Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4802 Sheboygan Avenue, Rm 601
P O Box 7916
Madison, WI 53707-7916

Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

May 3, 2016

NOTICE TO ALL CONTRACTORS:

Proposal #36:

6999-03-79, WISC 2016 179
C Wausau, Highway 52
17th Avenue to 1st Avenue
STH 52
Marathon County

6999-03-80, WISC 2016 180
C Wausau, Highway 52
1st Avenue to First Street
STH 52
Marathon County

6999-03-81, WISC 2016 101
C Wausau, Highway 52
Wisconsin River to McCellan St. WB
STH 52
Marathon County

6999-03-82
USH 51/STH 29 Corr-Wausau
STH 52 Extens Sewer Retrofit
STH 52
Marathon County

Letting of May 10, 2016

This is Addendum No. 01, which provides for the following:

Special Provisions

Revised Special Provisions	
Article No.	Description
3	Prosecution and Progress
4	Traffic
6	Utilities

Schedule of Items

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
204.0100	Removing Pavement	SY	13,104	338	13,442
204.0155	Removing Concrete Sidewalk	SY	1,794	41	1,835
204.0245.02	Removing Storm Sewer (size) 18-Inch	LF	140	52	192
204.0245.03	Removing Storm Sewer (size) 24-Inch	LF	39	67	106
204.0245.05	Removing Storm Sewer (size) 36-Inch	LF	36	201	237
305.0120	Base Aggregate Dense 1 ¼-Inch	Ton	2,489	110	2,599
416.0610	Drilled Tie Bars	Each	1,609	180	1,789
416.0620	Drilled Dowel Bars	Each	701	16	717
601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	3,532	35	3,567

602.0410	Concrete Sidewalk 5-Inch	SF	16,311	365	16,676
608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	39	67	106
608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	69	81	150
611.9710	Salvaged Inlet Covers	Each	1	2	3
628.1905	Mobilizations Erosion Control	Each	8	1	9
628.7015	Inlet Protection Type C	Each	118	10	128
643.0300	Traffic Control Drums	Day	87,262	1,210	88,472
643.0420	Traffic Control Barricades Type III	Day	6,589	130	6,719
643.0705	Traffic Control Warning Lights Type A	Day	19,228	260	19,488
643.0715	Traffic Control Warning Lights Type C	Day	5,839	400	6,239
643.0900	Traffic Control Signs	Day	17,071	380	17,451
646.0126	Pavement Marking Epoxy 8-Inch	LF	2,810	50	2,860
647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	404	16	420
647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	2,429	60	2,489
649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	6,932	922	7,854
652.0800	Conduit Loop Detector	LF	1,404	70	1,474
655.0800	Loop Detector Wire	LF	4,232	276	4,508
690.0250	Sawing Concrete	LF	10,311	476	10,787

Added Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
204.0245.06	Removing Storm Sewer (size) 21-Inch	LF	0	25	25
415.1090	Concrete Pavement HES 9-Inch	SY	0	285	285
522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	Each	0	1	1
602.0505	Curb Ramp Detectable Warning Field Yellow	SF	0	20	20
608.0342	Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	LF	0	201	201
611.9705	Salvaged Manhole Covers	Each	0	2	2
625.0500	Salvaged Topsoil	SY	0	70	70
628.7555	Culvert Pipe Checks	Each	0	1	1
631.1000	Sod Lawn	SY	0	70	70
643.0100.04	Traffic Control (project) 6999-03-82	Each	0	1	1
643.1000	Traffic Control Signs Fixed Message	SF	0	36	36
643.2000	Traffic Control Detour (project) 6999-03-82	Each	0	1	1
643.3000	Traffic Control Detour Signs	Day	0	510	510

Plan Sheets

Added Plan Sheets – **ID 6999-03-82**	
Plan Sheet	Plan Sheet Title (brief description of why sheet was added)
1A	Project 6999-03-82 Title Sheet
2A	Project 6999-03-82 General Notes
3A	Project 6999-03-82 Removals & Erosion Control
4A	Project 6999-03-82 Storm Sewer Revision
5A	Project 6999-03-82 Traffic Control – Stage 1
6A	Project 6999-03-82 Traffic Control – Stage 2
7A	Project 6999-03-82 Detour Plan – Stage 1

8A	Project 6999-03-82 Detour Plan – Stage 2
9A	Project 6999-03-82 Detour Plan – Miscellaneous Quantities
10A – 28A	Standard Detail Drawings
29A	Signing Detail – Fixed Message Signs

Other

Proposal Cover Sheet: Project 6999-03-82 is being added as follows:

6999-03-82
USH 51/STH 29 Corridor – Wausau
STH 52 Extension Sewer Retrofit
STH 52
Marathon County

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 01

6999-03-79

May 3, 2016

Special Provisions

3. Prosecution and Progress.

Add the following to the end of the article::

The contractor may begin work on project 6999-03-82 at any time. However, once work begins, the contractor shall have 20 calendar days to complete the work. If utility relocations are determined necessary during construction, an additional ten days will be allowed for notification and resolution of utility conflicts. If the contractor chooses a timeframe that includes a holiday, schedule work so that the stages do not span the holiday work restrictions.

4. Traffic.

Add the following after the section titled Scott Street and 1st Street*:*

STH 52 and Stewart Avenue Intersection

Stewart Avenue shall remain open to at least one lane of traffic at all times during construction operations under this contract. Traffic on Stewart Avenue shall be staged as follows:

Stage 1:

Construct storm sewer at the southwest and northeast corners of the STH 52 and Stewart Avenue intersection. The entrance ramp to STH 29 will be closed and detoured to the west. All approach lanes to the intersection will be reduced to one lane.

Stage 2:

Construct storm sewer at the southeast corner of the STH 52 AND Stewart Avenue intersection. Eastbound traffic on Stewart Avenue will be detoured along STH 52.

6. Utilities.

Add the following to the end of the Utilities article:

Project ID #6999-03-82

City of Wausau (Sanitary Sewer) maintains a sanitary sewer along the north side of Stewart Avenue that crosses STH 52 at Sta. 21+10AA. The proposed storm sewer removal and replacement will cross the sanitary sewer within the northeast corner of the intersection. No conflict is anticipated, as the storm sewer will be replaced at close to the same invert elevation as the existing pipe. Exercise caution to avoid impacts to the existing sanitary sewer while installing the new storm sewer.

The sanitary sewer contact for the City of Wausau is Mr. Eric Lindman (Director of Public Works & Utilities) at 715-261-6745.

WPS (Electric) maintains a buried electric line along the north side of Stewart Avenue that crosses STH 52 at Sta. 21+20AA. The proposed storm sewer removal and replacement will cross the electric line within the northeast corner of the intersection at Sta. 31+58 ST, 70' LT. No conflicts have been identified with this line as part of construction as the storm sewer will be replaced at close

to the same invert elevation as the existing pipe. Exercise caution to avoid impacts to the existing electric line while installing the new storm sewer and provide WPS ten working day notice regarding any issue in need of resolution.

The telephone contacts for Wisconsin Public Service (Electric) are Clayton Vircks at 715-848-7317 and Mr. Keith Markstrum at 715-848-7314.

WPS (Gas) maintains a gas main along the north side of Stewart Avenue that crosses STH 52 at Sta. 21+20AA. The proposed storm sewer removal and replacement will cross the gas main within the northeast corner of the intersection. The proposed storm sewer removal and replacement will cross the gas line within the northeast corner of the intersection at Sta. 31+63 ST, 73' LT. No conflicts have been identified with this line as part of construction as the storm sewer will be replaced at close to the same invert elevation as the existing pipe. Exercise caution to avoid impacts to the existing gas line while installing the new storm sewer and provide WPS ten working day notice regarding any issue in need of resolution.

The telephone contacts for Wisconsin Public Service (Gas) is Mr. Mike Bosi at 715-848-7471.

Charter Communications maintains a facility line along the north side of Stewart Avenue that crosses STH 52 at Sta. 21+20AA. The proposed storm sewer removal and replacement will cross the communication line within the northeast corner of the intersection at Sta. 31+63 ST, 73' LT. No conflicts have been identified with this line as part of construction as the storm sewer will be replaced at close to the same invert elevation as the existing pipe; however, the new pipe will be located underneath the existing facility line and the utility may require support during construction. Exercise caution to avoid impacts to the existing telephone line while installing the new storm sewer.

The telephone contacts for Charter Communications is Mr. Scott Olson at 715-302-1348.

Frontier Communication/Verizon North, Inc. maintains a telephone line in the westbound lanes of Stewart Avenue through the STH 52 intersection. The proposed storm sewer removal and replacement does not cross the line and no conflicts are anticipated.

The telephone contacts for Verizon North, Inc. are Warren Inman at 715-847-1504 and Mr. Calvin Klade at 715-847-1525.

WisDOT (Traffic Signals) maintains the traffic signals at the intersection of STH 52 and Stewart Avenue. The proposed storm sewer installation in the eastbound lanes of Stewart Avenue will conflict with the traffic signal detector loop in the right-thru lane. The contractor shall remove the traffic signal detector conduit and wire as part of the concrete pavement removal as shown in the plans. The existing primary traffic signal conduit and traffic signal loop conduit leading to the detector shall be protected in-place.

The contractor shall also protect existing traffic signal poles and equipment in-place during construction.

The WisDOT contact for traffic signals is Mr. Doug Pilgrim at 715-459-4784.

Schedule of Items
Attached, dated May 3, 2016, are the revised Schedule of Items Pages 1 – 28.

Plan Sheets
The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
Added: 1A – 29A

END OF ADDENDUM

PROJECT ID: 6999-03-82
WITH: 6999-03-79, 6999-03-80, 6999-03-81

COUNTY: MARATHON

ORDER OF SHEETS

TOTAL SHEETS =

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

USH 51/STH 29 CORRIDOR-WAUSAU

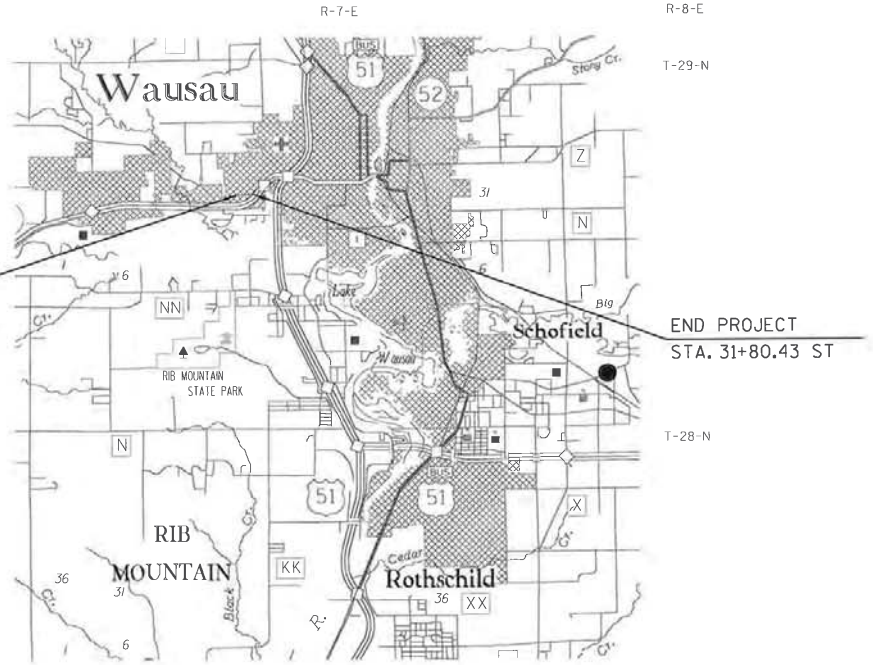
STH 52 EXTENSION SEWER RETROFIT

STH 52

MARATHON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6999-03-82		

STATE PROJECT NUMBER
6999-03-82



BEGIN PROJECT
STA 29+99.00 ST
Y= 200775.919
X= 269566.896

END PROJECT
STA. 31+80.43 ST

LAYOUT
SCALE 0 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.034 MI.

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

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 NAVD 88 (2007).

DESIGN DESIGNATION

A.A.D.T.	=	N/A
A.A.D.T.	=	N/A
D.H.V.	=	N/A
D.D.	=	N/A
T.	=	N/A
DESIGN SPEED	=	40 MPH
ESALS	=	N/A

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

Addendum No. 01
ID 6999-03-82
Added Sheet 1A
May 3, 2016

ORIGINAL PLANS PREPARED BY: GRAEF

MARY E. [illegible]
WATERFORD, WI
PROFESSIONAL ENGINEER
4/26/2016

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	GRAEF
Designer	GRAEF
Project Manager	DAN HOLLOWAY
Regional Examiner	N/A
Regional Supervisor	ROBIN STAFFORD
C.O. Examiner	N/A

APPROVED FOR THE DEPARTMENT
DATE 4/27/2016

Digitally signed by Daniel Holloway
DN: cn=Daniel Holloway, o=WisDOT, ou=PDS, email=daniel.holloway@dot.wi.gov, c=US(Signature)
Date: 2016.04.28 09:40:13 -05'00'

E

FILE NAME : L:\Jobs2001\20015020\M11\D4_11661000EC\Design\1073\Storm Sewer Revision Plans\00\010101_t1.dgn
PLOT DATE : 4/27/2016
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 10

1A

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS INDICATED FOR REMOVAL BY THE ENGINEER.

ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM THE ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES OR FROM GRUBBING OF TREES OR STUMPS SHALL BE BACKFILLED WITH GRANULAR BACKFILL. BACKFILL GRANULAR MATERIAL IS INCIDENTAL TO THE REMOVAL ITEM.

THE LOCATION OF KNOWN EXISTING UTILITIES IN THE VICINITY OF THE PROJECT ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITIES IN THE AREA THAT ARE NOT SHOWN.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE PRIOR TO THE START OF WORK.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED, FERTILIZED, AND SODDED AS DIRECTED BY THE ENGINEER. LANDSCAPE ALL TOPSOILED AREAS WITHIN 5 CALANDER DAYS AFTER THE PLACEMENT OF TOPSOIL.

ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.

INLET PROTECTION IS REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED BY THE ENGINEER.

CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT, IF THE NEAREST JOINT IS 4-FEET OR LESS. IT SHALL BE REMOVED TO THE LOCATION SHOWN ON THE PLAN (SAWCUT) IF THIS NEAREST JOINT IS GREATER THAN 4-FEET.

CONCRETE JOINTS SHALL MATCH ABUTTING PAVEMENT AND CURB AND GUTTER JOINTS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

UTILITIES

WISCONSIN PUBLIC SERVICE - GAS
MR. MIKE BOSI
1700 SHERMAN STREET
PO BOX 1166
WAUSAU, WI 54402-1166
MABosi@wisconsinpublicservice.com
PHONE: (715) 848-7471

WISCONSIN PUBLIC SERVICE - ELECTRIC
MR. CLAY VIRCKS
1700 SHERMAN STREET
PO BOX 1166
WAUSAU, WI 54402-1166
CHVircks@wisconsinpublicservice.com
PHONE: (715) 848-7317

FRONTIER COMMUNICATIONS/VERIZON
MR. WARREN INMAN
525 SUPERIOR STREET
ANTIGO, WI 54409
warren.e.inman@FTR.com
PHONE: (715) 847-1504
CELL: (608) 346-0667

FRONTIER COMMUNICATIONS
CONSTRUCTION SUPERINTENDANT
MR. CALVIN KLADE
521 NORTH 4TH STREET
WAUSAU, WI 54403
PHONE: (715) 847-1525

CHARTER COMMUNICATIONS
MR. SCOTT OLSON
853 MCINTOSH STREET
WAUSAU, WI 54403
scott.olson@charter.com
PHONE: (715) 302-1348

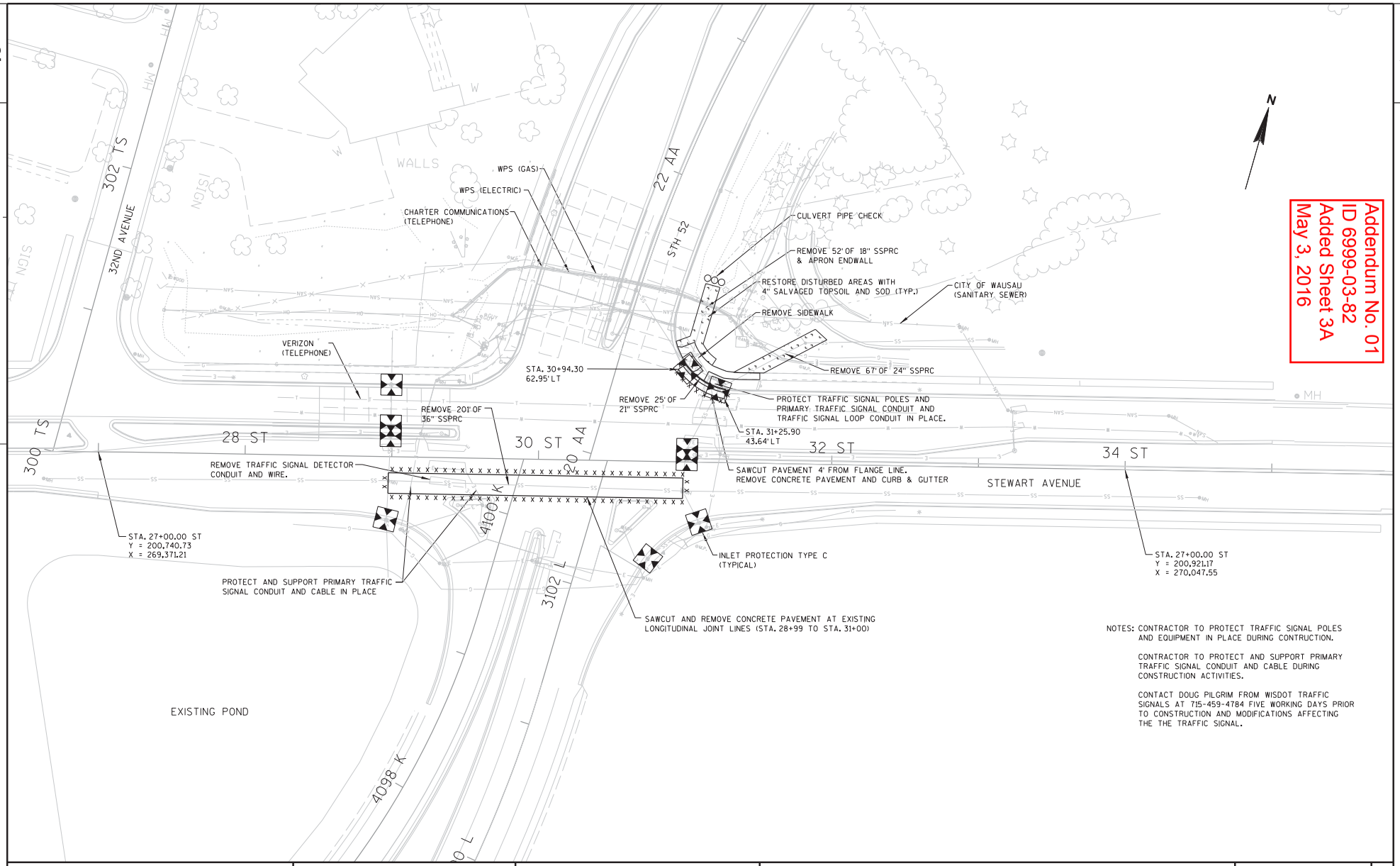
CITY OF WAUSAU - SANITARY
MR. ERIC LINDMAN
DIRECTOR OF PUBLIC WORKS & UTILITIES
407 GRANT STREET
WAUSAU, WI 54403
PHONE: (715) 261-6745

WISDOT TRAFFIC SIGNALS
MR. DOUG PILGRIM
PHONE: (715) 459-4784

Addendum No. 01
ID 6999-03-82
Added Sheet 2A
May 3, 2016

PROJECT NO: 6999-03-82	HWY: STEWART AVENUE	COUNTY: MARATHON	GENERAL NOTES	SHEET 2A	E

FILE NAME : L:\Jobs2001\20015020\Mil\D4_11661000EC\Design\1073\Storm Sewer Revision Plans\00\020101_gn.dgn PLOT DATE : 4/28/2016 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 40.0000 sf / in. WISDOT/CADDS SHEET 42



PROJECT NO: 6999-03-82	HWY: STEWART AVENUE	COUNTY: MARATHON	REMOVALS & EROSION CONTROL	SHEET 3A	E

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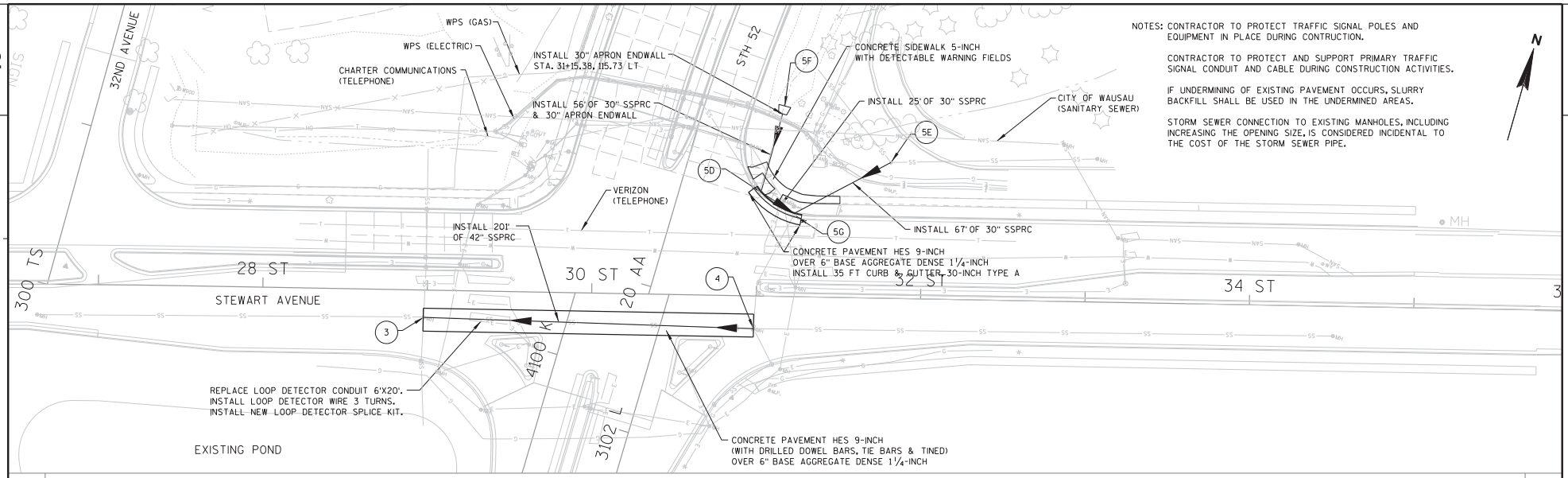
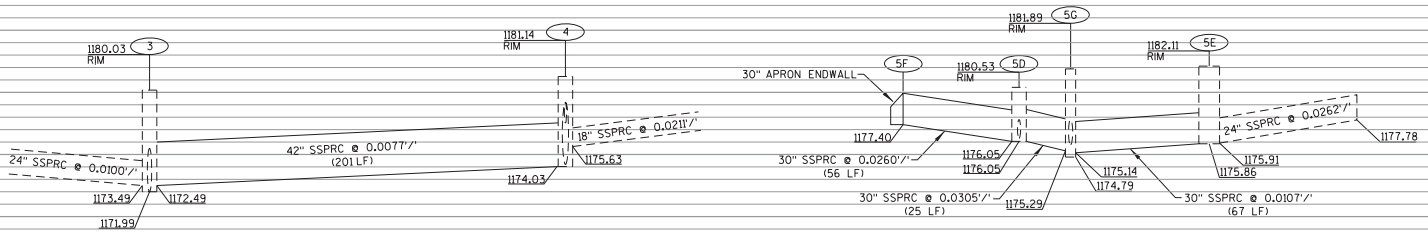
WISDOT/CADDS SHEET 42

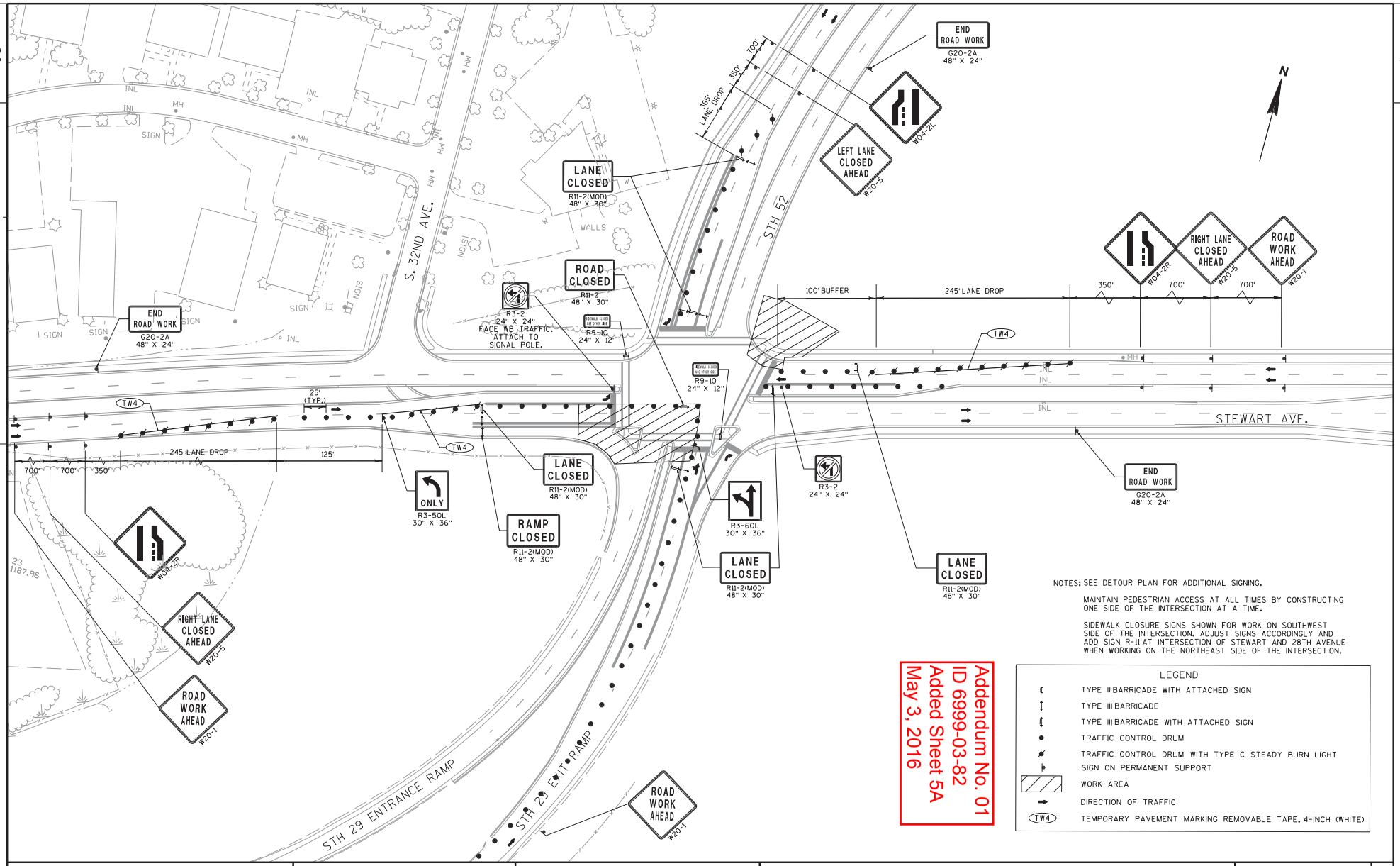


STRUCT. NO.	STATION	OFFSET	C-C (FT)	TO STRUCT.	INLET TYPE & COVER	MH TYPE & COVER	RIM/GRATE ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCH. ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	DISCHARGE PIPE CLASS	REMARKS
4	31+00.00 ST	18.00' RT	201.00	3	-- --	EX. 7' DIA	1181.14	7.11	42	1174.03	1172.49	201.00	0.77	III	EXISTING MANHOLE
5D	31+00.34 ST	61.12' LT	25.00	5G	-- --	EX. 7' DIA	1180.53	4.15	30	1176.05	1175.29	25.00	3.05	III	EXISTING MANHOLE
5F	31+15.38 ST	115.73' LT	56.00	5D	-- --	-- --	-- --	-- --	30	1177.40	1176.05	56.00	2.60	III	APRON ENDWALL FOR CPRC 30-INCH
5E	31+80.43 ST	82.37' LT	67.00	5G	-- --	EX. 10' DIA	1182.11	6.25	30	1175.86	1175.14	67.00	1.07	III	EXISTING MANHOLE



Addendum No. 01
ID 6999-03-82
Added Sheet 4A
May 3, 2016

PROJECT NO: 6999-03-82	HWY: STEWART AVENUE	COUNTY: MARATHON	STORM SEWER REVISION	SHEET 4A	E



NOTES: SEE DETOUR PLAN FOR ADDITIONAL SIGNING.

MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES BY CONSTRUCTING ONE SIDE OF THE INTERSECTION AT A TIME.

SIDEWALK CLOSURE SIGNS SHOWN FOR WORK ON SOUTHWEST SIDE OF THE INTERSECTION. ADJUST SIGNS ACCORDINGLY AND ADD SIGN R-11 AT INTERSECTION OF STEWART AND 28TH AVENUE WHEN WORKING ON THE NORTHEAST SIDE OF THE INTERSECTION.

Addendum No. 01
ID 6999-03-82
Added Sheet 5A
May 3, 2016

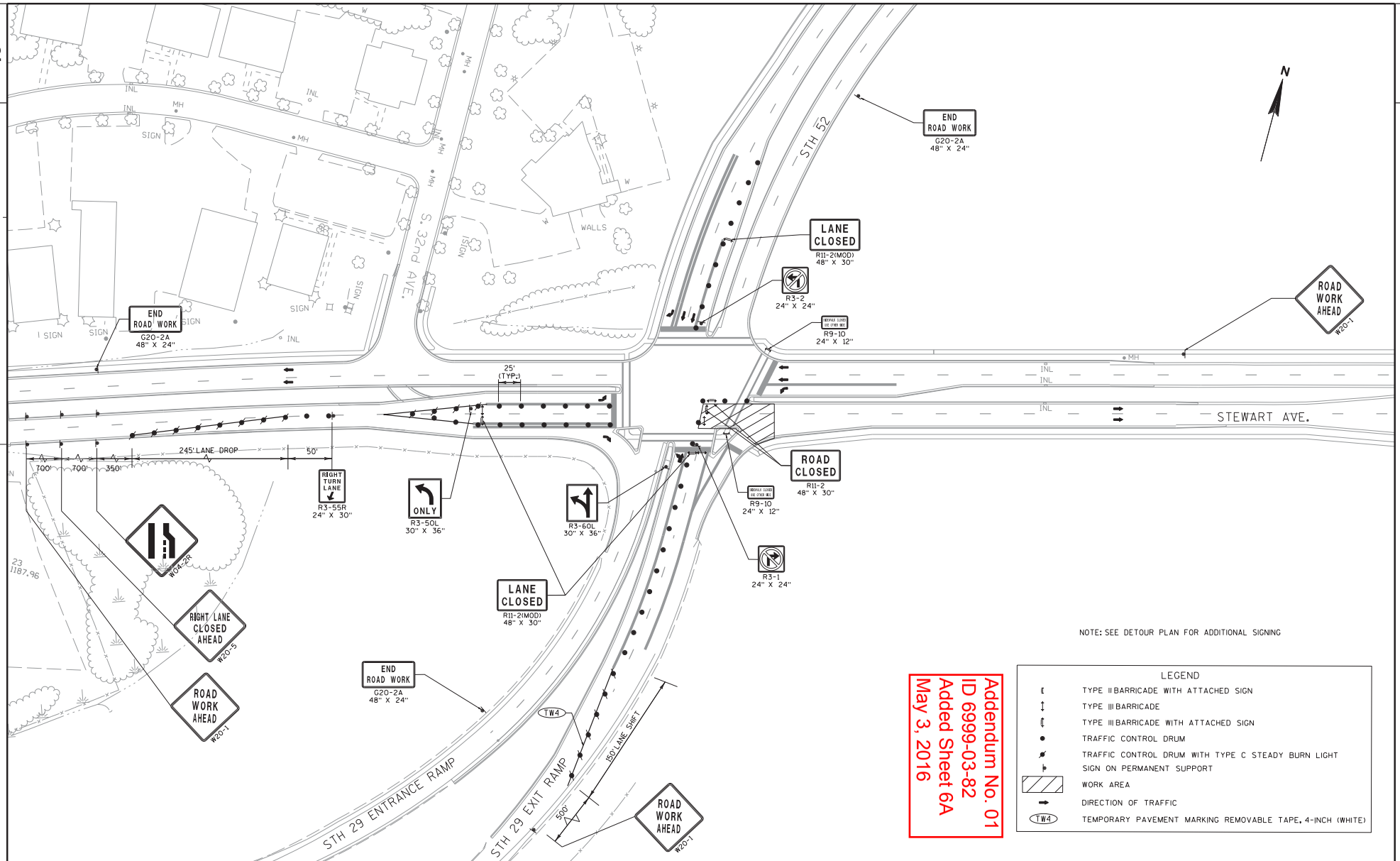
LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TW4 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE, 4-INCH (WHITE)

PROJECT NO: 6999-03-82	HWY: STEWART AVENUE	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SHEET 5A	E

FILE NAME : L:\Jobs2001\20015020\Mil\D4_11661000EC\Design\1073\Storm Sewer Revision Plans\00\026001_s1_Alt1.dgn PLOT DATE : 4/28/2016 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 100.000 sf / in.

WISDOT/CADDS SHEET 42



NOTE: SEE DETOUR PLAN FOR ADDITIONAL SIGNING

Addendum No. 01
ID 6999-03-82
Added Sheet 6A
May 3, 2016

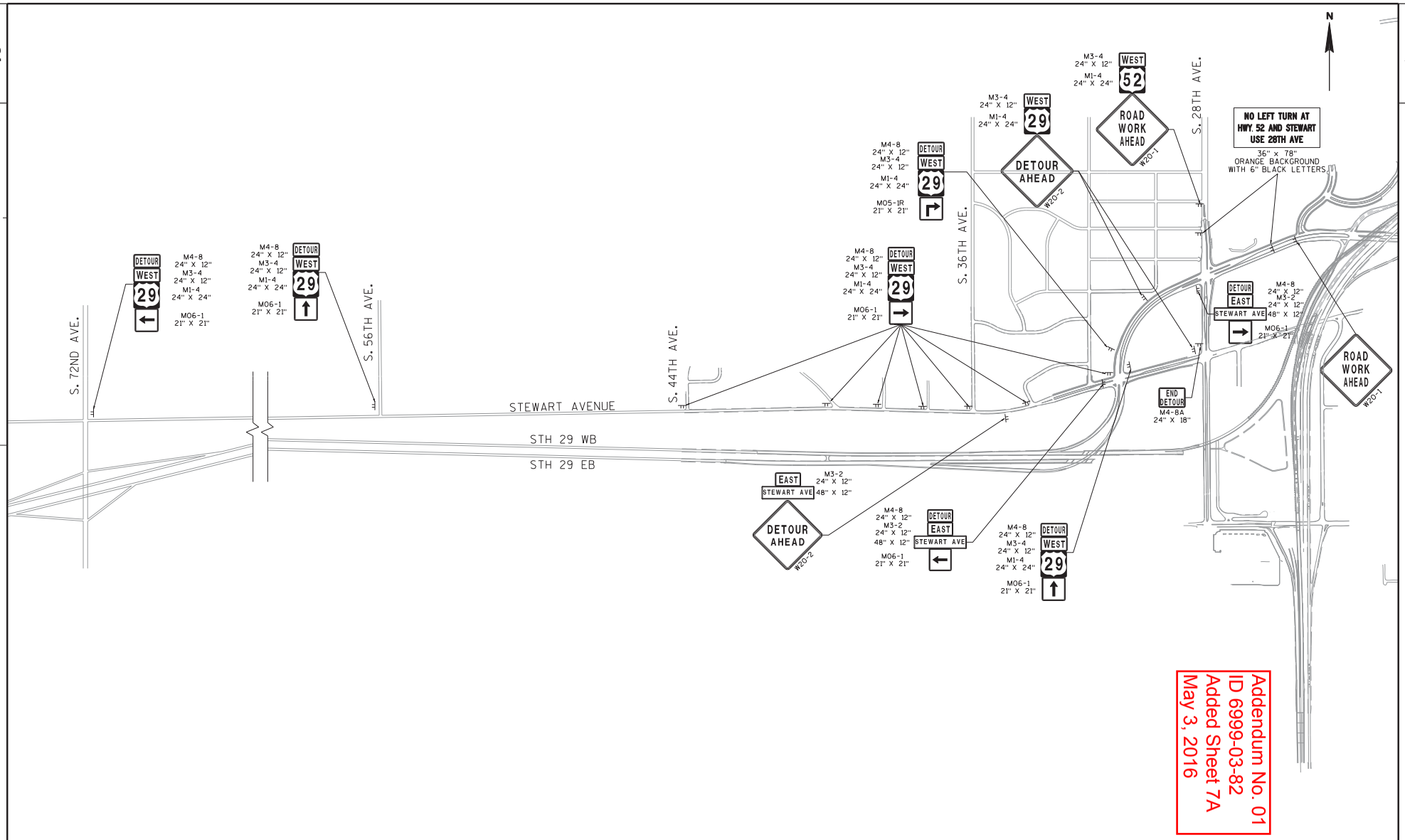
LEGEND

- TYPE II BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- TW4 — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE, 4-INCH (WHITE)

PROJECT NO: 6999-03-82	HWY: STEWART AVENUE	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2	SHEET 6A	E

FILE NAME : L:\Jobs2001\20015020\Mil\D4_11661000EC\Design\1073\Storm Sewer Revision Plans\00\026101_s2_Alt1.dgn PLOT DATE : 4/28/2016 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 100.000 sf / in.

WISDOT/CADDS SHEET 42

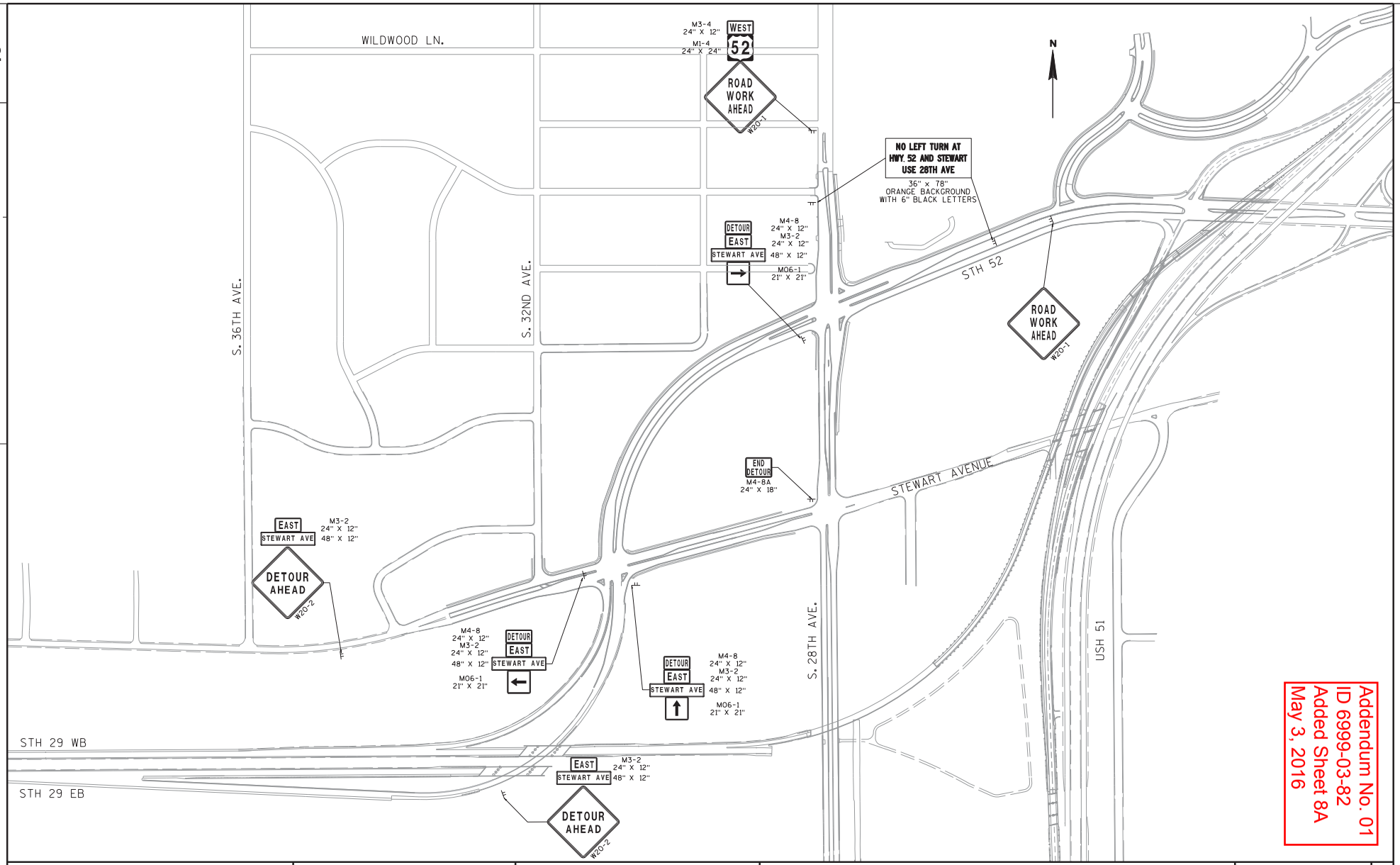


Addendum No. 01
ID 6999-03-82
Added Sheet 7A
May 3, 2016

PROJECT NO: 6999-03-82	HWY: STEWART AVENUE	COUNTY: MARATHON	DETOUR PLAN - STAGE 1	SHEET 7A	E

FILE NAME : L:\Jobs2001\20015020\Mil\D4_11661000EC\Design\1073\Storm Sewer Revision Plans\00\027001_dt_Alt1.dgn PLOT DATE : 4/28/2016 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 1000.000 sf / in.

WISDOT/CADDS SHEET 42



Addendum No. 01
ID 6999-03-82
Added Sheet 8A
May 3, 2016

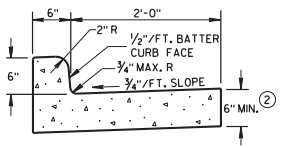
PROJECT NO: 6999-03-82	HWY: STEWART AVENUE	COUNTY: MARATHON	DETOUR PLAN - STAGE 2	SHEET 8A	E

FILE NAME : L:\Jobs2001\20015020\Mil\D4_11661000EC\Design\1073\Storm Sewer Revision Plans\00\027002_dt_Alt1.dgn PLOT DATE : 4/28/2016 PLOT BY : GRAEF PLOT NAME : PLOT SCALE : 400.000 sf / in.

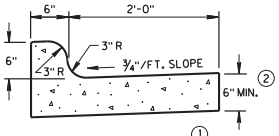
WISDOT/CADDS SHEET 42

ITEM #	DESCRIPTION	QTY	UNIT
204.0100	REMOVING PAVEMENT	338	SY
204.0155	REMOVING CONCRETE SIDEWALK	41	SY
204.0245.02	REMOVING STORM SEWER (18-INCH)	52	LF
204.0245.05	REMOVING STORM SEWER (21-INCH)	25	LF
204.0245.06	REMOVING STORM SEWER (24-INCH)	67	LF
204.0245.04	REMOVING STORM SEWER (36-INCH)	201	LF
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	110	TON
415.1090	CONCRETE PAVEMENT HES 9-INCH	285	SY
416.0610	DRILLED TIE BARS	180	EACH
416.0620	DRILLED DOWEL BARS	16	EACH
522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	1	EACH
601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	35	LF
602.0410	CONCRETE SIDEWALK 5-INCH	365	SF
602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	20	SF
608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	67	LF
608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	81	LF
608.0342	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH	201	LF
611.9705	SALVAGED MANHOLE COVERS	2	EACH
611.9710	SALVAGED INLET COVERS	2	EACH
619.1000	MOBILIZATION	0.03	EACH
625.0500	SALVAGED TOPSOIL	70	SY
628.1905	MOBILIZATIONS EROSION CONTROL	1	EACH
628.7015	INLET PROTECTION TYPE C	10	EACH
628.7555	CULVERT PIPE CHECKS	1	EACH
631.1000	SOD LAWN	70	SY
643.0100	TRAFFIC CONTROL (6999-03-82)	1	EACH
643.0300	TRAFFIC CONTROL DRUMS	1210	DAYS
643.0420	TRAFFIC CONTROL BARRICADES TYPE III	130	DAYS
643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	260	DAYS
643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	400	DAYS
643.0900	TRAFFIC CONTROL SIGNS	380	DAYS
643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	36	SF
643.2000	TRAFFIC CONTROL DETOUR (6999-03-82)	1	EACH
643.3000	TRAFFIC CONTROL DETOUR SIGNS	510	DAYS
646.0126	PAVEMENT MARKING EPOXY 8-INCH	50	LF
647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	16	LF
647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	60	LF
649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	922	LF
652.0800	CONDUIT LOOP DETECTOR	70	LF
655.0800	LOOP DETECTOR WIRE	276	LF
690.0250	SAWING CONCRETE	476	LF

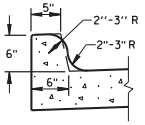
Addendum No. 01
ID 6999-03-82
Added Sheet 9A
May 3, 2016



TYPES A & D (1)

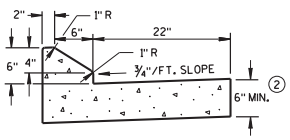


TYPES K & L (1)

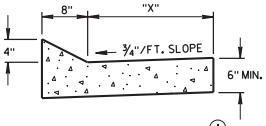


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

CONCRETE CURB & GUTTER 30"



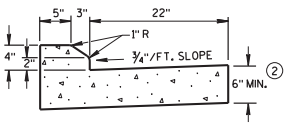
6" SLOPED CURB TYPES G & J (1)



TYPES TBT & TBTT (1)

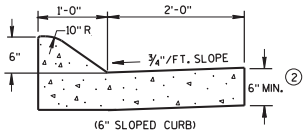
CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

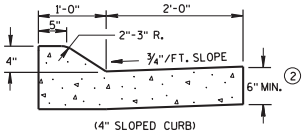


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

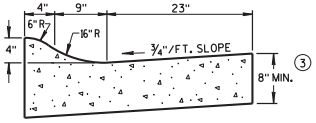


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D (1)



4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

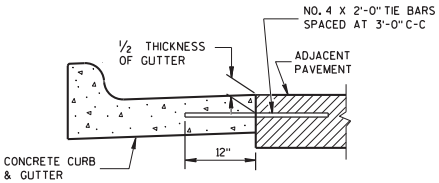
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

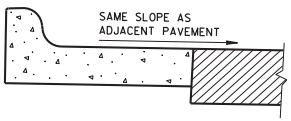
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

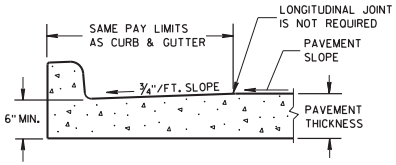
(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



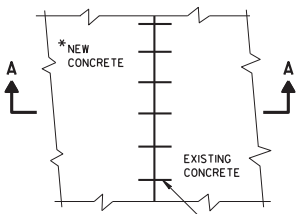
TYPICAL TIE BAR LOCATION (1)



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

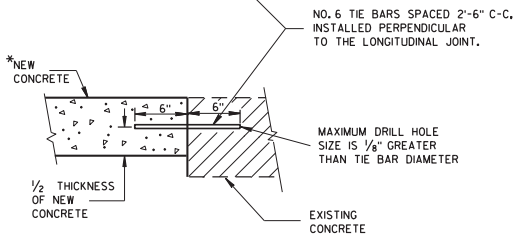


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

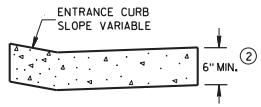


PLAN VIEW

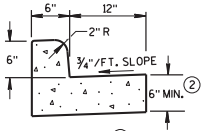
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.



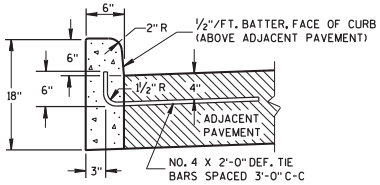
SECTION A-A
TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

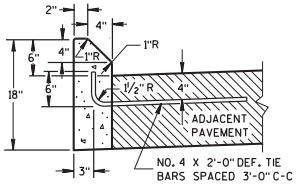


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"

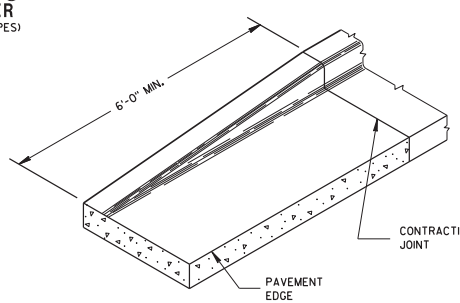


(1)
TYPES A & D

CONCRETE CURB



(1)
TYPES G & J



END SECTION CURB & GUTTER

Addendum No. 01
ID 6999-03-82
Added Sheet 10A
May 3, 2016

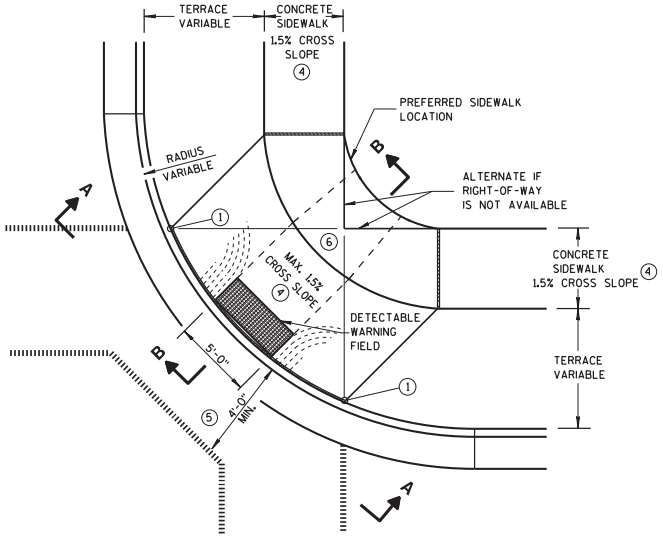
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

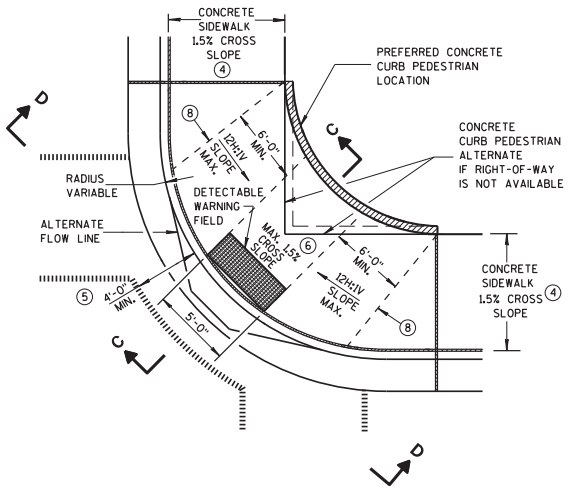
S.D.D. 8 D 1-18



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

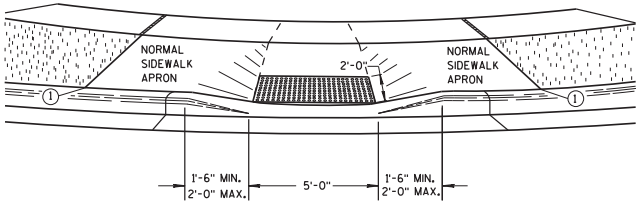
(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

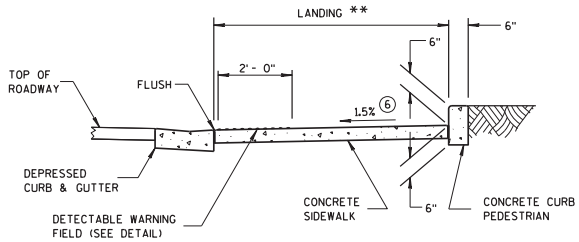
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

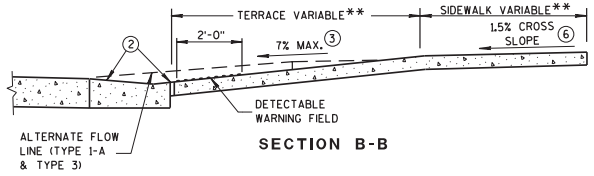


VIEW A-A

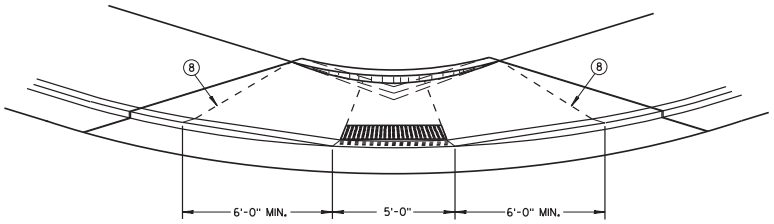
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION C-C



SECTION B-B



VIEW D-D

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

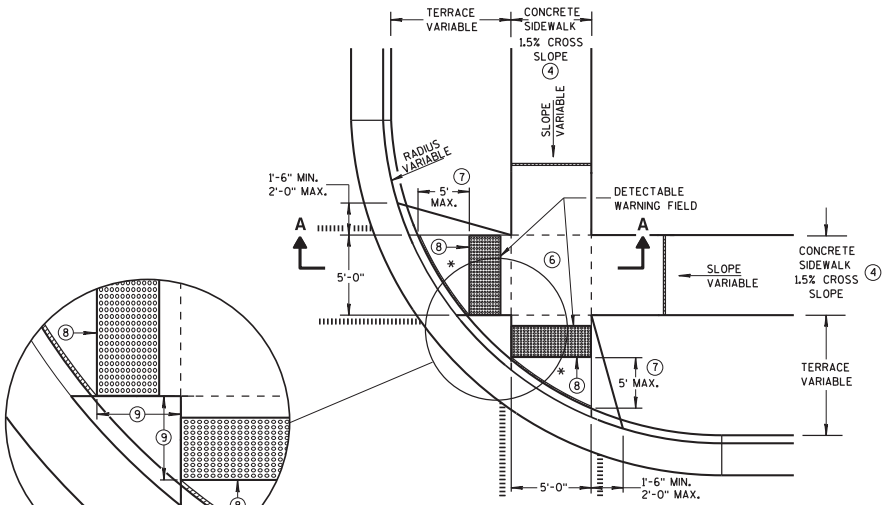
Addendum No. 01
ID 6999-03-82
Added Sheet 11A
May 3, 2016

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 5-16a

S.D.D. 8 D 5-16a

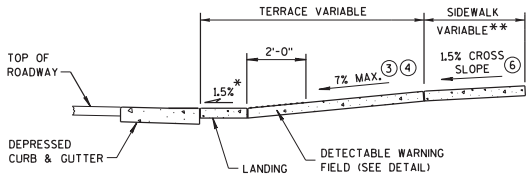


PLAN VIEW

TYPE 2 RAMP

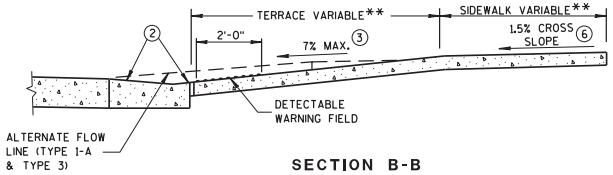
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

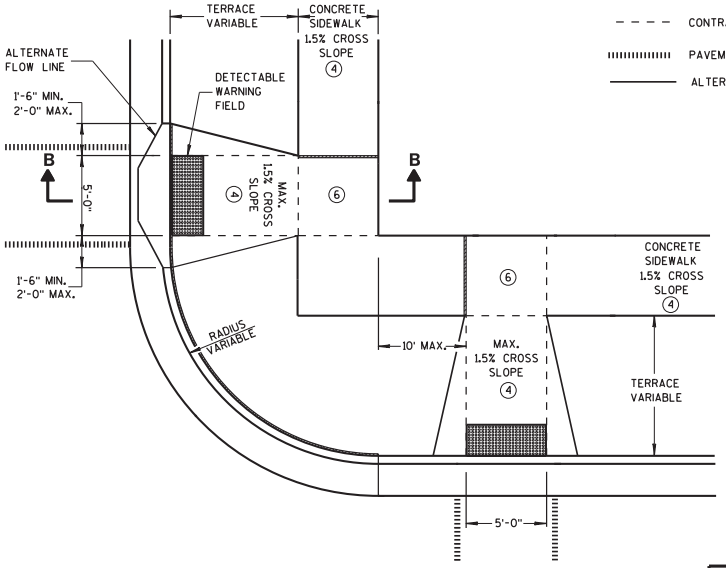
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. 2" MINIMUM CURB HEIGHT.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

Addendum No. 01
ID 6999-03-82
Added Sheet 12A
May 3, 2016

CURB RAMPS
TYPES 2 AND 3

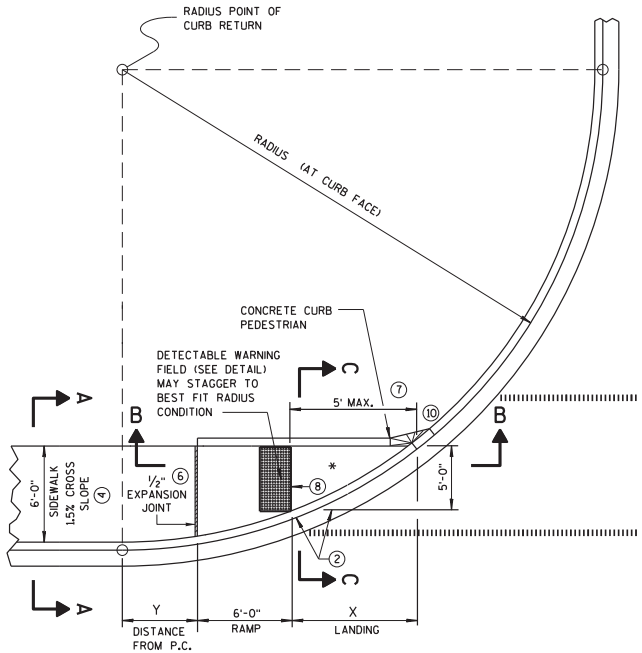
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

6

S.D.D. 8 D 5-16b

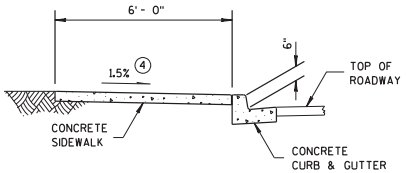
S.D.D. 8 D 5-16b



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

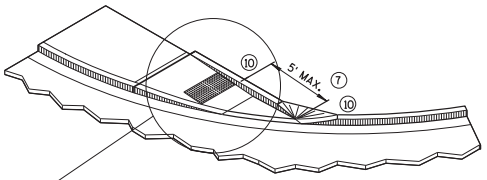
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

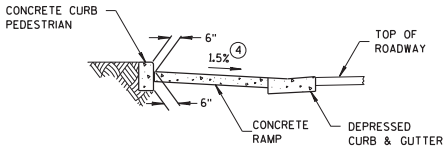
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

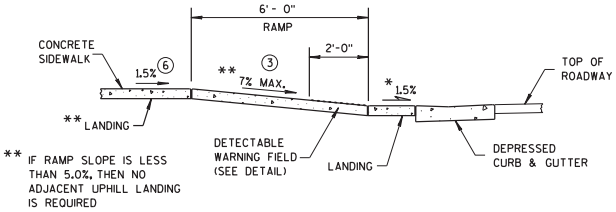


ISOMETRIC VIEW FOR TYPE 4A



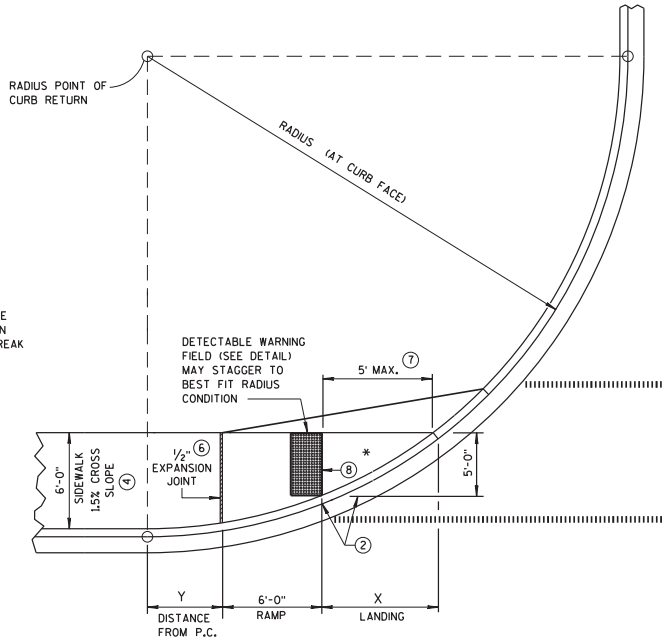
SECTION C-C FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

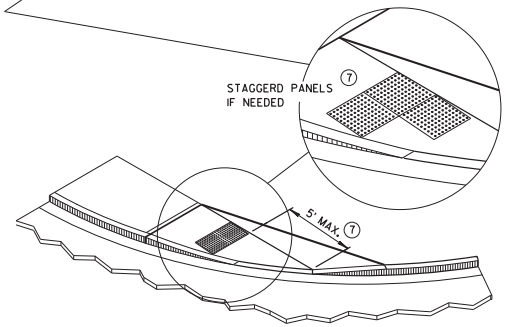


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

Addendum No. 01
ID 6999-03-82
Added Sheet 13A
May 3, 2016

CURB RAMPS
TYPES 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

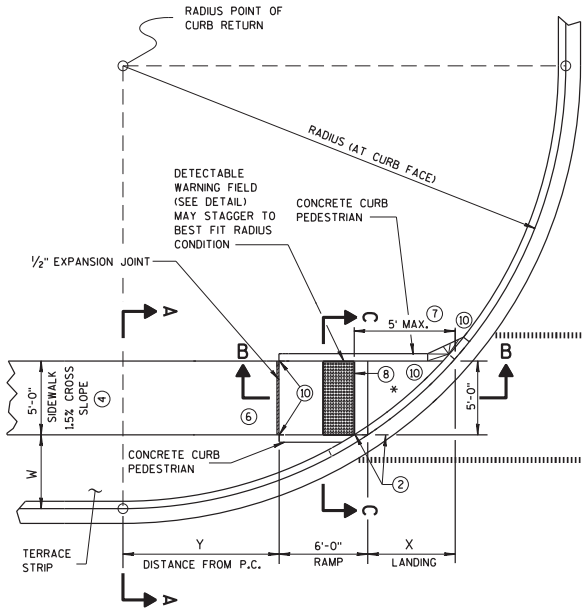
13A

6

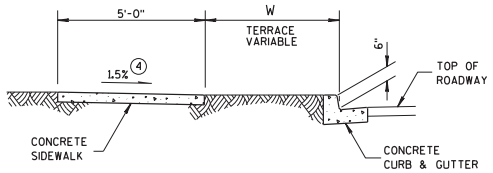
6

S.D.D. 8 D 5-16c

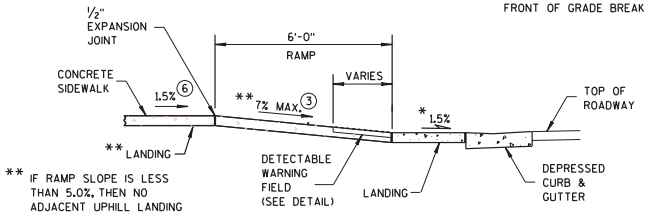
S.D.D. 8 D 5-16c



CURB RAMP TYPE 4B
PLAN VIEW



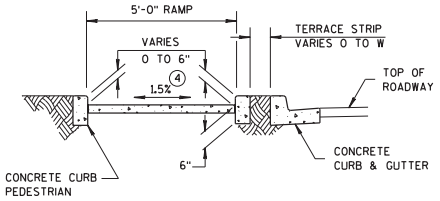
SECTION A-A FOR TYPE 4B



SECTION B-B FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-1¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

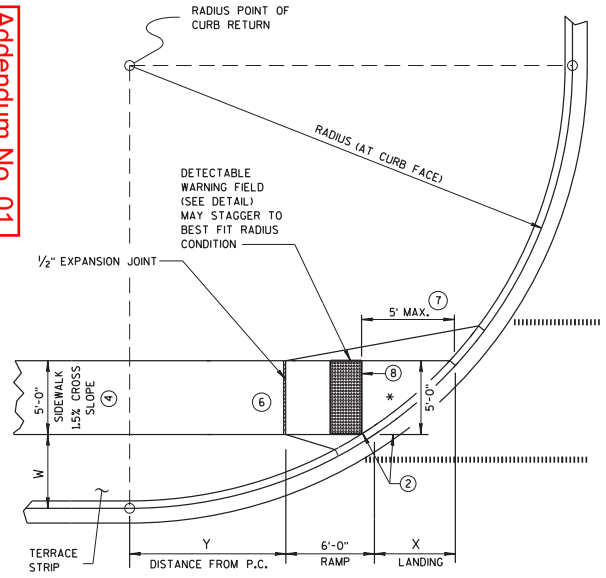
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

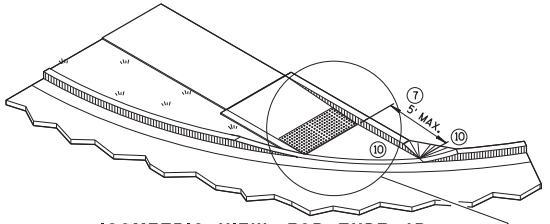
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

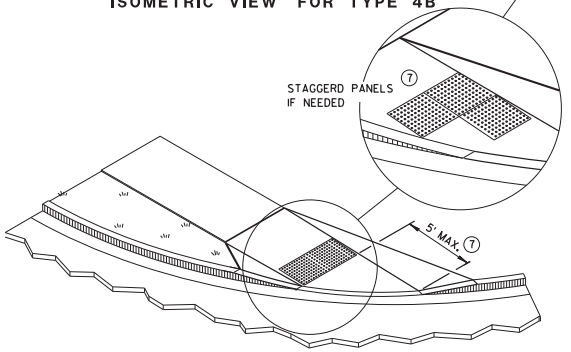
Addendum No. 01
ID 6999-03-82
Added Sheet 14A
May 3, 2016



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B

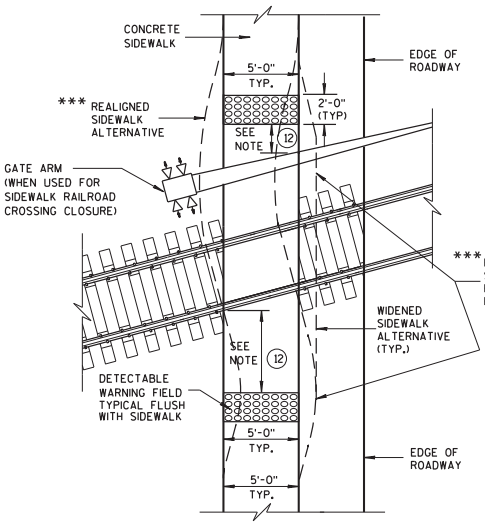


ISOMETRIC VIEW FOR TYPE 4B1

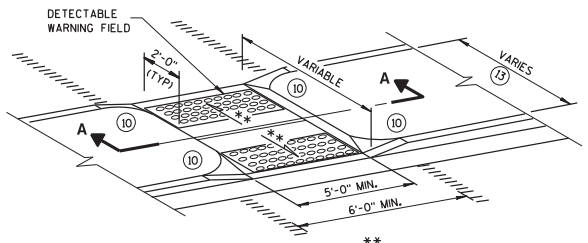
CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 5-16d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

*** DETAILS TO BE DETERMINED BY DESIGNER

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

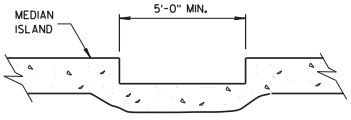
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

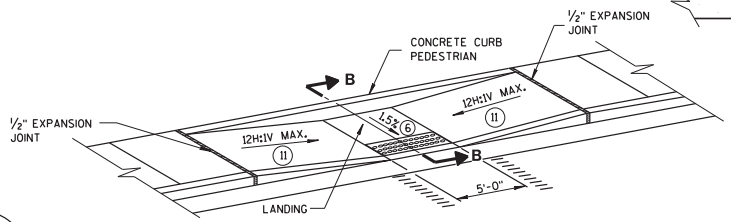
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



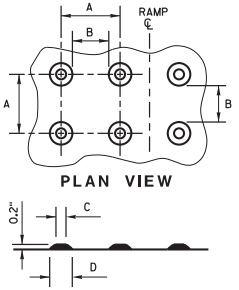
SECTION A-A



MID-BLOCK CROSSING
TYPE 7A

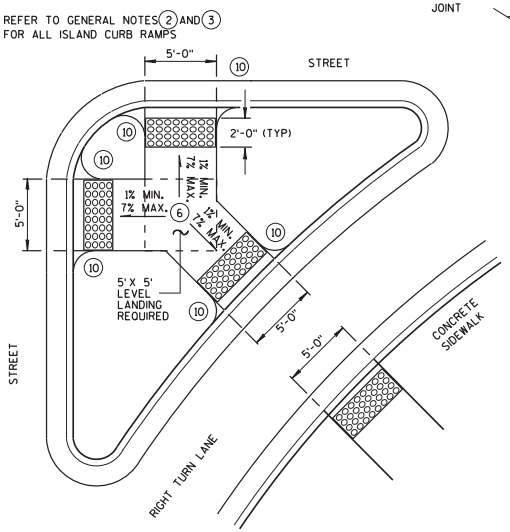
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

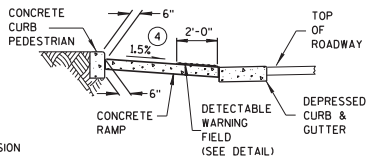


ELEVATION VIEW

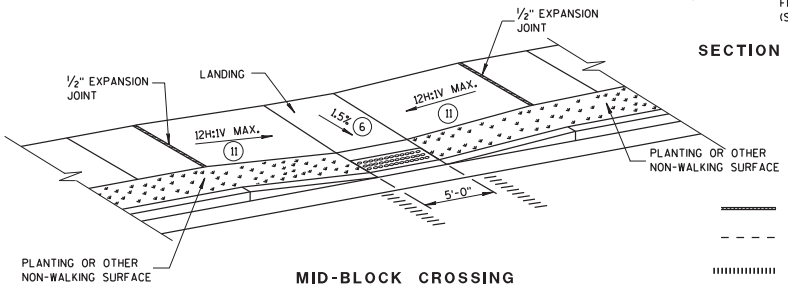
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



TYPE 6
DETECTABLE WARNING AT ISLANDS

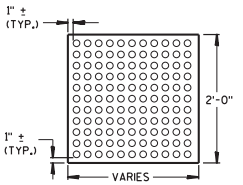


SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

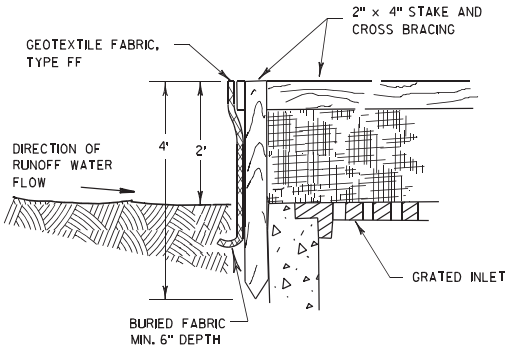
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

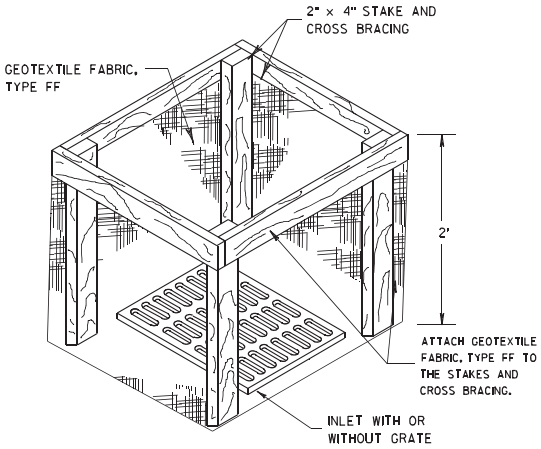
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

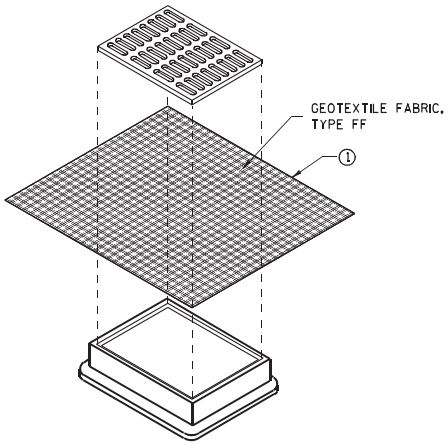
Addendum No. 01
ID 6999-03-82
Added Sheet 15A
May 3, 2016

6
S.D.D. 8 D 5-16e



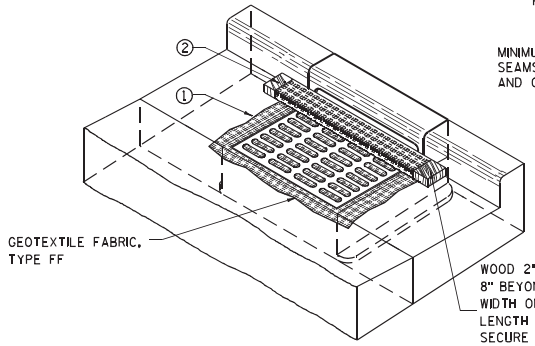


INLET PROTECTION, TYPE A

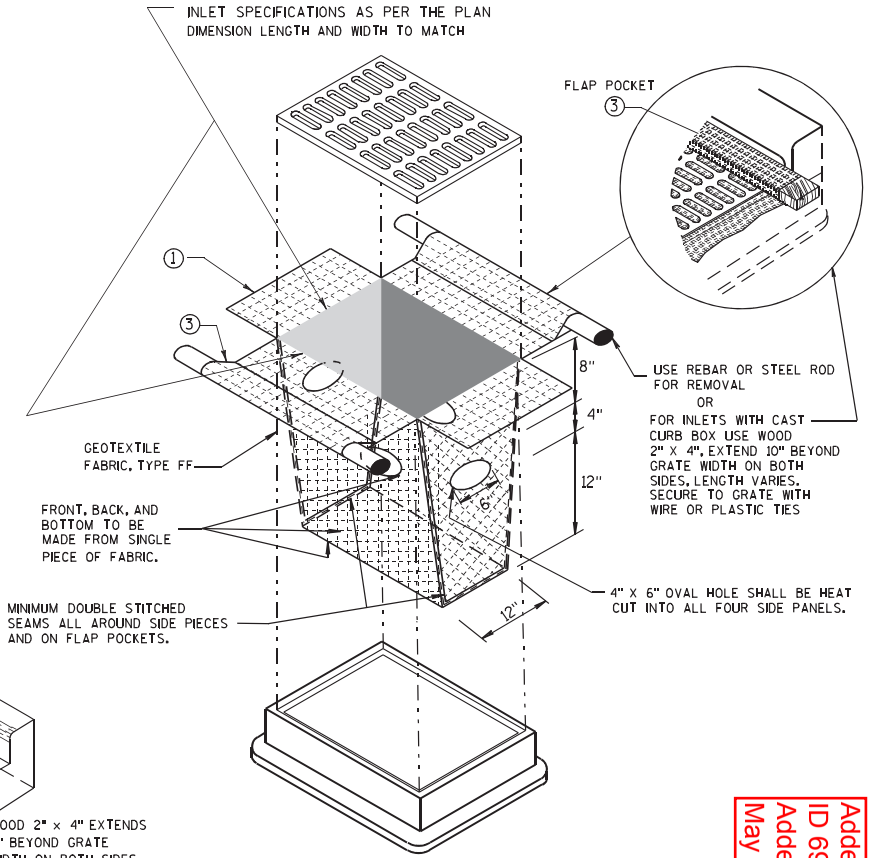


INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

(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.

Addendum No. 01
ID 6999-03-82
Added Sheet 16A
May 3, 2016

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

6
S.D.D. 8 E 10-2

METAL APRON ENDWALLS

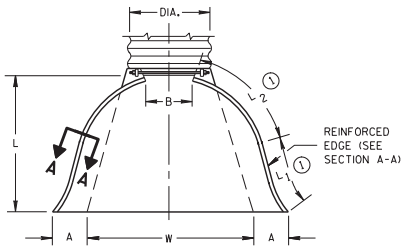
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

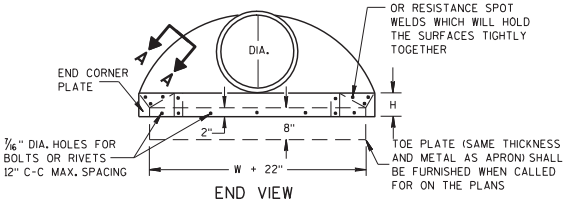
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 1/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

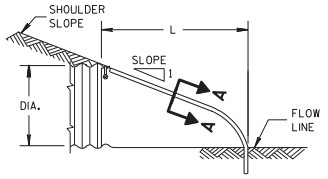
* MINIMUM
** MAXIMUM



PLAN VIEW

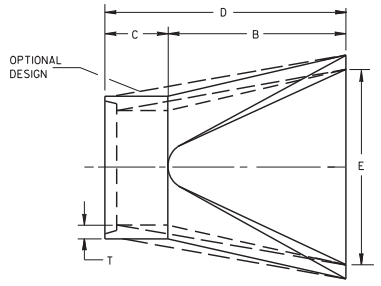


END VIEW

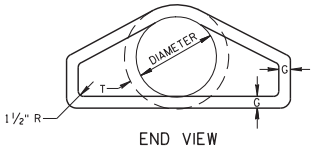


SIDE ELEVATION

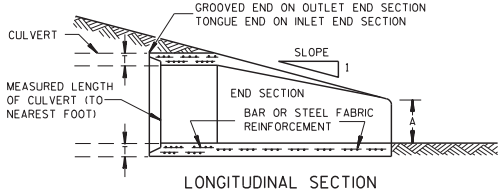
METAL ENDWALLS



PLAN

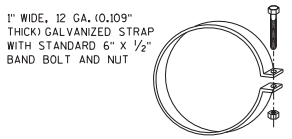


END VIEW



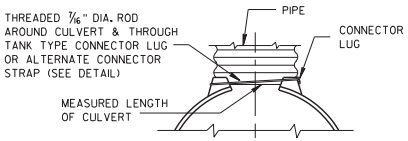
LONGITUDINAL SECTION

CONCRETE ENDWALLS

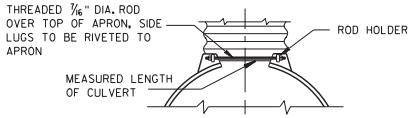


ALTERNATE FOR TYPE 1 CONNECTION

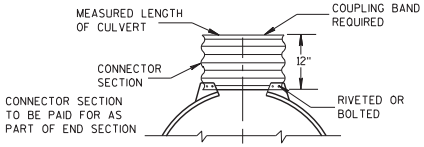
END SECTION CONNECTOR STRAP



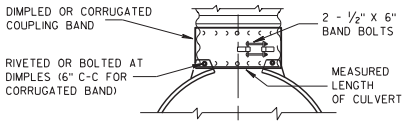
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

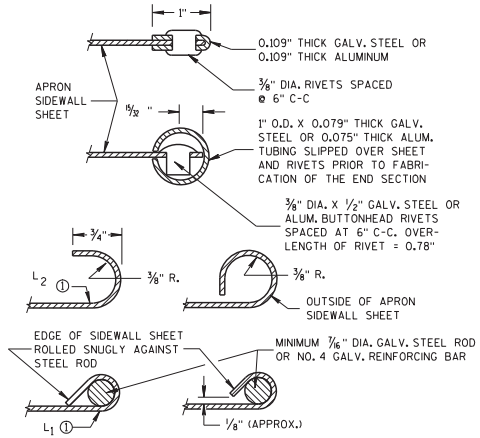
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

Addendum No. 01
ID 6999-03-82
Added Sheet 17A
May 3, 2016

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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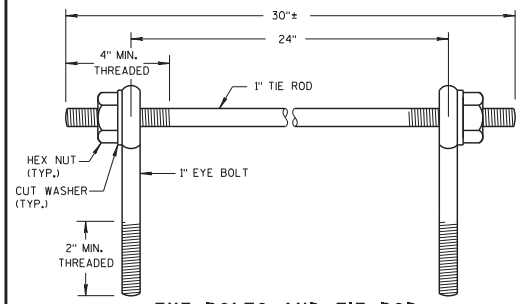
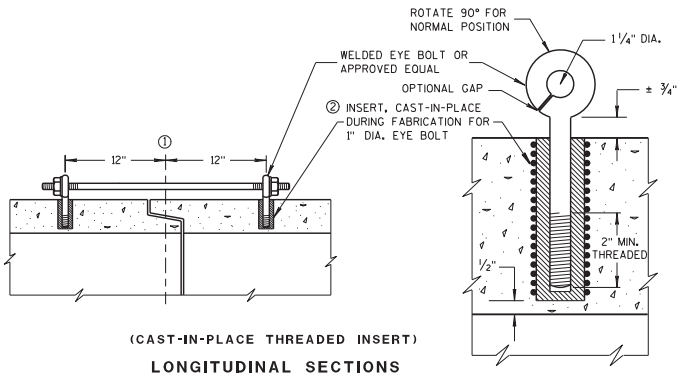
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

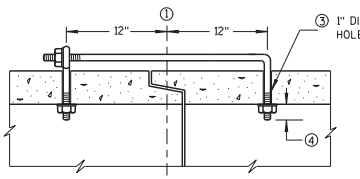
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

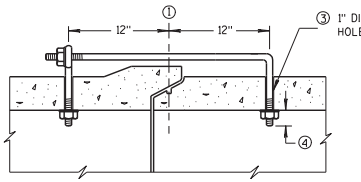
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

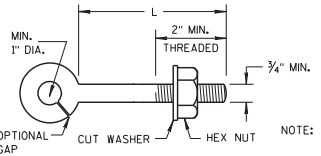


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

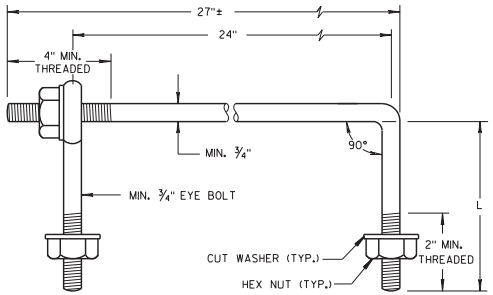
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

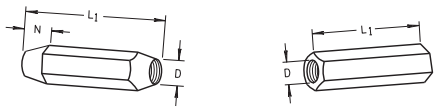
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

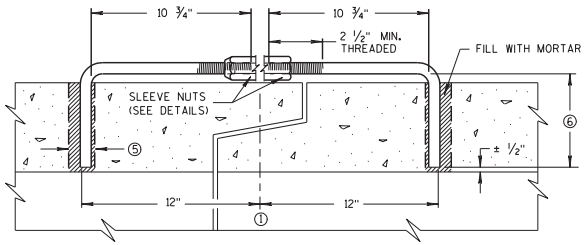
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

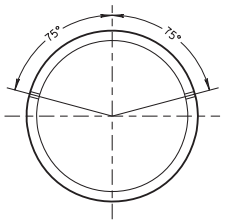
SLEEVE NUTS



LONGITUDINAL SECTION

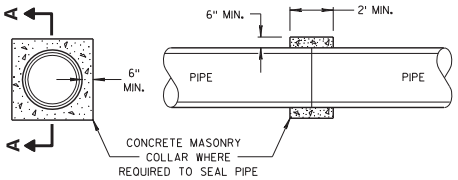
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

Addendum No. 01
ID 6999-03-82
Added Sheet 18A
May 3, 2016

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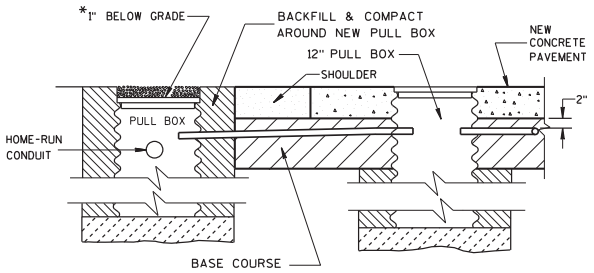


SECTION A-A
NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

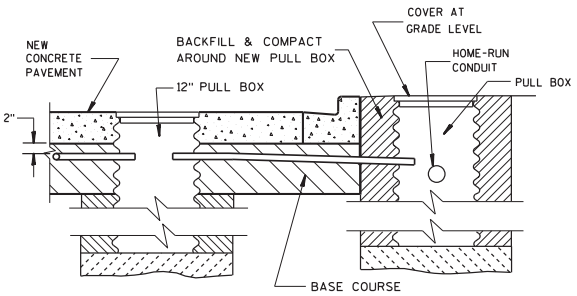
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

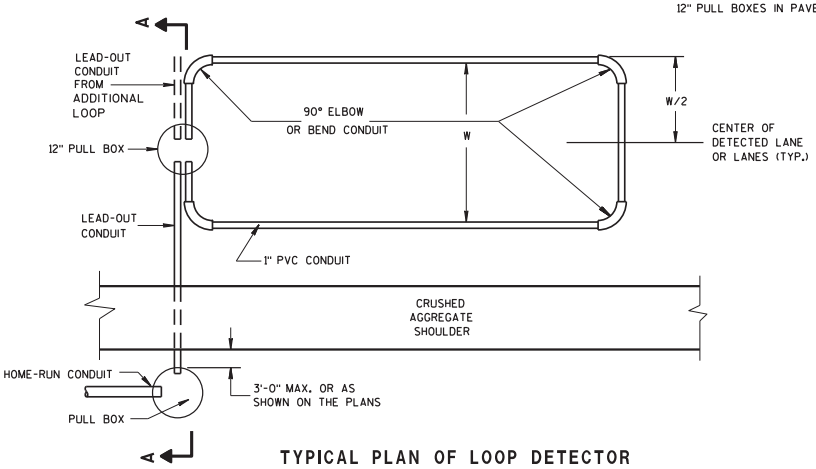
PROTECTION OF THE CONDUIT, CONDULET AND PULL BOX SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE NEW CONCRETE PAVEMENT IS PLACED.

12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.

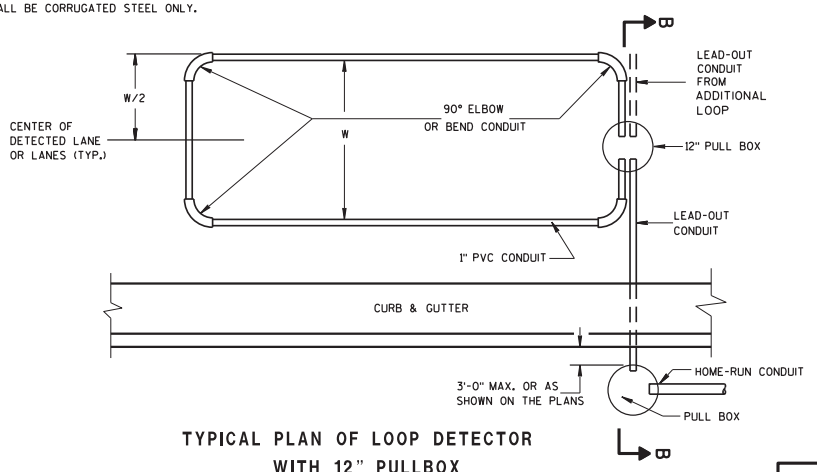


SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS



TYPICAL PLAN OF LOOP DETECTOR
WITH 12" PULLBOX



TYPICAL PLAN OF LOOP DETECTOR
WITH 12" PULLBOX

Addendum No. 01
ID 6999-03-82
Added Sheet 19A
May 3, 2016

LOOP DETECTOR PLACED
IN CRUSHED AGGREGATE BASE
(NEW CONCRETE PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER
FHWA

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S.D.D. 9 F 9-4

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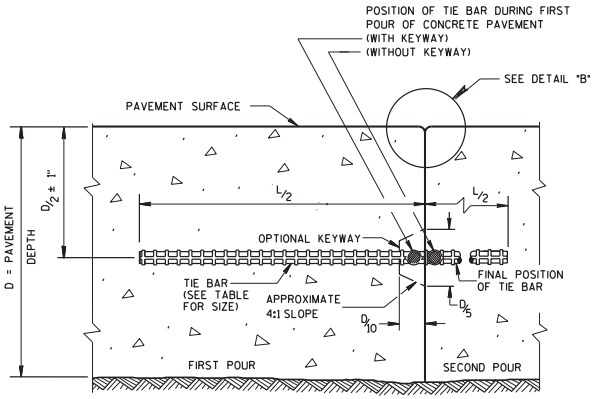
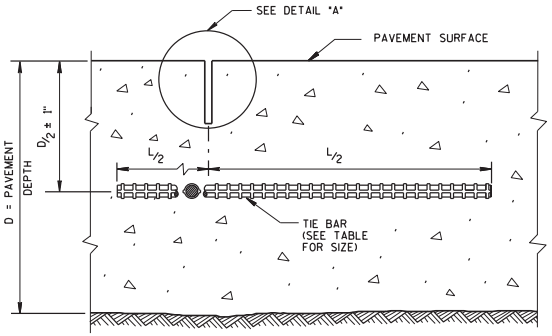
S.D.D. 9 F 9-4



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

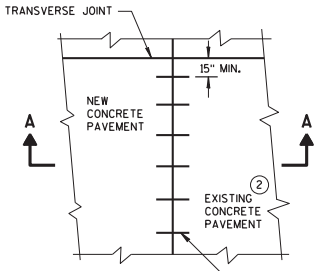
DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

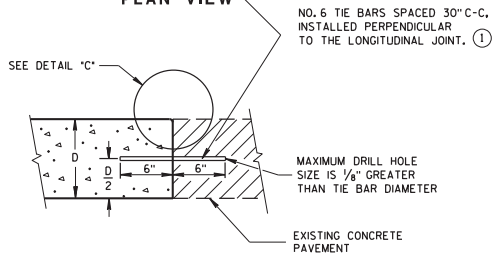
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

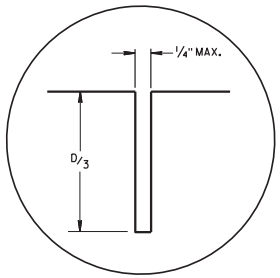
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



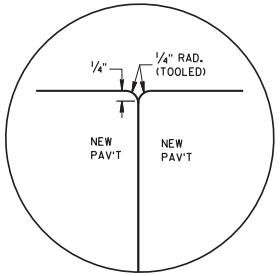
PLAN VIEW



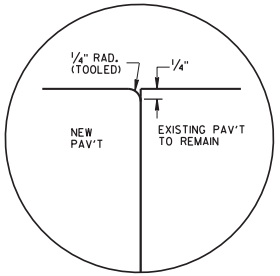
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



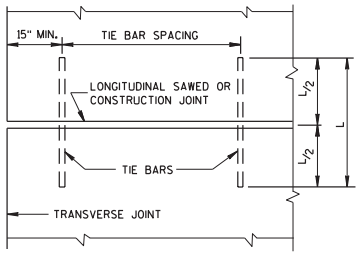
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

Addendum No. 01
ID 6999-03-82
Added Sheet 20A
May 3, 2016

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June. 2015
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISOR

FHWA

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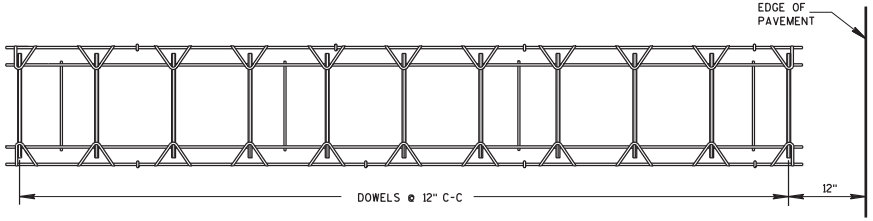
S.D.D. 13 C 1-18



PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6",6 ½"	NONE	12'
7",7 ½"	1"	14'
8",8 ½"	1 ¼"	15'
9",9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

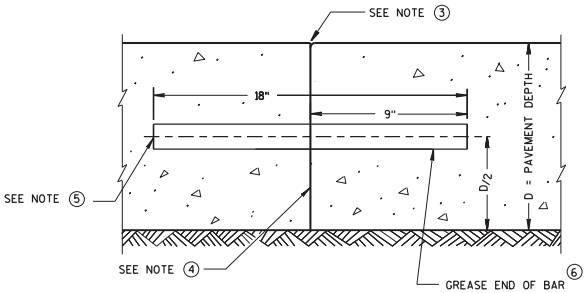
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

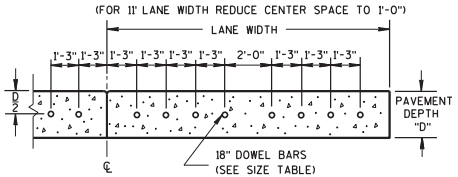
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

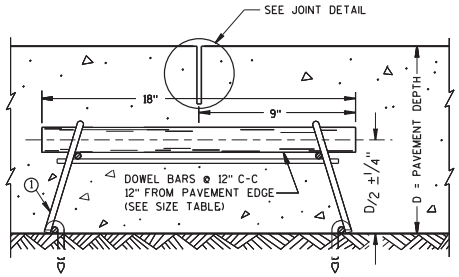
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



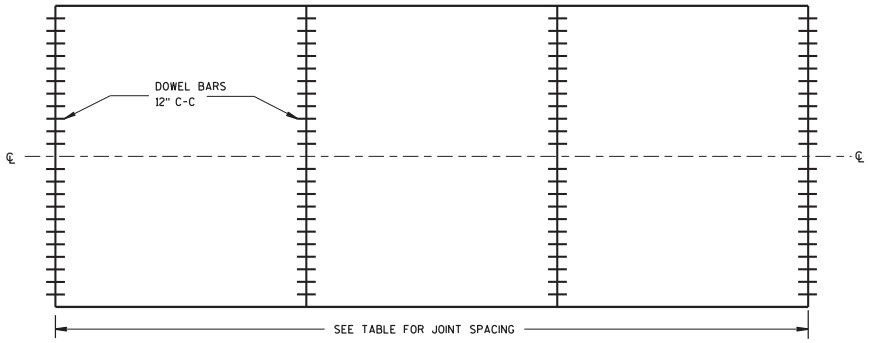
TRANSVERSE CONSTRUCTION JOINT



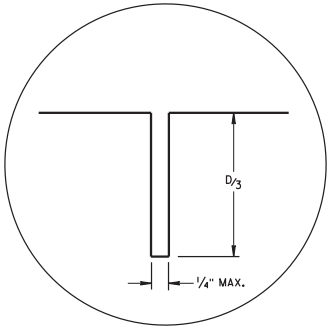
DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



DOWELED CONTRACTION JOINT



CONTRACTION JOINT LOCATIONS



JOINT DETAIL

Addendum No. 01
ID 6999-03-82
Added Sheet 21A
May 3, 2016

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER
FHWA

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S.D.D. 13 C 13-8

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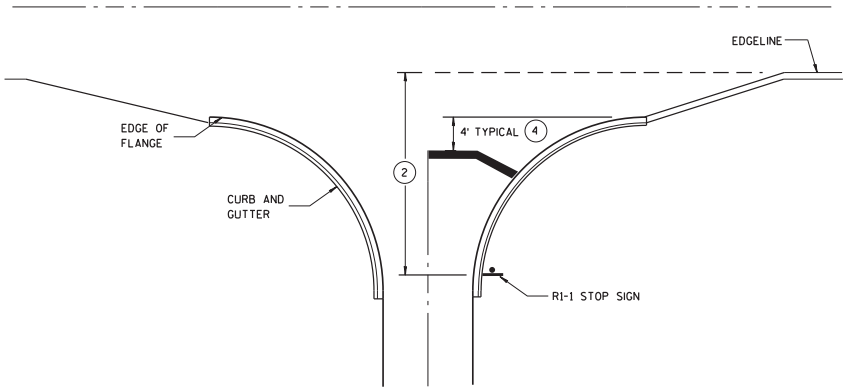
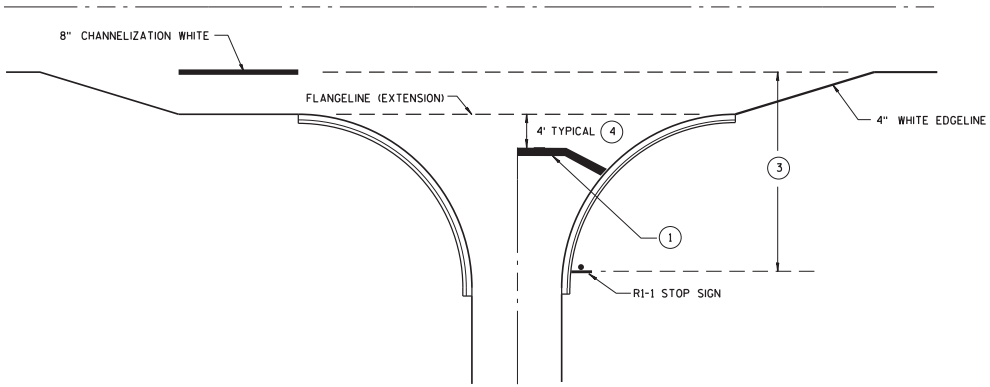
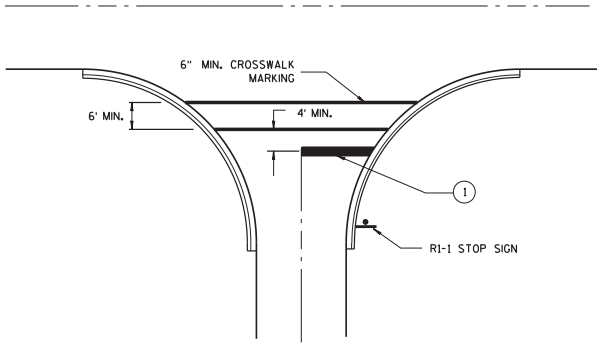
S.D.D. 13 C 13-8



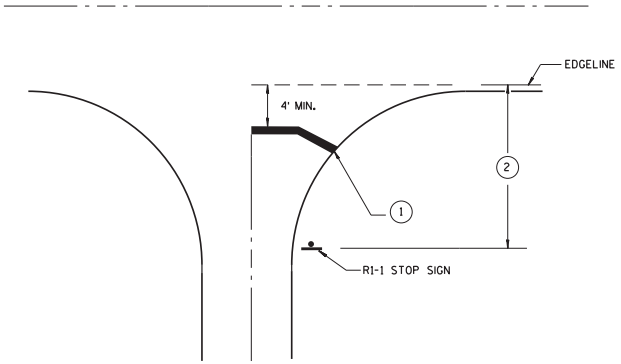
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

Addendum No. 01
ID 6999-03-82
Added Sheet 22A
May 3, 2016

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

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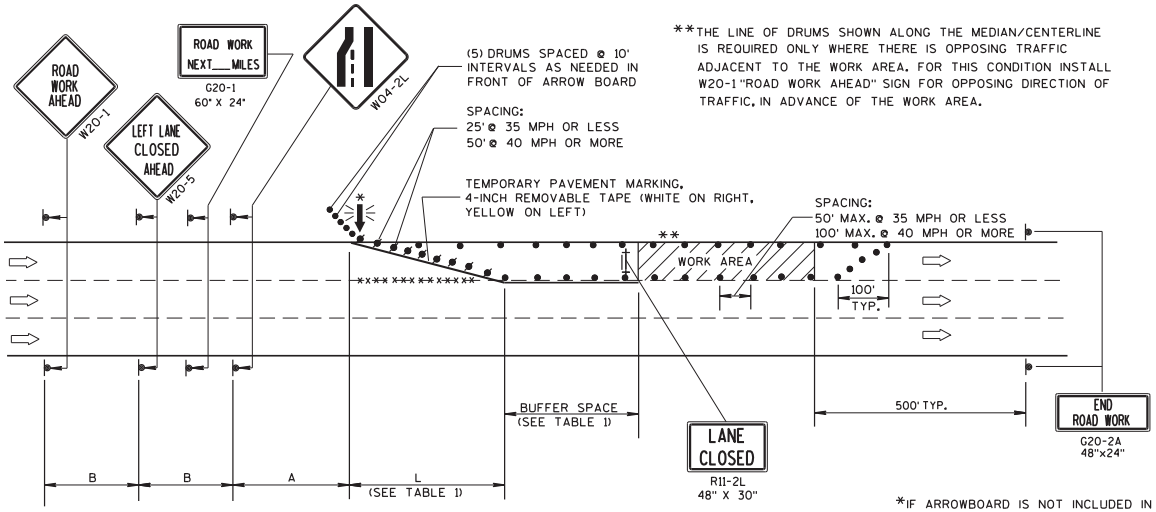
S.D.D. 15 C 33-1

S.D.D. 15 C 33-1



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER
$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS
L = TAPER LENGTH IN FEET
S = NON-CONSTRUCTION SPEED LIMIT (MPH)
W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"x48" 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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

Addendum No. 01
ID 6999-03-82
Added Sheet 23A
May 3, 2016

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER OF DESIGN
FHWA

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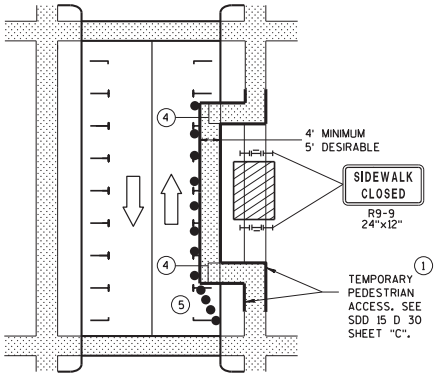
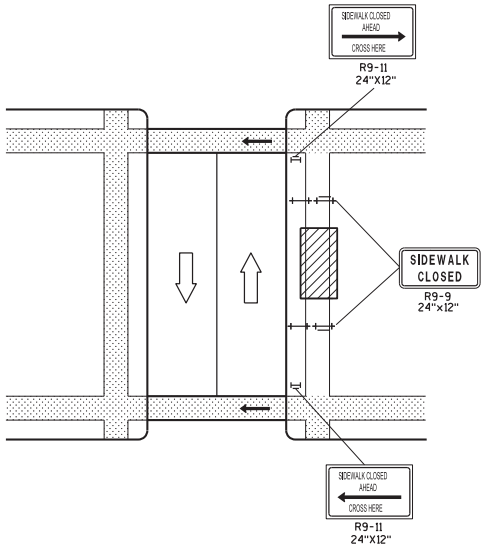
S.D.D. 15 D 20-3

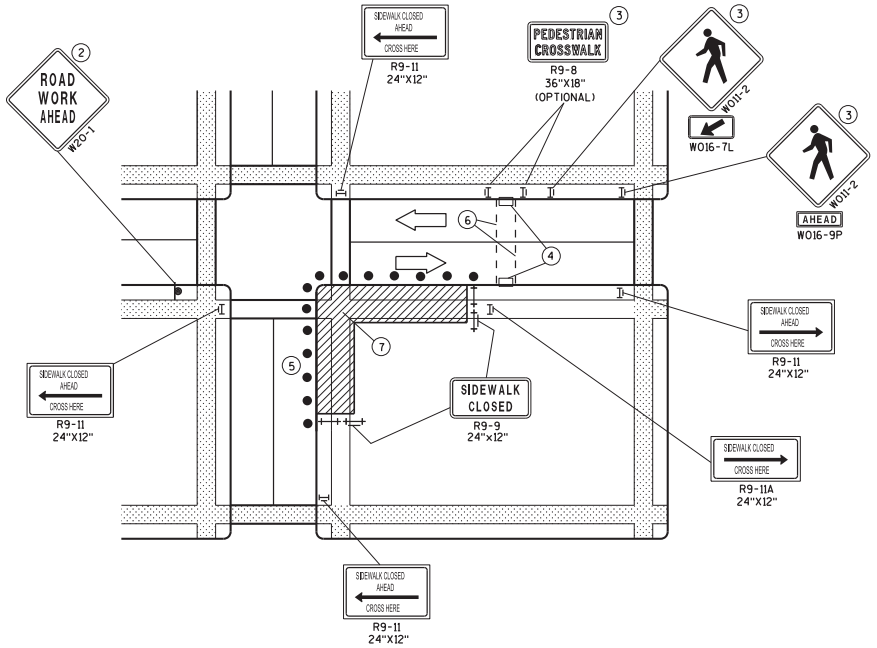
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.



MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

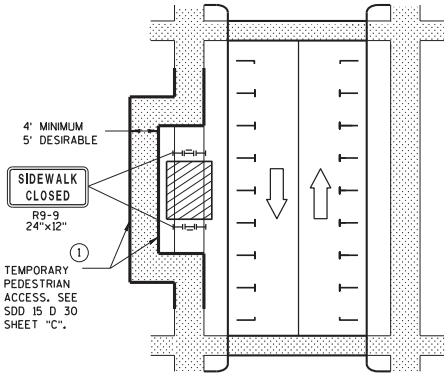


MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

Addendum No. 01
ID 6999-03-82
Added Sheet 24A
May 3, 2016

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 D 30-2a

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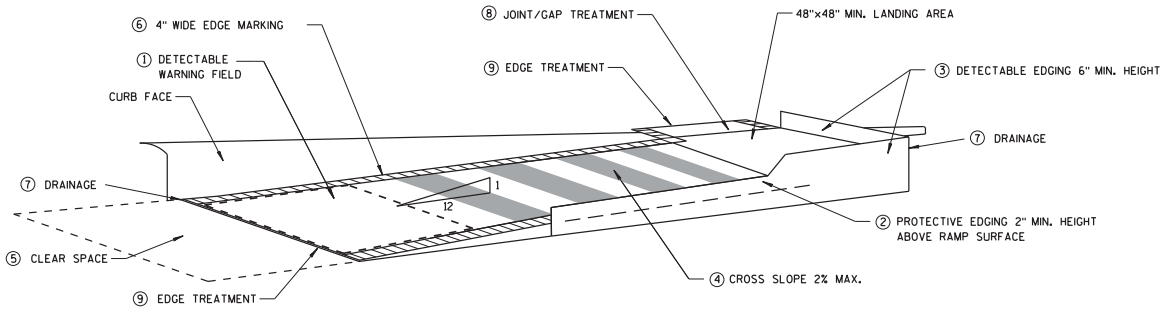
S.D.D. 15 D 30-2a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

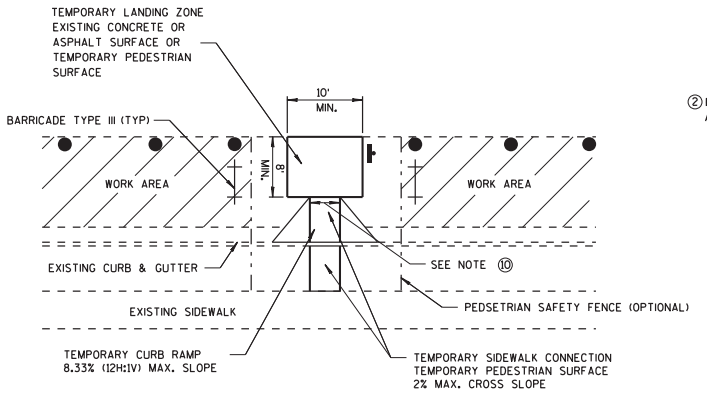
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

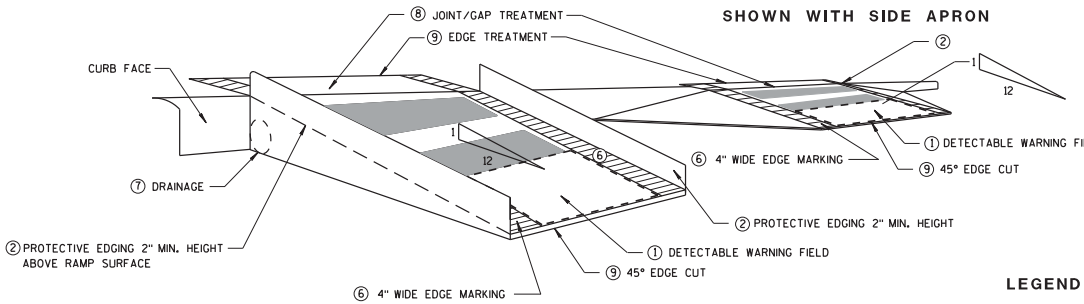
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

- WORK AREA
- TYPE III BARRICADE
- TRAFFIC CONTOL DRUM

Addendum No. 01
ID 6999-03-82
Added Sheet 25A
May 3, 2016

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER OF DESIGN
FHWA

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S.D.D. 15 D 30-2b

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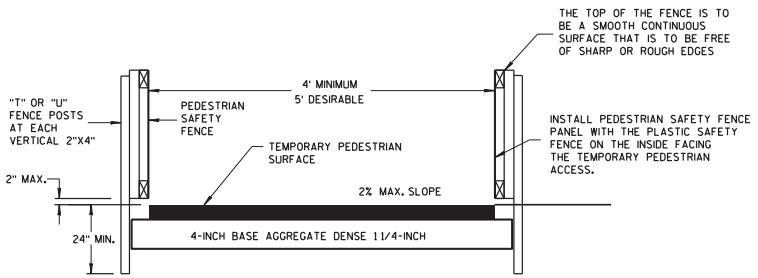
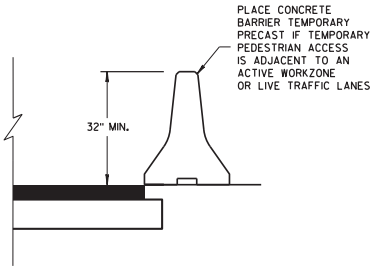
S.D.D. 15 D 30-2b



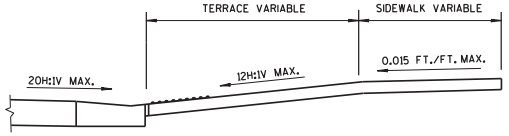


TEMPORARY PEDESTRIAN ACCESS

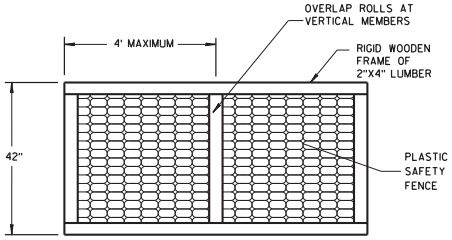
Addendum No. 01
ID 6999-03-82
Added Sheet 26A
May 3, 2016

GENERAL NOTES

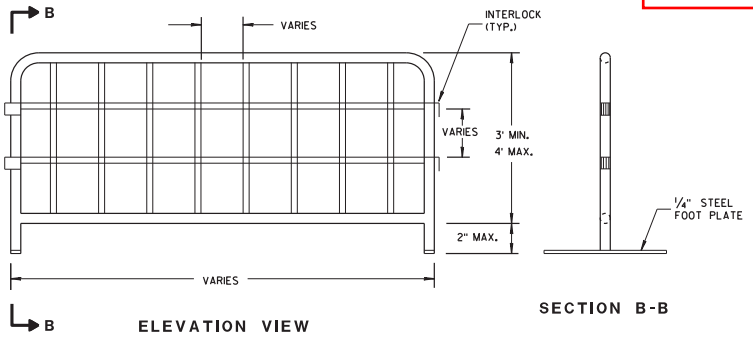
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



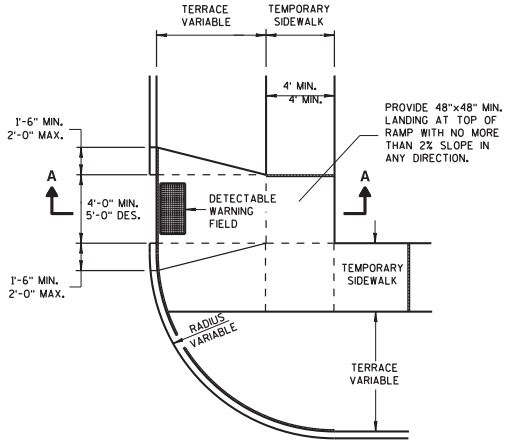
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

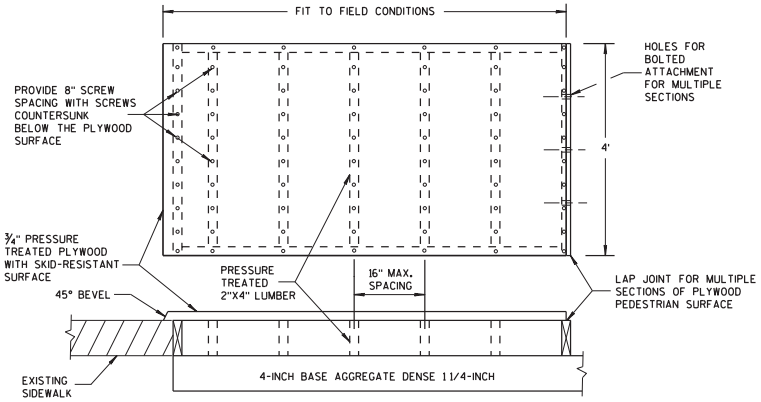
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



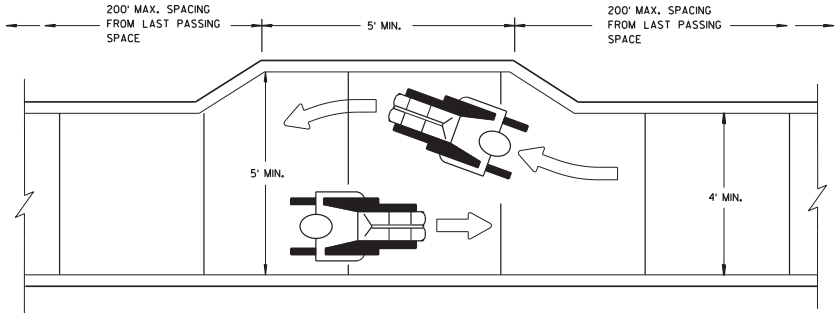
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER OF DESIGN
FHWA

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S.D.D. 15 D 30-2c

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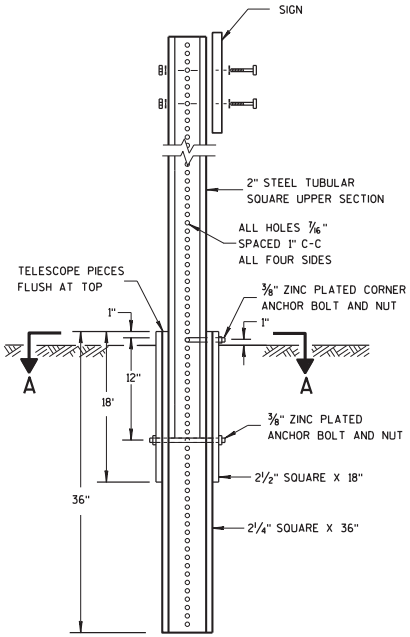
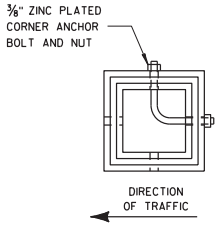
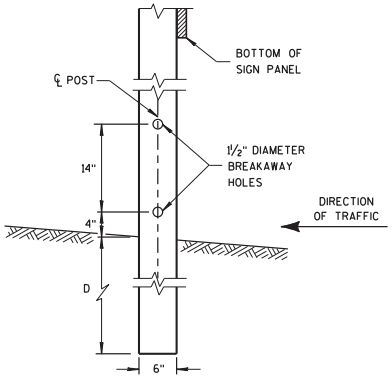
S.D.D. 15 D 30-2c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



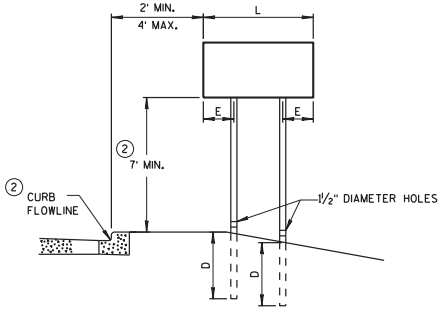
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

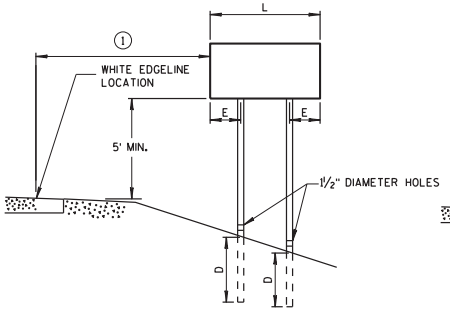
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

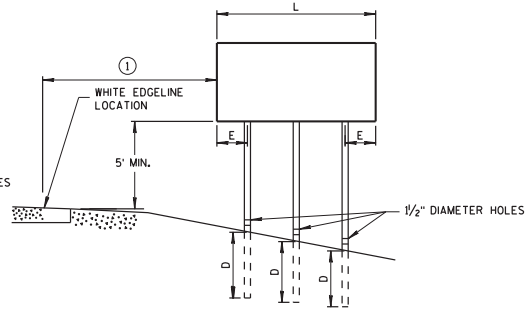
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

Addendum No. 01
ID 6999-03-82
Added Sheet 27A
May 3, 2016

TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

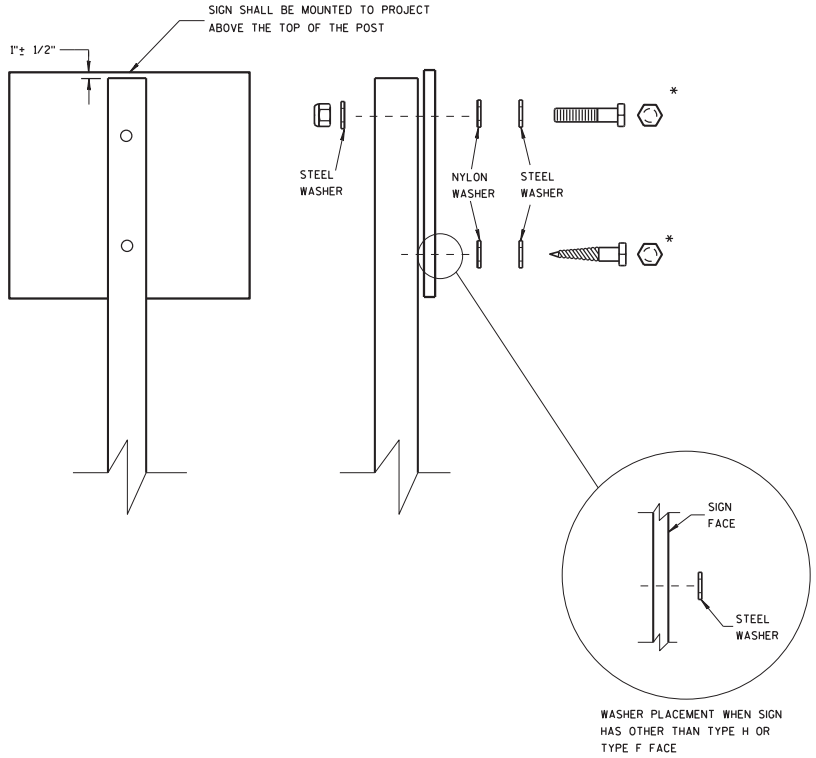
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 D 38-1a

6

S.D.D. 15 D 38-1a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

Addendum No. 01
ID 6999-03-82
Added Sheet 28A
May 3, 2016

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

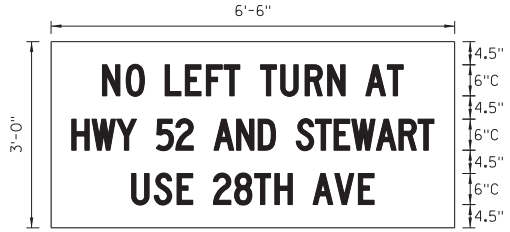
APPROVED
Feb. 2015
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN

FHWA

6

S.D.D. 15 D 38-1b



Addendum No. 01
ID 6999-03-82
Added Sheet 29A
May 3, 2016

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIRMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. ALL SIGNS SHALL BE MOUNTED ON 4" X 6" WOOD POST SUPPORTS.
3. SIGNS ON THIS SHEET TO BE PAID UNDER THE BID ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".
4. SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE REFLECTIVE BACKGROUND.
5. ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS AND SHALL BE SERIES "C".
6. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
7. DO NOT SCALE.

PROJECT NO: 6999-03-82	HWY: STEWART AVENUE	COUNTY: MARATHON	SIGNING DETAIL - FIXED MESSAGE SIGNS	SHEET	E

FILE NAME : L:±Jobs2001±20015020±Mil±D4_11661000EC±Design±1073±Storm Sewer Revision Plans±00±070101_sd.dgn PLOT DATE : 4/27/2016 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 47

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 Contract Items					
0010	204.0100 Removing Pavement	13,442.000 SY		.		.
0020	204.0105 Removing Pavement Butt Joints	3,243.000 SY		.		.
0030	204.0109.S Removing Concrete Surface Partial Depth	9,050.000 SF		.		.
0040	204.0150 Removing Curb & Gutter	136.000 LF		.		.
0050	204.0155 Removing Concrete Sidewalk	1,835.000 SY		.		.
0060	204.0195 Removing Concrete Bases	30.000 EACH		.		.
0070	204.0210 Removing Manholes	1.000 EACH		.		.
0080	204.0220 Removing Inlets	26.000 EACH		.		.
0090	204.0245 Removing Storm Sewer (size) 01. 12-Inch	284.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0100	204.0245 Removing Storm Sewer (size) 02. 18-Inch	192.000 LF		.		.
0110	204.0245 Removing Storm Sewer (size) 03. 24-Inch	106.000 LF		.		.
0120	204.0245 Removing Storm Sewer (size) 04. 30-Inch	122.000 LF		.		.
0130	204.0245 Removing Storm Sewer (size) 05. 36-Inch	237.000 LF		.		.
0140	204.0291.S Abandoning Sewer	5.000 CY		.		.
0150	205.0100 Excavation Common	4,282.000 CY		.		.
0160	211.0100 Prepare Foundation for Asphaltic Paving (project) 01. 6999-03-79	LUMP	LUMP			.
0170	213.0100 Finishing Roadway (project) 01. 6999-03-79	1.000 EACH		.		.
0180	213.0100 Finishing Roadway (project) 02. 6999-03-80	1.000 EACH		.		.
0190	213.0100 Finishing Roadway (project) 03. 6999-03-81	1.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0200	305.0110 Base Aggregate Dense 3/4-Inch	41.000 TON		.		.
0210	305.0120 Base Aggregate Dense 1 1/4-Inch	2,599.000 TON		.		.
0220	320.0150 Concrete Base 8 1/2-Inch	318.000 SY		.		.
0230	320.0350 Concrete Base HES 8 1/2-Inch	183.000 SY		.		.
0240	415.0080 Concrete Pavement 8-Inch	108.000 SY		.		.
0250	415.0085 Concrete Pavement 8 1/2-Inch	7,891.000 SY		.		.
0260	415.0410 Concrete Pavement Approach Slab	528.000 SY		.		.
0270	415.1085 Concrete Pavement HES 8 1/2-Inch	1,039.000 SY		.		.
0280	416.0160 Concrete Driveway 6-Inch	178.000 SY		.		.
0290	416.0610 Drilled Tie Bars	1,789.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0300	416.0620 Drilled Dowel Bars	717.000 EACH		.		.
0310	440.4410 Incentive IRI Ride	8,933.000 DOL	1.00000		8933.00	
0320	455.0605 Tack Coat	2,055.200 GAL		.		.
0330	460.2000 Incentive Density HMA Pavement	2,990.000 DOL	1.00000		2990.00	
0340	460.4000 HMA Cold Weather Paving	2,134.000 TON		.		.
0350	460.6424 HMA Pavement 4 MT 58-28 H	4,660.000 TON		.		.
0360	465.0105 Asphaltic Surface	23.000 TON		.		.
0370	465.0125 Asphaltic Surface Temporary	20.000 TON		.		.
0380	520.8000 Concrete Collars for Pipe	27.000 EACH		.		.
0390	601.0405 Concrete Curb & Gutter 18-Inch Type A	957.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0400	601.0409 Concrete Curb & Gutter 30-Inch Type A	3,567.000 LF		.		.
0410	601.0411 Concrete Curb & Gutter 30-Inch Type D	135.000 LF		.		.
0420	602.0410 Concrete Sidewalk 5-Inch	16,676.000 SF		.		.
0430	602.0515 Curb Ramp Detectable Warning Field Natural Patina	484.000 SF		.		.
0440	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	328.000 LF		.		.
0450	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	137.000 LF		.		.
0460	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	106.000 LF		.		.
0470	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	150.000 LF		.		.
0480	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	34.000 LF		.		.
0490	611.0420 Reconstructing Manholes	8.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0500	611.0430 Reconstructing Inlets	1.000 EACH		.		.
0510	611.0530 Manhole Covers Type J	11.000 EACH		.		.
0520	611.0600 Inlet Covers Type A	1.000 EACH		.		.
0530	611.0624 Inlet Covers Type H	6.000 EACH		.		.
0540	611.0639 Inlet Covers Type H-S	10.000 EACH		.		.
0550	611.0666 Inlet Covers Type Z	19.000 EACH		.		.
0560	611.1003 Catch Basins 3-FT Diameter	17.000 EACH		.		.
0570	611.1004 Catch Basins 4-FT Diameter	3.000 EACH		.		.
0580	611.1005 Catch Basins 5-FT Diameter	2.000 EACH		.		.
0590	611.1230 Catch Basins 2x3-FT	11.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0600	611.2003 Manholes 3-FT Diameter	1.000 EACH		.		.
0610	611.2004 Manholes 4-FT Diameter	2.000 EACH		.		.
0620	611.2005 Manholes 5-FT Diameter	4.000 EACH		.		.
0630	611.2007 Manholes 7-FT Diameter	1.000 EACH		.		.
0640	611.8110 Adjusting Manhole Covers	29.000 EACH		.		.
0650	611.8115 Adjusting Inlet Covers	10.000 EACH		.		.
0660	611.9710 Salvaged Inlet Covers	3.000 EACH		.		.
0670	619.1000 Mobilization	1.000 EACH		.		.
0680	620.0300 Concrete Median Sloped Nose	99.000 SF		.		.
0690	624.0100 Water	40.000 MGAL		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0700	625.0100 Topsoil	2,702.000 SY		.		.
0710	628.1504 Silt Fence	2,348.000 LF		.		.
0720	628.1520 Silt Fence Maintenance	4,691.000 LF		.		.
0730	628.1905 Mobilizations Erosion Control	9.000 EACH		.		.
0740	628.1910 Mobilizations Emergency Erosion Control	5.000 EACH		.		.
0750	628.2008 Erosion Mat Urban Class I Type B	2,702.000 SY		.		.
0760	628.7005 Inlet Protection Type A	65.000 EACH		.		.
0770	628.7015 Inlet Protection Type C	128.000 EACH		.		.
0780	630.0140 Seeding Mixture No. 40	49.190 LB		.		.
0790	630.0200 Seeding Temporary	66.800 LB		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0800	631.0300 Sod Water	65.900 MGAL		.		.
0810	634.0805 Posts Tubular Steel 2x2-Inch X 5-FT	1.000 EACH		.		.
0820	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	64.000 EACH		.		.
0830	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	27.000 EACH		.		.
0840	637.1220 Signs Type I Reflective SH	168.000 SF		.		.
0850	637.2210 Signs Type II Reflective H	616.130 SF		.		.
0860	637.2215 Signs Type II Reflective H Folding	111.900 SF		.		.
0870	637.2230 Signs Type II Reflective F	386.030 SF		.		.
0880	638.2102 Moving Signs Type II	2.000 EACH		.		.
0890	638.2602 Removing Signs Type II	97.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0900	638.3000 Removing Small Sign Supports	53.000 EACH		.		.
0910	642.5201 Field Office Type C	1.000 EACH		.		.
0920	643.0100 Traffic Control (project) 01. 6999-03-79	1.000 EACH		.		.
0930	643.0100 Traffic Control (project) 02. 6999-03-80	1.000 EACH		.		.
0940	643.0100 Traffic Control (project) 03. 6999-03-81	1.000 EACH		.		.
0950	643.0300 Traffic Control Drums	88,472.000 DAY		.		.
0960	643.0410 Traffic Control Barricades Type II	9,434.000 DAY		.		.
0970	643.0420 Traffic Control Barricades Type III	6,719.000 DAY		.		.
0980	643.0705 Traffic Control Warning Lights Type A	19,488.000 DAY		.		.
0990	643.0715 Traffic Control Warning Lights Type C	6,239.000 DAY		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1000	643.0800 Traffic Control Arrow Boards	2.000 DAY		.		.
1010	643.0900 Traffic Control Signs	17,451.000 DAY		.		.
1020	643.0920 Traffic Control Covering Signs Type II	16.000 EACH		.		.
1030	644.1420.S Temporary Pedestrian Surface Plywood	2,244.000 SF		.		.
1040	644.1601.S Temporary Curb Ramp	51.000 EACH		.		.
1050	646.0106 Pavement Marking Epoxy 4-Inch	12,168.000 LF		.		.
1060	646.0116 Pavement Marking Epoxy 6-Inch	3,982.000 LF		.		.
1070	646.0126 Pavement Marking Epoxy 8-Inch	2,860.000 LF		.		.
1080	646.0690.S Removing Pavement Markings Water Blasting	2,024.000 LF		.		.
1090	647.0110 Pavement Marking Railroad Crossings Epoxy	1.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1100	647.0156 Pavement Marking Arrows Epoxy Type 1	5.000 EACH		.		.
1110	647.0166 Pavement Marking Arrows Epoxy Type 2	12.000 EACH		.		.
1120	647.0176 Pavement Marking Arrows Epoxy Type 3	2.000 EACH		.		.
1130	647.0206 Pavement Marking Arrows Bike Lane Epoxy	26.000 EACH		.		.
1140	647.0306 Pavement Marking Symbols Bike Lane Epoxy	26.000 EACH		.		.
1150	647.0336 Pavement Marking Symbols Bike Shared Lane Epoxy	12.000 EACH		.		.
1160	647.0356 Pavement Marking Words Epoxy	13.000 EACH		.		.
1170	647.0406 Pavement Marking Words Bike Lane Epoxy	3.000 EACH		.		.
1180	647.0566 Pavement Marking Stop Line Epoxy 18-Inch	420.000 LF		.		.
1190	647.0656 Pavement Marking Parking Stall Epoxy	10.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1200	647.0716 Pavement Marking Diagonal Epoxy 8-Inch	1,042.000 LF		.		.
1210	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	2,489.000 LF		.		.
1220	647.0776 Pavement Marking Crosswalk Epoxy 12-Inch	1,057.000 LF		.		.
1230	647.0990.S Removing Special Pavement Markings Water Blasting	8.000 EACH		.		.
1240	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	7,854.000 LF		.		.
1250	649.0600 Temporary Pavement Marking Removable Tape 6-Inch	1,130.000 LF		.		.
1260	649.0801 Temporary Pavement Marking Removable Tape 8-Inch	376.000 LF		.		.
1270	649.1000 Temporary Pavement Marking Stop Line Removable Tape 12-Inch	20.000 LF		.		.
1280	649.1800 Temporary Pavement Marking Arrows Removable Tape	20.000 EACH		.		.
1290	650.4000 Construction Staking Storm Sewer	41.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1300	650.4500 Construction Staking Subgrade	3,428.000 LF		.		.
1310	650.5000 Construction Staking Base	58.000 LF		.		.
1320	650.5500 Construction Staking Curb Gutter and Curb & Gutter	135.000 LF		.		.
1330	650.7000 Construction Staking Concrete Pavement	2,325.000 LF		.		.
1340	650.8000 Construction Staking Resurfacing Reference	6,163.000 LF		.		.
1350	650.8500 Construction Staking Electrical Installations (project) 01. 6999-03-79	LUMP	LUMP			.
1360	650.8500 Construction Staking Electrical Installations (project) 02. 6999-03-80	LUMP	LUMP			.
1370	650.8500 Construction Staking Electrical Installations (project) 03. 6999-03-81	LUMP	LUMP			.
1380	650.9910 Construction Staking Supplemental Control (project) 01. 6999-03-79	LUMP	LUMP			.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1390	650.9910 Construction Staking Supplemental Control (project) 02. 6999-03-80	LUMP	LUMP			.
1400	650.9910 Construction Staking Supplemental Control (project) 03. 6999-03-81	LUMP	LUMP			.
1410	650.9920 Construction Staking Slope Stakes	3,428.000 LF		.		.
1420	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	1,734.000 LF		.		.
1430	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	290.000 LF		.		.
1440	652.0240 Conduit Rigid Nonmetallic Schedule 40 4-Inch	222.000 LF		.		.
1450	652.0605 Conduit Special 2-Inch	380.000 LF		.		.
1460	652.0615 Conduit Special 3-Inch	188.000 LF		.		.
1470	652.0625 Conduit Special 4-Inch	865.000 LF		.		.
1480	652.0700.S Install Conduit into Existing Item	4.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1490	652.0800 Conduit Loop Detector	1,474.000 LF		.		.
1500	652.0900 Loop Detector Slots	505.000 LF		.		.
1510	653.0105 Pull Boxes Steel 12x24-Inch	8.000 EACH		.		.
1520	653.0900 Adjusting Pull Boxes	6.000 EACH		.		.
1530	653.0905 Removing Pull Boxes	9.000 EACH		.		.
1540	654.0101 Concrete Bases Type 1	10.000 EACH		.		.
1550	654.0102 Concrete Bases Type 2	15.000 EACH		.		.
1560	654.0217 Concrete Control Cabinet Bases Type 9 Special	2.000 EACH		.		.
1570	655.0230 Cable Traffic Signal 5-14 AWG	1,424.000 LF		.		.
1580	655.0240 Cable Traffic Signal 7-14 AWG	75.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1590	655.0250 Cable Traffic Signal 9-14 AWG	5,160.000 LF		.		.
1600	655.0260 Cable Traffic Signal 12-14 AWG	1,361.000 LF		.		.
1610	655.0270 Cable Traffic Signal 15-14 AWG	528.000 LF		.		.
1620	655.0305 Cable Type UF 2-12 AWG Grounded	1,596.000 LF		.		.
1630	655.0515 Electrical Wire Traffic Signals 10 AWG	3,107.000 LF		.		.
1640	655.0610 Electrical Wire Lighting 12 AWG	1,476.000 LF		.		.
1650	655.0700 Loop Detector Lead In Cable	7,422.000 LF		.		.
1660	655.0800 Loop Detector Wire	4,508.000 LF		.		.
1670	655.0900 Traffic Signal EVP Detector Cable	358.000 LF		.		.
1680	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. STH 52 & 3rd Ave	LUMP	LUMP			.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1690	656.0200 Electrical Service Meter Breaker Pedestal (location) 02. STH 52 & 1st Ave	LUMP	LUMP			.
1700	657.0100 Pedestal Bases	11.000 EACH		.		.
1710	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	13.000 EACH		.		.
1720	657.0305 Poles Type 2	5.000 EACH		.		.
1730	657.0310 Poles Type 3	6.000 EACH		.		.
1740	657.0315 Poles Type 4	2.000 EACH		.		.
1750	657.0405 Traffic Signal Standards Aluminum 3.5-FT	1.000 EACH		.		.
1760	657.0420 Traffic Signal Standards Aluminum 13-FT	4.000 EACH		.		.
1770	657.0425 Traffic Signal Standards Aluminum 15-FT	3.000 EACH		.		.
1780	657.0430 Traffic Signal Standards Aluminum 10-FT	4.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1790	657.0585 Trombone Arms 15-FT	4.000 EACH		.		.
1800	657.0590 Trombone Arms 20-FT	3.000 EACH		.		.
1810	657.0595 Trombone Arms 25-FT	5.000 EACH		.		.
1820	657.0704 Luminaire Arms Truss Type 4-Inch Clamp 10-FT	11.000 EACH		.		.
1830	658.0110 Traffic Signal Face 3-12 Inch Vertical	18.000 EACH		.		.
1840	658.0115 Traffic Signal Face 4-12 Inch Vertical	7.000 EACH		.		.
1850	658.0120 Traffic Signal Face 5-12 Inch Vertical	1.000 EACH		.		.
1860	658.0155 Traffic Signal Face 3-12 Inch Horizontal	3.000 EACH		.		.
1870	658.0160 Traffic Signal Face 4-12 Inch Horizontal	1.000 EACH		.		.
1880	658.0165 Traffic Signal Face 5-12 Inch Horizontal	1.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1890	658.0215 Backplates Signal Face 3 Section 12-Inch	21.000 EACH		.		.
1900	658.0220 Backplates Signal Face 4 Section 12-Inch	7.000 EACH		.		.
1910	658.0225 Backplates Signal Face 5 Section 12-Inch	2.000 EACH		.		.
1920	658.0416 Pedestrian Signal Face 16-Inch	22.000 EACH		.		.
1930	658.0500 Pedestrian Push Buttons	19.000 EACH		.		.
1940	658.0600 Led Modules 12-Inch Red Ball	25.000 EACH		.		.
1950	658.0605 Led Modules 12-Inch Yellow Ball	25.000 EACH		.		.
1960	658.0610 Led Modules 12-Inch Green Ball	23.000 EACH		.		.
1970	658.0615 Led Modules 12-Inch Red Arrow	6.000 EACH		.		.
1980	658.0620 Led Modules 12-Inch Yellow Arrow	14.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1990	658.0625 Led Modules 12-Inch Green Arrow	12.000 EACH		.		.
2000	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	22.000 EACH		.		.
2010	658.5069 Signal Mounting Hardware (location) 01. STH 52 & 3rd Ave	LUMP	LUMP			.
2020	658.5069 Signal Mounting Hardware (location) 02. STH 52 & 1st Ave	LUMP	LUMP			.
2030	659.0125 Luminaires Utility HPS 250 Watts	11.000 EACH		.		.
2040	661.0200 Temporary Traffic Signals for Intersections (location) 01. STH 52 & 3rd Ave	LUMP	LUMP			.
2050	661.0200 Temporary Traffic Signals for Intersections (location) 02. STH 52 & 1st Ave	LUMP	LUMP			.
2060	673.0105 Communication Vault Type 1	2.000 EACH		.		.
2070	678.0400 Fiber Optic Termination	12.000 EACH		.		.
2080	690.0150 Sawing Asphalt	290.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2090	690.0250 Sawing Concrete	10,787.000 LF		.		.
2100	715.0415 Incentive Strength Concrete Pavement	3,026.000 DOL	1.00000		3026.00	
2110	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	1,200.000 HRS	5.00000		6000.00	
2120	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	600.000 HRS	5.00000		3000.00	
2130	SPV.0030 Special 01. Fertilizer For Lawn Type Turf	2.060 CWT		.		.
2140	SPV.0060 Special 01. Adjusting Valve Boxes	6.000 EACH		.		.
2150	SPV.0060 Special 02. Manhole Risers 2-Inch	33.000 EACH		.		.
2160	SPV.0060 Special 03. Inlet Risers 1-Inch Type H	31.000 EACH		.		.
2170	SPV.0060 Special 04. Inlet Risers 1-Inch Type Z	20.000 EACH		.		.
2180	SPV.0060 Special 05. Valve Box Risers 2-Inch	35.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2190	SPV.0060 Special 06. Inlet Covers Type H-D	1.000 EACH		.		.
2200	SPV.0060 Special 07. Repairing Storm Sewer Structures	19.000 EACH		.		.
2210	SPV.0060 Special 08. Bench	2.000 EACH		.		.
2220	SPV.0060 Special 50. Salvage and Reinstall Street Light Assembly	1.000 EACH		.		.
2230	SPV.0060 Special 52. Utility Line Opening (ULO)	6.000 EACH		.		.
2240	SPV.0060 Special 53. Pull Box Non-conductive 24X36-Inch	5.000 EACH		.		.
2250	SPV.0060 Special 54. Pull Box Non-conductive 24X42-Inch	30.000 EACH		.		.
2260	SPV.0060 Special 55. Salvage Warning Flasher Assembly	1.000 EACH		.		.
2270	SPV.0060 Special 56. Concrete Base Type 1 With Spread Footing	1.000 EACH		.		.
2280	SPV.0060 Special 57. Furnish and Install 35-Foot Mast Arm Assembly	1.000 EACH		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2290	SPV.0090 Special 01. Concrete Curb & Gutter 42-Inch Type A	249.000 LF		.		.
2300	SPV.0090 Special 02. Concrete Curb & Gutter 66-Inch With 6-Inch Curb Type A	2,628.000 LF		.		.
2310	SPV.0090 Special 03. Concrete Curb & Gutter 66-Inch With 7-Inch Curb Type A	413.000 LF		.		.
2320	SPV.0090 Special 04. Diagonal Epoxy 4-Inch	2,725.000 LF		.		.
2330	SPV.0090 Special 05. Clean and Repair Concrete Pavement	22,681.000 LF		.		.
2340	SPV.0090 Special 50. Fiber Optic Cable Outdoor Plant 36-CT	1,462.000 LF		.		.
2350	SPV.0090 Special 51. Fiber Optic Tracer Cable	983.000 LF		.		.
2360	SPV.0090 Special 52. Furnish and Install Equivalent Lighting Conductors	5,800.000 LF		.		.
2370	SPV.0105 Special 01. Concrete Pavement Joint Layout 6999-03-79	LUMP	LUMP			.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2380	SPV.0105 Special 02. Concrete Pavement Joint Layout 6999-03-80	LUMP	LUMP			.
2390	SPV.0105 Special 03. Concrete Pavement Joint Layout 6999-03-81	LUMP	LUMP			.
2400	SPV.0105 Special 04. Research and Locate Existing Property Monuments 6999-03-79	LUMP	LUMP			.
2410	SPV.0105 Special 05. Research and Locate Existing Property Monuments 6999-03-80	LUMP	LUMP			.
2420	SPV.0105 Special 06. Research and Locate Existing Property Monuments 6999-03-81	LUMP	LUMP			.
2430	SPV.0105 Special 07. Verify and Replace Existing Property Monuments 6999-03-79	LUMP	LUMP			.
2440	SPV.0105 Special 08. Verify and Replace Existing Property Monuments 6999-03-80	LUMP	LUMP			.
2450	SPV.0105 Special 09. Verify and Replace Existing Property Monuments 6999-03-81	LUMP	LUMP			.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2460	SPV.0105 Special 50. Salvage Traffic Signal STH 52 & 3rd Ave	LUMP	LUMP			.
2470	SPV.0105 Special 51. Salvage Traffic Signal STH 52 & 1st Ave	LUMP	LUMP			.
2480	SPV.0105 Special 52. Salvage and Reinstall Traffic Signal STH 52 & 1st St	LUMP	LUMP			.
2490	SPV.0105 Special 53. Salvage and Reinstall Emergency Vehicle Preemption Equipment STH52 & 3rd	LUMP	LUMP			.
2500	SPV.0105 Special 54. Salvage and Reinstall Emergency Vehicle Preemption Equipment STH52 & 1st	LUMP	LUMP			.
2510	SPV.0105 Special 55. Furnish and Install Traffic Signal Cabinet STH 52 & 3rd Ave	LUMP	LUMP			.
2520	SPV.0105 Special 56. Furnish and Install Traffic Signal Cabinet STH 52 & 1st Ave	LUMP	LUMP			.
2530	SPV.0105 Special 57. Furnish and Install Communications Equipment in Signal Cabinet STH 52 & 3rd	LUMP	LUMP			.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2540	SPV.0105 Special 58. Furnish and Install Communications Equipment in Signal Cabinet STH 52 & 1st	LUMP	LUMP			.
2550	SPV.0105 Special 61. Traffic Signal Systems Integrator 6999-03-79	LUMP	LUMP			.
2560	SPV.0165 Special 01. Salvage And Reinstall Brick Pavers	216.000 SF		.		.
2570	SPV.0180 Special 01. Preparing Topsoil For Lawn Type Turf	2,702.000 SY		.		.
2580	204.0245 Removing Storm Sewer (size) 06. 21-Inch	25.000 LF		.		.
2590	415.1090 Concrete Pavement HES 9-Inch	285.000 SY		.		.
2600	522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	1.000 EACH		.		.
2610	602.0505 Curb Ramp Detectable Warning Field Yellow	20.000 SF		.		.
2620	608.0342 Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	201.000 LF		.		.

CONTRACT: 20160510036

PROJECT(S): 6999-03-79, 6999-03-80, 6999-03-81, 6999-03-82

FEDERAL ID(S): WISC 2016179, WISC 2016180, WISC 2016181, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2630	611.9705 Salvaged Manhole Covers	2.000 EACH		.		.
2640	625.0500 Salvaged Topsoil	70.000 SY		.		.
2650	628.7555 Culvert Pipe Checks	1.000 EACH		.		.
2660	631.1000 Sod Lawn	70.000 SY		.		.
2670	643.0100 Traffic Control (project) 04. 6999-03-82	1.000 EACH		.		.
2680	643.1000 Traffic Control Signs Fixed Message	36.000 SF		.		.
2690	643.2000 Traffic Control Detour (project) 01. 6999-03-82	1.000 EACH		.		.
2700	643.3000 Traffic Control Detour Signs	510.000 DAY		.		.
	SECTION 0001 TOTAL					.
	TOTAL BID					.