

TOWN OF TRUMBULL, CT

PEQUONNOCK RIVER TRAIL CROSSING IMPROVEMENTS

ROUTE 111 AT OLD MINE ROAD

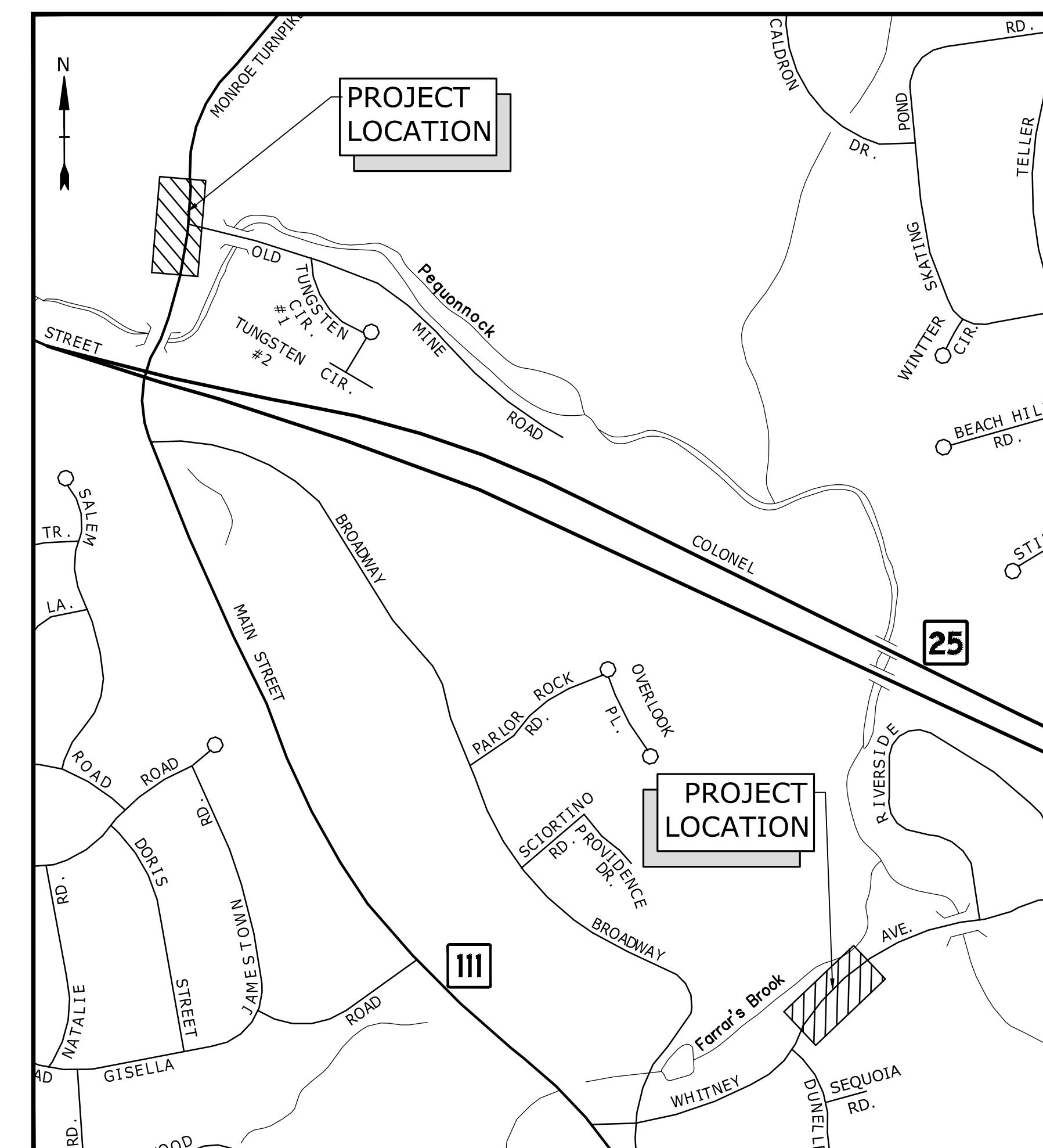
WHITNEY AVE. AT PEQUONNOCK RIVER TRAIL

AUGUST 2018

LIST OF DRAWINGS	
SHEET NO.	SHEET TITLE
	COVER SHEET
C1.00	TRAIL CROSSING IMPROVEMENT PLAN - ROUTE 111 - 1
C1.01	TRAIL CROSSING IMPROVEMENT PLAN - ROUTE 111 - 2*
C1.02	MISCELLANEOUS DETAILS - ROUTE 111 - 1
C1.03	MISCELLANEOUS DETAILS - ROUTE 111 - 2
C1.04	MISCELLANEOUS DETAILS - ROUTE 111 - 3
C1.05	TEMPORARY TRAFFIC CONTROL PLAN - ROUTE 111 - 1
C1.06	TEMPORARY TRAFFIC CONTROL PLAN - ROUTE 111 - 2
C1.07	TEMPORARY TRAFFIC CONTROL PLAN - ROUTE 111 - 3
C1.08	TRAFFIC CONTROL DETAILS - ROUTE 111
C2.00	TRAIL CROSSING IMPROVEMENT PLAN - WHITNEY AVENUE - 1
C2.01	TRAIL CROSSING IMPROVEMENT PLAN - WHITNEY AVENUE - 2
C2.02	MISCELLANEOUS DETAILS - WHITNEY AVENUE

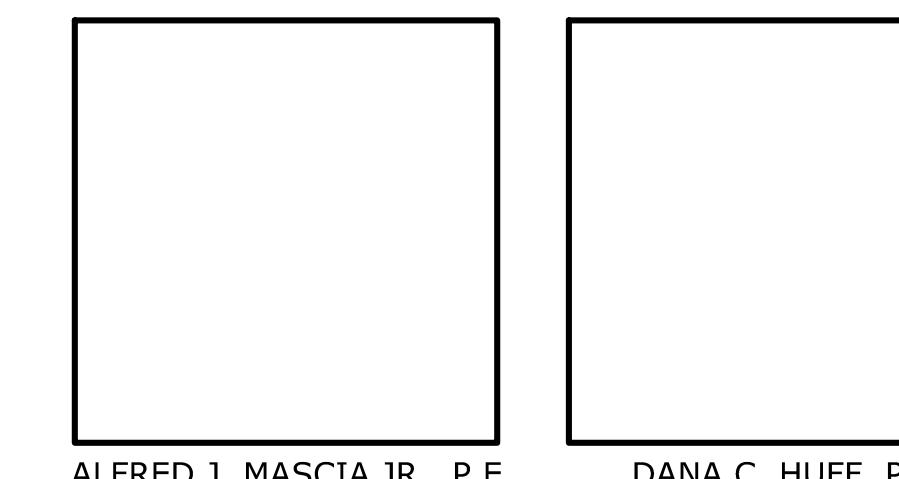
*PLAN FOR CTDOT USE ONLY - CONTRACTOR SEE SHEET C1.00

CTDOT STANDARD SHEETS	
SHEET NO.	SHEET TITLE
HW-811_01	CONCRETE CURBING
TR-1000_01	GENERAL CLAUSES
TR-1001_01	TRENCHING AND BACKFILLING ELECTRICAL CONDUIT
TR-1002_01	TRAFFIC CONTROL FOUNDATIONS
TR-1010_01	CONCRETE HANDHOLE
TR-1102_01	PEDESTALS, PEDESTRIAN SIGNALS
TR-1107_01	PEDESTRIAN PUSH BUTTONS
TR-1208_01	SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS
TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAIL
TR-1210_04	PAVEMENT MARKING LINES AND SYMBOLS
TR-1220_01	SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS
TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES

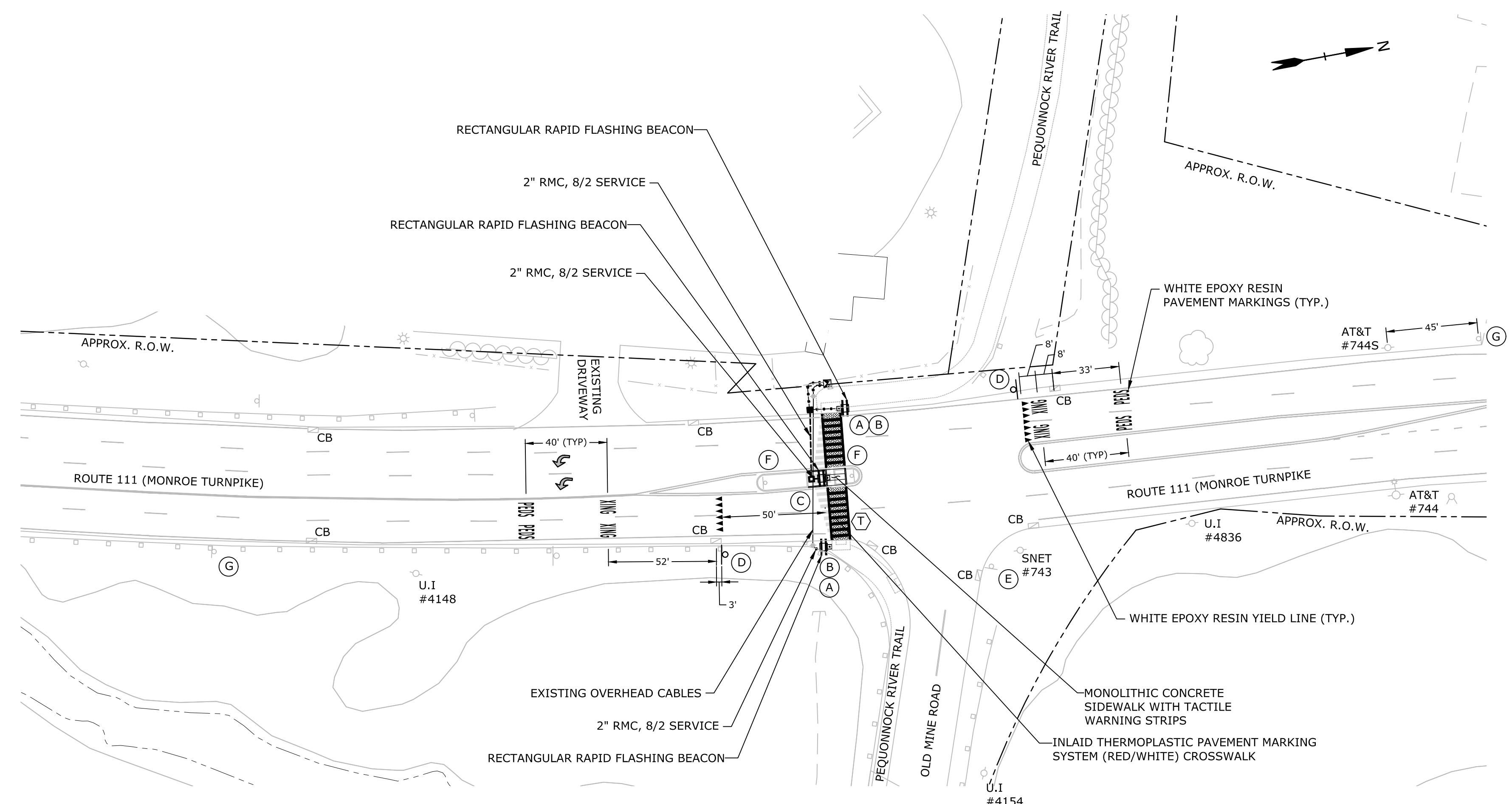
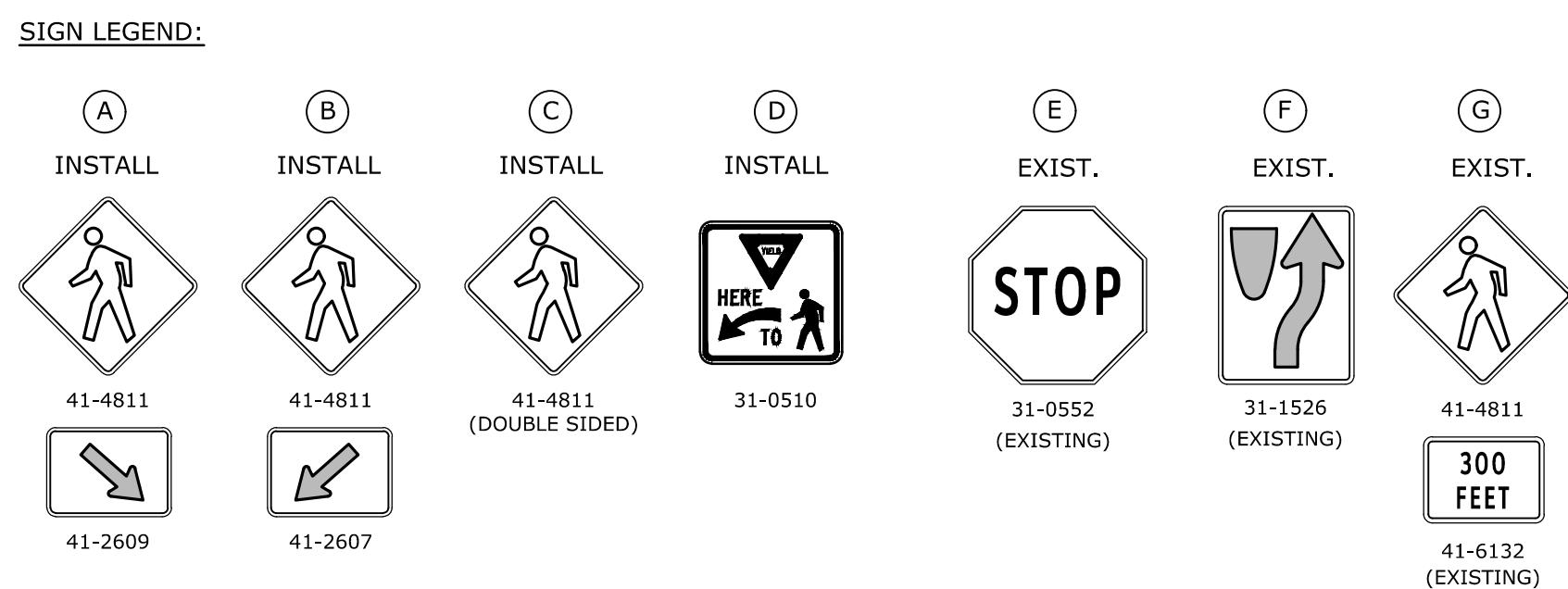


LOCATION MAP
SCALE: 1" = 500'

PREPARED BY:
Tighe&Bond
www.tighebond.com
1000 Bridgeport Avenue
Suite 320
Shelton, CT 06484
(203) 712-1100



PREPARED FOR:
TOWN OF TRUMBULL
FIRST SELECTMAN: VICKI A. TESORO
DIRECTOR OF PUBLIC WORKS: JOHN MARSILIO
TOWN ENGINEER: FRANK SMERIGLIO



**PLAN FOR CTDOT USE
ONLY - CONTRACTOR SEE
SHEET C1.00**

Pequonnock River Trail Crossing Improvements

Town of Trumbull

Trumbull, CT

NOTES:

1. TOWN OF TRUMBULL TO MAINTAIN "SLOW", "PEDS", "XING" PAVEMENT MARKINGS ON ROUTE 111, AND PAVEMENT MARKINGS ON OLD MINE ROAD.
2. STATE TO MAINTAIN ALL SIGNS AND OTHER PAVEMENT MARKINGS ON ROUTE 111 AND STOP BAR ON OLD MINE ROAD
3. RECTANGULAR RAPID FLASHING BEACON (RRFB) TO BE ACTIVATED BY PEDESTRIAN PUSHBUTTONS.
4. RRFB SHALL MEET THE FLASHING REQUIREMENTS OF THE MUTCD AND THE FHWA INTERIM APPROVAL AND REMAIN ACTIVATED FOR A MINIMUM OF 18 SECONDS TO ALLOW PEDESTRIAN CROSSING OF THE FULL WIDTH OF ROUTE 111.
5. PUSH BUTTONS TO BE INSTALLED WITH "PUSH BUTTON TO TURN ON WARNING LIGHTS" SIGN (CTDOT SIGN NO. 31-0846).
6. LIMITS OF FINAL PAVEMENT RESTORATION SHALL BE DETERMINED BY CTDOT.

817 NOTES:

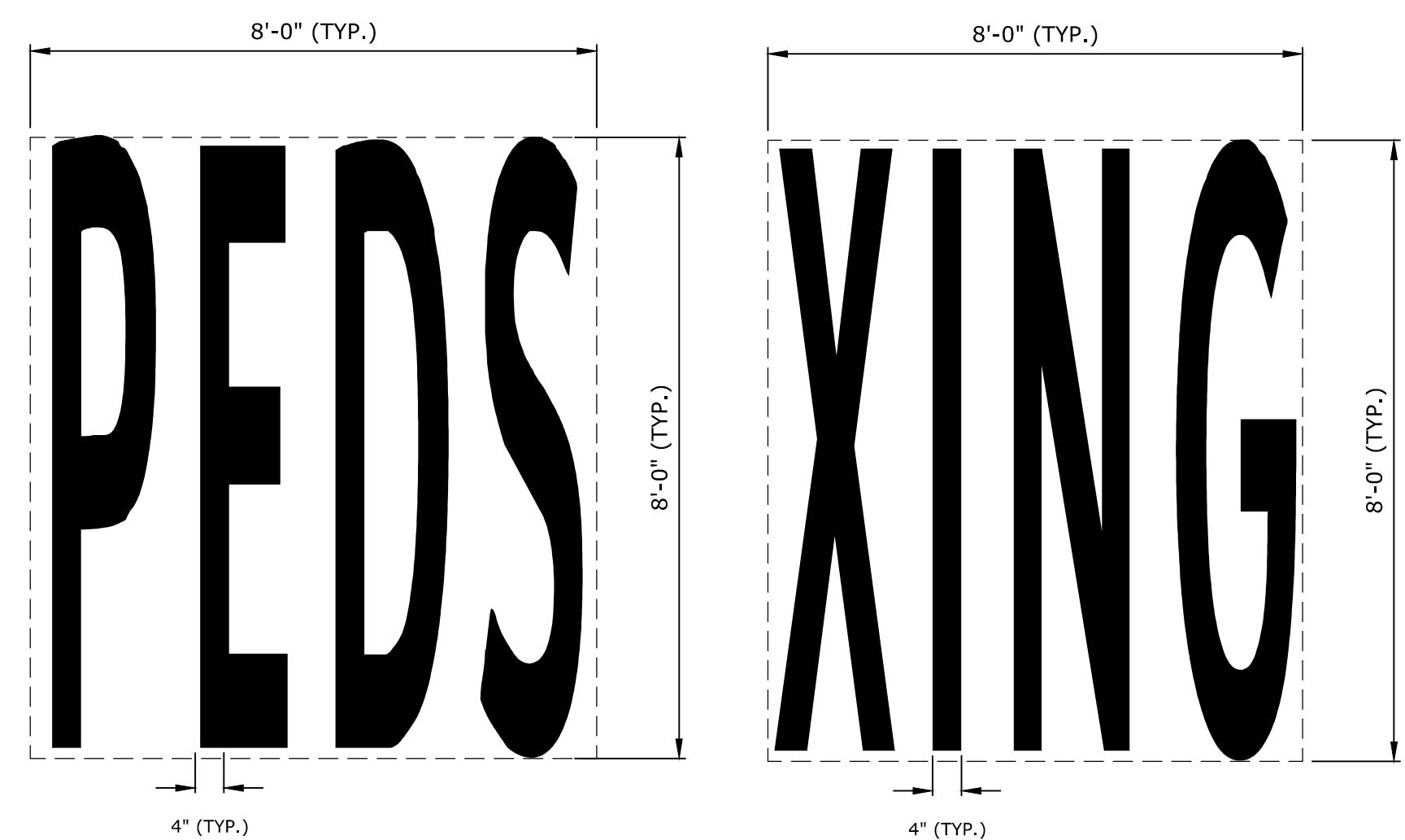
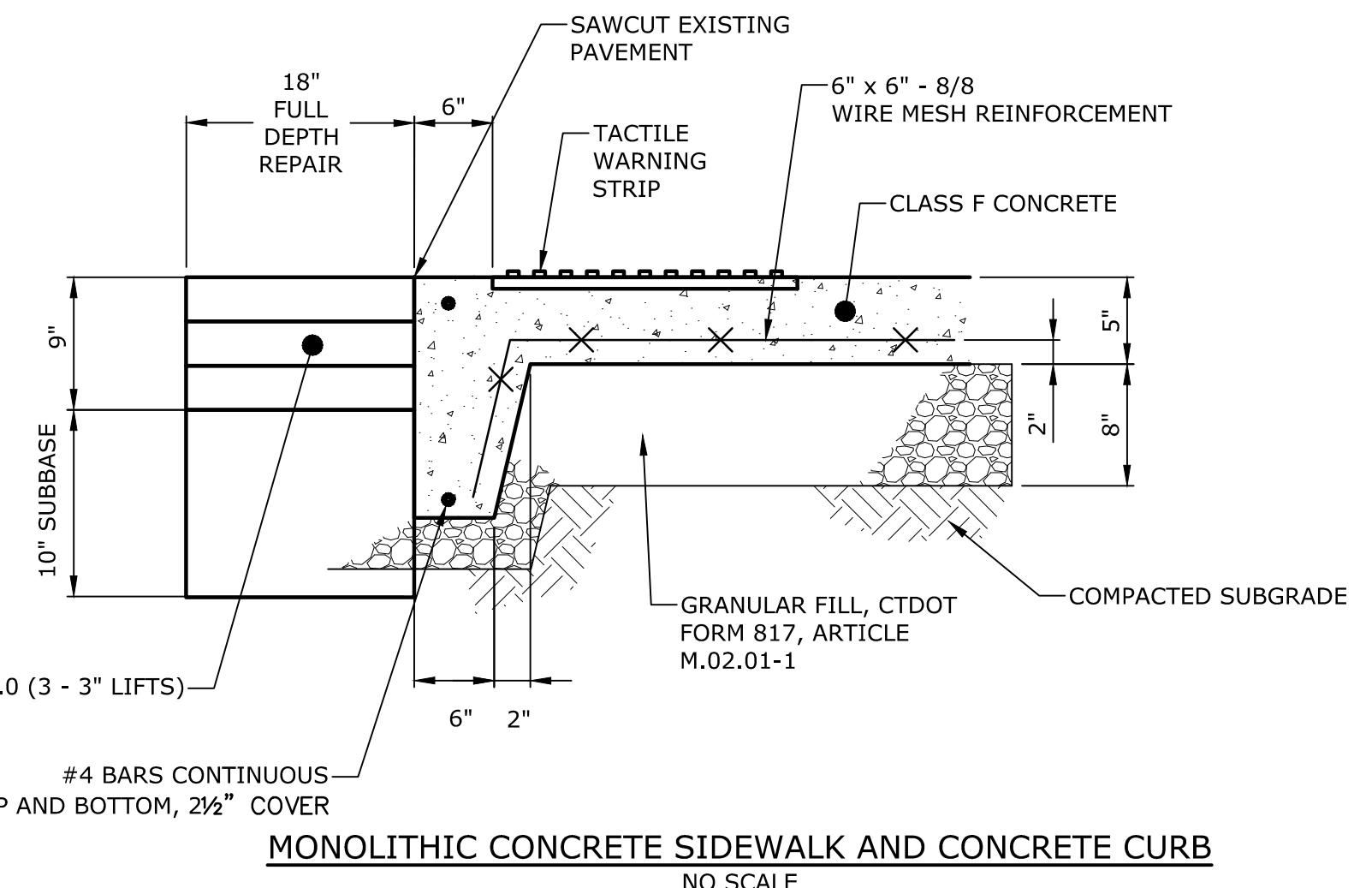
1. REMOVAL OF PAVEMENT MARKINGS ALONG STATE ROADWAYS SHALL BE COMPLETED BY A NON-DESTRUCTIVE METHOD IN COMPLIANCE WITH THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGES, AND INCIDENTAL CONSTRUCTION FORM 817 SECTION 12.11 AS REVISED.
2. NEW PAVEMENT MARKINGS SHALL BE PAINTED WITH EPOXY RESIN PAINT IN COMPLIANCE WITH THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION FORM 817 SECTION 12.10 AS REVISED.
3. NEW SIGN MATERIAL AND SHEETING SHALL BE MADE OF REFLECTIVE MATERIAL IN COMPLIANCE WITH STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION FORM 817 SECTION 12.08 AS REVISED.
4. ALL SIGNS AND PAVEMENT MARKINGS INSTALLED ALONG THE STATE ROAD MUST CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," THE LATEST STATE OF CONNECTICUT CATALOG OF SIGNS AND STANDARD AS REVISED.
5. ANY DAMAGE TO THE EXISTING CURB, SIDEWALK OR ANY OTHER HIGHWAY APPURTENANCES SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE DISTRICT 3 PERMIT SECTION AT NO ADDITIONAL COST.

1	08/21/2018	CTDOT COMMENTS
ARK	DATE	DESCRIPTION
PROJECT NO:		T0196-94
ATE:		08/21/2018
LE: T0196-94-C-100-SITE.dwg		
RAWN BY:		WGK
HECKED:		COG/AJM
PPROVED:		DCH
<h1 style="text-align: center;">TRAIL CROSSING IMPROVEMENT PLAN - ROUTE 111 - 2</h1>		
CALE:		AS NOTED
<h1 style="text-align: center;">C1.01</h1>		

Pequonnock River Trail Crossing Improvements

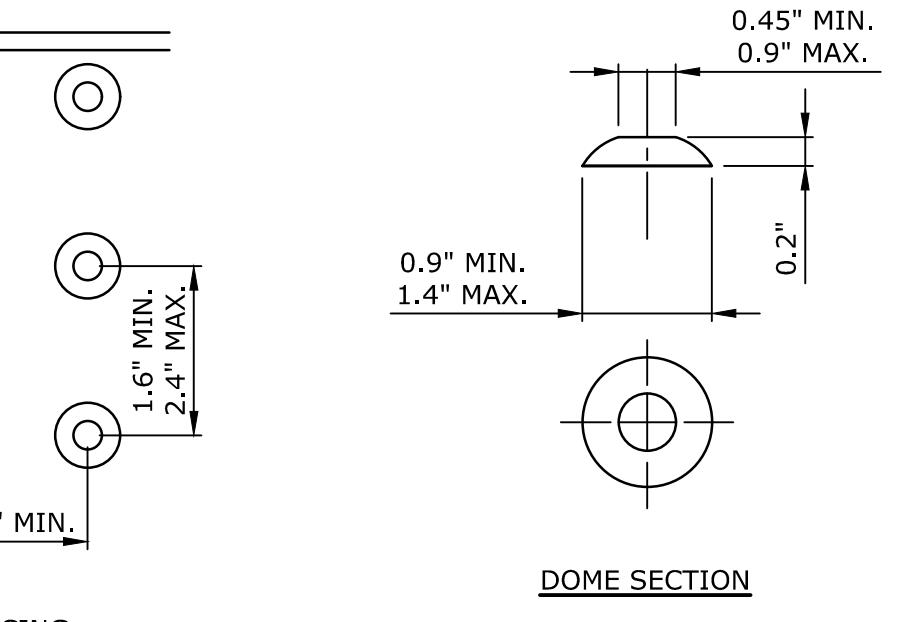
Town of Trumbull

Trumbull, CT

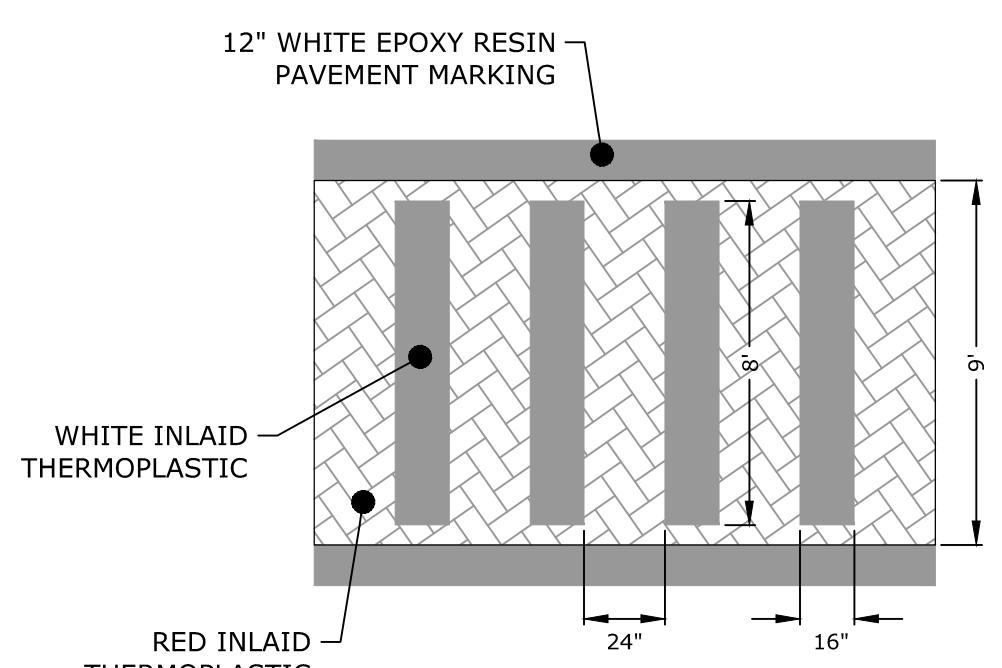


EPOXY RESIN PAVEMENT MARKING LEGEND

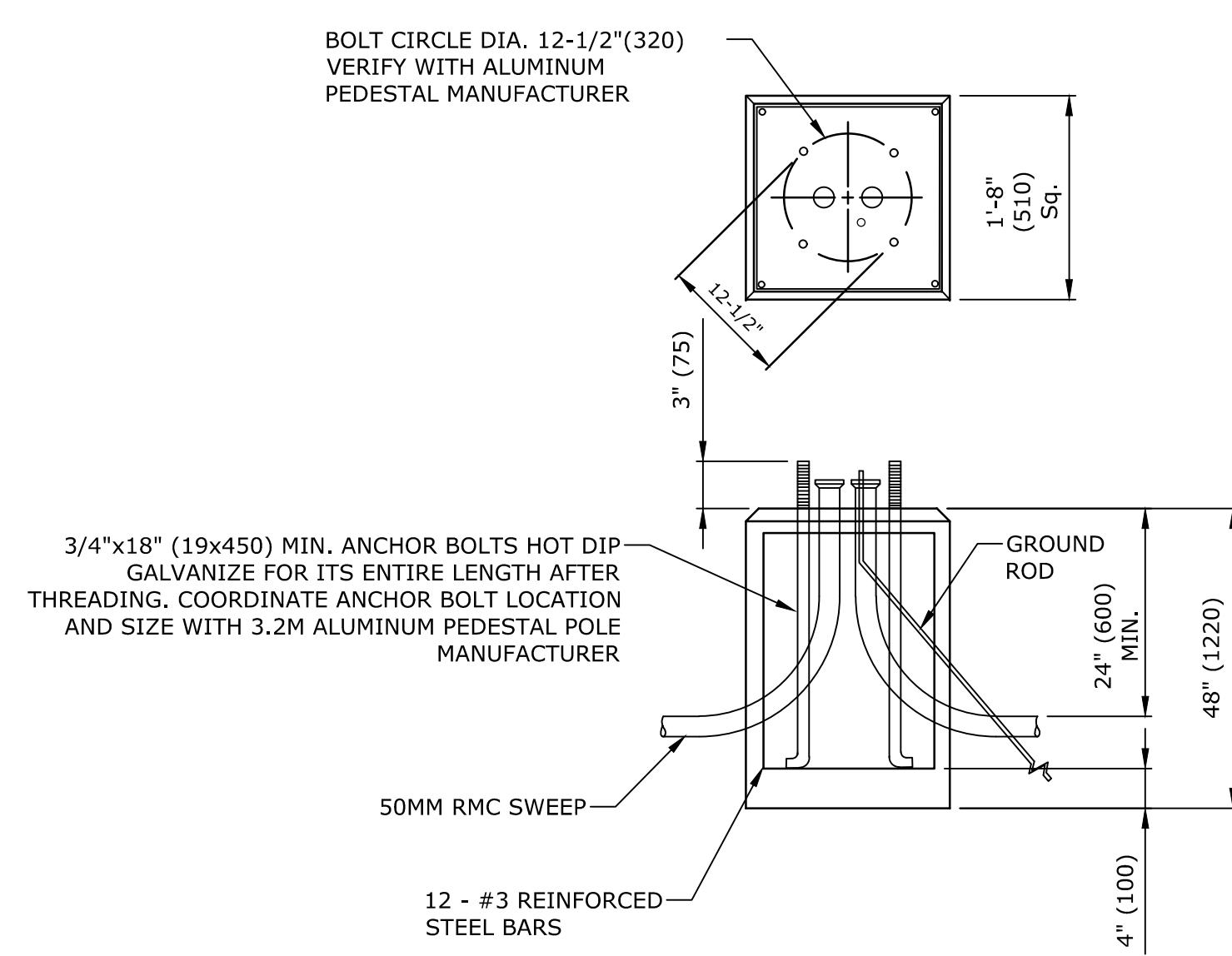
NO SCALE



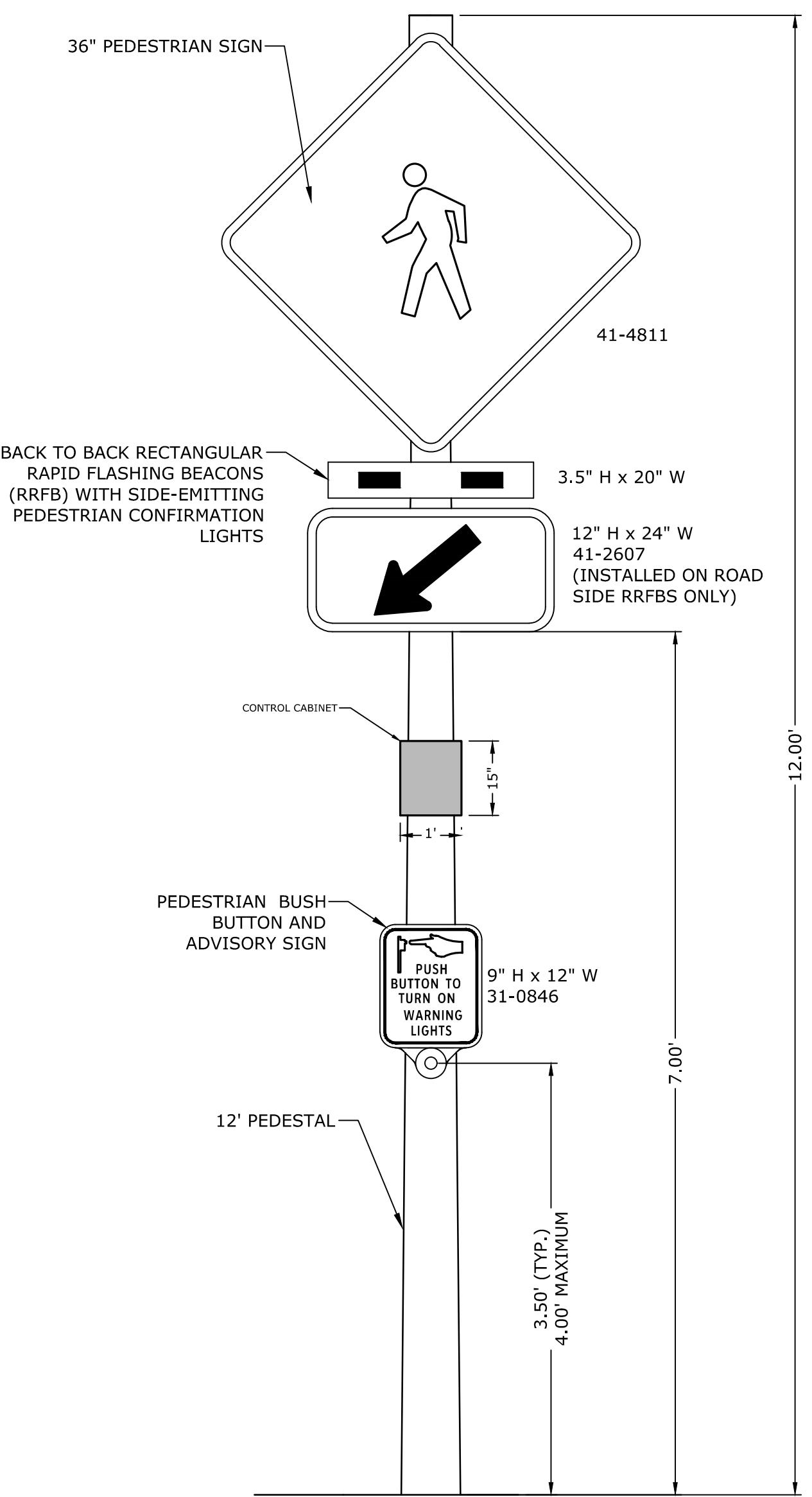
TACTILE WARNING STRIPS
NO SCALE



INLAID THERMOPLASTIC CROSSWALK DETAIL
NO SCALE



**TRAFFIC CONTROL FOUNDATION
PEDESTAL BASE - 48" DEEP
NO SCALE**



BACK TO BACK RECTANGULAR RAPID FLASHING BEACON DETAIL
NO SCALE

NOTES:

1. THE RRFB, AND PUSHBUTTONS SHALL BE BI-DIRECTIONAL CONFIGURATION AND HAVE SIDE-EMITTING PEDESTRIAN CONFIRMATION LIGHTS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR 12' ALUMINUM POLE.

NOTES:

1. INSTALL A MINIMUM OF ONE SPARE 2" (50) RMC SWEEPS IN ALL FOUNDATIONS.
2. EXTEND SPARE SWEEPS A MINIMUM OF 24" (600) FROM EACH SIDE.
3. INSTALL A MINIMUM OF TWO RMC SWEEPS IN ALL FOUNDATIONS.
4. FORM EXPOSED EDGES WITH 1"x1" (25x25) CHAMFER, EXCEPT EDGES ABUTTING CONCRETE, CURBING OR OTHER IMPERVIOUS SURFACES, IN WHICH CASE THE EDGES SHALL BE FLUSH WITH THE ADJACENT SURFACES.
5. MATCH TOP OF FOUNDATION WITH CROSS SLOPE OF ADJACENT SIDEWALK.
6. BOND ALL CONDUITS, POLES, PEDESTALS AND CONDUITS TO GROUND ROD.
7. ANCHOR BOLT LENGTH INCLUDES BEND.
8. WHERE AN EXISTING CONCRETE SLAB ABUTTING A FOUNDATION OR HANHOLE IS DAMAGED OR CUT DURING CONDUIT INSTALLATION THAT SECTION SHALL BE REPLACED.
9. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR FOUNDATION DESIGN.

1	08/21/2018	CTDOT COMMENTS
ARK	DATE	DESCRIPTION
PROJECT NO:		T0196-94
ATE:		08/21/2018
LE: T0196-94-C-101-DETL.dwg		
RAWN BY:		TAS
HECKED:		COG/AJM
PROVED:		DCH
MISCELLANEOUS DETAILS		
- ROUTE 111 - 1		
CALE:		AS NOTED

C1.02

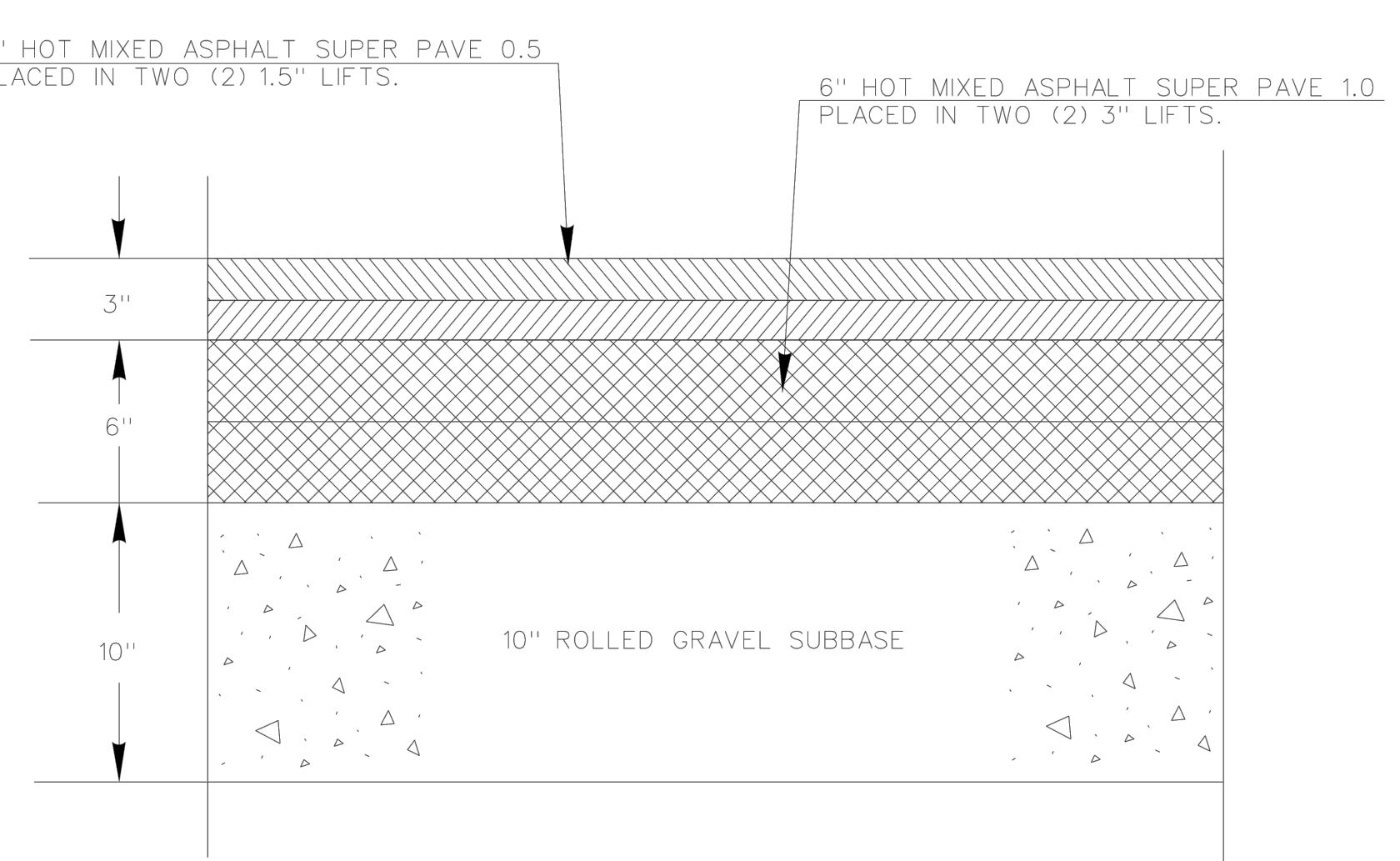
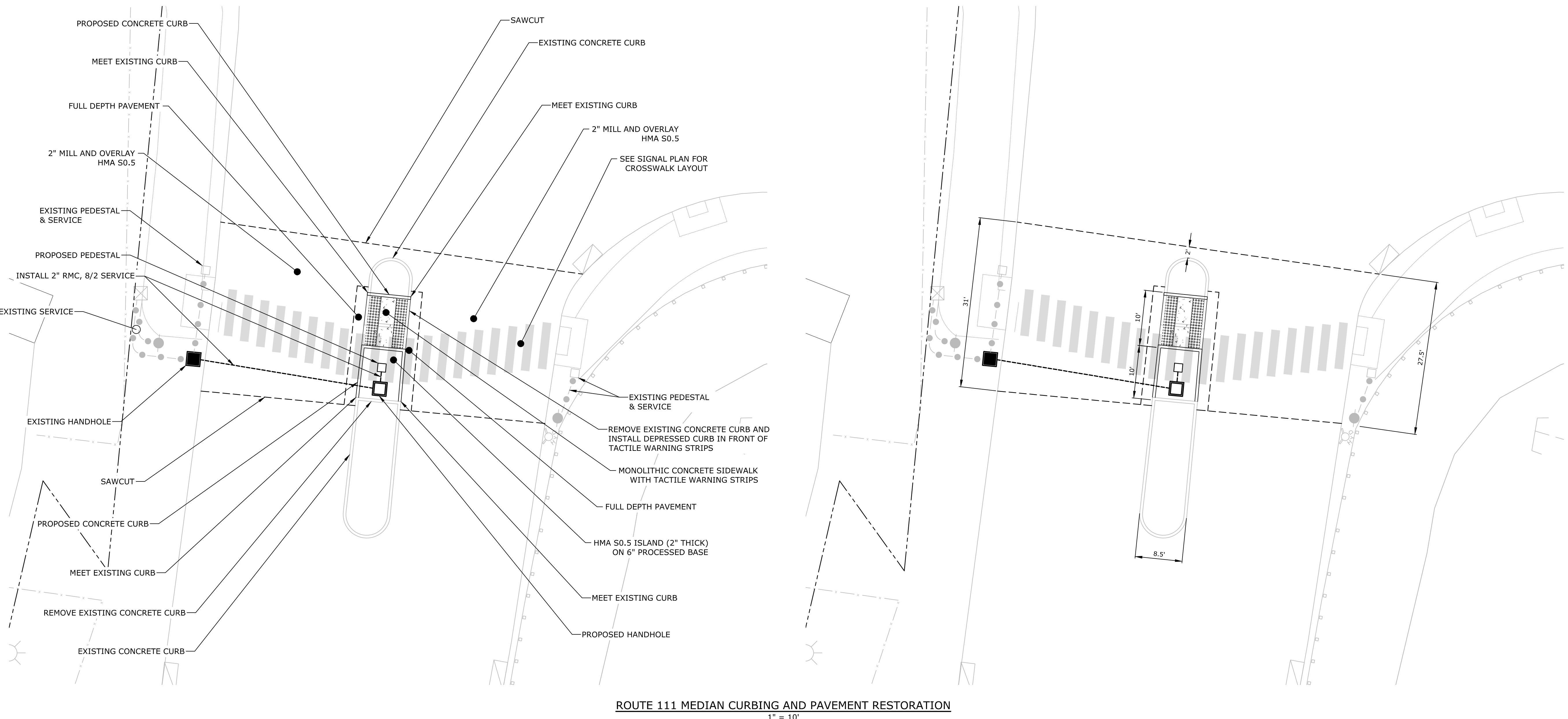
**Pequonnock
 River Trail
 Crossing
 Improvements**

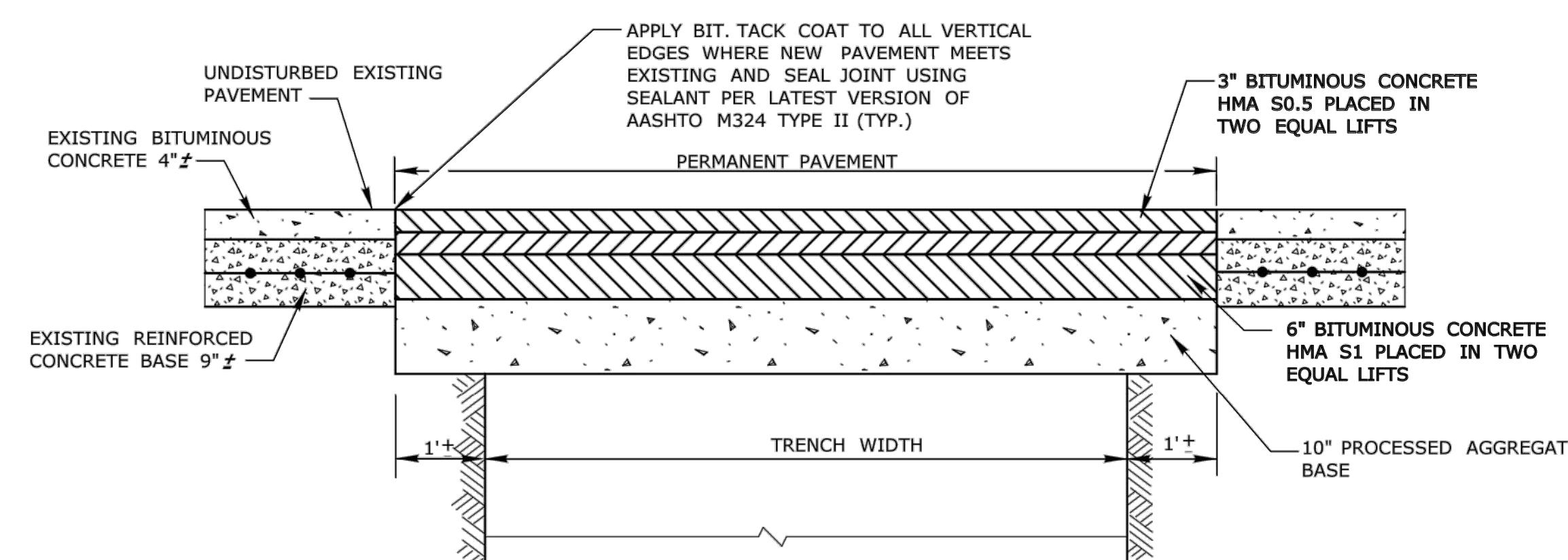
**Town of
 Trumbull**

Trumbull, CT

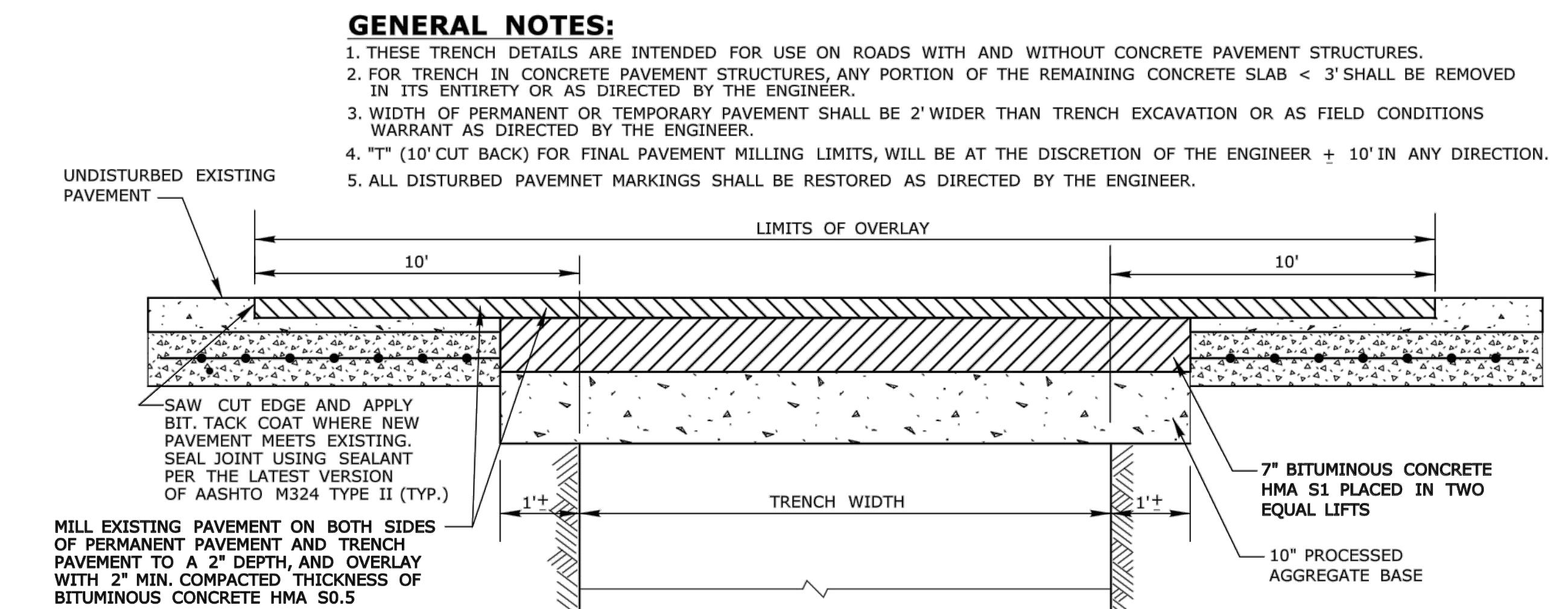
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PROJECT NO.:	T0196-94	
DATE:	08/21/2018	
FILE:	T0196-94-C-101-DET.dwg	
DRAWN BY:	WGK	
CHECKED:	CDY	
APPROVED:	JWB	
MISCELLANEOUS DETAILS		
- ROUTE 111 - 2		
SCALE:	AS NOTED	

C1.03

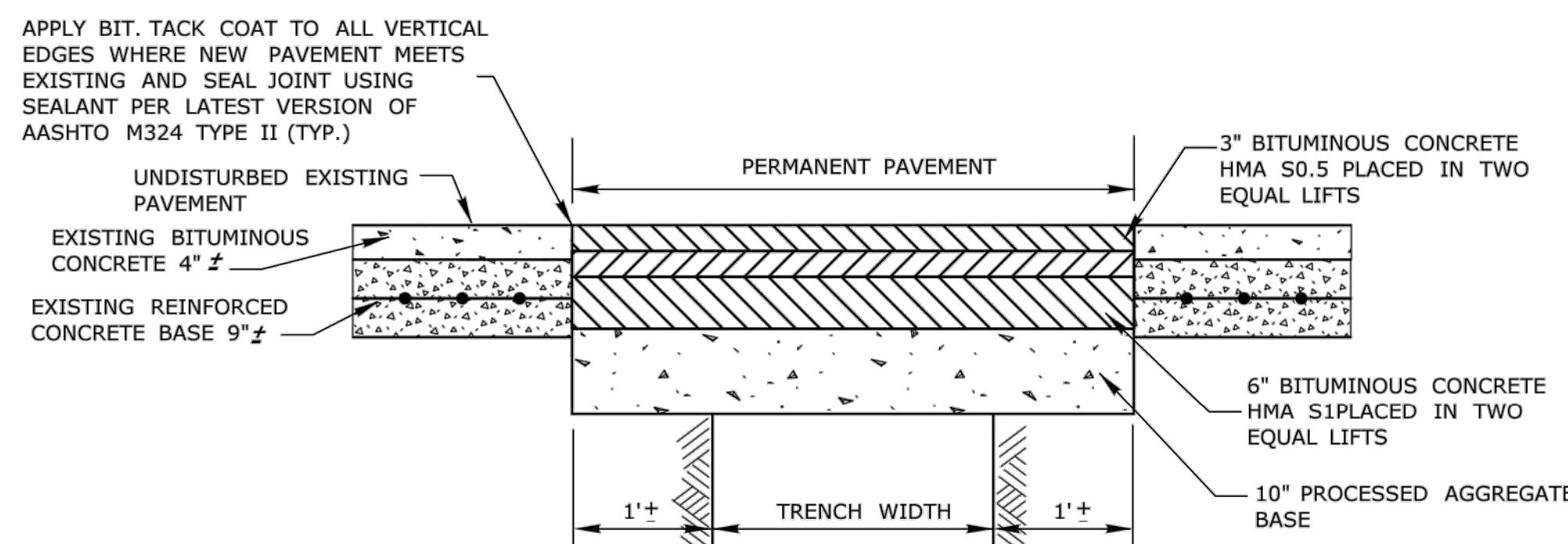




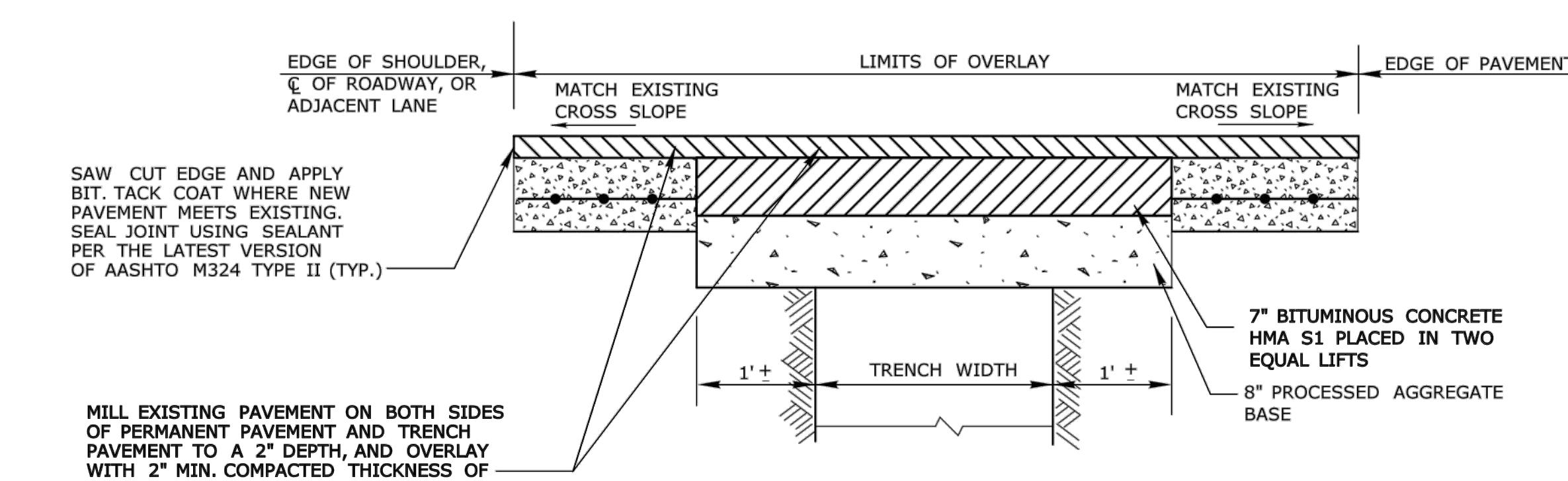
PERMANENT PAVEMENT TRENCH DETAIL
TRENCHES PERPENDICULAR TO EDGE OF PAVEMENT



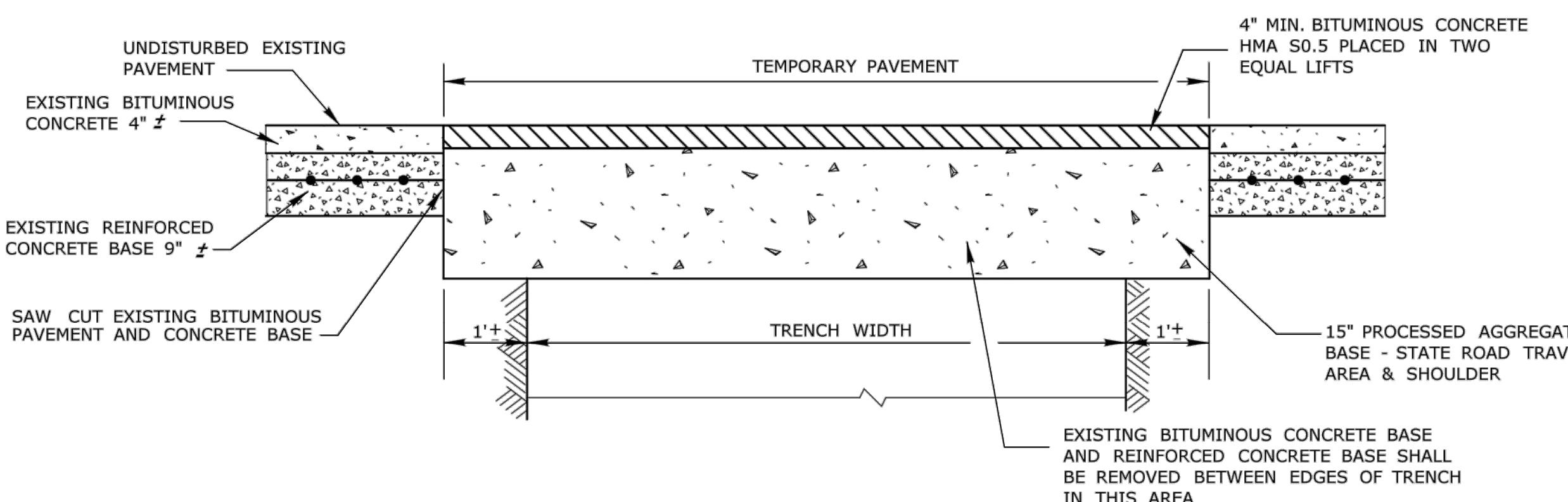
MILLING AND OVERLAY
TRENCHES PERPENDICULAR TO EDGE OF PAVEMENT



PERMANENT PAVEMENT TRENCH DETAIL
TRENCH PARALLEL TO EDGE OF PAVEMENT

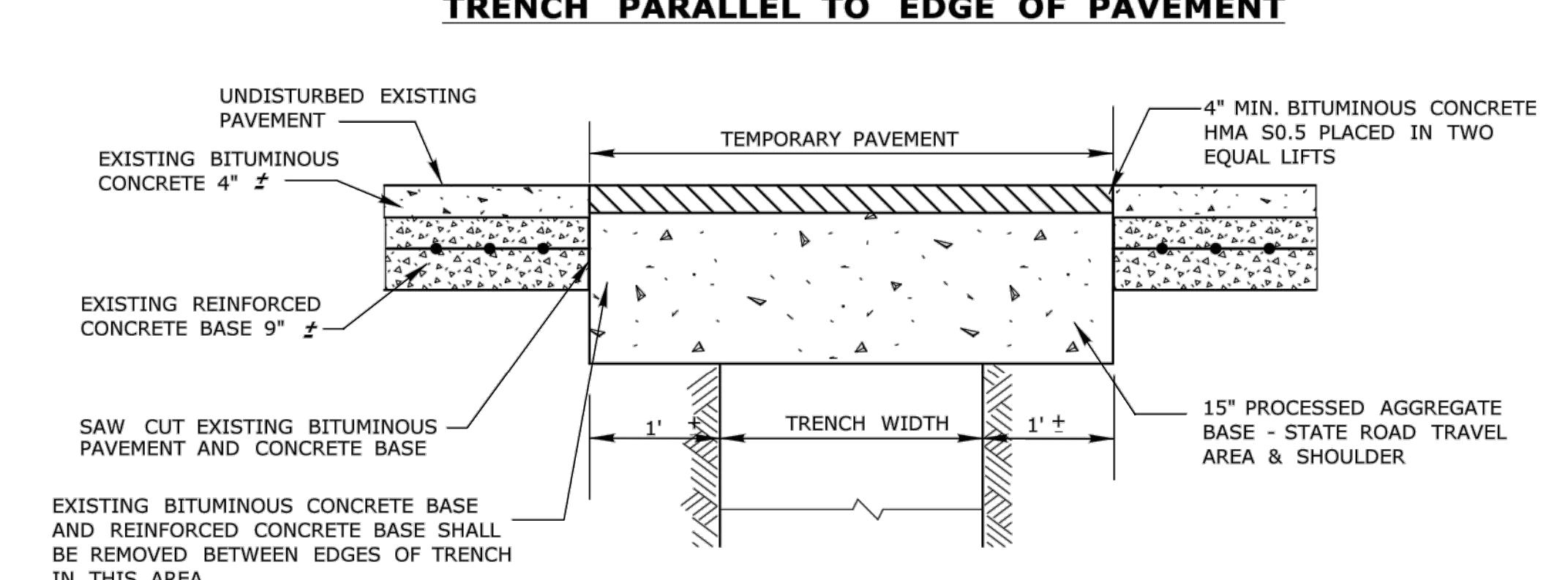


MILLING AND OVERLAY
TRENCH PARALLEL TO EDGE OF PAVEMENT



TEMPORARY PAVEMENT DETAIL
TRENCHES PERPENDICULAR TO EDGE OF PAVEMENT

TRENCH DETAIL FOR STATE ROADS
 NOT TO SCALE



TEMPORARY PAVEMENT DETAIL
TRENCH PARALLEL TO EDGE OF PAVEMENT

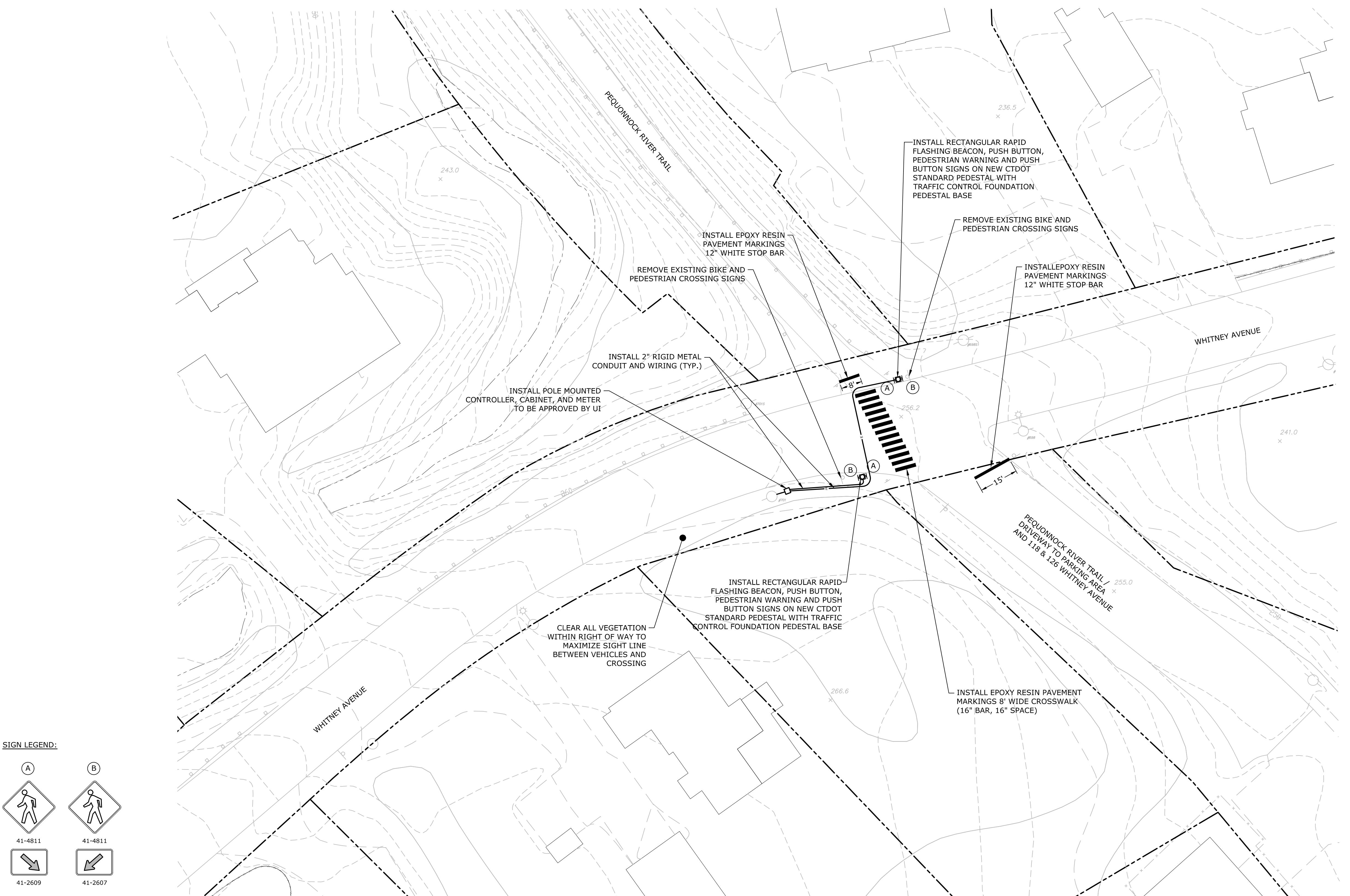
**Pequonnock
 River Trail
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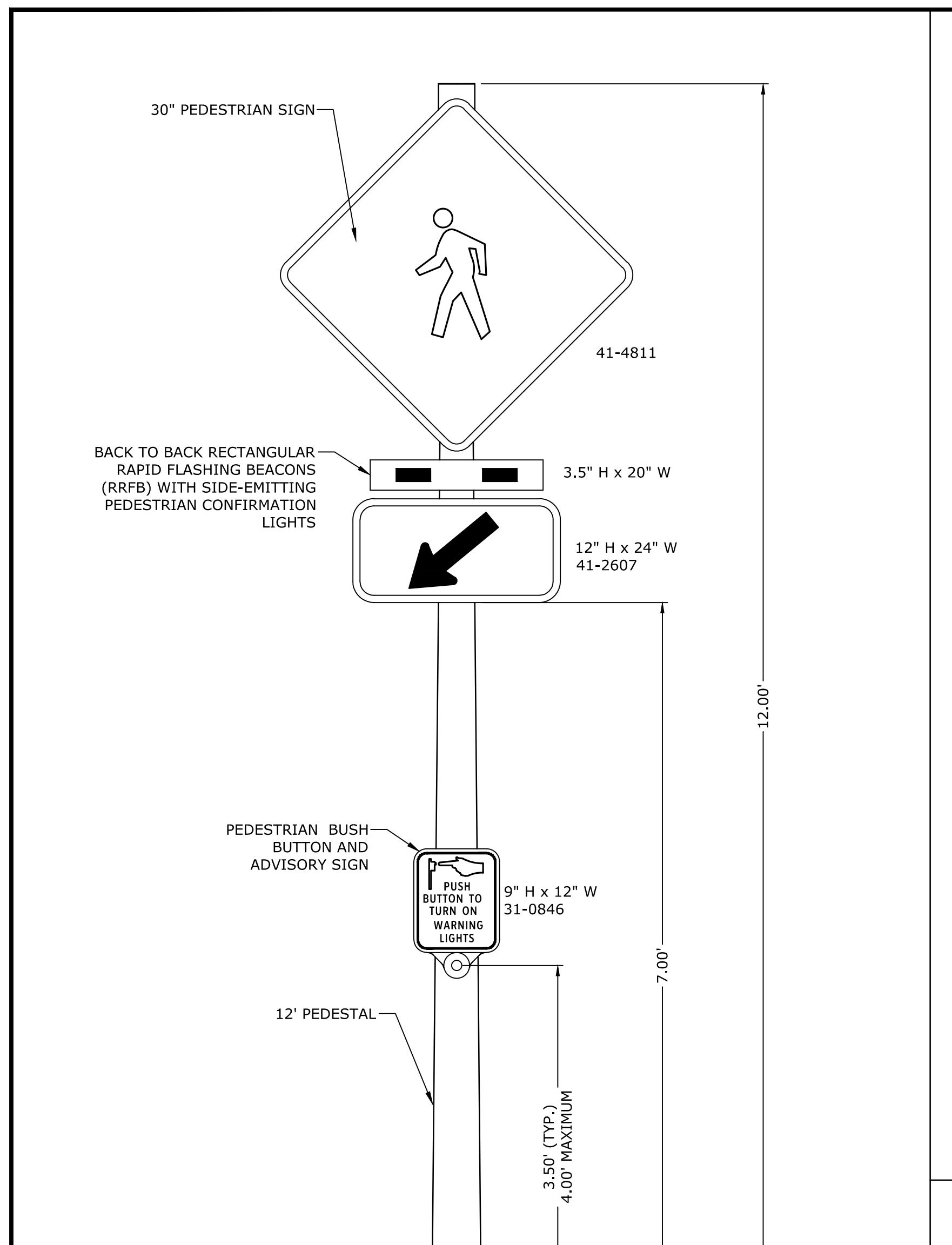
Trumbull, CT

1	08/21/2018 CT DOT COMMENTS
MARK	DATE DESCRIPTION
PROJECT NO.	T0196-94
DATE:	08/21/2018
FILE:	T0196-94-C-101-DET.dwg
DRAWN BY:	W.G.K.
CHECKED:	C.D.Y.
APPROVED:	J.W.B.
MISCELLANEOUS DETAILS	
- ROUTE 111 - 3	
SCALE:	AS NOTED

N



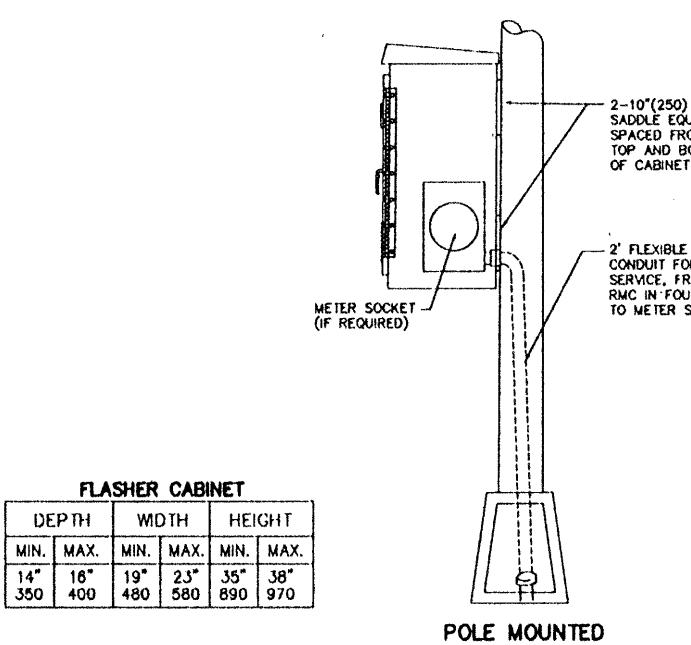
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MARK	DATE	DESCRIPTION
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DATE:	08/21/2018	
FILE:	T0196-94-C-200-SITE.dwg	
DRAWN BY:	TAS	
CHECKED:	COG/AM	
APPROVED:	DCH	
TRAIL CROSSING IMPROVEMENT PLAN - WHITNEY AVENUE - 1		
SCALE:	1" = 20'	



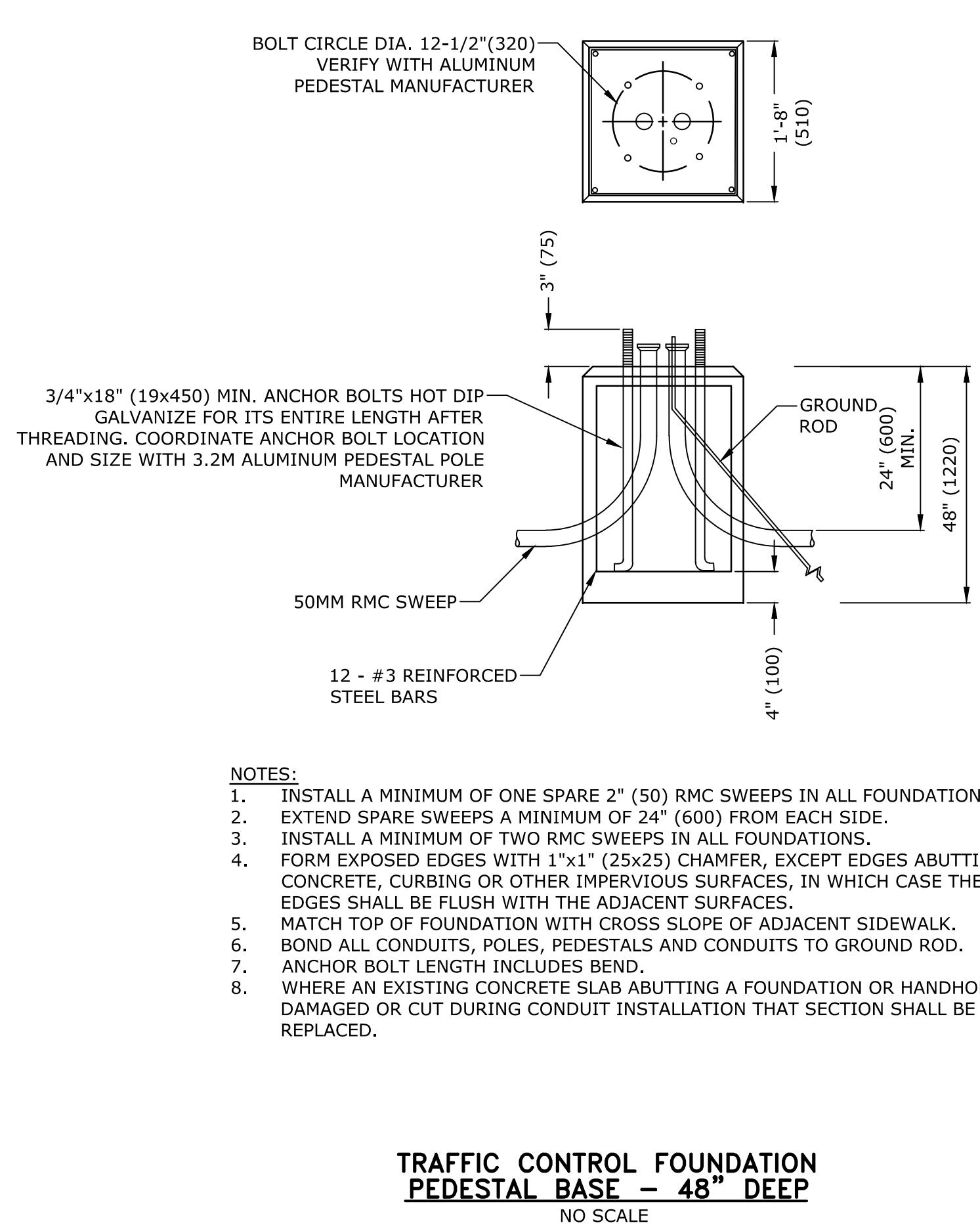
NOTES:

1. THE RRB, AND PUSHBUTTONS SHALL BE BI-DIRECTIONAL CONFIGURATION AND HAVE SIDE-EMITTING PEDESTRIAN CONFIRMATION LIGHTS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR 12' ALUMINUM POLE.

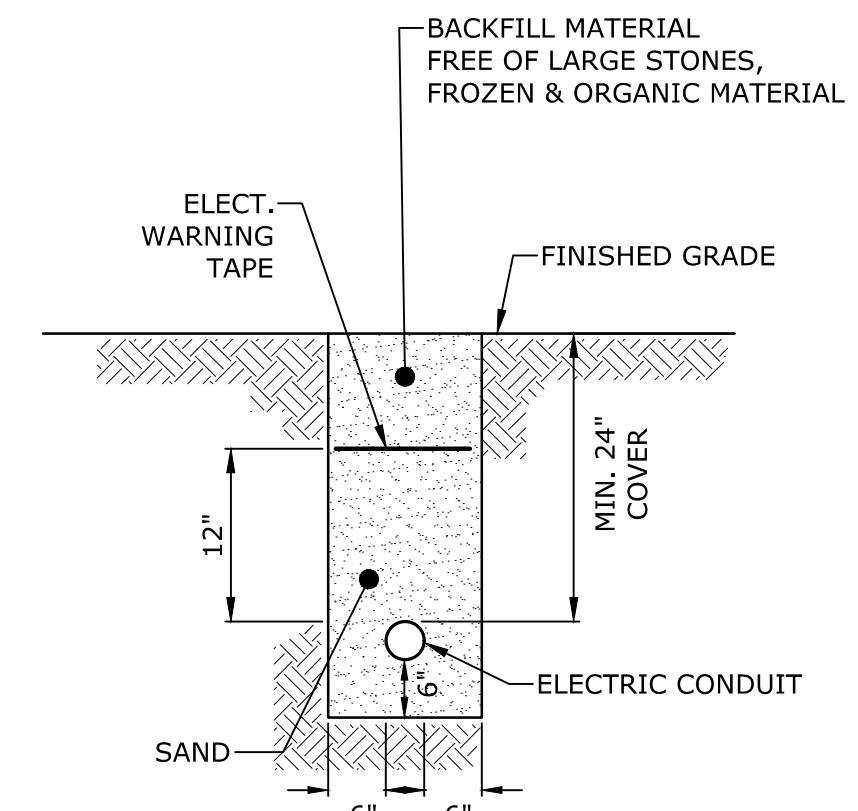
BACK TO BACK RECTANGULAR RAPID FLASHING BEACON DETAIL
 NO SCALE



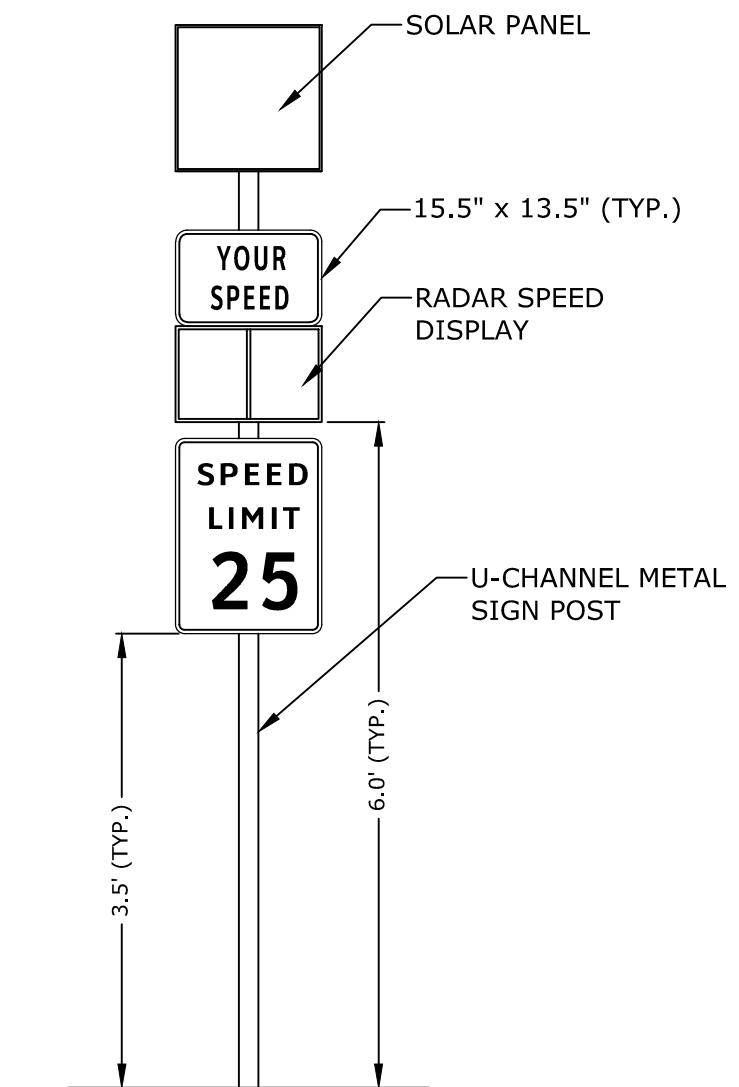
POLE MOUNTED CONTROLLER AND FLASHER CABINET
 NO SCALE



**TRAFFIC CONTROL FOUNDATION
 PEDESTAL BASE - 48" DEEP**
 NO SCALE



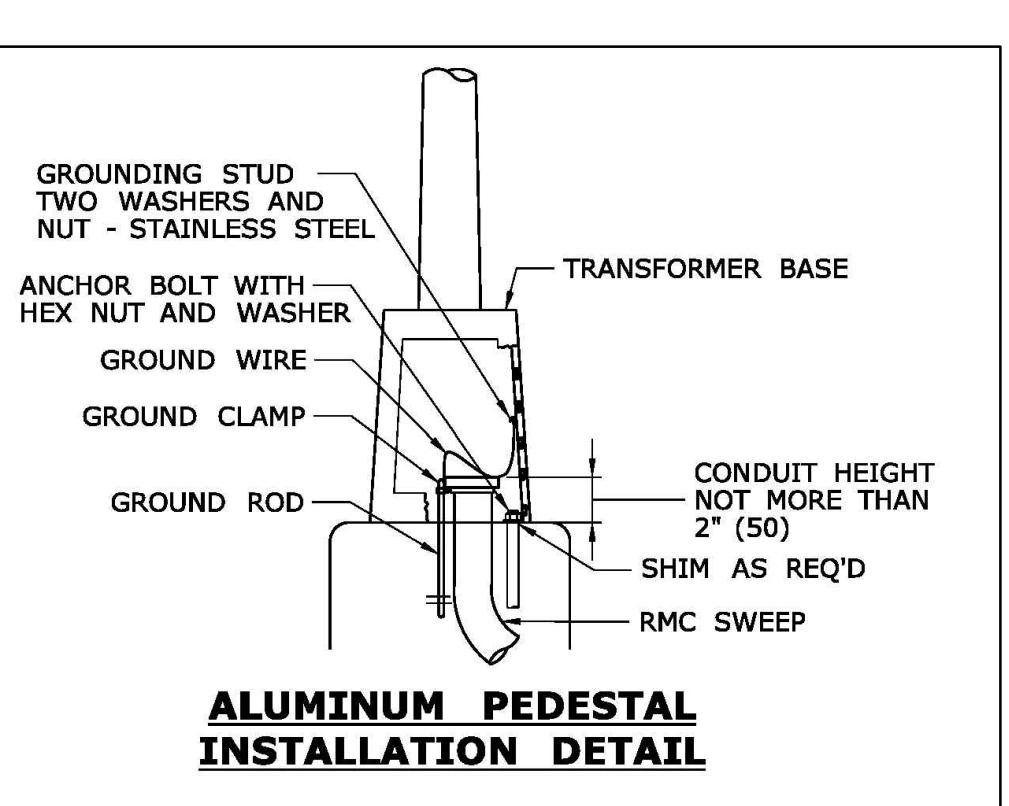
ELECTRICAL DISTRIBUTION TRENCH DETAIL
 NO SCALE



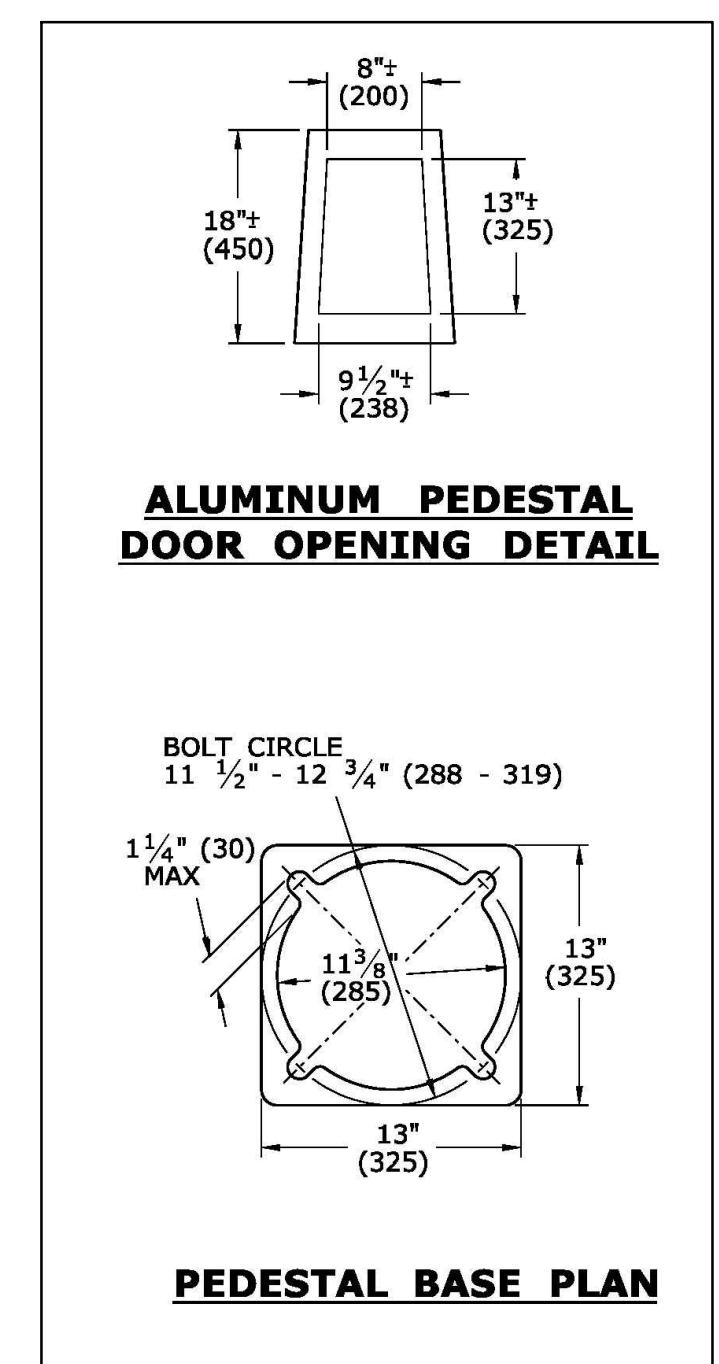
NOTES:

1. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR MATERIAL DIMENSIONS, LAYOUT, AND ASSEMBLY.

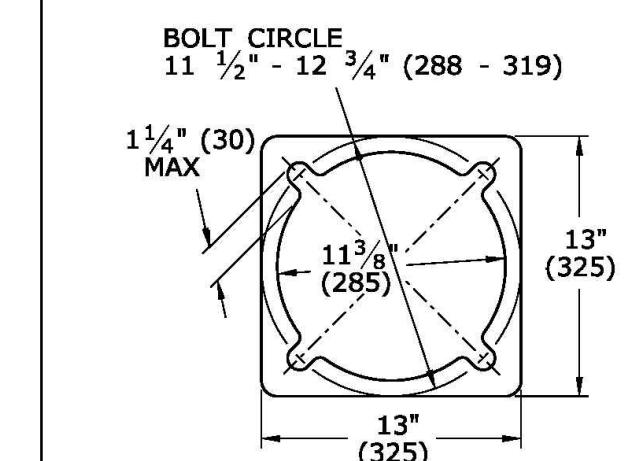
RADAR SPEED DISPLAY
 NO SCALE



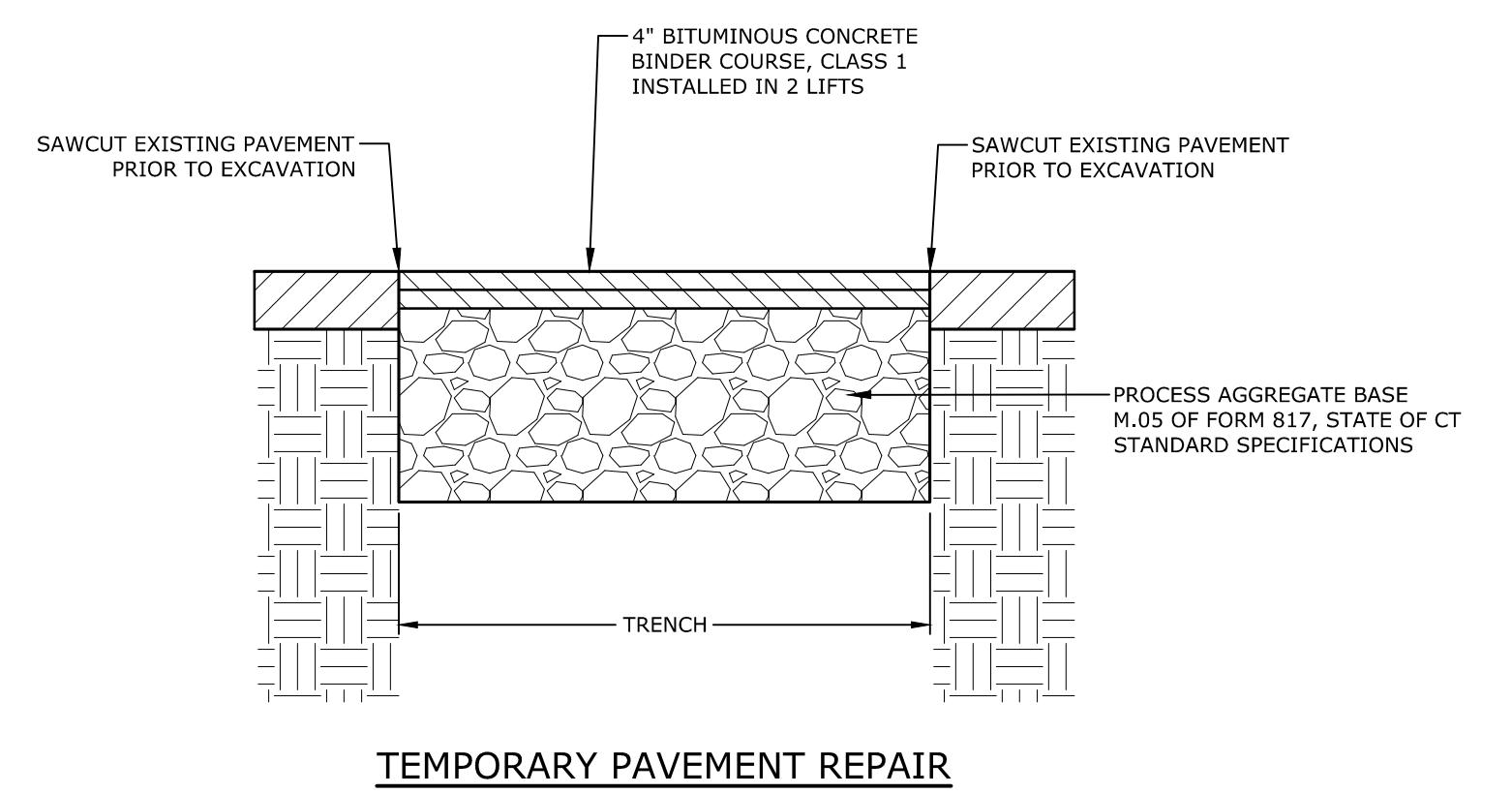
**ALUMINUM PEDESTAL
 INSTALLATION DETAIL**



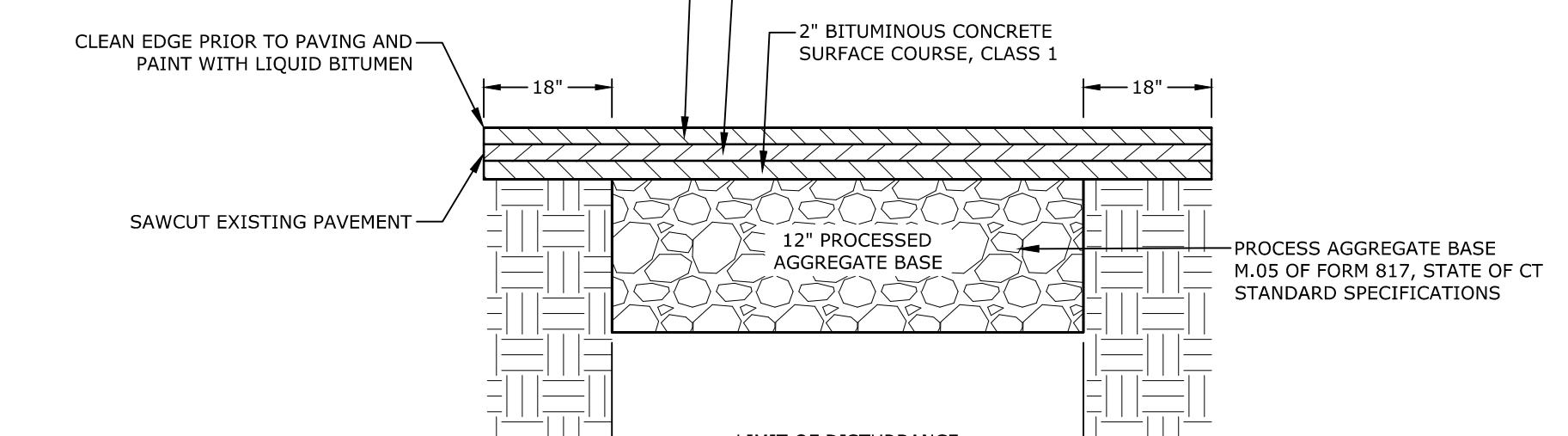
**ALUMINUM PEDESTAL
 DOOR OPENING DETAIL**



PEDESTAL BASE PLAN



TEMPORARY PAVEMENT REPAIR
 NO SCALE



PERMANENT PAVEMENT REPAIR
 NO SCALE

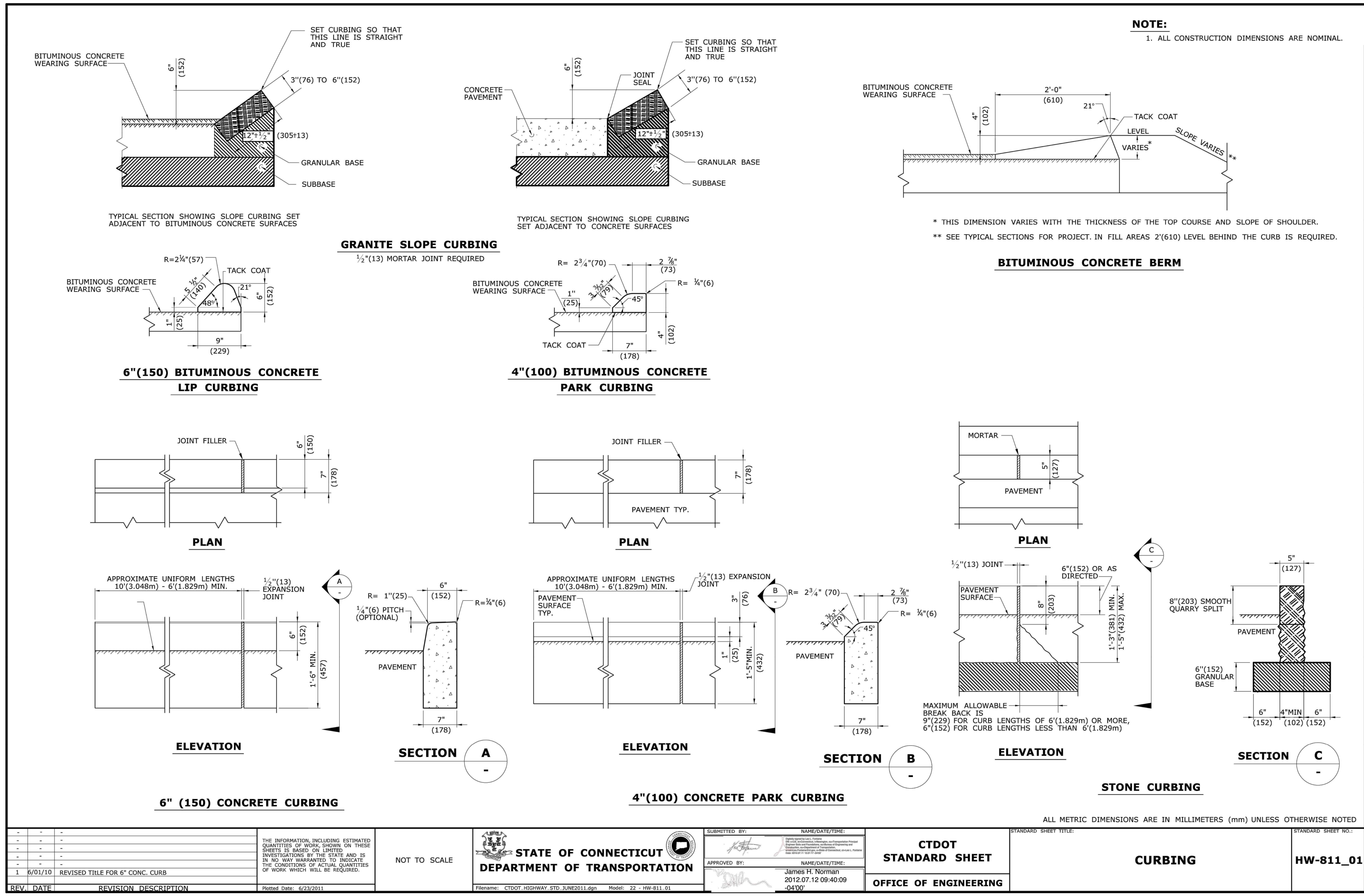
**Pequonnock
 River Trail
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1	08/21/2018	CTDOT COMMENTS
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PROJECT NO:	T0196-94	
DATE:	08/21/2018	
FILE:	T0196-94-C-202-DET.dwg	
DRAWN BY:	TAS	
CHECKED:	COG/AM	
APPROVED:	DCH	
MISCELLANEOUS DETAILS - WHITNEY AVENUE		
SCALE:	AS NOTED	

C2.02



DOCUMENT ALL LOOP DETECTOR VALUES BOTH CALCULATED AND MEASURED.

DEFINITIONS:

LOOP: #14 AWG WIRE IN SAWCUT, TERMINATED IN HANDBOLES, IMSA SPEC 51-7.
LEAD-IN: 14/2 SHIELDED TWISTED PAIR CABLE FROM HANDBOLES TO CONTROLLER, IMSA SPEC 50-2.
LOOP CIRCUIT: LOOP SAWCUT WIRE SPLICED TO 14/2 LEAD-IN CABLE.
AMPLIFIER: ELECTRONIC DEVICE CONNECTED TO LOOP CIRCUIT, SENSES CHANGE IN RESONANT FREQUENCY AND CREATES AN OUTPUT TO THE CONTROLLER.
MEGOMETER: INSTRUMENT SPECIFICALLY DESIGNED TO TEST THE INSULATION RESISTANCE OF A CIRCUIT. COMMON MANUFACTURERS: AMEC®, AMPROBE®, FLUKE®, MEGGER®.

1: RESISTANCE:

1a: INSULATION RESISTANCE: PERFORM A 600 VOLT (MINIMUM) MEGOHMMETER TEST ON LOOP CIRCUIT. THE LOOP AMPLIFIER MUST BE DISCONNECTED FROM THE LOOP CIRCUIT OR THE LOOP AMPLIFIER WILL BE DAMAGED. THE RESISTANCE OF THE LOOP WIRE TO GROUND MUST BE GREATER THAN 100 MEG OHMS.
1b: WIRE RESISTANCE: MEASURE THE DC RESISTANCE OF THE LOOP CIRCUIT. THE LOOP CIRCUIT MUST BE DISCONNECTED FROM THE AMPLIFIER. USING AN OHMMETER CONNECTED ACROSS THE LOOP CIRCUIT, MEASURE THE DC RESISTANCE OF THE CONDUCTORS. THE RESISTANCE SHOULD BE LESS THAN 4 OHMS.

NOTE: ALL TESTS SHALL BE DONE AT THE CONTROLLER ASSEMBLY (CA), HOWEVER IT IS RECOMMENDED TO PERFORM A PRELIMINARY MEGOHMMETER TEST AT THE HANDBOLES PRIOR TO SEALING THE SAWCUT AND SPLICING TO THE LEAD-IN. IF A DEFECTIVE LOOP WIRE IS FOUND, IT MAY BE EASILY REPLACED.

2: LOOP CIRCUIT INDUCTANCE:

2a: CALCULATE INDUCTANCE OF LOOP (L_{LOOP}) AND LEAD-IN CABLE ($L_{14/2}$).

LOOP INDUCTANCE (ENGLISH)

$$L_{LOOP} = (P/4)(N^2 + N)$$

LEAD-IN INDUCTANCE

$$L_{14/2} = (0.24 \mu\text{H}/\text{FT}) (D)$$

WHERE:

L_{LOOP} = INDUCTANCE OF INDIVIDUAL LOOP SEGMENTS IN MICROHENRIES (μH).
 $L_{14/2}$ = INDUCTANCE OF LEAD-IN CABLE.

P = PERIMETER OF INDIVIDUAL LOOP SEGMENT, IN FEET OR METERS.

N = NUMBER OF TURNS.

D = LENGTH OF LEAD-IN CABLE FROM SPLICING IN HANDBOLES TO CONTROLLER, IN FEET OR METERS.

$L_T = L_1 + L_2 + L_3$ etc.,
(TOTAL INDUCTANCE OF SEGMENTED LOOP SPliced IN SERIES.)

$L_T = 1 / [(1 / L_1) + (1 / L_2) + (1 / L_3) +$ etc.],
(TOTAL INDUCTANCE OF SEGMENTED LOOP SPliced IN PARALLEL).

WHERE:

L_T = TOTAL INDUCTANCE OF THE SEGMENTED ARRANGEMENT.
 L_1, L_2, L_3 = INDUCTANCE OF INDIVIDUAL LOOP SEGMENTS.

EXAMPLE: (IN ENGLISH)

6' x 6', 4 TURNS, APPROXIMATELY 300' FROM THE CONTROLLER

$$L_{LOOP} = (24/4)(4^2 + 4) \quad L_{14/2} = (0.24 \mu\text{H}/\text{FT}) (300)$$

$$L_{LOOP} = (6)(20) \quad L_{14/2} = (0.24)(300)$$

$$L_{LOOP} = 120 \mu\text{H} \quad L_{14/2} = 72 \mu\text{H}$$

2b: MEASURE INDUCTANCE OF LOOP AND LEAD-IN AT CONTROLLER. USE INSTRUMENT DESIGNED TO MEASURE LOOP CIRCUIT INDUCTANCE.

3: POWER INTERRUPTION:

AFTER THE AMPLIFIER HAS TUNED AND IS OPERATING, DISCONNECT POWER BY REMOVING FUSE OR HARNESS CONNECTOR. RETURN POWER TO THE AMPLIFIER AND CONFIRM IT RE-TUNES AUTOMATICALLY WITHOUT ANY MANUAL ADJUSTMENTS.

INDUCTIVE LOOP TEST PROCEDURE

PIN	COLOR	FUNCTION
A	WHITE	110 VAC Neutral
B	BROWN	Output Relay Common (moving contact)
C	BLACK	110 VAC (Fused)
D	RED	Loop
E	ORANGE	Loop
F	YELLOW	Output Relay Contact (Closes with moving contact when detecting vehicle)
G	BLUE	Output Relay Contact (Opens with moving contact when detecting vehicle)
H	GREEN	Chassis Ground
J	GREY	110 VAC Delay/Extend Override
Shell		Ground (shall be connected to pin H in the connector)

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
 INDUCTIVE LOOP DETECTOR
 SAW CUT
 RIGID METAL CONDUIT
 HANDBOLES

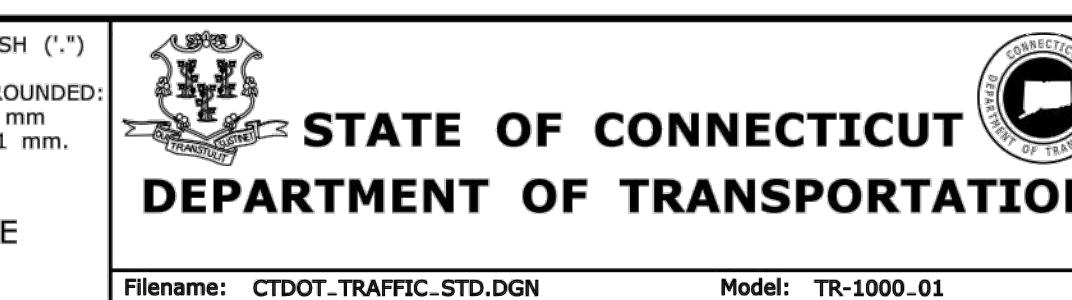
DETECTOR AMPLIFIER PIN DESIGNATION

2 1-2014	REVISED GROUND RESISTANCE NOTES.
1 4-2012	MINOR REVISIONS.
REV. DATE	REVISION DESCRIPTION

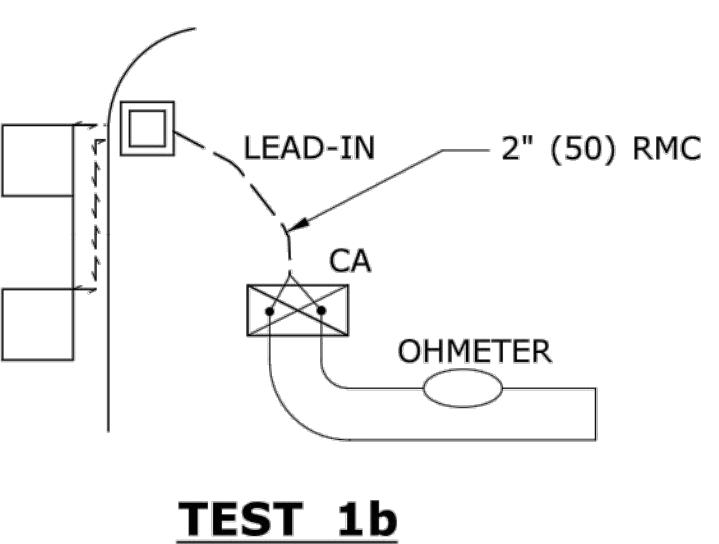
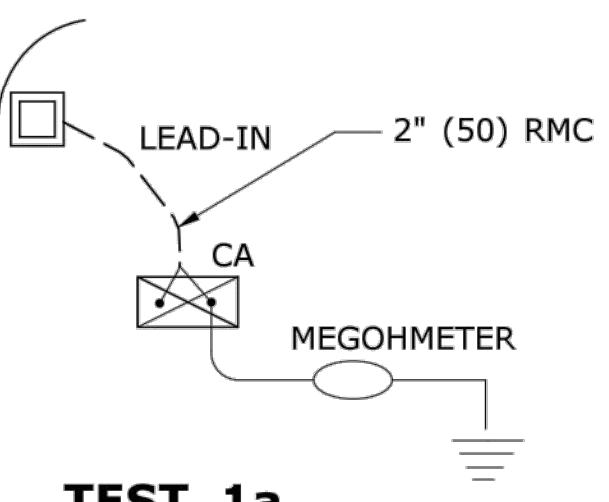
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INFORMATION AND IS FOR INFORMATION PURPOSES ONLY. IT IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DIMENSIONS ARE IN ENGLISH (") & METRIC UNITS (mm). METRIC DIMENSIONS ARE ROUNDING:
 - OVER 1" TO NEAREST 5 mm
 - UNDER 1" TO NEAREST 1 mm.

NOT TO SCALE



Filenumber: CTDOT-TRAFFIC-STD.DGN Model: TR-1000.01

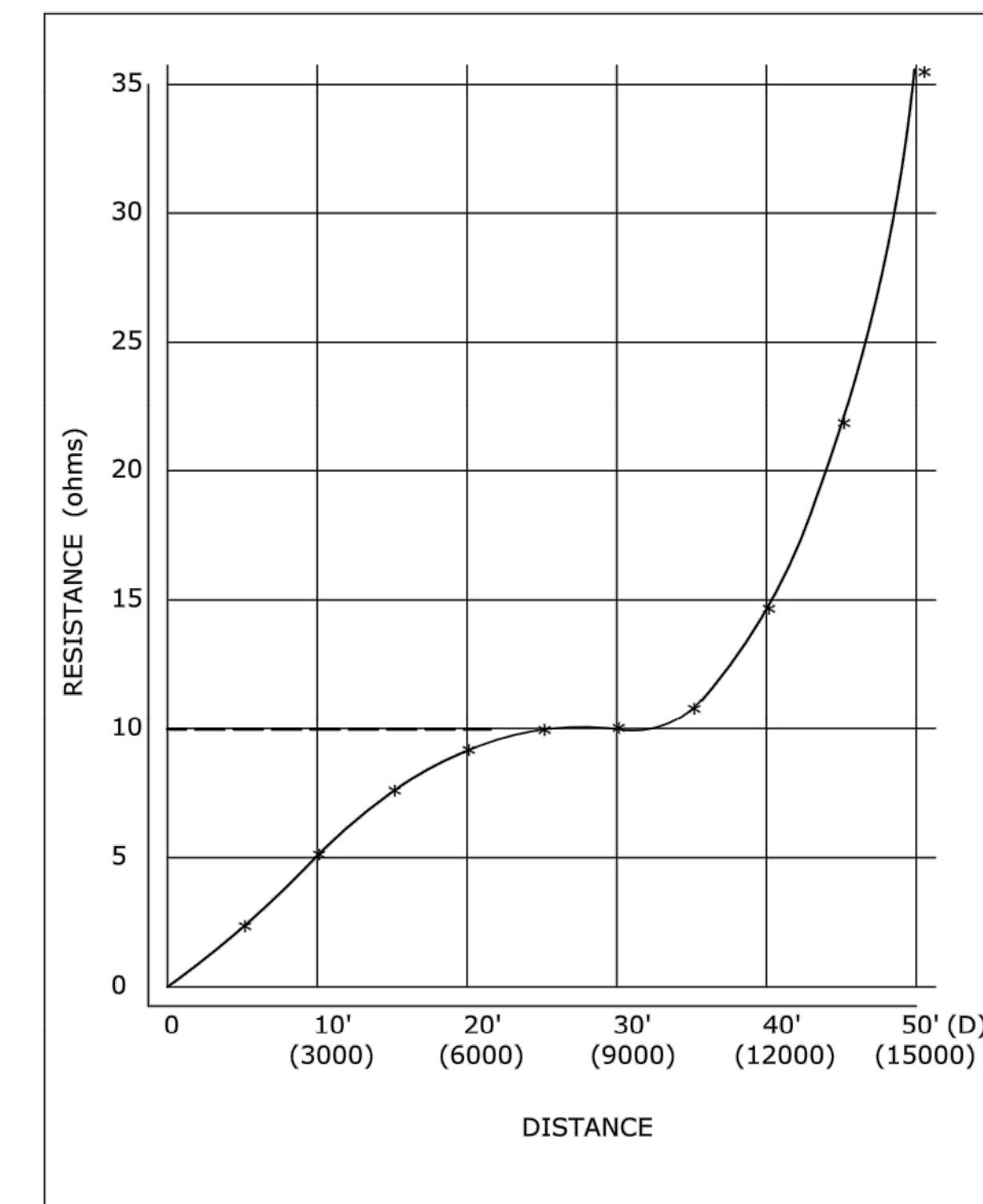
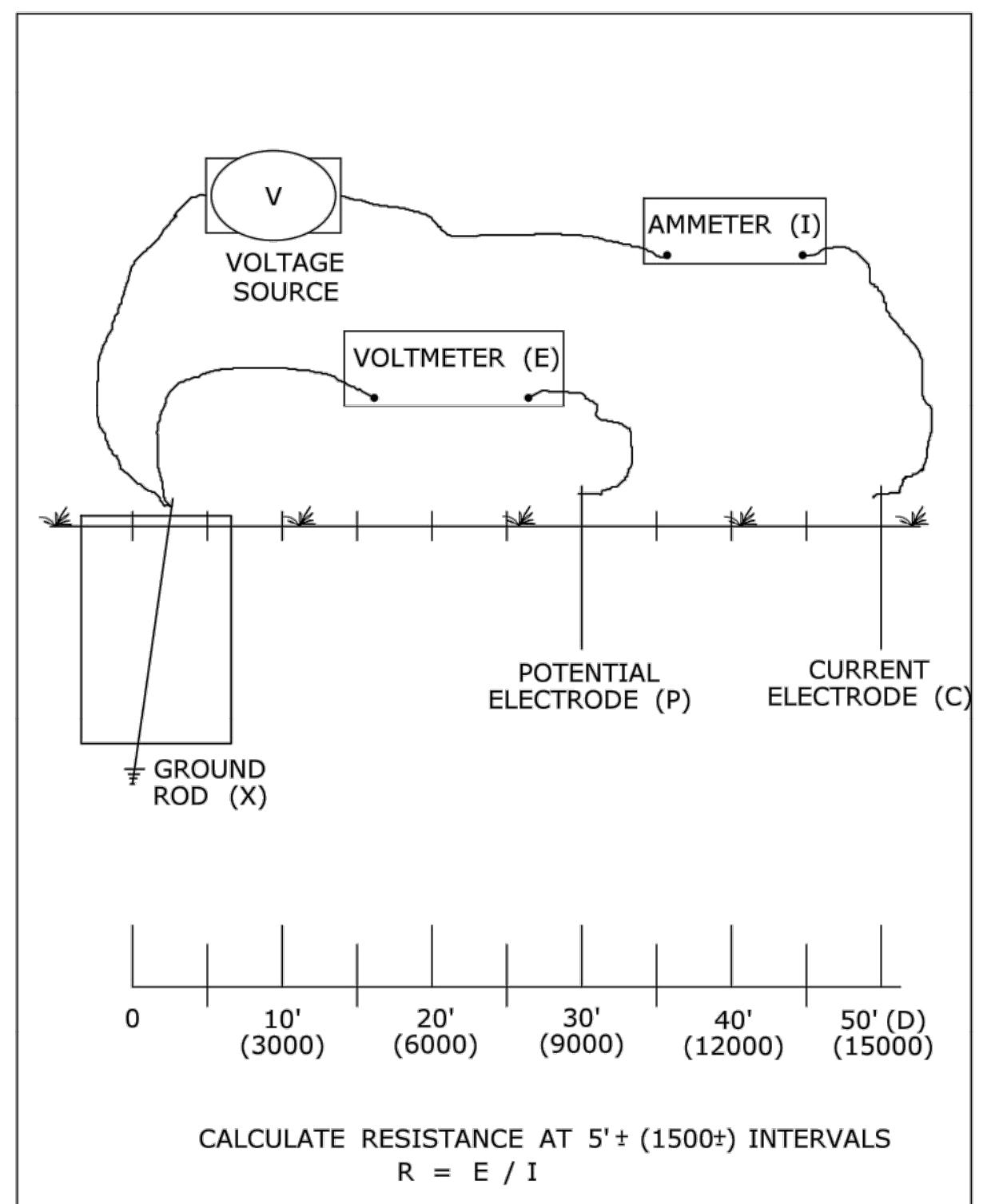


TEST PROCEDURE:

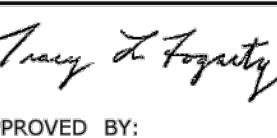
- INSERT ELECTRODE (C) A DISTANCE (D) FROM THE FOUNDATION. RECOMMEND A MINIMUM 50'.
- CONNECT A VOLTAGE SOURCE AND AMMETER BETWEEN THE FOUNDATION GROUND ROD (X) AND C.
- MEASURE THE CURRENT FLOW (I) BETWEEN X AND C.
- INSERT POTENTIAL ELECTRODE (P) AT 5' (1500) INTERVALS IN A STRAIGHT LINE TO ELECTRODE C.
- MEASURE VOLTAGE (E) AT EACH LOCATION OF P.
- CALCULATE RESISTANCE (R) AT EACH LOCATION OF P USING THE FORMULA $R = E/I$.
- PLT THE VALUES ON A RXD GROUND RESISTANCE CHART.
- THE ACTUAL GROUND RESISTANCE IS WHERE THE PLOTTED CURVE IS RELATIVELY FLAT, USUALLY AT 62%± OF D.
- SEE EXAMPLE CHART: CURVE FLATTENS OUT AT 10 OHMS, APPROXIMATELY 30' (9000) FROM FOUNDATION.
- IF GROUND RESISTANCE IS GREATER THAN 10 OHMS, PERFORM CORRECTIVE ACTION AND RE-TEST.

SUGGESTED CORRECTIVE ACTION:

- INSTALL ADDITIONAL 10' (3000) GROUND ROD(S). REFER TO NESC SECTION 09, RULE 94.B.2. DRIVE ADDITIONAL GROUND RODS NO CLOSER TO FOUNDATION THAN 6' (1800). IF MORE THAN ONE IS NEEDED, SPACE MINIMUM 6' (1800) APART. BONDS TO ADDITIONAL GROUND ROD(S) SHALL BE MADE BY A CLAMP DESIGN FOR DIRECT BURIAL OR BY EXOTHERMIC WELDING TECHNIQUE. TOP OF ADDITIONAL GROUND ROD(S) SHALL BE 6" (150) BELOW GRADE.
- IN AREAS OF SHALLOW BEDROCK, INSTALL A GROUND GRID OR ARRAY CONSISTING OF BURIED WIRE, RODS, STRIPS OR PLATES. REFER TO NESC SECTION 09, RULE 94.B.3. REFER TO NEC SECTION 250. MINIMUM DEPTH OF 18" (450). GRID CONNECTIONS AND BONDS ON GROUND GRID SHALL BE MADE BY CLAMPS DESIGNED FOR DIRECT BURIAL OR BY EXOTHERMIC WELDING TECHNIQUE.



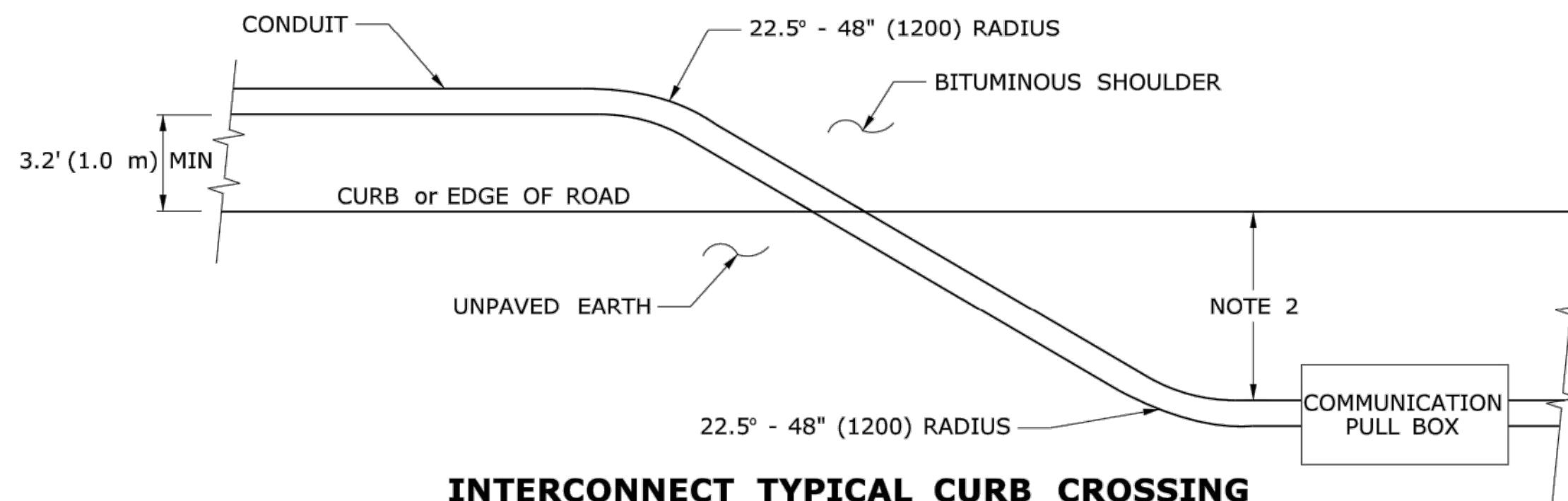
3 POINT FALL-OF-POTENTIAL GROUND RESISTANCE TEST

SUBMITTED BY:	NAME/DATE/TIME:
	Tracy L. Fogarty 2014.01.07 16:11:26-05'00'
APPROVED BY:	NAME/DATE/TIME:
	Charles S. Harlow 2014.01.08 09:02:11-05'00'

CTDOT STANDARD SHEET
OFFICE OF ENGINEERING

GENERAL CLAUSES (TEST PROCEDURES)

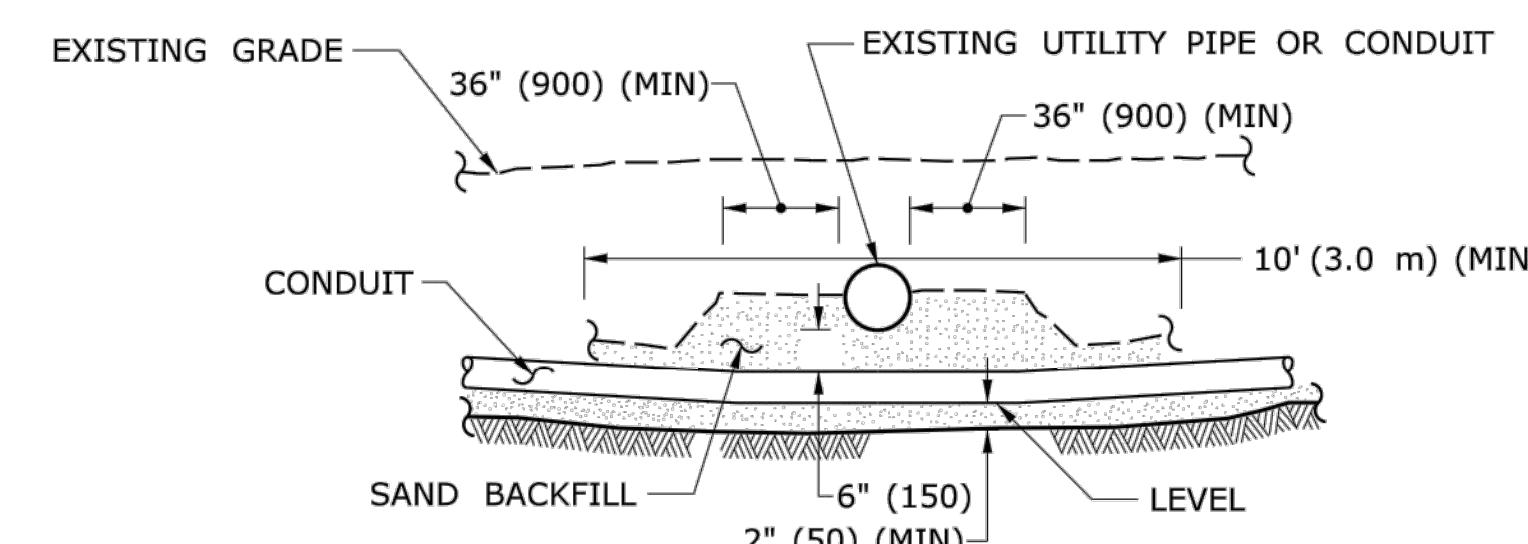
STANDARD SHEET NO.:
TR-1000_01



INTERCONNECT TYPICAL CURB CROSSING

NOTES:

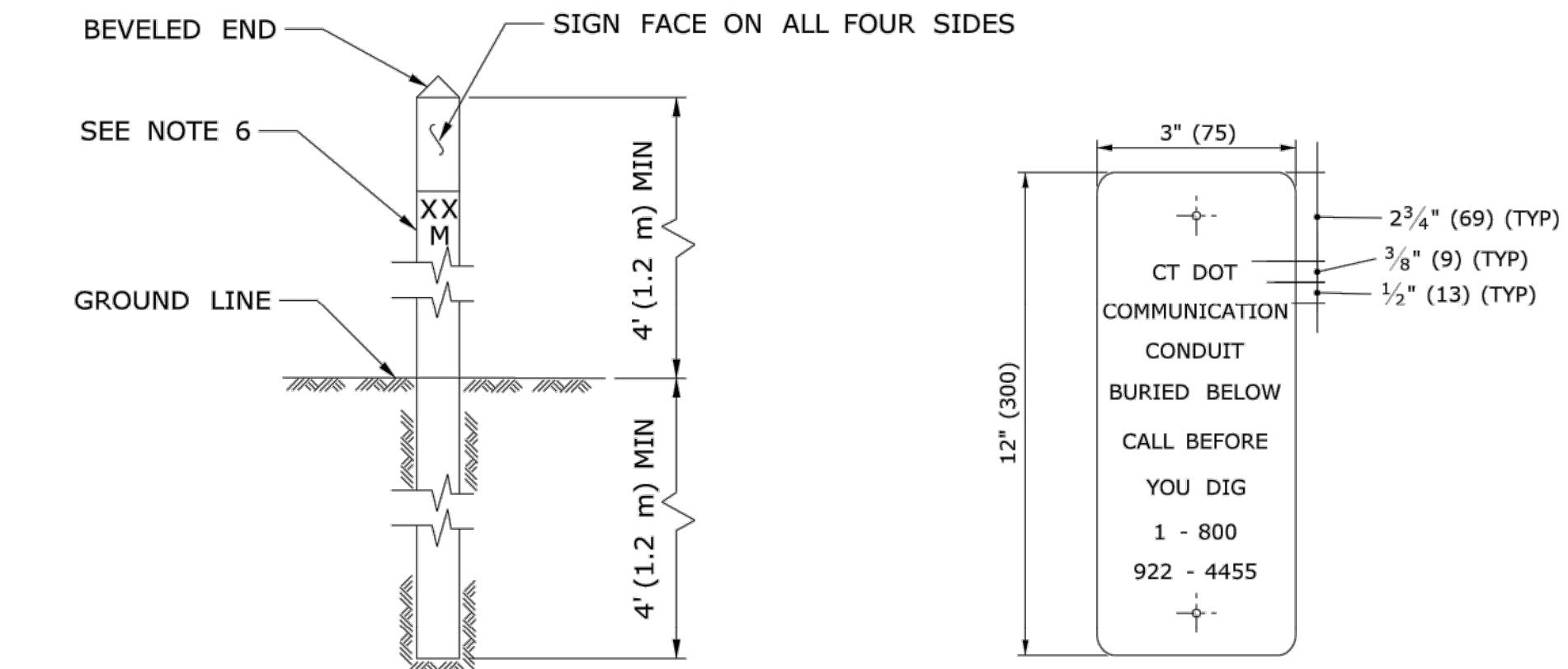
1. RESTORE AREAS DISTURBED BY TRENCH TO ORIGINAL CONDITION.
2. INSTALL PULL BOX A MINIMUM OF 10' (3.0 m) FROM CURB UNLESS OTHERWISE SHOWN ON PLANS OR DIRECTED BY ENGINEER.



CROSSING UNDER EXISTING UTILITY

NOTES:

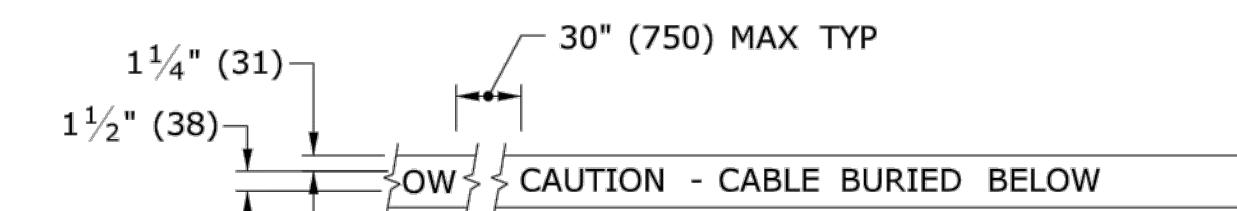
1. WHEN ENCOUNTERED AT APPROXIMATELY THE SAME DEPTH, CROSS BENEATH.
2. PROTECT & SUPPORT EXPOSED EXISTING UTILITY.



INTERCONNECT CONDUIT IDENTIFICATION POST

NOTES:

1. 4" x 4" (100 x 100) NOMINAL, PRESSURE TREATED WOOD POST.
2. ATTACH SIGN TO POST WITH 1/4" x 1 1/4" (6 x 31) STAINLESS STEEL LAG SCREW WITH NYLON WASHER ON FACE OF SIGN.
3. SIGN COLORS: BACKGROUND - ORANGE (RETROREFLECTIVE) LEGEND - BLACK (OPAQUE).
4. INSTALL POST APPROX 24" (600) FROM RMC IN VICINITY OF EACH PULL BOX.
5. INSTALL POSTS BETWEEN PULL BOXES, APPROX 10' (3.0 m) OFF CURB. SPACE POSTS 1500' (460 m²) APART.
6. PERMANENTLY ATTACH STAINLESS STEEL NUMBERS INDICATING DISTANCE TO TRENCH IN FEET (METERS) CONTAINING COMMUNICATION CABLE. ATTACH NUMBERS TO SIDE OF POST FACING CONDUIT. INCLUDE "M" SUFFIX IF METERS.

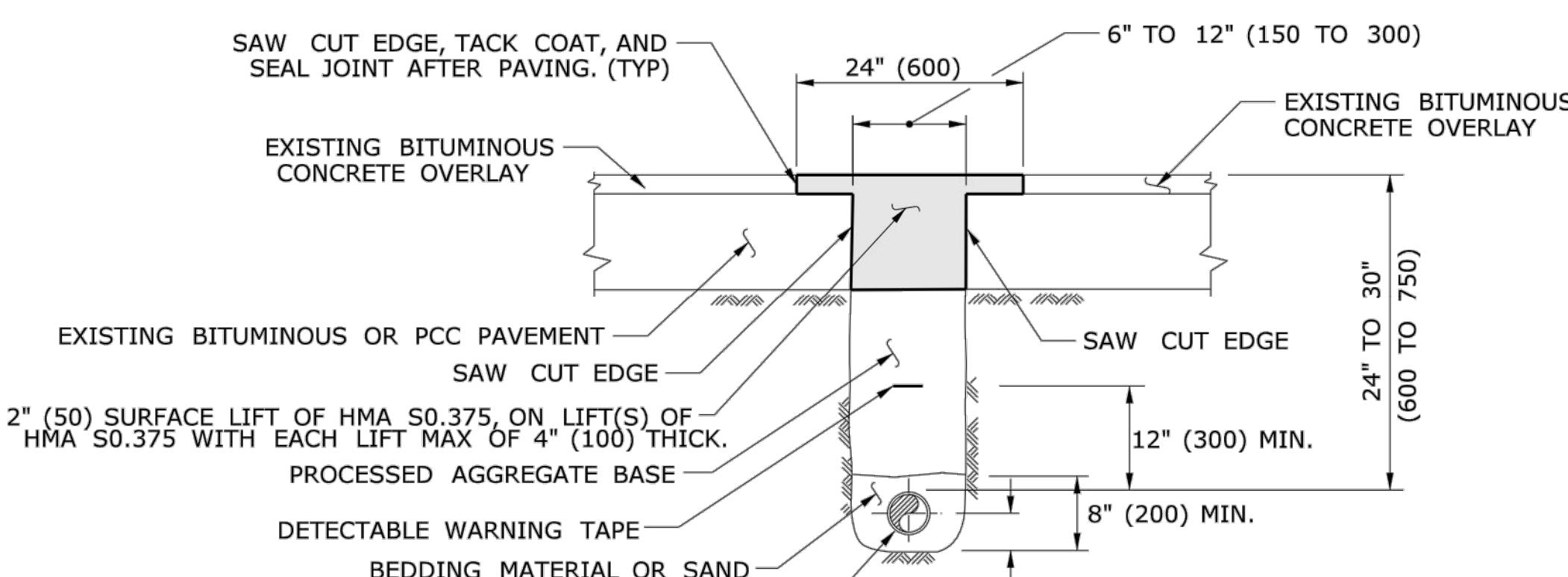


DETECTABLE WARNING TAPE

NOTE:

STANDARD SPECIFICATIONS, ARTICLE: 1.05.15

1. TAPE COLORS:
COMMUNICATION - ORANGE BACKGROUND / BLACK LEGEND
POWER - RED BACKGROUND / BLACK LEGEND

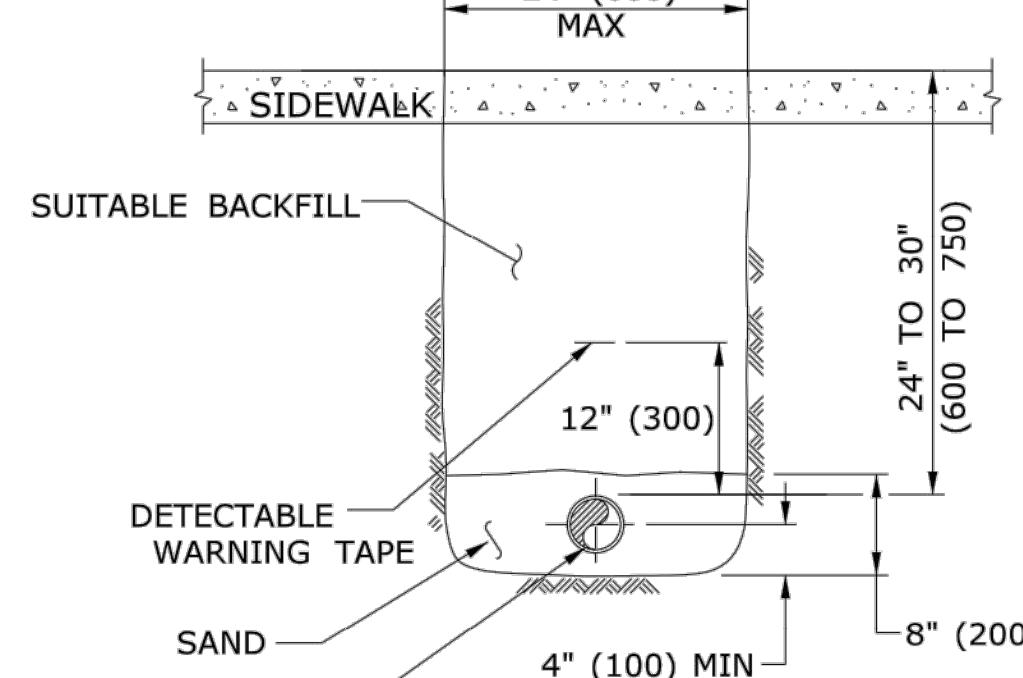


PAVEMENT - BITUMINOUS CONCRETE OR OVERLAYED PORTLAND CEMENT CONCRETE

NOTES:

STANDARD SPECIFICATIONS, ARTICLE: 3.04 & 4.06.03

1. TOTAL HOT MIX ASPHALT (HMA) THICKNESS TO MATCH EXISTING BITUMINOUS CONCRETE AND PORTLAND CEMENT CONCRETE (PCC) THICKNESS.
2. WHEN ALLOWED BY ENGINEER, USE CONTROLLED LOW STRENGTH MATERIAL (CLSM) AS BEDDING MATERIAL. TOP OF CLSM AT LEAST 20" (500) BELOW SURFACE.

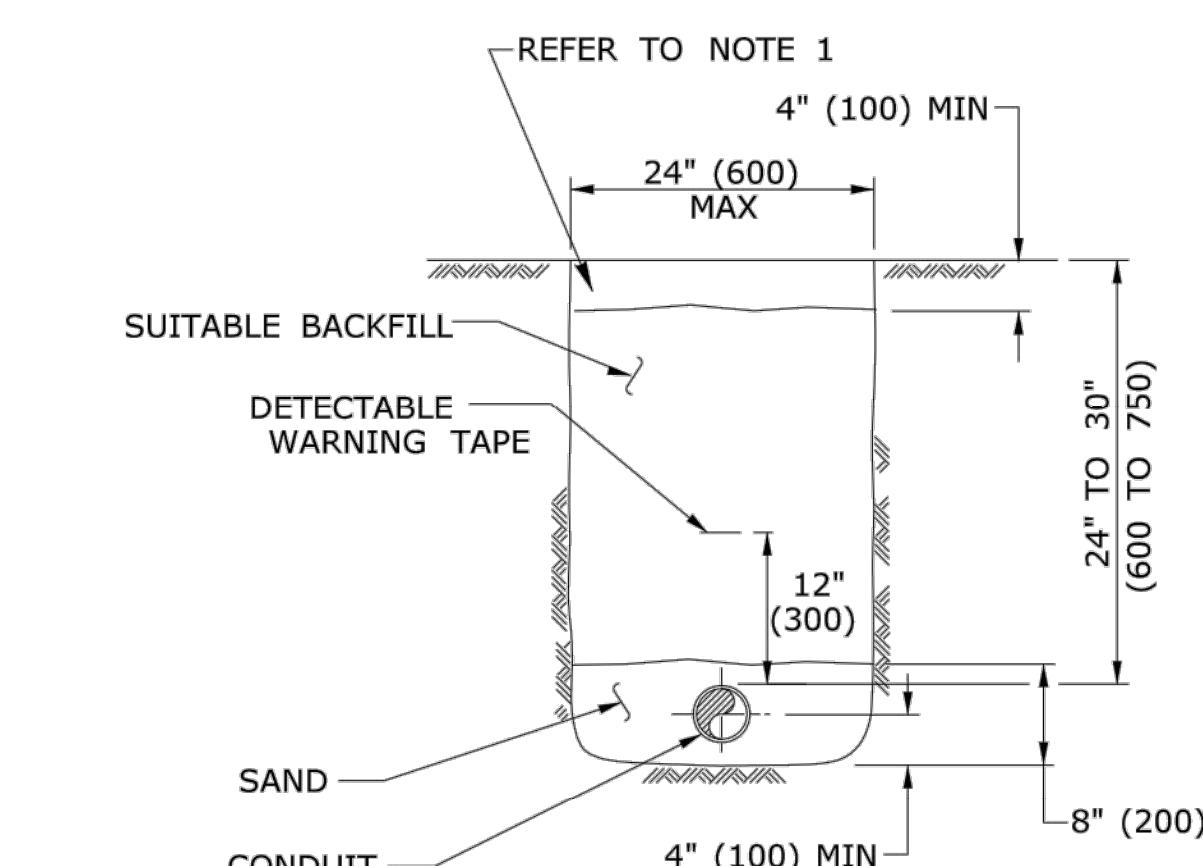


SIDEWALK

NOTES:

STANDARD SPECIFICATIONS, ARTICLE: 9.21 & 9.22

1. WHERE CONCRETE SIDEWALK DAMAGED OR CUT, REPLACE THE ENTIRE SECTION BETWEEN JOINTS. REPLACEMENT SIDEWALK IS PAID FOR AT THE CONTRACT UNIT PRICE FOR "CONCRETE SIDEWALK".



EARTH

NOTES:

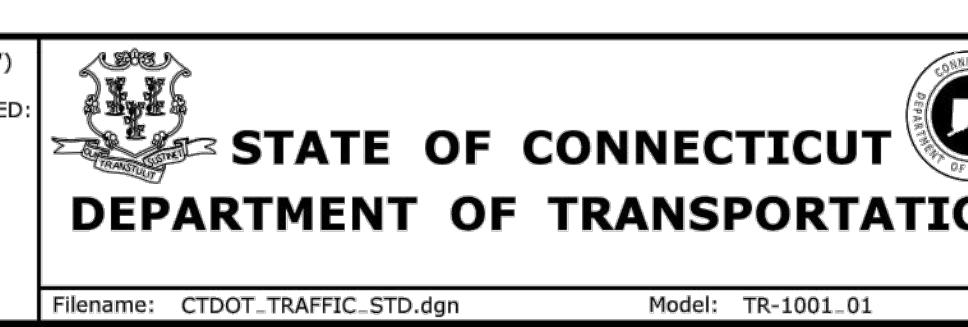
STANDARD SPECIFICATIONS, ARTICLE: 9.50

1. IN MOWED AREAS: PLACE TOPSOIL, FERTILIZER, SEED, & MULCH.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
--- RMC (RIGID METAL CONDUIT)

1 4-2012 REVISED BITUMINOUS CONCRETE TO HMA, & MINOR REVISIONS.	REV. DATE	REVISION DESCRIPTION
Plotted Date: 4/14/2012		

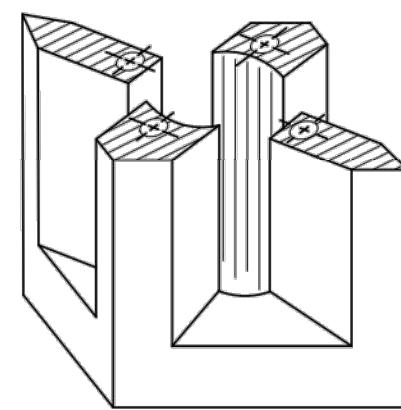
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS FOR INFORMATIONAL PURPOSES ONLY. IT IS THE RESULT OF INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.
DIMENSIONS ARE IN ENGLISH (") & METRIC UNITS (mm). METRIC DIMENSIONS ARE ROUNDED:
- OVER 1" TO NEAREST 5 mm
- UNDER 1" TO NEAREST 1 mm.
NOT TO SCALE
Filename: CTDOT_TRAFFIC_STD.dgn Model: TR-1001_01



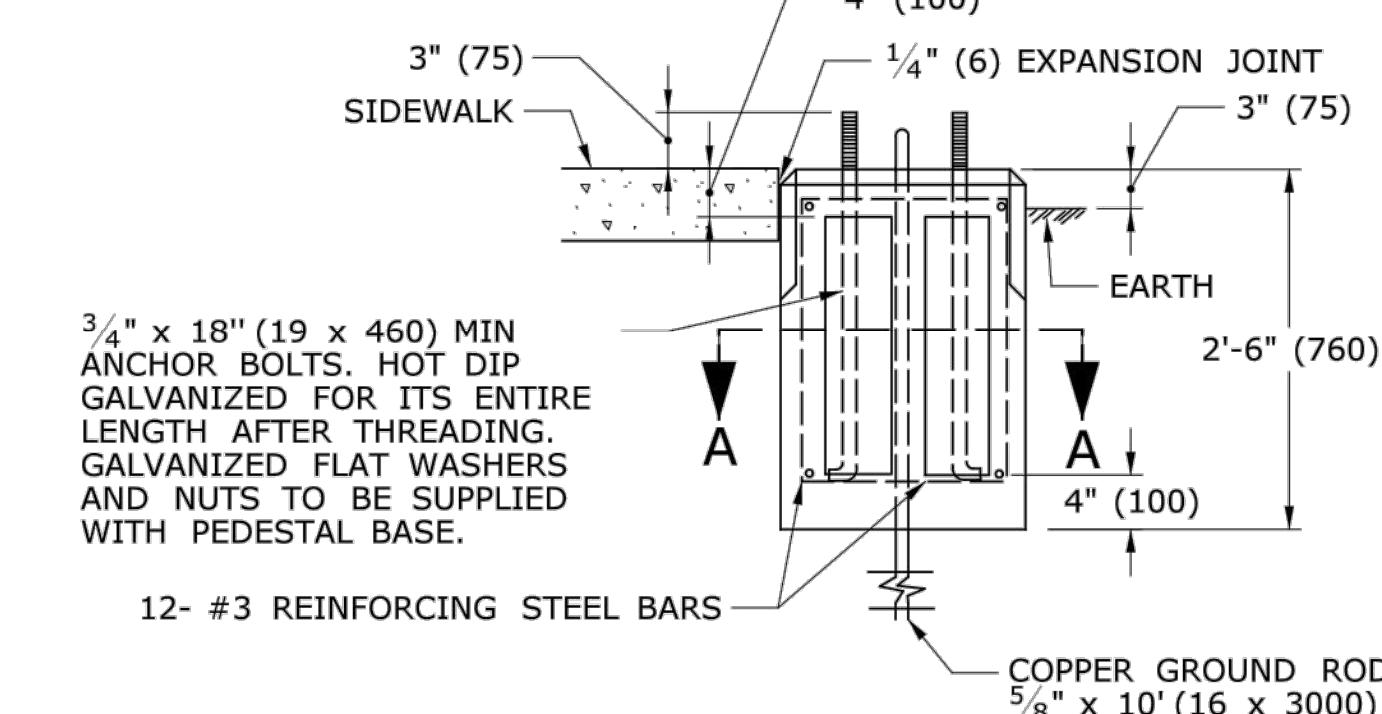
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<i>Tracy L. Fogarty</i>	Tracy L. Fogarty 2012.05.01 12:54:42-04'00'
APPROVED BY:	NAME/DATE/TIME:
<i>Timothy M. Wilson</i>	Timothy M. Wilson 2012.05.09 10:23:34-04'00'

CTDOT STANDARD SHEET	STANDARD SHEET TITLE:
OFFICE OF ENGINEERING	TRENCHING & BACKFILLING, ELECTRICAL CONDUIT

STANDARD SHEET NO.:
TR-1001_01



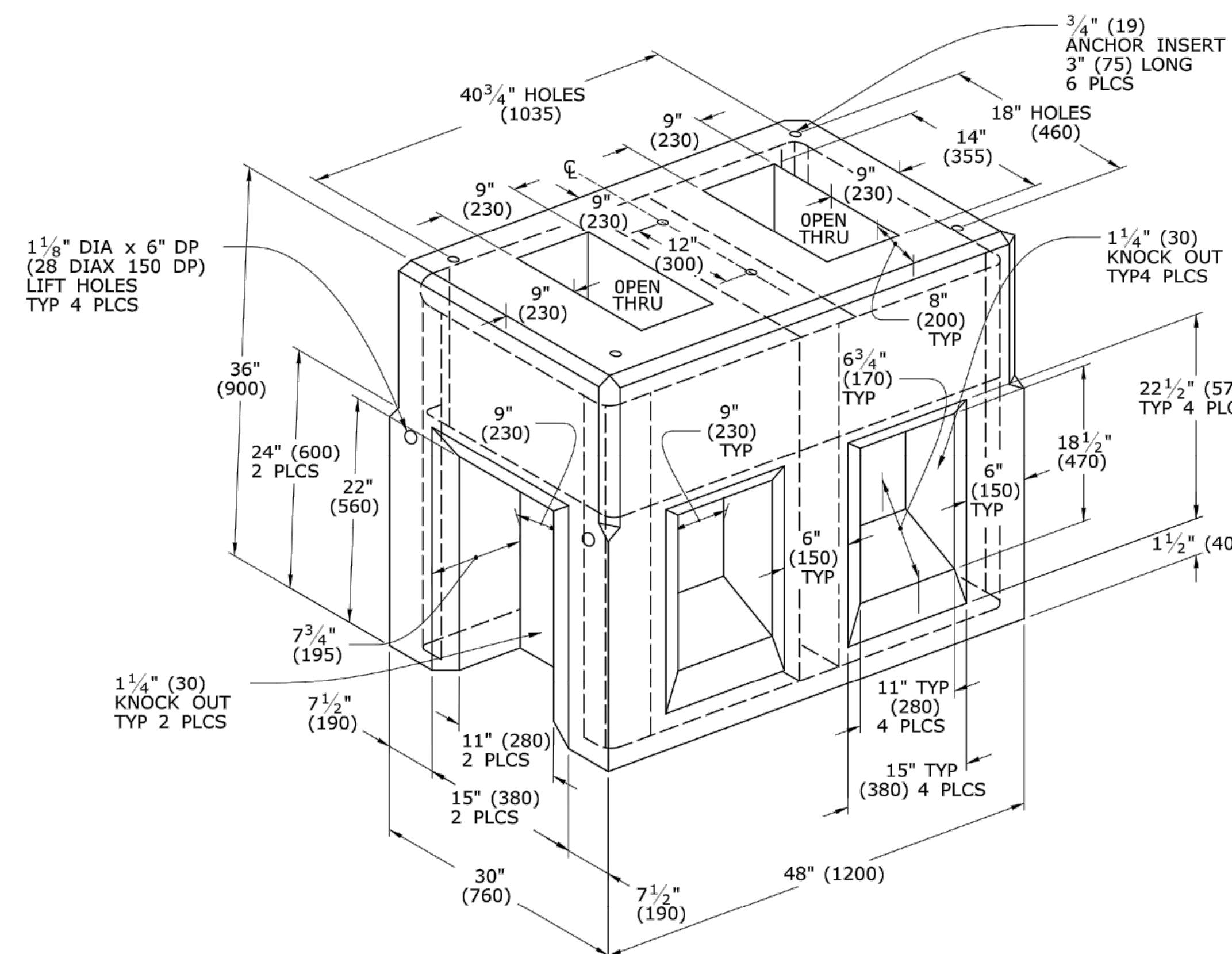
**PICTORIAL
SECTION A-A**



**TRAFFIC CONTROL FOUNDATION
PEDESTAL - TYPE I - PRECAST**

NOTES:

PLACE NO. 6 CRUSHED STONE IN CENTER OPENING AFTER CONDUITS AND GROUND ROD HAVE BEEN INSTALLED.



**TRAFFIC CONTROL FOUNDATION
CONTROLLER - TYPE IV - PRECAST**

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:

- PROPOSED CONTROLLER
- EXISTING CONTROLLER
- PROPOSED STEEL SPAN POLE
- EXISTING STEEL SPAN POLE

2 1-2014 REMOVED SPAN POLE FOUNDATION DETAILS, REVISED TYPICAL CONCRETE SIDEWALK AT CONTROLLER FOUNDATION.

1 4-2012 MINOR REVISIONS

REV. DATE

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NOT TO SCALE

Plotted Date: 1/7/2014

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT-TRAFFIC.STD.DGN Model: TR-1002-01

SUBMITTED BY:

Tracy L. Fogarty

2014.01.07 16:12:06-05'00"

APPROVED BY:

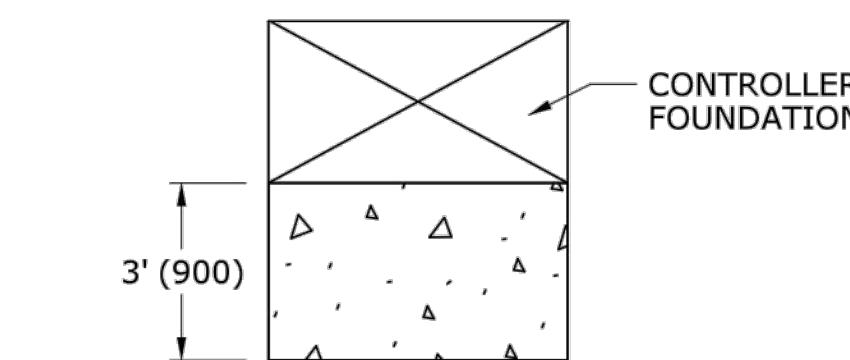
Charles S. Harlow

2014.01.08 09:02:54-05'00"

NAME/DATE/TIME:

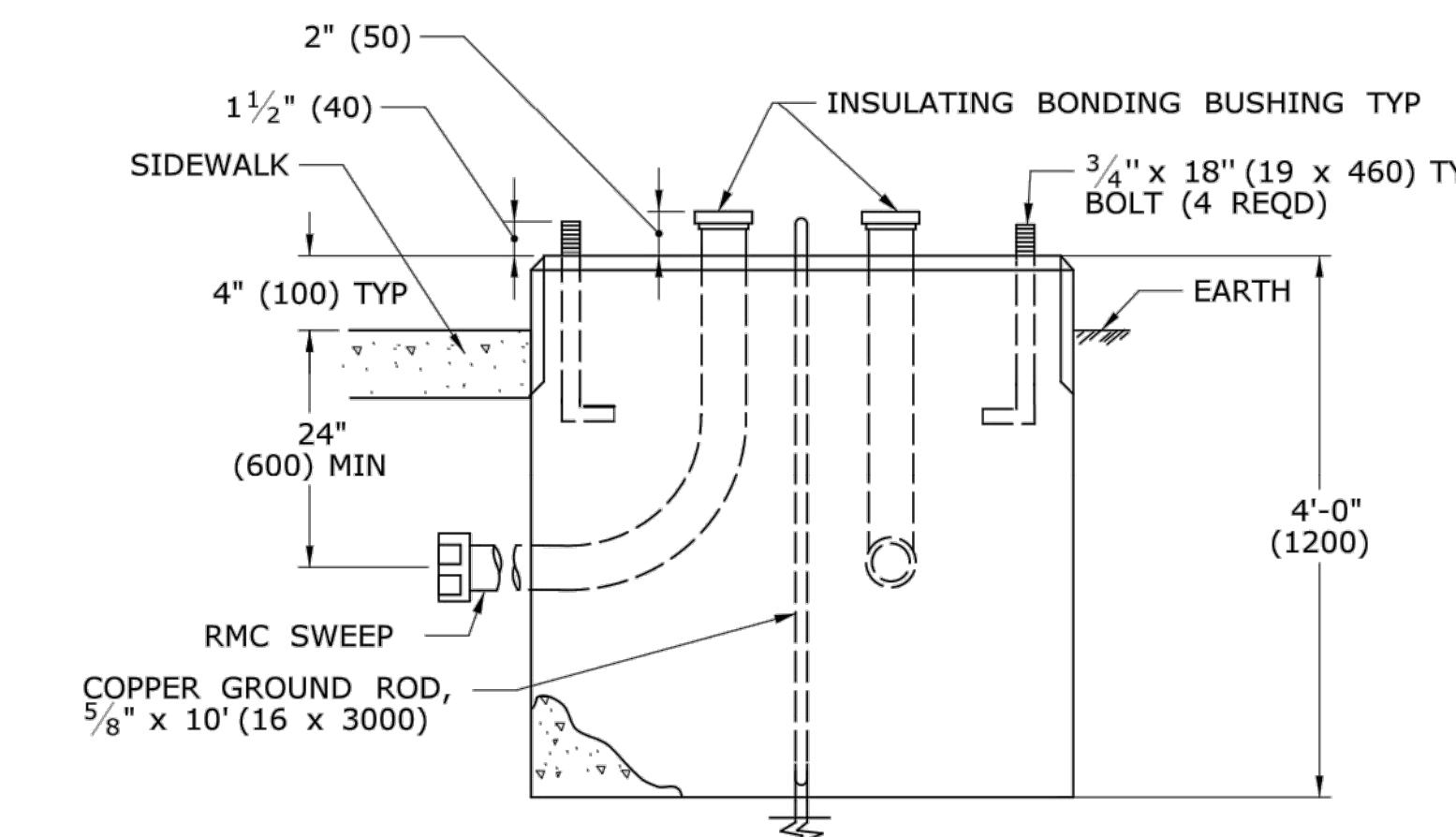
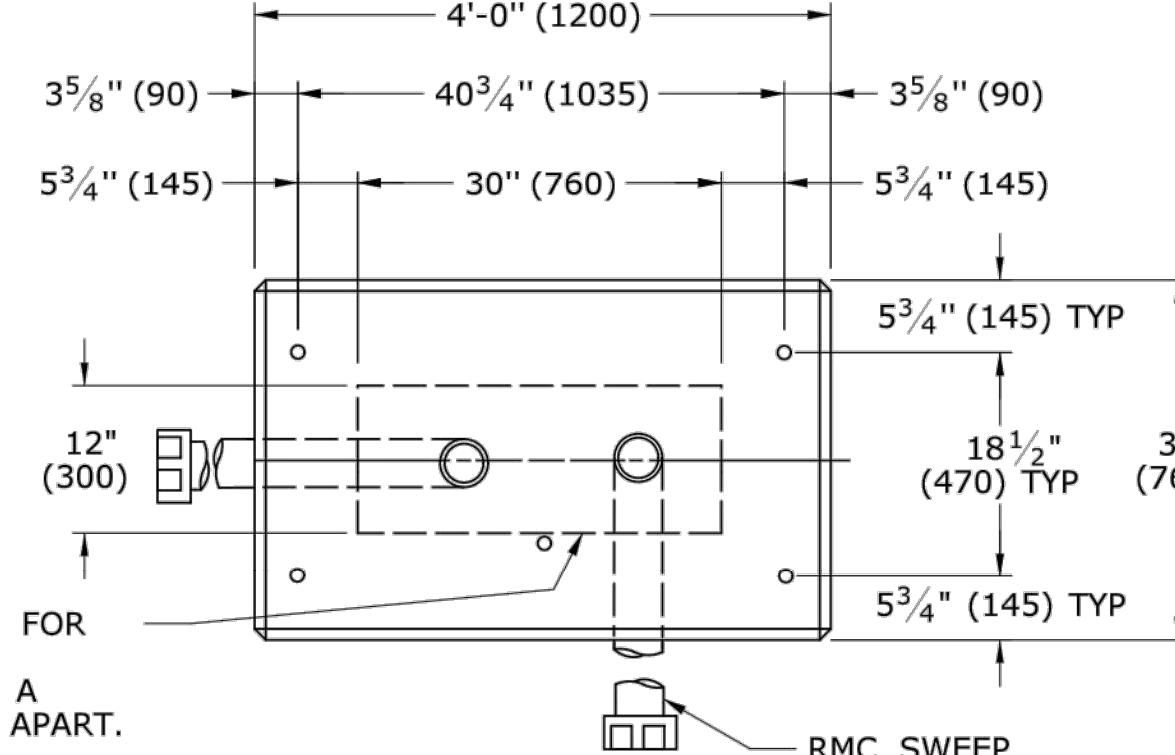
NAME/DATE/TIME:

Model:



INSTALL PRECAST OR CAST IN PLACE CONCRETE SIDEWALK ON CABINET DOOR SIDE OF CONTROLLER FOUNDATION.
PITCH SIDEWALK 1/4" PER FOOT (20 PER METER) AWAY FROM THE CONTROLLER FOUNDATION.
REFER TO HIGHWAY STANDARD SHEET HW-921-01 FOR SIDEWALK CONSTRUCTION.

**TYPICAL CONCRETE SIDEWALK
AT CONTROLLER FOUNDATION**



**TRAFFIC CONTROL FOUNDATION
CONTROLLER - TYPE IV - CAST IN PLACE**

NOTES:

INSTALL FOUNDATION ON 6" (150) OF COMPAKTED GRAVEL IN ACCORDANCE WITH SECTION 2.14. LEVEL FOUNDATION WITH A PROJECTION OF 4" (100) ABOVE FINISHED GRADE.

INSTALL COPPER GROUND ROD: 5/8" x 10' (16 x 3000).

PLACE NO. 6 CRUSHED STONE IN THE CENTER OPENINGS AFTER THE CONDUITS AND GROUND ROD HAVE BEEN INSTALLED. THE OPENINGS SHALL BE CAPPED WITH A 2" (50) GROUT LEVEL WITH THE TOP OF THE FOUNDATION AND NEATLY FINISHED. THE GROUT SHALL CONFORM WITH THE REQUIREMENTS OF ARTICLE M.3.01-12.

CONCRETE: CLASS "A" CONFORMING TO ARTICLE M.03.01.

#4 REBAR 2" (50) MIN COVER AROUND ALL OPENINGS, 3-#4 REBARS IN EACH CORNER.

CONDUITS SHALL NOT PROJECT MORE THAN 2" (50) ABOVE FOUNDATION.

STANDARD SHEET NO.:

**CTDOT
STANDARD SHEET
OFFICE OF ENGINEERING**

STANDARD SHEET TITLE:

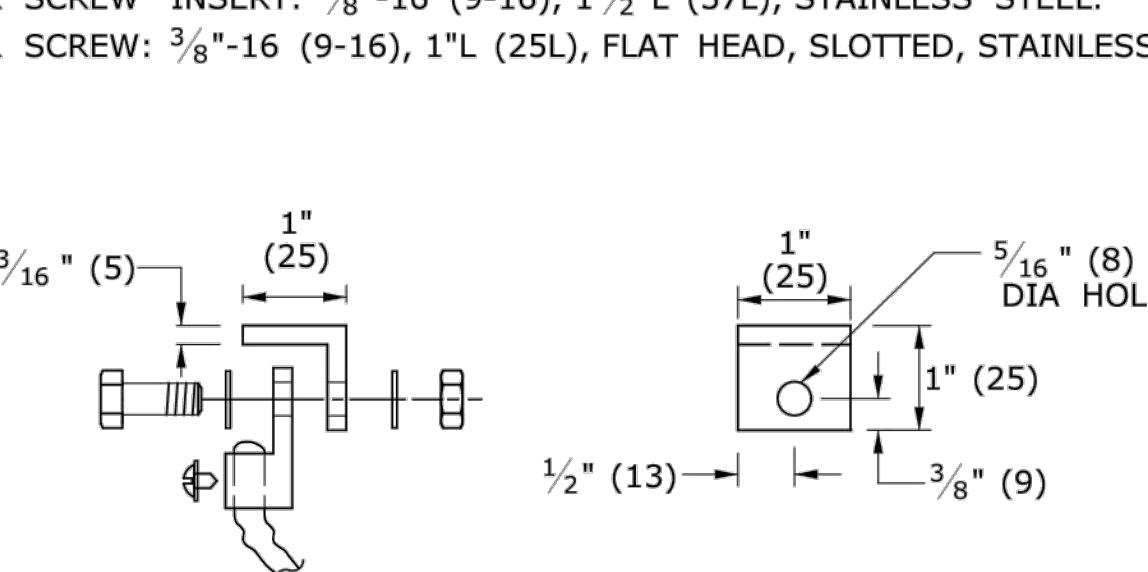
TRAFFIC CONTROL FOUNDATIONS

STANDARD SHEET NO.:

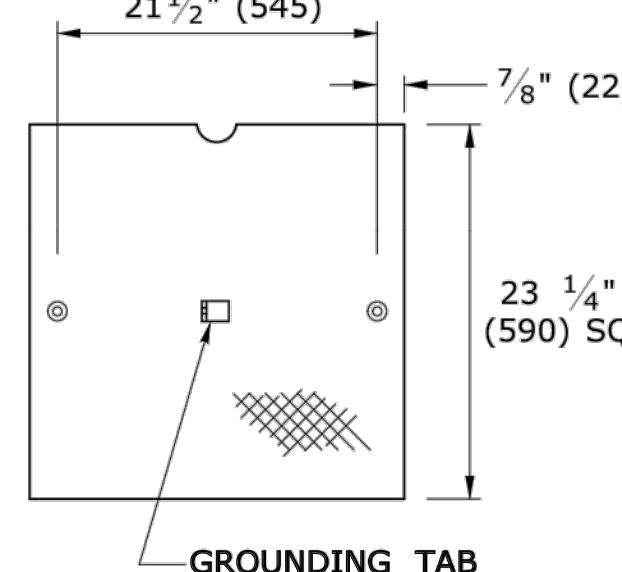
TR-1002_01

COVER NOTES:

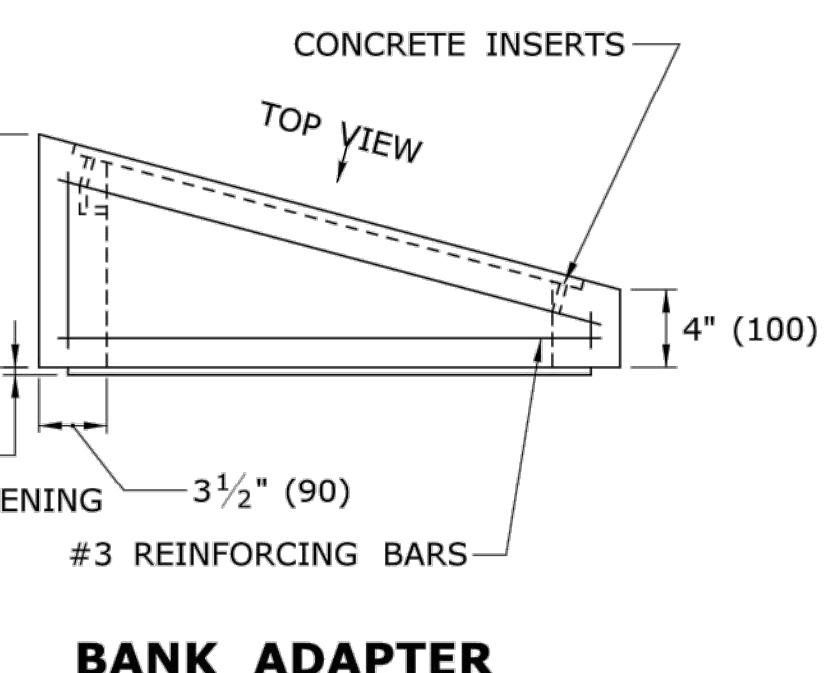
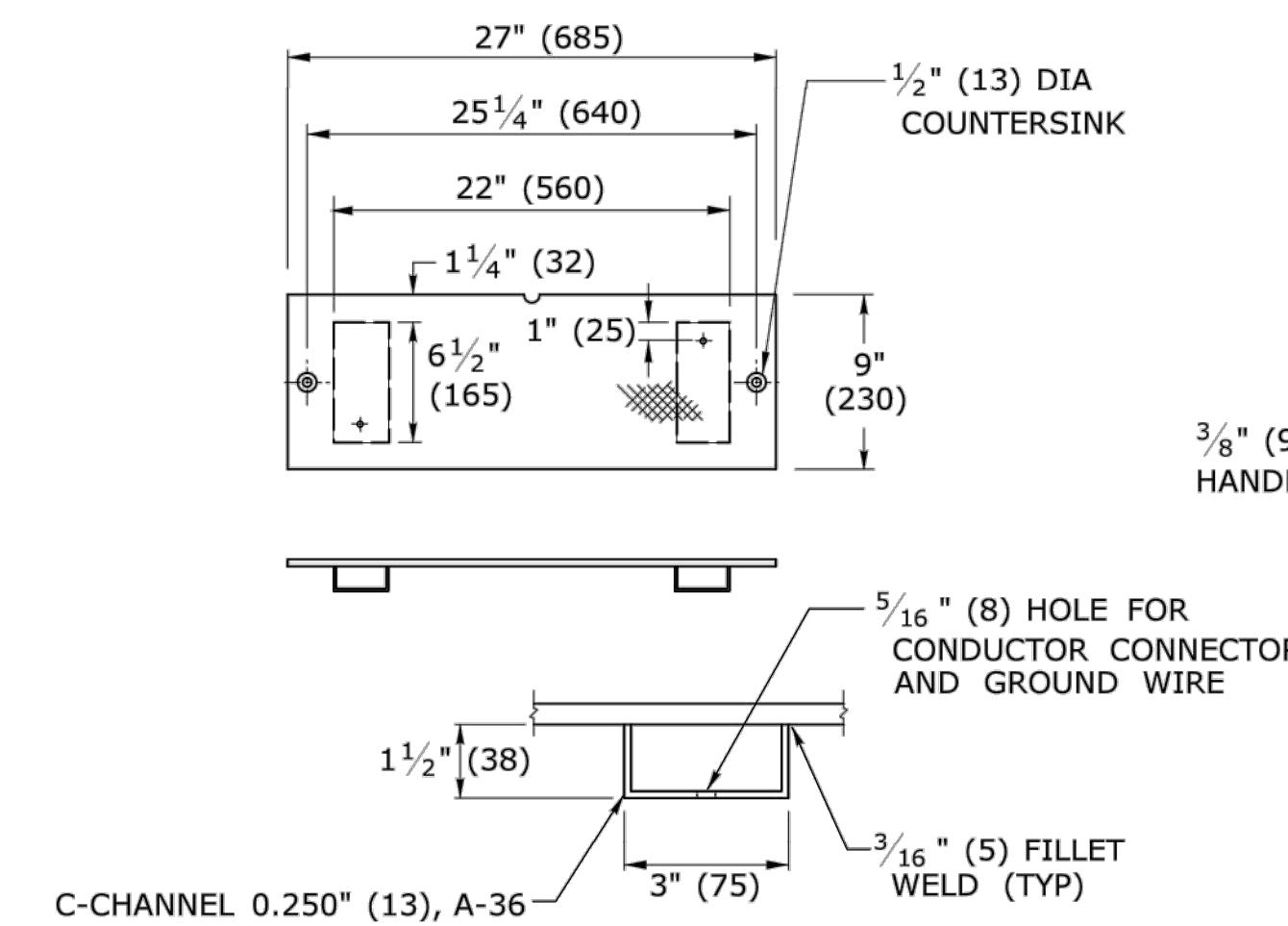
1. GROUNDING TAB WELDED TO BOTTOM CENTER OF COVER WITH $\frac{3}{16}$ " (5) WELD (3 SIDES).
2. ATTACH 6'(2 m) LENGTH OF NO. 8 GROUND WIRE TO GROUNDING TAB WITH CONDUCTOR CONNECTOR, $\frac{1}{4}$ " - 20 X $\frac{3}{4}$ " (M6 X 20) LG SST HEX HEAD BOLT, AND SST FLAT WASHER. ATTACH FREE END OF GROUND WIRE TO CONDUIT BONDING BUSHING IN HANDHOLE.
3. CONDUCTOR CONNECTOR: COPPER ALLOY BODY, BRASS SCREW, BRASS OR COPPER ALLOY PRESSURE PLATE.
4. COVER SCREW INSERT: $\frac{3}{8}$ "-16 (9-16), 1 $\frac{1}{2}$ "L (37L), STAINLESS STEEL.
5. COVER SCREW: $\frac{3}{8}$ "-16 (9-16), 1" (25L), FLAT HEAD, SLOTTED, STAINLESS STEEL.



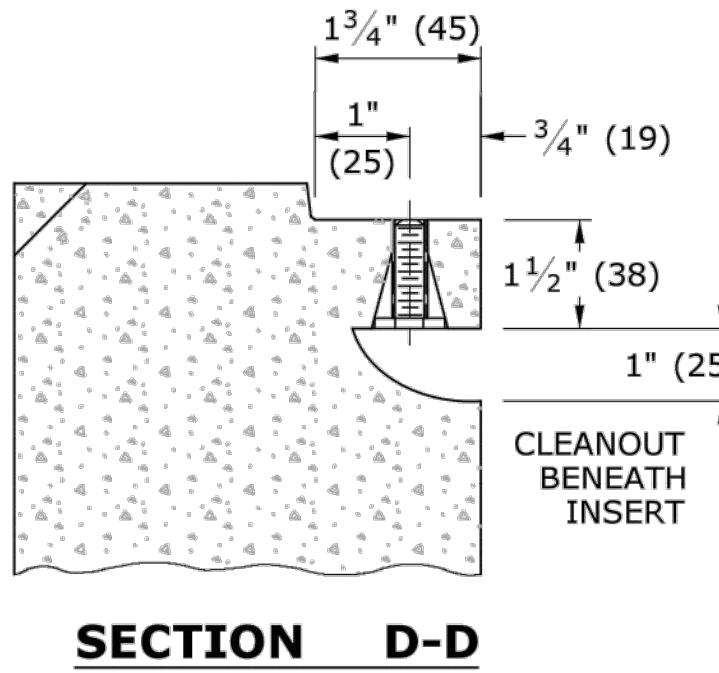
**STEEL GROUNDING TAB
w/ CONDUCTOR CONNECTOR**



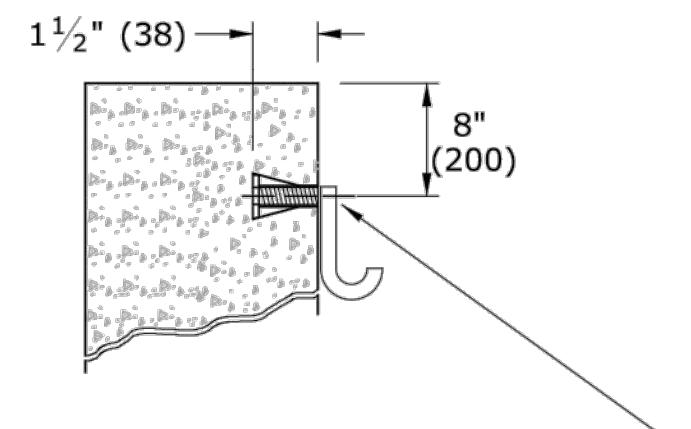
**NON SKID FLOOR PLATE
GALVANIZED STEEL, 3/8" (10)**



BANK ADAPTER

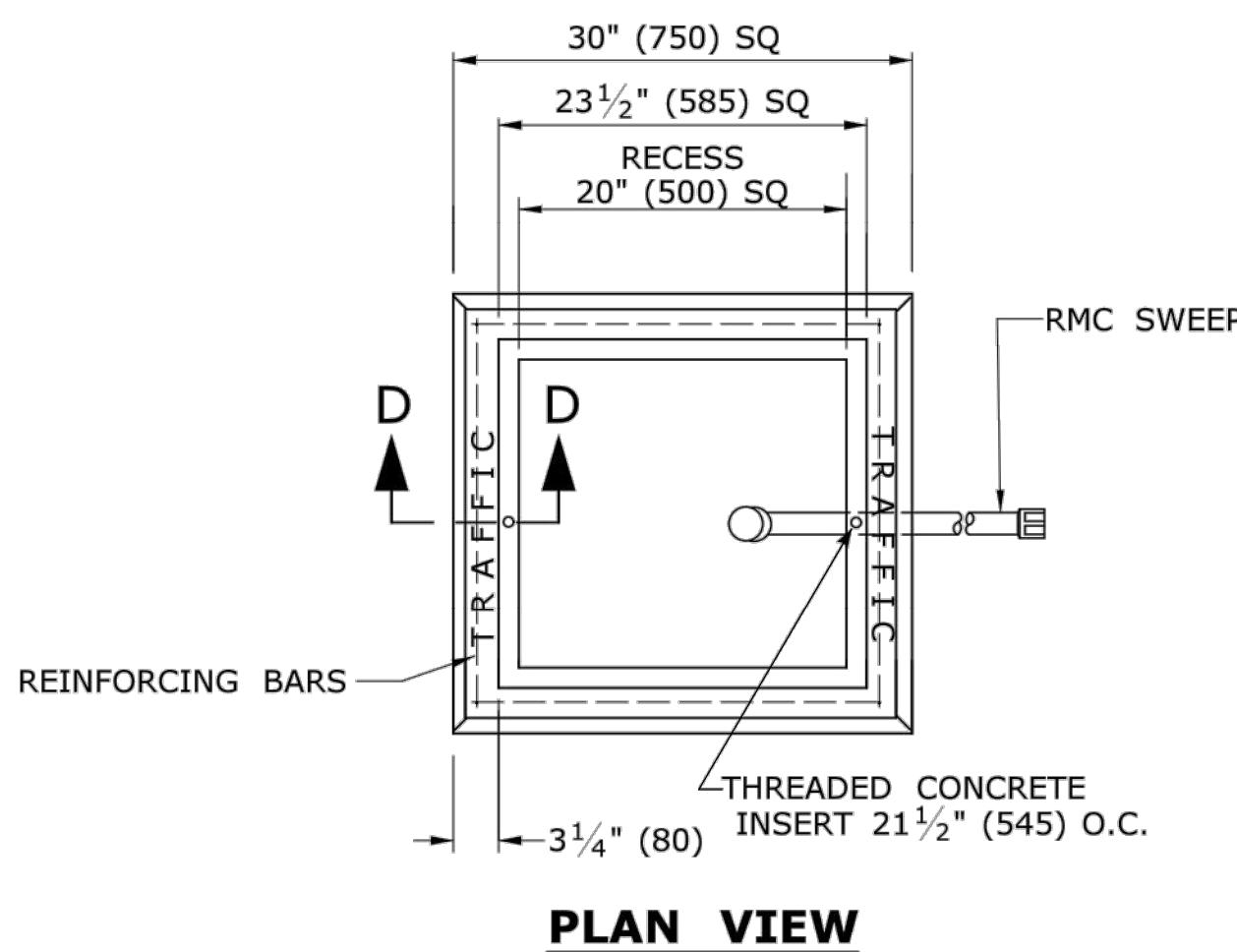


SECTION D-D

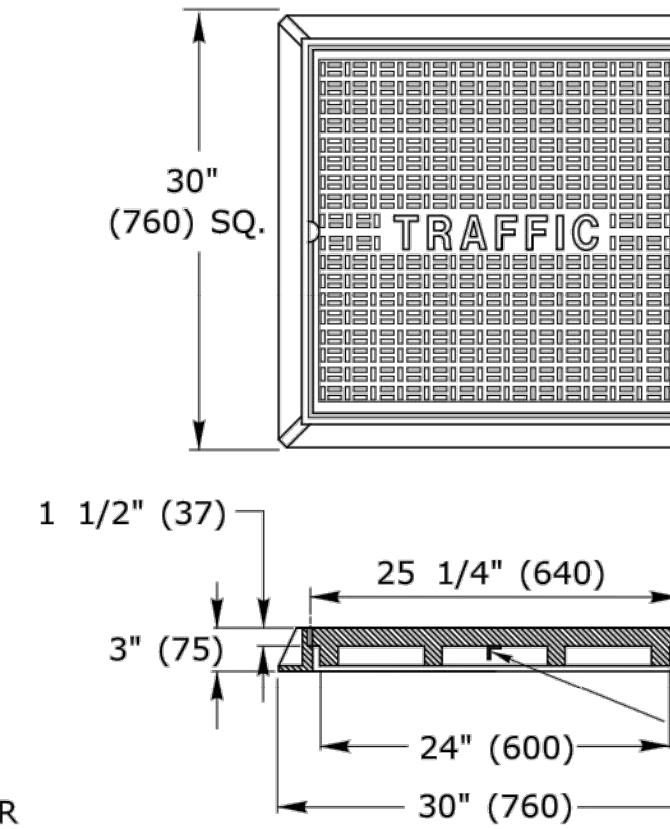


INSERT DETAIL

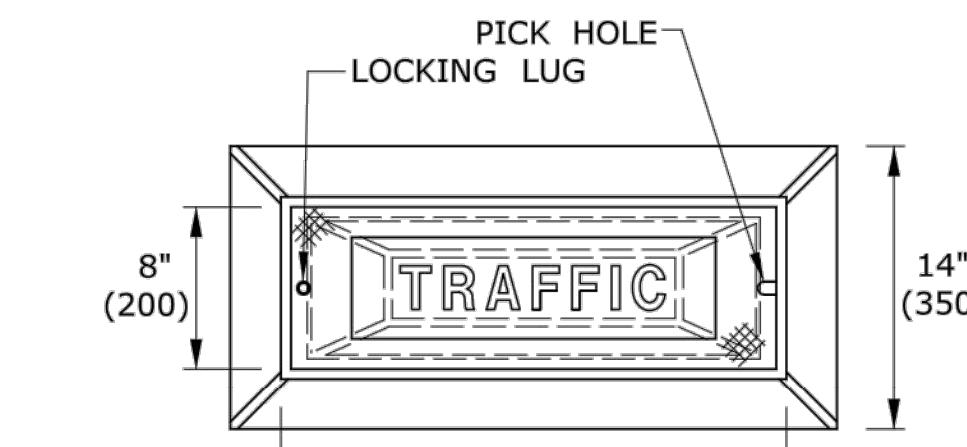
TYP IN TWO PLACES FOR
ALL HANDHOLES



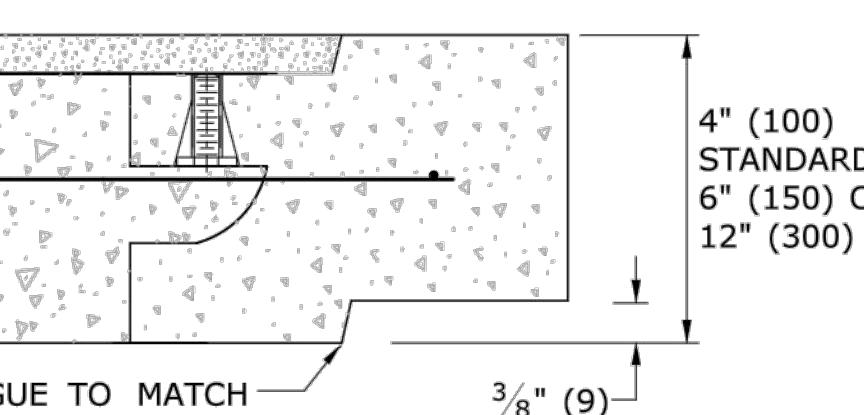
PLAN VIEW



TRAFFIC

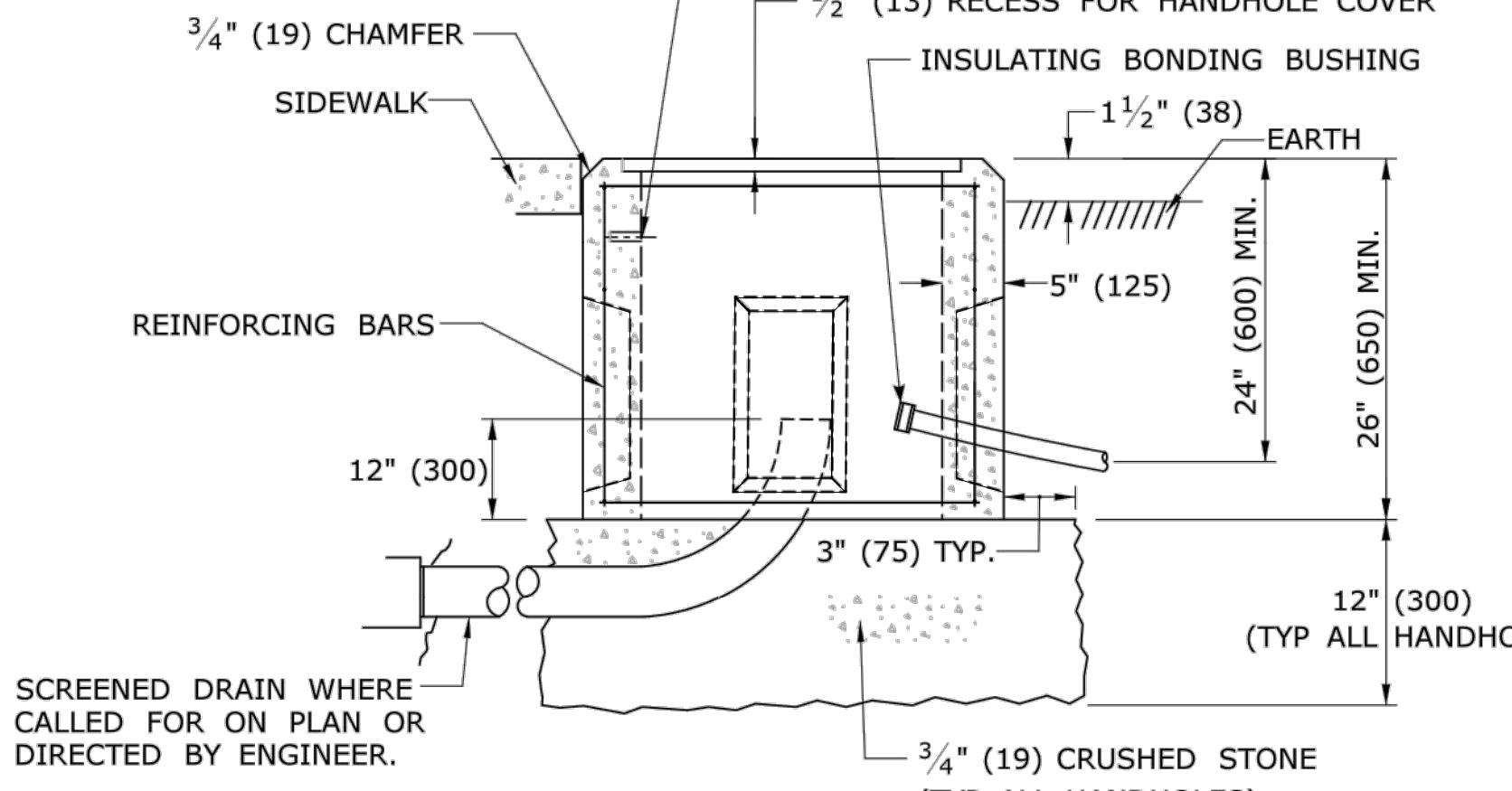


**CAST IRON
HANDHOLE COVERS**



**SECTION A-A
HANDHOLE EXTENSIONS**

4 - #8 REINFORCING BARS REQ'D



CONCRETE HANDHOLE TYPE I

HANDHOLE NOTES:

1. MINIMUM CLASS "C" CONCRETE.
2. COMPLETE TYPE II HANDHOLE:
IN EARTH AREAS, CONSISTS OF A BASE SECTION WITH 4" (100) HANDHOLE EXTENSION, IN SIDEWALK AREAS, CONSISTS OF A BASE SECTION WITH 4" (100) CAST IRON COVER.
3. PLAN VIEW DIMENSIONS, SECTION VIEW, & DETAILS, SAME FOR BASE SECTION, EXTENSIONS & BANK ADAPTER.
4. GROUT AROUND ALL CONDUITS.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
 PROPOSED HANDHOLE
 EXISTING HANDHOLE

2 4-2014 REVISED HANDHOLES NOTES, ADDED NOTE #6. ADDED "J" HOOK TO INSERT DETAIL.	1 4-2012 CAST IRON COVER: CHANGED BOLT TO PICK HOLE. ADDED EXTENSIONS, C-CHANNEL, CONDUCTOR CONNECTOR & MINOR REVISIONS.
REV. DATE	REVISION DESCRIPTION

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS FOR THE USE OF THE STATE AND INVESTIGATORS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

NOT TO SCALE

DIMENSIONS ARE IN ENGLISH (") & METRIC UNITS (mm).
METRIC DIMENSIONS ARE ROUNDED:
- OVER 1" TO NEAREST 5 mm
- UNDER 1" TO NEAREST 1 mm.

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD.DGN Model: TR-1010_01

SUBMITTED BY:

Tracy L. Fogarty, P.E.
2014.04.25 16:01:09-04'00'

APPROVED BY:

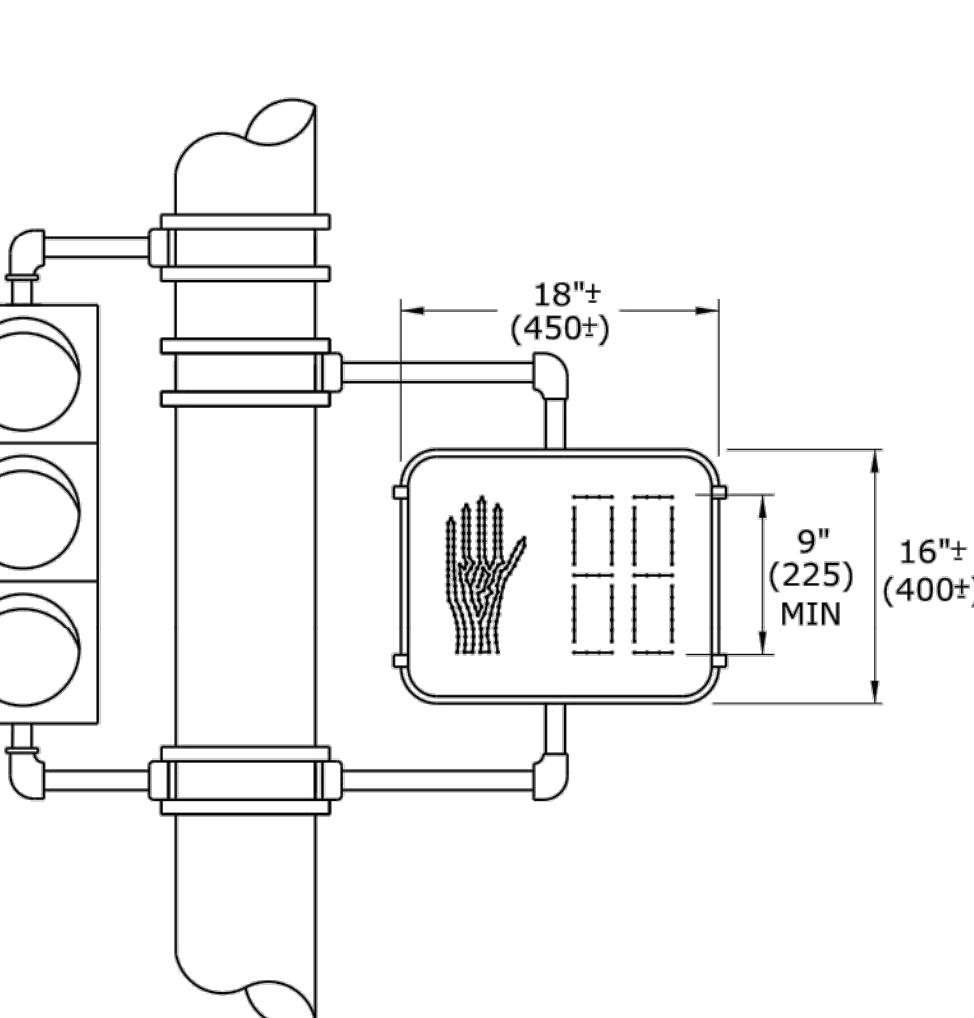
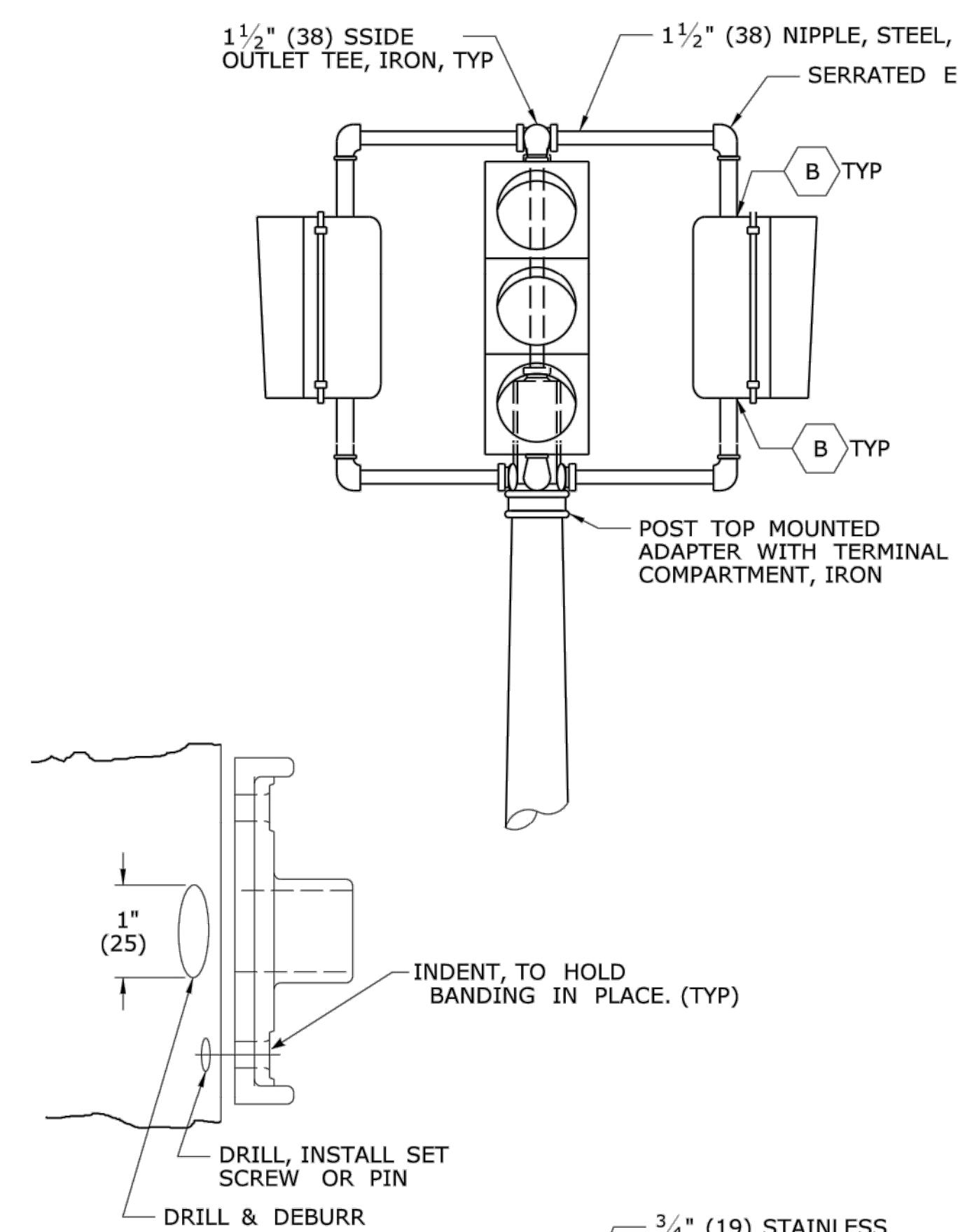
Charles S. Harlow,
P.E.
Digitally signed by Charles S. Harlow,
Date: 2014.04.29 14:26:25-04'00'

NAME/DATE/TIME:

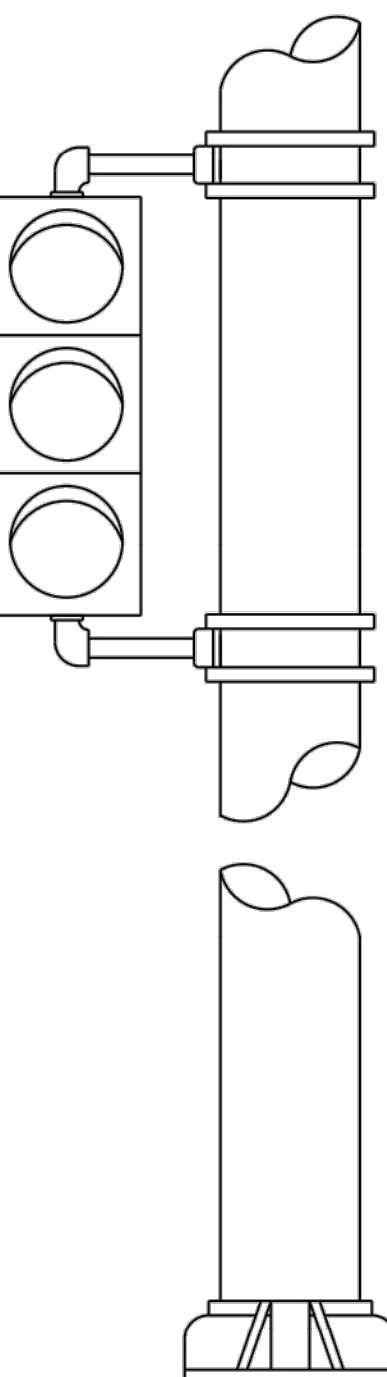
STANDARD SHEET TITLE:
**CTDOT
STANDARD SHEET**
OFFICE OF ENGINEERING

CONCRETE HANDHOLE

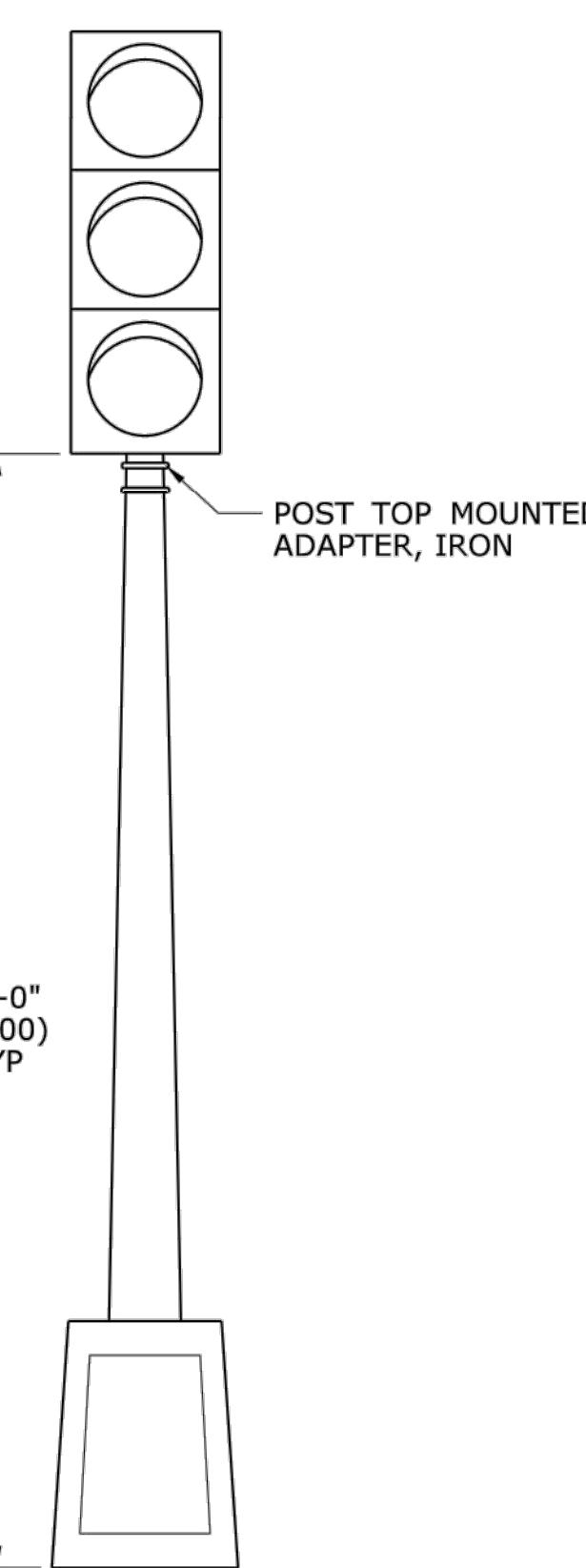
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TR-1010_01



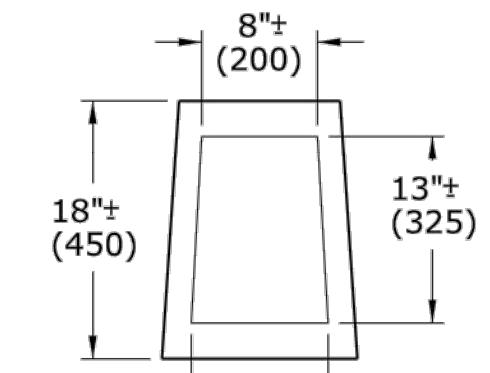
**ONE WAY TRAFFIC SIGNAL
PEDESTAL MOUNTED**



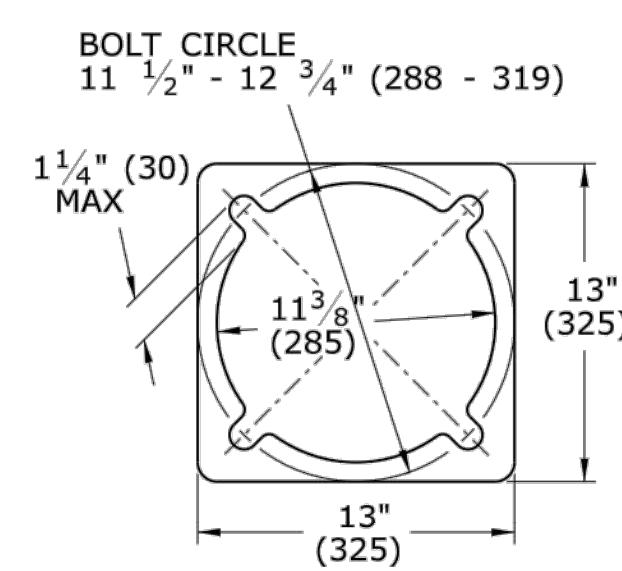
**ONE WAY TRAFFIC SIGNAL
POLE MOUNTED**



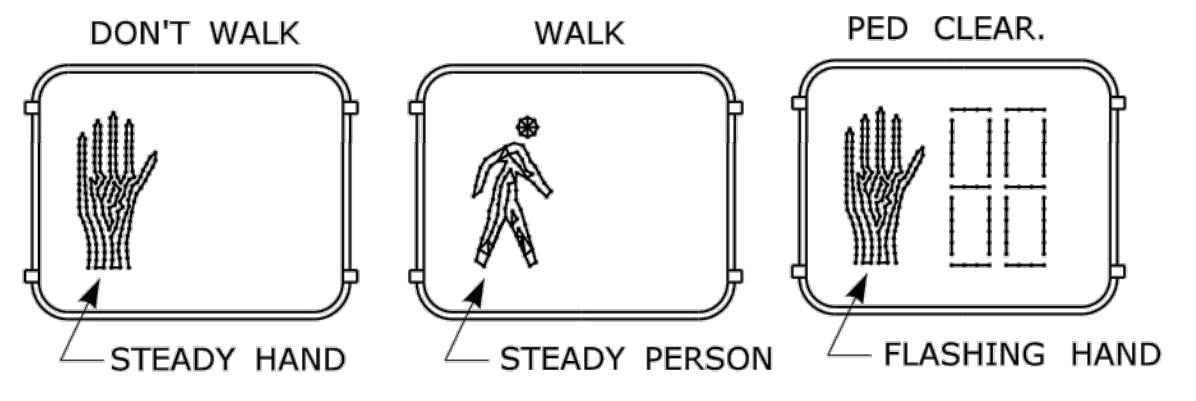
**ONE WAY WALK SIGNAL
PEDESTAL MOUNTED**



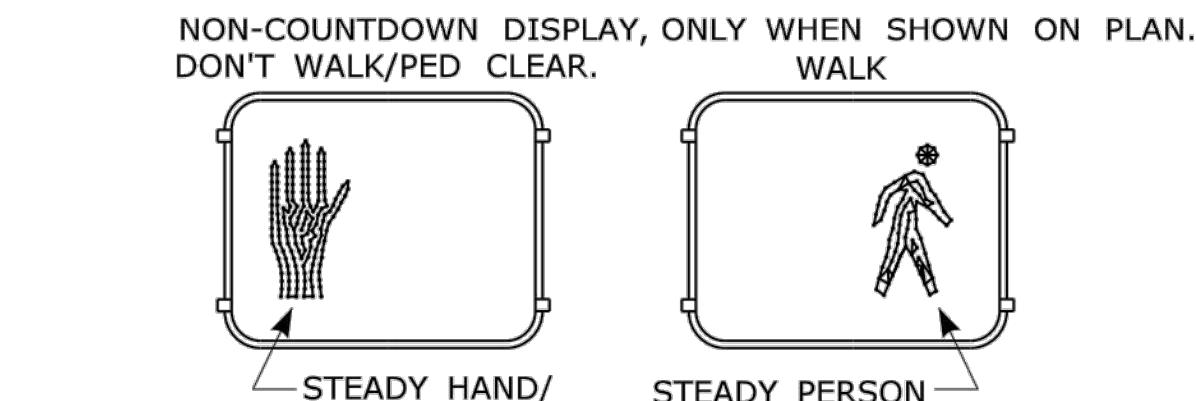
**ALUMINUM PEDESTAL
DOOR OPENING DETAIL**



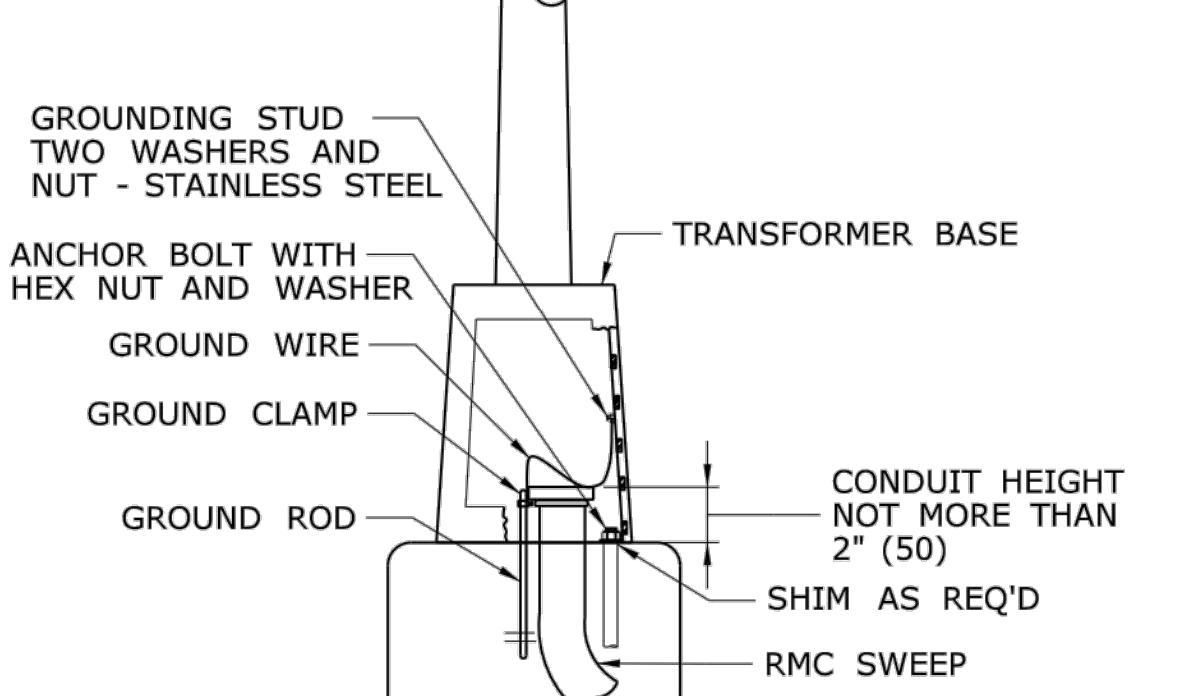
PEDESTAL BASE PLAN



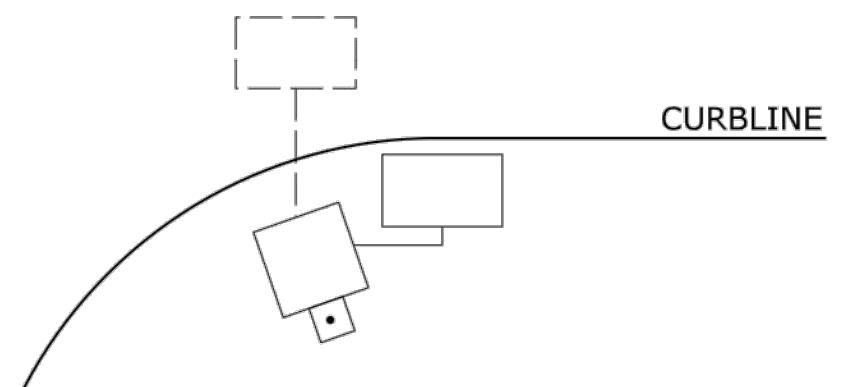
TYPICAL INDICATION WHEN LIT



NON-COUNTDOWN DISPLAY, ONLY WHEN SHOWN ON PLAN. DON'T WALK/PED CLEAR. WALK



**ALUMINUM PEDESTAL
INSTALLATION DETAIL**



WHEN PEDESTALS OR SPAN POLES ARE INSTALLED CLOSE TO THE CURB, SIDE MOUNT PEDESTRIAN OR TRAFFIC SIGNALS TO AVOID VISOR DAMAGE FROM TURNING VEHICLES.

NOTES:

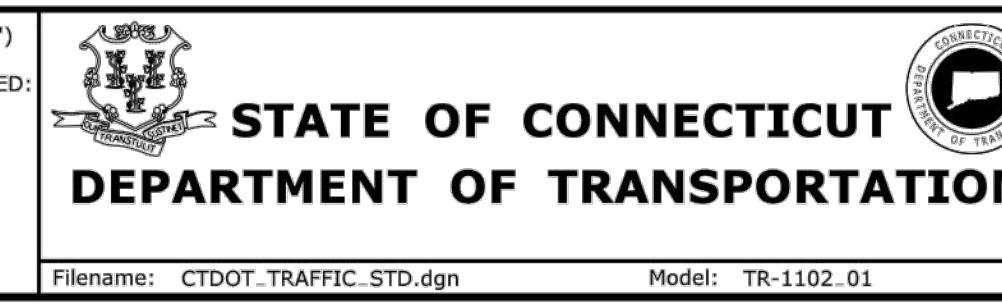
- A** SECURE LOWER HUB PLATE WITH STAINLESS STEEL SET SCREW OR PIN PRIOR TO BANDING TO PREVENT MOVEMENT. INSTALL CABLE THROUGH BOTTOM OF HUB PLATE.
- B** REFER TO CTDOT TRAFFIC STANDARD SHEET, TR-1105-01, TRAFFIC SIGNALS & CABLE ASSIGNMENTS.
- C** IF THREADED, MIN 1" (25) THREADED INTO BASE, SECURED WITH STAINLESS STEEL SET SCREWS.
- D** BASE DESIGNED AS BREAK-AWAY.

INCANDESCENT WALK SIGNAL LAMPS ARE 67 WATTS, RATED AT 8000 HOURS LAMP LIFE. LED WALK SIGNAL LAMPS ARE MAXIMUM 15 WATTS, WARRANTED AT 5 YEAR LIFE.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:	
<input type="checkbox"/> STEEL SPAN POLE, MAST ARM ASSEMBLY SHAFT	<input type="checkbox"/> PEDESTRIAN SIGNAL
<input type="checkbox"/> ALUMINUM PEDESTAL	<input type="checkbox"/> PEDESTAL MOUNTED, TRAFFIC & PEDESTRIAN SIGNALS
<input type="checkbox"/> TRAFFIC SIGNAL	<input type="checkbox"/> POLE MOUNTED, TRAFFIC & PEDESTRIAN SIGNALS

REV.	DATE	REVISION DESCRIPTION
2	4-2012	MINOR REVISIONS.
1	1-2010	INCLUDED COUNTDOWN PEDESTRIAN SIGNALS.

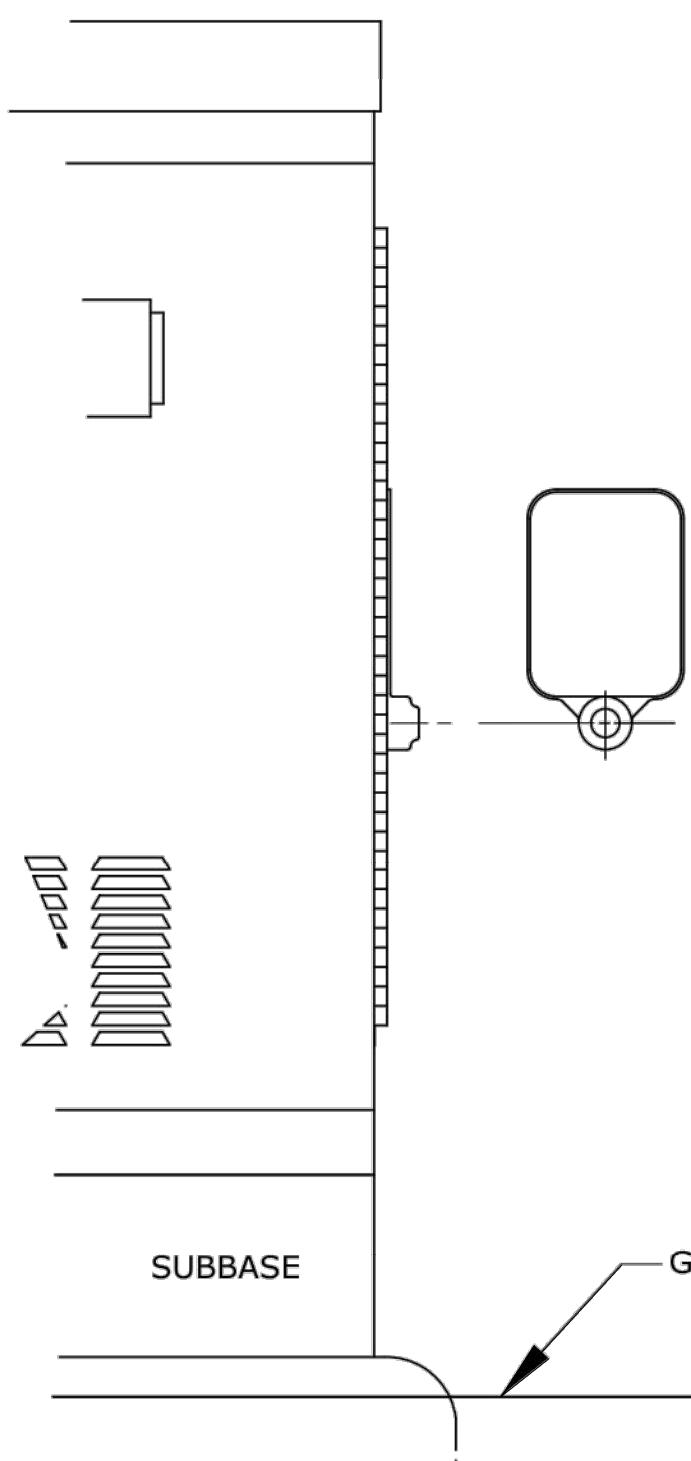
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS FOR INFORMATION ONLY AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.
NOT TO SCALE



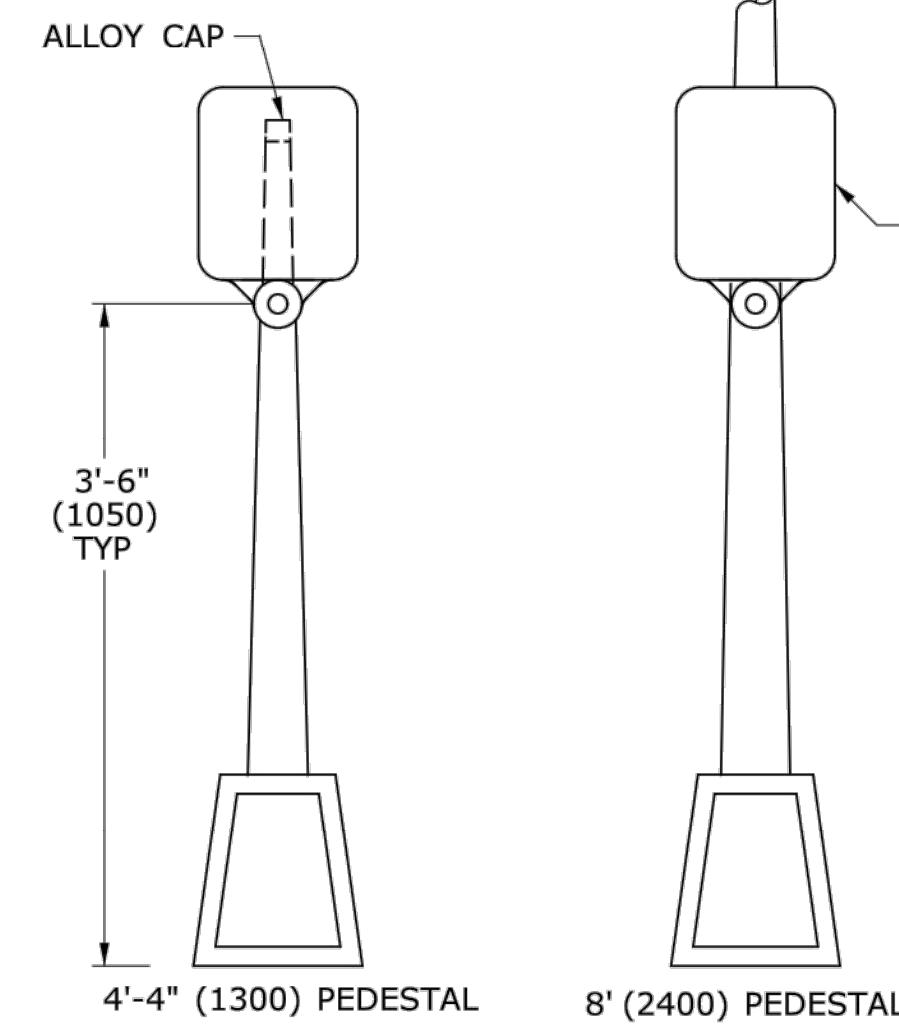
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APPROVED BY: Timothy M. Wilson 2012.05.09 10:24:58-04'00'
NOT TO SCALE

NAME/DATE/TIME:
NAME/DATE/TIME:
NAME/DATE/TIME:
NAME/DATE/TIME:
OFFICE OF ENGINEERING

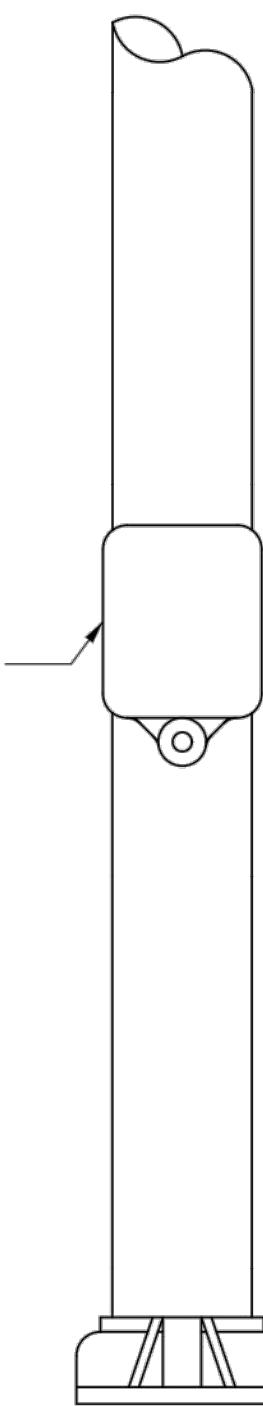
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PEDESTALS, PEDESTRIAN SIGNALS
STANDARD SHEET NO.: **TR-1102_01**



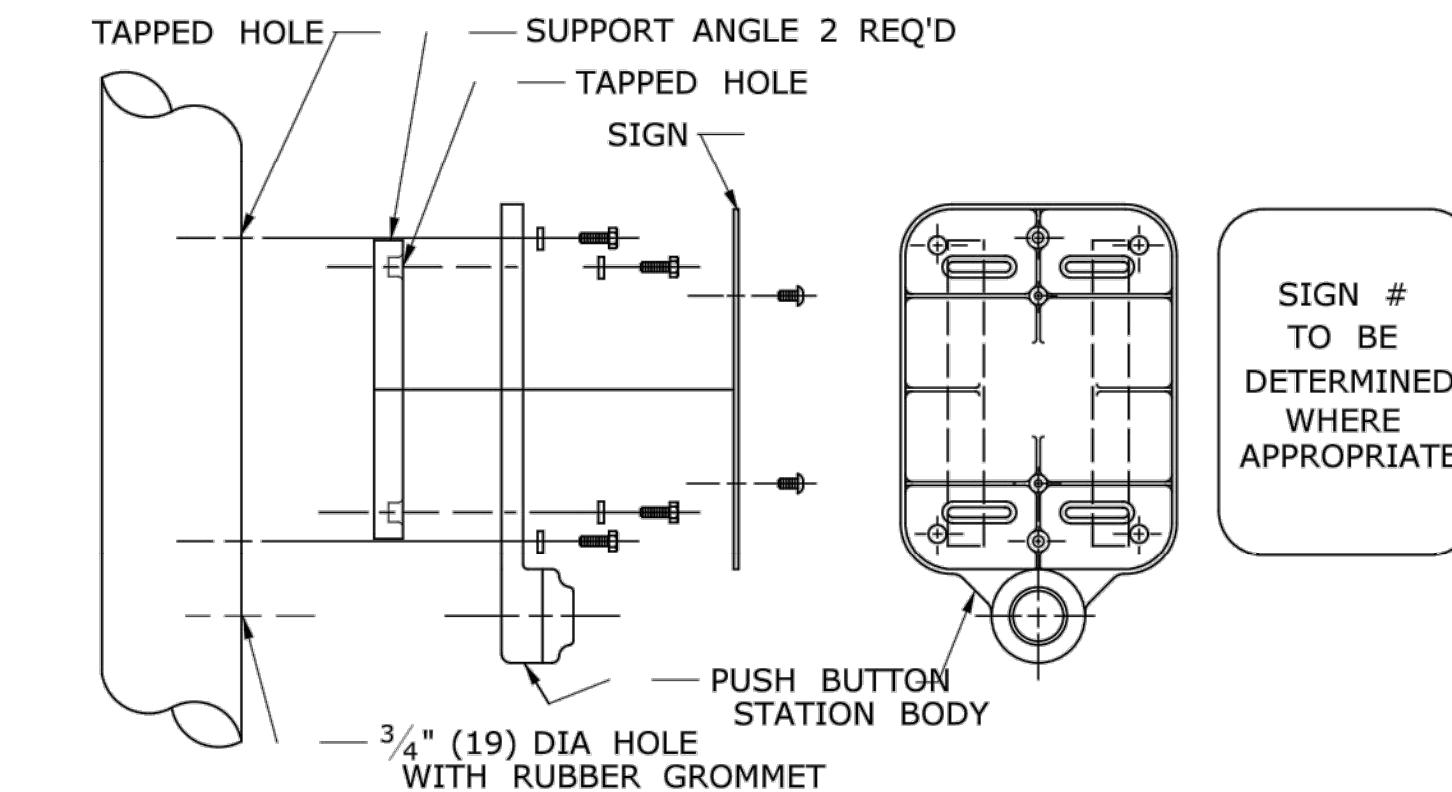
SURFACE MOUNTED



PEDESTAL MOUNTED



**SPAN POLE/MAST ARM
MOUNTED**



DETAIL A



SIGN # 31-0833
* USE APPROPRIATE ARROW UNLESS OTHERWISE NOTED ON PLAN.

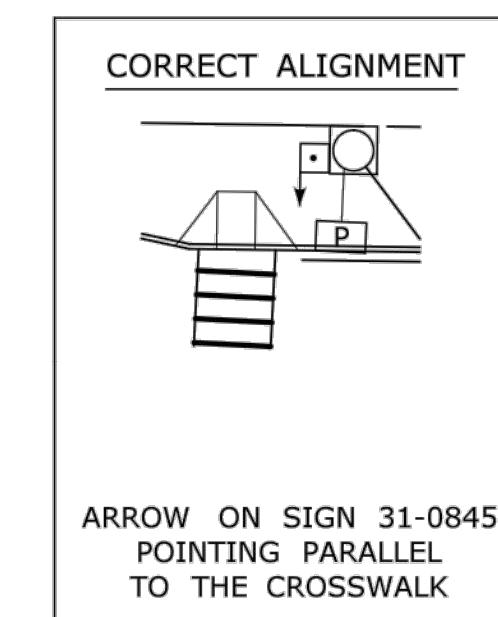


SIGN # 31-0835

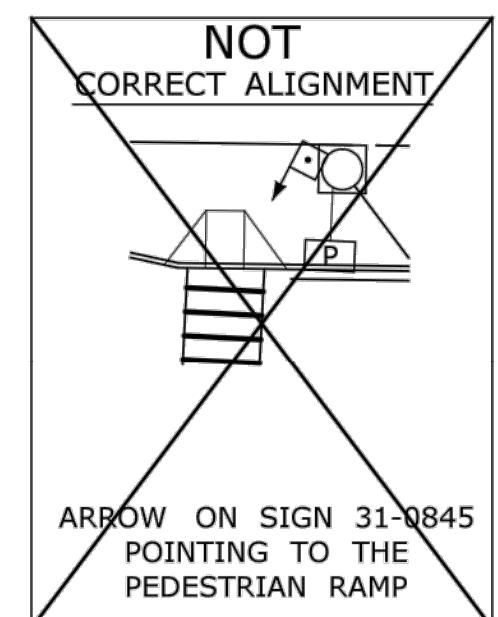
**FOR CROSSING
WITH SIDE STREET GREEN**

GENERAL NOTES:

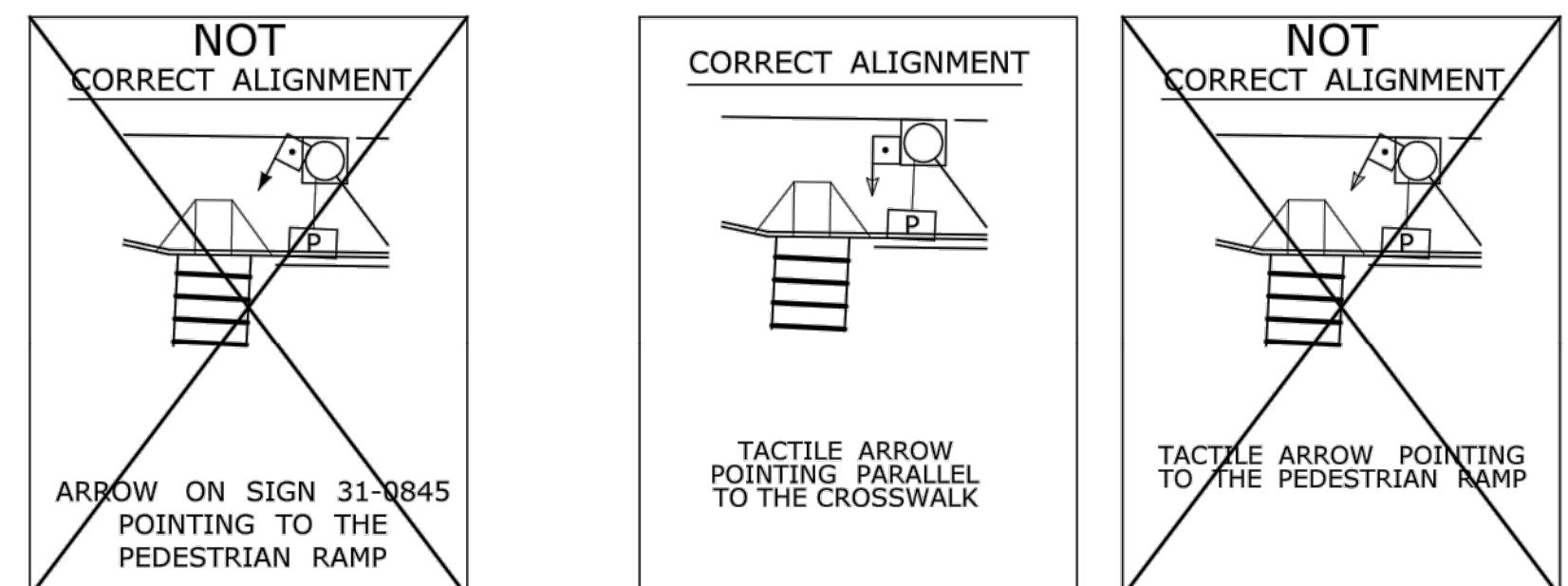
3'-6" (1050) FROM FINISHED GRADE SUCH AS SIDEWALK TO CENTER OF PUSH BUTTON.
PUSH BUTTON INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS
WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN, CURRENT EDITION GOVERNS.
4'-4" (1300) PEDESTAL TO INCLUDE ALLOY CAP SECURED WITH STAINLESS STEEL SET SCREW.



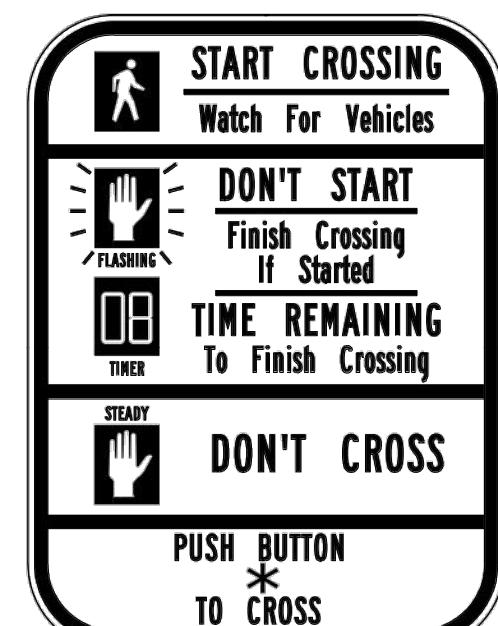
PEDESTRIAN PUSH BUTTON ALIGNMENT



ACCESSIBLE PEDESTRIAN SIGNAL AND DETECTOR



ACCESSIBLE PEDESTRIAN SIGNAL AND DETECTOR



SIGN # 31-0845
* USE APPROPRIATE ARROW UNLESS OTHERWISE NOTED ON PLAN.

**EXAMPLE ALIGNMENTS
FOR EXCLUSIVE PEDESTRIAN PHASE**

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
 PEDESTRIAN PUSH BUTTON
 PEDESTRIAN PUSH BUTTON, PEDESTAL MOUNTED
 PEDESTRIAN PUSH BUTTON, POLE MOUNTED

2 4-2014	ADDED PEDESTRIAN EXAMPLE ALIGNMENTS
1 4-2012	MINOR REVISIONS & UPDATED SIGN #31-0845
REV. DATE	REVISION DESCRIPTION

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NOT TO SCALE

Plotted Date: 4/25/2014

DIMENSIONS ARE IN ENGLISH (") & METRIC UNITS (mm). METRIC DIMENSIONS ARE ROUNDED:
 - OVER 1" TO NEAREST 5 mm
 - UNDER 1" TO NEAREST 1 mm.

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT.TRAFFIC.STD.DGN Model: TR-1107.01

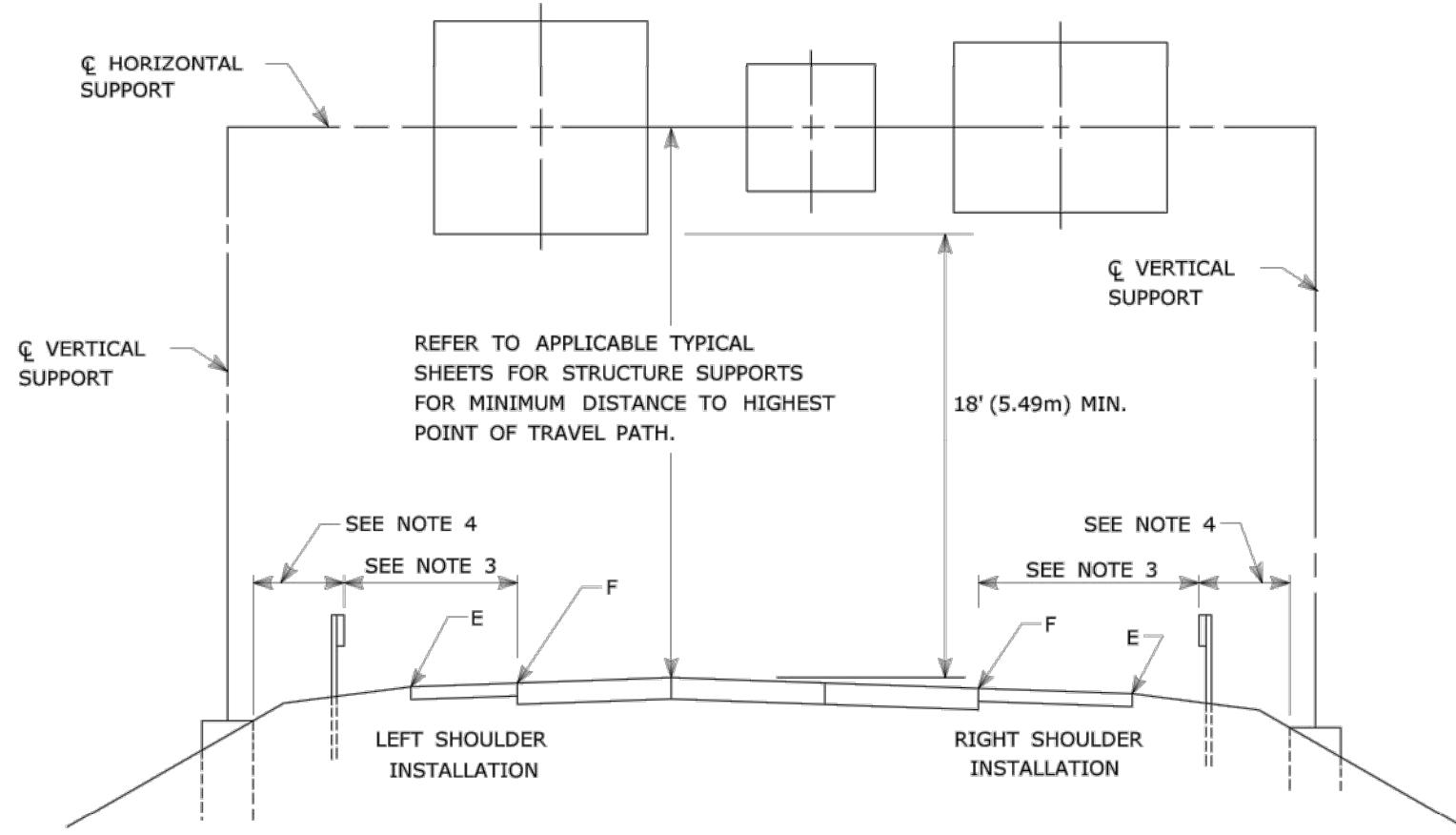
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 Tracy L. Fogarty, P.E. 2014.04.25 16:01:49-04'00'
 APPROVED BY: NAME/DATE/TIME:
 Digitally signed by Charles S. Harlow, P.E.
 Date 2014.04.29 14:27:01-04'00'

**CTDOT
STANDARD SHEET**
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

PEDESTRIAN PUSH BUTTONS

STANDARD SHEET NO.:
TR-1107_01



GUIDE RAIL PLACEMENT FOR SIGN SUPPORTS

NOTES:

- 1) FOR PLACEMENT OF CANTILEVER SIGN SUPPORT USE APPLICABLE PORTION OF ABOVE DETAIL.
- 2) BARRIER SYSTEM IS REQUIRED FOR BOTH SIDES OF MEDIAN SUPPORTS IN NARROW MEDIANS.
- 3) AT LOCATIONS WHERE IMPACT PROTECTION IS NOT REQUIRED FOR ROADSIDE ELEMENTS, FACE OF GUIDE RAIL SHALL BE PLACED 30' (9.1m) FROM EDGE OF TRAVELWAY.
- 4) OFFSETS OF FOUNDATIONS FROM BARRIER SYSTEMS SHALL BE AS SHOWN ELSEWHERE ON THE CONTRACT PLANS.
- 5) ALL SIGNS ARE TO BE HORIZONTAL, REGARDLESS OF CAMBER IN SUPPORT.

FOR MAXIMUM EFFECTIVENESS AND TO ELIMINATE OR MINIMIZE GLARE, POSITION SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS AS FOLLOWS:

ON A TANGENT SECTION, POSITION THE SIGN SO THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 93° WITH THE TRAFFIC LANE WHICH THE SIGN SERVES:

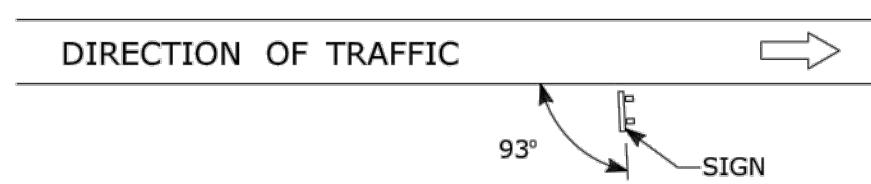


DIAGRAM "A"

ON A HORIZONTAL CURVE SECTION, POSITION THE SIGN SO THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 90° WITH A STRAIGHT LINE BETWEEN THE SIGN AND THE POINT AT WHICH THE SIGN SHALL BE READ.

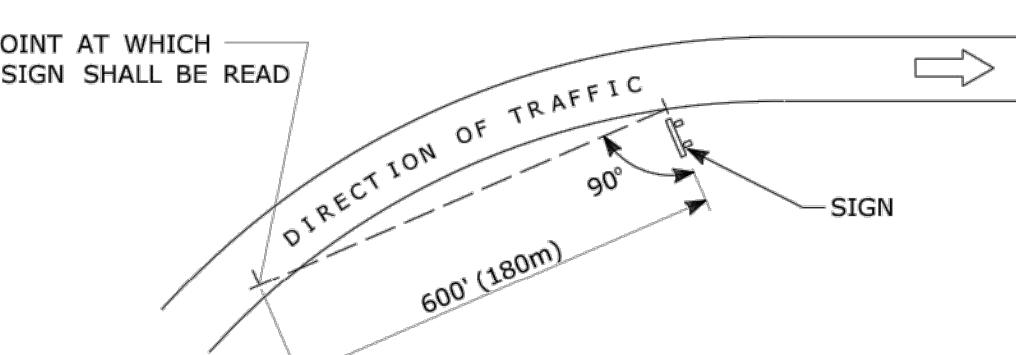
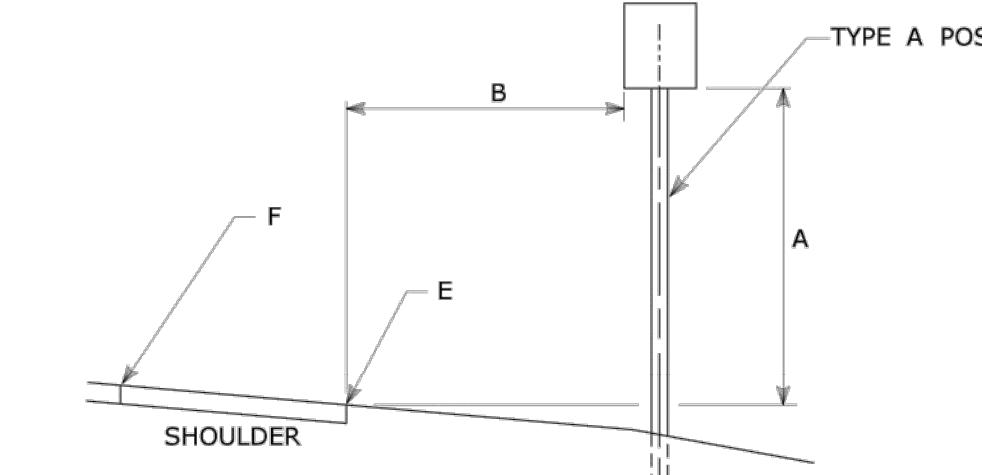
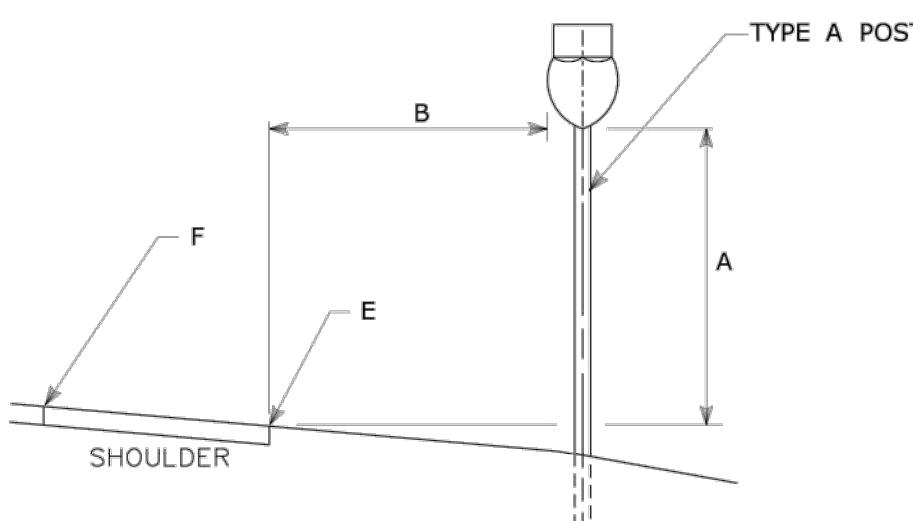


DIAGRAM "B"

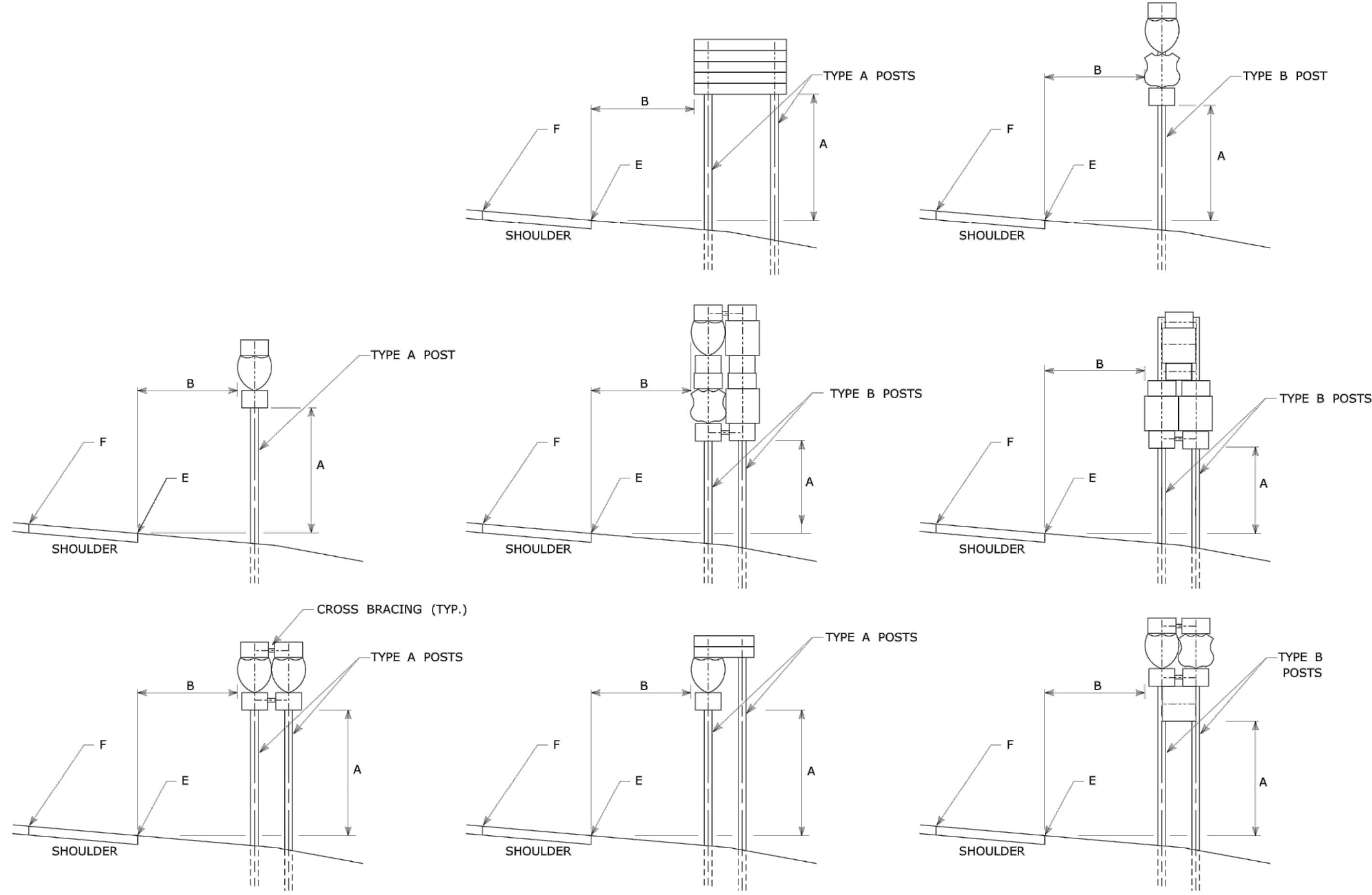
SIGN ORIENTATION DETAILS



TYPICAL REGULATORY & WARNING SIGN PLACEMENT



TYPICAL CONFIRMATORY ROUTE MARKER PLACEMENT



TYPICAL SIGN PLACEMENT AND POST SELECTION

NOTES:

- 1) ALL SIGNS AND SHIELDS ON DIRECTIONAL ASSEMBLIES SHALL ABUT VERTICALLY
- 2) POST ASSEMBLIES SHALL BE PROVIDED WITH 3" X 1/4" (75 X 6) GALVANIZED STEEL BAR CROSS BRACING.

REFER TO TRAFFIC TYPICAL SHEET "TYPICAL METAL SIGN POSTS AND SIGN MOUNTING DETAILS" FOR SIGN POSTS.

DIM."A"	DIM."B" ^①	ASSEMBLY LOCATION
7' (2.1m)	6' (1.8m) ^② 12' (3.6m) ^③	RURAL DISTRICTS & EXPRESSWAYS
7' (2.1m)	2' (0.6m)	BUSINESS & RESIDENTIAL DISTRICTS WHERE PARKING OR OTHER OBSTRUCTIONS LIMIT VISIBILITY
8'-6" (2.6m)	1' (0.3m)	SIDEWALKS ^③

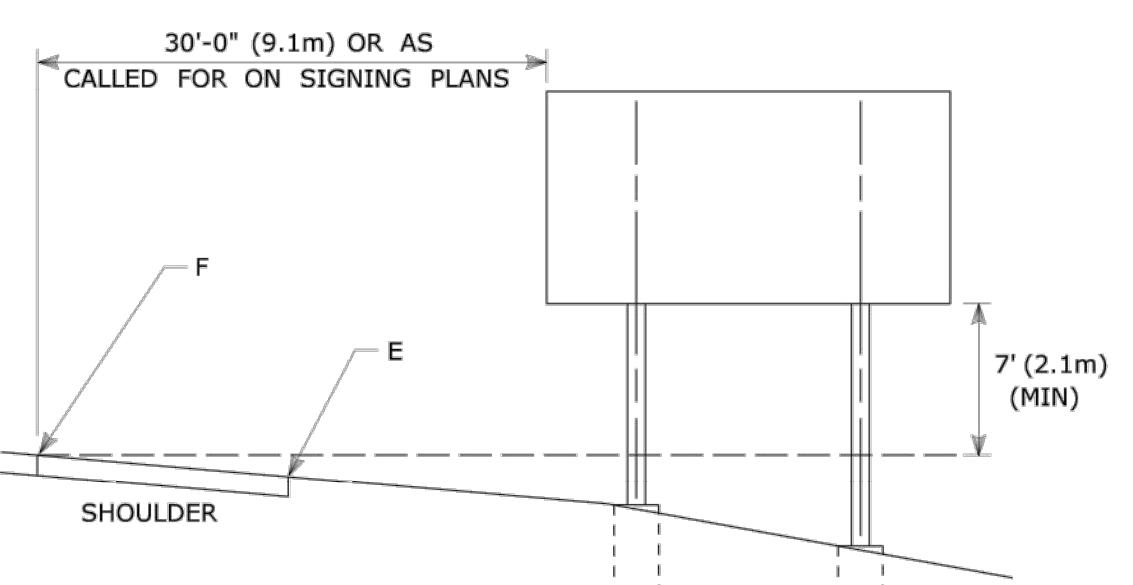
^① OR AS DIRECTED BY THE ENGINEER

^② 6' FROM EDGE OF SHOULDER, WHEN SHOULDER IS OVER 6' WIDE
12' FROM EDGE OF TRAVELWAY, WHEN SHOULDER IS LESS THAN 6' WIDE.

^③ A CLEAR PATH OF NOT LESS THAN 3 FT (0.9m) SHALL BE PROVIDED IN SIDEWALK AREAS.

"E" DENOTES EDGE OF SHOULDER OR FACE OF CURB

"F" DENOTES EDGE OF TRAVELWAY



TYPICAL PLACEMENT OF SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS

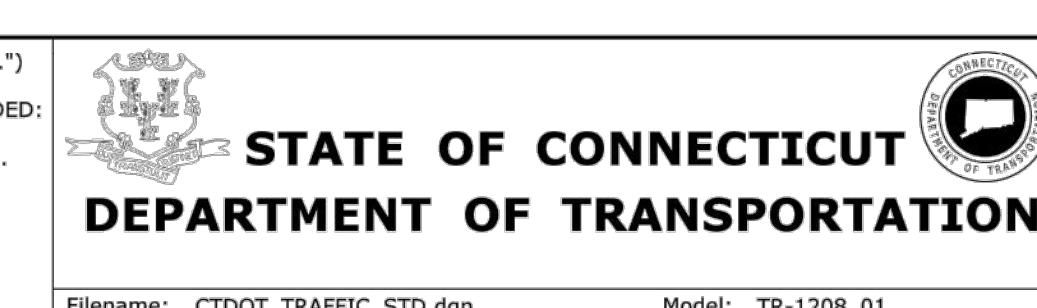
NOTES:

- 1) MIN. VERTICAL CLEARANCE ABOVE SIDEWALKS SHALL BE 8'-6" (2.6m).
- 2) WHERE GUIDE RAIL IS USED, THE OFFSET TO THE NEAR EDGE OF SIGN FACE SHALL BE AS SHOWN ELSEWHERE IN THE CONTRACT PLANS.
- 3) ON INTERSECTING ROADS AT RAMP TERMINI, THE OFFSET TO THE NEAR EDGE OF SIGN FACE SHALL BE 6' (1.8m) MIN. FROM POINT "E".
- 4) IF 30'-0" (9.1m) MIN. CANNOT BE MET, PLEASE CONTACT THE ENGINEER.

1	2-2011	MINOR REVISIONS.
REV. DATE	REVISION DESCRIPTION	Plotted Date: 2/16/2011

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS THE PROPERTY OF THE STATE OF CONNECTICUT AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.
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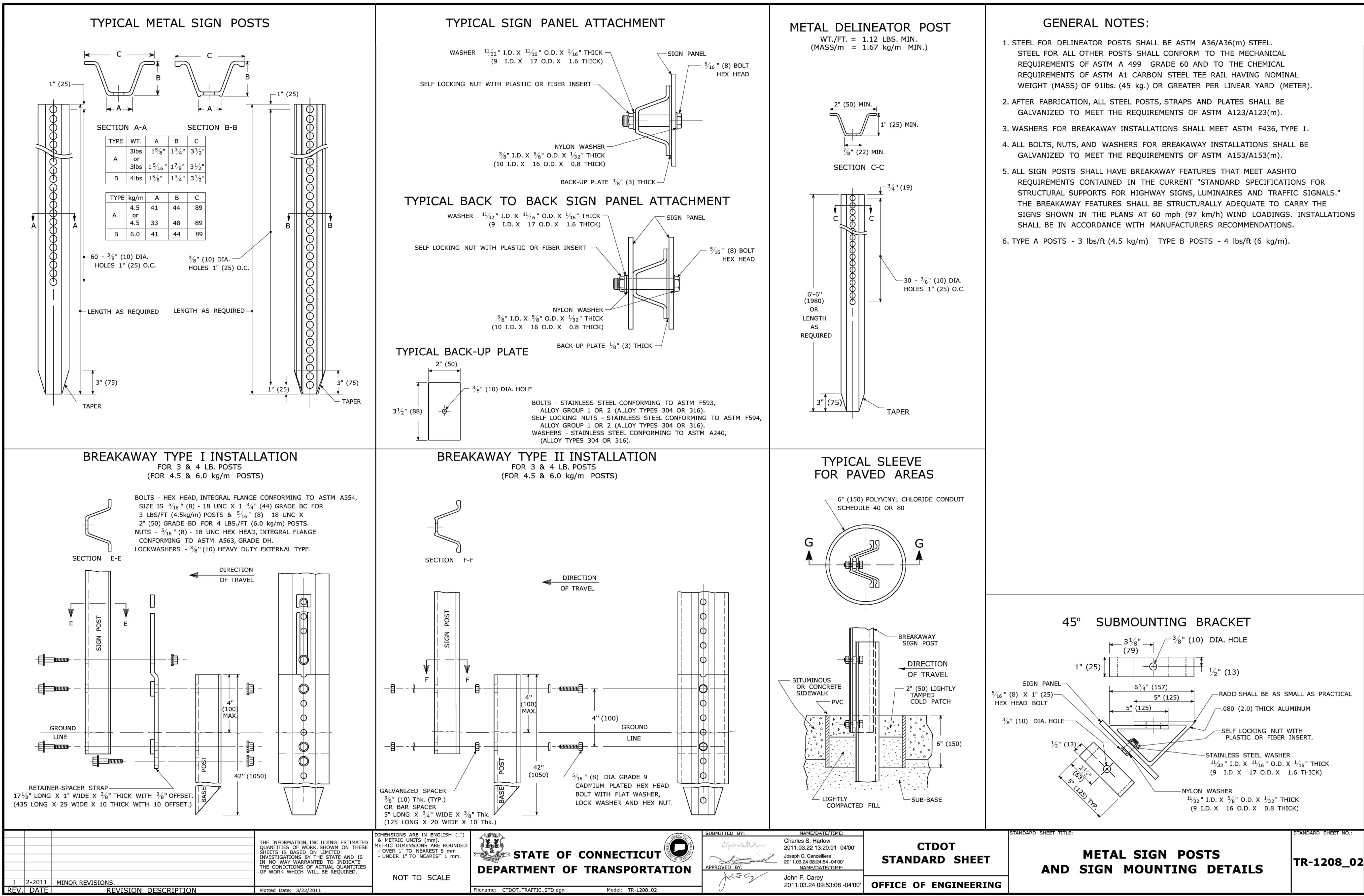
NOT TO SCALE

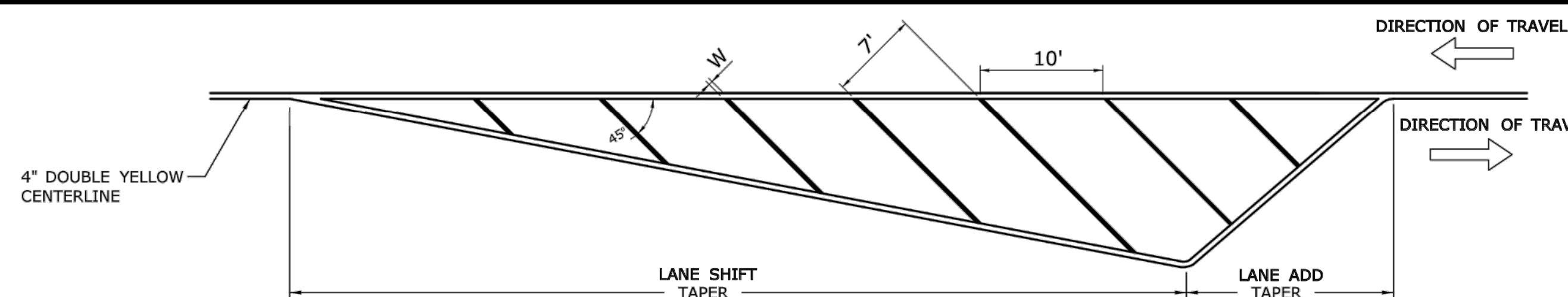
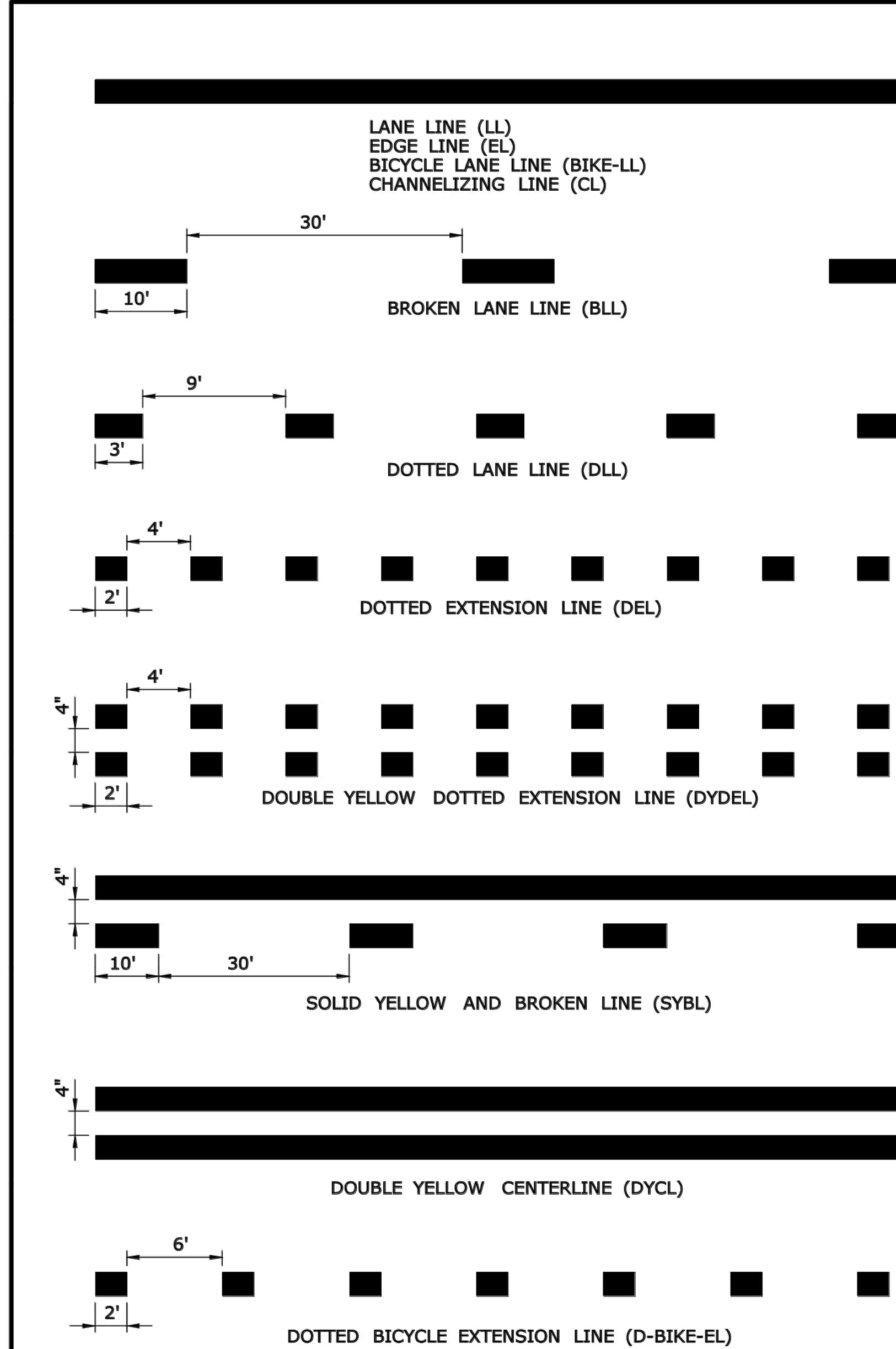


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Charles S. Harlow
2011.02.22 11:09:17 -0500'
APPROVED BY: NAME/DATE/TIME:
John F. Carey
2011.03.02 09:19:01 -0500'

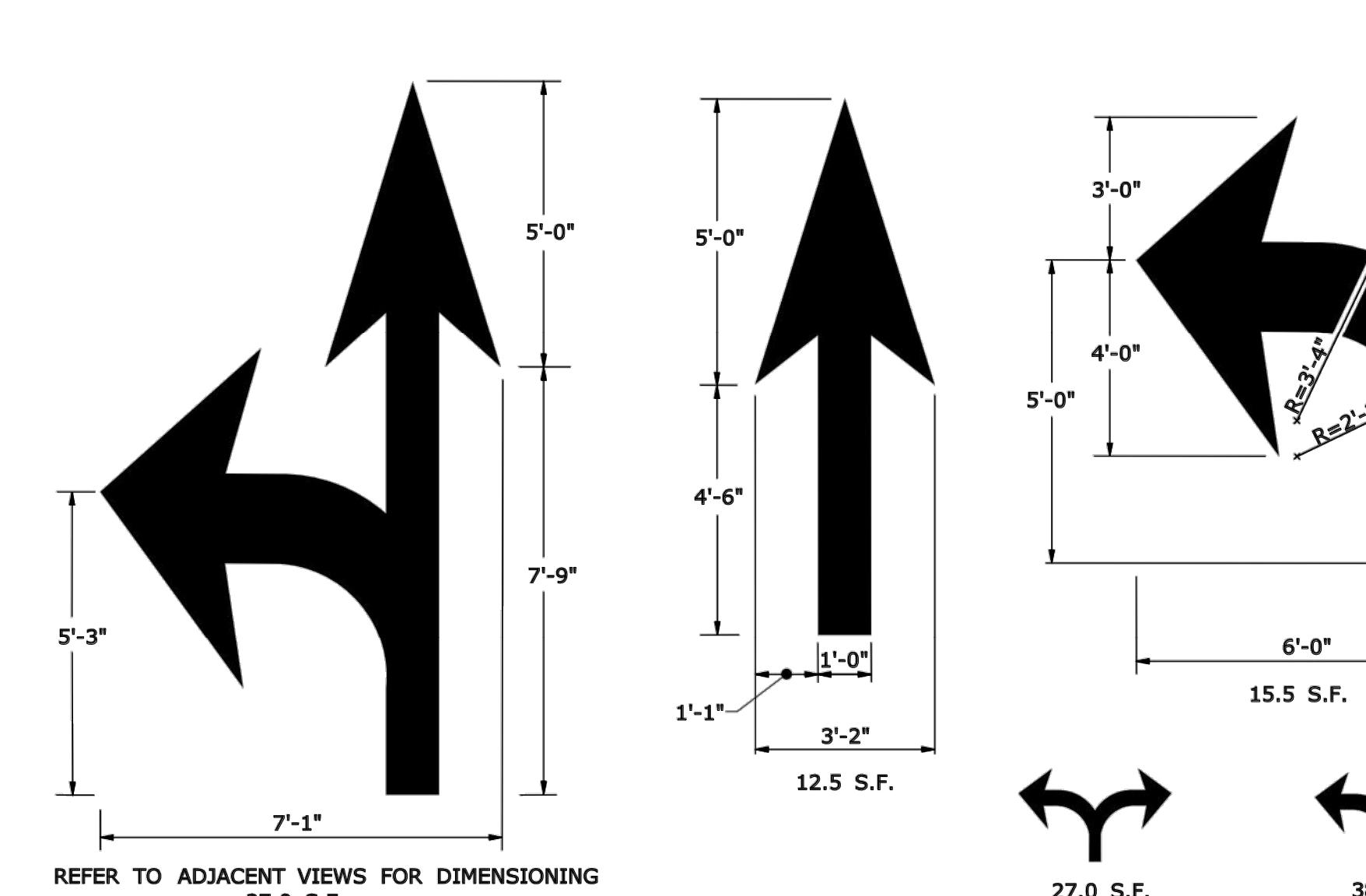
STANDARD SHEET TITLE:
CTDOT
STANDARD SHEET
OFFICE OF ENGINEERING

STANDARD SHEET NO.:
SIGN SUPPORT & SIGN PLACEMENT DETAILS, GORE EXIT SIGN
TR-1208_01

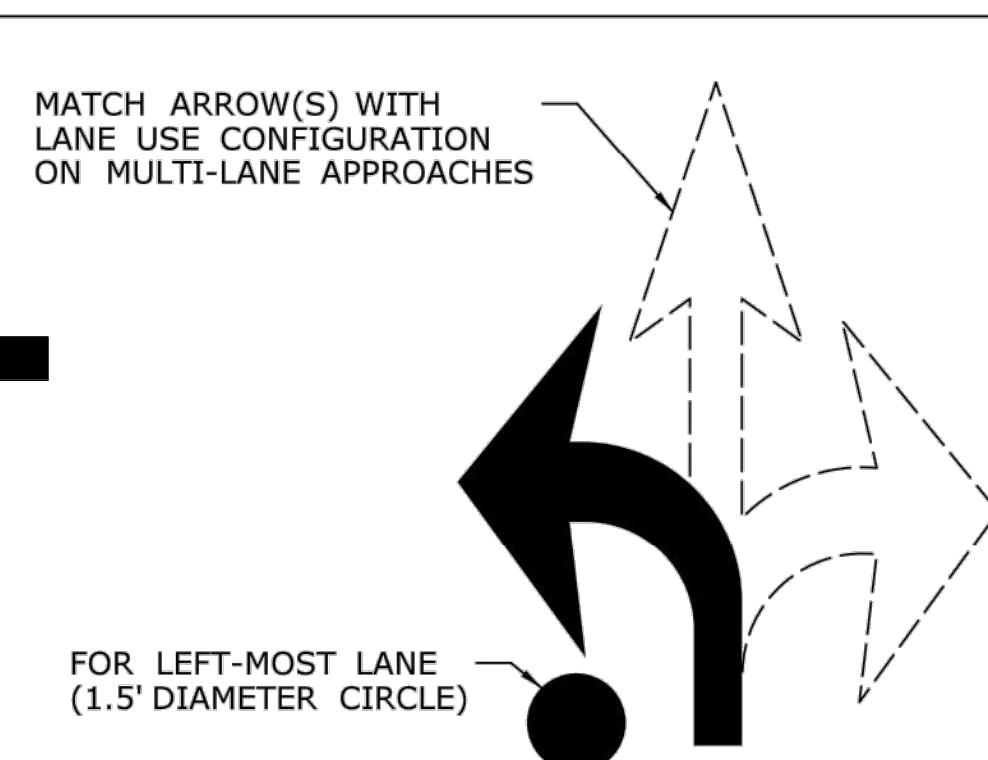




CROSS HATCHED ISLAND DETAIL (YELLOW)
W IS TO BE 6" WHEN POSTED SPEED \leq 45 MPH
W IS TO BE 12" WHEN POSTED SPEED $>$ 45 MPH
CROSS HATCHED ISLANDS ARE TO BE INSTALLED WHERE CALLED FOR ON THE PLANS

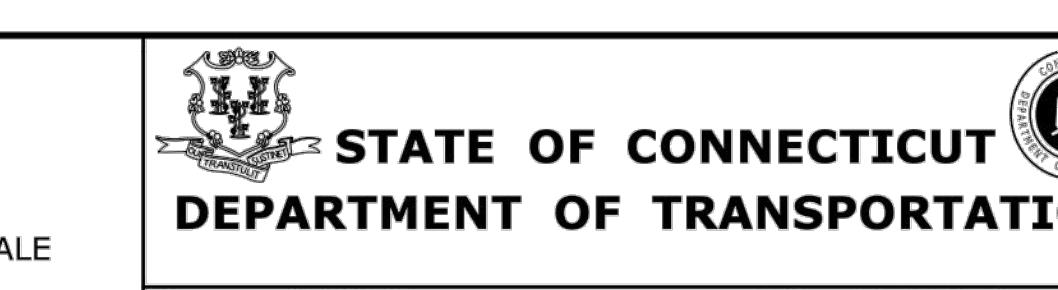


PAVEMENT ARROW DETAILS (WHITE)
ARROWS SHALL BE CENTERED IN TRAVEL LANE



NOTES :

1. AREA OF PAVEMENT MARKINGS AS INDICATED IS APPROXIMATE.
2. RIGHT TURN PAVEMENT MARKING ARROWS ARE MIRROR IMAGE OF LEFT TURN PAVEMENT MARKING ARROWS.



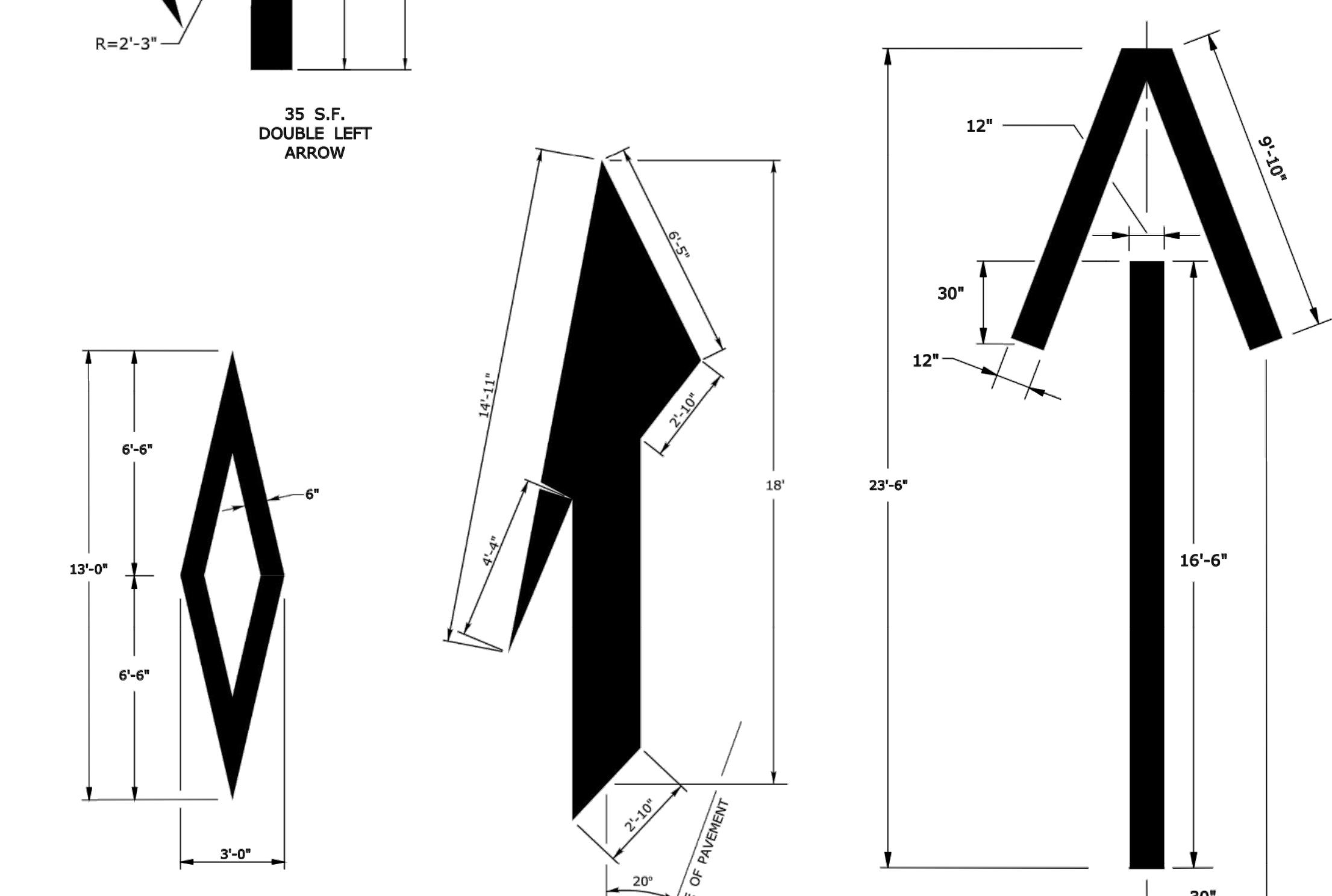
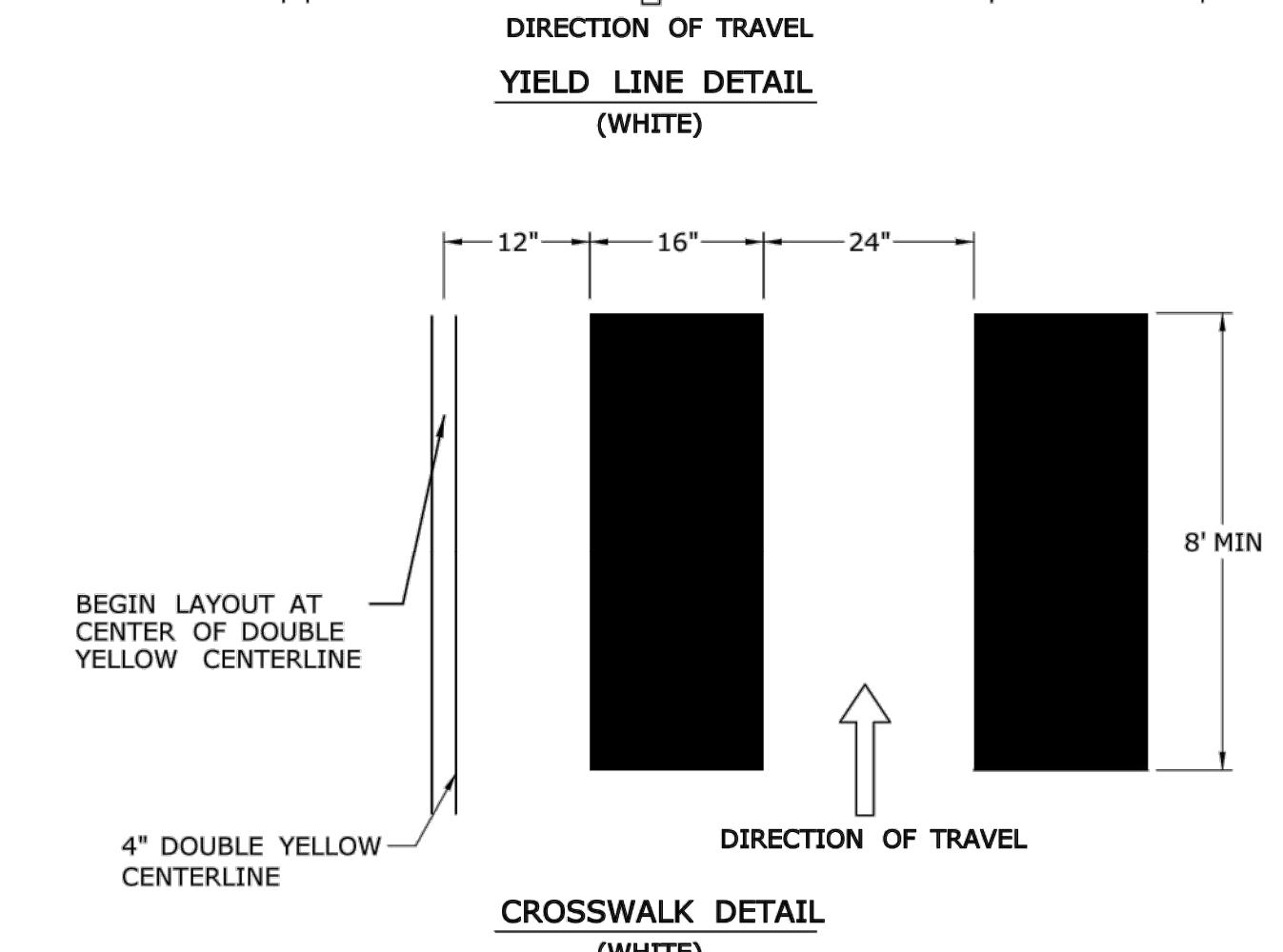
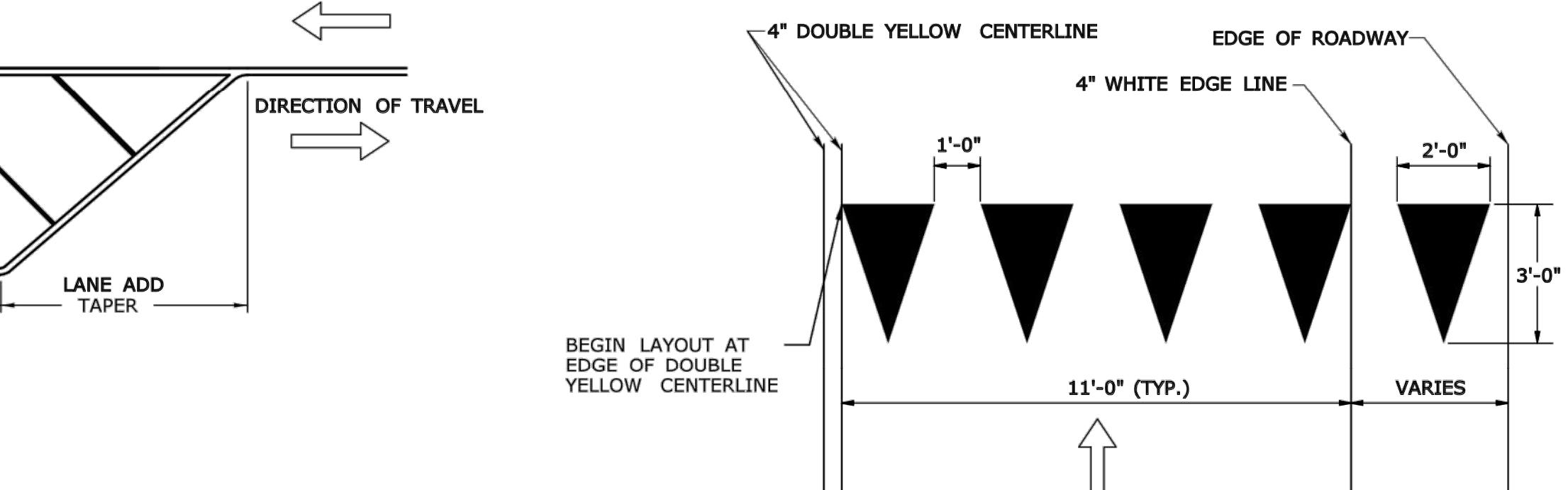
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

Plotted Date: 4/3/2017

Model: CT_Civil_2D_Sheet

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APPROVED BY:	NAME/DATE/TIME:
Gregory M. Dorosh, P.E. 04.20 13:16:12:04:00'	



WHITE PREFERENTIAL LANE SYMBOL
13.0 S.F.

WHITE LANE REDUCTION ARROW
41.8 S.F.

WHITE WRONG WAY PAVEMENT ARROW
36.2 S.F.

PAVEMENT MARKING LINES AND SYMBOLS

REV. DATE	REVISION DESCRIPTION
	Plotted Date: 4/3/2017

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NOT TO SCALE

CTDOT STANDARD SHEET	
OFFICE OF ENGINEERING	

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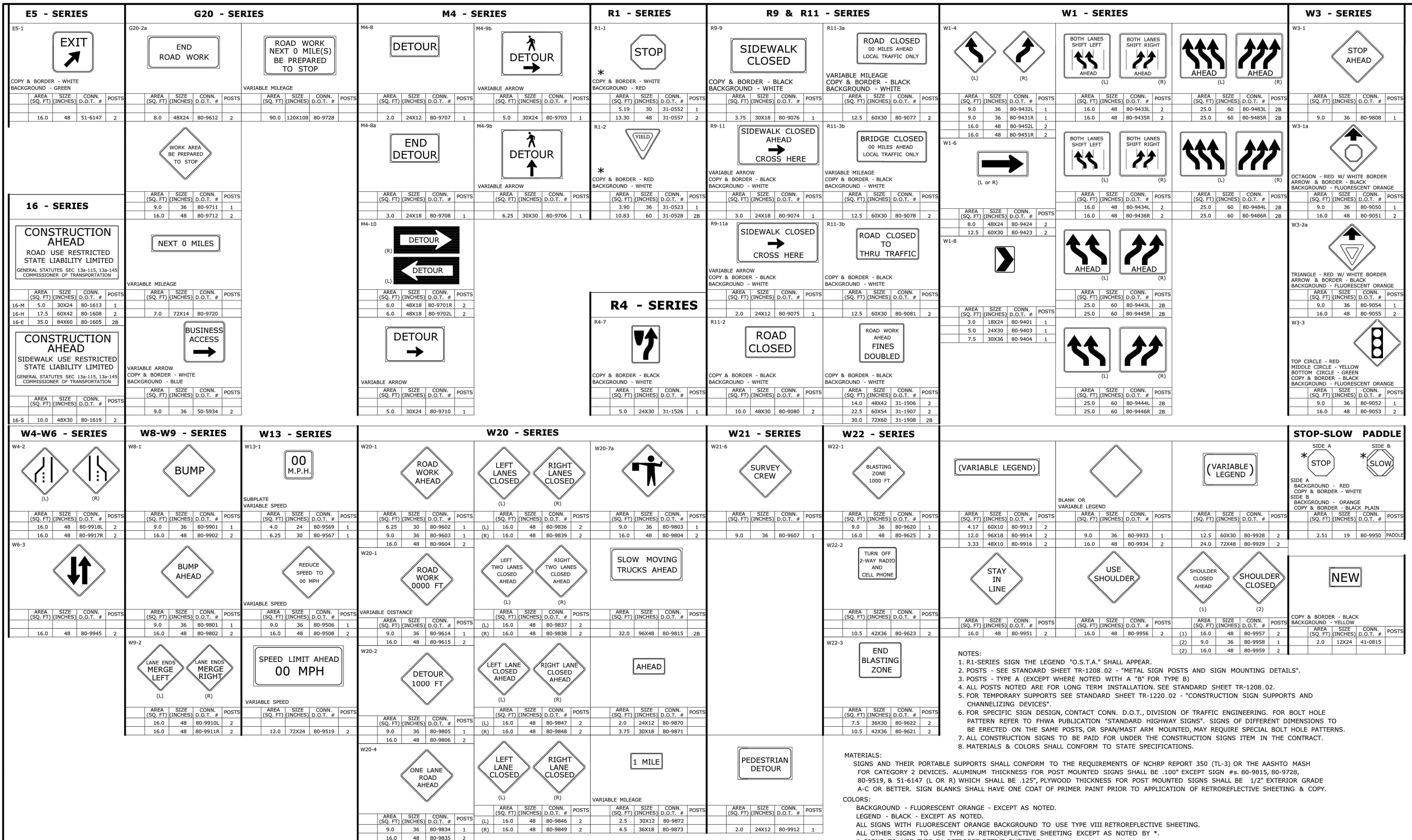
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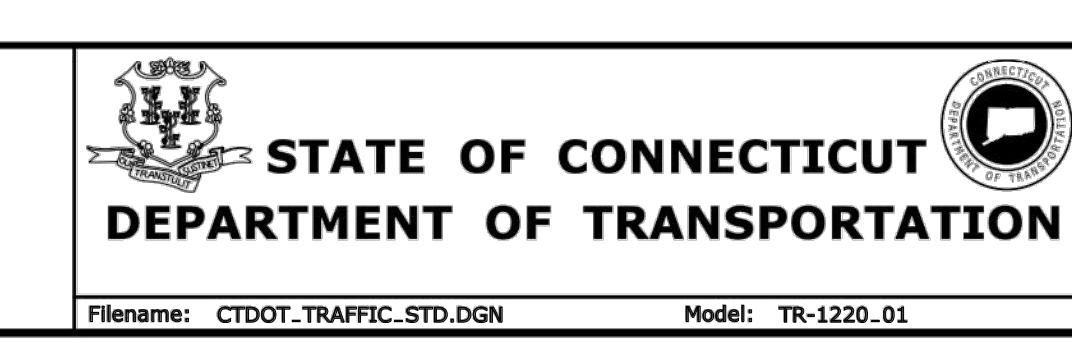


5 8-2015 UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.
4 6-2012 REVISED NOTE #1 TO REFERENCE "O.S.T.A."
3 4-2012 REVISED NEW SIGNAL SIGN(S) TO CONFORM TO 2009 MUTCD.
2 2-2011 MINOR REVISIONS.
1 3-2010 REMOVED OBSOLETE SIGNS (50-5925, 50-5935).
REV. DATE REVISION DESCRIPTION

Plotted Date: 8/25/2015

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NOT TO SCALE



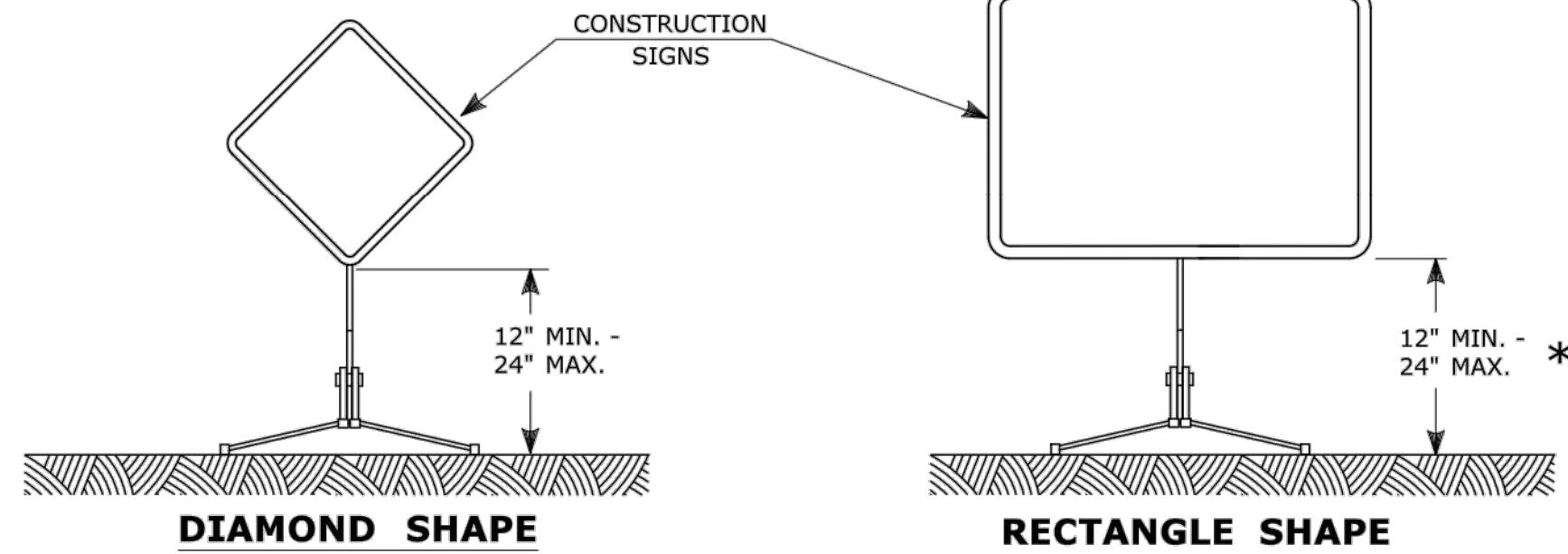
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2015.08.26 07:15:04'00'
APPROVED BY: NAME/DATE/TIME:
Charles S. Harlow, P.E.
2015.08.28 11:40:30'04'00'

STANDARD SHEET TITLE:
CTDOT
STANDARD SHEET
OFFICE OF ENGINEERING

SIGN FOR CONSTRUCTION
AND PERMIT OPERATIONS

STANDARD SHEET NO.:
TR-1220_01

NOTES:
1. R1-SERIES SIGN THE LEGEND "O.S.T.A." SHALL APPEAR.
2. POSTS - SEE STANDARD SHEET TR-1208-02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS".
3. POSTS - TYPE A (EXCEPT WHERE NOTED WITH A "B" FOR TYPE B).
4. ALL POSTS NOTED ARE FOR LONG TERM INSTALLATION. SEE STANDARD SHEET TR-1208-02.
5. FOR TEMPORARY SUPPORTS SEE STANDARD SHEET TR-1220-02 - "CONSTRUCTION SIGN SUPPORTS AND CHANNELING DEVICES".
6. FOR SPECIFIC SIGN DESIGN, CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS". SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
7. ALL CONSTRUCTION SIGNS TO BE PAID FOR UNDER THE CONSTRUCTION SIGNS ITEM IN THE CONTRACT.
8. MATERIALS:
SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES. ALUMINUM THICKNESS FOR POST MOUNTED SIGNS SHALL BE .100" EXCEPT SIGN #s. 80-9815, 80-9728, 80-9519, & 51-6147 (L OR R) WHICH SHALL BE .125". PLYWOOD THICKNESS FOR POST MOUNTED SIGNS SHALL BE 1/2" EXTERIOR GRADE A-C OR BETTER. SIGN BLANKS SHALL HAVE ONE COAT OF PRIMER PAINT PRIOR TO APPLICATION OF RETROREFLECTIVE SHEETING & COPY.
COLORS:
BACKGROUND - FLUORESCENT ORANGE - EXCEPT AS NOTED.
LEGEND - BLACK - EXCEPT AS NOTED.
ALL SIGNS WITH FLUORESCENT ORANGE BACKGROUND TO USE TYPE VIII RETROREFLECTIVE SHEETING.
ALL OTHER SIGNS TO USE TYPE IV RETROREFLECTIVE SHEETING EXCEPT AS NOTED BY *.
* SIGNS TO USE TYPE IX RETROREFLECTIVE SHEETING.

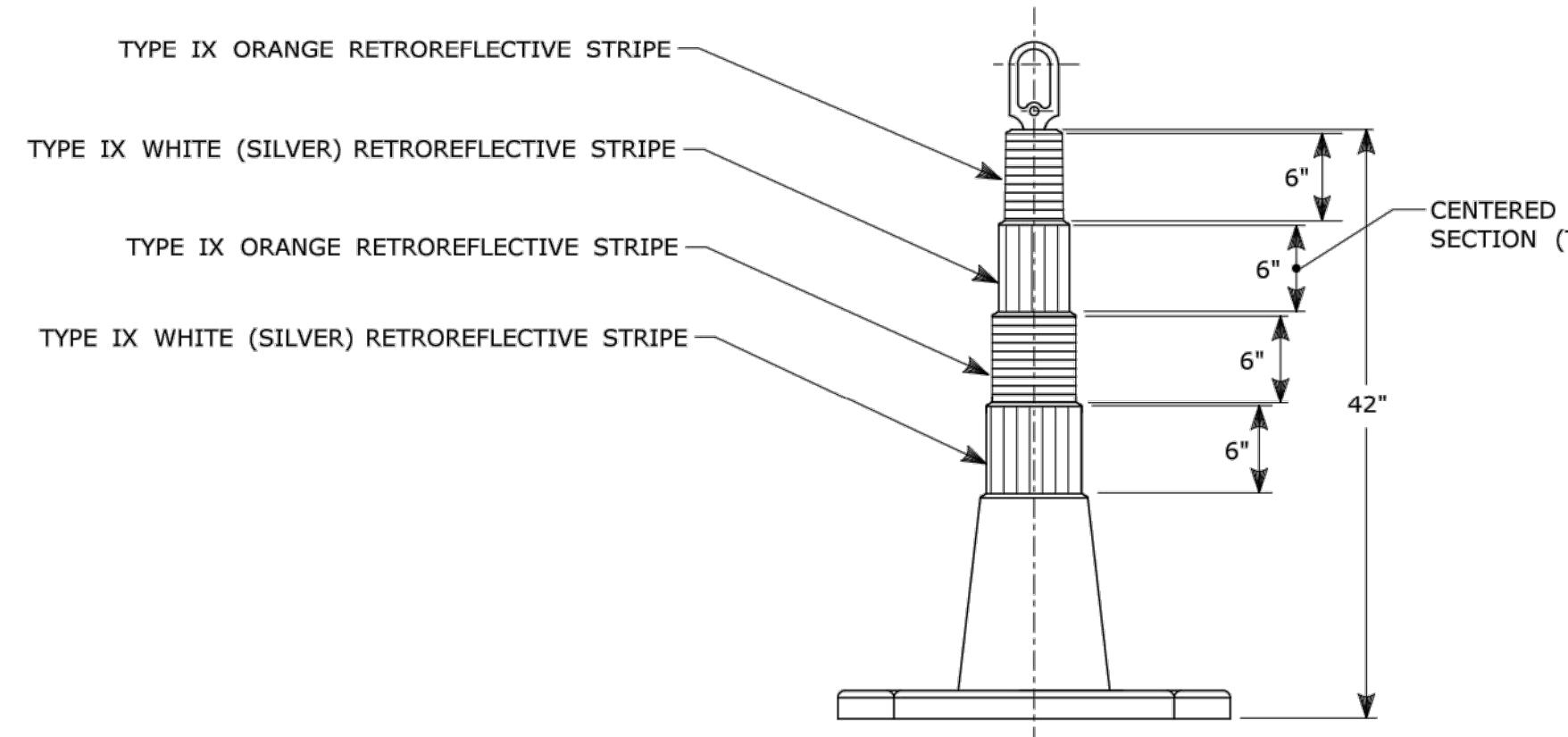


PORTABLE CONSTRUCTION SIGNS

NOTES FOR PORTABLE SIGN SUPPORTS:

1. SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. MOUNTING HEIGHT OF SIGNS SHALL BE A MINIMUM OF 12" AND A MAXIMUM OF 24". SIGNS SHALL BE MOUNTED HIGHER AS NEEDED TO MEET FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
3. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY SUPPORT DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
4. PORTABLE SIGN SUPPORTS SHALL BE STABILIZED IN A MANNER THAT WILL NOT AFFECT THEIR COMPLIANCE WITH NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES.
5. PORTABLE CONSTRUCTION SIGN SUPPORTS SHOULD NOT BE USED FOR DURATION OF MORE THAN 3 DAYS EXCEPT FOR R9-8 THROUGH R9-11a SERIES, R11 SERIES, W1-6 THROUGH W1-8 SERIES, M4-10, AND E5-1. SEE STANDARD SHEET TR-1220-01 - "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" FOR SIGN DETAILS.

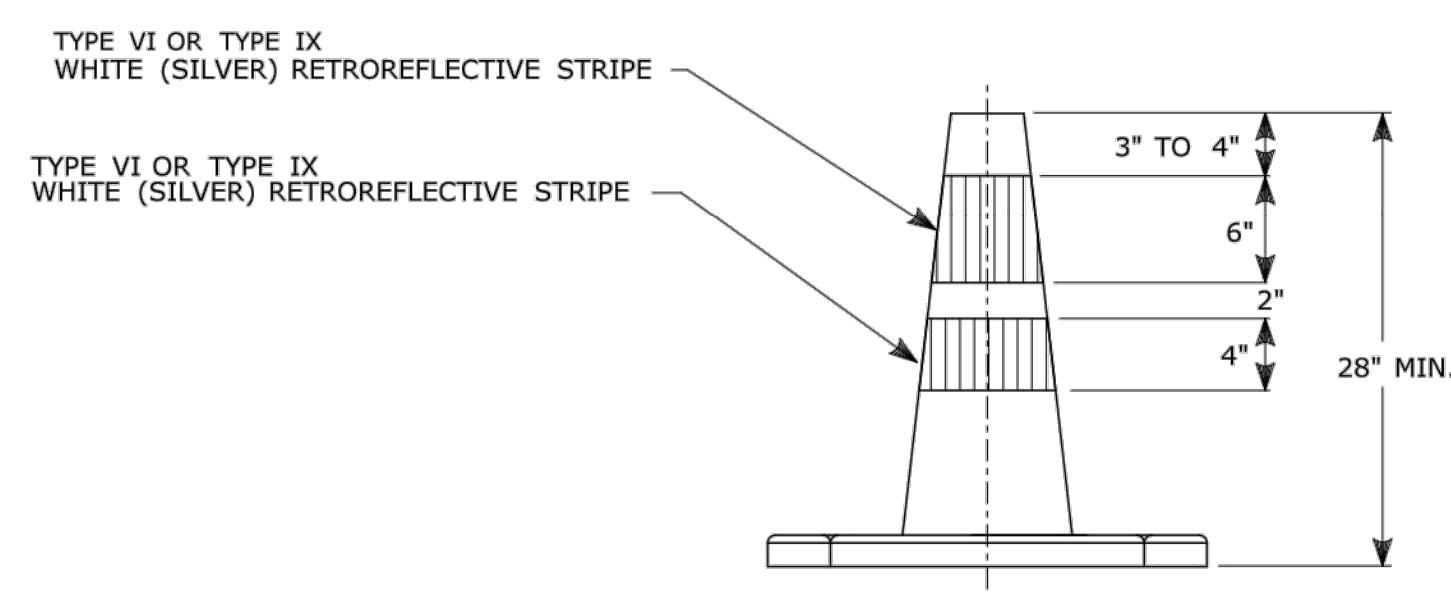
* FOR E5-1 (EXIT SIGNS) USE MIN 48".



42" TRAFFIC CONE

NOTES:

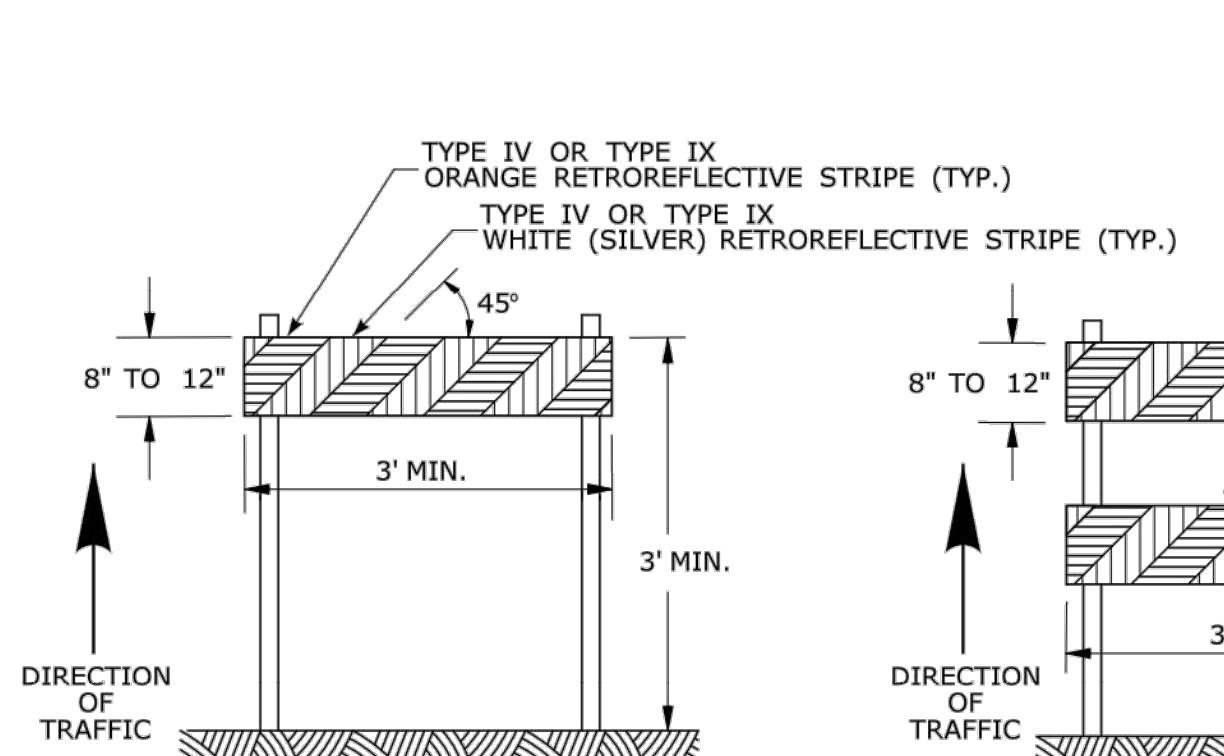
1. TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
3. IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
5. THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
6. THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



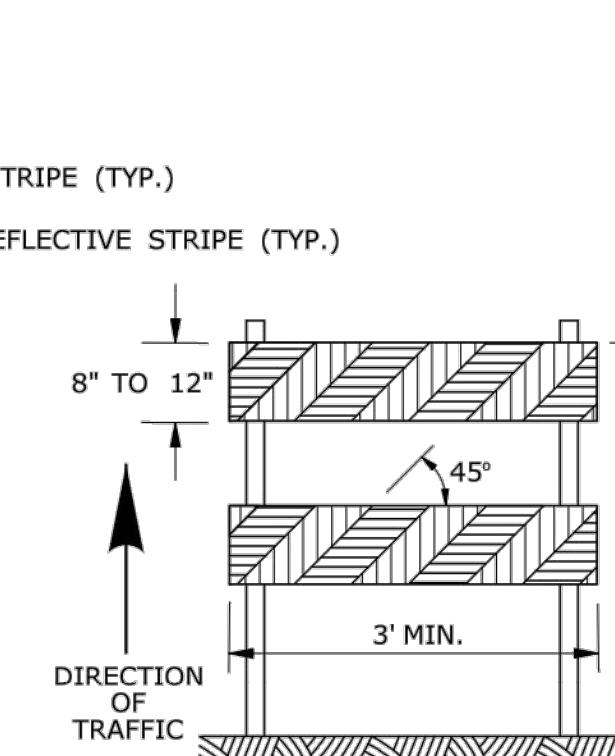
TRAFFIC CONE

NOTES:

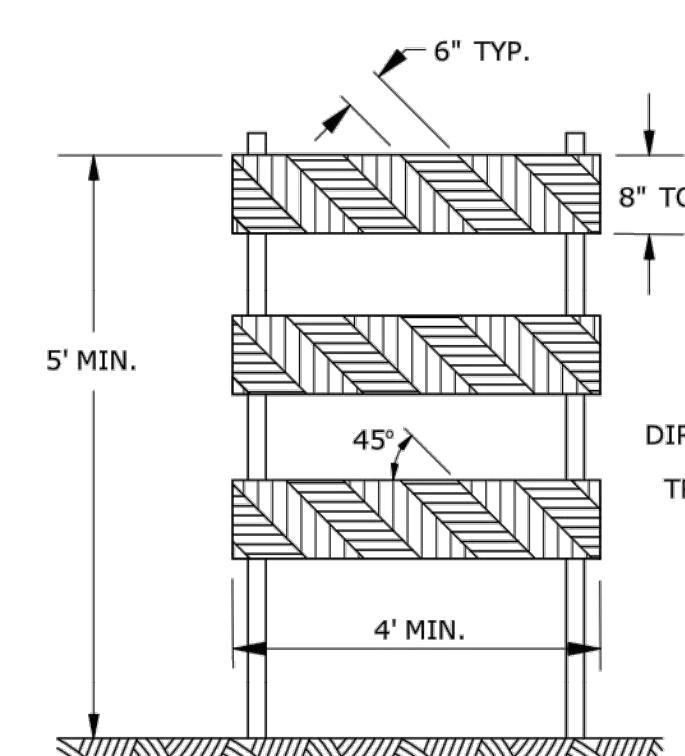
1. TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
3. IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
5. TRAFFIC CONES NOT USED AT NIGHT MAY UTILIZE TYPE III SHEETING.
6. THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



TYPE I BARRICADE



TYPE II BARRICADE

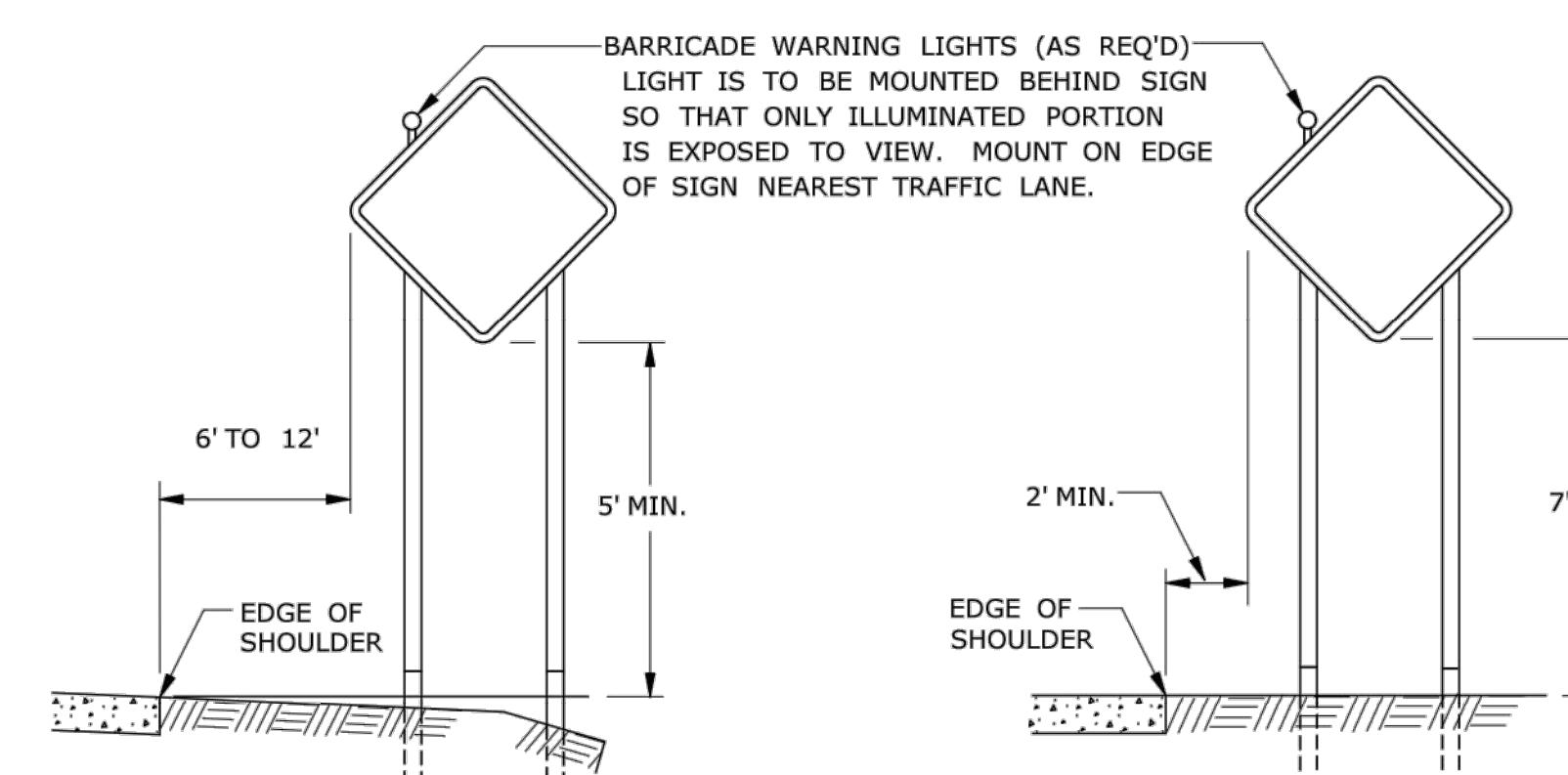


TYPE III BARRICADE

CONSTRUCTION BARRICADES

NOTES:

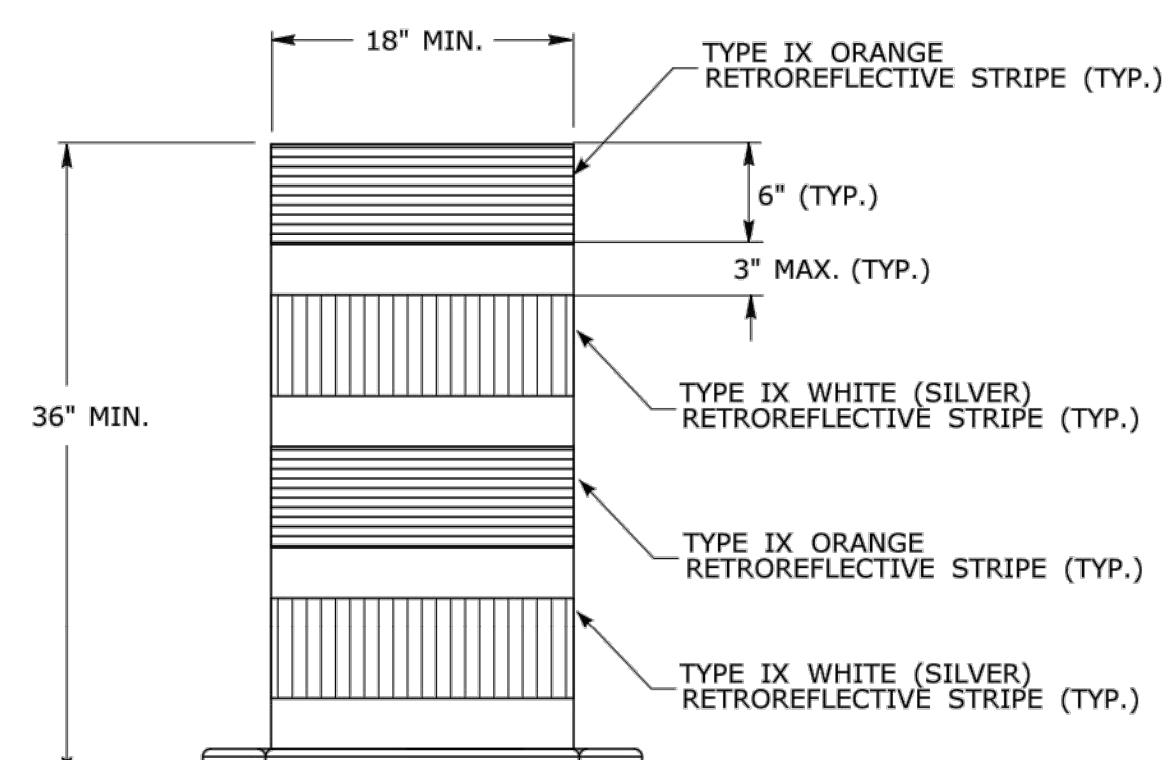
1. CONSTRUCTION BARRICADES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH AND THE LATEST EDITION OF THE MUTCD.
2. MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE STRIPES SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS. 6" WIDE STRIPES SHALL BE USED.
3. THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS. THE SIDES OF BARRICADES FACING TRAFFIC SHALL HAVE RETROREFLECTIVE RAIL FACES.
4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY BARRICADE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
5. CORNERS OF BARRICADE RAILS SHALL BE ROUNDED.
6. SIGNS MAY ONLY BE INSTALLED ON TYPE III BARRICADES AND SHALL BE PLACED SO AS TO COVER NO MORE THAN ONE BARRICADE RAIL.



PLACEMENT OF CONSTRUCTION SIGNS TYPICAL LONG TERM INSTALLATION

NOTES:

SUPPORTS SHALL BE METAL SIGN POSTS AND HAVE BREAK-AWAY FEATURES.
SEE TYPICAL SHEETS:
"TYPICAL SIGN SUPPORT AND SIGN PLACEMENT DETAILS-GORE EXIT SIGN"
"TYPICAL METAL SIGN POSTS AND SIGN MOUNTING DETAILS"



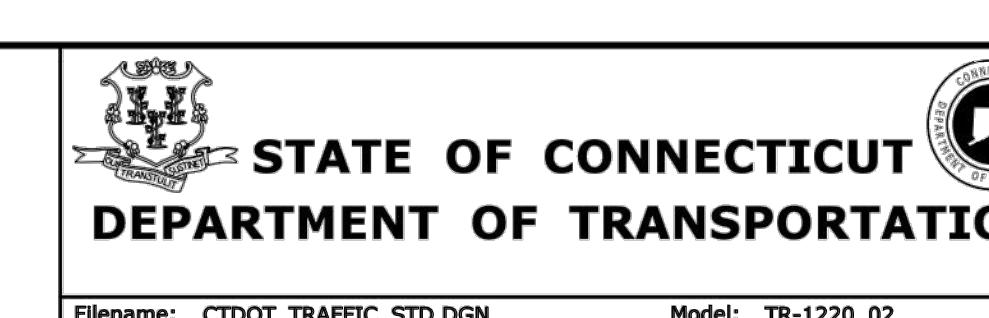
TRAFFIC DRUM FRONT VIEW

NOTES:

1. TRAFFIC DRUM SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY DRUM DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
3. THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
4. THE SECTIONS OF DRUMS NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.

REV. DATE	REVISION DESCRIPTION	Plotted Date: 8/14/2015
2 8-2015	UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.	
1 2-2011	MINOR REVISIONS.	

NOT TO SCALE



SUBMITTED BY:	NAME/DATE/TIME:
	Mark F. Makuch, P.E. 2015.08.26 07:15:47-04'00'
APPROVED BY:	NAME/DATE/TIME:
	Charles S. Harlow, P.E. 2015.08.28 11:40:57-04'00'

STANDARD SHEET TITLE:
CTDOT STANDARD SHEET
OFFICE OF ENGINEERING

CONSTRUCTION SIGN SUPPORTS
AND CHANNELIZING DEVICES

STANDARD SHEET NO.:
TR-1220_02