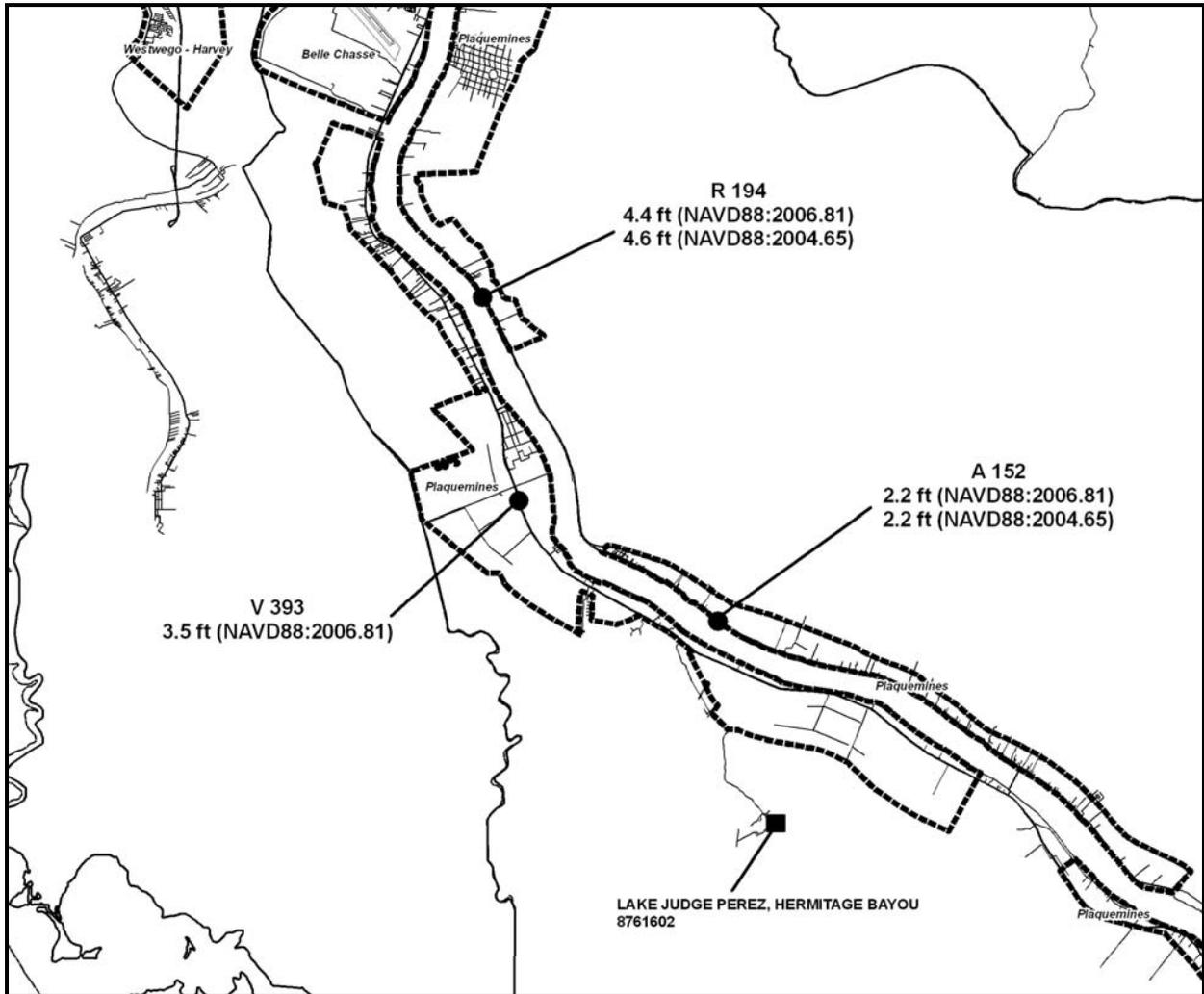


# Oakville to City Price Polder Vertical Datum Report



Original Date: 1 April 2010  
Expiration Date: 31 December 2010

USACE, New Orleans District  
CEMVN-ED-SS

**Purpose:**

This Polder Vertical Datum Report contains detailed information about three National Spatial Reference System (NSRS) "Permanent Bench Marks" established by the National Geodetic Survey (NGS). For USACE-MVN projects that lie within the extent of the subject polder, these "Permanent Bench Marks" are approved for use by USACE-MVN-ED as "Vertical Project Control" for all designs, plans and specifications. This report also contains information (when available) on tide gauges within or near the Polder and their associated geodetic/tidal datum relationships.

**Expiration Date:**

Due to regional subsidence and global sea-level rise, the published elevations of the referenced benchmarks and the published tidal datum values at the referenced gauges (as well as the geodetic/tidal datum relationships computed therefrom) are time-dependant and subject to change. Therefore, the information contained in this report shall be updated on a regular basis (every year) and/or as new information becomes available.

## Section 1: Oakville to City Price, Polder Bench Marks

The three National Spatial Reference System (NSRS) Permanent Bench Marks established by the National Geodetic Survey (NGS) and designated for use in this Polder are as follows:

**DESIGNATION:** R 194  
**PID:** AT0376

STATE/COUNTY: LA/PLAQUEMINES  
USGS QUAD: PHOENIX (1973)  
LAT/LON: N 29°43'46.41292" W 089°59'17.15056" NAD83(2007)  
NORTH/EAST: N 449,651.33' E 3,707,788.18' SPC LA S (US feet)  
ELEVATION: 4.4 feet NAVD88(2006.81)  
ELEVATION: 4.6 feet NAVD88(2004.65)  
MARKER: BENCH MARK DISK  
STAMPING: R 194 1964

DESCRIPTION: THE STATION IS LOCATED ABOUT 3.0 MI SOUTH OF WOODLAWN ON STATE HIGHWAY RIGHT OF WAY. TO REACH THE STATION FROM THE PLAQUEMINES PARISH DISTRICT 1 GOVERNMENT OFFICE COMPLEX IN WOODLAWN, GO SOUTHERLY FOR 3.1 MI ALONG STATE HIGHWAY 39 TO THE STATION ON THE RIGHT IN A GRASSY AREA BETWEEN THE HIGHWAY AND THE LEVEE, AND JUST BEFORE REACHING A GRAVEL DRIVE ON LEFT LEADING TO A PRIVATE RESIDENCE NUMBER 8793. THE STATION IS LOCATED 30.1 M NORTHWEST OF THE EXTENDED CENTER OF THE GRAVEL DRIVE LEADING TO THE PRIVATE RESIDENCE, 20.7 M NORTHEAST OF THE CENTER OF THE LEVEE, 18.2 M SOUTHWEST OF THE CENTER OF THE HIGHWAY, 0.2 M SOUTHWEST OF A METAL POST WITH METAL WITNESS SIGN ATTACHED, AND ABOUT 0.8 M BELOW THE LEVEL OF THE HIGHWAY.

**DESIGNATION:** V 393  
**PID:** DJ9378

STATE/COUNTY: LA/PLAQUEMINES  
USGS QUAD: PHOENIX (1973)  
LAT/LON: N 29°39'49.31987" W 089°58'32.45802" NAD83(2007)  
NORTH/EAST: N 425,749.81' E 3,712,011.93' SPC LA S (US feet)  
ELEVATION: 3.5 feet NAVD88(2006.81)  
MARKER: FLANGE-ENCASED ROD  
STAMPING: V 393 2006

DESCRIPTION: TO REACH FROM U.S. HIGHWAY 90 BUSINESS EXIT 7 EASTBOUND LANES OVERPASS AND STATE HIGHWAY 23 IN GRETNA, GO 20.7 MI (33.3 KM) SOUTHEAST ALONG HIGHWAY 23 TO A CROSSOVER AND MARK IN THE MEDIAN, ACROSS FROM A FENCED-IN AREA ON EAST SIDE OF S.H. 23. MARK IS 79.0 FT (24.0 M) NORTH OF CENTER OF CROSSOVER, 36.5 FT (11.2 M) WEST OF THE CENTERLINE OF HIGHWAY 23 NORTHBOUND, 31.0 FT (9.42 M) EAST OF THE CENTERLINE OF HIGHWAY 23 SOUTHBOUND, AND 0.6 FT (0.18 M) SOUTH OF A CARSONITE WITNESS POST. ACCESS TO MARK IS HAD THROUGH A 5 INCH (13 CM) PVC PIPE AND LOGO CAP. SLEEVE DEPTH DOES NOT MEET SPECIFICATIONS FOR A CLASS A MARK.

**DESIGNATION: A 152**

PID: AT0407

STATE/COUNTY: LA/PLAQUEMINES

USGS QUAD: LAKE LAURIER (1992)

LAT/LON: N 29°37'28.58843" W 089°54'10.66940" NAD83(2007)

NORTH/EAST: N 411,816.09' E 3,735,283.18' SPC LA S (US feet)

ELEVATION: 2.2 feet NAVD88(2006.81)

ELEVATION: 2.2 feet NAVD88(2004.65)

MARKER: BENCH MARK DISK

STAMPING: A 152 1951

DESCRIPTION: THE STATION IS LOCATED ABOUT 2.0 MI SOUTH OF PHOENIX ON PRIVATE PROPERTY. TO REACH THE STATION FROM THE PHOENIX HIGH SCHOOL, IN PHOENIX, GO SOUTHERLY FOR 2.1 MI ON PARISH ROAD 15 TO THE STATION ON THE RIGHT JUST BEFORE REACHING A LARGE RAISED WOOD FRAME HOUSE ON THE LEFT. THE STATION IS LOCATED 16.5 M WEST OF THE WEST CORNER OF THE FRONT PORCH OF THE HOUSE, 10.6 M SOUTHEAST OF THE CENTER OF THE ROAD, 1.2 M SOUTH-SOUTHEAST OF A WOODEN UTILITY POLE WITH METER, 0.4 M SOUTHWEST OF A METAL POST, AND 0.3 M BELOW THE LEVEL OF THE ROAD.

Use of the above benchmarks for all USACE MVN funded survey field work and in all plans and specifications shall be in accordance with: USACE MVN Engineering Division Datum Policy Memo #3, "Requirements for Use of Benchmarks for USACE Projects," dated March 23, 2009; the USACE New Orleans District Guide for Minimum Survey Standards for performing Topographic, Hydrographic, and Static GPS Control Surveys, Edition 2, dated September 2009 (ref: <http://www.mvn.usace.army.mil/ed/edss/surveyingguidelines.asp>); and a Survey Plan approved by the MVN District Datum Coordinator.

**Section 2: Oakville to City Price, Polder Tide Gauge Network  
(Complete for each tide gauge in Network)**

**2.1 Current Data**

2.1.1 NOAA Gauge 8761602, Lake Judge Perez, Hermitage Bayou, LA

The Local Tidal Datums (LMSL, MLLW, MHHW) for the 2001-2005 National Tidal Datum Epoch (NTDE) have been determined at NOAA Gauge 8761602, Lake Judge Perez, Hermitage Bayou, LA. Documentation of the Local Tidal Datum determinations at this tide gauge station may be obtained from <http://www.co-ops.nos.noaa.gov/>. Note that this gauge is outside of the Polder boundary.

The NAVD88:2004.65 geodetic elevation of Local Mean Sea Level (LMSL:2001-2005 NTDE) at the above described gauge was determined to be **0.18 feet** as per tie to NGS Station "876 1602 C TIDAL" (PID AT1392). Documentation of this geodetic/tidal datum relationship may be found in the IPET Study (Volume II - Geodetic Vertical and Water Level Datums) dated 26 march 2007.

**2.2 Superseded Data**

2.2.1 NOAA Gauge 8761602, Lake Judge Perez, Hermitage Bayou, LA

The Local Tidal Datums (LMSL, MLLW, MHHW) for the 1983-2001 National Tidal Datum Epoch (NTDE) have been determined at NOAA Gauge 8761602, Lake Judge Perez, Hermitage Bayou, LA. Documentation of the Local Tidal Datum determinations at this tide gauge station may be obtained from <http://www.co-ops.nos.noaa.gov/>. Note that this gauge is outside of the Polder boundary.

The NAVD88:2004.65 geodetic elevation of Local Mean Sea Level (LMSL:1983-2001 NTDE) at the above described gauge was determined to be **0.17 feet** as per tie to NGS Station "876 1602 C TIDAL" (PID AT1392). Documentation of this geodetic/tidal datum relationship may be found in the IPET Study (Volume II - Geodetic Vertical and Water Level Datums) dated 26 march 2007.

**2.3 Summary Tabulation of Geodetic/Tidal Datum Relationships**

Gauge ID	Agency	Tidal Datums with respect to Gauge Zero or Station Datum (in feet)			National Tidal Datum Epoch	Geodetic Elev. of Gauge Zero	Geodetic Elevation of Tidal Datums (in feet)			Reference: PBM/TBM, Geodetic Datum/Epoch
		LMSL	MLLW	MHHW			LMSL	MLLW	MHHW	
8761602	NOAA				2001-2005		0.18			876 1602 C TIDAL NAVD88:2004.65
8761602	NOAA				1983-2001		0.17			876 1602 C TIDAL NAVD88:2004.65

### **Section 3: Oakville to City Price, Polder Vertical Datum/Control Deficiencies**

Local Tidal Datums at tide gauges \_\_\_\_\_ need to be determined with respect to the current tidal datum epoch (2002-2006).

The “gauge zero” elevations of tide gauges \_\_\_\_\_ need to be determined with respect to the NAVD88:2004.65/2006.81.

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