

CULVERT #1
L-48

This structure is a three-barrel concrete pipe culvert located through L-48, about 2.5 miles west of State Road 78. Control is effected by submersible gates mounted on a concrete box inlet structure, with flap gates on the downstream side.

PURPOSE

This structure maintains the optimum upstream water control stages; it passes the design flood without exceeding the upstream flood design stage; it also prevents backflow from Lake Okeechobee during excessive stages in the lake caused by flood or wind tides.

OPERATION

This structure is operated to maintain an optimum headwater elevation of 16.4 feet. It is opened full during hurricane alerts in order to pass the maximum discharge possible.

FLOOD DISCHARGE CHARACTERISTICS

	Design
Discharge Rate	<u>300 + cfs</u>
	<u>--</u> % of SPF
Headwater Elevation	<u>19.0</u> feet
Tailwater Elevation	<u> </u> feet
Type Discharge	<u>controlled submerged</u>

DESCRIPTION OF STRUCTURE

Type concrete pipe culvert
Number of barrels 3
Diameter of barrel 72 inches
Length of barrel 139 feet
Flow line elevation 6.0 feet
Service bridge elevation 22.0 feet
Water level which will by-pass structure 32.2 feet
Inlet Structure
Type: Concrete Box

Width: _____

Height: 18.0 feet

Sill Elevation: 12.0 feet

Invert Elevation: 6.0 feet

Gates

Number 3

Type vertical lift gate

Size 6'-6" high by 8'-10" wide

Control manual

Lifting Mechanism hand operated, pedestal mounted lift

Top elevation of gate, full closed 18.0 feet

Bottom elevation of gate, full open 15.5 feet

Source of power manual

ACCESS west from State Road #78 along L-48 a distance of 2.5 miles
approximately

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level upstream and downstream staff gauges only

Gate Position Recorder none

DEWATERING FACILITIES (per barrel) none