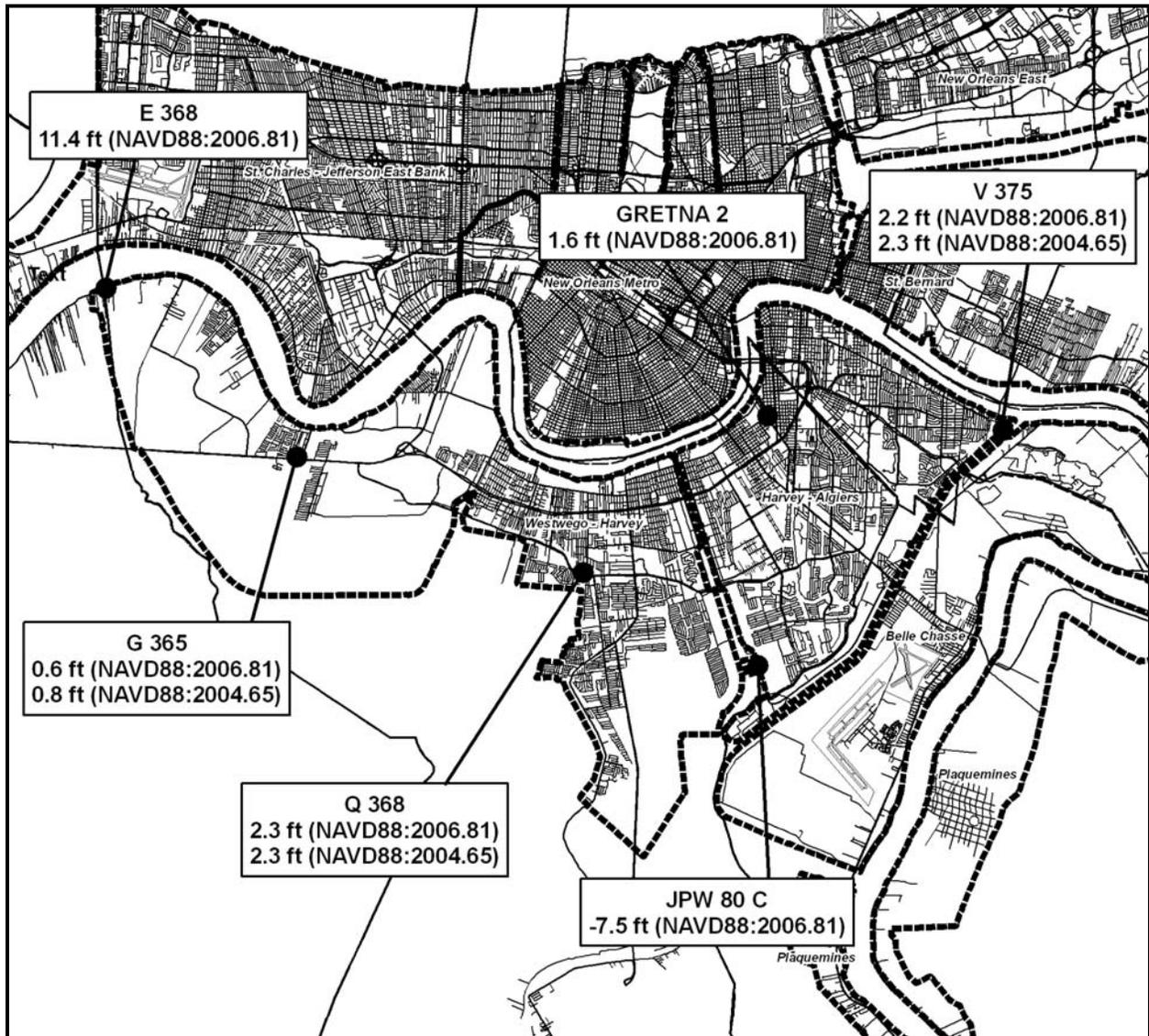


# Westwego - Harvey - Algiers Polder Vertical Datum Report



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 six 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: Westwego - Harvey - Algiers, Polder Bench Marks

The six 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:** Q 368  
**PID:** AU2123

STATE/COUNTY: LA/JEFFERSON  
USGS QUAD: NEW ORLEANS EAST (1992)  
LAT/LON: N 29°52'33.06424" W 090°06'55.21762" NAD83(2007)  
NORTH/EAST: N 502,396.15' E 3,666,840.25' SPC LA S (US feet)  
ELEVATION: 2.3 feet NAVD88(2006.81)  
ELEVATION: 2.3 feet NAVD88(2004.65)  
MARKER: VERTICAL CONTROL DISK  
STAMPING: Q 368 1984  
DESCRIPTION: 2.4 KM (1.50 MI) NORTHERLY ALONG STATE HIGHWAY 45 (BARATARIA BOULEVARD) FROM THE JUNCTION OF STATE HIGHWAY 3134 IN MARRERO, THENCE 1.7 KM (1.05 MI) WESTERLY ALONG LAPALCO BOULEVARD, 21.1 M (69.2 FT) NORTH OF THE CENTERLINE OF THE WESTBOUND LANES OF THE BOULEVARD, 6.2 M (20.3 FT) EAST OF THE CENTER OF A ROAD LEADING TO THE MARRERO WASTE WATER TREATMENT PLANT AND WAREHOUSE AT 6250 LAPALCO BOULEVARD, 1.7 M (5.6 FT) EAST OF THE EAST POST OF A GATE, 0.5 M (1.6 FT) SOUTH OF A WITNESS POST AND THE SOUTHEAST CORNER OF A CHAIN-LINK FENCE ENCLOSING THE PLANT, AND 0.3 M (1.0 FT) BELOW THE LEVEL OF THE BOULEVARD. NOTE--ACCESS TO THE DATUM POINT IS THROUGH A 5-INCH LOGO CAP.

**DESIGNATION:** G 365  
**PID:** AU2110

STATE/COUNTY: LA/JEFFERSON  
USGS QUAD: NEW ORLEANS WEST (1992)  
LAT/LON: N 29°54'39.52070" W 090°12'46.30718" NAD83(2007)  
NORTH/EAST: N 514,854.25' E 3,635,808.80' SPC LA S (US feet)  
ELEVATION: 0.6 feet NAVD88(2006.81)  
ELEVATION: 0.8 feet NAVD88(2004.65)  
MARKER: FLANGE-ENCASED ROD  
STAMPING: G 365 1984  
DESCRIPTION: 5.7 KM (3.55 MI) WEST ALONG US HWY 90 FROM THE HUEY LONG BRIDGE IN BRIDGE CITY, 0.24KM (0.15 MI) WEST ALONG US 90 FROM THE JUNCTION OF AVONDALE GARDEN ROAD IN AVONDALE. THE MARK IS LOCATED INSIDE THE ENTRANCE OF THE REST LAWN CEMENTARY GARDENS IN THE APPROX CENTER OF THE GRASSY MEDIAN. THE MARK IS APPROX. 40 MTR N OF THE WEST BOUND LANES OF US 90, IT 10 FT NORTH OF THE FACE OF THE CENTER BRICK PILLAR, 16 FT ESE OF THE NE CORNER OF THE NW BRICK PILLAR, 17 FT ENE OF THE NE CORNER OF THE SW BRICK PILLAR, 16.6 FT WSW OF THE NW CORNER OF THE NE BRICK PILLAR, 16.7 FT WNW OF OF THE SW BRICK PILLAR, AND 39.4 FT S OF THE FLAGPOLE.

**DESIGNATION: E 368**

PID: AU2109

STATE/COUNTY: LA/JEFFERSON

USGS QUAD: LULING (1992)

LAT/LON: N 29°57'42.90256" W 090 16 39.48717" NAD83(2007)

NORTH/EAST: N 533,183.13' E 3,615,118.29' SPC LA S (US feet)

ELEVATION: 11.4 feet NAVD88(2006.81)

MARKER: FLANGE-ENCASED ROD

STAMPING: A 368 1984

DESCRIPTION: 9.8 KM (6.10 MI) EASTERLY ALONG STATE HIGHWAY 18 FROM THE JUNCTION OF STATE HIGHWAY 52 IN LULING, 22.7 M (74.5 FT) NORTH OF THE NORTHEAST CORNER OF A FIRE STATION (VACANT), 21.5 M (70.5 FT) NORTH OF A FIRE HYDRANT, 6.3 M (20.7 FT) NORTH OF THE HIGHWAY CENTERLINE, 1.5 M (4.9 FT) SOUTHWEST OF A UTILITY LIGHT POLE, 0.7 M (2.3 FT) SOUTHWEST OF A WITNESS POST, AND 0.3 M (1.0 FT) BELOW THE LEVEL OF THE HIGHWAY. NOTE--ACCESS TO THE DATUM POINT IS THROUGH A 5-INCH LOGO CAP. RECOVERED IN GOOD CONDITION. NEW MEASUREMENTS. 94.0 M (308.4 FT) NORTHEAST OF THE EXTENDED CENTERLINE OF ALICE STREET, 78.0 M (255.9 FT) SOUTHWEST OF THE EXTENDED CENTERLINE OF LAUVE LANE, 46.2 M (151.6 FT) NORTHEAST OF A UTILITY POLE WITH INTER SAINT CHARLES PARISH SIGN ATTACHED, 21.3 M (69.9 FT) NORTH OF A FIRE HYDRANT SOUTH OF THE HIGHWAY, 1.4 M (4.6 FT) SOUTHWEST OF UTILITY POLE NUMBER 124, 0.7 M (2.3 FT) SOUTHWEST OF A WITNESS POST. LOGO CAP IS MISSING.

**DESIGNATION: V 375**

PID: AT0760

STATE/COUNTY: LA/ORLEANS

USGS QUAD: CHALMETTE (1994)

LAT/LON: N 29°55'01.55072" W 089°58'18.04269" NAD83(2007)

NORTH/EAST: N 517,907.03' E 3,712,188.62' SPC LA S (US feet)

ELEVATION: 2.2 feet NAVD88(2006.81)

ELEVATION: 2.3 feet NAVD88(2004.65)

MARKER: FLANGE-ENCASED ROD

STAMPING: V 375 1985

DESCRIPTION: THE STATION IS LOCATED IN NEW ORLEANS, ON WEST BANK, 4.5 MILES NORTH OF BELLE CHASE FERRY, 5.5 MILES SOUTHEAST OF GREATER NEW ORLEANS BRIDGE, OVER MISSISSIPPI RIVER, 0.5 MILES SOUTH OF CHALMETTE FERRY. OWNERSHIP- CORPS OF ENGINEERS. TO REACH THE STATION FROM THE INTERSECTION OF GENERAL DE GAULLE AVENUE AND SULLEN ROAD, NEAR THE BRIDGE OVER INTERCOASTAL WATERWAY, GO NORTH ON SULLEN ROAD TO PATTERSON DRIVE (LEVEE ROAD), TURN RIGHT ON PATTERSON DRIVE AND PROCEED EAST ON PATTERSON DRIVE FOR 0.9 MILES TO BLYTHE ROAD, TURN RIGHT ON BLYTHE AND GO TO GATE ENTRANCE TO LOCKS, PASSING THROUGH GATE AND MARK ON LEFT NEAR GATE. THE STATION IS 22.6 FEET EAST OF CENTERLINE OF ENTRANCE ROAD TO LOCKS, 18.3 FEET SOUTHEAST OF THE EAST GATE POST FOR GATE, 107 FEET SOUTH OF A LIGHT POLE, 10 FEET SOUTH OF A WITNESS SIGN. STATION IS A STAINLESS ROD DRIVEN 25.6 METERS AND STAMPED V 375. RECOVERED IN GOOD CONDITION. RAISED LOGO CAP AND PUT CONCRETE AROUND IT BECAUSE ROD WAS 2 INCHES (5 CM) ABOVE CAP.

**DESIGNATION: GRETNA 2**

PID: AU0934

STATE/COUNTY: LA/JEFFERSON

USGS QUAD: NEW ORLEANS EAST (1992)

LAT/LON: N 29°55'16.64686" W 090°03'06.46808" NAD83(2007)

NORTH/EAST: N 519,139.16' E 3,686,792.22' SPC LA S (US feet)

ELEVATION: 1.6 feet NAVD88(2006.81)

MARKER: BENCH MARK DISK

STAMPING: GRETNA 2 1951

DESCRIPTION: IN GRETNA, AT THE INTERSECTION OF STUMPF BOULEVARD AND 5TH STREET, 68.9 M (226.0 FT) SOUTH OF THE STREET CENTERLINE, 14.6 M (47.9 FT) EAST OF THE CENTERLINE OF THE NORTHWEST BOUND LANES OF THE BOULEVARD, 5.8 M (19.0 FT) EAST OF THE NEAR RAIL OF A RAILROAD, 2.4 M (7.9 FT) EAST OF THE SOUTHWEST CORNER OF A RAILROAD SIGNAL CONTROL BOX, 0.6 M (2.0 FT) BELOW THE LEVEL OF THE BOULEVARD, 0.4 M (1.3 FT) WEST OF A CHAIN-LINK FENCE ENCLOSING A SUBSTATION, 0.3 M (1.0 FT) NORTHWEST OF A WITNESS POST, AND THE MONUMENT PROJECTS 0.1 M (0.3 FT) ABOVE THE GROUND SURFACE.

**DESIGNATION: JPW 80 C**

PID: AU2274

STATE/COUNTY: LA/JEFFERSON

USGS QUAD: BERTRANDVILLE (1992)

LAT/LON: N 29°50'52.40023" W 090°03'23.56022" NAD83(2007)

NORTH/EAST: N 492,431.02' E 3,685,585.71' SPC LA S (US feet)

ELEVATION: -7.5 feet NAVD88(2006.81)

MARKER: BENCH MARK DISK

STAMPING: JPW 80 C

DESCRIPTION: IN HARVEY, 51.0 M (167.3 FT) NORTH OF THE NORTHEAST CORNER OF THE BOOMTOWN CASINO AT 4132 PETERS ROAD, 42.3 M (138.8 FT) SOUTH OF THE CENTERLINE OF AN EXIT ROAD FROM THE CASINO, 20.4 M (66.9 FT) WEST OF THE CENTERLINE OF PETERS ROAD, 7.1 M (23.3 FT) SOUTH OF THE CENTER OF A GATE, 3.6 M (11.8 FT) WEST OF THE NEAR RAIL OF A RAILROAD, 0.3 M (1.0 FT) EAST OF A CHAIN-LINK FENCE, AND 0.3 M (1.0 FT) BELOW THE LEVEL OF THE ROAD. NOTE--THE DISK IS ENCASED IN A 6-INCH PVC PIPE AND IS RECESSED 0.1 M (0.3 FT) BELOW THE GROUND SURFACE.

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: Westwego - Harvey - Algiers, Polder Tide Gauge Network  
(Complete for each tide gauge in Network)**

The Local Tidal Datum LMSL/MLLW/MHHW (\_\_\_\_\_ tidal datum epoch) has been determined at USACE/USGS/NOAA gauge \_\_\_\_\_ on \_\_\_\_\_ through a comparison of short-term data collected at this station with simultaneously observed data collected at the long-term NOAA tide gauge station \_\_\_\_\_ located \_\_\_\_\_. Documentation of the Local Tidal Datum determinations at this tide gauge stations may be found at \_\_\_\_\_.

The NAVD88:2004.65 elevation of the “gauge zero” of the above described gauge was determined on \_\_\_\_\_ with respect to permanent benchmarks \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_. This gauge was last inspected on \_\_\_\_\_. Inspection level notes may be found in Survey Section field book \_\_\_\_\_, pages \_\_\_\_\_. The full gauge inspection reports may be found at \_\_\_\_\_.

Various geodetic datum/tidal datum relationships (e.g., the NAVD88:2004.65 and NAVD88:2006.81 elevation of LMSL) at each of the above gauges may be found in the table below.

**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	

### **Section 3: Westwego - Harvey - Algiers, 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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