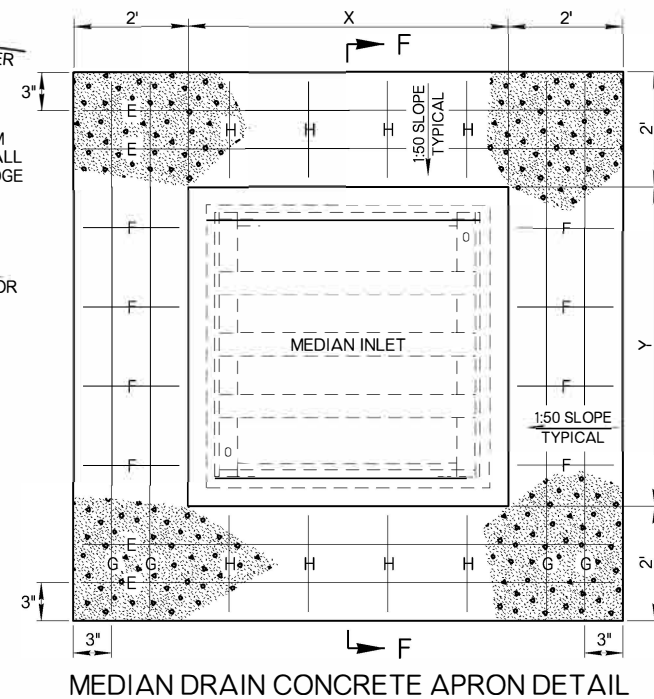
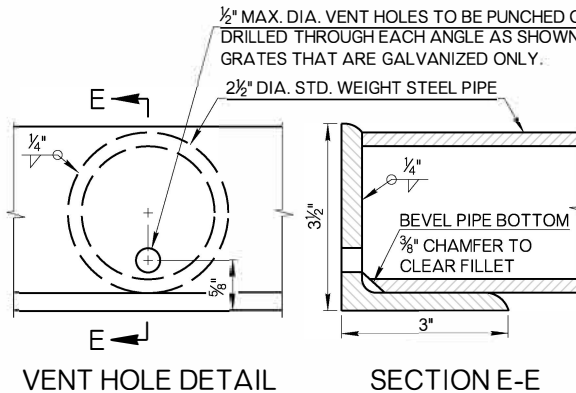
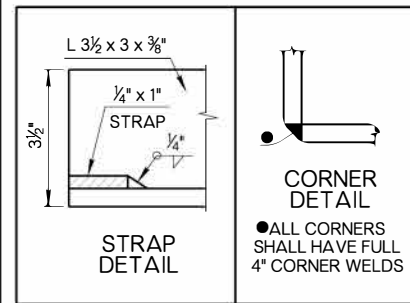
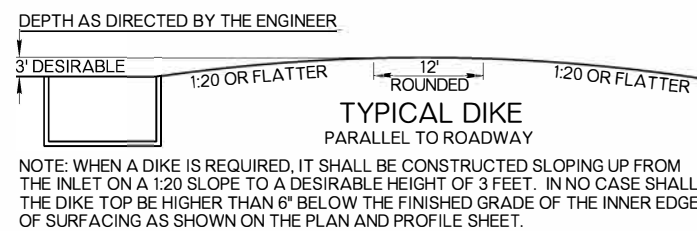
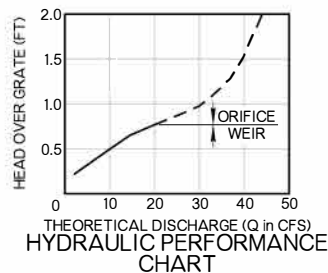




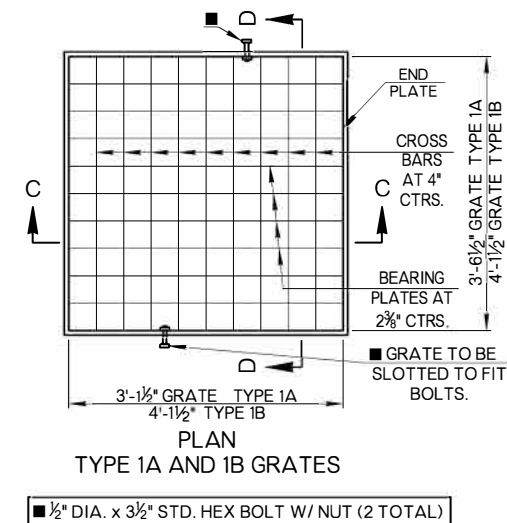
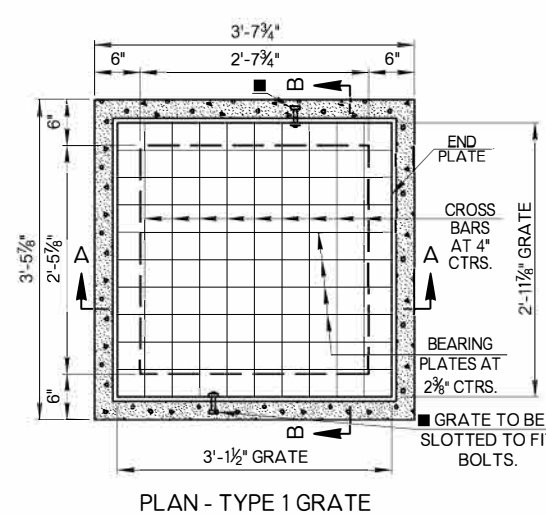
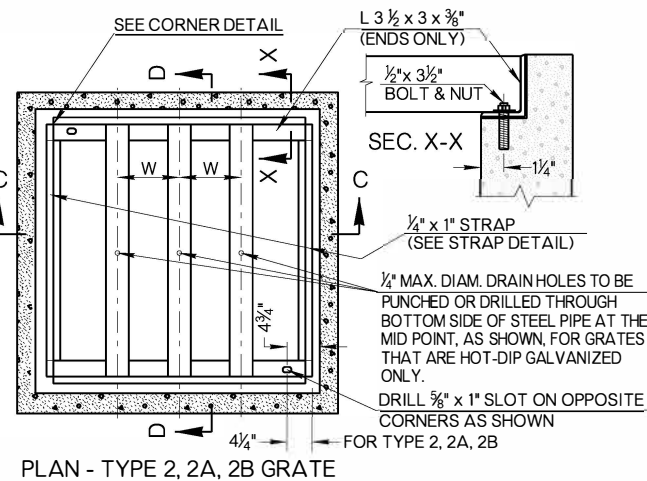
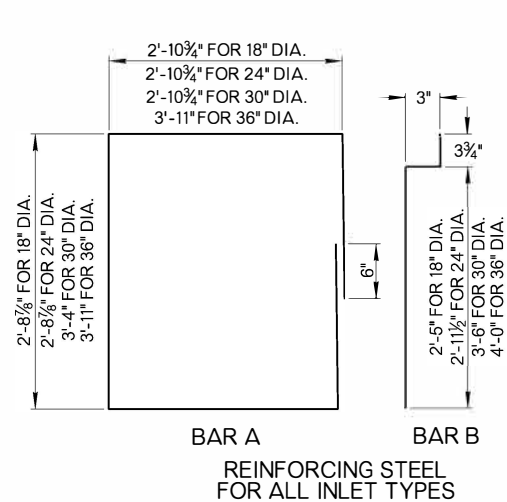
APRON REINFORCING STEEL LOCATION & LENGTHS (#4 BARS - EQUALLY SPACED @ 18" MAXIMUM)*							APRON REINF. STEEL°	APRON CLASS C CONCRETE°
DIAMETER	E - BARS	F - BARS	G - BARS	H - BARS	X	Y		
IN.	(NO.) FT. - IN.	(NO.) FT. - IN.	(NO.) FT. - IN.	(NO.) FT. - IN.	FT. - IN.	FT. - IN.	LB.	C.Y.
18 & 24	(4) 7 - 2½	(8) 1 - 9	(4) 7 - 4¾	(8) 1 - 9	3 - 7¾	3 - 5½	57	0.83
30	(4) 7 - 10	(8) 1 - 9	(4) 7 - 4¾	(8) 1 - 9	3 - 7¾	4 - 1	59	0.87
36	(4) 8 - 5	(9) 1 - 9	(4) 8 - 5	(9) 1 - 9	4 - 8	4 - 8	66	0.99
*MINIMUM 1½" COVER OVER STEEL			°QUANTITIES ARE FOR ONE APRON					

*MINIMUM 1 1/2\"/>

°QUANTITIES ARE FOR ONE APRON

COMPONENT	TYPE 1 GRATE		TYPE 1A GRATE		TYPE 1B GRATE	
	DIMENSIONS	NO.	DIMENSIONS	NO.	DIMENSIONS	NO.
CROSS BARS	3/8\"/>	10	3/8\"/>	10	3/8\"/>	14
END PLATES	3 1/2\"/>	2	3 1/2\"/>	2	3 1/2\"/>	2
BEARING PLATES	4\"/>	16	4\"/>	19	4\"/>	22

SMD INLET BAR LIST					
BAR	SIZE	NO.	SHAPE	LENGTH	SPACE
TYPE 1 - 18\"/>					
A	#4	5	BENT	11'-10"	6\"/>
B	#4	15	BENT	2'-11 1/2"	9\"/>
C	#5	7	STR.	3'-1 1/2"	6\"/>
D	#5	6	STR.	3'-3 3/4"	6\"/>
TYPE 2 - 18\"/>					
A	#4	6	BENT	11'-10"	6\"/>
B	#4	16	BENT	3'-6 1/2"	9\"/>
C	#5	7	STR.	3'-1 1/2"	6\"/>
D	#5	6	STR.	3'-3 3/4"	6\"/>
TYPE 2A - 18\", 24\"/>					
A	#4	7	BENT	12'-11 1/2"	6\"/>
B	#4	18	BENT	4'-1"	9\"/>
C	#5	7	STR.	3'-3 3/4"	6\"/>
D	#5	7	STR.	3'-7"	6\"/>
TYPE 2B - 18\", 24\", 30\"/>					
A	#4	8	BENT	16'-2"	6\"/>
B	#4	20	BENT	4'-7"	9\"/>
C	#5	7	STR.	4'-4"	6\"/>
D	#5	8	STR.	4'-4"	6\"/>
GRATES - OVERALL DIMENSIONS					
TYPE 1 GRATE: 3'-1 1/2\"/>					
TYPE 2 GRATE: 3'-1 1/2\"/>					
TYPE 1A, 2A GRATE: 3'-1 1/2\"/>					
TYPE 1B, 2B GRATE: 4'-1 1/2\"/>					
W = 8 1/4\"/>					
W = 9\"/>					
PIPE GRATE MATERIAL					
2 1/2\"/>					

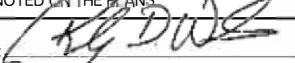


ESTIMATED SMD QUANTITIES					ADD'L SMD DEPTH PER VERT. FT.	
DESIGNATED PIPE SIZE IN INLET	TYPE OF GRATE	1 PIPE CLASS A CONC.	2 PIPES CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL
18\"/>	1 OR 2	0.75	0.67	115	0.23	27
24\"/>	1 OR 2	0.85	0.76	129	0.23	27
30\"/>	1A OR 2A	1.06	0.96	160	0.25	29
36\"/>	1B OR 2B	1.52	1.38	211	0.31	35

- ### GENERAL NOTES
- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2019 ODOT STANDARD SPECIFICATIONS.
 - VENT HOLES AND DRAIN HOLES FOR HOT DIP GALVANIZATION SHALL BE DRILLED OR PUNCHED IN GRATE AS SHOWN.
 - BICYCLE AND PEDESTRIAN SAFE GRATES, SIMILAR TO TYPE 1 GRATES, MAY BE USED, PROVIDED THEY MEET THE MINIMUM EQUIVALENT HYDRAULIC STRUCTURAL REQUIREMENTS AND PROPOSED DESIGNS ARE APPROVED BY THE ENGINEER. SUBSTITUTED GRATES SHALL BE INCLUDED IN THE PRICE BID FOR THE RESPECTIVE INLET.
 - EXPOSED ROUNDED EDGING, ALL EXPOSED SURFACES SHALL BE FINISHED IN ACCORDANCE WITH SECTION 509.
 - COST OF APRON MATERIALS (INCLUDING REINFORCING STEEL), LABOR, AND INSTALLATION SHALL BE INCLUDED IN THE PRICE BID FOR SMD INLET.
 - AS SHOWN ON THIS STANDARD, INLET CONCRETE DRAWINGS AND INLET REINFORCING STEEL DESIGN ARE BASED ON CAST-IN-PLACE MANUFACTURING. PRECAST CONCRETE MANUFACTURING DESIGN AND DRAWINGS ARE ON ROADWAY STANDARD PSMD-2.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
611 (G)	INLET (SMD-TYPE 1)	EA
611 (G)	INLET (SMD-TYPE 2)	EA
611 (G)	INLET (SMD-TYPE 2A)	EA
611 (G)	INLET (SMD-TYPE 2B)	EA

NOTE: COST OF INLET GRATE SHALL BE INCLUDED IN THE PRICE BID FOR THE INLET. COST OF ALL CLASS A CONCRETE AND REINFORCING STEEL NECESSARY FOR ADDITIONAL DEPTH SHALL BE INCLUDED IN THE PRICE BID FOR THE SMD INLET. SMD INLET ADDITIONAL DEPTH DATA SHALL BE NOTED ON THE PLANS.

APPROVED BY ROADWAY ENGINEER:  DATE: 6/30/22

ROADWAY DESIGN DIVISION STANDARD

CAST-IN-PLACE STANDARD MEDIAN DRAINS (18\"/>



2019 SPECIFICATIONS	
SMD-4	2
R-29	