

C.2 ZONING

NOAA initially supplied tide zones that cover the extent of the survey, with time and range correctors relative to the Sand Point tide station. These were superseded by the final tide zoning computed by JOA once the tide gauges at Dolgoi Island were recovered. The initial and final tide zones are as follows:

| Tide Zone | GS Identifier | Time Corrector | Range Corrector | Reference Station |
|------------------|----------------------|-----------------------|------------------------|--------------------------|
| SWA193A | 1 | +0 minutes | x1.02 | 9459450 |
| SWA204A | 2 | +0 minutes | x1.00 | 9459450 |
| SWA205 | 3 | +6 minutes | x0.94 | 9459450 |
| SWA218 | 4 | +6 minutes | x0.91 | 9459450 |
| D1 | 5 | +0 minutes | x1.00 | 9459758 |

Table 5 – Tide Zones

An analysis of simultaneous tides at Sand Point and Dolgoi Harbor for the period May 1, 2005 to July 31, 2005 enabled JOA to compute final datum for the Dolgoi Harbor tide station. Full details of this analysis can be found in the Dolgoi Harbor Tide Station Report prepared by JOA dated December 16, 2005.

This report has been supplied digitally in PDF format on the USB hard drive, in the tides directory. A copy has also been dispatched to CO-OPS.

The final tide zone for H11487 is tide zone D1 and details are provided in A.3.3 of the Vertical and Horizontal Control Report.

An analysis of crossline and overlaps of the mainlines of soundings concluded that the proposed final tide zoning was adequate and therefore the proposed final tide zoning correctors have been considered to be the final tide zoning correctors for the survey.

The derived value at Dolgoi Harbor tide station for the difference between MLLW and MHW is 1.865m. From the final tide zoning a range factor 1.00 was used for H11487, Sheet F to determine a MHW value of 1.865m, or 1.020 fathoms.

The final tides were supplied by John Oswald and Associates. The final verified tide data was checked against predicted tides to ensure there were no meteorological effects at the tide gauge. The corrected gauge data was smoothed using a fifth order polynomial of five hours length and then supplied to Tenix LADS, Inc. for the application of tides.

For final processing, the time and amplitude correctors were applied to the tidal data delivered by JOA. Soundings were then reduced to MLLW using these corrected tides.