

STRUCTURE G-330 (A-E)

Structures G-330 A-E are a series of five culverts in the south perimeter levee of Treatment Cell 1 and severs to control the outflow from Cell1 to the Discharge Canal. Culverts G-330 A-E each consist of a 54- inch (54”) diameter corrugated metal pipe with a 20-foot x 9-foot 9 in.weir box, slide gate and a service platform on the upstream end, and a flared end section on its downstream end. Flow through the structures is controlled by the use of the weir at low flow and by pipe flow at stages associated with extreme events. The weir also serves to establish the Static Water Level differential between Treatment Cell 1 and the Discharge Canal.

These structures are located in Palm Beach County and situated generally on and surrounding the former Brown’s Farm Wildlife Management Area and is positioned immediately west of Water Conservation Area 2A.

PURPOSE

G-330 A-E provide outflow from Cell 1 to the Discharge Canal of STA-2. Flows will travel in an eastward direction from the Cell and eventually supply inflows to the Discharge Pump Station G-335.

OPERATION

The G-330 A-E structures are passive structures. The slide-gates can be operated manually.

FLOOD DISCHARGE CHARACTERISTICS

	<u>Design</u>
Discharge Rate:	876 cfs
Headwater Elevation:	14.60 ft. NGVD
Tailwater Elevation:	9.8 ft. NGVD
Type Discharge:	uncontrolled weir box submerged
* Design not related to Standard Project Flood	

DESCRIPTION OF STRUCTURE

Type: Reinforced concrete weir box with associated culverts and slide gate

Number of barrels: 1

Size of barrels: 54” X 54”

Inlet Structure Size (L x W): 20 ft. x 9 ft. 9in

Weir Crest Elevation: 13.10 ft. NGVD

Weir Length: 50 ft.

Slide gate: 3ft x 4ft

Length of barrels: 90" feet each

Flow line elevation: 12.10 ft. NGVD

Service bridge elevation: 19.0 ft. NGVD

Water level which will by-pass structure: 20.0 ft. NGVD

Gates:

Number: 1

Type: Slide

Size: 3' X 4'

Control: Manual

Lifting Mechanism: - Type hoist, pedestal mounted, screw type, hand wheel operated or telemetry

Date Acceptance into Service: June, 1999

ACCESS: Access to G-330 A-E is from S-6 along the East levee of the Supply Canal. The structures are located between S-6 and S-7.

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level: Telemetry available for headwater/tailwater and calculated flow. Headwater/tailwater staff gauges are available for local monitoring.

Gate Position Recorder: None

DEWATERING FACILITIES (per gate): None