CROSSROADS PARK BASIN
FCD GAGE ID# 33007 (6623)

STATION DESCRIPTION

LOCATION – The gage site is located in the town of Gilbert near the intersection of Warner and Greenfield Roads. The site can be accessed through the park which has access from Greenfield Road or via the Eastern Canal service road from Warner Road. The canal service road leads most easily to the pumphouse platform where the gage is located. Latitude N33° 19' 40", Longitude W111° 44' 49". Located in the NW1/4 NW1/4 SE1/4 S21 T1S R6E in the Higley 7.5-minute quadrangle.

ESTABLISHMENT – The gage was installed on December 18, 1995.

DRAINAGE AREA – 15.7 mi^2

GAGE – The gage is a pressure transducer type instrument located in the well shaft into a larger rectangular concrete chamber from which the basin is evacuated by large pumps. The concrete chamber is fed by a 48-inch diameter intake pipe from the lake just east of the gage. The transducer is 25 feet below the finished concrete slab elevation, and is at 1.33 feet gage height.

There is no staff gage at this location.

There is no crest gage at this location.

ZERO GAGE HEIGHT - is defined as 1,248.462 feet NAVD88, which is defined as the normal aesthetic water level of the lake, from the design.

HISTORY – No previous history at this location.

REFERENCE MARKS –

BM-33000 is an FCDMC brass cap located on the southeast corner of a footbridge over the small bypass ditch close to the pump house. It is at elevation 24.096 feet gage height and 1,272.558 feet NAVD88, levels of January 30, 2019.

RM-1 is a chiseled 'X' on the northwest corner of the concrete pad at the pump station. It is at elevation 26.330 feet gage height and 1,274.792 feet NAVD88, levels of January 30, 2019. (This reference had previously been called RP-1 and is the basis of all other gage height elevations.)

RM-2 is a chiseled 'X' on the intake headwall. It is at elevation 1.983 feet gage height, and 1,250.445 feet NAVD88, levels of January 30, 2019.

RP-1 was renamed RM-1.

RP-2 is a rebar located on the east outside of the fence surrounding the station tube. It is at elevation 24.974 feet gage height, levels of January 30, 2019.

CHANNEL AND CONTROL – The basin has no gravity outflow and is evacuated by several pumps into the bypass ditch east of the Eastern Canal. There is a spillway at the north side of the basin that spills into a shallow retention area north of the main basin. If that level is exceeded, excess water will spill into the small bypass ditch east of the Eastern Canal.

RATING – The rating is a stage-storage relationship, and is Rating #1. The rating is from the design plans.

DISCHARGE MEASUREMENTS – None

POINT OF ZERO FLOW – The uncontrolled point of zero flow is where the basin spills to the north into the shallow retention basin. This elevation is 22.3 feet gage height, or 1,270.76 feet NAVD88.

FLOODS – The largest impoundment occurred on December 21, 2011 at 4.33 feet gage height and 35.8 acre-feet.

REGULATION – The basin regulates flows into storm drain facilities.

DIVERSIONS – None

ACCURACY – Fair

JUSTIFICATION – Monitor Crossroads Basin for town of Gilbert.

UPDATE – January 31, 2019
D E Gardner