IOWA DEPARTMENT OF NATURAL RESO

CONSTRUCTION DOCUM FOR HALES SLOUGH WMA **PAVEMENT PRESERVAT**

DICKINSON COUNTY, IO

DOT PROJECT #SP-00SP(6)--7C-00 **DNR PROJECT**



bruce.flippin@dnr.iowa.gov

EMAIL

	I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS 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.				
	SIGNATORE DATE				
lin.	MANTED OR TWEE NAME MY LICENCE RENEWAL DATE IS DECEMBER 31, 20 <u>24</u> PAGES COVERED BY THIS SEAL:				

T #22-01-30-02

PROJECT DESCRIPTION

This project consists of HMA road maintenance - crack sealing/filling, patching, longitudinal/transverse repair, fog sealing and several culvert replacements.

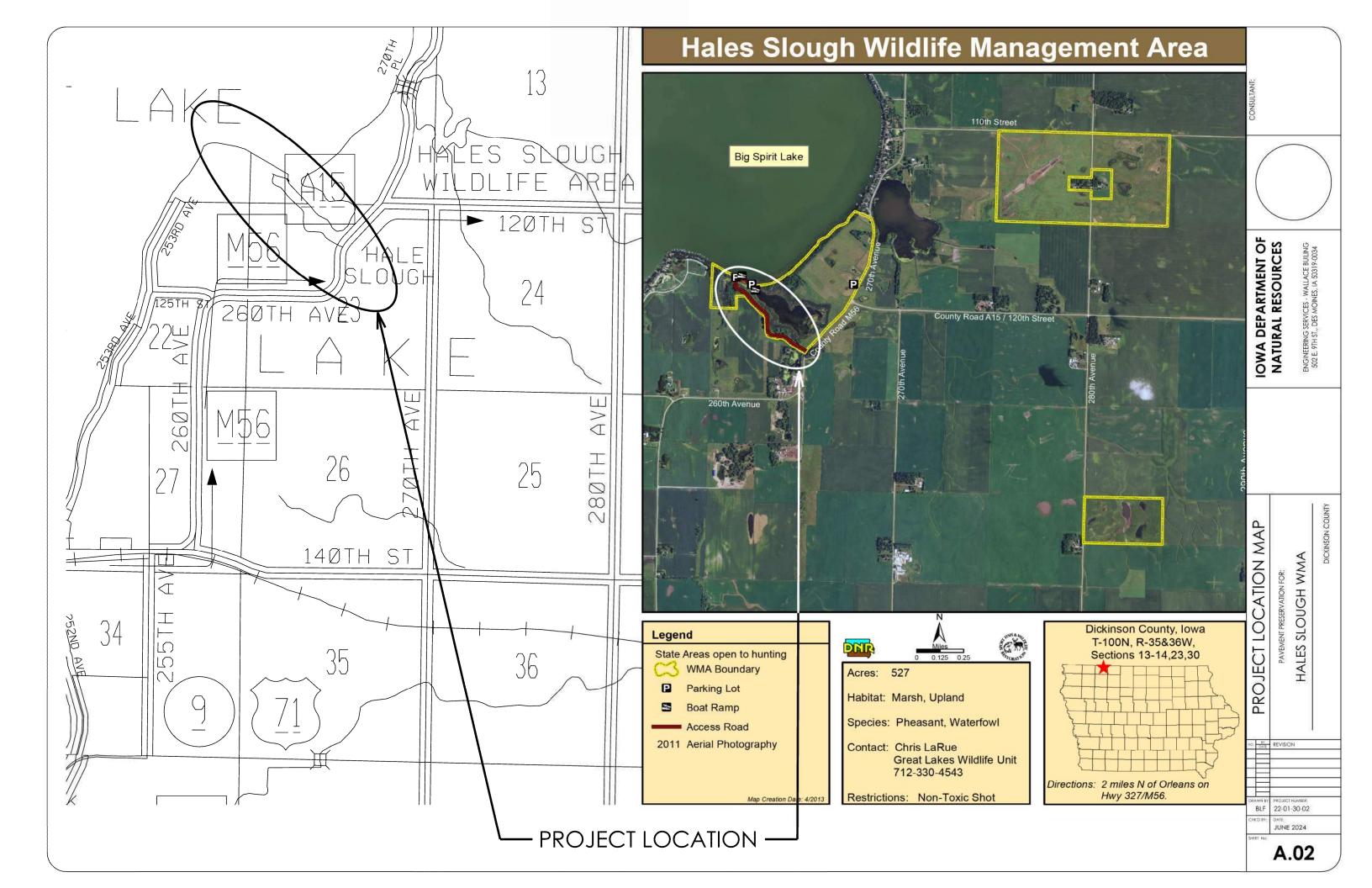


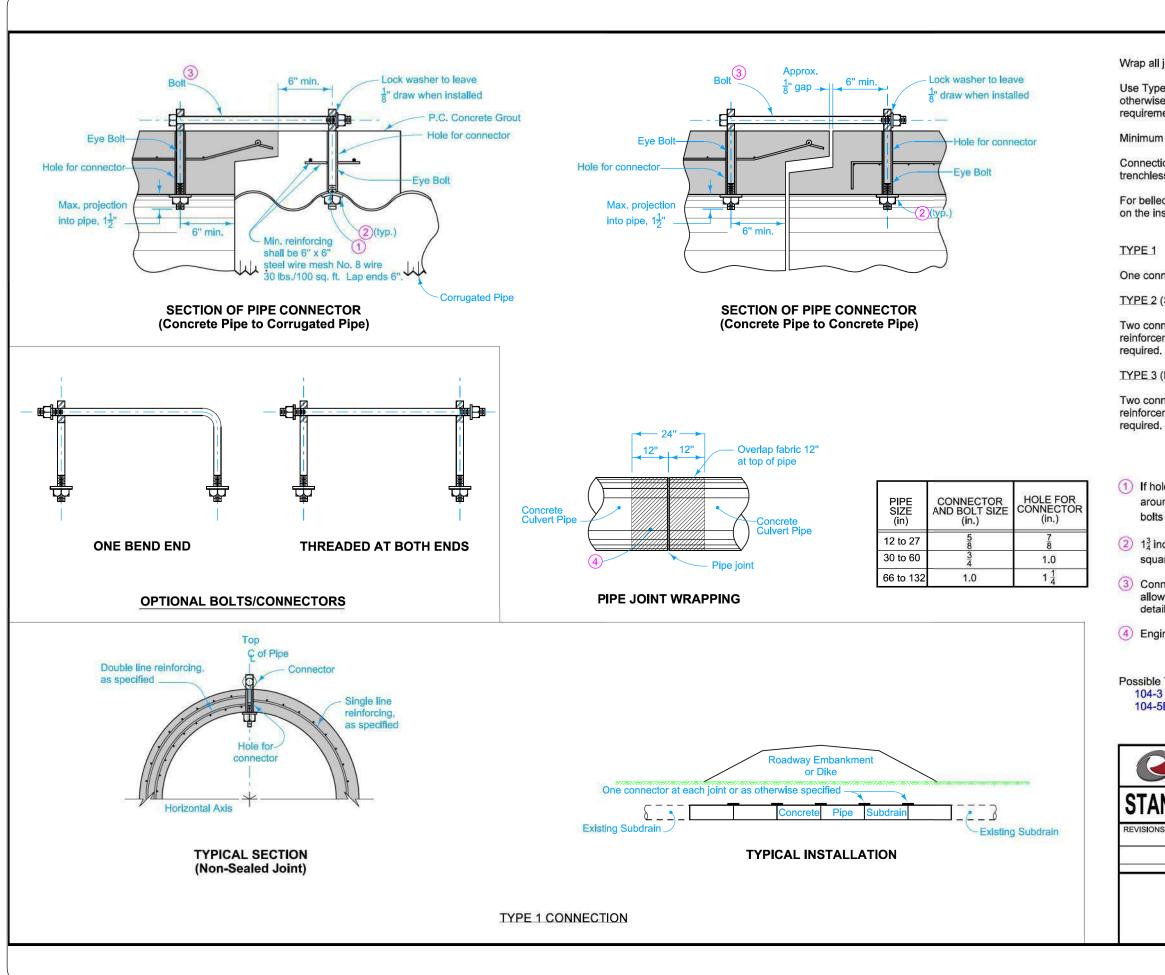
URCES		SHEET INDEX		
ENTS	A.02 B.01 B.02 C.01 D.01	TYPICAL CROSS SECTIONS AND DETAILS TYPICAL CROSS SECTIONS AND DETAILS QUANTITIES AND GENERAL INFORMATION SITE PLAN	CONSULTANT:	
Α ΓΙΟΝ			IOWA DEPARTMENT OF	NATURAL RESOURCES ENGINEERING SERVICES - WALLACE BUILING 502 E. 97H ST., DES MOINES, IA 50319-0034
)WA			MOI	
			COVER SHEET	PAVEMENT PRESERVATION FOR: HALES SLOUGH WMA
joint AUTHORIZATION TO BID AUTHORIZATION - PARKS WILDLIFE FISHERIES LAW ENFORCEMENT FORESTRY DATE ENGINEERING BURFALL CHIFE DATE			NO. DATE	22-01-30-02 DATE: JUNE 2024
ENGINEERING BUREAU CHIEF DATE			SHEET No:	

DIRECTORY						
PROJECT MANAGER		CONSTRUCTION INSPECTOR				
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES			
ADDRESS	502 EAST 9TH STREET	ADDRESS				
CITY,STATE,ZIP	DES MOINES, IA, 50319	CITY,STATE,ZIP				
CONTACT	BRUCE L. FLIPPIN	CONTACT	JEFF FELTS			
TELEPHONE	515-689-8009	TELEPHONE	515-250-3712			
FAX	515-281-8685	FAX				

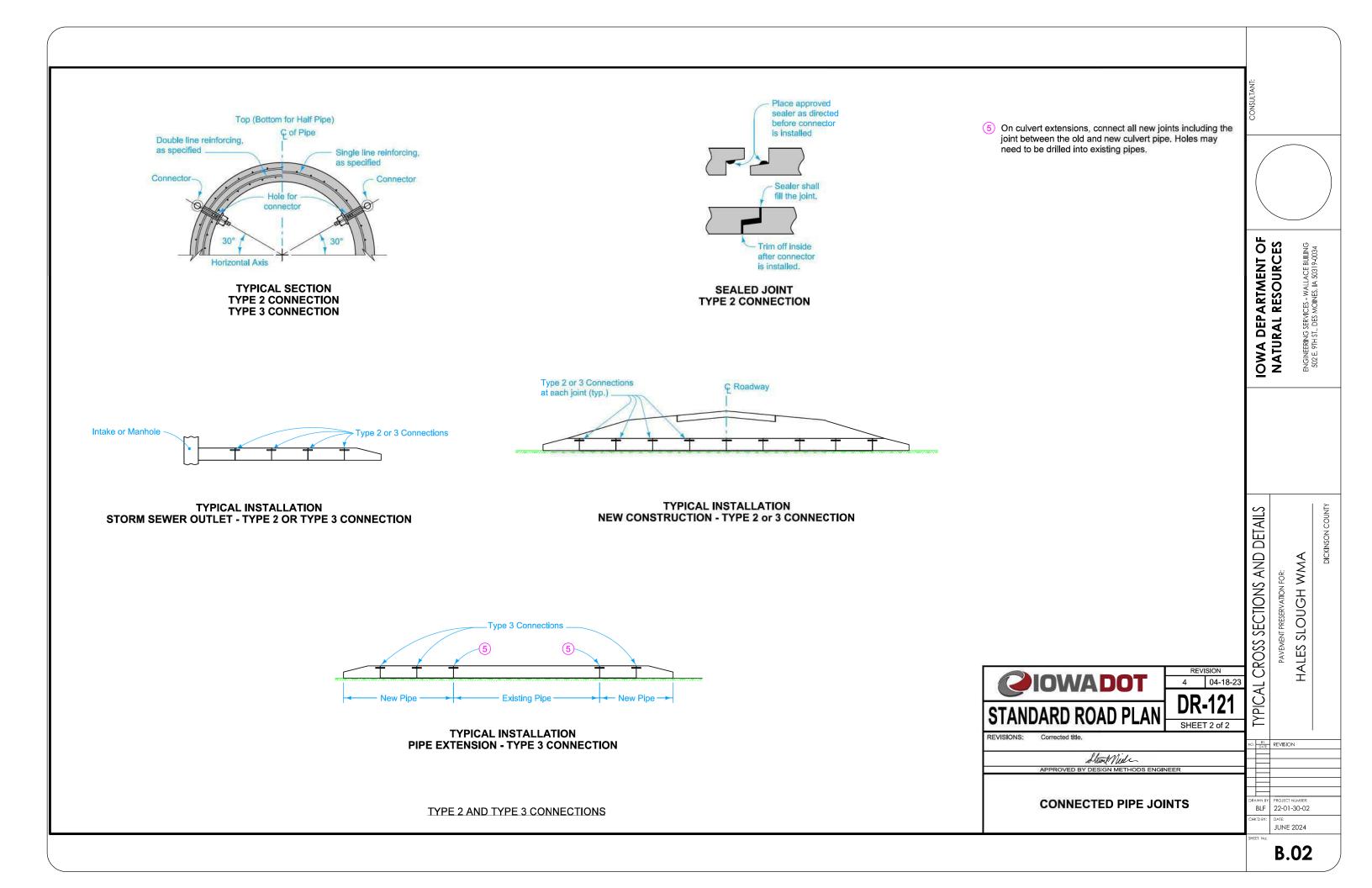
EMAIL

jeff.felts@dnr.iowa.gov





)
ll joints on concrete roadway pipe culverts.	CONSULTANT			
pe 3 Connections on all culvert pipes, unless specified se. Refer to Materials I.M. 445.01 for Connector nents.	CONSI			
m 2 threads showing at all threaded ends.				$\overline{\ }$
tions not required on pipe sections installed by ass methods.				
ed concrete pipe joints, connectors may be installed nside of the pipe.				
	Щ	S	<u>U</u>	4
	ĬĔ	Ü	BUILIN	
nnector at the top of the pipe section.	 	NUR	LLACE	A 5031
(Sealed Joint)	l ₹	SC SC	WAI	NES, L
nnectors near the top of the pipe section. For details of ement, refer to AASHTO M 170 for the class of pipe d. Refer to Materials I.M. 491.09 for seal requirements.	OWA DEPARTMENT OF	ural re	engineering services - wallage builing	71H ST., DES MOI
(Non - Sealed Joint)		ATI	GINE	02 E. 9
nnectors near the top of the pipe section. For details of ement, refer to AASHTO M 170 for the class of pipe	<u>0</u>	Z	Ž I	
oles are field drilled, place a ribbon of butyl sealant und bolts before placing 3 in. x 3 in. x $\frac{1}{4}$ in. plate on ts through corrugated metal pipe and tightening nuts. nch round x $\frac{9}{64}$ inch thick washer or 3 in. x 3 in. x $\frac{1}{4}$ in. uare plate (shaped to pipe radius).	ETAILS			DICKINSON COUNTY
wed per Materials I.M. 451. Refer to Optional Bolts ail.			~	CKINSC
neering fabric for embankment erosion control.	Z	òż	hales slough wma	DIC
	₹S /	PAVEMENT PRESERVATION FOR:	3	
	Ó	VATIC	Ċ	
e Tabulations: 3		PRESEF	DO	
5B	SSI	MENT	SL	
	Ő	PAVE	Ϋ́	
210WADOT 4 04-18-23	Ŭ		₹H	
	M			
NDARD ROAD PLAN DR-121	TYPICAL CROSS SECTIONS AND DETA			
NS: Corrected title.	NO. BY DATE	REVISIC	N	
APPROVED BY DESIGN METHODS ENGINEER				
CONNECTED PIPE JOINTS	DRAWN BY:	PROJECT		
	BLF CHK'D BY:	22-01 DATE:	-30-02	
	SHEET NO:	JUNE	2024	
		Β.	01)



ESTIMATED PROJECT QUANTITIES

TEM NO.	ITEM	UNIT	TOTAL
1	2111 - GRANULAR SUBBASE 6 IN	SY	95
2	2306 - ASPHALT EMULSION FOR FOG SEAL (PAVEMENT)	GAL	406
3	2402 - GRANULAR BACKFILL - PIPE BEDDING	TON	39
4	2416 - APRON, CONC, 18"	EACH	6
5	2416 - APRON, CONC, 24"	EACH	2
6	2416 - CULV, CONC RDWY PIPE, 18"	LF	88
7	2416 - CULV, CONC RDWY PIPE, 24"	LF	24
8	2518 - SAFETY CLOSURE	EACH	1
9	2528 - TRAFFIC CONTROL	LS	1
10	2529 - PATCHES, FULL-DEPTH FINISH, BY AREA. 5-IN. HMA	SY	99
11	2529 - PATCHES, FULL-DEPTH FINISH, 5-IN., BY COUNT, HMA	EACH	4
12	2533 - MOBILIZATION	LS	1
13	2540 - LONGITUDINAL JOINT REPAIR	LF	1000
14	2541 - CRACK AND JOINT CLEANING AND SEALING (HMA SURFACES)	MILE	0.72
15	2541 - SEALER MATERIAL (HMA SURFACES)	LB	541
16	2543 - TRANSVERSE JOINT REPAIR	TON	15

ESTIMATE REFERENCE INFORMATION

ITEM NO.	DESCRIPTION
1	A. Use under patch areas.B. Place at the direction of the DNR Field Engineer.C. DOT approved source.
2	 A. Use CSS-1 or SS-1 asphalt emulsion grade. B. Dilute with 2 parts water. C. Apply at a rate of 0.15 GAL/SY. D. 1-week minimum notice for fog sealing.
3	A. Use for pipe bedding.B. Backfill culverts to haunch - halfway up.C. DOT approved source.
4-7	A. Match existing flow lines and inlet locations, or as directed by the DNR Field ENgineer.B. Wrap and pin ALL joints. Use TYPE 3 pinned connections.C. DOT approved source.
8	A. Follow lowa DOT specification section 2528 for safety closure set-up.
10-11	 A. Areas will be marked by the DNR Field Engineer. B. 5 - inch depth. C. Remove all old pavement/millings from project site.
13	 A. Areas will be marked by the DNR Field Engineer. B. 3 - inch depth. C. LF quantity will be paid in 6-inch widths. D. Remove all old pavement/millings from project site.
15	A. DOT approved source.
16	 A. Locations will be marked by the DNR Field Engineer. B. Quantities based upon 24-inch wide, 3-inch deep repair. C. Minimum of ST surface mixture. D. Remove all old pavement/millings from project site. E. 10% added for irregularities.

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 themselves with the actual job conditions prior to bidding and the 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 condition shall notify the DNR Engineer of any discrepancies, omissions, and, proceeding with the work.

It shall be the contractor's responsibility to provide waste areas or material (excavated material or broken concrete) which is not desi into the work involved on this project. No payment for overhaul w hauled to these sites. No material shall be placed within the rightstated 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 o equipment or use these areas for storage of materials. Storage, pawill be subject to the approval of the DNR Engineer.

Where utilities and fixtures are shown as Existing on the plans or e construction area, it shall be the responsibility of the contractor to of those utilities prior to the beginning of any construction. The co access to these facilities for necessary modification of services. Un structures and utilities have been plotted from available surveys ar their locations must be considered approximate only. It is possible existence of which is presently not known or shown. It is the contracter determine their existence and exact location and to avoid damage additional compensation will be allowed to the contractor for any i 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 labo to install and maintain erosion control features on the project. This fence, rock ditch checks, silt basins or silt dikes.

	_
	CONSULTANT
ll applicable codes and	CONS
l thoroughly familiarize e start of work. Failure to ing the work in accordance	
ons shown on the plans and d/or conflicts prior to	
or disposal sites for excess sirable to be incorporated will be allowed for material t-of-way, unless specifically	OWA DEPARTMENT OF NATURAL RESOURCES ENGINEERING SERVICES - WALLACE BUILING 502 E. 9TH ST., DES MOINES, IA 50319-2034
le trees outside the or service vehicles and parking and service areas	OWA DEP, NATURAL ENGINEERING SERVI 502 E. 9TH ST., DES,
encountered within the o notify the DNR Engineer contractor shall be afforded Inderground facilities, and records and therefore le there may be others, the tractor's responsibility to e thereto. No claims for y interference or delay	
age. All elevations are to	-ORMATION
or available on a daily basis his may involve seeding, silt	DICKINSON O DICKINSON O DICKIN
	SHEET NO: C.01

	GRANULAR SUBBASE	APRON, CONC, 18"	PATCHES, FULL-DEPTH	CRACK AND JOINT	
	6 IN	13+00	FINISH, BY AREA. 5"	CLEANING AND SEALING	
BIG SPIRIT LAKE	10+75	2 EACH	10+75	(HMA SURFACES)	Ę
EAST BAY	21.3 SY	31+25	19X10 = 21.1 SY	0+00 31+99	SULTAT
O EASIDAT	13+00	4 EACH	13+00	0.61 MILE	CON
o o	21.3 SY	APRON, CONC, 24"	19X10 = 21.1 SY	100+00 105+52	
0 9 0	31+25	10+75	31+25	0.11 MILE	
2143 - 2014	42.6 SY	2 EACH	19X20 = 42.2 SY	SEALER MATERIAL (HMA	
5*	104+50	CULV, CONC RDWY PIPE,	104+50	SURFACES)	
	10 SY	18"	3.5X25 = 9.7 SY	0+00 31+99	
	FOG SEAL	13+00	PATCHES, FULL-DEPTH	458 LBS	
30700	0+00 31+99	24 LF	FINISH, 5-IN., BY COUNT,	100+00 105+52	OF 034 034
	338 GALLON	31+25	10+75	83 LBS	
	100+00 105+52	64 LF	1 EACH	TRANSVERSE JOINT	
	68 GALLON	CULV, CONC RDWY PIPE,	13+00	REPAIR	OWA DEPARTMENT O VATURAL RESOURCES INGINERING SERVICES - WALLACE BUILING SO2 E. 97H ST., DES MOINES, IA 50319-20034
	GRANULAR BACKFILL -	24"	1 EACH	LOCATIONS VARY ON	IOWA DEP NATURAL SO2 E. 9TH ST., DES VI
C X X	PIPE BEDDING	10+75	31+25	EACH ROAD SEGMENT	TUR TUR 97H ST
	10+75	24 LF	1 EACH	0+00 31+99	
	12 TON	SAFETY CLOSURE	104+50	100+00 105+52	<u> </u>
	13+00	0+00	1 EACH	19 JOINTS TOTAL	
	9 TON	1 EACH	LONGITUDINAL JOINT	EACH JOINT ~ 19' X 2' X 3"	
	31+25		REPAIR	15 TON	52
	18 TON		LOCATIONS VARY ON		
		· · · · · · · ·	EACH ROAD SEGMENT		
		a the second	0+00 31+99		
			100+00 105+52	1	DUNTY
-0^{\pm}	Contraction of the second	Ar an and a star	1000 LF	All mindeller for	ON CC
5+00+	and the second second	Paris How P		13 FULLION	
	CONTRACT CONTRACT			Contra (ITE PLAN ANT PRESERVATION FOR: SLOUGH WMA
The second s				and the second	PLAN ESERVATION FC
		A with a		N	
		5	o Zu		
	X	7	X		SITE VEMENT PR ES SLC
	X	- Unter	X	7	SI PAVEMI HALES
			A MARK		I I
	0		Okton	-9-	
	5				
			The second second	A State of the sta	
	amin 2	9	EN PRESS		
200		OI			DRAWN BY: PROJECT NUMBER:
0 300 FEET		and the second of the second of the	NOR ALE		DIE 00.01.00.00
					BLP ZZ-UT-3U-0Z CHKD BY: DATE: JUNE 2024 SHEET No:
		· ····································			D.01
	So the second			Carlos and a second second	