

CAMELBACK RD. AT 24TH AVENUE BASIN

FCD GAGE ID # 6807

STATION DESCRIPTION

LOCATION:

The station is located along the north side of Camelback Road at about 24th Avenue, about 1 block east of I-17. The station is located at latitude 33° 30' 35.5" and longitude W112° 06' 37.7". It is in Section 13 of Township 2N and Range 2E.

ESTABLISHMENT:

The gage was established on October 8, 2015.

DRAINAGE AREA:

The drainage area of the gage is undetermined.

HISTORY:

No previous gaging at this location. Station established on October 8, 2015.

GAGE INFORMATION:

There is one pressure transducer instrument located at the outlet of the basin which is located at the southwest corner of the basin. Transducer elevation is at 0.33 feet gage height, levels of February 20, 2019.

ZERO GAGE HEIGHT ELEVATION:

Zero gage height is defined as the invert of the inlet of the principal outlet of the basin. It is at elevation 1,131.545 feet NAVD88, levels of February 20, 2019.

REFERENCE MARKS:

BM-50068 is an FCDMC brass cap monument located about 6 feet west of the station tube near the southwest corner of the basin. It is at elevation 6.705 feet gage height and 1,138.250 feet NAVD88, levels of February 20, 2019.

RM-1 is a chiseled 'x' on the utility box, flush to the ground, about 20 feet south of the station tube. It is at elevation 6.231 feet gage height and 1,137.776 feet NAVD88, levels of February 20, 2019.

RM-2 is a chiseled 'X' on the southwest corner of the basin curbing upstream of the principal outlet. It is at elevation 0.254 feet gage height and 1,131.799 feet NAVD88, levels of February 20, 2019.

RP-1 is a chiseled 'X' on the right side of the top of the wingwall. It is at elevation 5.376 feet gage height and 1,136.921 feet NAVD88, levels of February 20, 2019.

RP-2 is the ground at the transducer gage as found on February 20, 2019. It is at elevation -0.026 feet gage height and 1,131.519 feet NAVD88, levels of February 20, 2019.

CHANNEL AND CONTROL:

The gage is installed near the inlet to the principal outlet of the basin at the southwest corner of the basin. The inlet is a 2-foot diameter pipe, likely leading to a storm drain below the surface of Camelback Road.

RATING:

Discharge rating #1 was developed in 2024 from an HY-8 model. The inlet conditions are known but no downstream conditions are known, and therefore were estimated, but thought to be reasonable estimates. The capacity rating is Rating #1 and was developed from was determined from aerial photography, computing area, and assumed depths.

DISCHARGE MEASUREMENTS:

Discharge measurements are not practical at this location.

POINT OF ZERO FLOW:

The elevation of the inlet is at 0.76 feet gage height, levels of February 20, 2019. No other known outlets exist below this elevation. The invert of the inlet is raised above the concrete apron.

HISTORIC IMPOUNDMENTS:

The peak impoundment since installation occurred on August 2, 2016 at 1.63 feet gage height and about 3.7 acre-feet.

REGULATION:

The basin regulates flow into a storm drain.

DIVERSIONS:

No diversions are anticipated to be found in the watershed.

ACCURACY:

The discharge rating is rated as fair. The capacity rating is an estimate and is considered poor to fair.

JUSTIFICATION:

Provide level data in this basin for flood warning for the city of Phoenix.

UPDATED:

February 23, 2024

DE Gardner