



ADDENDUM NO. 5
POTTAWATTAMIE COUNTY, IOWA
ROADS OPERATION CENTER – EARTHWORK AND EROSION CONTROL PLANS
Council Bluffs, Iowa

HGM PROJECT # 105120

DATE OF ISSUE: August 9, 2021

DATE OF BID OPENING: Tuesday, August 10, 2021, at 9:00 a.m.

NOTE TO PLANHOLDERS: Please insert this addendum into your copy of the Project Contract Documents. The following additions or changes to the Contract Documents for the above named project are issued by the Engineer and have the same force and effect as though part of the original issued.

PROJECT MANUAL

PLAN REVISION

SHEET C.4.0

The Trench Bedding for the 36-Inch Corrugated Metal Pipe shall be Class F-3 as shown on Standard Plan SW-103, copy attached. Native fill can be used above the Class 1 bedding material limit (no floodable backfill is required).

The amount of camber required for the CMP will be adjusted after the bid letting. The amount of camber has not been finalized but it will be in the range of 12 inches.

All other stipulations and requirements of the plans and specifications remain in effect. This addendum shall be attached to and made part of the Contract Documents and shall be acknowledged with the bidders proposal.

Respectfully Submitted:

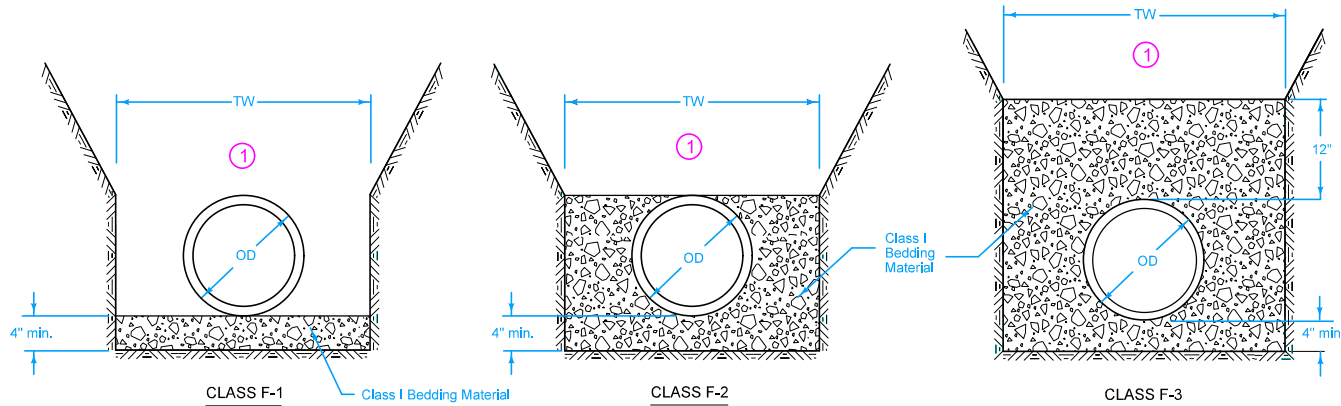
HGM ASSOCIATES INC.

A handwritten signature in blue ink, appearing to read "John E. Jorgensen".

John E. Jorgensen, PE
Project Manager

DO NOT USE ON PRIMARY ROADWAYS

BEDDING CLASSES



- 1 Place remainder of bedding and backfill materials as specified in the contract documents.
- 2 Minimum depth of bury 12 inches or as specified by the manufacturer.

ALLOWABLE BEDDING CLASSES

PIPE MATERIAL	STORM SEWER	SANITARY SEWER
Ductile Iron	F-1, F-2, F-3	F-1, F-2, F-3
HDPE	F-2, F-3	Not allowed
Polypropylene	F-2, F-3	F-3
PVC	F-2, F-3	F-3

Key

OD = Outside diameter of pipe

TW = Trench width at top of pipe:
Min. = OD+18 Inches OR 1.25xOD+12 Inches
(whichever is greater)

ALLOWABLE BURY DEPTH

PVC PIPE

Pipe Diameter (in)	ASTM D 3034			ASTM F 679	ASTM F 949	ASTM F 1803	ASTM D 2680
	Solid Wall			Solid Wall	Corrug. Exterior	Closed Profile	Composite (Truss Type)
	SDR 23.5	SDR 26	SDR 35				
8	30'	28'	24'	---	24'	---	32'
10	30'	28'	24'	---	24'	---	32'
12	30'	28'	24'	---	24'	---	32'
15	30'	28'	24'	---	24'	---	32'
18	---	---	---	24'	24'	---	---
21	---	---	---	24'	24'	24'	---
24	---	---	---	24'	24'	24'	---
27	---	---	---	24'	---	24'	---
30	---	---	---	24'	24'	24'	---
33	---	---	---	24'	---	---	---
36	---	---	---	24'	24'	24'	---
42	---	---	---	24'	---	24'	---
48	---	---	---	24'	---	24'	---
54	---	---	---	---	---	24'	---
60	---	---	---	---	---	24'	---

DUCTILE IRON, AWWA C151, CLASS 52

Pipe Diameter (in)	Class F-1 Bedding	Class F-2 Bedding	Class F-3 Bedding
4	40'	40'	40'
6	40'	40'	40'
8	40'	40'	40'
10	40'	40'	40'
12	37'	40'	40'
14	31'	40'	40'
16	28'	37'	40'
18	25'	34'	40'
20	23'	32'	40'
24	20'	29'	38'
30	18'	23'	31'
36	18'	22'	30'
42	17'	21'	29'
48	16'	19'	27'
54	16'	19'	27'

HDPE PIPE

Pipe Diameter (in)	AASHTO M 294
12	8'
15	9'
18	9'
24	9'
30	9'
36	9'
42	8'
48	8'
54	8'
60	8'

POLYPROPYLENE PIPE

Pipe Diameter (in)	ASTM F 2764
12	24'
15	25'
18	22'
24	20'
30	22'
36	21'
42	22'
48	23'
54	21'
60	21'

FIGURE 3010.103

SHEET 1 OF 1

		REVISION
		4 04-20-21
FIGURE 3010.103	STANDARD ROAD PLAN	SW-103
REVISIONS: Added note DO NOT USE ON PRIMARY ROADWAYS.		SHEET 1 of 1
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER
FLEXIBLE GRAVITY PIPE TRENCH BEDDING		