

DRAFT

**S-508
3-Bay Spillway**

Revisions 7 September 2000 - Original submission

XY Coord 842725 587940

Location Crossing Krome Ave 300 feet east of US -27.

Purpose Controls flow direction with S-30 either to NLBSA or southward to C-6, C-4/2 and SDCS. Also assists in maintaining stages in the southern EBS.

Note 1. Service bridge also serves as southbound Krome Ave.
2. Riprap requirements have not been verified with Geotech.

Design Conditions

Discharge (CFS)	2,000 cfs
Headwater Elevation	6.00 ft,NGVD
Tailwater Elevation	5.75 ft,NGVD

Maximum Expected Stages

Headwater Elevation	9.00 ft,NGVD
Tailwater Elevation	8.75 ft,NGVD

Maximum Head Difference

Maximum Headwater Elevation	6.50 ft,NGVD
Minimum Tailwater Elevation	5.50 ft,NGVD

Crest Data

Shape	Ogee
Crest Elevation	-4.70 ft, NGVD
Ogee Flow Length	14.80 feet
Net Crest Length	60.00 feet
Number and Width of Piers	2@3.25 feet
Approach Apron Elevation	-8.95 ft, NGVD
Approach Apron Width	66.50 feet
Approach Apron Length	10.70 feet

Gate Data

Weir Control	Slide Gates
Number of Gates	3
Gate Bay Width	20.00 feet
Gate Height	14.40 feet
Gate Clearance Elevation	10.00 feet NGVD
Base of Breastwall Elevation	None

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Stilling Basin Data

Design Discharge	2,500 cfs
Apron Elevation	-9.95 ft,NGVD
Training Wall Elevation	8.75 ft,NGVD
Apron Length from Toe of Ogee to Toe of Endsill	28.20 feet
End Sill Elevation	-9.20 ft,NGVD
Slope from apron to Top of End Sill	5
Baffle Block Elevation	-8.20 ft,NGVD
Baffle Block Width	1.75 feet
Rows of Baffle Blocks	2
Distance from toe of Ogee to 1st Row of Baffle Blocks	13.00 feet
Distance from toe of Ogee to 2st Row of Baffle Blocks	17.30 feet

Canal Data

Side Slopes Cotangent	1
Upstream Bottom Width	120.00 feet
Upstream Bottom Elevation	-11.00 ft,NGVD
Downstream Bottom Width	120.00 feet
Downstream Bottom Elevation	-11.00 ft,NGVD

Riprap Requirements

Design Endsill Velocity	2.56 fps
Design Riprap Velocity	4.00 fps
Riprap Protected Area	1,600 sq-ft
Riprap Thickness	1.50 feet
Riprap Bedding Thickness	1.00 feet

Control Protection Elevation

10.00 ft,NGVD