

SCOPE OF WORK AND LAND USE DESCRIPTION

ANCHOR BOLT INSTALLATION TO REPLACE DEGRADED EXISTING BOTTOM PLATE ANCHORS TO PREVENT UPLIFT OF THE STRUCTURE. INSTALLATIONS ARE WITHIN THE EXISTING STEM WALL AND DO NOT AFFECT THE EXTERIOR APPEARANCE OF THE STRUCTURE.

BUILDING CODE

2018 INTERNATIONAL BUILDING CODE (IBC)

IMPROVED ANCHOR BOLT APPARATUS - INSTALLATION INSTRUCTIONS

- IDENTIFY AREAS WHERE EMBEDDED ANCHORS HAVE A 20% LOSS IN DIAMETER DUE TO CORROSION
- REMOVE THE CONCRETE AROUND THE AFFECTED AREA MEASURING THAT THE UNDERSIDE OF THE BOTTOM PLATE IS EXPOSED AND ENOUGH ROOM HAS BEEN LEFT TO DRILL A 1/2" HOLE THROUGH THE PLATE.
- INSTALL REMOVABLE REINFORCEMENT BLOCKS AT EVERY BUILDING CORNER AND AT EVERY 4' INTERVAL ALONG THE LENGTH OF THE WALL TO BE REPAIRED.
- REMOVE THE AFFECTED ANCHOR BY CUTTING THE ROD AND INSERTING THE BOLT BACK THROUGH THE TOP OF THE PLATE.
- DRILL A 3/8" HOLE THROUGH THE BOTTOM PLATE IN THE ORIGINAL LOCATION OF THE AFFECTED ANCHOR.
- INSERT THE "IMPROVED ANCHOR BOLT APPARATUS" THROUGH THE HOLE WITH THE ROUNDED SIDE OF THE BLADE FACING UP.
- INSERT THE "IMPROVED ANCHOR BOLT APPARATUS" UNTIL THE BLADE FULLY CLEARS THE BOTTOM PLATE AND PULL DOWN TO SEAT THE BLADE. THE BLADE CAN BE ORIENTED IN ANY DIRECTION AS LONG AS IT RESTS FLAT ON THE BOTTOM PLATE.
- TIGHTEN THE FIRST NUT TO THE UNDERSIDE OF THE BOTTOM PLATE TO AT LEAST 35 FT-LBS.
- ADJUST THE LOWER WASHER/NUT ASSEMBLY ON THE "IMPROVED ANCHOR BOLT APPARATUS" UNTIL THEY COME INTO CONTACT WITH THE UNDERSIDE OF THE EXISTING REBAR.
- SECURE THE "IMPROVED ANCHOR BOLT APPARATUS" TO THE EXISTING REBAR WITH A 19-GA. TIE WIRE OR ZIP TIE.
- IN THE CASE THAT NO REBAR IS PRESENT, ENSURE THERE IS AT LEAST 5" OF CLEARANCE FROM THE LOWER WASHER/NUT ASSEMBLY TO THE UNDERSIDE OF THE BOTTOM PLATE.
- SEAL ANY VISIBLE CRACKS IN THE STEM WALL WITH PC PRODUCTS MODEL # 072561.
- INSTALL A 7,000 PSI GROUT PATCH TO SURROUND THE REINFORCING STRUCTURE AND MAKE UP THE NEW EXTERIOR STEM WALL FINISH.
- THE GROUTED FOUNDATION SHOULD THEN BE PAINTED TO PREVENT MOISTURE FROM ENTERING THE FOUNDATION SYSTEM.

GENERAL NOTES

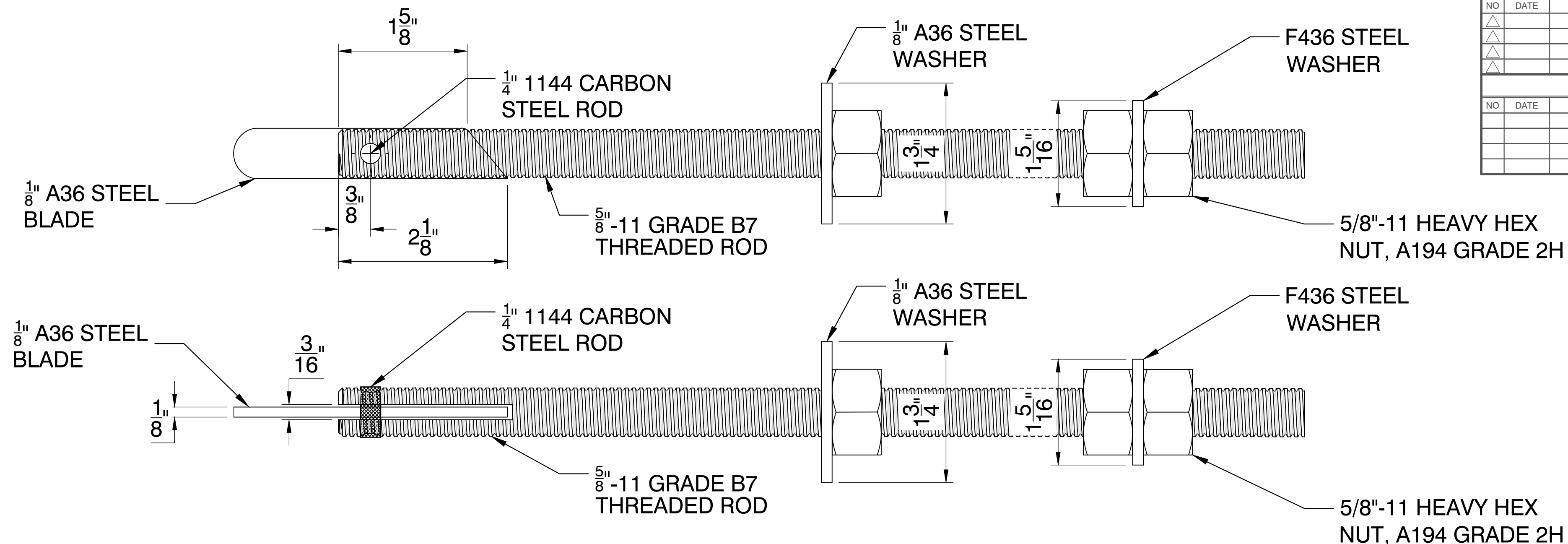
- DETAILS ARE INTENDED TO DEPICT GENERAL CONSTRUCTION METHODS FOR THE STRUCTURE. ESTABLISH AND VERIFY GEOMETRY AND POSSIBLE CONFLICTS WITH THE PROPOSED SCOPE OF WORK WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS PRIOR TO CONSTRUCTION. IF EXISTING CONDITIONS CONFLICT WITH CONTRACT DOCUMENTS, NOTIFY ENGINEER OF RECORD FOR CLARIFICATION IN A TIMELY MANNER. DO NOT DEVIATE FROM THE CONSTRUCTION DOCUMENTS WITHOUT INSTRUCTION FROM ENGINEER OF RECORD.
- CONTRACTOR IS RESPONSIBLE FOR EXECUTING PROPOSED SCOPE OF WORK IN A MANNER THAT MEETS REQUIREMENTS OF GOVERNING JURISDICTION. PROVIDE MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, BRACING, SHORING, TEMPORARY LOADING, AND STABILITY DURING CONSTRUCTION.
- THE PROJECT CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT ADJACENT PROPERTIES, WORKERS, AND OTHER PERSONS DURING EXCAVATION AND SITE PREPARATION OPERATIONS (IBC 3306)
- THE EXISTING LATERAL FORCE RESISTING SYSTEM IS NOT A PART OF THESE RETROFIT PLANS.

ANCHOR BOLT SPECIAL INSPECTION REQUIREMENTS

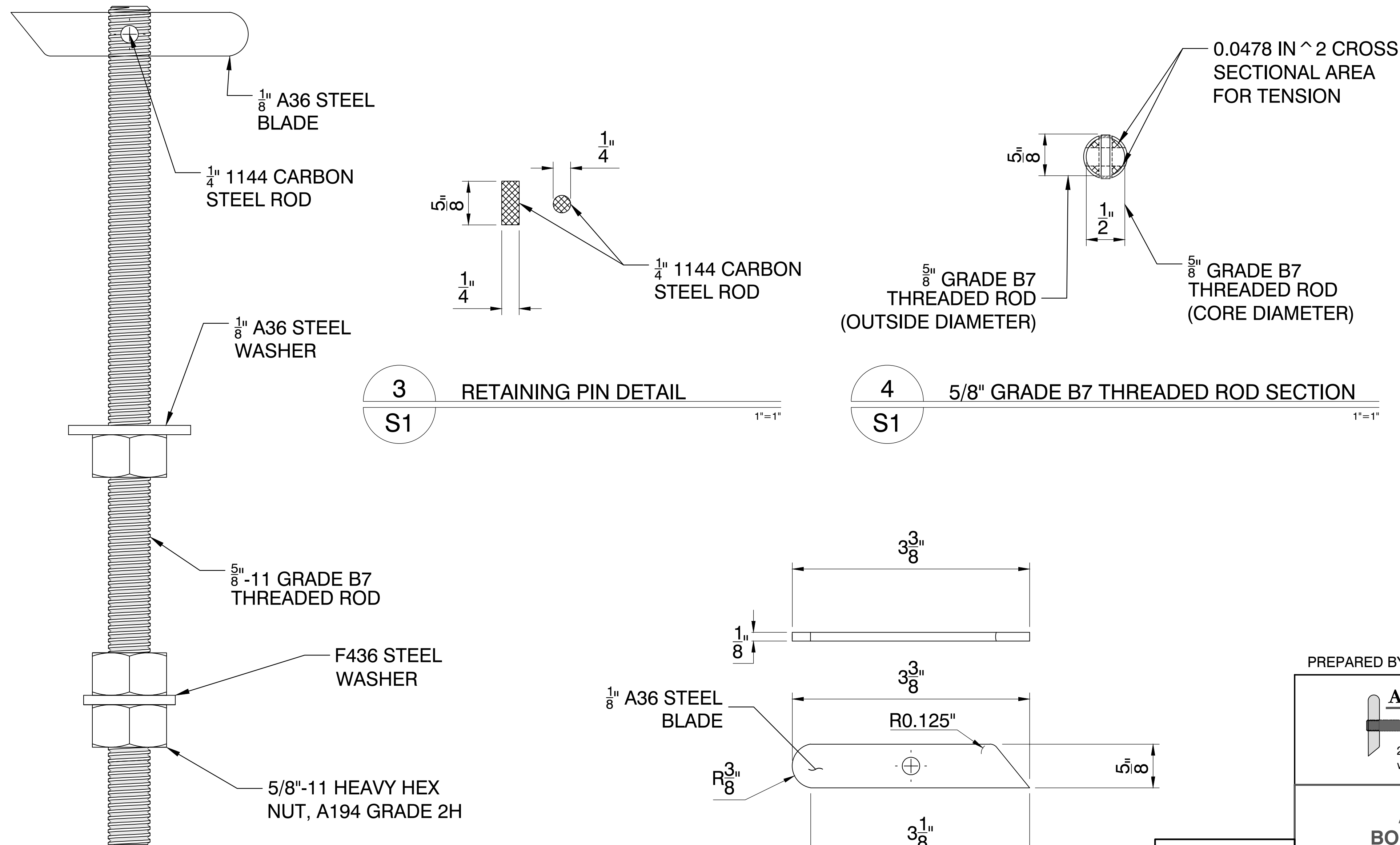
SPECIAL INSPECTION OF PILE INSTALLATIONS SHALL BE PERFORMED CONTINUOUSLY ACCORDING TO 1705.9 OF THE BUILDING CODE THE INSPECTION SCHEDULE SHALL CONSIST OF VERIFICATION OF USE OF PATENTED ANCHOR, ANCHOR PLACEMENT, PLACEMENT OF BLOCKS EVERY 4', AND USE OF 7,000 PSI GROUT PATCH.

SHALL BE VERIFIED THROUGH REVIEW OF THE ON-SITE LOG BOOK. A FINAL INSPECTION OF THE REMAINING A SEALED SPECIAL INSPECTION CERTIFICATE SHALL BE SUBMITTED TO THE APPLICABLE JURISDICTION BY A SPECIAL INSPECTOR OR REGISTERED ENGINEER.

- SPECIAL INSPECTOR SHALL DEMONSTRATE COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING QUALIFICATIONS TO THE SATISFACTION OF BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION IN QUESTION.
- PRIOR TO BEGINNING OF CONSTRUCTION, REVIEW SPECIAL INSPECTION REQUIREMENTS WITH ARCHITECT, ENGINEER, BUILDING OFFICIAL, GENERAL CONTRACTOR, AND SPECIAL INSPECTOR.
- DUTIES OF THE SPECIAL INSPECTOR INCLUDE, BUT ARE NOT LIMITED TO:
 - OBSERVE WORK FOR CONFORMANCE WITH APPROVED PERMIT DRAWINGS AND SPECIFICATIONS. BRING DISCREPANCIES TO IMMEDIATE ATTENTION OF GENERAL CONTRACTOR FOR CORRECTION. THEN, IF UNCORRECTED, TO THE ENGINEER OF RECORD AND BUILDING OFFICIAL.
 - FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO ARCHITECT, ENGINEER, BUILDING OFFICIAL, AND GENERAL CONTRACTOR IN A TIMELY MANNER.
 - SUBMIT A FINAL REPORT STATING WHETHER WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED AND WHETHER WORK IS IN CONFORMANCE WITH APPROVED PERMIT DRAWINGS AND SPECIFICATIONS.
- DUTIES OF THE GENERAL CONTRACTOR INCLUDE, BUT ARE NOT LIMITED TO:
 - NOTIFY SPECIAL INSPECTOR THAT WORK IS READY FOR INSPECTION NO LESS THAN 24 HOURS PRIOR TO INSPECTION BEING REQUIRED.
 - MAINTAIN ACCESS AND EXPOSURE TO WORK REQUIRING SPECIAL INSPECTION UNTIL IT HAS BEEN OBSERVED AND INDICATED TO BE IN CONFORMANCE BY SPECIAL INSPECTOR AND APPROVED BY BUILDING OFFICIAL.
 - PROVIDE SPECIAL INSPECTOR ACCESS TO APPROVED PERMIT DRAWINGS AND SPECIFICATIONS AT JOB SITE.
 - MAINTAIN JOB SITE COPIES OF ALL REPORTS SUBMITTED BY SPECIAL INSPECTOR.
- IF INITIAL TESTS OR INSPECTIONS REVEAL ANY PORTION OF WORK DOES NOT COMPLY WITH THE CONSTRUCTION DOCUMENTS, ADDITIONAL TESTS, INSPECTIONS, AND NECESSARY REPAIRS SHALL BE MADE AT THE CONTRACTORS EXPENSE.
- SPECIAL INSPECTION FREQUENCY DEFINITIONS:
 - CONTINUOUS SPECIAL INSPECTION (C): SPECIAL INSPECTOR SHALL OBSERVE WORK REQUIRING SPECIAL INSPECTION AT ALL TIMES.
 - PERIODIC SPECIAL INSPECTION (P): SPECIAL INSPECTOR SHALL BE PRESENT IN AREA OF WORK INTERMITTENTLY AND AT COMPLETION AS REQUIRED TO CONFIRM WORK REQUIRING SPECIAL INSPECTION IS IN CONFORMANCE. PROVIDED ONCE PROPER EXECUTION OF THE S.E.O.R.'S PRESCRIBED SOLUTION HAS BEEN COMPLETED.
- INSTEAD OF HIRING A SPECIAL INSPECTOR, THE OWNER MAY HIRE THE STRUCTURAL ENGINEER OF RECORD TO ACT AS THE SPECIAL INSPECTOR ON PROJECTS ACCORDING TO BUILDING CODE SECTION 1704.2.1, WHERE: "THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS SPECIAL INSPECTORS FOR THE WORK DESIGNED BY THEM, PROVIDED THEY QUALIFY AS SPECIAL INSPECTORS."
- INSPECTORS FROM THE COUNTY OR CITY AGENCY HAVING JURISDICTION MAY ALSO BE REQUIRED IN ACCORDANCE WITH THE BUILDING CODE OR LOCAL ORDINANCES. WHERE REQUIRED, THE OWNER AND CONTRACTOR SHALL NOTIFY THE AGENCY HAVING JURISDICTION TO PROVIDE THE REQUIRED INSPECTIONS. SPECIAL INSPECTIONS BY THE SPECIAL INSPECTOR HIRED BY THE OWNER ARE NOT A SUBSTITUTE OR IN LIEU OF INSPECTIONS REQUIRED BY THE BUILDING CODE OR LOCAL ORDINANCES BY THE INSPECTOR OF THE AGENCY HAVING JURISDICTION.
- IF THE STRUCTURAL ENGINEER OF RECORD IS HIRED TO PROVIDE SPECIAL INSPECTION AS DESCRIBED ABOVE, THE S.E.O.R. WILL REVIEW THE CONTRACTORS WORK FOR THE ITEMS WITHIN THE SPECIAL INSPECTIONS TABLE PERTAINING TO PUSH PIERS, HELICAL PILES, AND HELICAL TIEBACKS AS APPLICABLE (SEE SCOPE OF WORK PER DEEP FOUNDATION ELEMENTS APPLICABILITY). FINAL SUMMARY LETTER FOLLOWING COMPLETION OF THE PROJECT WILL BE PROVIDED ONCE THE INSTALLATION IS FOUND TO BE ACCEPTABLE AND COMPLETE TO THE ENGINEERS JUDGMENT.
- FOR ANY WORK FOUND UNACCEPTABLE, THE S.E.O.R. AND THE CONTRACTOR WILL COORDINATE TO DETERMINE AN APPROPRIATE SOLUTION. ANY SUBSTANTIAL CHANGES FROM THE APPROVED CONSTRUCTION DOCUMENTS WILL BE UPDATED ACCORDINGLY OR ALTERNATIVELY/ADDITIONALLY R.F.I.'S WILL BE RECORDED TO DOCUMENT DEVIATIONS FROM PLAN. A FINAL ACCEPTANCE MEMO WILL BE



1 IMPROVED ANCHOR BOLT APPARATUS BA1 - SIDE VIEW
S1 1"=1"



2 IMPROVED ANCHOR BOLT APPARATUS BA1 - AS INSTALLED
S1 1"=1"

3 RETAINING PIN DETAIL
S1 1"=1"

4 5/8" GRADE B7 THREADED ROD SECTION
S1 1"=1"

5 RETAINING BLADE
S1 1"=1"

REVISION RECORD		DESCRIPTION
NO	DATE	
SUBMITTAL RECORD		DESCRIPTION
NO	DATE	

GOVERNING DESIGN CRITERIA

GRADE B7 THREADED ROD:
-125,000 PSI TENSILE STRENGTH

1144 CARBON STEEL ROD PIN:
-84,800 PSI ULTIMATE YIELD STRENGTH

ULTIMATE DESIGN CAPACITY:
-5,285 LBS UPLIFT

-MEETS OR EXCEEDS ALLOWABLE TENSION LOADS OF 5,285 FOR SIMPSON STHD14 AND STHD14RJ TENSION TIES

-MEETS OR EXCEEDS ALLOWABLE TENSION LOADS OF 4,250 FOR WEDGE ANCHORS UP TO 3/4" WITH EMBEDMENT DEPTH UP TO 6-3/4"

-MEETS OR EXCEEDS MAXIMUM PULL OUT STRENGTH OF 4,749.7 LBS FOR EMBEDDED TYPE ANCHORS UP TO 5/8" PER ACI 318-08 APPENDIX D AND IBC 2018 SECTION 1901

NOTES:
FULL DESIGN REPORT AND MATERIAL SPECIFICATIONS CAN BE FOUND IN THE POUNDERS ENGINEERING PLLC MEMO TITLED "CALCULATION SUPPORT PACKAGE FOR AN IMPROVED ANCHOR BOLT APPARATUS PATENT 12,227,935 B2" DATED MARCH 4, 2025.

PREPARED BY:

AZ ANCHOR BOLTS LLC

216 N 88TH ST MESA, AZ 85207 | (480) 323-5314
www.AZAnchorBolts.com

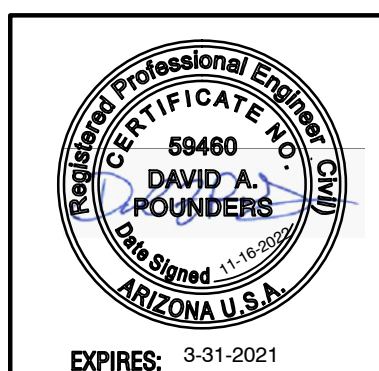
AN IMPROVED ANCHOR BOLT APPARATUS (IABA) BA1 PATENT 12,227,935 B2

DRAWN BY: DAP | CHECKED BY: DAP | APPROVED BY: DAP | DATE: SEPTEMBER 2021 | DWG SCALE: VARIES | PROJECT NO: PEDD1021012 | DRAWING NO: **S1**

ANCHOR DESIGN

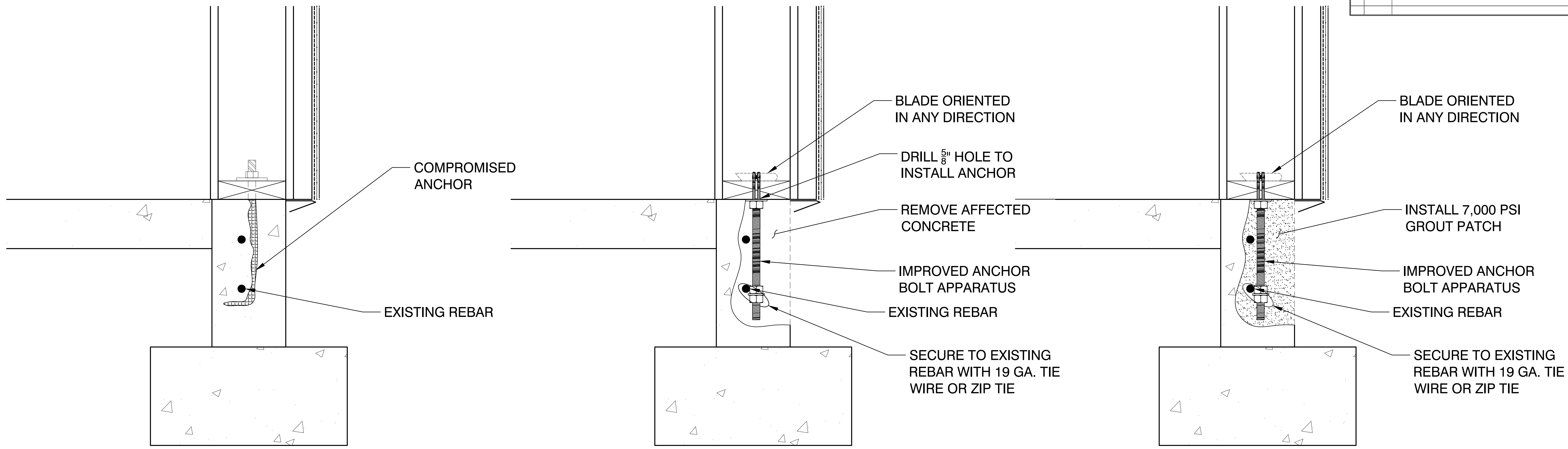
EXPIRES: 3-31-2021

SHEET 1 OF 2



REVISION RECORD		
NO	DATE	DESCRIPTION

SUBMITTAL RECORD		
NO	DATE	DESCRIPTION



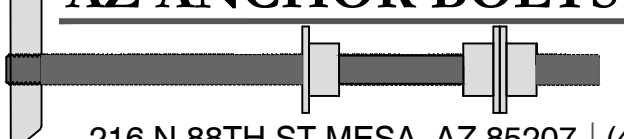
1 INSTALLATION GUIDANCE TYP.
S2

1/4"=1"

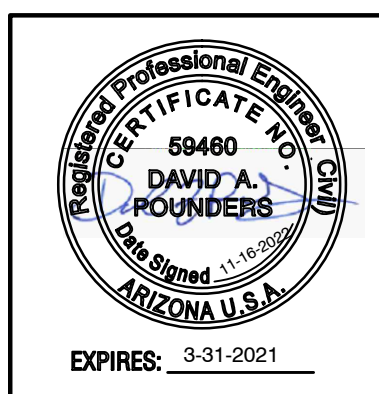
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**IABA BA1 INSTALLTION
 PATENT 12,227,935 B2**



DRAWN BY: DAP	CHECKED BY: DAP	APPROVED BY: DAP
DATE: SEPTEMBER 2021	DWG SCALE: VARIES	PROJECT NO: PEDD1021012

ANCHOR INSTALLATION SHEET **S2** OF 2

