daily data tape. During processing the offset values are extracted from the tape along with the navigation data applied during post processing.

# 5.0 Tides and Tide Gages

### 5.1 Tide Gages

The NOAA tide gage installed in American Samoa

(seehttp://tidesandcurrents.noaa.gov/station\_info.shtml?stn=1770000%20Pago%20Pago,%20AMERIC AN%20SAMOA) has been operational since September 6, 1948 and is referenced to Mean Low Water. This was used to determine tidal datums and benchmark datum offsets previously established for this gage.<sup>8</sup>

For surveys of American Samoa the KGPS base station receiver was placed over a previously installed benchmark STN022. (See <u>Appendix A</u> for further detail).

### 5.2 Preliminary Tidal Zoning

Not applicable.

### **5.3 Final Tidal Zoning**

Not applicable.

# 5.4 Tidal Data Collection

Not applicable.

### **5.5 Tidal Corrections**

Not applicable.

# **5.6 Application of Tides**

The lidar data was collected with respect to the WGS84 ellipsoid (i.e. the "soundings" and "elevations" are really distances between the ellipsoid and the measurement). Depths and elevations for this project will eventually be referred to chart datum (Mean Low Water) and map datum (MSL) when a final "datum-to-ellipsoid" zoning scheme is determined.<sup>9</sup> See <u>American Samoa Data Processing Report</u>.