

MIDDLE HARBOR REDEVELOPMENT: THIRD PARTY FILL MATERIAL



Port of
LONG BEACH
The Green Port



CMANC
January 20, 2011

Middle Harbor Terminal Redevelopment



- \$750 million project
- Consolidate two older facilities into one efficient, 345-acre rectangular-shaped terminal
- Construction will occur in multiple stages over a 10-year period

Middle Harbor Fill Site



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- Phase 1: Fill Pier E Extension, and portion of Slip 1
- Phase 2: Complete fill of Slip 1 and portion of East Basin



Total Project Volume



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- Require approx. 5,400,000 cy of fill material
- Middle Harbor Project will generate 2,200,000 cy
- Fills will accommodate an additional 3,200,000 cy from other Port and outside sources

Project Timing (Phase 1)

- Fill material from LARE (USACE) and Rainbow Harbor (City of Long Beach)
- Rock dike anticipated to start in July 2011
- Fill site will start accepting material in July 2011
- Surcharge to be placed at end of 2012
- Complete First Quarter 2013

Fill Objectives

- Construct a cost effective structurally sound fill to support a Modern Marine Container Terminal
- Honor our CSTF commitment to provide the region with opportunities to beneficially reuse contaminated sediments
- Maximize, to the extent feasible, the amount of contaminated material removed from the environment



The Port will **NOT** accept material that:

1. Constitutes “hazardous waste” as termed by USEPA or CA DTSC
2. Deemed unsuitable for confined aquatic Disposal by USEPA
3. Has or will have land use restrictions or other requirements imposed by DTSC or other regulatory agencies



- Long-term settlement
- “Fine-grained” compressible soils are susceptible to long-term settlement
- “Coarse-grained” soils are not-susceptible to long-term settlement


Application Acceptance Process and Timeline



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- Solicit applications (May -Jun)
- Evaluate applications and Develop Tentative Fill Plan Applications (July – Oct)
- Present Applications to CSTF (Nov 17)
- Develop Final Fill Plan(Dec)
- Prepare Individual Fill Plans with Applicants (Dec – Jan)
- Execute MOAs (Feb 2011)

Print Form

 **Port of
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The Green Port
Tel: (562) 590-4160 Fax: (562) 901-1728

FOR OFFICIAL USE ONLY
Date Received: _____
Application Number: _____

**Application for Placement of Dredge Material
Port of Long Beach Middle Harbor Fill Site**
Please Print or Type All Responses

1. APPLICANT INFORMATION

Applicant Name: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Contact Person: _____ Phone: _____
Fax: _____ Email Address: _____

2. REPRESENTATIVE INFORMATION (if applicable)

Authorized Agent's Name/Title: _____
Organization: _____
Mailing Address: _____ City: _____
State: _____ Zip: _____ Phone: _____ Email Address: _____
Who should receive correspondence relevant to this application? ☐ Applicant ☐ Representative ☐ Both
I hereby authorize the above named agent to act as my representative and bind me in all matters concerning this application.

Signature of Applicant Date

3. GENERAL PROJECT INFORMATION

Project Name or Title: _____
Type of Dredging Project: ☐ Maintenance ☐ New Work ☐ Remediation Dredging
Timing of Project: ☐ Single Episode ☐ Multi-Episode
Has the project been designed to a minimum of 30% engineered design? Yes ☐ No ☐
Month and Year Dredging is Proposed to Begin: _____
Estimated Completion Date: _____

POLB Middle Harbor Fill Site Application
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Applications Received



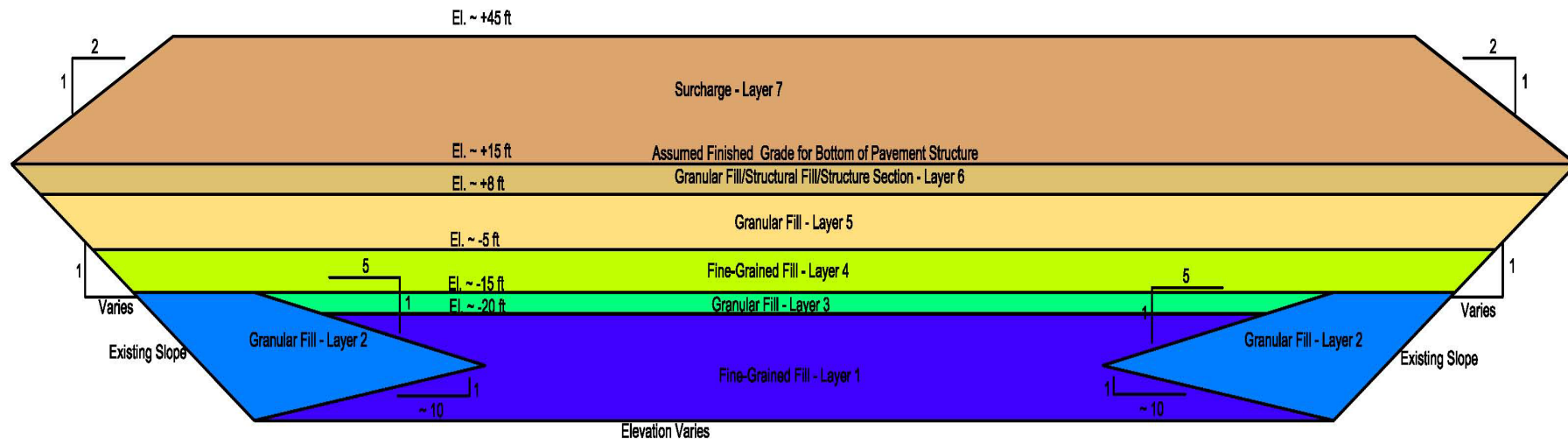
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Applicant	Project Name	Est. Volume (cubic yards)
Eagle Rock Aggregates	Long Beach Berth D44 Redevelopment Project Dredging	6,000
City of Long Beach	Alamitos Bay Marina	41,000
City of Long Beach	Colorado Lagoon Restoration Project	72,000
City of Los Angeles	Machado Lake Ecosystem Rehabilitation Project	187,000
City of Newport Beach	Rhine Channel Contaminated Sediment Cleanup	150,000
City of Newport Beach	Lower Newport Bay Maintenance Dredging	700,000
County of Los Angeles	Marina del Rey Maintenance Dredging	571,000
Port of Los Angeles	Anchorage Road Soil Storage Site Removal	1,000,000
Port of Los Angeles	Berth 240 Slip Remediation Dredging Project	235,000
Port of Los Angeles	Consolidated Slip Remediation Project	500,000
Port of Los Angeles	Main Channel Deepening Project	630,000
TOTAL		4,092,000

Fill Section (E-W)










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Optimizing the fill Plan

- Silts, clays and compressible soils lower in fill
- Separate larger layers of silts/clays with sand for drainage
- Provide a non-compressible area above existing rock slopes
- Surcharge and wick drains for settlement management

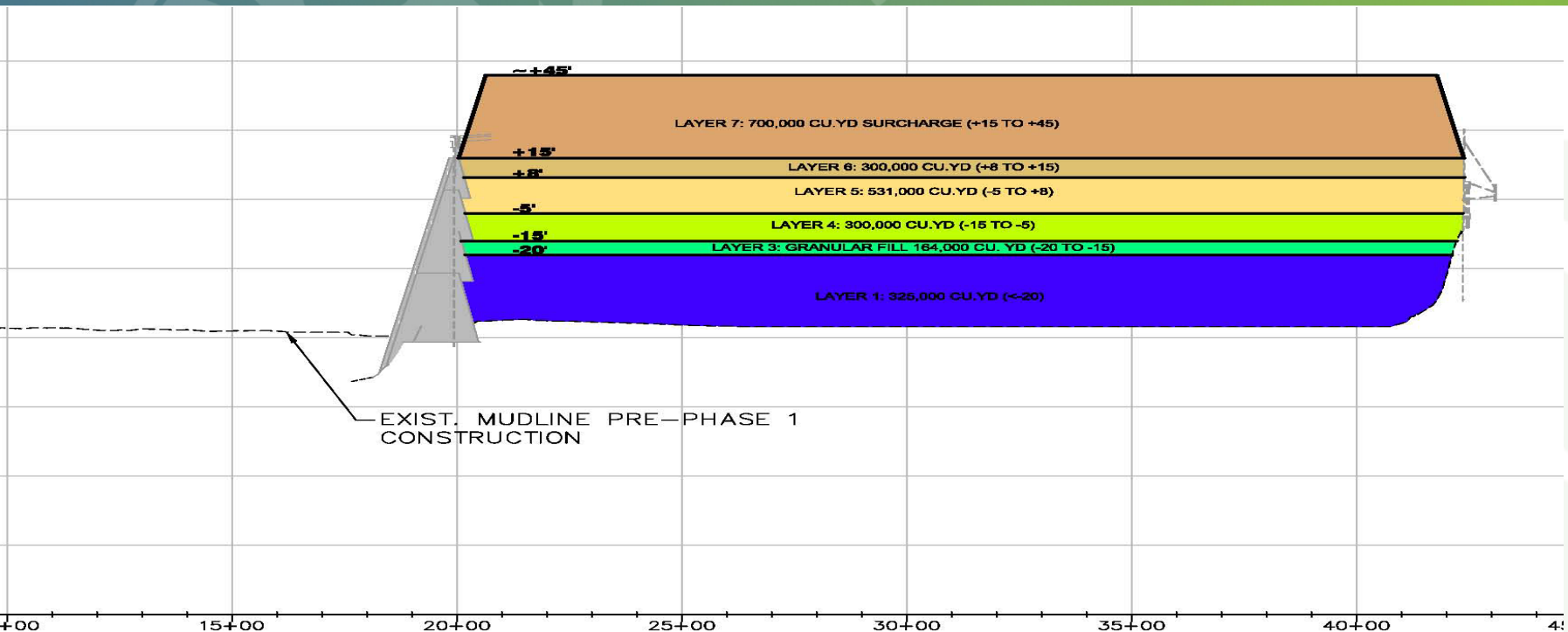
VOLUME

	LAYER 1: 325,000 CU.YD (<-20)
	LAYER 2: 100,000 CU. YD (<-20 GRANULAR BERM)
	LAYER 3: GRANULAR FILL 164,000 CU. YD (-20 TO -15)
	LAYER 4: 300,000 CU.YD (-15 TO -5)
	LAYER 5: 531,000 CU.YD (-5 TO 8)
	LAYER 6: 300,000 CU.YD (+8 TO +15)
	LAYER 7: 700,000 CU.YD SURCHARGE (+15 TO +45)







Fill Section (N-S)



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LEGEND

	LAYER 1: 325,000 CU.YD (<-20)
	LAYER 3: GRANULAR FILL 164,000 CU. YD (-20 TO -15)
	LAYER 4: 300,000 CU.YD (-15 TO -5)
	LAYER 5: 531,000 CU.YD (-5 TO +8)
	LAYER 6: 300,000 CU.YD (+8 TO +15)
	LAYER 7: 700,000 CU.YD SURCHARGE (+15 TO +45)

Tentative Fill Plan: Phase 1



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Approximate Elevation (ft)	Fill Layer	Tentative Projects for Each Layer	Estimated Source Volume (cy)	Estimated Total Volume (cy)	Tentative Timing of Fill Availability
(+15 to +45)	7	Borrow Site	700,000	700,000	After Dec 2012
(+8 to +15)	6	Storage Site	300,000	300,000	Sept to Dec 2012
(-5 to +8)	5	Storage Site	307,000	531,000	May to Aug 2012
		LA County, Marina del Rey, Areas 1-6	116,000		
		LA County, Marina del Rey, Areas 7-9	108,000		
(-15 to -5)	4	Eagle Rock Aggregate, Port of Long Beach D44	6,000	300,000	Jan to Apr 2012
		Miscellaneous Port of Long Beach Projects	100,000		
		City of Long Beach, Colorado Lagoon	70,000		
		City of Long Beach, Alamitos Bay	41,000		
		LA County, Marina del Rey, Areas 7-9	83,000		
(-20 to -15) Granular Layer	3	LA County, Marina del Rey, Areas 1-6	164,000	164,000	Nov 2011 to Jan 2012
(<-20) Berm	2	LA County, Marina del Rey, Areas 7-9	100,000	100,000	Nov 2011 to Jan 2012
(<-20')	1	City of Newport Beach, Rhine Channel	150,000	325,000	Aug to Nov 2011
		USACE LARE and City of Long Beach Rainbow Harbor	175,000		Sept to Dec 2010

- Applicants will obtain all permits, insurance, licenses, & agreements (MOA)
- Start receiving material in July 2011 with the goal to completed the Phase 1 fill by the end of Dec 2012.
- Phase 2 fill is anticipated to begin in 2015 and will present another opportunity to accept additional Third party material.