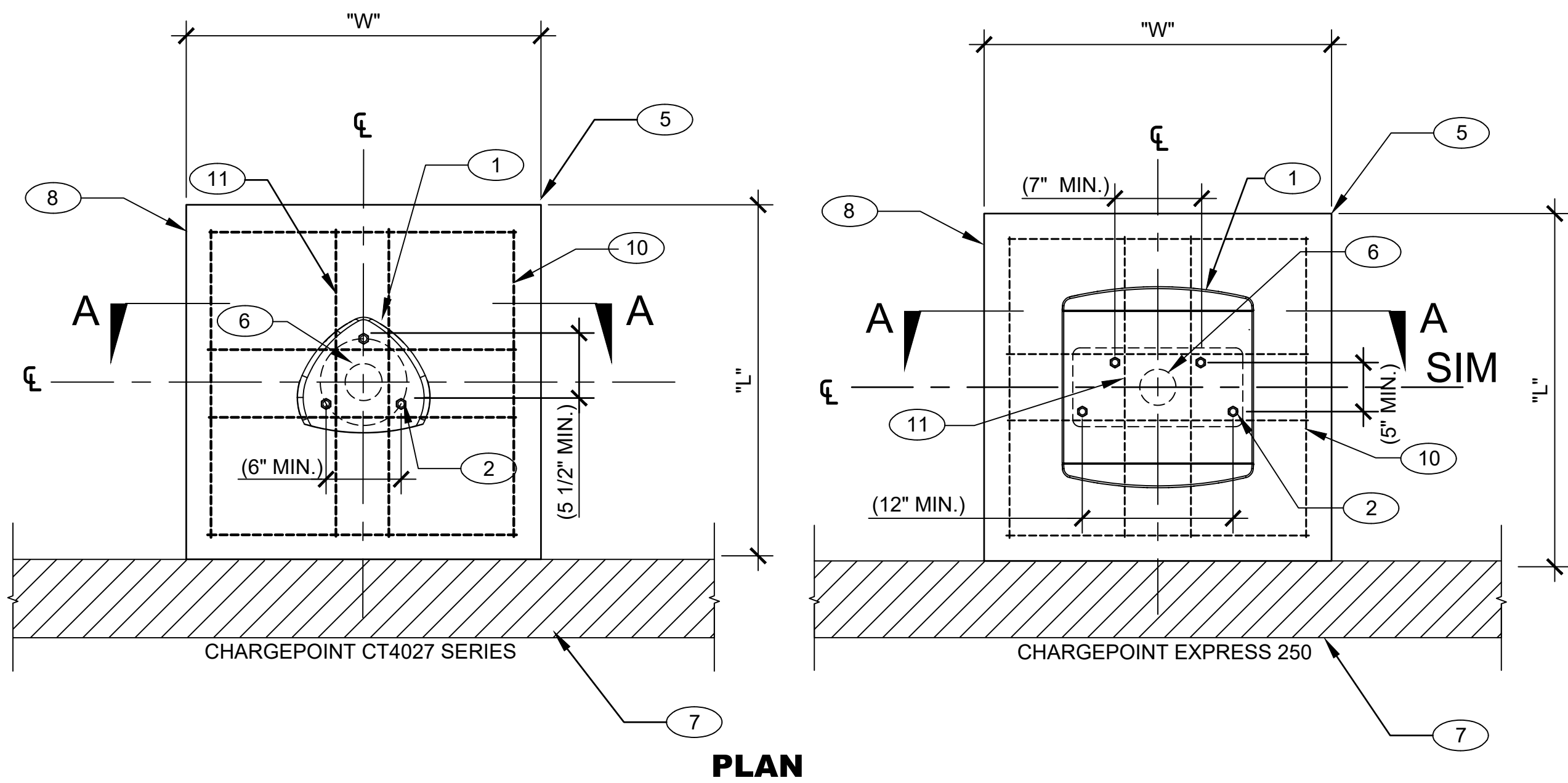
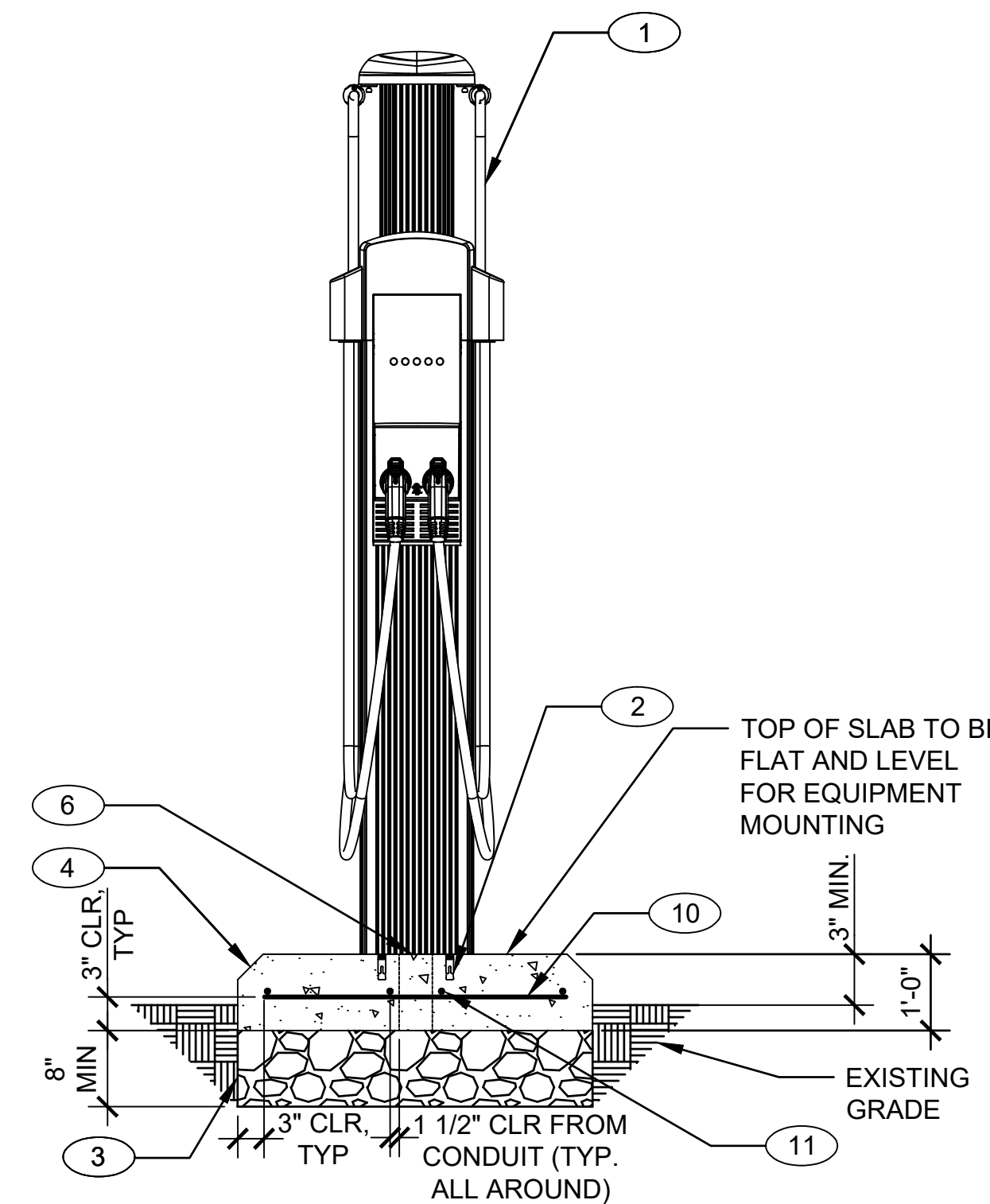


SPREAD FOOTING SCHEDULE (SEE GENERAL NOTE 5A)				
CHARGER TYPE	REQUIRED ANCHORS	ALLOWABLE EQUIPMENT WEIGHT (LBS)	FOOTING WIDTH (W)	FOOTING LENGTH (L)
CHARGE POINT [CT4027]	3	500-1250	3'-6"	3'-6"
CHARGEPOINT [EXPRESS 250], [POWERLINK], [POWERBLOCK]	4	500-2800	4'-9"	4'-9"



PLAN



SECTION A-A
SCALE: NONE

GENERAL NOTES:

GENERAL CRITERIA

- COORDINATION WITH EXISTING CONDITIONS
 - COORDINATE WITH ELECTRICAL, (CIVIL), AND MANUFACTURER'S DRAWINGS. IF DISCREPANCIES ARE FOUND REPORT THEM TO THE STRUCTURAL EOR BEFORE PROCEEDING WITH THE WORK.
 - DO NOT SCALE DRAWINGS FOR THE PURPOSE OF DETERMINING DIMENSIONS.
 - IF THIS SHEET IS NOT 24"x36" USE GRAPHIC SCALE ACCORDINGLY.
- NO MODIFICATIONS SHALL BE MADE TO ANY MEMBERS OF THE STRUCTURAL SYSTEM WITHOUT THE PRIOR WRITTEN APPROVAL OF THE STRUCTURAL EOR.
- EXISTING CONDITIONS
 - NEW CONSTRUCTION MUST BE COORDINATED WITH EXISTING SITE CONDITIONS.
 - LOCATE AND PROTECT ALL EXISTING UNDERGROUND FACILITIES.
- SUBMITTAL REQUIREMENTS
 - SEE PROJECT SPECIFICATIONS FOR ALL SUBMITTAL REQUIREMENTS. EOR TO VERIFY ALL SUBMITTALS LISTED IN 01 3300 ATTACHMENT-A ARE ACCURATE AND REFLECT THE ACTION SUBMITTALS LISTED IN SPECIFICATION SECTIONS.
- FOOTING SCHEDULE
 - ALL OPERATING EQUIPMENT WEIGHTS SHALL BE WITHIN THE ALLOWABLE LIMITS.

MATERIAL CRITERIA

- CONCRETE:
 - ALL CONCRETE SHALL BE NORMAL WEIGHT AND DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4500 PSI FOR ACI 318 EXPOSURE CLASS F2 AND CONFORMING TO SPECIFICATION 03 3001.
- POST INSTALLED ANCHORS:
 - ANCHORS SHALL BE INSTALLED PER PROJECT SPECIFICATIONS, THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) AND ICC-ES TEST REPORTS.
 - HOLES FOR ANCHORING SHALL BE ACHIEVED WITH ROTARY HAMMER AND CARBIDE-TIPPED DRILL BIT, UNLESS NOTED OTHERWISE. CORED HOLES ARE NOT ALLOWED.
 - ANCHORS SHALL BE INSTALLED AT NOT LESS THAN MINIMUM EDGE DISTANCES, EMBEDMENT AND/OR SPACING AS LISTED IN THE MPII AND ICC-ES TEST REPORTS.
 - ANCHOR LENGTHS SHOWN IN THESE PLANS ARE THE REQUIRED MINIMUM EMBEDMENT DEPTHS. SUBCONTRACTOR SHALL PROVIDE ANCHORS WITH SUFFICIENT PROJECTION LENGTH FOR PROPER INSTALLATION OF SUPPORTED EQUIPMENT AND/OR STRUCTURE.
 - NO REINFORCING SHALL BE CUT TO INSTALL ANCHORS. EV CHARGERS LOCATIONS ON DRAWINGS MAY VARY BY +/- 1" UNLESS NOTED OTHERWISE TO AVOID CONFLICTS.
- REINFORCING STEEL
 - REINFORCING STEEL SHALL BE GRADE 60, DEFORMED BARS, CONFORMING TO ASTM A615 or A706.
 - MAINTAIN THE FOLLOWING CONCRETE COVERAGE FOR REINFORCING STEEL:
 - CONCRETE CAST AGAINST EARTH = 3"
 - CONCRETE EXPOSED TO WEATHER: 1-1/2" (FOR #5 BARS AND SMALLER)

GENERAL NOTES CON'D :

MATERIAL CRITERIA CONT'D:

- REINFORCING STEEL (CONT'D)
 - DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD UNLESS SPECIFICALLY SHOWN OR APPROVED BY ENGINEER OF RECORD.
 - PROVIDE BAR SUPPORT ACCESSORIES IN ACCORDANCE WITH THE LATEST ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.
 - PLACEMENT OF ALL REINFORCEMENT SHALL COMPLY WITH CRSI'S "MANUAL OF STANDARD PRACTICE".

DESIGN CRITERIA

THE FOLLOWING CRITERIA COVERS THE STRUCTURAL DESIGN OF THIS EV CHARGING STATION FOUNDATION.

- MANAGEMENT LEVEL 4
- DESIGN LOADS:
 - VERTICAL:
 - DEAD LOADS - STRUCTURE IS DESIGNED FOR THE ACTUAL IN-PLACE WEIGHTS OF ALL MATERIALS SHOWN ON THE CONSTRUCTION DOCUMENTS.
- ASSUMED SOIL BEARING PRESSURE: 1500 PSF

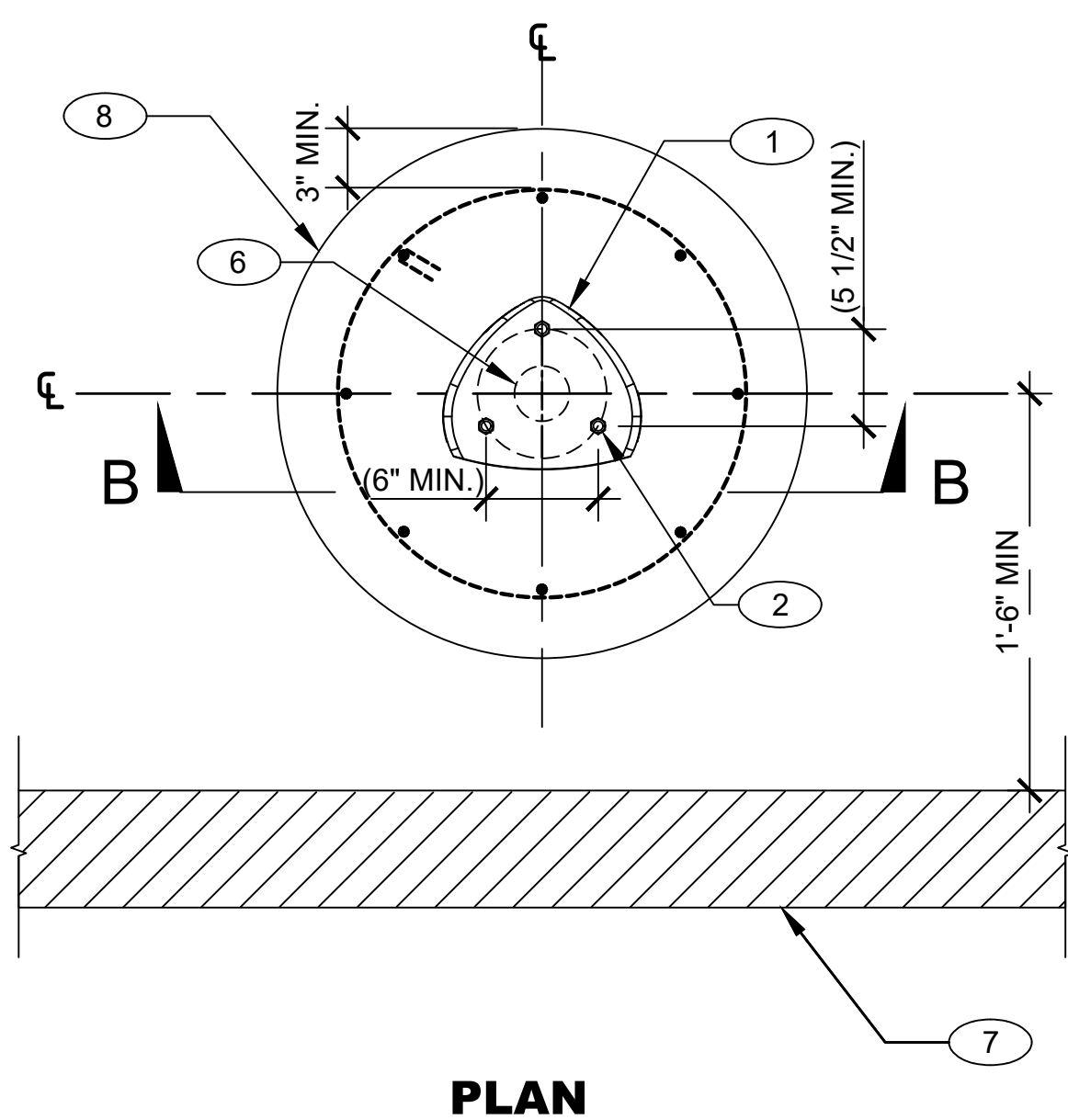
KEYED NOTES:

- ELECTRIC VEHICLE CHARGING STATION EQUIPMENT. CENTER STAND ON CONCRETE PAD. SEE ELECTRICAL/CIVIL FOR SITE LOCATION.
- 1/2"Ø X 5-1/2" MIN. HILTI KB-T22 SS304 W/ MINIMUM 3-1/4" EFFECTIVE EMBEDMENT. USE MANUFACTURER PROVIDED CONCRETE MOUNT KIT TEMPLATE FOR BOLT PATTERN. MIN. EDGE DISTANCE = 3". FOLLOW INSTALLATION INSTRUCTIONS FOR EMBEDDED TEMPLATE IN NEW CONCRETE PAD. BOLT PATTERN SHOWN IS CONCEPTUAL. SEE ICC-ES REPORT 4266 FOR ANCHOR INSTALLATION INSTRUCTIONS.
- NEW BASE COURSE. REMOVE EXISTING ASPHALT OR MISCELLANEOUS CONCRETE WHERE REQUIRED. COMPACT BASE COURSE TO 95% OF MAXIMUM DENSITY PER SPECIFICATION 31 2000.
- ALL EXPOSED EDGES OF CONCRETE FOUNDATION SHALL HAVE A 3/4" CHAMFER. WHERE NEW PAD ABUTS EXISTING SIDEWALK, CHAMFER NOT REQUIRED.
- ELECTRIC VEHICLE CHARGING STATION EQUIPMENT PAD. REFER TO THE MATERIAL CRITERIA FOR CONCRETE SPECIFICATION. PAD MAY BE ROTATED, OR ENLARGED AT SUBCONTRACTOR/CUSTOMER DISCRETION. DIMENSIONS SHOWN ARE MINIMUMS.
- CONDUIT STUB OUT, SEE ELECTRICAL DRAWINGS.
- EXISTING CONCRETE CURB, IF APPLICABLE.
- SAWCUT EXISTING [ASPHALT AND/OR CONCRETE] WHERE PRESENT. PLACE 1/2" EXPANSION JOINT MATERIAL CONFORMING TO ASTM D1752 AROUND PERIMETER OF NEW FOOTING WHERE ABUTTING EXISTING SIDEWALK/GUTTER. PATCH AND REPLACE SIDEWALK WHERE NECESSARY. [SEE CIVIL DRAWINGS.]
- REINFORCED CONCRETE EMBED POST FOUNDATION WITH (8) #5 VERTICAL BARS EQUALLY SPACED WITH (7) #3 TIES AT 8" O.C. MAX. WITH 135 DEG. HOOKS AT ENDS.
- # 4 @ 12" O.C. MAX. EACH WAY CENTERED IN SLAB.
- # 4 EACH SIDE OF CONDUIT STUBOUT, BOTH DIRECTIONS.

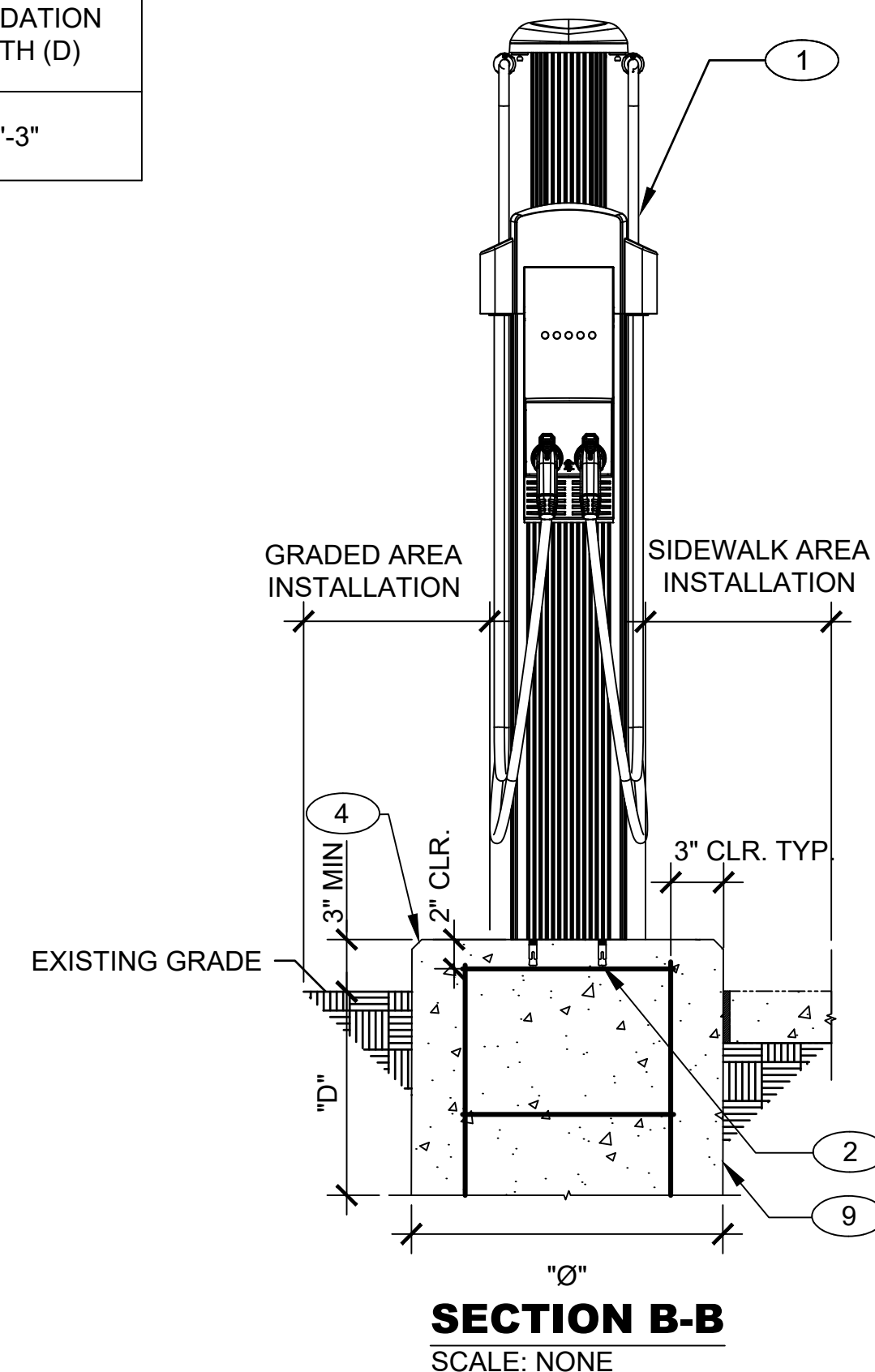
1 CHARGING EQUIPMENT PAD DETAIL

S-XXXX SCALE: NONE

POST FOOTING SCHEDULE				
CHARGER TYPE	REQUIRED ANCHORS	ALLOWABLE EQUIPMENT WEIGHT (LBS)	FOUNDATION DIAMETER (Ø)	FOUNDATION DEPTH (D)
CHARGEPOINT [CT4027]	3	500-930	2'-0"	3'-3"



PLAN



SECTION B-B
SCALE: NONE

DESIGNER NOTES:
(DO NOT INCLUDE ON CONSTRUCTION DRAWINGS)

- EDIT TO BE PROJECT SPECIFIC.
- COMPLY WITH CURRENT EDITION OF LANL CAD STANDARDS MANUAL.
- ANCHORS PER LANL MASTER SPEC 05 0520 FOR NORMAL CONFIDENCE POST-INSTALLED ANCHORS.
- FOUNDATION AND ANCHORAGE DESIGN IS BASED ON THE DIMENSIONS AND OPERATIONAL WEIGHTS OF THE EV CHARGING STATIONS PROVIDED BELOW. FOR EV CHARGING STATIONS NOT LISTED, ENSURE THE QUANTITY OF ANCHORS REQUIRED AND OPERATIONAL WEIGHTS, ARE WITHIN THE PARAMETERS OF THE SCHEDULE.

CHARGEPOINT CT4000
CHARGEPOINT EXPRESS 250
CHARGEPOINT POWER LINK
CHARGEPOINT POWERBLOCK
- THE CHARGING EQUIPMENT POST FOUNDATION DETAIL IS ONLY APPLICABLE TO THE LEVEL 2 CHARGEPOINT CT4000 SERIES.
- THIS STANDARD DETAIL HAS BEEN DEVELOPED FOR INSTALLATIONS EXEMPT FROM THE EFFECTS OF NATURAL PHENOMENA HAZARDS PER ESM CH. 5 SECTION II, 1.1.A.1. AN SSI AND CALCULATION SHALL NOT BE REQUIRED FOR INSTALLATIONS MEETING THIS EXEMPTION.C
- WHERE THE ESM CH. 5 SECTION II, 1.1.A.1 EXEMPTION DOES NOT APPLY, ALL IBC, ESM, AND REFERENCED CODE AND STANDARDS REQUIREMENTS SHALL APPLY.

2 CHARGING EQUIPMENT POST FOUNDATION DETAIL

S-XXXX SCALE: NONE

LBO-DESIGN PACKAGE REVIEWER	N/A		
APPROVED FOR RELEASE A. YAEGER			
SUBMITTED A. GIESLER			
VERIFIED A. GIESLER			
DESIGNED G. SEAY			
DRAWN G. SEAY	0	INITIAL ISSUE	10/02/23
CLASSIFICATION UNCLASSIFIED D. SMITH	NO	REVISION DESCRIPTION	DATE

ENGINEERING STANDARDS

ELECTRICAL VEHICLE CHARGING STATIONS

POST-MOUNTED FOUNDATION DETAILS

TA-XX	BLDG XXXX
Los Alamos NATIONAL LABORATORY	SHEET S-5000
PROJECT ID CHAPTER 5	PO Box 1663 Los Alamos, New Mexico 87545 2 OF 6
DRAWING NO ST-G4090-2	REV 0