

Michigan Department of Transportation Traffic and Safety



WAYNE COUNTY TRAFFIC SIGNAL DETAILS


SIGWC-026A THROUGH SIGWC-408A

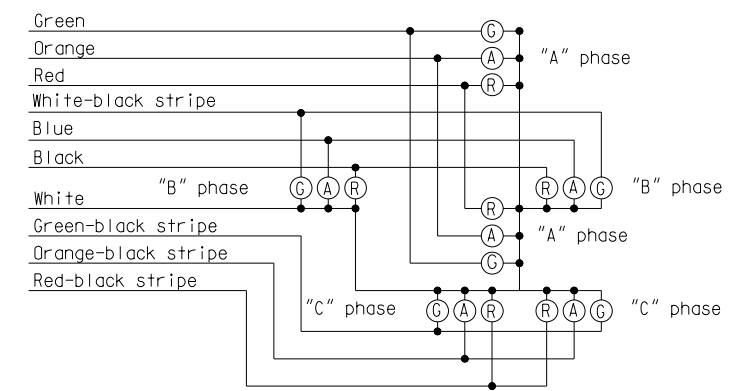
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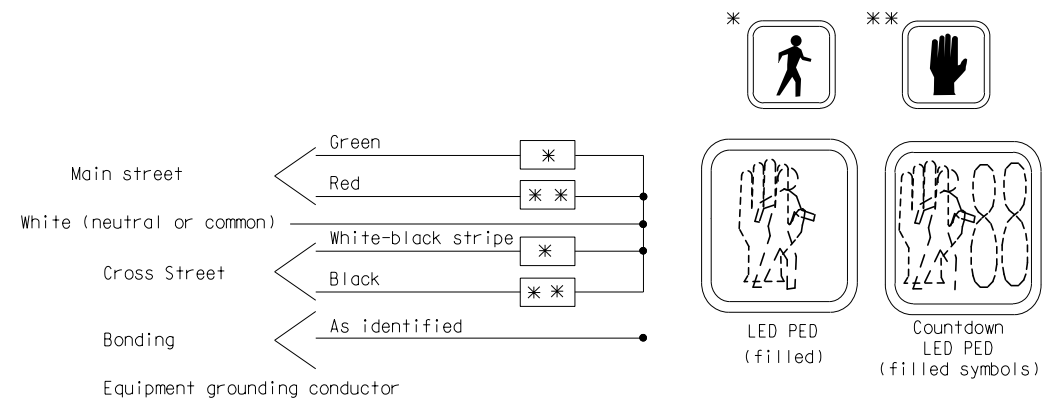
ENGLISH VERSION

 Michigan Department of Transportation	PREPARED BY TRAFFIC AND SAFETY
	ENGINEER OF TRAFFIC AND SAFETY
DEPARTMENT DIRECTOR KIRK T. STEUDLE	DRAWN BY: MTS
	CHECKED BY: JAT
MDOT\Projectwise\Documents\Reference Documents\Traffic Reference\Signals\Wayne County Special Details\Develop	




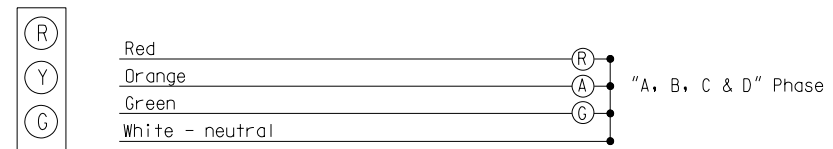
COLOR CODE FOR WIRING CONNECTING TRAFFIC SIGNAL LAMPS

NOTE: No splices allowed between traffic signal head and controller.

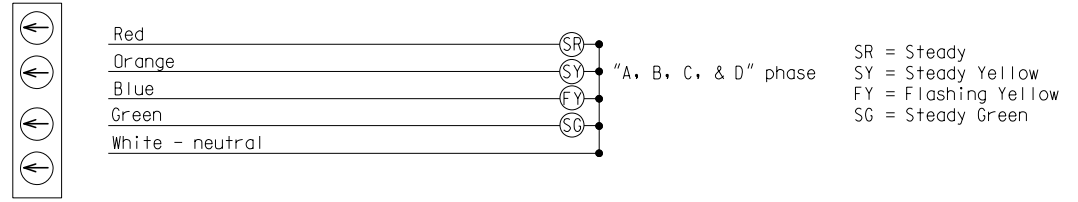


COLOR CODE FOR WIRING CONNECTING PEDESTRIAN SIGNAL LAMPS
(WALKING PERSON – HAND SYMBOL)

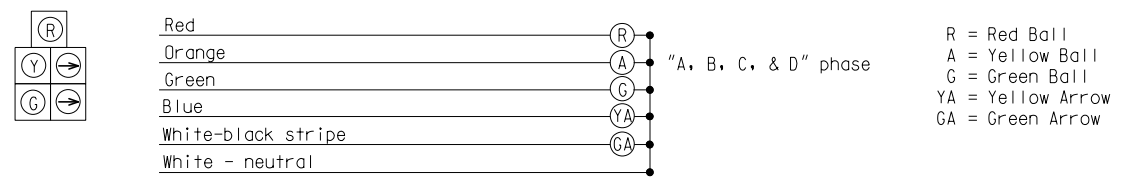
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 Michigan Department of Transportation		ENGINEER OF DELIVERY		MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR	
PREPARED BY TRAFFIC AND SAFETY		ENGINEER OF DEVELOPMENT		COLOR CODE WIRING/ EQUIPMENT GROUNDING	
DRAWN BY: DJF		(SPECIAL DETAIL)		PLAN DATE	
CHECKED BY:		FHWA APPROVAL DATE		WC-026-A	
				SHEET 1 of 6	



STANDARD – 3 COLOR SIGNAL DISPLAY




FLASHING YELLOW ARROW (FYA) – 4 COLOR SIGNAL DISPLAY

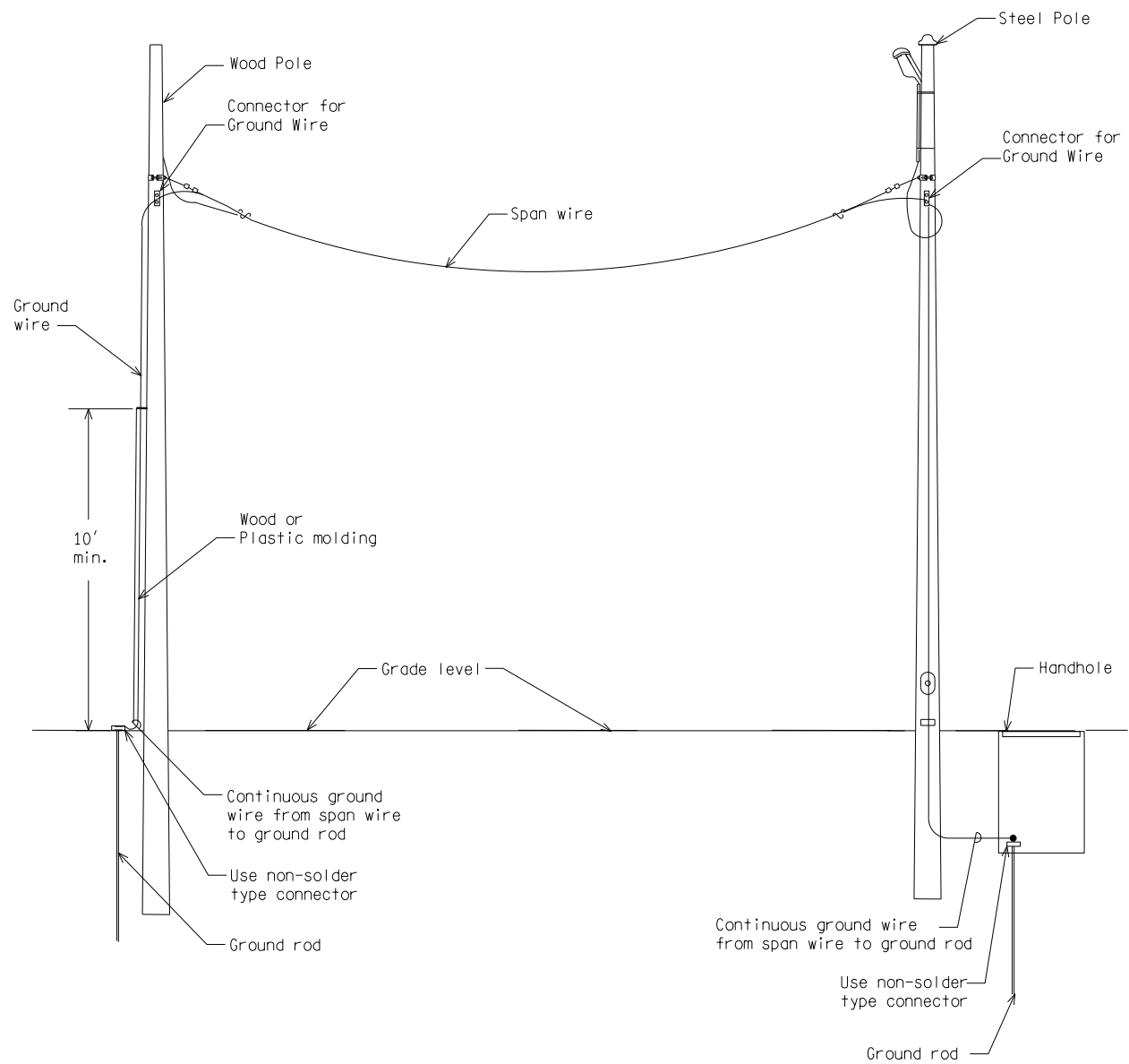


DOG HOUSE W/RIGHT TURNS – 5 COLOR SIGNAL DISPLAY

COLOR CODE FOR WIRING CONNECTING TRAFFIC SIGNAL LAMPS

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MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN		(SPECIAL DETAIL) FHWA APPROVAL DATE		PLAN DATE	
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				SHEET 2 of 6	

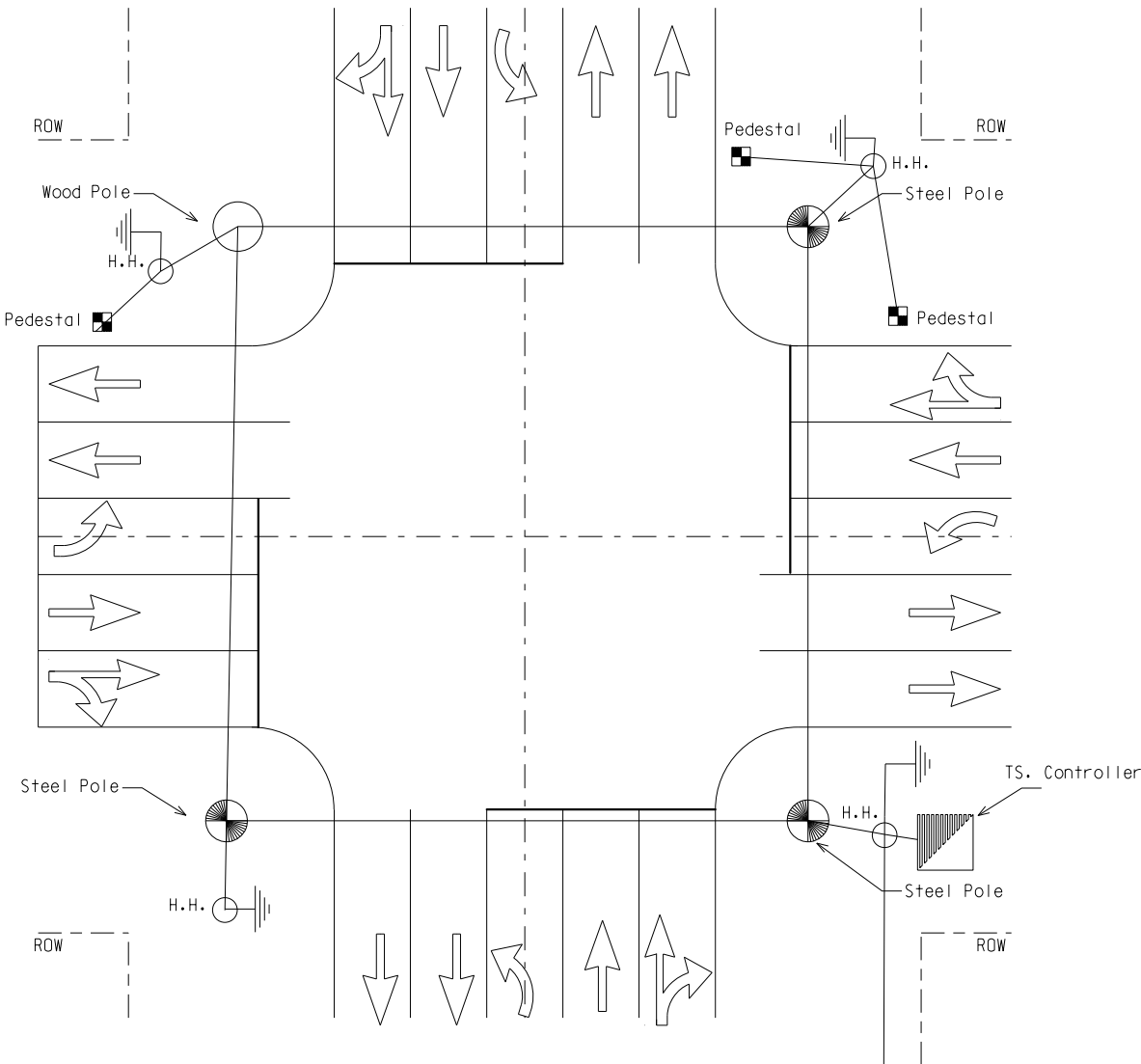
AS-LET PLAN REVISIONS								 Michigan Department of Transportation	FILE:	DATE:	CS:	DRAWING	SHEET
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SPAN WIRE GROUNDING DETAIL

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- 1) All ground rods shall be 3/4" x 10' in length copperclad.
- 2) Ground rods shall be drive straight down, so that only the required portions of of the ground rod is exposed to attach the ground wires.
- 3) All ground rods shall be connected to each other or to a span wire with a single #6 AWG copper conductor.
- 4) Each ground wire attaching to a ground rod shall have its own approved acorn type connector.
- 5) Do not install any ground rods within 10' of any other ground rods from other grounding.
- 6) The grounding system shall measure 10 ohms or less.
- 7) A separate #6 AWG copper ground is required from the service disconnect (safety switch) to the ground bussbar in the controller cabinet.
- 8) Ground rod for each steel pole, wood pole, pedestal and/or traffic signal controller cabinet shall be located in the adjacent handhole as indicated on the plans or as directed by the Engineer.
- 9) All metal bases must be connected to a ground rod with a #6 ground wire.

SYSTEM GROUNDING DETAL

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MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN				(SPECIAL DETAIL) FHWA APPROVAL DATE			WC-026-A	SHEET 6 of 6
File: PW:RD/TR/Signals/Web/WC SD/Final				Rev. 10/21/14		PLAN DATE		

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CONDUCTOR COLOR	7/C	12/C	16/C	20/C
GREEN	A Ø GREEN	A Ø GREEN	A Ø GREEN	A Ø GREEN
ORANGE	A Ø YELLOW	A Ø YELLOW	A Ø YELLOW	A Ø YELLOW
RED	A Ø RED	A Ø RED	A Ø RED	A Ø RED
WHITE W/ BLACK TRACER	B Ø GREEN	B Ø GREEN	B Ø GREEN	B Ø GREEN
BLUE	B Ø YELLOW	B Ø YELLOW	B Ø YELLOW	B Ø YELLOW
BLACK	B Ø RED	B Ø RED	B Ø RED	B Ø RED
WHITE	COMMON	COMMON	COMMON	COMMON
GREEN W/ BLACK TRACER		C Ø GREEN	C Ø GREEN	C Ø GREEN
ORANGE W/ BLACK TRACER		C Ø YELLOW	C Ø YELLOW	C Ø YELLOW
RED W/ BLACK TRACER		C Ø RED	C Ø RED	C Ø RED
BLUE W/ BLACK TRACER		CASE SIGN COMMON	CASE SIGN COMMON	CASE SIGN COMMON
BLACK W/ WHITE TRACER		CASE SIGN	CASE SIGN	CASE SIGN
GREEN W/ WHITE TRACER			W-1	W-1
RED W/ WHITE TRACER			DW-1	DW-1
BLUE W/ WHITE TRACER			W-2	W-2
BLACK W/ RED TRACER			DW-2	DW-2
WHITE W/ RED TRACER				D Ø GREEN
ORANGE W/ RED TRACER				D Ø YELLOW
BLUE W/ RED TRACER				D Ø RED
RED W/GREEN TRACER				FLASHING YELLOW

WHEN USING CABLES FOR PEDESTRIAN SIGNALS, USE GREEN & RED FOR **W-1** WALK AND DON'T WALK,
AND USE WHITE W/ BLACK TRACER AND BLACK FOR **W-2** WALK AND DON'T WALK

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TRAFFIC AND SAFETY

DRAWN BY:
CHECKED BY:

ENGINEER OF DELIVERY

ENGINEER OF DEVELOPMENT


FHWA APPROVAL DATE

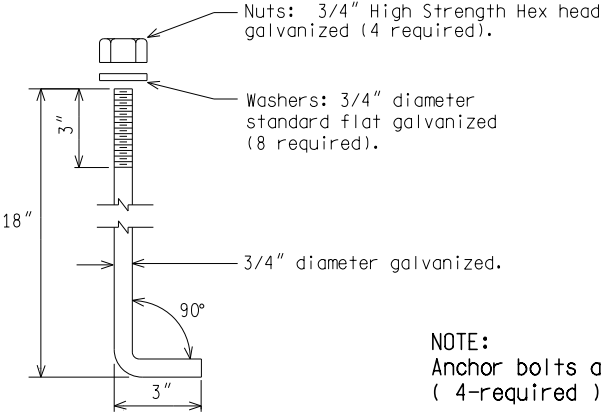
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR
COLOR CODE FOR WIRING
CONNECTING SIGNAL LAMPS

PLAN DATE

WC-026-B

SHEET
1 of 1

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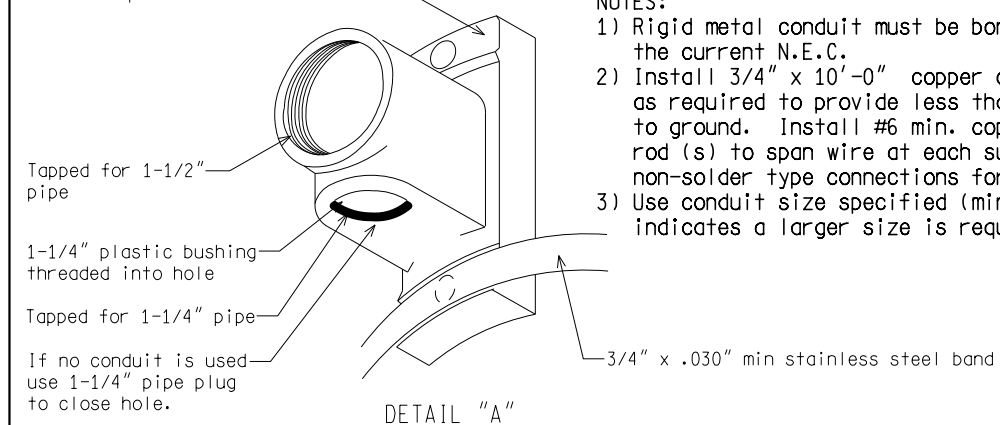
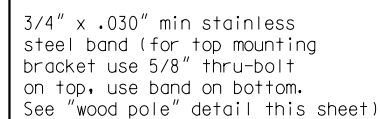
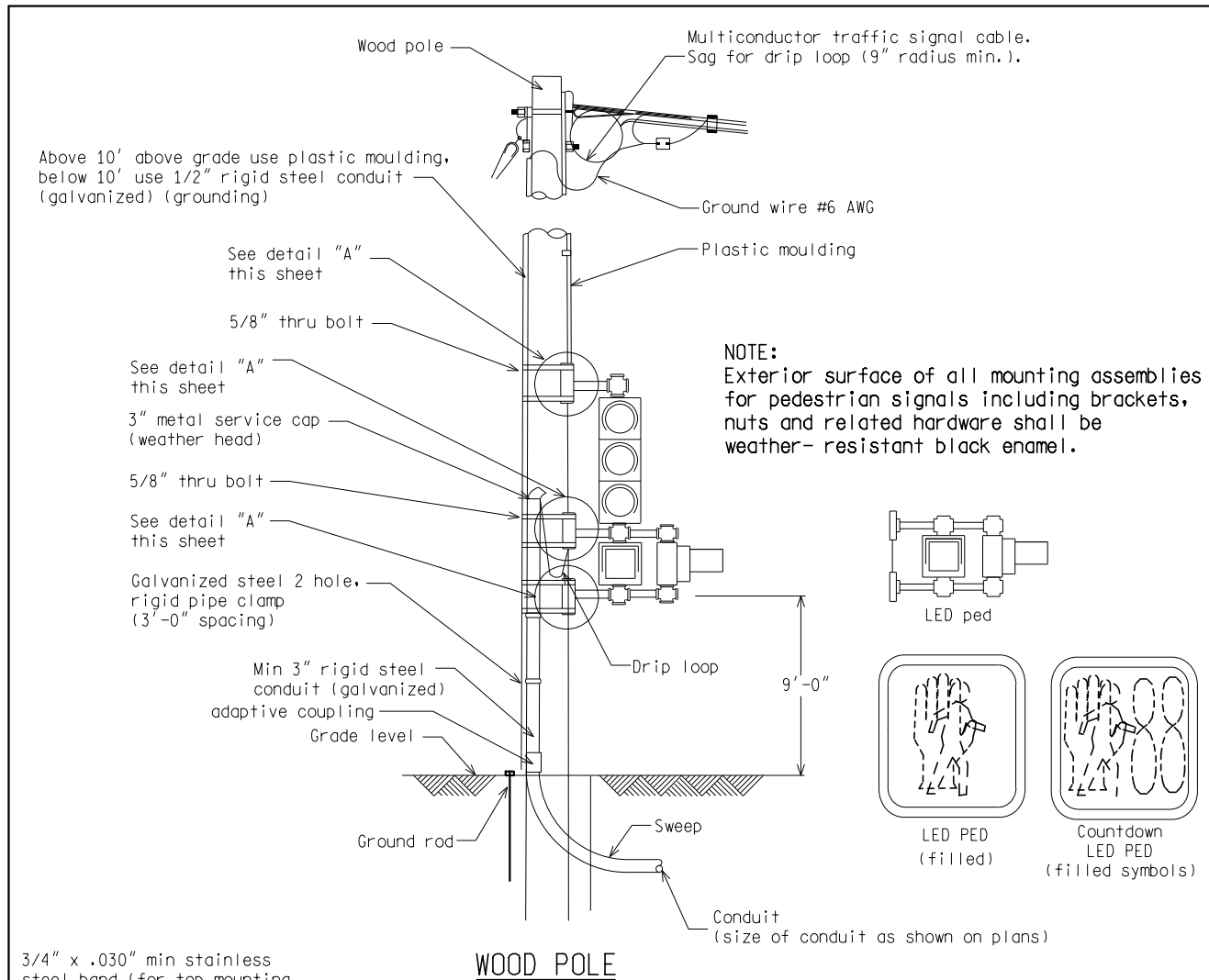
NOTE:
Anchor bolts are to be ASTM A-307 steel
(4-required)

ANCHOR BOLT DETAIL

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN		(SPECIAL DETAIL) FHWA APPROVAL DATE		WC-028-B	SHEET 3 of 3
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NOTES:

- 1) Rigid metal conduit must be bonded according to the current N.E.C.
- 2) Install 3/4" x 10'-0" copper clad ground rod (s) as required to provide less than 10 ohm resistance to ground. Install #6 min. copper wires from ground rod (s) to span wire at each supporting pole using non-solder type connections for span wire ground.
- 3) Use conduit size specified (min.) unless current N.E.C. indicates a larger size is required.

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ENGINEER OF DEVELOPMENT

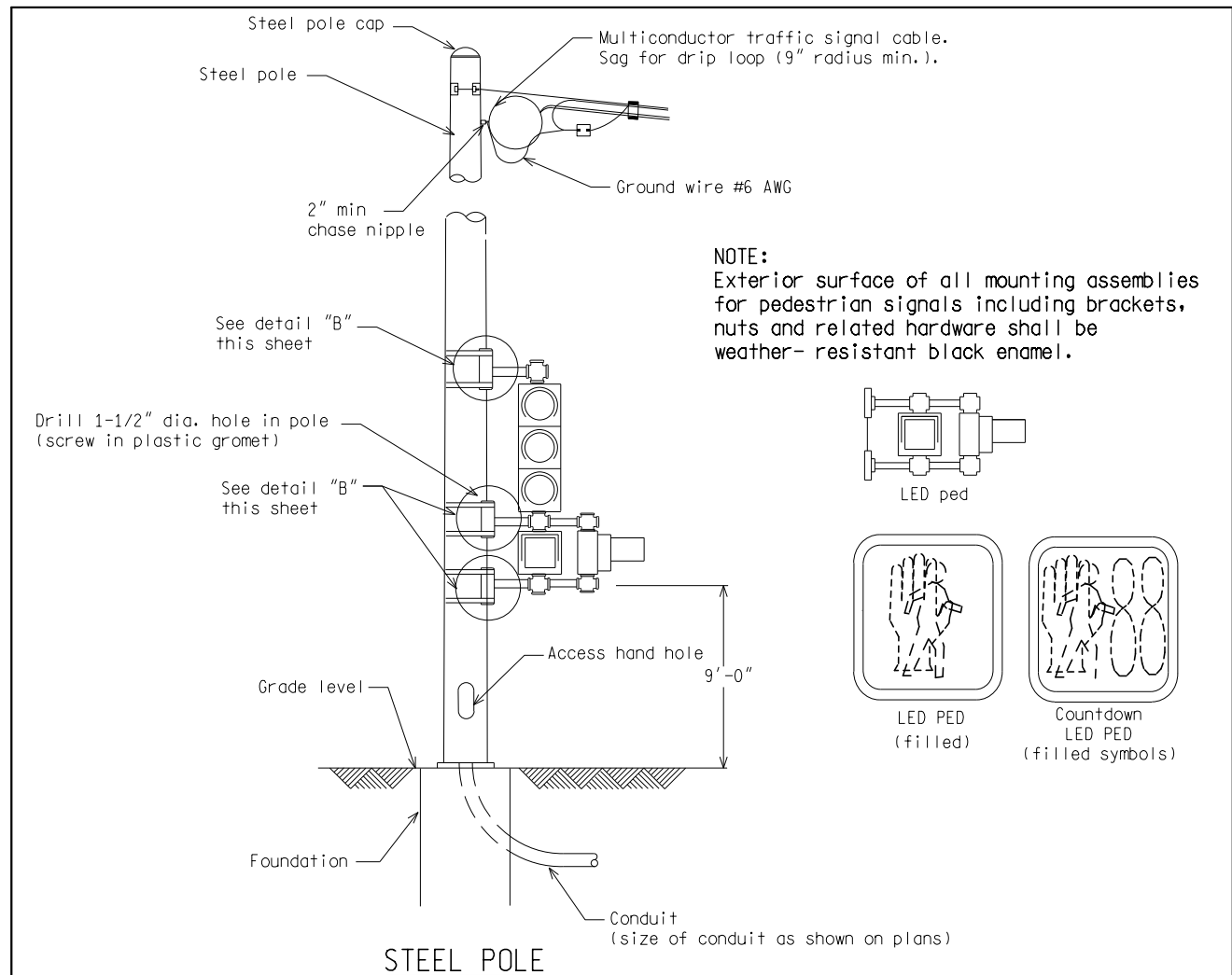
(SPECIAL DETAIL)

FHWA APPROVAL DATE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR
TYPICAL POLE MOUNTED
PEDESTRIAN SIGNALS

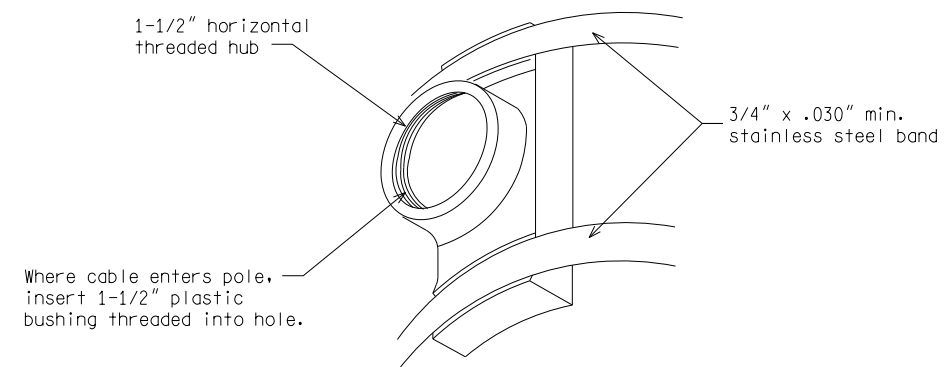
WC-029-C

SHEET
1 of 4



NOTE:

Exterior surface of all mounting assemblies for pedestrian signals including brackets, nuts and related hardware shall be weather-resistant black enamel.



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MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

(SPECIAL DETAIL)
FHWA APPROVAL DATE

File: PW:RD/TR/Signals/WC SD/Final

Rev. 10/21/14

PLAN DATE

WC-029-C

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2 of 4

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Michigan Department of Transportation

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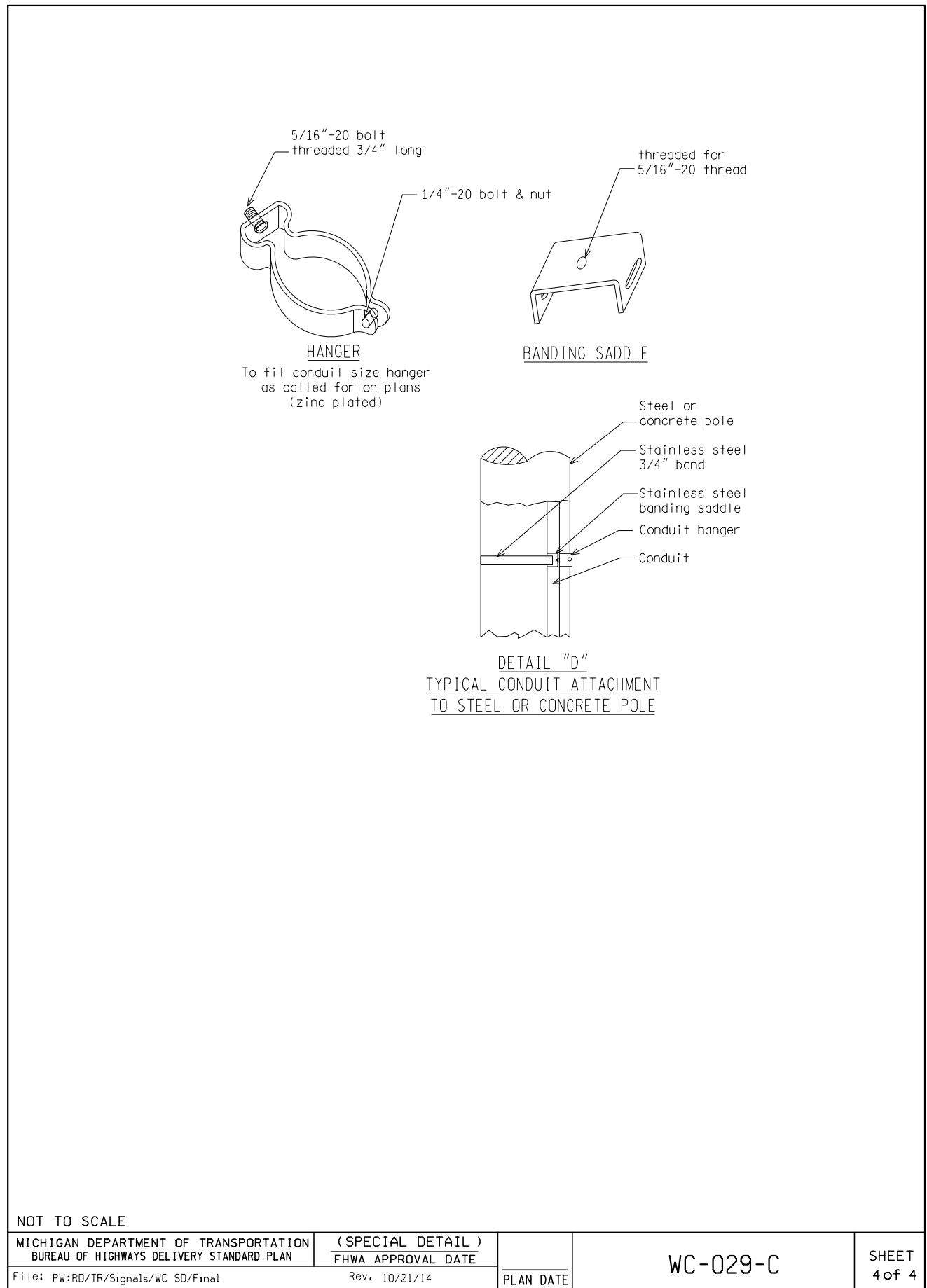
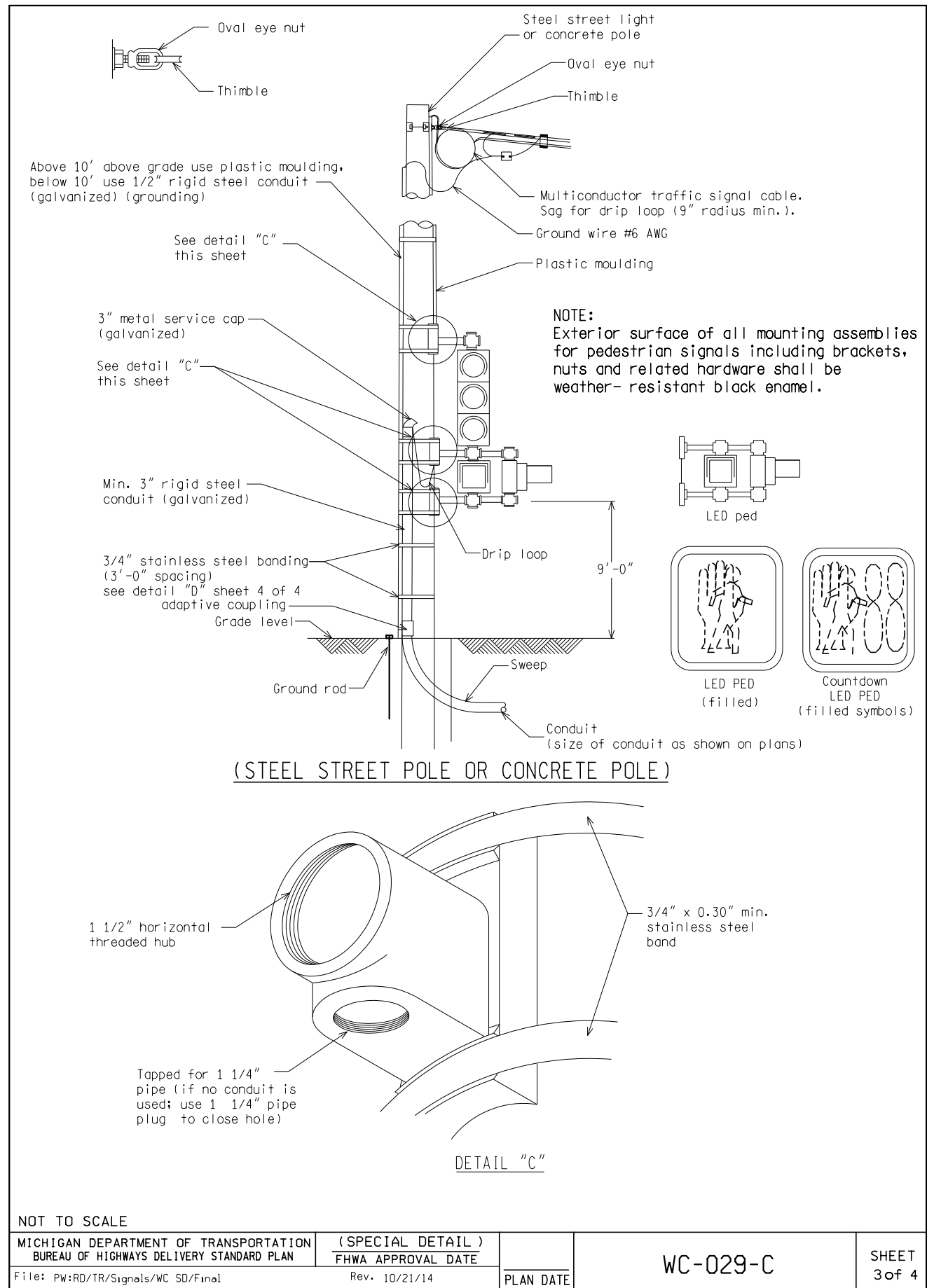
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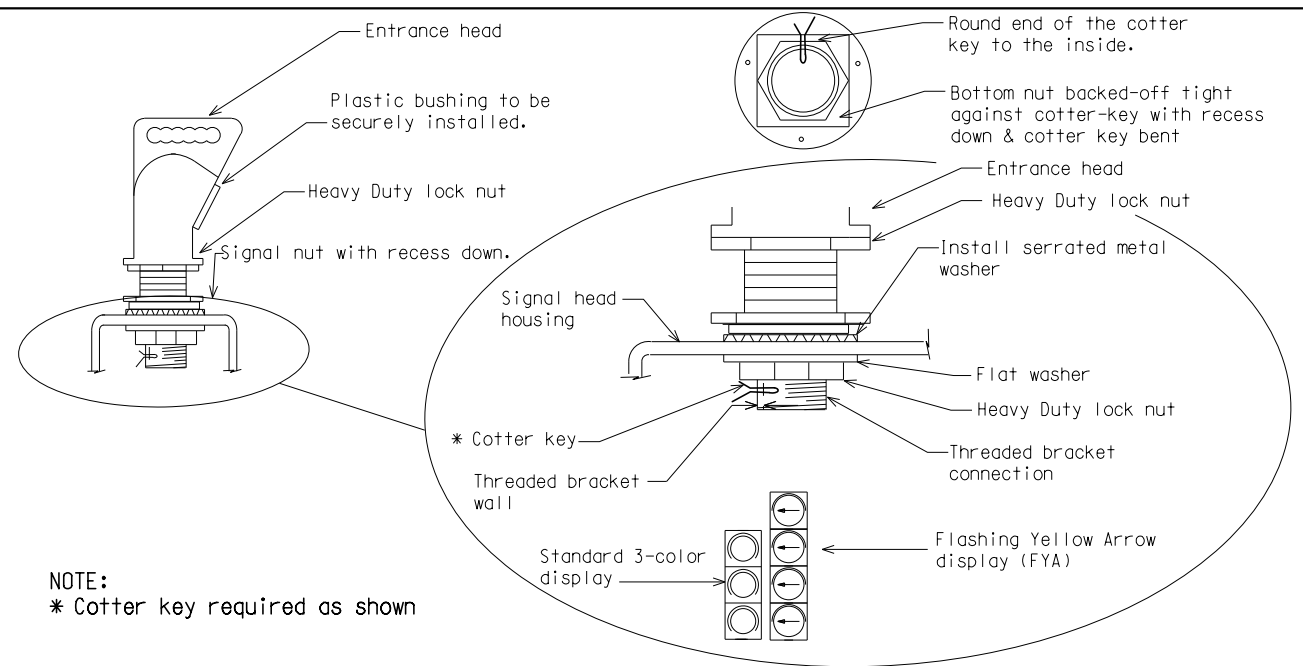
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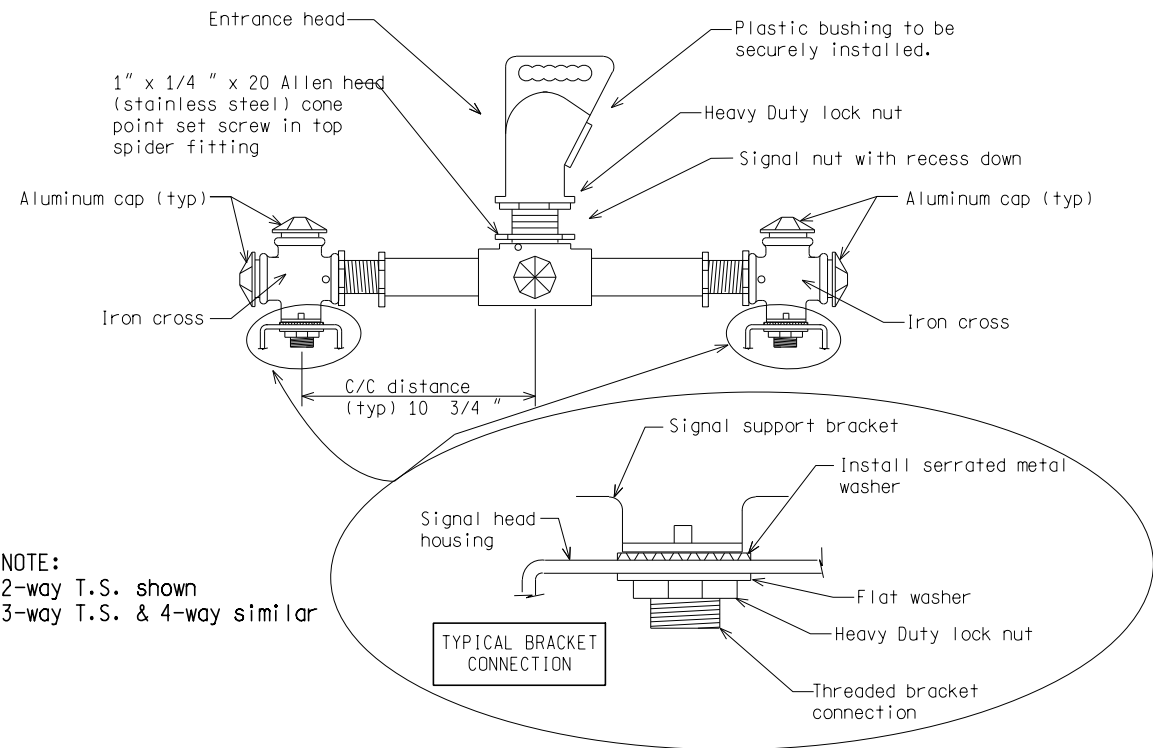
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ONE-WAY TRAFFIC SIGNAL HEAD



MULTIPLE-WAY TRAFFIC SIGNAL HEAD(S)

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ENGINEER OF DELIVERY

ENGINEER OF DEVELOPMENT

(SPECIAL DETAIL)

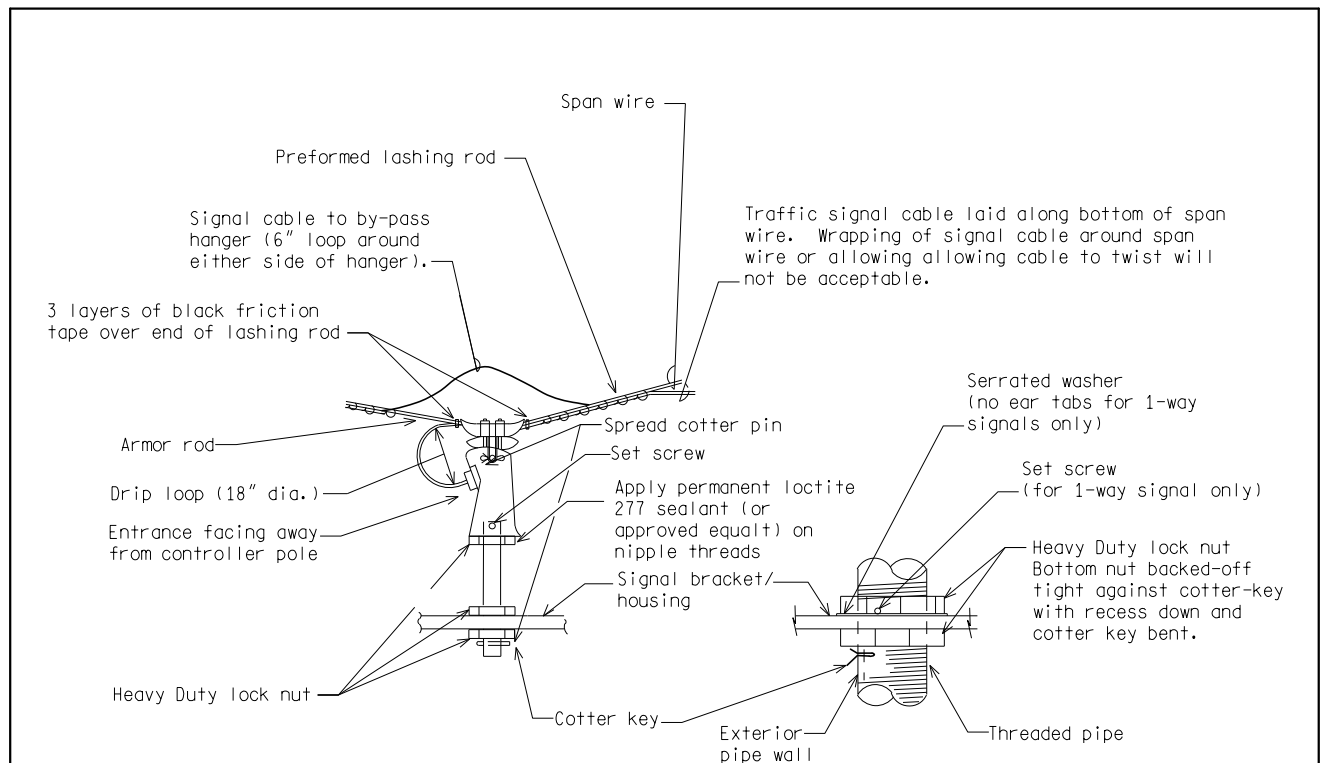
FHWA APPROVAL DATE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR
SPAN WIRE MOUNTED
T.S. BRACKET ASSEMBLY

WC-030-A

SHEET
1 of 2

PLAN DATE



HANGER ATTACHMENT

NOTE:

Exterior surface of all mounting assemble located below span clamps, including stems, lock nuts, and related hardware must match the current FHWA Highway yellow color tolerance chart per the Standard Specifications for Construction.

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BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

(SPECIAL DETAIL)
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PLAN DATE

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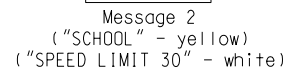
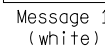
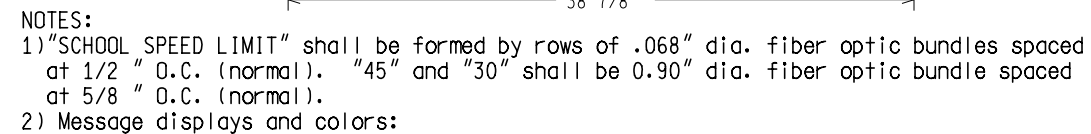
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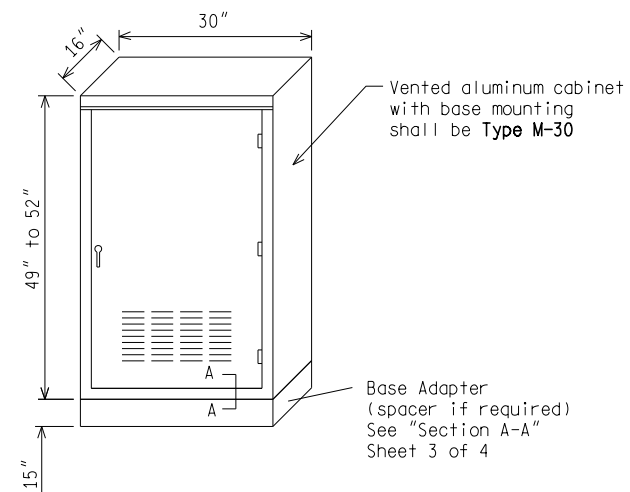
- 3) Message shall completely blank out when not energized.
- 4) Phase dimmer shall provide a means of manual adjustment for nighttime dimming. Dimming shall be activated by the photocell.
- 5) Sign housing shall be pre-drilled for power entry through top mounting hub.
- 6) Sign shall be equipped with four (4) 3/16 " dia. weep holes located in the lower corners of the housing.
- 7) Exterior of housing assembly shall be painted semi-gloss black.
- 8) Approximate weight of sign assembled - 120 lbs.

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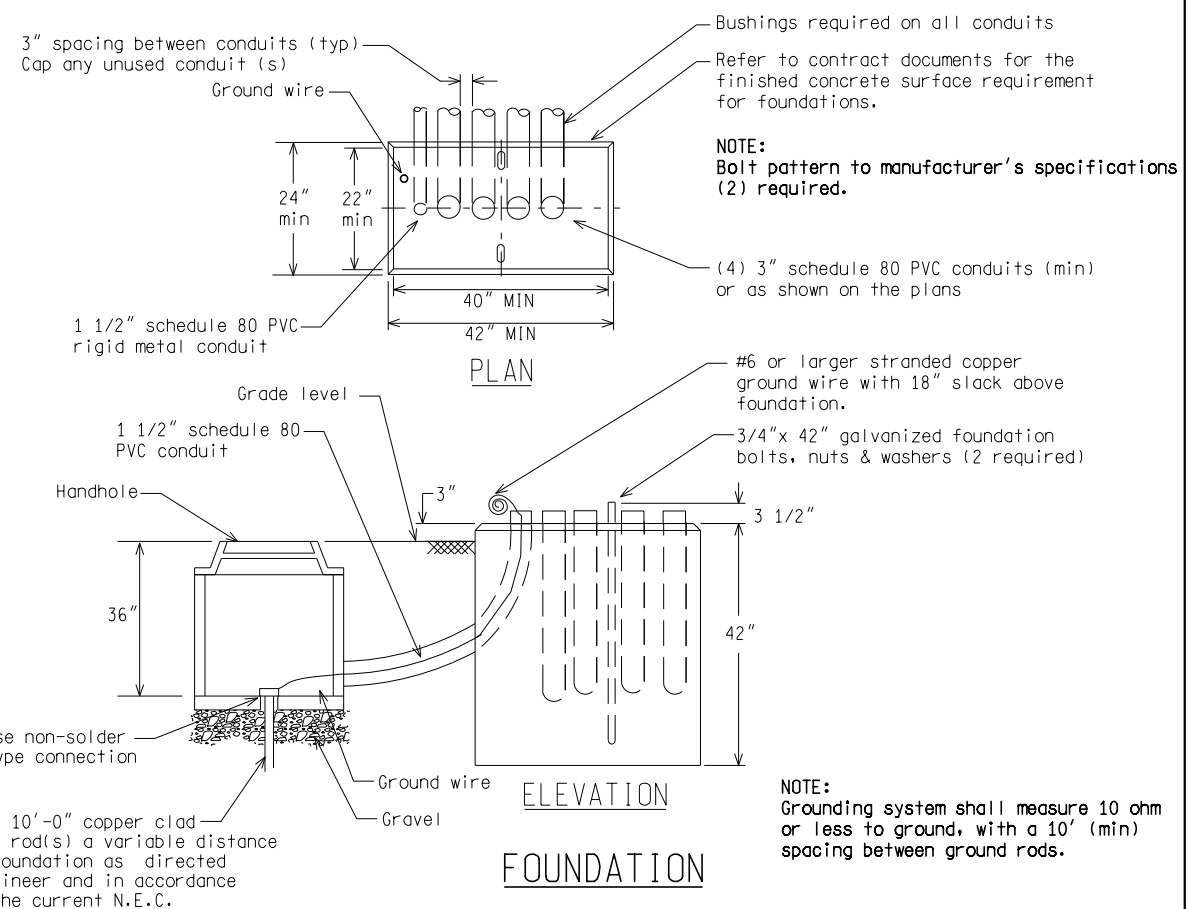


SHEET
2 of 2

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BASE MOUNTED TRAFFIC SIGNAL CONTROLLER CABINET

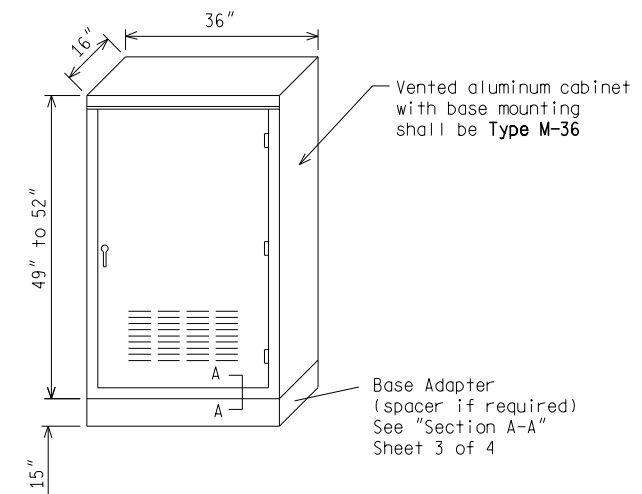


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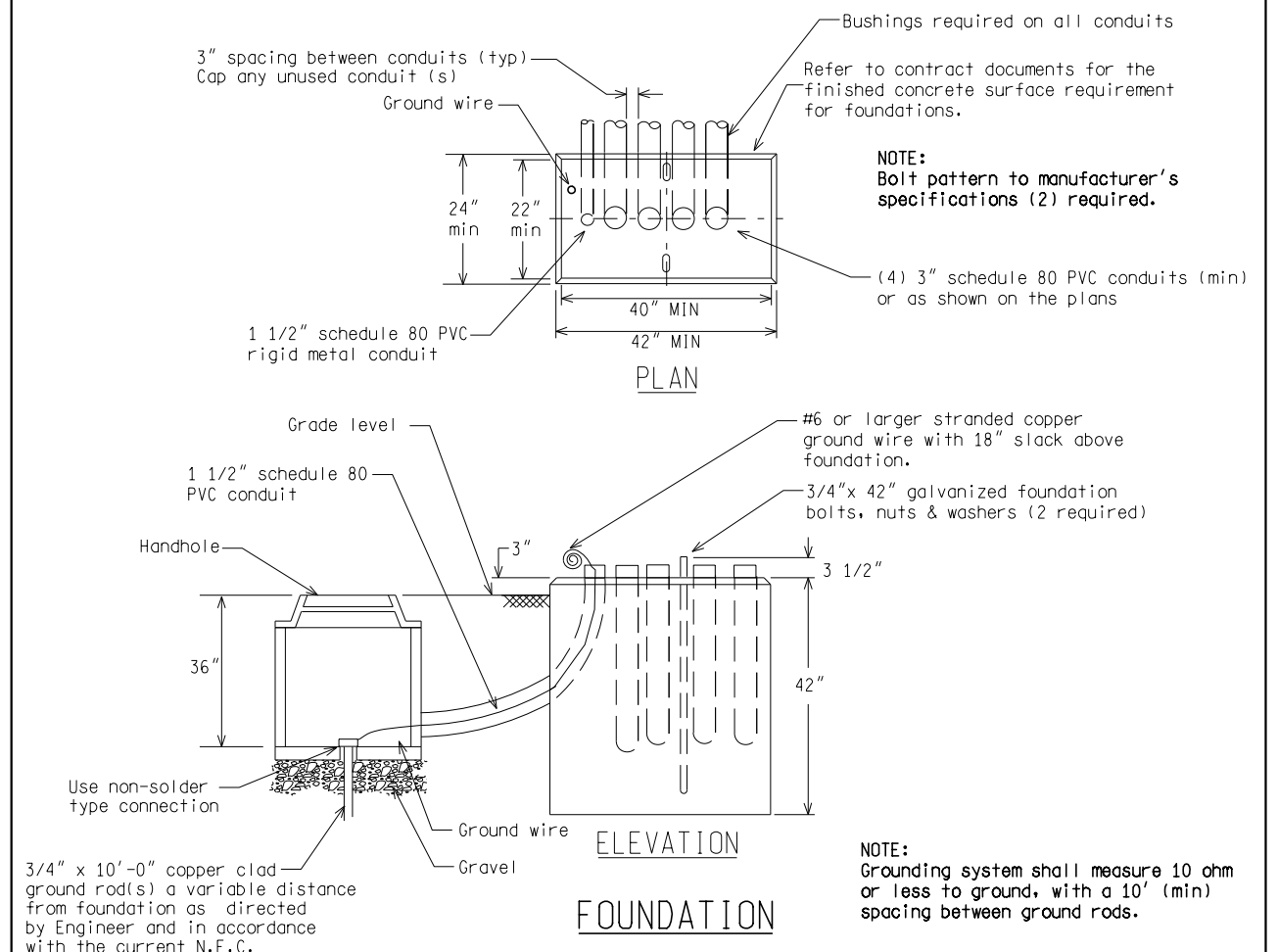
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	<p>ENGINEER OF DEVELOPMENT</p>	<p>BASE MOUNTED T.S. CONTROLLER CABINET/FOUNDATIONS</p>		
<p>DRAWN BY:</p>	<p>(SPECIAL DETAIL)</p>	<p>WC-045-A</p>	<p>SHEET 1 of 4</p>	
<p>CHECKED BY:</p>	<p>FHWA APPROVAL DATE</p>	<p>PLAN DATE</p>		



BASE MOUNTED TRAFFIC SIGNAL CONTROLLER CABINET



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MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

(SPECIAL DETAIL)
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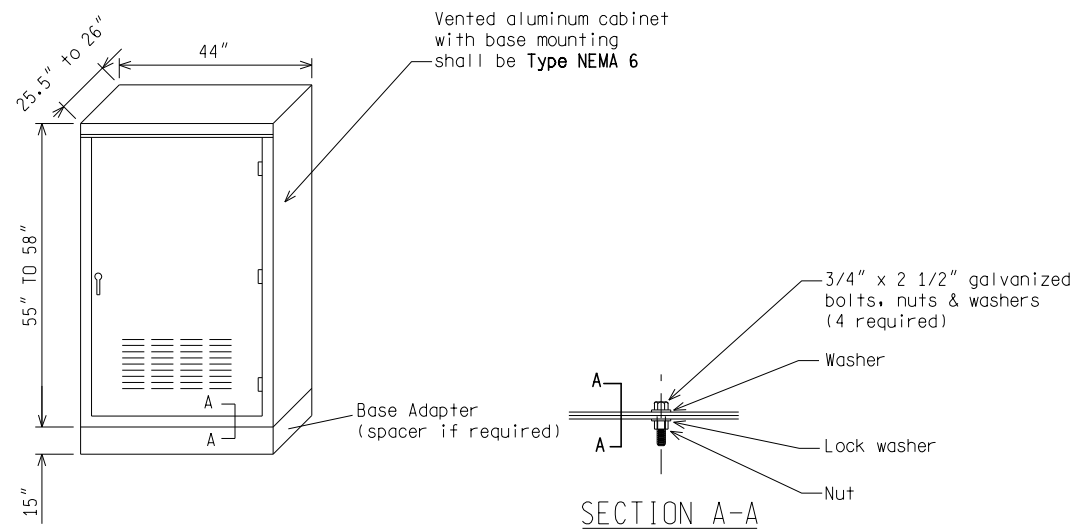
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2 of 4

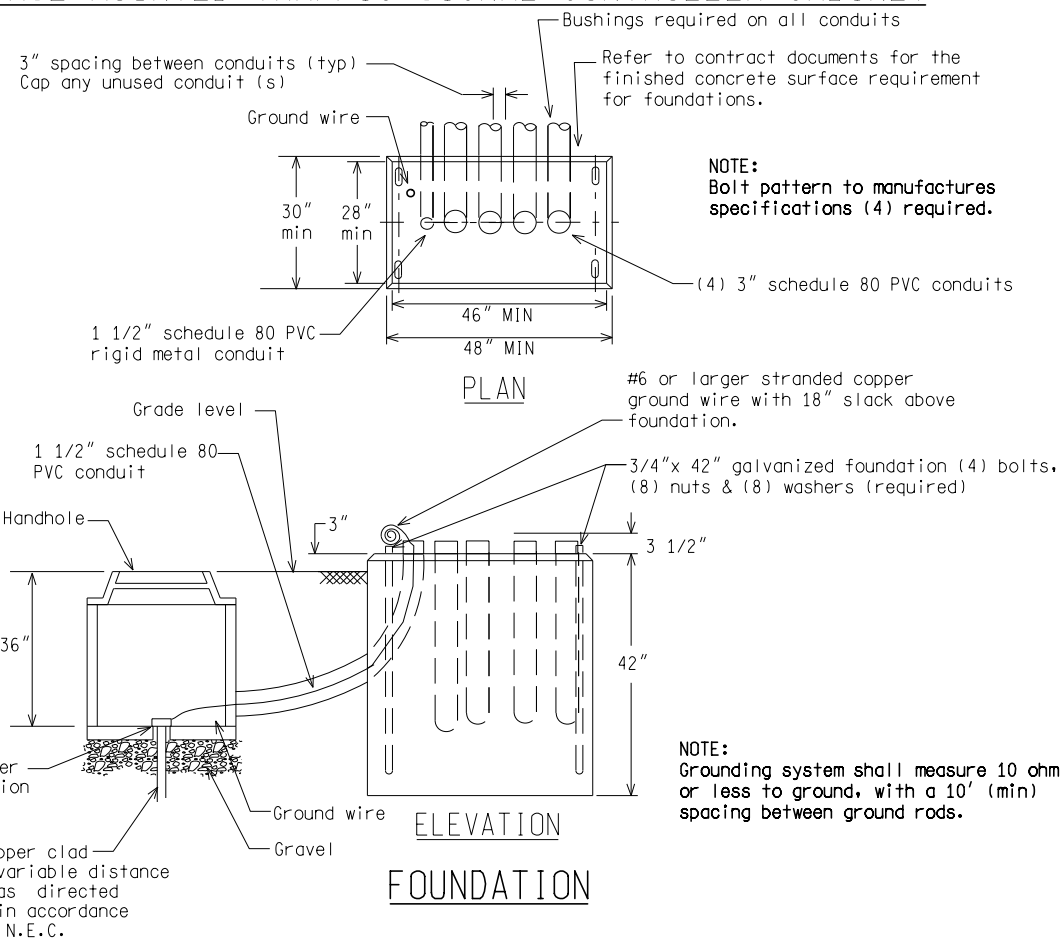
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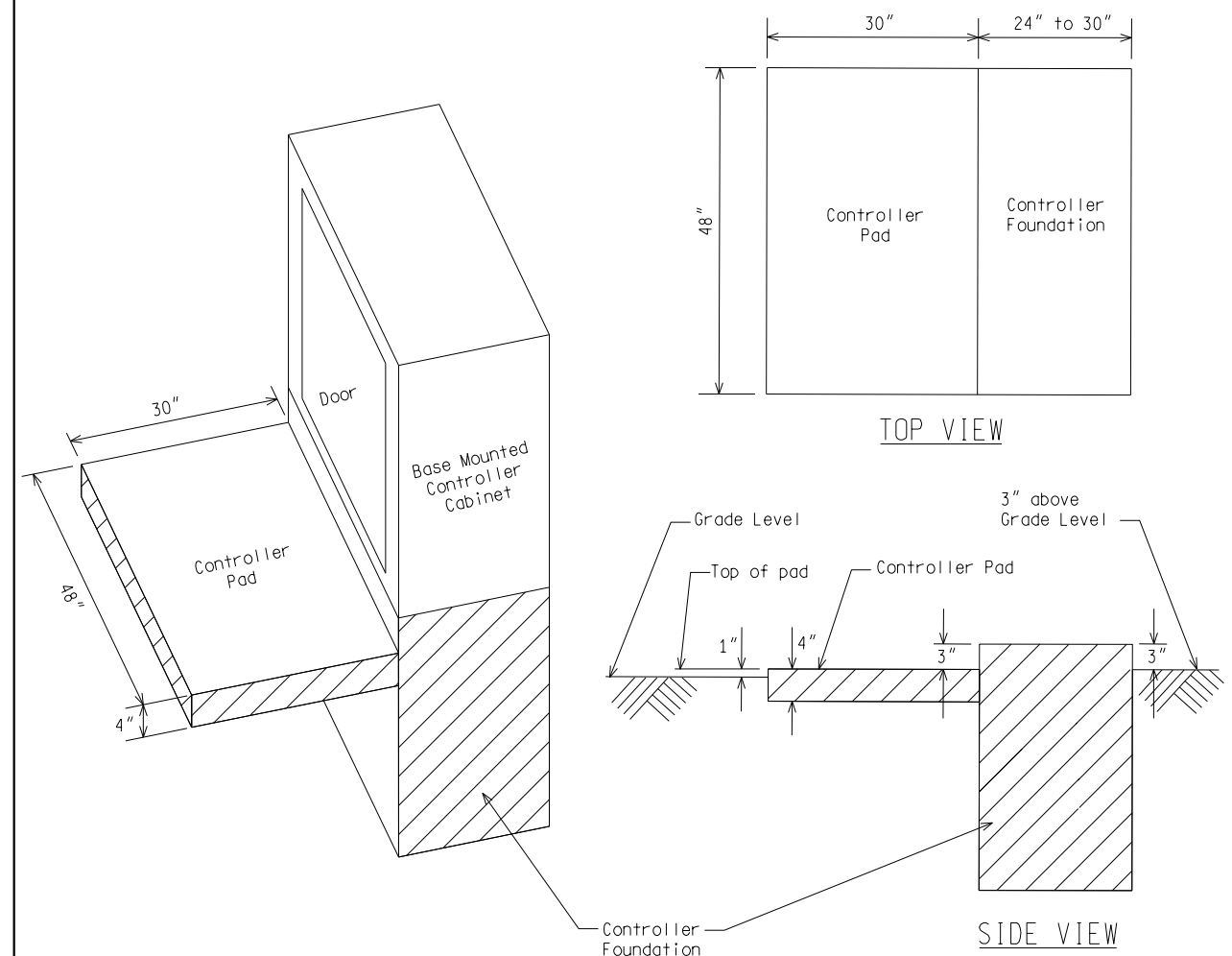


BASE MOUNTED TRAFFIC SIGNAL CONTROLLER CABINET



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			PLAN DATE		



BASE MOUNTED CONTROLLER PAD

NOTE:
Payment for controller pad to be included in controller foundation pay item.
Controller cabinet door to open toward pad.

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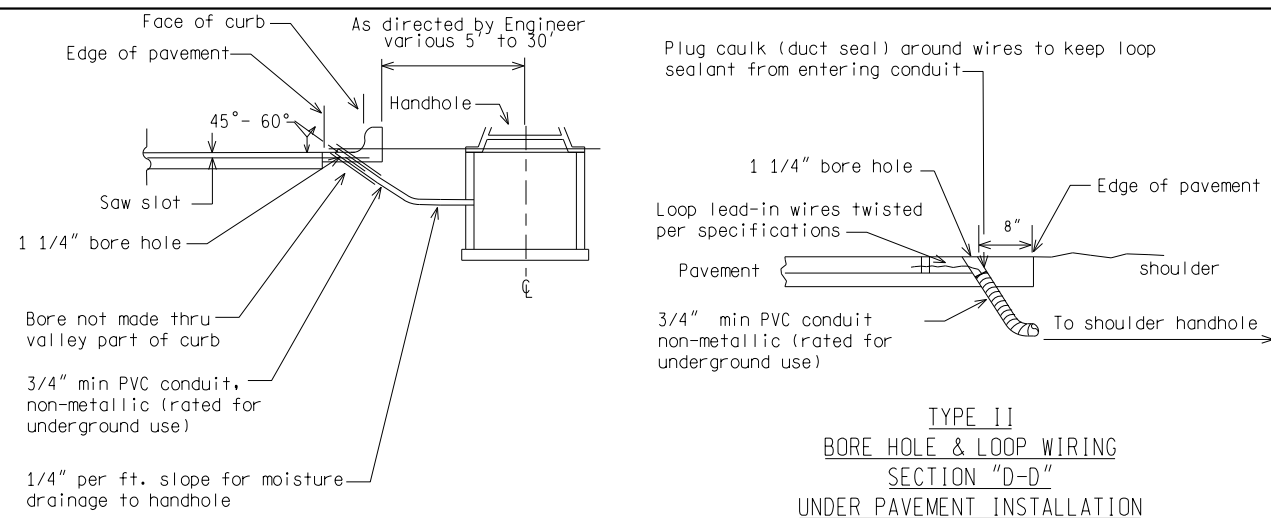


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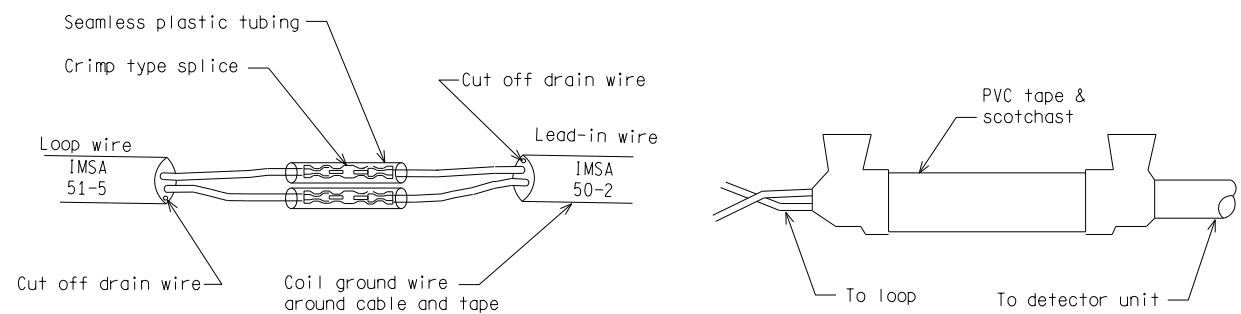
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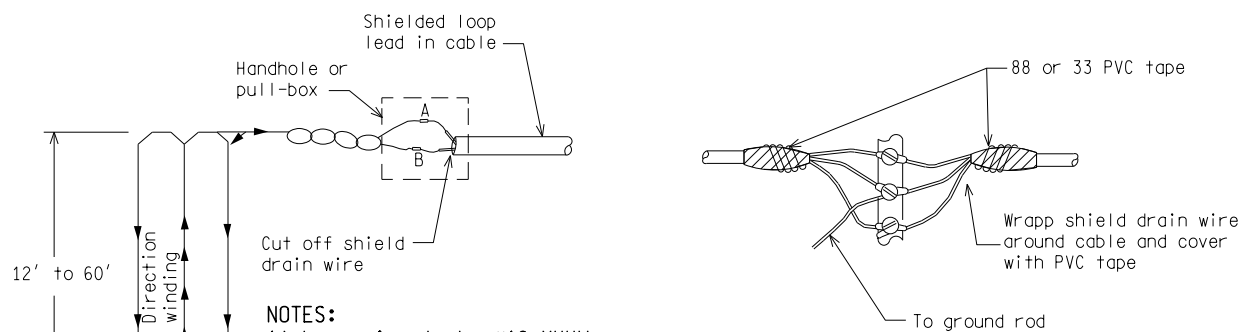
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TYPE I
SECTION "C-C"
UNDER CURB INSTALLATION



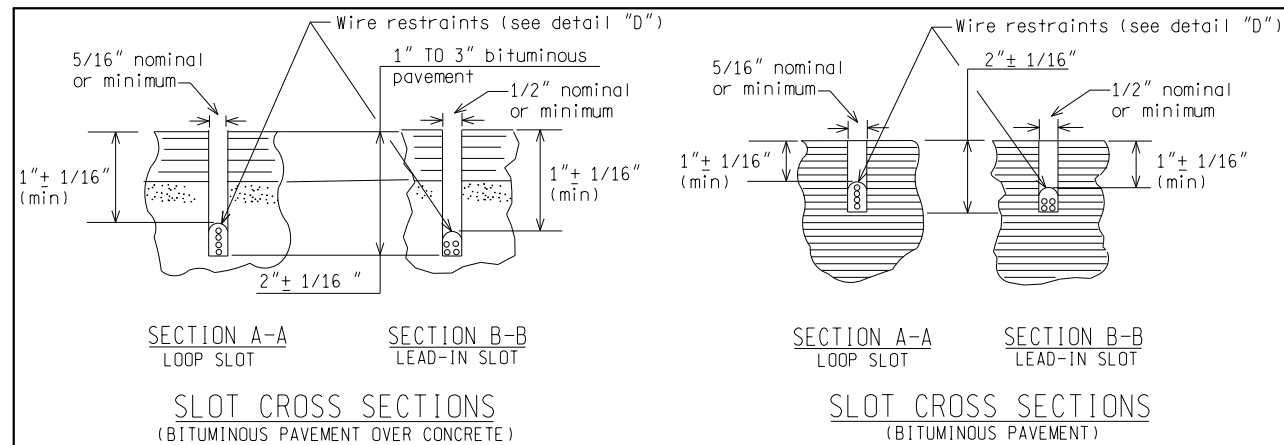
HANDHOLE & PULL-BOX SPLICES (WATERPROOF)



CONTROLLER CABINET CONNECTION

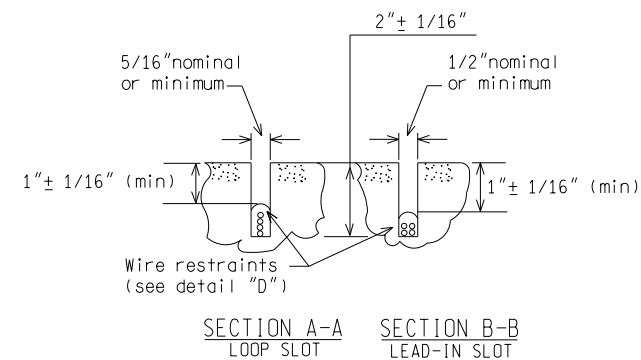
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File: PW:RD/TR/Signals/WC SD/Final		Rev. 10/21/14 PLAN DATE		



SLOT CROSS SECTIONS
(BITUMINOUS PAVEMENT OVER CONCRETE)


SLOT CROSS SECTIONS
(BITUMINOUS PAVEMENT)

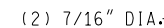


SLOT CROSS SECTIONS
(CONCRETE PAVEMENT)


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MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	(SPECIAL DETAIL) FHWA APPROVAL DATE		WC-170-A	SHEET 4 of 4
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- ## ALUMINUM SPAN WIRE JUNCTION BOX

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				SPAN WIRE JUNCTION BOX	
				<div>PLAN DATE</div>	WC-408-A

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