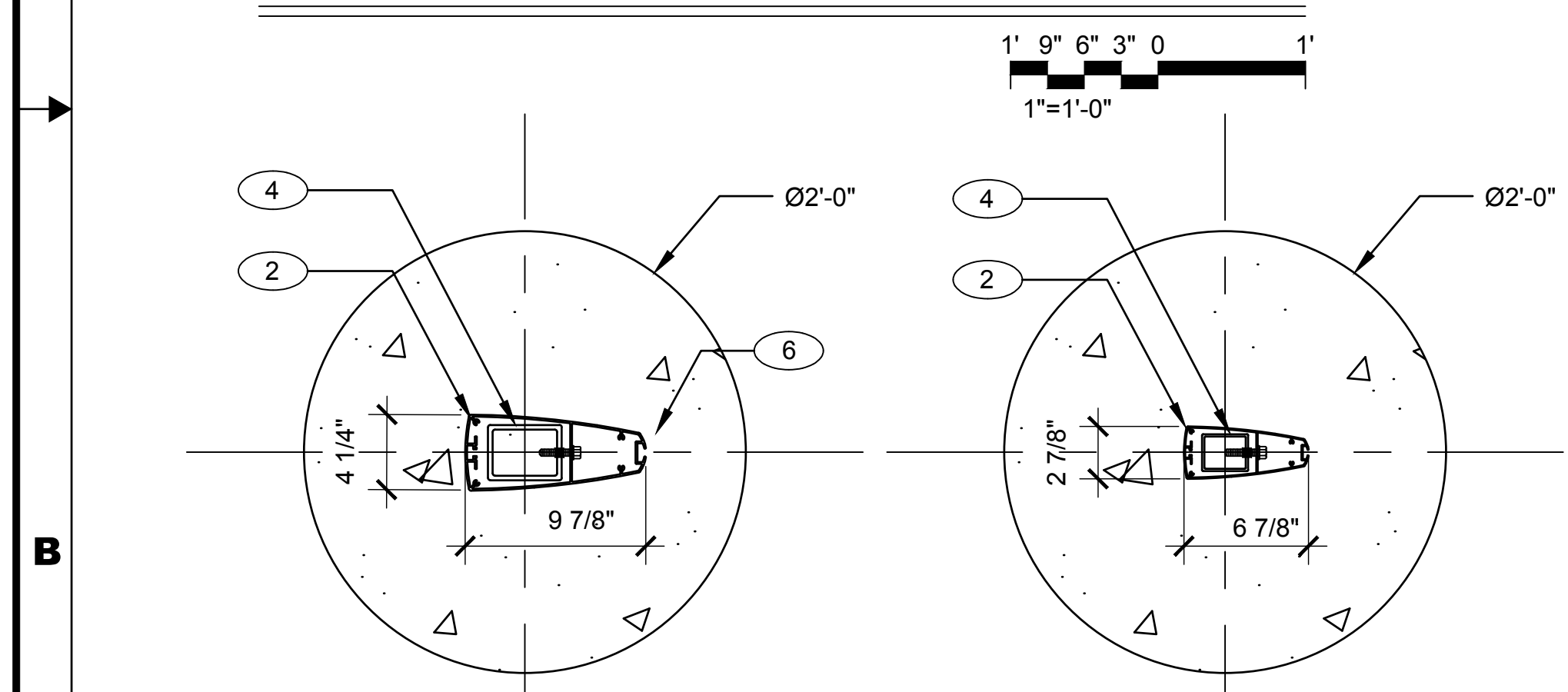
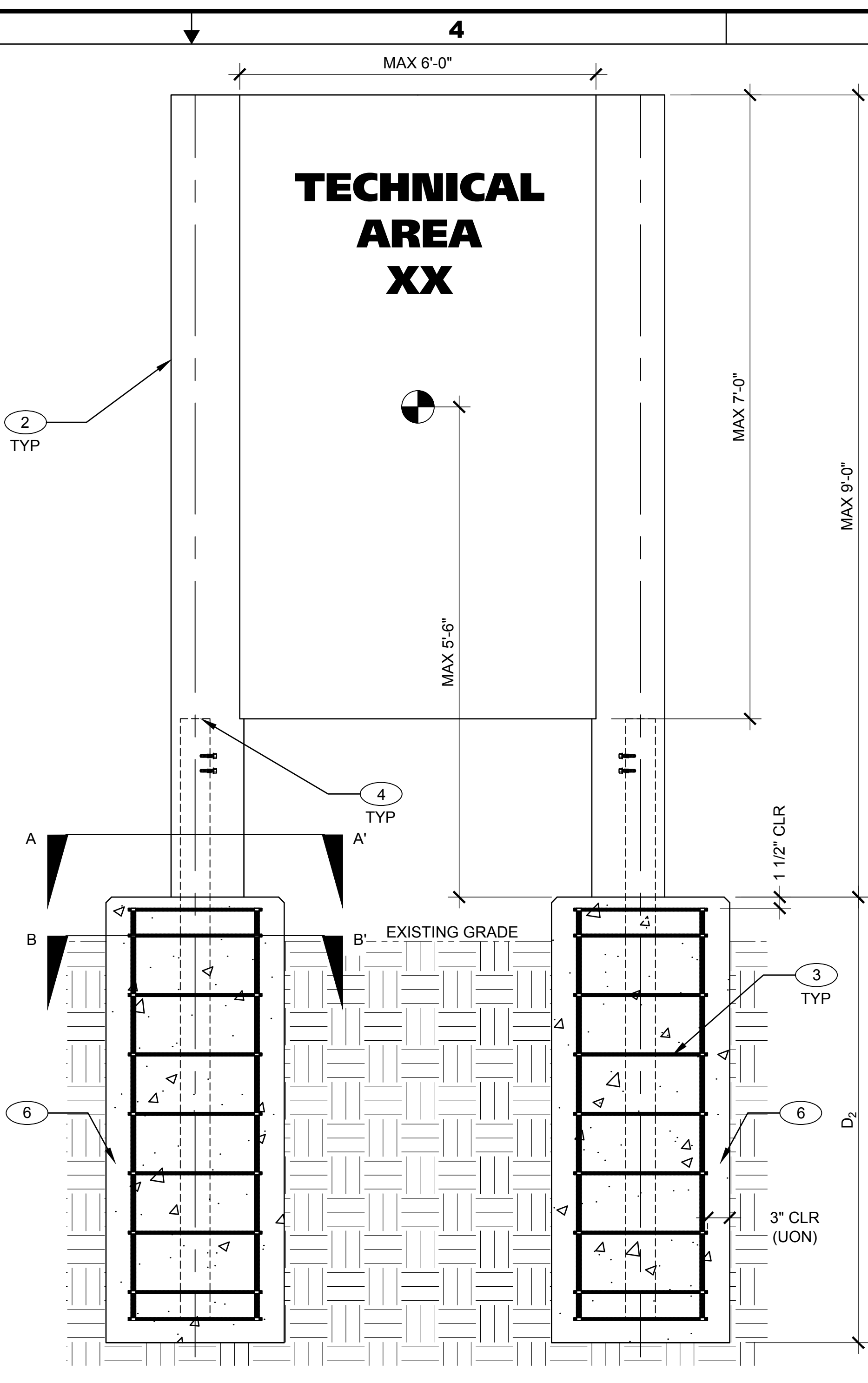


TYPE A SIGN ELEV.



SECTION A-A'

SECTION B-B'



TYPE B SIGN ELEV.

SIGN PIER DEPTH (DEPTH OF CONCRETE)

SOIL CLASSIFICATION	$K_{ZT} \leq 2.96$		$K_{ZT} \leq 2.73$		$K_{ZT} \leq 2.05$		$K_{ZT} \leq 1.50$		$K_{ZT} = 1.00$	
	D ₁	D ₂	D ₁	D ₂	D ₁	D ₂	D ₁	D ₂	D ₁	D ₂
TUFF	3'-3"	4'-3"	3'-3"	4'-3"	2'-9"	3'-9"	2'-6"	3'-3"	2'-3"	3'-0"
SANDY GRAVEL/GRAVEL	4'-3"	5'-6"	4'-0"	5'-6"	3'-9"	4'-9"	3'-3"	4'-3"	2'-9"	3'-9"
SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL, AND CLAYEY GRAVEL	4'-9"	6'-3"	4'-6"	6'-0"	4'-0"	5'-6"	3'-9"	4'-9"	3'-0"	4'-0"
CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT, SILT, AND SANDY SILT	5'-6"	7'-3"	5'-6"	7'-0"	4'-9"	6'-3"	4'-3"	5'-6"	3'-9"	4'-9"

GENERAL NOTES

- THIS MOUNTING DETAIL IS TO BE USED FOR SIGNS PLACED A MINIMUM OF 30 FT FROM EDGE OF ESTABLISHED ROADS.
- THE 6-7/8" X 2-7/8" ASI COMPASS SIGN POST IN KEYED NOTE #2 SHALL ONLY BE USED FOR FREESTANDING BUILDING SIGNS. WHEREAS THE 9-7/8" X 4-1/4" POST MAY BE USED FOR BOTH FREESTANDING TECHNICAL AREA SIGNS AND FREESTANDING BUILDING SIGNS.

KEYED NOTES:

- 1/2" Ø ASTM A36 THREADED ROD W/ ASTM A563 HEX NUTS AND ASTM A36 WASHERS, 10" EMBED. (TYP OF 8)
- 6-7/8" X 2-7/8" OR 9-7/8" X 4-1/4" ASI COMPASS SIGN POST
- #4 TIES (ASTM A615, GRADE 60) AT 8" O.C.
- CONCRETE-FILLED, ASTM A500 GRADE B HSS 4X3X1/4 FOR LARGER ASI COMPASS SIGN POSTS AND HSS 2-1/2X2X1/4 FOR SMALLER POSTS.
- (8) #4 VERTICAL REBAR (ASTM A615, GRADE 60), EQUALLY SPACED, 3" CLEAR COVER
- 5000 PSI (28 DAY) CONCRETE PIER, RADIAL 3/4" CHAMFER
- AFTER INSTALLING MACHINE SCREWS, PLUG/SEAL OUTER MOST PRE-MANUFACTURED HOLES (i.e., THE HOLES ON THE EXTERIOR OF THE ASI POST)

LEGEND

GEOMETRIC CENTER

NOTES TO EOR:

- (DO NOT INCLUDE ON CONSTRUCTION DRAWINGS)
- IF THIS SHEET IS NOT 24"X36" USE GRAPHIC SCALE ACCORDINGLY.
 - COORDINATE WITH LANL MASTER SPECIFICATION 10 1405.
 - SIGNS INSTALLED WITHIN 30 FT OF EDGE OF HIGHWAY PAVEMENT SHALL BE DESIGNED W/ BREAKAWAY MOUNTINGS IN ACCORDANCE WITH HIGHWAY CODES AND STANDARDS.
 - SIGN TYPES:
 - FACE AREA ≤ 24 SF & SIGN GEOMETRIC CENTER ≤ 3'-6" ABOVE BASE. (EX: FREESTANDING BUILDING SIGN - VARIES DEPENDING ON SIGN TEXT AND LAYOUT)
 - FACE AREA ≤ 42 SF & SIGN GEOMETRIC CENTER ≤ 5'-6" ABOVE BASE. (EX: FREESTANDING TECHNICAL AREA SIGN - VARIES DEPENDING ON SIGN TEXT AND LAYOUT)
 - FACE AREA SHALL BE DETERMINED BY THE GEOMETRY OF THE NON-STRUCTURAL ROLL-FORMED SIGN FACE.
 - PIER DEPTH, CORRESPONDING TO THE PROJECT-SPECIFIC K_{ZT} (DETERMINED PER ASCE 7) AND SOIL CLASS, SHALL BE SELECTED FROM THE TABLE HEREIN.
 - DRAWING DEVELOPED FOR:
 - ML-3/ML-4 PROJECTS.
 - FOR ML-1/ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED.
 - SUPPORTING CALCULATION:
 - CAL-012-03-1414-0012-S-R1

3	8/6/18	UNCLASS	DY	REVISED TO MEET ESM CHAPTER 5, SECTION II, REV 10; UPDATED TO MEET CSM, SECTION 200, REV 5.	BDW	BDW	GJP	SCR	THO
2	11/17/14	U	EJS	CHANGED GRADE 40 REBAR TIES TO GRADE 60 & CLARIFIED INSTALLATIONS NEAR ROADS	SR	SR	ES	DC	TO
1	8/30/12	U	EJS	REVISED NOTES TO DESIGNER	SR	SR	RT	DC	TO
NO	DATE	CLASS REV	DC	DESCRIPTION	DWN	DSGN	CHKD	SUB	APP

ENGINEERING STANDARDS

ARCHITECTURAL

SIGN BASE DETAIL & ALTERNATIVE

TA-XX BLDG XXXX

DRAWN: R. PEARSON
DESIGN: S. RICHARDSON
CHECKED: R. TROUT
DATE: 5-17-04

Los Alamos NATIONAL LABORATORY
PO Box 1663
Los Alamos, New Mexico 87545

D.C.: U PROJECT ID: CHAPTER 4 REVIEWER: ED SEAWALT DRAWING NO: ST-G2040-4 DATE: REV: 3

9 OF 9

00% REVIEW
NOT FOR CONSTRUCTION