CONSTRUCTION, TAKE NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION THE EOR WILL NOT ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND

HEALTH STANDARDS, LAWS, AND REGULATIONS.
VERIPY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES THAT ARE FOUND. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS.
ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS

ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND FIELD INSPECTOR. THE ENGINEER SHALL PROVIDE A SOLUTION PRIOR TO PROCEEDING WITH ANY WORK AFFECTED BY THE CONFLICT OR

WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, USE THOSE FOR OTHER SIMILAR WORK. WHEN A DETAIL IS IDENTIFIED AS TYPICAL, APPLY IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED IN EVERY INSTANCE.

CHANGES TO THE DRAWINGS: OBTAIN PRIOR WRITTEN APPROVAL. WORK PERFORMED IN CONFLICT WITH THE DRAWINGS OR APPLICABLE BUILDING CODE REQUIREMENTS SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR.

DESIGN CRITERIA

STRUCTURE IS DESIGNED IN ACCORDANCE WITH ASCE 7-16-MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES. WIND LOAD: BASIC WIND SPEED, V_{ULT} = 115 MPH MAXIMUM

RISK CATEGORY: II EXPOSURE: C SNOW LOAD: IMPORTANCE FACTOR, $I_5 = I.0$ SURFACE ROUGHNESS: C EXPOSURE: PSF MAXIMUM. PSF GROUND 20 ROOF LIVE LOAD:

STEEL SHAPES SHALL CONFORM TO THE FOLLOWING (U.N.O.): Fy=46 KSI MIN. Fy=50 KSI MIN. RND. HSS SQ./RECT. HSS ASTM A500, GR C THREADED ROD ASTM A36 Fv=36 KSI MIN STEEL PLATE Fy=36 KSI MIN. ASTM A36 ANGLE & CHANNEL ASTM A36 Fv=36 KSI MIN STD. PIPE STRUCT. PIPE ASTM A53, GR B ASTM A252, GR 3 Fv=45 KSI MIN WIDE ELANGE ΔSTM Δ992 EV=50 KSLMIN

MACHINE BOLTS SPECIFIED AS "A307" SHALL CONFORM TO ASTM A307 w/ NUTS PER ASTM A563A \$ WASHERS PER ASTM F844 (U.N.O.). THREADED PARTS, NUTS, AND WASHERS SHALL BE HDG OR ZP AS DEFINED HEREIN.

STRUCTURAL BOLTS SHALL CONFORM TO ASTM F3 L25 GRADES A325 OR A490 A5 SPECIFIED ("A325" OR "A490") w/ NUTS PER ASTM A563DH \$ WASHERS PER ASTM F436.

A. WHERE DESIGNATED AS ".x", CARE MUST BE TAKEN TO ENSURE THREADS ARE EXCLUDED FROM THE SHEAR PLANE(S). B. WHERE DESIGNATED AS "-N" OR IF NO DESIGNATION IS NOTED.

THREADS MAY BE INCLUDED IN THE SHEAR PLANE(S C. WHERE SPECIFIED, "A325" MAY BE HDG OR ZP AS DEFINED

D. GRADE "A490" SHALL NOT BE HDG OR ZP AS DEFINED HEREIN ANCHORS CAST IN CONCRETE SHALL CONFORM TO ASTM F1554 GR. 36 (U.N.O.) w/ NUTS TO ASTM A563 AND WASHERS TO ASTM F436. PARTS SHALL BE HOT-DIP GALVANIZED (HDG) OR ZINC

(MECHANICAL) PLATED (ZP). PARTS EMBEDDED ENTIRELY IN CONCRETE MAY BE PLAIN STEEL.
WHERE SPECIFIED FOR STEEL THREADED PARTS, NUTS, AND WASHERS, HOT-DIP GALVANIZING (HDG) SHALL CONFORM TO ASTM F2329 AND ZINC (MECHANICAL) PLATING (ZP) TO CLASS 55 PER ASTM B695

PLAIN STEEL FASTENERS ARE NOT TO BE USED UNLESS SPECIFIED.
ZINC ELECTRO-PLATED FASTENERS PER ASTM F1941 MAY BE SUBSTITUTED FOR INTERIOR APPLICATIONS, BUT ARE OTHERWISE NOT TO BE USED UNLESS SPECIFIED.

NUTS AND WASHERS SHALL HAVE THE SAME COATING AS THE CORRESPONDING THREADED PART.
WHERE SPECIFIED, IRON AND STEEL HARDWARE SHALL BE HOT-DIP

GALVANIZED PER ASTM A I 53. STAINLESS STEEL (SS) BOLTS, STUDS, AND THREADED ROD SHALL

CONFORM TO ASTM F593 AND BE ALLOY 304 OR 316 W NUTS TO ASTM F594. NUTS AND WASHERS SHALL MATCH THE ALLOY OF THE THREADED PART. WEI DING:

A. WELD STRUCTURAL STEEL IN COMPLIANCE WITH ANSI/AWS DI.I AND AISC SPECIFICATION, CHAPTER J. WELDERS SHALL BE CERTIFIED AS REQUIRED BY THE LOCAL BUILDING AUTHORITY. WELDING SHALL BE DONE BY ELECTRIC ARC PROCESS USING LOW-HYDROGEN ELECTRODES WITH SPECIFIED TENSILE STRENGTH NOT LESS THAN 70 KSI UNLESS NOTED OTHERWISE.

B. UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELD PER AISC SPECIFICATION, SECTION J2, TABLE J2,4

FABRICATE AND ERECT ALUMINUM IN COMPLIANCE WITH THE 2015 ALUMINUM DESIGN MANUAL (ADM I), THE SPECIFICATIONS FOR ALUMINUM SHEET METAL WORK (ASM35), AND CHAPTER 20 OF THE

6063-T5 ASTM B221

ALUMINUM SHAPES SHALL CONFORM TO THE FOLLOWING PIPE & TUBE 6061-T6 ASTM B429 Fy=35 KSI MIN. 6061-T6 ASTM B308 Fy=35 KSI MIN. STRUCT. PROFILES 6061-T6 ASTM B308 SHEET & PLATE 6061-T6 ASTM B209 Fv=35 KSI MIN

ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY AN AISC QUALITY CERTIFIED FABRICATOR

UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELD PER ADM

FILLER SHALL BE 5556 ALLOY REGARDLESS OF MEMBER THICKNESS. NO OTHER FILLER ALLOY SHALL BE USED UNLESS NOTED OTHERWISE

CONCRETE & REINFORCEMENT

MINIMUM 28-DAY COMPRESSIVE STRENGTH (fc) SHALL BE 2.500

REINFORCEMENT TO BE ASTM AG I 5 GR GO. FV=60 KSI UNO.

CALCIUM CHLORIDE OR ADDED CHLORIDE IS NOT PERMITTED ALL REINFORCED CONCRETE SHALL BE CONSOLIDATED WITH MECHANICAL VIBRATORS

MINIMUM CONCRETE COVER:

CAST AGAINST & EXPOSED TO EARTH

EXPOSED TO FARTH OR WEATHER CHAIRS AND SPACERS: AS REQUIRED TO MAINTAIN COVER.

SIGN MAY BE INSTALLED ON FOUNDATION AFTER A MINIMUM CURING TIME OF (14) DAYS PROVIDED CURING PROCESS IS PROPERLY MAINTAINED PER ACI 3 | 8.

GROUT SHALL BE NON-SHRINK AND NON-METALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT (I) DAY. MIX AND PLACE IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.

FOUNDATIONS

DESIGN BEARING PRESSURES ARE PER IBC CLASS 4 PRESUMPTIVE VALUES (NO SPECIAL INSPECTION REQUIRED): LATERAL BEARING: 150 PSF/FT VERTICAL BEARING: 2.000 PSF

EXISTING CONDITIONS

ENGINEER WILL NOT BE PERFORMING ON-SITE INSPECTIONS OR VERIFICATIONS. IT IS THE RESPONSIBILITY OF THE INSTALLER AND OWNER(S) TO IDENTIFY EXISTING CONDITIONS AND CONTACT

ENGINEER WITH ANY DISCREPANCIES OR CONCERNS.
EXISTING INFORMATION HAS BEEN FURNISHED BY THE ENTITY WHOM THIS DOCUMENT WAS PREPARED FOR. ENGINEER IN NO WAY CERTIFIES THIS INFORMATION AS "AS-BUILT".

FEATURES OF WORK ANNOTATED AS "VERIFY" (OR SIMILAR) MUST BE NSPECTED, VERIFIED AS SUCH, AND DOCUMENTED PRIOR TO FABRICATION AND INSTALLATION.

IF THERE IS ANY REASON TO BELIEVE THE EXISTING CONDITIONS
DETAILED HEREIN ARE NOT ACCURATE, CONTRACTOR SHALL CEASE WORK AND NOTIPY ENGINEER IMMEDIATELY.

CONTRACTOR SHALL INSPECT AND CONFIRM THE QUALITY OF EXISTING STRUCTURE AS "IN GOOD REPAIR". STRUCTURE SHALL BE FREE OF CORROSION, DECAY, AND ANY OTHER MATERIAL. FABRICATION, ASSEMBLY, OR INSTALLATION DEFECT. IF THERE ARE ANY INDICATIONS THAT THIS IS NOT THE CASE, CONTRACTOR SHALL CEASE WORK IMMEDIATELY AND NOTIFY ENGINEER.

THIS AREA INTENTIONALLY LEFT BLANK

EVALUATION REPORT SCHEDULE

ABBREVIATIONS

ALTERNATE

ALUMINUM

BOTTOM

BLOCKING

CONCRETE

CONNECTION CONTINUOUS

CONTRACTOR

IAMETER

DETAIL

EXISTING

FACH WAY

ELEVATION

EMBEDMEN

FOUNDATION

FIELD VERIFY

FRAMING

FOOTING

FRM'G

Fy=16 KSI MIN

FABRICATOR/FABRICATION U.N.O.

ARCHITECTURAL

CIRCLE/CIRCULAR

ABOVE FINISHED FLOOR

ARCHITECT OF RECORD

ANCHORS, FASTENERS, AND OTHER PRODUCTS SHALL CONFORM TO AND BE INSTALLED PER THEIR RESPECTIVE EVALUATION REPORT(S) AS FOLLOWS (NOT ALL APPLICABLE THIS PROJECT):

ANCHOR TYPE	REPORT #
HILTI KB-TZ2 (CS \$ SS) ANCHORS IN CONCRETE	ICC-ESR-4266
HILTI KB-TZ2 (CS \$ SS) ANCHORS IN MASONRY	ICC-ESR-4561
HILTI KH-EZ (CS & SS) ANCHORS IN CONCRETE	ICC-ESR-3027
HILTI KH-EZ (CS \$ SS) ANCHORS IN MASONRY	ICC-ESR-3056
HILTI HIT-HY 200 ADHESIVE IN CONCRETE	ICC-ESR-3 87
HILTI HIT-HY 200 ADHESIVE IN MASONRY	ICC-ESR-3963
SIMPSON TITEN HD (CS) ANCHORS IN CONCRETE	ICC-ESR-2713
SIMPSON TITEN HD (CS & SS) ANCHORS IN MASONRY	ICC-ESR-1056
SIMPSON TITEN HD (SS) ANCHORS IN CONCRETE	UES-ER-493
TAPCON ANCHORS IN MASONRY	ICC-ESR-1671
TAPCON ANCHORS IN CONCRETE	ICC-ESR-2202
TAPCON+ SCREW ANCHORS IN CONCRETE	ICC-ESR-3699
ITW BUILDEX TEKS SDS	ICC-ESR-1976

HDG

HOR. O.C. LOC.

MAX. MIN.

o/ O.D.

OPT. PENE.

REINF. RND SIM.

SUPP

GENERAL CONTRACTOR

HOT DIP GALVANIZED

HORIZONTAL

ON CENTER LOCATION

NOT TO EXCEED

OPTIONAL PENETRATION

SIMILAR

TOP OF

TYPICAL

REINFORCEMENT

STAINLESS STEEL STANDARD

SUPPLEMENTAL

THICK(NESS

VERTICAL

WITHOUT

UNLESS NOTED OTHERWISE

ZINC (MECHANICAL) PLATED

OUTSIDE DIAMETER

MAXIMUM

NEW

MANUFACTURED SIGN CABINETS

NLESS NOTED OTHERWISE, MANUFACTURED SIGN CABINETS SHALL BE DESIGNED BY THE MANUFACTURER/FABRICATOR OR OTHER COMPETENT PARTY AND FABRICATED IN ACCORDANCE WITH ALL APPLICABLE CODES, UL LISTINGS, LOCAL ORDINANCES, AND INDUSTRY STANDARDS. THIS NCLUDES FACES AND CLADDING, INTERNAL STRUCTURE, ELECTRICAL, AND ALL OTHER ACCESSORY COMPONENTS.

THE MANUFACTURER/FABRICATOR IS RESPONSIBLE FOR ENSURING ALL THE MINISTER AND ADDICATOR SHEET AND ALTO MAINTENAL FRAMING AND STIFFNESS. CABINET FRAMING SHALL BE CAPABLE OF DELIVERING ALL IMPOSED DESIGN LOADS (WIND, SEISMIC, DEAD, SNOW, ETC.) DIRECTLY TO THE STRUCTURAL CONNECTIONS OR ELEMENTS DETAILED HEREIN. CABINET FRAMING SHALL LIMIT EXCESSIVE VIBRATION, DRIFT, OR FLECTION TO REASONABLE LEVELS.

FAILURE TO PROVIDE AN ADEQUATE LOAD PATH OR SUFFICIENT CABINET STIFFNESS MAY RESULT IN EXCESSIVE VIBRATION, DRIFT, OR DEFLECTION WHICH MAY YIELD SECOND-ORDER EFFECTS THAT CAN NEGATIVELY AFFECT THE PERFORMANCE OF THE STRUCTURAL CONNECTIONS OR FIEMENTS DETAILED HEREIN

REVERENCE ENGINEERING MAKES NO CLAIMS AS TO THE SUITABILITY OF MANUFACTURED SIGN CABINETS IDENTIFIED AS "BY MFR." OR "BY FAB." WHICH HAVE NOT BEEN ENGINEERED, CERTIFIED, OR REVIEWED BY REVERENCE ENGINEERING UNLESS SPECIFICALLY CONTRACTED OTHERWI AND DETAILED OR NOTED HEREIN

DESIGN BY OTHERS NOTE

REVERENCE ENGINEERING IN NO WAY CERTIFIES OR MAKES CLAIMS TO TI SUITABILITY OF CONDITIONS OR ELEMENTS (EXISTING OR NEW) THAT ARE DESIGNED BY OTHERS. SUCH CONDITIONS AND ELEMENTS ARE IDENTIFIE! AS "BY OTHERS" OR "DESIGN(ED) BY OTHERS" AND ARE NOT ENGINEERED

THE SCOPE OF ENGINEERING HEREIN ASSUMES THESE ELEMENTS HAVE BEEN, OR WILL BE, DESIGNED OR CHECKED FOR SUITABILITY BY A DESIGN PROFESSIONAL

ELECTRICAL NOTE ELECTRIC COMPONENTS AND WIRING ARE NOT DESIGNED BY REVERENCE ENGINEERING. FABRICATOR AND INSTALLER SHALL COMPLY WITH THE CURRENT VERSION OF THE ADOPTED NATIONAL ELECTRIC CODE (NEC.) AND ARTICLE 600: "ELECTRIC SIGNS AND OUTLINE LIGHTING".

Missouri

RELEASED FOR CONSTRUCTION As Noted on Plans Review

www.reverenceengineering.com (619) 354-1152 501 W BROADWAY, STE 425 SAN DIEGO, CA 92101

ENGINEERING

MEGA LED TECHONOLOGY

PROJECT #:

2503169

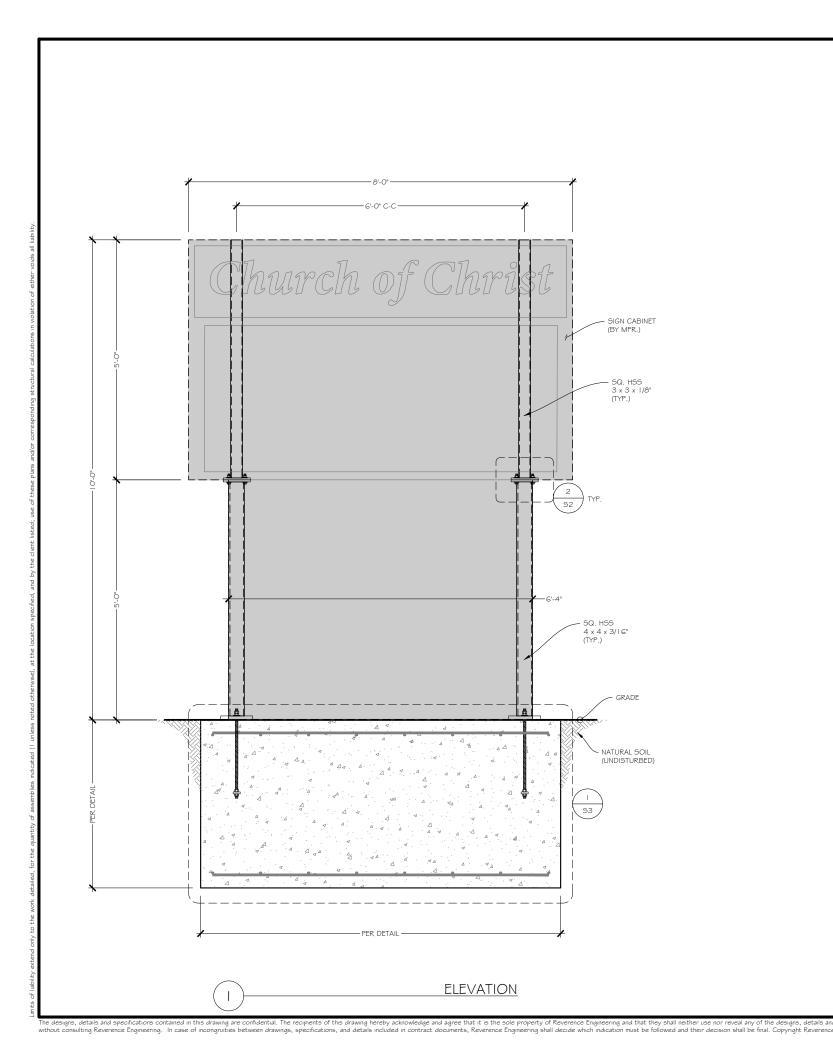
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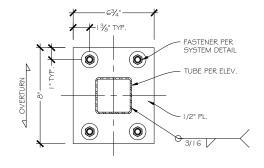
No. Issue/Revision Initial Submittal 4-1-2025



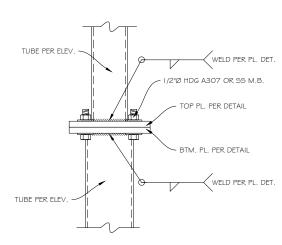
STRUCTURAL

ORIGINAL SHEET SIZE: 11x17

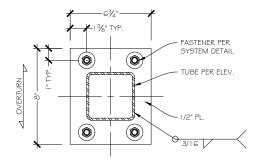




TOP PLATE



SYSTEM DETAIL



BOTTOM PLATE

2 CONNECTION DETAIL

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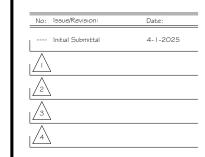
REPARED FOR:

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PROJECT :

2503169

CHURCH OF CHRIST LED SIGN



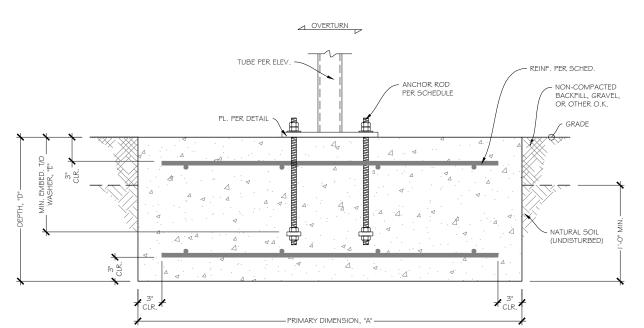


SHEET TITLE:

STRUCTURAL

SHEET:

ORIGINAL SHEET SIZE: | | x | 7



SPREAD FOOTING SCHEDULE

FOUNDATION DESIGN

ANCHORAGE DESIGN

PRIMARY DIMENSION, "A"
TRANSVERSE DIMENSION, "B" FOOTING DEPTH, "D"

BOTTOM MAT REINFORCEMENT

#5 BAR5 @ | 2" O.C. #5 BAR5 @ | 2" O.C. TOP MAT REINFORCEMENT #5 BARS @ | 2" O.C. #5 BARS @ | 2" O.C.

TRANSVERSE

ANCHOR ROD SPEC.

(**Q**)

PLATE DETAIL

HDG SIMPSON PAB5H-24 (L=24") OR EQUIV. ALT. PER SUB. SCHED. GRADE 55 MIN. O.K.

SCHEDULE

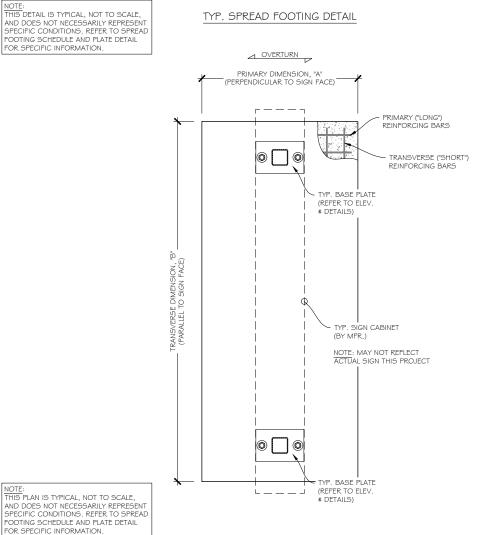
- TUBE PER ELEV.

ANCHOR EMBEDMENT, "E" ... I'-6" MINIMUM

TYP. SPREAD FOOTING DETAIL

FOR SPECIFIC INFORMATION.

THIS PLAN IS TYPICAL, NOT TO SCALE,



TYP. SPREAD FOOTING PLAN

FOUNDATION DETAIL

"PAB SUBSTITUTION SCHEDULE"

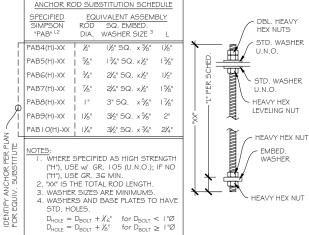
THE PURPOSE OF THE SUBSTITUTION TABLE IS TO PROVIDE FOR AN EQUIVALENT FABRICATED ANCHOR ASSEMBLY TO THE SIMPSON "PAB" SPECIFIED IN THE PLANS.

REFER TO PLANS FOR SPECIFIED ANCHOR BEFORE USING SUBSTITUTION TABLE.

HOW TO USE THE SUBSTITUTION TABLE

- I. IDENTIFY THE SPECIFIED ANCHOR IN THE PLAN OR DETAILS.
 LOCATE THE SPECIFIED ANCHOR IN THE FIRST COLUMN OF THE TABLE. USE ONLY THIS ENTRY.
- 3. IDENTIFY THE CORRESPONDING ANCHOR COMPONENTS FOR AN EQUIVALENT ASSEMBLY.

 4. WHERE THE PLANS INDICATE (H), REFER TO TABLE NOTES.



ANCHOR ROD SUBSTITUTION SCHEDULE

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MEGA LED TECHONOLOGY

2503169

CHRIST SIGN OF CHURCH (LED

No: Issue/Revision 4-1-2025



STRUCTURAL