



**US Army Corps  
of Engineers**®  
Rock Island District

# PUBLIC NOTICE

Applicant: Iowa Department of Natural Resources Date: October 14, 2021

Expires: November 12, 2021

CEMVR-RD-2021-1366

Section 404

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**Joint Public Notice  
US Army Corps of Engineers  
Iowa Department of Natural Resources**

1. **Applicant:** Iowa Department of Natural Resources, 502 East 9<sup>th</sup> St. Des Moines, Iowa 50319.

2. **Project Location:**

- Red Haw Lake in Red Haw State Park
- Sections 28 and 33, Township 72 North, Range 21 West
- Lucas County, Iowa
- UTM NAD-83 Zone15
- Lat 40.9991, Long -93.2741.

3. **Project Description and Purpose.** The applicant proposes to stabilize the bank of Red Haw Lake by placing rock armoring along the shoreline at four locations for a total distance of 3,680 linear feet; Site 1 = 760 linear feet, Site 2 = 660 linear feet, Site 3 = 760 linear feet, and Site 4 = 1,500 linear feet. Most of the riprap is new and will be placed along the shoreline on a 2:1 slope. The riprap will be 2 feet thick and 5 feet high, with 3 feet below pool elevation and 2 feet above pool elevation. No bank reshaping is required as the shoreline is already at a 2:1 slope. All disturbed areas will be seeded, mulched, and fertilized. The replacement of a deteriorated water control structure is also proposed at the inlet to Red Haw Lake, which is located at the southeastern end of the Lake. The applicant has stated there are no impacts on existing wetlands, no borrow areas, stockpile and staging will occur in existing gravel parking lots, there will be no tree clearing, and existing trees will be preserved and worked around with small equipment. The purpose of this project is to stabilize the shoreline of Red Haw Lake and replace the deteriorating water control structure.

4. **Avoidance and Minimization.** The applicant has not provided avoidance and minimization efforts. However, impacts are minimized by installing riprap at four separate locations with no segment exceeding 1,500 linear feet, no tree clearing, utilizing existing parking lots for staging and stockpiling locations, and no bank reshaping. Stream mitigation will not be required due to the beneficial nature of the project.

## 5. Agency Review.

a. Department of the Army, Corps of Engineers. The Department of the Army application is being processed under the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344).

b. State of Iowa. The project plans have been submitted to the Iowa Department of Natural Resources (IDNR) for state certification of the proposed work in accordance with Section 401 of the Clean Water Act. The certification, if issued, will express the Department's opinion that the proposed activity will comply with Iowa's water quality standards (Chapter 61 IAC). The applicant has also applied for authorization of work in the floodplain pursuant to Chapter 455B of the Iowa Code and other applicable state permits. Written comments concerning possible impacts to waters of Iowa should be addressed to: Iowa Department of Natural Resources, 502 East 9<sup>th</sup> Street, Des Moines, Iowa 50319. A copy of the comments should be provided to the Corps of Engineers office (see paragraph 11. of this public notice for address).

6. **Historical/Archaeological.** The District consulted with the Iowa I-Sites geographic information systems archeological site and survey databases online (including all three layers of the HILD). No historic properties were identified in the current permit area. The soil survey and early aerial photos were also reviewed. Based on all the information available it appears that the permit areas are located on relatively steep side slopes and were fairly high up prior to the lake inundation. The soils are listed as Gara clay loam with 14-18 percent slopes, moderately eroded and do not appear likely to contain significant historic properties as the proposed area for stabilization have also been eroded by wave action for nearly 100 years. Based on this information it is the opinion of the District Archaeologist there will be **no historic properties affected** by the currently proposed permit action because “the nature, scope, and magnitude of the work, and/or structures to be permitted are such that there is little likelihood that a historic property exists or may be affected” (33 CFR Part 325, Appendix C.3.b).

## 7. Endangered Species.

a. District staff has performed a preliminary review of this application for the potential impact on threatened or endangered species pursuant to Section 7 of the Endangered Species Act as amended. The following all have potential habitat in Lucas County, Iowa.

- Northern Long-eared bat (*Myotis septentrionalis*),
- Indiana bat (*Myotis sodalist*),
- Monarch Butterfly (*Danaus plexippus*),
- Prairie Bush-clover (*Lespedeza leptostachya*),
- Western Prairie Fringed Orchid (*Platanthera praeclara*),
- Eastern Prairie Fringed Orchid (*Platanthera leucophaea*)

b. No critical habitats are listed within the project area. No tree clearing is proposed and the project area does not contain suitable habitat for the other listed species. Our preliminary determination is that this project is “**no effect**” to federally endangered species or critical habitat. We are coordinating this application with the Fish and Wildlife Services through this public notice. Accordingly, our preliminary determination is subject to change should further information become available.

**8. Dredge/Fill Material Guidelines.** The evaluation of the impact of the proposed activity on the public interest will also include application of the guidelines promulgated by the Administrator of the United States Environmental Protection Agency under authority of Section 404(b) of the Clean Water Act (40 CFR Part 230).

**9. Public Interest Review.** The decision whether to issue the Corps permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

**10. Who Should Reply.** The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. These statements should be submitted on or before the expiration date specified at the top of page 1. These statements should bear upon the adequacy of plans and suitability of locations and should, if appropriate, suggest any changes considered desirable.

**11. Public Hearing Requests.** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided.

**12. Reply to the Corps.** Comments concerning the Corps permit should be addressed to the US Army Corps of Engineers, Rock Island District, Attn: RD (K. Brown), Clock Tower Building - Post Office Box 2004, Rock Island, Illinois 61204-2004. **Mrs. Kirsten Brown** may be contacted for additional information at (309) 794-5369 or email at [Kirsten.L.Brown@usace.army.mil](mailto:Kirsten.L.Brown@usace.army.mil).



Attach  
Plan

Mrs. Kirsten L. Brown  
Project Manager, Western Branch  
Regulatory Division

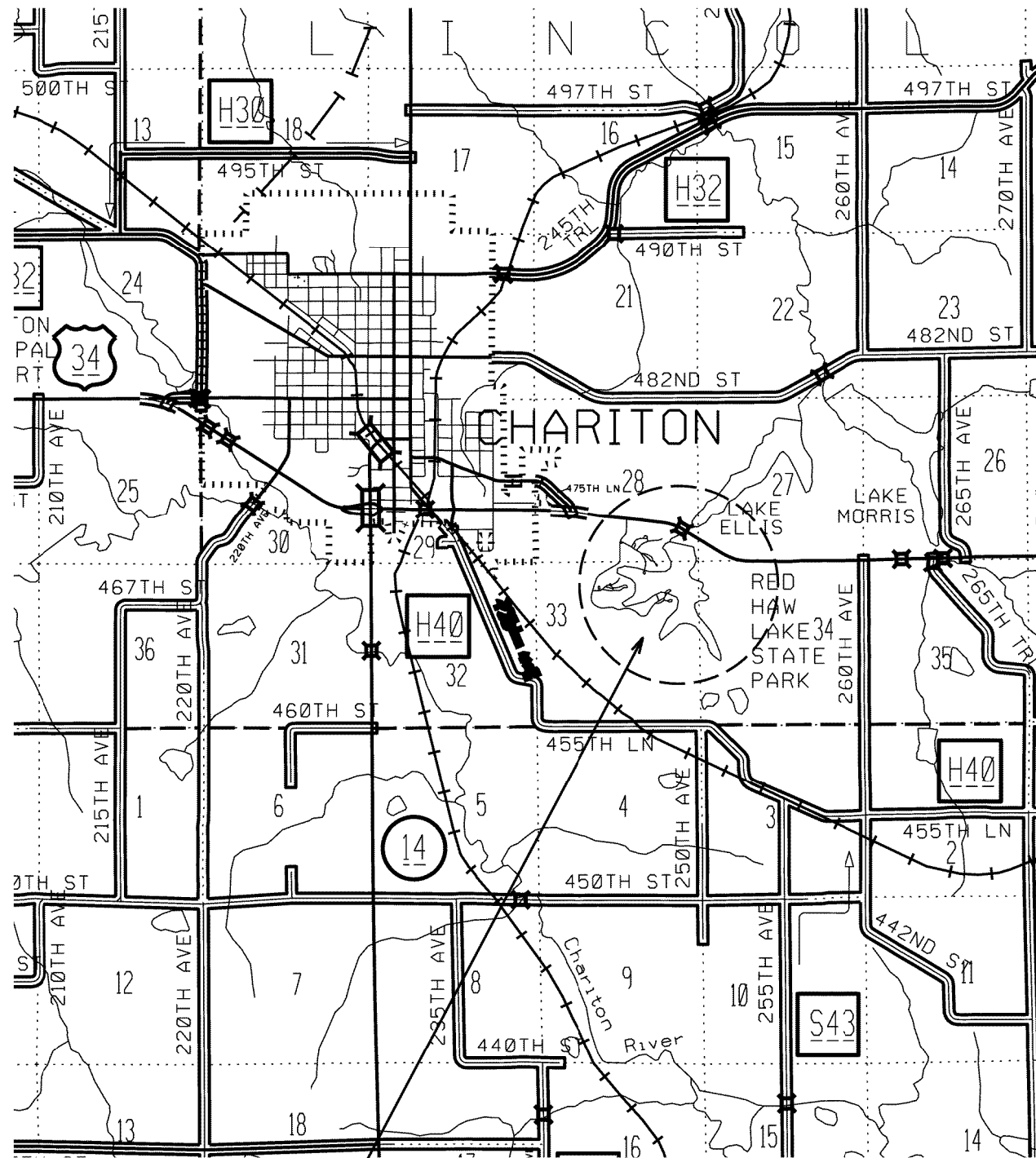
Construction Plans – 6 pages

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**REQUEST TO POSTMASTERS:** Please post this notice conspicuously and continuously until the expiration date specified at the top of page 1.

**NOTICE TO EDITORS:** This notice is provided as background information for your use in formatting news stories. This notice is not a contract for classified display advertising.



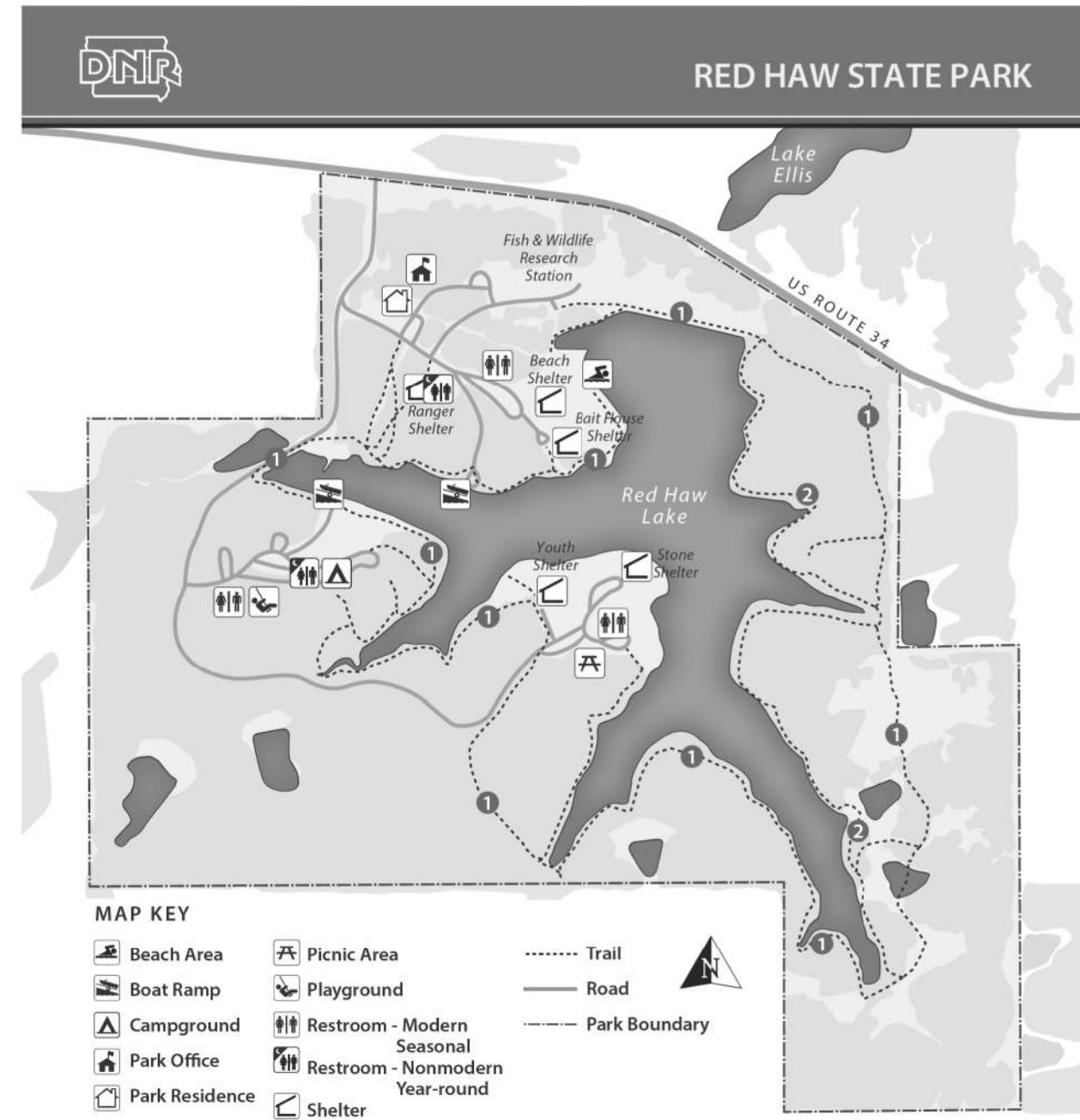


PROJECT LOCATION

T-72N R-21W SEC 33

CEMVR-RD-2021-1366

Sheet 2 of 6



MAP KEY

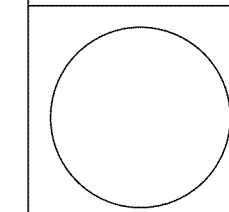
- Beach Area
- Boat Ramp
- Campground
- Park Office
- Park Residence
- Picnic Area
- Playground
- Restroom - Modern Seasonal
- Restroom - Nonmodern Year-round
- Shelter
- Trail
- Road
- Park Boundary

TRAIL INFORMATION

Trail Name	Trail Activity	Length	Level of Difficulty	Estimated Hike Time
1 Lake Loop	Hiking, Biking, Snowmobiling	4 mi.	Moderate	1 hr 36 mins
2 Lower Lake Loop	Hiking, Biking, Snowmobiling	1.1 mi.	Moderate	26 minutes

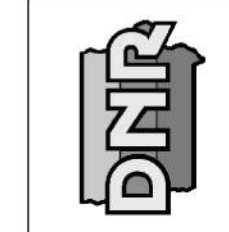
Walking times are figured at a rate of 2.5 mph.  
[www.iowadnr.gov/Places-to-Go/State-Parks](http://www.iowadnr.gov/Places-to-Go/State-Parks)

CONSULTANT:



**IOWA DEPARTMENT OF  
NATURAL RESOURCES**

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



**PROJECT LOCATION MAP**

SHORELINE STABILIZATION AND WATER CONTROL STRUCTURE REPLACEMENT FOR:

RED HAW STATE PARK

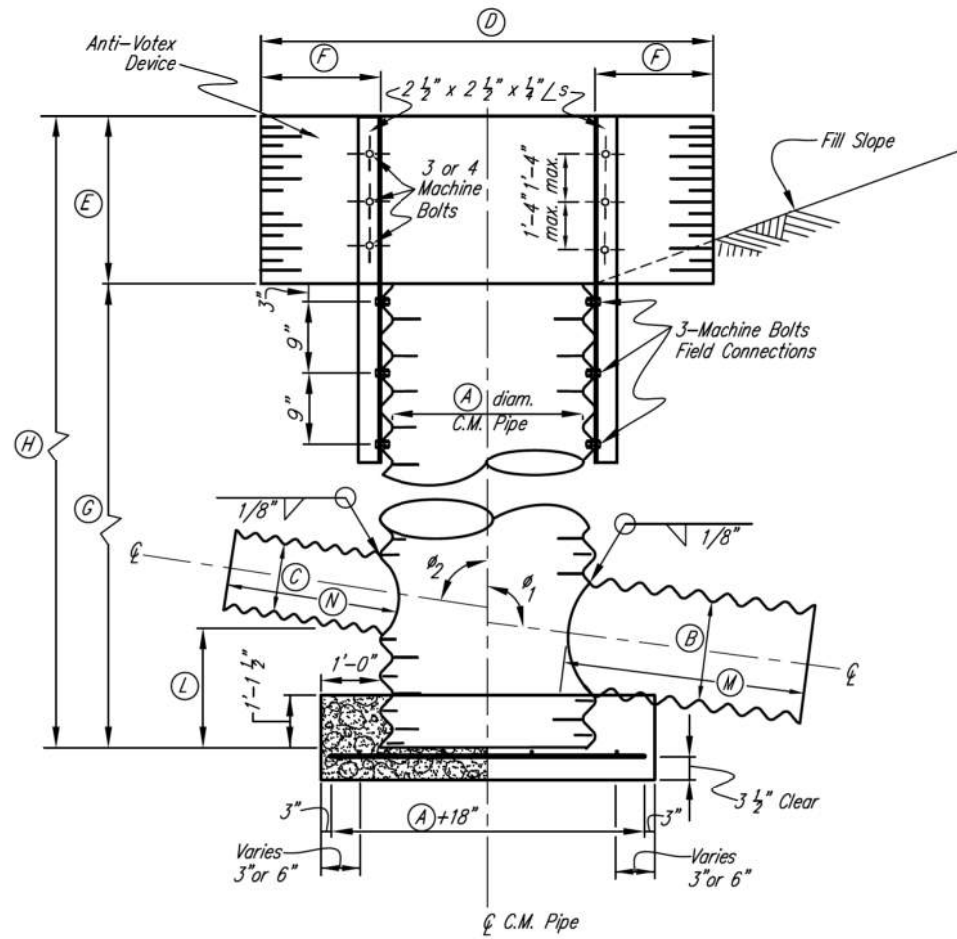
LUCAS COUNTY

NO.	BY	REVISION

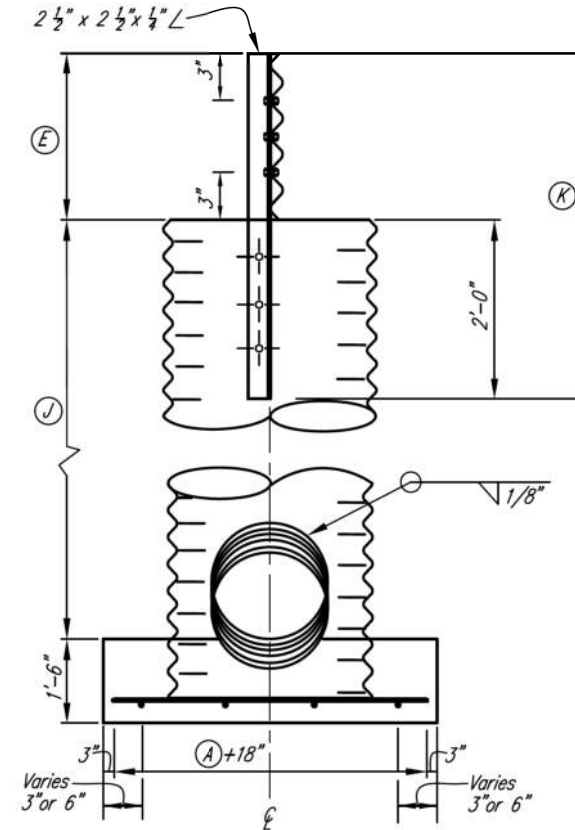
DRAWN BY: PROJECT NUMBER:  
 ESANG 22-05-59-01  
 CHK'D BY: DATE:  
 JARRISE  
 SHEET NO.:

**A.02**

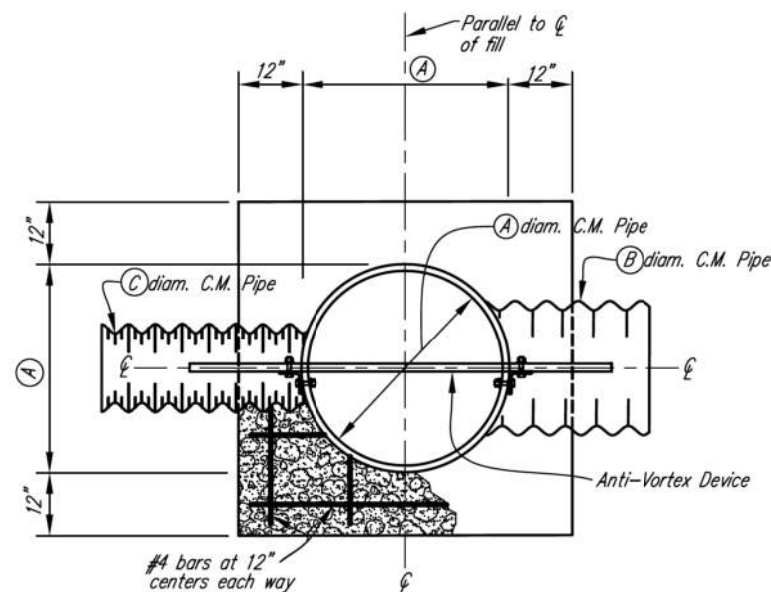
ANTIVORTEX & VERTICAL INLET ( ADOPTED FROM IA-1131 NRCS)



SECTION ON CENTERLINE



REAR ELEVATION



PLAN

Notes:  
 All holes for bolts shall be 9/16" diam.  
 Vertical Inlet to be shop fabricated.  
 After welding, damaged coatings shall be repaired as specified in Construction Specification 51.

Minimum (M) Dimension  
 B ≤ 36" M = 2'-1 1/2"  
 B > 36" M = 4'-1 1/2"  
 Minimum (N) Dimension  
 N = 2'-1 1/2"

OPTIONAL (C) FABRICATION		
	C1	C2
Diameter, Inches		
Sheet Thickness		
Corrugations		
Position O'clock (B=12:00)		
(L)		
∅ Degrees-Angles		
Slope in ft./ft.		

TABLE-DIMENSIONS AND MATERIAL

Dimensions	
(A)	
(B)	
(C)	
(D)	
(E)	
(F)	
(G)	
(H)	
(J)	
(K)	
(L)	
(M)	
(N)	
Sheet Thickness for (A) diam.	
Corrugations for (A) diam.	
Sheet Thickness for (B) diam.	
Corrugations for (B) diam.	
Sheet Thickness for (C) diam.	
Corrugations for (C) diam.	
Sheet Thickness for Anti-Vortex Device	
Corrugations for Anti-Vortex	
MATERIAL ITEMS	QUANTITY REQUIRED
2 1/2" x 2 1/2" x 1/4" Ls x (K) Galv.	2
(D) x (E) Corr. Metal Sheets Galv.	1
1/2" x 1 1/4" Steel Cadmium Plated Mach. Bolts	
1/2" Steel Split Lockwashers	
1/2" Steel Cadmium Plated Nuts	
∅ Degrees-Angles	∅1 ∅2
Slope of (B) diam. pipe in ft./ft.	
Slope of (C) diam. pipe in ft./ft.	

VERTICAL INLET BASE QUANTITIES

Dimension (in.) (A)	Concrete Cu. Yd.	Steel Reinforcement #4 Bar		
		Length Each Bar	Number of Bars	Total Weight Pounds
18"	0.68	3'-0"	8	16.0
24"	0.89	3'-6"	8	18.7
30"	1.13	4'-0"	10	26.7
36"	1.39	4'-6"	10	30.1
42"	1.68	5'-0"	12	40.1
48"	2.00	5'-6"	12	44.1
54"	2.35	6'-0"	14	56.1
60"	2.72	6'-6"	14	60.8

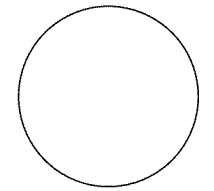
STANDARD DWG. IA-1131

DATE April 2021 | PAGE 1 OF 1

DETAILS OF INLET  
 Not to Scale

CEMVR-RD-2021-1366  
 Sheet 3 of 6

CONSULTANT:



IOWA DEPARTMENT OF  
 NATURAL RESOURCES

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



ANTIVORTEX & VERTICAL INLET

SHORELINE STABILIZATION AND WATER CONTROL STRUCTURE REPLACEMENT FOR:

RED HAW STATE PARK

LUCAS COUNTY

NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:

ESANG 22-05-59-01

CHK'D BY: DATE:

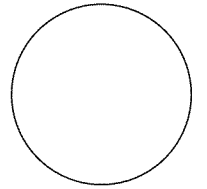
JARRIDE

SHEET NO.:

B.01

TRASH RACK (ADOPTED FROM IA-1100 NRCS)

CONSULTANT:



IOWA DEPARTMENT OF NATURAL RESOURCES

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



TRASH RACK DETAILS

SHORELINE STABILIZATION AND WATER CONTROL STRUCTURE REPLACEMENT FOR:

RED HAW STATE PARK

LUCAS COUNTY

NO.	DATE	REVISION

DRAWN BY: PROJECT NUMBER:  
ESANG 22-05-59-01

CHK'D BY: DATE:

SHEET NO:

B.02

**PLAN**

**ISOMETRIC VIEW**  
Not to Scale

**SIDE ELEVATION**

**UPSTREAM ELEVATION**

Mark	Quantity	Item	15" Diam.	18" Diam.	21" Diam.	24" Diam.	30" Diam.
1	2	L's 3"x3"x $\frac{5}{16}$ "	3-3	3-7	3-11	4-3	5-0
2	1	"	3-3	3-7	3-11	4-3	5-0
3	1	"	3-3	3-7	3-11	4-3	5-0
4	1	"	3-7	3-11	4-3	4-7	5-5
5	1	"	4-1	4-5	4-9	5-1	5-11
6	1	"	4-1	4-5	4-9	5-1	5-11
7	1	"	3-7	3-11	4-3	4-7	5-5
8	1	L's 2"x2"x $\frac{3}{16}$ "	3-9	4-1	4-5	4-9	5-7
9	1	"	3-9	4-1	4-5	4-9	5-7
10	1	"	3-7	3-11	4-3	4-7	5-5
11	2	"	2-3	2-7	2-11	3-3	4-0
12	1	"	2-3	2-7	2-11	3-3	4-0
13	2	"	4-1	4-5	4-9	5-1	5-11
32		$\frac{1}{2}$ " $\phi$ Machine Bolts w/Lock Washers and Hex. Nuts	0- $\frac{1}{2}$	0- $\frac{1}{2}$	0- $\frac{1}{2}$	0- $\frac{1}{2}$	0- $\frac{1}{2}$
		Concrete	0.6 Cu.Yd.				

**Construction Notes:**  
Structure is symmetrical about  $\bar{C}$ .  
Trash Rack to be fabricated of steel angles, bolted together with  $\frac{1}{2}$  inch  $\phi$  machine bolts.  
All cuts shall be saw cuts.  
All holes for bolts shall be  $\frac{1}{16}$  inch larger than bolt diam.

	15" Diam.	18" Diam.	21" Diam.	24" Diam.	30" Diam.
A	3-4	3-8	4-0	4-4	5-2
B	1-8	1-10	2-0	2-2	2-7
C	4-1	4-5	4-9	5-1	5-11
D	1-5 $\frac{1}{2}$	1-7 $\frac{1}{2}$	1-9 $\frac{1}{2}$	1-11 $\frac{1}{2}$	2-4 $\frac{1}{2}$
E	2-3	2-7	2-11	3-3	4-0
F	1-1	1-3	1-5	1-7	1-11
G	1-2	1-4	1-6	1-8	2-1
H	1-3	1-4	1-5	1-7	1-10
I	1-4	1-5	1-7	1-8	1-11
J	1-6	1-8	1-9	1-10	2-2
K	3-7	3-11	4-3	4-7	5-5

**FRONT ELEV.**

**SIDE ELEV.**

**SIDE ELEV. FRONT ELEV. VIEW "B"**

**PLAN VIEW "A"**

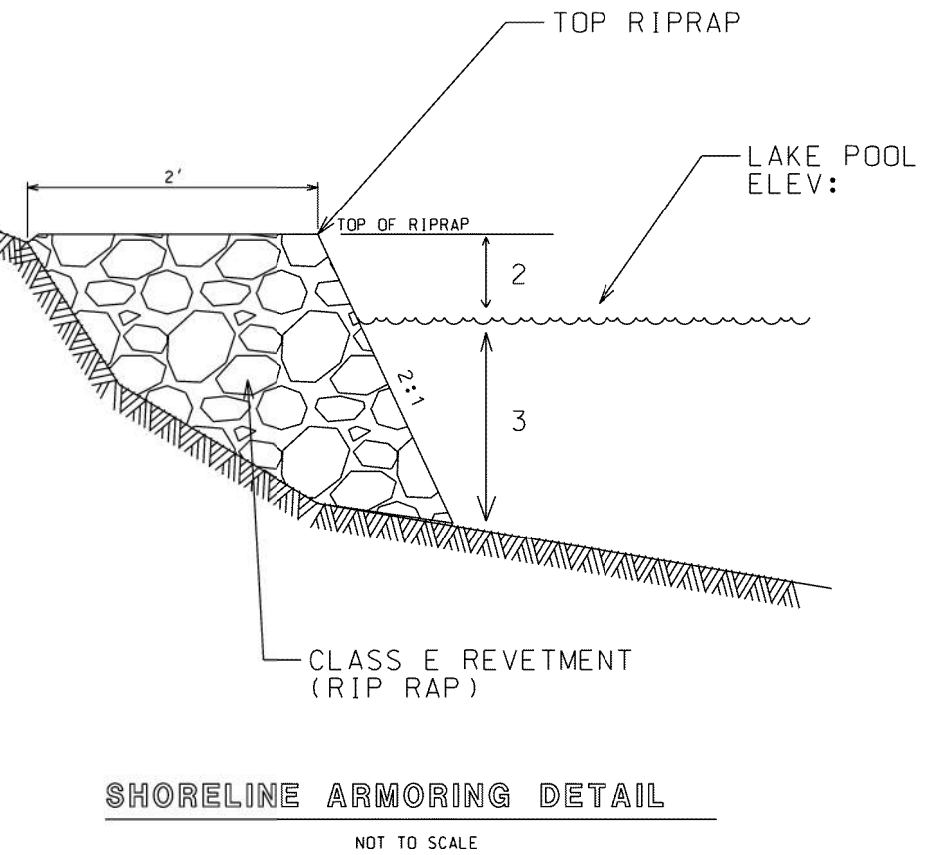
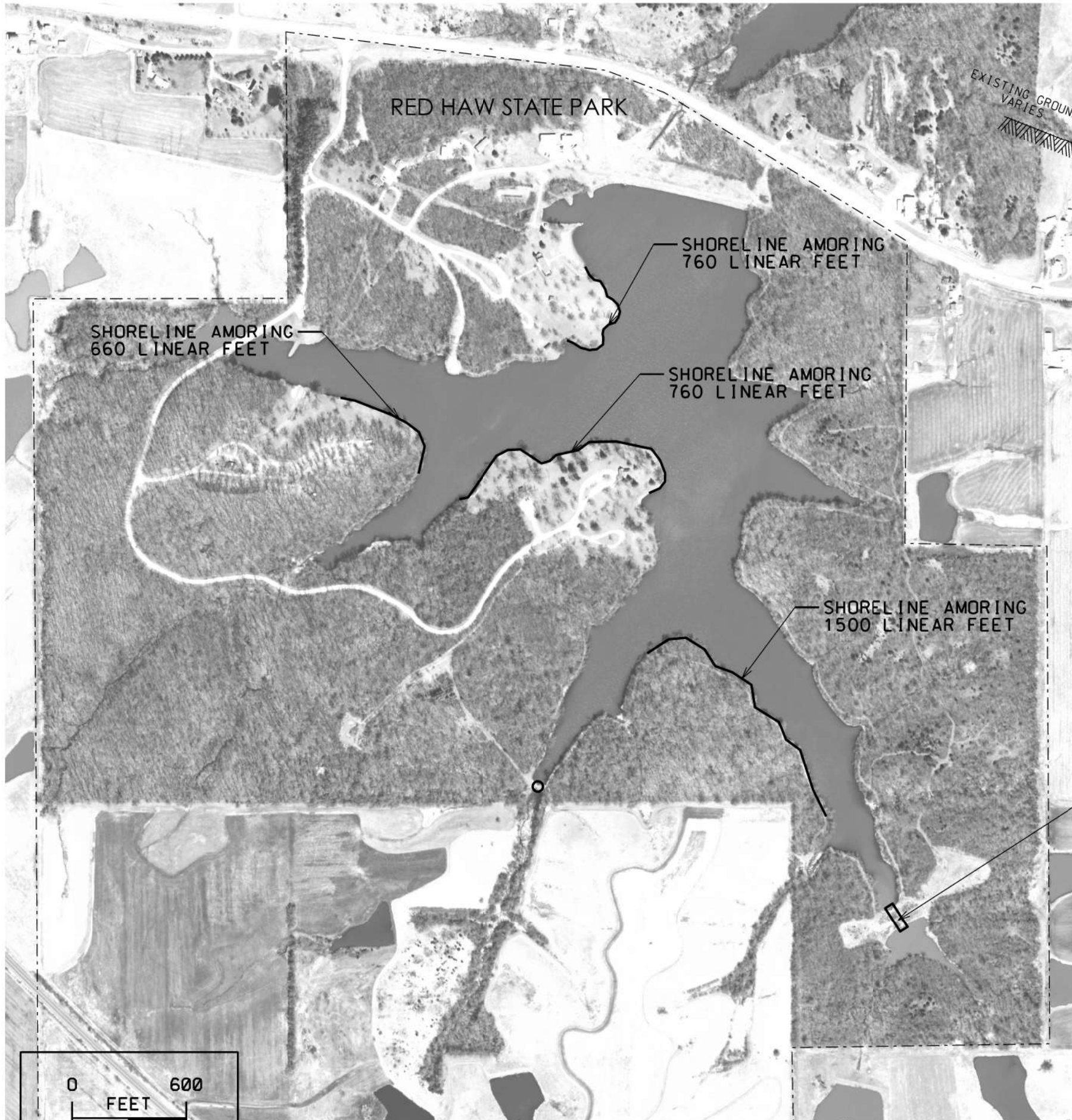
**END ELEV. VIEW "C"**

**SIDE ELEV. VIEW "D"**

**CONCRETE FOOTING LAYOUT**

**FOOTING DETAIL**  
Not to Scale

Concrete filled hole for footing  
Post, Corner 3"x3"x $\frac{5}{16}$ "  
A void shall be formed in the concrete footings to receive the Mark 1, 2 and 3 posts.  
The void shall be one foot deep. The cross section of the void may be triangular, rectangular or circular the  $\frac{1}{4}$  inch clearance between the concrete and the Mark 1, 2 and 3 posts.  
After the posts are installed, the remaining voids shall be filled with bituminous mastic.



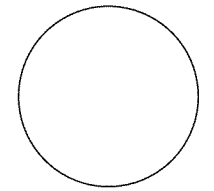
**SHORELINE ARMORING DETAIL**

NOT TO SCALE



**CEMVR-RD-2021-1366**  
**Sheet 5 of 6**

CONSULTANT:



**IOWA DEPARTMENT OF  
 NATURAL RESOURCES**

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



**SITE PLAN**

SHORELINE STABILIZATION AND WATER CONTROL STRUCTURE REPLACEMENT FOR:

**RED HAW STATE PARK**

LUCAS COUNTY

NO.	BY	REVISION

DRAWN BY: PROJECT NUMBER:  
 ELSANG 22-05-59-01

CHK'D BY: DATE:  
 JKRUSE

SHEET NO:

**D.01**

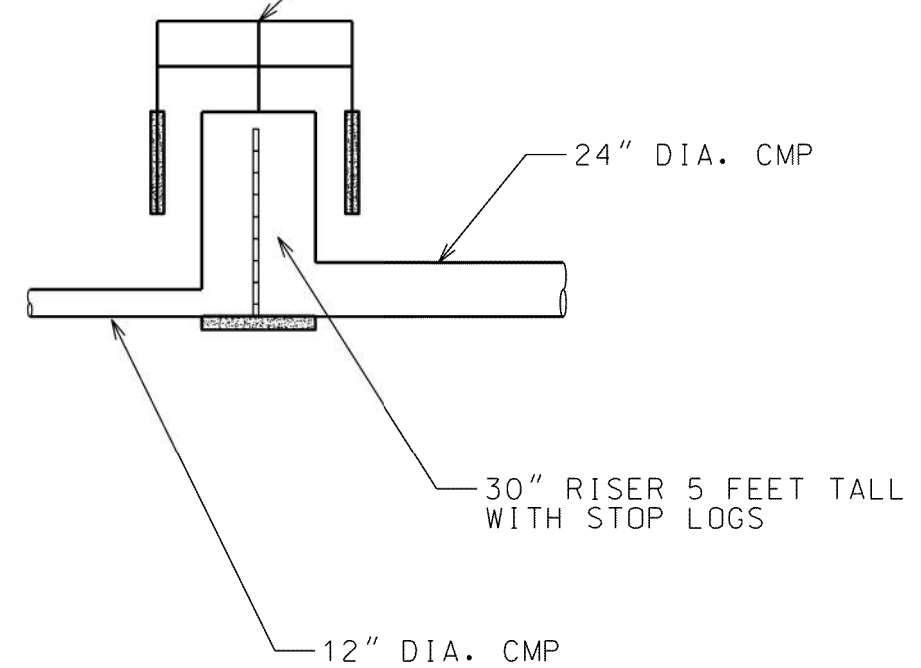




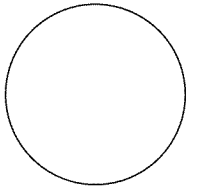
REPLACE THE TRASH RACK  
SEE DETAIL ON SHEET B.01

REPLACE THE RISER  
SEE DETAILS ON  
SHEET B.02

TRASH RACK WITH ANTI VORTEX  
SEE DETAILS SHEET B.01



CONSULTANT:



**IOWA DEPARTMENT OF  
NATURAL RESOURCES**

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



**WATER CONTROL STRUCTURE REPLACEMENT**

SHORELINE STABILIZATION AND WATER CONTROL STRUCTURE REPLACEMENT FOR:

**RED HAW STATE PARK**

LUCAS COUNTY

NO.	BY	REVISION

DRAWN BY: PROJECT NUMBER:  
ESANG 22-05-59-01

CHK'D BY: DATE:  
JARUSE

SHEET NO:

**CEMVR-RD-2021-1366**

**Sheet 6 of 6**

**D.02**