



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION**

**APPLICATION FOR OSHPD PREAPPROVAL OF  
MANUFACTURER'S CERTIFICATION (OPM)**

OFFICE USE ONLY

**APPLICATION #: OPM-0571**

**OSHPD Preapproval of Manufacturer's Certification (OPM)**

Type:  New  Renewal/Update

**Manufacturer Information**

Manufacturer: Visaris d.o.o

Manufacturer's Technical Representative: Vladimir Petrovic

Mailing Address: Batajnicki drum 10. deo 1B, 11186 Zemun,, Belgrade, Se 11186

Telephone: (38111) 201-7600 Email: vpetrovic@visaris.com

**Product Information**

Product Name: ddRAura U

Product Type: Radiographic Imaging System

Product Model Number: 4.1031.0400.0

General Description: The ddRAura U is a universal, stationary, diagnostic x-ray device intended for a wide range of diagnostic x-ray studies. Options for either auto-positioning or manual operation. Intended for use by a qualified physician/technician on adult and pediatric subjects. Not intended for mammography.

**Applicant Information**

Applicant Company Name: Swissray Customer Care, LLC.

Contact Person: Deniz Kortan

Mailing Address: 1090 King Georges Post Road, Unit 1203, Edison, NJ 08837

Telephone: (908) 307-1522 Email: deniz.kortan@swissraycustomercare.com

Title: QA/RA Manager

\*Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs\*

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION**

**Registered Design Professional Preparing Engineering Recommendations**

Company Name: JOHN A. MARTIN & ASSOCIATES, INC.  
Name: Gregory Orozco California License Number: S4957  
Mailing Address: 950 South Grad Avenue, 4th Floor, Los Angeles, CA 90015  
Telephone: (213) 483-6490 Email: gorozco@johnmartin.com

**OSHPD Special Seismic Certification Preapproval (OSP)**

Special Seismic Certification is preapproved under OSP OSP Number: \_\_\_\_\_

**Certification Method**

Testing in accordance with:  ICC-ES AC156  FM 1950-16  
 Other(s) (Please Specify): \_\_\_\_\_

\*Use of criteria other than those adopted by the California Building Standards Code, 2019 (CBSC 2019) for component supports and attachments are not permitted. For distribution system, interior partition wall, and suspended ceiling seismic bracings, test criteria other than those adopted in the CBSC 2019 may be used when approved by OSHPD prior to testing.

- Analysis
- Experience Data
- Combination of Testing, Analysis, and/or Experience Data (Please Specify): \_\_\_\_\_

**OSHPD Approval**

Date: 10/5/2020  
Name: William Staehlin Title: Senior Structural Engineer  
Condition of Approval (if applicable): \_\_\_\_\_



**ADHESIVE ANCHORS AND DOWELS**

- ANCHORS AND DOWELS INSTALLED INTO CONCRETE SHALL BE INSTALLED USING, HILTI RE500-V3 (LARR #26028, ICC ESR-3814). INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH ICC REPORT AND MANUFACTURER'S RECOMMENDATIONS.
- MANUFACTURER'S FIELD REPRESENTATIVE SHALL PROVIDE INSTALLATION TRAINING FOR ALL PRODUCTS TO BE USED PRIOR TO COMMENCEMENT OF WORK; ONLY PROPERLY TRAINED INSTALLERS SHALL PERFORM POST INSTALLED ANCHOR INSTALLATION.
- INSTALLATION OF ADHESIVE ANCHORS IN HORIZONTAL TO VERTICAL ORIENTATION SHALL BE DONE BY A CERTIFIED ADHESIVE INSTALLER (AA) AS CERTIFIED THROUGH ACI AND IN ACCORDANCE WITH THE CURRENT EDITION OF ACI 318.
- EMBEDMENT DEPTH FOR ANCHORS AND DOWELS IS AS SHOWN ON PLAN. THE TESTING LABORATORY WILL PERFORM TENSION TESTS ON 50% OF NON-STRUCTURAL ANCHORS PER ON OF THE FOLLOWING METHODS AND IN ACCORDANCE WITH THE VALUES SPECIFIED BELOW:
  - HYDRAULIC RAM METHOD: APPLY PROOF TEST LOAD WITHOUT REMOVING THE NUT. IF IT IS NOT POSSIBLE TO TEST WITH THE NUT INSTALLED, REPLACE THE NUT WITH A THREADED COUPLER TO THE SAME TORQUE MEASURED WITH A TORQUE WRENCH, AND THEN APPLY THE LOAD. MOVEMENT MAY BE DETERMINED WHEN THE WASHER UNDER THE NUT BECOMES LOOSE.
  - TEST LOAD FOR ANCHORS TO BE TWO TIMES THE ALLOWABLE TENSION VALUE OR 1 1/4 TIMES THE MAXIMUM DESIGN STRENGTH GIVEN IN THE ICC APPROVAL, BUT NEED NOT EXCEED 0.8Ase fya, WHERE Ase IS THE CROSS SECTIONAL AREA OF THE ANCHOR AND Fya IS THE YIELD STRESS OF THE ANCHOR. TENSION TEST LOADS FOR ANCHORS SHALL BE:

ANCHOR DIAMETER	EMBEDMENT	TEST LOAD (KIPS)
5/8" (16mm)	4 1/2" (115mm)	4.72
5/8" (16mm)	6" (153mm)	7.56
5/8" (16mm)	6 1/2" (165mm)	9.45
5/8" (16mm)	9" (229mm)	10.49
5/8" (16mm)	10 1/2" (267mm)	15.11

- ANCHORS SHALL CONFORM WITH ASTM A193 GRADE B7 THREADED RODS USING ASTM A 563 GRADE DH HEAVY HEX NUTS AND ASTM F436 WASHERS U.N.O.
- DOWELS SHALL CONFORM WITH ASTM A615 OR ASTM A706 GRADE 60 REINFORCING STEEL U.N.O.
- REPLACE ANCHORS AND DOWELS THAT FAIL DURING TESTING AND RETEST. IF ANY OF THE TESTED DOWELS AND ANCHORS FAIL TO ACHIEVE THE SPECIFIED TEST LOAD, TEST 100% OF THE DOWELS AND ANCHORS INSTALLED IN THE LAST 2 DAYS OF ANCHOR INSTALLATION.
- CENTER BAR IN THE HOLE AND WEDGE TIGHT WITH WOODEN WEDGES TO HOLD IT IN PLACE UNTIL THE ADHESIVE SETS.
- IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE ENGINEER WILL DETERMINE A NEW LOCATION.
- LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH ADHESIVE ANCHORS.

**STRUCTURAL STEEL AND MISCELLANEOUS METAL (ALL OTHER STEEL)**

- ALL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND THE LATEST EDITION OF AISC SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS. WHERE THE STRUCTURAL STEEL IS EXPOSED AND INDICATED AS 'AESS' ON PLANS OR DETAILS, FABRICATION AND ERECTION SHALL ALSO BE IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL.
- GENERAL CONTRACTOR TO DETERMINE SCOPE OF WORK FOR BOTH STRUCTURAL STEEL AND MISCELLANEOUS METAL SUBCONTRACTORS (IF MULTIPLE SUBCONTRACTORS ARE USED). THE COMBINED SCOPE OF WORK FOR ALL SUBCONTRACTORS SHALL INCLUDE ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK SHOWN ON THE CONTRACT DRAWINGS.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION AS INDICATED BELOW UNLESS NOTED OTHERWISE:
 

ALL WIDE FLANGE AND WT SHAPES	A992, GRADE 50
STEEL ANGLES AND CHANNELS	A36 UNO
DECK CLOSURE PLATES AND SHIM MATERIALS	A36
BEAM SHEAR PLATES, STIFFENER PLATES, ALL OTHER PLATES	A572, GRADE 50 UNO
BOLTS	A325X
MACHINE BOLTS (USE ONLY WHERE INDICATED)	A307
ANCHOR BOLTS	F1554, GRADE 55 S1, HEADED
THREADED AND HANGER ROD	A572, GR50
NUTS FOR BOLTS AND MACHINE BOLTS	A563
HARDENED WASHERS	F436
UNHARDENED WASHERS	F844
PLAIN WASHERS	ANSI B18.22.1
- HIGH STRENGTH BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325. HIGH STRENGTH BOLTS SHALL BE FRICTION TYPE WITH THREADS EXCLUDED FROM THE FROM THE SHEAR PLANES (I.E. A325-X, SLIP CRITICAL) UNLESS NOTED OTHERWISE.
- WHEN FABRICATING BEAMS, PLACE NATURAL CAMBER UP. PROVIDE UPWARD CAMBER TO ALL MEMBERS SHOWN TO HAVE CAMBER. AMOUNT MEASURED IN THE FIELD PRIOR TO ERECTION SHALL NOT DEVIATE BY MORE THAN ALLOWED BY THE AISC SPECIFICATIONS. DO NOT CAMBER MEMBERS OCCURRING BELOW ELEVATOR ENTRANCE DOORS.
- AFTER FABRICATION, ALL STEEL SHALL BE CLEANED FREE OF RUST, LOOSE MILL SCALE AND OIL.
- BOLT HOLES IN STEEL SHALL BE STANDARD HOLES, 1/16 INCH LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE. BOLT HOLES IN BASE PLATES MAY BE OVERSIZED PER AISC TABLE 14-2 IF WASHERS ARE PROVIDED IN ACCORDANCE WITH AISC TABLE 14-2.
- BOLTS SHALL BE SPACED AT 3" O.C. UNLESS NOTED OTHERWISE. THE DISTANCE FROM THE EDGE OF A STANDARD HOLE TO THE EDGE OF A CONNECTING PART IN ANY DIRECTION SHALL NOT BE LESS THAN 1 1/2" U.N.O. THE EDGE DISTANCE MAYBE 1 1/4" AT THE ENDS OF BEAM CONNECTION ANGLES AND SHEAR END PLATES. THE DISTANCE FROM CENTER OF AN OVERSIZED OR SLOTTED HOLE TO THE EDGE OF A CONNECTING PART SHALL NOT BE LESS THAN THAT REQUIRED FOR A STANDARD HOLE TO THE EDGE OF A CONNECTED PART PLUS THE APPLICABLE INCREMENT C<sub>2</sub> FROM AISC TABLE J3.5.
- ALL STRUCTURAL STEEL SURFACES TO BE WELDED OR HIGH-STRENGTH BOLTED, TO BE ENCASED IN CONCRETE OR TO RECEIVE SPRAY-APPLIED FIREPROOFING SHALL BE LEFT UNPAINTED.

**MECHANICAL ANCHORS**

- EXPANSION ANCHORS INTO CONCRETE: HILTI KB TZ GALVANIZED CARBON STEEL (ICC ESR-1917 REVISED JANUARY 2020) TO BE INSTALLED IN ACCORDANCE WITH ICC REPORT AND MANUFACTURER'S RECOMMENDATIONS. MAINTAIN FULL THREAD ENGAGEMENT FOR NUT AND WASHER.
- IF PT TENDONS ARE PRESENT IN SLAB, LOCATE THE EXISTING TENDONS IN THE SLAB BY NONE DESTRUCTIVE MEANS PRIOR TO INSTALLING ANCHORS. DO NOT CUT OR DAMAGE EXISTING TENDONS. ANY EXISTING TENDONS THAT ARE DAMAGED OR CUT SHALL BE REPAIRED. ANY REPAIR WORK WILL REQUIRE OSHPD APPROVAL. IN CASE OF ANY CONFLICT OF LOCATION OF REINF AND/OR TENDON TO THE ANCHOR INSTALLATION CONTRACTOR SHALL ADJUST THE UNIT LAYOUT TO AVOID THE EXISTING TENDONS. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 6,000 PSI. USE "SIKA GROUT 212" OR "MASTERFLOW 928". IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE STRUCTURAL ENGINEER WILL DETERMINE A NEW LOCATION.
- ANCHORS SHALL BE PROOF-TESTED BY OWNER'S TESTING AND INSPECTION AGENCY OR TESTED IN THE PRESENCE OF THE SPECIAL INSPECTOR. A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO OSHPD.
- TEST ANCHORS NO SOONER THAN 24 HOURS AFTER INSTALLATION.
- REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING BY A BASE PLATE OR OTHER FIXTURE. IF RESTRAINT IS FOUND, LOOSEN AND SHIM OR REMOVE THE FIXTURE PRIOR TO TESTING.
- TEST 50% OF ANCHORS PER THE FOLLOWING METHOD AND IN ACCORDANCE WITH THE VALUES SHOWN IN THE TABLE:
  - TORQUE WRENCH METHOD: TEST ANCHORS TO THE TORQUE LOAD INDICATED IN THE TABLE WITHIN ONE-HALF TURN OF THE NUT.

EXPANSION ANCHOR EMBEDMENT DEPTH AND TEST LOAD		
ANCHOR DIAMETER	(h <sub>ep</sub> ) MIN EMBED	ANCHORS IN CONCRETE
		TORQUE LOAD (FT-LBS)
1/2"	2"	40

- IF ANY ANCHOR FAILS TESTING, REPLACE ANCHOR AND TEST ALL ANCHORS OF THE SAME CATEGORY INSTALLED BY THE SAME TRADE NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE TESTS PASS, THEN RESUME INITIAL TESTING FREQUENCY.
- AN INDEPENDENT TESTING AGENCY AND SPECIAL INSPECTORS SHALL BE RETAINED BY THE OWNER TO PERFORM THE TESTS AND INSPECTION AS REQUIRED BY SECTION 1704A OF THE CALIFORNIA BUILDING CODE. THE CONTRACTOR SHALL PROVIDE ACCESS TO THE SPECIAL INSPECTOR TO THE SITE OR FABRICATION SHOPS AND SHALL FURNISH SAMPLES OF MATERIALS FOR TESTING AS REQUESTED BY THE TESTING AGENCY AND THE GOVERNING CODE.
- IF INITIAL TESTS OR INSPECTIONS MADE BY THE OWNER'S TESTING AGENCY REVEAL THAT ANY PORTION OF THE WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, ADDITIONAL TESTS, INSPECTIONS, AND NECESSARY REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE.
- PROVIDE PERIODIC SPECIAL INSPECTION FOR ALL HILTI KB-TZ, AS REQUIRED PER THE CHAPTER 17A OF THE CALIFORNIA BUILDING CODE AND ALL APPLICABLE AMENDMENTS.
- PROVIDE CONTINUOUS SPECIAL INSPECTION FOR ALL ADHESIVE ANCHORS PER CHAPTER 17A OF THE CALIFORNIA BUILDING CODE AND ALL APPLICABLE AMMENDMENTS.

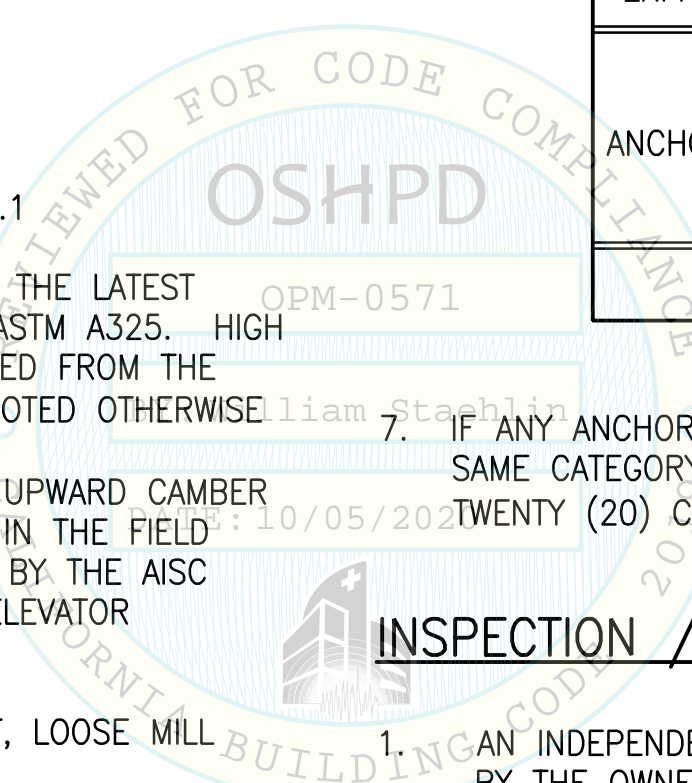
**RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD (SEOR)**

- VERIFY EXISTING SLABS, DECKS, JOISTS AND SOFFITS CAN RESIST LOADS IMPOSED BY NEW WALL AND BRACE CONNECTIONS IN ADDITION TO THEIR EXISTING LOADS.
- VERIFY CONCRETE COMPRESSIVE STRENGTH (f'c) COMPLIES WITH THE MINIMUM SHOWN IN THESE DRAWINGS.
- VERIFY EXISTING SLAB THICKNESS AND EDGE DISTANCES COMPLY WITH THE MINIMUM SHOWN IN THESE DRAWINGS.
- VERIFY THAT ALL EXISTING WOOD MEMBERS WHERE ATTACHMENTS ARE BEING MADE HAVE A SPECIFIC GRAVITY OF AT LEAST 0.50.

**GENERAL**

- THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2019.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
- INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE OWNER'S REPRESENTATIVE.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS. DRAWINGS SHALL NOT BE SCALED.
- TYPICAL DETAILS AND GENERAL NOTES APPLY TO ALL PARTS OF THE WORK, EXCEPT WHERE SPECIFICALLY DETAILED OR UNLESS NOTED OTHERWISE. THESE DETAILS ARE NOT SPECIFICALLY REFERENCED WHERE THEY OCCUR.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NOTES AND DETAILS ON DRAWINGS AND THESE GENERAL NOTES AND TYPICAL DETAILS ARE IN CONFLICT WITH THE PROJECT SPECIFICATIONS THE MOST STRINGENT SHALL APPLY. CONDITIONS NOT SPECIFICALLY SHOWN SHALL BE CONSTRUCTED AS SHOWN FOR SIMILAR WORK.
- ALL WORK SHALL CONFORM TO THE STANDARDS OF THE FOLLOWING:
  - CALIFORNIA BUILDING CODE, 2019 EDITION
  - ASCE 7-16 INCLUDING SUPPLEMENT 1.

AND ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING BUT NOT LIMITED TO CAL/OSHA, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH, AND THOSE CODES AND STANDARDS LISTED IN THE CONTRACT DOCUMENTS.
- CODES, AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS SHALL BE OF THE LATEST APPROVED ISSUE, INCLUDING SUPPLEMENTS, UNLESS OTHERWISE NOTED. MATERIAL SPECIFICATIONS SHALL COMPLY WITH ASTM REFERENCED STANDARDS LATEST EDITION.
- CONTRACTOR SHALL CAREFULLY REVIEW THE DRAWINGS TO IDENTIFY THE EXTENT OF THE SCOPE OF WORK. VISIT THE SITE TO RELATE THE SCOPE OF WORK TO EXISTING CONDITIONS AND DETERMINE THE EXTENT TO WHICH THOSE CONDITIONS AND PHYSICAL SURROUNDINGS WILL IMPACT THE WORK.
- SEISMIC DESIGN LOADS BASED ON 2019 CBC 1613A & ASCE 7-16 13.3, RISK CATEGORY IV, IMPORTANCE FACTOR I<sub>p</sub> = 1.5, COMPONENT AMPLIFICATION/RESPONSE FACTOR a<sub>p</sub> = 1.0 / R<sub>p</sub> = 2.5, OVERSTRENGTH FACTOR Ω<sub>0</sub> = 2.0 (CONCRETE DESIGN ONLY), MAXIMUM ALLOWABLE S<sub>DS</sub> AND z/h VALUES VARY SEE DETAILS ON PLAN.
- FOR PROJECTS WHERE THE S<sub>DS</sub> AND z/h VALUES ARE GREATER THAN THE VALUES LISTED IN THE TABLES ON PLAN, CONTACT SWISSRAY FOR AN ALTERNATIVE ENGINEERING SOLUTION.



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 The drawings and notes, concepts designs and specific herein are and shall remain the property of the engineer. They are to be used only for the specific project for which they are prepared and no part of them shall be used for any other project without the written consent of the engineer. The engineer shall not be responsible for errors or omissions in the drawings or notes. The user is responsible for verifying all dimensions and conditions shown on the drawings and notes. This document may not represent the current design status. Therefore, it is the responsibility of the user to obtain and distribute the most current design document.

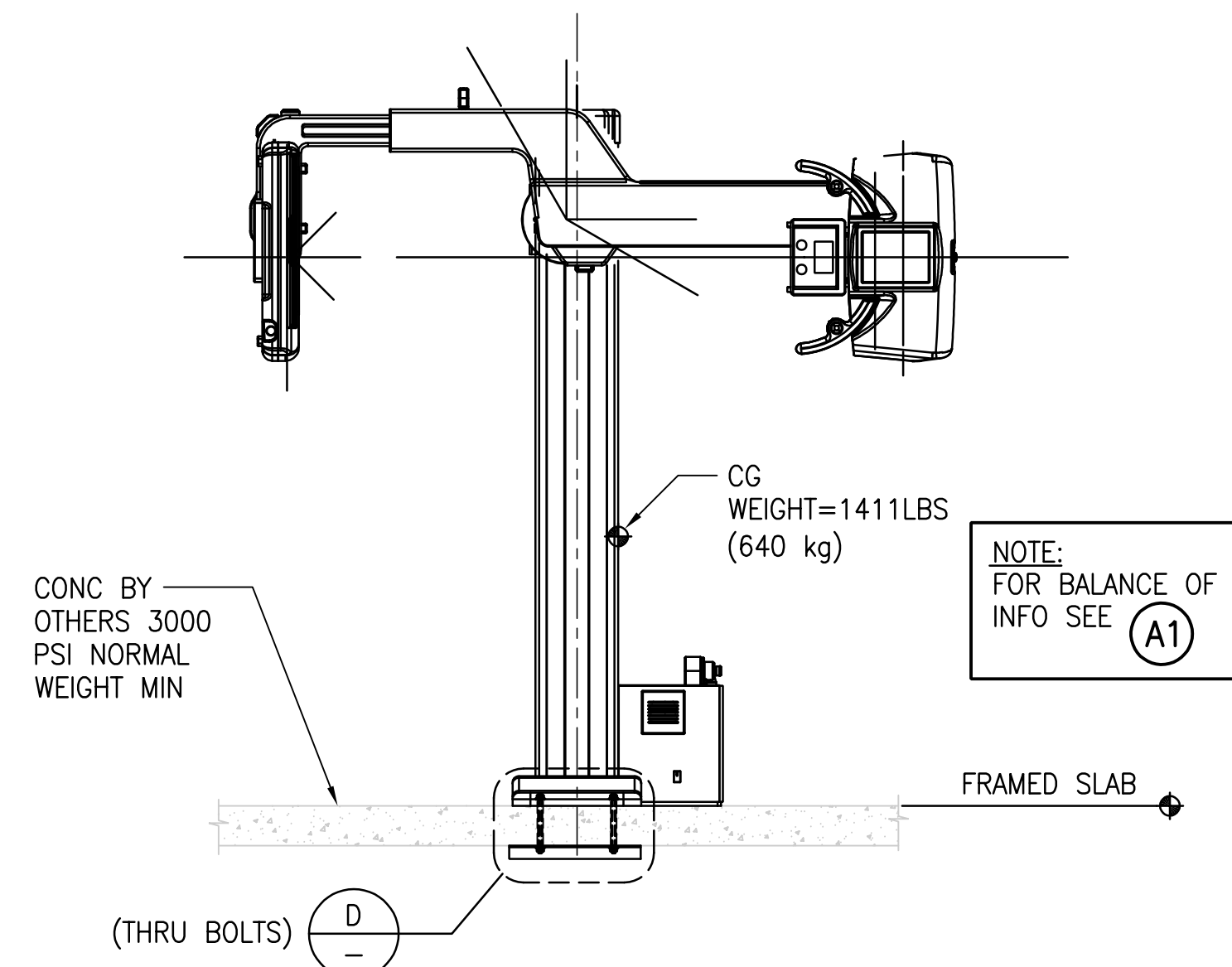
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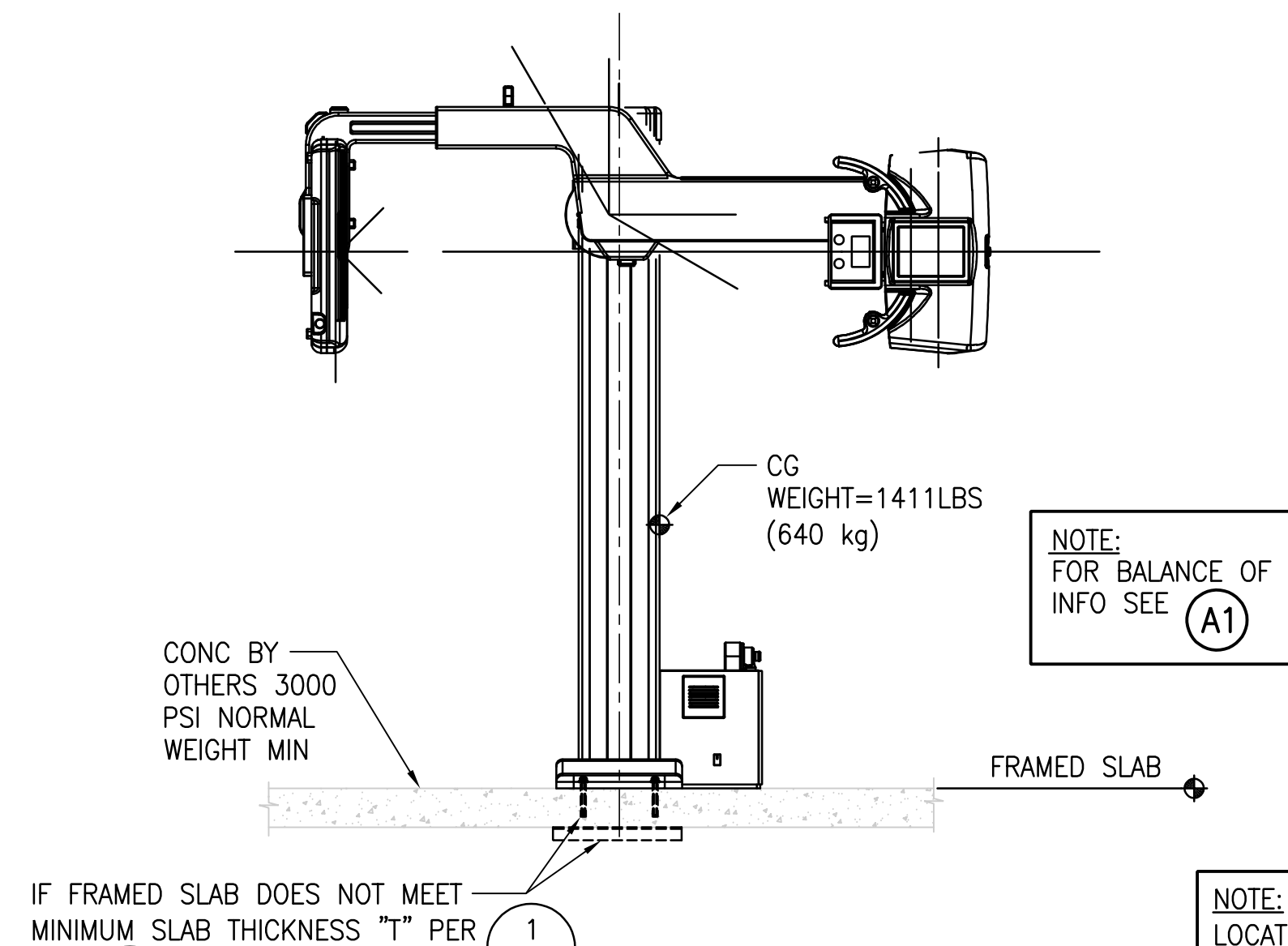
SHEET TITLE	GENERAL NOTES
PROJECT	SWISSRAY gdRaura U OPM
Client	Swissray International, Inc
ADDRESS	31 Gordon Road Piscataway, New Jersey 08854

**SWISSRAY®**  
**JOHN A. MARTIN & ASSOCIATES, INC.**  
**STRUCTURAL ENGINEERS**  
 950 S. GRAND AVENUE, LOS ANGELES, CALIF. 90015

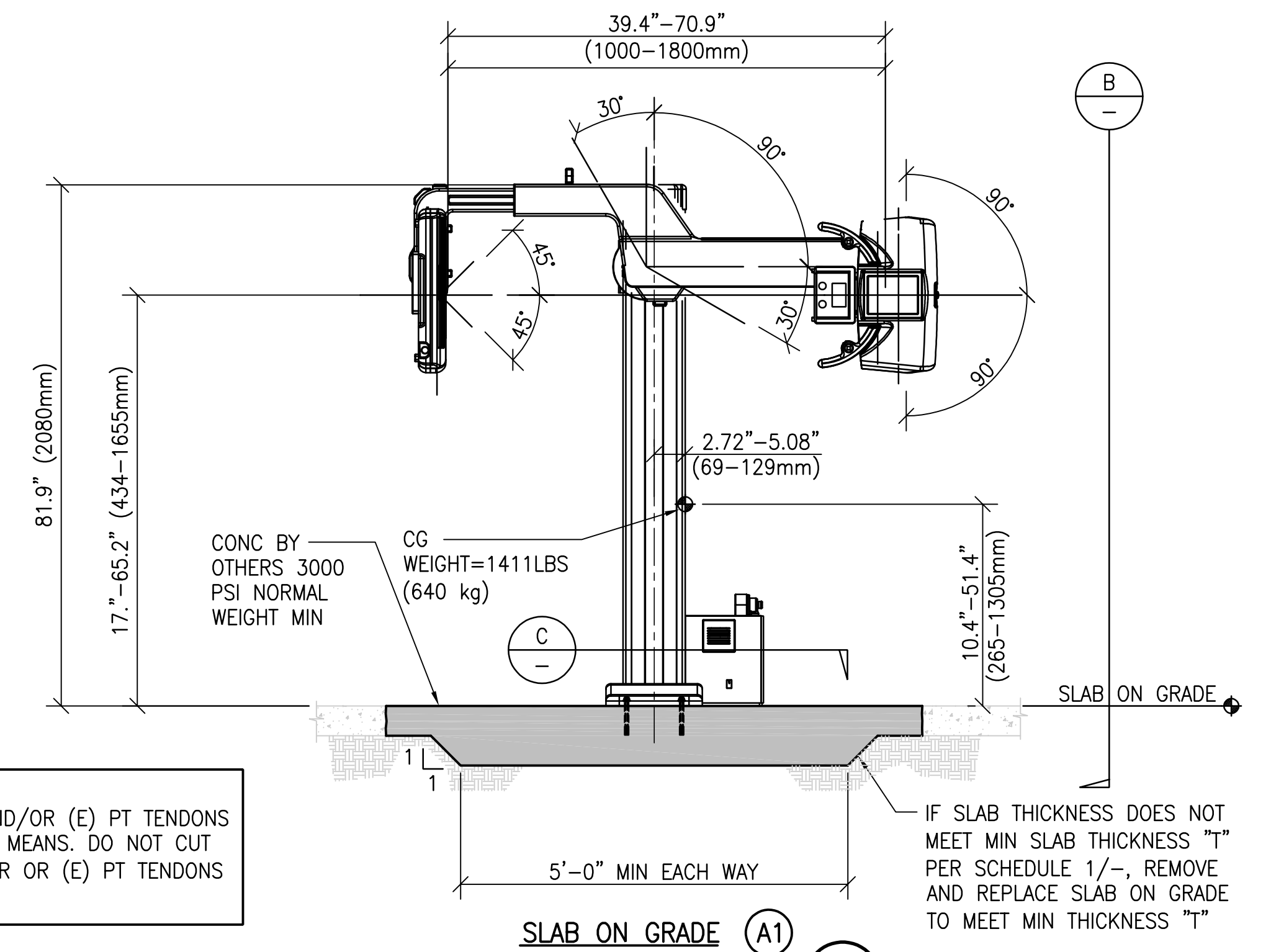
**MARTIN & ASSOCIATES**



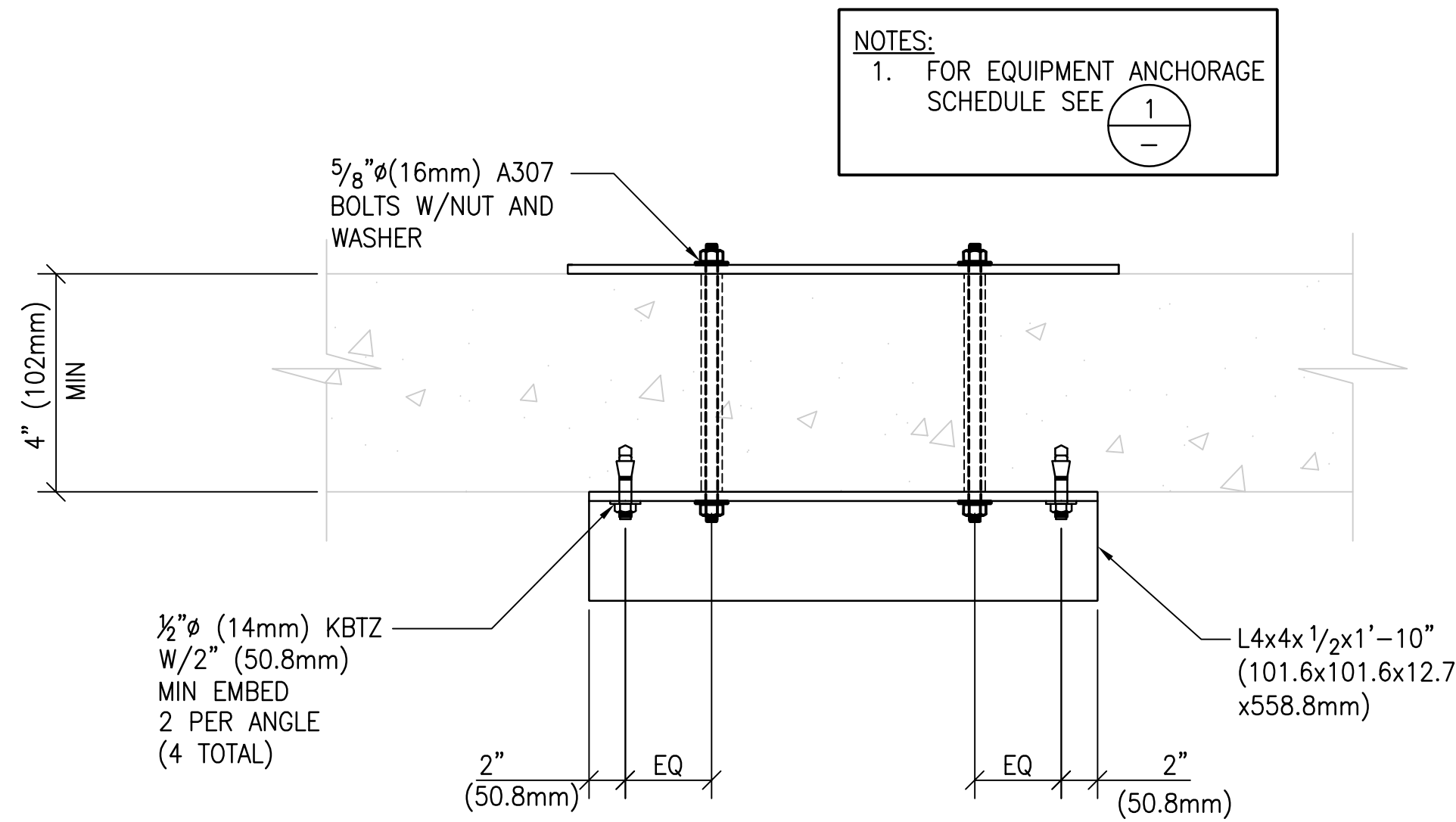
**FRAMED SLAB W/THRU BOLTS (A3)**  
**ddRAura U ANCHORAGE SUPPORT – FRONT VIEW**  
 NTS



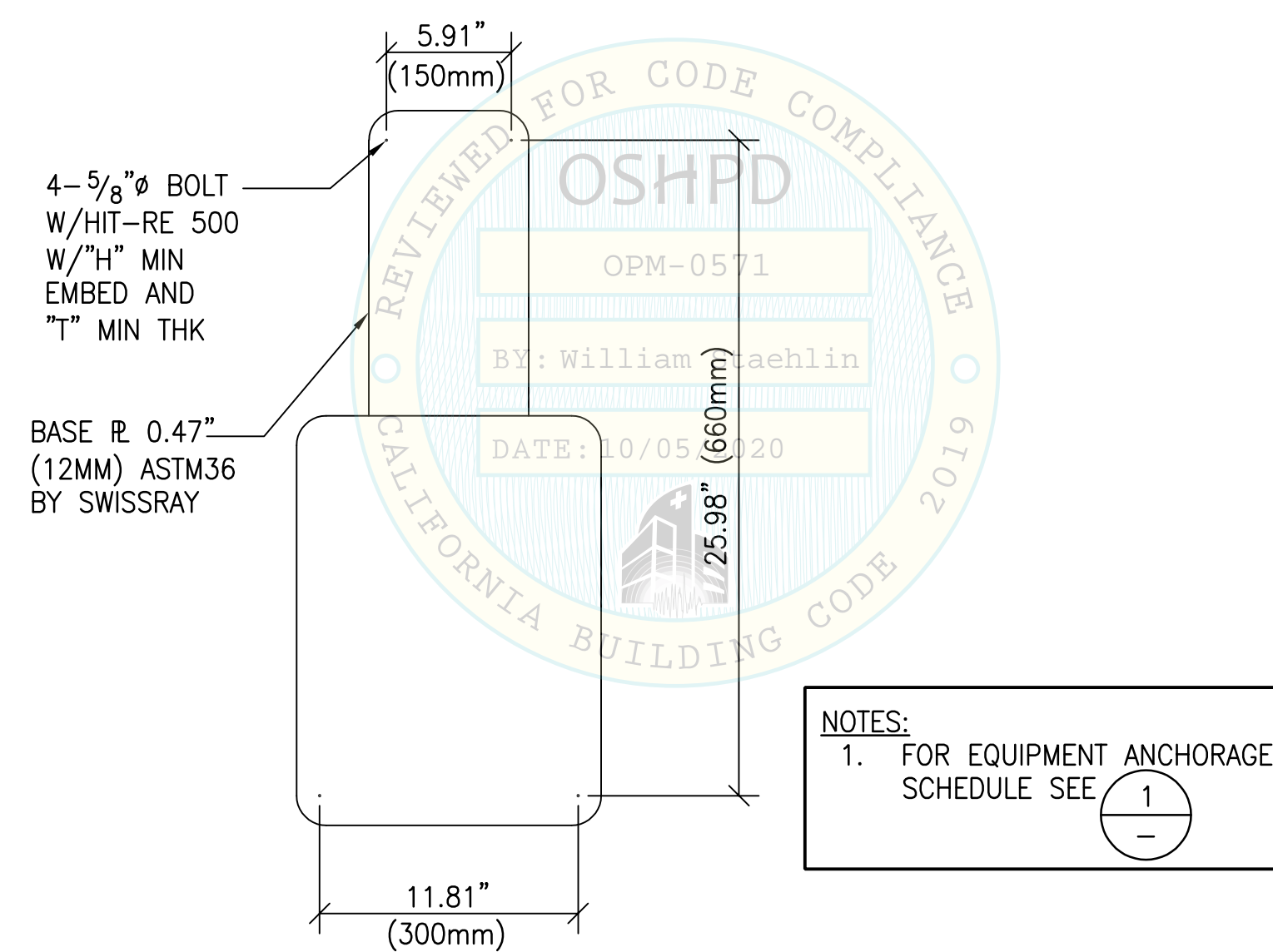
**FRAMED SLAB W/ADHESIVE ANCHORS (A2)**



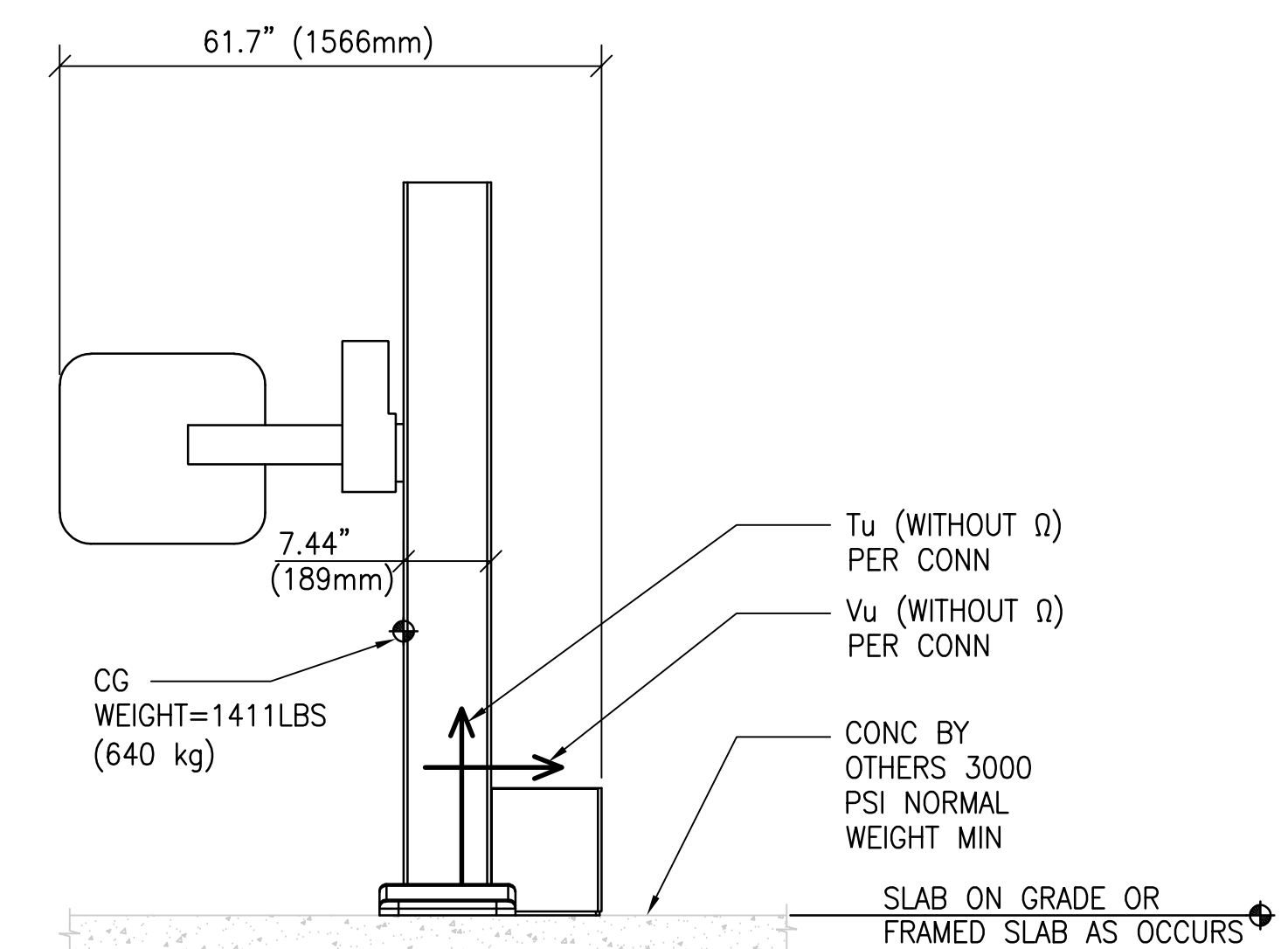
**SLAB ON GRADE (A1)**



**ddRAura U ANCHORAGE SUPPORT – DETAIL (D)**  
 NTS



**ddRAura U ANCHORAGE SUPPORT – PLAN VIEW (C)**  
 NTS



**ddRAura U ANCHORAGE SUPPORT – SIDE VIEW (B)**  
 NTS

ddRAura U EQUIPMENT ANCHORAGE SCHEDULE ELEVATED SLAB									
S <sub>DS</sub>	Z/h MAX	ANCHOR DIAMETER 'A'	EMBEDMENT 'H'	THICKNESS (MIN) 'T'	'Tu' KIP	'Vu' KIP	Ω'Tu' KIP	Ω'Vu' KIP	ANCHOR BOLT MATERIAL
1.0	0.4	5/8" (16mm)	6" (153mm)	8" (203mm)	2.7	0.42	5.4	0.83	ISO 898-1 CLASS 5.8
1.0	1.0	5/8" (16mm)	9" (229mm)	10 1/2" (267mm)	4.5	0.70	9.0	1.4	ISO 898-1 CLASS 5.8
2.0	0.4	5/8" (16mm)	10 1/2" (267mm)	12" (305mm)	5.4	0.85	10.8	1.7	ASTM A193 B7
2.0	1.0	-	-	-	9.0	1.4	18.0	2.8	-

NOTE:  
 BASE BUILDING ENGINEER MUST JUSTIFY Tu AND Vu IMPOSED ON THE SLAB

**ddRAura U ANCHORAGE SCHEDULE**

ddRAura U EQUIPMENT ANCHORAGE SCHEDULE SLAB ON GRADE									
S <sub>DS</sub>	ANCHOR DIAMETER 'A'	EMBEDMENT 'H'	THICKNESS (MIN) 'T'	'Tu' KIP	'Vu' KIP	Ω'Tu' KIP	Ω'Vu' KIP	ANCHOR BOLT MATERIAL	
1.0	5/8" (16mm)	4 1/2" (115mm)	6" (153mm)	1.7	0.26	3.4	0.52	ISO 898-1 CLASS 5.8	
2.0	5/8" (16mm)	6 1/2" (165mm)	8" (203mm)	3.4	0.55	6.8	1.1	ISO 898-1 CLASS 5.8	

NOTE:  
 BASE BUILDING ENGINEER MUST JUSTIFY Tu AND Vu IMPOSED ON THE SLAB

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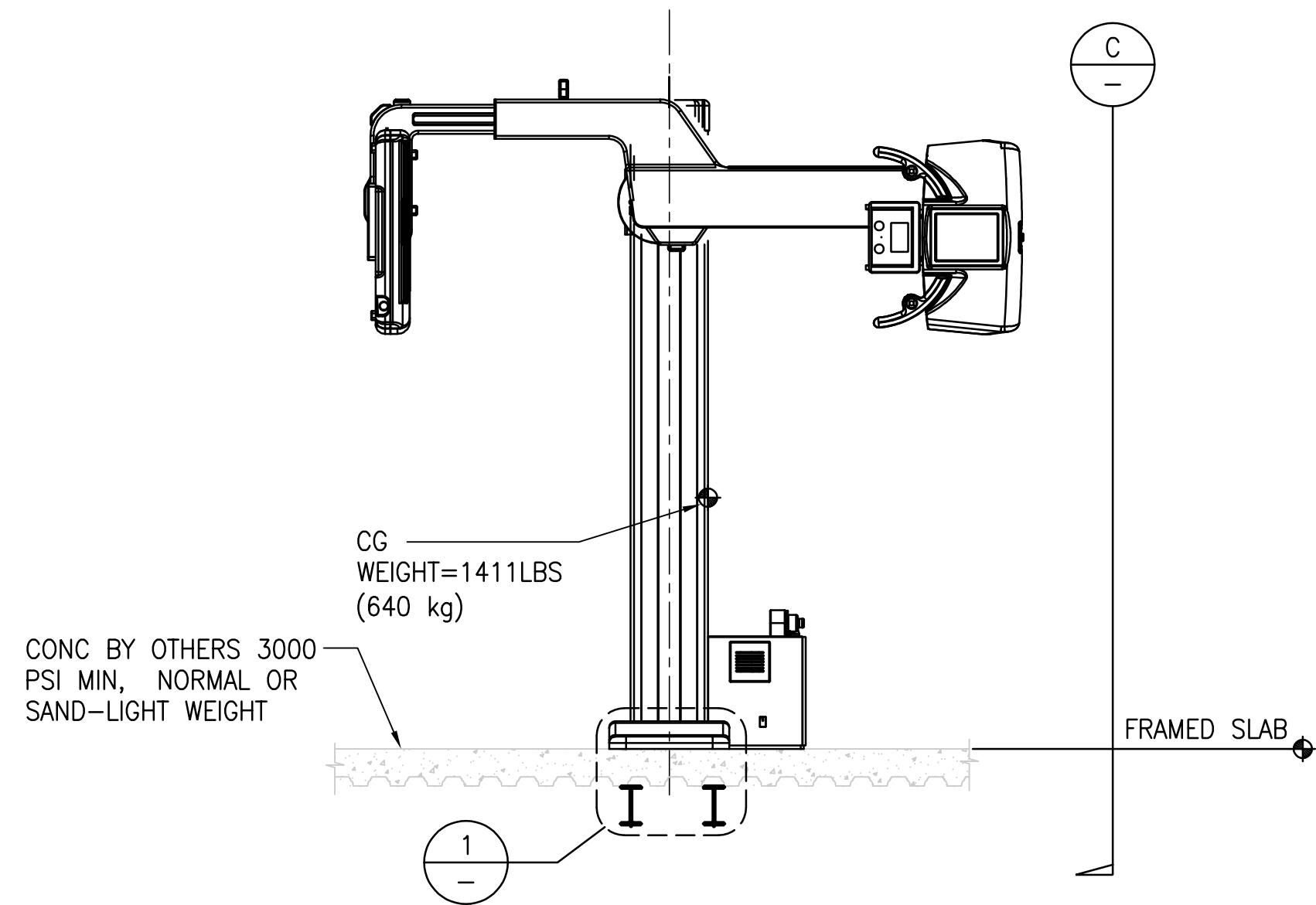
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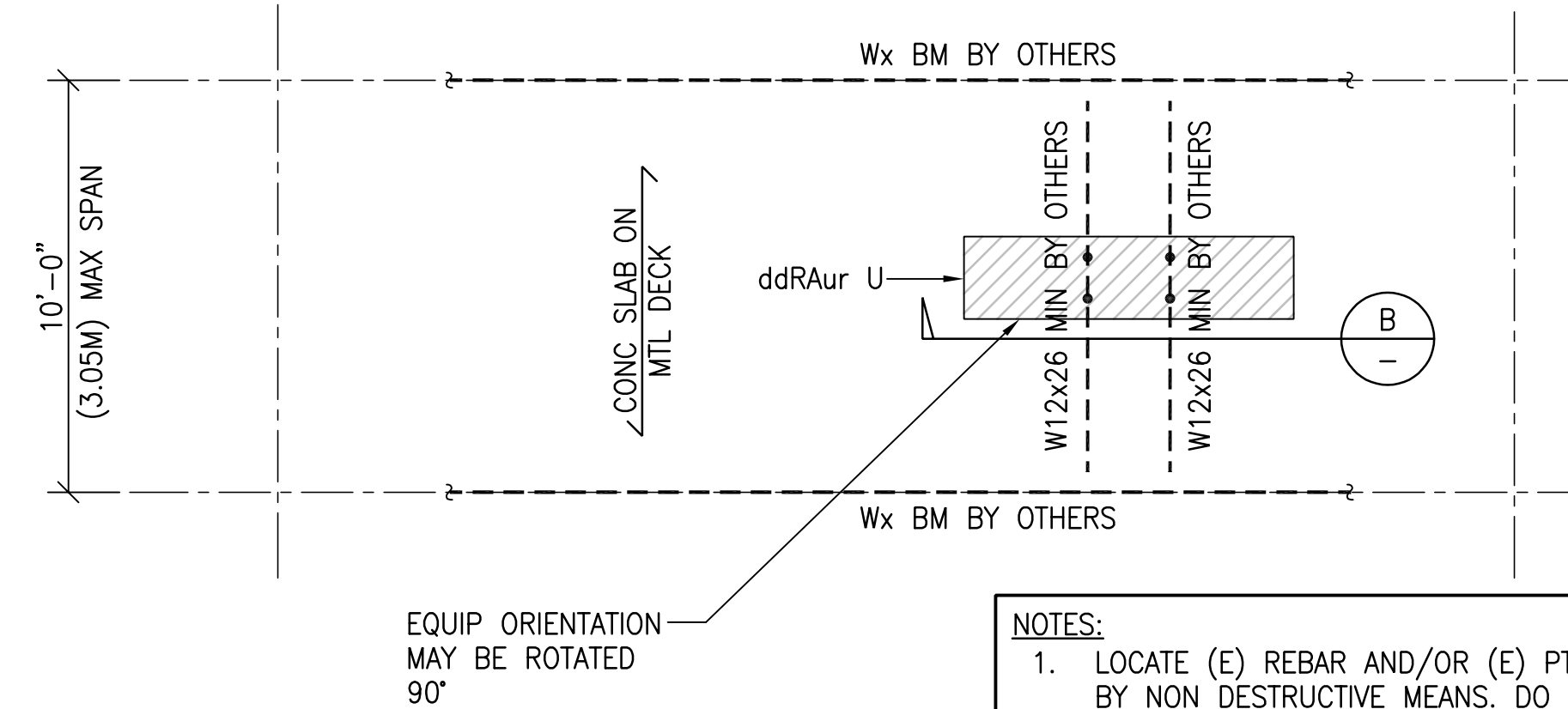
SHEET TITLE: ddRAura U ANCHOR SUPPORT AND SCHEDULES  
 PROJECT: SWISSRAY ddRAura U OPM  
 Client: Swissray International, Inc  
 ADDRESS: 31 Gordon Road Piscataway, New Jersey 08854

**SWISSRAY**  
**JOHN A. MARTIN & ASSOCIATES, INC.**  
 STRUCTURAL ENGINEERS  
 950 S. GRAND AVENUE LOS ANGELES, CALIF. 90015

JOB NO. J171417-70  
 ENGINEER JAMA  
 DATE 10-05-20  
 SHEET NUMBER S2 OF SHEETS

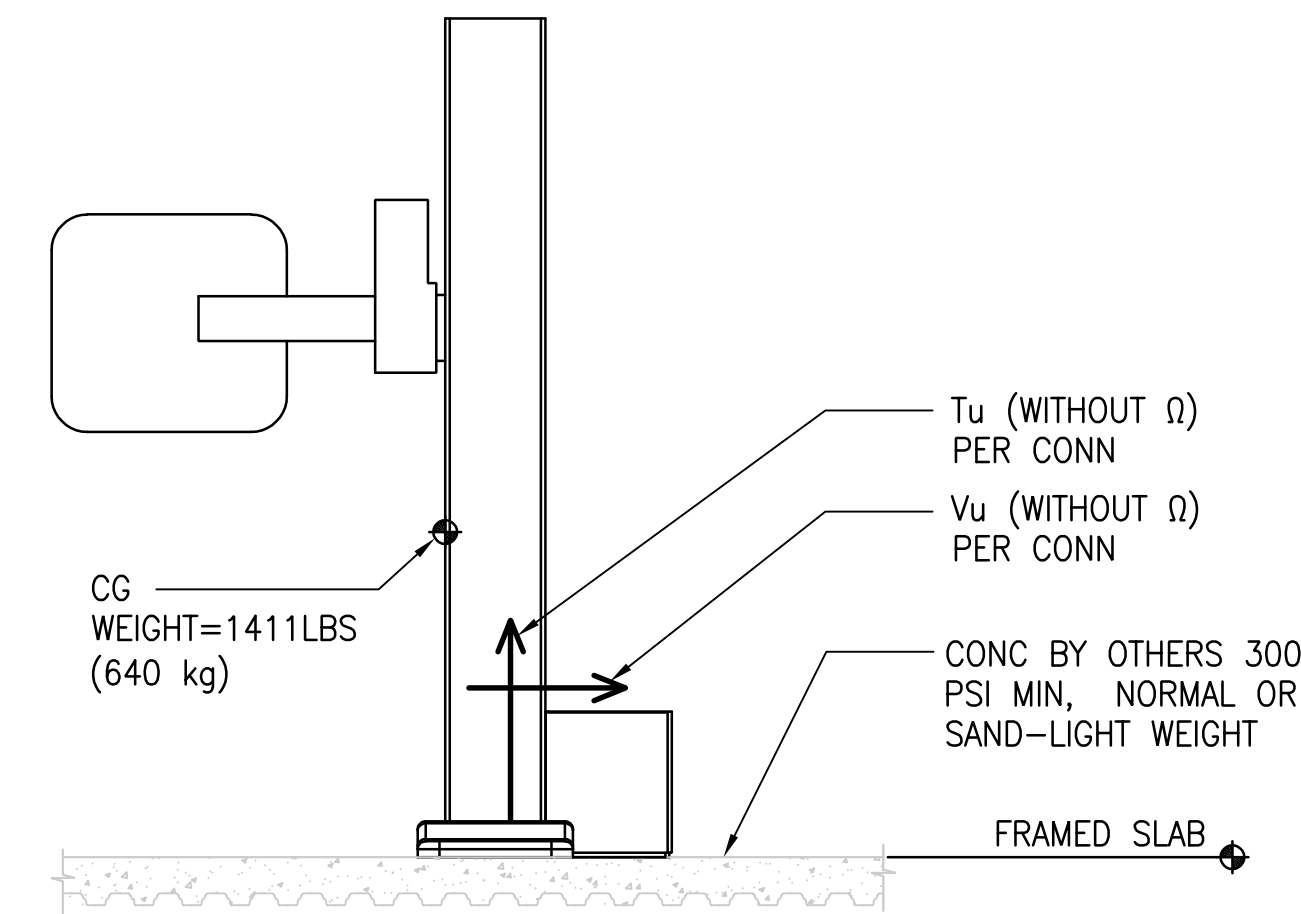
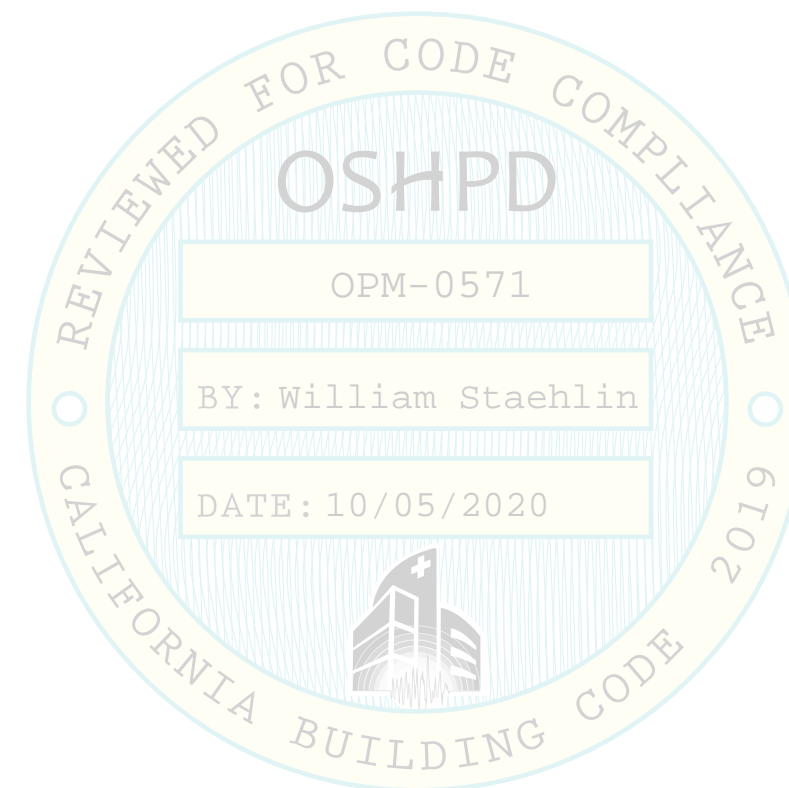


ddRAura U ANCHORAGE SUPPORT – FRONT VIEW (B)  
NTS



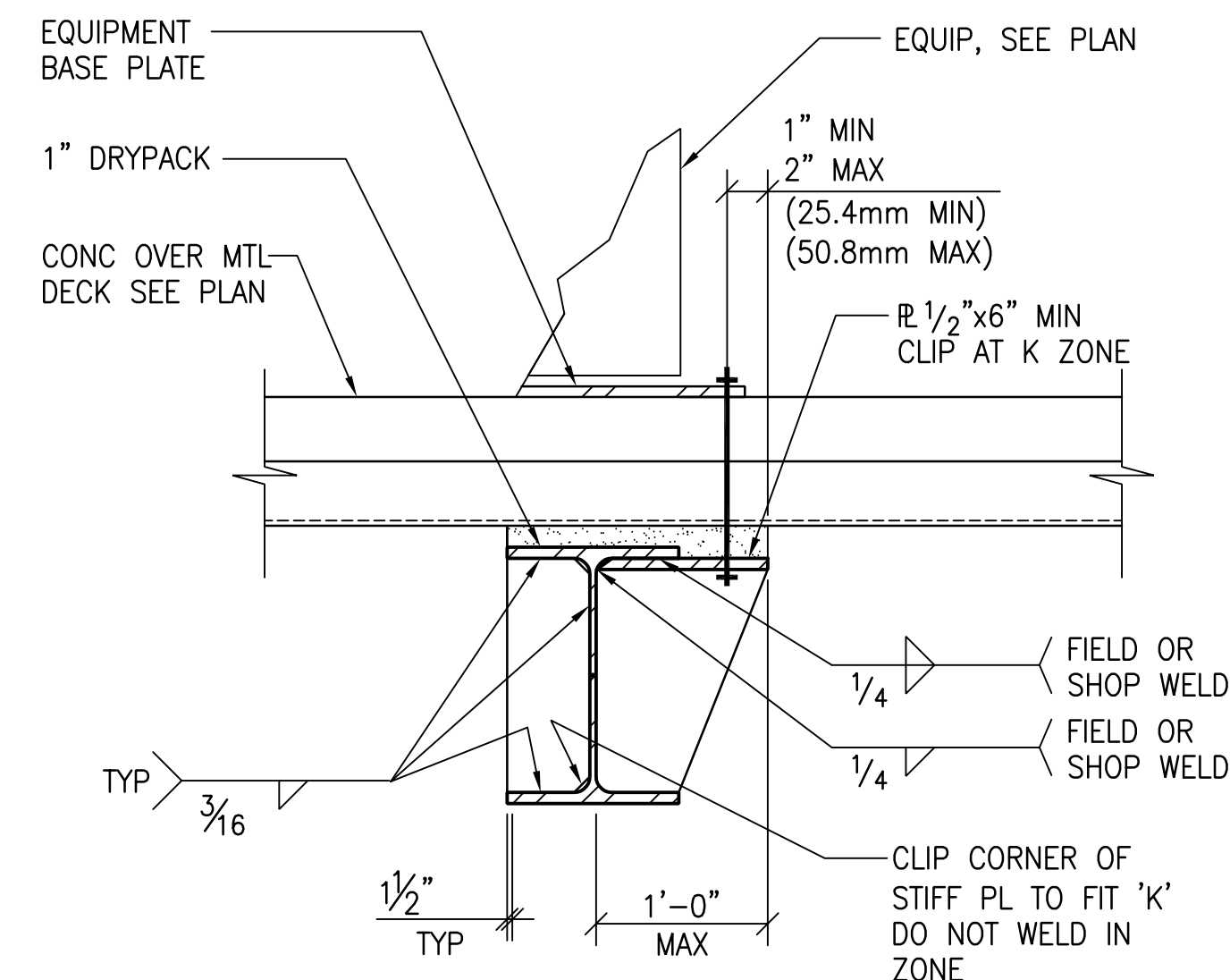
ddRAura U ANCHORAGE SUPPORT – PLAN VIEW (A)  
NTS

- NOTES:**
1. LOCATE (E) REBAR AND/OR (E) PT TENDONS BY NON DESTRUCTIVE MEANS. DO NOT CUT OR DAMAGE (E) REBAR OR (E) PT TENDONS.
  2. FOR EQUIPMENT REACTIONS REFER TO SCHEDULE ON (2)
  3. BASE BUILDING ENGINEER MUST JUSTIFY  $T_u$  AND  $V_u$  IMPOSED ON STEEL BEAMS

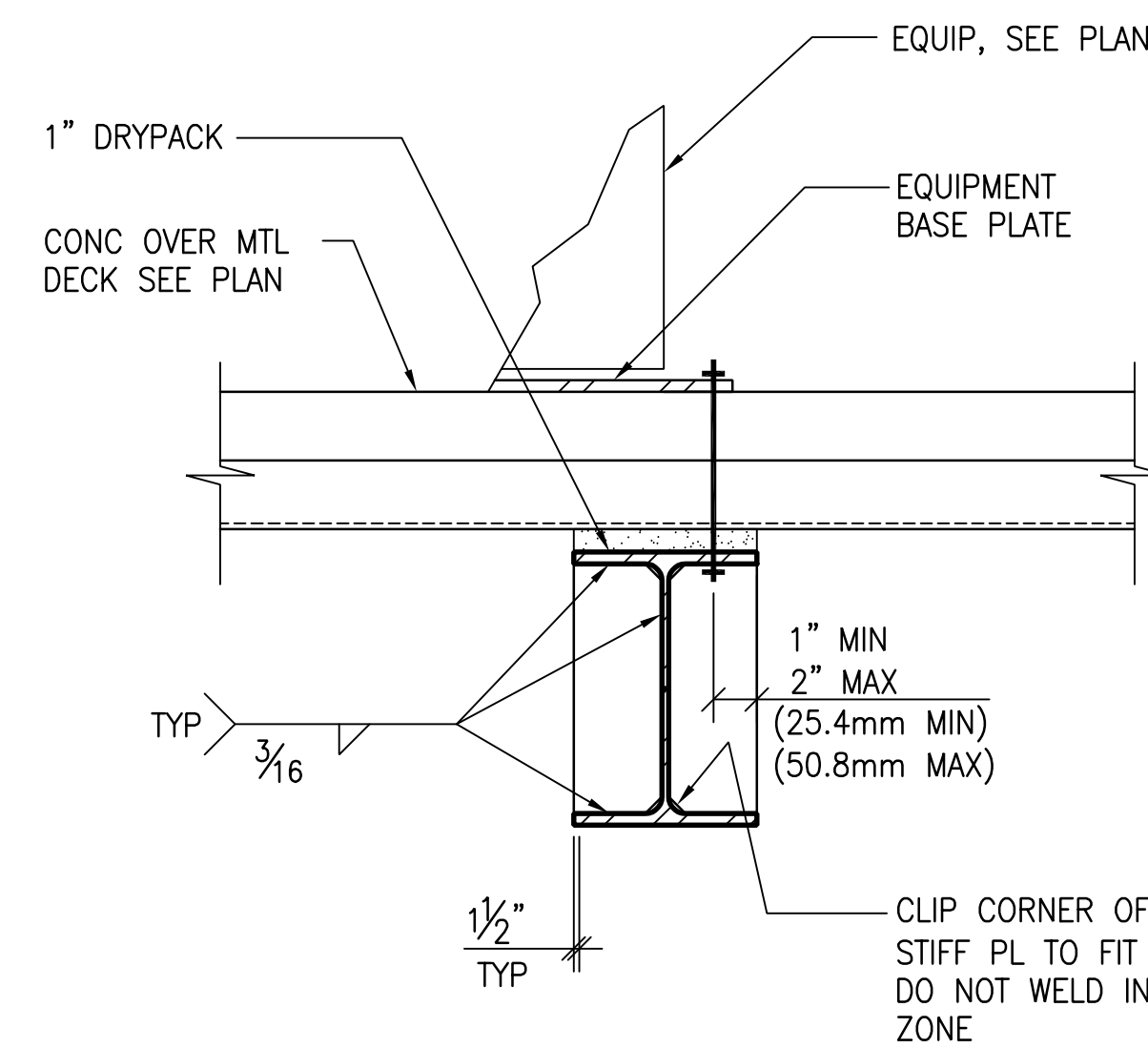


ddRAura U ANCHORAGE SUPPORT – SIDE VIEW (C)  
NTS

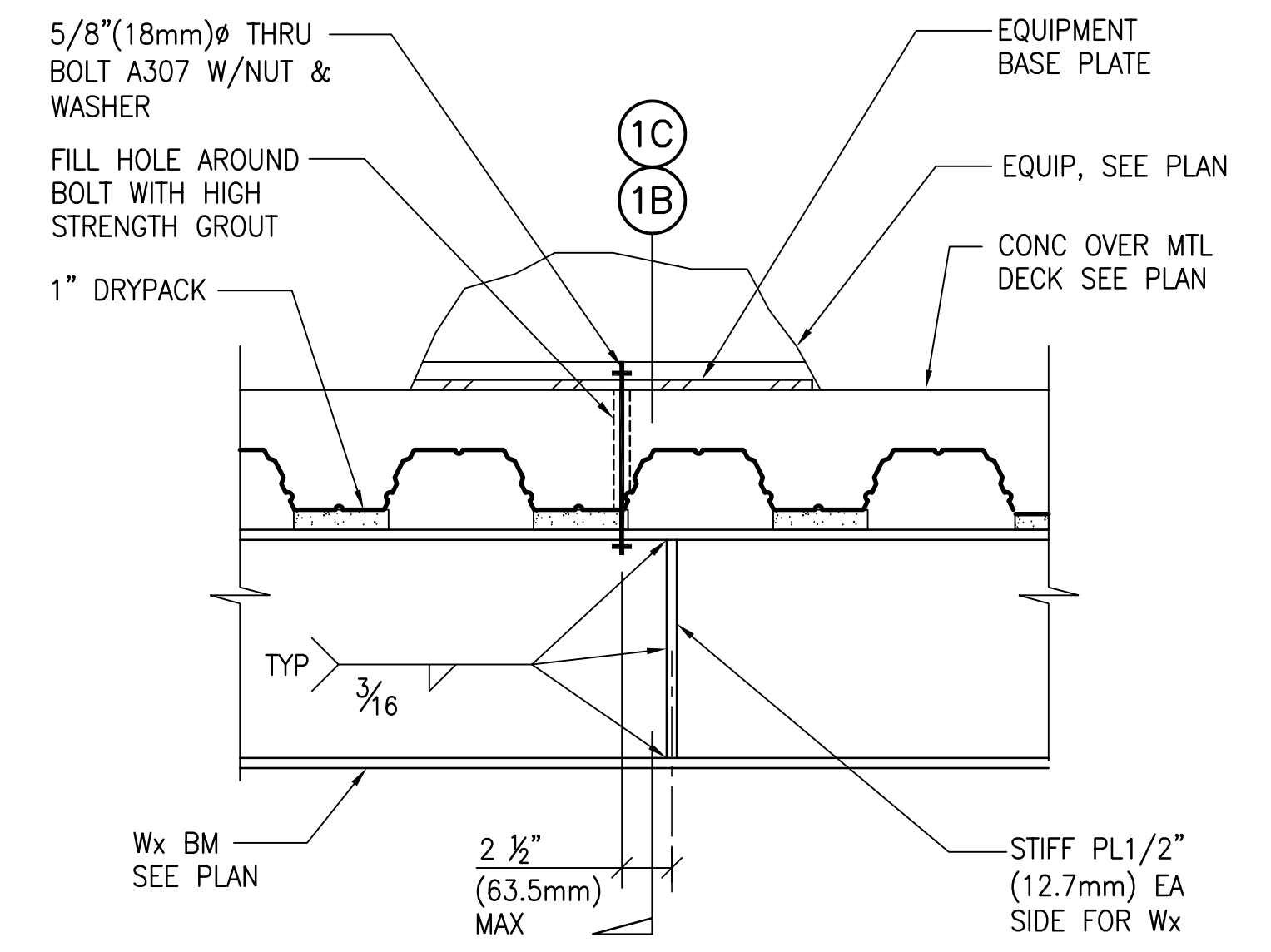
ddRAura U EQUIPMENT REACTION SCHEDULE					
$S_{ps}$	Z/h	EQUIPMENT	' $T_u$ ' KIP	' $V_u$ ' KIP	$\Omega$ ' $V_u$ ' KIP
1.0	0.4	ddRAura U	2.7	0.42	0.83
1.0	1.0	ddRAura U	4.5	0.70	1.4
2.0	0.4	ddRAura U	5.4	0.85	1.7
2.0	1.0	ddRAura U	9.0	1.4	2.8



SECTION (1C)



SECTION (1B)



SECTION (1A)

ddRAura U ANCHORAGE SCHEDULE

(2)

CONNECTION DETAIL

NTS

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ISSUE	DATE	DESCRIPTION



SHEET TITLE: ddRAura U ANCHOR SUPPORT AND SCHEDULES  
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Client: Swissray International, Inc  
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