

# USACE Survey Marker Archive & Retrieval Tool Datasheet

Type:

**Designation:**

**Project:**

**Stamping:**

**PID NGS:**  **COE:**

**State:**

**County:**

**District:**

**Nearest Town:**

**USGS Quad:**

**T.R.S.:**

**Nearest Hwy/Mi:**

**Date Recovered:**

**By:**

**Condition/Stability:**

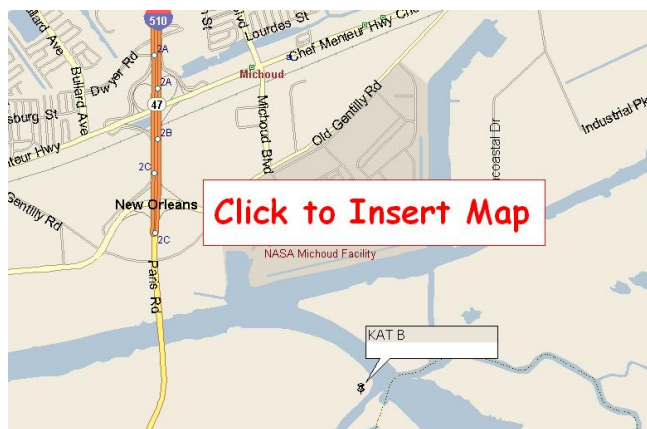
**Setting/Monument Type:**

**Owner:**

**GPS Suitable:** ☐ Yes ☐ No

**Obstructions:** ☐ N ☐ E ☐ S ☐ W

**Magnetic:** ☐ Yes ☐ No



## - Horizontal -

**Datum:**  (  )

**Lat:**

**Lon:**

**Local Accuracy:**

**NSRS Accuracy:**

**Survey/Computation Method:**

**Date Observed:**

## - Vertical -

**Datum:**  (  )

**Elevation Ht:**

**Ellip Ht:**

**Local Accuracy:**

**NSRS Accuracy:**

**Survey/Computation Method:**

**Date Observed:**

**Access:**

## - Tidal/Hydraulic Gage Relationships -

**Owner:**  **Gage ID:**  **- Elevation -**  **- Datum -**  **Epoch:**

**Description/Comments:**

## - State Plane Coordinates -

**Zone:**  **Northing:**  **Easting:**  **Convergence:**  **CSF:**

## - Horizon/Setup View -



## - Close-Up View -



Required Fields In Red

System Fields in Green

## User guidance for estimating local and network accuracy values

FGDC-STD-007.2-1998 Geospatial Positioning Accuracy Standards Part 2: Standards for Geodetic Networks

Local accuracy for horizontal and vertical geodetic control points is similar to the older accuracy methodology, since they are both methods to describe the relative accuracy between points. Hence, the older methodology can be converted into local accuracy by taking the average length of line, using the older defined accuracy of the points, and converting that into a value in meters.

Examples for horizontal and vertical surveys are:

- Second-order, class II horizontal survey (that is to say, 1:20,000) with average length line of 12,000 feet:  $12,000 \times 1/20,000 = 0.600$  feet
- Second-order, class II leveling survey (that is to say, 8 millimeters per square-root of the distance in kilometers) with an average bench mark spacing of 1 mile (that is to say, 1.6 kilometers):  $0.008 \times \text{SQRT}[1.6] = 0.01$  meters

Propagated Error Comp

Error1

Error2

P.Error

Network accuracy for horizontal geodetic control points can be estimated in two ways. First, if the NAD 83 coordinates are consistent with the original NAD 83 adjustment, for example, the original NAD 83 (1986), then the network accuracy has been determined to seldom exceed 1.0 meters. Second, if the NAD 83 coordinates are the result of a statewide or regional High Accuracy Reference Network (HARN) adjustment, then the network accuracy has been determined to seldom exceed 0.05-0.1 meter. If better values have been determined for network accuracy for the area covered by the specific dataset, then those values should be used in place of these general values.

Vertical Accuracy:

Average Control Point Spacing (ft)

meters      feet

1st Order, Class I



1st Order, Class II



2nd Order, Class I



2nd Order, Class II



3rd Order



Horizontal Accuracy:

Average Line Distance (ft)

meters      feet

1st Order



2nd Order, Class I



2nd Order, Class II



3rd Order, Class I



3rd Order, Class II