GRE

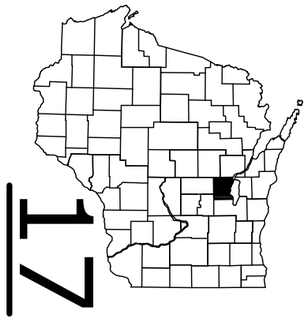
FEB 2015

PROJECT ID: 1517-75-82
WITH: N/A

COUNTY: WINNEBAGO

ORDER OF SHEETS

TOTAL SHEETS = 38



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

USH 10 - USH 10/STH 441

COUNTY CB - ONEIDA STREET

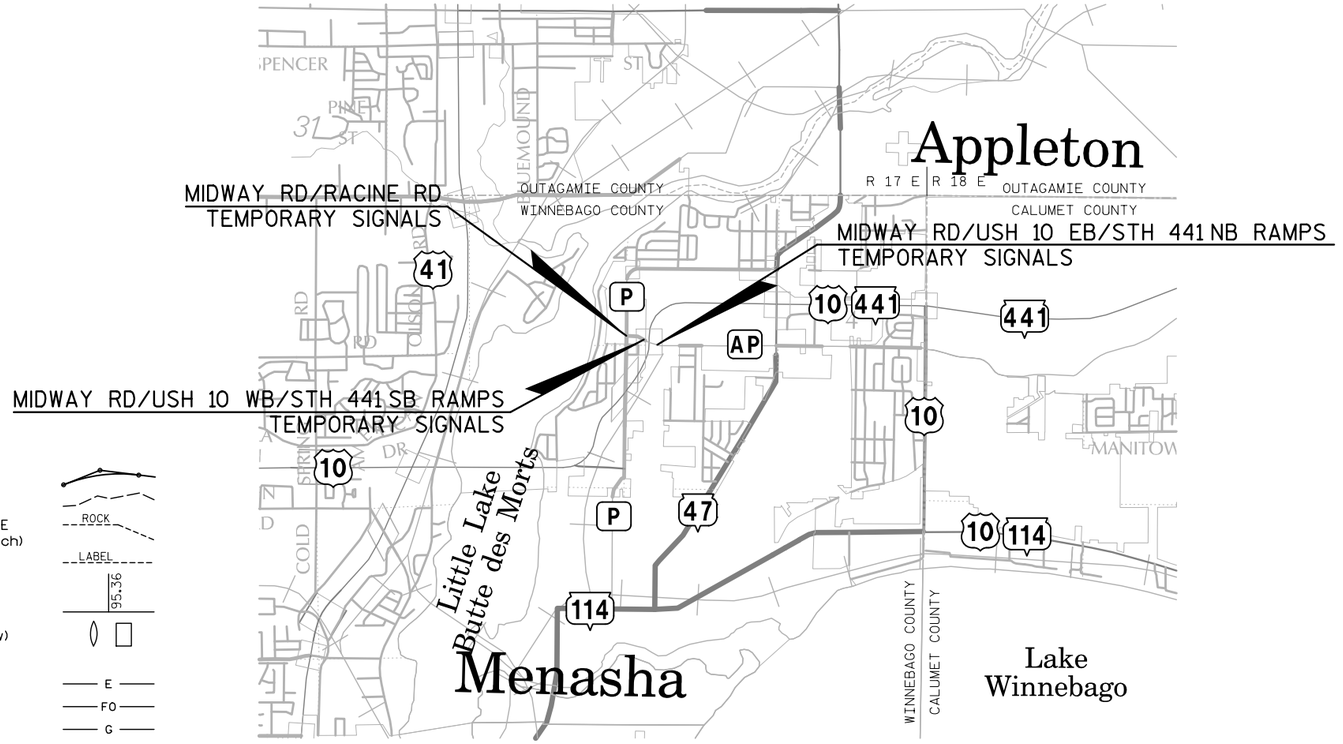
LOCAL STREET

WINNEBAGO COUNTY

MIDWAY ROAD TMP

STATE PROJECT NUMBER
1517-75-82

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1517-75-82	WISC 2015082	1



LAYOUT
SCALE 0 ½ MI.

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD29).

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WINNEBAGO COUNTY, NAD83 (1991).

ORIGINAL PLANS PREPARED BY

URS
342 North Water Street
7th Floor
Milwaukee, WI 53202
(414) 831-4100

WISCONSIN PROFESSIONAL ENGINEER
NICHOLAS J BECKER
E-40803
BROOKFIELD
WISCONSIN

7/15/2014 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
- Surveyor: WisDOT/ KAPUR
- Designer: URS
- Project Manager: SCOTT EBEL
- Regional Examiner:
- Regional Supervisor: CHAD DEGRAVE

APPROVED FOR THE DEPARTMENT
DATE: 7/15/14 (Signature)

E

DIGGERS HOTLINE

Dial 811 or (800) 242-8511

www.DiggersHotline.com

UTILITY CONTACTS

AMERICAN TRANSMISSION COMPANY
MR. MIKE OLSEN
801 O'KEEFE RD
DE PERE, WI 54115
(920) 338-6582
MOBILE: (920) 660-2390
MOLSEN@ATCLLC.COM

AT&T LEGACY
MR. WILLIAM KOENIG
c/o JMC ENGINEERS & ASSOCIATES, INC.
P.O. BOX 244
LAKE MILLS, WI 53551
(608) 628-0575
JMC140@FRONTIER.COM

AT&T WISCONSIN
MR. VINCENT LEBRUN
221 W. WASHINGTON ST 4TH FLOOR
APPLETON, WI 54911
(920) 735-3076
VL1253@ATT.COM

SPRINT
MR. JAMES BURTON
c/o ERICSSON INC.
400W GRAND AVE
ELMHURST, IL 60126
MOBILE: (708) 955-6659
JAMES.BURTON@ERICSSON.COM

TOWN OF MENASHA - ELECTRIC
MR. RANDY GALLOW
STREET DEPARTMENT
2000 MUNICIPAL DR
NEENAH, WI 54956
(920) 720-7110

TOWN OF MENASHA - SANITARY SEWER
MR. STEVEN LAABS
UTILITY DISTRICT
2340 AMERICAN DR
NEENAH, WI 54956
(920) 739-5120
STEVEL@TOWN-MENASHA.COM

TOWN OF MENASHA - WATER
MR. JEFF ROTH
UTILITY DISTRICT
2000 MUNICIPAL DR
NEENAH, WI 54956
(920) 720-7100
JEFFR@TOWN-MENASHA.COM

TDS METROCOM
MR. STEVE JAKUBIEC
10 COLLEGE AVE STE 218A
APPLETON, WI 54911
(920) 882-4166
MOBILE: (920) 562-7221
STEVE.JAKUBIEC@TDSTELECOM.COM

TIME WARNER CABLE
MR. VINCE ALBIN
3520 DESTINATION DR
APPLETON, WI 54915
(920) 831-9249
MOBILE: (920) 378-0444
VINCE.ALBIN@TWCABLE.COM

WE ENERGIES - ELECTRIC
MR. JIM QUINN
P.O. BOX 1699
APPLETON, WI 54912
(920) 380-3401
JIM.QUINN@WE-ENERGIES.COM

WE ENERGIES - ELECTRIC AND GAS
MR. DAN SANDE
333 W EVERETT ST A299
MILWAUKEE, WI 53203
(414) 221-4578
DAN.SANDE@WE-ENERGIES.COM

WE ENERGIES - GAS
MR. KEN VAN OSS
P.O. BOX 1699
APPLETON, WI 54912
(920) 380-3318

WISCONSIN CENTRAL LTD CONTACTS

RAILROAD FLAGGING CONTACT
MARY ELLEN CARMODY
2800 LIVERNOIS ROAD, SUITE 330
TROY, MI 48083
OFFICE: (248) 740-6227
FAX: (248) 740-6036
MARYELLEN.CARMODY@CN.CA

MAIN RAILROAD CONTACT
JACKIE MACEWICZ
MANAGER PUBLIC WORKS
1625 DEPOT STREET
STEVENS POINT, WI 54481
OFFICE: (715) 345-2503
FAX: (715) 345-2507
JACKIE.MACEWICZ@CN.CA

24 HOUR EMERGENCY RAILROAD SIGNAL
1-800-616-3432

CALL BEFORE YOU DIG

WISCONSIN CENTRAL LTD IS NOT PART OF DIGGERS HOTLINE.
CALL CHRISTINE GRZESIAK, (715) 345-2506, WHEN DIGGING
ON RAILROAD R/W

DNR AREA LIAISON

JAY SCHIEFELBEIN
DEPARTMENT OF NATURAL RESOURCES
2984 SHAWANO AVE
GREEN BAY, WI
(920) 662-5407

US ARMY CORP OF ENGINEERS

ANN NYE
OLD FORT SQUARE
211 N. BROADWAY, STE 221
GREEN BAY, WI 54303
(920) 448-2824
ANN.M.NYE@USACE.ARMY.MIL

WINNEBAGO COUNTY HIGHWAY COMMISSIONER

ERNIE WINTERS
901 WEST COUNTY ROAD Y
P.O. BOX 2764
OSHKOSH, WI 54903
(920) 232-1700

COUNTY SURVEYOR

DIANE CULVER
WINNEBAGO COUNTY PLANNING AND ZONING DEPT
PO BOX 2808
OSHKOSH, WI 54903
920-232-3335
DCULVER@COWINNEBAGO.WI.US

DESIGN CONTACTS

SCOTT EBEL
WISDOT - NE REGION
1940 WEST MASON STREET
GREEN BAY, WI 54303
920-492-2240
SCOTT.EBEL@DOT.WI.GOV

NICHOLAS BECKER
URS CORPORATION
342 N. WATER ST, 7TH FLOOR
MILWAUKEE, WI 53202
414-831-4122

MATTHEW LETOURNEAU
URS CORPORATION
342 N. WATER ST, 7TH FLOOR
MILWAUKEE, WI 53202
414-831-4138

2

2

2

GENERAL NOTES

THE CONTRACTOR SHALL CONTACT THE UTILITIES AND DIGGERS HOTLINE TO LOCATE AND FIELD VERIFY UTILITIES PRIOR TO THE START OF WORK. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. ANY LOCAL, MUNICIPAL OR OTHER UTILITY THAT IS NOT A MEMBER OF DIGGERS HOTLINE SHALL BE CONTACTED SEPERATELY.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.

PROTECT INLETS WITH PROPER INLET PROTECTION AT LOCATIONS EXHIBITING RISK OF BEING IMPACTED BY CONSTRUCTION OPERATIONS, OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY ANY OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT THE CONTRACTOR'S EXPENSE.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY OR FLOODPLAIN OF ANY WATERWAY.

PLACE SALVAGED TOPSOIL IN ALL DISTURBED AREAS AS DESIGNATED BY THE ENGINEER IMMEDIATELY AFTER INSTALLATION OF TEMPORRAY TRAFFIC SIGNALS HAS BEEN COMPLETED. SEE, MULCH AND FERTILIZE OR SOD AND FERTILIZE ALL AREAS 5 DAYS AFTER PLACEMENT OF SALVAGED TOPSOIL. RESTORATION ITEMS ARE INCIDENTAL TO THE CONTRACT

FILL AND COMPACT ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES WITH GRANULAR BACKFILL. BACKFILLING IS INCIDENTAL TO CORRESPONDING ABANDONMENT OR REMOVAL ITEM.

CONTRACTORS SHALL FIELD VERIFY UTILITY DEPTHS AT ALL PROPOSED CONNECTION POINTS TO THE EXISTING SYSTEMS.

FERTILIZER SHALL NOT BE USED NEAR NAVIGABLE WATERWAYS OR WETLANDS.

THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.

REMOVAL OF EROSION CONTROL DEVICES IS INCIDENTAL TO THE COST OF RESPECTIVE BID ITEMS.

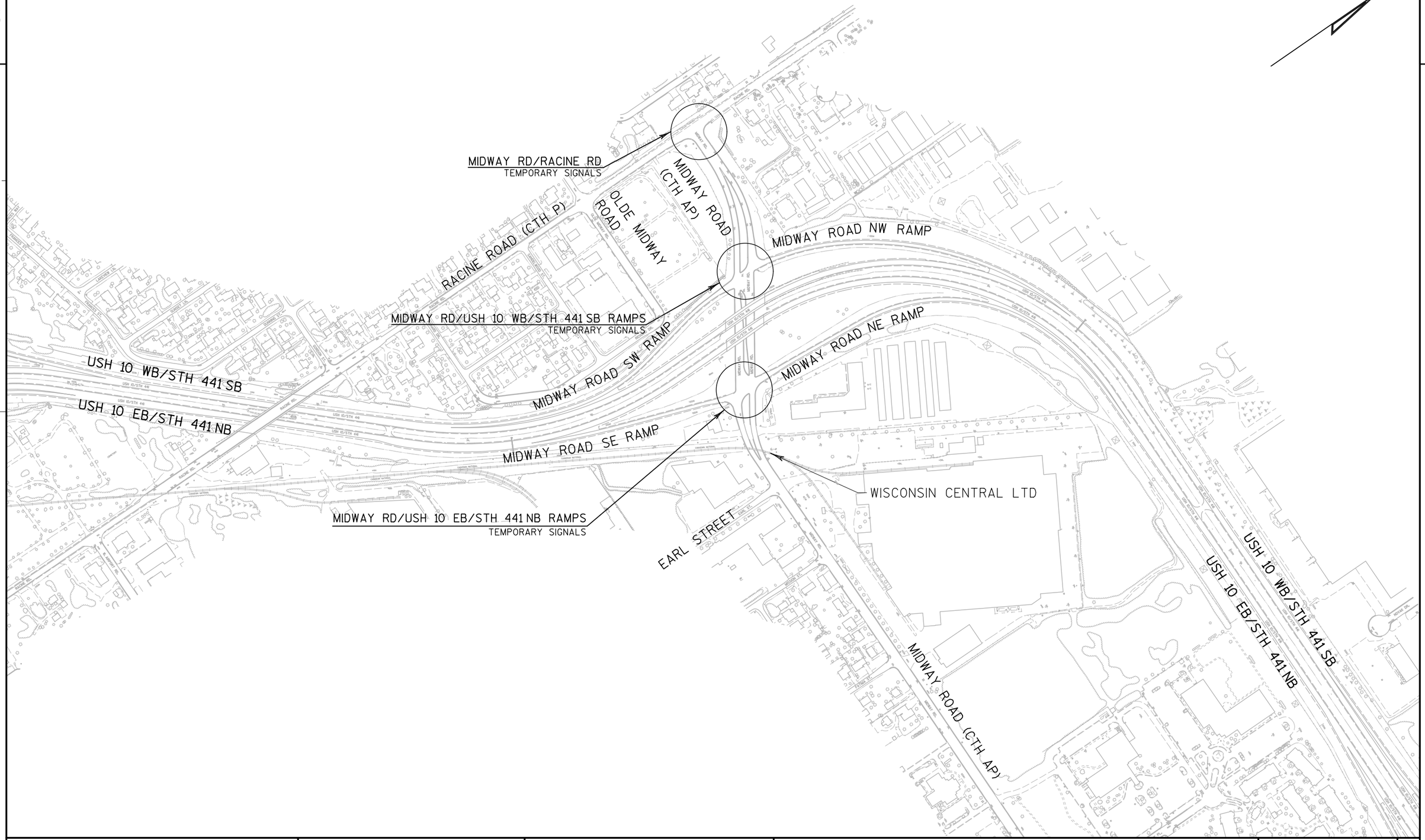
EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

ADJUST TRAFFIC CONTROL DEVICES TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

STATIONING, DISTANCES AND OFFSETS FOR SIGNS SHOWN IN THE PLANS ARE APPROXIMATE AND THE FINAL LOCATION OF SIGNS ARE TO BE DETERMINED BY THE ENGINEER.

BENCHMARK LOCATIONS SHOWN ON PLAN ARE APPROXIMATE AND SHOULD BE VERIFIED AND USED FOR ELEVATION ONLY.

2



PROJECT NO: 1517-75-82	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	PROJECT OVERVIEW	SHEET 4	E

LEGEND

- TRAFFIC SIGNAL CONTROL CABINET
- CABLE-OVERHEAD
- TEMPORARY WOOD POLE OR TEMPORARY PEDESTAL POLE
- 250 WATT LUMINAIRE
- SIGNAL HEAD MOUNTED ON OVERHEAD CABLE
- MULTIZONE MICROWAVE VEHICLE SENSOR
- 8 SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- FY FLASHING YELLOW ARROW
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- LANE DESIGNATION (FOR INFORMATION ONLY)
- MICROWAVE VEHICLE SENSOR NODE

N

MH MH

STOP
R1-1F
30" X 30"

W3-3
36" X 36"

UTILIZE EXISTING 3" CONDUIT

TOWN OF MENASHA
SANITARY SEWER

TOWN OF MENASHA
SANITARY SEWER

TOWN OF MENASHA
ELECTRIC

PROPOSED PULL BOX
(24"X36")

PB02 WP01 MVS01 OH MVS02 WP02 MVS03

BORE CONDUIT

61
11

RACINE RD (CTH P)

TOWN OF MENASHA
WATER

21
22

UTILIZE EXISTING 3" CONDUIT

PP02

TRAFFIC SIGNAL
PEDESTAL SCREW IN

PB03

PROPOSED PULL BOX
(24"X36")

TOWN OF MENASHA
ELECTRIC

AT&T

WE ENERGIES
ELECTRIC

PP01

TCB1 PB01

TRAFFIC SIGNAL
PEDESTAL SCREW IN

PROPOSED PULL BOX
(24"X36")

WE ENERGIES
ELECTRIC AND GAS

WE ENERGIES
ELECTRIC

41 42

STOP
R1-1F
30" X 30"

W3-3
36" X 36"

EX ROW
(TYP.)

UTILIZE EXISTING 3" CONDUIT

MIDWAY RD (CTH AP)

STOP
R1-1 (REMOVE)
30" X 30"
REPLACE W/
STOP
R1-1F
30" X 30"

NOTES

1. CONTRACTOR SHALL BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED AS SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND FACILITIES AND STRUCTURES. SOME TRAFFIC SIGNAL EQUIPMENT MAY HAVE TO BE MOVED SLIGHTLY TO AVOID UTILITY CONFLICTS.

2. FINAL LOCATION OF WOOD POLES AND SIGNAL HEADS TO BE APPROVED BY THE ENGINEER IN THE FIELD.

3. MULTIZONE MICROWAVE VEHICLE SENSOR TO BE MOUNTED 17 FEET TO 19 FEET ABOVE GROUND.

4. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.

5. ALL SIGNAL EQUIPMENT SHOWN ABOVE AND UNDERGROUND ON THIS SHEET ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.

PROJECT NO: 1517-75-82	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TEMPORARY TRAFFIC SIGNALS: RACINE RD & MIDWAY RD	SHEET 5	E

SEQUENCE OF OPERATION

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

RING 1		HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO ✳✳			Ø2 R/W	Ø2 CLEAR TO ✳✳			Ø3 R/W	Ø3 CLEAR TO ✳✳			Ø4 R/W	Ø4 CLEAR TO ✳✳			FLASH
	Ø1	9, 10	G ←	Y ←	-		-	-	-						-	-	-		-
	Ø2	5, 6, 7	R	R	R		G	Y	R						R	R	R		R
	Ø3																		
	Ø4	1, 2, 3, 4	R	R	R		R	R	R						G	Y	R		R
	Ø5																		
	Ø6	8, 9, 10, 11	R	R	R		R	R	R						R	R	R		R
	Ø7																		
	Ø8																		

NOT USED

NOT USED

NOT USED

RING 2		HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO ✳✳			Ø6 R/W	Ø6 CLEAR TO ✳✳			Ø7 R/W	Ø7 CLEAR TO ✳✳			Ø8 R/W	Ø8 CLEAR TO ✳✳		
	Ø1	9, 10					-	-	-									
	Ø2	5, 6, 7					R	R	R									
	Ø3																	
	Ø4	1, 2, 3, 4					R	R	R									
	Ø5																	
	Ø6	8, 9, 10, 11					G	Y	R									
	Ø7																	
	Ø8																	

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	6	2,4
2	6	1,4
3		
4		1,2,6
5		
6	1 OR 2	4
7		
8		

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11		X			1	1				6X30	MVS
61		X			6	6				6X30	MVS
41		X			4	4				6X30	MVS
42		X			4	4		X		6X30	MVS
21		X			2	2				6X30	MVS
22		X			2	2		X		6X30	MVS

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				X
2			MIN.	X
3				
4				X
5				
6			MIN.	X
7				
8				

N

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM #:	SS- -

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. PROVIDE FOR HAND CONTROL.

RACINE RD & MIDWAY RD
TOWN OF MENASHA
WINNEBAGO COUNTY

SIGNAL NO.

CONTROLLER TYPE:

DATE 8/1/2014

FILE NAME : P:\Transportation\US 10 WIS 441\CADD\sheets\15177582\024002_sp.dgn PLOT DATE : 10/23/2014 PLOT BY : jessica_meddaugh PLOT NAME : PLOT SCALE : 40.0000 sf / in.
WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC SIGNAL CONTROL CABINET
- OH — CABLE-OVERHEAD
- TEMPORARY WOOD POLE
- 250 WATT LUMINAIRE
- SIGNAL HEAD MOUNTED ON OVERHEAD CABLE
- MULTIZONE MICROWAVE VEHICLE SENSOR
- 8 SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- FY FLASHING YELLOW ARROW
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- LANE DESIGNATION (FOR INFORMATION ONLY)
- MICROWAVE VEHICLE SENSOR NODE

TOWN OF MENASHA SANITARY SEWER

MIDWAY RD (CTH AP) WB

MIDWAY RD (CTH AP) EB

W3-1 36" X 36" (REMOVE)

REPLACE WITH

W3-3 36" X 36"

STOP R1-1F 30" X 30" (ON WOOD POST)

W3-1 36" X 36" (REMOVE)

REPLACE WITH

W3-3 36" X 36"

WP03

WP04

WP02 MVS01 MVS02

WE ENERGIES ELECTRIC AND GAS

STOP R1-1F 30" X 30"

WP01

TCB2

WP05 MVS03

EX ROW (TYP.)

TOWN OF MENASHA WATER

STOP R1-1F 30" X 30" (ON WOOD POST)

TOWN OF MENASHA SANITARY SEWER

TOWN OF MENASHA SANITARY SEWER

USH 10 WB/STH 441 SB

USH 10 EB/STH 441 NB

NOTES

1. CONTRACTOR SHALL BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED AS SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND FACILITIES AND STRUCTURES. SOME TRAFFIC SIGNAL EQUIPMENT MAY HAVE TO BE MOVED SLIGHTLY TO AVOID UTILITY CONFLICTS.

2. FINAL LOCATION OF WOOD POLES AND SIGNAL HEADS TO BE APPROVED BY THE ENGINEER IN THE FIELD.

3. MULTIZONE MICROWAVE VEHICLE SENSOR TO BE MOUNTED 17 FEET TO 19 FEET ABOVE GROUND.

4. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.

N

PROJECT NO: 1517-75-82	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TEMPORARY TRAFFIC SIGNALS: MIDWAY RD & USH 10/STH 441 SB RAMPS	SHEET 7	E

SEQUENCE OF OPERATION

		Ø1								Ø2								Ø3								Ø4								FLASH
			CLEAR TO								CLEAR TO								CLEAR TO								CLEAR TO							
	HEAD NUMBERS	R/W	**							R/W	**							R/W	**							R/W	**							
Ø1																																	
Ø2	4, 5, 6, 7, 8, 9									G	Y	R														R	R	R					R
Ø3																																	
Ø4	10, 11, 12									R	R	R														G	Y	R					R
RING 1 Ø5	4, 6, 7									-	-	-														-	-	-					-
Ø6	1, 2, 3									R	R	R														R	R	R					R
Ø7																																	
Ø8																																	
OLA	4,6,7									R	R	R														R	R	R					R

		Ø5								Ø6								Ø7								Ø8							
			CLEAR TO								CLEAR TO								CLEAR TO								CLEAR TO							
	HEAD NUMBERS	R/W	**							R/W	**							R/W	**							R/W	**							
Ø1																																	
Ø2	4, 5, 6, 7, 8, 9	R	R	R						R	R	R																					
Ø3																																	
RING 2 Ø4	10, 11, 12	R	R	R						R	R	R																					
Ø5	4, 6, 7	G	-	-						-	-	-																					
Ø6	1, 2, 3	R	R	R						G	Y	R																					
Ø7																																	
Ø8																																	
OLA	4,6,7	-	Y	R						FY	Y	R																					

BARRIER

N

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1		
2	5 OR 6	4
3		
4		2,5,6
5	2	4,6
6	2	4,5
7		
8		

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
51		X			5	5				6X30	MVS
41		X			4	4				6X30	MVS
42		X			4	4		X		6X30	MVS
21		X			2	2				6X30	MVS
22		X			2	2				6X30	MVS
61		X			6	6				6X30	MVS
62		X			6	6				6X30	MVS

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2			MIN.	X
3				
4				X
5				X
6			MIN.	X
7				
8				

OVERLAPS

OLA	PROTECTED	PERMITTED
	5	6

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM #:	SS- -

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. PROVIDE FOR HAND CONTROL.

MIDWAY & USH 10/STH 441 SB RAMPS
TOWN OF MENASHA
WINNEBAGO COUNTY

SIGNAL NO.

CONTROLLER TYPE:

DATE 8/1/2014 PAGE NO. 2 OF 2

PROJECT NO: 1517-75-82	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	SEQUENCE OF OPERATIONS: MIDWAY RD & USH 10/STH 441 SB RAMPS	SHEET 8	E

NOTES

1. CONTRACTOR SHALL BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED AS SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND FACILITIES AND STRUCTURES. SOME TRAFFIC SIGNAL EQUIPMENT MAY HAVE TO BE MOVED SLIGHTLY TO AVOID UTILITY CONFLICTS.

2. FINAL LOCATION OF WOOD POLES AND SIGNAL HEADS TO BE APPROVED BY THE ENGINEER IN THE FIELD.

3. MULTIZONE MICROWAVE VEHICLE SENSOR TO BE MOUNTED 17 FEET TO 19 FEET ABOVE GROUND.

4. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.

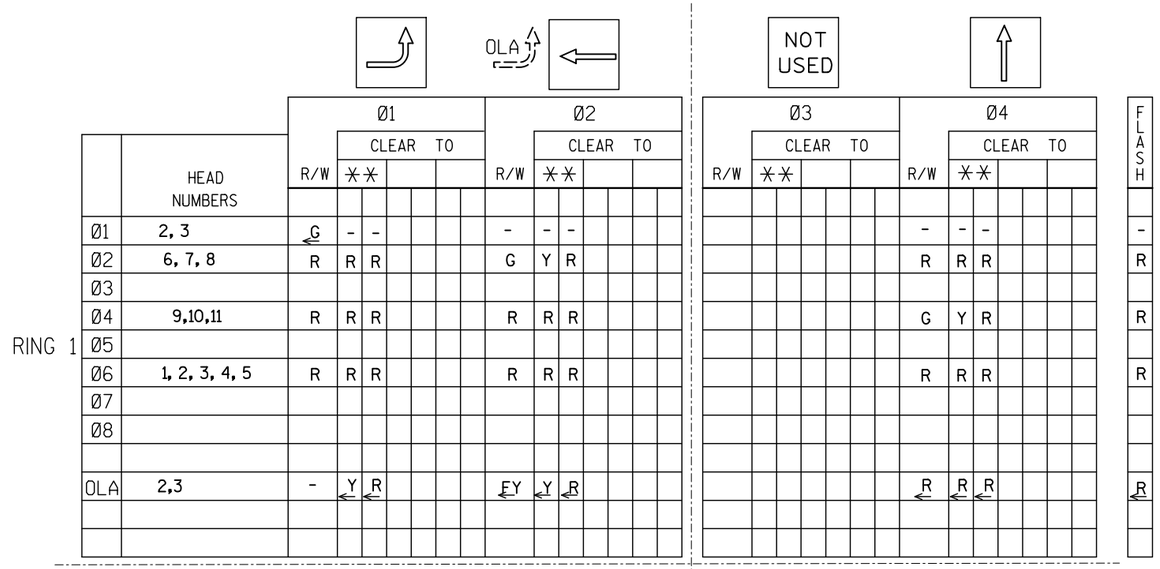
LEGEND

- TRAFFIC SIGNAL CONTROL CABINET
- OH — CABLE-OVERHEAD
- TEMPORARY WOOD POLE
- 250 WATT LUMINAIRE
- SIGNAL HEAD MOUNTED ON OVERHEAD CABLE
- MULTIZONE MICROWAVE VEHICLE SENSOR
- 8 SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- FY FLASHING YELLOW ARROW
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- LANE DESIGNATION (FOR INFORMATION ONLY)
- MICROWAVE VEHICLE SENSOR NODE

WPO3
MVS01
MVS02
WP04
MVS03
WP05
WP02
WP01
TCB3
STOP
R1-1F
30" X 30"
(ON WOOD POST)
EXEMPT
R15-3
24" X 12"
PLACE ON EXISTING POLE WITH RAILROAD ADVANCED WARNING SIGN
TOWN OF MENASHA STORM SEWER
WE ENERGIES ELECTRIC AND GAS
AT&T
WE ENERGIES ELECTRIC
TIME WARNER CABLE
EX ROW (TYP.)
MIDWAY RD (CTH AP) WB
MIDWAY RD (CTH AP) EB
TOWN OF MENASHA SANITARY SEWER
TOWN OF MENASHA ELECTRIC
TOWN OF MENASHA WATER
W3-1
36" X 36"
(REMOVE)
REPLACE WITH
W3-3
36" X 36"
TDS METROCOM
(ON WOOD POST)

PROJECT NO: 1517-75-82	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	TEMPORARY TRAFFIC SIGNALS: MIDWAY RD & USH10/STH 441 NB RAMPS	SHEET 9	E

SEQUENCE OF OPERATION



RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	2, 3	G	- -	-	- -			-	- -	-
Ø2	6, 7, 8	R	R R	G	Y R			R	R R	R
Ø3										
Ø4	9,10,11	R	R R	R	R R			G	Y R	R
Ø5										
Ø6	1, 2, 3, 4, 5	R	R R	R	R R			R	R R	R
Ø7										
Ø8										
OLA	2,3	-	Y R	EY	Y R			R	R R	R

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	2, 3			-	- -				
Ø2	6, 7, 8			R	R R				
Ø3									
Ø4	9, 10, 11			R	R R				
Ø5									
Ø6	1, 2, 3, 4, 5			G	Y R				
Ø7									
Ø8									
OLA	2,3			R	R R				

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	6	2,4
2	6	1,4
3		
4		1,2,6
5		
6	1 OR 2	4
7		
8		

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11		X			1	1				6X30	MVS
21		X			2	2				6X30	MVS
22		X			2	2				6X30	MVS
41		X			4	4				6X30	MVS
42		X			4	4		X		6X30	MVS
61		X			6	6				6X30	MVS
62		X			6	6				6X30	MVS

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				X
2			MIN.	X
3				
4				X
5				
6			MIN.	X
7				
8				

OVERLAPS

OLA	PROTECTED	PERMITTED
	1	2

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM #:	SS- -

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. PROVIDE FOR HAND CONTROL.

MIDWAY & USH 10/STH 441 NB RAMPS
TOWN OF MENASHA
WINNEBAGO COUNTY

SIGNAL NO.

CONTROLLER TYPE:

DATE

PAGE NO. 2 OF 2

PROJECT NO: 1517-75-82	HWY: USH 10/STH 441	COUNTY: WINNEBAGO	SEQUENCE OF OPERATIONS: MIDWAY RD & USH 10/STH 441 NB RAMPS	SHEET 10	E

MIDWAY & RACINE
APPLETON ROAD INTERCHANGE CLOSURE

TIMING/COORDINATION DATA
CYCLE REFERENCE: 1 AND 6/BEGIN OF GREEN

TIMING PLAN 1	PHASE	1	2	3	4	5	6	7	8
	GREEN	8	21		23		35		
	YELLOW	4	4		4		4		
	ALL RED	2	2		2		2		
	TOTAL	14	27		29		41		
	MODE		MIN				MIN		

OFFSET: 0 SECONDS
CYCLE LENGTH: 70 SECONDS
TIME OF DAY: 6:30-9:00AM (AM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA
CYCLE REFERENCE: 1 AND 6/BEGIN OF GREEN

TIMING PLAN 2	PHASE	1	2	3	4	5	6	7	8
	GREEN	9	19		24		34		
	YELLOW	4	4		4		4		
	ALL RED	2	2		2		2		
	TOTAL	15	25		30		40		
	MODE		MIN				MIN		

OFFSET: 0 SECONDS
CYCLE LENGTH: 70 SECONDS
TIME OF DAY: 2:30-6:00PM (PM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA
CYCLE REFERENCE:

TIMING PLAN 3	PHASE	1	2	3	4	5	6	7	8
	MIN GR	7	25		10		25		
	MAX1	15	40		25		40		
	PSG	4	4		4		4		
	YELLOW	4	4		4		4		
	ALL RED	2	2		2		2		
	MODE		MIN				MIN		

OFFSET: N/A
CYCLE LENGTH: RUNS FREE
TIME OF DAY: OFF-PEAK
DAY OF WEEK: SUNDAY-SATURDAY

MIDWAY & USH 10/STH 441 SB RAMPS
APPLETON ROAD INTERCHANGE CLOSURE

TIMING/COORDINATION DATA
CYCLE REFERENCE: 2 AND 5/BEGIN OF GREEN

TIMING PLAN 1	PHASE	1	2	3	4	5	6	7	8
	GREEN		39		18	19	14		
	YELLOW		4		4	4	4		
	ALL RED		2		3	2	2		
	TOTAL		45		25	25	20		
	MODE		MIN				MIN		

OFFSET: 67 SECONDS
CYCLE LENGTH: 70 SECONDS
TIME OF DAY: 6:30-9:00AM (AM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA
CYCLE REFERENCE: 2 AND 5/BEGIN OF GREEN

TIMING PLAN 2	PHASE	1	2	3	4	5	6	7	8
	GREEN		41		16	18	17		
	YELLOW		4		4	4	4		
	ALL RED		2		3	2	2		
	TOTAL		47		23	24	23		
	MODE		MIN				MIN		

OFFSET: 1 SECOND
CYCLE LENGTH: 70 SECONDS
TIME OF DAY: 2:30-6:00PM (PM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA
CYCLE REFERENCE:

TIMING PLAN 3	PHASE	1	2	3	4	5	6	7	8
	MIN GR		25		10	7	25		
	MAX1		40		25	15	40		
	PSG		4		4	4	4		
	YELLOW		4		4	4	4		
	ALL RED		2		3	2	2		
	MODE		MIN				MIN		

OFFSET: N/A
CYCLE LENGTH: RUNS FREE
TIME OF DAY: OFF-PEAK
DAY OF WEEK: SUNDAY-SATURDAY

MIDWAY & USH 10/STH 441 NB RAMPS
APPLETON ROAD INTERCHANGE CLOSURE

TIMING/COORDINATION DATA
CYCLE REFERENCE: 1 AND 6/BEGIN OF GREEN

TIMING PLAN 1	PHASE	1	2	3	4	5	6	7	8
	GREEN	7	14		30		27		
	YELLOW	4	4		4		4		
	ALL RED	2	2		3		2		
	TOTAL	13	20		37		33		
	MODE		MIN				MIN		

OFFSET: 44 SECONDS
CYCLE LENGTH: 70 SECONDS
TIME OF DAY: 6:30-9:00AM (AM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA
CYCLE REFERENCE: 1 AND 6/BEGIN OF GREEN

TIMING PLAN 2	PHASE	1	2	3	4	5	6	7	8
	GREEN	7	20		24		33		
	YELLOW	4	4		4		4		
	ALL RED	2	2		3		2		
	TOTAL	13	26		31		39		
	MODE		MIN				MIN		

OFFSET: 45 SECONDS
CYCLE LENGTH: 70 SECONDS
TIME OF DAY: 2:30-6:00PM (PM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA
CYCLE REFERENCE:

TIMING PLAN 3	PHASE	1	2	3	4	5	6	7	8
	MIN GR	7	25		10		25		
	MAX1	15	40		25		40		
	PSG	4	4		4		4		
	YELLOW	4	4		4		4		
	ALL RED	2	2		3		2		
	MODE		MIN				MIN		

OFFSET: N/A
CYCLE LENGTH: RUNS FREE
TIME OF DAY: OFF-PEAK
DAY OF WEEK: SUNDAY-SATURDAY

MIDWAY & RACINE

RACINE RD INTERCHANGE CLOSURE

TIMING/COORDINATION DATA

CYCLE REFERENCE: 1 AND 6/BEGIN OF GREEN

	PHASE	1	2	3	4	5	6	7	8
	GREEN	7	17		28		30		
	YELLOW	4	4		4		4		
	ALL RED	2	2		2		2		
TIMING PLAN 1	TOTAL	13	23		34		36		
	MODE		MIN				MIN		

OFFSET: 0 SECONDS
CYCLE LENGTH: 70 SECONDS
TIME OF DAY: 6:30-9:00AM (AM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA

CYCLE REFERENCE: 1 AND 6/BEGIN OF GREEN

	PHASE	1	2	3	4	5	6	7	8
	GREEN	7	20		35		33		
	YELLOW	4	4		4		4		
	ALL RED	2	2		2		2		
TIMING PLAN 2	TOTAL	13	26		41		39		
	MODE		MIN				MIN		

OFFSET: 0 SECONDS
CYCLE LENGTH: 80 SECONDS
TIME OF DAY: 2:30-6:00PM (PM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA

CYCLE REFERENCE:

	PHASE	1	2	3	4	5	6	7	8
	MIN GR	7	25		10		25		
	MAX1	15	40		25		40		
	PSG	4	4		4		4		
	YELLOW	4	4		4		4		
TIMING PLAN 3	ALL RED	2	2		2		2		
	MODE		MIN				MIN		

OFFSET: N/A
CYCLE LENGTH: RUNS FREE
TIME OF DAY: OFF-PEAK
DAY OF WEEK: SUNDAY-SATURDAY

MIDWAY & USH 10/STH 441 SB RAMPS

RACINE RD INTERCHANGE CLOSURE

TIMING/COORDINATION DATA

CYCLE REFERENCE: 2 AND 5/BEGIN OF GREEN

	PHASE	1	2	3	4	5	6	7	8
	GREEN		39		18	14	19		
	YELLOW		4		4	4	4		
	ALL RED		2		3	2	2		
TIMING PLAN 1	TOTAL		45		25	20	25		
	MODE		MIN				MIN		

OFFSET: 11 SECONDS
CYCLE LENGTH: 70 SECONDS
TIME OF DAY: 6:30-9:00AM (AM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA

CYCLE REFERENCE: 2 AND 5/BEGIN OF GREEN

	PHASE	1	2	3	4	5	6	7	8
	GREEN		48		19	20	22		
	YELLOW		4		4	4	4		
	ALL RED		2		3	2	2		
TIMING PLAN 2	TOTAL		54		26	26	28		
	MODE		MIN				MIN		

OFFSET: 13 SECONDS
CYCLE LENGTH: 80 SECONDS
TIME OF DAY: 2:30-6:00PM (PM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA

CYCLE REFERENCE:

	PHASE	1	2	3	4	5	6	7	8
	MIN GR		25		10	7	25		
	MAX1		40		25	15	40		
	PSG		4		4	4	4		
	YELLOW		4		4	4	4		
TIMING PLAN 3	ALL RED		2		3	2	2		
	MODE		MIN				MIN		

OFFSET: N/A
CYCLE LENGTH: RUNS FREE
TIME OF DAY: OFF-PEAK
DAY OF WEEK: SUNDAY-SATURDAY

MIDWAY & USH 10/STH 441 NB RAMPS

RACINE RD INTERCHANGE CLOSURE

TIMING/COORDINATION DATA

CYCLE REFERENCE: 1 AND 6/BEGIN OF GREEN

	PHASE	1	2	3	4	5	6	7	8
	GREEN	7	14		30		27		
	YELLOW	4	4		4		4		
	ALL RED	2	2		3		2		
TIMING PLAN 1	TOTAL	13	20		37		33		
	MODE		MIN				MIN		

OFFSET: 52 SECONDS
CYCLE LENGTH: 70 SECONDS
TIME OF DAY: 6:30-9:00AM (AM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA

CYCLE REFERENCE: 1 AND 6/BEGIN OF GREEN

	PHASE	1	2	3	4	5	6	7	8
	GREEN	8	17		36		31		
	YELLOW	4	4		4		4		
	ALL RED	2	2		3		2		
TIMING PLAN 2	TOTAL	14	23		43		37		
	MODE		MIN				MIN		

OFFSET: 59 SECONDS
CYCLE LENGTH: 80 SECONDS
TIME OF DAY: 2:30-6:00PM (PM PEAK)
DAY OF WEEK: MONDAY-FRIDAY

TIMING/COORDINATION DATA

CYCLE REFERENCE:

	PHASE	1	2	3	4	5	6	7	8
	MIN GR	7	25		10		25		
	MAX1	15	40		25		40		
	PSG	4	4		4		4		
	YELLOW	4	4		4		4		
TIMING PLAN 3	ALL RED	2	2		3		2		
	MODE		MIN				MIN		

OFFSET: N/A
CYCLE LENGTH: RUNS FREE
TIME OF DAY: OFF-PEAK
DAY OF WEEK: SUNDAY-SATURDAY

DATE 16DEC14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1517-75-82 QUANTITY
0010	213.0100	FINISHING ROADWAY (PROJECT) 001. 1517-75-82	EACH	1.000	1.000
0020	619.1000	MOBILIZATION	EACH	1.000	1.000
0030	628.1504	SILT FENCE	LF	60.000	60.000
0040	628.1520	SILT FENCE MAINTENANCE	LF	60.000	60.000
0050	628.7020	INLET PROTECTION TYPE D	EACH	10.000	10.000
0060	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	7.000	7.000
0070	637.2230	SIGNS TYPE II REFLECTIVE F	SF	127.250	127.250
0080	638.2602	REMOVING SIGNS TYPE II	EACH	5.000	5.000
0090	643.0100	TRAFFIC CONTROL (PROJECT) 001.1517-75-82	EACH	1.000	1.000
0100	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 001.RACINE ROAD WITH MIDWAY ROAD	LS	1.000	1.000
0110	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 002.MIDWAY ROAD WITH USH 10/STH 441 SB RAMPS	LS	1.000	1.000
0120	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 003.MIDWAY ROAD WITH USH 10/STH 441 NB RAMPS	LS	1.000	1.000
0130	661.0200	TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (LOCATION) 001.RACINE ROAD WITH MIDWAY ROAD	LS	1.000	1.000
0140	661.0200	TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (LOCATION) 002.MIDWAY ROAD WITH USH 10/STH 441 SB RAMPS	LS	1.000	1.000
0150	661.0200	TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (LOCATION) 003.MIDWAY ROAD WITH USH 10/STH 441 NB RAMPS	LS	1.000	1.000
0160	SPV.0060	SPECIAL 450.MULTIZONE MICROWAVE VEHICLE SENSOR	EACH	9.000	9.000

3

TEMPORARY TRAFFIC SIGNALS

CATEGORY	LOCATION	661.0200.001 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LS	661.0200.002 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LS	661.0200.003 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LS	SPV.0060.450 MULTIZONE MICROWAVE VEHICLE SENSOR EACH
1300	MIDWAY RD & RACINE RD	1	-	-	3
	MIDWAY RD & USH 10/STH 441 SB RAMPS	-	1	-	3
	MIDWAY RD & USH 10/STH 441 NB RAMPS	-	-	1	3
	TOTAL	1	1	1	9

FINISHING ROADWAY (1517-75-82)

CATEGORY	LOCATION	213.0100 FINISHING ROADWAY (1517-75-82) EACH
1000	PROJECT 1517-75-82	1
	TOTAL	1

EROSION CONTROL

CATEGORY	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.7020 INLET PROTECTION TYPE D EACH
1000	UNDISTRIBUTED	60	60	10
	TOTAL	60	60	10

TRAFFIC SIGNAL ELECTRICAL SERVICE

CATEGORY	LOCATION	656.0200.001 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	656.0200.002 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	656.0200.003 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS
1300	MIDWAY RD & RACINE RD	1	-	-
	MIDWAY RD & USH 10/STH 441 SB RAMPS	-	1	-
	MIDWAY RD & USH 10/STH 441 NB RAMPS	-	-	1
	TOTAL	1	1	1

SIGNING

CATEGORY	LOCATION	CODE	SIZE	DESCRIPTION	634.0616 POSTS WOOD 4X6X16 EACH	637.2230 SIGNS TYPE II REFLECTIVE F (SF)	638.2602 REMOVING SIGNS TYPE II EACH
1300	NB RACINE						
		W3-3	36X36	SIGNAL AHEAD	1	9.0	-
		R1-1F	30X30	STOP (FOLDING)	-	6.25	-
	SB RACINE						
		W3-3	36X36	SIGNAL AHEAD	1	9.0	-
		R1-1F	30X30	STOP (FOLDING)	-	6.25	-
	WB						
		R1-1F	30X30	STOP (FOLDING)	-	6.25	-
		W3-3	36X36	SIGNAL AHEAD	-	9.0	-
		W3-3	36X36	SIGNAL AHEAD	-	9.0	-
		R1-1		STOP	-	-	1
		W3-1		STOP AHEAD	-	-	2
		W3-3	36X36	SIGNAL AHEAD	1	9.0	-
		R1-1F	30X30	STOP (FOLDING)	-	6.25	-
		R1-1F	30X30	STOP (FOLDING)	1	6.25	-
		R15-3	24X12	EXEMPT	-	2.00	-
		R15-3	24X12	EXEMPT	-	2.00	-
	EB						
		R1-1F	30X30	STOP (FOLDING)	-	6.25	-
		R1-1F	30X30	STOP (FOLDING)	1	6.25	-
		R15-3	24X12	EXEMPT	-	2.00	-
		R15-3	24X12	EXEMPT	-	2.00	-
	NB EXIT RAMP						
		W3-1		STOP AHEAD	-	-	1
		W3-3	36X36	SIGNAL AHEAD	-	9.0	-
		R1-1F	30X30	STOP (FOLDING)	1	6.25	-
	SB EXIT RAMP						
		W3-1		STOP AHEAD	-	-	1
		W3-3	36X36	SIGNAL AHEAD	-	9.0	-
		R1-1F	30X30	STOP (FOLDING)	1	6.25	-
	TOTAL				7	127.25	5

TRAFFIC CONTROL

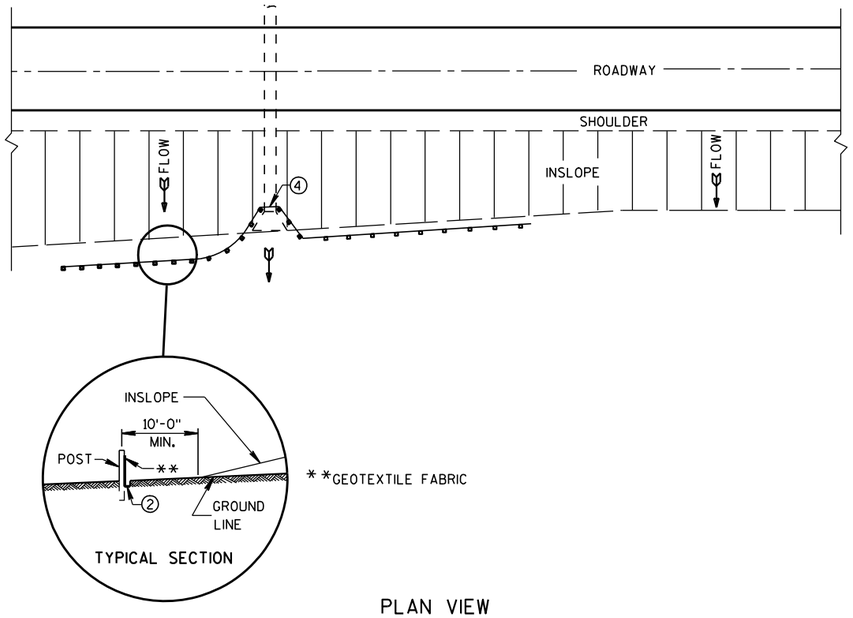
CATEGORY	LOCATION	643.0100 TRAFFIC CONTROL (1517-75-82) EACH
1000	PROJECT 1517-75-82	1
	TOTAL	1

MOBILIZATION

CATEGORY	LOCATION	619.1000 MOBILIZATION (1517-75-82) EACH
1000	PROJECT 1517-75-82	1
	TOTAL	1

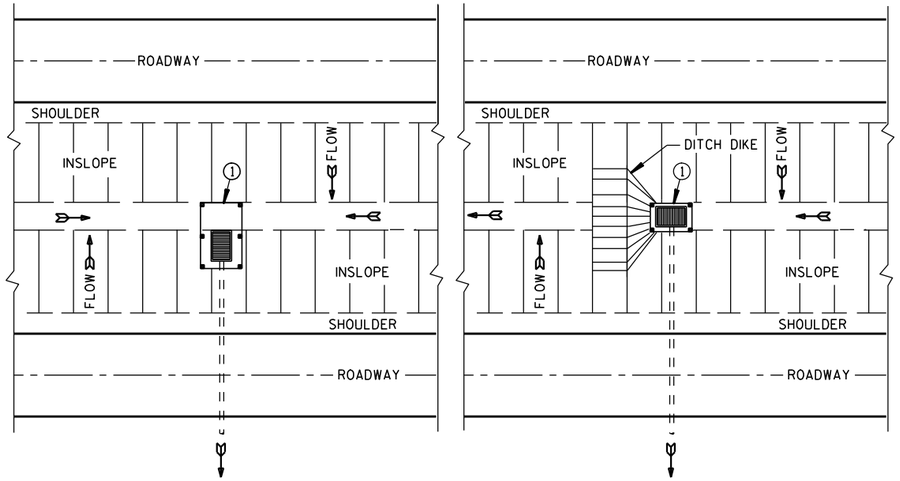
Standard Detail Drawing List

08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-07	CONDUIT
09B04-10	PULL BOX
09D01-04	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09G01-03A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D32-03	TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION



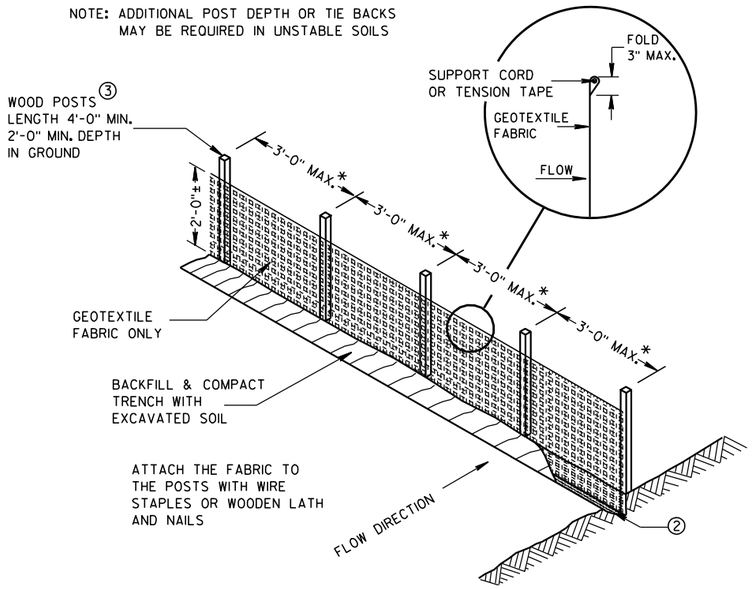
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



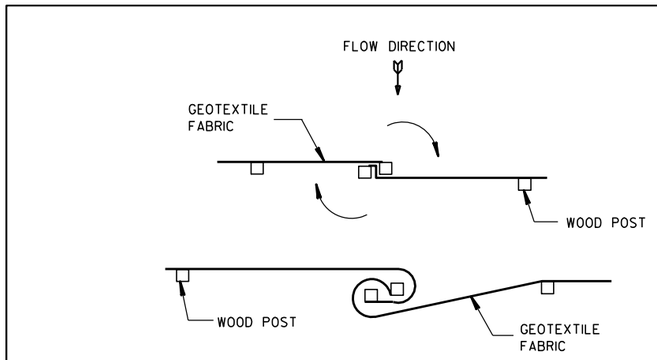
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

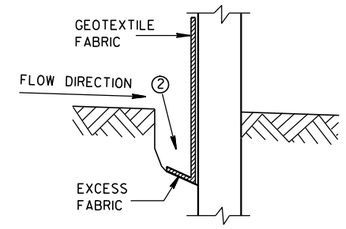


JOINING TWO LENGTHS OF SILT FENCE 5

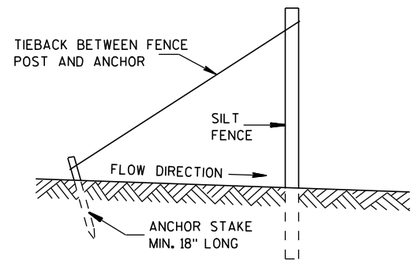
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 9-6

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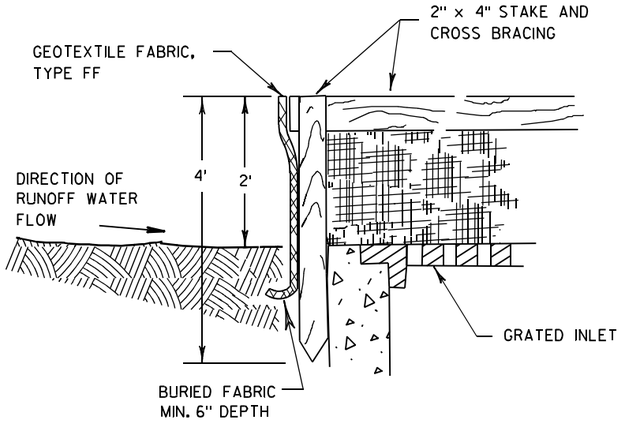
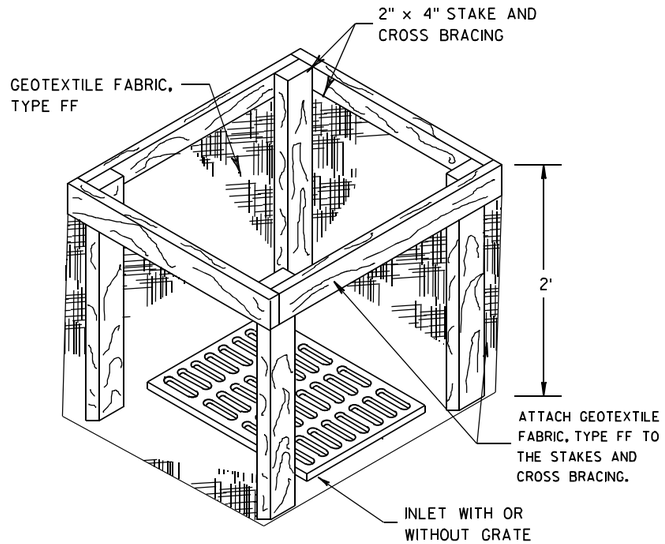
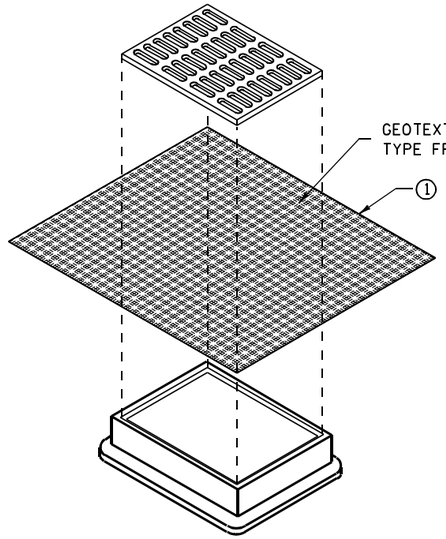
S.D.D. 8 E 9-6



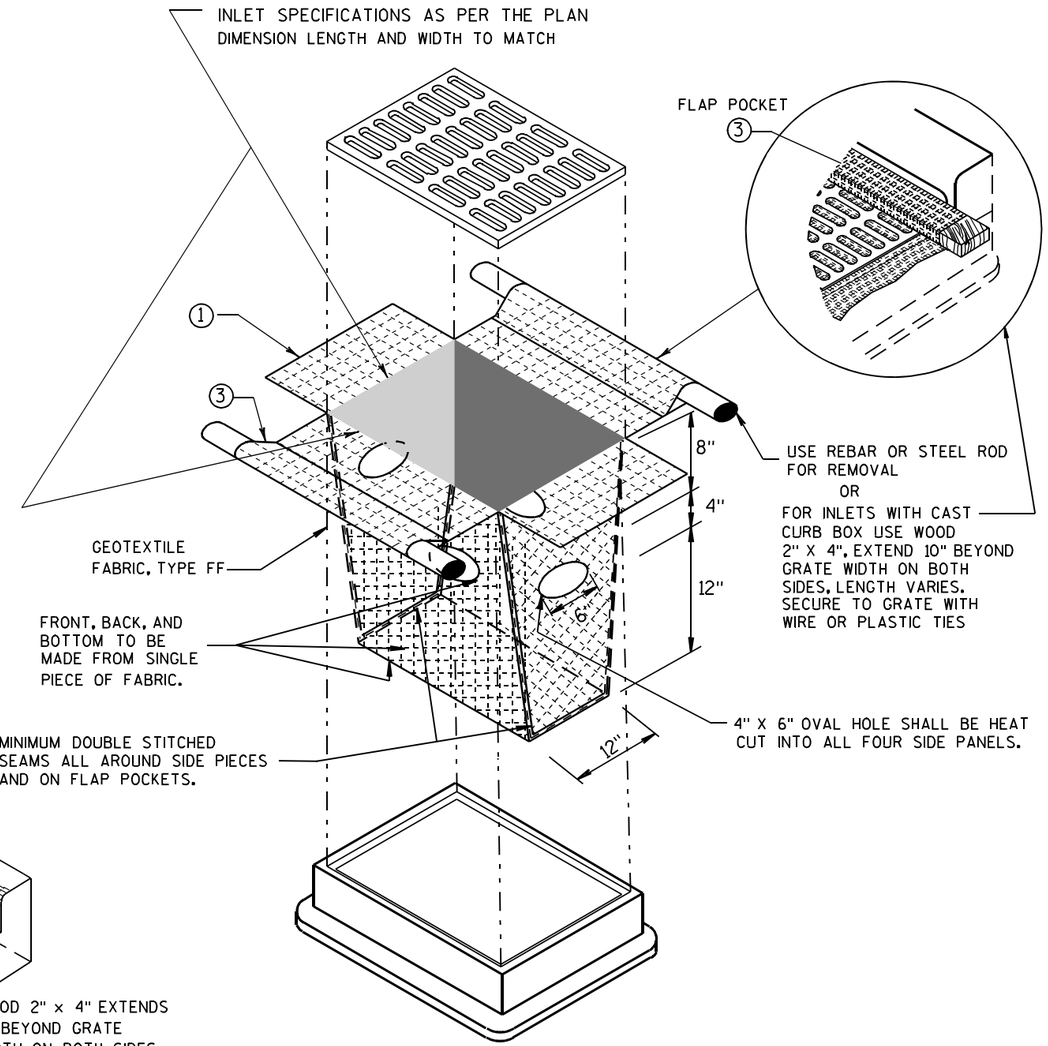


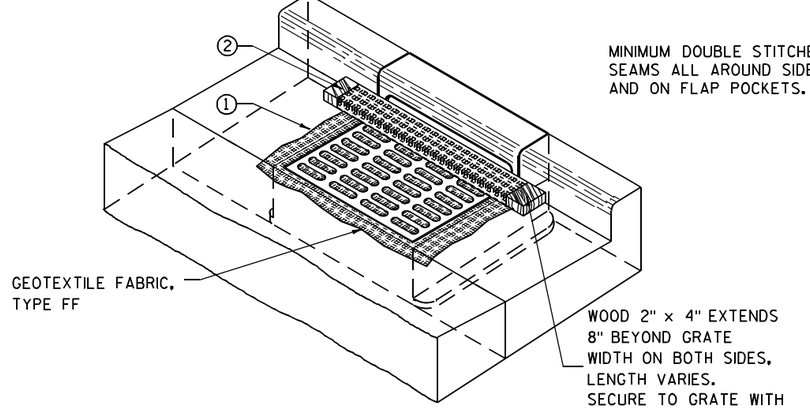
INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)





INLET PROTECTION, TYPE C (WITH CURB BOX)

INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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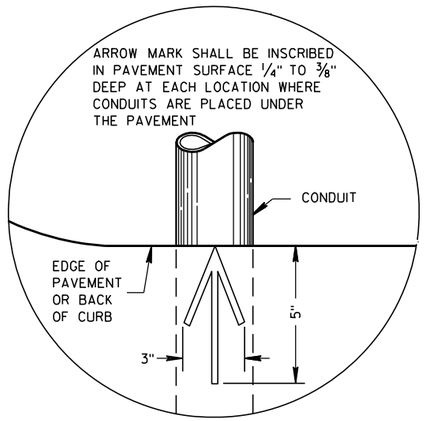
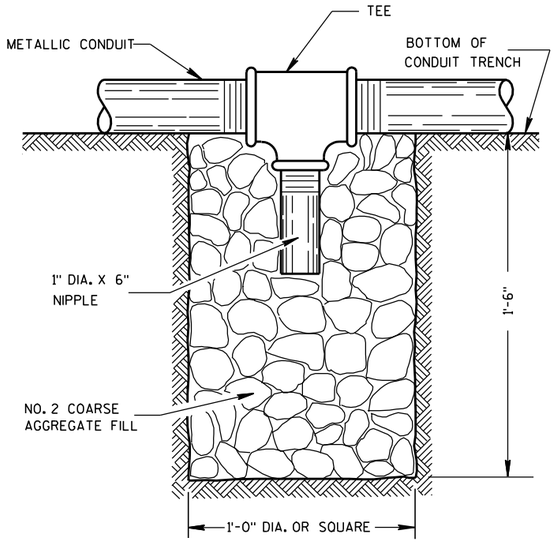


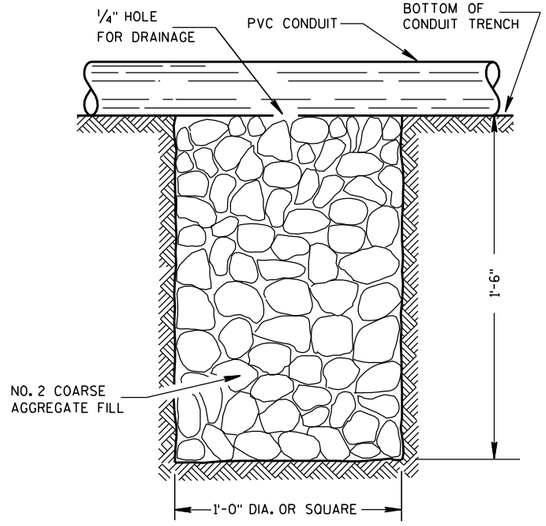
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

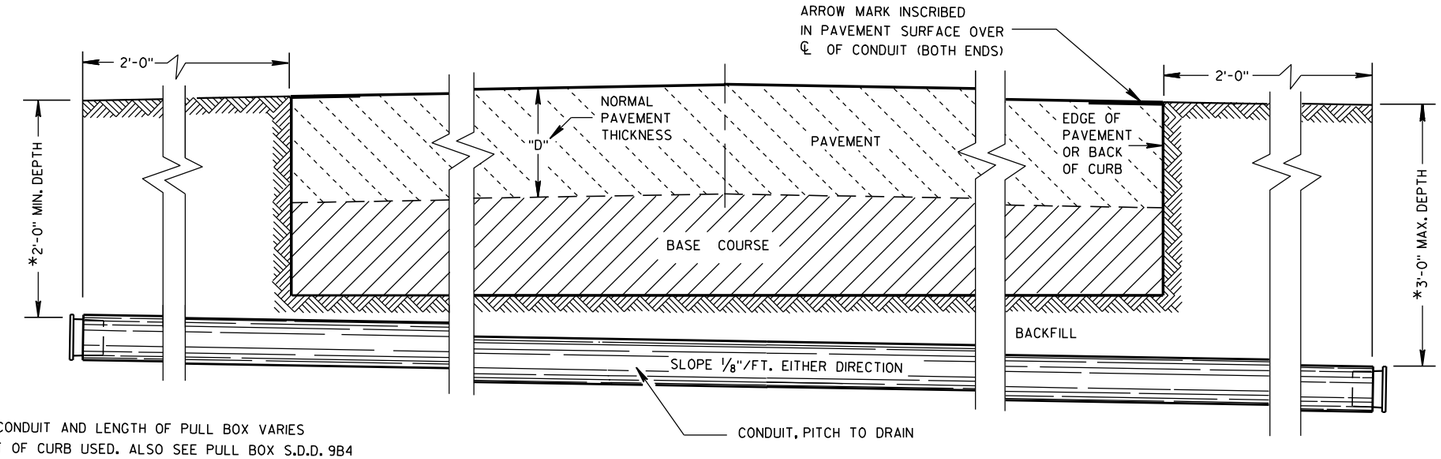
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/23/03 — DATE

/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI

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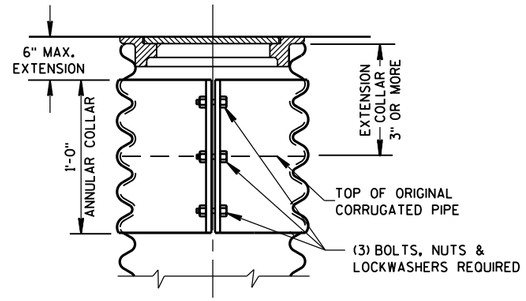
TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

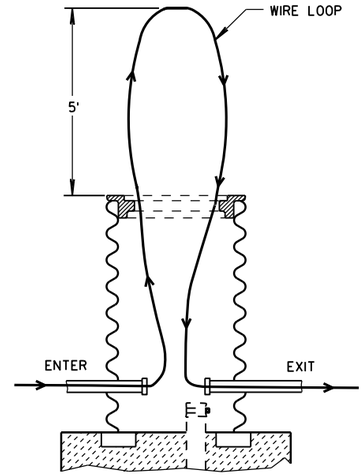
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

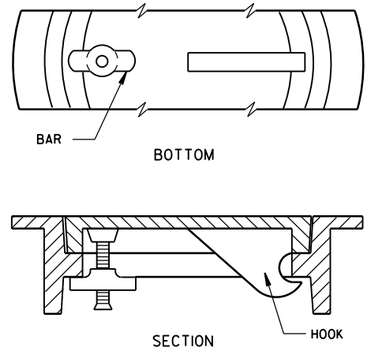
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

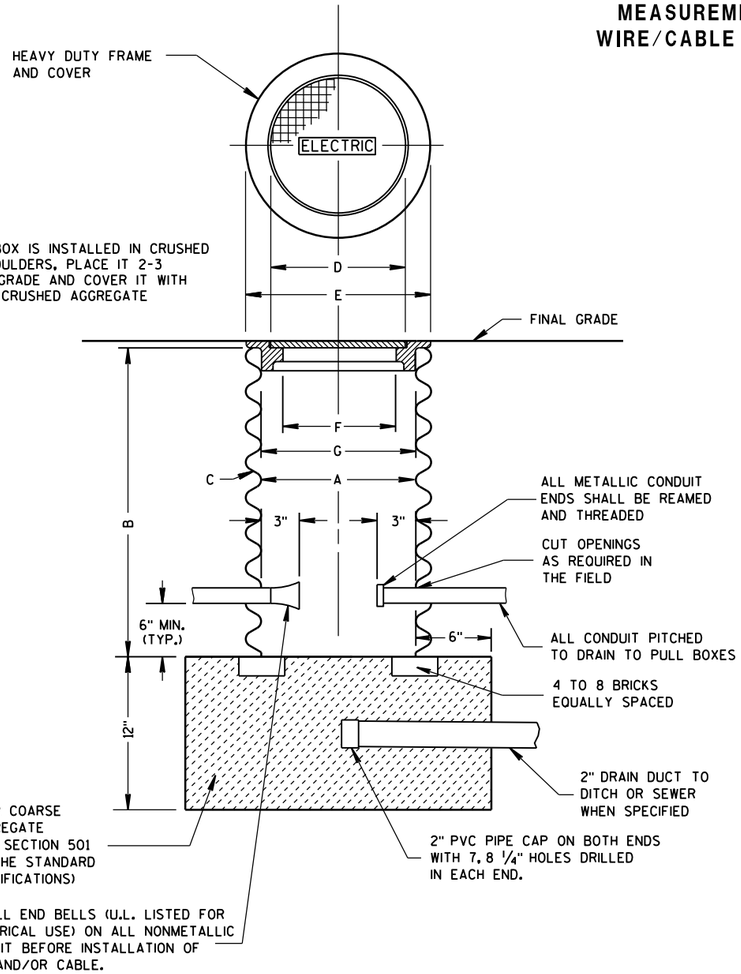


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



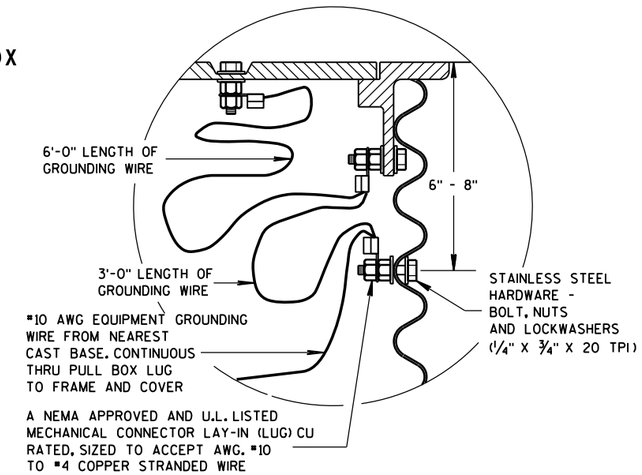
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

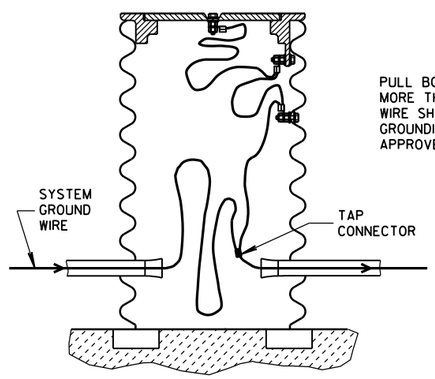


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-7-2013 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

FHWA

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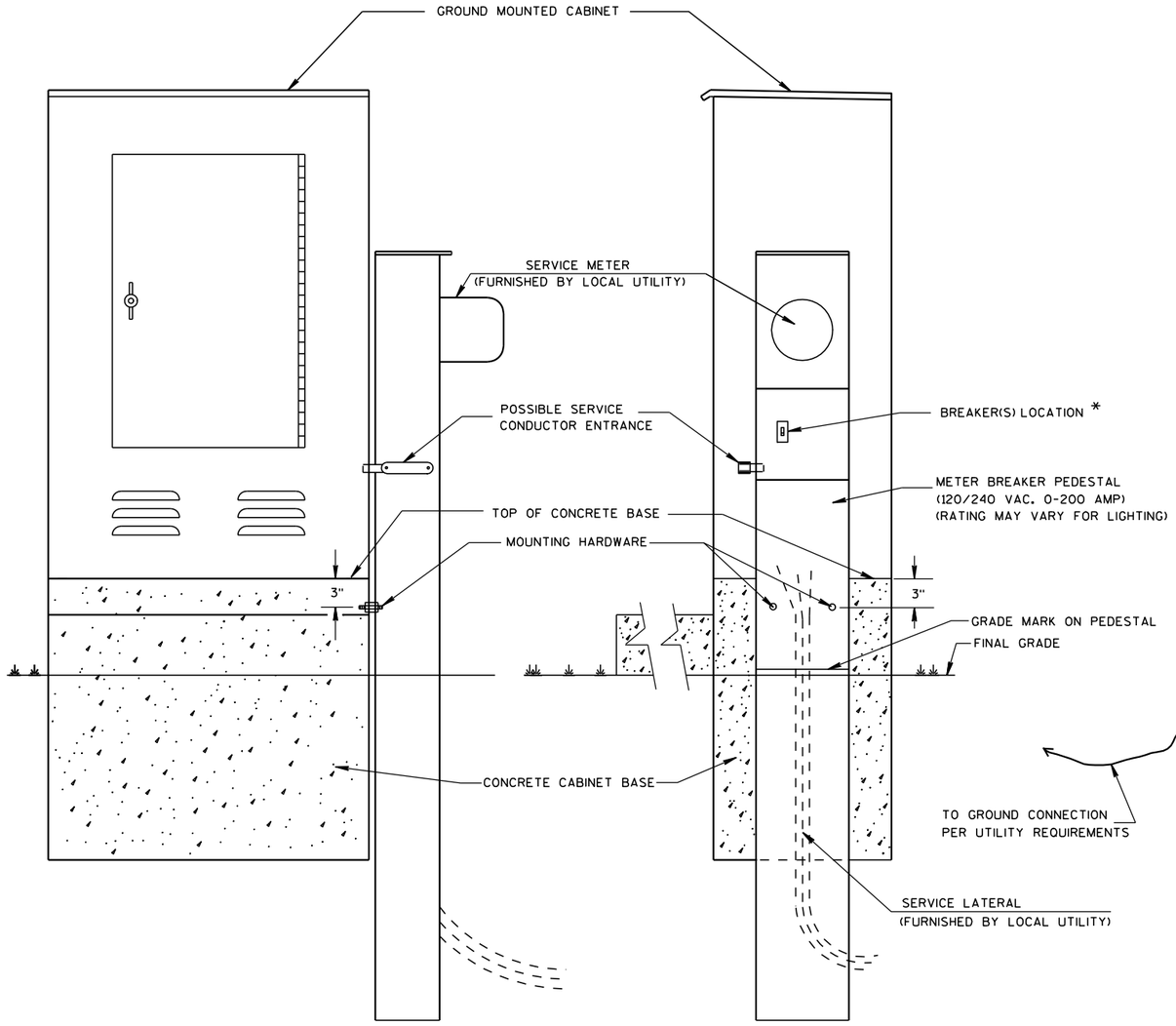

TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/27/09 DATE

/S/ Joanna L. Bush
STATE ELECTRICAL ENGI

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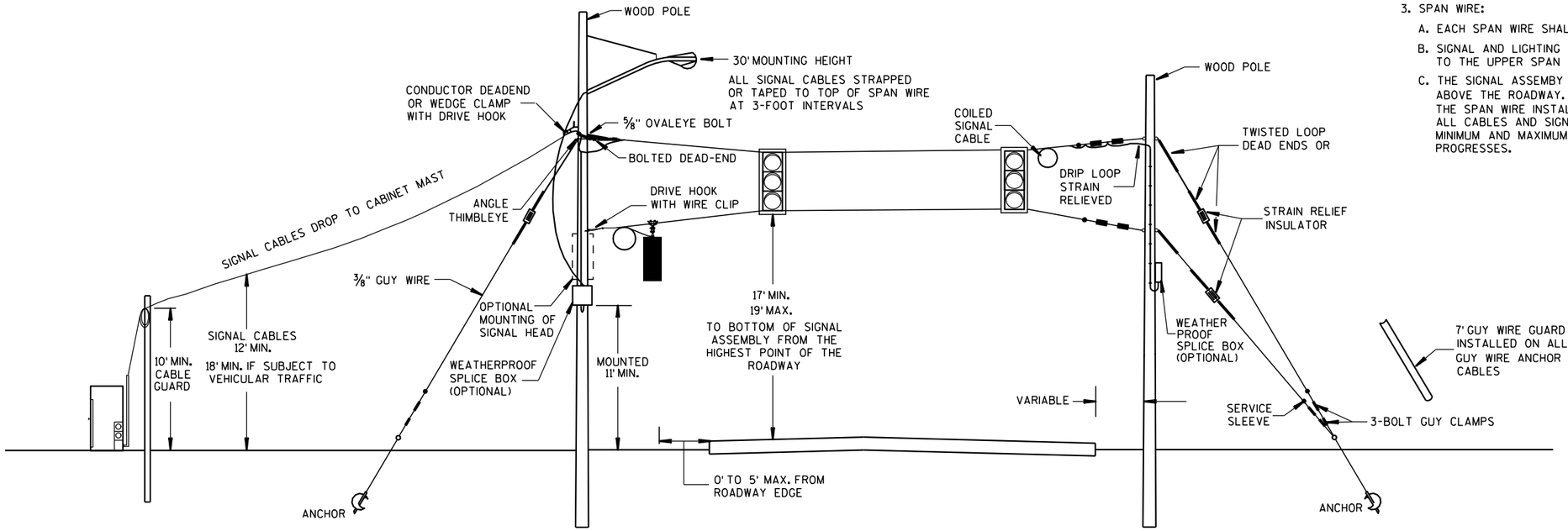
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE

/S/ Balu Ananthar [illegible] n
STATE ELECTRICAL ENGI 21 HWYS

FHWA

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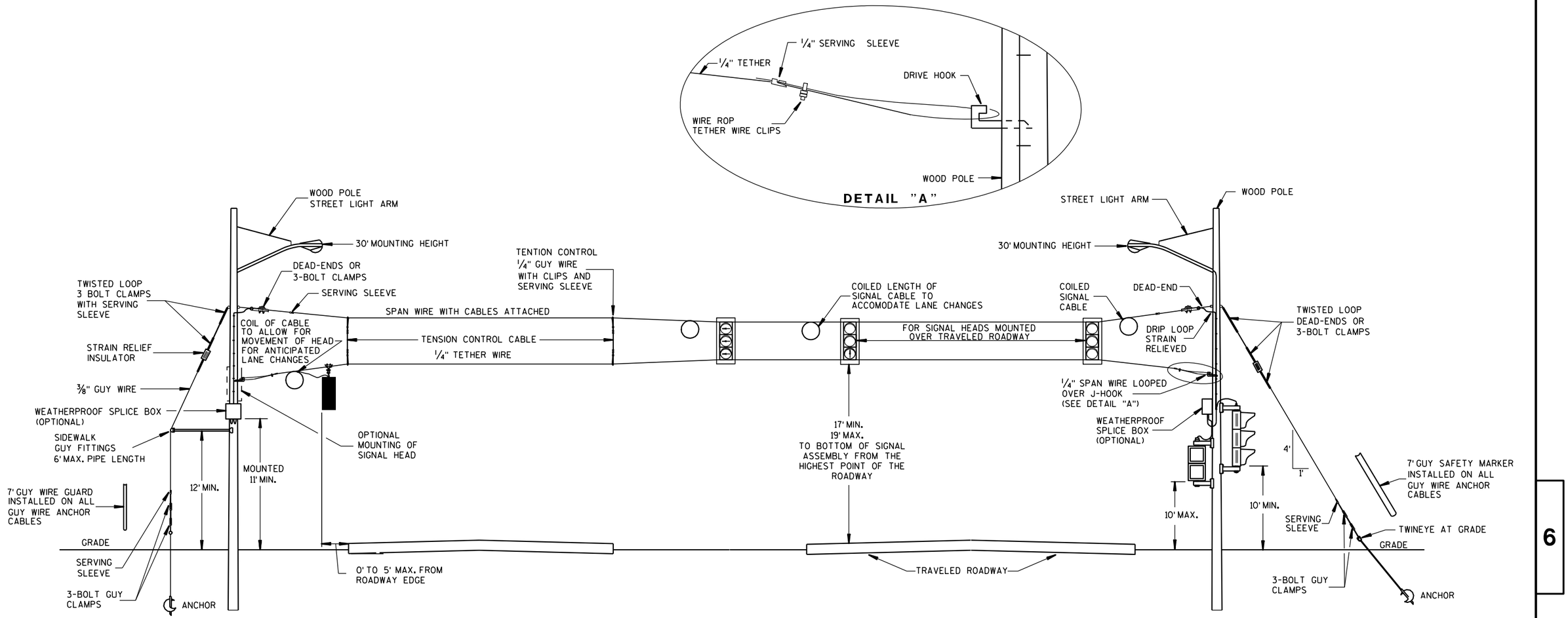


GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE — /S/ Balu Ananthanarayanan STATE ELECTRICAL ENGI

22

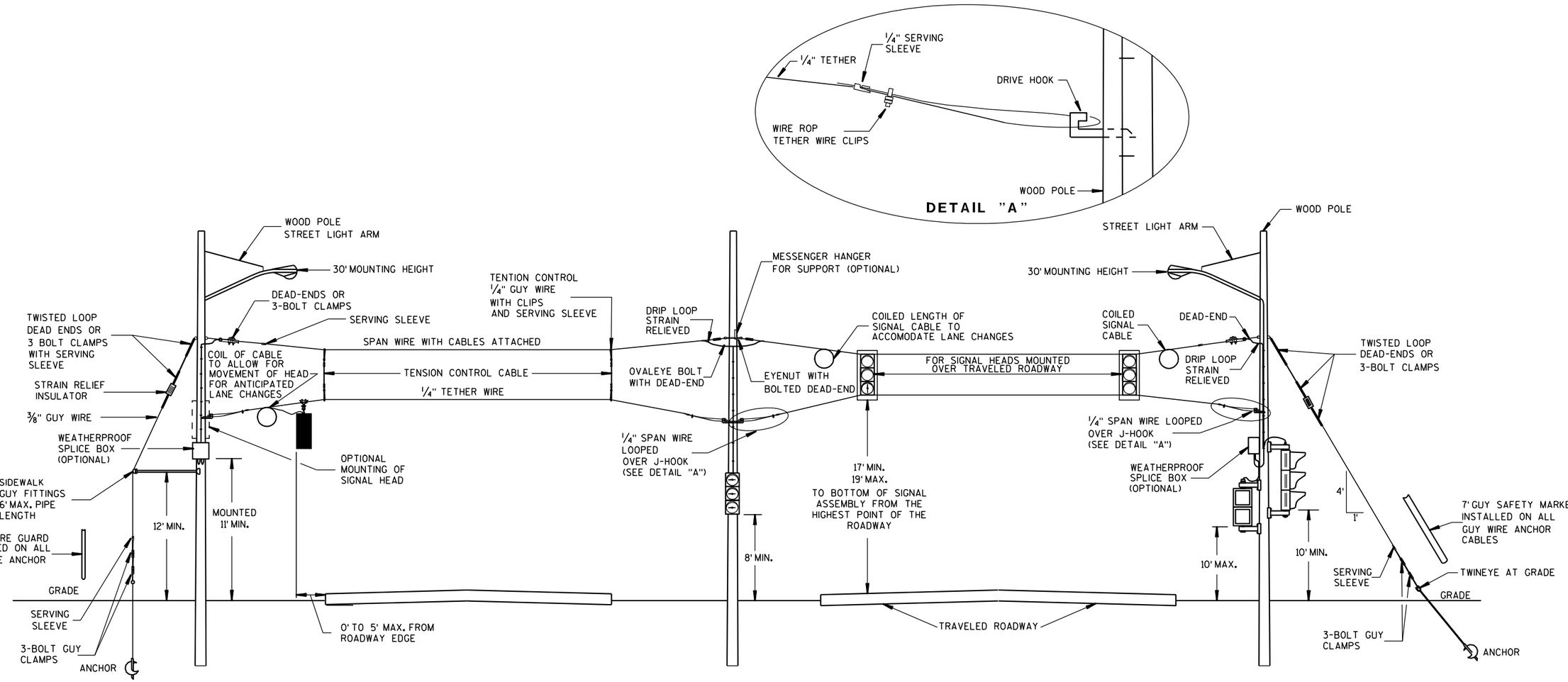
HWYS FHWA

6

S.D.D. 9 G 1-3b

6

S.D.D. 9 G 1-3b



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE

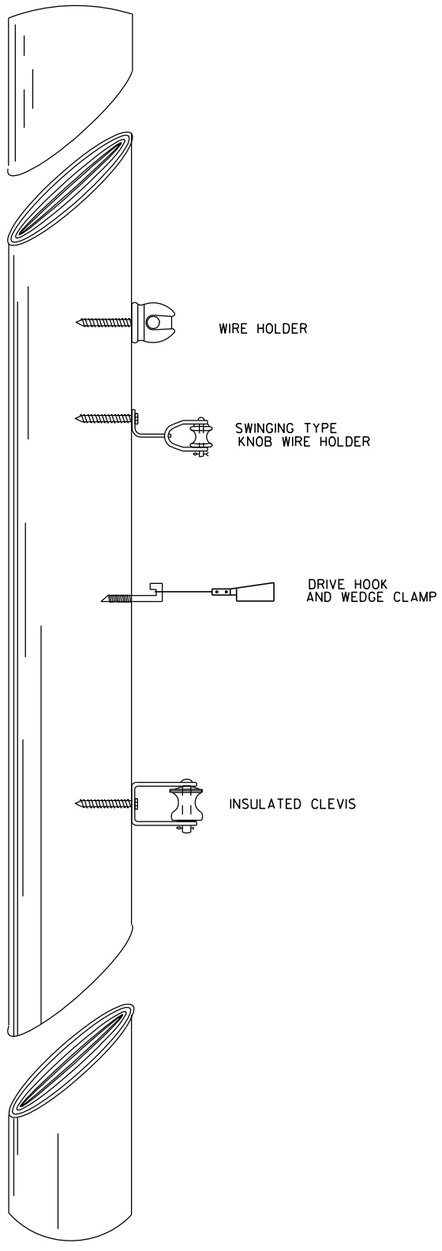
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI

HWYS

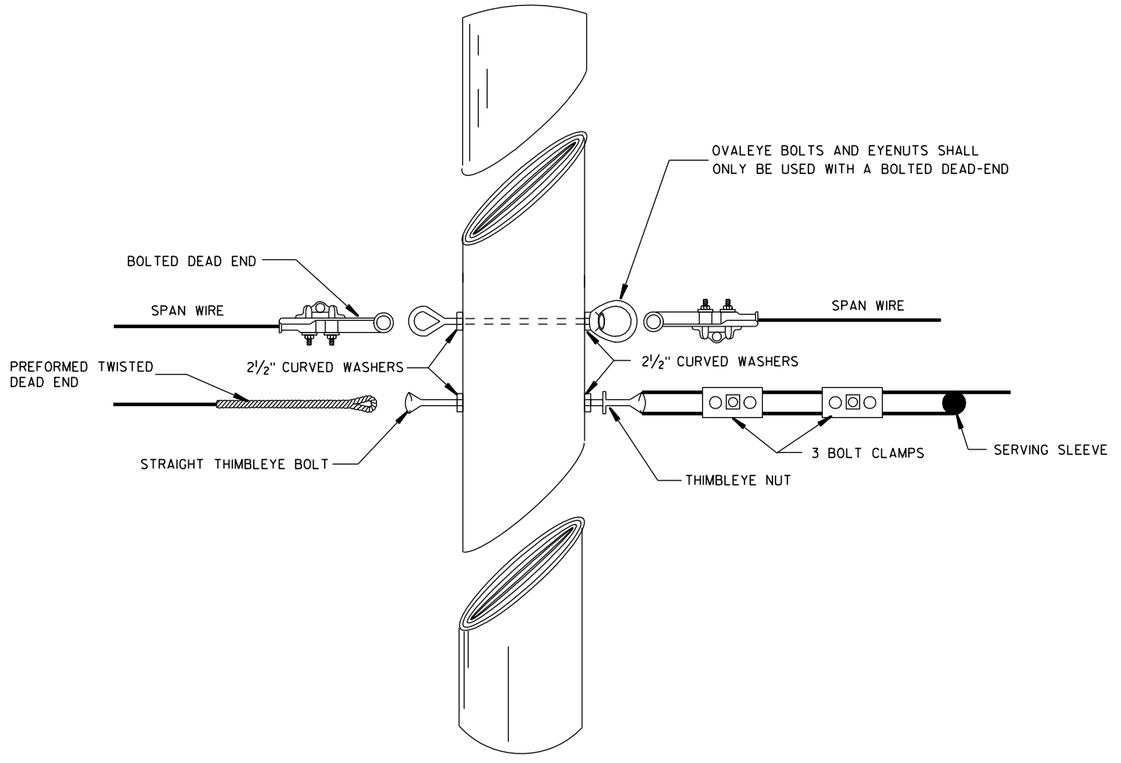
FHWA

6

S.D.D. 9 G 1-3c



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

6

6

S.D.D. 9 G 1-3d

S.D.D. 9 G 1-3d

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08
DATE

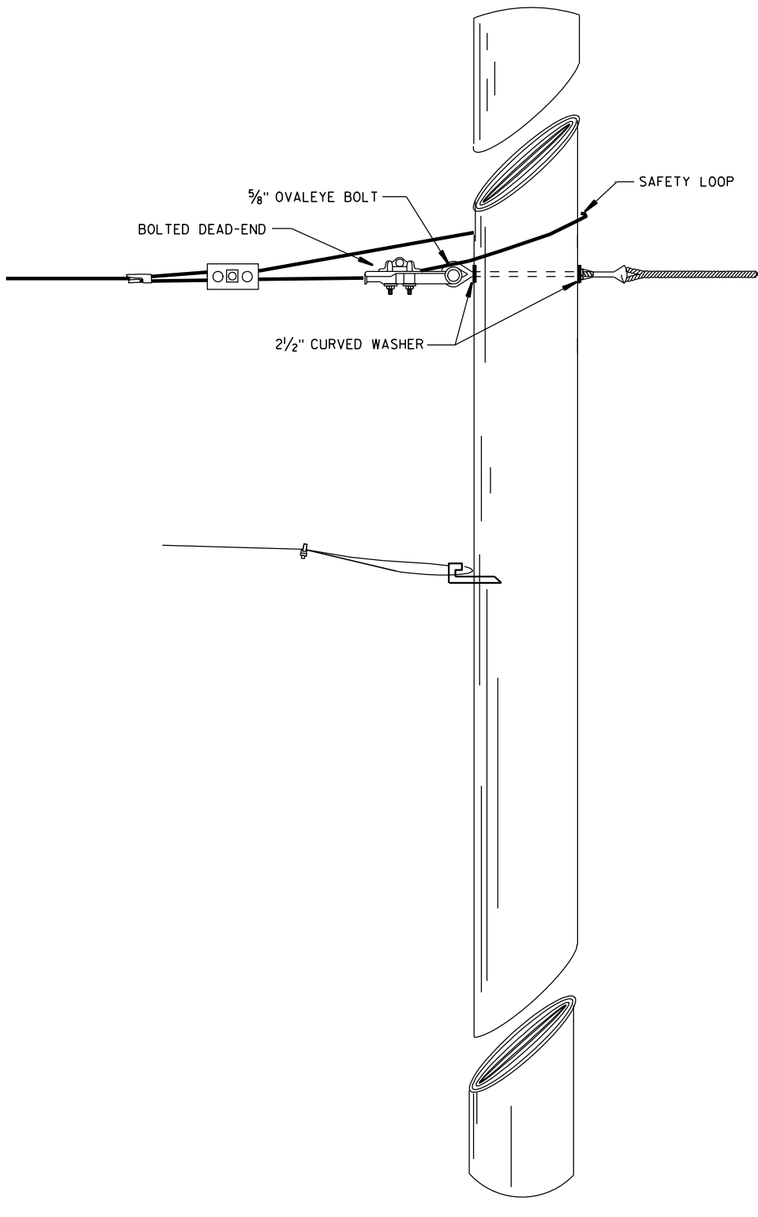
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI

FHWA

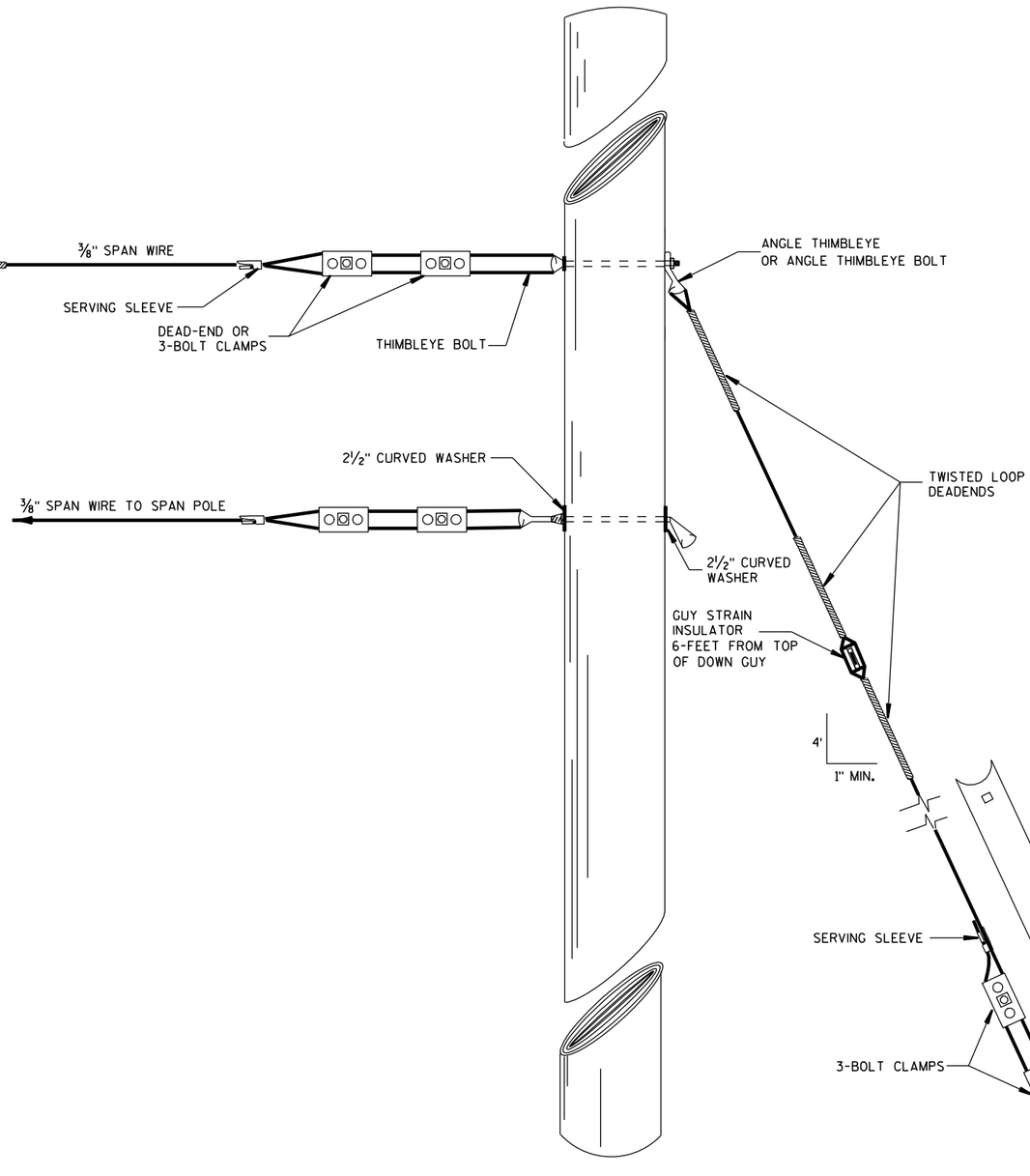
HWYS

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7-14-08 DATE
/S/ Balu Aganthanarayanan
STATE ELECTRICAL ENGI 25 HWYS
FHWA

6

S.D.D. 9 G 1-3e

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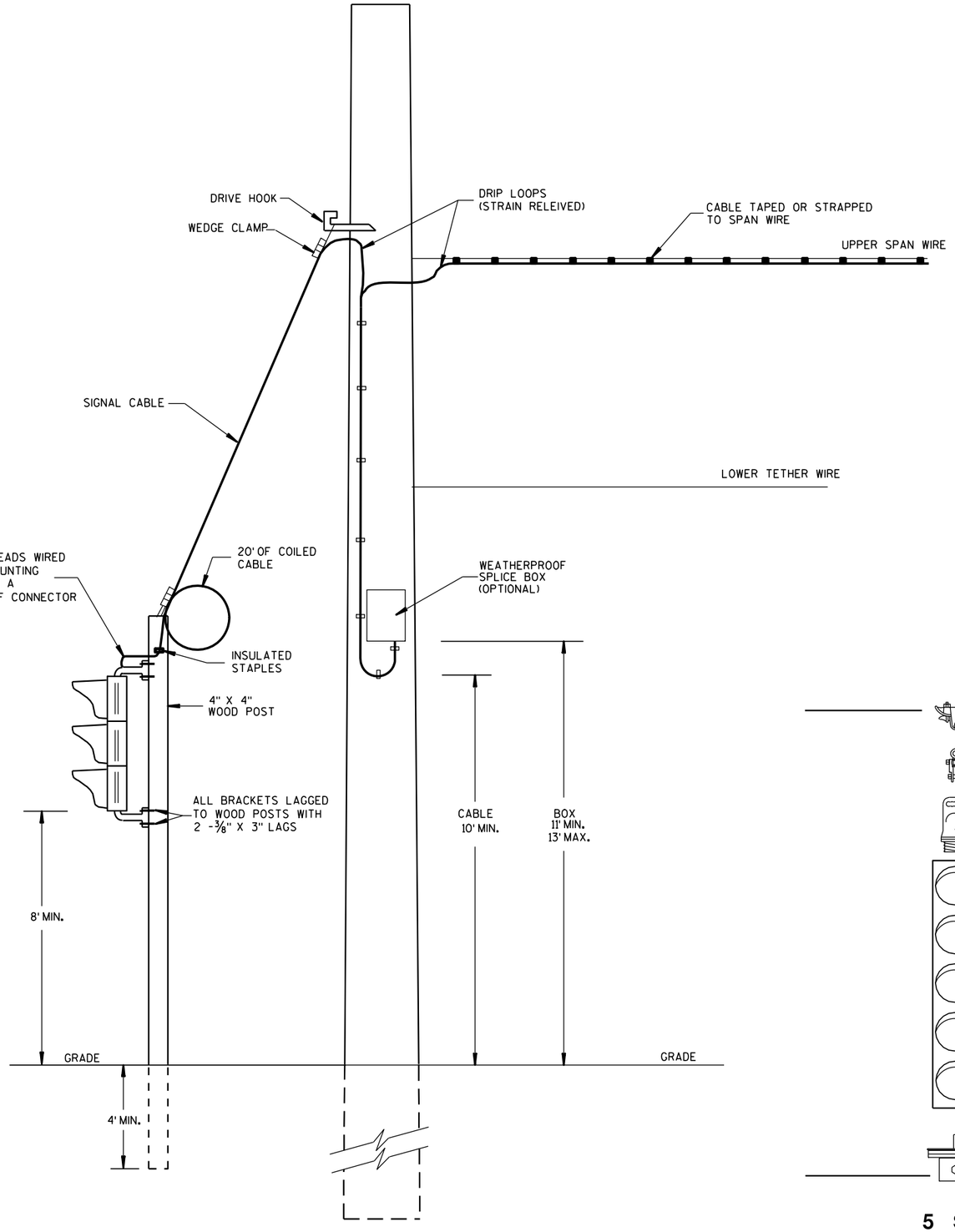
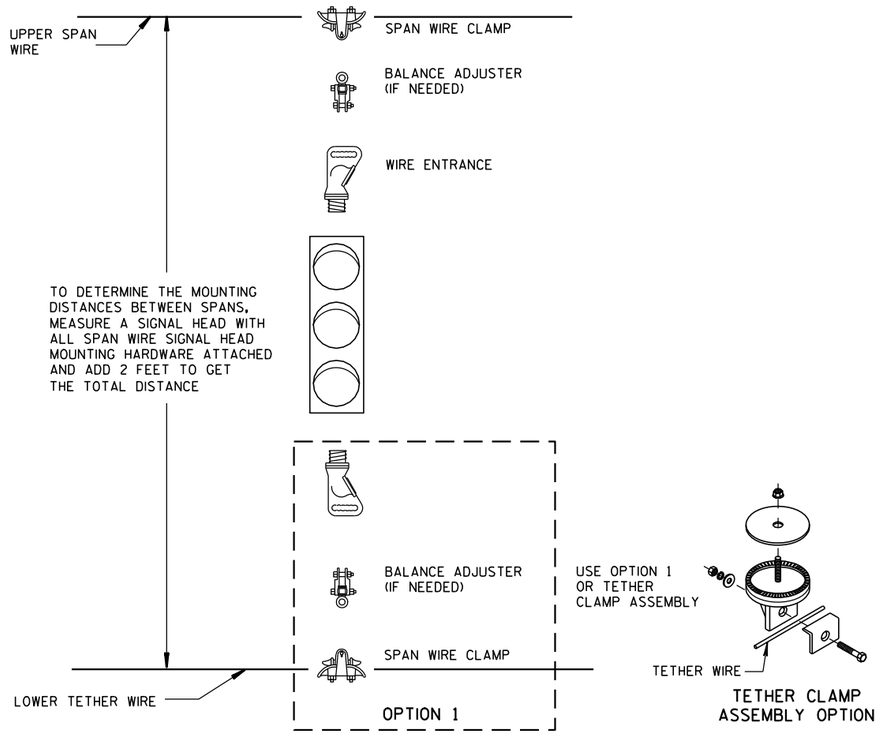
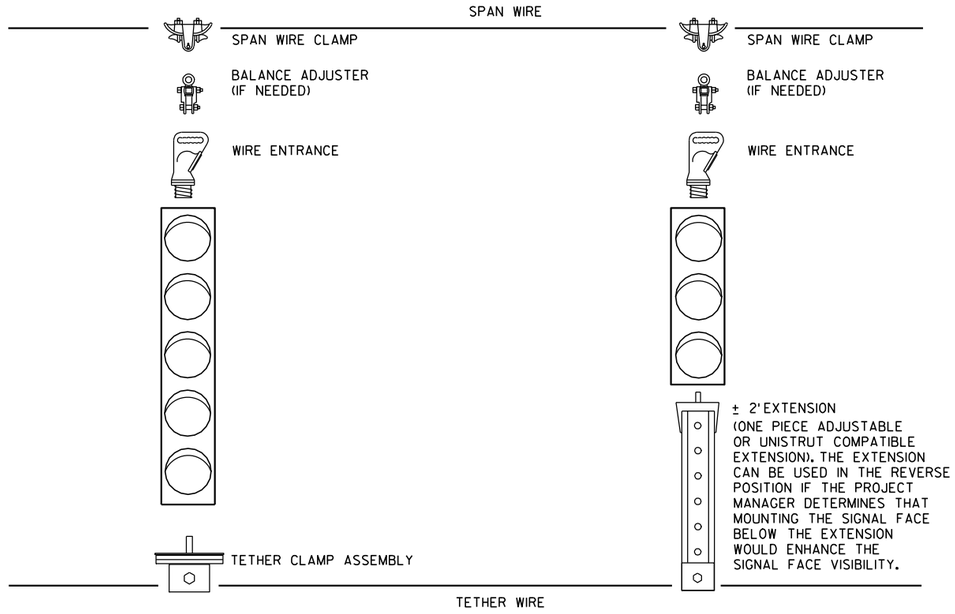
S.D.D. 9 G 1-3e



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08
DATE

/S/ Balu Aganthangarayanan
STATE ELECTRICAL ENGI

FHWA

HWYS

6

S.D.D. 9 G 1-3f

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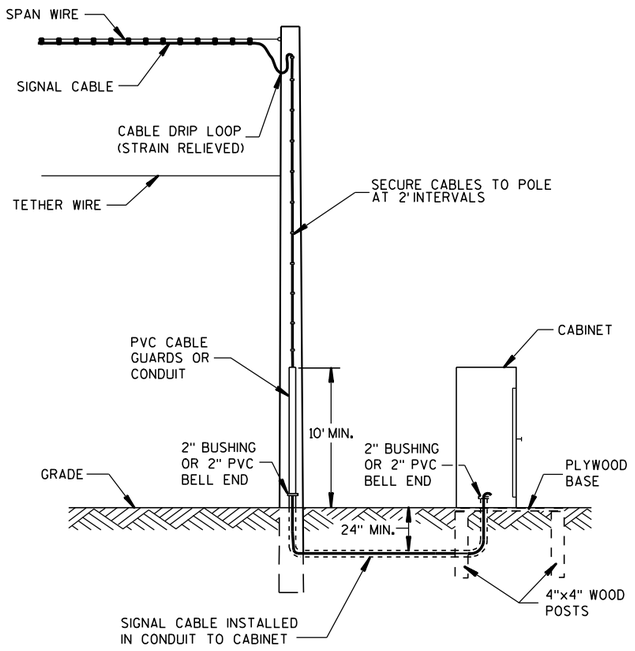
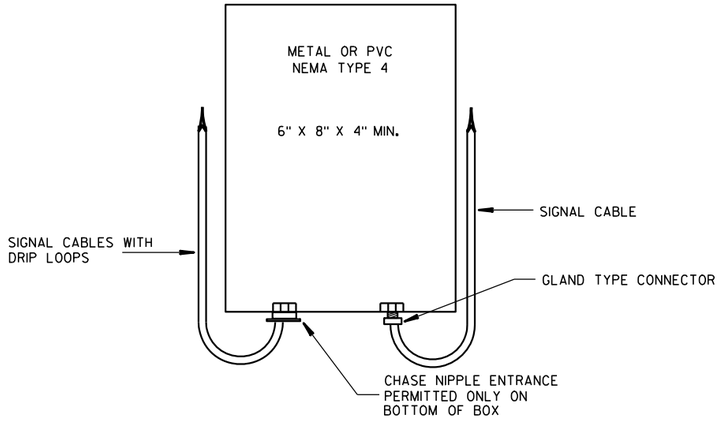
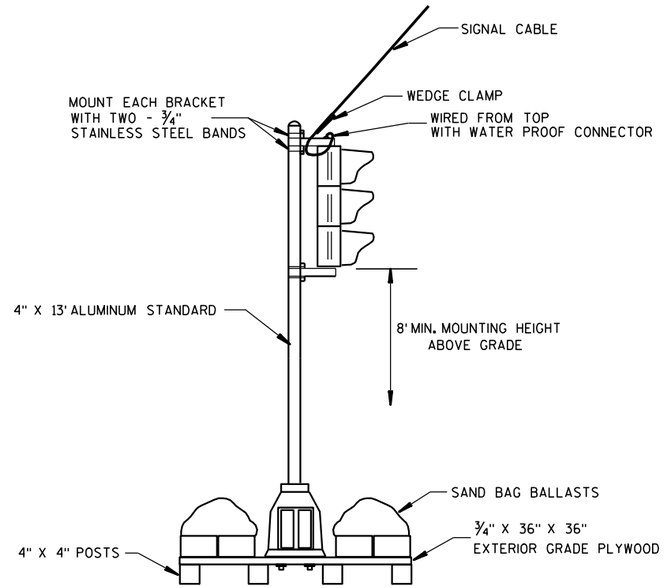
S.D.D. 9 G 1-3f

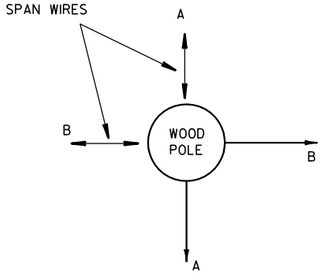




SPLICE BOX

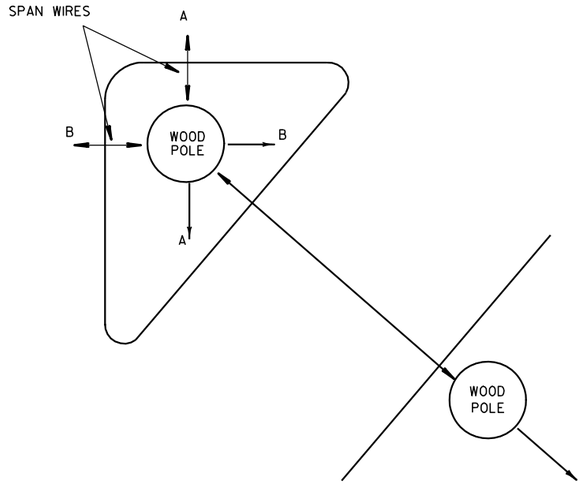


TYPICAL SKID TYPE TEMPORARY

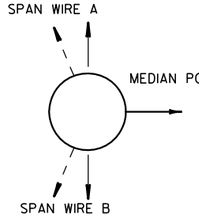


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF THE
SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08
DATE

/S/ Balu Aganthangayagan
STATE ELECTRICAL ENGI

27

HWYS

FHWA

6

S.D.D. 9 G 1-3g

6

S.D.D. 9 G 1-3g

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

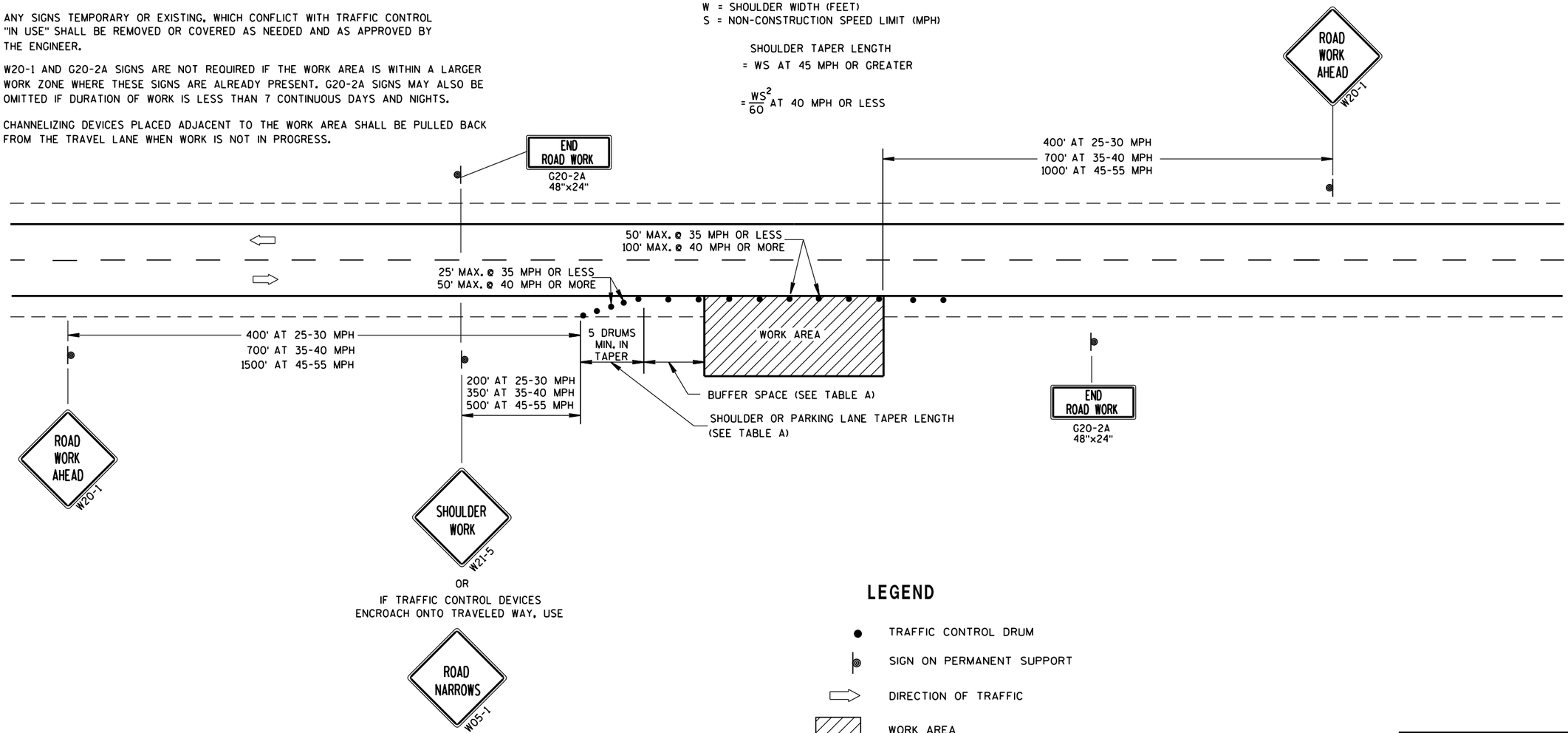
TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

$= \frac{WS^2}{60}$ AT 40 MPH OR LESS



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE

/S/ Travis Feltes STATE TRAFFIC ENGINEER

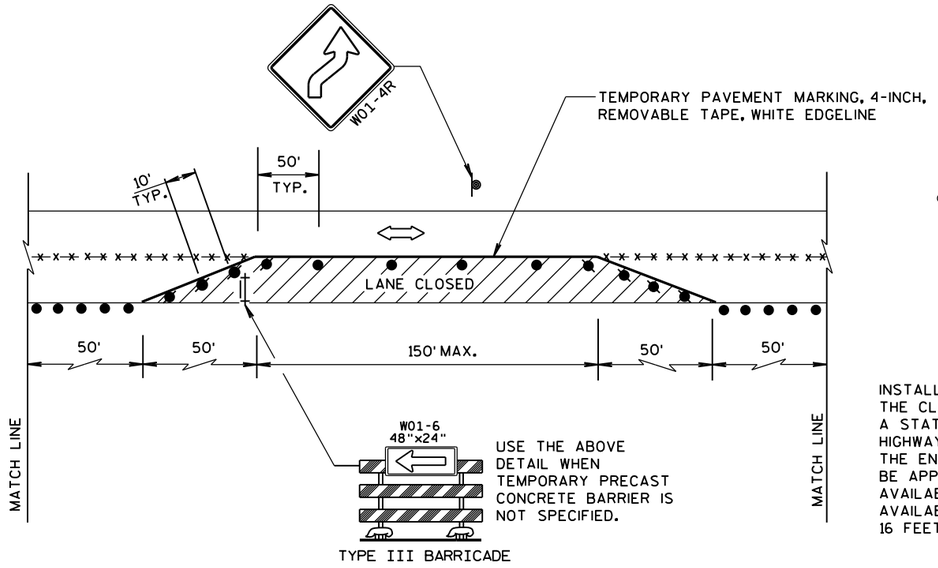
FHWA

6

S.D.D. 15 D 28-2

LEGEND

- SIGN ON PERMANENT SUPPORT
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH ATTACHED SIGN
- CONCRETE BARRIER TEMPORARY PRECAST
- FLAGS, 16" x 16" MIN., (ORANGE)
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ASPHALTIC PAVEMENT WIDENING
- DIRECTION OF TRAFFIC



TYPE III BARRICADE

W057-52
36"x24"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET.)

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

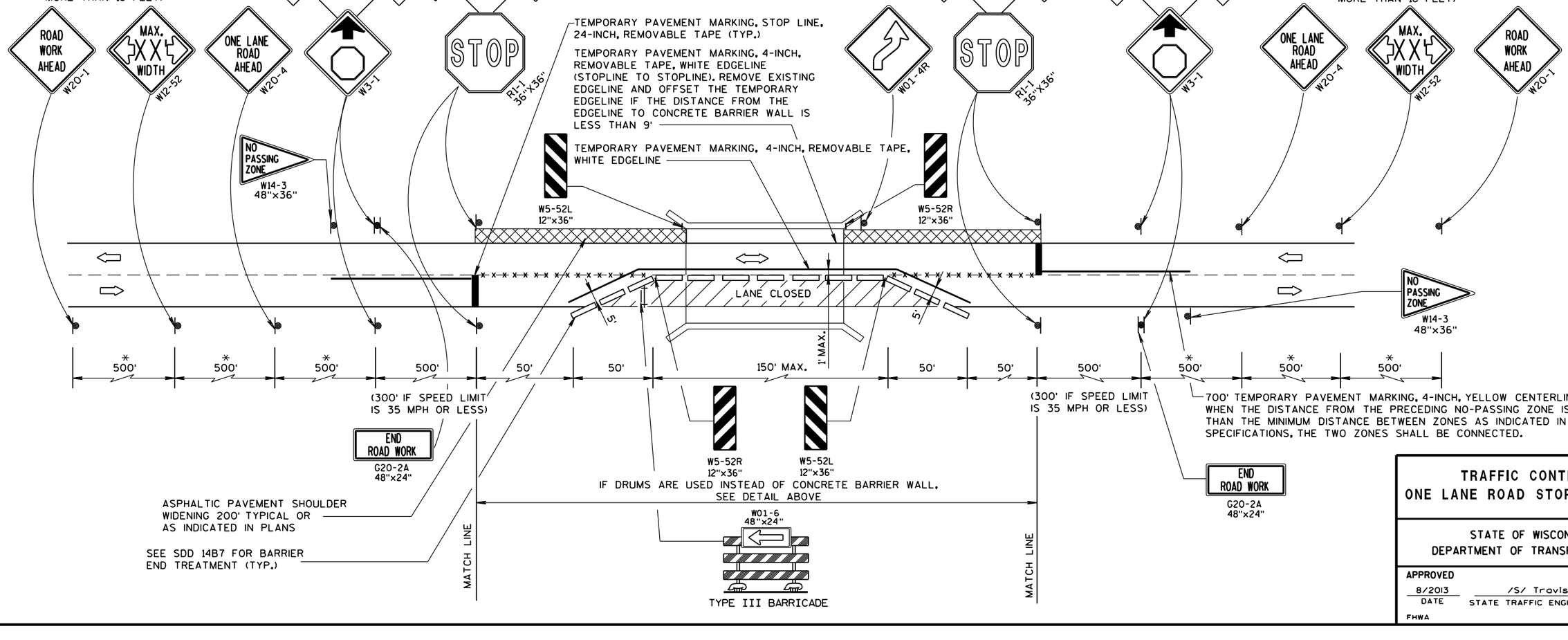
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

* 500-FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350-FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200-FOOT TYPICAL SPACING.

WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET)



TYPE III BARRICADE

TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

SIGN

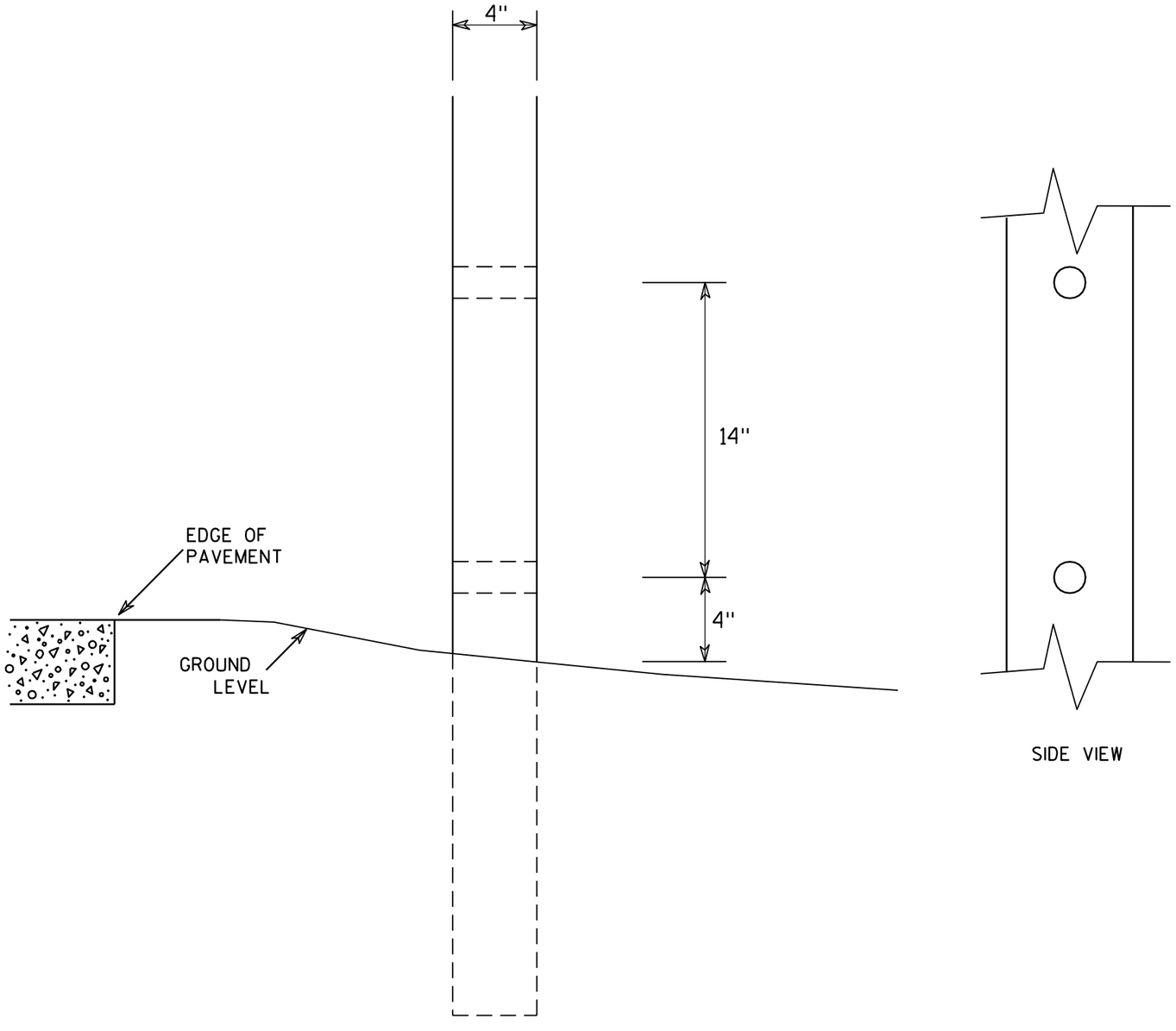
FHWA

6

S.D.D. 15 D 32-3

6

S.D.D. 15 D 32-3



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

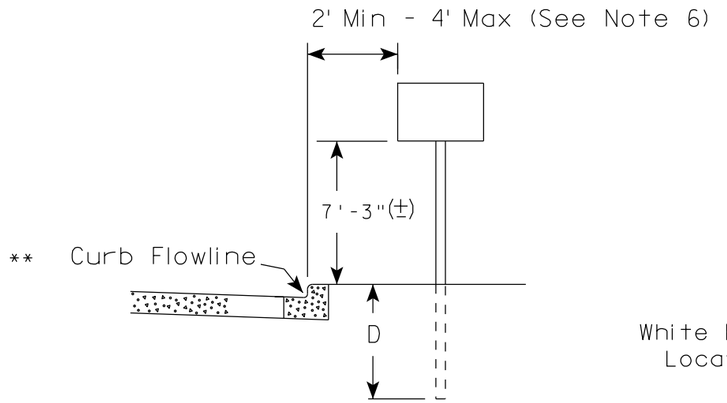
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

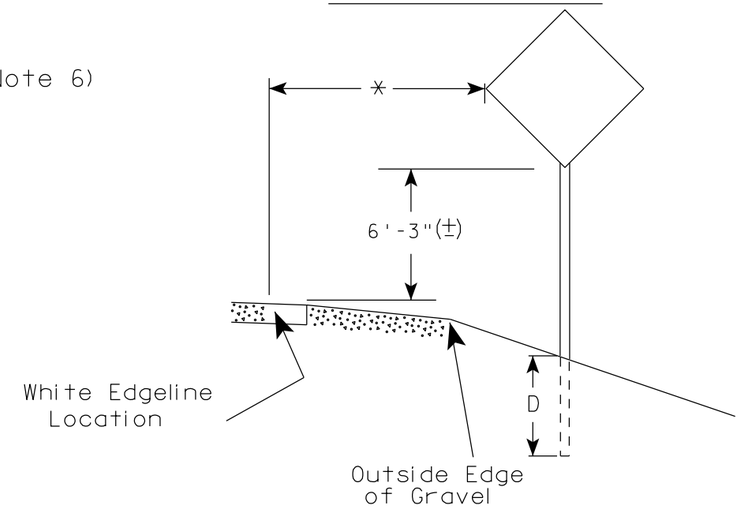
DATE 3/27/97 PLATE NO. A4-11.2

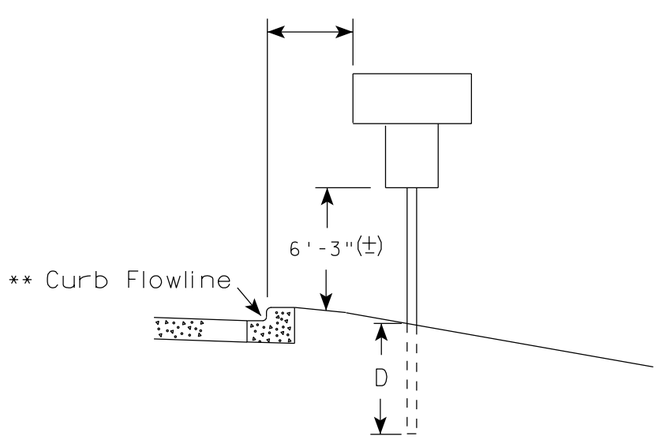
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 30	E

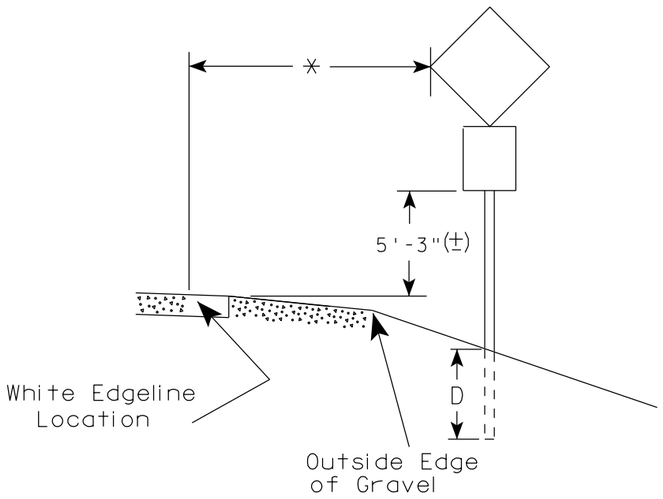
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

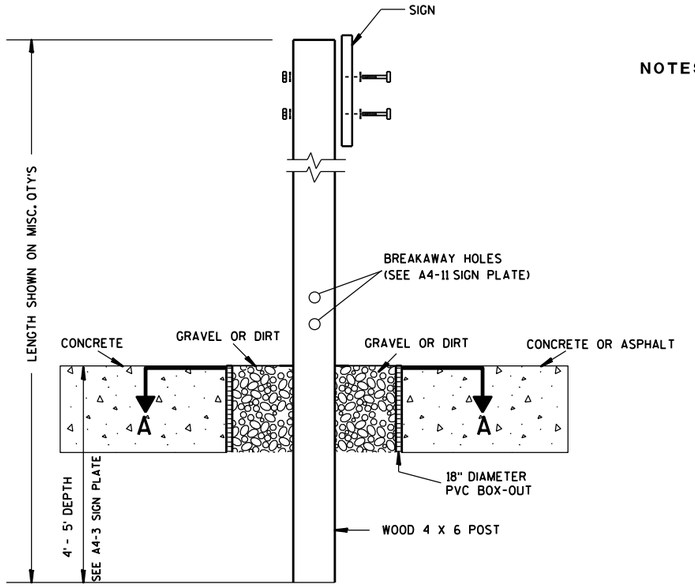
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE NO. A4-3.19

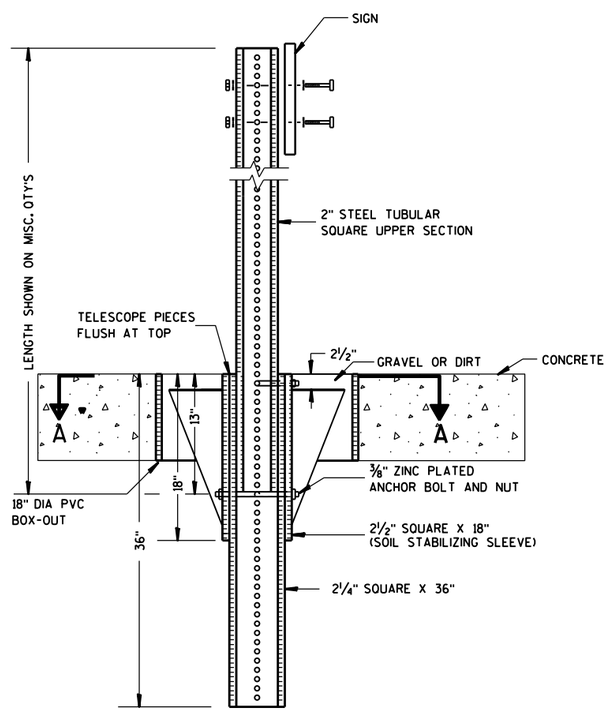
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

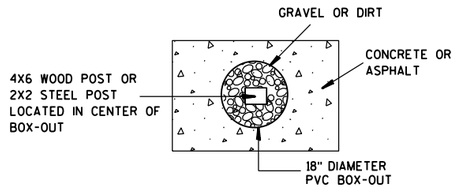
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

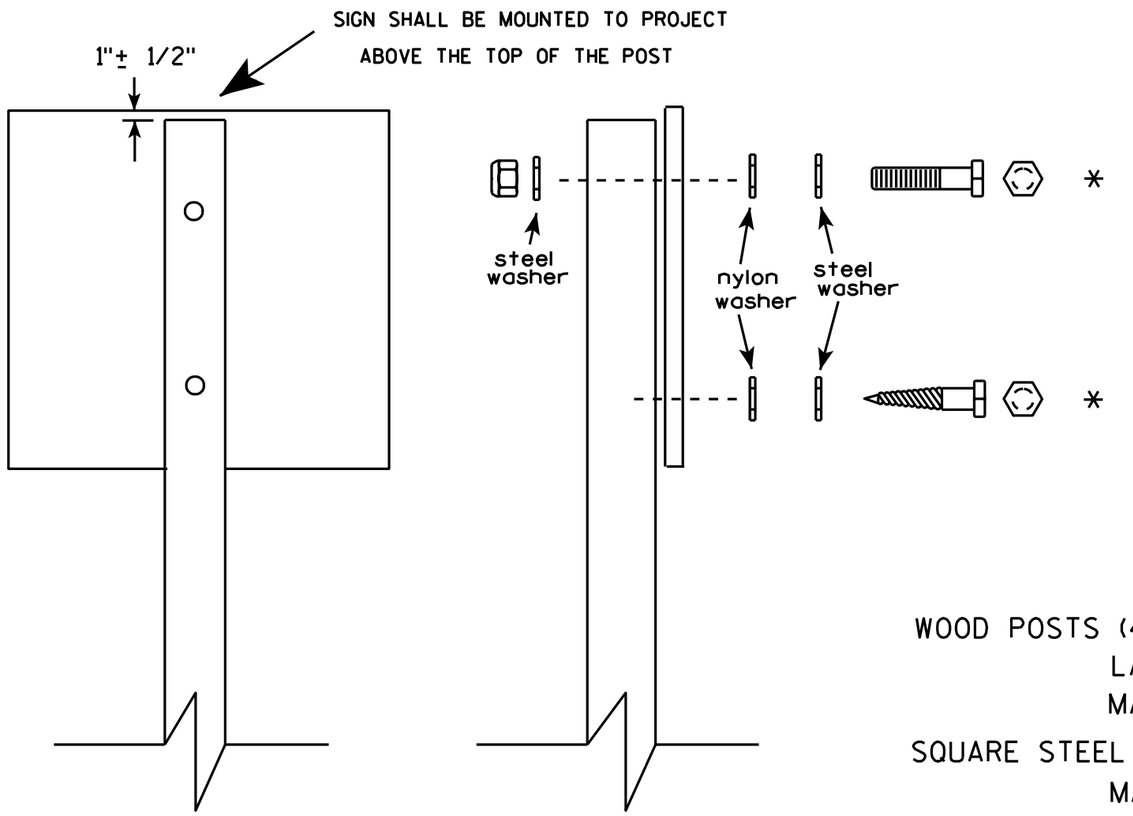
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

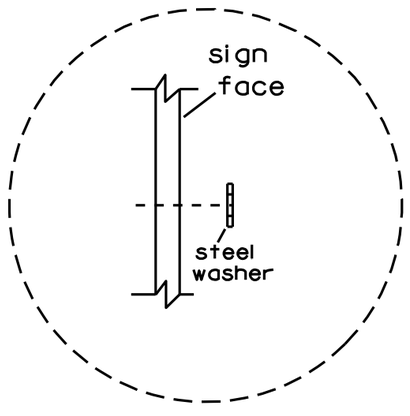
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

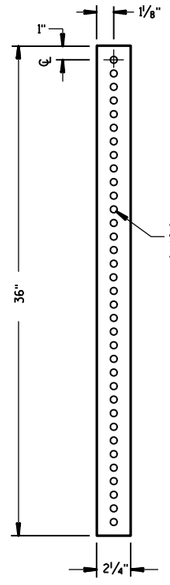
7

PROJECT NO:

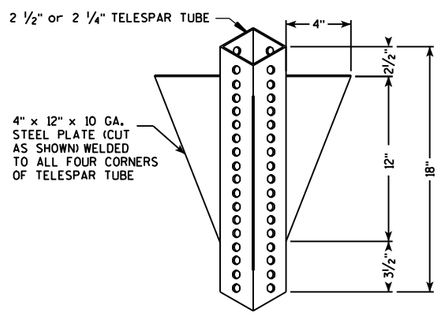
SHEET NO: 33 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

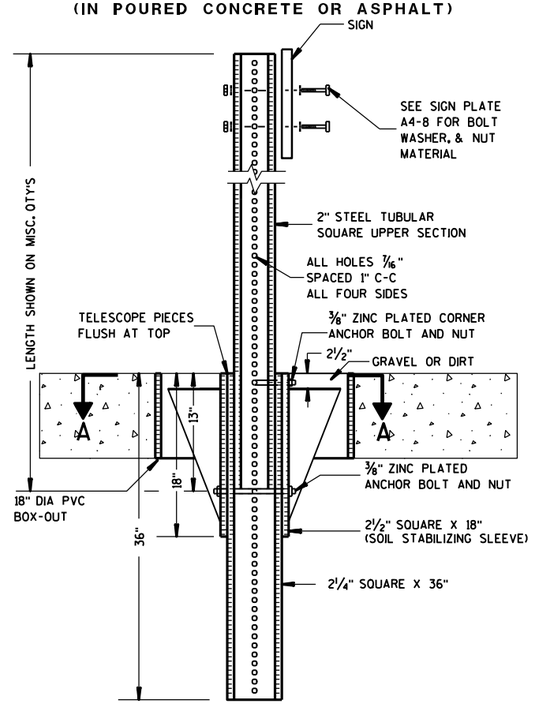
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



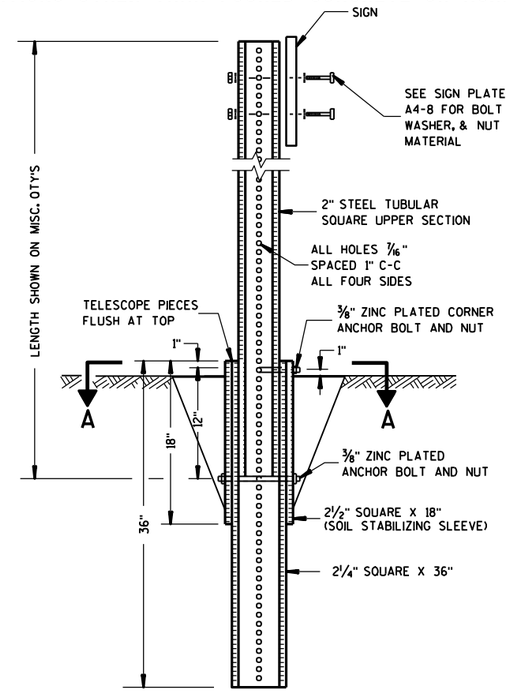
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

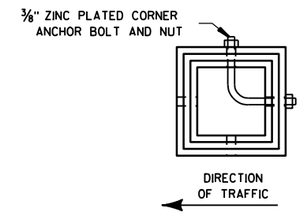


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

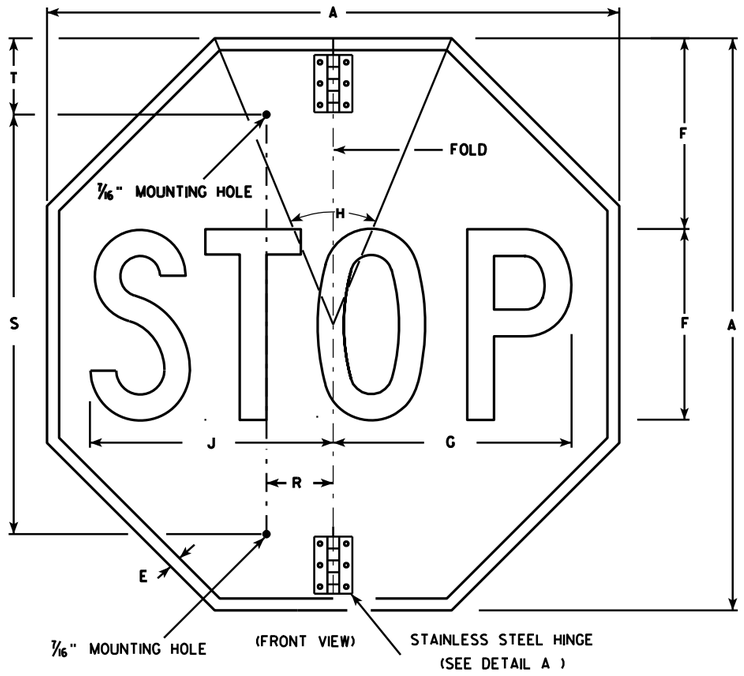
TUBULAR STEEL SIGN POST A4-9

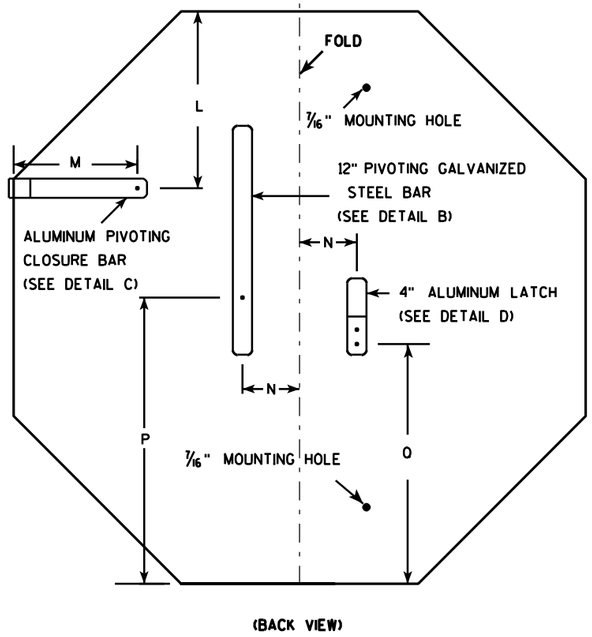
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/30/12 PLATE NO. A4-9.7

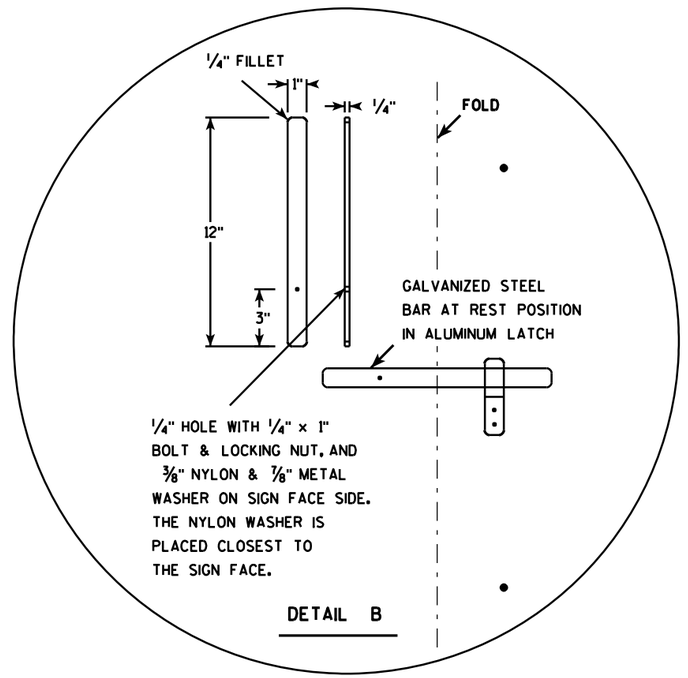
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 34	E

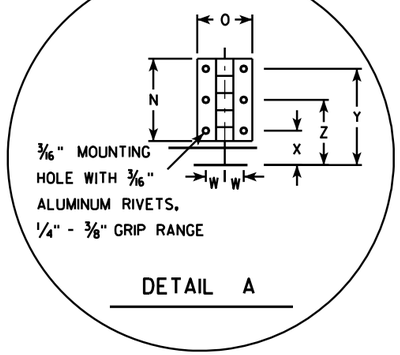


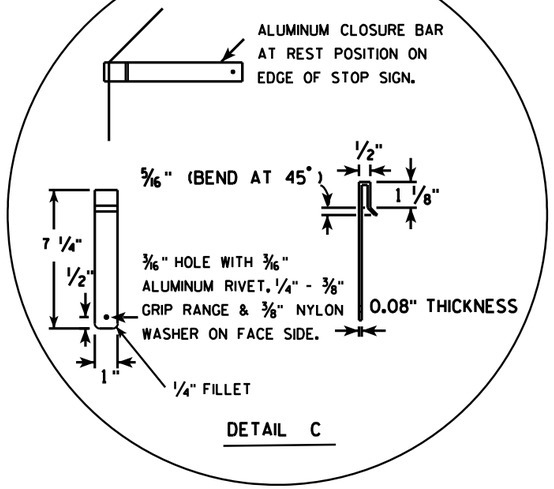


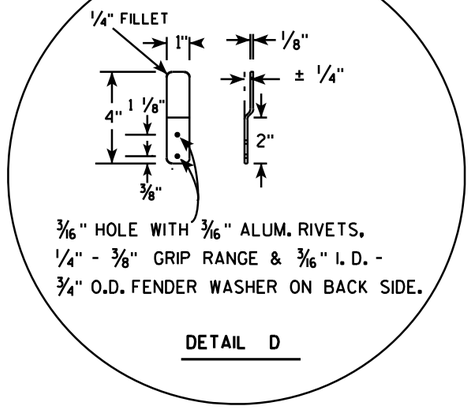
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

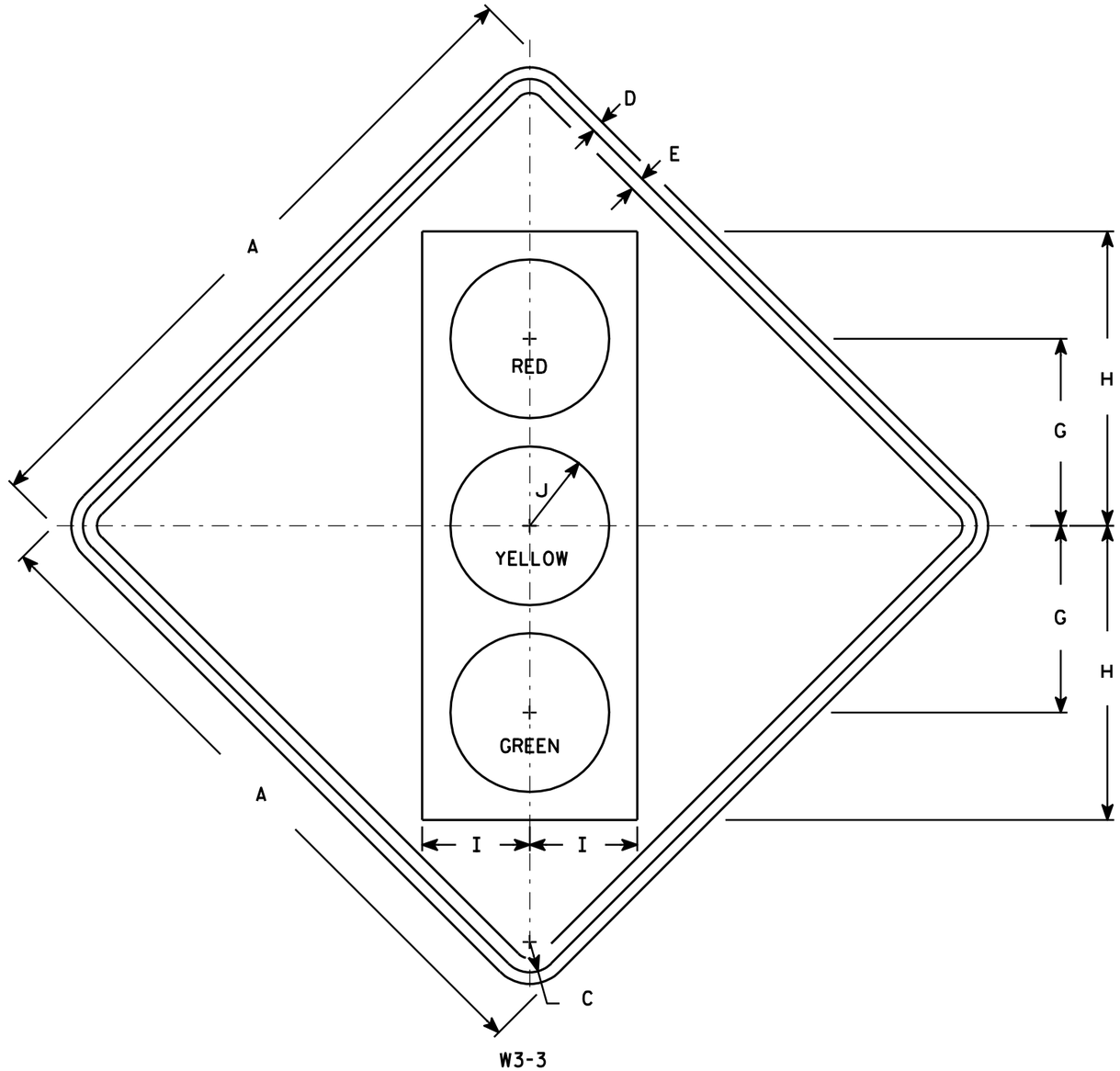
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 35	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 36 | E

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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