

## G-150

This structure is a three-barreled corrugated metal pipe culvert, located at the divide line of L-1 and L-2. Control is effected by slide gates at the south side of the culverts.

### PURPOSE

This structure is used to control flow between L-1 and L-2.

### OPERATION

The operational objectives of this structure have been developed from multiple lawsuits against the District by Jackman Ranch. The purpose is to prevent flows from the south exacerbating flooding problems in the L-1 angle area. However, the hydraulic calculations and structure design are not consistent with this constraint, as they call for delivery of 500 cfs from the south with stage in the L-1 angle equal to 18.7. The critical flooding stage in the L-1 angle area is 14. The present operational method is to restrict any northerly flow of water, except water supply releases due to the construction of STA-5.

### FLOOD DISCHARGE CHARACTERISTICS

	Design
Discharge Rate	<u>500 cfs</u>
Headwater Elevation	<u>19.8 (south) feet</u>
Tailwater Elevation	<u>18.85 (north) feet</u>

### DESCRIPTION OF STRUCTURE

Type:	<u>Corrugated metal pipe culvert with upstream control</u>
Number of Barrels:	<u>3</u>
Size of Barrels:	<u>84 inches</u>
Length of Barrel:	<u>40 feet</u>
Flow Line Elevation:	<u>8.5 feet</u>
Service Bridge Elevation:	<u>25.5 feet</u>
Water Level which will by-pass structure	<u>24 feet.</u>
Gates:	
Number	<u>3</u>

Size: 7 feet square gate  
Type: Heavy duty sluice gate  
Control: Manual  
Lifting Mechanism:  
Normal Power Source: None  
Emergency Power Source: None  
Type Hoist: Pedestal mounted, manual operated

**ACCESS:** Structure is located at intersection of L-2 and L-2W. From County Road 846 via L-2W north levee, go east to L-2, or from County Road 832 via L-1 east levee, go south for one mile to structure.

#### **HYDROLOGIC AND HYDRAULIC MEASUREMENTS**

Water Level: Upstream and downstream staff gauges.  
Gate Position Recorder: On-site gate position indicator.  
Rain Gauge: None