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PRECAST

BED OF

MORTAR

5"

SEPARATE PRECAST REINFORCED

**CONCRETE BASE OPTION** 

DETAIL "B"

WALL

DISCHARGE

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

OUTSIDE

PIPE WALL

## **GENERAL NOTES**

DETAILS OF CONSTRUCTION, MAT THE PERTINENT REQUIREMENTS C

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

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS 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 PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES 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 RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND 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.

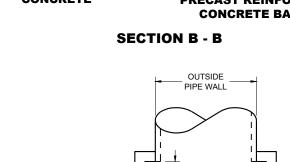
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO

ASTM C 913 (2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

		WIDTH W (FT.)	LENGTH	INLET COVER TYPE									
				ALL A'S	ALL B'S	BW	F	ALL H'S	s	т	V	WM	V V-B
	2 X 2-FT	2	2	х	х				х				
	2 X 2.5-FT	2	2.5			x			х	х	Х	x	
	2 X 3-FT	2	3					Х					
	2.5 X 3-FT	2.5	3				х						
	2 X 3.5-FT	2	3.5										х

CA 2 2 X 2 2.5 2 X



DETAIL "A"

\_\_\_\_\_ 3" MIN. (TYP.)

TERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO	
OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.	

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

## **CATCH BASIN COVER MATRIX**

## **PIPE MATRIX**

CATCH BASIN	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES				
SIZE	WIDTH (IN)	LENGTH (IN)			
X 2-FT	12	12			
(2.5-FT	12	18			
X 3-FT	12	24			
5 X 3-FT	18	24			
( 3.5-FT	12	30			

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED December 2023

/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

DATE

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# Standard Detail Drawing 8C7

## Inlets 2x2-FT, 2x2.5-FT, 2x3-FT, 2.5x3-FT, and 2x3.5-FT

#### **References:**

FDM 13-25-30

# Bid items associated with this drawing:

ITEM NUMBER	DESCRIPTION	<u>UNIT</u>
611.3220	Inlets 2x2-FT	EACH
611.3225	Inlets 2x2.5-FT	EACH
611.3230	Inlets 2x3-FT	EACH
611.3253	Inlets 2.5x3-FT	EACH
611.3260	Inlets 2x3.5-FT	EACH

#### Standardized Special Provisions associated with this drawing:

<u>STSP</u> <u>NUMBER</u>	<u>TITLE</u>
NONE	

### Other SDDs associated with this drawing:

<u>SDD 8A5</u>	Inlet cover sheets "a", "b", "c", "d", and "e"
SDD 8D17	Manholes, Manhole and Inlet Covers

### **Design Notes:**

Guidelines for matching inlet opening size and inlet covers are provided on the front side of this SDD.

A pipe matrix on the front side of this SDD provides guidance for selecting the maximum inside pipe diameter. The inside pipe diameter was determined by the pipe entering perpendicular to the structure at 90°. Pipes entering at a skewed angle should be evaluated on a case by case basis.

Inlets should be kept as shallow as possible to reduce cost.

#### **Contact Person:**

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