IOWA DEPARTMENT OF NATURAL RESOURCES

# **CONSTRUCTION DOCUMENTS** FOR **RANDOLPH ACCESS WMA ROAD MAINTENANCE**

# IOWA COUNTY, IOWA

# DOT PROJECT #SP-00SP(3)--7C-00 **DNR PROJECT** 1100 OF 10 04



PREPARED UNDER MY SUPERVISION AND THAT ENGINEERING DECISIONS WITH REGARD TO THE DESIGN WERE MADE BY ME UNDER THE LAWS OF THE STATE OF IOWA.
SIGNATURE DATE DATE DATE DATE DATE DATE DATE DAT

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### PROJECT DESCRIPTION

This project consists of granular roadway maintenance - ditch cleaning, small tree/brush cleaning/removal. roadway blading/shaping, rock placement/spreading/rolling, and culvert replacement. It also includes the grade preparation and forming/placement of approximately 100 SY (~25 CY) of 9-inch PCC.



AUTHORIZATION TO BID
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#### DATE

**PROJECT MANAGER** CONSTRUCTION INSPECTOR IOWA DEPARTMENT OF NATURAL RESOURCES. COMPANY IOWA DEPARTMENT OF NATURAL RESOURCES COMPANY ADDRESS 502 EAST 9TH STREET ADDRESS CITY,STATE,ZIP DES MOINES, IA, 50319 CITY,STATE,ZIF CONTACT BRUCE L. FLIPPIN CONTACT MIKE DUFOE TELEPHONE 515-689-8009 TELEPHONE 515-985-9196 FAX 515-281-8685 FAX EMAIL EMAIL bruce.flippin@dnr.iowa.gov michael.dufoe@dnr.iowa.gov

DIRECTORY

	SHEET INDEX			
A.01	COVER SHEET			
A.02	LOCATION MAP			
B.01	TYPICAL CROSS SECTIONS AND DETAILS	Ë		
B.02	TYPICAL CROSS SECTIONS AND DETAILS	TAN		
B.03	TYPICAL CROSS SECTIONS AND DETAILS	Insh		
B.04	TYPICAL CROSS SECTIONS AND DETAILS	Ó		
B.05	TYPICAL CROSS SECTIONS AND DETAILS	Ŭ		
B.06	TYPICAL CROSS SECTIONS AND DETAILS			
C.01			$\frown$	
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D.01	SITE PLAN			
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		NO. BY DATE	REVISION	
		DRAWN BY	PROJECT NUMBER: 20-05-48-01	
		CHK'D BY	DATE:	
			MARCH 202	22
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			Π.υ	• /





Typical Roadway Section - Center Crown

## Note:

Normal sections shown may be appropriately modified for areas specifically designated by the Engineer.

STATION	TO STATION	LOCATION	WIDTH
0+00	43+20	HEADING NORTH	12′

# ---MOVE ANY HIGH Shulder material To roadway

EXISTING FORESLOPE

	FERING SERVICES - WALLACE BULING 9TH ST., DES MOINES, IA 50319-20034
	ERING SERVICES - WALLACE BUILING 9TH ST., DES MOINES, IA 50319-0034
	PTH ST., DES MOINES, IA 50319-0034
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RANDOLPH ACCESS WMA	
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ISION ECT NUMBER 05-48-0	R: )]
	RANDOLPH ACCESS WMA





SPEED LIMIT (mph)	A	С	E	F and G Range	F + G Max.	H Max.	т
35 or less	250'	40'	0'-200'	500'-3000'	3500'	2000'	50'
40 - 45	350'	80'	0'-200'	700'-3000'	3700'	2000'	100'
50 or greater	500'	100'	200'-300'	1000'-3000'	4000'	2000'	100'

(1) Keep F and G distances as near to minimum values as work permits. However, to allow advancement of the work area without moving signs, F and G distances may be varied within the limits of the table. Maximum movement can be achieved by setting one F or G value at the minimum and the other value at its maximum.

2 If length of work area exceeds 1/4 mile, use TC-214.





r to DR-104 for minimum and maximum allowable (H) for the particular kind of pipe culvert.	SONSULTANT:
The backfill adjacent to and above the pipe culvert may be placed in conjunction with normal embankment onstruction. Thoroughly tamp the embankment within the limits shown.	
ake extra care to ensure complete and satisfactory amping of backfill material in the area immediately djacent to the lower portion of pipe.	
Carefully shape excavation below groundline either using a template conforming to actual dimension and hape of the pipe or using other means. If using other neans, check with a template conforming to the actual limension and shape of the pipe.	INT OF IRCES CEBUILING 3319-0034
For culverts backfilled by flooding, place a cohesive soil lug at the inlet, outlet, and, when necessary, sides, rior to flooding.	ARTME RESOU VICES - WALLAG
-inch Porous Backfill bedding. 2-inch Floodable Backfill edding may be used under unsealed rigid pipe.	A DEF URAL
extend Porous Backfill through the outlet end soil plug when used for bedding.	IOW/ NAT NAT Soz E. 9
Quantity calculations are based upon a 1:1 slope and ninimum trench dimension. Actual slope of trench may ary based upon Contractor's operations.	
Ground Line at time of pipe installation. When existing round exceeds 5 feet depth over pipe, backfill and ompaction by flooding is not required more than 5 feet bove the pipe.	
Vhere a corrugated metal pipe culvert requiring longation is to be installed (to counteract deformation aused by backfill), complete elongation using a means pproved by the Engineer. Elongation may be leveloped either as part of shop fabrication or field installation. Install with elongated axis vertical.	DETAILS A owa country
ible Contract Items: owable Mortar ooded Backfill cavation, Class 20	INS AND [ DEFOR: CESS WM
ible Tabulations: 4-3 4-4	SS SECTIC
<b>2 04-18-17</b>	L CRO
ANDARD ROAD PLAN DR-101	(PICA R,
IONS: Changed "Porous Backfill" to "Porous Backfill Bedding" for clarity. Modified trench Installation detail for H>4' to clarify pay limits.	
Brian Smith APPROVED BY DESIGN METHODS ENGINEER	
PIPE CULVERT	
(BEDDING AND BACKFILL)	DRAWN BY         PROJECT NUMBER:           BLF         20-05-48-01           CHED BY:         DATE:
	MARCH 2022
	<b>B.03</b>







OWA DEPARTMENT OF NATURAL RESOURCES SERVICES - WALLACE BUILING , DES MOINES, IA 50319-0034 ENGINEERING S 502 E. 9TH ST., COUNTY **CROSS SECTIONS AND DETAILS** ACCESS WMA FOR: NCE RANDOLPH õ AL  $\odot$ 0 > BT REVISION 20-05-48-01 BLF MARCH 2022

**B.05** 



### ESTIMATED PROJECT QUANTITIES

1	11 - 17 1	I UNII	I IU/IAI
	2101 - CI FARING	ACRE	4
- 2	2102 - SPECIAL BACKFILL	TON	28
3	2102 - EXCAVATION, CL 10, RDWY+BORROW	СҮ	42
4	2125 - RESHAPING DITCHES	STA	4
5	2127 - RECONSTRUCTION OF ROADBED - BLADING/SHAPING	STA	42.4
6	2312 - GRANULAR SURFACING ON ROAD, CLASS A CRUSHED STONE	TON	908
7	2301 - STD/S-F PCC PAV'T, CL C CL 3I, 9"	SY	100
8	2416 - APRON, CONC, 36"	EACH	4
9	2416 - CULV, CONC RDWY PIPE, 36"	LF	80
10	2507 - EROSION STONE	TON	20
	2507 - MACADAM STONE	TON	40
12		EACH	1
13	2528 - LANE CLUSURE TC-213	EACH	
14			1
13	2528 - FLAGUER 2533 - MORII IZATION		1
10			60
17	2601 - SEED+EERTILIZE (RURAL)		1
10		ACIL	
ITEM NO.	DESCRIPTION		
B. C	Trees/brush may be cleared in any manner allowed - cutting, grinding, chipping, fecon, etc. Trees/brush chipped and/or grinded may be left where they land. Cut trees/brush must be removed from projection	ect site.	
2 A	Place and compact 6-inches of special backfill under new PCC.		
2 A 3 A B.	<ul> <li>Place and compact 6-inches of special backfill under new PCC.</li> <li>A. Remove 15-inches of existing gravel/soil in area of new PCC.</li> <li>The top 6-inches may be placed on the existing roadway at the direction of the DNR Field Engineer. All remain</li> </ul>	ing spoil to be re	emoved from projec
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#### ESTIMATE REFERENCE INFORMATION

ITEM NO.	DESCRIPTION
11	<ul> <li>A. Place as shown on plans, and/or at the direction of the DNR Field Engineer.</li> <li>B. Dot approved source.</li> </ul>
12	A. Follow Iowa DOT Specification 2528 for set-up details.
13	<ul><li>A. 10 - day notice minimum for lane closure.</li><li>B. Follow TC - 213 for set-up. Sheet B.02</li></ul>
17	<ul> <li>A. Saw cut 2-inches off existing shoulder pavement for good jointing with new PCC.</li> <li>B. Remove from project site.</li> </ul>

18 A. Seed and fertilize all distrubed areas.

B. DOT approved source.

GENERAL NOTES ON SHEET C.02

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<b>DEP</b> <b>RAL</b> ST., DER
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DRAWN BY: PROJECT NUMBER:
BLF 20-05-48-01 CHK'D BY: DATE:
MARCH 2022
 C.01

#### GENERAL NOTES

Verify actual locations and elevations with DNR Engineer.

All work shall conform to and be performed in accordance with all ordinances.

The contractor shall visit the site and inspect the project area and the themselves with the actual job conditions prior to bidding and the s visit the project site shall not relieve the contractor from performing to the plans, specification, special provisions and contract.

The contractor shall verify, at the site, all dimensions and conditions shall notify the DNR Engineer of any discrepancies, omissions, and/o proceeding with the work.

It shall be the contractor's responsibility to provide waste areas or c material (excavated material or broken concrete) which is not desira into the work involved on this project. No payment for overhaul will hauled to these sites. No material shall be placed within the right-o stated in the plans or approved by the DNR Engineer.

The contractor shall not disturb desirable grass areas and desirable construction limits. The contractor will not be permitted to park or equipment or use these areas for storage of materials. Storage, par will be subject to the approval of the DNR Engineer.

Where utilities and fixtures are shown as Existing on the plans or en construction area, it shall be the responsibility of the contractor to r of those utilities prior to the beginning of any construction. The cor access to these facilities for necessary modification of services. Und structures and utilities have been plotted from available surveys and their locations must be considered approximate only. It is possible t existence of which is presently not known or shown. It is the contra determine their existence and exact location and to avoid damage t additional compensation will be allowed to the contractor for any in caused by such work.

The contractor shall shape graded area to maintain surface drainage finish grade.

The contractor is expected to have materials, equipment, and labor to install and maintain erosion control features on the project. This fence, rock ditch checks, silt basins or silt dikes.

NO WORK FROM 12 NOON FRIDAYS, UNTIL THE FOLLOWING MON

	ANT:	
applicable codes and	CONSULT	
horoughly familiarize start of work. Failure to ng the work in accordance		
s shown on the plans and or conflicts prior to		
disposal sites for excess rable to be incorporated ill be allowed for material of-way, unless specifically trees outside the service vehicles and rking and service areas	VA DEPARTMENT OF	ATURAL RESOURCES INFERING SERVICES - WALLACE BUILING (E. 97H ST., DES MOINES, IA 50319-2034
ncountered within the notify the DNR Engineer ntractor shall be afforded derground facilities, nd records and therefore there may be others, the actor's responsibility to thereto. No claims for nterference or delay		
ge. All elevations are to r available on a daily basis s may involve seeding, silt DAY.	QUANTITIES AND GENERAL INFORMATION	ROAD MAINTENANCE FOR: RANDOLPH ACCESS WMA IOWA COUNTY
		PROJECT NUMBER: 20-05-48-01
	CHKD BY Sheet no	C.02

Clearing		Apron, Conc, 36"		
0+00	43+20	5+00		
6' - 26' Lef	6' - 26' Left and Right		-00	
1	1 LS		2 EACH	
Special Backfill		Culv, Conc Rdwy Pipe, 36"		
0+00	0+30	5+00		
28 TON		25+00		
<b>Class 10 Excavation</b>		60 LF		
0+00	0+30	Erosior	n Stone	
42 CY		5+00; Inlet/Outlet		
<b>Reshaping Ditches</b>		25+00; Inlet/Outlet		
4+00	6+00	20 TON		
24+00	26+00	Macada	m Stone	
Inlet Side Only		32+50		
4 STA		40 TON		
Blading/Shaping		Safety Closure		
0+00	43+20	0+00		
42.4 STA		1 EACH		
Crushed Stone		Seed & Fertilize (Rural)		
0+00	43+20	0+00	43+20	
756 TON		As Needed		
2301 - STD/S-F PCC		1 ACRE		
PAV'T, CL C CL 3I, 9"				
0+00	30+00			
100 SY		and the second		

「日本の

0 + 00

15+00

0+00

- Salar





 Special Backfill

 0+00
 0+30

  $28 ext{VN}$  

 Class 10  $ext{vation}$  

 0+00
 0+30

 42  $ext{V}$  

 STD/S-F PCC  $ext{vation}$  

 STD/S-F PCC  $ext{vation}$  

 0+00
 30+00

 100  $ext{V}$ 

~25 FOOT RADIUS

16 FE

# MATCH NEW PCC TO EXISTING ROAD GRADE AS ALLOWABLE

FEE

SAW JOINT

200 FEET

CROWN PCC 2% EACH WAY FROM CENTERLINE SAW JOINT

NOT TO SCALE

