

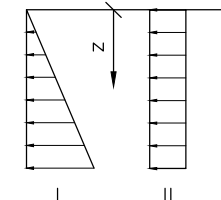
GENERAL NOTES:

- ANY DEVIATION FROM THE CONDITIONS SHOWN ON THESE DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
 - THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCING WORK. REPORT ANY INCONSISTENCIES BEFORE PROCEEDING WITH THE WORK. ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE. DO NOT SCALE THESE DRAWINGS.
 - STRUCTURAL DESIGN HAS BEEN PERFORMED IN ACCORDANCE WITH: ONTARIO BUILDING CODE 2012 (OBC) [JAN. 2020 AMD.]; CANADIAN FOUNDATION ENGINEERING MANUAL (CFEM), FOURTH EDITION; O. REG. 213/91: OCCUPATIONAL HEALTH AND SAFETY ACT FOR CONSTRUCTION PROJECTS; SOIL PARAMETERS HAVE BEEN OBTAINED FROM THE GEOTECHNICAL INVESTIGATION REPORT (PG3780), PREPARED BY PATERSON GROUP, DATED NOVEMBER 21, 2019; CONTRACT DOCUMENTS.
- THESE DRAWINGS HAVE BEEN REVIEWED WITH RESPECT TO STRUCTURAL REQUIREMENTS ONLY. NON-STRUCTURAL DETAILS SHALL BE VERIFIED BY OTHERS.
- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER DESIGN DOCUMENTS INCLUDING THE ARCHITECTURAL, STRUCTURAL, AND GEOTECHNICAL DOCUMENTS, AS APPLICABLE.
 - ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE ONTARIO HEALTH AND SAFETY ACT (OHS) AND ITS REGULATIONS.
 - ALL MATERIAL SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT.
 - ALL SHOP DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE PROFESSIONAL ENGINEERING FOR CONFORMANCE WITH THESE DRAWINGS. SHOP DRAWINGS SHALL BE SUBMITTED TO ART ENGINEERING INC. (AEI) FOR REVIEW AND APPROVAL.
 - A PRE-CONDITION SURVEY OF ADJACENT STRUCTURES AND ELEMENTS IS RECOMMENDED TO BE CARRIED OUT PRIOR TO INSTALLATION OF EXCAVATION SHORING OR COMMENCING EXCAVATION.

DESIGN LOADS:

- DESIGN LOADS ARE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE 2012 (OBC) [JAN. 2020 AMD.] AND THE CANADIAN FOUNDATION ENGINEERING MANUAL (CFEM), FOURTH EDITION.

- ACTIVE EARTH PRESSURE = $\gamma \cdot z \cdot K_a$
 $K_a = 0.33$;
 $\gamma = 20 \text{ kN/m}^3$;
- SURCHARGE (PEDESTRIAN) = $q \cdot K_a$;
 $q = 2.4 \text{ kPa}$;
 $K_a = 0.33$;



THE ABOVE LOADING IS BASED ON DRAINED SOIL CONDITIONS. THE GROUND WATER TABLE IS ASSUMED TO BE LOWERED BELOW THE BASE OF EXCAVATION.

- EXCAVATION SHORING HAS BEEN DESIGNED FOR TEMPORARY CONDITIONS. SEISMIC LOADING NOT APPLICABLE FOR TEMPORARY APPLICATIONS.

EXCAVATION SHORING & EARTHWORKS:

- MATERIALS:**
 STRUCTURAL STEEL:
 ROLLED SHAPES - CSA G40.20/G40.21, GRADE 350W;
 PLATES - CSA G40.20/G40.21, GRADE 300W;
 HOLLOW STRUCTURAL SECTION (HSS) - ASTM A500 GRADE 'C';
 3" LAGGING - ROUGH CUT CONSTRUCTION GRADE;
 E49XX WELDING ELECTRODE, CSA W59;
 0.6" Ø STRAND ANCHORS - 7-WIRE, 1860 MPa MIN., ASTM A416, c/w ACCESSORIES;
 CONCRETE, 35 MPa MIN. 28-DAY COMPRESSIVE STRENGTH, CSA A23.1 EXPOSURE CLASS 'N';
 REINFORCING STEEL, CSA G30.18, GRADE 400W, PLAIN BLACK STEEL;
 35 MPa MIN. NON-SHRINK GROUT.
- ALL DESIGN AND MATERIAL STANDARDS LISTED ABOVE MEET OR EXCEED THE REQUIREMENTS OF THE DESIGN AND MATERIAL STANDARDS REFERENCED IN THE 2012 ONTARIO BUILDING CODE [JAN. 2020 AMD.].
- LOCATE ALL PUBLIC AND PRIVATE UTILITIES AND BURIED STRUCTURES PRIOR TO PILING. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND REINSTATEMENT OF ANY SERVICES AND UTILITIES ENCOUNTERED. REPORT ANY CONFLICTS TO AEI.
- THE EXCAVATION SHORING HAS BEEN DESIGNED TO MEET A MAXIMUM HORIZONTAL DEFLECTION LIMIT OF 25 mm (OPSS/MUNI 539 PERFORMANCE LEVEL 2).
- INSTALL SOLDIER PILES PLUMB TO WITHIN A VERTICAL TOLERANCE OF 1%. INSTALL STRUTS, RAKERS AND WALERS TO WITHIN 20 mm OF THE LOCATION SPECIFIED. INSTALL WALERS LEVEL TO WITHIN A TOLERANCE OF 1%.
- LUMBER LAGGING SHALL BE CHECKED FOR DEFECTS PRIOR TO INSTALLATION. DEFECTIVE LUMBER SHALL BE DISCARDED.
- WELDING SHALL BE PERFORMED IN ACCORDANCE WITH CSA W59 BY WELDERS CERTIFIED UNDER CSA W47.1.
- THE EXCAVATION SHORING SHALL BE PROTECTED FROM FREEZING TEMPERATURES DURING WINTER MONTHS USING SUITABLE CONSTRUCTION TECHNIQUES (HEAT INSULATED TARPS, ETC.), AS DIRECTED BY A GEOTECHNICAL ENGINEER.
- A GUARDRAIL SHALL BE PROVIDED AROUND THE PERIMETER OF THE EXCAVATION IN ACCORDANCE WITH OBC 2012 [2020 AMD.] OR O. REG. 219/91.
- THE EXCAVATION SHORING SHALL BE INSTALLED IN A MANNER TO LIMIT VIBRATIONS ON THE GROUND, AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER.
- STORING OR STACKING OF MATERIALS OR EQUIPMENT SHALL NOT BE PERMITTED WITHIN 6.1 m [20'] OF THE FACE OF THE EXCAVATION SHORING AT ANY TIME.
- OBTAIN EASEMENT (RIGHT-OF-WAY) AGREEMENT WITH ADJACENT PROPERTY OWNERS PRIOR TO INSTALLATION OF EXCAVATION SHORING TIEBACKS TO THE ADJACENT PROPERTY.
- EXCAVATION SHORING SHALL BE INSPECTED BY AN ENGINEER, IN ACCORDANCE WITH OBC 2012 [JAN. 2020 AMD.] DIVISION 'B', CLAUSE 4.2.2.2.(2).(a).(i).

- PERMISSION TO PROCEED LETTERS WILL BE ISSUED UPON THE SUCCESSFUL COMPLETION OF THE FOLLOWING MILESTONES:
- INSTALLATION OF SOLDIER PILES;
 - INSTALLATION OF UPPER LEVEL OF SUPPORTS;
 - PRE-LOADED RAKER FOOTING REINFORCING STEEL;
 - INSTALLATION OF LOWER LEVEL OF SUPPORTS;
 - EXCAVATION TO DREDGE LINE & INSTALLATION OF LAGGING;
 - CUTTING OF SOLDIER PILES BELOW GRADE;
- A SIGNED AND SEALED FINAL SIGN-OFF LETTER WILL BE ISSUED AT COMPLETION OF INSTALLATION, SHORING REMOVAL AND COMPLETION OF RELATED BACKFILLING OPERATIONS.

CONCRETE

- REINFORCED CONCRETE DESIGN DONE IN CONFORMANCE WITH CSA A23.3-19.
- CONCRETE REINFORCING, PLACEMENT AND TOLERANCES SHALL BE IN ACCORDANCE WITH CSA A23.1-19 & A23.2-19.
- ALL REINFORCING STEEL SHALL BE CLEAN AND FREE OF RUST, OIL OR ANY OTHER DELETERIOUS MATERIAL.
- SECURE AND SUPPORT REINFORCING STEEL TO PREVENT MOVEMENT DURING THE POURING OF CONCRETE.
- REINFORCING BAR SPLICES SHALL BE 1300 mm LONG MINIMUM FOR 25M TOP BARS AND 1000 mm LONG MINIMUM FOR 25M BOTTOM BARS. LAP SPLICES SHALL BE OFFSET OR STAGGERED.
- CONCRETE SHALL BE MIXED, PLACED, AND CURED IN ACCORDANCE WITH CSA A23.1-19 AND CSA A23.2-19. MAINTAIN RECORDS OF POURED CONCRETE ITEMS. RECORD DATE, LOCATION OF POUR, QUANTITY, AIR TEMPERATURE AND ANY TEST SAMPLES TAKEN.
- DO NOT POUR CONCRETE OVER A FROZEN SUBGRADE. ENSURE A MINIMUM TEMPERATURE OF 10°C DURING PLACEMENT OF CONCRETE AND FOR A MINIMUM OF 3 DAYS AFTER PLACEMENT.
- CONSOLIDATE CONCRETE WITH EXTERNAL/INTERNAL VIBRATORS TO THE REQUIREMENTS OF CSA A23.1-19.
- THE LOCATION AND ORIENTATION OF ALL CONCRETE CONSTRUCTION/COLD JOINTS SHALL BE AS SHOWN ON THESE DRAWINGS. ANY ADDITIONAL PROPOSED CONSTRUCTION JOINTS SHALL BE SUBMITTED TO AEI FOR APPROVAL, PRIOR TO CONSTRUCTION.
- REINFORCING STEEL BAR HOOKS SHALL HAVE STANDARD HOOK DIMENSIONS, USING MINIMUM BEND DIAMETERS, U.N.O.
- THE CONTRACTOR SHALL ENSURE THAT ALL REINFORCING STEEL IS INSPECTED AND APPROVED BY THE ENGINEER UPON COMPLETION AND PRIOR TO PLACING CONCRETE.

INSTALLATION & REMOVAL PROCEDURE:

- COMPLETE UTILITY LOCATES. IF ANY CONFLICTS EXIST, CONTACT AEI PRIOR TO PROCEEDING.
- INSTALL SOLDIER PILES TO THE EXTENT AND DEPTH AS SHOWN ON THESE DRAWINGS. DEPTH OF INSTALLED SOLDIER PILES SHALL BE SUBMITTED TO AEI FOR REVIEW AND APPROVAL. ALL SOLDIER PILES WITH TIEBACKS SHALL BE DRIVEN TO REFUSAL. GEOTECHNICAL ENGINEER TO VERIFY THAT THE MINIMUM SPECIFIED TOE BEARING CAPACITY IS ACHIEVED.
- PLACE MONITORING TARGETS ON THE TOPS OF EVERY OTHER SOLDIER PILE. RECORD INITIAL POSITION.
- LOWER GROUND WATER TABLE TO BELOW BEDROCK SURFACE, AS REQUIRED, IN ACCORDANCE WITH ALL PERMITS, OPERATIONAL CONSTRAINTS AND REGULATIONS RELATING TO WITHDRAWAL OF GROUND WATER.

- EXCAVATE OVERBURDEN SOILS TO THE UNDERSIDE OF THE FIRST LEVEL OF WALER, AS SHOWN ON THESE DRAWINGS. INSTALL LAGGING AS EXCAVATION PROGRESSES.
- INSTALL TOP WALERS, TIEBACKS, STRUTS, AND/OR RAKERS AT EACH PILE. TEST AND LOCK-IN TIEBACKS IN ACCORDANCE WITH THE ANCHOR TESTING PROCEDURE. PRE-LOAD STRUTS AND RAKERS AS PER THE PLANS. RESULTS SHALL BE RECORDED AND SUBMITTED TO AEI PRIOR TO PROCEEDING WITH THE REMAINDER OF THE EXCAVATION. REFER TO TABLE 1/SE-1 FOR DETAILS.
- PLACE MONITORING TARGETS ON EVERY OTHER SOLDIER/PIPE PILE AT THE TOP WALER ELEVATION. RECORD INITIAL POSITION.
- ONCE TOP SUPPORT IS INSTALLED, REPEAT STEPS 5-7 FOR THE SECOND LEVEL OF SUPPORT (WHERE APPLICABLE).
- ONCE ALL WALERS, TIEBACKS, STRUTS, AND RAKERS ARE INSTALLED, EXCAVATE TO THE BASE OF EXCAVATION. IF THE BASE OF EXCAVATION IS LOWER THAN THAT SHOWN ON THESE DRAWINGS, REPORT THE DISCREPANCY TO AEI PRIOR TO PROCEEDING.
- FOR REMOVAL:** COMPLETE OPERATIONS IN REVERSE OF INSTALLATION: BACKFILL AND COMPACT TO UNDERSIDE OF WALER. DE-STRESS TIEBACKS (WHERE ACCESSIBLE), STRUTS, RAKERS, REMOVE WALERS. REPEAT AS NECESSARY UNTIL BACKFILL REACHES FINISHED GRADE. SAW-CUT SOLDIER PILES 1.2 m CLEAR OF FINISHED GRADE.

MONITORING PROCEDURE:

- EXCAVATION SHORING SHALL NOT BE LEFT WITHOUT VISUAL INSPECTION DURING AN EXTENDED PERIOD OF TIME (I.E. HOLIDAYS, WEEKENDS, ETC.).
- MONITORING READING INTERVALS SHALL BE DAILY STARTING FROM THE START OF THE EXCAVATION AND DURING THE INSTALLATION AND REMOVAL OF THE EXCAVATION SHORING. MONITORING FREQUENCY MAY BE DECREASED TO WEEKLY, 30 DAYS AFTER THE EXCAVATION SHORING HAS BEEN COMPLETELY INSTALLED.
- IF HORIZONTAL WALL DISPLACEMENT EXCEEDS 25 mm, NOTIFY AEI.
- DAILY VISUAL MONITORING OF THE GROUND BEHIND THE SHORING WALL SHALL BE PERFORMED. IF ANY CRACKS OR DISTURBANCE IS OBSERVED, NOTIFY AEI.
- MONITORING REPORT SHALL CLEARLY SHOW: THE DATE, TARGET #, PILE #, NORTHING, EASTING, ELEVATION, VERTICAL AND LATERAL MOVEMENTS.

TIEBACK ANCHOR TESTING PROCEDURE:

- PROOF TEST INSTALLED TIEBACK ANCHORS. PROOF TESTING SHALL BE INCREMENTALLY LOADED TO THE FOLLOWING SCHEDULE:
 AL, 0.25DL, 0.50DL, 0.75DL, 1.00DL, 1.20DL, 1.33DL, AL, LO
 WHERE: AL = ALIGNMENT LOAD, DL = DESIGN LOAD, LO = LOCK-OFF LOAD (REFER TO TABLE 1/SE-1);
- 1.33DL (ie: TL) SHALL BE MAINTAINED FOR 10 MINUTES. TOTAL MOVEMENT SHALL BE RECORDED AT 1, 2, 3, 4, 5, 6 AND 10 MINUTES.
- ACCEPTANCE FOR PROOF TESTING: 1) ANCHOR DOES NOT PULL OUT OF DRILLED HOLE, 2) CREEP DISPLACEMENT MEASURED FOR STEP #2 DOES NOT EXCEED 1 mm.
- RECORDED RESULTS OF ANCHOR TESTING SHALL BE SUBMITTED TO AEI FOR REVIEW AND APPROVAL.

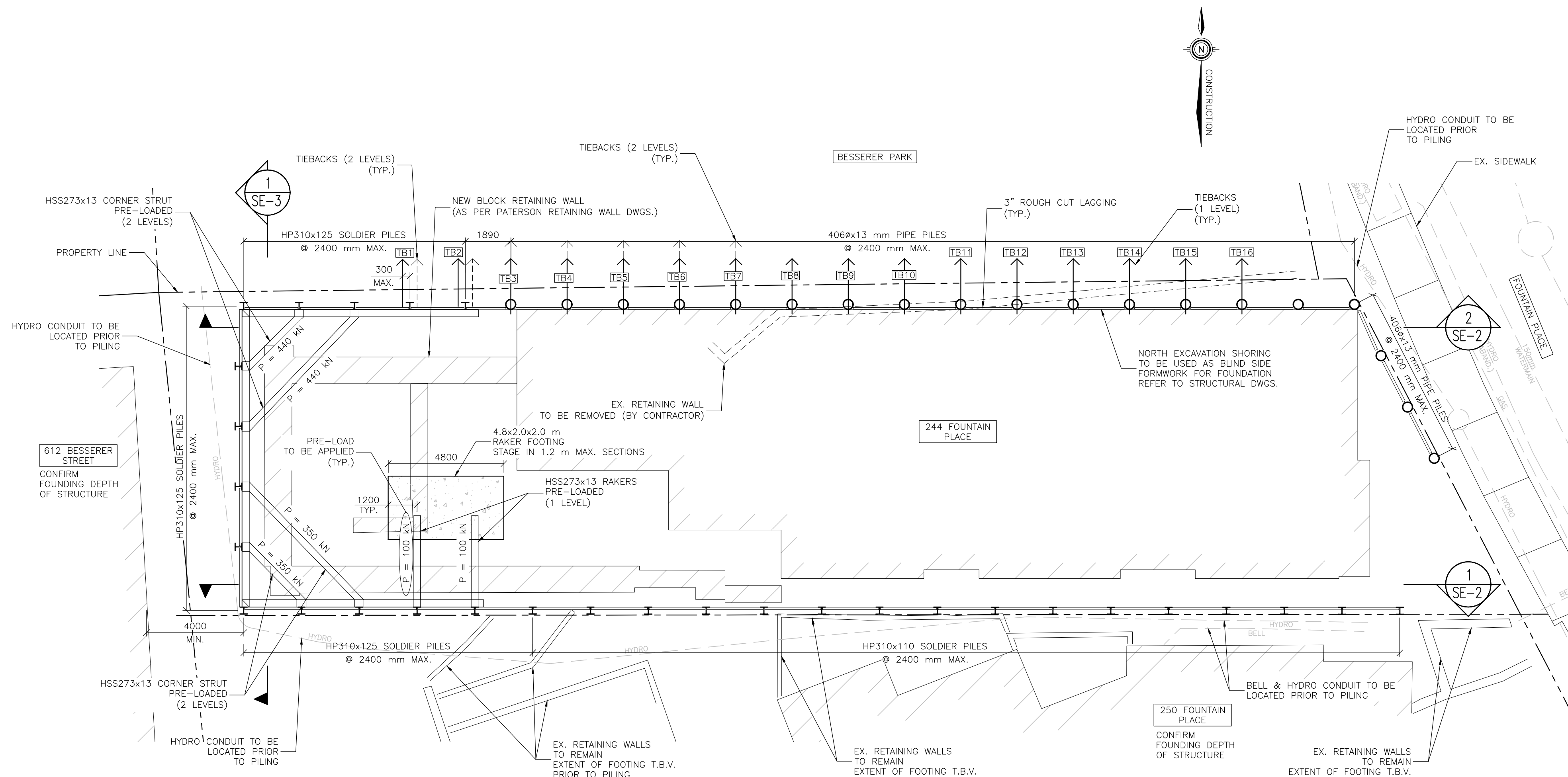
NOTE: UTILITY LOCATIONS SHOWN ARE BASED ON THE INFORMATION PROVIDED TO AEI AND ARE NOT GUARANTEED. CONTRACTOR TO LOCATE ALL UTILITIES AND SERVICES PRIOR TO PILING.

NOTE: OBTAIN EASEMENT AGREEMENTS WITH ADJACENT PROPERTY OWNERS FOR TIEBACK ANCHORS.

TABLE 1/SE-1: TIEBACK ANCHOR INFORMATION TABLE:

| TIEBACK No. | EL. (m) | # STRANDS | DESIGN LOAD, DL (kN) | TEST LOAD, TL (kN) | LOCK-OFF LOAD, LO (kN) | BOND LENGTH (mm) |
|-----------------|---------|-----------|----------------------|--------------------|------------------------|------------------|
| TB1 UPPER | 67.6 | 4 | 480 | 640 | 530 | 3900 |
| TB1 LOWER | 64.1 | 5 | 710 | 940 | 780 | 5700 |
| TB2 UPPER | 67.6 | 3 | 380 | 510 | 420 | 3100 |
| TB2 LOWER | 64.1 | 5 | 670 | 890 | 730 | 5300 |
| TB3 & TB4 UPPER | 66.2 | 4 | 570 | 760 | 620 | 4500 |
| TB3 & TB4 LOWER | 62.7 | 4 | 620 | 830 | 690 | 5000 |
| TB5 UPPER | 65.0 | 4 | 520 | 700 | 580 | 4200 |
| TB5 LOWER | 61.5 | 4 | 580 | 770 | 640 | 4600 |
| TB6 UPPER | 65.0 | 3 | 410 | 550 | 450 | 3300 |
| TB6 LOWER | 61.5 | 4 | 540 | 720 | 590 | 4300 |
| TB7 UPPER | 65.0 | 2 | 300 | 400 | 330 | 2500 |
| TB7 LOWER | 61.5 | 4 | 480 | 640 | 530 | 3900 |
| TB8 | 63.9 | 2 | 260 | 350 | 280 | 2500 |
| TB9 & TB10 | 63.9 | 2 | 200 | 270 | 220 | 2500 |
| TB11 TO TB14 | 63.2 | 2 | 170 | 230 | 190 | 2500 |
| TB15 & TB16 | 62.7 | 2 | 170 | 230 | 190 | 2500 |

NOTE: ROCK BOND LENGTH BASED ON SHALE BEDROCK WITH A MINIMUM ALLOWABLE GROUT-TO-ROCK BOND STRENGTH OF 0.4 MPa. BOND LENGTH MAY BE ALTERED BASED ON THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.



1 SHORING PLAN
SE-1 1:125

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON SITE. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS STAMPED AND SIGNED BY THE ENGINEER AND ISSUED "FOR CONSTRUCTION". DO NOT SCALE THESE DRAWINGS.

client
TCU DEVELOPMENT CORPORATION

project
FOUNTAIN APARTMENT CONDOMINIUMS
244 FOUNTAIN PLACE OTTAWA, ON

art engineering inc.
 171 Walgreen Road
 Carp - Ontario - K0A 1L0 - Canada
 (613) 836-0632 - Fax: (613) 836-1226
 www.artengineering.ca

A A detail no. no. de détail
 B B location drawing no. sur dessin no.

scale 1:125

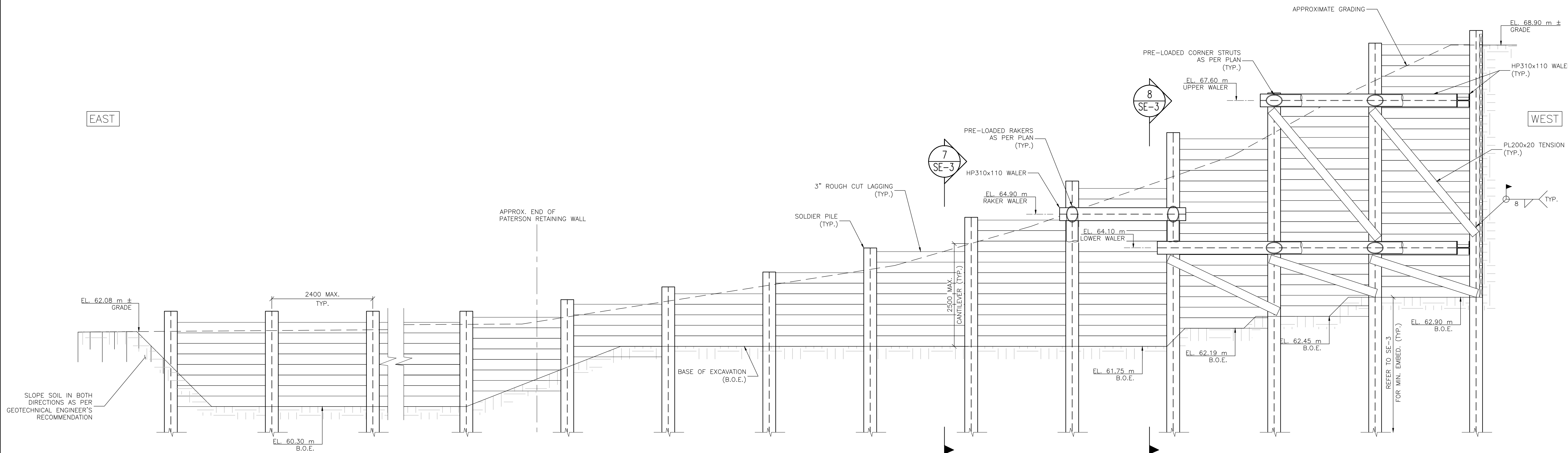
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EXCAVATION SHORING: GENERAL NOTES & PLAN

stamp

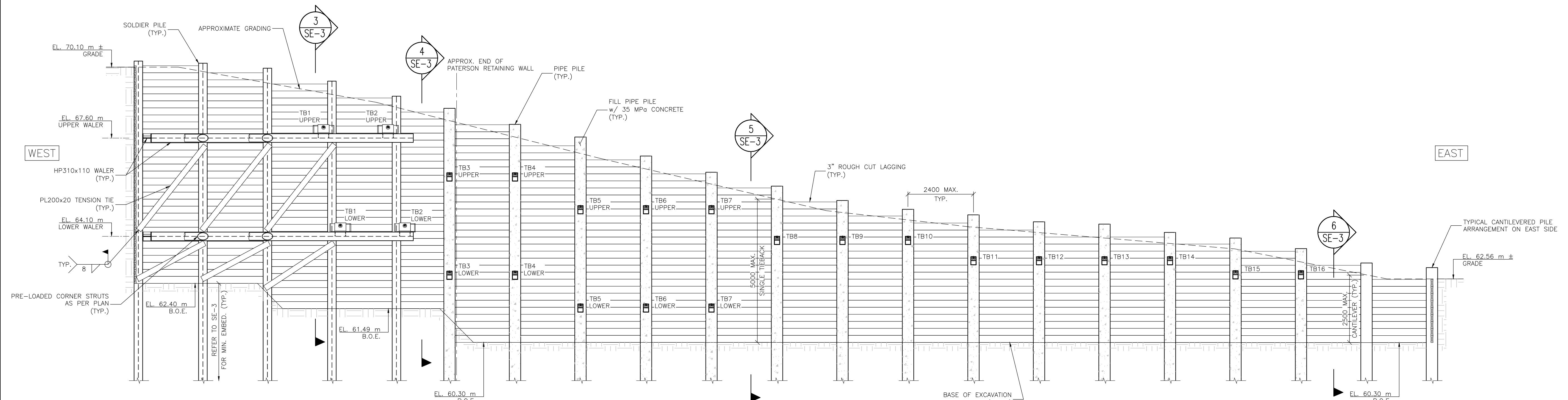
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| designed T.B. | drawn T.B. | reviewed B.H. | approved T.B. |
| date October 6, 2021 | project number 4831 | drawing number SE-1 | |

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1 SOUTH SHORING ELEVATION
SE-2 1:50

NOTE: STRUCTURAL ENGINEER, ARCHITECT AND GEOTECHNICAL ENGINEER TO CONFIRM UNDERSIDE OF FOOTING FOR THE PROPOSED BUILDING PRIOR TO COMMENCING PILING (TYP.)

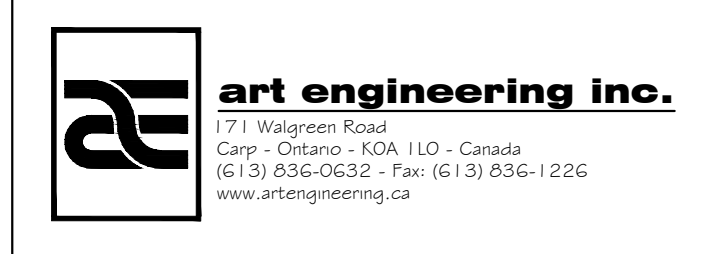


2 NORTH SHORING ELEVATION
SE-2 1:75

NOTE: STRUCTURAL ENGINEER, ARCHITECT AND GEOTECHNICAL ENGINEER TO CONFIRM UNDERSIDE OF FOOTING FOR THE PROPOSED BUILDING PRIOR TO COMMENCING PILING (TYP.)

Client
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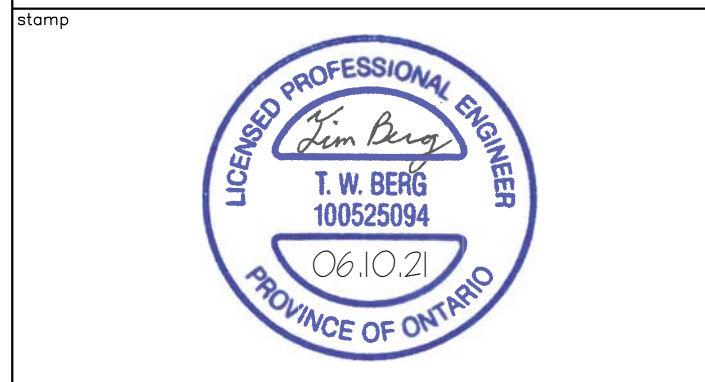
Project
FOUNTAIN APARTMENT CONDOMINIUMS
244 FOUNTAIN PLACE
OTTAWA, ON



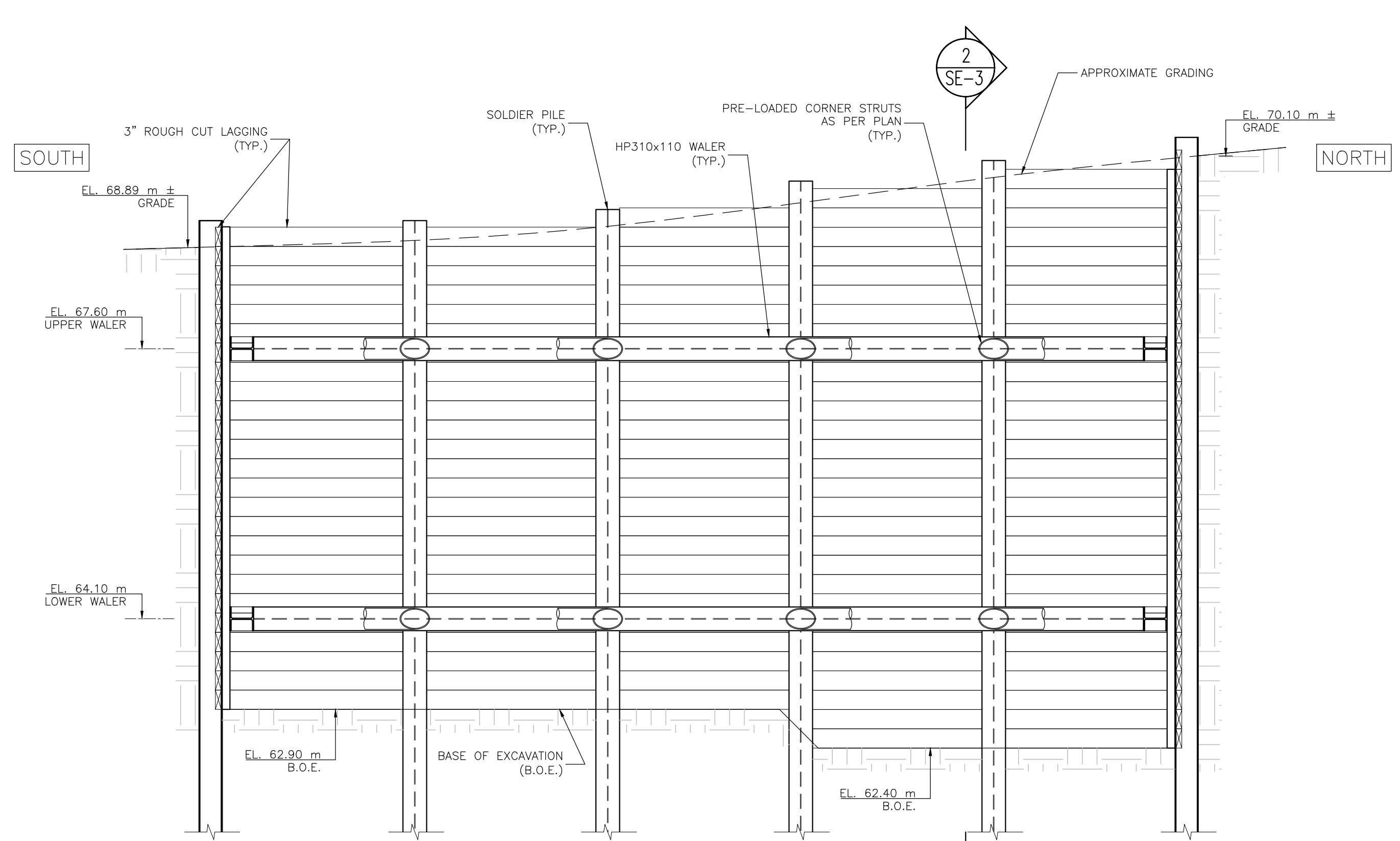
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| revisions drawing | 0 ISSUED FOR BUILDING PERMIT | 06-10-2021 |

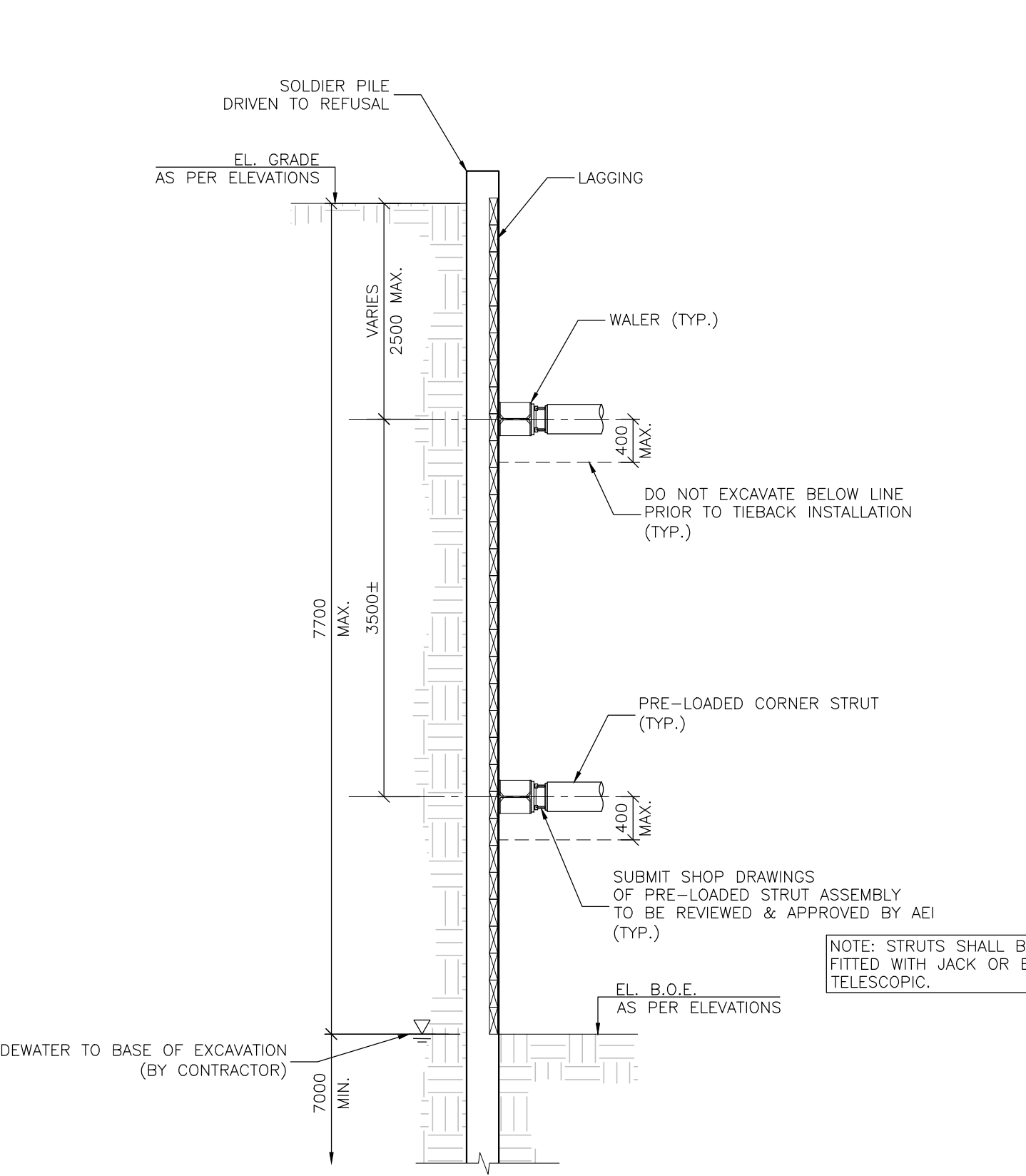
EXCAVATION SHORING:
NORTH & SOUTH ELEVATIONS



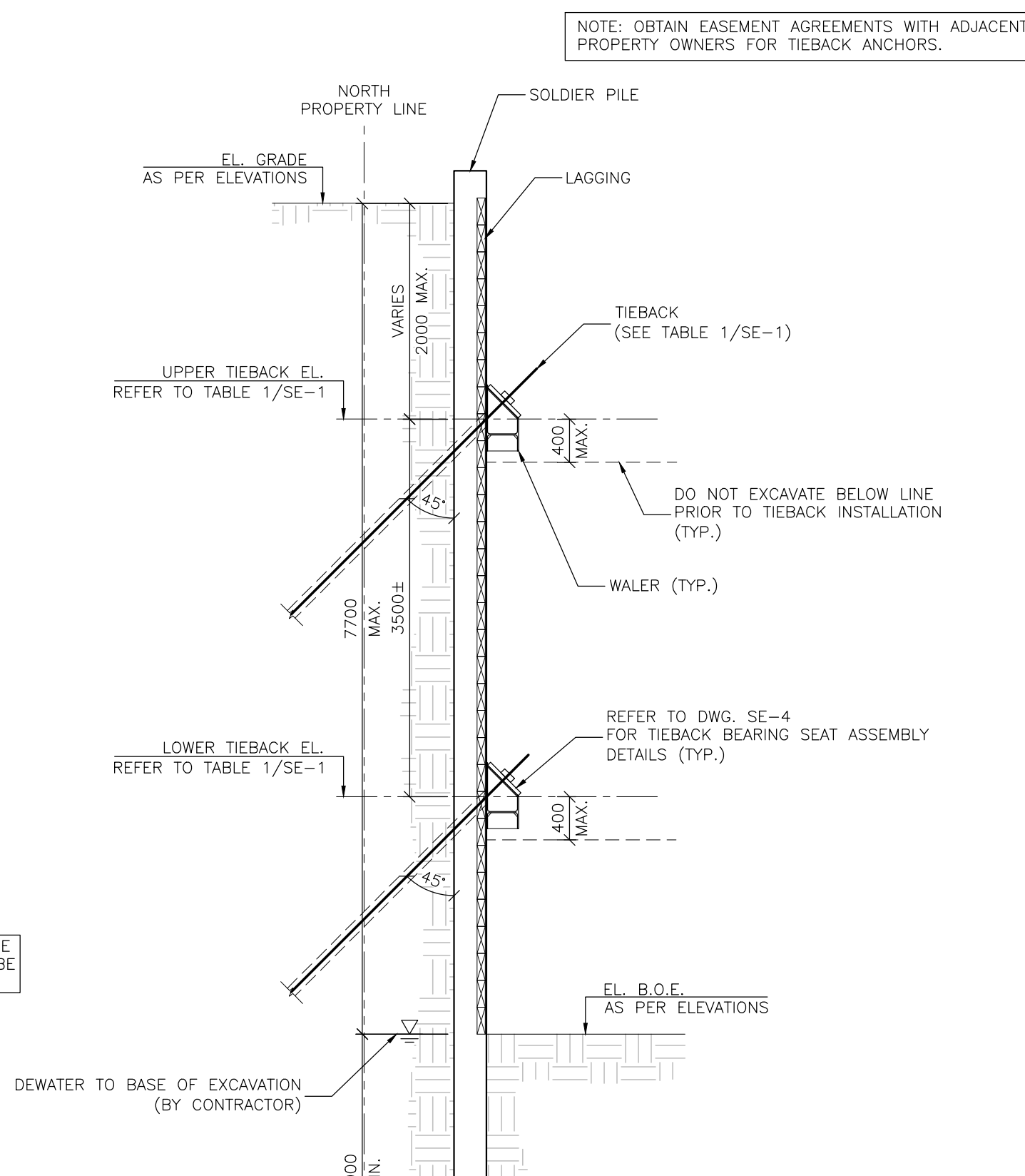
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| October 6, 2021 | 4831 | SE-2 | |



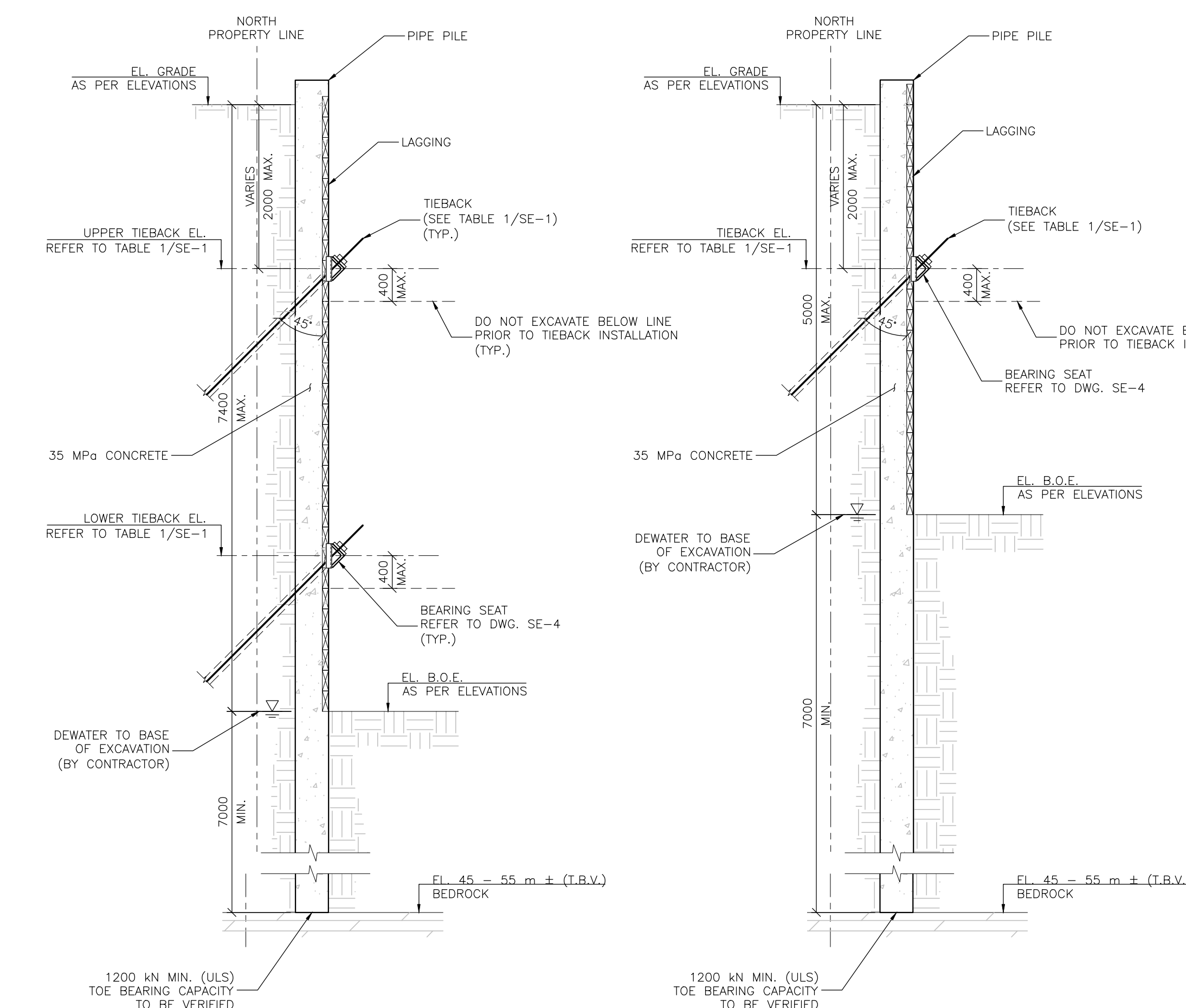
1 WEST SHORING ELEVATION
SE-3 1:50



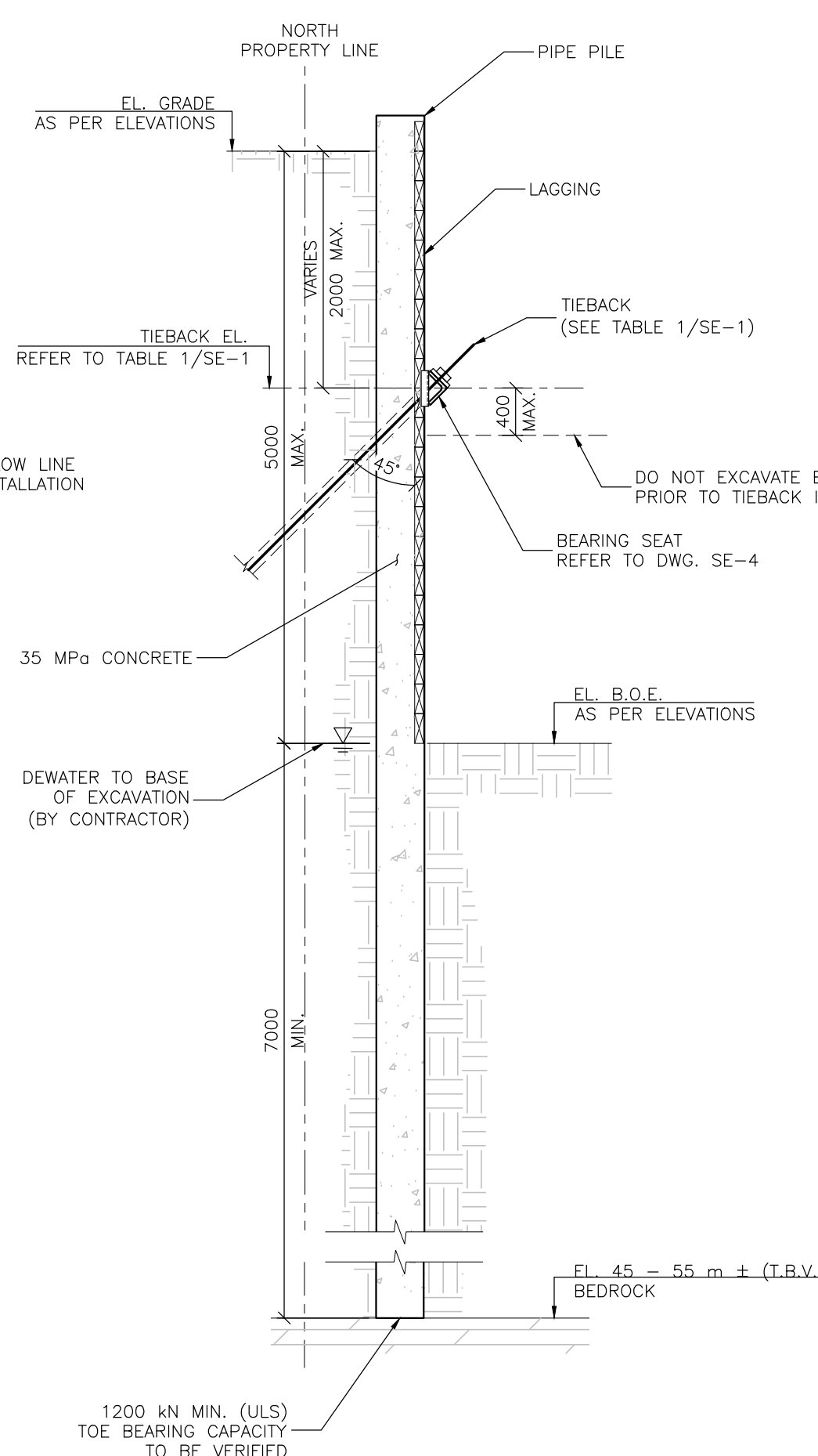
2 WEST SECTION
SE-3 1:50



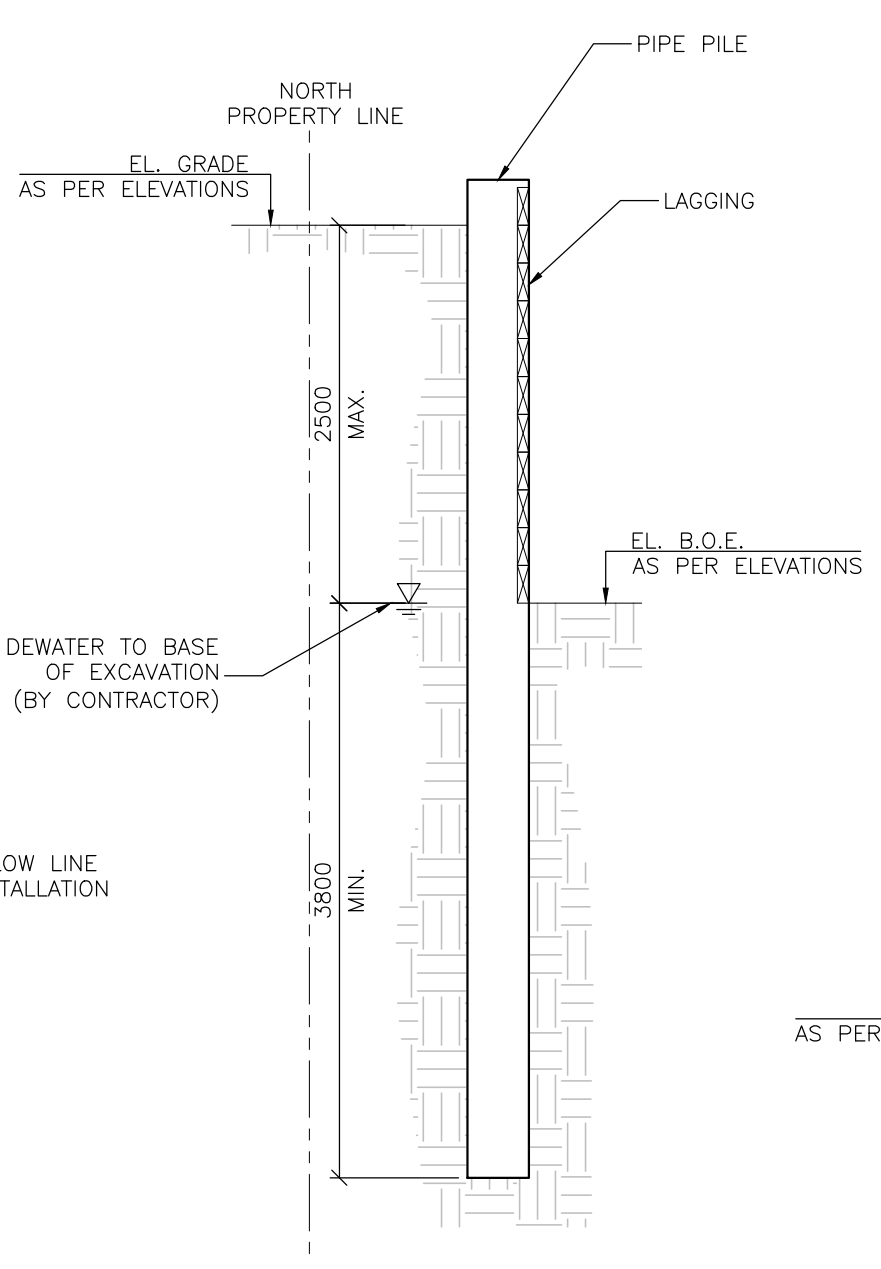
3 NORTH SECTION
SE-3 1:50



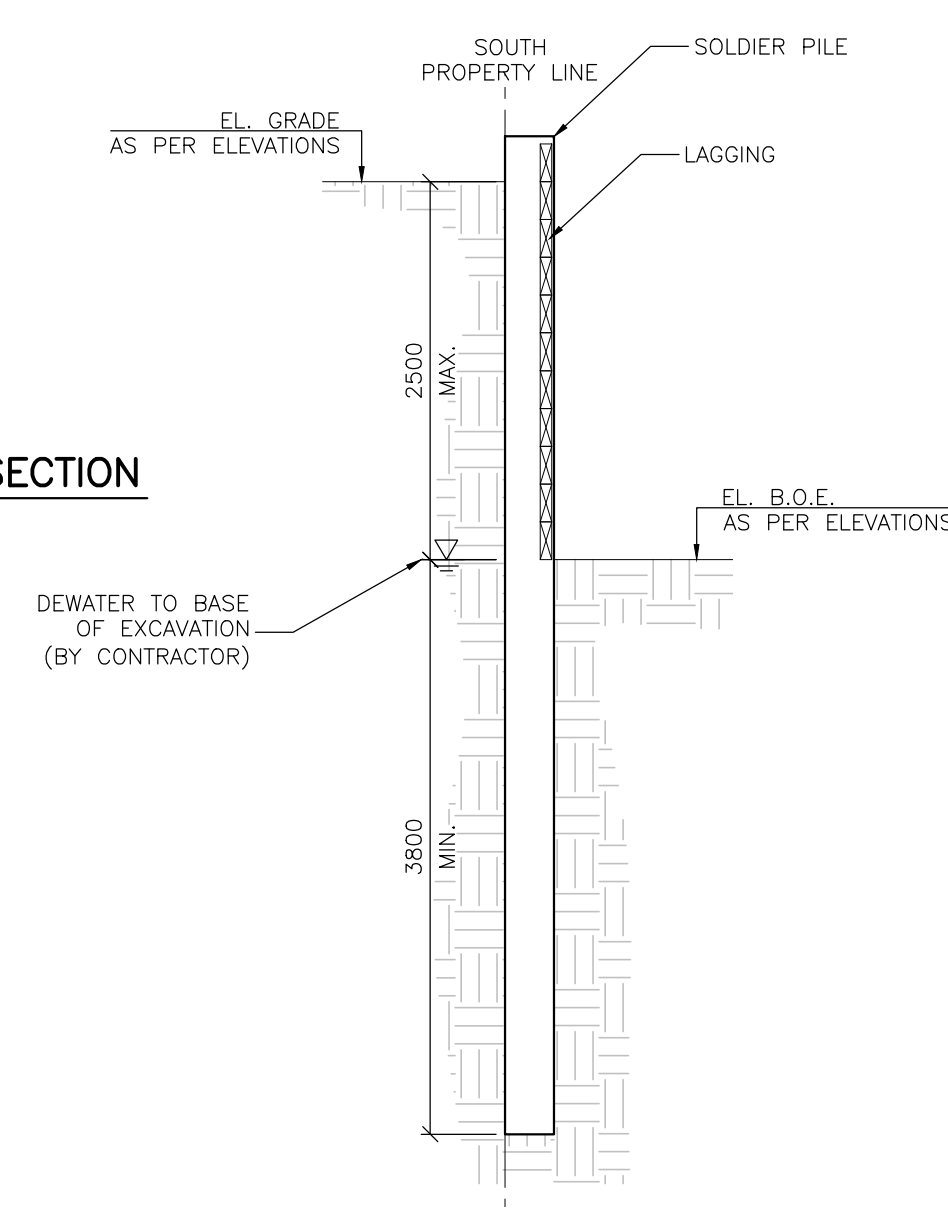
4 NORTH SECTION
SE-3 1:50



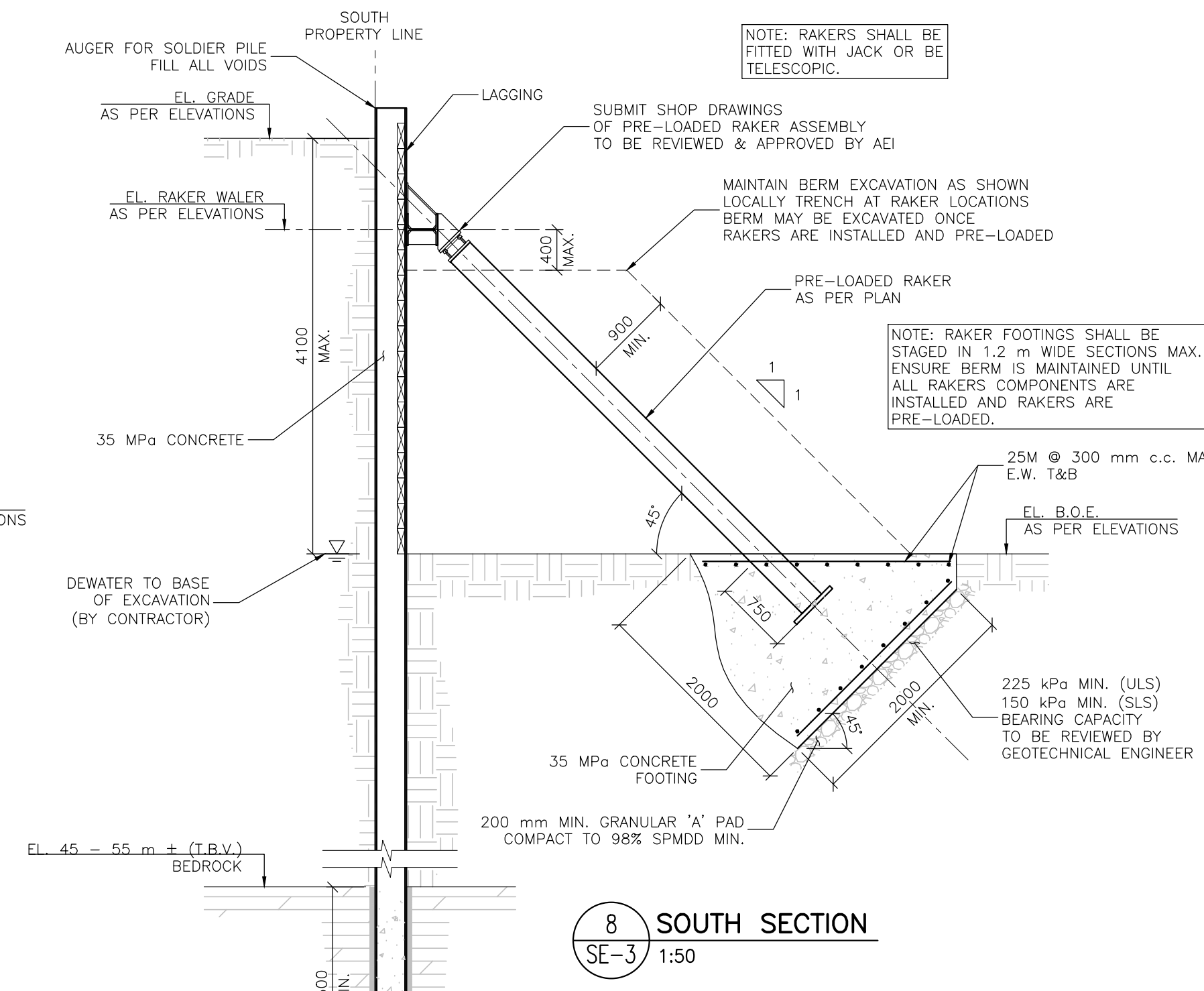
5 NORTH SECTION
SE-3 1:50



6 NORTHEAST CANTILEVER SECTION
SE-3 1:50



7 SOUTH CANTILEVER SECTION
SE-3 1:50



8 SOUTH SECTION
SE-3 1:50

NOTE: OBTAIN EASEMENT AGREEMENTS WITH ADJACENT PROPERTY OWNERS FOR TIEBACK ANCHORS.

NOTE: ARCHITECT AND GEOTECHNICAL ENGINEER TO CONFIRM UNDERSIDE OF FOOTING FOR THE PROPOSED RETAINING WALL PRIOR TO COMMENCING PILING (TYP.)

SUBMIT SHOP DRAWINGS OF PRE-LOADED STRUT ASSEMBLY TO BE REVIEWED & APPROVED BY AEI (TYP.)

NOTE: STRUTS SHALL BE FITTED WITH JACK OR BE TELESCOPIC.

NOTE: RAKERS SHALL BE FITTED WITH JACK OR BE TELESCOPIC.

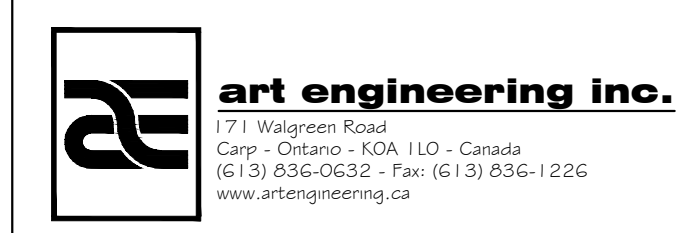
NOTE: RAKER FOOTINGS SHALL BE STAGED IN 1.2 m WIDE SECTIONS MAX. ENSURE BERM IS MAINTAINED UNTIL ALL RAKERS COMPONENTS ARE INSTALLED AND RAKERS ARE PRE-LOADED.

NOTE: MINIMUM ALLOWABLE ROCK BOND ASSUMED TO BE 0.4 MPa. BOND LENGTH MAY BE ALTERED BASED ON THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON SITE. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS STAMPED AND SIGNED BY THE ENGINEER AND ISSUED "FOR CONSTRUCTION". DO NOT SCALE THESE DRAWINGS.

Client
TCU DEVELOPMENT CORPORATION

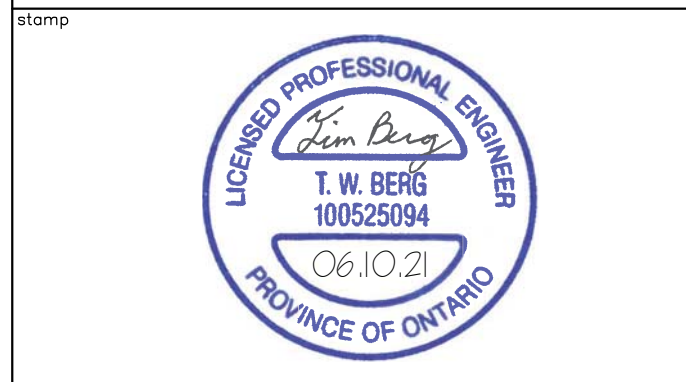
Project
FOUNTAIN APARTMENT CONDOMINIUMS
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OTTAWA, ON



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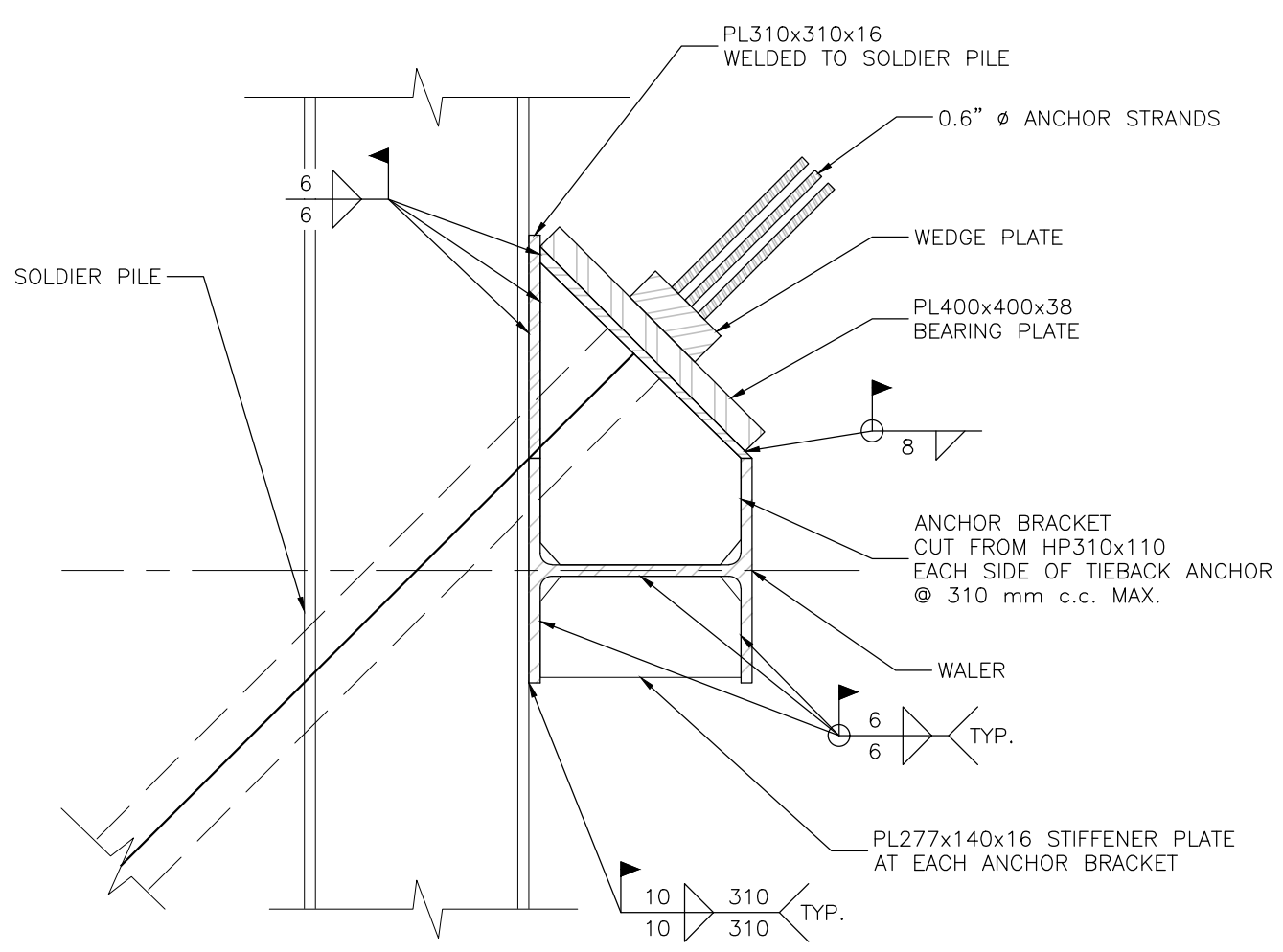
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| drawing | | |

EXCAVATION SHORING: ELEVATIONS & SECTIONS

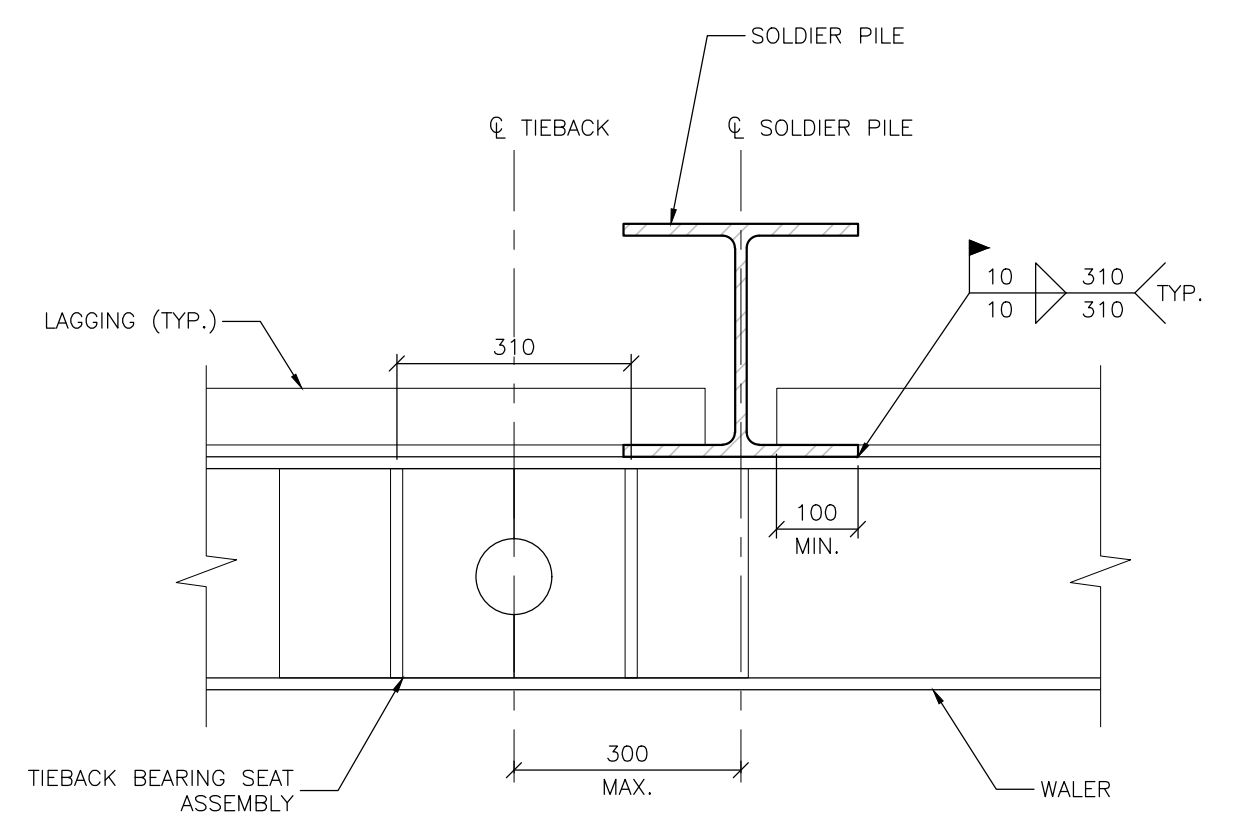


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| October 6, 2021 | 4831 | SE-3 | |

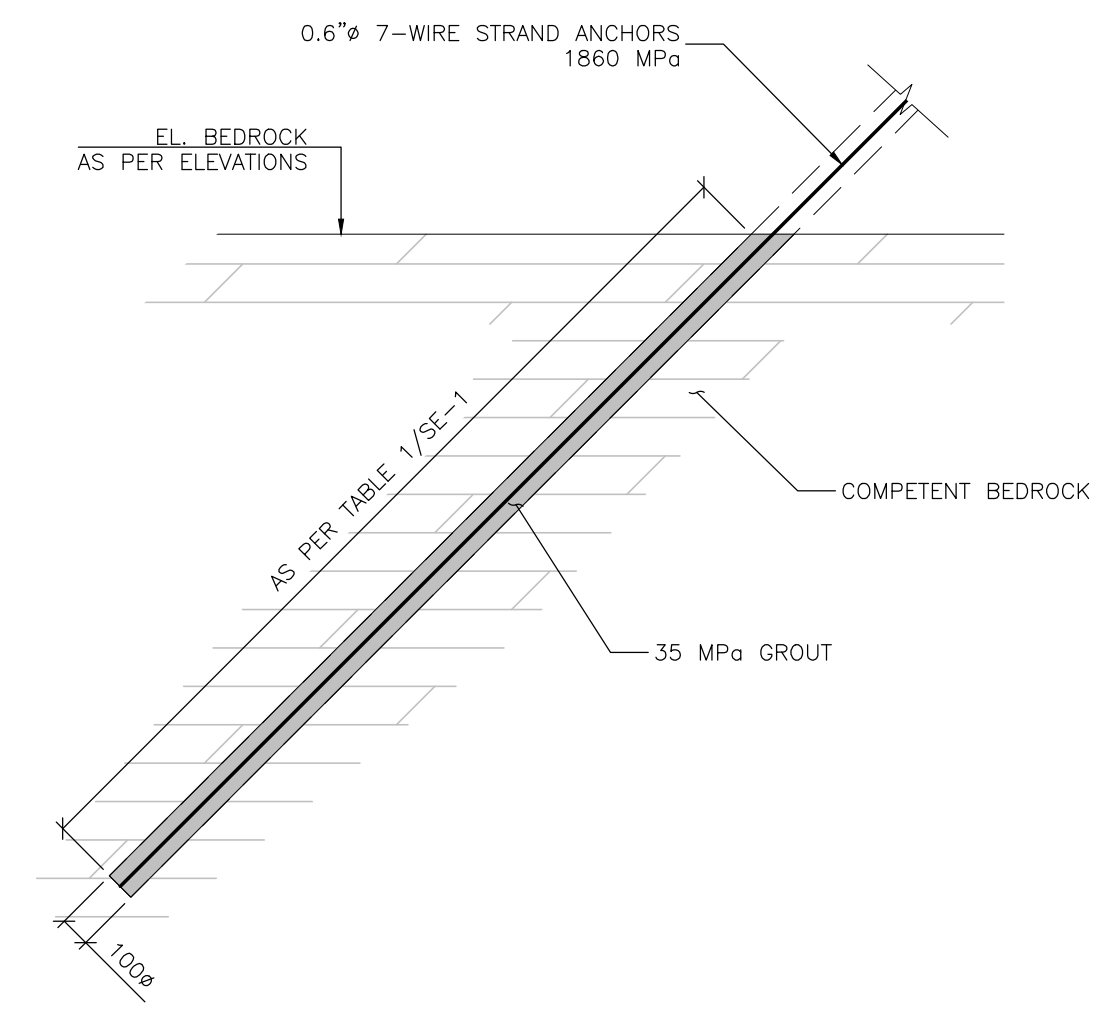
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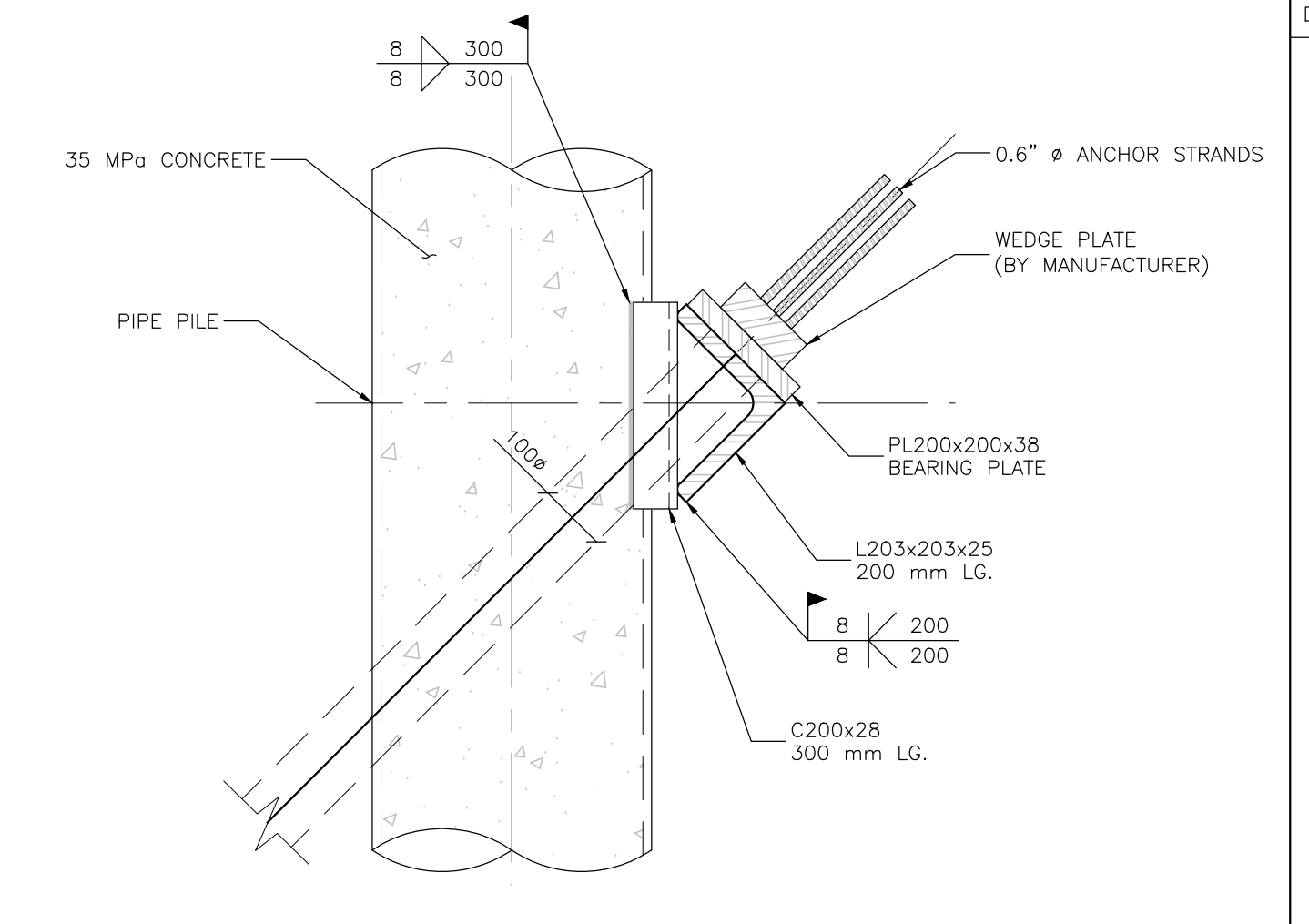
1 BEARING SEAT ASSEMBLY DETAIL
SE-4 1:10
HP310x110 PILE



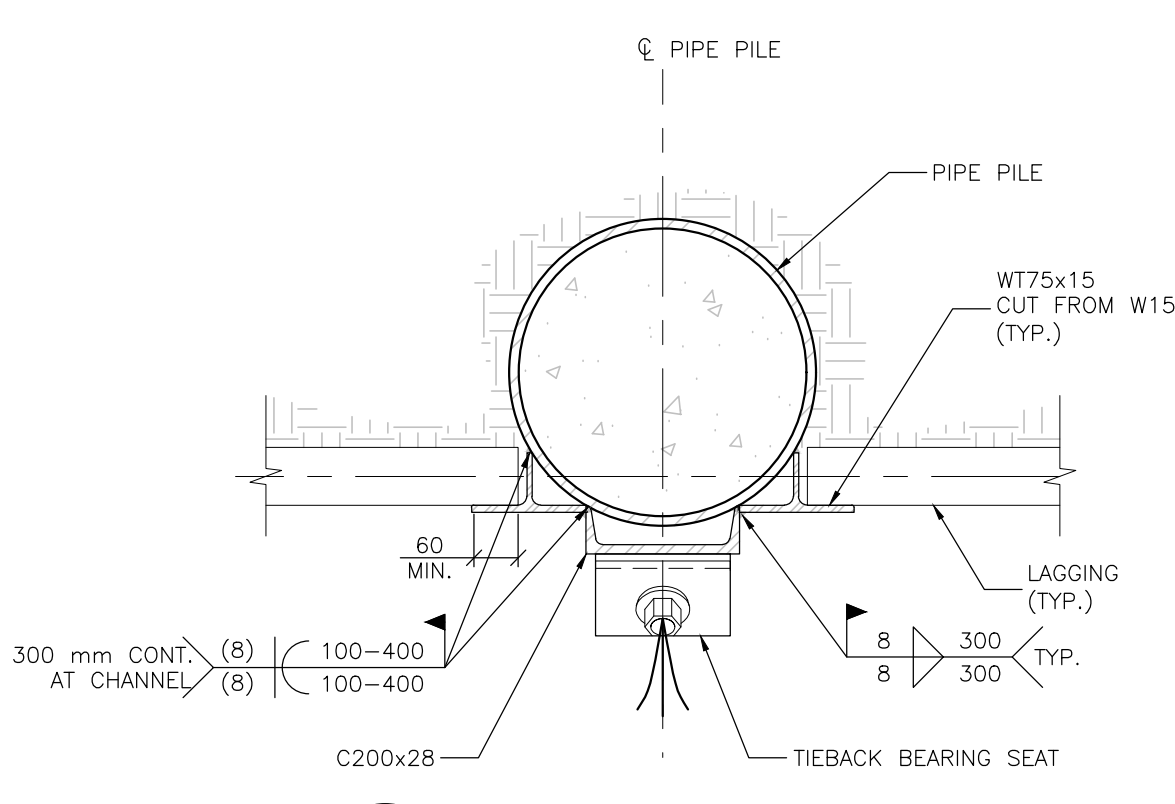
2 WALER ASSEMBLY LAYOUT
SE-4 1:10



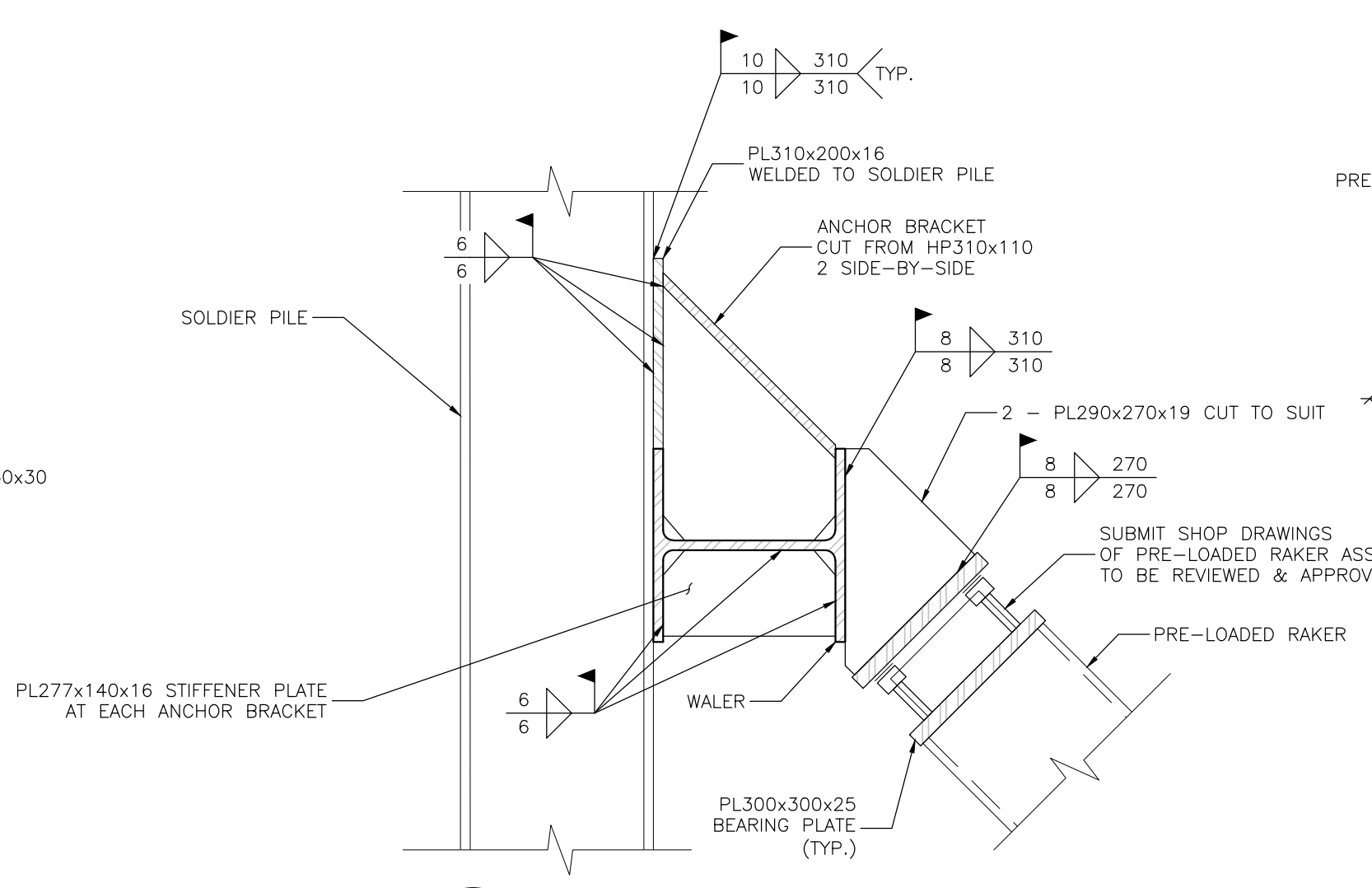
3 TIEBACK ANCHORAGE DETAIL
SE-4 1:25



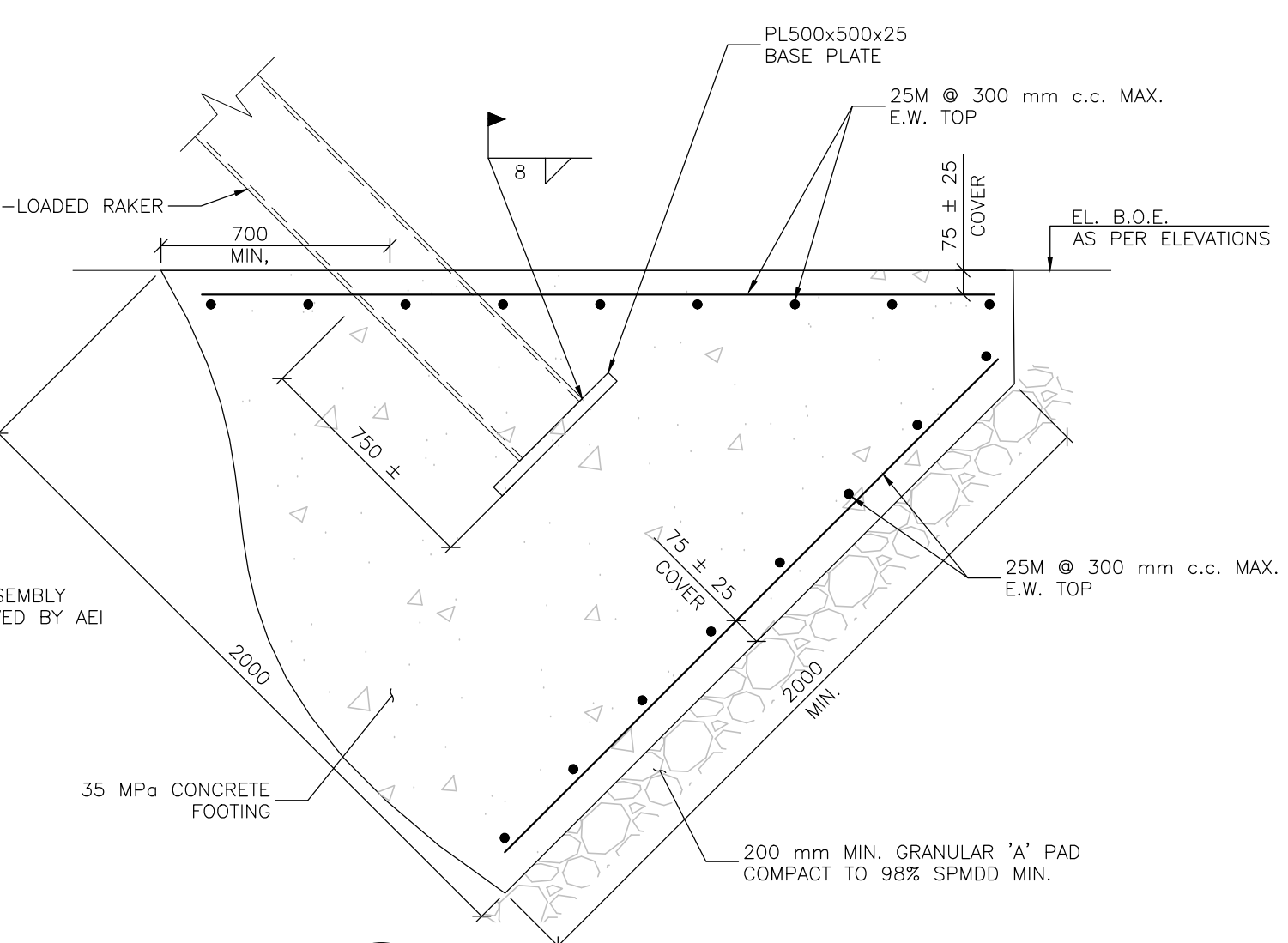
4 BEARING SEAT ASSEMBLY DETAIL
SE-4 1:10
406x13 PIPE PILE



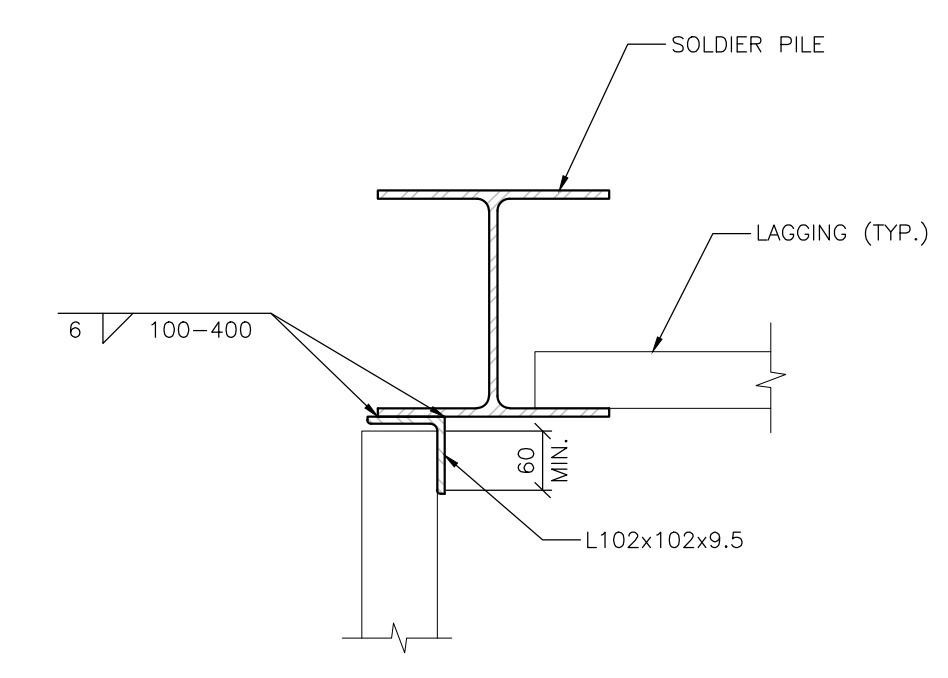
5 TYPICAL PIPE PILE LAYOUT
SE-4 1:10



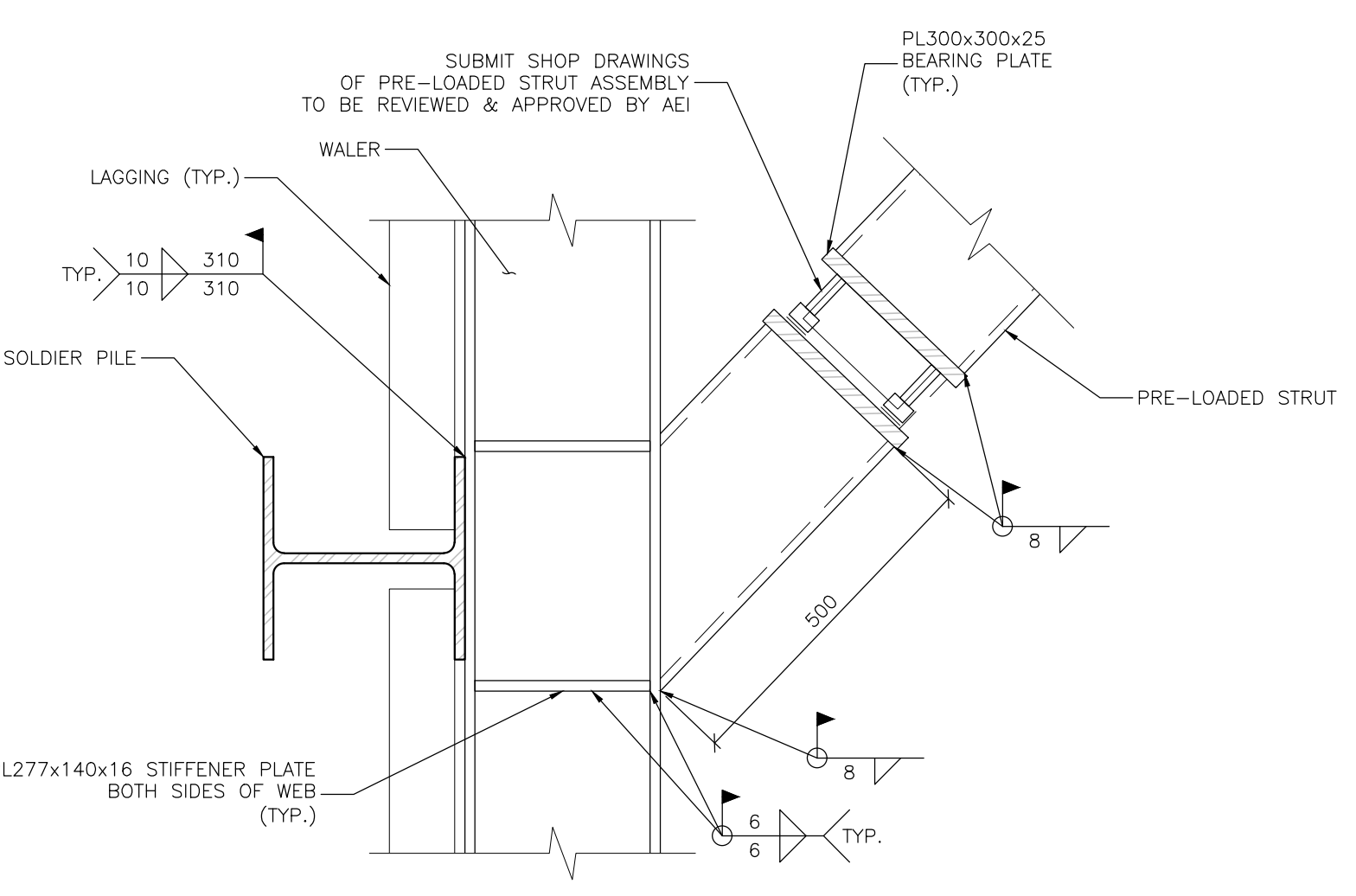
6 RAKER TOP CONNECTION DETAIL
SE-4 1:10



7 RAKER FOOTING DETAIL
SE-4 1:20



8 CORNER PILE DETAIL
SE-4 1:10



9 TYPICAL CORNER STRUT CONNECTION DETAIL
SE-4 1:10

Client
TCU DEVELOPMENT CORPORATION

Project
FOUNTAIN APARTMENT CONDOMINIUMS
244 FOUNTAIN PLACE OTTAWA, ON

art engineering inc.
171 Walgreen Road
Camp - Ottawa - K2A 1L0 - Canada
(613) 836-0632 - Fax: (613) 836-1226
www.artengineering.ca

A detail no. no. of detail
B location drawing no. sur. design no.

| | | |
|-----------|----------------------------|------------|
| Scale | VARIES | |
| Revisions | ISSUED FOR BUILDING PERMIT | 06-10-2021 |
| drawing | | |

EXCAVATION SHORING: DETAILS

stamp

| | | | |
|-----------------|----------------|----------------|----------|
| designed | drawn | reviewed | approved |
| T.B. | T.B. | B.H. | T.B. |
| date | project number | drawing number | |
| October 6, 2021 | 4831 | SE-4 | |