

CONSULTANTS

ISSUED

REVISIONS / ADDENDA

PROJECT # : 19.0076

DRAWN : JDR

CHECKED : JDR

DATE : 05/31/2019

PHASE :

PROJECT

SHIFT: HIGHLAND AVE
 UNDERPASS ART

SITE PLANS
 - ELECTRICAL

GENERAL NOTES:

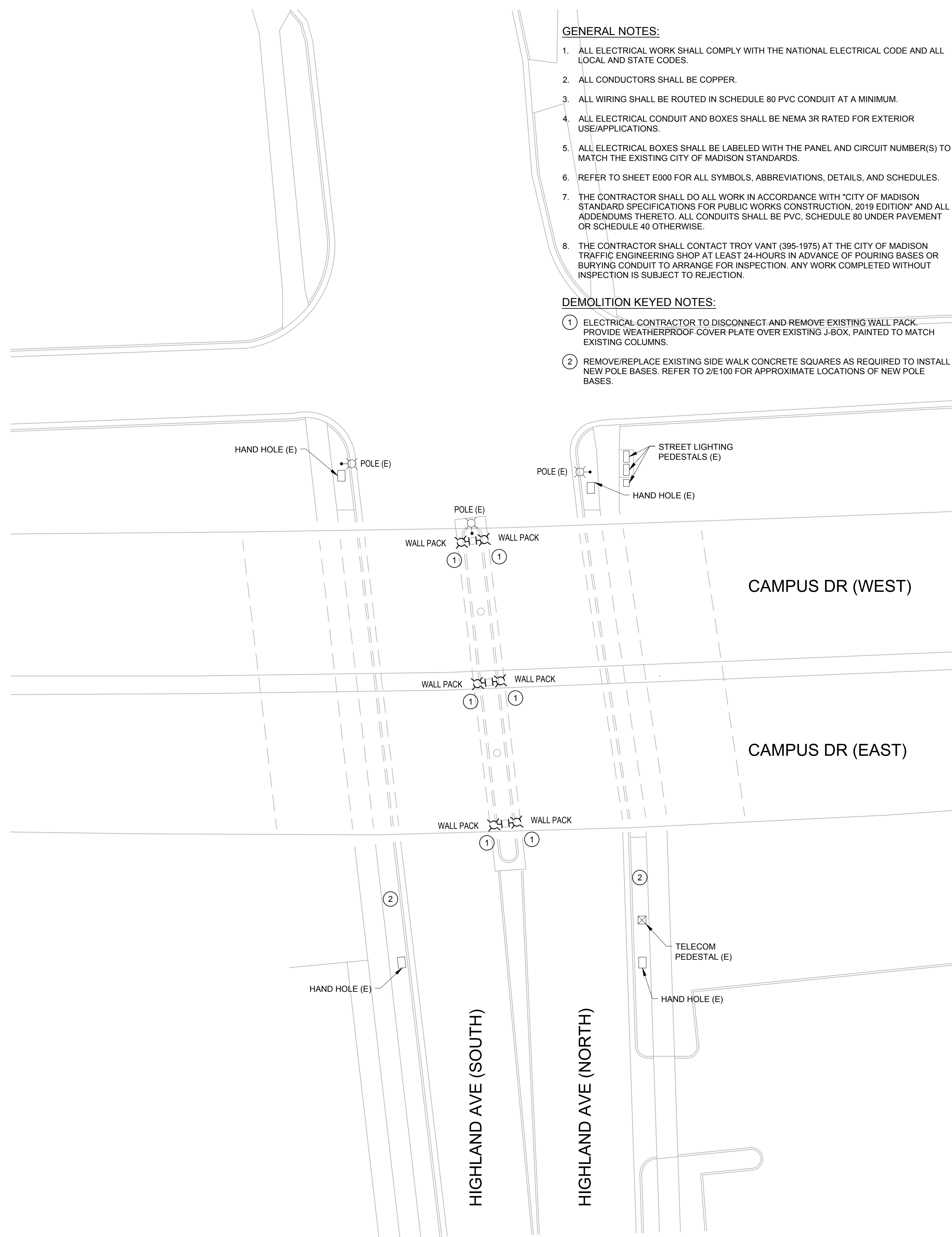
1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES.
2. ALL CONDUCTORS SHALL BE COPPER.
3. ALL WIRING SHALL BE ROUTED IN SCHEDULE 80 PVC CONDUIT AT A MINIMUM.
4. ALL ELECTRICAL CONDUIT AND BOXES SHALL BE NEMA 3R RATED FOR EXTERIOR USE/APPLICATIONS.
5. ALL ELECTRICAL BOXES SHALL BE LABELED WITH THE PANEL AND CIRCUIT NUMBER(S) TO MATCH THE EXISTING CITY OF MADISON STANDARDS.
6. REFER TO SHEET E000 FOR ALL SYMBOLS, ABBREVIATIONS, DETAILS, AND SCHEDULES.
7. THE CONTRACTOR SHALL DO ALL WORK IN ACCORDANCE WITH "CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2019 EDITION" AND ALL ADDENDUMS THERETO. ALL CONDUITS SHALL BE PVC, SCHEDULE 80 UNDER PAVEMENT OR SCHEDULE 40 OTHERWISE.
8. THE CONTRACTOR SHALL CONTACT TROY VANT (395-1975) AT THE CITY OF MADISON TRAFFIC ENGINEERING SHOP AT LEAST 24-HOURS IN ADVANCE OF POURING BASES OR BURYING CONDUIT TO ARRANGE FOR INSPECTION. ANY WORK COMPLETED WITHOUT INSPECTION IS SUBJECT TO REJECTION.

DEMOLITION KEYED NOTES:

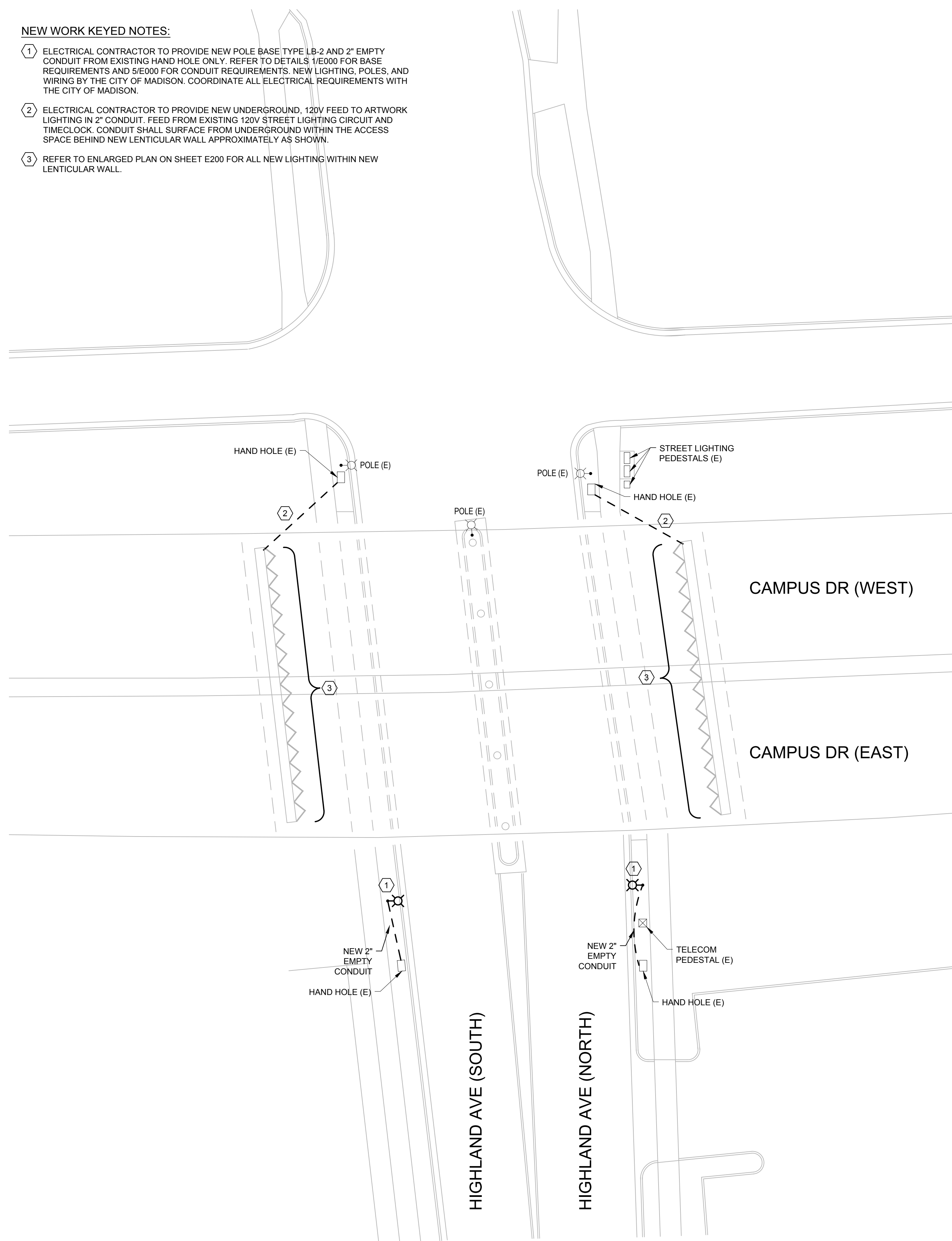
1. ELECTRICAL CONTRACTOR TO DISCONNECT AND REMOVE EXISTING WALL PACK. PROVIDE WEATHERPROOF COVER PLATE OVER EXISTING J-BOX, PAINTED TO MATCH EXISTING COLUMNS.
2. REMOVE/REPLACE EXISTING SIDE WALK CONCRETE SQUARES AS REQUIRED TO INSTALL NEW POLE BASES. REFER TO 2/E100 FOR APPROXIMATE LOCATIONS OF NEW POLE BASES.

NEW WORK KEYED NOTES:

1. ELECTRICAL CONTRACTOR TO PROVIDE NEW POLE BASE TYPE LB-2 AND 2" EMPTY CONDUIT FROM EXISTING HAND HOLE ONLY. REFER TO DETAILS 1/E000 FOR BASE REQUIREMENTS AND 5/E000 FOR CONDUIT REQUIREMENTS. NEW LIGHTING, POLES, AND WIRING BY THE CITY OF MADISON. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH THE CITY OF MADISON.
2. ELECTRICAL CONTRACTOR TO PROVIDE NEW UNDERGROUND, 120V FEED TO ARTWORK LIGHTING IN 2" CONDUIT. FEED FROM EXISTING 120V STREET LIGHTING CIRCUIT AND TIMELOCK. CONDUIT SHALL SURFACE FROM UNDERGROUND WITHIN THE ACCESS SPACE BEHIND NEW LENTICULAR WALL APPROXIMATELY AS SHOWN.
3. REFER TO ENLARGED PLAN ON SHEET E200 FOR ALL NEW LIGHTING WITHIN NEW LENTICULAR WALL.



1 DEMOLITION SITE PLAN - ELECTRICAL
 E100 SCALE: 1/16"=1'-0"



2 NEW WORK SITE PLAN - ELECTRICAL
 E100 SCALE: 1/16"=1'-0"



NO.	DATE	DESCRIPTION

MATERIAL STRENGTHS:

CAST-IN-PLACE CONCRETE:

FOOTINGS

MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS	$f_c = 4000$ PSI
MAXIMUM WATER-CEMENTITIOUS RATIO	0.59
MAXIMUM AGGREGATE SIZE	1 1/2"
SLUMP LIMIT	5" ± 1"
AIR CONTENT	NO

FOUNDATION FROST WALLS

MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS	$f_c = 4000$ PSI
MAXIMUM WATER-CEMENTITIOUS RATIO	0.48
MAXIMUM AGGREGATE SIZE	3/4"
SLUMP LIMIT	4" ± 1"
AIR CONTENT	YES 4 TO 6%

REINFORCING STEEL:

ALL-ASTM A 615, GRADE 60, DEFORMED	$F_y = 60,000$ PSI
STEEL WELDED WIRE REINFORCEMENT, FLAT SHEETS	$F_y = 60,000$ PSI

STRUCTURAL STEEL:

CHANNELS, ANGLES, & S SHAPES, ASTM A 36	$F_y = 36,000$ PSI
TUBE SHAPES, ASTM A 500 GRADE B	$F_y = 46,000$ PSI

WELDED CONNECTIONS:

WELDING ELECTRODES	E70XX
--------------------	-------

DESIGN DATA:

APPLICABLE CODES/STANDARDS:

- INTERNATIONAL BUILDING CODE-2009 WITH SEPTEMBER 1, 2011 WISCONSIN AMENDED I-CODE INSERTS
- ASCE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE/SEI 2005

STRUCTURAL DESIGN STANDARDS (DESIGN SHALL CONFORM TO THE CURRENT EDITION UNDER THE APPLICABLE CODE):

- ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY
- ANSI/AISC 360 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
- WS D1.1/D1.1M STRUCTURAL WELDING CODE-STEEL

BUILDING CLASSIFICATION CATEGORY: II

BUILDING DESIGN LOADS/CRITERIA:

DESIGN DEAD LOADS: SELF WEIGHT OF FRAME AND 1/2" PERFORATED STEEL PLATES

DESIGN LIVE LOADS: SIDEWALKS 100 PSF

HANDRAIL ASSEMBLIES & GUARDS: 200LB LOAD OR 50 PLF LOAD APPLIED IN ANY DIRECTION AT TOP OF HANDRAIL ASSEMBLY OR GUARD & TO TRANSFER THIS LOAD THROUGH SUPPORTS TO THE STRUCTURE.

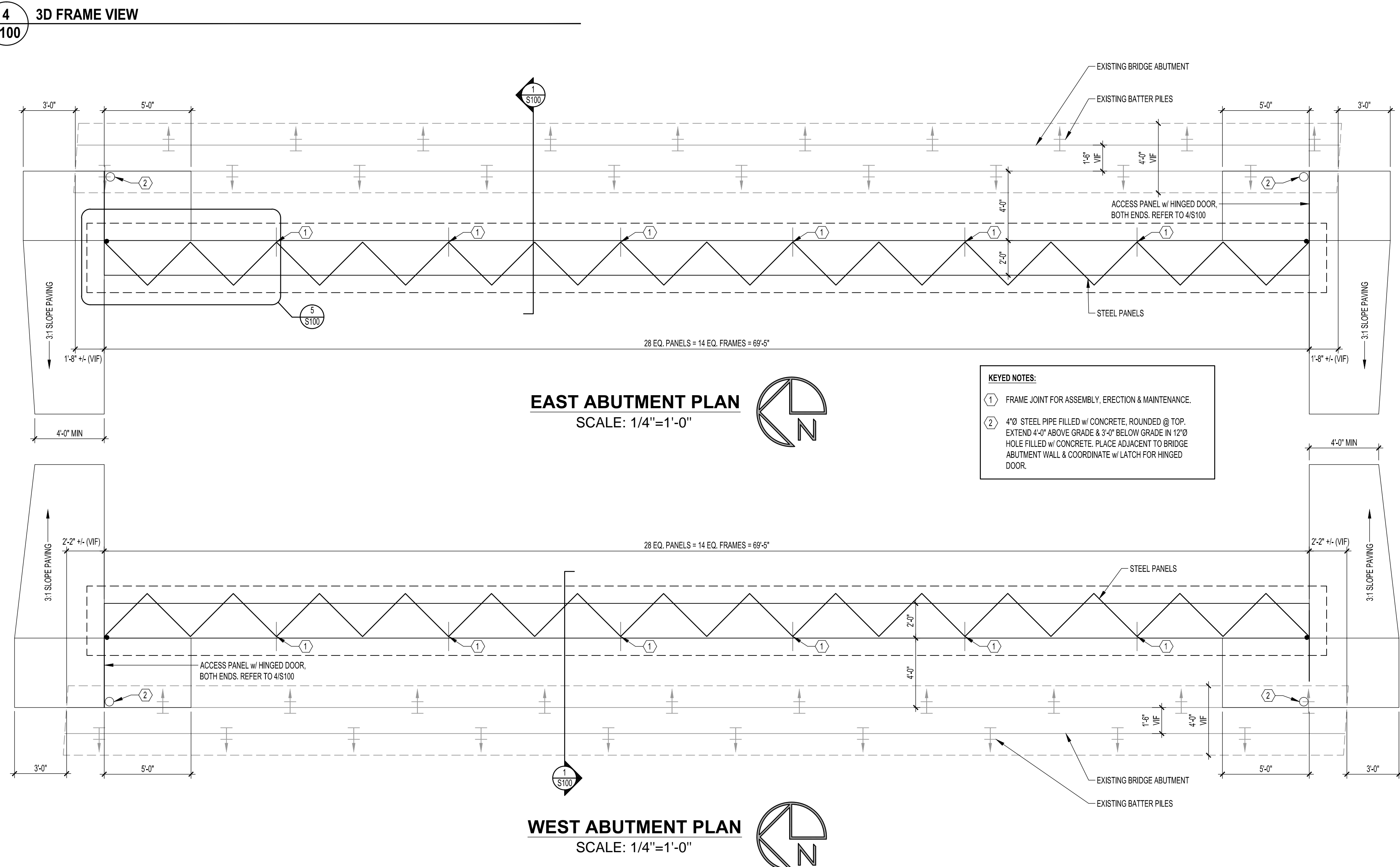
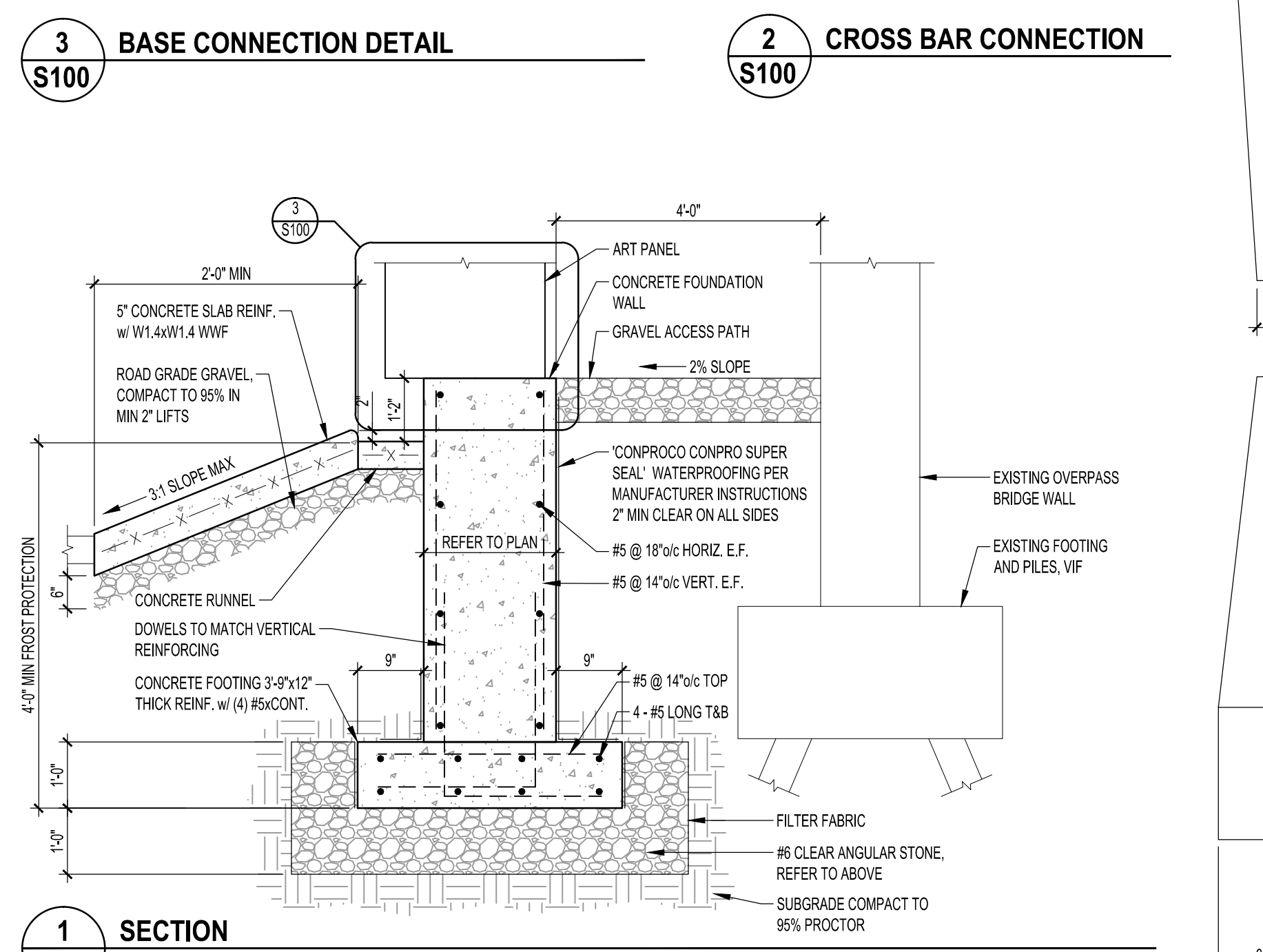
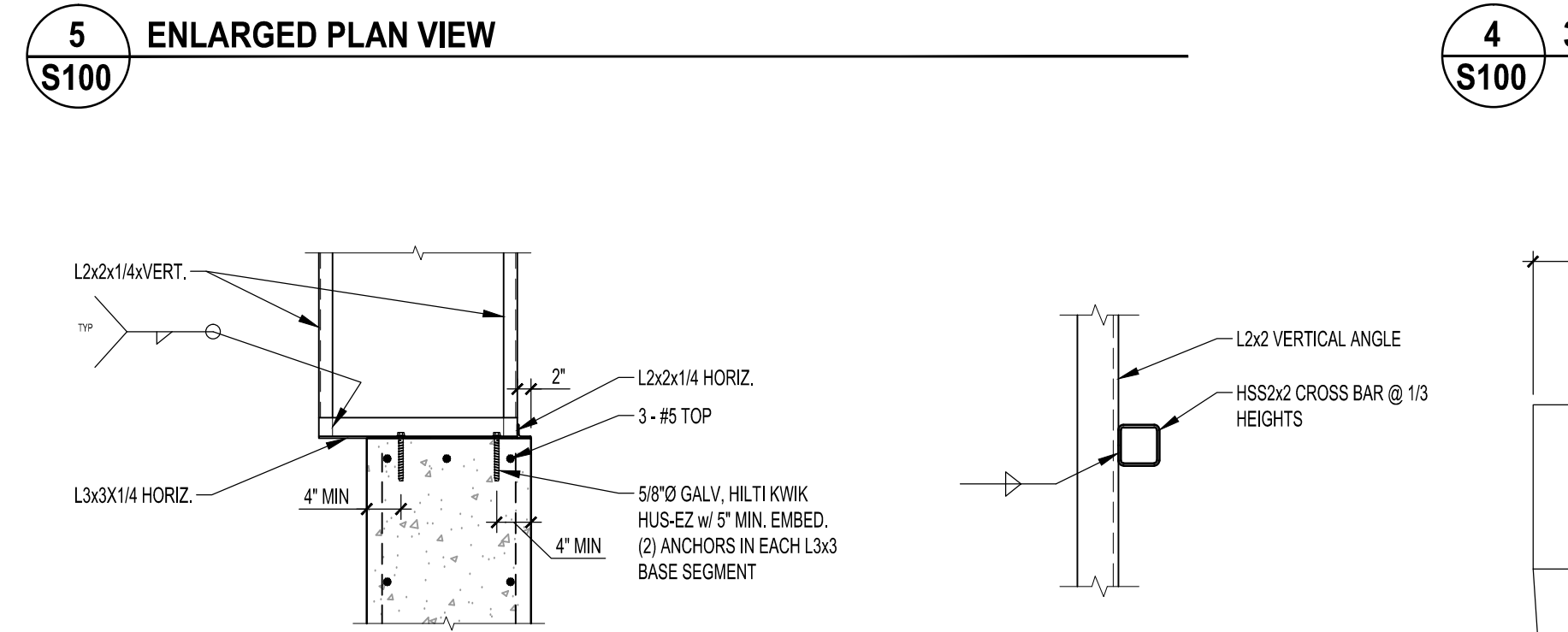
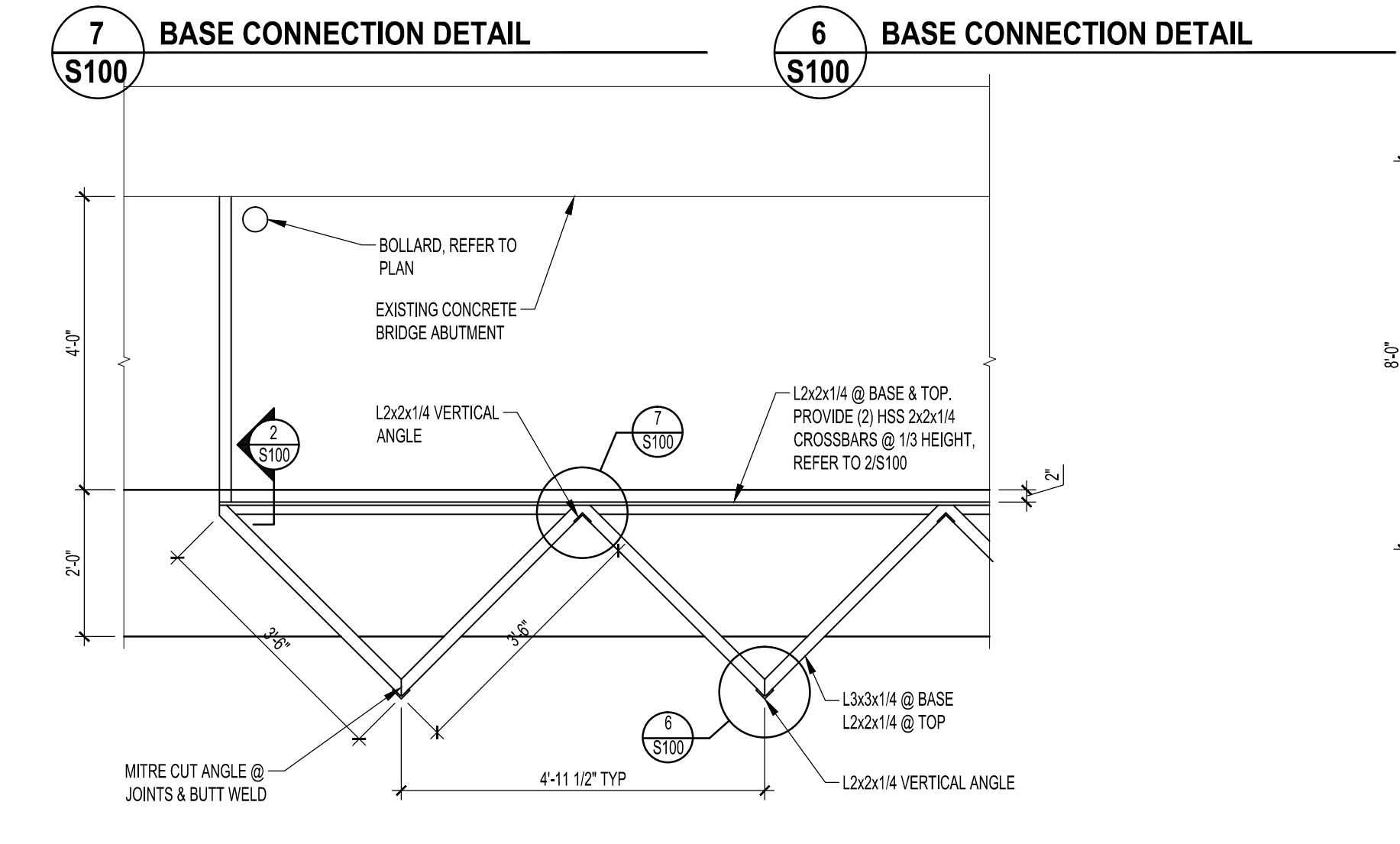
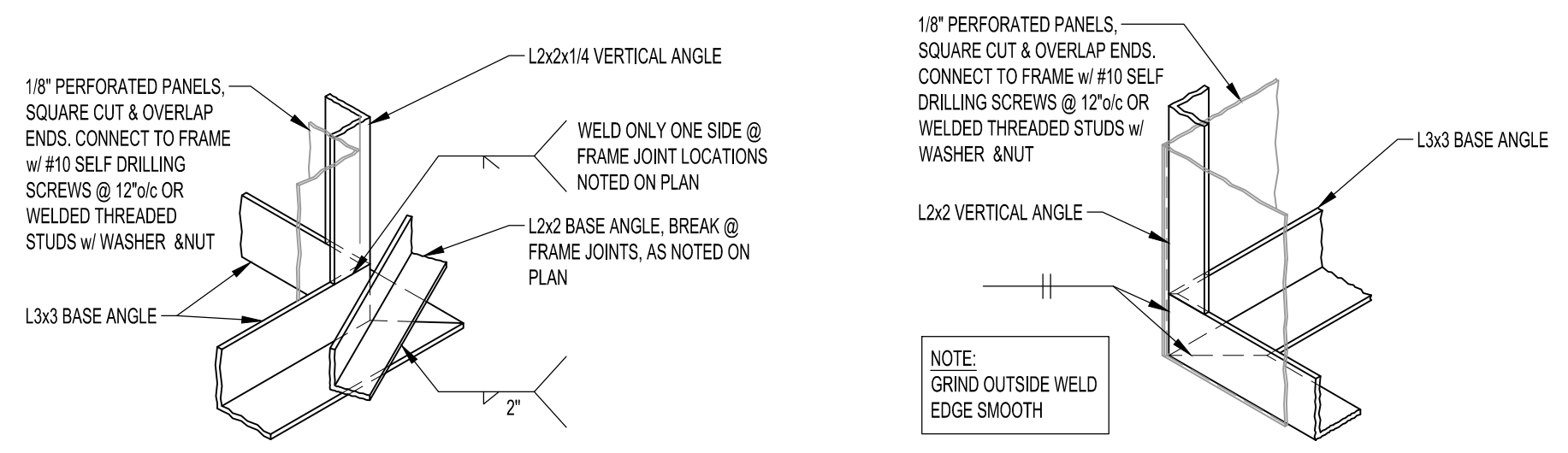
WIND DESIGN DATA:

WIND IMPORTANCE FACTOR (I _w)	1.0
BASIC WIND SPEED (3-SECOND GUST)	90 mph
WIND DIRECTIONALITY FACTOR (K _d)	0.85
MEAN ROOF HEIGHT	8 FT
WIND EXPOSURE CATEGORY	B
PERCENT OF OPEN AREA	5 % MIN
NORMAL WIND PRESSURE	12.6 psf
DESIGN PROCEDURE	SOLID FREESTANDING WALLS & SOLID SIGNS

SOIL DESIGN VALUES:

SOIL UNIT WEIGHT	110 PCF (ASSUMED)
LATERAL EARTH PRESSURE	
ACTIVE (RETAINING WALLS)	40 PSF/FT OF DEPTH (ASSUMED)
AT-REST (BASEMENT WALLS)	60 PSF/FT OF DEPTH (ASSUMED)
PASSIVE	300 PSF (ASSUMED)
COEFFICIENT OF SLIDING FRICTION	0.30 (ASSUMED)
SUBGRADE MODULUS	150 PCI (ASSUMED)
ALLOWABLE SOIL BEARING PRESSURE	2,000 PSF (ASSUMED)

SOIL CONDITIONS TO BE VERIFIED UPON EXCAVATION



EAST ABUTMENT PLAN
 SCALE: 1/4"=1'-0"

WEST ABUTMENT PLAN
 SCALE: 1/4"=1'-0"

KEYED NOTES:

- FRAME JOINT FOR ASSEMBLY, ERECTION & MAINTENANCE.
- 4"Ø STEEL PIPE FILLED W/ CONCRETE, ROUNDED @ TOP. EXTEND 4'-0" ABOVE GRADE & 3'-0" BELOW GRADE IN 12"Ø HOLE FILLED W/ CONCRETE. PLACE ADJACENT TO BRIDGE ABUTMENT WALL & COORDINATE W/ LATCH FOR HINGED DOOR.

Shift

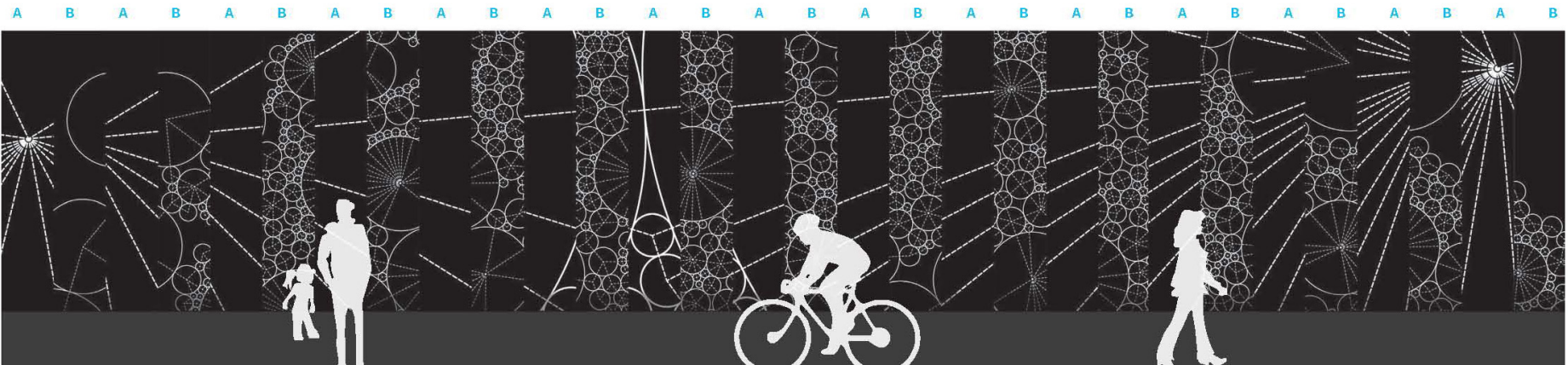
Highland Avenue Underpass, Unbuilt Work

Artist Budget: \$82,000

Shift is composed of two 70' long backlit weathered steel panel walls spanning both sides of the Highland Avenue underpass. The project has been an ongoing collaborative neighborhood initiative between the Regent Neighborhood, UW Madison Environmental Design Center, and 1000 Friends of Wisconsin. *Shift* will serve as a visual transition between the UW campus and the Regent Neighborhood for the thousands of employees, students, and residents who use the underpass each day. The project will increase walkability, create a safe and inviting lighting system for the underpass and improve the daily experience of commuters.



Scale Model Photos



East Wall Elevation