Design and Construction of Cruise Berth for Colon 2000, Panama

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Manzanillo Bay

Panama Canal

PPC

MIT

FTZ
Project Issues

- Marginal Wharf
- Very Poor Soils
- Tight Schedule
- RCCL Interaction
- Dredging by Others
- Construction Costs
Soil Profile

Borehole No.

Depth (m)

Sedimentary Soil (Muck or Lama) with loose Coral

Residual Soil

Gatun Rock

Sand Fill
Wharf Alternatives

- Sheet Pile Bulkhead Wharf
- Open (Pile-Supported) Wharf
Wharf Cross-Section
Wharf Framing Plan

201M STRUCTURE LENGTH

10M (TYP)

CUT OFF PANELS

D/C PANELS

DRAIN (TYP)
Seismic Design

Capacity Spectrum (COLON 2000 2nd Cruise Pier) - OLE (72 yr Earthquake)

- 72 yr EQ (Colon)
- Reduced Demand Spectrum
- Capacity Curve
- Bilinear Capacity Curve
- Performance Point
Mooring Dolphins

5 500

1 200

510 SQ P/S PILE, TYP
Stone Columns
Pile Driving
Pile Caps
Slope Dredging
Deck Panels
Completed Wharf
Mooring Dolphins