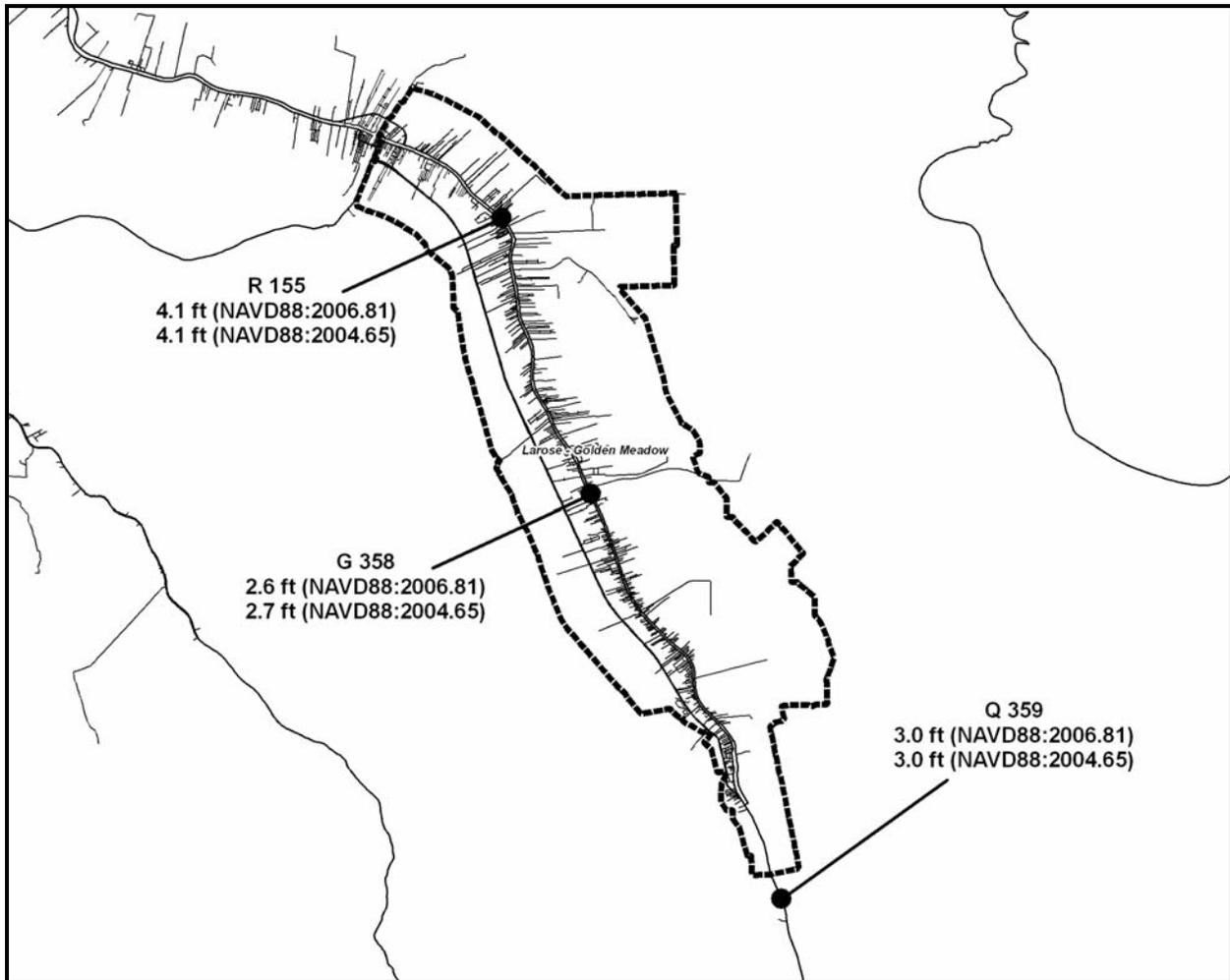


Larose - Golden Meadow Polder Vertical Datum Report



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: Larose - Golden Meadow, 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 155
PID:	AU1126
STATE/COUNTY:	LA/LAFOURCHE
USGS QUAD:	CUT OFF (1979)
LAT/LON:	N 29°32'45.82926" W 090°20'20.74255" NAD83(2007)
NORTH/EAST:	N 381,788.73' E 3,596,969.75' SPC LA S (US feet)
ELEVATION:	4.1 feet NAVD88(2006.81)
ELEVATION:	4.1 feet NAVD88(2004.65)
MARKER:	BENCH MARK DISK
STAMPING:	R 155 1952
DESCRIPTION:	THE STATION IS LOCATED IN CUT OFF. TO REACH THE STATION FROM THE JUNCTION OF LA HWY 657 AND LA HWY 308 IN LAROSE GO SOUTHEASTERLY FOR 4.3 KM ALONG HWY 308 TO THE MARK ON THE LEFT IN FRONT OF A TWO STORY WHITE HOUSE. THE STATION IS LOCATED 10.3 M NORTHEAST OF THE CENTERLINE OF THE HWY, 9.5 M SOUTHEAST OF THE CENTER OF A BRICK DRIVEWAY LEADING TO A STEEL GATE AND THE RESIDENCE, 3.5 M SOUTHWEST OF A BRICK WALL WITH BRICK COLUMNS, 0.07 M SOUTHWEST OF A PLASTIC PIPE NUMBER 973 INDICATING A BURIED CABLE, 0.6 M WEST-SOUTHWEST OF A UTILITY POLE WITH A SINGLE TRANSFORMER, 4.7 M SOUTH OF THE CENTER OF A PIPE CULVERT RUNNER UNDER THE DRIVEWAY, 0.3 M BELOW THE LEVEL OF THE HIGHWAY, AND THE DATUM POINT IS RECESSED 0.2 M BELOW THE LEVEL OF THE GROUND SURFACE.

DESIGNATION:	G 358
PID:	AU2028
STATE/COUNTY:	LA/LAFOURCHE
USGS QUAD:	GOLDEN MEADOW (1994)
LAT/LON:	N 29°27'38.86100" W 090°18'31.16585" NAD83(2007)
NORTH/EAST:	N 350,867.37' E 3,606,925.09' SPC LA S (US feet)
ELEVATION:	2.6 feet NAVD88(2006.81)
ELEVATION:	2.7 feet NAVD88(2004.65)
MARKER:	FLANGE-ENCASED ROD
STAMPING:	G 358 1982
DESCRIPTION:	9.3 KM (5.75 MI) NORTHWESTERLY ALONG STATE HIGHWAY 308 FROM THE JUNCTION OF STATE HIGHWAY 1 IN GOLDEN MEADOW, 11.1 M (36.4 FT) SOUTHWEST OF THE SOUTH CORNER OF AN ABANDONED BUILDING, 8.5 M (27.9 FT) NORTHEAST OF THE CENTERLINE OF THE HIGHWAY, 0.7 M (2.3 FT) NORTHWEST OF A UTILITY LIGHT POLE WITH 2 TRANSFORMERS ATTACHED, 0.4 M (1.3 FT) NORTH-NORTHWEST OF THE SOUTHWEST END OF A FENCE, 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.

DESIGNATION: Q 359
PID: AU2033

STATE/COUNTY: LA/LAFOURCHE
USGS QUAD: MINK BAYOU (1994)
LAT/LON: N 29°20'06.89482" W 090°14'35.42304" NAD83(2007)
NORTH/EAST: N 305,407.09' E 3,628,198.41' SPC LA S (US feet)
ELEVATION: 3.0 feet NAVD88(2006.81)
ELEVATION: 3.0 feet NAVD88(2004.65)
MARKER: VERTICAL CONTROL DISK
STAMPING: Q 359 1982
DESCRIPTION: 7.18 KM (4.45 MI) SSE FROM GOLDEN MEADOW. THE MARK IS 0.18 M BELOW HIGHWAY. 7.18 KILOMETERS (4.45 MILES) SOUTH-SOUTHEAST ALONG STATE HIGHWAY 1 FROM THE POST OFFICE IN GOLDEN MEADOW, TO THE MARK ON THE RIGHT, IN TOP OF THE NORTHWEST END OF THE SOUTHWEST HEADWALL OF A CONCRETE BOX CULVERT UNDER THE HIGHWAY, 7.62 METERS (25.0 FEET) SOUTHWEST OF THE CENTER LINE OF THE HIGHWAY, 0.18 METER (0.6 FOOT) SOUTHEAST OF THE NORTHWEST END OF THE SOUTHWEST HEADWALL OF THE CULVERT. RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1993 6.5 KM (4.05 MI) SOUTHEASTERLY ALONG STATE HIGHWAY 1 FROM THE JUNCTION OF STATE HIGHWAY 308 IN GOLDEN MEADOW, IN TOP OF AND 0.2 M (0.7 FT) SOUTH OF THE NORTH END OF THE WEST CONCRETE HEADWALL OF A CULVERT, AND 7.6 M (24.9 FT) WEST OF THE CENTERLINE OF THE HIGHWAY.

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: Larose - Golden Meadow, 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: Larose - Golden Meadow, 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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