

## **C. Vertical and Horizontal Control**

Field installed tide GPS stations were not utilized for this survey; there is no HVCR report included with submission of H13292.

## C.1 Vertical Control

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

### ERS Datum Transformation

The following ellipsoid-to-chart vertical datum transformation was used:

Method	Ellipsoid to Chart Datum Separation File
ERS via VDATUM	S-N905_VDatumLimits_100m_NAD83- MLLW_geoid12b.csar

*Table 13: ERS method and SEP file*

Sounding elevations relative to the ellipsoid were collected through Ellipsoidal Referenced Survey (ERS) with post-processing of the daily logger POSpac data to create a statistical best estimate of trajectory (SBET) file, as detailed in the DAPR. All H13292 meets HSSD vertical accuracy requirements.

## C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD 83).

The projection used for this project is Universal Transverse Mercator (UTM) Zone 10.

### RTK

Precise Positioning-Real Time Extended (PP-RTX) processing methods were used in Applanix POSpac MMS 8.3 software to produce SBETs for post-processing horizontal correction. All of H13292 meets HSSD horizontal accuracy requirements.