C. Vertical and Horizontal Control

Additional information discussing the vertical or horizontal control for this survey can be found in the accompanying HVCR.

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	OPR_T381-RA-22_GuamCNMI_EC_ERTDM2021_NAD83(MA11)-MLLW.csar OPR_T381-RA-22_GuamCNMI_EC_ERTDM2021_NAD83(MA11)-MHW.csar

Table 13: ERS method and SEP file

All submitted H13574 MBES data were vertically referenced to the ellipsoid. VDATUM Models included with the Project Instructions were used for referencing H13574 data to MLLW and MHW.

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 55.

<u>RTK</u>

Precise Positioning-Real time Extended (PP-RTX) processing methods were used in Applanix POSPac MMS (v8.5) software for post-processing horizontal correction of submitted H13574 MBES data.

<u>WAAS</u>

The Wide Area Augmentation System (WAAS) was used for real-time horizontal control during data acquisition.