# 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 Methods Used:

#### ERS via VDATUM

Ellipsoid to Chart Datum Separation File:

TampaBay\_EC\_poly\_xyNAD83-MLLW\_geoid12b.txt

#### C.2 Horizontal Control

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

The projection used for this project is Projected UTM 17N.

The positioning systems aboard the vessels utilize Oceaneering C-Nav systems which deliver Precise Point Positioning (PPP). The C-Nav GPS recieve corrections through the C-Nav Subscription Services.

## C.3 Additional Horizontal or Vertical Control Issues

# **C.3.1 GNSS Data Processing**

GNSS data were not collected separately by the C-Nav systems on 11/05/2018. However, navigation and positioning information is collected within OII's proprietary software Hydomap for each line. The GNSS data collected for each line were processed separately within Hydromap and added to each line individually in CARIS, after which normal processing operations continued.