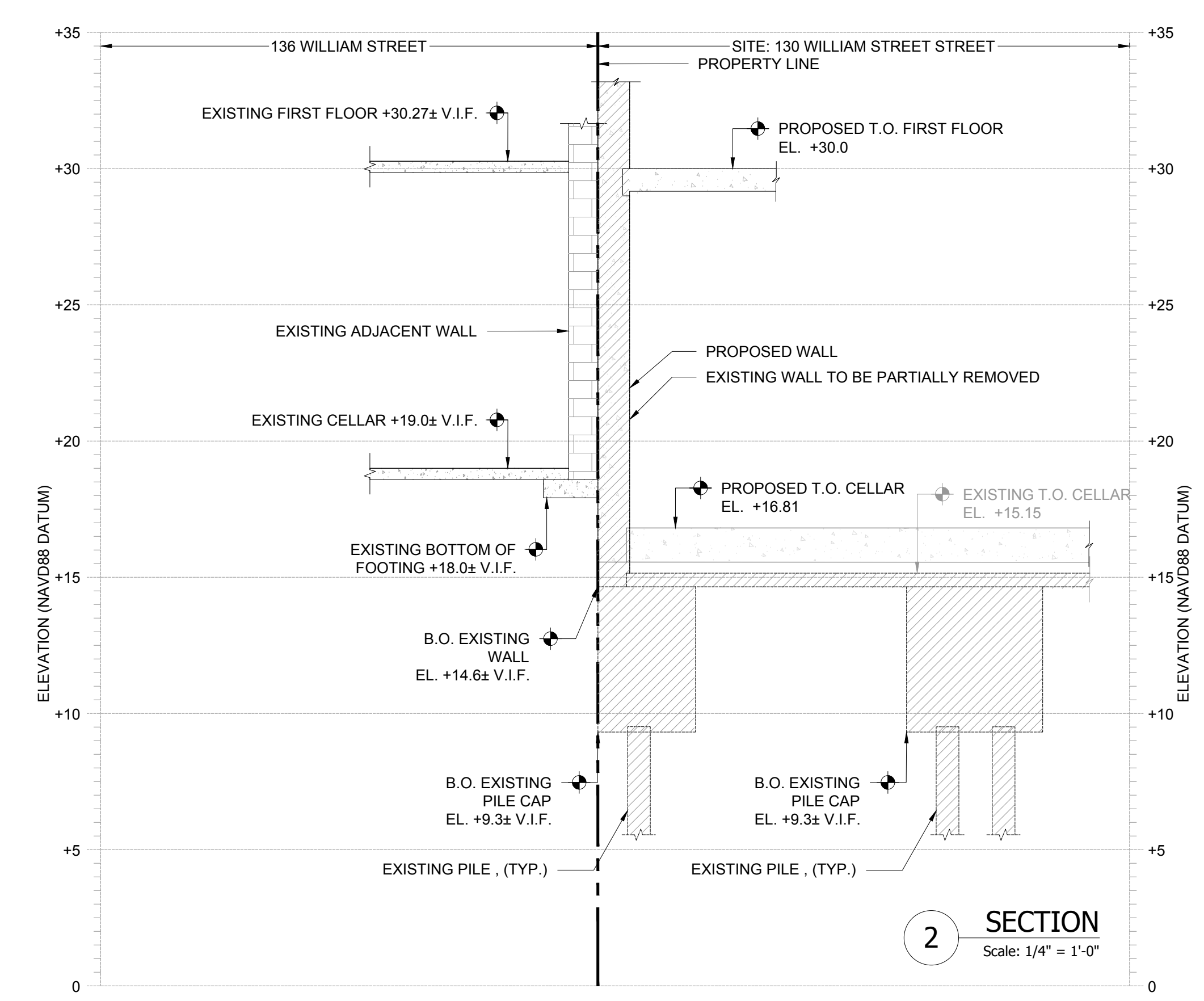
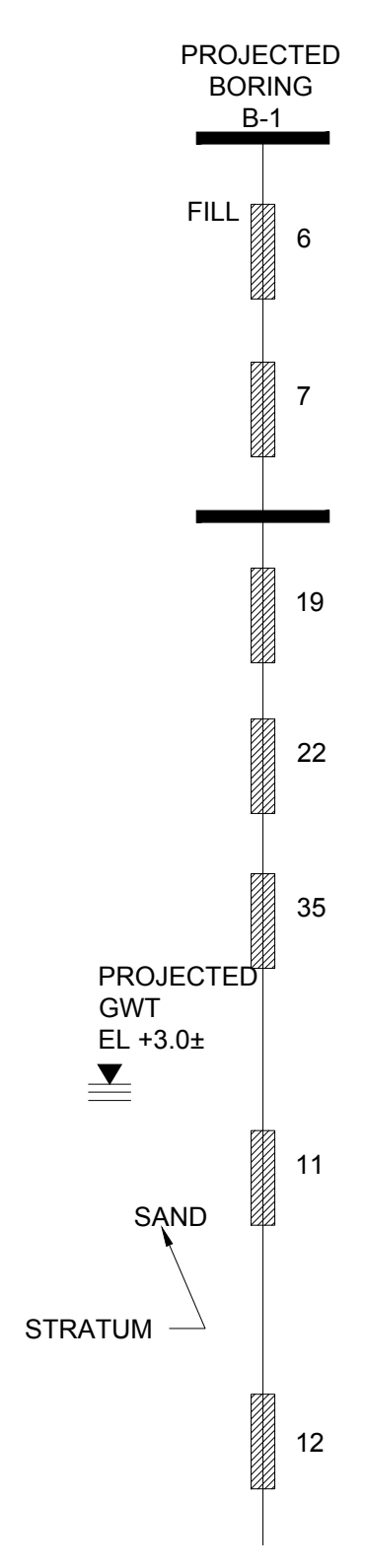
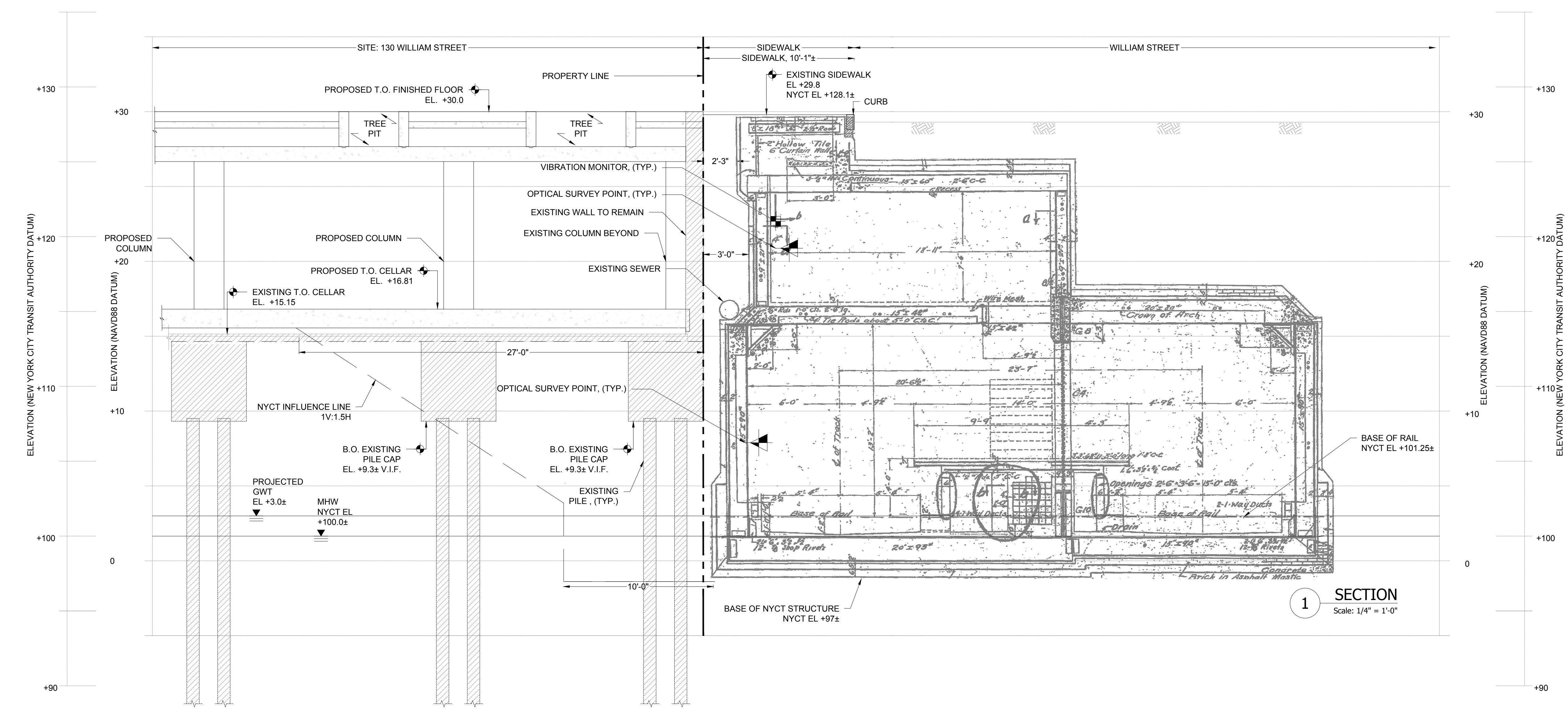
PW GROSSER CONSULTING, INC.
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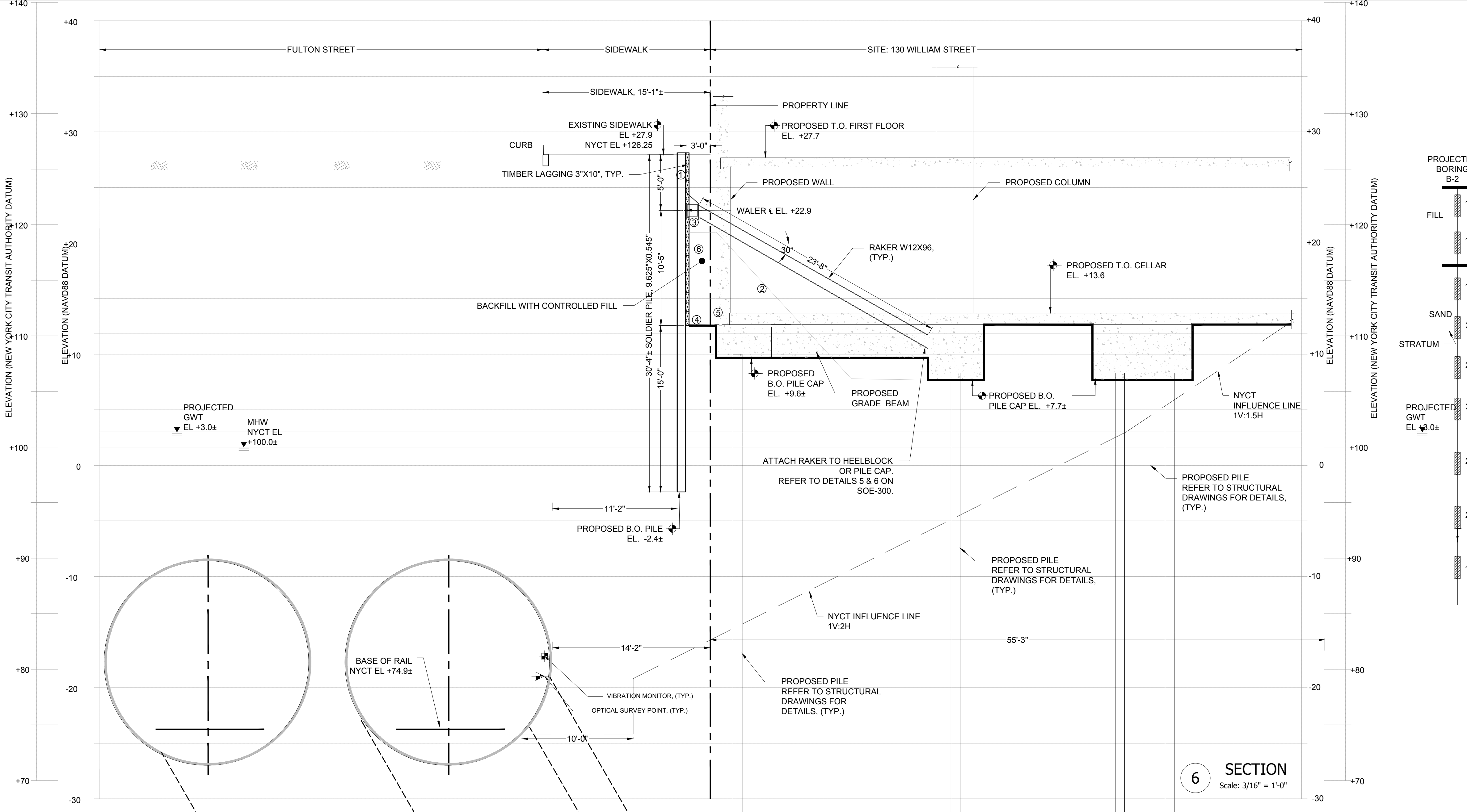
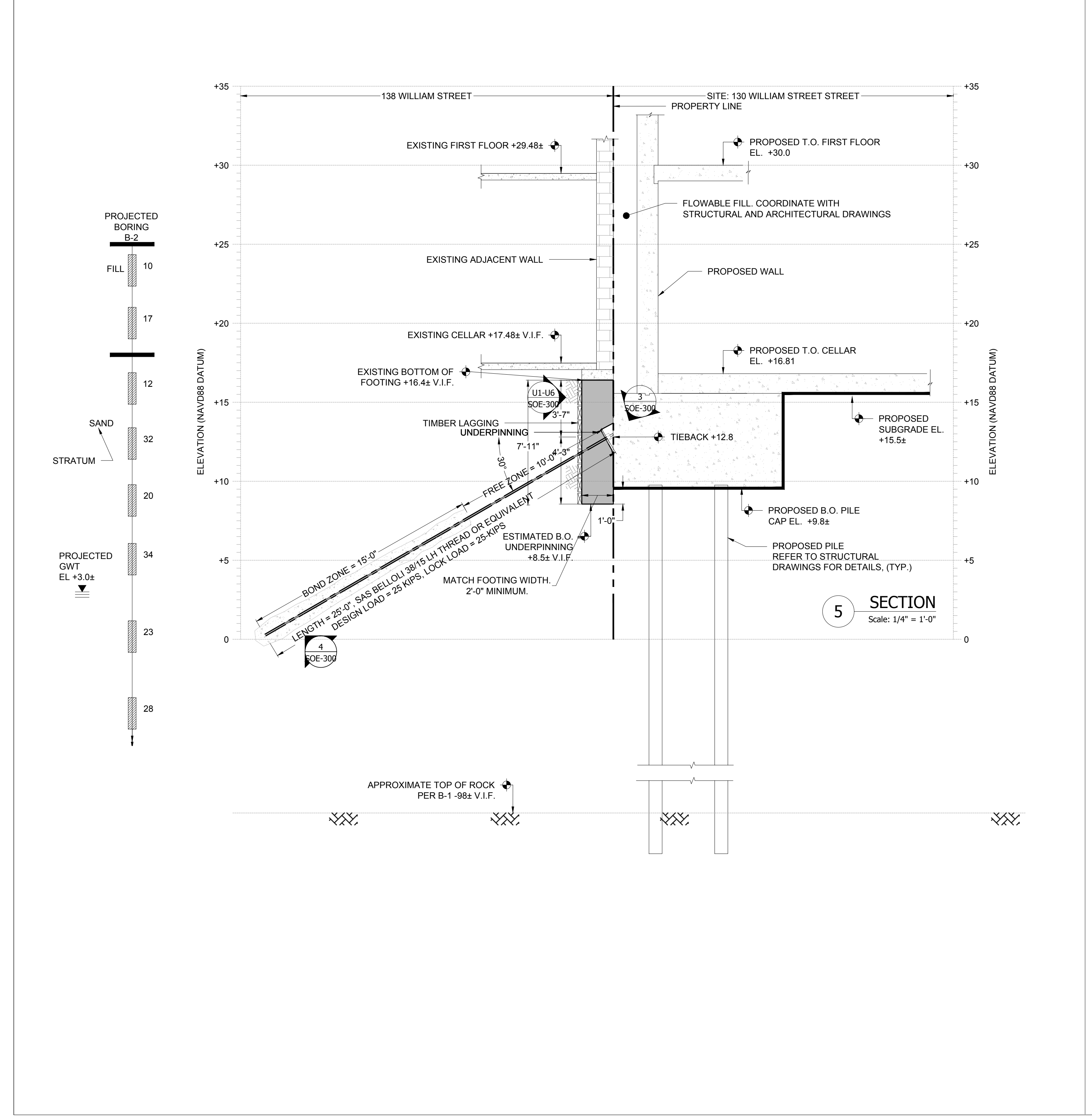
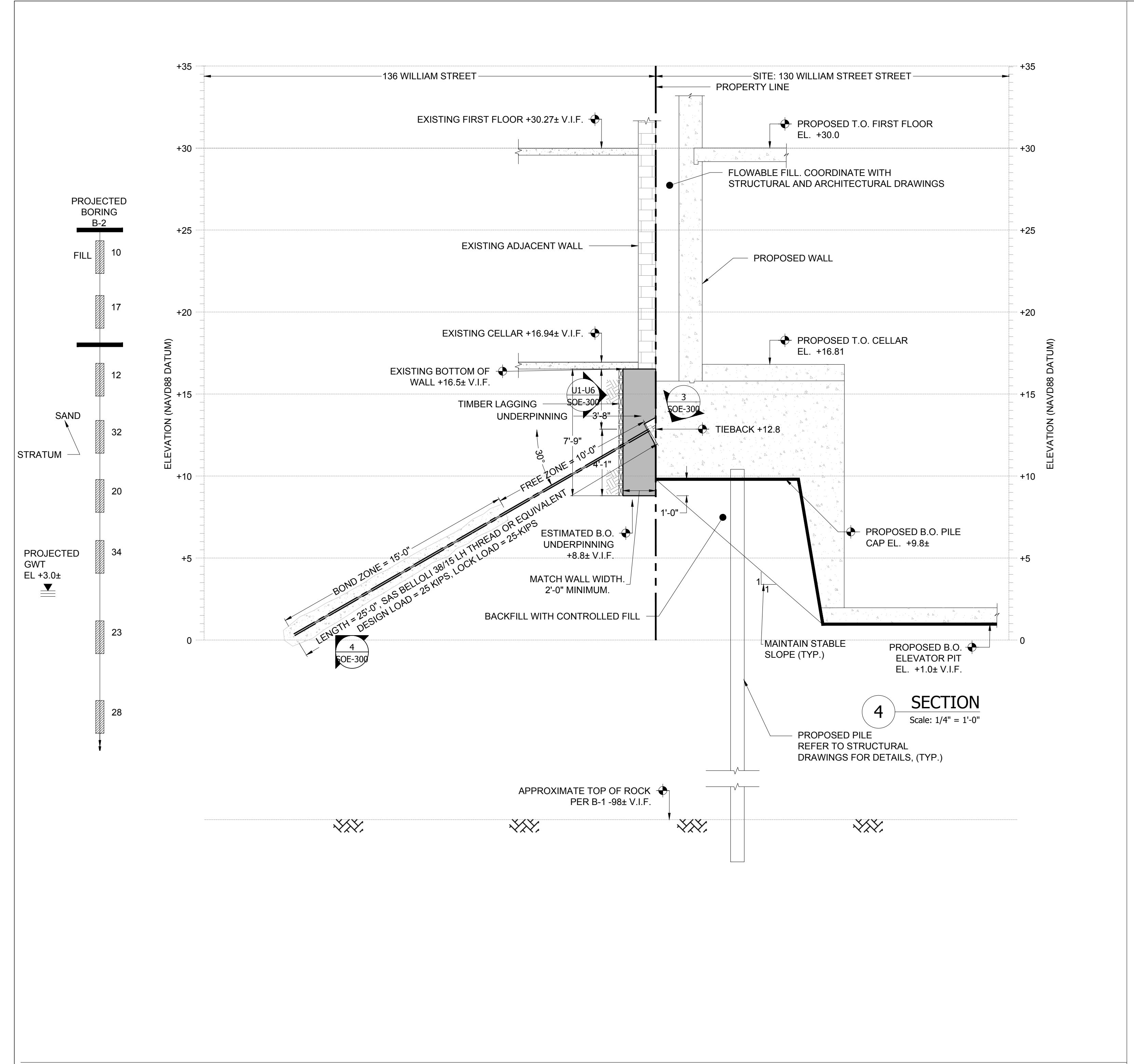
DOB RECORD



DWG TITLE
SUPPORT OF EXCAVATION SECTIONS

SEAL & SIGNATURE	DATE	11/28/15
	PROJECT #	15C1077
	SCALE	AS NOTED
	DWG NO.	SOE-200.00
		3





- CONSTRUCTION SEQUENCE:**
1. INSTALL PILES FOLLOWING GUIDELINES OUTLINED ON SHEET SOE-001
 2. EXCAVATE SOIL AND INSTALL LAGGING BRIMS FIRST. MAINTAIN SOIL BENCH IN FRONT OF WALL AND STABLE SOIL SLOPE OF 1H:1V. EXCAVATION SHALL NOT BE DEEPER THAN 2FT BELOW WALKER LEVEL. ELEVATION REFER TO SOE-001 FOR SOLDIER PILE LAGGING NOTES.
 3. INSTALL WALKER AND RAKER FOLLOWING GUIDELINES OUTLINED ON SHEET SOE-001
 4. EXCAVATE SOIL TO SUBGRADE AND INSTALL LAGGING BRIMS FIRST.
 5. CONSTRUCT FOUNDATIONS, STRUCTURAL WALLS, SLAB ON GRADE, AND FIRST FLOOR SLAB.
 6. BACKFILL BETWEEN SOIL WALL AND STRUCTURAL WALL USING CONTROLLED COMPACTED FILL.

NOTES

PROJECTED BORING B-2
FILL 10
17
12
SAND 32
20
PROJECTED GWT EL. +3.0±

KEYPLAN

03/21/2017 COORDINATED SET
01/06/2017 HUB SET
10/06/2016 NYCT SUBMITTAL
08/06/2016 NYCT SUBMITTAL
08/22/2016 NYCT SUBMITTAL
03/21/2016 NYCT SUBMITTAL

Number: Date: Revision:

THE LIGHTSTONE GROUP
130 WILLIAMS STREET
PROPERTY OWNER LLC
460 PARK AVE, 13TH FLOOR
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TEL: (212) 616.9971

PROJECT NAME: **130 WILLIAM STREET**
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DOB ESCAL

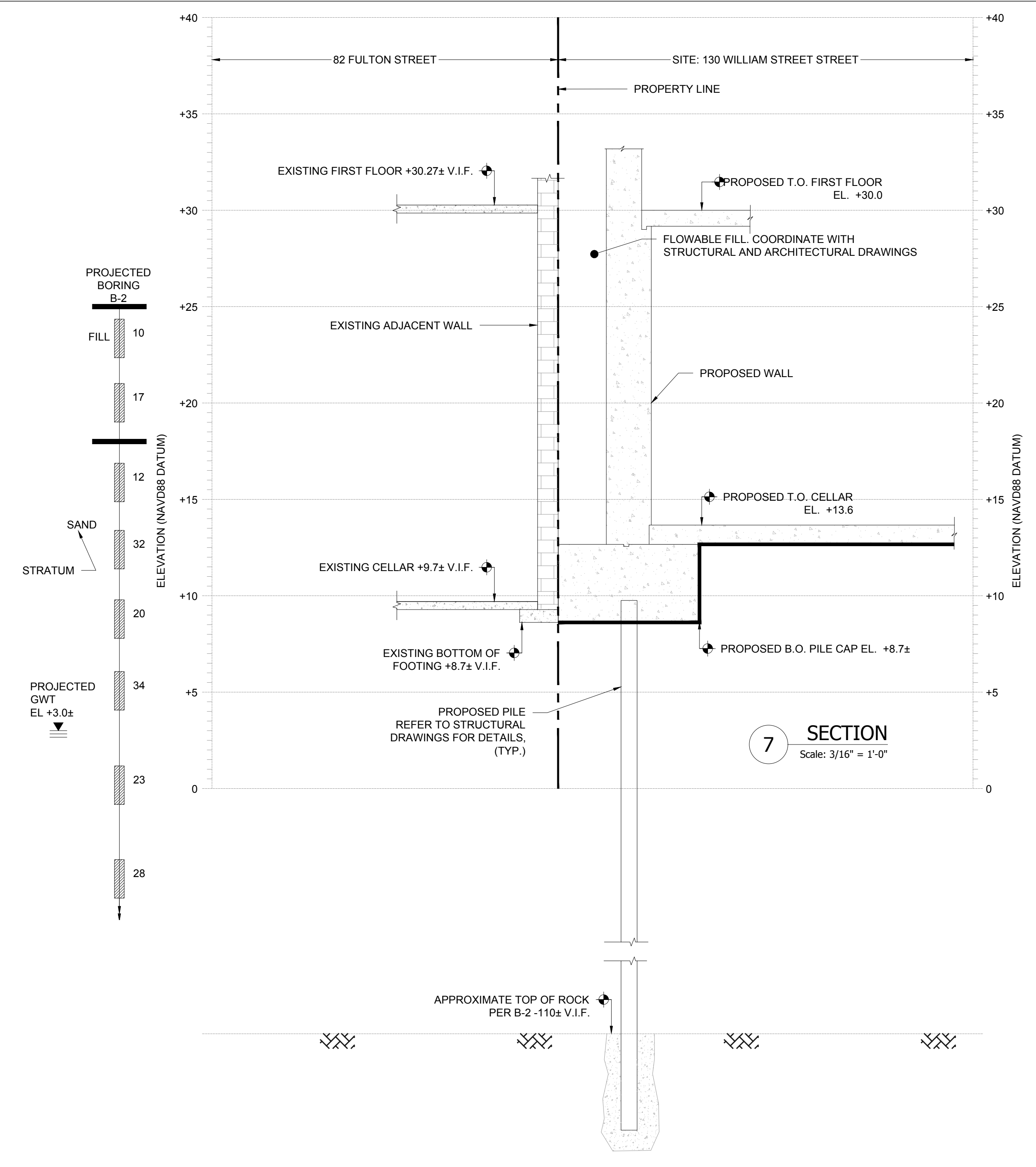
DOB STAMPS & SIGNATURES

DWG TITLE

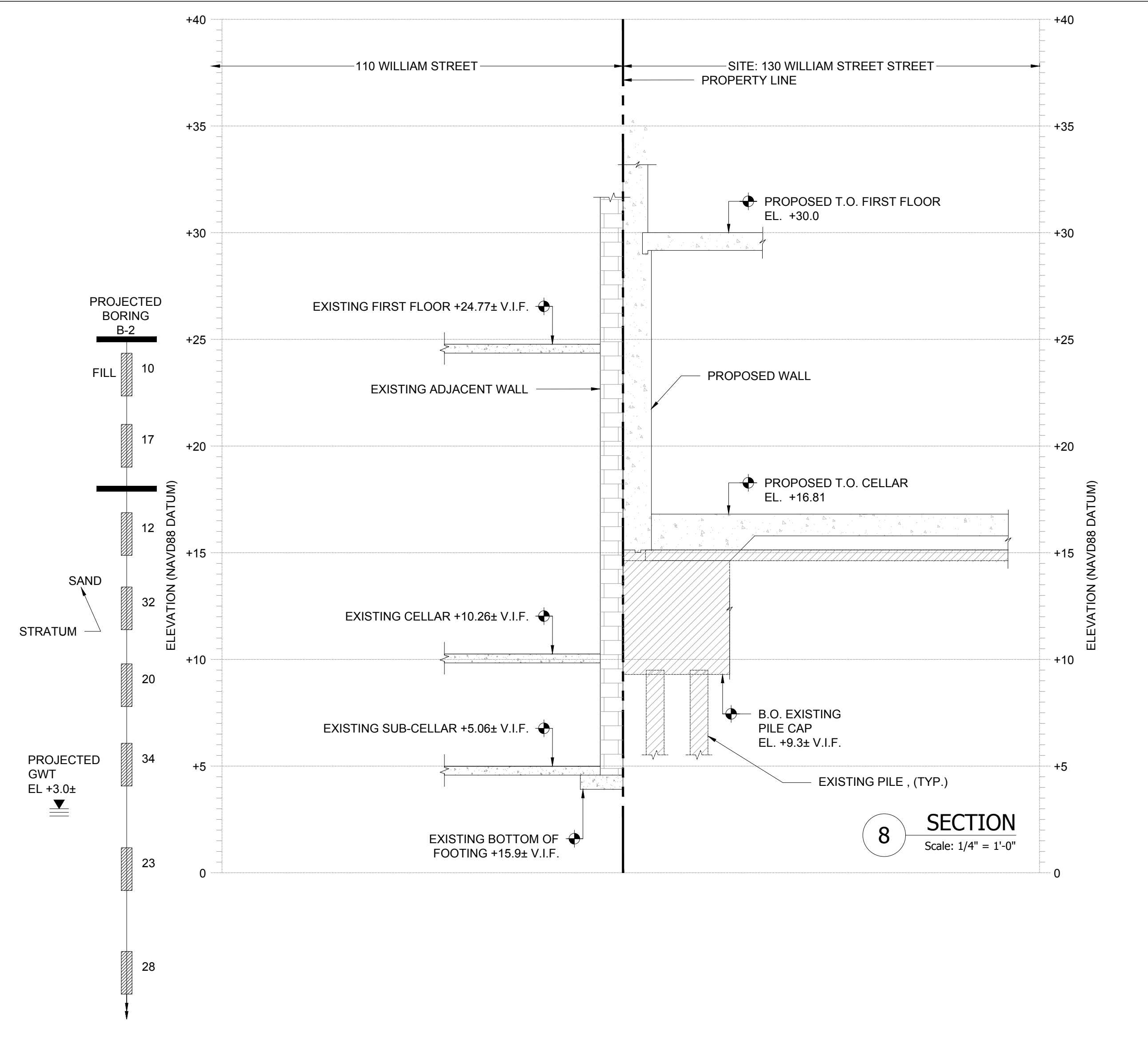
SUPPORT OF EXCAVATION SECTIONS

SEAL & SIGNATURE: [Signature]
DATE: 11/28/15
PROJECT #: 15C1077
SCALE: AS NOTED
DWG NO: **SOE-201.00**

4



7 SECTION
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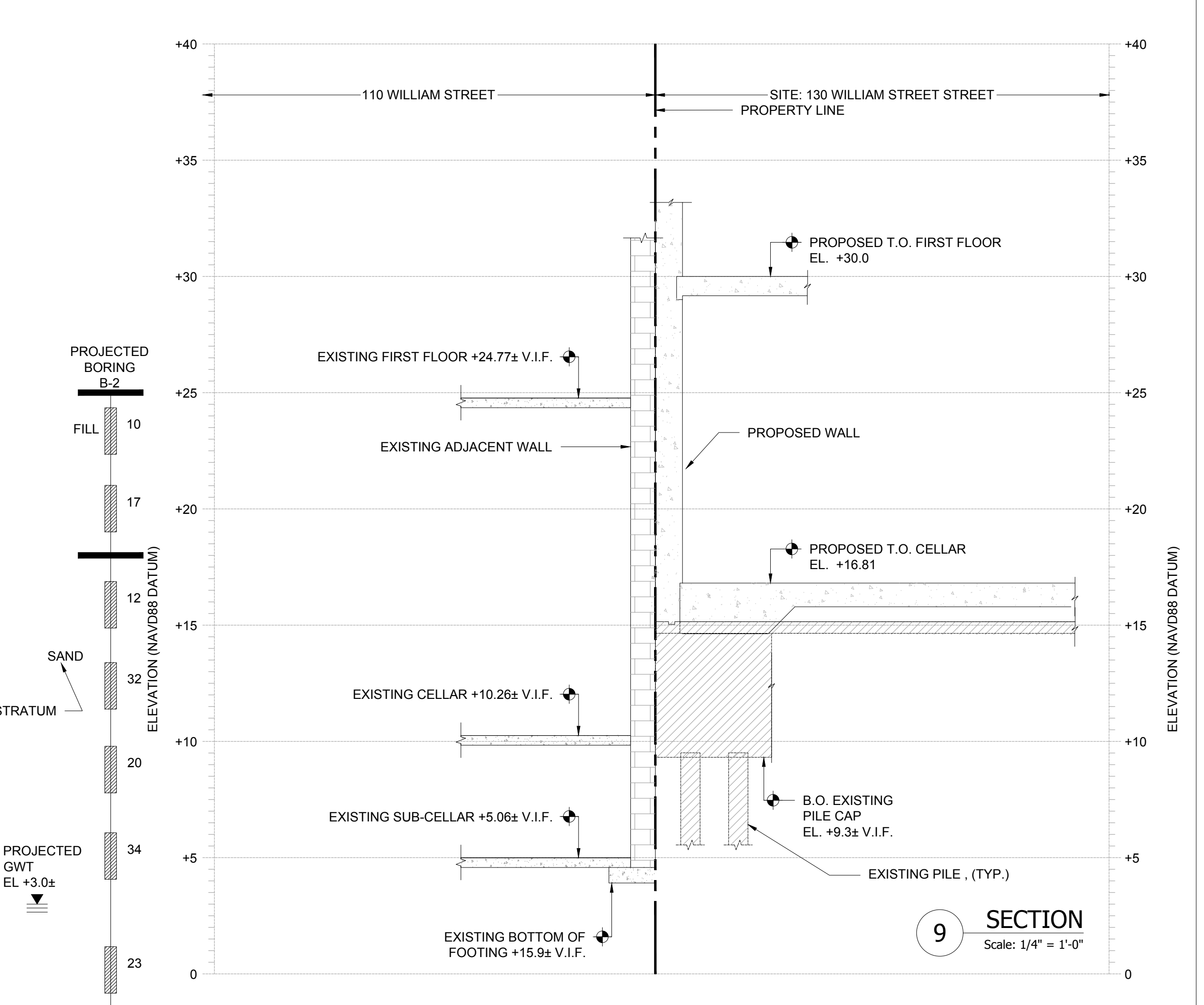


8 SECTION
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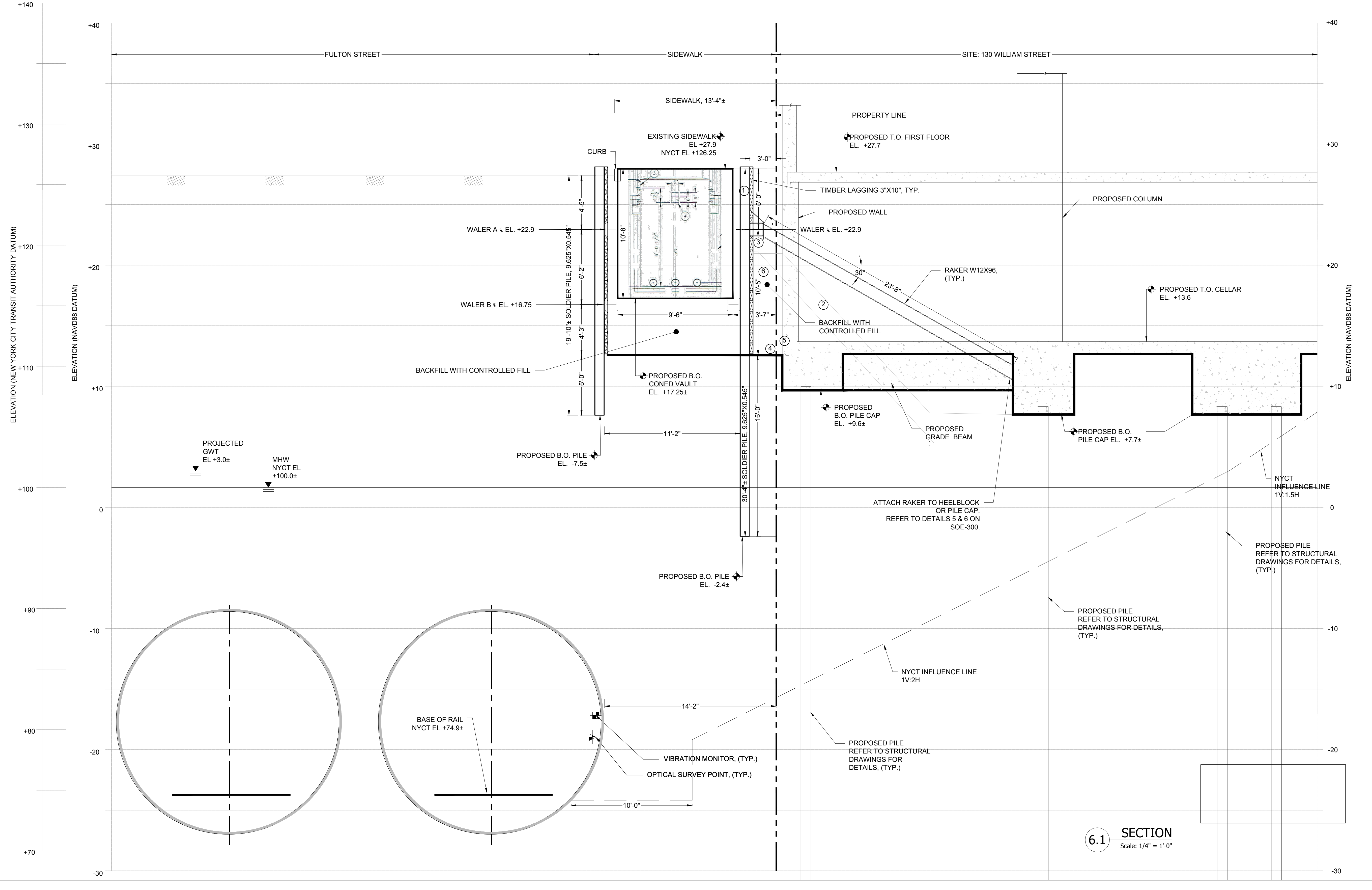
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Number	Date	Revision
03/21/2017		COORDINATED SET
01/06/2017		HUB SET
10/06/2016		NYCT SUBMITTAL
08/06/2016		NYCT SUBMITTAL
08/22/2016		NYCT SUBMITTAL
03/21/2016		NYCT SUBMITTAL

THE LIGHTSTONE GROUP
130 WILLIAMS STREET
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9 SECTION
Scale: 1/4" = 1'-0"



6.1 SECTION
Scale: 1/4" = 1'-0"

PROJECT NAME: **130 WILLIAM STREET**
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DOB SIGNATURE

DOB STAMPS & SIGNATURES

NYC Development Hub

SUPPORT OF EXCAVATION SECTIONS

SEAL & SIGNATURE

DATE: 11/28/15
PROJECT #: 1501077
SCALE: AS NOTED
DWG NO: **SOE-202.00**

5

NOTES

KEYPLAN

03/21/2017	COORDINATED SET
01/06/2017	PLS SET
10/05/2016	INVT SUBMITTAL
09/05/2016	INVT SUBMITTAL
08/22/2016	INVT SUBMITTAL
03/21/2016	INVT SUBMITTAL

Number: _____ Date: _____ Revision: _____

THE LIGHTSTONE GROUP
130 WILLIAMS STREET
PROPERTY OWNER LLC
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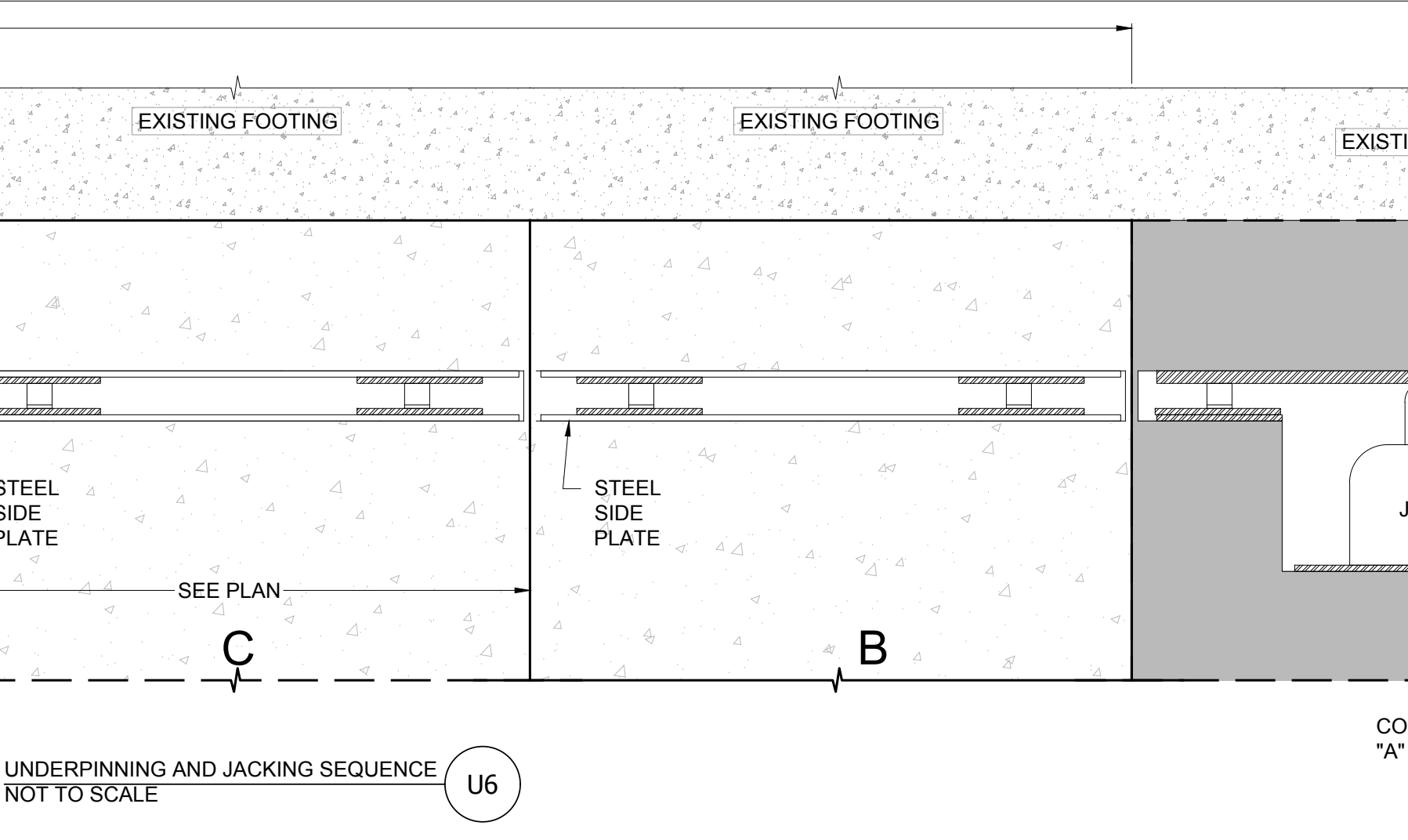
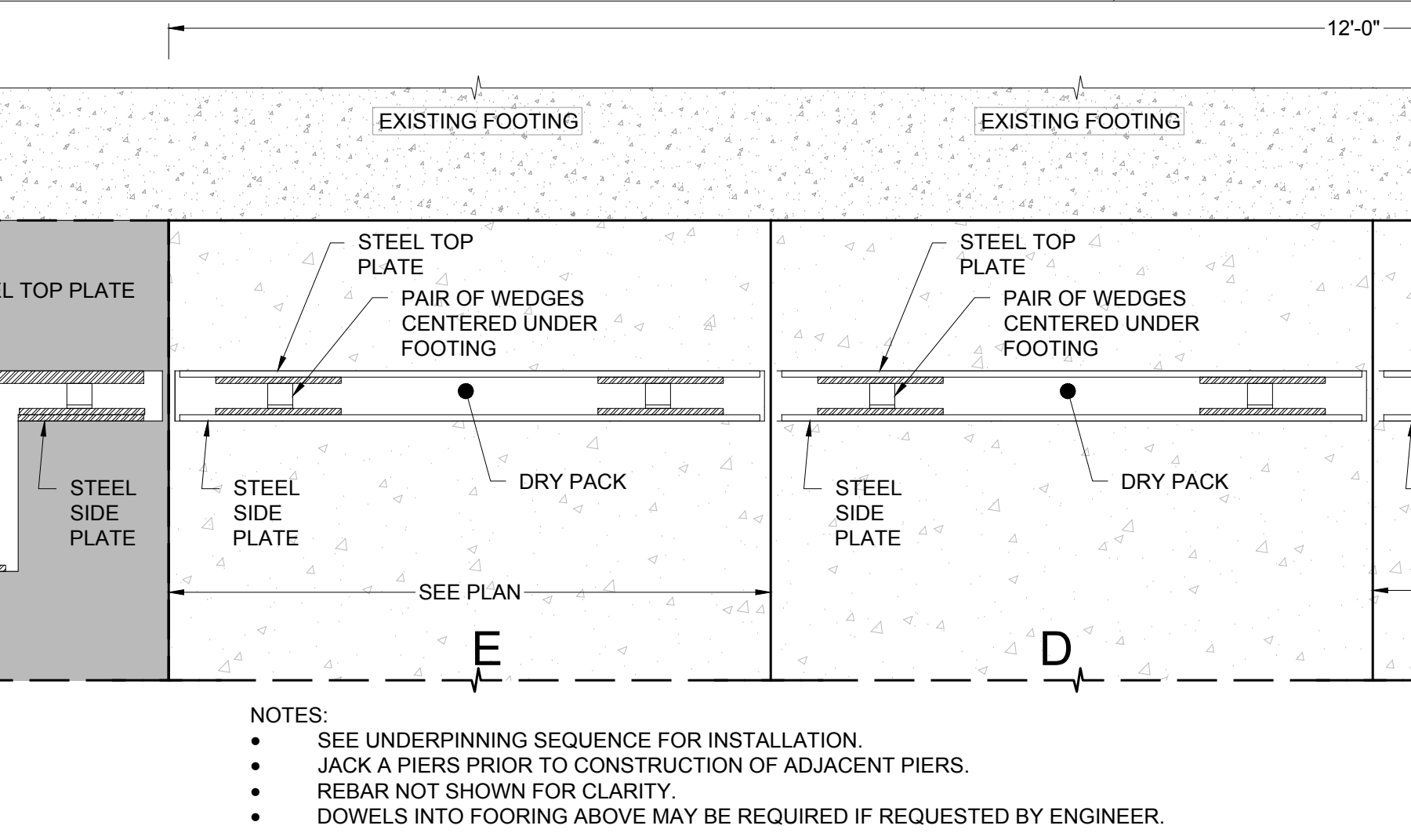
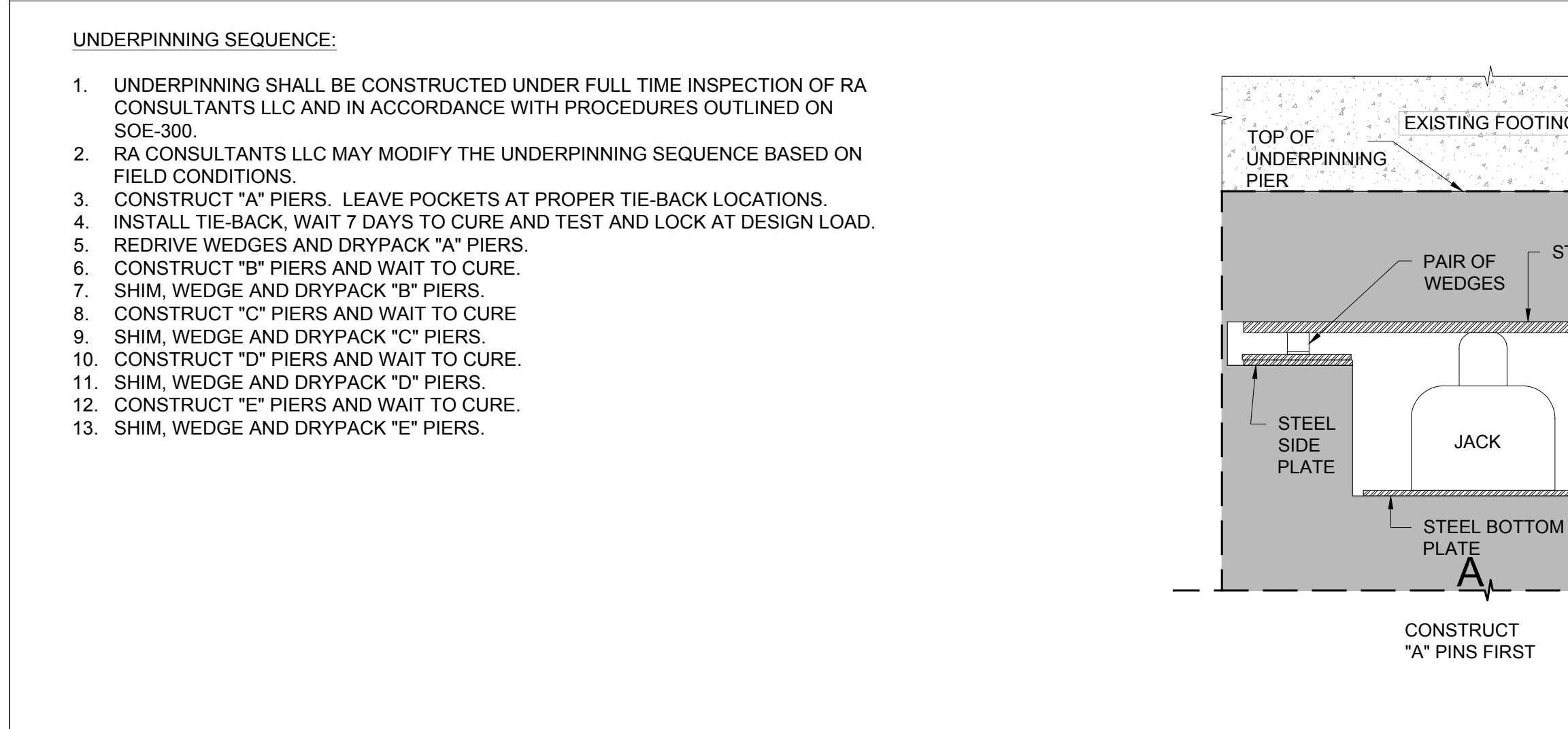
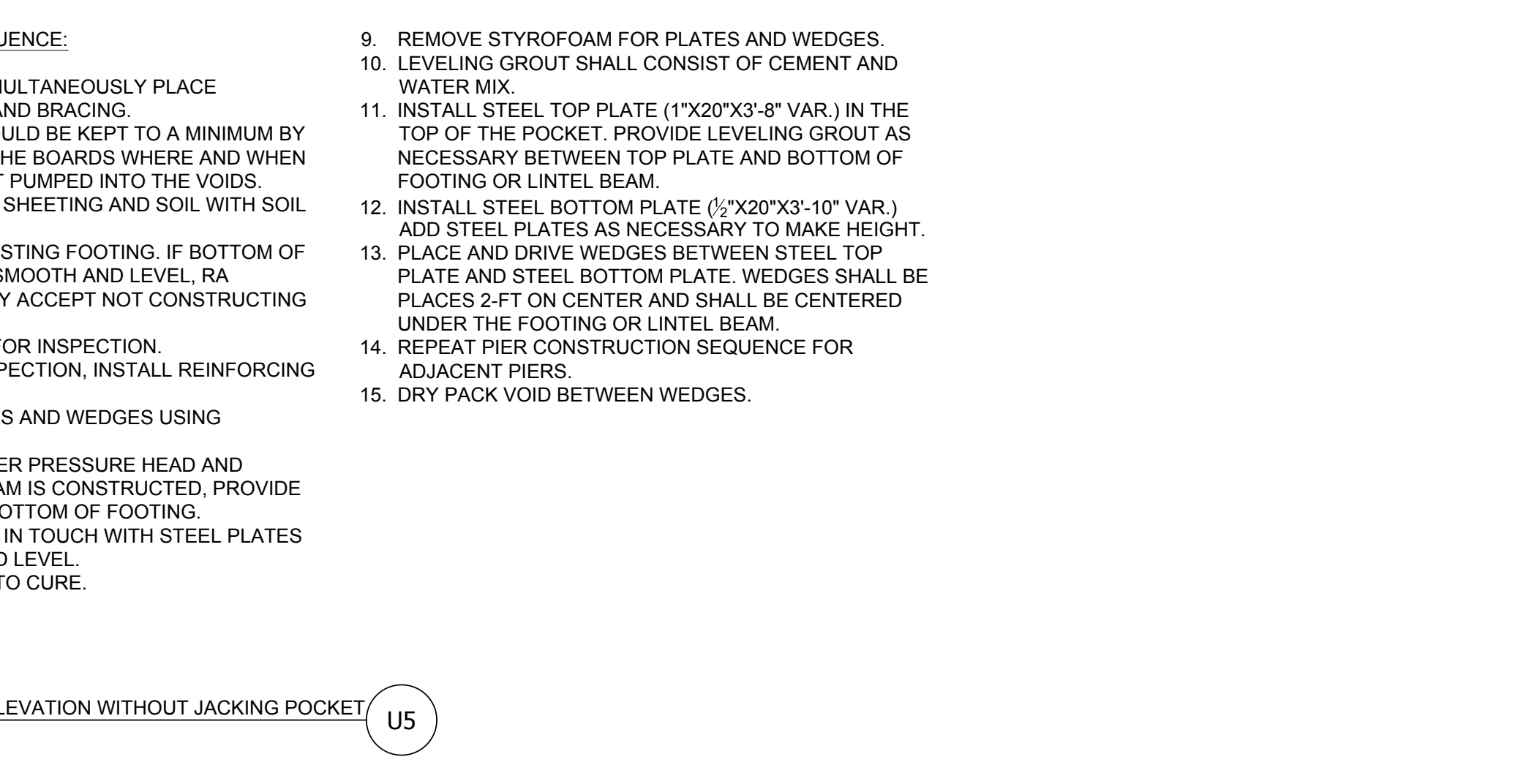
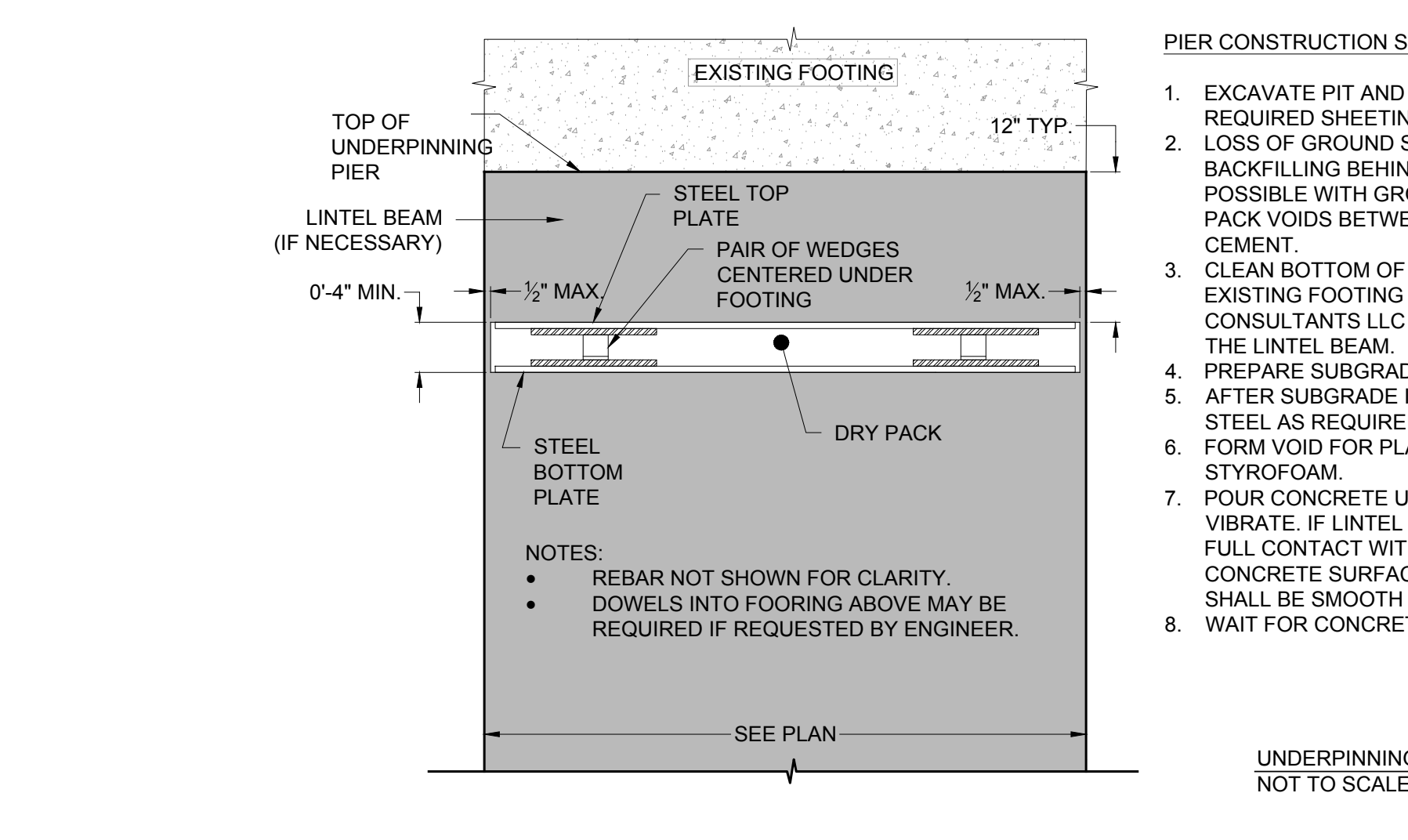
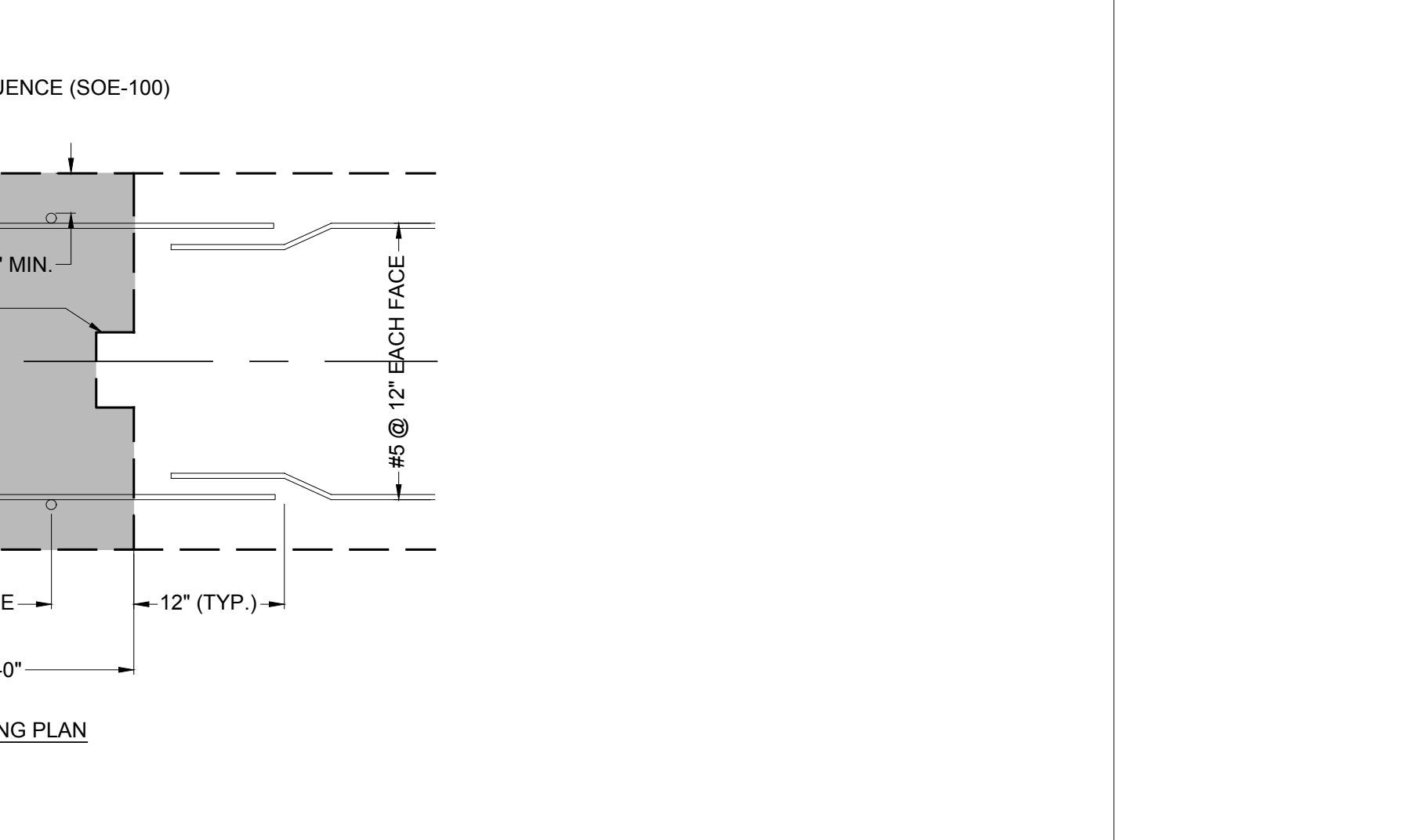
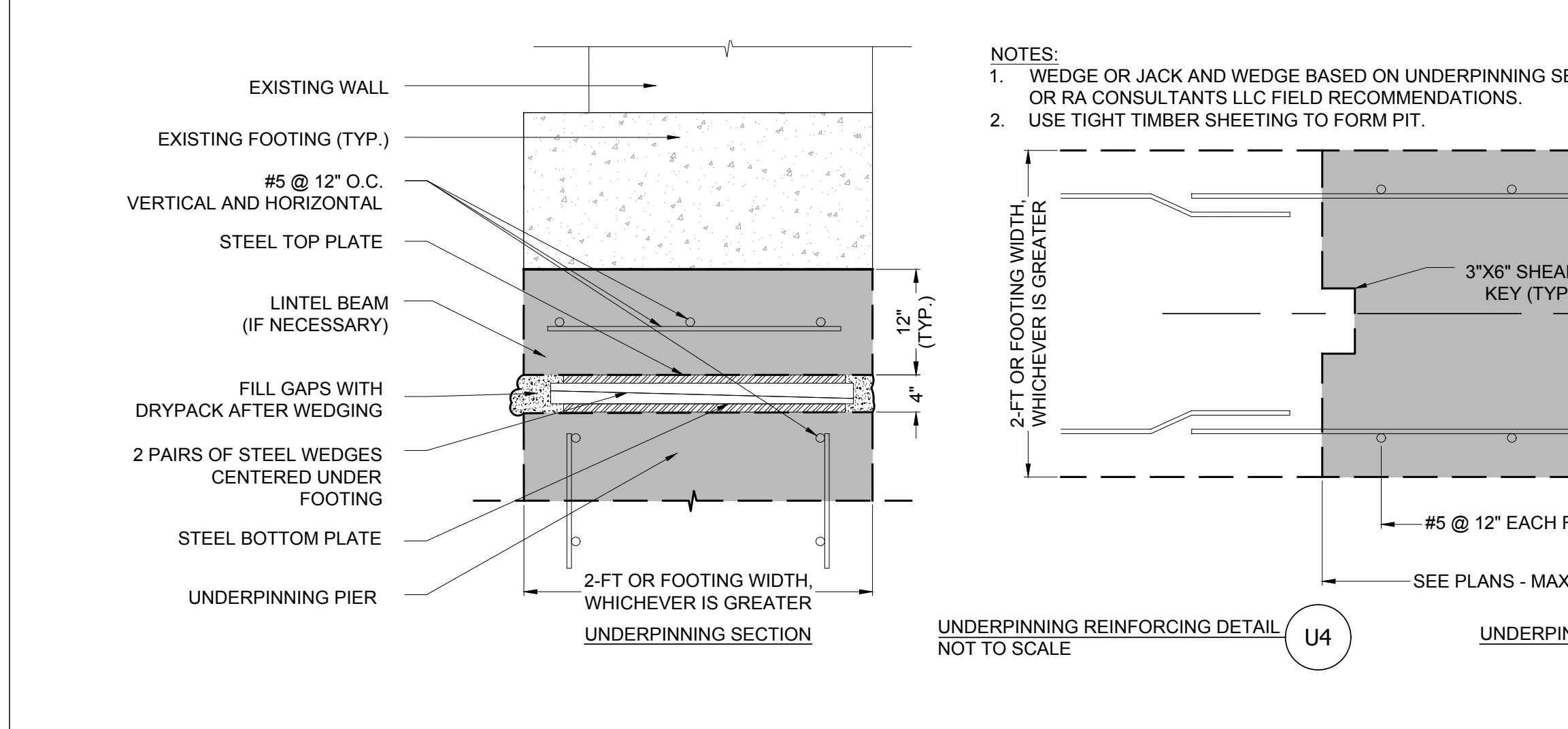
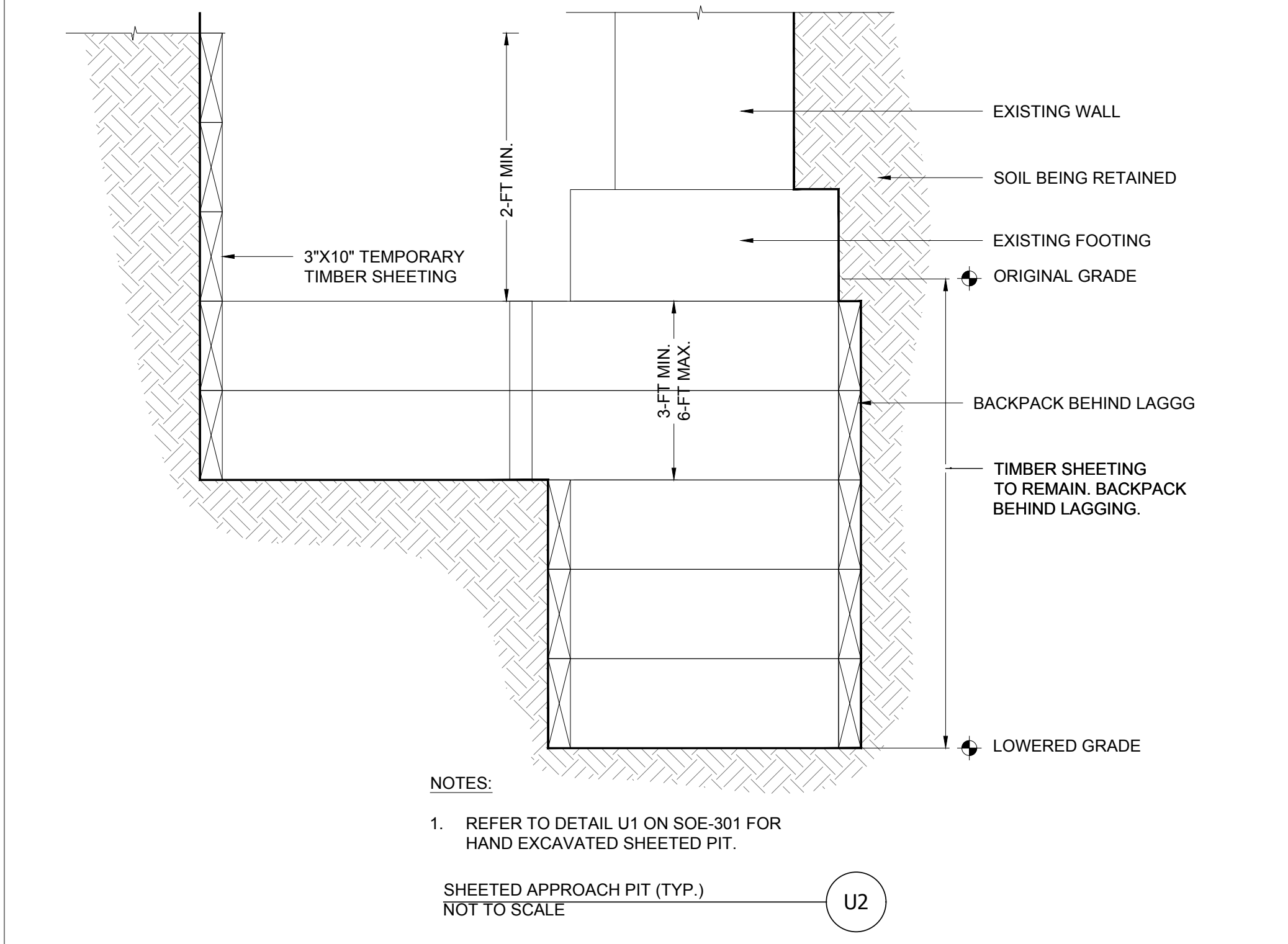
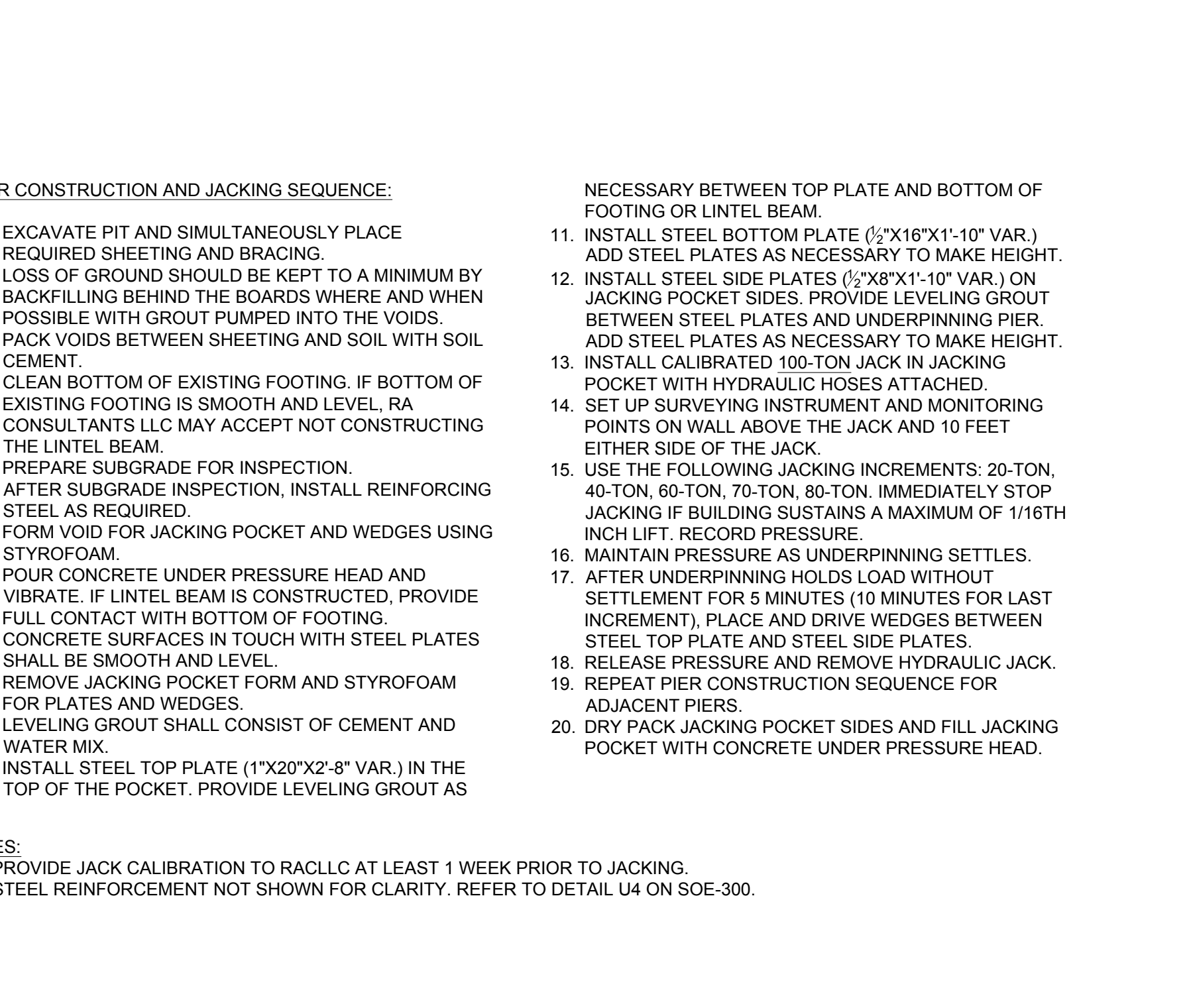
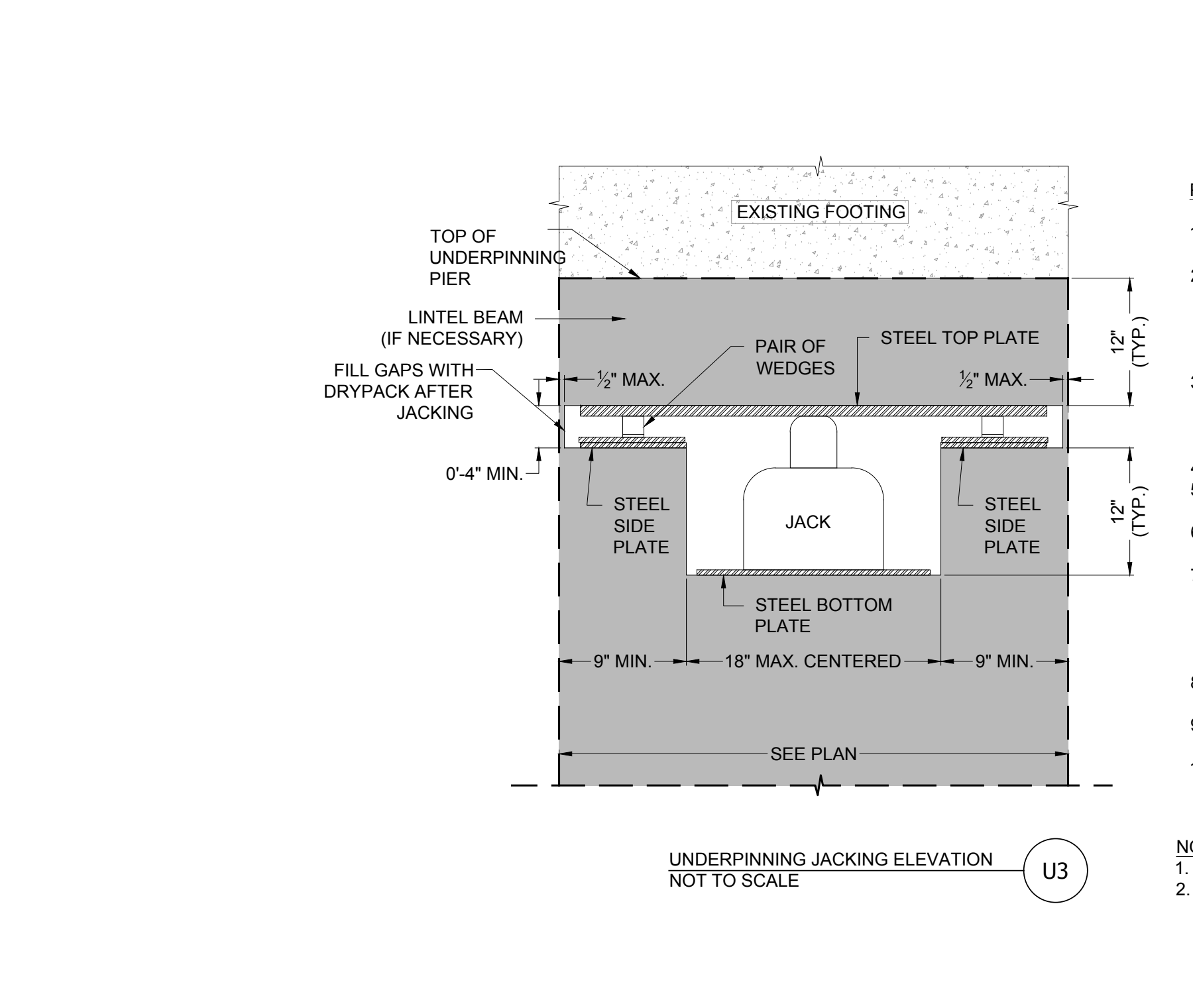
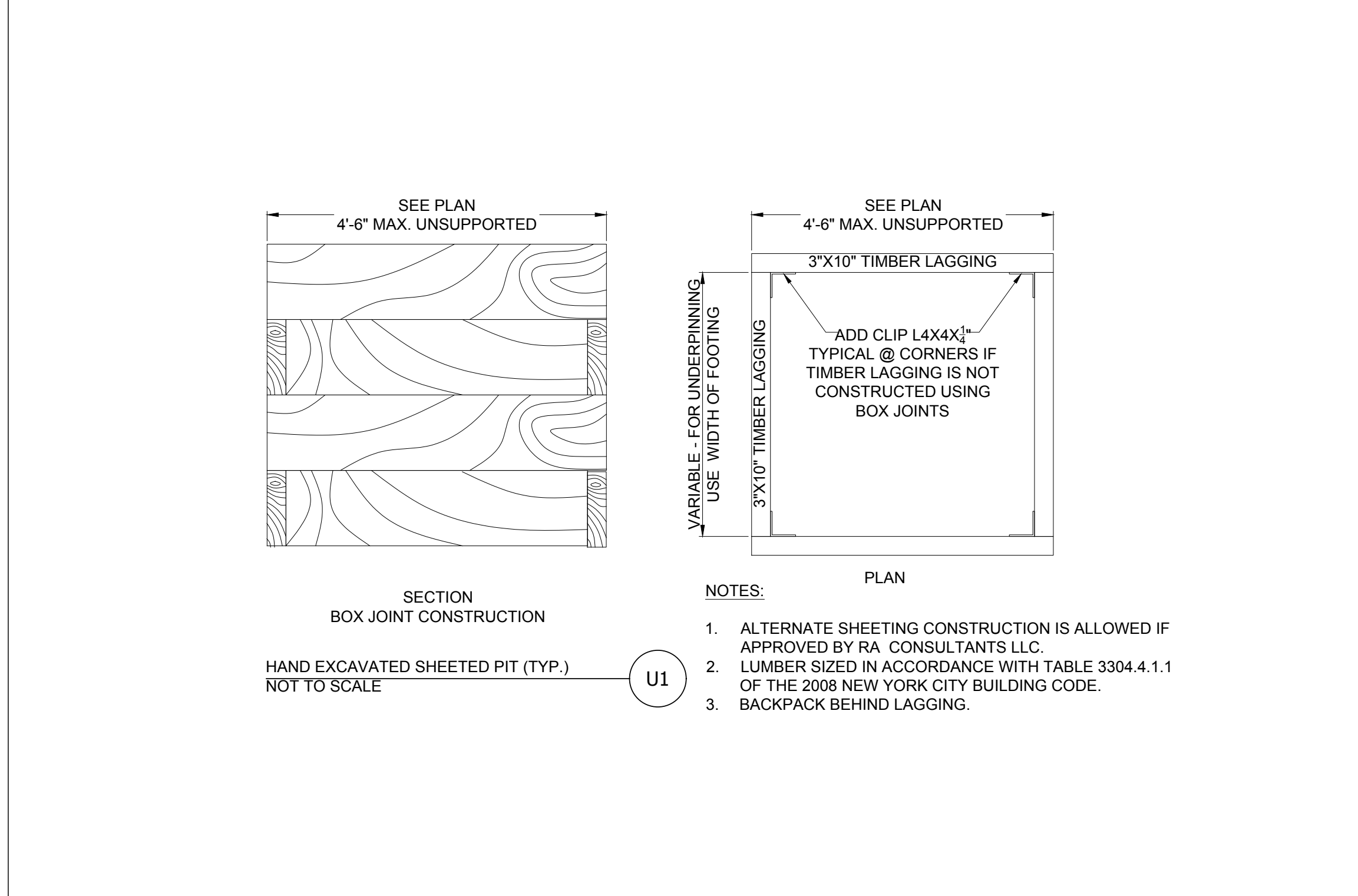
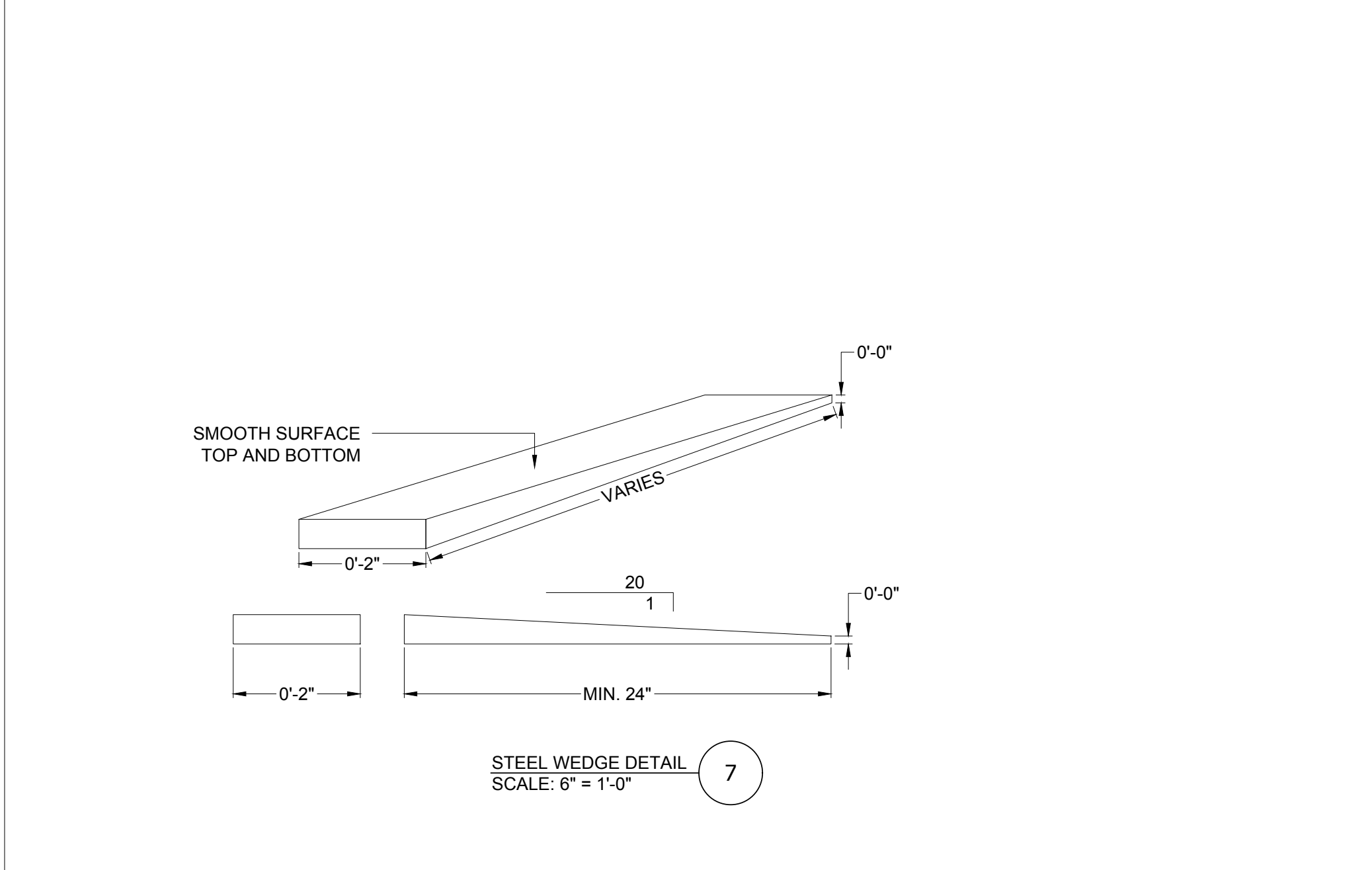
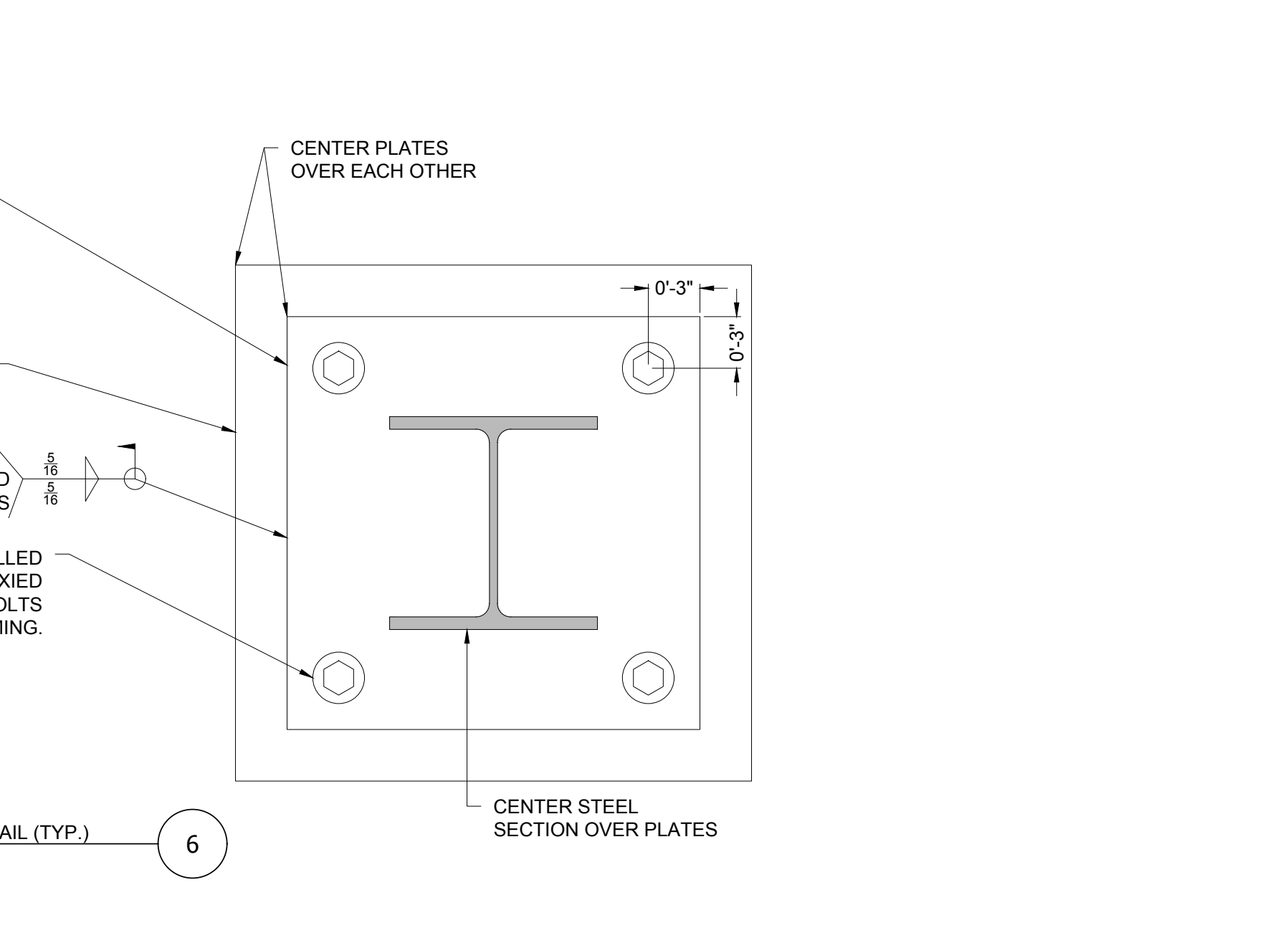
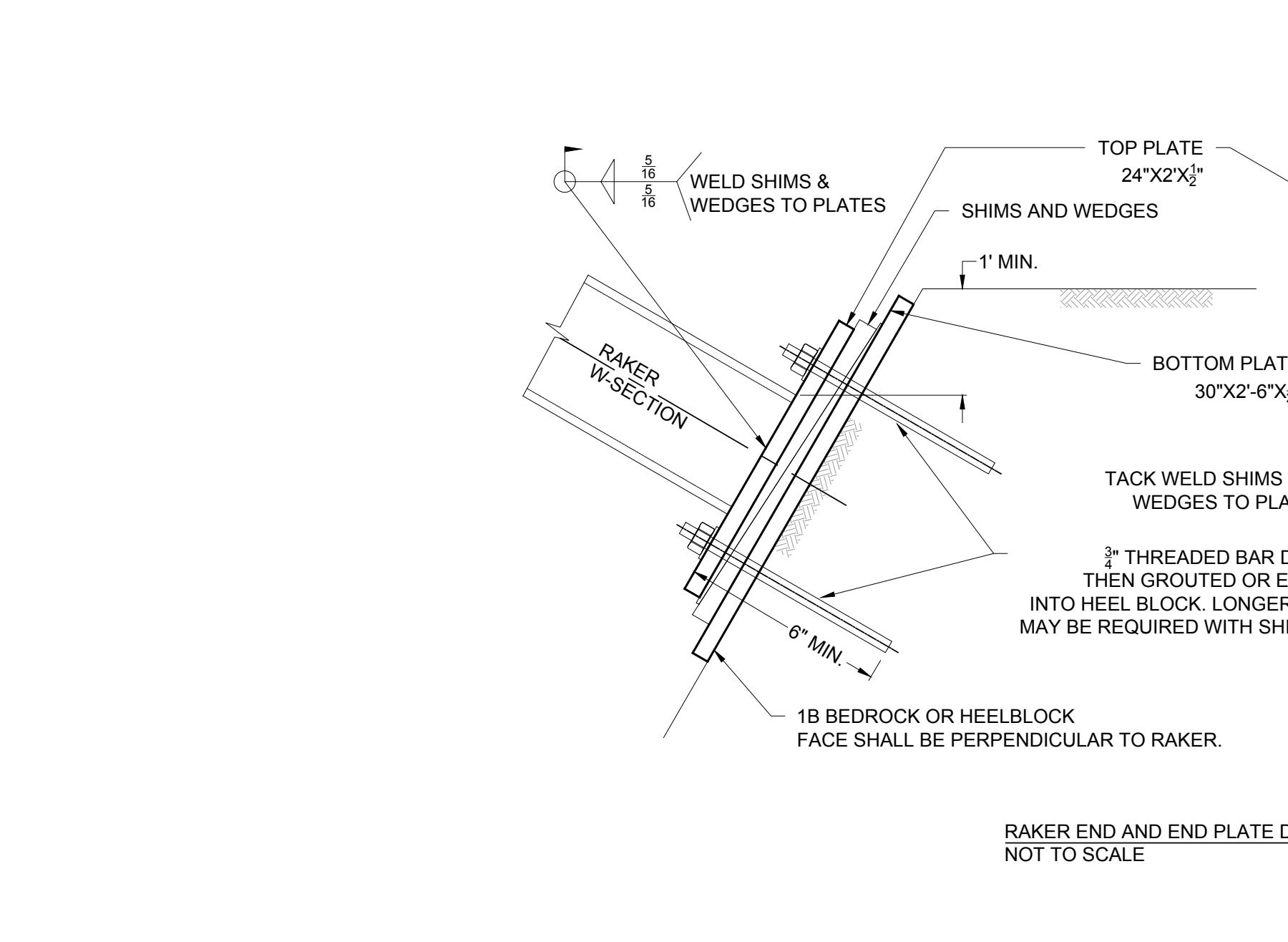
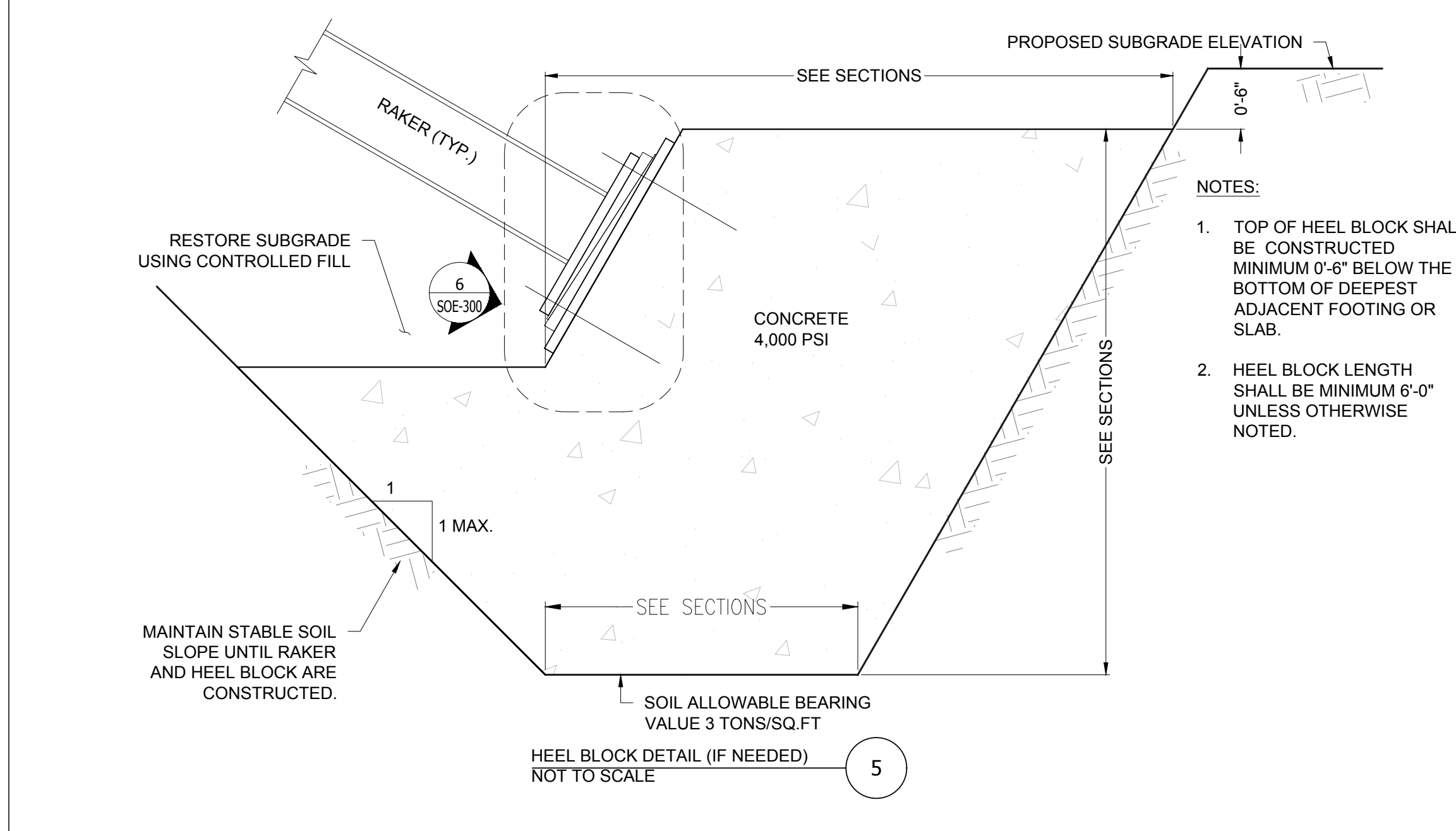
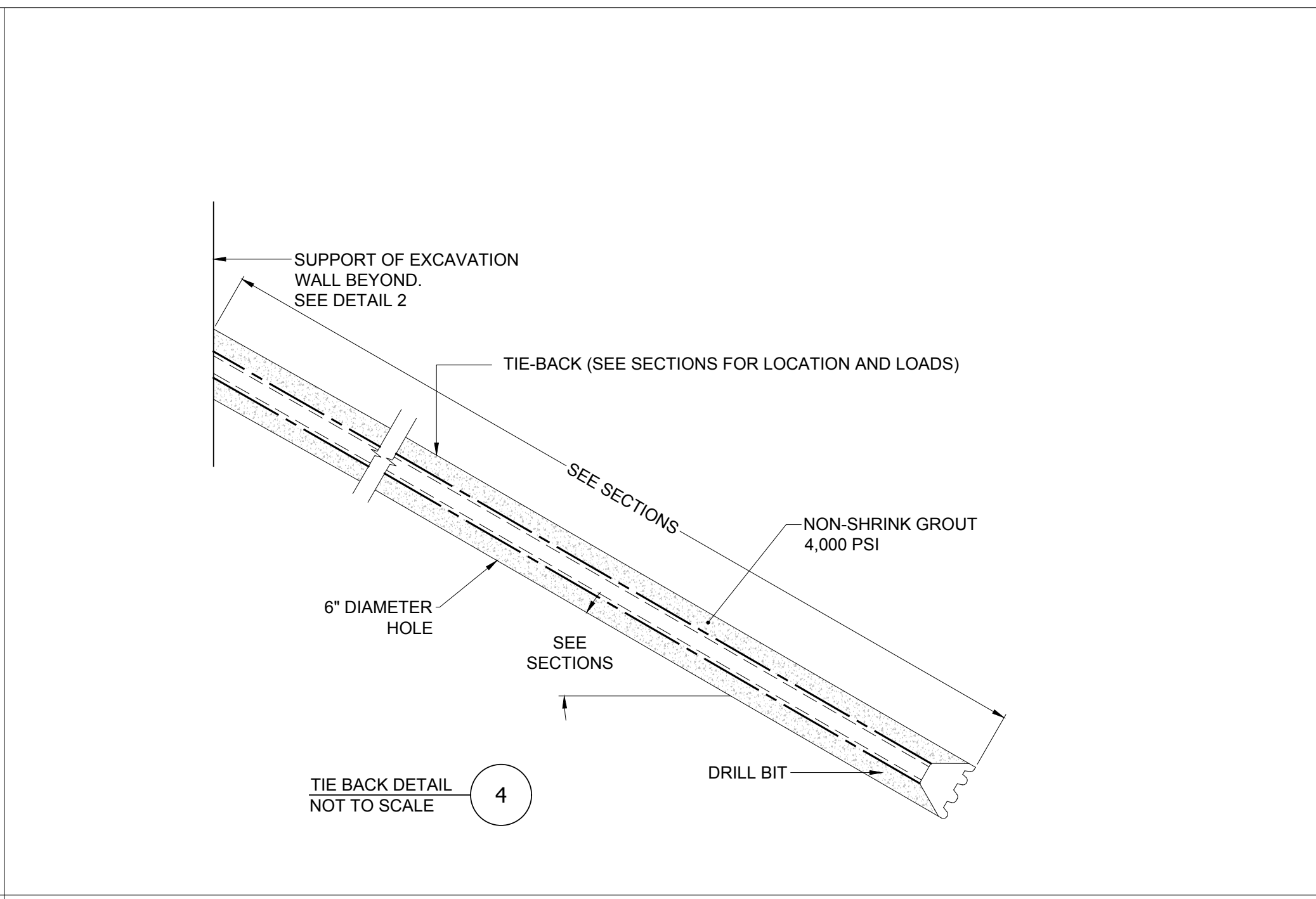
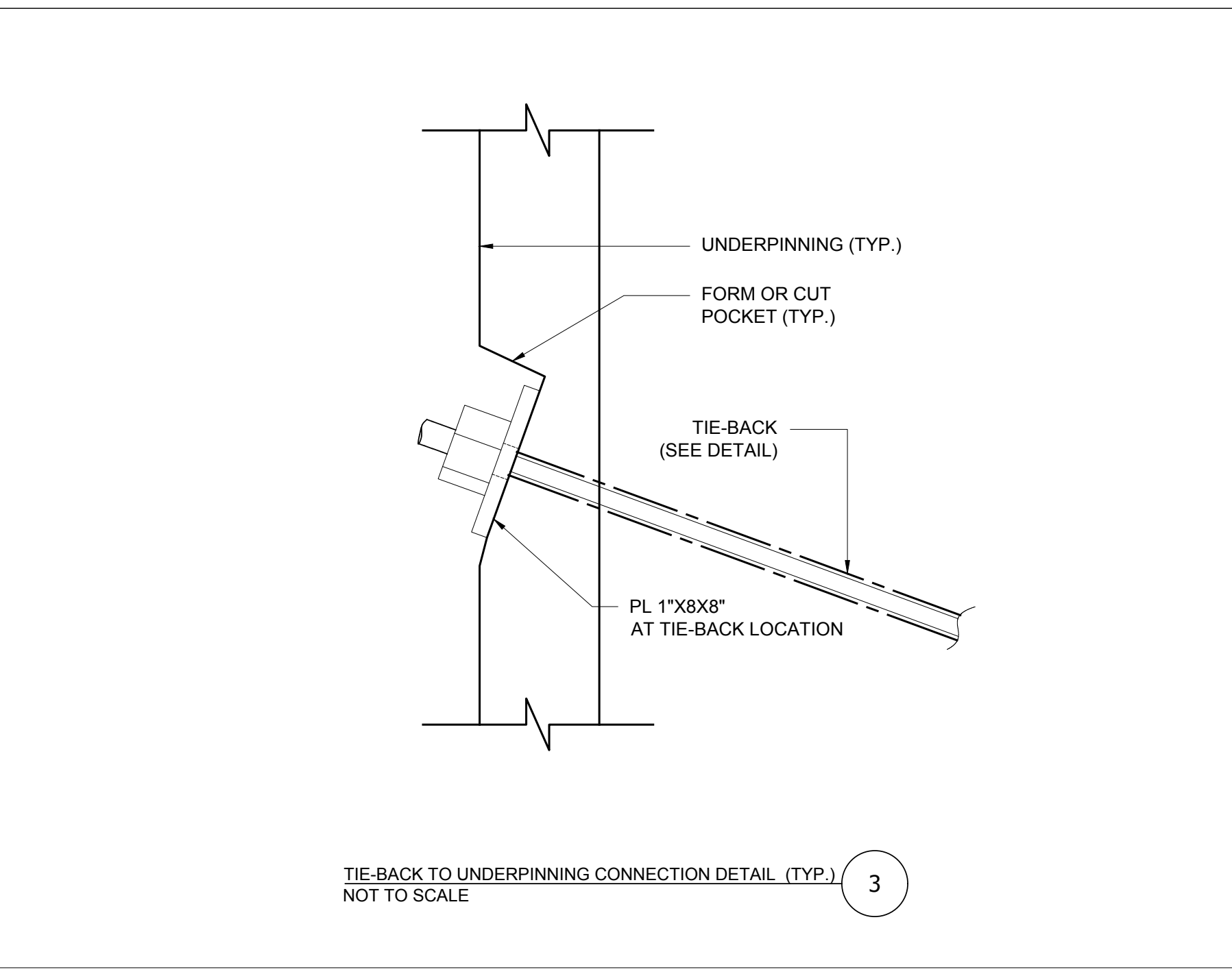
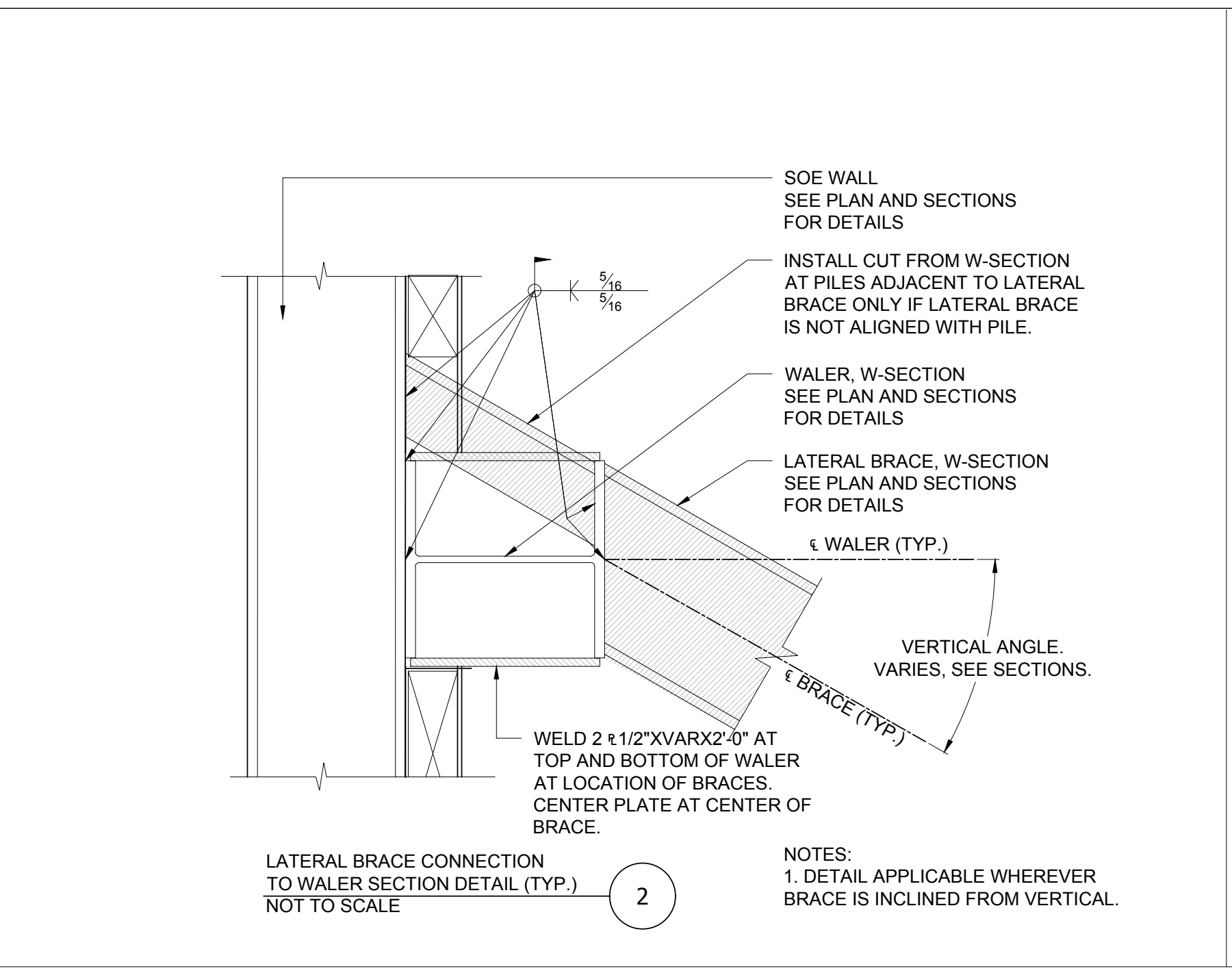
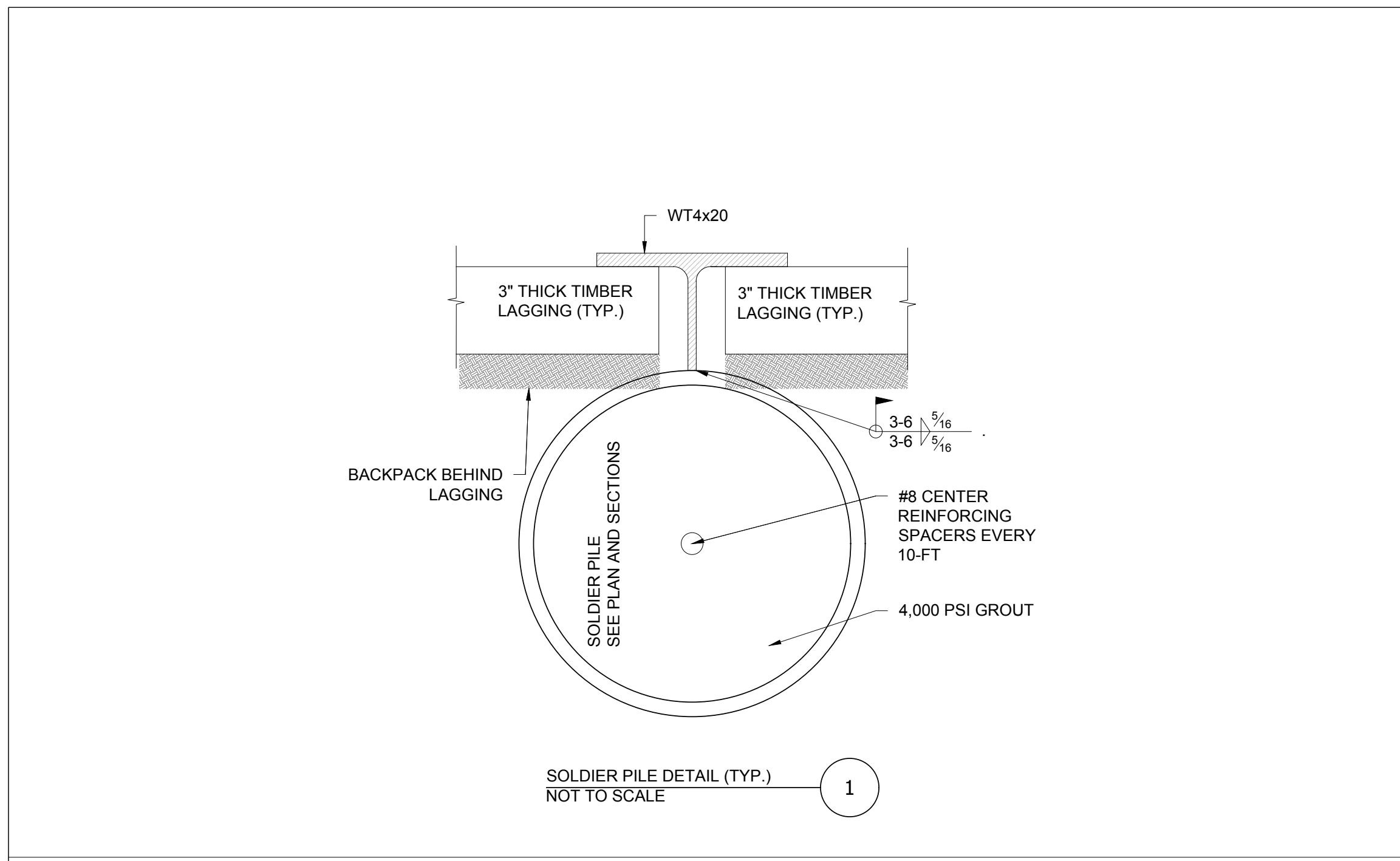
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SEAL & SIGNATURE

DATE: 11/29/15

PROJECT #: 1501077

SCALE: AS NOTED

SOE-300.01

DWG TITLE: SUPPORT OF EXCAVATION DETAILS

DWG NO: 6

