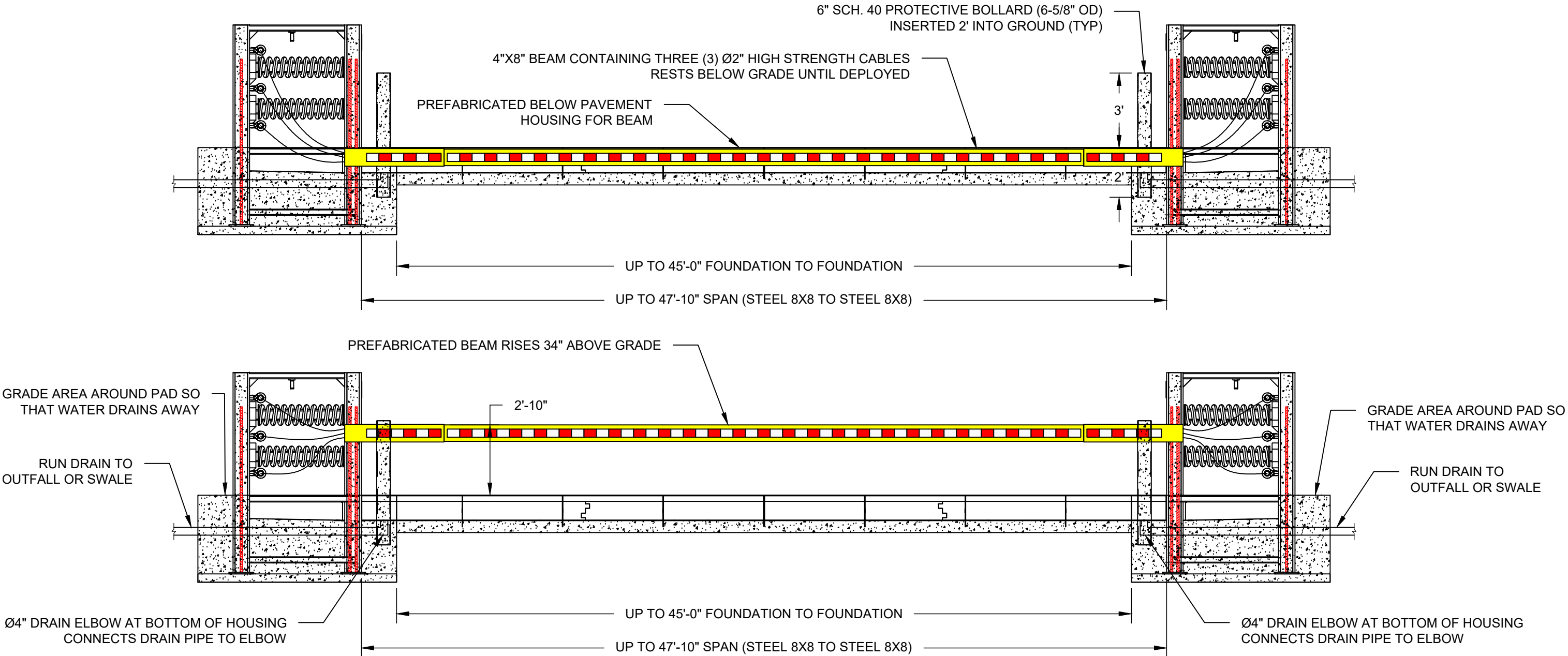


B1 NIMITZ M50

HORIZONTAL CRASH BEAM - MODEL HCB-ELE-1200

CRASH TESTED TO ASTM F2656-07 - M50/P2 RATED - STOPS 15,000 LB. VEHICLE AT 50 MPH IMPACT

CRASH BEAM ELEVATION VIEW



NOTE:

1. BARRIER LENGTH IS APPROXIMATE. CONFIRM SPACING ON ACTUAL SITE.



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HORIZONTAL CRASH BEAM
ELEVATION VIEW AND DETAIL
(1 OF 2)

HCB-ELE-1200
WEBSITE DRAWING

SHEET: 1 OF 12

20250625-10-M

SCALE: N.T.S.

CRASH TESTED TO ASTM F2656-07 - M50/P2 RATED - STOPS 15,000 LB. VEHICLE AT 50 MPH IMPACT

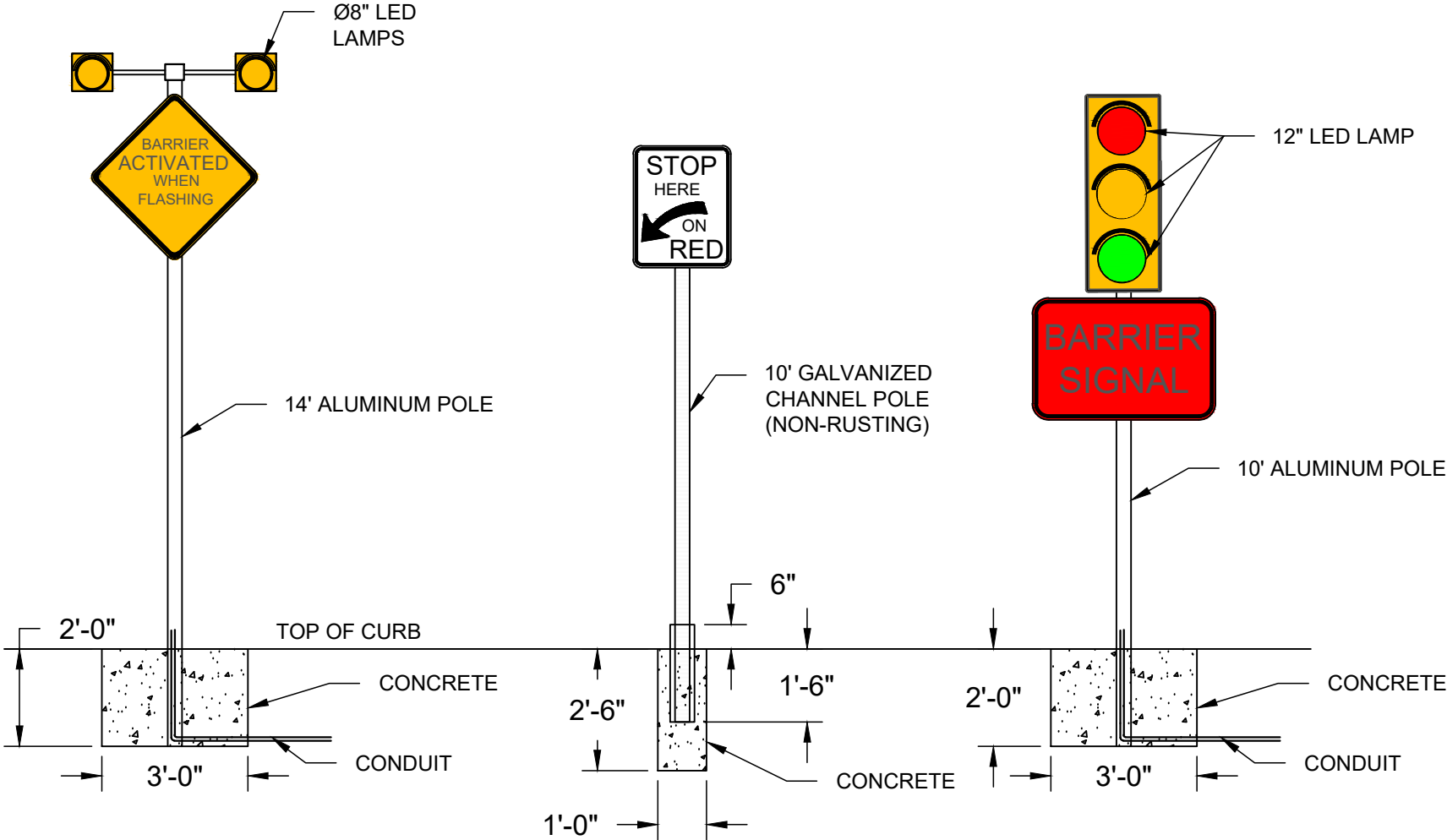
Ø2" HIGH STRENGTH CABLES
 8X8 TUBES FILLED WITH 4000 PSI CONCRETE
 FOUR (4) #8 REBAR @80" INSIDE FRONT 8X8 TUBES
 CRASH BEAM REST 1/2" BELOW GRADE WHEN LOWERED
 BELOW PAVEMENT HOUSING FOR BARRIER BEAM
 ELEVEN (11) #8 REBAR @60"
 SEVEN (7) #8 REBAR @84"
 COMPRESSION SPRINGS PARTIALLY ABSORB FORCE OF IMPACT
 TWO (2) #8 REBAR @80" INSIDE REAR 8X8 TUBES
 4'-11 1/4"
 2'-10"
 3'-6"
 4"
 RUN DRAIN TO OUTFALL OR SWALE
 Ø4" DRAIN ELBOW AT BOTTOM OF HOUSING CONNECTS DRAIN PIPE TO ELBOW
 SPACE BELOW BEAM FOR GRAVITY DRAIN
 1'-6"
 5 15/16"
 2'
 4"X8" BEAM CONTAINING THREE (3) Ø2" HIGH STRENGTH CABLES
 4000 PSI CONCRETE
 TWO (2) Ø1-1/2" CONDUITS CONNECTS END SUPPORT
 PROTECTIVE BOLLARD
 ELEVEN (11) #8 REBAR @60"
 ANGLE REBAR AS NEEDED TO FIT AROUND END SUPPORT
 FOUR (4) #8 REBAR @80" INSIDE FRONT 8X8 TUBES
 TWO (2) #8 REBAR @80" INSIDE REAR 8X8 TUBES
 6'
 8'
 4000 PSI CONCRETE
 RUN DRAIN TO OUTFALL OR SWALE



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HORIZONTAL CRASH BEAM - MODEL HCB-ELE-1200

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SIGNS AND SIGNAL
ELEVATIONS

HCB-ELE-1200
WEBSITE DRAWING

SHEET: 3 OF 12

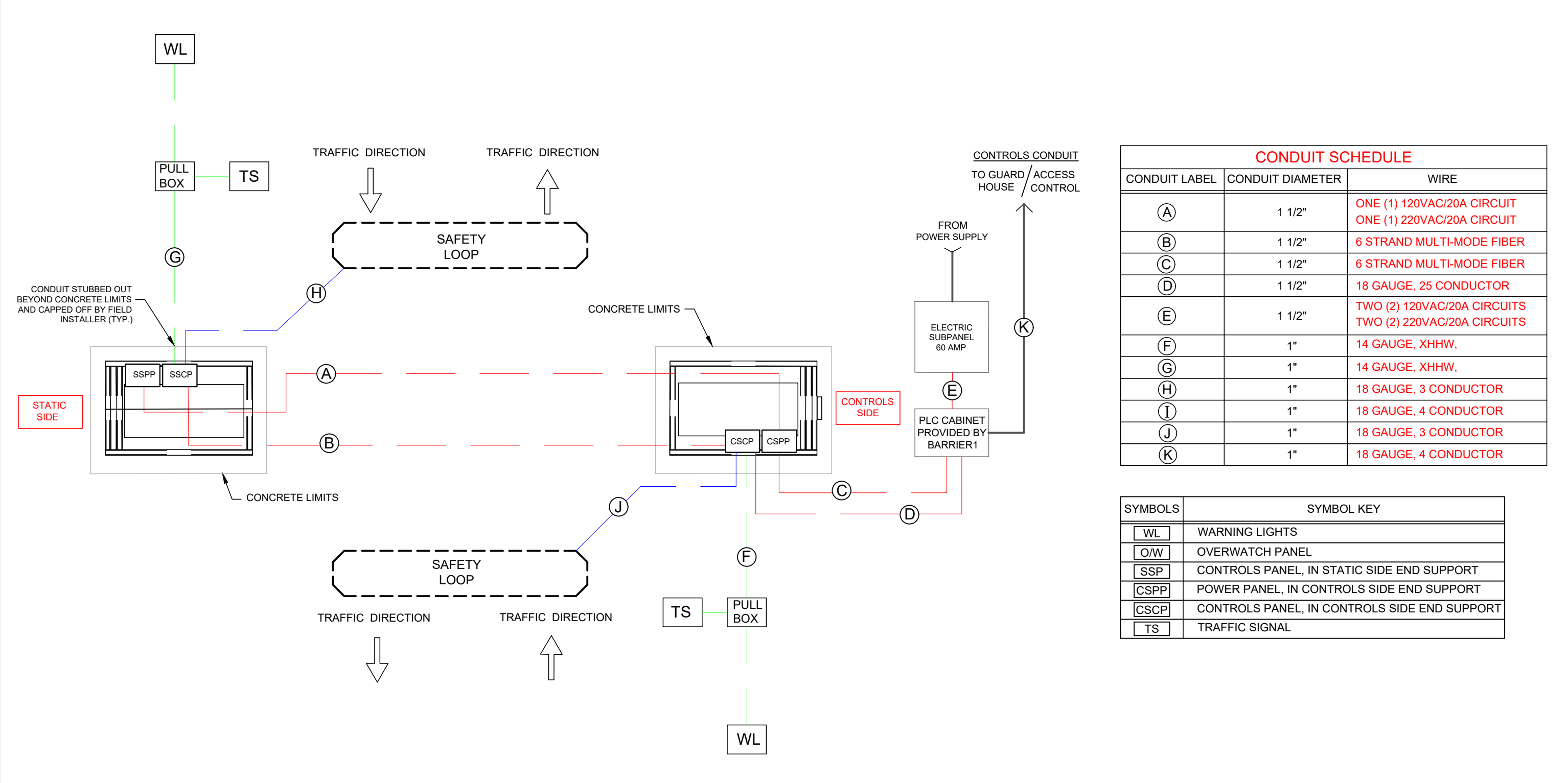
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SCALE: N.T.S.

B1 NIMITZ M50

HORIZONTAL CRASH BEAM - MODEL HCB-ELE-1200

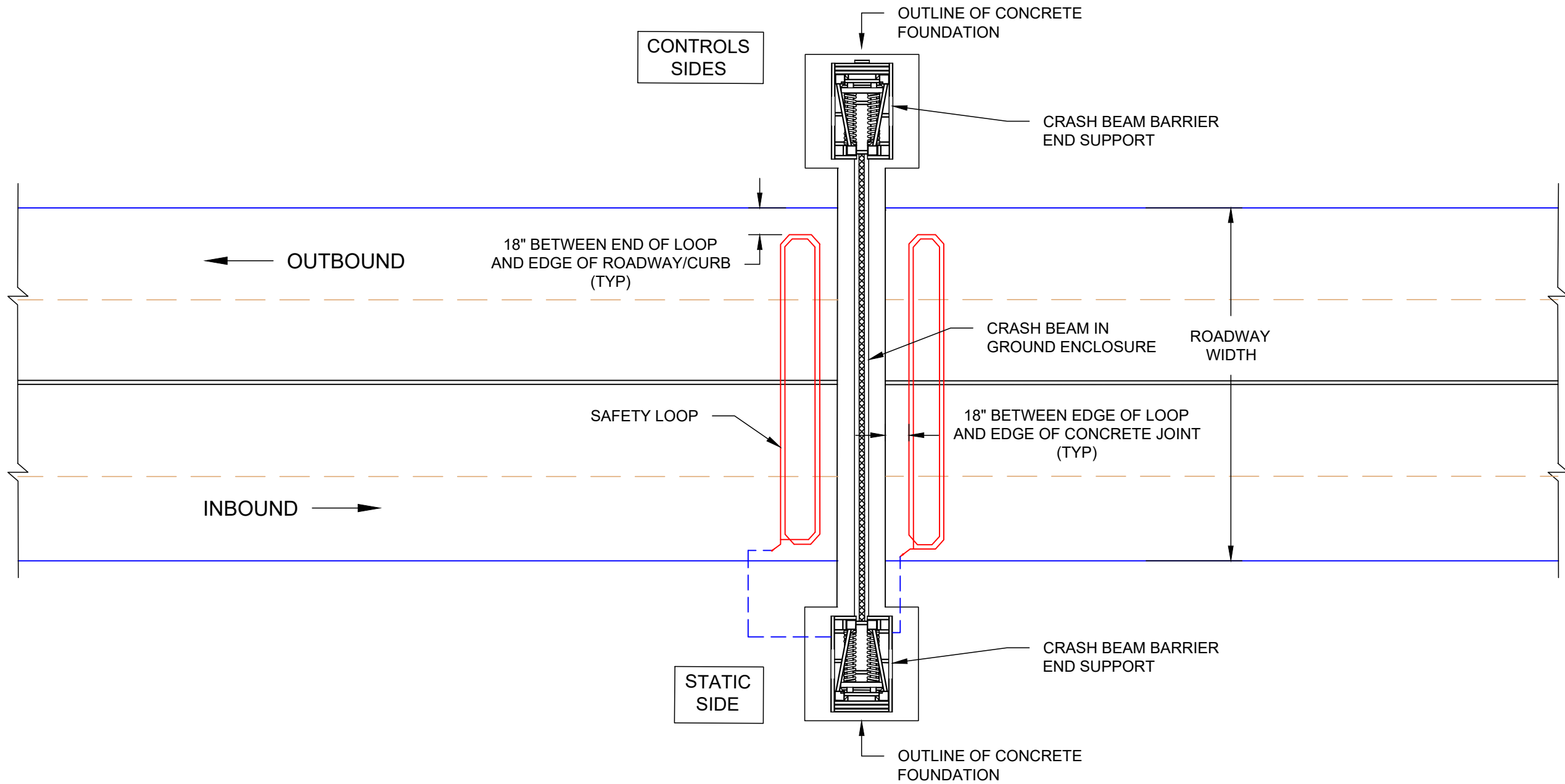
CRASH TESTED TO ASTM F2656-07 - M50/P2 RATED - STOPS 15,000 LB. VEHICLE AT 50 MPH IMPACT



B1 NIMITZ M50

HORIZONTAL CRASH BEAM - MODEL HCB-ELE-1200

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SAFETY LOOP DETAIL

HCB-ELE-1200
WEBSITE DRAWING

SHEET: 5 OF 12

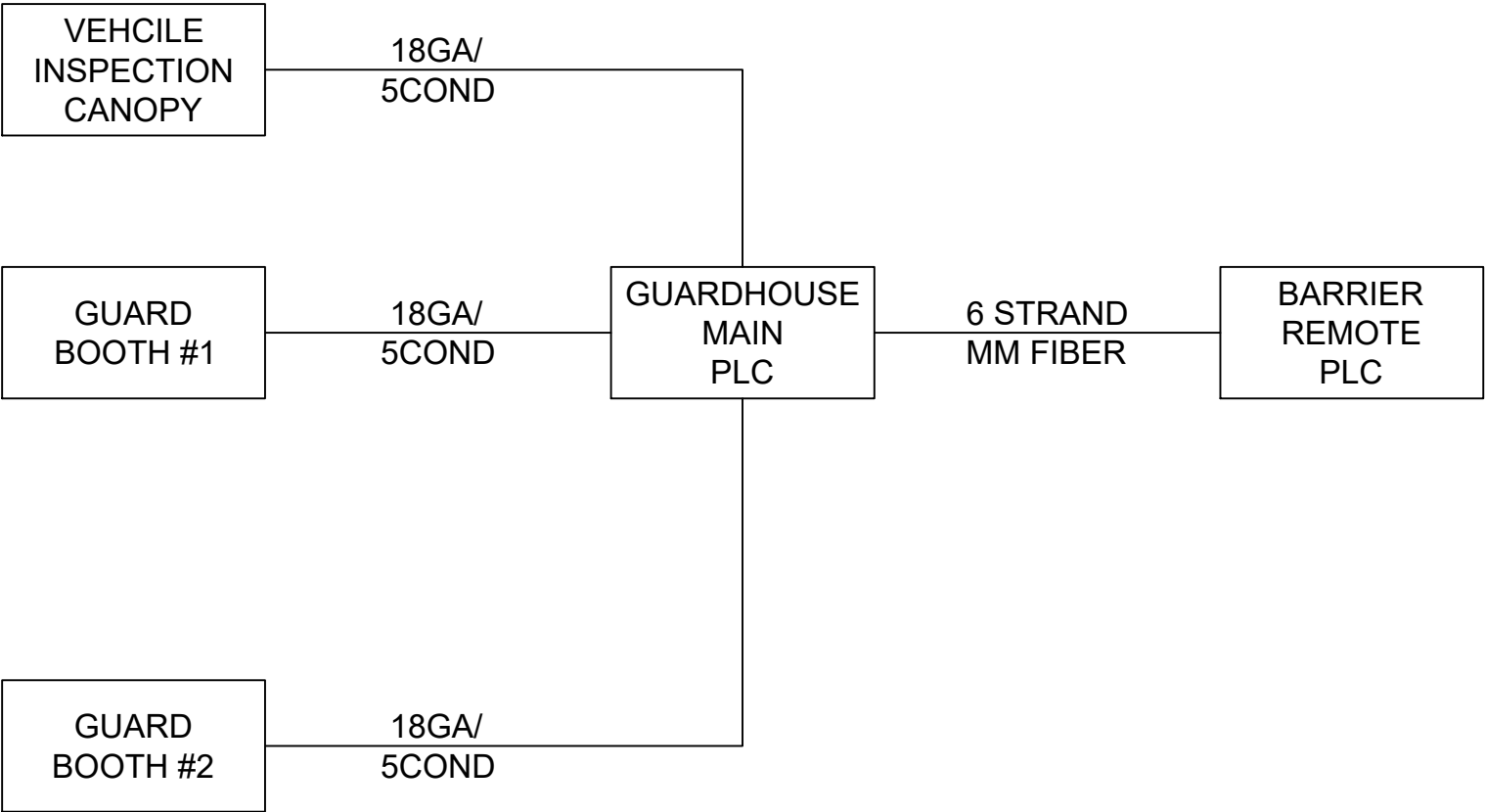
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SITE COMMUNICATION CABLING

HCB-ELE-1200
WEBSITE DRAWING

SHEET: 6 OF 12

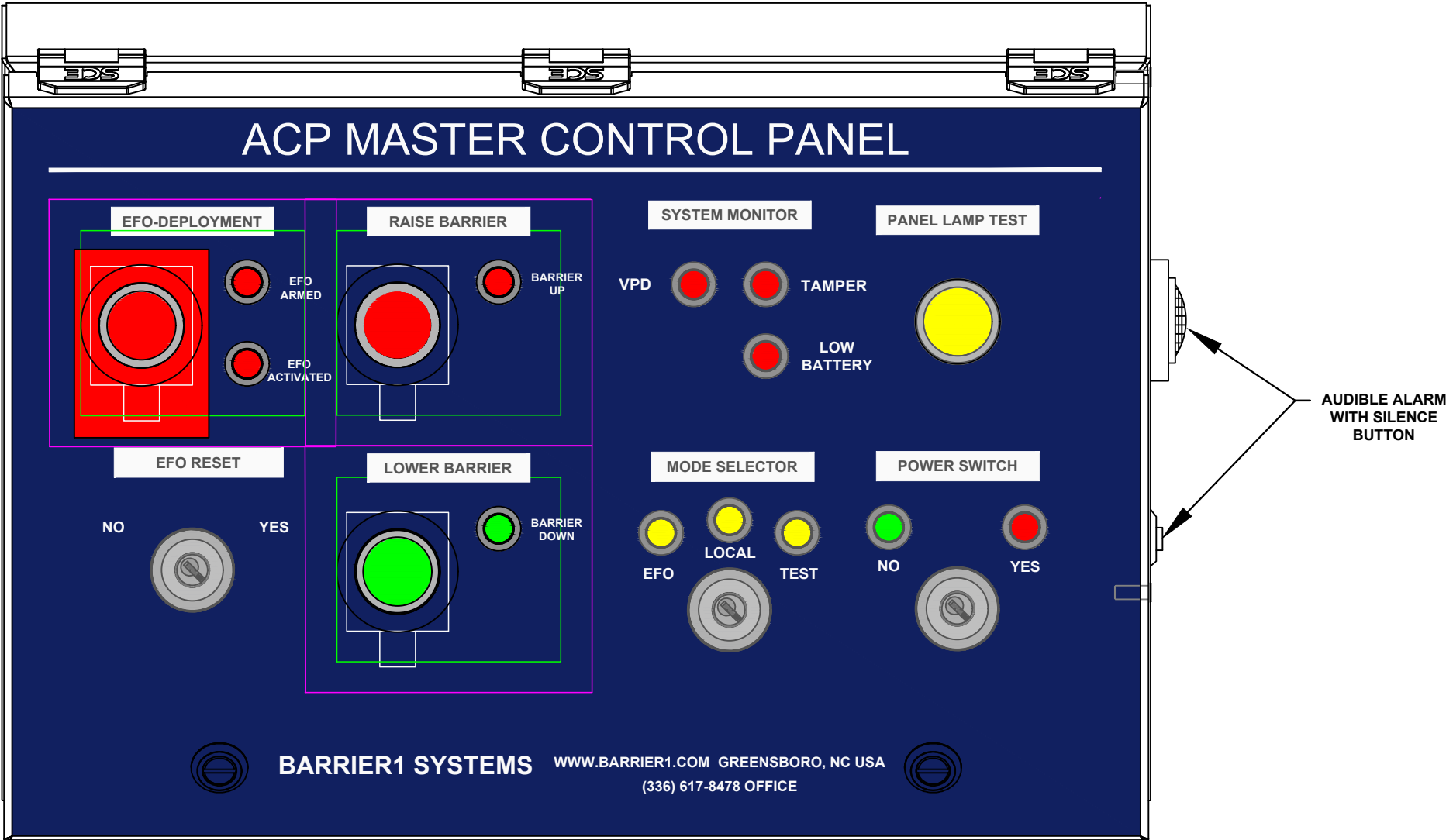
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HORIZONTAL CRASH BEAM - MODEL HCB-ELE-1200

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NOTE:
1. FINAL CONTROL LAYOUT TO BE DECIDED.



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MASTER CONTROL PANEL

HCB-ELE-1200
WEBSITE DRAWING

SHEET: 7 OF 12

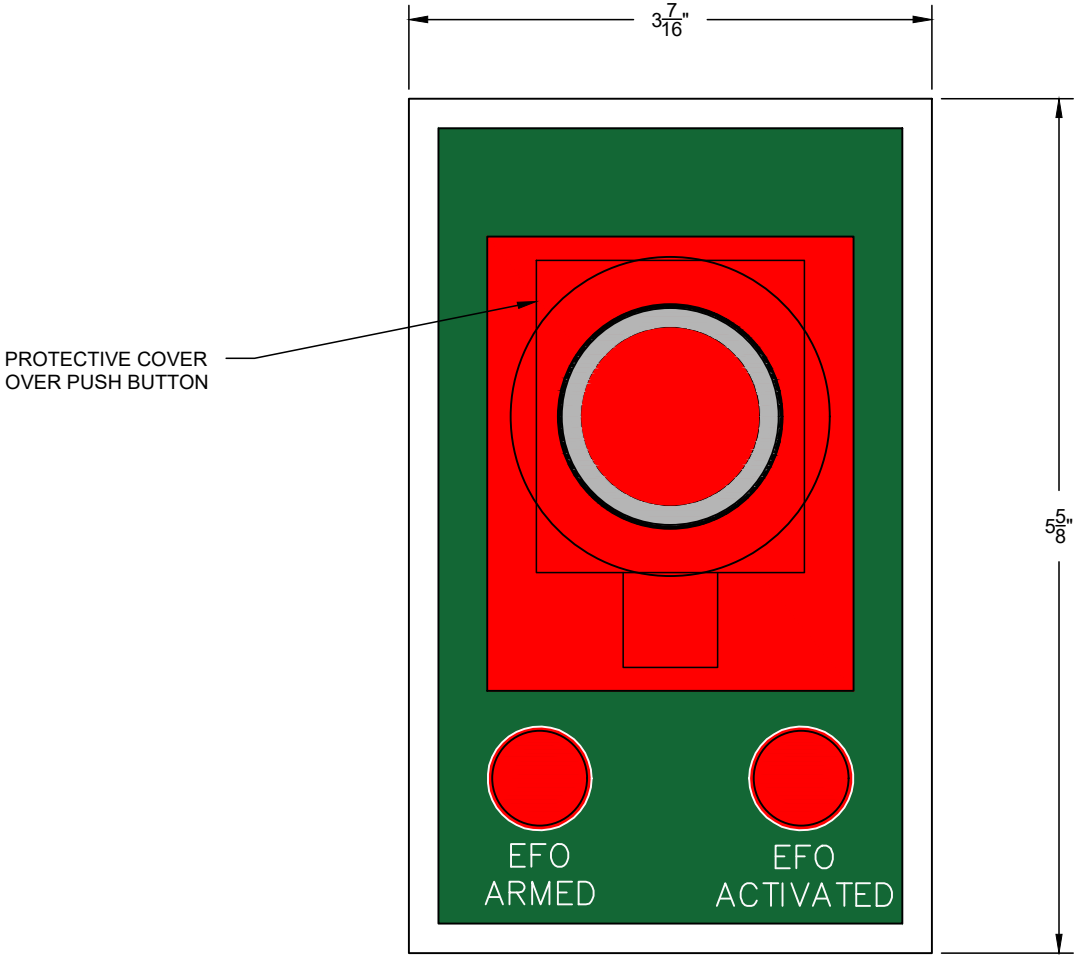
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SCALE: N.T.S.

B1 NIMITZ M50

HORIZONTAL CRASH BEAM - MODEL HCB-ELE-1200

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NOTE:
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REMOTE CONTROLLER

HCB-ELE-1200
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SHEET: 8 OF 12

20250625-10-M

SCALE: N.T.S.

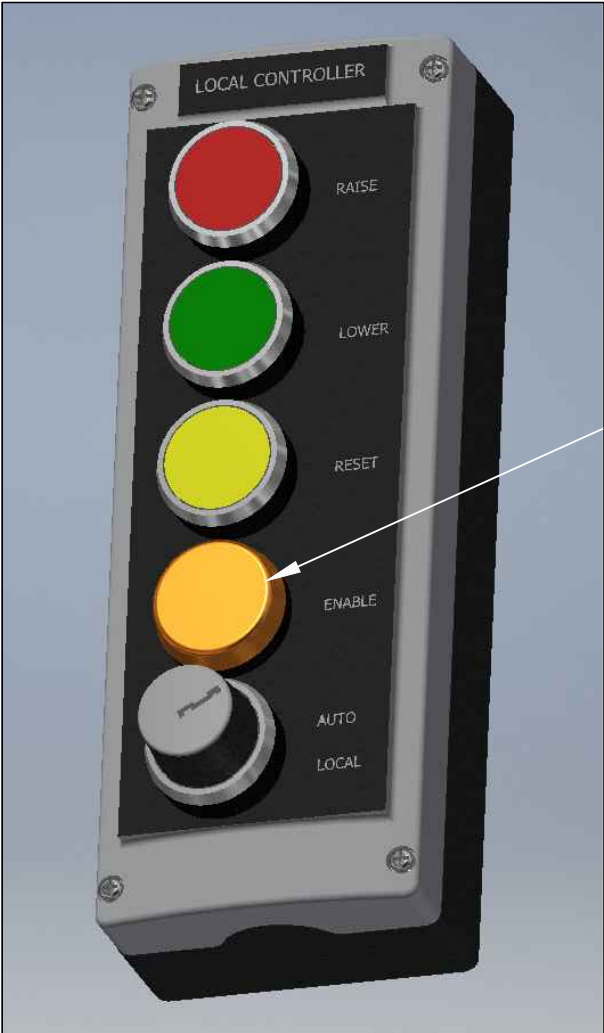
B1 NIMITZ M50

HORIZONTAL CRASH BEAM - MODEL HCB-ELE-1200

CRASH TESTED TO ASTM F2656-07 - M50/P2 RATED - STOPS 15,000 LB. VEHICLE AT 50 MPH IMPACT

LOCAL BARRIER CONTROLLERS

LOCAL CONTROLLER



LAMP INDICATES THAT LOCAL
CONTROLLER HAS BEEN ENABLED
AT MASTER CONTROL PANEL.



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LOCAL CONTROLS

HCB-ELE-1200
WEBSITE DRAWING

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B1 NIMITZ M50

HORIZONTAL CRASH BEAM - MODEL HCB-ELE-1200

CRASH TESTED TO ASTM F2656-07 - M50/P2 RATED - STOPS 15,000 LB. VEHICLE AT 50 MPH IMPACT

CONTROLS COMMUNICATION SCHEMATIC

OPERATIONAL SEQUENCE PER SECOND (MIN. FOR SAFETY - 40 KPH (25MPH) DESIGN SPEED												
	ELAPSED TIME	0	1	2	3	4	5	6	7	8	9	10
TRAFFIC CONTROLS AND SAFETY AT ACTIVE BARRIER	TRAFFIC CONTROLS	NORMAL OPERATION	GUARD PERCEPTION AND REACTION TIME TO THREAT (EFO BUTTON) - 4 SECONDS						DEPLOYING BARRIER			THREAT CONTAINED
SIGN AND SIGNAL WARNING SYSTEM	WARNING SIGNS AND LIGHT WITH BEACONS	OFF	OFF	OFF	OFF	FLASHING YELLOW	FLASHING YELLOW	FLASHING YELLOW	FLASHING YELLOW	FLASHING YELLOW	FLASHING YELLOW	FLASHING YELLOW
	TRAFFIC SIGNAL	GREEN	GREEN	GREEN	GREEN	YELLOW	YELLOW	YELLOW	RED	RED	RED	RED
	AUDIBLE SIREN ALARM	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON
	SAFETY LOOP DETECTORS	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
	ACTIVE BARRIER POSITION	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	ACTIVATED	ACTIVATED	ACTIVATED	DEPLOYED

NOTES:

1. SEQUENCING AND TIMING OF SIGNALS, ALARMS AND LIGHTS CAN BE FIELD ADJUSTED USING PLC.
2. SAFETY LOOP DETECTORS PREVENT DEPLOYMENT OF BARRIER IF A VEHICLE IS ABOVE LOOP.
BARRIER DEPLOYS AFTER VEHICLE PASSES OVER THE SAFETY LOOPS.



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TIME SEQUENCING DIAGRAM

HCB-ELE-1200
WEBSITE DRAWING

SHEET: 10 OF 12

20250625-10-M

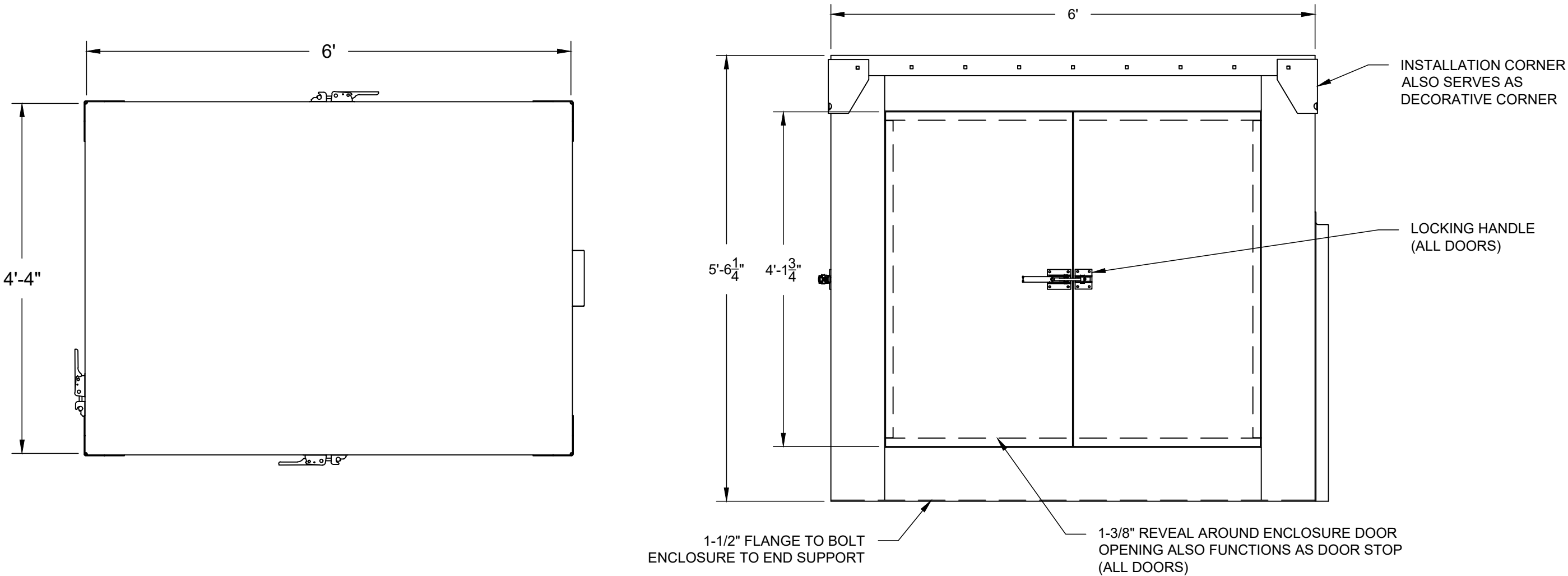
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END SUPPORT ENCLOSURES AND LOCKING ACCESS DOORS



NOTES:

1. ENCLOSURE MATERIALS ARE 3/16" ALUMINUM WITH STANDARD PAINTED GRAY FINISH.
2. ENCLOSURES HAVE DOUBLE DOORS ON BOTH SIDES, AND A SINGLE DOOR IN REAR.



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ENCLOSURE DETAIL
(1 OF 2)

HCB-ELE-1200
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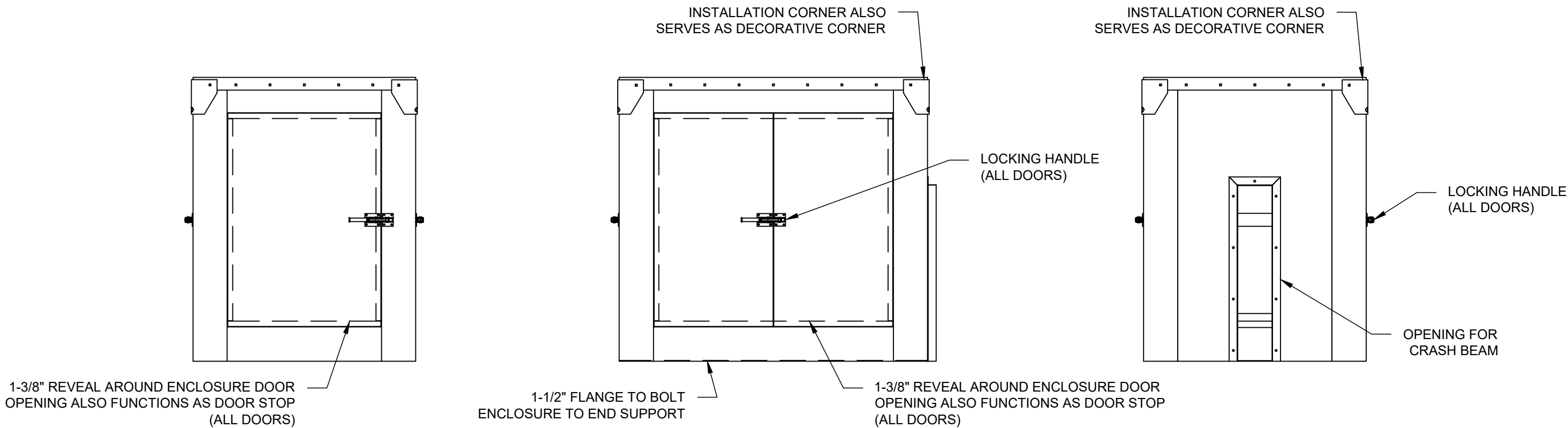
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CONTROL AND STATIC SIDE END SUPPORT ENCLOSURES



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ENCLOSURE DETAIL
(2 OF 2)

HCB-ELE-1200
WEBSITE DRAWING

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