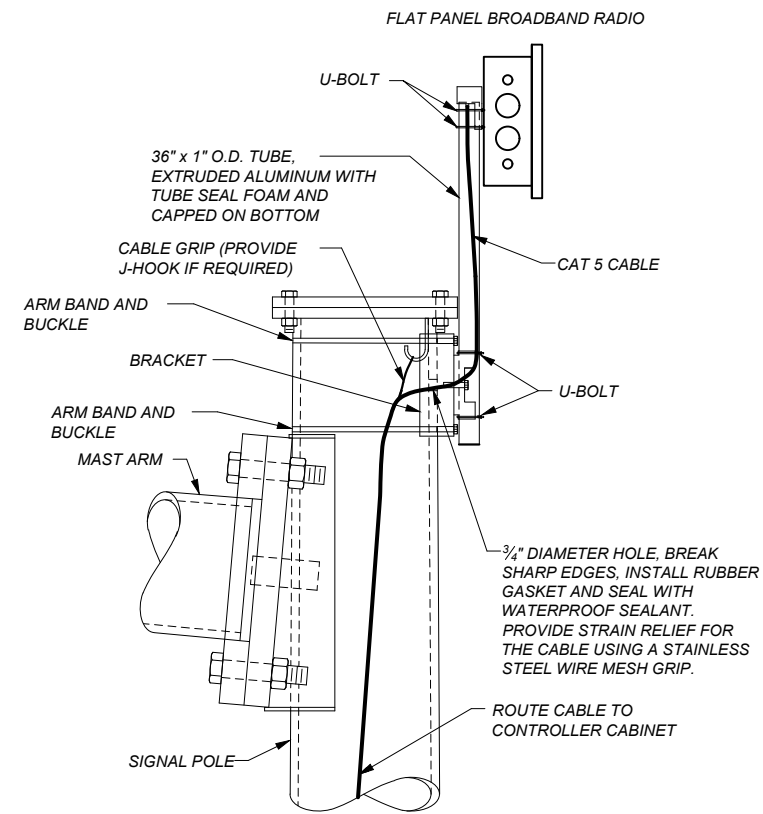


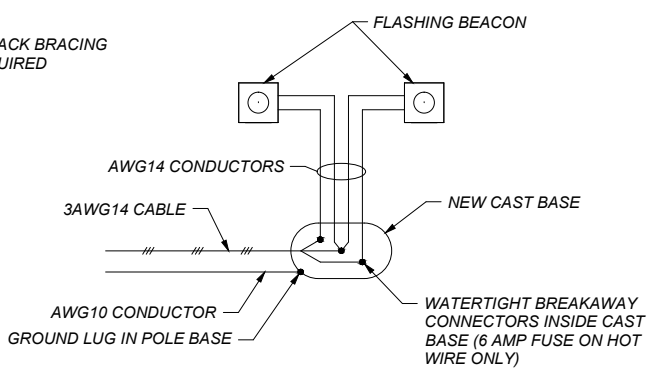
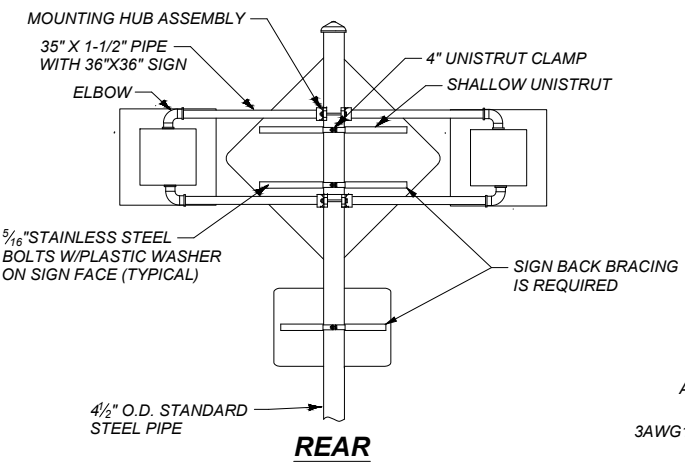
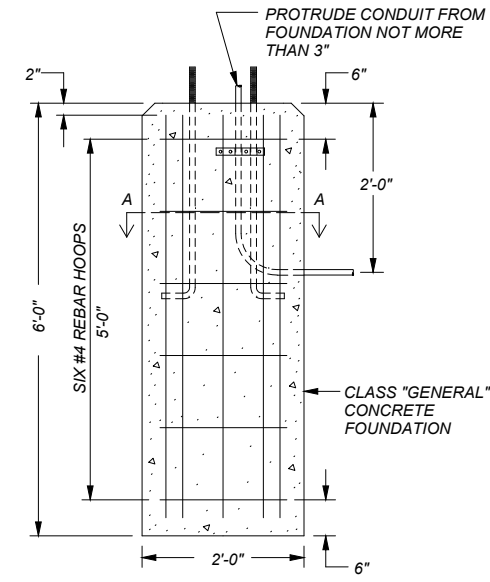
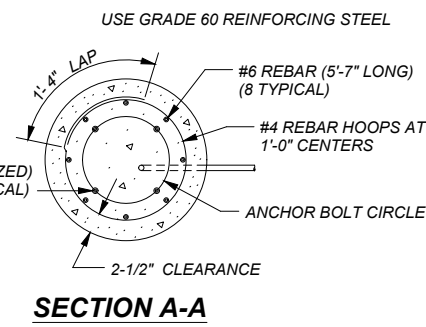
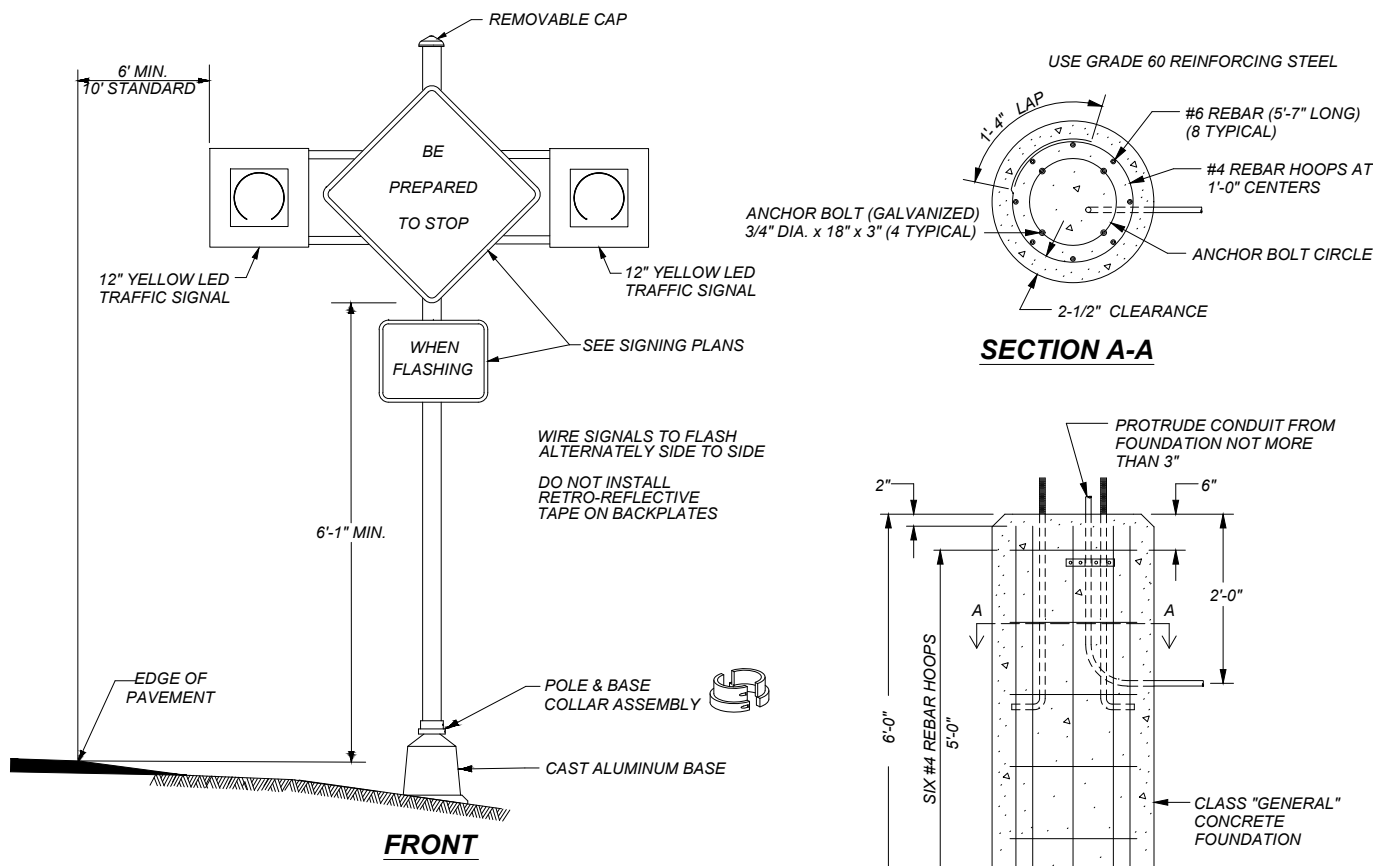
**INTERCONNECT ANTENNA MOUNTING
TYPE 3-A SIGNAL POLE**



**INTERCONNECT ANTENNA MOUNTING
TYPE 2-A POLE**

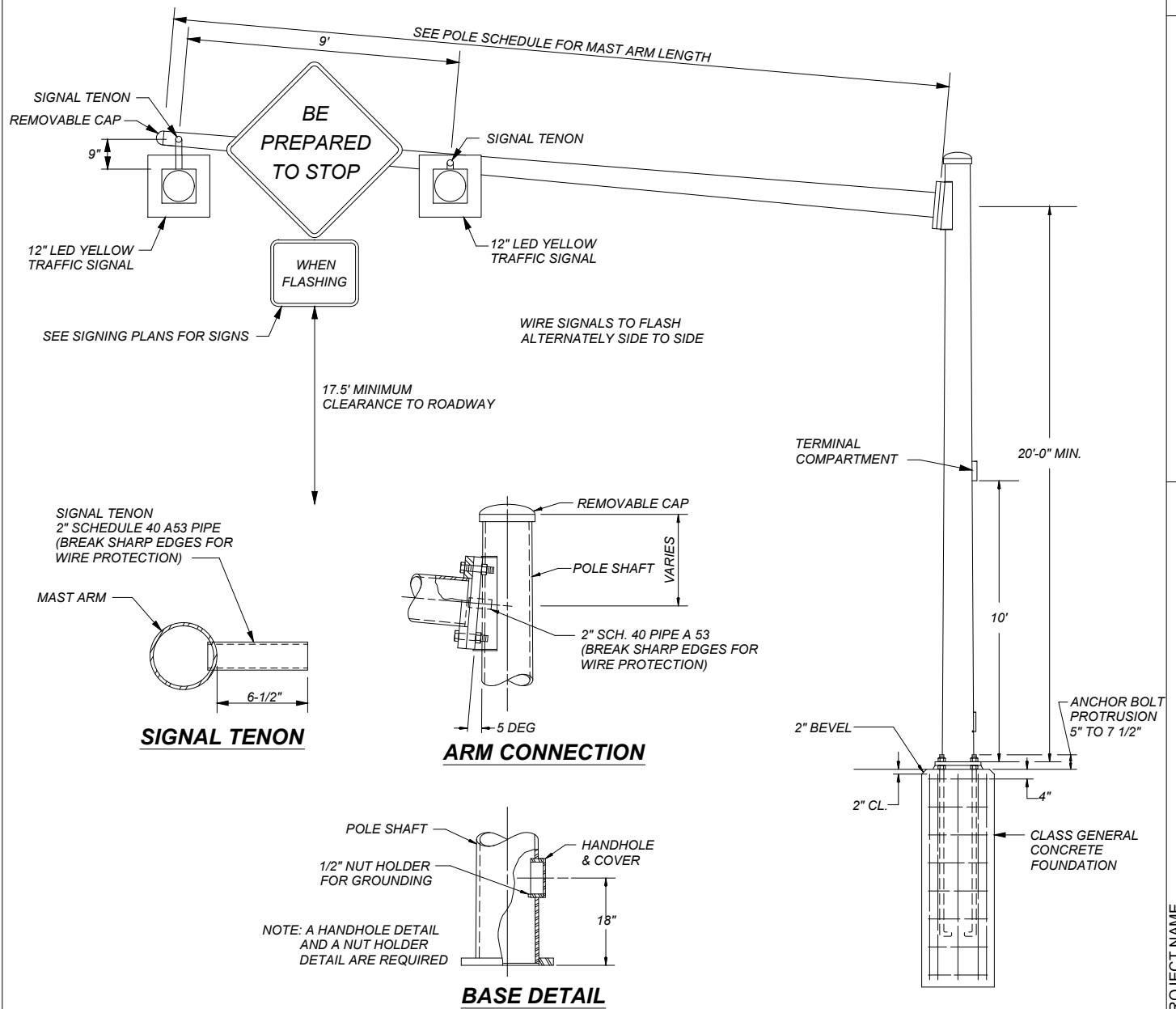
BROADBAND RADIO MOUNTING
NO SCALE

RAD
REVISED 12-SEPT-2024



WIRING DIAGRAM

ADVANCE FLASHING BEACON & SIGN MOUNTING DETAIL
NO SCALE



NOTES

MOUNT ALL SIGNS LEVEL HORIZONTALLY ON THE MAST ARM AS SHOWN AND CENTERED OVER THE APPROPRIATE DRIVING LANE.

INCLUDE MOUNTING HARDWARE IN THE UNIT BID PRICE FOR SIGNS.

PROVIDE SHOP DRAWINGS ACCORDING TO STANDARD SPECIFICATIONS.

FABRICATE AND INSPECT STRUCTURE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS PER AWS D1.1 AND THE CURRENT AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, INCLUDING THE FATIGUE REQUIREMENTS IN SECTION 11 AND ANY AMENDMENTS THERETO.

UNLESS NOTED OTHERWISE, ALL MAJOR COMPONENT CONNECTIONS ARE TO BE WELDED, BOLTED USING HIGH STRENGTH BOLTS OR A COMBINATION OF BOTH. DO NOT USE TAPPED HOLES FOR STRUCTURAL CONNECTIONS.

ALL TUBE-TO-TRANSVERSE PLATE CONNECTIONS ARE TO BE CJP WELDS PER DETAIL 4.4 IN TABLE 11.9.3.1-1 OF THE SPECIFICATIONS.

UNLESS NOTED OTHERWISE, THE BID ITEM INCLUDES DESIGNING AND FURNISHING THE FOUNDATION AND OBTAINING BORING LOG.

WELDING PROCEDURES, SYMBOLS, BASE METAL SPECIFICATIONS & GRADES MUST BE CALLED OUT PRIOR TO FABRICATION OR APPROVAL.

GALVANIZE POLES AND ARMS TO ASTM DESIGNATION : A123.

GALVANIZE ACCESSORIES TO ASTM DESIGNATION : A153.

ADVANCE FLASHING BEACON & SIGN MOUNTING DETAIL
NO SCALE

FOUNDATION DESIGN BY CONTRACTOR

PROJECT NAME	####
COUNTY	####
PROJECT ID	####
UPN	####

DESIGNED BY	####
REVIEWED BY	####
CHECKED BY	####
EL-STANDARD DETAILS.DWG	####

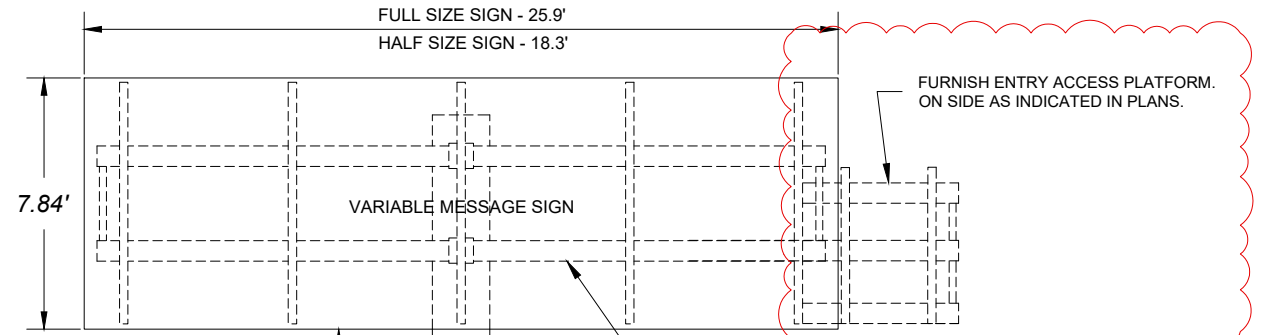
VARIABLE MESSAGE SIGN

STATE FURNISHED CAT 5 CABLE. INSTALL CABLE AND PULL STRING BETWEEN AUXILIARY CONTROL PANEL AND THE SIGN BUT DO NOT TERMINATE. LEAVE ENOUGH CABLE AT BOTH ENDS TO ALLOW TERMINATION BY THE MANUFACTURER.

POWER TO VARIABLE MESSAGE SIGN: 4 of AWG4 CONDUCTOR (120V, 120V, NEUT, GND) TERMINATE AT LOAD CENTER IN SIGN

AUXILIARY CONTROL PANEL

POWER TO AUXILIARY CONTROL PANEL: 3 OF AWG8 CONDUCTOR (120V, NEUT, GND) TERMINATE IN PANEL AS DIRECTED BY THE MANUFACTURER.



FURNISH AND INSTALL 2 of 1 1/2" CONDUIT FOR INTERFACE BETWEEN THE SIGN AND THE STRUCTURE. INSTALL A PULL STRING IN THE CONDUIT BETWEEN THE SIGN AND AUXILIARY CONTROL PANEL ALONG WITH THE CAT 5 CABLE.

CONTRACTOR FURNISHED STRUCTURE: DESIGN VERTICLE SHAFT AND MOUNTING BRACKETS FOR FULL SIZE SIGN. VARY HORIZONTAL ARM LENGTH PER SIGN WIDTH.

1 of 1 1/2" SCHED.80 PLASTIC CONDUIT 1 NO.6 AWG

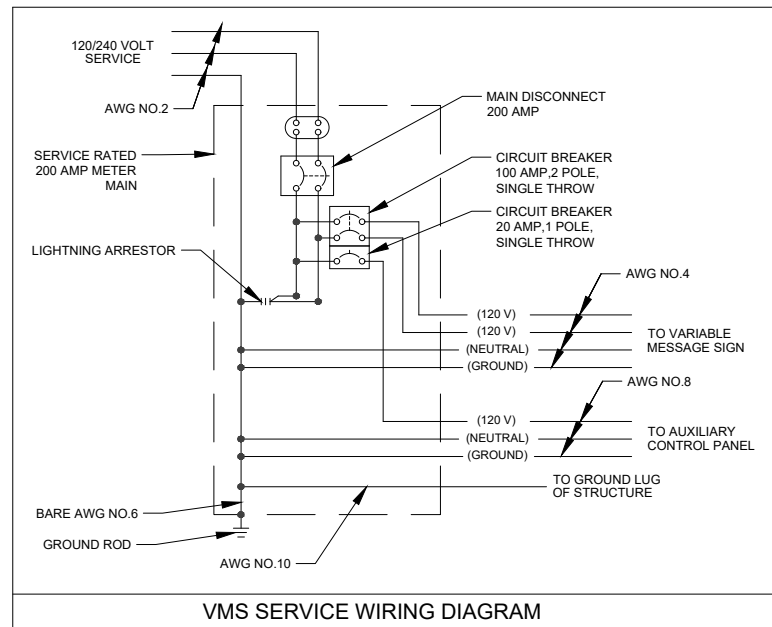
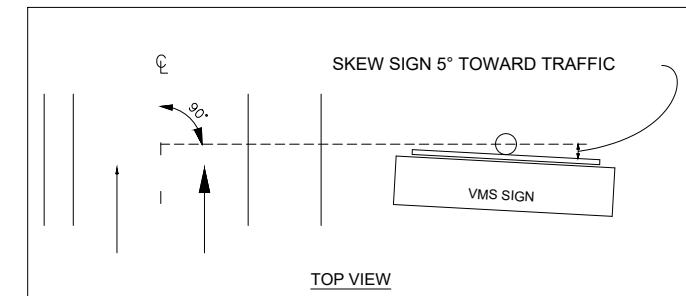
AUXILIARY CONTROL PANEL.

CONDUIT AND WIRING AS INDICATED IN PLANS.

3" Min. 6' Min. COPPERWELD GROUNDROD 5/8" x 8' WITHIN 10' OF POLE BASE

NOTES:

- MOUNT ALL SIGNS LEVEL HORIZONTALLY ON THE SIGN STRUCTURE AND SKEW TOWARD TRAFFIC AS SHOWN.
- INCLUDE MOUNTING HARDWARE IN THE BID PRICE FOR SIGN STRUCTURES. THIS INCLUDES CONDUIT FOR INSTALLATION OF WIRING BETWEEN STRUCTURES AND SIGNS.
- DESIGN ALL MOUNTING BRACKETS AND HARDWARE TO ATTACH TO THE VMS SIGNS.
- DESIGN SIGN STRUCTURE IN ACCORDANCE WITH THE CURRENT AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS AND ANY AMENDMENTS THERETO.
- DESIGN WIND VELOCITY = 130 MPH + 30% GUST LOADING.
- DESIGN AREA = AREA WITH RESPECT TO MAX. WIND LOAD.
- DESIGN WEIGHT OF VMS SIGN: DEAD WT = 5000 lb. LIVE LOAD = 1000 lb.
- PROVIDE ANCHOR RODS CONFORMING TO ASTM F1554 OR EQUAL, THREAD AND GALVANIZE THE TOP END 12 INCHES MIN.
- WELDING PROCEDURES, SYMBOLS, BASE METAL SPECIFICATIONS & GRADES MUST BE CALLED OUT PRIOR TO FABRICATION OR APPROVAL.
- GALVANIZE POLES AND ARMS TO ASTM DESIGNATION : A123.
- GALVANIZE ACCESSORIES TO ASTM DESIGNATION : A153.
- CONTRACTOR TO DETERMINE FOUNDATION SIZE BASED ON RW RESTRICTIONS, DESIGN LOADS AND SOILS DATA.



VMS SERVICE WIRING DIAGRAM