



# Wisconsin Department of Transportation

August 6, 2018

**Division of Transportation Systems Development**  
 Bureau of Project Development  
 4822 Madison Yards Way, 4<sup>th</sup> Floor South  
 Madison, WI 53705

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

## NOTICE TO ALL CONTRACTORS:

**Proposal #04: 2704-00-78**  
**Wisconn Valley Way**  
**Box Culvert**  
**Loc Str**  
**Racine County**

**3763-00-75**  
**CTH KR, V Mt Pleasant**  
**Kilbourn Ditch Box Culvert**  
**CTH KR**  
**Racine County**

## Letting of August 14, 2018

This is Addendum No. 02, which provides for the following:

### Special Provisions:

Added Special Provisions	
Article No.	Description
58	Cover Plates Left In Place, Item SPV.0060.002

Deleted Special Provisions	
Article No.	Description
35	Coordination with Businesses and Residents

### Schedule of Items:

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
606.0200	Riprap Medium	CY	118	80	198
645.0120	Geotextile Type HR	SY	735	256	991

Added Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
204.0280	Sealing Pipes	EACH	0	4	4
205.0100	Excavation Common	CY	0	3,100	3,100
208.0100	Borrow	CY	0	6,250	6,250
522.1024	Apron Endwalls For Culvert Pipe Reinforced Concrete 24-Inch	EACH	0	2	2

522.1030	Apron Endwalls For Culvert Pipe Reinforced Concrete 30-Inch	EACH	0	1	1
522.1036	Apron Endwalls For Culvert Pipe Reinforced Concrete 36-Inch	EACH	0	1	1
608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	0	151	151
608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	0	80	80
608.0436	Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	LF	0	164	164
611.2005	Manholes 5-FT	EACH	0	1	1
611.2006	Manholes 6-FT	EACH	0	1	1
628.7005	Inlet Protection Type A	EACH	0	1	1
633.5200	Markers Culvert End	EACH	0	4	4
SPV.0060.002	Cover Plates Left In Place	EACH	0	2	2

Deleted Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
511.1200.001	Temporary Shoring B-30-142	SF	1,287	-1,287	0
511.2200.001	Temporary Shoring Left In Place B-30-142	SF	614	-614	0

### **Plan Sheets:**

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
11	Erosion Control (added riprap, updated legend)
12	Erosion Control (added riprap and inlet protection, updated legend)
57	Structure B-30-142 (removed temporary shoring from plan view)
58	Structure B-30-142 (removed bid items 511.1200.001 & 511.2200.001)
60	Structure B-30-142 (removed temporary shoring from plan view)

Added Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of why sheet was added)
9A	Construction Details (added 'Structure Location', 'Cover Plate' & 'Bulkhead' details)
9B	Construction Details (added 'Riprap' and 'Borrow Limits' detail)
9C	Construction Details (added 'Topsoil Removal Detail')
12A	Storm Sewer Plan (added storm sewer notes)
12B	Storm Sewer Plan (added storm sewer)
12C	Storm Sewer Plan (added storm sewer)
22A	Miscellaneous Quantities (added 'Apron Endwalls', 'Earthwork', 'Sealing Pipe' & 'Riprap' tables)
22B	Miscellaneous Quantities (added 'Storm Sewer' tables)
24A	Miscellaneous Quantities (added 'Apron Endwalls', 'Sealing Pipe', 'Earthwork', 'Inlet Protection', 'Cover Plate' & 'Riprap' tables)
24B	Miscellaneous Quantities (added 'Storm Sewer' tables)
29A	Standard Detail Drawing (SDD 'Manholes 3-FT, 4-FT, 5-FT, 6-FT, 7-FT and 8-FT Diameter')
31A	Standard Detail Drawing (SDD 'Inlet Protection Type A, B, C and D')
32A	Standard Detail Drawing (SDD 'Apron Endwalls for Culvert Pipe')
32B	Standard Detail Drawing (SDD 'Joint Ties for Concrete Pipe and Concrete Pipe Collars')

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. 02**  
**PROJECT ID 2704-00-78 & 3763-00-75**  
**August 6, 2018**

**Special Provisions**

**35. DELETED.**

**58. Cover Plates Left In Place, Item SPV.0060.002.**

**A Description**

Furnish and install a steel plate to cover and support construction, backfill material, and traffic loading at storm sewer structures as shown on the plans, according to the pertinent provisions of standard spec 611, and as hereinafter provided.

Cover plates left in place becomes the property of the department after final acceptance by the engineer.

**B Materials**

Provide a 0.75-inch minimum thickness steel plate that extends to the outside edge of the existing masonry walls. Backfill with base aggregate dense, 1 ¼”.

Provide ¼-inch diameter steel bolts and epoxy to secure the cover plate to the top deck of the existing structure.

**C Construction**

Remove the existing grate, frame, and accompanying grade adjusting rings. Remove 2’ minimum concrete block. Remove all loose debris and other accumulated material found on the structure deck which would otherwise interfere with cover plate installation. Drill a single 3/8-inch hole centered in each corner of the cover plate. Set the cover plate on the existing structure deck, ensuring the access hole is completely covered and that the cover plate extends to the edges of the existing masonry. Place cover plate over portion of storm sewer structure which is below the proposed flow line elevation. Do not extend covers above the proposed flow line to prevent flow bypass of the inlet. Embed and epoxy each ¼-inch steel bolts a minimum of 2-inches into the structure deck through each drilled hole. Backfill to the subgrade elevation any construction voids above the cover plate with base aggregate dense 1-1/4 inch.

Place cover plates as shown on the plans.

**D Measurement**

The department will measure Cover Plates Left In Place as each individual cover plate left in place, acceptably completed.

**E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.002	Cover Plates Left In Place	EACH

Payment is full compensation for furnishing and installing the cover plate and leaving cover plates in place; furnishing and installing drilled epoxy bars; base aggregate dense, 1-¼” backfill; removing inlet frame and lid; removing 2’ minimum concrete block, and for excavation.

**Schedule of Items**

Attached, dated August 6, 2018, are the revised Schedule of Items Pages 1 – 5.

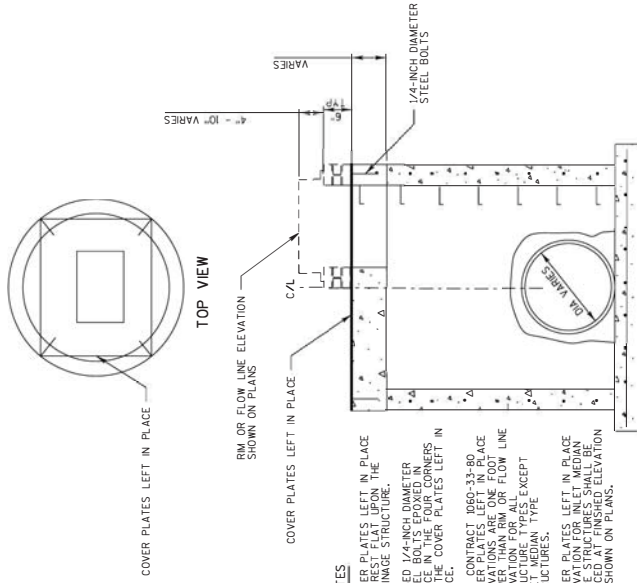
**Plan Sheets**

The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:

Revised: 11, 12, 57, 58, and 60.

Added: 9A-C, 12A-C, 22A-B, 24A-B, 29A, 31A, and 32A-B.

END OF ADDENDUM



**NOTES**

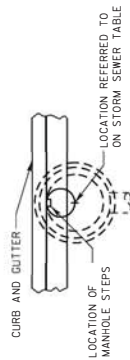
COVER PLATES LEFT IN PLACE TO REST FLAT UPON THE DRAINAGE STRUCTURE.

EMBED 1/4-INCH DIAMETER STEEL BOLTS AT THE FOUR CORNERS OF THE COVER PLATES LEFT IN PLACE.

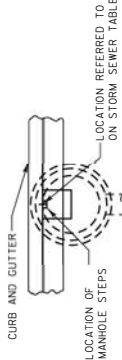
PER CONTRACT ID60-33-80 ELEVATIONS ARE ONE FOOT LOWER THAN RM OR FLOW LINE ELEVATIONS EXCEPT INLET MEDIAN TYPE STRUCTURES.

COVER PLATES LEFT IN PLACE UPON THE STRUCTURE SHALL BE PLACED AT FINISHED ELEVATION AS SHOWN ON PLANS.

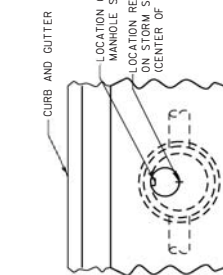
COVER PLATES LEFT IN PLACE



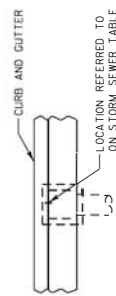
MANHOLE IN CURB AND GUTTER



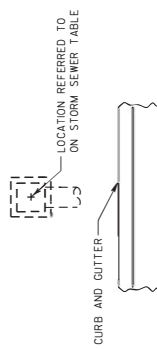
MANHOLE WITH INLET COVER IN CURB AND GUTTER



MANHOLE NOT IN CURB AND GUTTER



INLET IN CURB AND GUTTER



INLET NOT IN CURB AND GUTTER

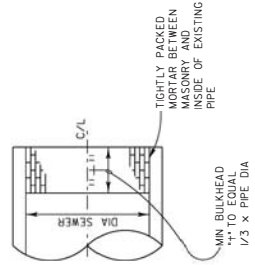
**NOTE**

1) LOCATION OF STRUCTURE MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

2) LOCATION AND SIZE OF STRUCTURE COVER OPENING DEPENDS ON TYPE OF CASTING.

3) MANHOLE TYPES ARE SHOWN ON THE STORM SEWER TABLE.

**STRUCTURE LOCATION DETAIL**

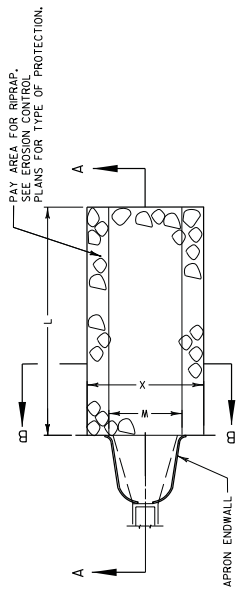


BULKHEAD PIPE MASONRY

ITEM TO BE PAID FOR UNDER ITEM "SEALING PIPES"

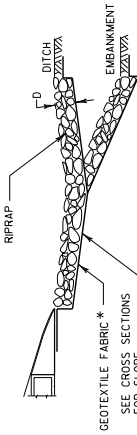
Addendum No. 02  
ID 3763-00-75  
Added Sheet 9A  
August 6, 2018

Addendum No. 02  
 ID 3763-00-75  
 Added Sheet 9B  
 August 6, 2018



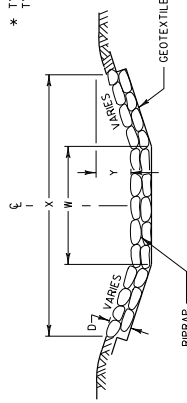
PLAN VIEW

- L = 3' x W (NO. 10) OR 10' MIN. OR AS INDICATED IN THE PLANS OR AS DIRECTED BY THE ENGINEER
- D = 12" FOR RIPRAP LIGHT  
18" FOR RIPRAP MEDIUM  
24" FOR RIPRAP HEAVY
- X = W/2 FOR TYPICAL CULVERT DISCHARGE INTO DITCH DOWN EMBANKMENT SLOPE
- Y = 0 FOR TYPICAL CULVERT DISCHARGE INTO DITCH DOWN EMBANKMENT SLOPE
- 12" FOR CULVERT DISCHARGE DOWN EMBANKMENT SLOPE



SECTION A-A

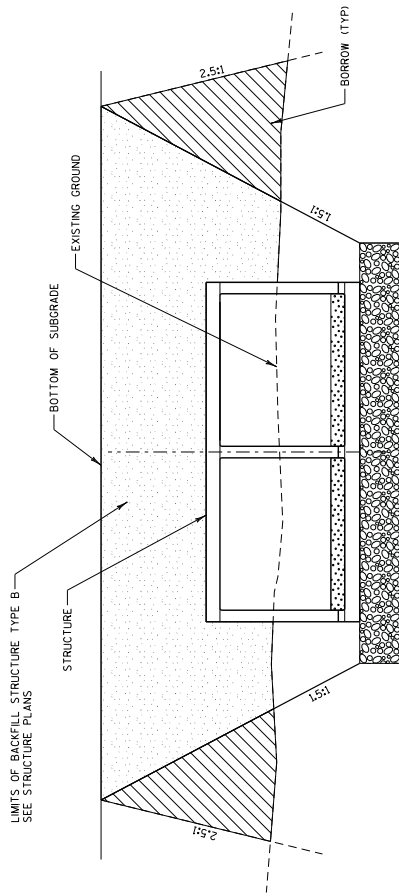
\* TYPE B (FOR RIPRAP LIGHT ONLY)  
 \* TYPE HR (FOR RIPRAP HEAVY AND MEDIUM ONLY)



SECTION B-B

**RIPRAP AND GEOTEXTILE FABRIC DETAIL**  
 AT APRON ENDWALLS

SEE EROSION CONTROL PLAN FOR LOCATIONS



**BORROW LIMITS**  
 NOT TO SCALE

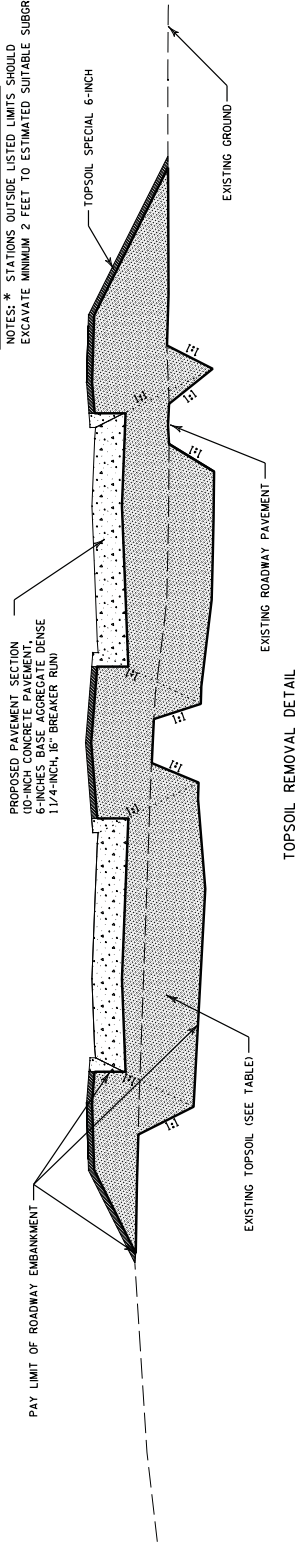
Addendum No. 02  
 ID 3763-00-75  
 Added Sheet 9C  
 August 6, 2018

ESTIMATED LOCATIONS FOR GREATER THAN 2 FEET  
 OF EXCAVATION TO SUITABLE SUBGRADE

BEGIN STA	END STA	ESTIMATED REMOVAL DEPTH (FEET)*
364+00	367+50	4
367+50	370+00	3.5
376+50	377+75	3
377+75	379+75	4
386+50	408+50	3
417+00	420+00	3
430+50	446+50	3

NOTES: \* STATIONS OUTSIDE LISTED LIMITS SHOULD  
 EXCAVATE MINIMUM 2 FEET TO ESTIMATED SUITABLE SUBGRADE.

NOTES:  
 STRIP TOPSOIL FROM ROADWAY FOUNDATION, REPLACE WITH BORROW.  
 EXCESS TOPSOIL REMOVED NOT REQUIRED TO COVER SIDE SLOPES UNDER THE TOPSOIL SPECIAL BID ITEM TO BE PAID AS EXCAVATION COMMON.  
 THE TOPSOIL THICKNESS MAY BE INCREASED TO 12" OR AS DIRECTED BY THE ENGINEER TO UTILIZE EXCESS TOPSOIL.  
 TOPSOIL PLACED THICKER THAN 6" WILL BE PAID FOR UNDER THE ROADWAY ENHANCEMENT BID ITEM.

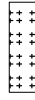




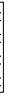


LEGEND

SILT FENCE



EROSION MAT CLASS 1, TYPE B



RIPRAP HEAVY (INCLUDED IN STRUCTURE PLANS)



INLET PROTECTION TYPE A



RIPRAP MEDIUM

NOTE:

RESTORE ALL DISTURBED AREAS WITH SOIL STABILIZER TYPE B, TEMPORARY SEED AND EROSION MAT.

UNNAMED TRIBUTARY NO. 18 TO KILBOURN ROAD DITCH

Addendum No. 02  
ID 2704-00-78  
Revised Sheet 11  
August 6, 2018

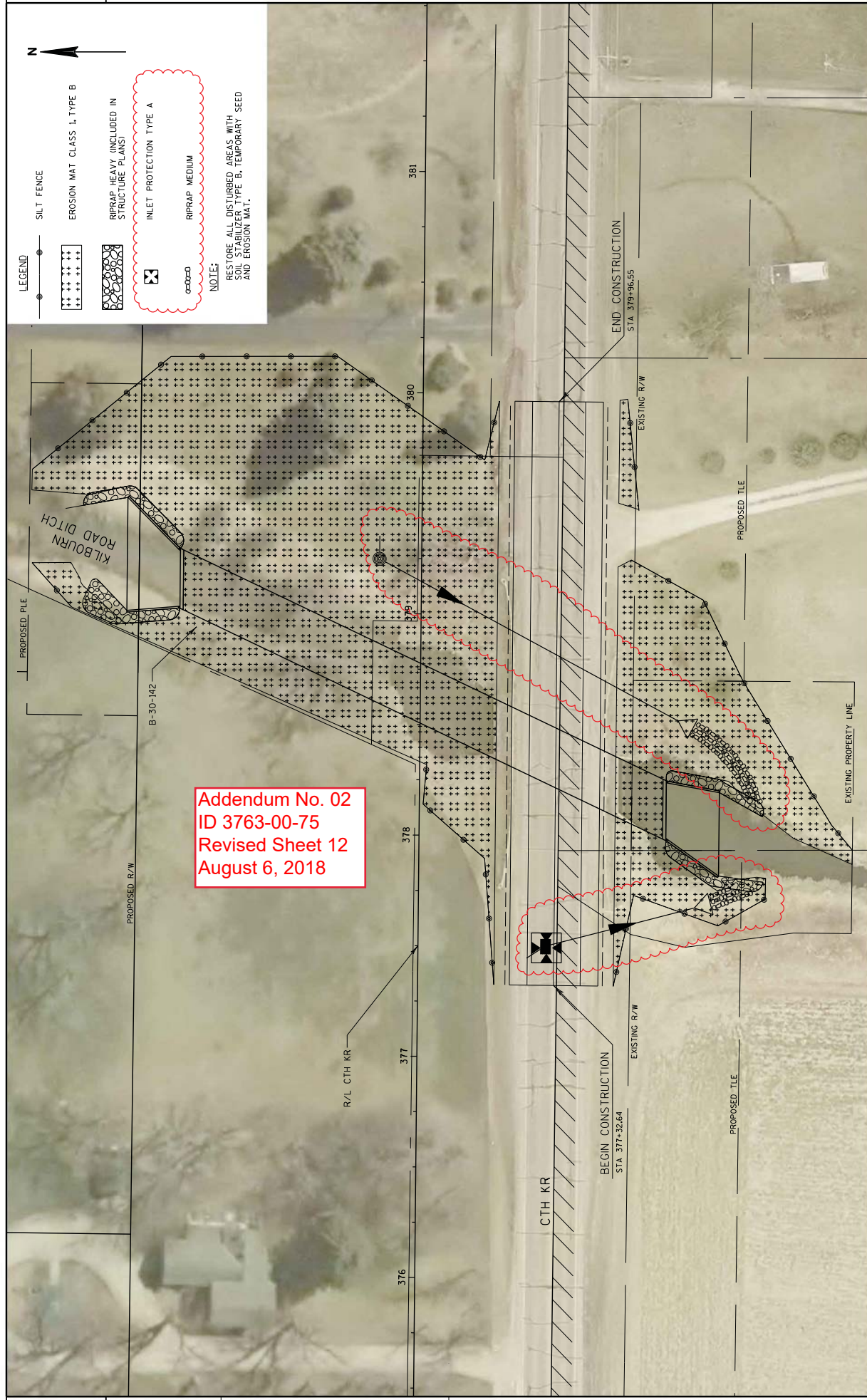




**LEGEND**

- SILT FENCE
- EROSION MAT CLASS 1, TYPE B
- RIPRAP HEAVY (INCLUDED IN STRUCTURE PLANS)
- INLET PROTECTION TYPE A
- RIPRAP MEDIUM

**NOTE:**  
RESTORE ALL DISTURBED AREAS WITH SOIL STABILIZER, TYPE B, TEMPORARY SEED AND EROSION MAT.



Addendum No. 02  
 ID 3763-00-75  
 Revised Sheet 12  
 August 6, 2018

Addendum No. 02  
ID 3763-00-75  
Added Sheet 12A  
August 6, 2018

GENERAL DRAINAGE NOTES

PLAN LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE FOR EXISTING PIPE. PROPOSED LENGTH OF PIPE MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE AND IS USED TO COMPUTE PIPE SLOPE.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES AND PIPES SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS.

UTILITY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE. LOCATIONS SHOWN ARE TAKEN FROM EXISTING RECORDS AND BEST AVAILABLE INFORMATION FROM EXISTING PLANS. THE ENGINEER HAS VISUALLY CHECKED THE LOCATION OF UTILITIES AND STRUCTURES SHOWN. VERIFY ALL LOCATIONS IN THE FIELD.

COORDINATE WITH DIGGERS HOTLINE TO FIELD LOCATE UTILITIES. SHEETING SHALL NOT GO THROUGH UTILITIES. ANY UTILITIES DAMAGED DUE TO CONTRACTOR ACTIVITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE COMPLETE SATISFACTION OF THE UTILITY FACILITY.

PROVIDE TEMPORARY POSITIVE DRAINAGE THROUGHOUT THE PROJECT DURING ALL PROJECT STAGES, PROVIDING TEMPORARY POSITIVE DRAINAGE IS INCIDENTAL TO CONSTRUCTION.

SUPPORTING UTILITIES DURING STORM SEWER CONSTRUCTION IS INCIDENTAL TO STORM SEWER PIPE AND/OR STORM SEWER STRUCTURE.

CONSTRUCTION AND REMOVAL OF TEMPORARY BULKHEAD IS CONSIDERED INCIDENTAL TO COST OF STORM SEWER PIPE OR STORM SEWER STRUCTURE WHEN A PIPE OR STRUCTURE IS CONSTRUCTED OR REMOVED IN MULTIPLE STAGES.

STORM SEWER PLAN & PROFILE NOTE:

PLAN VIEW HIGHLIGHTS CORRESPOND TO PROFILES SHOWN IN PROFILE BELOW PLAN VIEW (SAME SHEET). STORM SEWER STRUCTURES AND PIPES LABELED IN PLAN VIEW WITHOUT HIGHLIGHT ARE SHOWN ON THE NEXT PROFILE ONLY SHEET(S).

STORM SEWER LEGEND

- EXISTING  
E\*\*\*\*
- EXISTING DRAINAGE STRUCTURE  
E\*\*\*\*
- PROPOSED DRAINAGE STRUCTURE  
P\*\*\*\*
- PROPOSED MANHOLE  
●
- PROPOSED INLET / PROPOSED CATCH BASIN  
■
- PROPOSED ENDWALL  
△
- EXISTING STORM SEWER PIPE  
E\*\*\*\*
- PROPOSED STORM SEWER PIPE  
P\*\*\*\*
- PROPOSED STORM SEWER PIPE PLAN VIEW  
→

PROJECT NO: 3763-00-75

HWY: CTH KR

COUNTY: RACINE

STORM SEWER PLAN

SHEET 12A

E

FILE NAME : S:\DOT\DOT\_SE\180045\_Foxcom-Local\_Roads\DesIgn\00N\_Files\W\WBox\_Culverts\_Contract\PlanSheets\022500\_SS.dgn

PLOT DATE : 8/1/2018

PLOT BY : mwolok

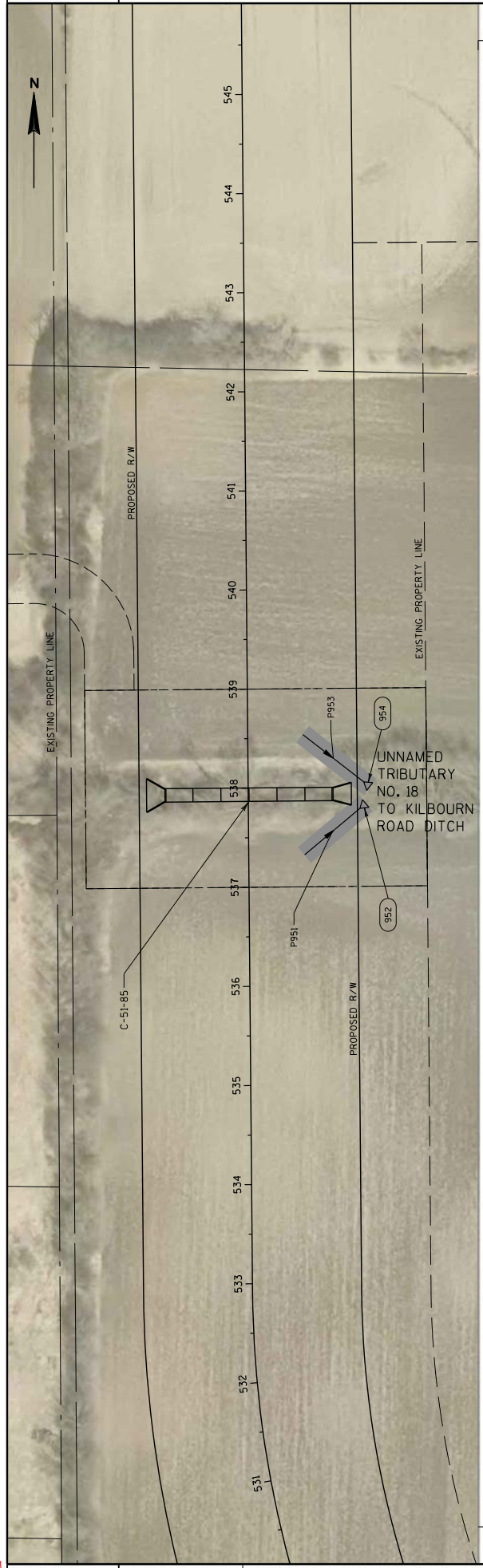
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PLOT SCALE : 1:2

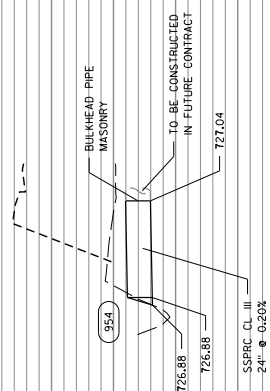
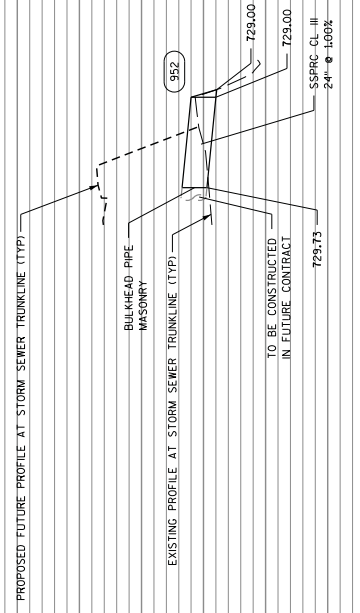
WISDOT\CADD\ SHEET\_42



2



Addendum No. 02  
 ID 2704-00-78  
 Added Sheet 12B  
 August 6, 2018



PROJECT NO: 2704-00-78

HWY: WISCONN VALLEY WAY

COUNTY: RACINE

STORM SEWER PLAN AND PROFILE: WISCONN VALLEY WAY

SHEET 12B

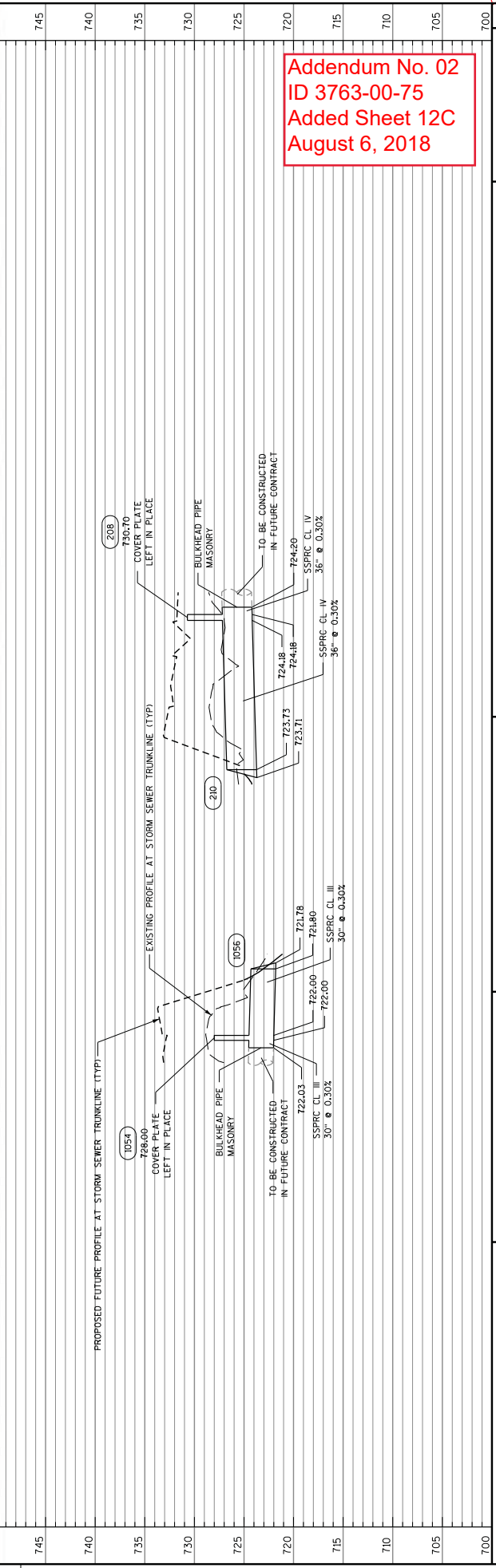
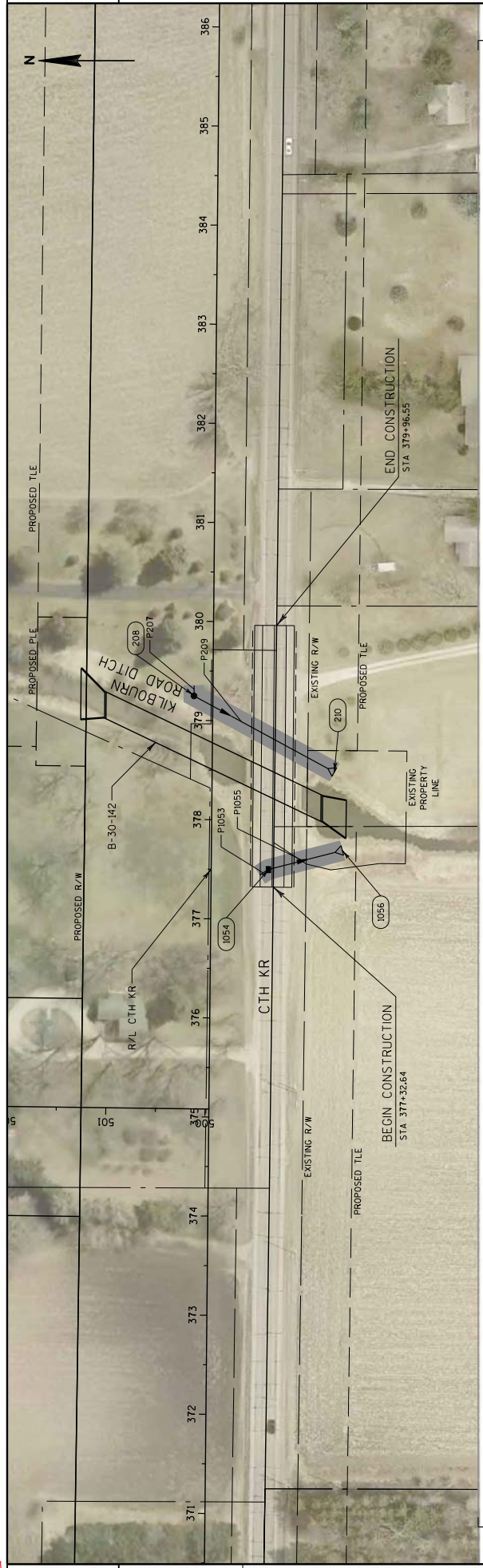
FILE NAME : S:\ADOT\DOT\_SE\190045\_Fogcom\Local\_Roads\Design\001\_Files\WV\Box\_Culverts\_Contract\ProfileSheets\022501\_SS.dgn

PLOT DATE : 8/1/2018

PLOT BY : mwj/ck

PLOT SCALE : 1:100

WSDOT/CADD/SHEET 41



Addendum No. 02  
 ID 3763-00-75  
 Added Sheet 12C  
 August 6, 2018

**EARTHWORK**

ROADWAY	STATION	CY	REMOVAL (2)	CY
WWW	UNDISTRIBUTED	100	1,500	3,500
PROJECT 2704-00-78 TOTAL		100	1,500	3,500

- 1) Cut Volume Includes Concrete and Asphaltic Surface Material.
- 2) Topsoil thickness estimated, refer to Topsoil Removal Construction Detail

**SEALING PIPES**

STATION	OFFSET	LOCATION	PIPE END	PPE	204.0280 SEALING PIPES EACH
537+32	56' RT	WWW	UPSTREAM	P951	1
538+54	56' RT	WWW	UPSTREAM	P953	1
PROJECT 2704-00-78 TOTAL					2

Addendum No. 02  
ID 2704-00-78  
Added Sheet 22A  
August 6, 2018

**APRON ENDWALLS**

LOCATION	PRE ID	ENDWALL ID	ELEVATION	ENDWALL STATION	ENDWALL OFFSET	ENDWALL	MARKERS FOR CULVERT END	204.0280 SEALING PIPES EACH
WWW	P951	952	757.22	537+83	117' RT	1	1	1
WWW	P953	954	754.15	538+02	122' RT	1	1	1
PROJECT 2704-00-78 TOTAL							2	2

- NOTE**  
1) ENDWALL ELEVATION / STATION / OFFSET ARE TO END CENTER OF ENDWALL

**RIPRAP AND GEOTEXTILE FABRIC**

STATION	OFFSET	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
537+83	117' RT	WWW	7	30
538+02	122' RT	WWW	8	34
PROJECT 2704-00-78 TOTAL				64

PROJECT NUMBER: 2704-00-78

HWY: WISCONSIN VALLEY WAY

COUNTY: RACINE

MISCELLANEOUS QUANTITIES

SHEET NO: 22A

ALL ITEMS ARE CATEGORY 1000 UNLESS OTHERWISE SPECIFIED.

STORM SEWER STRUCTURES										STORM SEWER PIPES										
ROADWAY	STRUCTURE NO.	STATION	OFFSET (FT)	LOCATION	RIM OR FLOW ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	DEPTH <sup>1</sup> (FT)	STRUCTURE COMMENTS	PIPE D	FROM STR	TO STR	NLET ELEV	DISCH ELEV	SLOPE <sup>A</sup> %	PIPE LENGTH <sup>B</sup> (FT)	PLAN LENGTH <sup>C</sup> (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
---	---	---	---	---	---	---	---	---	---	P951	BULKHEAD	952	729.73	729.00	1.00	73	73	III	24	---
---	---	---	---	---	---	---	---	---	---	P953	BULKHEAD	954	727.04	726.88	0.20	78	78	III	24	---

STORM SEWER  
PIPE SUMMARY  
608.0324  
STORM SEWER  
PIPE  
REINFORCED  
CONCRETE  
CLASS II  
24-INCH  
LF  
151

Addendum No. 02  
ID 2704-00-78  
Added Sheet 22B  
August 6, 2018

<sup>1</sup>DEPTH = RIM OR FLOW ELEV - LOWEST PIPE INVERT ELEVATION    <sup>2</sup>DEPTH = RIM OR FLOW ELEV - LOWEST PIPE INVERT ELEVATION    <sup>3</sup>PIPE LENGTH REPRESENTS LENGTH OF PIPE    <sup>4</sup>PIPE LENGTH SHOWN FOR SLOPE CALCULATION ONLY.    <sup>5</sup>PLAN LENGTH SHOWN FOR PAY QUANTITY.  
MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE    NOT INTENDED FOR PAY QUANTITY.

**SEALING PIPES**

STATION	OFFSET	LOCATION	PIPE END	PIPE ID	PIPE PIPES	SEALING EACH
377+45	49' RT	CTH KR	UPSTREAM	P1053		1
379+35	19' LT	CTH KR	UPSTREAM	P207		1
PROJECT 3763-00-75 TOTAL						2

**RIPRAP AND GEOTEXTILE FABRIC**

STATION	OFFSET	LOCATION	RYRAP MEDIUM	GEOTEXTILE TYPE	SY	
377+70	131' RT	CTH KR	18	58		
378+49	124' RT	CTH KR	47	134		
PROJECT 3763-00-75 TOTAL						65
						192

**EARTHWORK**

ROADWAY	STATION	CY	CY	CY
CTH KR	UNDISTRIBUTED	250	1,250	2,750
PROJECT 3763-00-75 TOTAL				2,750
				1,500

EXCAVATION COMMON BORROW 208.0100  
 CUT (1) TOPSOIL REMOVAL (2)  
 205.0100  
 208.0100

- 1) Cut Volume Includes Concrete and Asphaltic Surface Material.
- 2) Topsoil thickness estimated, refer to Topsoil Removal Construction Detail

**APRON ENDWALLS**

LOCATION	PRE.D	ENDWALL ID	ELEVATION	ENDWALL STATION	ENDWALL OFFSET	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE	APRON MARKERS CULVERT END
CTH KR	P1055	761	751.20	377+70	131' RT	1	1	1
CTH KR	P786	787	748.67	378+77	124' RT	1	1	1
PROJECT 3763-00-75 TOTAL								
						1	1	2

- NOTE**
- 1) ENDWALL ELEVATION / STATION / OFFSET ARE TO END CENTER OF ENDWALL

**INLET PROTECTION**

STATION	TO	STATION	LOCATION	PROTECTION TYPE	EACH	
377+33	-	379+97	CTH KR	EACH	1	
PROJECT 3763-00-75 TOTAL						1

628.7005  
 INLET PROTECTION TYPE A

**COVER PLATE LEFT IN PLACE**

LOCATION	STRUCTURE ID	STATION	OFFSET	EACH
CTH KR	1054	377+50	58' RT	1
CTH KR	208	379+35	19' LT	1
PROJECT 3763-00-75 TOTAL				
				2

SPV.0060.002  
 COVER PLATES LEFT IN PLACE

Addendum No. 02  
 ID 3763-00-75  
 Added Sheet 24A  
 August 6, 2018

ALL ITEMS ARE CATEGORY 1000 UNLESS OTHERWISE SPECIFIED.

PROJECT NUMBER 3763-00-75 HWY: CTH KR COUNTY: RACINE MISCELLANEOUS QUANTITIES SHEET NO: 24A E

ORIG. DATE: MAY 10, 2018

ORIGINATOR: JUSTIN M. ARNOT

FILE NAME: S:\DOT\DOT\_SE180045\_Foxconn\_Local\_Roads\Design\Estimates\Wisconn Valley\98%\_Box\_18-051103\0201\_1\_MO.PPT

PLOTTED DATE: 6/22/2018 3:36 PM



STORM SEWER STRUCTURES										STORM SEWER PIPES										
ROADWAY	STRUCTURE NO.	STATION	OFFSET (FT)	LOCATION	RIM OR FLOW ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	DEPTH <sup>1</sup> (FT)	STRUCTURE COMMENTS	PPE ID	FROM STR	TO STR	NLET ELEV	DISCH ELEV	SLOPE <sup>A</sup> %	PIPE LENGTH <sup>B</sup> (FT)	PLAN LENGTH <sup>C</sup> (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
---	---	---	---	---	---	---	---	---	---	P207	BULKHEAD	208	724.20	724.18	0.30	7	10	IV	36	---
CTH KR	208	379+24.73	19.0	LT	731.77	MANHOLES 6-FT DIAMETER	---	7.59	COVER RATE LEFT IN PLACE	P209	208	210	724.18	723.73	0.30	151	154	IV	36	---
---	---	---	---	---	---	---	---	---	---	P1063	BULKHEAD	1054	722.03	722.00	0.30	7	10	III	30	---
CTH KR	1054	377+50.30	60.0	RT	732.74	MANHOLES 5-FT DIAMETER	---	10.74	COVER RATE LEFT IN PLACE	P1065	1054	1056	722.00	721.80	0.30	67	70	III	30	---

Addendum No. 02  
ID 3763-00-75  
Added Sheet 24B  
August 6, 2018

STORM SEWER PIPE SUMMARY	
608 0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	80
608 0436 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	164

STORM SEWER STRUCTURE SUMMARY	
611.2005 MANHOLES	1
611.2006 MANHOLES	1
5-FT DIAMETER EACH	1
6-FT DIAMETER EACH	1

<sup>1</sup>DEPTH = RIM OR FLOW ELEV - LOWEST PIPE INVERT ELEVATION    <sup>A</sup> SLOPE CALCULATED BASED ON PIPE LENGTH. PIPE LENGTH REPRESENTS LENGTH OF PIPE <sup>B</sup> PIPE LENGTH SHOWN FOR SLOPE CALCULATION ONLY.    <sup>C</sup> PLAN LENGTH SHOWN FOR PAY QUANTITY.  
MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE    NOT INTENDED FOR PAY QUANTITY.

Addendum No. 02  
 ID 2704-00-78  
 Added Sheet 29A  
 August 6, 2018

**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. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNING FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3x3-1", "CATCH BASINS 4-R", "INLETS 2x3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING ASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES; FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF ASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PRECS. SEE DETAIL "C".

MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT. 5 INCHES FOR 4-FT. 6 INCHES FOR 5-FT. 7 INCHES FOR 6-FT. 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASHTO M199.

PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

**MANHOLE COVER OPENING MATRIX**

MANHOLE COVER TYPE	C	ALL VS	K	L	M
OPENING SIZE (FT)	X	X	X	X	X
2 DIA.					
3 DIA.					

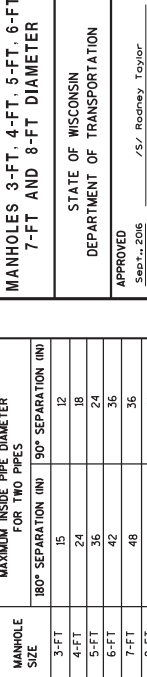
**PIPE MATRIX**

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	48	36
7-FT	60	48
8-FT	72	60

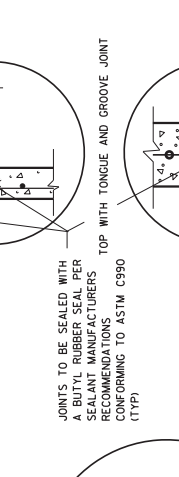
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN  
 DEPARTMENT OF TRANSPORTATION

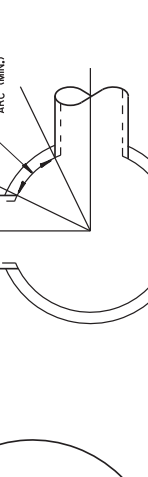
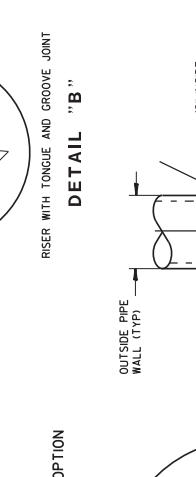
APPROVED  
 DATE: 8/6/2018  
 ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR



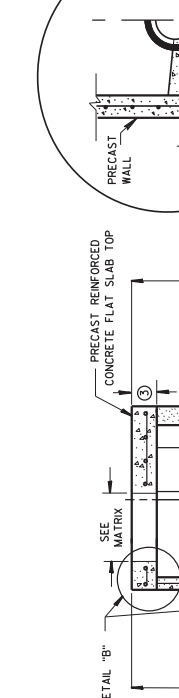
**OPTIONAL PRECAST REINFORCED CONCENTRIC TOP**



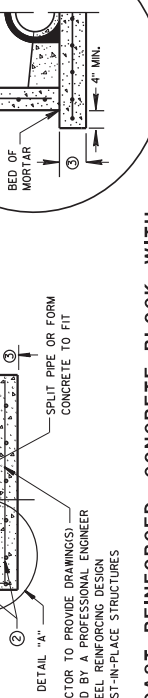
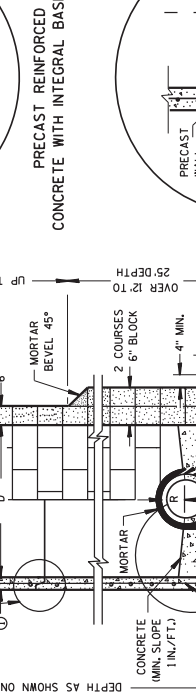
**OPTIONAL PRECAST REINFORCED CONCENTRIC TOP**



**PLAN VIEW CIRCULAR OPENING**



**DETAIL "A"**



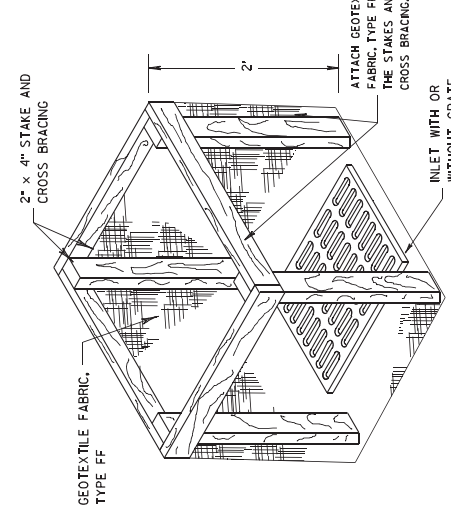
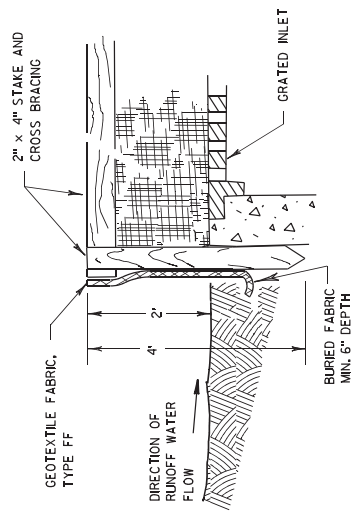
PRECAST REINFORCED CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE

CONCRETE WITH MONOLITHIC BASE

CONTRACTOR TO PROVIDE DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER FOR CAST-IN-PLACE STRUCTURES

PRECAST REINFORCED CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER



**INLET PROTECTION, TYPE A**

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

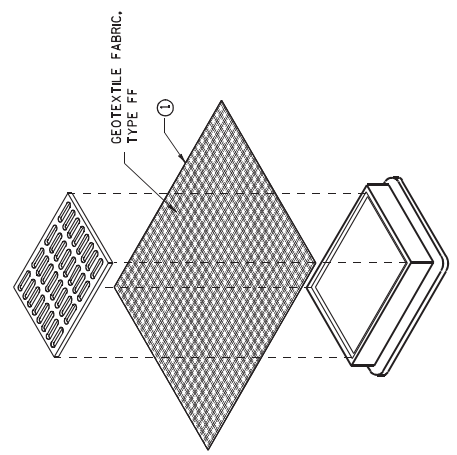
MANUFACTURED ALTERNATIVES, APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

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.

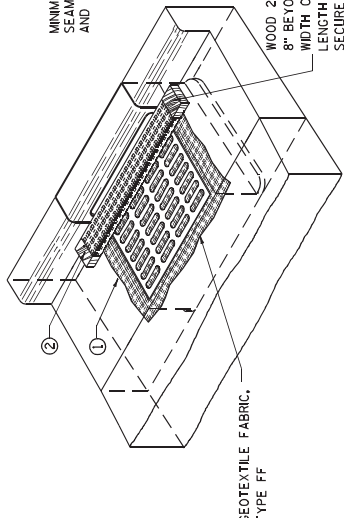
① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

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.



**INLET PROTECTION, TYPE B (WITHOUT CURB BOX)**  
 (CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



**INLET PROTECTION, TYPE C (WITH CURB BOX)**

**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.

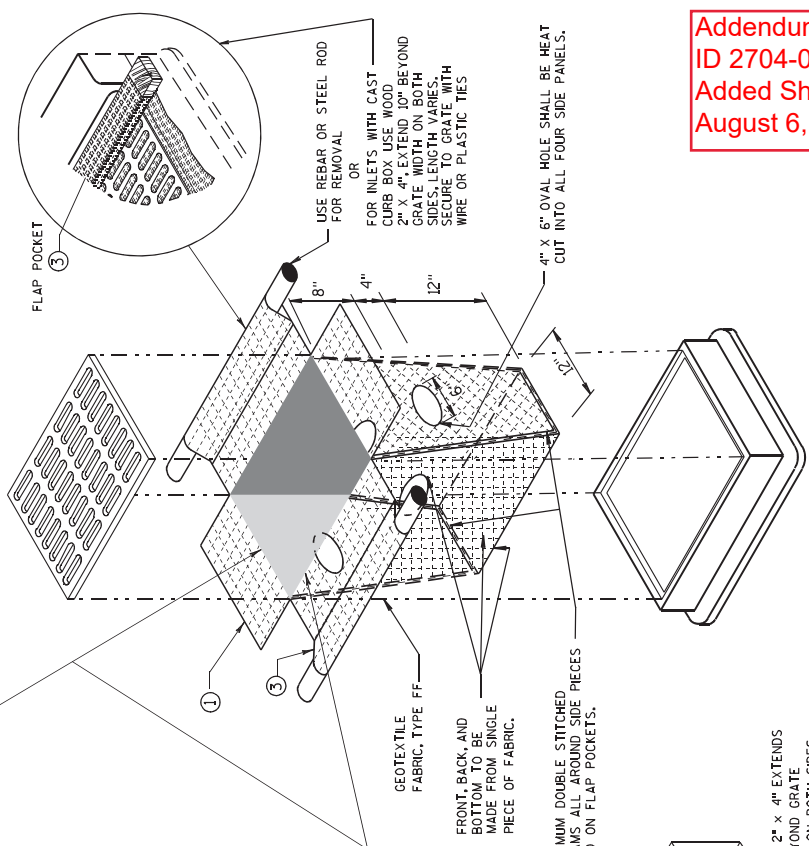
**TYPE D**

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 SNIP THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET SPECIFICATIONS AS PER THE PLAN DIMENSION LENGTH AND WIDTH TO MATCH

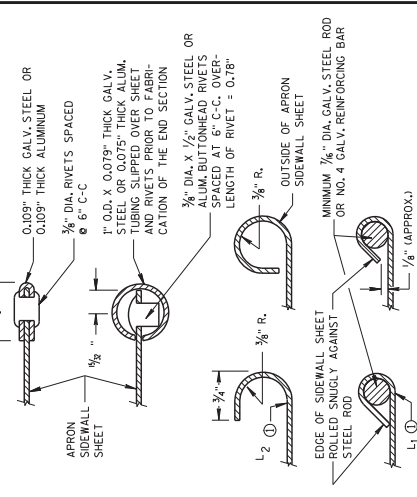


**INLET PROTECTION, TYPE D**

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

Addendum No. 02  
 ID 2704-00-78  
 Added Sheet 31A  
 August 6, 2018

<b>INLET PROTECTION TYPE A, B, C, AND D</b>	
STATE OF WISCONSIN	
DEPARTMENT OF TRANSPORTATION	
APPROVED	DATE
10/16/02	/s/ Beth Connestra
PHWA	
CHIEF ROADWAY DEVELOPMENT ENGINEER	



SECTION A-A

GENERAL NOTES

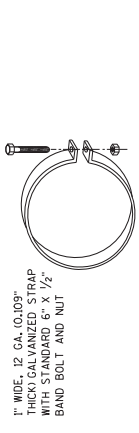
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

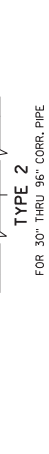
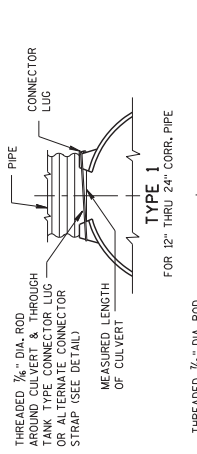
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60\"/>

Addendum No. 02  
ID 2704-00-78  
Added Sheet 32A  
August 6, 2018

APRON ENDWALLS FOR CULVERT PIPE	
STATE OF WISCONSIN	
DEPARTMENT OF TRANSPORTATION	
APPROVED	/s/ Roy L. Rinesmith
DATE	11/30/94
P.H.A. CHIEF ROADWAY DEVELOPMENT ENGINEER	

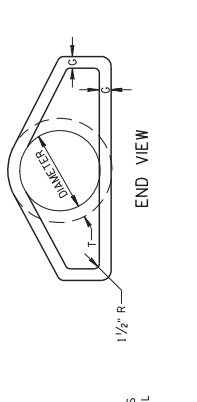
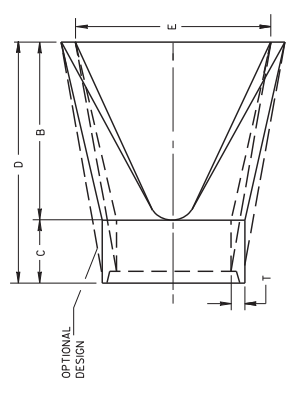


ALTERNATE FOR TYPE 1 CONNECTION END SECTION CONNECTOR STRAP



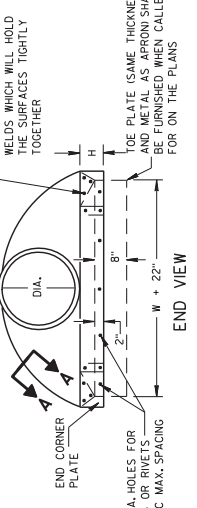
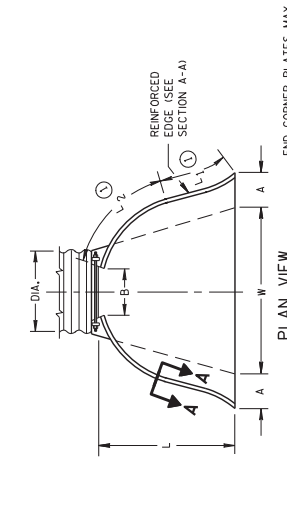
PIPE DIA. (IN.)	REINFORCED CONCRETE APRON ENDWALLS						
	T	A	B	C	D	E	G
12	2	4	24	48 1/2	72 1/2	24	2
15	2 1/4	6	27	46	73	30	2 1/4
18	2 1/2	8	31	46	73	36	2 1/2
21	3	10	37	50	77 1/2	42	3
24	3 1/4	12	43 1/2	54	81 1/2	48	3 1/4
27	3 3/4	15	49 1/2	60	87 1/2	54	3 3/4
30	4	18	55 1/2	66	93 1/2	60	4
36	4 1/2	24	65	78	105	72	4 1/2
42	5	30	78	93	120	84	5
48	5 1/2	36	90	108	132	96	5 1/2
54	6	42	102	126	144	108	6
60	6 1/2	48	114	141	156	120	6 1/2
66	7	54	126	156	168	132	7
72	7 1/2	60	138	174	180	144	7 1/2
78	8	66	150	192	192	156	8
84	8 1/2	72	162	210	204	168	8 1/2
90	9	78	174	228	216	180	9

\*MINIMUM  
\*\*MAXIMUM



PIPE DIA. (IN.)	METAL APRON ENDWALLS						
	A	B	H	L	L1	L2	W
15	8	6	21	17 1/2	14	27 1/2	11 Pc.
18	10	6	26	14	21 3/4	30	11 Pc.
21	12	6	31	15	28 1/4	36	11 Pc.
24	14	6	36	18	29 3/4	42	11 Pc.
27	16	6	41	18	37 1/4	48	11 Pc.
30	18	6	46	18	45 1/4	54	11 Pc.
36	21	9	51	18	52 1/4	60	11 Pc.
42	24	12	56	24	59 1/4	72	11 Pc.
48	27	12	61	24	67	84	11 Pc.
54	30	12	66	24	75 1/4	90	11 Pc.
60	33	12	71	24	83 1/4	102	11 Pc.
66	36	12	76	24	91 1/4	114	11 Pc.
72	39	12	81	24	99 1/4	126	11 Pc.
78	42	12	86	24	107 1/4	138	11 Pc.
84	45	12	91	24	115 1/4	150	11 Pc.
90	48	12	96	24	123 1/4	162	11 Pc.

x EXCEPT CENTER PANEL SEE GENERAL NOTES



END CORNER PLATES MAY BE FASTENED TO APRON OR RESISTANCE SPOT WELDS WHICH WILL HOLD TOGETHER TIGHTLY

TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS

**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 JOINT TIES FOR CAST-IN-PLACE PIPE SHALL BE 1" DIA. TIE RODS WITH 2" MIN. LONG THREADED END AND 3" MAY BE USED FOR CASTLE PASSAGES 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 ENROLLS 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.

Ø OF TONGUE AND GROOVE OR BELL AND SPOT JOINTS.

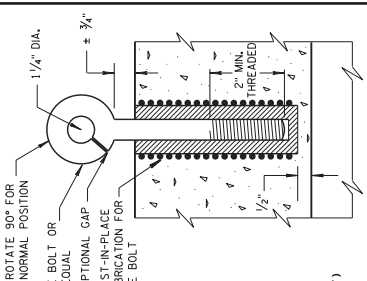
THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

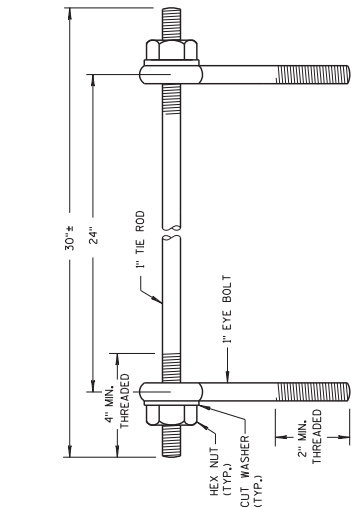
BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

OPENING TO BE ROD DIAMETER PLUS 1/16 INCH.

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

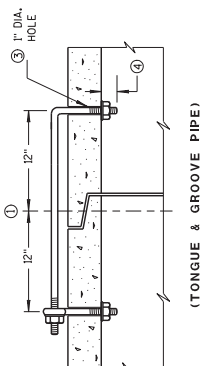


**(CAST-IN-PLACE THREADED INSERT) LONGITUDINAL SECTIONS**

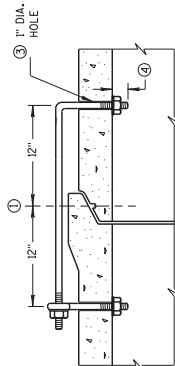


**EYE BOLTS AND TIE ROD**

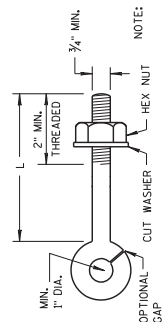
**EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)**



**(TONGUE & GROOVE PIPE)**



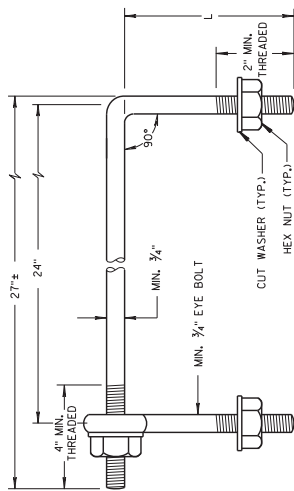
**(MODIFIED BELL PIPE) LONGITUDINAL SECTION**



**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 ASSEMBLY (ALTERNATE NO. 2)**



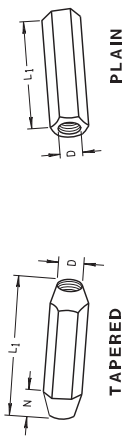
**EYE BOLT AND TIE ROD**

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

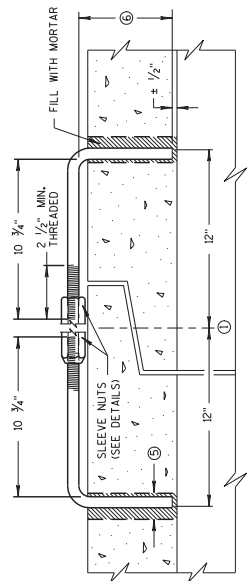
**ADJUSTABLE TIE ROD TABLE**

PIPE TIE ROD DIAMETER	D	L <sub>1</sub>	N
12-60	3/4"	5 1/2"	1 1/2"
66-84	3/4"	5 1/2"	1 1/2"
90-108	1"	7 1/4"	1 1/2"

DIMENSIONS SHOWN ARE IN INCHES



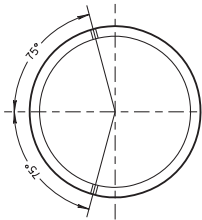
**TAPERED SLEEVE NUTS**  
**PLAIN SLEEVE NUTS**



**LONGITUDINAL SECTION**

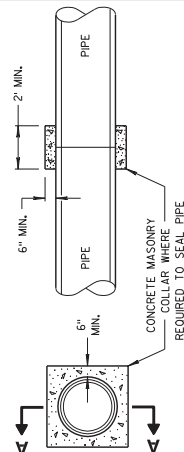
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

**ADJUSTABLE TIE ROD (ALTERNATE NO. 3)**



**TRANSVERSE SECTION**

PLACEMENT OF (3) CAST-IN-PLACE INSERTS FOR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS



**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

FOR

PHWA

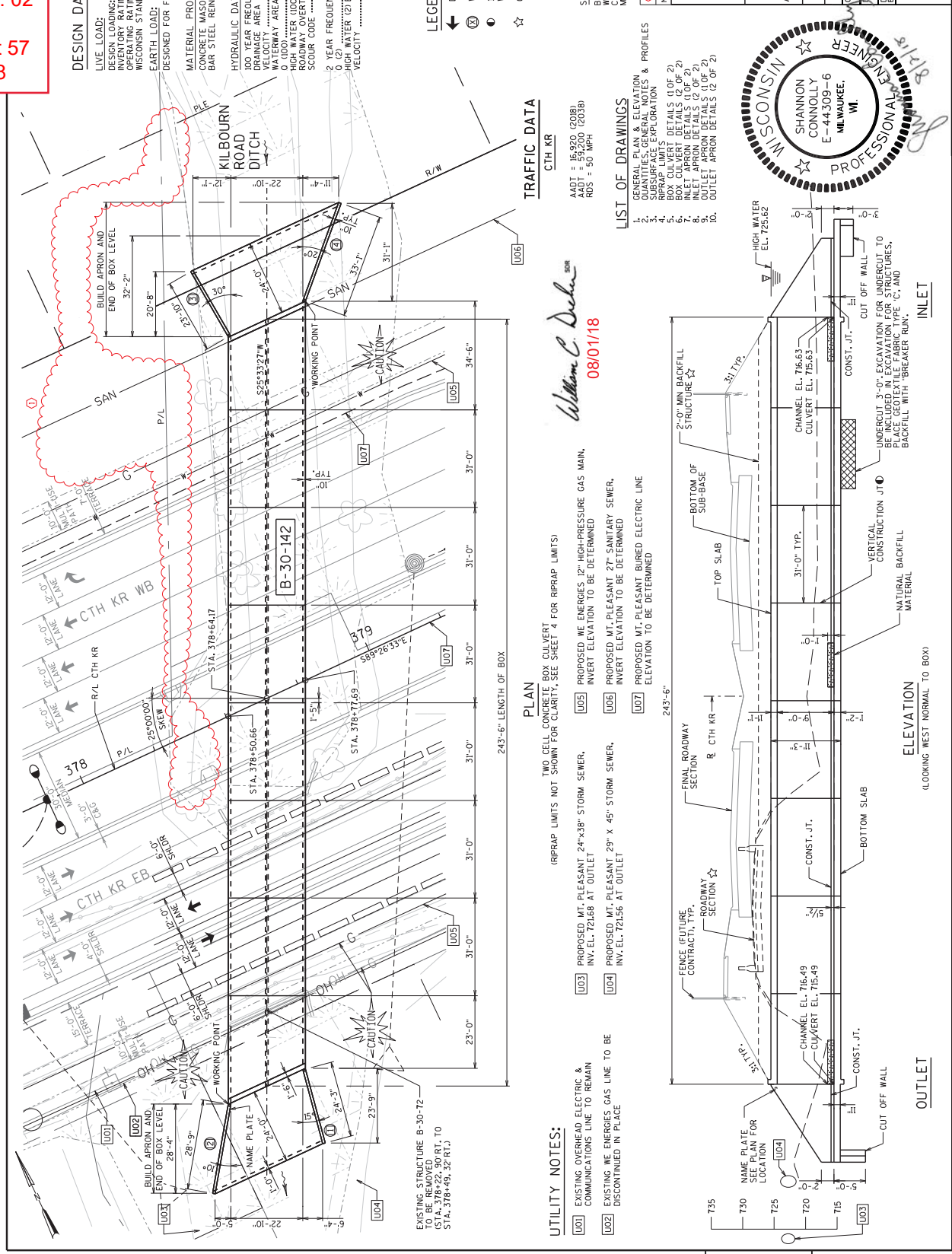
Addendum No. 02  
ID 2704-00-78  
Added Sheet 32B  
August 6, 2018

32B



**Addendum No. 02**  
**ID 3763-00-75**  
**Revised Sheet 57**  
**August 6, 2018**

STATE PROJECT NUMBER <b>3763-00-75</b>	
DESIGN DATA	
LIVE LOAD: DESIGN LOADING: HL-93 INVENTORY RATING FACTOR: RF = 1.76 OPERATING RATING FACTOR: RF = 2.28 WISCONSIN STANDARD PERMIT VEHICLE (MS-SPV): 250 KIPS EARTH LOAD: DESIGNED FOR FILL HEIGHT RANGE OF 2 TO 8 FEET	
MATERIAL PROPERTIES: CONCRETE MASONRY ..... f <sub>c</sub> = 3,500 psi BARS STEEL REINFORCEMENT ..... f <sub>y</sub> = 60,000 psi	
HYDRAULIC DATA: 100-YEAR FREQUENCY ..... 5.42 S.O. ML DRAINAGE AREA ..... 1.65 F.P.S. WATERWAY AREA ..... 54 S.C.F.T. HIGH WATER 1000-ELEVATION ..... 725.62 F.T. ROADWAY OVERTOPPING ..... 8 SCOUR CODE ..... NA	
2-YEAR FREQUENCY ..... 0.12 HIGH WATER 127-ELEVATION ..... 724.14 F.T. VELOCITY ..... 4.56 F.P.S.	
STRUCTURES DESIGN CONTACTS BRIDGE OFFICE: WILLIAM DREHER (608) 266-8489 MOHAMMED ZAGLOUL (414) 751-7200	
ORIGINAL PLANS PREPARED BY <b>KAPUR &amp; ASSOCIATES</b> CONSULTING ENGINEERS 1414-751-7200	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
ACCEPTED	DATE
CHIEF STRUCTURES DESIGN ENGINEER	
STRUCTURE B-30-142	
CITY KR OVER KILBOURN ROAD DITCH CULVERT	
COUNTY RACINE/KENOSHA VILLAGE MT-PLEASANT	
DESIGN SPEC. ASHTO LRFD BRIDGE DESIGN SPECIFICATIONS	
DESIGNED BY SMC LK/SON MHZ BY/WM LK/SON MHZ	
SHEET 1 OF 10	
GENERAL PLAN & ELEVATION	
57	



EXISTING STRUCTURE B-30-72 TO BE REMOVED (STA. 378+22.90 RT. TO STA. 378+49.32 RT.)

**UTILITY NOTES:**  
 U01 EXISTING OVERHEAD ELECTRIC & COMMUNICATIONS LINE TO REMAIN  
 U02 EXISTING WE ENERGIES GAS LINE TO BE DISCONTINUED IN PLACE  
 U03 PROPOSED MT. PLEASANT 24" X 38" STORM SEWER, INV. EL. 724.68 AT OUTLET  
 U04 PROPOSED MT. PLEASANT 29" X 45" STORM SEWER, INV. EL. 724.56 AT OUTLET  
 U05 PROPOSED WE ENERGIES 12" HIGH-PRESSURE GAS MAIN, INVERT ELEVATION TO BE DETERMINED  
 U06 PROPOSED MT. PLEASANT 27" SANITARY SEWER, INVERT ELEVATION TO BE DETERMINED  
 U07 PROPOSED MT. PLEASANT BURIED ELECTRIC LINE ELEVATION TO BE DETERMINED

**TRAFFIC DATA**  
 CTH KR  
 AADT = 16,920 (2018)  
 ADT = 59,200 (2038)  
 RDS = 50 MPH

**PLANNING**  
 TWO CELL CONCRETE BOX CULVERT (RRPRAP LIMITS NOT SHOWN FOR CLARITY, SEE SHEET 4 FOR RRPRAP LIMITS)  
 U05 PROPOSED WE ENERGIES 12" HIGH-PRESSURE GAS MAIN, INVERT ELEVATION TO BE DETERMINED  
 U06 PROPOSED MT. PLEASANT 27" SANITARY SEWER, INVERT ELEVATION TO BE DETERMINED  
 U07 PROPOSED MT. PLEASANT BURIED ELECTRIC LINE ELEVATION TO BE DETERMINED

**ELEVATION**  
 (LOOKING WEST NORMAL TO BOX)

**LEGEND**  
 DIRECTION OF TRAFFIC  
 WINDWALL NUMBER  
 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING UP WALLS & ACROSS TOP SLAB  
 CONSTRUCTION FEATURES DURING INTERM PERIOD

**LIST OF DRAWINGS**  
 1. GENERAL PLAN & ELEVATION QUANTITIES, GENERAL NOTES & PROFILES  
 2. SUBSURFACE EXPLORATION  
 3. BOX CULVERT DETAILS (1 OF 2)  
 4. BOX CULVERT DETAILS (2 OF 2)  
 5. INLET APRON DETAILS (1 OF 2)  
 6. INLET APRON DETAILS (2 OF 2)  
 7. OUTLET APRON DETAILS (1 OF 2)  
 8. OUTLET APRON DETAILS (2 OF 2)

**PROFESSIONAL ENGINEER**  
 SHANNON CONNOLLY  
 E-44309-6  
 MILWAUKEE, WI

**WISCONSIN**

ACCEPTED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHIEF STRUCTURES DESIGN ENGINEER

STRUCTURE B-30-142

CITY KR OVER KILBOURN ROAD DITCH CULVERT

COUNTY RACINE/KENOSHA VILLAGE MT-PLEASANT

DESIGN SPEC. ASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY SMC LK/SON MHZ BY/WM LK/SON MHZ

SHEET 1 OF 10

GENERAL PLAN & ELEVATION

57

FILE NAME : S:\DOT\DOT\_SE\180045\Foxconn\Local\Roads\Structures\B-30-142\cds\B-30-142-080101.dgn  
 PLOT DATE : 8/1/2018  
 PLOT BY : mmyaskovsky  
 PLOT NAME : #FILES  
 PLOT SCALE : 1:130.0025

Addendum No. 02  
ID 3763-00-75  
Revised Sheet 58  
August 6, 2018

**TOTAL ESTIMATED QUANTITIES**

ITEM NO.	BID ITEMS	UNIT	SOUTH WINGS	CULVERT BOX	NORTH WINGS	TOTAL
203.0200.001	REMOVING OLD STRUCTURE STA. 378+36	LS	--	--	--	1
206.2000.002	EXCAVATION FOR STRUCTURES CULVERTS (B-30-142)	LS	--	--	--	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	342	7,068	336	7,746
310.0100	BREAKER RUN	TON	186	1,444	221	1,850
504.0100	CONCRETE MASONRY CULVERTS	CY	42	701	46	789
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1,520	90,590	1,450	93,580
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	3,610	--	3,440	7,050
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	11	53	12	76
606.0200	RIPRAP MEDIUM	CY	37	--	49	86
645.0105	GEOTEXTILE TYPE C	SY	141	986	166	1,293
645.0120	GEOTEXTILE TYPE HR	SY	102	--	129	231
SPV.0035.001	NATURAL BACKFILL MATERIAL	CY	33	238	41	312
	NON-BID ITEMS					
	NAME PLATE	EACH				1
	PERFORMED FILLER	SIZE				3/4"

**GENERAL NOTES**

THE EXISTING STRUCTURE B-30-72 IS 11 WIDE BY 8 HIGH OPENING BY 62 LONG. TWIN CELL CONCRETE BOX CULVERT WITH WINGWALLS ALL FOUR CORNERS. ALL INFORMATION ON THIS EXISTING STRUCTURE WAS TAKEN FROM EXISTING PLANS DATED 1995.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE. ALL BAR STEEL REINFORCEMENT ARE ENGLISH DESIGNATION.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCS), RACINE COUNTY ZONE MAD 83 (2007). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2007).

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. THE UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.

NAME PLATE SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "CONCRETE MASONRY CULVERTS". REFER TO S.D.D. "NAME PLATE STRUCTURES" FOR NAME PLATE DETAILS.

SEE ROADWAYS PLANS FOR TEMPORARY WATER WAY DURING CONSTRUCTION.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE OR BREAKER RUN SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE "C" TO THE ELEVATION SHOWN IN THE SECTION THRU BOX CULVERT. FILL ABOVE THE BACKFILL IS INCLUDED IN THE EARTHWORK QUANTITIES IN THE ROAD PLANS.

BACKFILL PAY LIMITS. BACKFILL TO BOTTOM OF ROADWAY SUBGRADE OR A MINIMUM OF 2 FEET. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS (B-30-142)" SHALL BE THE EXISTING GROUND LINE OR EXISTING STREAM BED. UNDERCUT 3'-0" EXCAVATION FOR UNDERCUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE 'C'" AND BACKFILL WITH "BREAKER RUN".

THE CONCRETE IN THE CUT OFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE Dewatered. THE ALTERNATE CUT OFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALL QUANTITIES AND BID PRICES.

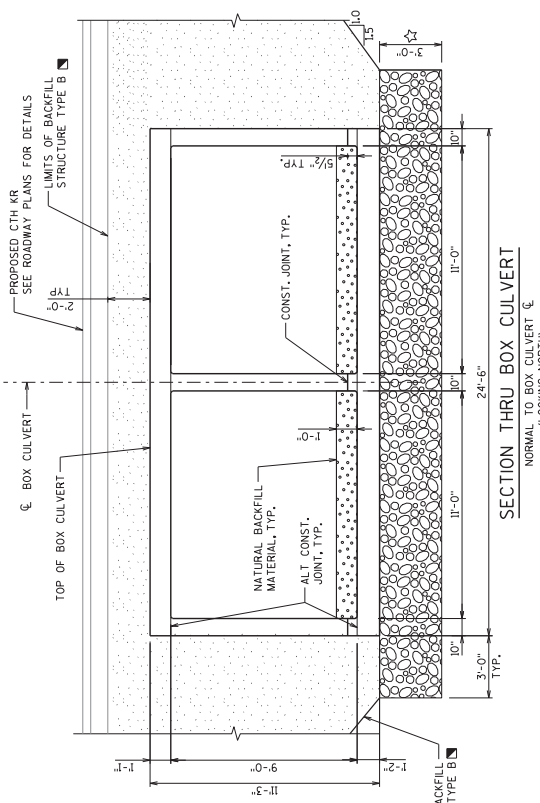
THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL AND ITS CORRESPONDING STANDARDS. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

THE SLOPE OF THE FILL AT THE WINGWALLS SHALL BE COVERED WITH MEDIUM RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENTS SHOWN ON SHEET 4.

BACKFILL SHALL BE PLACED AND MAINTAINED AROUND THE ENTIRE BOX CULVERT DURING INTERIM PERIOD.

TEMPORARY SHORING SHALL BE CONSTRUCTED TO MAINTAIN A MINIMUM OF 1'-6" CLEARANCE FROM THE OUTSIDE EDGES OF UTILITY PIPES.

ALL ITEMS ARE CATEGORY 2000



**BENCH MARKS**

NO.	LOCATION	ELEVATION	DESCRIPTION
343	N+165051230	E+597053.276	BM FENO WITH ALUM CAP
444	N+164996	E+597429	BM PPOL 99-09984 RR SPIKE IN FACE
445	N+165005	E+598641	BM PPOL 99-09986 RR SPIKE IN FACE

**SECTION THRU BOX CULVERT**  
NORMAL TO BOX CULVERT & (LOOKING NORTH)

8/21/18

NO. DATE: **8/02/18**

REVISION: **REMOVING TEMPORARY SHORING**

BY: **SMC**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

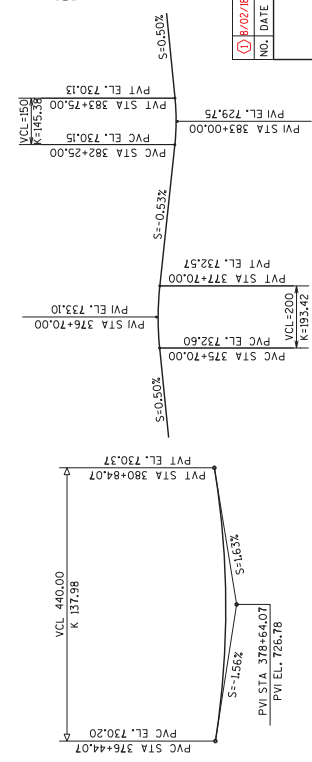
STRUCTURE B-30-142

QUANTITIES, GENERAL NOTES & PROFILES

SHEET 2 OF 10

58

**INTERIM PROFILE AT C/L CTH KR FUTURE PROFILE AT R/L CTH KR**



*William C. DeLuna*  
08/01/18

STATE PROJECT NUMBER  
3763-00-75

**Addendum No. 02**  
**ID 3763-00-75**  
**Revised Sheet 60**  
**August 6, 2018**

*William C. Decker*  
08/01/18



NO.	DATE	REVISION	BY
1	8/02/18	REMOVE TEMPORARY SHORING	SMC

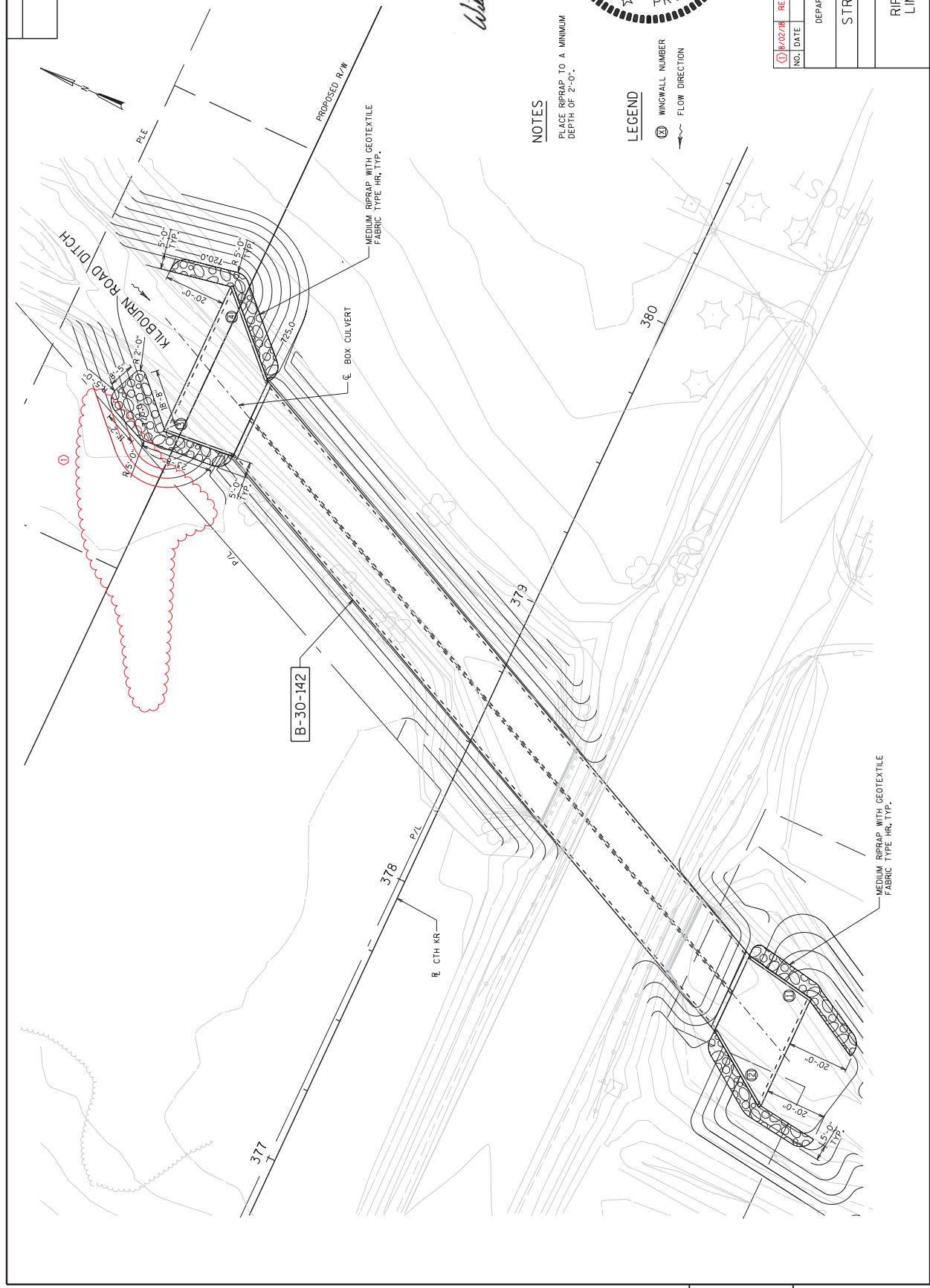
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
STRUCTURE B-30-142	
DRWN	MM
CHKD	MM
DATE	MM
SHEET 4 OF 10	
RIPRAP LIMITS	
60	

**NOTES**

PLACE RIPRAP TO A MINIMUM DEPTH OF 2'-0".

**LEGEND**

- ⊗ WINGWALL NUMBER
- FLOW DIRECTION



PLOT SCALE : 1:130

PLOT BY : mmydskovsky

PLOT DATE : 8.1.2018

PLOT NAME : \$FILE\$





Proposal Schedule of Items

Proposal ID: 20180814004 Project(s): 2704-00-78, 3763-00-75

Federal ID(s): N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	108.4400 CPM Progress Schedule	1.000 EACH	_____.	_____.
0004	201.0105 Clearing	2.000 STA	_____.	_____.
0006	201.0115 Clearing	0.100 ACRE	_____.	_____.
0008	201.0120 Clearing	15.000 ID	_____.	_____.
0010	201.0205 Grubbing	2.000 STA	_____.	_____.
0012	201.0215 Grubbing	0.100 ACRE	_____.	_____.
0014	201.0220 Grubbing	15.000 ID	_____.	_____.
0016	203.0100 Removing Small Pipe Culverts	1.000 EACH	_____.	_____.
0018	203.0200 Removing Old Structure (station) 002. Sta 378+36	LS	LUMP SUM	_____.
0020	204.0165 Removing Guardrail **P**	267.000 LF	_____.	_____.
0022	204.9090.S Removing (item description) 001. Drain Tile	200.000 LF	_____.	_____.
0024	206.2000 Excavation for Structures Culverts (structure) 001. C-51-85	LS	LUMP SUM	_____.
0026	206.2000 Excavation for Structures Culverts (structure) 002. B-30-142	LS	LUMP SUM	_____.
0028	210.2500 Backfill Structure Type B	12,670.000 TON	_____.	_____.
0030	305.0120 Base Aggregate Dense 1 1/4-Inch	914.000 TON	_____.	_____.
0032	311.0110 Breaker Run	2,412.000 TON	_____.	_____.



## Proposal Schedule of Items

Proposal ID: 20180814004 Project(s): 2704-00-78, 3763-00-75

Federal ID(s): N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0034	450.4000 HMA Cold Weather Paving	353.000 TON	_____	_____
0036	455.0605 Tack Coat	74.000 GAL	_____	_____
0038	465.0105 Asphaltic Surface	353.000 TON	_____	_____
0040	504.0100 Concrete Masonry Culverts **P**	1,079.000 CY	_____	_____
0042	505.0400 Bar Steel Reinforcement HS Structures	129,010.000 LB	_____	_____
0044	505.0600 Bar Steel Reinforcement HS Coated Structures	10,200.000 LB	_____	_____
0050	516.0500 Rubberized Membrane Waterproofing **P**	119.000 SY	_____	_____
0052	606.0200 Riprap Medium	198.000 CY	_____	_____
0054	608.0512 Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	200.000 LF	_____	_____
0056	612.0700 Drain Tile Exploration	200.000 LF	_____	_____
0058	616.0700.S Fence Safety	600.000 LF	_____	_____
0060	619.1000 Mobilization	1.000 EACH	_____	_____
0062	623.0200 Dust Control Surface Treatment	3,500.000 SY	_____	_____
0064	624.0100 Water	50.000 MGAL	_____	_____
0066	625.0500 Salvaged Topsoil **P**	11,548.000 SY	_____	_____
0068	628.1104 Erosion Bales	200.000 EACH	_____	_____



Proposal Schedule of Items

Proposal ID: 20180814004 Project(s): 2704-00-78, 3763-00-75

Federal ID(s): N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0070	628.1504 Silt Fence	2,087.000 LF	_____.	_____.
0072	628.1520 Silt Fence Maintenance	2,087.000 LF	_____.	_____.
0074	628.1905 Mobilizations Erosion Control	6.000 EACH	_____.	_____.
0076	628.1910 Mobilizations Emergency Erosion Control	4.000 EACH	_____.	_____.
0078	628.2004 Erosion Mat Class I Type B	13,748.000 SY	_____.	_____.
0080	628.6510 Soil Stabilizer Type B	2.630 ACRE	_____.	_____.
0082	628.7560 Tracking Pads	2.000 EACH	_____.	_____.
0084	628.7570 Rock Bags	100.000 EACH	_____.	_____.
0086	630.0200 Seeding Temporary	343.000 LB	_____.	_____.
0088	643.0420 Traffic Control Barricades Type III	3,000.000 DAY	_____.	_____.
0090	643.0705 Traffic Control Warning Lights Type A	6,000.000 DAY	_____.	_____.
0092	643.0900 Traffic Control Signs	23,100.000 DAY	_____.	_____.
0094	643.0920 Traffic Control Covering Signs Type II	5.000 EACH	_____.	_____.
0096	643.1050 Traffic Control Signs PCMS	14.000 DAY	_____.	_____.
0098	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0100	645.0105 Geotextile Type C	1,859.000 SY	_____.	_____.
0102	645.0120 Geotextile Type HR	991.000 SY	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20180814004 Project(s): 2704-00-78, 3763-00-75

Federal ID(s): N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0104	646.1020 Marking Line Epoxy 4-Inch **P**	1,060.000 LF	_____.	_____.
0106	690.0150 Sawing Asphalt	48.000 LF	_____.	_____.
0108	715.0502 Incentive Strength Concrete Structures	6,474.000 DOL	1.00000	6,474.00
0110	SPV.0035 Special 001. Natural Backfill Material	434.000 CY	_____.	_____.
0112	SPV.0060 Special 001. Crash Cushion Temporary Left In Place	4.000 EACH	_____.	_____.
0114	SPV.0060 Special 003. Sand Bags	100.000 EACH	_____.	_____.
0116	SPV.0060 Special 013. Connect Drain Tile	2.000 EACH	_____.	_____.
0118	SPV.0090 Special 001. Concrete Barrier Temporary Precast Delivered Special	400.000 LF	_____.	_____.
0120	SPV.0105 Special 001. Survey Project 2704-00-78	LS	LUMP SUM	_____.
0122	SPV.0105 Special 002. Survey Project 3763-00-75	LS	LUMP SUM	_____.
0124	SPV.0105 Special 003. Temporary Access Road Culvert C-51-85	LS	LUMP SUM	_____.
0126	SPV.0105 Special 004. Temporary Stream Diversion Culvert C-51-85	LS	LUMP SUM	_____.
0128	SPV.0105 Special 005. Temporary Stream Diversion Culvert B-30-142	LS	LUMP SUM	_____.
0130	SPV.0170 Special 001. Removal and Disposal of Invasive Plant Species	2.000 STA	_____.	_____.
0132	204.0280 Sealing Pipes	4.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20180814004 Project(s): 2704-00-78, 3763-00-75

Federal ID(s): N/A, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0134	205.0100 Excavation Common	3,100.000 CY	_____.	_____.
0136	208.0100 Borrow	6,250.000 CY	_____.	_____.
0138	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	2.000 EACH	_____.	_____.
0140	522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	1.000 EACH	_____.	_____.
0142	522.1036 Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	1.000 EACH	_____.	_____.
0144	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	151.000 LF	_____.	_____.
0146	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	80.000 LF	_____.	_____.
0148	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	164.000 LF	_____.	_____.
0150	611.2005 Manholes 5-FT Diameter	1.000 EACH	_____.	_____.
0152	611.2006 Manholes 6-FT Diameter	1.000 EACH	_____.	_____.
0154	628.7005 Inlet Protection Type A	1.000 EACH	_____.	_____.
0156	633.5200 Markers Culvert End	4.000 EACH	_____.	_____.
0158	SPV.0060 Special 002. Cover Plates Left In Place	2.000 EACH	_____.	_____.
Section: 0001			Total:	_____.
			Total Bid:	_____.

