C. Vertical and Horizontal Control

Additional information discussing the vertical or horizontal control for this survey can be found in the accompanying Horizontal and Vertical Control Report (HVCR) for Project OPR-K354-KR-18.

C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

ERS Methods Used:

ERS via VDATUM

Ellipsoid to Chart Datum Separation File:

OPR-K354-KR-2018_NAD83-MLLW_xGeoid17B.csar

C.2 Horizontal Control

The horizontal datum for this project is North American Datum 1983.

The projection used for this project is UTM Zone 15 North.

The following PPK methods were used for horizontal control:

Smart Base

Application of the Applanix POSPac Smart Base process is described in detail in the project HVCR.

The following CORS Stations were used for horizontal control:

HVCR Site ID	Base Station ID
Calcasieu Pass	CALC
Eugene Island 337	DEV1
Abdalla Hall ULL	TONY
Franklin High Sch	FSHS
Amerada Pass	AMER
Lumcon	LMCN
Houma	HOUM

Table 13: CORS Base Stations

The following user installed stations were used for horizontal control:

HVCR Site ID	Base Station ID
OSI Freshwater Lock	OSFL

Table 14: User Installed Base Stations

Correctors from the U.S. Coast Guard Differential GPS (DGPS) station in English Turn, LA were utilized by the secondary GPS, a Trimble MS750, used as a "position integrity" alarm.

The following DGPS Stations were used for horizontal control:

DGPS Stations
English Turn, LA

Table 15: USCG DGPS Stations