



Lightship Overfalls
219 Pilottown Rd
Lewes, DE 19958

Attn. Dave Bernheisel

Subject: Pre Installation Site Inspection Summary Report for Water Side and Soil Side Impressed Current Cathodic Protection Systems.

The purpose of the inspection was to take measurements on the steel seawall and ship (length, width & depth). This information is used to design the Impressed Current Cathodic Protection systems needed for corrosion control on the ship and bulkhead. There are two (2) ICCP system that are needed. One (1) ICCP system for the ship and water side of the bulkhead and One (1) ICCP system for the soil side of the bulkhead.

Water Side System – will require an estimated 50 amps (this is based on square footage of the ship and bulkhead on the waterside). The amp requirements will more than likely be less than 50 amps due to the new coating that will be applied to the ship in drydock. The ICCP system will include a 30V-75A Universal Rectifier and 10 – 11 Amp MMO Anodes. The anodes will be placed in specific positions around the ship, slip and bulkhead.

Soil Side – will require an estimated 30 amps. The ICCP system will include a 60V-40 Amp Universal rectifier and 8 – 11 amp canistered MMO anodes. Anodes will be buried at approximately 10 ft deep in specific spots around the perimeter of the bulkhead on the soil side.

Note – Museum will be responsible for providing electrical power for the rectifiers and locate services to identify underground utilities before installation.

A site diagram is included with this report. The site diagram depicts soil to structure volt potentials and water to structure volt potentials. A minimum volt potential of -0.85V Instant “off” is required for corrosion control using cathodic protection. The Ship met these requirements, the bulkhead on the water and soil side did not meet the requirements.

It would be my recommendation to wait until the ship is back from dry dock before installing the ICCP systems. Once installed it is my recommendation that the systems be checked a minimum of at least once a year by a qualified cathodic protection professional.

Thank you for then opportunity to work with the Overfalls Foundation on this project. We are looking forward to this project. Please let me know if you have any questions.

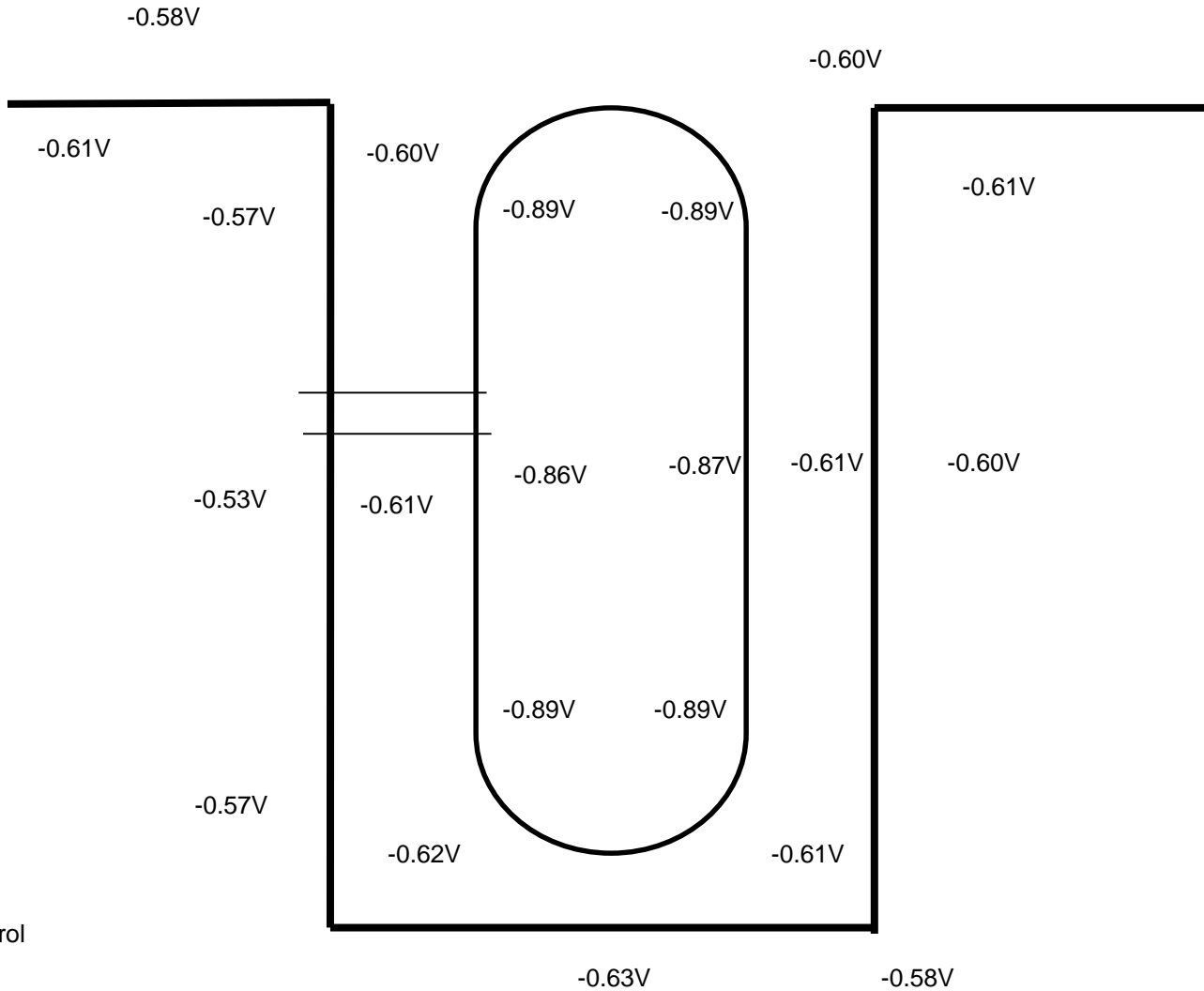
Thank you

A handwritten signature in blue ink, appearing to read "Lance Thomas". The signature is fluid and cursive, with the first name "Lance" and last name "Thomas" clearly distinguishable.

Lance Thomas
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Lightship Overfalls

Site Inspection – Pre-Installation Volt Potentials
February 27, 2017



A minimum of
-0.85V is Required
For Corrosion Control
Using Cathodic
Protection