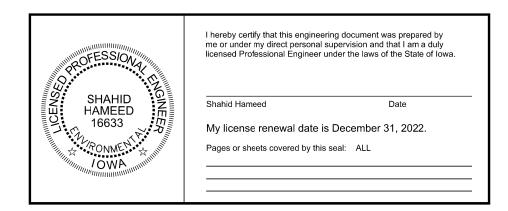
IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DOCUMENTS FOR GREEN ISLAND AND PRINCETON LEVEE REPAIRS MAQUOKETA WILDLIFE UNIT JACKSON AND SCOTT COUNTY, IOWA

PROJECT # 21-06-49-01



\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

PROJECT DESCRIPTION

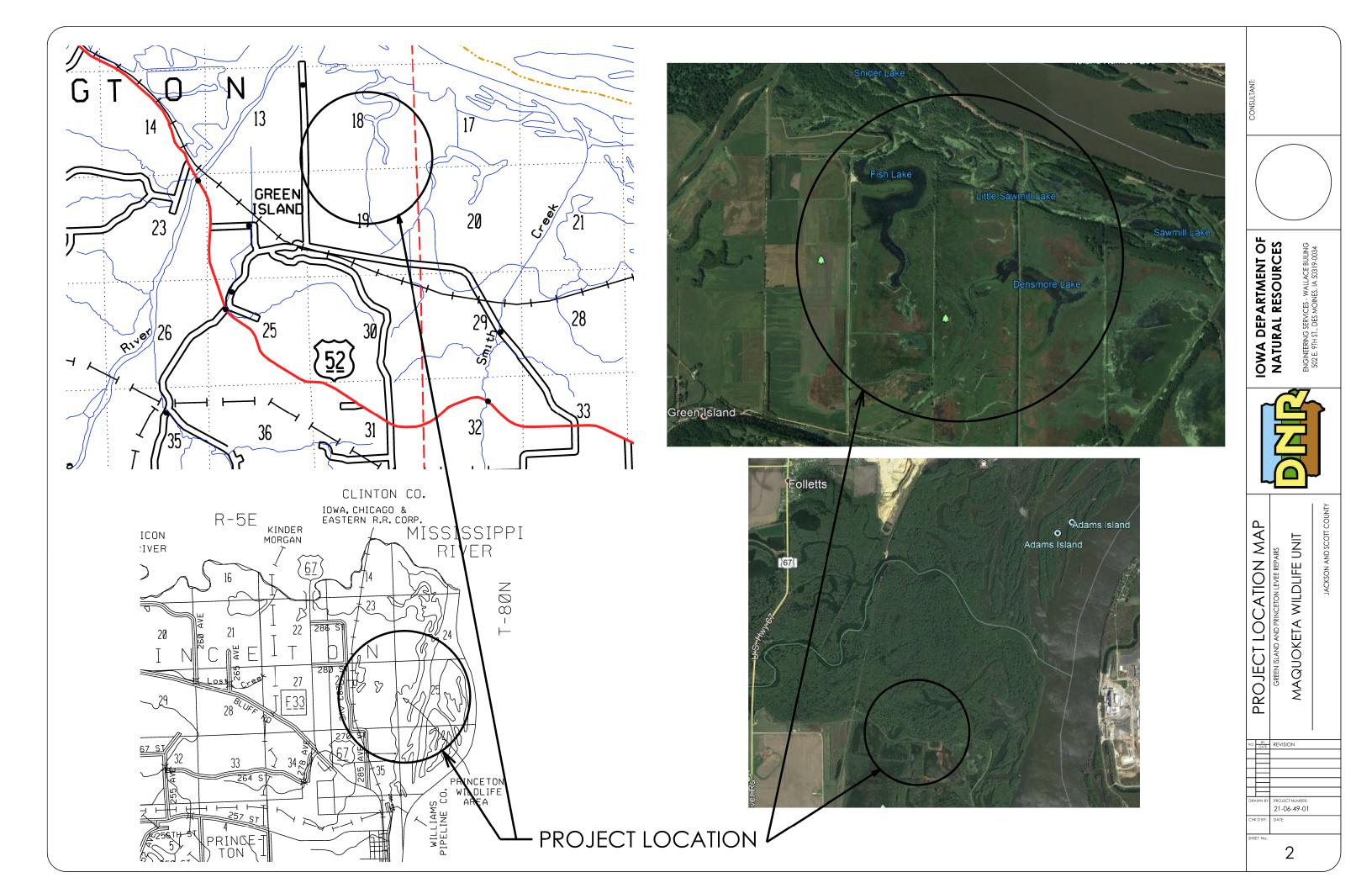
(S) IOWA	
ONE CA	

	DIRE	CTORY	
PROJECT	OJECT 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	MIKE HAMEED	CONTACT	MIKE DUFOE
TELEPHONE	515-336-2839	TELEPHONE	515-985-9196
FAX		FAX	
EMAIL	mike.hameed@dnr.iowa.gov	EMAIL	michael.dufoe@dnr.iowa.gov

THIS PROJECT CONSISTS OF REPAIRING AND RESTORING FLOOD DAMAGED LEVEES AT GREEN ISLAND AND PRINCETON FOR MAQUOKETA WILDLIFE MANAGEMENT AREA

AUTHORIZATION TO BID	`
AUTHORIZATION - PARKS WILDLIFE FISHERIES LAW ENFORCEMENT FORESTF	RY DATE
ENGINEERING BUREAU CHIEF DATE	

	SHEET INDEX	,
1	COVER SHEET	
2	LOCATION MAP	
3	LEVEE REPAIRS AT SITE 1 & 2	
4	LEVEE REPAIRS AT SITE 3 & 4	N N
5	LEVEE REPAIRS AT SITE 5 & 6	N ITINS
6	LEVEE REPAIRS AT SITE 7 & 8	CONSULTANT:
7	QUANTITIES AND GENERAL INFORMATION	
		(
		\
		P &
		≥ 0
		🗗 🚾 👸
	-	IOWA DEPARTMENT OF NATURAL RESOURCES ENGINEERING SERVICES - WALLACE BUILING
		୲୲ଌୢୣ୷
		> =
		6 🗦 🖫
		=
		~
		⊢ № #
		0,
-	-	COVER SHEET GREEN ISLAND PRINCETON LEVEE REPAIRS MAQUOKETA WILD LIFE U
-		
	+	
		≥
		NO. BY REVISION
<u> </u>	-	
	-	
-		
-	+	DRAWN BY: PROJECT NUMBER:
	+	21-06-49-01
	<u> </u>	CHK'D BY: DATE:
		OUTET AL
		SHEET No:
		SHEEL NO:





Site 1 End GPS Latitude 42.15021 Longitude -90.27935

Repair work includes:

1 Clear, grub and strip vegetation to 6-inch depth.

2. Level out all washout areas where possible.

3. Place unclassified fill along levee edge (estimate at 4" depth by 15' wide) to fill in areas that need additional material to reestablish original side slopes.

4. Seed with an erosion control mix. Place erosion

control matting.

Site 1 - Blakes Lake Rd

Site 1 Start GPS Latitude 42.14816 Longitude -90.28412

Damage includes repair of washouts along a 1,705 LF stretch of levee (Blakes Lake Rd). Above is a location of the flood damage.

Site 2 End GPS Latitude 42.16142 Longitude -90.26553 Site 2 Start GPS Latitude 42.15114 Longitude -90.27465

Damage includes repair of washouts along a 4,510 LF stretch of main levee. Above is a location of the flood damage.

Repair work includes

Clear, grub and strip vegetation to 6-inch depth.
 Level out all washout areas where possible.
 Place unclassified fill along levee edge (estimate at 4" depth by 15' wide) to fill in areas that need additional material to reestablish original side slopes.
 Seed with an erosion control mix.

5. Place erosion control matting.



Site 2 - Main Levee

OWA DEPARTMENT OF NATURAL RESOURCES

MAQUOKETA WILDLIFE UNIT

LEVEE REPAIRS AT SITE 1 & 2

NO.	BY DATE	REVISION
DRA	WN BY:	PROJECT NUMBER: 21-06-49-01
CHR	C'D BY:	DATE:
SHE	ET No:	



Repair work includes:

1 Clear, grub and strip vegetation to 6-inch depth.

2. Level out all washout areas where possible.

3. Place unclassified fill along levee edge (estimate at 4" depth by 15' wide) to fill in areas that need additional material to reestablish original side slopes.

4. Seed with an erosion control mix.

5. Place erosion control matting.

Site 3 - Containment Dike



Repair work includes:

1 Clear, grub and strip vegetation to 6-inch depth.

2. Level out all washout areas where possible.

3. Place unclassified fill along levee edge (estimate at 4" depth by 15' wide) to fill in areas that need additional material to reestablish original side slopes.

4. Seed with an erosion control mix.

5. Place erosion control matting.

5. Place erosion control matting.



Site 4 - Ducks Unlimited #1

OWA DEPARTMENT OF NATURAL RESOURCES

MAQUOKETA WILDLIFE UNIT LEVEE REPAIRS AT SITE 3 & 4

Damage includes repair of washouts along a 3,110 LF stretch of levee on levee DU #1. Above is a location of the flood damage.

Levee No. 3 -



Repair work includes:

1 Clear, grub and strip vegetation to 6-inch depth.

2. Level out all washout areas where possible.

3. Place unclassified fill along levee edge (estimate at 4" depth by 15' wide) to fill in areas that need additional material to reestablish original side slopes.

4. Seed with an erosion control mix.

5. Place erosion control matting.



Site 5 Start GPS Latitude 42.15674 Longitude -90.30585

Damage includes repair of washouts along a 5,860 LF stretch of levee at Fish Lake Road. Above is a location of the flood damage.





Site 6 Start GPS Latitude 42.17592 Longitude -90.30503

Damage includes repair of washouts along a 3,780 LF stretch of levee on levee DU #4. Above is a location of the flood damage



Repair work includes:

1 Clear, grub and strip vegetation to 6-inch depth.

2. Level out all washout areas where possible.

3. Place unclassified fill along levee edge (estimate at 4" depth by 15' wide) to fill in areas that need additional material to reestablish original side slopes.

4. Seed with an erosion control mix.

5. Place erosion control matting.

Site 6 - Ducks Unlimited #4

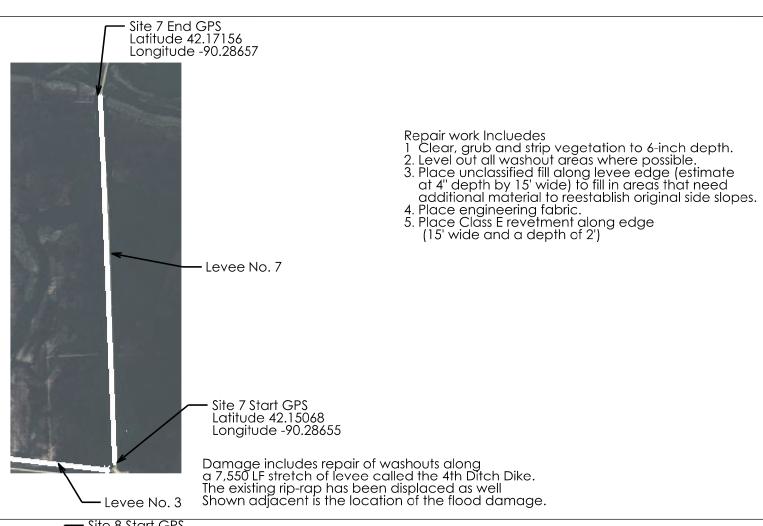
OWA DEPARTMENT OF NATURAL RESOURCES



MAQUOKETA WILDLIFE UNIT LEVEE REPAIRS AT SITE 5 & 6

21-06-49-01

5





Site 7 - 4th Ditch Dike



Damage includes repair of washouts along a 3,405 LF stretch of levee within Princeton WMA. Above is a location of the

flood damage.

Repair work includes:

1 Clear, grub and strip vegetation to 6-inch depth.

2. Level out all washout areas where possible.

3. Place unclassified fill along levee edge (estimate at 4" depth by 15' wide) to fill in areas that need additional material to reestablish original side slopes.

4. Seed with an erosion control mix.

5. Place erosion control matting.

· Site 8 End GPS Latitude 42.72210 Longitude -90.33367



Site 8 - Princeton Levee

OWA DEPARTMENT OF NATURAL RESOURCES

MAQUOKETA WILDLIFE UNIT

ITEM NO.	ITEM	UNIT	TOTAL
1	Mobilization For All Sites	Lump Sum	1
'			_
te 1: Blake	Lakes Road		
2	Unclassified Fill	СҮ	316
3	Slope Leveling (One Side of Levee)	LF	1750
4	Seeding and Fertilizing	Acre	0.6
5	Erosion Matting	SY	2917
ite 2: Main			
6	Unclassified Fill	CY	836
7	Slope Leveling (One Side of Levee)	LF	4510
8	Seeding and Fertilizing	Acre	1.55
9	Erosion Matting	SY	7517
ite 3: Conta	inment Dike		
10	Unclassified Fill	CY	465
11	Slope Leveling (One Side of Levee)	LF	2510
12	Seeding and Fertilizing	Acre	0.86
13	Erosion Matting	SY	4183
	S Unlimited #1		
14	Unclassified Fill	CY	576
15	Slope Leveling (One Side of Levee)	LF	3110
16	Seeding and Fertilizing	Acre	1.07
17	Erosion Matting	SY	5183
Site 5: Fish L			
18	Unclassified Fill	СУ	1086
19	Slope Leveling (One Side of Levee)	LF	5860
20	Seeding and Fertilizing	Acre	2.02
21	Erosion Matting	SY	9767
Star C. Dal.	. Hallanda di HA		
22	Unclassified Fill	- CV	700
		CY LF	700
23 24	Slope Leveling (One Side of Levee) Seeding and Fertilizing		3780
25	Erosion Matting	Acre	1.3
	Erosion Matting	SY	6300
ite 7: 4th D	itch Dike		
26	Unclassified Fill	CV	1399
27	Slope Leveling (One Side of Levee)	CY	7550
28	Engineering Fabric	SY	12583
29	Revetment, Class E	CY	8388
30	Seeding and Fertilizing	Acre	0.87
	Security and Fertilizing	Acie	0.67
ite 8: Princ	eton Levees		
31	Unclassified Fill	СУ	631
32	Slope Leveling (One Side of Levee)	LF	3405
33	Seeding and Fertilizing	Acre	1.17
34	Erosion Matting	SY	5675

GENERAL NOTES

Verify actual locations and elevations with DNR Engineer.

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

The contractor shall visit the site and inspect the project area and thoroughly familiarize themselves with the actual job conditions prior to bidding and the start of work. Failure to visit the project site shall not relieve the contractor from performing the work in accordance to the plans, specification, special

The contractor shall verify, at the site, all dimensions and conditions shown on the plans and shall notify the DNR Engineer of any discrepancies, omissions, and/or conflicts prior to proceeding with the work.

It shall be the contractor's responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project. No payment for overhaul will be allowed for material hauled to these sites. No material shall be placed within the right-of-way, unless specifically stated in the plans or approved by the DNR Engineer.

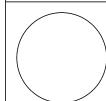
The contractor shall not disturb desirable grass areas and desirable trees outside the construction limits. The contractor will not be permitted to park or service vehicles and equipment or use these areas for storage of materials. Storage, parking and service areas will be subject to the approval of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

Where utilities and fixtures are shown as Existing on the plans or encountered within the construction area, it shall be the responsibility of the contractor to notify the DNR Engineer of those utilities prior to the beginning of any construction. The contractor shall be afforded access to these facilities for necessary modification of services. Underground facilities, structures and utilities have been plotted from available surveys and records and therefore their locations must be considered approximate only. It is possible there may be others, the existence of which is presently not known or shown. It is the contractor's responsibility to determine their existence and exact location and to avoid damage thereto. No claims for additional compensation will be allowed to the contractor for any interference or delay caused by such work.

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

ESTIMATE REFERENCE INFORMATION

ITEM DESCRIPTION NO. Earth, Fill Hauled and Placed (All sites) A. Borrow material shall be contractor furnished. B. All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained road roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event, March 12, 2019. For any FEMA-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g. a new pit, agricultural fields, roa ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient rior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a sub-recipient or their contractor commencing borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at closeout. C. Place fill as directed by the DNR inspector. D. Clearing, grubbing and stripping vegetation shall be incedental. E. Steel plates to protect out structure crossing shall be incidental. Erosion Control Mat (All sites) A. Clearing, gurbbing and stripping vegetation shall be incidental. B. Mats to be placed on repaired side slope C. Erosion Matting shall be per Iowa Statewide Urban Design and Specifications (SUDAS) Section 9040. Type of matting shall be RECP Type 2.C. Revertment (Where applicable) A. Revertment will be Class E as per SUDAS section 7E-10. Seeding and Fertilizing (All sites) A. Seed with a cover crop of winter (cereal) rye seeded at 2 bushels per acre immediately upon completion of B. After November 15, use the following dormant seeding mix: Smooth Brome 16 lbs/ac. Perenial Rye 16 lbs/ac. Tall Fescue 24 lbs/ac. Red Clover 24 lbs/ac.



OWA DEPARTMENT OF NATURAL RESOURCES - WALLACE BUILING NES, IA 50319-0034



WILDLIFE

GENERAL INFORMATION MAQUOKETA AND

QUANTITIES NO. BY REVISION 21-06-49-01