# **ADDENDUM NO. 1**

# PARKER SWAMP DRAIN SAGINAW COUNTY, MICHIGAN

TO: ALL PROSPECTIVE BIDDERS ON THE SUBJECT PROJECT

**RE:** CHANGES TO BIDDING DOCUMENTS

Acknowledge Receipt of this Addendum on Page C-410-1 of the Bidform (Proposal) where indicated.

The following is a list of changes to the bidding documents:

- 1. Addendum No. 1 has been emailed to you on Monday, May 23<sup>rd</sup>, 2022.
- 2. Enclosed please find the following attachments pertaining to Addendum No. 1
  - Mandatory Pre-Bid Meeting Minutes
  - Attendance Sheet from Mandatory Pre-Bid Meeting
  - Revised plan sheets:
    - i. DR-4246-06
      - 1. Updated spoil leveling table
    - ii. DR-4246-08
      - 1. Added cross culvert and maintenance access culvert to Gleaner and Pierce Road Crossing Detail

# Replace above revised sheets in your plan set.

- Revised Bid Form
  - i. Item No. 4 & No. 5
    - 1. Quantities revised
  - ii. Added the following Bid Items
    - 1. No. 26A
    - 2. No. 26B
    - 3. No. 60

# Use attached revised Bid Form when preparing your bid.

- Revised Site Clearing Specification Section No. 31 10 00.
  - i. Added specification for 'Remove Obstructions within Drain Right-of-Way (Allowance)'

# Replace above revised specification in your specification binder.

Note all clarifications and changes contained within this Addendum and/or the Pre-Bid meeting minutes supersede any data that may be contained in the plans and specifications regarding the same matter.

An unsigned acknowledgement or lack of acknowledgement shall be cause to have the bid rejected. Acknowledgment of the Addendum No. 1 by the bidder shall indicate full understanding and acceptance of this addendum in its entirety.

Please sign the Acknowledgment below and attach this Addendum No. 1 to the front of your bidding document. Acknowledge the same in the Bid Form (Proposal).

Included with the sealed bid should be:

- A. The Bid Form with Addendum No. 1 acknowledged
- B. A copy of this Addendum with the Acknowledgement Form completed

Prepared by:		
SPICER GROUP, INC.		
David S. Vallier Project Manager	ACKNOWLEDGMENT	
BIDDER:		
BY:		
DATE:		

# Parker Swamp Drain Mandatory Pre-Bid Conference 10:00 A.M., May 19th, 2022 Saginaw County Public Works Commissioner

# Minutes

# 1. Sign in Sheet – Pass around

# 2. Introduction

- a. This meeting will entail general overview of project, construction schedule, specific items on plans and specifications, and questions and answers.
- b. This is a mandatory Pre-bid Mtg. Be sure to sign in; only those in attendance will be allowed to bid on the project.
- c. Addendum No. 1 will be issued as a result of this Pre-Bid Meeting and will include the minutes of the meeting and sign in sheet, and be posted at: <a href="http://www.saginawcounty.com/PublicWorks/Current-Projects.aspx">http://www.saginawcounty.com/PublicWorks/Current-Projects.aspx</a> by 3:00 PM on Monday May 23<sup>rd</sup>, 2022 or before.
- d. Ask questions at any time.

# 3. Project Schedule

- a. Bid Letting
  - i. June 9th, 2022 @ 10:00 A.M. at Spicer Group office.
  - ii. Bids will be received until 10:00 A.M.
  - iii. Bids will remain open to acceptance for 120 Days after the bid letting.
- b. Notice to Proceed Projected to be October 2022.
- c. Substantial Completion September 15, 2023.
  - i. All pipe and structures installed, all roads paved, and driveways repaired, and cleanup and site restoration completed.
- d. Final Completion October 15, 2023.
  - i. Any remaining site restoration.
  - ii. Vegetation established.

# 4. Construction Staking and Inspection

- a. Staking OWNER will provide through the ENGINEER all construction staking for the project.
- b. Construction Inspection All construction inspection for the project will be provided by the OWNER'S engineer.

# 5. Required Permits

- a. Saginaw County Road Commission Obtained by the Contractor (No Charge)
- b. Tittabawassee Township Burning Permits Obtained by Contractor.

# 6. Utilities

- a. As shown on the plans.
  - i. Contractor to coordinate all work within 50 feet of 12-inch Gas Transmission pipeline with Consumers Energy, as stated on plans.

# 7. Discussion

- a. General Overview of Project
  - i. Review Plans
    - Sta. 14+48 to Sta. 61+50: Limited access
    - Sta. 22+50 to Sta. 24+30 Complete work on both sides of drain prior to removing Crossing No. 2

- Sta. 39+40 to Sta. 39+80: Remove lower section of fence, install toe of slope riprap
- Sta. 107+00: Additional bid items at intersection of Gleaner Rd and Pierce Rd will be addressed in Addendum No. 1.

# ii. Review Bid Items

- Drain Restoration
- Round culverts shall be either: RCP (C-76, CL-111) or ADS HP Storm, unless otherwise specified.
- b. Contractor Question Deadline Thursday, June 2<sup>nd</sup> @ 12:00 PM, Email all project related questions to: <a href="mailto:davev@spicergroup.com">davev@spicergroup.com</a> or call @ 989-233-0136.
  - i. If needed, Addendum No. 2 will be posted at:
    <a href="http://www.saginawcounty.com/PublicWorks/Current-Projects.aspx">http://www.saginawcounty.com/PublicWorks/Current-Projects.aspx</a> by 3:00 PM on Friday, June 3<sup>rd</sup> or before.

# 8. Clarifications

Trees will be cut within 6 inches of the bank and stumps will be sprayed along drain banks.

Limited access areas – landowners to move fences, trees, sheds etc.

All subdivision area, spoils to be hauled out. Farmer - John Wirtz interested in spoils.

Rough estimate of how many yards. Estimated haul volume for entire project: approximately 3400 cubic yards.

Issue new DR-06 sheet, DR-08 sheet, as well as updated bid form

Complete Class II sand backfill to be used for all county road crossings.

Seeding/Mulching – ditch banks daily hand seeding, no mulch on banks. – Lawn areas will have mulch/seeding.

- 9. Public Works Commissioner Comments
- 10. Bids are due June 9th, 2022, by 10:00 A.M. @ Spicer Group office.
  - a. Entire bid form must be filled out.
  - b. 5% Bid bond (Parker Swamp Drain Drainage District).
  - c. Signed addendum.
  - d. Acknowledge addendums on bid form.
  - e. Signed bid form.
- 11. Contact
  - i. David S. Vallier, Project Manager
  - ii. Cell: 989-233-0136
  - iii. davev@spicergroup.com

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# PARKER SWAMP DRAIN

Mandatory Pre-Bid Meeting: 10:00 AM May 19th, 2022

Name	Company	Phone/Fax	Email
GARY Bildeic	B. LAcieTRucking	P: (989) 876-8516 F: (989) 876-769/	bihAcictRucking at YA160.com
Larry Jocham	L.J. Const.	P: (989) 76/013/ F: ( )	LJ construction mi@Gmpil
Zuc Birnbaum	American	P: (%4) 233-7141 F: ( )	7.1.0
NICK GORNEY	MID-STATE EARTHWORKS	P: (984) 233-483/ F: ( )	Zaca anericanexa.c.c.
Marya Colpaert	S.C.P.W.C.	P: (989 )790-5222 F: ( )	mcolpaertesaginawcounty.com
Christian Valesano	Spicer	P: (906) 284 - 1862 F: ( )	
Justin Tomerek	Prairie Grain	P: (989 ) 359 - 27 78 F: ( )	justinapraine grain.org.
Dave Vallier	Spier	P: (989) 233-013 6 F: ( )	dave v@spieer group, com
Angie M'Eullen	Spice	P: (900) 921-5538 F: (989)	angela mospicer group, com
		P: ( ) F: ( )	
		P: ( ) F: ( )	



NO. 3A - STA 41+50- STEVENS, K INSTALL ROCKFORD CROSSING.

NO. 7 - STA 59+77 - LABEAN, R REMOVE EXISTING CROSSING.

NO. 4 - STA 49+04 - MIELKE ROAD CLEANOUT EXISTING CROSSING.

USE SPOIL LEVELING DETAIL "A" THROUGH FIELD AREA. USE SPOIL LEVELING DETAIL "B" THROUGH WOODED AREA. SPOILS TO BE HAULED IN LAWN AREAS.

/	KEY*	FROM STATION	STATION	SIDE	DESCRIPTION	QTY
	1 P	30+00	60+00	вотн	SEEDING OF ALL DISTURBED	LUMP SUM
	$\frac{2}{1}$	30+00	60+00	вотн	MULCH OF ALL DISTURBED AREAS	LUMP SUM
	16 P		KED BY NEER	1	RIPRAP TOE OF SLOPE PROTECTION	800 LIN FT
/	18 P	AS STAKED BY ENGINEER		ı	GRASS SPILLWAY	0 LIN FT
-	19 P	AS STAKED BY ENGINEER		1	RIPRAP SPILLWAY	25 LIN FT
	(23) P	ALL EX FIELD TILE OUTLETS AND S.O.T.		вотн	OUTFALL STABILIZATION	30 EA
	(15) P	CROSS	INGS 3-6	ВОТН	INSTALL RIPRAP PROTECTION AT INLET & OUTLET OF CROSSING	110 SQ YDS TOTAL

NOTE: COORDINATE INSTALLATION OF EROSION CONTROL STRUCTURES WITH ENGINEER PRIOR TO CONSTRUCTION. LOCATIONS, QUANTITIES, OR TYPES MAY VARY BASED ON FIELD DECISIONS.

- 2. CONTRACTOR TO SALVAGE CONCRETE BLOCK HEADWALL FROM CROSSING NO. 5 AND STACK BLOCKS OUTSIDE OF THE DRAIN RIGHT OF WAY. COST TO BE INCLUDED IN UNIT PRICE BID PER LIN FEET FOR CROSSING NO. 5.
- 3. STA 39+40 TO STA 39+80 REMOVE 40 LIN FT OF WOOD FENCE AND PLACE RIPRAP BANK PROTECTION AS DIRECTED BY FIELD ENGINEER. COST FOR REMOVAL OF WOOD FENCE TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR SITE CLEARING.

GROVE CENTER CURB ISLAND IN MIDPOINT OF END.

**BENCHMARKS** BM NO. 204 - SET P.K. NAIL IN TOP OF CURB AT EAST END OF MAPLE

EL 616.35

RIGHT OF WAY PARKER SWAMP DRAIN - DRAIN RIGHT-OF-WAY IS 99' WIDE 49.5' ON EACH SIDE OF CENTERLINE OF DRAIN.

·					
CBS	$\triangle$	ADDENDUM NO. 1	5/23/2022		
BY	MARK	REVISIONS	DATE		
THE WORK REPRESENTED BY THIS DRAWING WAS DESIGNED BY THE ENGINEER FOR THIS SPECIFIC APPLICATION AND SPECIFIC LOCATION DESCRIBED HEREON IN ACCORDANCE WITH THE CONDITIONS PREVALENT AT THE TIME THE DESIGN WAS DONE. THE ENGINEER DOES NOT GUARANTEE AND WILL NOT BE LIABLE FOR ANY OTHER LOCATION, CONDITION, DESIGN OR PURPOSE					

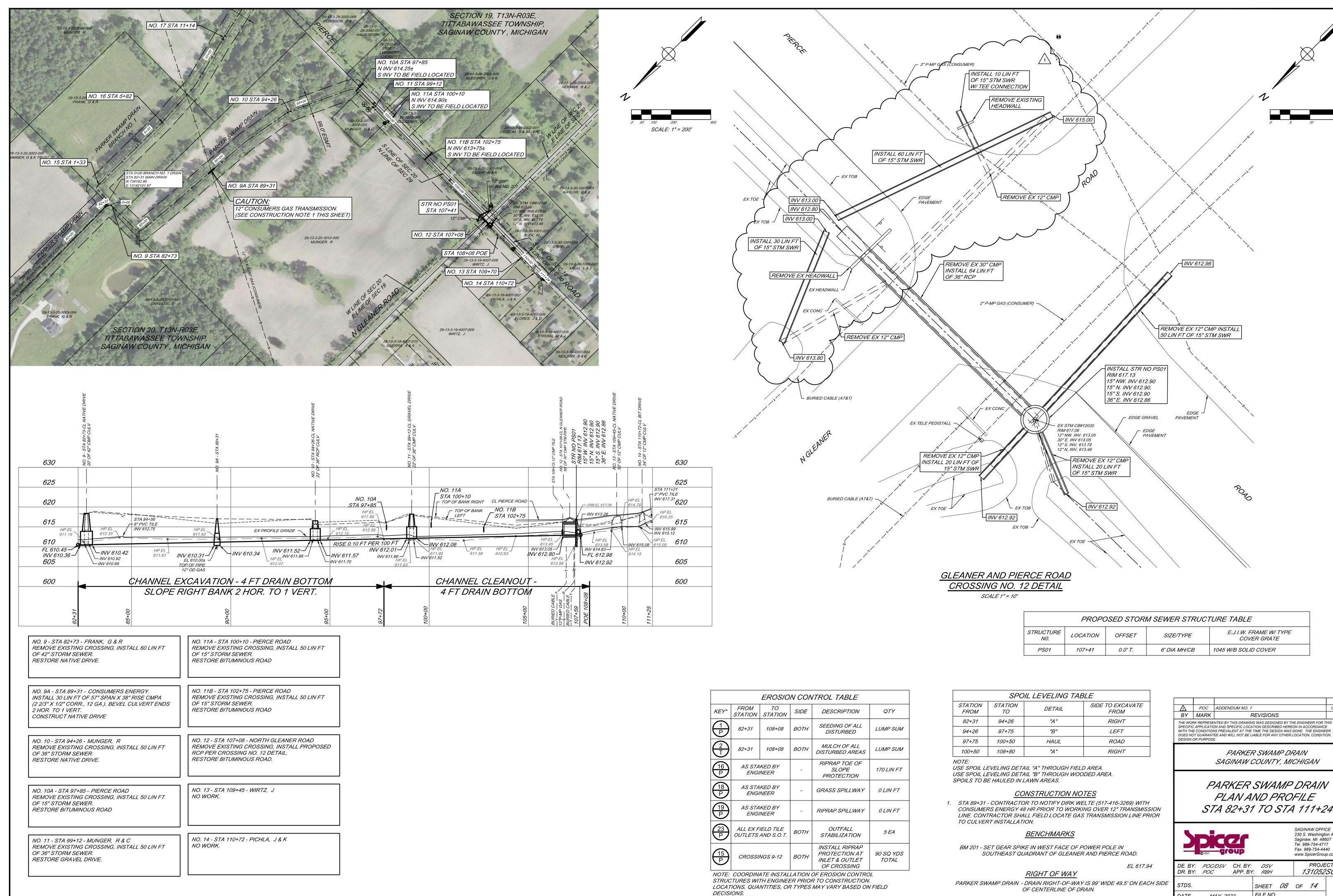
SAGINAW COUNTY, MICHIGAN

PARKER SWAMP DRAIN PLAN AND PROFILE STA 30+00 TO STA 60+00



230 S. Washington Ave. Saginaw, MI 48607 Tel. 989-754-4717 Fax. 989-754-4440 www.SpicerGroup.com

PROJECT NO. DE. BY: POC/DSV CH. BY: DSV DR. BY: POC APP. BY: RBH 131052SG2021 SHEET *06* OF *14* DATE MAY, 2022 SCALE H:1"=100' V:1"=10' FILE NO. DR-4246-06



PLAN AND PROFILE STA 82+31 TO STA 111+24

230 S. Washington Ave.

E.J.I.W. FRAME W/ TYPE

COVER GRATE

REVISIONS

PARKER SWAMP DRAIN

Saginaw, MI 48607 Tel. 989-754-4717 Fax. 989-754-4440 www.SpicerGroup.com PROJECT NO. DE. BY: POC/DSV CH. BY: DSV

DATE

DR. BY: POC APP. BY: RBH 131052SG2021 SHEET 08 OF 14 DATE *MAY, 2022* SCALE *H:1"=200' V:=10'* FILE NO. DR-4246-08

# PARKER SWAMP DRAIN BID FORM

# **REVISED PER ADDENDUM NO. 1**

# 5/20/2022

Item	Estimated				Unit	
No.	Quantity	Unit	Description		Price	Amount
PAR	KER SWA	MP DRAIN	AND BRANCH			
<u>OPE</u>	N CHANN	EL CONSTI	RUCTION			
1.	3,894	Lin. Ft.	Drain Restoration	\$	\$	
2.	8,324	Lin. Ft.	Open Channel Excavation	\$	\$	
۷.	0,324	LIII. Ft.	(Slope Banks as Shown on Plans)	Ф	a	
			(Stope Baliks as Shown on Flans)			
3.	3,011	Lin. Ft.	Channel Cleanout - (Bottom width as indicated)	\$	\$	
	ŕ		,			
4.	7,461	Lin. Ft.	Spoil Leveling	\$	\$	
5.	3,874	Lin. Ft.	Spoil Hauling	\$	\$	
6.	1	Lump Sum	Site Clearing		Lump Sum \$	
CDO	CCINCC D	ADIZED CW	AMD DD AIN			
			AMP DRAIN c Native Drive			
7.	1		Remove Existing Crossing		Lump Sum \$	
,.	1	Lump Sum	Remove Existing Crossing		Lump Sum •	
No. 2	A Station 3	32+95 - Sprag	uTrepkowski, P. & E., Bakos, J. & T Native Drive			
8.	1		Remove Existing Crossing		Lump Sum \$	
		-	•			
No. 3	Station 34		lge Road - SCRC - Bituminous Road			
9.	1	Lump Sum	Cleanout Existing Crossing		Lump Sum \$	
	. ~ .					
		1+50 <u>+</u> - Stev				
10.	1	Lump Sum	Rockford Crossing		Lump Sum \$	
			(Approx. 48 Ton Plain Riprap, Haul all Spoils)			
No. 4	Station 10	+04 - Mielke	Road - Bituminous Road			
11.	1		Cleanout Existing Crossing		Lump Sum \$	
11.	1	Lump Sum	Cleanout Existing Crossing		Lump Sum •	
No. 5	Station 56	+71 - Mills, C	3. & L Native Drive			
12.	62	Lin. Ft.	87" x 63" C.M.P.A., (3" x 1" Corr., 12 Ga.)	\$	\$	
			Bevel Culvert Ends 2 Hor. To 1 Vert.			
No. 6	Station 59		s, I. & M Bituminous Drive			
13.	1	Lump Sum	Cleanout Existing Crossing		Lump Sum \$	
			, R Native Drive			
14.	1	Lump Sum	Remove Existing Crossing		Lump Sum \$	
NI. O	C4-4: C0	+20 W'11-	Dod Diaminos Dod			
			son RoadBituminous Road		I C	
15.	1	Lump Sum	Cleanout Existing Crossing		Lump Sum \$	

No 0 S	tation 82±	72 Fronk	G. & R Native Drive		
16.	60	Lin. Ft.	42" Dia. Stm. Swr.	\$	\$
					. *
No. 9A	Station 89	9+31 - Cons	umers Energy - Native Drive		
17.	30	Lin. Ft.	57" x 38" C.M.P.A. (2 2/3" x 1/2 " Corr., 12 Ga.)	\$	\$
			Bevel Culvert Ends 2 Hor. To 1 Vert.		
N- 10	C4-4: 0.4	126 M	D & C Consul Drive		
18.	50	<u>+26 - Mung</u> Lin. Ft.	ger, R. & C Gravel Drive 36" Dia. Stm. Swr.	\$	\$
10.	30	LIII. I't.	30 Dia. Suii. Swi.	Φ	<u> </u>
No. 10 <i>A</i>	A Station 9	7+85 - SCI	RC - Pierce Road, Bituminous		
19.	50	Lin. Ft.	15" Dia. Stm. Swr.	\$	\$
No. 11	Station 99	+12 - Mung	ger, R. & C Gravel Drive		
20.	50	Lin. Ft.	36" Dia. Stm. Swr.	\$	\$
			RC - Pierce Road, Bituminous		•
21.	50	Lin. Ft.	15" Dia. Stm. Swr.	\$	\$
No. 111	R Station 1	02+75 -SC	RC - Pierce Road, Bituminous		
22.	50	Lin. Ft.	15" Dia. Stm. Swr.	\$	\$
22.	50	Lin. I t.	13 Did. Still. SWI.	Ψ <u> </u>	Ψ
No. 12	Station 10	7+08 - SCR	.C - N. Gleaner & Pierce Roads, Bituminous		
23.	64	Lin. Ft.	36" Dia. C76-III R.C.P.	\$	\$
24.	50	Lin. Ft.	15" Dia. Stm. Swr.	\$	\$
25.	40	Lin. Ft.	15" Dia. Stm. Swr.	\$	\$
26.	1	Each	6' Dia. M.H.	\$	\$
20.	1	Lacii	U Dia. Wi.ii.	Ψ	<u> </u>
26A.	100	Lin. Ft.	15" Dia. Stm. Swr.	\$	\$
				· -	<u> </u>
26B.	1	Each	15" x 15" Prefabricated Tee	\$	\$
		OF THE I	PARKER SWAMP DRAIN		
CROSS		22 F 1			
			G. & R Native Drive	¢	¢
27.	60	Lin. Ft.	42" Dia. Stm. Swr.	\$	\$
No. 16	Station 5+	82 - Frank	G. & R Wood Footbridge		
28.	1		Cleanout Under Existing Footbridge	Lump Sum	\$
20.	-	Zump zum	Common chart Zindanig recorning		
No. 17	Station 11	+14 - Mung	ger, R Native Drive		
29.	50	Lin. Ft.	42" Dia. Stm. Swr.	\$	\$
			RC - Pierce Road, Bituminous		
30.	50	Lin. Ft.	15" Dia. Stm. Swr.	\$	\$
No. 171	O Station 1	6±00 SCT	C. Diarca Dand Dituminaus		
31.	50	6+00 - SCF Lin. Ft.	RC - Pierce Road, Bituminous 18" Dia. Stm. Swr.	¢	\$
<i>J</i> 1.	50	Lm. rt.	10 Dia. Buil. Bwi.	Ψ	Ψ

NI 10	C	2104 CCDC	Mall D. J. Div. C. D. J.		
			- Mielke Road - Bituminous Road	r.	r.
32.	60	Lin. Ft.	36" Dia. Stm. Swr.	\$	_ \$
33.	1	T71-	7' Dia. M. H.	¢.	¢.
33.	1	Each	/ Dia. M. n.	\$	\$
34.	40	Lin. Ft.	15" Dia. Stm. Swr.	\$	\$
34.	40	LIII. Ft.	13 Dia. Sun. Swi.	<b>.</b>	_
No. 19	Station 2	94+49 - SCRC	C - Pierce Road - Bituminous Road		
35.	50	Lin. Ft.	36" Dia. Stm. Swr.	\$	\$
55.	20	2 1	30 Blan Sum Sum		Ψ
No. 20	Station 2	26+78 - Wirtz	, J Gravel Drive		
36.	50	Lin. Ft.	36" Dia. Stm. Swr.	\$	\$
				*	_
No. 21	Station 2	28+16 - Wirtz	, J Gravel Drive		
37.	100	Lin. Ft.	36" Dia. Stm. Swr.	\$	\$
No. 22	Station 3	34+72 - Hugh	es, J. & LNative Drive		
38.	50	Lin. Ft.	30" Dia. Stm. Swr.	\$	\$
					_
No. 23	Station 3	88+25 - Casse	lls, M & M Gravel Drive		
39.	1	Lump Sum	Cleanout Existing Structure	Lump Sum	\$
	Station 4		K. & S. Trust - Gravel Drive		
40.	1	Lump Sum	Cleanout Existing Structure	Lump Sum	\$
			T. & S Gravel Drive		
41.	1	Lump Sum	Cleanout Existing Crossing	Lump Sum	_ \$
MAIN	TENIANI	CE LANE C	HI VEDTO		
		CE LANE C	15" Dia. Stm. Swr.	r.	r.
42.	40	Lin. Ft.		\$	_ \$
			(Maint. Lane Culvert - Sta. 14+85SW. Side River Rd.)		
43.	40	Lin. Ft.	24" Dia, Stm. Swr.	\$	\$
43.	40	LIII. I't.	(Maint. Lane Culvert - Sta. 14+85NW. Side River Rd.)	Φ <u> </u>	Φ
			(Maint. Lane Curveit - Sta. 14-651VW. Stac River Rd.)		
44.	40	Lin. Ft.	30" Dia. Stm. Swr.	\$	\$
	10	Em. 1 t.	(Maint. Lane Culvert - Sta. 67+95N. Side Wilkinson)	Ψ <u></u>	Ψ
			(Maint Baile Curvett San 67-5514 State Wilkinson)		
45.	40	Lin. Ft.	24" Dia. Stm. Swr.	\$	\$
-			(Maint. Lane Culvert - Br. 1, Sta. 33+40E. Side Mielke Road)	*	<u> </u>
SOIL 1	EROSIO	N AND SED	IMENT CONTROL		
46.	500	Sq. Yds.	Miscellaneous Plain Riprap	\$	\$
		_			
47.	50	Lin. Ft.	Grass Spillway	\$	\$
				<del></del>	
48.	150	Lin. Ft.	Plain Riprap Spillway	\$	\$
49.	2,850	Lin. Ft.	Plain Riprap Toe of Slope Protection	\$	_ \$
50.	1,500	Sq. Yd.	NAG C-350 Erosion Control Blanket (or approved equal)	\$	\$

51.	12	Each	35' of 15" C.M.P. Surface Outlet Tube ( 2 2/3" x 1/2" Corr., 16 Ga.)	\$_		\$_	
52.	4	Each	35' of 18" C.M.P. Surface Outlet Tube ( 2 2/3" x 1/2" Corr., 16 Ga.)	\$_		\$_	
53.	5	Each	10" and Larger Tile Outlet Repair	\$ _		\$_	
54.	15	Each	6" to 8" Tile Outlet Repair	\$ _		\$_	
55.	40	Each	4" to and Smaller Tile Outlet Repair	\$ _		\$_	
56.	80	Each	Plain Riprap Splash Pad	\$ _		\$_	
MICCI	7T T A NII	EOUG ITEMS					
<u>MISCI</u> 57.	<u>ellani</u> 1	EOUS ITEMS Lump Sum	Cleanup and Restoration	-	Lump Sum	\$_	
58.	1	Lump Sum	Seeding, Fertilizing, and Mulching	<u>-</u>	Lump Sum	\$_	
59.	1	Lump Sum	Traffic Control - County Roads	_	Lump Sum	\$_	
60.	1	Lump Sum	Allowance - Remove Obstructions within Drain Right-of-Way	_	\$ 20,000.00	_	\$ 20,000.00
TOTAL	. BID AN	MOUNT				\$	

# SECTION 31 10 00 SITE CLEARING

# PART 1 - GENERAL

### 1.1 SUMMARY

# A. Section Includes:

- 1. Site Clearing
- 2. Channel Clearing, Grubbing, and Herbicide Application
- 3. Topsoil Excavation
- 4. Debris Management
- 5. Marketable Timber
- 6. Fences and/or other private property

# B. Related Sections:

- 1. Section 31 22 13 Rough Grading.
- 2. Section 31 25 00 Erosion and Sedimentation Controls.
- 3. Section 31 23 16 Excavation.
- 4. Section 32 91 19 Landscape Grading.

# 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

# A. Site Clearing:

- 1. Basis of Measurement: At the lump sum price bid as stated in the proposal.
- 2. Basis of Payment: Includes material, labor, and equipment for removal and disposal of trees, stumps, brush, in agricultural, wooded and residential areas, and equipment for clearing of site, loading and removing waste material as indicated in specifications and/or drawings, loading and removing of unsalvageable structures, excavation, and removing and hauling all trees, debris, stumps and root balls to upland locations or off site as specified on the drawings. Also includes, root raking of spoils in residential areas, removal of bituminous pavement, concrete pavement, curb and gutter, and culverts as indicated, and applying herbicide to designated plant life and cut stumps as specified. Wood requested by landowners shall be cut into 10' lengths and placed on the backside of the drain right-of-way.
- B. Remove Obstructions within Drain Right-Of-Way (Allowance)
  - 1. Basis of Measurement: included in the allowance for Removing Obstructions within Drain Right-of-Way.
  - 2. Basis of Payment: Includes labor and equipment for removal of fences, sheds, and other obstructions that may need to be moved to complete the work within the drain right-of-way. Contractor shall submit time and material invoices to the engineer for approval, and payment will be made from allowance.

## 1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Product Data: Submit data for herbicide. Indicate compliance with applicable codes for environmental protection.

# PART 2 - PRODUCTS

# 2.1 MATERIALS

# A. Herbicide:

- 1. Garlon 3A or approved equal shall be used on brush having diameter of 1 inch or less.
- 2. 25 percent Garlon 4 or approved equal and 75 percent Ax-it shall be used on all cut stumps and brush greater than 1 inch per manufacturer's specifications.
- 3. All herbicides shall contain a dye additive so that sprayed areas can be visually identified.
- 4. Applicator shall be certified.
- 5. Herbicide use shall conform to all environmental restrictions and the manufacturer's recommendations for the specific area treated.
- 6. Use only in locations approved by Engineer and with materials approved by Engineer and Owner.

# PART 3 - EXECUTION

# 3.1 EXAMINATION

- A. Section 01 30 00 Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify existing plant life designated to remain is tagged or identified.

# 3.2 PREPARATION

- A. Verify that existing plant life designated to remain is tagged or identified.
- B. The Contractor shall investigate for himself/herself what trees, brush, etc. must be removed and verify with the Engineer.
- C. Call Local Utility Line Information service not less than three working days before performing Work.
  - 1. Request underground utilities to be located and marked within and surrounding construction areas.

# 3.3 PROTECTION

- A. Locate, identify, and protect utilities indicated to remain, from damage.
- B. Protect benchmarks, survey control points, and existing structures from damage or displacement. Protect survey stakes and survey monuments. If monuments, stakes or benchmarks are damaged or destroyed, the Contractor will be responsible for replacements costs.

C. All trees outside of right-of-way and those trees within right-of-way specified by Owner shall be protected.

# 3.4 CLEARING, GRUBBING AND HERBICIDE APPLICATION

- A. Notify Engineer forty-eight (48) hours prior to clearing, grubbing, or applying herbicide.
- B. Clear all trees, shrubs, and brush located between top of drain banks in accordance with the following:
  - 1. In reaches proposed for clear and spray, the Contractor shall not excavate. Work is to be completed by hand.
  - 2. In reaches proposed for clearing and grubbing, the Contractor shall remove and/or excavate all stumps, trees, and brush.
  - 3. In reaches proposed for sloping one bank, the Contractor shall excavate and grub side slope proposed for excavation and shall hand clear, without grubbing, on opposite side. Ground vegetation on opposite side shall not be disturbed. Spray all stumps.
  - 4. In reaches proposed for sloping two banks, clear and grub.
- C. Stumps located in drain bottom toe of slope, or in proposed excavation areas shall be grubbed.
- D. Stumps not indicated for grubbing shall be trimmed within six (6) inches of proposed grade and sprayed with herbicide to inhibit future growth.
- E. Apply herbicide to all trees, shrubs, brush and stumps located between tops of drain banks.
- F. Clear areas required for access to site and execution of work or as indicated on plans.
- G. Channel clearing and grubbing to be done according to the plans.
- H. Burying of wood, stumps and debris is permitted in wooded areas and must be buried a minimum of 3 feet below the existing ground surface.
- I. All wood, stumps or debris shall be hauled from agricultural and residential and lawn areas. No wood, stumps or debris shall be buried in agricultural, residential and lawn areas.

# 3.5 REMOVAL

- A. Remove debris, rock, and extracted plant life from site.
  - 1. Clear areas required for access to site and execution of work unless otherwise indicated on the plans or in the specifications.
- B. Remove paving, curbs, and debris as indicated on the plans.
- C. Continuously clean-up and remove waste materials from site. Do not allow materials to accumulate on site.
- D. Do not burn or bury materials in residential areas. Leave site in clean condition.

# 3.6 TOPSOIL EXCAVATION

- A. Excavate topsoil from areas to be further excavated, re-landscaped, or regraded without mixing with foreign materials for use in finish grading.
- B. Do not excavate wet topsoil.
- C. Stockpile in area designated on site to depth not exceeding 8 feet and protect from erosion.
- D. Do not remove topsoil from site.

# 3.7 DEBRIS MANAGEMENT

- A. Coordinate debris management with Engineer, prior to construction.
- B. Debris, stumps, and root balls **shall not be buried in residential, lawn or agricultural areas**. Coordinate locations with landowners. Landowner agreement forms shall be provided where burying debris outside of existing drain right-of-way
- C. Burnable debris can be burned in agricultural areas if burning permit from the township is acquired. Other areas must be approved by the Engineer.
- D. The Contractor must obtain burning permits from the proper authority.
- E. Woody Debris.
  - Wooded areas Stumps shall be chipped or buried in wooded areas or hauled. Trees shall be topped and placed outside drain right-of-way if landowner requests to keep wood or chipped. Treetops and small trees must be chipped, hauled or buried. Wood chips shall be spread along backside of spoil piles.
  - 2. Agricultural areas Debris shall be chipped or hauled. Wood chips shall be spread along backside of spoil piles.
  - 3. Residential areas Trees shall be removed in a manner to protect; houses, fences, outbuildings, and other residential amenities. Stumps in the maintenance lane shall be ground a minimum of 6-inches below the ground surface. All woody debris shall be chipped or hauled off site and disposed of. All chipped material shall be hauled off site and disposed of. All removed stumps shall be hauled from the site and disposed of.
- F. In agricultural areas, root rake and hand pick sticks and rocks so that foreign debris 1' in length or 6" in diameter is disposed of.
- G. Non-Woody Débris.
  - 1. Wooded areas Debris to be buried within the Drain right-of-way.
  - 2. Agricultural areas Debris to be removed and disposed of.
  - 3. Residential areas Debris to be removed and disposed of.
  - 4. Existing spoils do not require leveling unless the proposed construction activity requires it. Any leveling of existing spoils will be incidental to other work items.

# 3.8 MARKETABLE TIMBER

- A. Contractor may remove timber from site provided landowner is not opposed to timber removal.
- B. Top trees, remove stumps and windrow outside drain right-of-way for landowners requesting timber. Treetops and small trees shall be chipped or removed from the site. Wood chips shall be spread along backside of spoil banks. In lawn and landscaped areas, all debris must be removed unless requested by landowner.

# 3.9 FENCES AND/OR OTHER PRIVATE PROPERTY

- A. Fences and other private property located within drain right-of-way are the responsibility of the landowner.
- B. Contractor shall notify landowners and engineer of conflicts and provide reasonable cooperation and assistance.
- C. Any structures outside of drain right-of-way shall not be disturbed. Contractor shall correct all damage outside of right-of-way at his expense.
- D. Contractor shall disassemble fence, etc. and stockpile off right-of-way, and landowner is responsible for reassembly. No extra payment will be made for fences, etc.

**END OF SECTION**