

Borrow may be taken from the pool area

Do not borrow below elevation 821.60. - See cross section sheet for more details.

The top dashed line is the top of dam elevation at 827.0
The middle dashed line is the auxiliary spillway elevation at 826.0
The lowest dashed line is the waterline at 825.0

All benchmarks are set high on the landscape. Therefore, NRCS will set the benchmarks for the contractor prior to construction.

CONSTRUCTED TOP OF DAM = 827.5
SETTLED TOP OF DAM = 827.0
AUXILIARY SPILLWAY = 826.0
PRINCIPAL SPILLWAY (WATERLINE) = 825.0
PERMANENT POOL AREA = 0.72 ACRES
TOP WIDTH OF DAM = 12 FT.

MAIN FILL =
The constructed top of dam is 827.50 and the settled top is 827.0. The top width is 12 ft. wide. The side slopes are 4:1. The core of the dam needs to be good clay material. The front and back slopes can be built from the pool area. Do not borrow on the sides of the pool area under the water line. The dam must be cored at least 4 ft. deep with a 10 ft. bottom width and sideslopes 1.5:1 for safety.

PRINCIPAL SPILLWAY=
The principal spillway is an Inline water control structure. The structure is 4 ft tall and has an inlet and outlet for a 6 Inch PVC. The top of the box should be set 0.5 feet below the elevation of the auxiliary spillway (825.5) Then set the top stop log in the box at the waterline (825.0). The inlet and outlet pipes of the structure should be 6 Inch PVC. The pipe that should be used may be SDR 32.5 ASTM D2241 or Schedule 40 ASTM D 1785. No other pipe will be accepted if this can not be found or ordered contact the NRCS for alternatives. Install 1, 4 ft. X 4 ft. anti-seep collars on the downstream side of the box. Install a bar guard trash rack on the inlet side of the pipe and a rat guard on the outlet of the pipe. Install a heavy duty bar guard lid on the structure with an 6 inch hole. The inlet portion of the pipes (upstream of box) should be installed at 0 grade. The outlet section should outlet at back toe.

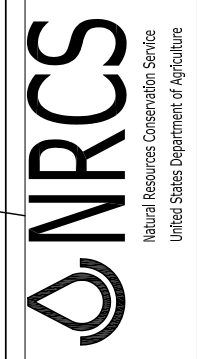
AUXILIARY SPILLWAY =
The auxiliary spillway is on the right side of the dam. The spillway elevation is 826.0 and it is 10 ft. wide. The spillway dike has an 8 ft. top and all sideslopes are 4:1. Include a 25 ft. flat control section with no grade.



Scale in Feet

Date
JOHN LEIGHTMAN 12-2008
Designed
JOHN LEIGHTMAN 12-2008
Drawn
Checked
Approved

Hale Wildlife Area Phase 3 Wetlands
Wetland Complex - North Pool Plan View
Page 3 of 14
Jones County, Iowa
Hale Section 1 and 2



File No.
site1.DWG
Drawing No.
1/2/09 7:58 AM
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