

ORANGE AVENUE CONTROL STRUCTURE

G-81

The old structure is a steel sheet pile dam with three timber gates set on a concrete weir in the center of the channel. The new structure was completed on May 15, 2000. The structure is a two concrete box culvert with gate control. Operation of the gates is manual. The structure is located under Orange Avenue at the drainage divide between C-24 and C-25.

PURPOSE

The purpose of this structure is to provide flexibility in the operation of C-24 and C-25, so that water can be transferred from one basin to another as conditions warrant.

OPERATION

During the dry season, this structure is opened when one basin has excess water and the other basin needs the water. During the flood season, this structure is opened when flood conditions exist in one basin and additional flows will not create a flood condition in the other basin.

FLOOD DISCHARGE CHARACTERISTICS

This structure does not have a design flood discharge.

DESCRIPTION OF STRUCTURE

Type: concrete box culvert with control on C-24 side

Number of Barrels: 2
Size of Barrel: 10.0 feet (high) x 8 feet (wide)
Net Length: 92.0 feet
Elevation: 8.0 feet
Service Bridge Elevation: 28.0 feet
Water Level Which Will By-pass Structure: 31.4 feet

Gates:

Number 2
Size 10.0 feet high x 8.0 feet wide
Type aluminum, vertical lift

Control manual

Lifting Mechanism:

Power source: None

Type hoist: Manually operated

ACCESS: From State Road No. 68 (Orange Avenue) via about 100 feet of levee top road.

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level: upstream and downstream staff gauges

Gate Position Recorder: gauge on all gates

DEWATERING FACILITIES: None