Port of Oakland
-50ft Deepening Project

- Contract With: USACE

  San Francisco District

- Partners/Stakeholders:

  California State Coastal Conservancy

  Port of Oakland

  San Francisco Bay Conservation and Development Commission

- Project Revenue

  About $165,000,000

- Phase 3E Project Duration

  Spring 2006 - December 2009

- Production Since Dec 2007

  About 5 million CY

MANSON CONSTRUCTION CO.

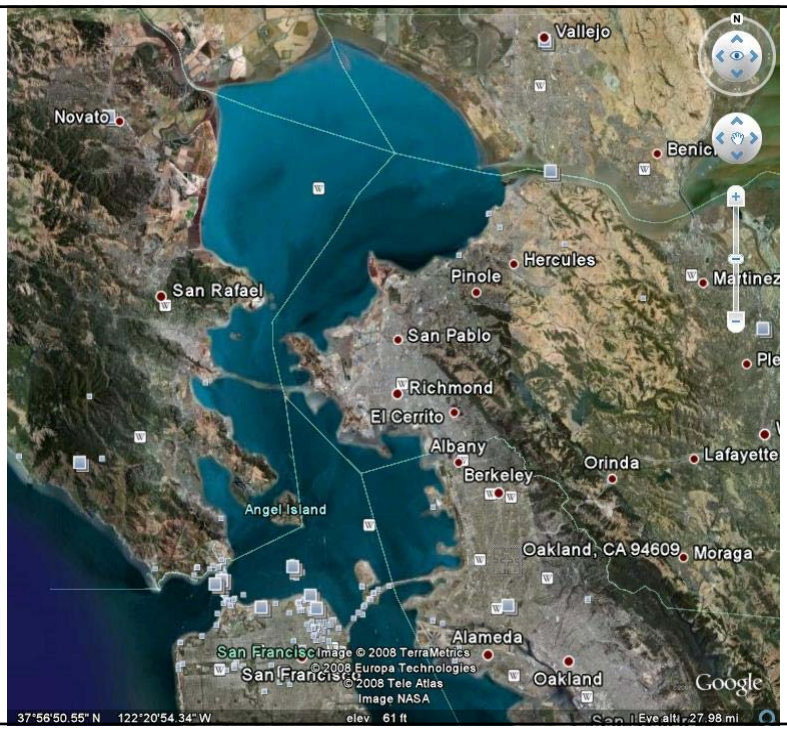
THE DUTRA GROUP

MANSON / DUTRA J.V.

HAMILTON WETLANDS RESTORATION PROJECT

Dredging Sand into Oakland Middle Harbor

Port of Oakland
Valhalla & Njord


Vallejo
Novato
Benicia
Hercules
Pinole
Martinez
San Rafael
San Pablo
Richmond
El Cerrito
Albany
Berkeley
Orinda
Lafayette
Angel Island
Oakland, CA 94609
Moraga
Alameda
San Francisco
Oakland
Image © 2008 TerraMetrics
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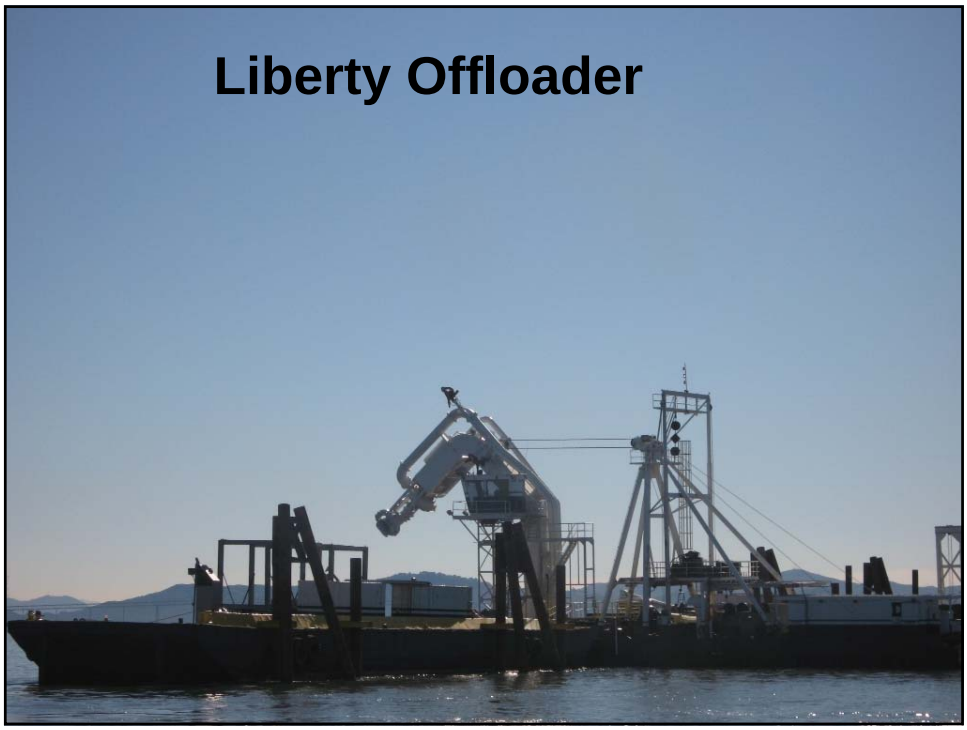
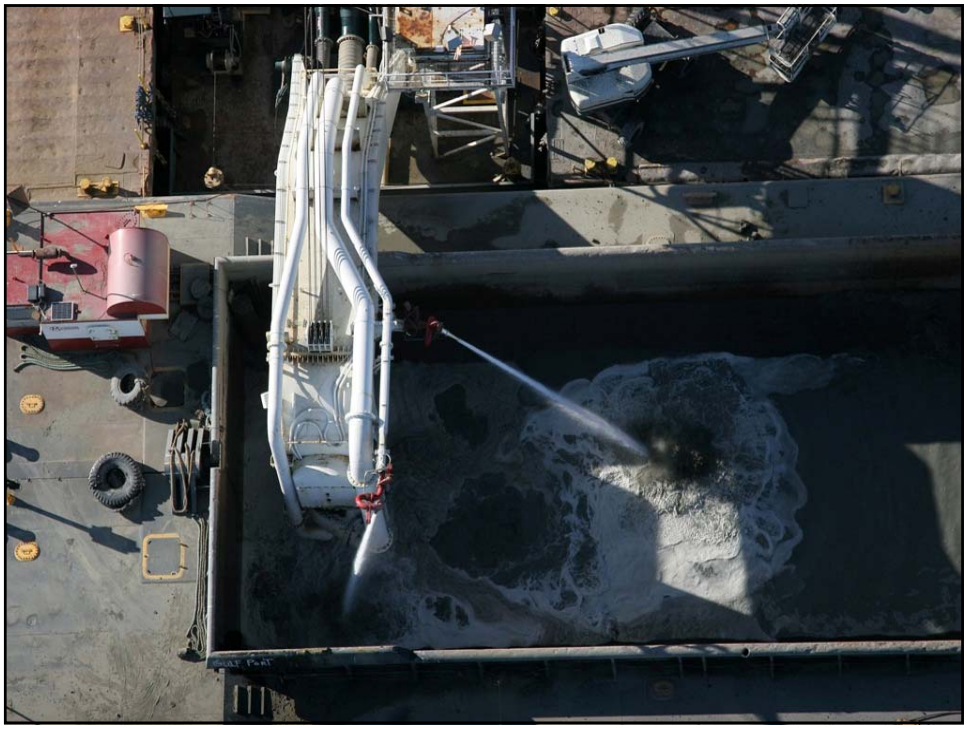
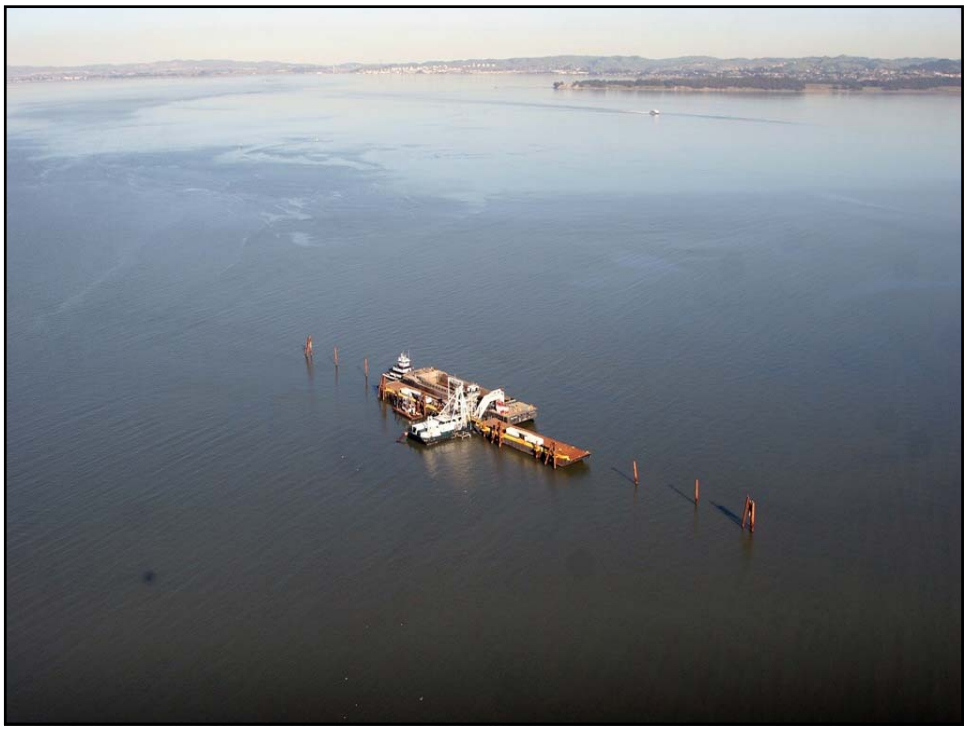
© 2008 Tele Atlas
Image NASA
Google
37°56'50.55" N 122°20'54.34" W
elev 61 ft
Eye alt 27.98 mi

Existing Pipeline: 38 03.1213N, 122 29.4666W
Super Booster: 38 01.2559N, 122 27.0663W
Liberty Offloader: 38 00.3709N, 122 25.8897W
Image © 2008 TerraMetrics
©2007 Google

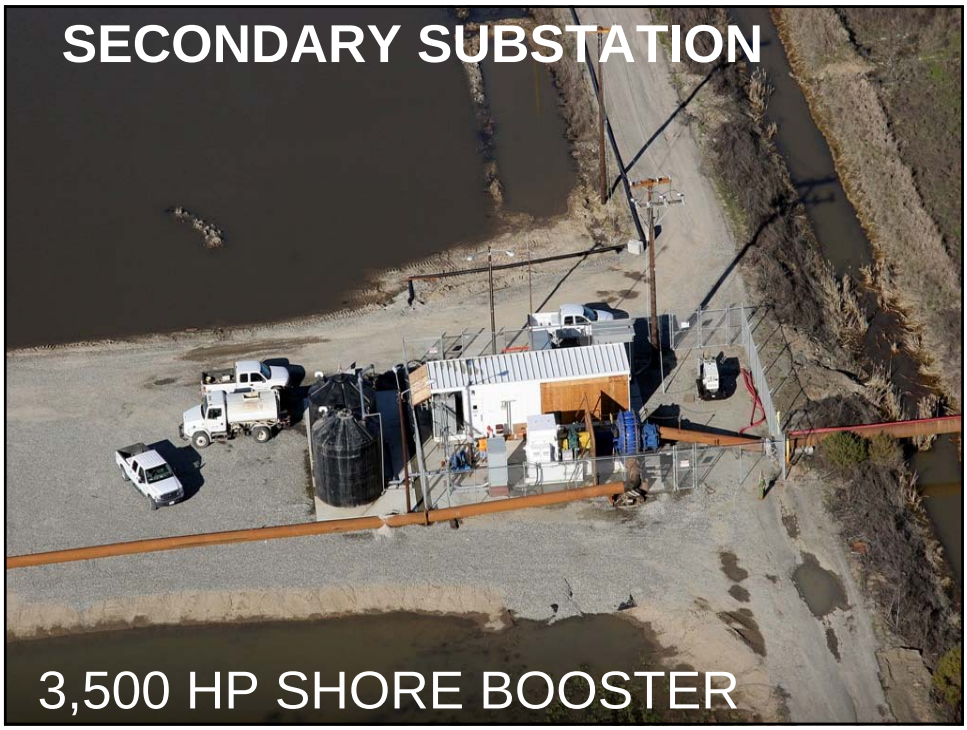

Liberty Offloader



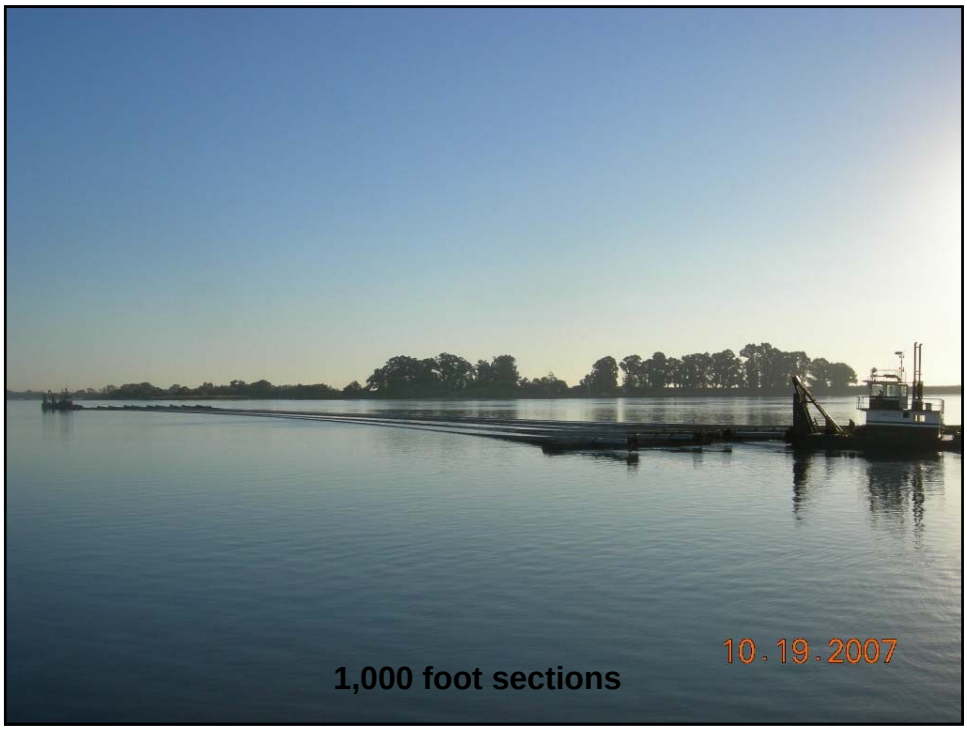


Super Booster

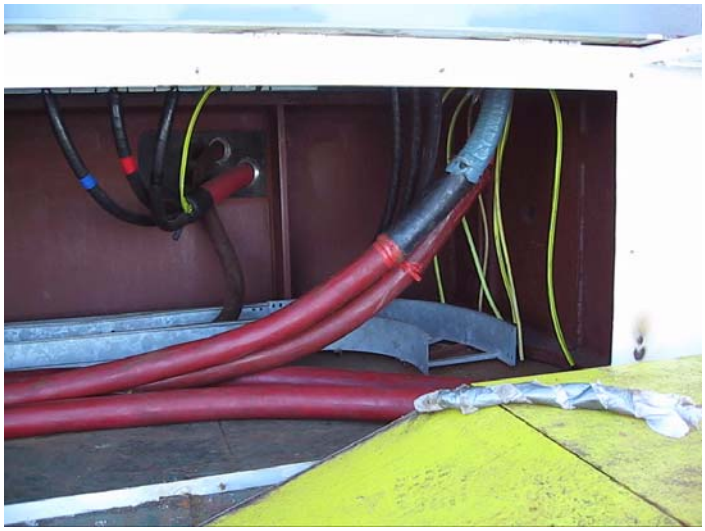
ONSHORE BOOSTER


SECONDARY SUBSTATION
3,500 HP SHORE BOOSTER

Dutra Fabrication


10 . 19 . 2007
1,000 foot sections

SUBMERGED POWER CABLE



SUBMERGED POWER CABLE

HAMILTON WETLANDS

Hamilton Field - 1974

March 15th, 2006

February 28th 2008

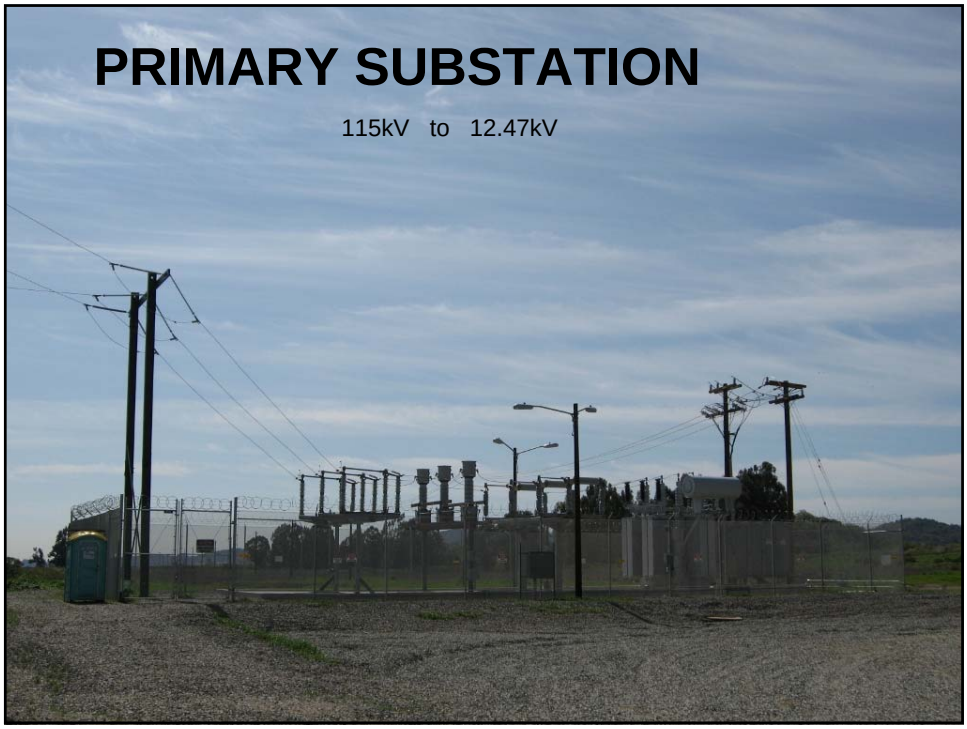
August 4th, 2008

March, 2009

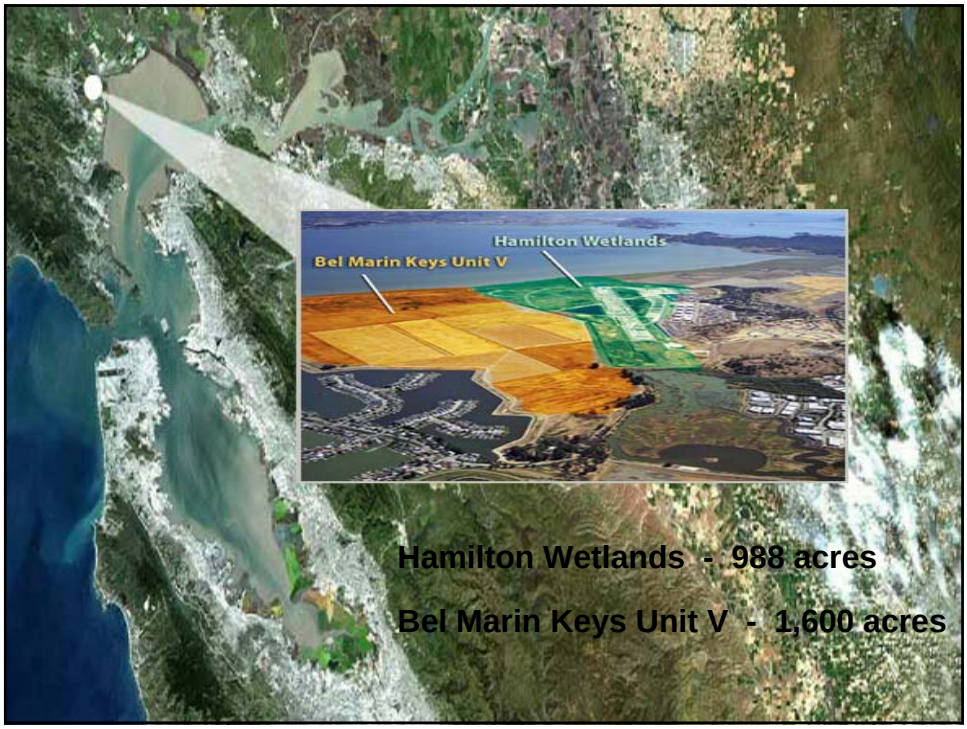
August, 2009

SWITCHES FOR PUMPING
INTO DIFFERENT CELLS

Primary Substation Construction


PRIMARY SUBSTATION
115kV to 12.47kV

Water Quality Monitoring


Hamilton Wetlands
Bel Marin Keys Unit V
Hamilton Wetlands - 988 acres
Bel Marin Keys Unit V - 1,600 acres