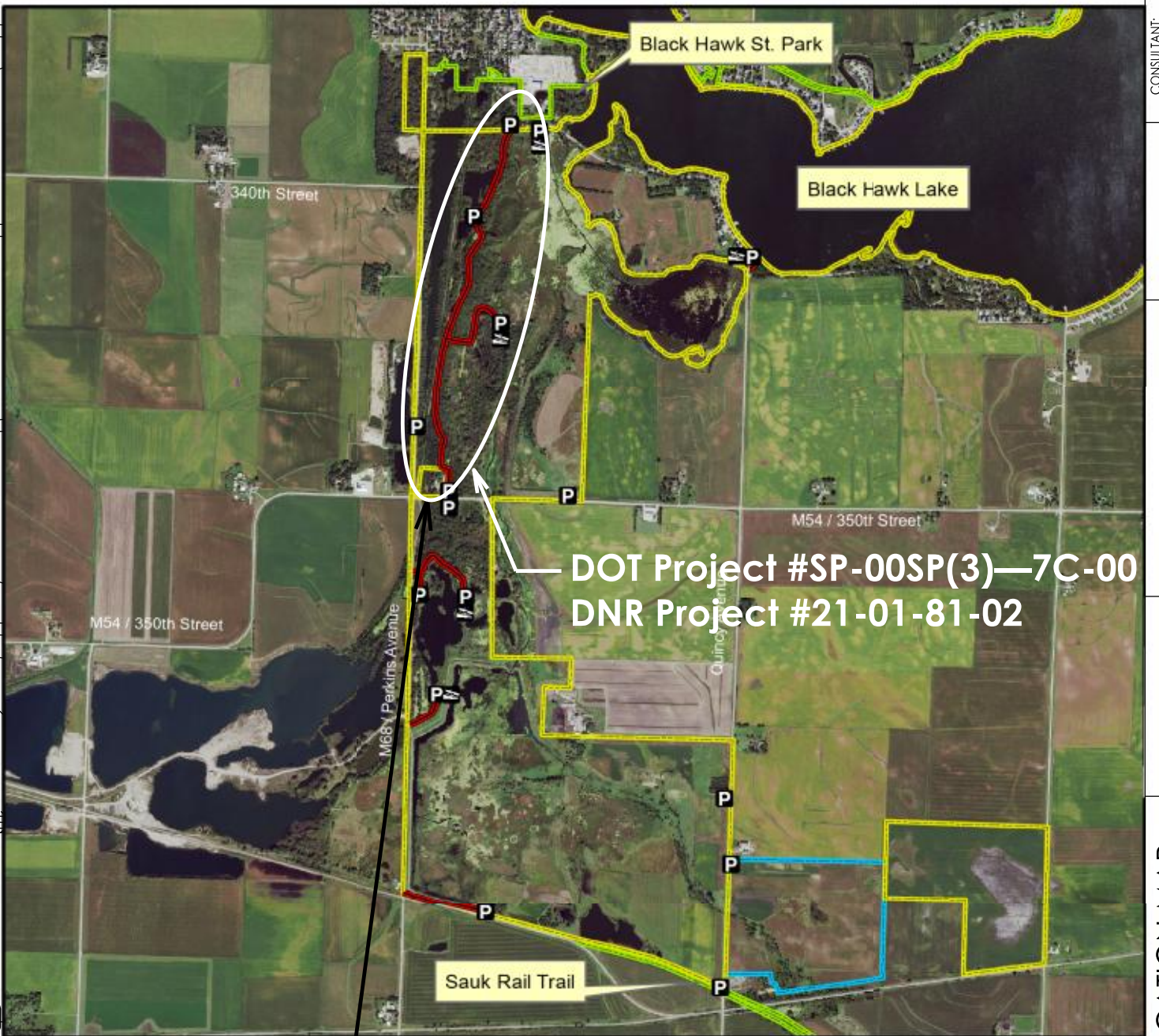
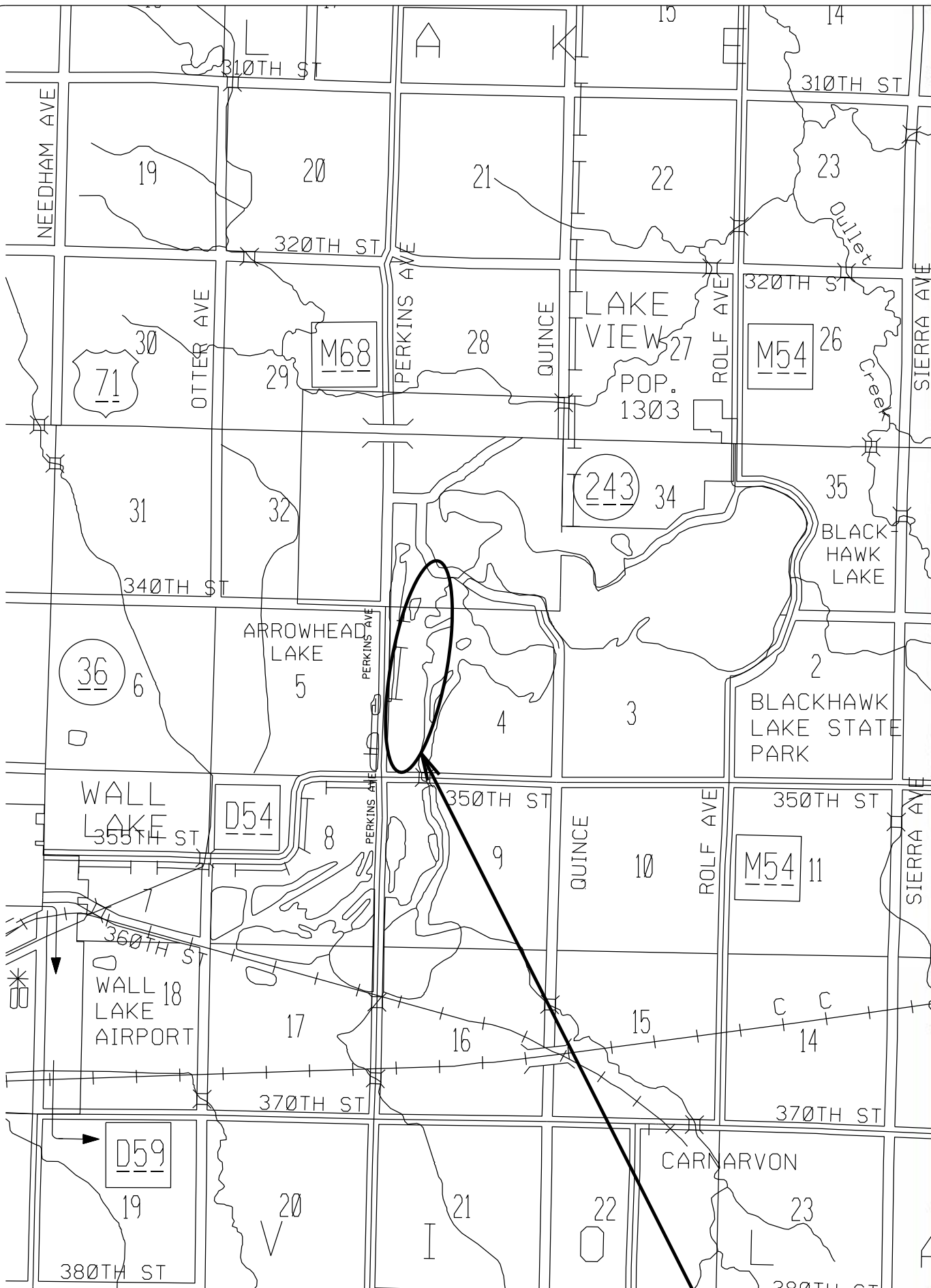


Black Hawk Marsh Wildlife Management Area



DOT Project #SP-00SP(3)—7C-00
DNR Project #21-01-81-02

Legend Map Creation Date: 11/2018

- ▭ State Areas open to hunting
- WMA Boundary
- WPA Boundary
- P Parking Lot
- B Boat Ramp
- Access Road
- Other Public Land

2015 Aerial Photography

DNR

Acres: 2,027

Habitat: 1/2 Upland, 1/4 Marsh
1/4 Timber

Species: Deer, Pheasant, Waterfowl, Dove

Contact: Clint Maddix
Blackhawk Wildlife Unit
712-657-2639

Restrictions: Non-Toxic Shot

Sac County, Iowa
T-86,87N, R-36W,
Sections 4,9,15,16,32,33

Directions: 1.5 miles W of Carnarvon
on D59, 1 mile N on M68

CONSULTANT:

IOWA DEPARTMENT OF
NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



PROJECT LOCATION MAP

GAME ROAD MAINTENANCE FOR:

BLACK HAWK MARSH

SAC COUNTY

NO.	BY	REVISION
DATE		

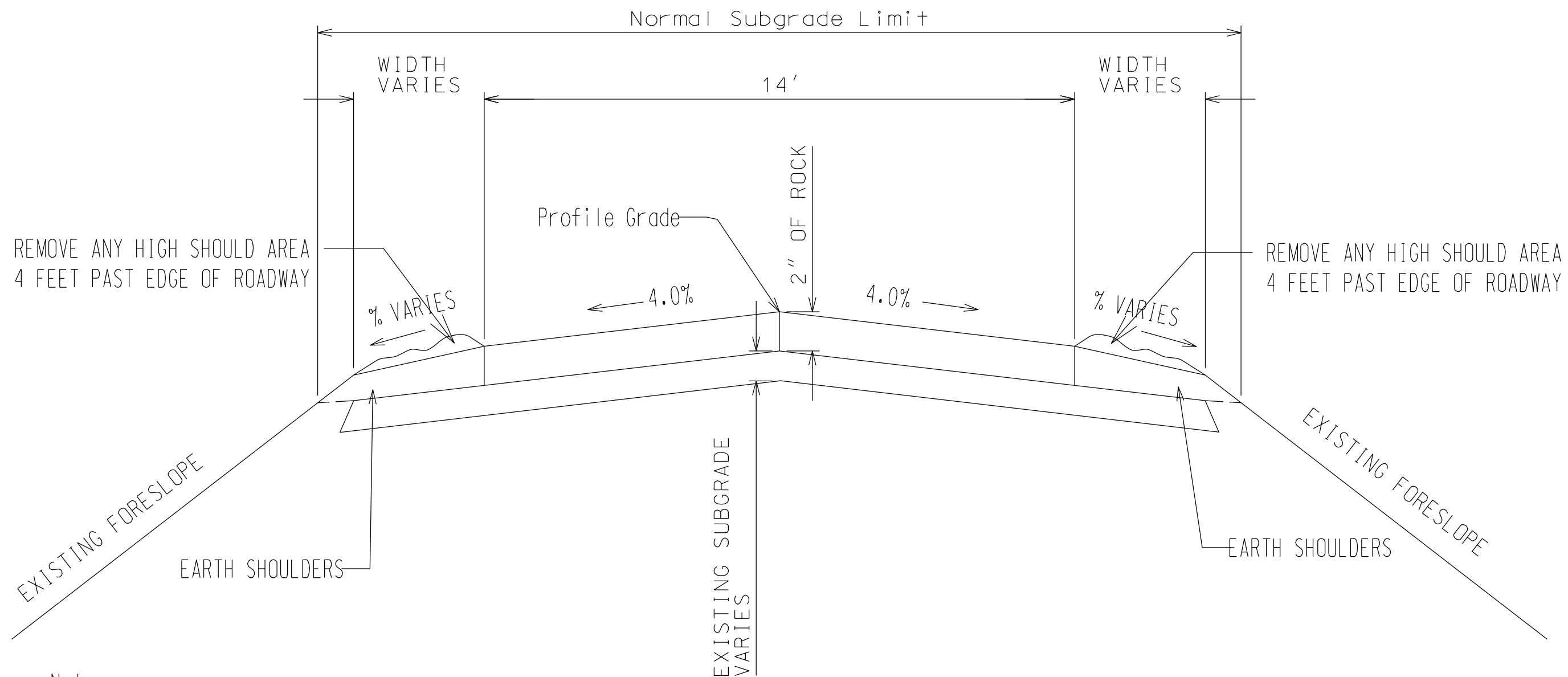
DRAWN BY: PROJECT NUMBER:
BLF 21-01-81-02

CHK'D BY: DATE:
OCT 2020

SHEET NO:

A.02

PROJECT LOCATION



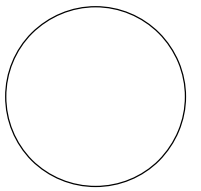
Note:

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

Typical Roadway Section - Center Crown

STATION TO	STATION	LOCATION	WIDTH
0+00	67+09	NORTH/SOUTH	14'
100+00	115+03	EAST/WEST	14'

CONSULTANT:



IOWA DEPARTMENT OF
NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



TYPICAL CROSS SECTIONS AND DETAILS

GAME ROAD MAINTENANCE FOR:

BLACK HAWK MARSH

SAC COUNTY

NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:
BLF 21-01-81-02

CHK'D BY: DATE:
OCT 2020

SHEET No:

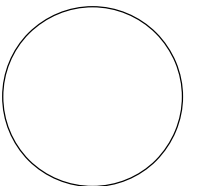
B.01

ESTIMATED PROJECT QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL
1	2101 - CLEARING, EACH, 15" - 18"	EACH	2
2	2101 - CLEARING, EACH, 24" - 30"	EACH	7
3	2101 - CLEARING, EACH, 30" - 36"	EACH	4
4	2101 - CLEARING, EACH, 36" - 42"	EACH	1
5	2101 - CLEARING, EACH, 42" - 48"	EACH	1
6	2101 - CLEARING, EACH, 48" - 60"	EACH	4
7	2101 - CLEAR AND GRUBB, EACH, 9' - 12'	EACH	2
8	2101 - CLEAR AND GRUBB, EACH, 30" - 36"	EACH	1
9	2101 - CLEAR AND GRUBB, EACH, 48" - 60"	EACH	1
10	2127 - RECONSTRUCTION OF ROADBED - BLADING/SHAPING	STA	82.2
11	2312 - GRANULAR SURFACING ON ROAD, CRUSHED STONE, CLASS A	TON	2213
12	2417 - APRON, METAL, 24"	EACH	2
13	2417 - CULV, CMP RDWY, 24"	LF	40
14	2507 - ENGINEERING FABRIC	SY	89
15	2507 - REVETMENT, CLASS E	TON	20
16	2518 - SAFETY CLOSURE	EACH	2
17	2528 - TRAFFIC CONTROL	LS	1
18	2533 - MOBILIZATION	LS	1

ESTIMATE REFERENCE INFORMATION	
ITEM NO.	DESCRIPTION
1-6	A. Cut down within 2-feet of ground. B. Move all cleared trees to tree disposal site indicated on plans.
7-9	A. Move all cleared/grubbed trees to tree disposal site indicated on plans.
10	A. Repair all potholes by scarifying surrounding area to depth of pothole and recompacting. B. Re-establish roadway crown - 4% positive drainage each way from centerline; 4% across the width in banked sections. C. Remove any high shoulder areas before spreading new rock - incorporate into existing roadway - see sheet B.01.
11	A. From DOT approved source. B. Approximate 3-inch depth. C. A final leveling of the aggregate after being dumped, is required
12	A. Install at flowline. B. DOT approved source.
13	A. Install at flowline. B. DOT approved source.
14	A. Inlet/Outlet of culvert. B. DOT approved source.
15	A. Inlet/Outlet of culvert. B. DOT approved source.
16	A. Follow current Iowa DOT Standard Specifications section 2518 for safety closure requirements.
Contact DNR Field Engineer with any questions concerning staging or material storage.	

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 provisions and contract.
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.
The contractor is expected to have materials, equipment, and labor available on a daily basis to install and maintain erosion control features on the project. This may involve seeding, silt fence, rock ditch checks, silt basins or silt dikes.

CONSULTANT:



IOWA DEPARTMENT OF NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



QUANTITIES AND GENERAL INFORMATION

GAME ROAD MAINTENANCE FOR:
BLACK HAWK MARSH

SAC COUNTY

NO.	BY DATE	REVISION

DRAWN BY: BLF PROJECT NUMBER: 21-01-81-02

CHK'D BY: DATE: OCT 2020

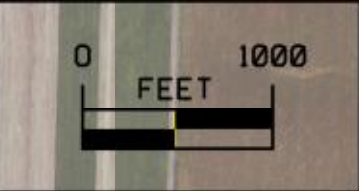
SHEET NO.:

C.01

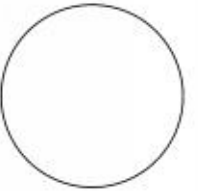


BLACK HAWK MARSH PROJECT OVERVIEW

TREE DISPOSAL SITE



CONSULTANT:



**IOWA DEPARTMENT OF
NATURAL RESOURCES**
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



SITE PLAN

GAME ROAD MAINTENANCE FOR:

BLACK HAWK MARSH

SAC COUNTY

NO.	DATE	REVISION

DRAWN BY:	PROJECT NUMBER:
BLF	21-01-81-02
CHK'D BY:	DATE:
	0-CT 2020

SHEET No. **D.01**

+20+00

+15+00

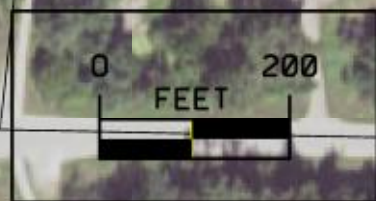
+10+00

+5+00

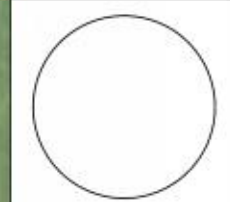
0+00

Clearing	
6+00	24"
1 TOTAL	
Blading/Shaping	
0+00	20+00
20 STA	
Class A Rock	
0+00	20+00
539 TON	
Safety Closure	
0+00	
1 EACH	

TREE DISPOSAL SITE



CONSULTANT:



**IOWA DEPARTMENT OF
NATURAL RESOURCES**
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



SITE PLAN

GAME ROAD MAINTENANCE FOR:

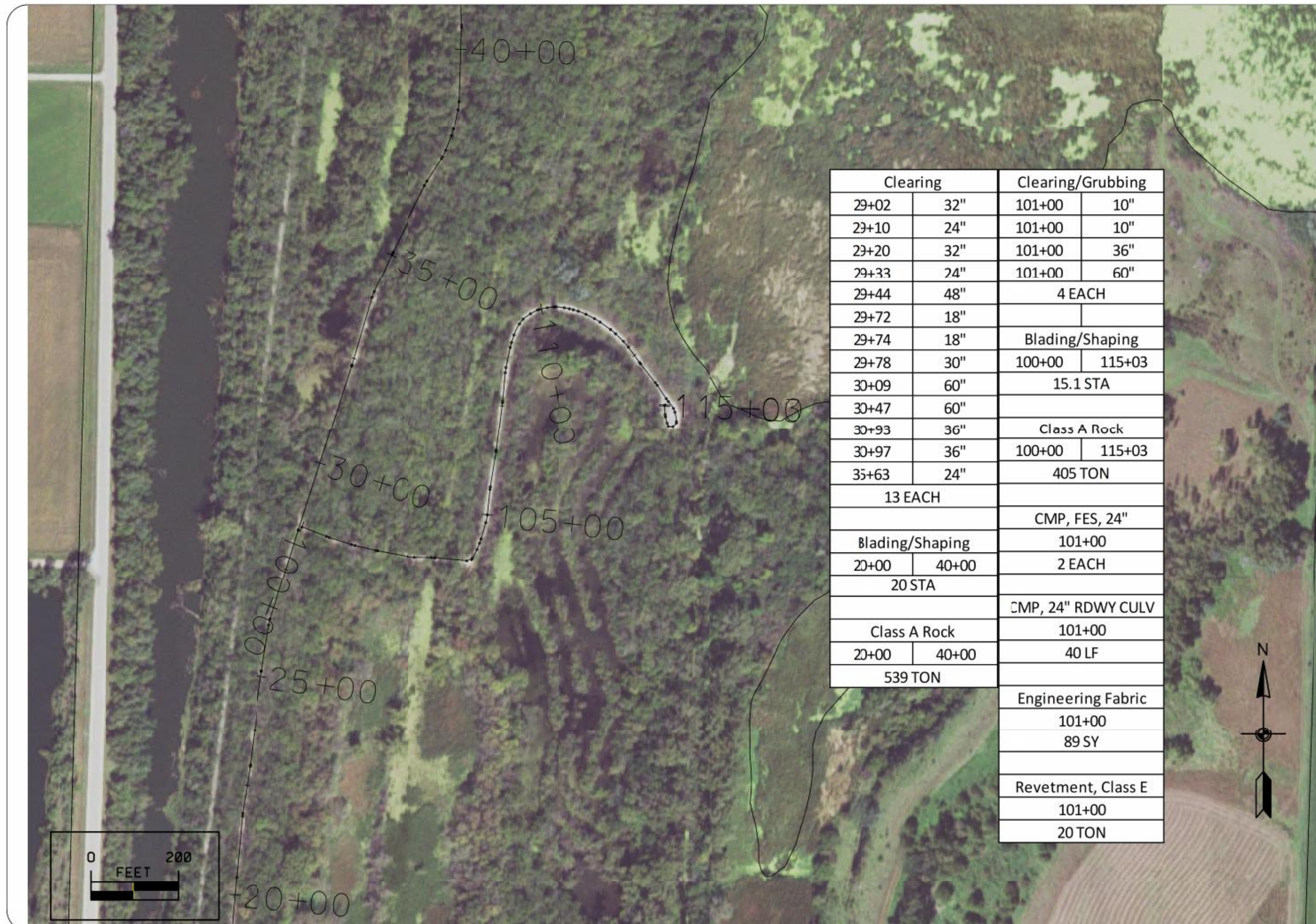
BLACK HAWK MARSH

SAC COUNTY

NO.	DATE	REVISION

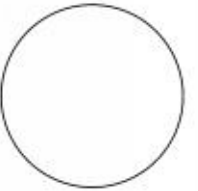
DRAWN BY: BLF PROJECT NUMBER: 21-01-81-02
CHWD BY: DATE: OCT 2020
SHEET No:

D.02



Clearing		Clearing/Grubbing	
29+02	32"	101+00	10"
29+10	24"	101+00	10"
29+20	32"	101+00	36"
29+33	24"	101+00	60"
29+44	48"	4 EACH	
29+72	18"		
29+74	18"	Blading/Shaping	
29+78	30"	100+00	115+03
30+09	60"	15.1 STA	
30+47	60"		
30+93	36"	Class A Rock	
30+97	36"	100+00	115+03
35+63	24"	405 TON	
13 EACH			
		CMP, FES, 24"	
Blading/Shaping		101+00	
20+00	40+00	2 EACH	
20 STA			
		CMP, 24" RDWY CULV	
Class A Rock		101+00	
20+00	40+00	40 LF	
539 TON			
		Engineering Fabric	
		101+00	
		89 SY	
		Revetment, Class E	
		101+00	
		20 TON	

CONSULTANT:



IOWA DEPARTMENT OF
NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



SITE PLAN

GAME ROAD MAINTENANCE FOR:

BLACK HAWK MARSH

SAC COUNTY

NO.	DATE	REVISION

DRAWN BY: BLF
 PROJECT NUMBER: 21-01-81-02
 CHECKED BY: DATE: OCT 2020
 SHEET No:

D.03



Clearing	
40+71	30"
40+73	30"
43+75	40"
48+01	60"
56+89	60"
5 TOTAL	
Blading/Shaping	
40+00	60+00
20 STA	
Class A Rock	
40+00	60+00
539 TON	



SITE PLAN

GAME ROAD MAINTENANCE FOR:

BLACK HAWK MARSH

SAC COUNTY

NO.	DATE	REVISION

DRAWN BY: **BLF** PROJECT NUMBER: **21-01-81-02**
 CHK'D BY: DATE: **OCT 2020**

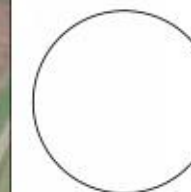
SHEET No. **D.04**



**IOWA DEPARTMENT OF
NATURAL RESOURCES**

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034

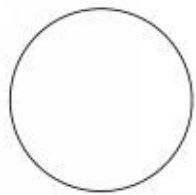
CONSULTANT:





Blading/Shaping	
60+00	67+09
7.1 STA	
Class A Rock	
60+00	67+09
405 TON	
Safety Closure	
67+09	
1 EACH	

CONSULTANT:



**IOWA DEPARTMENT OF
NATURAL RESOURCES**

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



SITE PLAN

GAME ROAD MAINTENANCE FOR:

BLACK HAWK MARSH

SAC COUNTY

NO.	DATE	REVISION

DRAWN BY: BLF

PROJECT NUMBER: 21-01-81-02

CHKD BY: DATE: OCT 2020

SHEET No:

D.05