

## C. Vertical and Horizontal Control

Field installed tide or GPS stations were not utilized for this survey, so no HVCR report is included.

### 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-B927-NRT5-20_VDatum_100m_NAD83- MLLW_geoid12b.csar

*Table 10: 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 19.

The following PPK methods were used for horizontal control:

- Smart Base

The following CORS Stations were used for horizontal control:

HVCR Site ID	Base Station ID
MAMI	Milton
MAPL	Plymouth
MAFA	Falmouth
URIL	U of RI Coop
MADA	Dartmouth

*Table 11: CORS Base Stations*