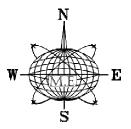


NOTES:

- 1. NUMBERS SHOWN REPRESENT DEPTH OF WATER BASED ON MEAN LOW WATER (MLW) ELEVATION.
- 2. WATER DEPTH DATA COLLECTED ON MARCH 5, 2014.





## MERIDIAN ENGINEERING, LLC

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## March 10, 2014

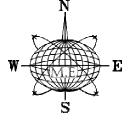
RE: Richard Walker Marina Water Elevation Datum Transformation Calculations

The following data and calculations were used to determine the depth of water as shown on the Existing Water Depths sheet of the Meridian Engineering plans for Richard Walker Marina, dated March 10, 2014. Original field data was collected between the hours of 2:00 p.m. and 3:00 p.m. on March 5, 2014.

- Actual tide data was determined by accessing the nearest active tide station via the NOAA Tides and Currents website (<u>http://www.tidesandcurrents.noaa.gov</u>) with the options set as:
  - Tide station #8724580 Key West, FL
  - Date: March 5, 2014
  - o Units: Feet
  - Time Zone: GMT (Greenwich Mean Time)
  - o Datum: MLW
- Time Zone conversion from EST (Eastern Standard Time) to GMT is +5:00, so the time of data collection was translated to between the hours of 8:00 p.m. and 9:00 p.m.
- Preliminary tide elevations, as reported by the tide station listed above, were:
  - 1.047' @ 8:00 p.m. GMT
  - 0.867' @ 8:30 p.m. GMT
- [Average over 1 hr. = 0.858']
- o 0.650' @ 9:00 p.m. GMT
- A 24 hr. plot of time vs. water height is shown below, with the three times listed above indicated by arrows.



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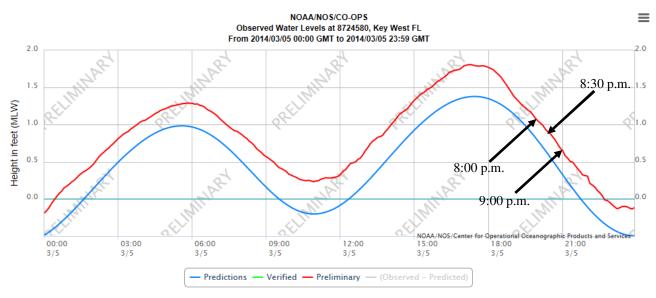


Figure 1 – Water level chart from NOAA Tides and Currents website

• The 1 hr. average of 0.858' was subtracted from each measured data point and the resulting water depths, based on the MLW datum, are shown on the Existing Water Depths plan sheet.

