

1 SITE PLAN  
 1 NEW PIN PILE RETAINING WALL = 10'-0"

**NOTES:**

GENERAL

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PROJECT DOCUMENTS, APPLICABLE REQUIREMENTS OF THE 2019 EDITION OF THE CALIFORNIA BUILDING CODE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE PROJECT DOCUMENTS WITH CONDITIONS AT THE SITE AND SHALL VERIFY EXISTING GRADES, ELEVATIONS AND CONDITIONS PRIOR TO COMMENCING WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER AND SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK. ANY DEVIATION, SUBSTITUTION OR ALTERATION TO THE DESIGN SHALL BE SUBJECT TO REVIEW BY THE ENGINEER.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE CONSTRUCTION AREA DURING CONSTRUCTION AND SHALL PROVIDE NECESSARY SAFETY MEASURES IN ACCORDANCE TO ALL STATE AND LOCAL SAFETY ORDINANCES. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
4. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE OF REQUIRED INSPECTIONS.
5. THE DOCUMENTS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. SIMILAR DETAILS APPLY TO SIMILAR CONDITION SUBJECT TO REVIEW BY THE ENGINEER AND THE OWNER.
6. CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR LOCATION AND AVOIDANCE OR REPAIR OF ALL UTILITIES, INCLUDING, BUT NOT LIMITED TO WATER. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES WHETHER SHOWN ON THE DRAWINGS OR NOT. IF THE CONTRACTOR FAILS TO ADEQUATELY PROTECT THE UTILITIES, ANY RESULTING DAMAGE SHALL BE REPAIRED AT CONTRACTOR'S COST.
7. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE NAME AND TELEPHONE NUMBER OF THE RESPONSIBLE PERSON TO CONTACT, WITH REGARD TO THIS PROJECT, 24 HOURS A DAY.
8. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY OWNER AND ENGINEER. IN ADDITION TO INSPECTIONS REQ'D BY COUNTY OF SANTA CLARA.

FOUNDATIONS

1. WHERE PRACTICAL, EXCAVATIONS SHALL BE MADE AS NEAR AS POSSIBLE TO THE NEAT LINES REQUIRED BY THE SIZE AND SHAPE OF THE FOOTINGS. NO MATERIAL SHALL BE EXCAVATED UNNECESSARILY.
2. AS EXCAVATION PROGRESSES, CONDITIONS MAY DEVELOP REQUIRING CHANGES IN ELEVATIONS OF FOOTINGS. SUCH CHANGES SHALL BE MADE ONLY AS DIRECTED BY THE ARCHITECT/ENGINEER.
3. FOOTINGS AND SLABS SHALL BEAR ON FIRM UNDISTURBED SOIL OR ON ENGINEERED FILL HAVING A MINIMUM RELATIVE COMPACTION OF 90 PERCENT BASED UPON ASTM D1557 LABORATORY COMPACTION TEST PROCEDURE. EXCAVATION AND GRADING SHALL CONFORM TO THE PROJECT GEOTECH REPORT.
4. ALL FOUNDATION WORK SHALL CONFORM TO THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT BY: HARO KASUNICH & ASSOC. INC., PROJECT No. SCL11777, DATED: JULY 27, 2021  
 LATERAL EARTH PRESSURE-PIN PILES (ACTIVE+SEIS.+SURCHARGE): 130 PCF  
 PASSIVE RESISTANCE: 650 (IGNORE TOP 3' DENSE BEDROCK PASS. ZONE) PCF ( x 2.5 DIAMETERS)  
 ADDL. FORCE AT RESTRAINED PIERS: 91H PLF  
 END BEARING CAPACITY: 10000 PSF  
 GROUTED TIE BACK DESIGN: 6" DIAMETER HOLE  
 ANGLE OF INCLINATION 16° (MIN.) 26° (MAX.)  
 SHAFT BOND STRESS=60 PSI (ALLOWABLE)

CONCRETE

1. ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI. USE A MINIMUM OF 5 1/2" SACKS OF TYPE II PORTLAND CEMENT PER CUBIC YARD OF CONCRETE. MAXIMUM SLUMP = 4 INCHES.
2. SPECIAL INSPECTION REQUIRED, PER CBC 1704.
3. CONCRETE SHALL BE MECHANICALLY VIBRATED.
4. NON-SHRINK GROUT SHALL BE BURKE NON-METALLIC MULTI PURPOSE OR APPROVED EQUAL WITH Fc = 3000psi @ 28 DAYS.

REINFORCING STEEL

1. REINFORCING STEEL SHALL CONFORM TO ASTM DESIGNATION A-615. NUMBER 2 & 3 SHALL BE GRADE 40. NUMBER 4 & LARGER SHALL BE GRADE 60.
2. ALL REINFORCEMENT SHALL BE CONTINUOUS. STAGGER SPLICES IN ADJACENT BARS. LAP SPLICES SHALL BE PER PLANS, 40 BAR DIAMETERS OR 24-INCH MINIMUM, STAGGER SPLICES 3'-0" MIN.
3. REINFORCING BARS AND EMBEDDED HARDWARE SHALL BE SUFFICIENTLY TIED AND HELD IN PLACE TO PREVENT DISPLACEMENT DURING PLACEMENT OF CONCRETE.
4. MINIMUM BAR COVERAGE SHALL BE AS FOLLOWS, U.O.N.:  
 3" FOR CONCRETE CAST AGAINST EARTH ( EXCEPT SLABS).  
 2" FOR CONCRETE EXPOSED TO EARTH BUT PLACED IN FORMS.  
 1-1/2" FOR SURFACES EXPOSED TO WEATHER.
5. SPECIAL INSPECTION REQUIRED PER C.B.C. 1704.

PIER CONSTRUCTION

1. PLACEMENT OF CONCRETE @ DRILLED PIERS SHALL CONFORM TO THE PROCEDURES FOR PIER FOUNDATIONS, ACI 336.3R LATEST EDITION.
2. PRIOR TO PLACEMENT OF CONCRETE EXCAVATIONS SHALL BE THOROUGHLY CLEANED. CASING OF THE UPPER PORTION OF DRILLED HOLE MAY BE NECESSARY TO AVOID SPILLING OF DEBRIS AND COLLAPSING THE TOP OF THE HOLE.
3. IF GROUND WATER IS ENCOUNTERED IN THE DRILLED HOLE, WATER SHALL BE PUMPED OUT AND TREMIE PLACEMENT OF CONCRETE SHALL BE REQUIRED.
4. NO CONCRETE SPILLS SHALL BE ALLOWED DURING CONSTRUCTION. CONTRACTOR SHALL BE PREPARED TO CONTAIN AND CLEAN UP ALL CONCRETE SPILLS. CONTAINMENT METHOD SHALL BE APPROVED AND IN PLACE PRIOR TO POURING CONCRETE.
5. DRILLED PIERS SHALL BE EMBEDDED TO A DEPTH INTO COMPETENT SOIL AS NOTED ON PLANS OR BEDROCK AS DETERMINED IN THE FIELD BY THE PROJECT GEOTECHNICAL ENGINEER.

SPECIAL INSPECTIONS

THE CONTRACTOR SHALL OBTAIN AND THE OWNER SHALL PAY FOR ONE OR MORE SPECIAL INSPECTORS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED UNDER CBC SECTION 1705.

1. PROVIDE CONTINUOUS (WHERE REQUIRED) & PERIODIC (WHERE ALLOWED) SPECIAL INSPECTION OF THE FOLLOWING ITEMS:  
 A. DRILLED PIER CONSTRUCTION  
 B. CONCRETE MIX DESIGN
2. SUBMIT WRITTEN REPORTS OF SPECIAL INSPECTIONS TO THE ARCHITECT/ENGINEER, OWNER, CONTRACTOR AND BUILDING OFFICIAL.
3. ALL INSPECTIONS SHALL CONFORM TO THE LOCAL BUILDING DEPARTMENT REQUIREMENTS. SPECIAL INSPECTION AGENCY/INSPECTOR SHALL BE APPROVED BY THE BUILDING DEPARTMENT

STRUCTURAL OBSERVATIONS

1. THE OWNER SHALL EMPLOY THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, OR ANOTHER ENGINEER OR ARCHITECT DESIGNATED BY THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, TO PERFORM STRUCTURAL OBSERVATION. OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, CONTRACTOR AND THE BUILDING OFFICIAL. THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFYING ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

2. THE FOLLOWING INSPECTIONS ARE REQUIRED BY THE PROJECT STRUCTURAL ENGINEER OF RECORD:  
 A. FOUNDATION REINFORCEMENT PLACEMENT PRIOR TO PLACING FOUNDATION CONCRETE.

3. THE ABOVE INSPECTIONS DO NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE SPECIAL INSPECTIONS REQUIRED BY CBC CHAPTER 17 OR THAT OF THE BUILDING DIVISION.

GRADING & EXCAVATION

1. WHERE PRACTICAL, FOUNDATION EXCAVATION SHALL BE MADE AS NEAR AS POSSIBLE TO THE NEAT LINES REQUIRED BY THE SIZE AND SHAPE OF THE FOOTING DETAILS. NO MATERIAL SHALL BE UNNECESSARILY EXCAVATED.
2. ALL FOUNDATION WORK SHALL CONFORM TO THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT BY THE GEOTECHNICAL ENGINEER AS PROVIDED IN THE BID DOCUMENT.
3. THE GEOTECHNICAL ENGINEER SHALL REVIEW THE FOUNDATION DESIGN DOCUMENTS FOR CONFORMANCE TO THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL INVESTIGATION AND SHALL PROVIDE WRITTEN DOCUMENTATION OF THE REVIEW TO THE BUILDING DEPARTMENT.
4. THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER 4 DAYS IN ADVANCE OF EXCAVATIONS. THE GEOTECHNICAL ENGINEER SHALL INSPECT PIER EXCAVATION, DETERMINE REQUIRED DEPTH OF ALL DRILLED PIERS. ALL ENGINEERED FILL SHALL BE PLACED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL SUBMIT WRITTEN DOCUMENTATION OF ALL REQUIRED INSPECTIONS TO THE BUILDING DEPARTMENT.
5. ALL FILL SHALL BE PLACED IN THIN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND COMPACTED. A HIGH DEGREE OF COMPACTION IS NOT NECESSARY FOR TRAILS.
6. AGGREGATE BASE ROCK SHALL CONSIST OF CLASS II BASEROCK CONFORMING TO THE LATEST CALTRANS STANDARDS. AGGREGATE BASEROCK SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT RELATIVE COMPACTION. RELATIVE COMPACTION PER ASTM D 1557.
7. IN THE EVENT THAT ANY UNUSUAL CONDITIONS NOT COVERED BY THE PLANS AND SPECIFICATIONS ARE ENCOUNTERED DURING EXCAVATION OPERATION, THE ENGINEER AND GEOTECHNICAL ENGINEER SHALL BE IMMEDIATELY CONTACTED FOR DIRECTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY NOTIFY THE ENGINEER AND THE GEOTECHNICAL ENGINEER UPON DISCOVERY OF ANY FIELD CONFLICTS.

**BROCKDICKIE**  
 ENGINEERING  
 COMMERCIAL & RESIDENTIAL STRUCTURES

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**CLIENT**

**ANTHONY NGUYEN**

17895 APACHE TR.  
 LOS GATOS, CA 95033

**PROJECT**

**NEW PIN PILE WALL**

17895 APACHE TR.  
 LOS GATOS, CA 95033

**STAMP**

**SHEET**

**SITE PLAN**

DATE :	04/11/22
SCALE :	AS NOTED
DRAW :	BD
DESIGN :	BD
CHECK :	
JOB No.	BDE-21161

REVISIONS	BY
▲ PLANCHECK RESUBMITTAL 08-28-24	BD

SHEET :

**S-1**

**CLIENT**

**ANTHONY NGUYEN**

17895 APACHE TR.  
LOS GATOS, CA 95033

**PROJECT**

**NEW PIN PILE WALL**

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LOS GATOS, CA 95033

**STAMP**



**SHEET**

**SITE PLAN  
HAND DUG PIER  
OPTION**

DATE : 04/11/22

SCALE : AS NOTED

DRAW : BD

DESIGN : BD

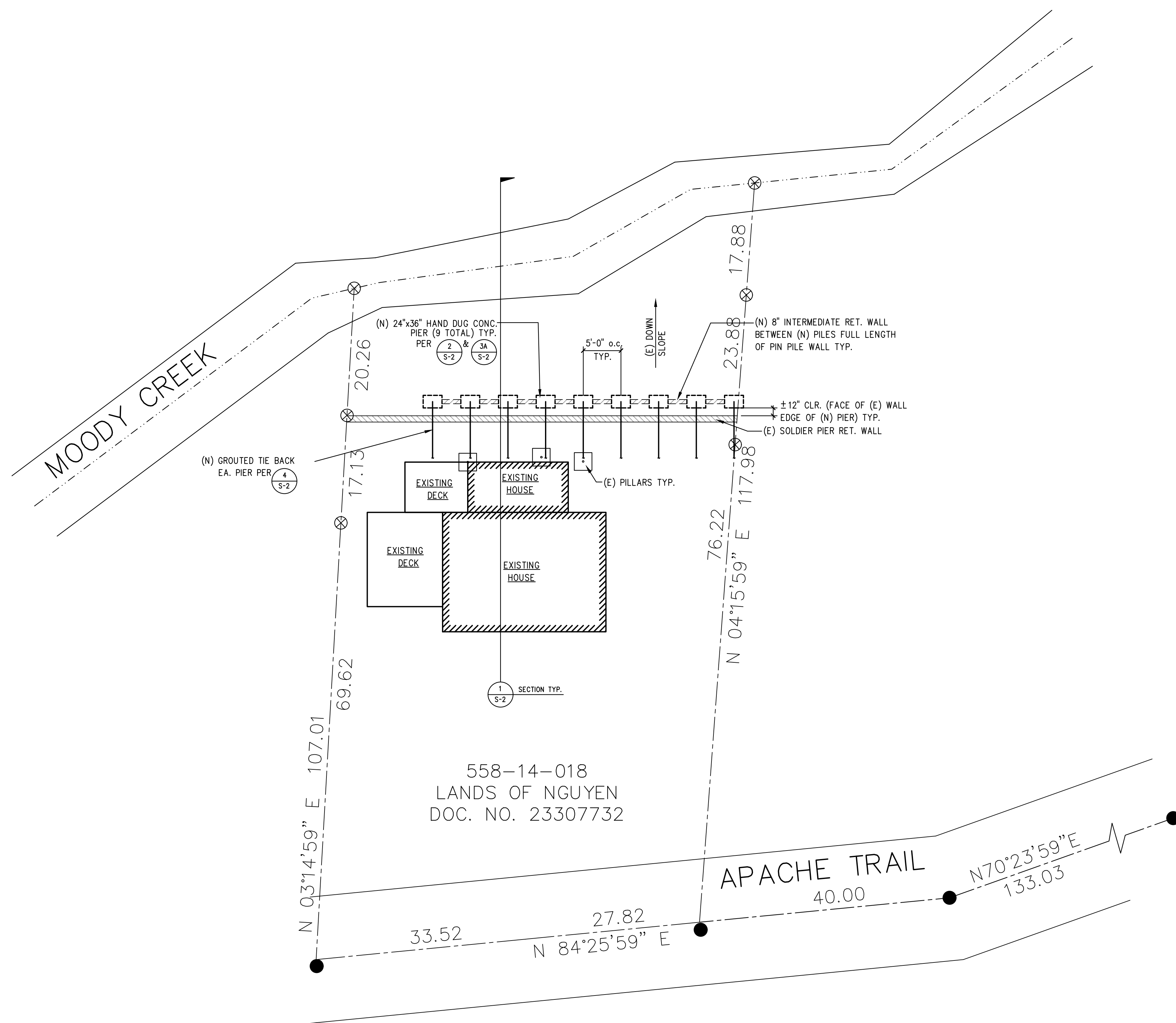
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JOB No. BDE-21161

REVISIONS	BY
△ PLANCHECK RESUBMITTAL 08-28-24	BD

SHEET :

**S-1A**



1 SITE PLAN  
NEW PIN PILE RETAINING WALL = 10'-0"

**CLIENT**

**ANTHONY NGUYEN**

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**PROJECT**

**NEW PIN PILE WALL**

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LOS GATOS, CA 95033

**STAMP**



**SHEET**

**SECTION & DETAILS**

DATE : 04/11/22

SCALE : AS NOTED

DRAW : BD

DESIGN : BD

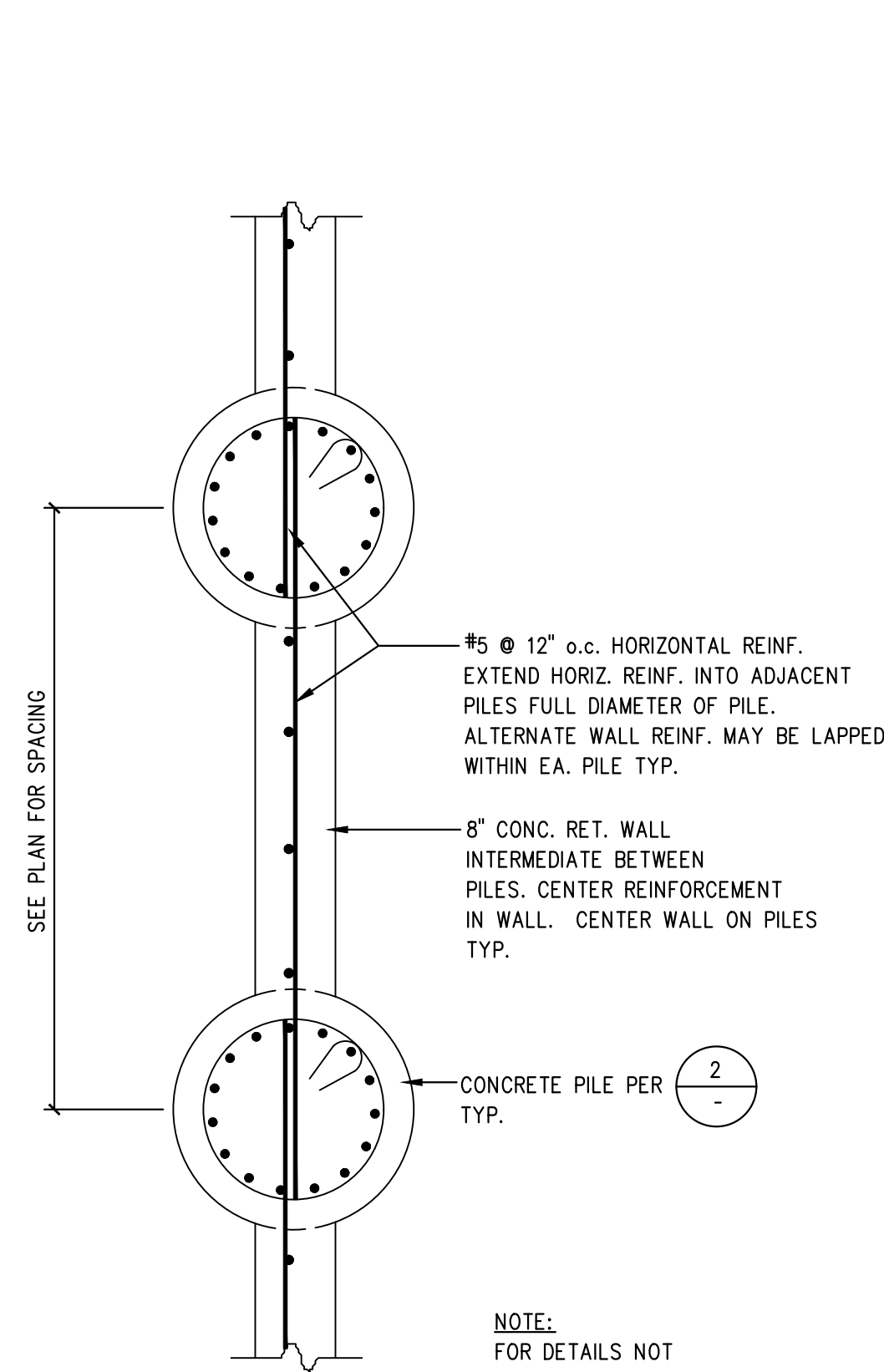
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JOB No. BDE-21161

**REVISIONS** BY

PLANCHECK RESUBMITTAL 08-28-24 BD

SHEET : **S-2**



**6** INTERMEDIATE RETAINING WALL  
PLAN  
3/4"=1'-0"

CONCRETE STRENGTH	F <sub>c</sub> = 2500 PSI		F <sub>c</sub> = 3000 PSI	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	3'-1"	2'-5"	2'-10"	2'-2"
#4	4'-1"	3'-1"	3'-9"	2'-10"
#5	5'-2"	3'-10"	4'-8"	3'-6"
#6	6'-0"	4'-10"	5'-5"	4'-3"
#7	8'-10"	6'-10"	8'-0"	6'-2"
#8	10'-3"	8'-8"	9'-4"	7'-0"
#9	11'-2"	8'-7"	10'-2"	7'-10"
#10	12'-4"	9'-7"	11'-3"	8'-11"
#11	13'-9"	10'-7"	12'-6"	9'-7"

**OFFSET**



**LAP SPLICE SCHEDULE**

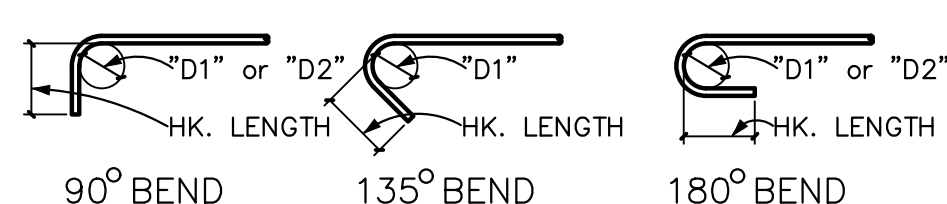
- NOTES:**
- UNLESS INDICATED OTHERWISE, USE THE "OTHER BARS," LAP SPLICE LENGTHS (CRS) CATEGORY 3)
  - TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.
  - SPLICES OF HORIZONTAL REINFORCEMENT IN WALLS SHALL BE STAGGERED.
  - SPLICES IN WALLS CONTAINING TWO CURTAINS OF REINFORCEMENT SHALL NOT OCCUR IN THE SAME LOCATION.
  - BARS SHALL HAVE CLEAR SPACING GREATER THAN 2 x BAR DIAMETER OR 1-1/2", WHICHEVER IS GREATER.
  - LAPS SHALL BE STAGGERED SUCH THAT ONE-HALF OR LESS OF THE TOTAL REINFORCING BARS ARE SPLICED AT ANY ONE LOCATION.

**7** REBAR OFFSET AND LAP SPLICE  
N.T.S.

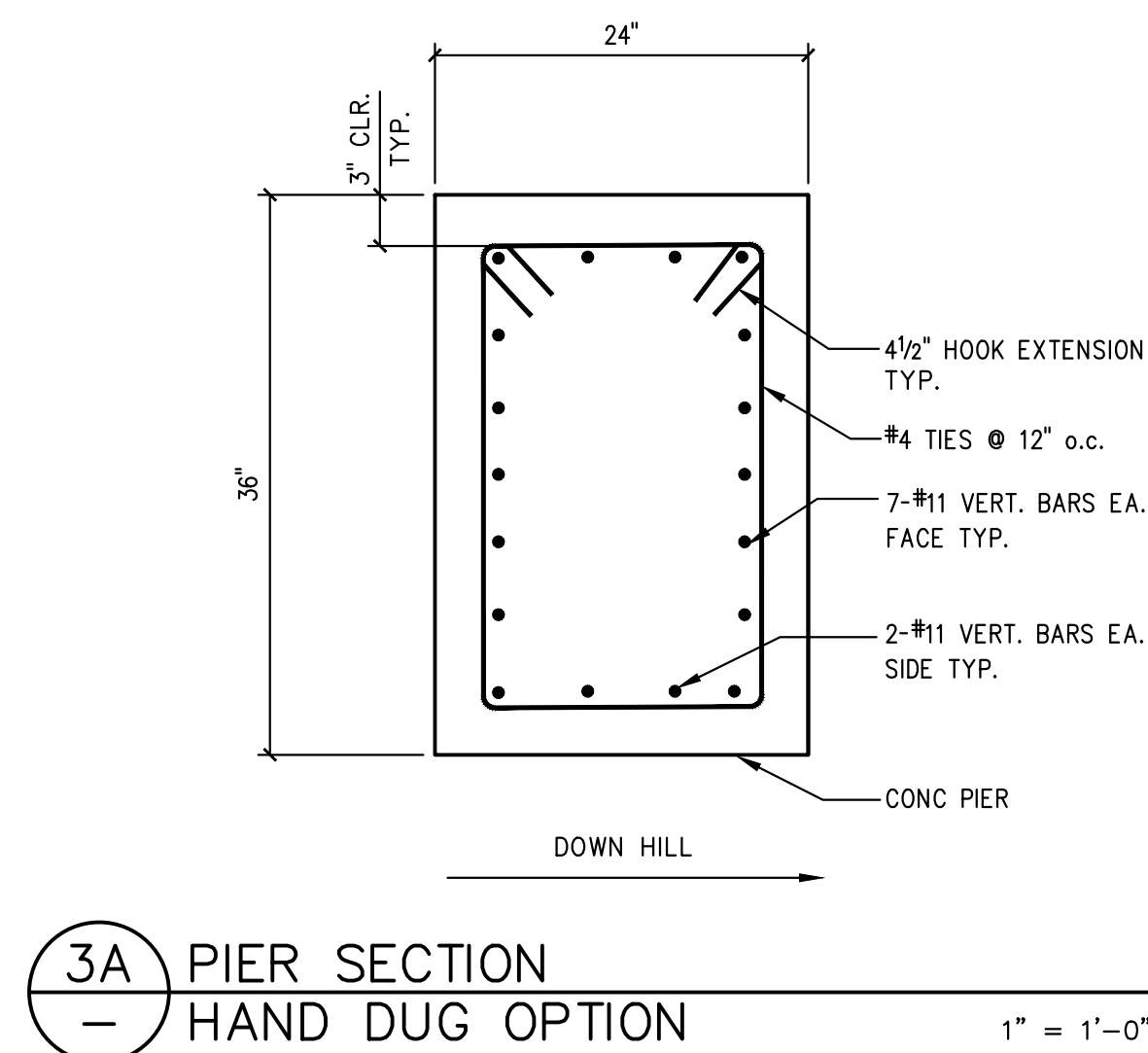
DIAMETER OF BENDS	
D1	1 1/2" FOR #3 BARS 2" FOR #4 BARS 2 1/2" FOR #5 BARS
D2	6d FOR #3 THRU #6 BARS

STANDARD HOOK LENGTHS			
BAR SIZE	MAIN REINF.	STIRRUP & TIE HOOKS	
#3	6"	4"	3"
#4	8"	4"	4"
#5	9 1/2"	4 1/2"	5"
#6	11 1/2"	5 1/2"	11 1/2"

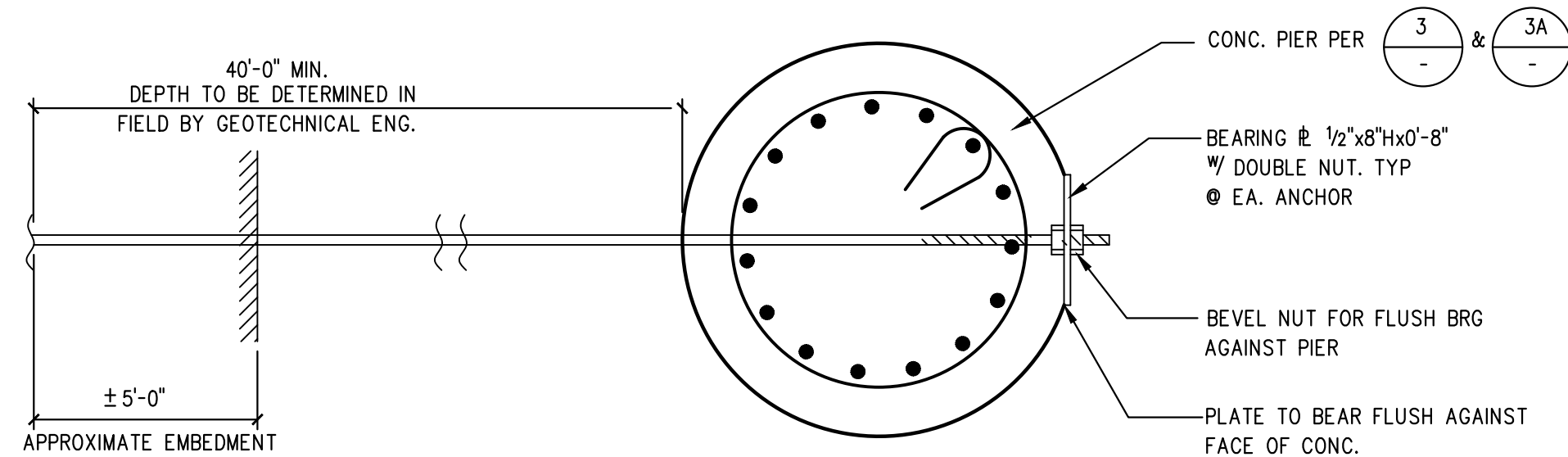
"D1" - FOR STIRRUPS, TIES AND WALL REINF. AT OPENINGS  
"D2" - FOR ALL OTHERS



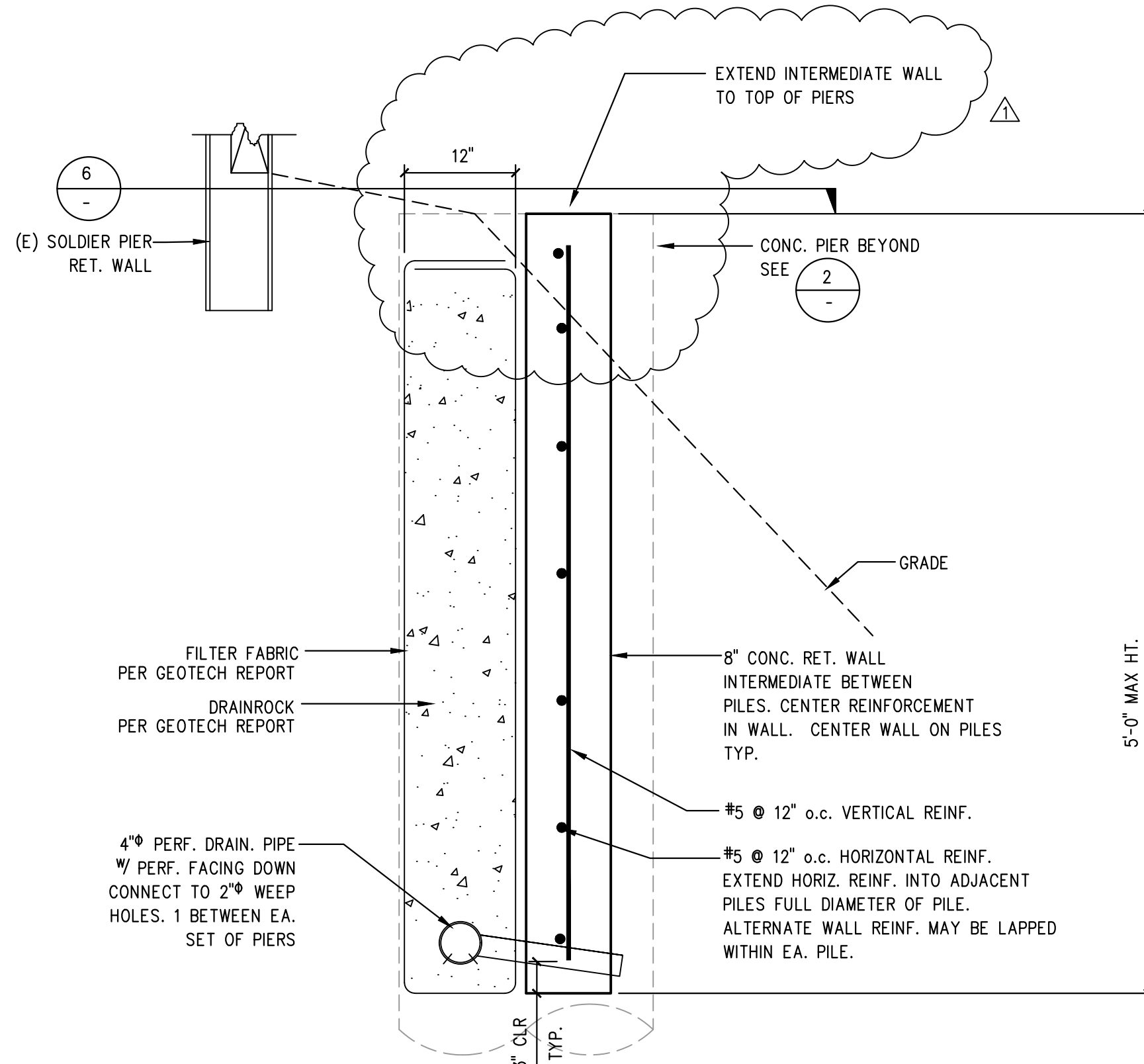
**8** STANDARD HOOK  
N.T.S.



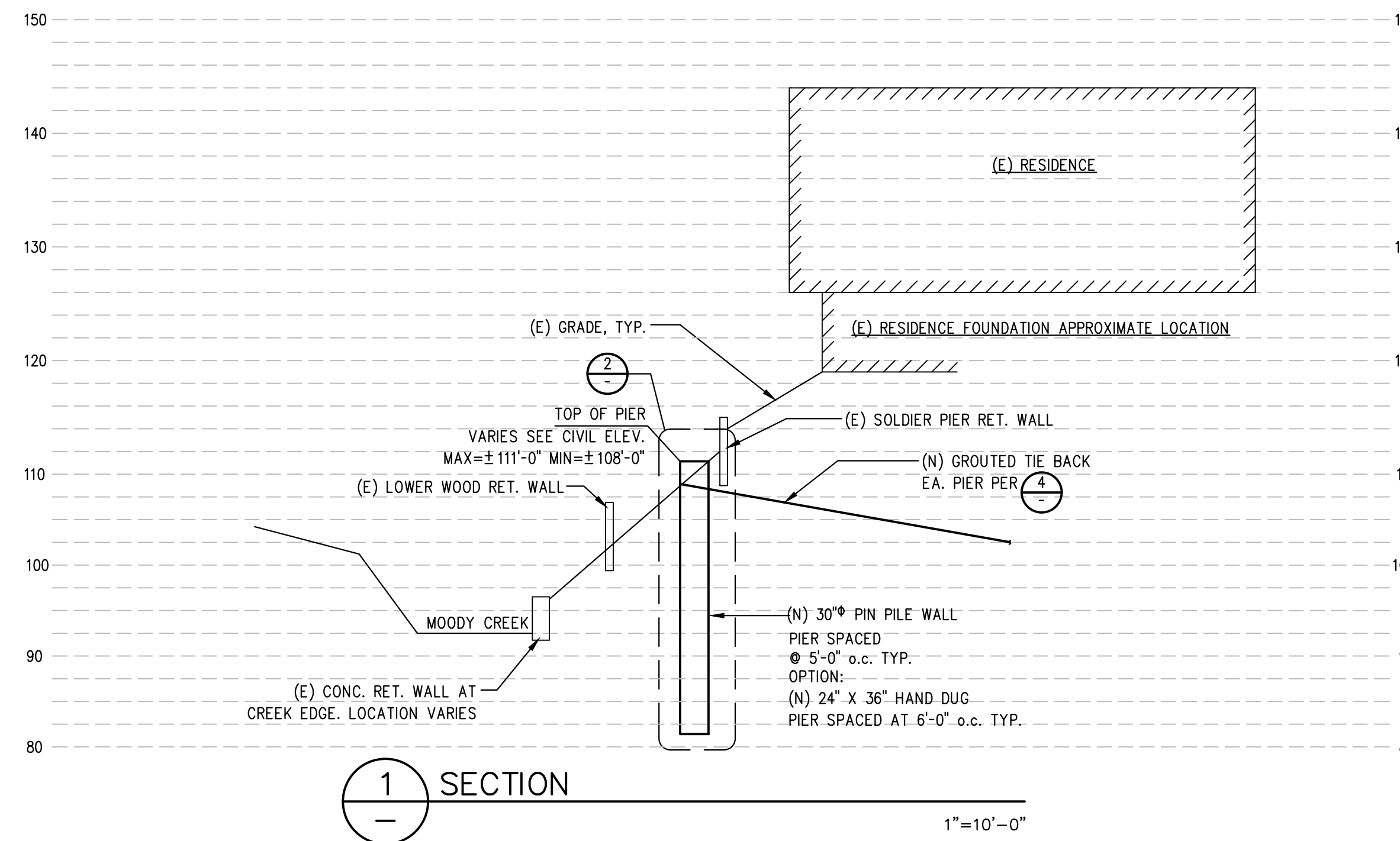
**3A** PIER SECTION  
HAND DUG OPTION  
1"=1'-0"



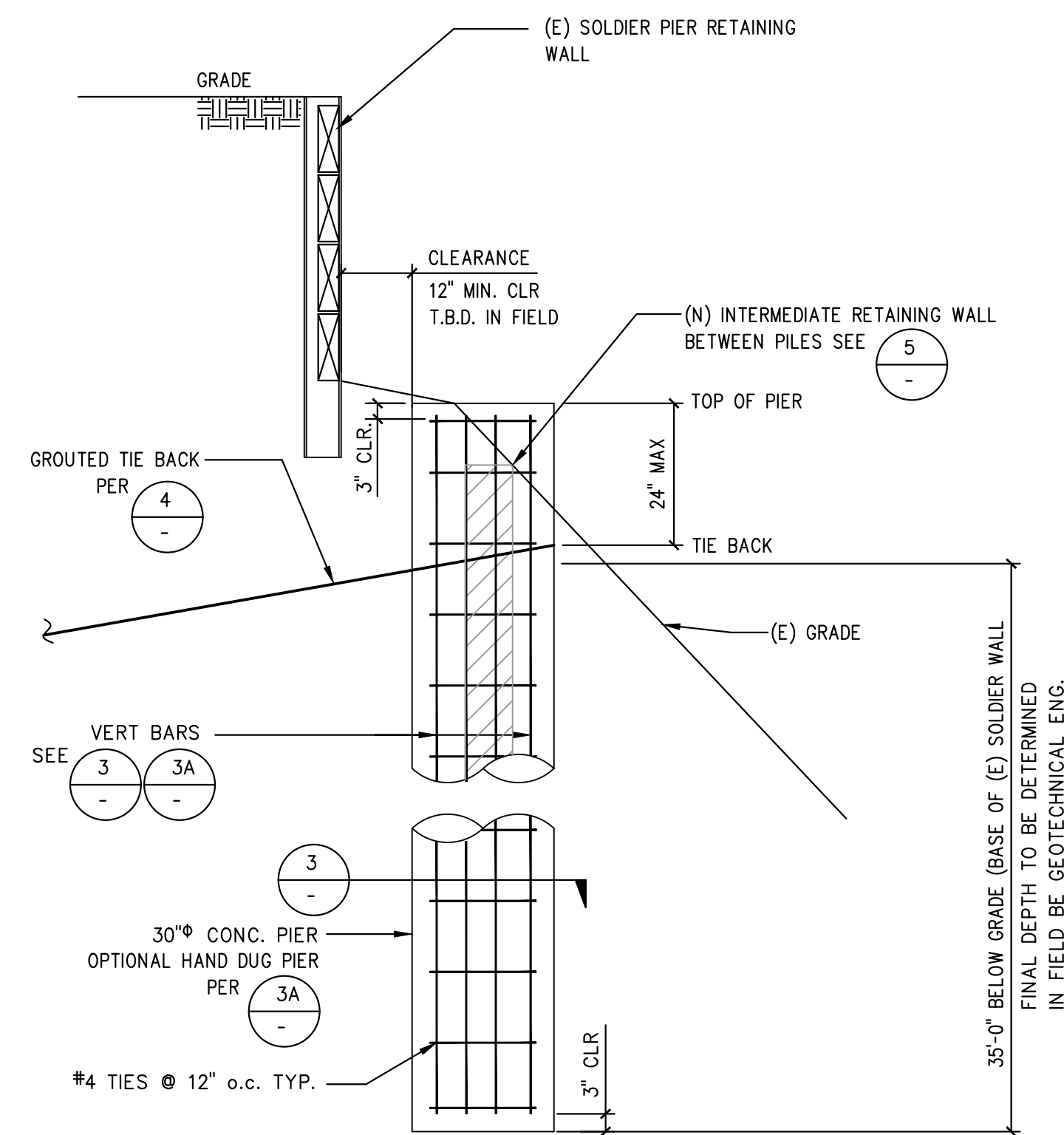
**4** GROUTED TIE BACK ANCHOR  
@ PIN PILE  
1"=1'-0"



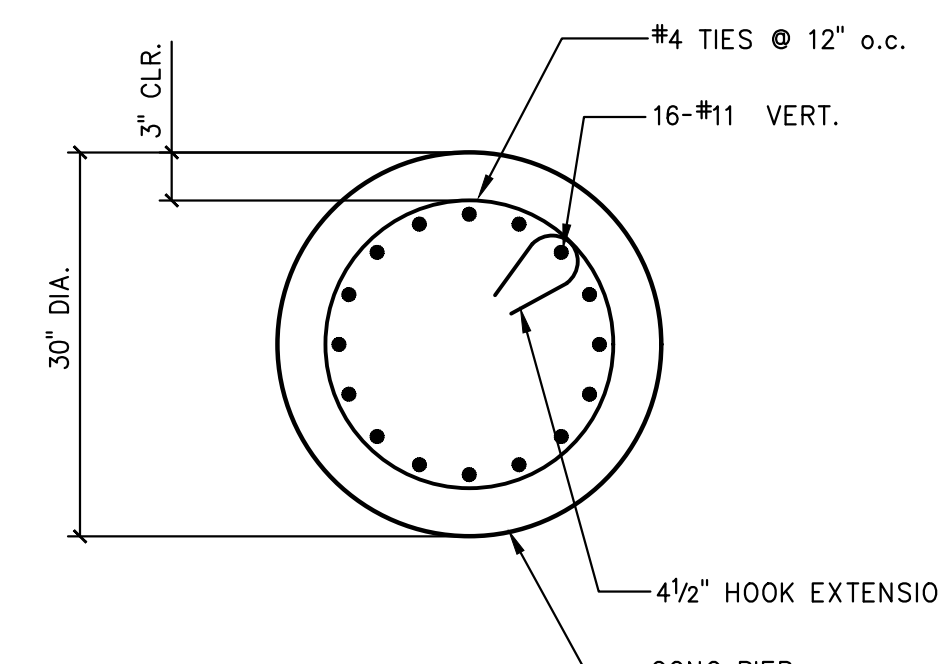
**5** INTERMEDIATE RETAINING WALL  
SECTION  
1"=1'-0"



**1** SECTION  
1"=10'-0"



**2** PIER ELEVATION  
1/2"=1'-0"



**3** PIER SECTION  
1"=1'-0"