

## 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 ERTDM	OPR-T383- RA-20_P1+2NM_KealaikahikiChannel_gERTDM_NAD83(PA11)- MLLW.csar
	OPR-T383- RA-20_P2+2NM_PailoloChannel_gERTDM_NAD83(PA11)- MLLW.csar
	OPR-T383- RA-20_P5+2NM_KaiwiChannelToMoloka'i_gERTDM_NAD83(PA11)- MLLW.csar

*Table 13: ERS method and SEP file*

## 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 4.

The following PPK methods were used for horizontal control:

- RTX

All data and deliverables for this survey are projected in the NAD83(PA11) 4N horizontal datum. Post Processed-Real-Time Extended (PP-RTX) processing methods were used in Applanix POSPac MMS 8.4 SP2 software to produce SBETs for post-processed horizontal and vertical corrections with a template set to NAD83(PA11).

### WAAS

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