

DRAFT

**S-504
3-Bay Spillway**

Revision 28 September 2000 - Original Submission

XY Coord 842565 630035

Location SW corner of C-11 impoundment, just north of Truck Stop.

Purpose Delivery to C-9 impoundment and CLBSA.

Notes 1. Riprap requirements have not been verified with Geotech.

Design Conditions

Discharge (CFS)	2,500 cfs
Headwater Elevation	8.75 ft,NGVD
Tailwater Elevation	7.70 ft,NGVD

Maximum Expected Stages

Headwater Elevation	15.00 ft,NGVD
Tailwater Elevation	9.00 ft,NGVD

Maximum Head Difference

Headwater Elevation	12.00 ft,NGVD
Tailwater Elevation	6.50 ft,NGVD

Crest Data

Shape	Ogee
Crest Elevation	1.10 ft,NGVD
Ogee Flow Length	11.20 feet
Net Crest Length	60.00 feet
Number and Width of Piers	2@ 3.25 feet
Upstream Apron Elevation	-3.00 ft,NGVD
Upstream Apron Width	66.50 feet
Upstream Apron Length	7.65 feet

Gate Data

Weir Control	Slide Gate
Number of Gates	3
Gate Bay Width	20.00 feet
Gate Height	14.40 feet
Gate Clearance Elevation	15.50 ft,NGVD
Base of Breastwall Elevation	None

Stilling Basin Data

Design Discharge	3,000 cfs
Apron Elevation	-4.00 ft,NGVD
Training Wall Elevation	9.00 ft,NGVD
Apron Length from Toe of Ogee to Toe of Endsill	24.25 feet
End Sill Elevation	-3.00 ft,NGVD
Slope, Apron to Top of Endsill	1 on 5
Baffle Block Elevation	-2.60 ft,NGVD
Baffle Block Width	1.40 feet
Rows of Baffle Blocks	2
Distance from toe of Ogee to 1st Row of Baffle Blocks	12.50 feet
Distance from toe of Ogee to 2nd Row of Baffle Blocks	16.70 feet

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Canal Data

Side Slopes Cotangent	3
Upstream Bottom Width	Pool feet
Upstream Bottom Elevation	-4.00 ft,NGVD
Downstream Bottom Width	Pool feet
Downstream Bottom Elevation	-5.00 ft,NGVD

Riprap Requirements

Design Endsill Velocity	4.22 fps
Design Riprap Velocity	6.00 fps
Riprap Protected Area	2,100 sq-ft
Riprap Thickness	1.50 feet
Riprap Bedding Thickness	1.00 feet

Control Protection Elevation

10.00 ft,NGVD