# C. Vertical and Horizontal Control

Additional information discussing the vertical and 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.

Standard Vertical Control Methods Used:

Discrete Zoning

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

| Station Name | Station ID |
|---|---|
| Unalaska, Dutch Harbor | 9462620 |
| King Cove | 9459881 |

*Table 10: NWLON Tide Stations*

The following subordinate water level stations were established for this survey:

| Station Name | Station ID |
|---|---|
| Broad Bight | 9462676 |
| SE Tigalda Island | 9462705 |
| Green Bight | 9462786 |

*Table 11: Subordinate Tide Stations*

| File Name | Status |
|---|---|
| 9462676.tid | Verified Observed |
| 9462705.tid | Verified Observed |
| 9462786.tid | Verified Observed |

*Table 12: Water Level Files (.tid)*

| File Name | Status |
|---|---|
| OPR-Q191-KR-13_Zoning_20131008.zfd | Preliminary |

*Table 13: Tide Correctors (.zdf or .tc)*

On October 08, 2013, John Oswald and Associates (JOA) issued verified tidal data and zoning for OPR-Q191-KR-13. All sounding data was then re-merged using CARIS HIPS and SIPS tide routine. JOA verified tidal data were used for all final Navigation BASE surfaces and S-57 Feature files. It should be noted that the tidal data applied to OPR-Q191-KR-13 is JOA verified and not CO-OPs verified. JOA are currently in the WALI verification process, which is pending, awaiting CO-OPs approval. Since the timeframe for CO-OPs verification is unknown, FPI were given approval, by our COTR, to submit the data with the JOA verified tides and zoning applied.