

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

2375 Northside Drive, Suite.100, San Diego, CA 92108
Phone (619) 516-1990 • Fax (619) 516-1994
<http://www.waterboards.ca.gov/sandiego/>

**Amendment No. 2 to Clean Water Act Section 401
Water Quality Certification No. 11C-026**

**PROJECT: BAE Systems San Diego Ship Repair Pier 4
Replacement Project
Certification Number 11C-026
WDID: 9000002252**

Reg. Meas. ID: 378272 Place ID: 764828 Party ID: 40631
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**APPLICANT: BAE Systems San Diego Ship Repair Inc.
2205 East Belt Street
Foot of Sampson Street
San Diego, CA 92113**

On December 28, 2012, Clean Water Act Section 401 Water Quality Certification No. 11C-026 (Certification) was issued to the BAE Systems San Diego Ship Repair Inc. (Applicant) for the Pier 4 Replacement Project (Project). On May 31, 2013, Amendment No. 1 to the Certification was issued to update the estimated volume of dredge material and change the method used to determine when the clamshell bucket is completely closed.

By letter dated March 18, 2015, the Applicant requested the Certification be amended a second time to include the construction of a mooring fender system for Pier 4. The mooring fender system was accidentally omitted from the Pier 4 plans and consequently the work was not included in the Certification. Excluding gaps and fender tapers, the mooring fender system would add less than 150 square feet of bay coverage to the pier. The Unified Port District of San Diego has approved the Applicant's use of additional shading credit mitigation for the additional coverage to San Diego Bay that will result from the installation of the mooring fender system.

Based on the Applicant's request, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) is amending Certification No. 11C-026. Except as modified or superseded by the Certification modifications set forth below, all of the findings, provisions and other requirements of Certification No. 11C-026 and addenda remain in full force and effect. The following changes are made to Certification No. 11C-026 and are shown in underline/strikeout format to indicate added and removed language:

1. Page 3 and 4, Project Description is modified as follows:

Biological resources on the Project site, particularly sedentary or sessile species, will be adversely affected during Project construction as a result of removal of existing

structures, dredging, and construction of new structures. Long-term impacts will result from changes in the structural composition of the habitat (net increase in piles, net reduction of bay fill) and the increase in bay surface area coverage (structures covering the surface of the water). Based on current Project design, the Applicant is required to mitigate for approximately 8,119 ~~7,969~~ square feet of increased bay surface area coverage resulting from construction of the new Pier 4 and the associated mooring fender system.

2. Page 6, Standard Conditions 1, 2, and 3 are replaced with the following:

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to all water quality certification actions:

1. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
2. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the Applicant.

3. Page 15, Section V.A, Compensatory Mitigation, is modified as follows:

The installation of the new Pier 4, mooring fender system, and mooring dolphin will increase bay coverage by 8,119 ~~7,969~~ square feet. To compensate for the increased bay coverage the Applicant must purchase credits at a 1:1 ratio from the San Diego Unified Port District where bay coverage has been reduced in previous projects. The credits come from 6,025 square feet of dock removals at Convair Lagoon in 1995, and 4,800 square feet of dock removals at Silver Gate Yacht Club in 2007. Mitigation for the increase in bay coverage shall be finalized and approved prior to any increase in existing bay coverage.

4. Page 23, Section VII.E , Notification Requirements, is replaced as follows:

~~The submittal of reports and other information under this Certification is required pursuant to California Water Code (CWC) sections 13267 and 13283. Civil liability~~

~~may be administratively imposed by the San Diego Water Board for failure to submit required information pursuant to CWC section 13268 or 13385.~~

The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the Regional Board for failure to submit information pursuant to Water Code sections 13268 and 13385.

5. Page 23, Section VIII.C, Reporting Requirements, is removed:

~~The Applicant shall submit both one complete electronic copy (on CD or other appropriate media) and one complete paper copy of all reports required under this Certification including notifications, technical reports, and monitoring reports. All correspondence and documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: ID No. 764828; Certification No. 11C-026. The preferred electronic format for each report submission is PDF format that is Optical Character Recognition (OCR) capable.~~

6. Page 24, Section VIII.F, Reporting Requirements, is replaced with the following:

Electronic Document Submittal. The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to SanDiego@waterboards.ca.gov. Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification No. 11C-026; PIN 764828
2375 Northside Drive, Suite 100
San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF) format, and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. 11C-026; PIN 764828.

7. Page 25, Section XI, San Diego Water Board Contact Person, is replaced with the following:

Alan Monji, Environmental Scientist
Telephone: (619) 521-3968
E-mail: Alan.Monji@waterboards.ca.gov

8. Page 30, Project Description is modified as follows:

Biological resources on the Project site, particularly sedentary or sessile species, will be adversely affected during Project construction as a result of removal of existing structures, dredging, and construction of new structures. Long-term impacts will result from changes in the structural composition of the habitat (net increase in piles, net reduction of bay fill) and the increase in bay surface area coverage (structures covering the surface of the water). Based on current Project design, the Applicant is required to mitigate for approximately 8,119 ~~7,969~~ square feet of increased bay surface area coverage resulting from construction of the new Pier 4 and the associated mooring fender system.

9. Page 31, Compensatory Mitigation, is modified as follows:


The installation of the new Pier 4, mooring fender system, and mooring dolphin will increase bay coverage by 8,119 ~~7,969~~ square feet. To compensate for the increased bay coverage the Applicant must purchase credits at a 1:1 ratio from the San Diego Unified Port District where bay coverage has been reduced in previous projects. The credits come from 6,025 square feet of dock removals at Convair Lagoon in 1995, and 4,800 square feet of dock removals at Silver Gate Yacht Club in 2007. Mitigation for the increase in bay coverage shall be finalized and approved prior to any increase in existing bay coverage.

10. Page 36, Attachment 5, Conceptual Design, is modified as follows:

Figure titled "Pier 4 Mooring Fender System", BAE Drawing G-1 and G-2 is added to Attachment 5.

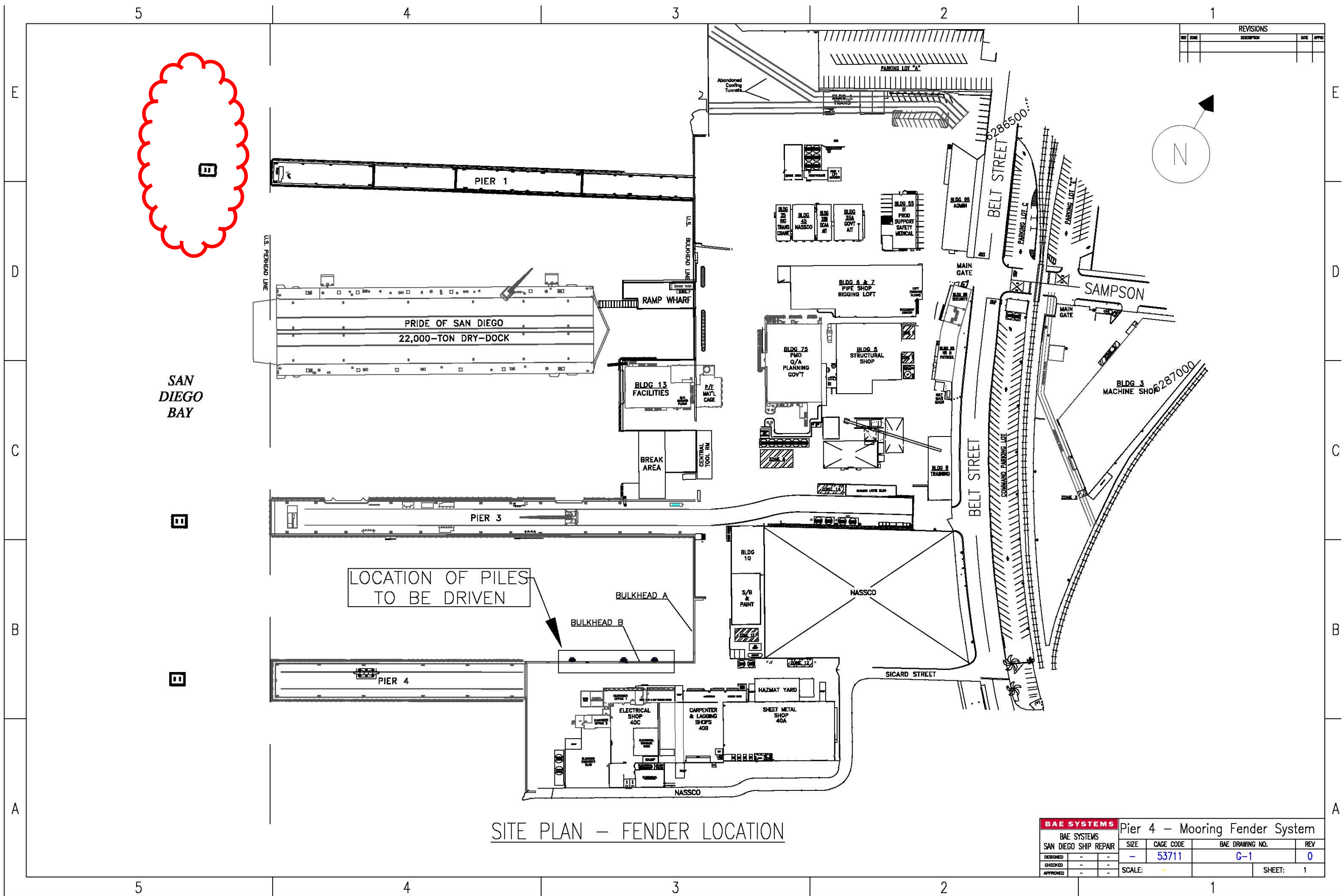
Notification: Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification Amendment. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Amendment No. 2 to Certification No. 11C-026 issued on April 22, 2015.



DAVID W. GIBSON
Executive Officer
San Diego Water Board

22 April 2015
Date



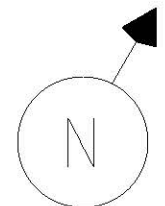
REVISIONS			
NO	DATE	DESCRIPTION	BY

SITE PLAN – FENDER LOCATION

BAE SYSTEMS		Pier 4 – Mooring Fender System		
BAE SYSTEMS	SIZE	CAGE CODE	BAE DRAWING NO.	REV
SAN DIEGO SHIP REPAIR	-	53711	G-1	0
DESIGNED	-	-	-	-
CHECKED	-	-	-	-
APPROVED	-	-	-	-
SCALE:			SHEET: 1	

GENERAL NOTES

- 3 Fender Locations with 6 driven piling.
- Total cross sectional area 156.6sqinches or 1.08sqft



BULKHEAD A

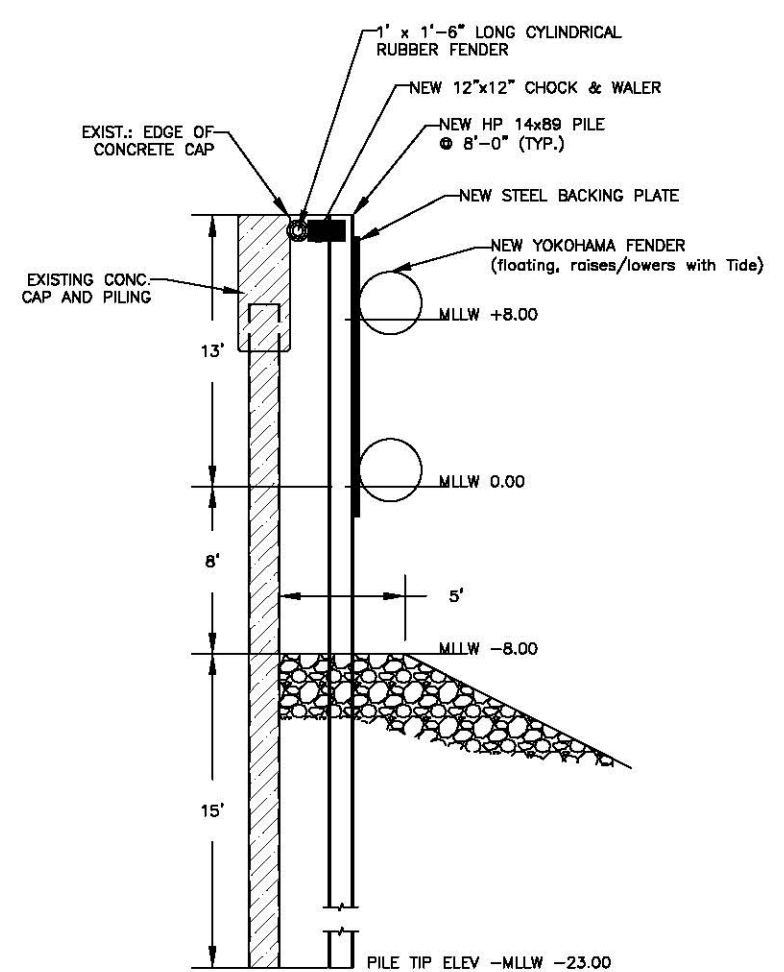
85'-0"

50'-0"

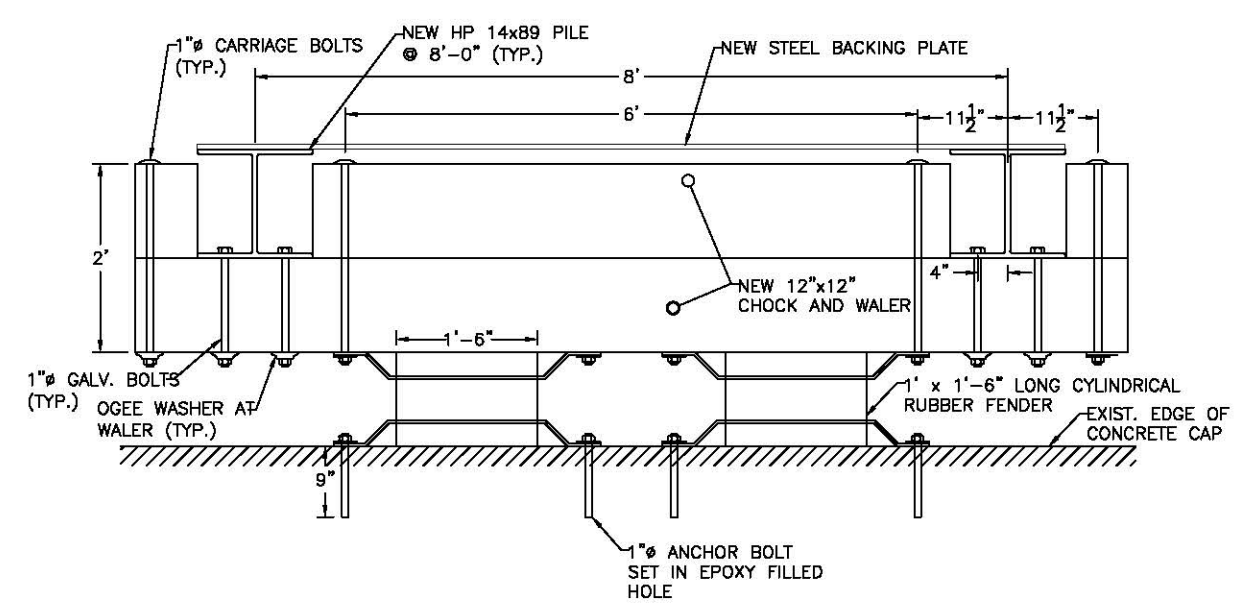
64'-0"

FENDER LAYOUT DETAIL

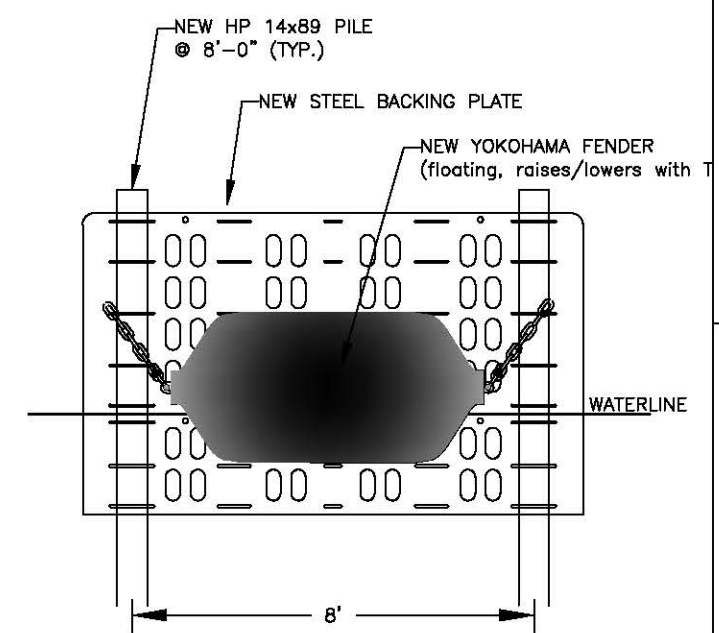
BULKHEAD B



FENDER ELEVATION DETAIL
Typical at 3 locations



FENDER DETAIL
Typical at 3 locations



FENDER PLATE AND PILE
Typical at 3 locations

BAE SYSTEMS		Pier 4 - Mooring Fender System		
DESIGNED	-	SIZE	CAGE CODE	BAE DRAWING NO.
CHECKED	-	-	53711	G-2
APPROVED	-	SCALE:	-	REV
				0
				SHEET: 1



EDMUND G. BROWN JR
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

California Regional Water Quality Control Board, San Diego Region

Amendment No. 1 to Clean Water Act Section
401 Water Quality Certification
and Waste Discharge Requirements
for Discharge of Dredged and/or Fill Materials

**PROJECT: BAE Systems San Diego Ship Repair Pier 4
Replacement Project Certification Number (11C-026)**

**APPLICANT: BAE Systems San Diego Ship Repair, Inc.
2205 East Belt Street
Foot of Sampson Street
San Diego, CA 92113**

WDID: 9000002252
Reg. Meas. ID: 378272
Place ID: 764828
Party ID: 40631

The following changes have been made to Clean Water Action Section 401 Water Quality Certification No. 11C-026, BAE Systems San Diego Ship Repair Pier 4 Project. Changes below are shown in redline/strikeout format to indicate added and removed language.

1. Pages 1-3, PROJECT DESCRIPTION has been modified as follows:

The Pier 4 Replacement Project (Project) proposes to demolish the existing obsolete Pier 4 and Pier 5 structures, remove five drydock mooring dolphins, construct three new bulkhead sections, relocate shoreline infrastructure, conduct underwater dredging, and construct a new replacement pier and a mooring dolphin. The Project site is located in San Diego Bay at the BAE Systems San Diego Ship Repair, Inc. (Applicant) facility at 2205 East Belt Street in the City of San Diego. Demolition will occur at Piers 4 and 5 and the adjacent shore side structures. Prior to and during Pier 4 construction, it will be necessary to dredge the bay floor around the vicinity of the new pier out to the main baychannel. The post-dredge condition will be -35 feet mean lower low water (MLLW), with between 0 and 1 foot over-depth. Thus, the post-dredge condition is expected to be between -35 feet and -36 feet MLLW. The existing condition ranges from -29 feet to -33 feet MLLW for the majority of the dredge footprint, however, the area adjacent to the shoreline is shallower with depths ranging from 0 to 20 feet located in a narrow band immediately adjacent to the bulkhead shoreline.

By letter dated April 1, 2013, the Applicant requested an amendment to the Certification to address two separate items, one is a change to the estimated volume to be dredged and the second is to change the method used for ensuring that the

TOMÁS MORALES, CHAIR | DAVID GIBSON, EXECUTIVE OFFICER

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clamshell bucket is completely closed prior to it being withdrawn from bay waters or from the barge when loaded with sediments.

The estimated volumes of dredged materials within the Project foot print have increased based on the most recent (2013) bathymetric survey. The changes to the dredging estimates are summarized in Table 1.

Table 1. BAE Systems Pier 4 Replacement Project Approximate Dredge Volumes and Disposal Locations.

Dredge Area Phase	Dredge Area Subphase	Dredge Depth (feet MLLW)	Disposal Location	Dredge Volume (cy)*	Dredge Volume (cy)*
A	A1	existing bottom to -36	Ocean Disposal	26,862	27,905
	A2a (lower)	-32 to -36	Ocean Disposal	368	367
	A3	existing bottom to -36	Ocean Disposal	270	278
Estimated Total Ocean Disposal Volume				27,500	28,550
A	A2	existing bottom to -36	Upland Disposal	1,839	2,234
	A2a (upper)	existing bottom to -31	Upland Disposal	184	223
Phase A2 Total Upland Disposal Volume				2,023	2,457
B	B1	existing bottom to -36	Upland Disposal	5,949	6,928
	B2	existing bottom to -36	Upland Disposal	2,006	4,633
	B3	existing bottom to -36	Upland Disposal	180	210
Phase B Total Upland Disposal Volume				8,135	11,771
C	C1	existing bottom to -36	Upland Disposal	1,250	1,772
	C2	existing bottom to -36	Upland Disposal	3,000	3,107
Phase C Total Upland Disposal Volume				4,250	4,879
Estimated Total Upland Disposal Volume				14,408	19,107
Project Total Dredged Material Volume				41,908	47,657
*includes a 1-foot over-dredge allowance					

As indicated in Table 1, the Project will result in the dredging of approximately 47,657 41,908-cubic yards (cy) of bay sediment in three phases. Phase A will include the dredging of 31,007 29,523-cy of bay sediment of which 28,550 27,500-cy (subphase A1, A2a (lower) and A3) has been approved for ocean disposal, and 2,457 2,023-cy (subphase A2 and A2a (upper)) will be classified for disposal at an

appropriate upland landfill disposal facility. Phase B will include the dredging of 11,771 8,135-cy of bay sediment, all of which will be classified for disposal at an appropriate upland landfill disposal facility. Phase C will include the dredging of 4,879 4,250-cy of bay sediment that will be classified for disposal at an appropriate upland landfill disposal facility.

Subphase B2 and all of Phase C comprise approximately 20 45% of the dredging area and are within the boundary of the Shipyard Sediment Site remediation footprint identified in Cleanup and Abatement Order (CAO) R9- 2012-0024. This Water Quality Certification No. 11C-026 (Certification) regulates dredging that is necessary to facilitate deep draft ships in the areas adjacent to the new Pier 4 and is not a Certification for the cleanup of the Shipyard Sediment Site remediation footprint. However, this Certification requires that Project dredge activities within the CAO remediation footprint be conducted in accordance with all of the applicable requirements in CAO No. R9-2012-0024 and the mitigation measures identified in the certified Final Environmental Impact Report for the Shipyard Sediment Site and this Certification.

The Certification Construction Best Management Practices Provision III.N.1 requires that the clamshell bucket must be entirely closed during dredging activities when it contains sediment. The Applicant will use a visual method for ensuring that the clamshell bucket is entirely closed, rather than using an instrumental method identified as Clam Vision in the certified Final Environmental Impact Report for the Shipyard Sediment Site. The visual method is a proven method that will provide equal or better performance than the Clam Vision as a mitigation measure.

2. Page 11, CONSTRUCTION BEST MANAGEMENT PRACTICES PROVISION III.K has been modified as follows:

K. All dredging and construction activities under this Certification in contaminated sediment areas within the Shipyard Sediment Site remedial footprint shall be conducted in accordance with the applicable requirements of Cleanup and Abatement Order R9-2012-0024 and with the mitigation measures identified in the certified Final Environmental Impact Report for the Shipyard Sediment Site, the certified Final Environmental Impact Report for the BAE Systems Pier4 Replacement, and this Certification.

3. Page 11, CONSTRUCTION BEST MANAGEMENT PRACTICES PROVISION III.L has been modified as follows:

L. All dredging and construction activities under this Certification in areas designated for upland disposal outside the Shipyard Sediment Site remedial footprint shall be conducted in accordance with the mitigation measures identified in the certified Final Environmental Impact Report for the BAE Systems Pier 4 Replacement, and this Certification.

4. Page 11, CONSTRUCTION BEST MANAGEMENT PRACTICES PROVISION III.M has been modified as follows:

M. The maximum volume removed from areas designated for upland disposal include up to 19,600 cy of sediments, this includes up to 9,600 cy of sediments removed from areas within the CAO R9-2012-0024 remediation footprint. The volume of sediment removed from areas dredged within the CAO R9-2012-0024 remediation footprint must not exceed 6,256 cy of sediment.

5. Page 11, CONSTRUCTION BEST MANAGEMENT PRACTICES PROVISION III.N.1 has been modified as follows:

N. Dredging of sediments designated for upland disposal must be conducted in accordance with, but not limited to, the following best management practices:

1. The dredging of contaminated sediment must be conducted using an environmental cable arm clamshell bucket. The clamshell bucket must be entirely closed during dredging activities when withdrawn from bay waters and moved to the barge and when withdrawn from the barge and moved to the truck. Marks painted on the clamshell bucket's holding cable and the closing cable, made above the water line, will be used to visually verify when the bucket is fully closed. These marks will be placed so that they are visible to the dredging operator at all times. In addition, the clamshell bucket must be completely empty of sediment prior to being moved back to the barge to minimize sediment being spilled over the dock.

6. Page 13, CONSTRUCTION BEST MANAGEMENT PRACTICES PROVISION III.Q has been modified as follows:

Q. The volume of non-contaminated sediment removed from areas dredged outside the CAO R9-2012-0024 remediation footprint in areas designated for ocean disposal must not exceed 28,600 ~~27,500~~ cy of sediment.

7. Page 24, CEQA FINDINGS has been modified as follows:

C. Based on an analysis dated May 28, 2013, prepared by LSA Associates on behalf of the Applicant the San Diego Water Board has concluded that the proposed project changes are within the scope of the final Environmental Impact Report for the Project dated August 1, 2012, and that the final EIR adequately addresses the project changes and implementation of the changes will not cause environmental effects that were not analyzed in the final EIR or require any new mitigation measures for the purposes of CEQA. Accordingly, the San Diego Water Board is relying on the final EIR for the Project to provide CEQA

compliance for issuance of this Certification amendment, and no further CEQA document or review is required at this time.

8. Pages 27-28, ATTACHMENT 1, PROJECT DESCRIPTION has been modified as follows:

The Pier 4 Replacement Project (Project) proposes to demolish the existing obsolete Pier 4 and Pier 5 structures, remove five drydock mooring dolphins, construct three new bulkhead sections, relocate shoreline infrastructure, conduct underwater dredging, and construct a new replacement pier and a mooring dolphin. The Project site is located in San Diego Bay at the BAE Systems San Diego Ship Repair, Inc. (Applicant) facility at 2205 East Belt Street in the City of San Diego. Demolition will occur at Piers 4 and 5 and the adjacent shore side structures. Prior to and during Pier 4 construction, it will be necessary to dredge the bay floor around the vicinity of the new pier out to the main baychannel. The post-dredge condition will be -35 feet mean lower low water (MLLW), with between 0 and 1 foot over-depth. Thus, the post-dredge condition is expected to be between -35 feet and -36 feet MLLW. The existing condition ranges from -29 feet to -33 feet MLLW for the majority of the dredge footprint, however, the area adjacent to the shoreline is shallower with depths ranging from 0 to 20 feet located in a narrow band immediately adjacent to the bulkhead shoreline.

By letter dated April 1, 2013, the Applicant requested an amendment to the Certification to address two separate items, one is a change to the estimated volume to be dredged and the second is to change the method used for ensuring that the clamshell bucket is completely closed prior to it being withdrawn from bay waters or from the barge when loaded with sediments.

The estimated volumes of dredged materials within the Project foot print have increased based on the most recent (2013) bathymetric survey. The changes to the dredging estimates are summarized in Table 1.

Table 2. BAE Systems Pier 4 Replacement Project Approximate Dredge Volumes and Disposal Locations.

Dredge Area Phase	Dredge Area Subphase	Dredge Depth (feet MLLW)	Disposal Location	Dredge Volume (cy)*	<u>Dredge Volume (cy)*</u>
A	A1	existing bottom to -36	Ocean Disposal	26,862	<u>27,905</u>
	A2a (lower)	-32 to -36	Ocean Disposal	368	<u>367</u>
	A3	existing bottom to -36	Ocean Disposal	270	<u>278</u>

Estimated Total Ocean Disposal Volume				27,500	28,550
A	A2	existing bottom to -36	Upland Disposal	1,839	2,234
	A2a (upper)	existing bottom to -31	Upland Disposal	184	223
Phase A2 Total Upland Disposal Volume				2,023	2,457
B	B1	existing bottom to -36	Upland Disposal	5,949	6,928
	B2	existing bottom to -36	Upland Disposal	2,006	4,633
	B3	existing bottom to -36	Upland Disposal	480	210
Phase B Total Upland Disposal Volume				8,435	11,771
C	C1	existing bottom to -36	Upland Disposal	1,250	1,772
	C2	existing bottom to -36	Upland Disposal	3,000	3,107
Phase C Total Upland Disposal Volume				4,250	4,879
Estimated Total Upland Disposal Volume				14,498	19,107
Project Total Dredged Material Volume				41,908	47,657
*includes a 1-foot over-dredge allowance					

As indicated in Table 1, the Project will result in the dredging of approximately 47,657 ~~41,908~~-cubic yards (cy) of bay sediment in three phases. Phase A will include the dredging of 31,007 ~~29,523~~-cy of bay sediment of which 28,550 ~~27,500~~-cy (subphase A1, A2a (lower) and A3) has been approved for ocean disposal, and 2,457 ~~2,023~~-cy (subphase A2 and A2a (upper)) will be classified for disposal at an appropriate upland landfill disposal facility. Phase B will include the dredging of 11,771 ~~8,435~~-cy of bay sediment, all of which will be classified for disposal at an appropriate upland landfill disposal facility. Phase C will include the dredging of 4,879 ~~4,250~~-cy of bay sediment that will be classified for disposal at an appropriate upland landfill disposal facility.

Subphase B2 and all of Phase C comprise approximately 20 ~~15~~% of the dredging area and are within the boundary of the Shipyard Sediment Site remediation footprint identified in Cleanup and Abatement Order (CAO) R9- 2012-0024. This Water Quality Certification No. 11C-026 (Certification) regulates dredging that is necessary to facilitate deep draft ships in the areas adjacent to the new Pier 4 and is not a Certification for the cleanup of the Shipyard Sediment Site remediation footprint. However, this Certification requires that Project dredge activities within the CAO remediation footprint be conducted in accordance with all of the applicable requirements in CAO No. R9-2012-0024 and the mitigation measures identified in the certified Final Environmental Impact Report for the Shipyard Sediment Site and this Certification.

The Certification Construction Best Management Practices Provision III.N.1 requires that the clamshell bucket must be entirely closed during dredging activities when it contains sediment. The Applicant will use a visual method for ensuring that the clamshell bucket is entirely closed, rather than using an instrumental method identified as Clam Vision in the certified Final Environmental Impact Report for the Shipyard Sediment Site. The visual method is a proven method that will provide equal or better performance than the Clam Vision as a mitigation measure.

9. Page 31, ATTACHMENT 1, DREDGE VOLUME has been modified as follows:

48,200 ~~41,908~~ cubic yards

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Amendment No. 1 to Certification No. 11C-026 issued on May 31, 2013.



DAVID W. GIBSON
Executive Officer
San Diego Regional Water Quality Control Board

31 May 2013
Date

California Regional Water Quality Control Board, San Diego Region

Action on Request for
Clean Water Act Section 401 Water Quality Certification
and Waste Discharge Requirements
for Discharge of Dredged and/or Fill Materials

**PROJECT: BAE Systems San Diego Ship Repair
Pier 4 Replacement Project
Certification Number (11C-026)
WDID: 9 000002252**

CIWQS Reg. Meas. ID: 378272 Place ID: 764828 Party ID: 40631

**APPLICANT: BAE Systems San Diego Ship Repair, Inc.
2205 East Belt Street
Foot of Sampson Street
San Diego, CA 92113**

ACTION:

<input type="checkbox"/> Order for Low Impact Certification	<input type="checkbox"/> Order for Denial of Certification
<input checked="" type="checkbox"/> Order for Technically-conditioned Certification	<input type="checkbox"/> Waiver of Waste Discharge Requirements
<input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017 DWQ	<input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004 DWQ

PROJECT DESCRIPTION

The Pier 4 Replacement Project (Project) proposes to demolish the existing obsolete Pier 4 and Pier 5 structures, remove five drydock mooring dolphins, construct three new bulkhead sections, relocate shoreline infrastructure, conduct underwater dredging, and construct a new replacement pier and a mooring dolphin. The Project site is located in San Diego Bay at the BAE Systems San Diego Ship Repair, Inc. (Applicant) facility at 2205 East Belt Street in the City of San Diego. Demolition will occur at Piers 4 and 5 and the adjacent shore side structures. Prior to and during Pier 4 construction, it will be necessary to dredge the bay floor around the vicinity of the new pier out to the main baychannel. The post-dredge condition will be -35 feet mean lower low water (MLLW), with between 0 and 1 foot over-depth. Thus, the post-dredge condition is expected to be between -35 feet and -36 feet MLLW. The existing condition ranges from -29 feet to -33 feet MLLW for the majority of the dredge footprint, however, the area adjacent to the shoreline is shallower with depths ranging from 0 to 20 feet located in a narrow band immediately adjacent to the bulkhead shoreline. As indicated in Table 1 below the Project will result in the dredging of

approximately 41,908 cubic yards (cy) of bay sediment in three phases. Phase A will include the dredging of 29,523 cy of bay sediment of which 27,500 cy (subphase A1, A2a (lower) and A3) has been approved for ocean disposal, and 2,023 cy (subphase A2 and A2a (upper)) will be classified for disposal at an appropriate upland landfill disposal facility. Phase B will include the dredging of 8,135 cy of bay sediment, all of which will be classified for disposal at an appropriate upland landfill disposal facility. Phase C will include the dredging of 4,250 cy of bay sediment that will be classified for disposal at an appropriate upland landfill disposal facility.

Table 1. BAE Systems Pier 4 Replacement Project Approximate Dredge Volumes and Disposal Locations

Dredge Area Phase	Dredge Area Subphase	Dredge Depth (feet MLLW)	Disposal Location	Dredge Volume (cy)*
A	A1	existing bottom to -36	Ocean Disposal	26,862
	A2a (lower)	-32 to -36	Ocean Disposal	368
	A3	existing bottom to -36	Ocean Disposal	270
Estimated Total Ocean Disposal Volume				27,500
A	A2	existing bottom to -36	Upland Disposal	1,839
	A2a (upper)	existing bottom to -31	Upland Disposal	184
Phase A2 Total				2,023
B	B1	existing bottom to -36	Upland Disposal	5,949
	B2	existing bottom to -36	Upland Disposal	2006
	B3	existing bottom to -36	Upland Disposal	180
Phase B Total				8,135
C	C1	existing bottom to -36	Upland Disposal	1,250
	C2	existing bottom to -36	Upland Disposal	3,000
Phase C Total				4,250
Estimated Total Upland Disposal Volume				14,408
Project Total Dredged Material Volume				41,908

*includes a 1-foot over-dredge allowance

Subphase B2 and all of Phase C comprise approximately 15% of the dredging area and are within the boundary of the Shipyard Sediment Site remediation footprint identified in Cleanup and Abatement Order (CAO) R9- 2012-0024. This Water Quality Certification No. 11C-026 (Certification) regulates dredging that is necessary to facilitate deep draft ships in the areas adjacent to the new Pier 4 and is not a Certification for the cleanup of the Shipyard Sediment Site remediation footprint. However, this Certification requires that Project dredge activities within the CAO remediation footprint be conducted in accordance

with all of the applicable requirements in CAO No. R9-2012-0024 and the mitigation measures identified in the certified Final Environmental Impact Report for the Shipyard Sediment Site.

Excess water from dredged sediments suitable for ocean disposal will be decanted on the barge and discharged back into San Diego Bay within the confines of the silt curtains. There will be no discharge of decant water from the barge for any dredged sediment from the proposed CAO remediation footprint or other areas where upland disposal of dredged material is proposed. The dredged sediment from these areas will, as necessary, be dewatered, rotated, and thickened with a cement based reagent (pozzolanics) to facilitate drying and to bind the sediments. All runoff water from these areas will be collected and stored in on-shore covered tanks. The on-shore dredged sediment dewatering area will be designed as a no-discharge facility to prevent decanted or excess water from flowing back into San Diego Bay and to prevent infiltration into underlying groundwater. The design will also incorporate features to prevent storm water run-on or run-off from adjacent areas from entering the dewatering area. To support dredged sediment dewatering, the Applicant will utilize an existing industrial wastewater permit (Permit No. 11-0217) issued by the City of San Diego to discharge the recovered water into the City's sewage system in accordance with all permit requirements. If the water does not meet permit requirements, the water will be removed by a licensed waste hauler for treatment and disposal at an authorized off-site location.

Dredged sediments approved for ocean disposal by the U.S Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (USEPA) will be loaded into barges and transported to the Ocean Dredged Material Disposal Site (ODMDS) LA-5. LA-5 is a USEPA designated offshore open-water disposal site located on the ridged slope of the continental shelf at a depth of approximately 600 feet, 5.4 nautical miles from Point Loma, off the San Diego Coast. LA.5 is located approximately 13 miles from the Project site. Barges will be equipped with electronic tracking devices to document that dredged sediment releases occur within the LA-5 disposal site boundaries, as specified in the USACE Clean Water Act Section 404 dredging permit.

Dredged sediments not approved for ocean disposal will be classified for disposal at an appropriate upland landfill disposal facility pursuant to Title 23, Chapter 15, and Title 27, Chapter 3 of the California Code of Regulations. Dewatered dredged sediments classified as nonhazardous are currently planned for transportation via truck for disposal at the Otay Sanitary Landfill at 1700 Maxwell Road in Chula Vista, California which is located approximately 19 miles from the Project site. Dredged sediments classified as hazardous are currently planned for transportation and disposal at the Buttonwillow Hazardous Waste Landfill at 2500 West Lokem Road in Buttonwillow, California which is located approximately 245 miles from the Project site.

Biological resources on the Project site, particularly sedentary or sessile species, will be adversely affected during Project construction as a result of removal of existing structures, dredging, and construction of new structures. Long-term impacts will result from changes in the structural composition of the habitat (net increase in piles, net reduction of bay fill)

and the increase in bay surface area coverage (structures covering the surface of the water). Based on current Project design, the Applicant is required to mitigate for approximately 7,969 square feet of increased bay surface area coverage resulting from construction of the new Pier 4.

The Applicant intends to start on-site work on the Project in January, 2013 and complete Project construction in July, 2014.

This Certification incorporates the following Attachments:

1. Project Information
2. Distribution List
3. Location Map
4. Project Site Map
5. Conceptual Design
6. Project Site – Before and After
7. Phased Dredge Areas
8. Monitoring Station Location Scheme for Dredge Areas Designated for Upland Disposal

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I. STANDARD CONDITIONS

The following three standard conditions apply to all Certification actions, except as noted under Condition C for denials.

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the California Water Code and section 3867 of Title 23 of the California Code of Regulations (23 CCR).
- B. This Certification action is not intended and must not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. The validity of any non-denial Certification action must be conditioned upon total payment of the full fee required under 23 CCR section 3833, unless otherwise stated in writing by the certifying agency.

II. GENERAL CONDITIONS

- A. Water Quality Certification No. 11C-026 (Certification) is only valid if the project begins no later than five (5) years from the date of issuance. If the project has not begun within 5 years from the date of issuance, then this Certification shall expire 5 years from the date of issuance.
- B. The Applicant must comply with the requirements of State Water Resources Control Board Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material That Have Received State Water Quality Certification*. These General Waste Discharge Requirements are accessible at:
http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/go_wdr401regulated_projects.pdf
- C. The Applicant must comply with the requirements of State Water Resources Control Board Water Quality Order No. 2009-0014-DWQ as amended by Order No. 2010-0014-DWQ, NPDES No. CAS000002, *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*. This General NPDES Permit is accessible at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

- D. The Applicant must, at all times, fully comply with the engineering plans, specifications and technical reports submitted to the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), to support this Certification and all subsequent submittals required as part of this Certification and as described in Attachment 1. The conditions within this Certification supersede conflicting provisions within such plans, specifications, and reports submitted prior to the Certification action. Any modifications thereto, will require notification to the San Diego Water Board and reevaluation for individual Waste Discharge Requirements and/or Certification amendment.
- E. During construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies.
- F. The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to:
1. Enter upon the Applicant's premises, where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Certification;
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;
 3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this Certification; and
 4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance or as otherwise authorized by the Clean Water Act or the California Water Code, any substances or parameters at any location.
- G. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation must be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- H. In response to a suspected violation of any condition of this Certification, the San Diego Water Board may pursuant to California Water Code sections 13267 and 13383, require the holder of any permit or license subject to this Certification to investigate, monitor and report information on the violation. The only restriction is

that the burden, including costs, of preparing the reports must bear a reasonable relationship to the need for and the benefits to be obtained from the reports.

- I. In response to any violation of the conditions of this Certification, or if the results of the Project have unintended impacts to water quality, the San Diego Water Board may modify the conditions of this Certification as appropriate to ensure compliance.

III. RECEIVING WATER LIMITATIONS

The receiving water limitations set forth below for San Diego Bay waters are based on applicable water quality standards contained in water quality control plans and policies and federal regulations and are a required part of this Certification. Project activities shall not cause or contribute to violation of these receiving water limitations in San Diego Bay. Compliance with these limitations shall be determined from samples collected at the points of compliance described in the Receiving Water Monitoring Program in Section V.B. of this Certification.

- A. **Visual.** Floating particulates and grease and oil shall not be visible.
- B. **Color.** Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.
- C. **Hydrogen Ion Concentration.** The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- D. **Hydrogen Ion Concentration.** The pH shall not be depressed below 7.0 nor raised above 9.0.
- E. **Turbidity.** If natural turbidity is between 0 to 50 nephelometric turbidity units (NTUs), the maximum increase from dredge activities must not exceed 20 percent of the measured natural turbidity. If natural turbidity is between 51 to 100 NTUs, the maximum increase from dredge activities must not exceed 10 NTUs. If natural turbidity is greater than 100 NTUs, the maximum increase from dredge activities must not exceed 10% above natural background levels.
- F. **Dissolved Oxygen.** The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally.
- G. **Benthic Communities.** Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities.
- H. **Human Health.** Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health.

- I. **Water Quality Objectives.** Water quality objectives applicable to San Diego Bay established in Chapter 3 of the San Diego Water Board's *Water Quality Control Plan for the San Diego Basin* (Basin Plan) shall not be exceeded.
- J. **Priority Pollutant Criteria.** Priority pollutant criteria applicable to San Diego Bay promulgated by the U.S. Environmental Protection Agency (U.S. EPA) through the a) *National Toxics Rule* (NTR) (40 CFR 131.36 promulgated on December 22, 1992 and amended on May 4, 1995) and b) *California Toxics Rule* (CTR) (40 CFR 131.38, (65 Fed. Register 31682-31719), adding Section 131.38 to Title 40 of the Code of Federal Regulations, on May 18, 2000) shall not be exceeded.

IV. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response, and Best Management Practices (BMPs) implementation and maintenance.
- B. The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- C. The treatment, storage, and disposal of wastewater during the life of the Project must be done in accordance with waste discharge requirements established by the San Diego Water Board pursuant to California Water Code Section 13260.
- D. Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or the State or placed in locations that may be subjected to storm flows.
- E. Substances hazardous to aquatic life including, but not limited to, petroleum products, raw cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.

Silt Curtain Deployment

- F. Dredging of sediments designated for upland disposal shall include a continuous length of double silt curtains, installed and maintained fully surrounding the active dredge areas and around the dredge barge/bucket area in conformance with the following requirements:
 1. The silt curtains must be comprised of Type III geotextile material.

2. The silt curtains must restrict the surface visible turbidity plume to the area of construction and dredging.
 3. The silt curtains must be supported by floating debris booms in open water areas such as along the bayward side of the dredging areas. Along pier edges the silt curtains may be connected to the pier structure.
 4. The bottom of the silt curtains must be weighted with ballast weights or rods affixed to the base of the fabric. The silts curtains shall extend from the bay surface to at least 20 feet into the water column. Where feasible and applicable, the floating silt curtains shall be anchored and deployed from the surface of the water to just above the substrate.
 5. If necessary, silt curtains with tidal flaps must be installed to facilitate curtain deployment in areas of higher flow. Air curtains may be used in conjunction with silt curtains to contain resuspended sediment, enhance worker safety, and allow barges to transit into and out of the work area without the need to open and close silt curtain gates.
 6. The silt curtains must be continuously monitored for damage, dislocation or gaps and must be immediately repaired where it is no longer continuous or where it has loosened.
- G. Dredging of sediments designated for ocean disposal shall include a continuous length of a single silt curtain, installed and maintained fully surrounding the active dredge areas and around the dredge barge/bucket area in conformance with the Silt Curtain Deployment Requirements III.F1. – III F.6 above.

Eelgrass Beds

- H. Prior to construction, the boundaries of the eelgrass beds within the Applicant's facility must be staked with ridged PVC markers or self-centering buoys visible at all tide heights. The PVC markers or self-centering buoys must be protected, replaced, and maintained as needed to ensure that they remain in place and properly stake the boundaries of the eelgrass beds.
- I. The turbidity curtain must be kept a minimum of 30 feet away from staked eelgrass beds in order to prevent damage to eelgrass beds from curtain drag or movement. The goal of this measure is to minimize the area of San Diego Bay in which visibility of prey by California least terns is obstructed.
- J. During shoreline work and regardless of the timing of the upland disposal dredging area dredging, the eelgrass beds must be protected with silt curtains deployed above the eelgrass and below the shoreline work area. The silt curtain must be designed to prevent drift, so that impacts to eelgrass during installation are avoided.

Sediment Dredging in the Shipyard Sediment Site Remedial Footprint and Other Areas Designated for Upland Disposal

- K. All dredging and construction activities under this Certification in contaminated sediment areas within the Shipyard Sediment Site remedial footprint shall be conducted in accordance with the applicable requirements of Cleanup and Abatement Order R9-2012-0024 and with the mitigation measures identified in the certified Final Environmental Impact Report for the Shipyard Sediment Site and the certified Final Environmental Impact Report for the BAE Systems Pier4 Replacement.
- L. All dredging and construction activities under this Certification in areas designated for upland disposal outside the Shipyard Sediment Site remedial footprint shall be conducted in accordance with the mitigation measures identified in the certified Final Environmental Impact Report for the BAE Systems Pier 4 Replacement.
- M. The volume of sediment removed from areas dredged within the CAO R9-2012-0024 remediation footprint must not exceed 6,256 cy of sediment.
- N. Dredging of sediments designated for upland disposal must be conducted in accordance with, but not limited to, the following best management practices:
 - 1. The dredging of contaminated sediment must be conducted using an environmental cable arm clamshell bucket. The clamshell bucket must be entirely closed during dredging activities when withdrawn from bay waters and moved to the barge and when withdrawn from the barge and moved to the truck. In addition, the clamshell bucket must be completely empty of sediment prior to being moved back to the barge to minimize sediment being spilled over the dock.
 - 2. The clamshell bucket must not be overfilled in order to prevent the spillage of dredged material back in to San Diego Bay waters.
 - 3. Dredging must be conducted to remove dredge material and not stockpile material on the floor of San Diego Bay or level the bottom surface with the clamshell bucket.
 - 4. The drop height from the clamshell bucket into the barge must be controlled to prevent splashing or sloshing of dredged material back into San Diego Bay waters.
 - 5. The swing radius of unloading equipment must be controlled to prevent spillage of dredged material back into San Diego Bay waters.
 - 6. Dredged sediments must be loaded onto wide pocket material barges with watertight compartments and water collection systems to prevent return water

from re-entering San Diego Bay.

7. Dredged material barges must not be filled to a point that overflow or spillage could occur. Each material barge must be marked in such a way to allow the operator to visually identify the maximum load point.
 8. Load-controlled barge movement, line attachment, and horsepower requirements of tugs and support boats at the project site must be specified to avoid resuspension of sediment and ensure that sea turtles and marine mammals are not injured or harassed through excessive vessel speed or propeller damage. Such measures may include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels.
 9. Excess or decanted water from dredged sediments must not be discharged into San Diego Bay.
 10. Dredged sediments may be mixed with a cement based reagent (pozzolanics) to facilitate drying and to bind the sediments.
 11. The on-shore dredged sediment dewatering area must be designed as a no-discharge facility to prevent decanted water from flowing back into San Diego Bay and prevent infiltration into underlying groundwater. The design must also prevent storm water run-on or run-off from adjacent areas from entering the dewatering area.
 12. At all times during Project construction, storm water in contact with sediment and dredge barge decant water will be collected in closed-top tanks to prevent infiltration and overflow during a storm event. This will involve the decant and/or storm water being collected in a sump in the operation area, pumped to aboveground tanks, and disposed of either within the sanitary sewer or off site. The storage areas shall be surrounded by a curb, dike, berm, or some other type of secondary containment system. All paved storage areas shall be free of cracks and gaps, and shall be able to contain leaks and overflows until they can be addressed.
 13. Prior to discharge to the sanitary sewer system, the dredge sediment decant water must meet the City of San Diego's requirements for discharge of wastewater to the sanitary sewer system. The discharge must comply with any limits on pollutant concentrations, discharge times and flow rates required by the City of San Diego. If the decanted water does not meet City of San Diego's requirements for discharge of wastewater to the sanitary sewer, it must be removed by a licensed waste hauler for treatment and disposal at an authorized site.
- O. Dewatered dredged sediments for upland landfill disposal, classified as nonhazardous, must be transported for disposal at a landfill permitted for accepting

this material. It is anticipated that the Otay Sanitary Landfill at 1700 Maxwell Road in Chula Vista, California 91911 will be utilized for disposal of dredged sediments classified as nonhazardous. Dredged sediments classified as hazardous must be transported to a hazardous waste landfill permitted for accepting this material. Currently it is anticipated that the Buttonwillow Hazardous Water Landfill at 2500 West Lokem Road in Buttonwillow, California 93206 will be utilized for disposal of dredged sediments classified as hazardous. Alternative disposal of dredge materials at non-permitted disposal facilities is **not** authorized by this Certification.

Sediment Dredging Outside the Shipyard Sediment Site Remedial Footprint in Areas Designated for Ocean Disposal

- P. All dredging and construction activities under this Certification in non-contaminated sediment areas designated for ocean disposal must be conducted in accordance with the mitigation measures identified in the certified Final Environmental Impact Report for the BAE Systems Pier 4 Replacement.
- Q. The volume of non-contaminated sediment removed from areas dredged outside the CAO R9-2012-0024 remediation footprint in areas designated for ocean disposal must not exceed 27,500 cy of sediment.
- R. Dredging must be conducted in accordance with, but not limited to, the following best management practices:
1. The dredging must be conducted using a standard clamshell bucket or whenever possible, an environmental cable arm clamshell bucket.
 2. The clamshell bucket must not be overfilled in order to prevent the spillage of dredged material back in to San Diego Bay waters.
 3. Dredging must be conducted to remove dredge material and not stockpile material on the floor of San Diego Bay or level the bottom surface with the clamshell bucket.
 4. The drop height from the clamshell bucket into the barge must be controlled to prevent splashing or sloshing of dredged material back into San Diego Bay waters.
 5. The swing radius of unloading equipment must be controlled to prevent spillage of dredged sediments back into the water.
 6. Dredged material not suitable for ocean disposal must be loaded onto wide pocket material barges with watertight compartments and water collection systems to prevent decant water from re-entering San Diego Bay.

7. Excess water from dredged sediment suitable for ocean disposal may be decanted and discharged back into San Diego Bay within the confines of the silt curtains.
 8. Dredged material barges must not be filled to a point that overflow or spillage could occur. Each material barge must be marked in such a way to allow the operator to visually identify the maximum load point.
 9. Load-controlled barge movement, line attachment, and horsepower requirements of tugs and support boats at the Project site must be specified to avoid resuspension of sediment and ensure that sea turtles and marine mammals are not injured or harassed through excessive vessel speed or propeller damage. Such measures may include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels.
- S. Dredged material approved by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency for ocean disposal shall be transported by barge for disposal at the LA-5 Ocean Dredged Material Disposal Site (LA-5).

Response Actions to Monitoring Results

- T. In the event that visual observations or water quality monitoring described in Section V. of this Certification indicate an exceedance of an applicable Receiving Water Limitation described in Section II of this Certification, the Applicant shall implement the additional or enhanced operational or engineering BMPs described below:
1. Evaluate the concurrent measurements at background and compliance monitoring stations and supporting visual evidence to determine whether the exceedance is caused by construction activities or by other ambient conditions in San Diego Bay (e.g., wind waves, boat wakes, barge/ship traffic, and storm inflow).
 2. Immediately re-take measurements at background and compliance stations.
 3. If the exceedance is confirmed, immediately notify the dredge contractor to immediately modify operations or implement additional BMPs to mitigate the exceedance. Operational modifications may include, but are not limited to the following modifications implemented individually or in combination:
 - a. Adjust the sequence and/or speed of dredging and disposal operations;
 - b. Reposition dredge operations in such a way as to ensure future exceedances do not occur;
 - c. Fix, maintain, and/or upgrade floating silt curtains; and

- d. Modify, either on a temporary or permanent basis, dredge equipment (such as the dredging bucket size or type).
4. Re-evaluate field measurements at all relevant stations 30 minutes later, after additional BMPs or operational modifications are implemented.
5. If the receiving water limitation exceedance continues to persist, even with additional BMPs, determine and implement more aggressive BMPs or operational modifications that resolve the exceedance or stop work to further assess the source of the exceedance, identify effective mitigation measures, and allow the water column to recover.

V. COMPENSATORY MITIGATION

- A. The installation of the new Pier 4 and mooring dolphin will increase bay coverage by 7,969 square feet. To compensate for the increased bay coverage the Applicant must purchase credits at a 1:1 ratio from the San Diego Unified Port District where bay coverage has been reduced in previous projects. The credits come from 6,025 square feet of dock removals at Convair Lagoon in 1995, and 4,800 square feet of dock removals at Silver Gate Yacht Club in 2007. Mitigation for the increase in bay coverage shall be finalized and approved prior to any increase in existing bay coverage.
- B. A pre-construction eelgrass survey must be completed in accordance with the requirements of the Southern California Eelgrass Mitigation Policy (SCEMP) by a qualified biologist within 60 days prior to initiation of demolition or construction activities at the site. This survey must include both aerial and density characterization of the beds. A post-construction survey must be performed by a qualified biologist within 30 days following project completion to quantify any unanticipated losses to eelgrass habitat. Impacts must then be determined from a comparison of pre- and post-construction survey results. Impacts to eelgrass, if any, must be mitigated through conformance with the SCEMP, which defines the mitigation ratio and other requirements to achieve mitigation for significant eelgrass impacts. If required following the post-construction survey, the SCEMP defined mitigation must be developed; approved by the San Diego Water Board, U.S. Army Corps of Engineers and National Marine Fisheries Service; and implemented to offset losses to eelgrass.
- C. In-water construction activities are anticipated to be scheduled to occur outside the California least tern nesting season. Should in-water Project activities be conducted during the least tern breeding season, a qualified Biological Monitor shall be retained by the Applicant to conduct monitoring within 500 feet of construction activities and a silt curtain installed during breeding season. The monitor shall be empowered to delay commencing work, and shall do so if terns are actively foraging (e.g., searching and diving) within the work area. Should adverse impacts to terns occur (e.g., agitation or startling during foraging activities), the Biological Monitor shall be

empowered to delay or halt construction, and shall do so until California least terns have left the project site.

VI. MONITORING REQUIREMENTS

A. Monitoring Provisions

1. Samples and measurements taken as required herein must be representative of the volume and nature of the discharge. Monitoring points shall not be changed without notification to and the approval of the San Diego Water Board.
2. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants under the Clean Water Act* as amended, unless other test procedures have been specified in this Certification.
3. All laboratory analyses must be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the San Diego Water Board.
4. If the Applicant monitors any pollutant more frequently than required by this Certification, using test procedures approved under 40 CFR, Part 136, or as specified in this Certification, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Applicant's reports. The increase in frequency of monitoring must also be reported.
5. The Applicant must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Certification, and records of all data used to complete the application for this Certification. Records must be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this Certification or when requested by the San Diego Water Board.
6. Records of monitoring information must include:
 - The date, exact place, and time of sampling, measurements;
 - The individual(s) who performed the sampling, measurements, or observations;
 - The date (s) analyses were performed;
 - The individual(s) who performed the analyses;
 - The analytical techniques or method used; and
 - The results of such analyses.

7. All monitoring instruments and devices which are used by the Applicant to fulfill the prescribed monitoring program must be properly maintained and calibrated as necessary to ensure their continued accuracy.
8. The San Diego Water Board Executive Officer may make revisions to the monitoring program at any time, and may include a reduction or increase in the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.

B. Receiving Water Monitoring Program

Throughout the duration of dredging activities the Applicant shall conduct water quality monitoring to demonstrate that dredging activities do not result in violations of applicable water quality standards described in Section II. Receiving Water Limitations, outside of the construction area. The water quality monitoring program, including monitoring parameters, monitoring locations and depths, field procedures, and compliance criteria is described below.

1. Monitoring Parameters.

The following parameters shall be monitored outside the construction area during dredging activities:

- Visual parameters
 - (1) No floating particulates, suspended materials, grease, or oil
 - (2) No significant discoloration of the water surface
- Field parameters
 - (1) Turbidity (in *nephelometric turbidity units [NTU]*)
 - (2) *Dissolved oxygen* (DO; in milligrams per liter [mg/L])
 - (3) Hydrogen ion concentration (pH)

2. Monitoring Locations and Depths in Dredge Areas Designated for Upland Disposal.

During each monitoring event, water quality parameters including turbidity, DO, and pH shall be measured at seven stations, as shown in Attachment 8. All water quality parameter measurements shall be monitored on two arcs (early warning and compliance). Two early warning and four compliance stations shall be spaced evenly along the arcs to capture all tidal and current conditions.

Monitored water quality measurements shall be compared to "ambient" background measurements outside the construction area, including San Diego Bay conditions and effects of non-remedial shipyard activities. The location of the background station shall remain the same for all monitoring events. Water quality measurements shall be collected from a depth of 10 feet below the water surface.

Station descriptions are as follows:

- **Compliance Stations.** Four compliance stations shall be located 500 feet from the construction area. Two compliance stations (Compliance Station Nearshore, North [CNN] and Compliance Station Nearshore, South [CNS]) shall be located on the North and South sides of the 500-foot compliance arc at approximately the same distance from shore as the construction activity. Two additional compliance stations (Compliance Station Offshore, North [CON] and Compliance Station Offshore, South [COS]) shall be located on the North and South sides of the 500-foot compliance arc offshore from the construction activity. The compliance stations shall be adjusted in the field to better target a visible turbidity plume, if a visible plume is observed.
- **Early Warning Station.** Two early warning stations shall be located 250 feet from the construction area. The North and South early warning stations (Early Warning Station, North [EWN] and Early Warning Station, South [EWS]) shall be spaced evenly along the north and south sides of the 250-foot early warning arc. The objective of the early warning stations is to become quickly aware of potential water quality impacts at the construction work area and to be able to adjust dredging operations or BMPs before an exceedance occurs at the compliance station. The early warning stations shall be adjusted in the field to better target a visible turbidity plume, if a visible plume is observed.
- **Background Station.** The background station (BG) shall be located 1,000 feet from the dredging activity in the direction of the head of the bay and beyond the influence of construction activities. The background station shall be monitored during every event, because the turbidity criterion is based on an acceptably small increase in the vicinity of the construction activity relative to ambient background levels.

Water quality shall be monitored at a depth of 10 feet below the water surface at each of the stations.

3. Monitoring Frequency

Turbidity and other water quality conditions (DO and pH) shall be monitored by the Applicant using an automatic system throughout dredging operations in areas designated for upland disposal to provide real-time feedback to the dredge operator. The automatic system will include threshold alarms to alert the dredge operator and/or other appropriate personnel to recognize that one or more water quality criteria have been exceeded.

The automatic system shall be supplemented by a robust system of manual

water quality monitoring that will be conducted by the Applicant's Project Team field representatives. During dredging, samples shall be collected once daily after dredging operations have been underway for a minimum of 1 hour. A reference (BG) station and outside the influence of dredging shall also be sampled at similar depths and frequency for comparison to the samples collected from the dredge area.

4. Monitoring Locations and Depths in Dredge Areas Designated for Ocean Disposal.

Daily visual monitoring shall be conducted outside of the silt curtain. Weekly manual water quality parameters (i.e., turbidity, DO, and pH) shall be measured after dredging operations have been underway for a minimum of 1 hour in areas designated for ocean disposal. During weekly water column monitoring all water quality parameters will be measured during one monitoring event per week. Station locations and depths shall be in accordance with Section V.B.2. above.

5. Compliance Criteria.

Receiving Water Limitations are provided in Section II of this Certification. The point of compliance with these receiving water limitations shall be located 500 feet from the edge of the construction area. The construction area is defined as the area(s) occupied by the dredging barge(s), the sediment scow(s), sand and rock placement equipment, demolition work equipment, silt curtains, and other work.

6. Methods and Equipment.

Dredging activities shall be monitored using an automatic Early Alert Systems (EAS) set at fixed locations as described in Section V.B. 2, above. The compliance stations evaluated during dredging shall be monitored using instrumentation capable of measuring dissolved oxygen (DO), pH, and turbidity (in nephelometric turbidity units (NTU's)).

7. Sample Location and Depth Control.

Monitoring station positions shall be located using a Global Position System (GPS) accurate to within ± 3 meters. Monitoring depths shall be determined using a depth finder with an accuracy of ± 0.5 feet.

8. Station Identification.

Water quality monitoring locations shall be identified as follows:

Stations shall be identified using the nomenclature specified in the Remedial Action Plan (RAP) for the Shipyard Sediment Site CAO (Anchor 2012). All station information shall be recorded on project specific water quality monitoring forms, and consistently applied from one monitoring event to the next. Station names shall use the following identification scheme consisting of nine alphanumeric characters:

A-BB-YYMMDD

Where:

“A” shall be used to identify the construction activity being monitored and will be one of the following:

- D = dredging
- P = material placement
- R = debris removal

“BB” shall be used to identify the water quality monitoring location and will be one of the following:

- BG = Background Station¹
- EWN = Early Warning Station, North¹
- EWS = Early Warning Station, South¹
- CNN = Compliance Nearshore Station, North¹
- CNS = Compliance Nearshore Station, South¹
- CON = Compliance Offshore Station, North¹
- COS = Compliance Offshore Station, South¹

¹ will be monitored with automatic system described in Section V.B.6.

“YYMMDD” shall be used to identify the monitoring date and represents the following:

- YY = The last two digits of the year of collection
- MM = The month of collection
- DD = The day of collection

For example, following this identification scheme, “D-CNS-131018” represents field monitoring during dredging in the Compliance Nearshore Station, South on October 18, 2013.

9. Field Documentation.

Daily visual observations shall be recorded on a standard observer form throughout dredging activities. Manual water quality monitoring field logs shall include date and time of sampling, tide information, water depth, and observations of water quality including sheen, color, odor, floating particulate, and plume observations. Logs shall also include weather conditions such as

wind speed/direction and cloud cover.

The integrity of each water sample collected shall be maintained from the time of collection to the point of data reporting. Proper record keeping and chain of custody (COC) procedures shall be implemented to allow samples to be traced from collection to final disposition. After collection of water samples, documentation on various logs and forms shall be required to adequately identify and catalog sample information.

10. Water Quality Field Equipment Calibration and Maintenance.

All monitoring equipment shall be calibrated according to manufacturer's specifications and be maintained in optimal condition prior to and during the monitoring project. Logs of calibration procedures shall be retained as a standard operating procedure (SOP). The log shall be maintained for the duration of the project and shall be available for review upon request.

VII. NOTIFICATION REQUIREMENTS

- A. The Applicant must report to the San Diego Water Board any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a written description of the incident and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The San Diego Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours.
- B. The Applicant must conduct a surveillance-level survey for *Caulerpa taxifolia* not more than 90 days before the initiation of construction to determine presence/absence of this species within the immediate vicinity of the project. If *Caulerpa taxifolia* is identified during a survey, or at any other time before, during, or within 120 days following completion of authorized activities, both National Marine Fisheries Service and California Department of Fish and Game must be contacted within 24 hours of first noting the occurrence. In the event *Caulerpa* is detected, all disturbing activity must cease until such time as the infestation has been isolated and treated, or the risk of spread from the disturbing activity is eliminated in accordance with the *Caulerpa* Control Protocol.
- C. This Certification is not transferable in its entirety or in part to any person except after notice to the San Diego Water Board. The Applicant must notify the San Diego Water Board of any change in ownership of the project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has

provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the Certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board **within 10 days of the transfer of ownership**.

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of this Certification in the event that a transferee fails to comply.

- D. The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to** the actual commencement of dredge, fill, and discharge activities.
- E. The submittal of reports and other information under this Certification is required pursuant to California Water Code (CWC) sections 13267 and 13283. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit required information pursuant to CWC section 13268 or 13385.

VIII. REPORTING REQUIREMENTS

- A. **Weekly Reports.** The Applicant shall prepare and submit a weekly receiving water quality monitoring report that contains the results of each weeks receiving water quality monitoring activities. The reports must include:
 - 1. A tabulation of the daily volume (in cubic yards) of dredged material, the locations from which the material was removed and the final disposal location;
 - 2. A summary table of the monitoring results with a comparison to receiving water limitation compliance criteria;
 - 3. An evaluation, interpretation, and tabulation of the visual observations and water quality data including interpretations and conclusions as to whether applicable receiving water limitations were attained at each monitoring station; and
 - 4. A description of all incidents of non-compliance and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The reports covering each weekly period from Sunday through Saturday shall be submitted to the San Diego Water Board by Wednesday of the following week.

- B. Completion Report.** Within 30 days of Project completion, but prior to any authorized use of the replacement pier, the Applicant must submit to the San Diego Water Board a Completion Report containing the following information:
1. The dates for Project initiation and completion.
 2. An evaluation, interpretation and tabulation of Project activities detailing the completion and compliance with all requirements of this Certification and all applicable mitigation measures contained in the Project's certified *Final Environmental Impact Report for the BAE Systems Pier4 Replacement* and the *Final Environmental Impact Report, Shipyard Sediment Site Project, San Diego Bay, California*.
 3. All logs, waste manifests, and related documentation as required by this Certification and each applicable mitigation measure identified in the Final EIRs.
 4. A tabulation of the daily volume (in cubic yards) of dredged material, the locations from which the material was removed and the final disposal location.
 5. The total volume (in cubic yards) of dredged material removed during the project and the total volume (in cubic yards) of material deposited at each final disposal location.
 6. An evaluation, interpretation and tabulation of the visual observations and water quality monitoring conducted.
- C.** The Applicant shall submit both one complete electronic copy (on CD or other appropriate media) and one complete paper copy of all reports required under this Certification including notifications, technical reports, and monitoring reports. All correspondence and documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: ID No. 764828; Certification No. 11C-026. The preferred electronic format for each report submission is PDF format that is Optical Character Recognition (OCR) capable.
- D.** All applications, reports, or information submitted to the San Diego Water Board must be signed and certified as follows:
1. For a corporation, by a responsible corporate officer of at least the level of vice president.
 2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
 3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.

4. A duly authorized representative may sign applications, reports, or information if:
 - a. The authorization is made in writing by a person described above.
 - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
 - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

- E. All applications, reports, or information submitted to the San Diego Water Board must be signed and certified as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

- F. The Applicant must submit reports required under this Certification, or other information required by the San Diego Water Board, to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification; Project No. 11C-026
9174 Sky Park Court, Suite 100
San Diego, California 92123

IX. CEQA FINDINGS

- A. The San Diego Unified Port District is the lead agency under the California Environmental Quality Act (Public Resources Code section 21000, et seq., (CEQA)), and filed a Notice of Determination on August 15, 2012 for an *Environmental Impact Report, State Clearinghouse No. 2012031024 BAE Systems Pier 4 Replacement Project*, August 1, 2012, San Diego Unified Port District, under CEQA Guidelines Title 14, California Code of Regulations. The San Diego Unified Port District has determined the project will not have a significant effect on the environment; however, mitigation measures were made a condition of the Project.
- B. The San Diego Water Board has reviewed the lead agency's Environmental Impact Report and finds that the Project as proposed will not have a significant effect on the environment with conditioned mitigation measures and therefore determines that issuance of this Certification is consistent with the Notice of Determination.

X. PUBLIC NOTIFICATION OF PROJECT APPLICATION

On April 6, 2011, receipt of the Project application was posted on the San Diego Water Board web site to serve as appropriate notification to the public. No public comments were received.

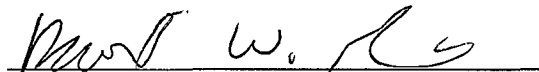
XI. SAN DIEGO WATER BOARD CONTACT PERSON

Jody Ebsen
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123
858-636-3146
jebsen@waterboards.ca.gov

XII. WATER QUALITY CERTIFICATION:

I hereby certify that the proposed discharge from the BAE Systems San Diego Ship Repair - Pier 4 Replacement Project, (Project No. 11C-026) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "*Statewide General Waste Discharge Requirements for Dredged or Fill Discharges That Have Received State Water Quality Certification (General WDRs)*," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the applicants' project description and/or on the attached Project Information Sheet, and (b) on compliance with all applicable requirements of the Water Quality Control Plan for the San Diego Basin Region (9) (Basin Plan).



DAVID W. GIBSON
Executive Officer
San Diego Regional Water Quality Control Board

28 Dec 2012
Date

- Attachments:
1. Project Information
 2. Distribution List
 3. Location Map
 4. Project Site Map
 5. Conceptual Design
 6. Project Site – Before and After
 7. Phased Dredge Areas
 8. Monitoring Station Location Scheme for Dredge Areas

ATTACHMENT 1 PROJECT INFORMATION

- Applicant:** BAE Systems San Diego Ship Repair, Inc.
Sandor Halvax
2205 East Belt Street
Foot of Sampson Street
San Diego, CA 92113
- Project Name:** BAE Systems San Diego Ship Repair –
Pier 4 Replacement Project
- Project Location:** BAE Systems' facilities at 205 East Belt Street
Foot of Sampson Street, San Diego, CA 92113
Latitude: 32°41.404' N Longitude: 117°08625' W
- Type of Project:** Pier and bulkhead replacement with associated dredging.
- Need for Project:** To modernize the ship repair facilities and provide a safe work environment for the repair of large military and commercial ships.
- Project Description:** The Pier 4 Replacement Project (Project) proposes to demolish the existing obsolete Pier 4 and Pier 5 structures, remove five drydock mooring dolphins, construct three new bulkhead sections, relocate shoreline infrastructure, conduct underwater dredging, and construct a new replacement pier and a mooring dolphin. The Project site is located in San Diego Bay at the BAE Systems San Diego Ship Repair, Inc. (Applicant) facility at 2205 East Belt Street in the City of San Diego. Demolition will occur at Piers 4 and 5 and the adjacent shore side structures. Prior to and during Pier 4 construction, it will be necessary to dredge the bay floor around the vicinity of the new pier out to the main bay channel. The post-dredge condition will be -35 feet mean lower low water (MLLW), with between 0 and 1 foot over-depth. Thus, the post-dredge condition is expected to be between -35 feet and -36 feet MLLW. The existing condition ranges from -29 feet to -33 feet MLLW for the majority of the dredge footprint, however, the area adjacent to the shoreline is shallower with depths ranging from 0 to 20 feet located in a narrow band immediately adjacent to the bulkhead shoreline. As indicated in Table 1 below the Project will result in the dredging of approximately 41,908 cubic yards (cy) of bay sediment in three phases. Phase A will include the dredging of 28,700 cy of bay sediment of which 27,500 cy (subphase A1, A2a

(lower) and A3) has been approved for ocean disposal, and 2,023 cy (subphase A2 and A2a (upper)) will be classified for disposal at an appropriate upland landfill disposal facility. Phase B will include the dredging of 8,135 cy of bay sediment, all of which will be classified for disposal at an appropriate for upland landfill disposal facility. Phase C will include the dredging of 4,250 cy of bay sediment that will be classified for disposal at an appropriate for upland landfill disposal facility.

Dredge Area Phase	Dredge Area Subphase	Dredge Depth (feet MLLW)	Disposal Location	Dredge Volume (cy)*
A	A1	existing bottom to -36	Ocean Disposal	26,862
	A2a (lower)	-32 to -36	Ocean Disposal	368
	A3	existing bottom to -36	Ocean Disposal	270
Estimated Total Ocean Disposal Volume				27,500
A	A2	existing bottom to -36	Upland Disposal	1,839
	A2a (upper)	existing bottom to -31	Upland Disposal	184
Phase A2 Total				2,023
B	B1	existing bottom to -36	Upland Disposal	5,949
	B2	existing bottom to -36	Upland Disposal	2006
	B3	existing bottom to -36	Upland Disposal	180
Phase B Total				8,135
C	C1	existing bottom to -36	Upland Disposal	1,250
	C2	existing bottom to -36	Upland Disposal	3,000
Phase C Total				4,250
Estimated Total Upland Disposal Volume				14,408
Project Total Dredged Material Volume				41,908

Subphase B2 and all of Phase C comprise approximately 15% of the dredging area and are within the boundary of the Shipyard Sediment Site remediation footprint identified in Cleanup and Abatement Order (CAO) R9- 2012-0024. This Water Quality Certification No. 11C-026 (Certification) regulates dredging that is necessary to facilitate deep draft ships in the areas adjacent to the new Pier 4 and is not a Certification for the cleanup of the Shipyard Sediment Site remediation footprint. However, this Certification requires that Project dredge activities within the CAO remediation footprint be conducted in accordance with all of the applicable requirements in CAO No. R9 2012 0024 and the mitigation measures identified in the certified Final Environmental Impact Report for the Shipyard Sediment Site.

Excess water from dredged sediments suitable for ocean

disposal will be decanted on the barge and discharged back into San Diego Bay within the confines of the silt curtains. There will be no discharge of decant water from the barge for any dredged sediment from the proposed CAO remediation footprint or other areas where upland disposal of dredged material is proposed. The dredged sediment from these areas will, as necessary, be dewatered, rotated, and thickened with a cement based reagent (pozzolanics) to facilitate drying and to bind the sediments. All runoff water from these areas will be collected and stored in on-shore covered tanks. The on-shore dredged sediment dewatering area will be designed as a no-discharge facility to prevent decanted or excess water from flowing back into San Diego Bay and to prevent infiltration into underlying groundwater. The design will also incorporate features to prevent storm water run-on or run-off from adjacent areas from entering the dewatering area. To support dredged sediment dewatering, the Applicant will utilize an existing industrial wastewater permit (Permit No. 11-0217) issued by the City of San Diego to discharge the recovered water into the City's sewage system in accordance with all permit requirements. If the water does not meet permit requirements, the water will be removed by a licensed waste hauler for treatment and disposal at an authorized off-site location.

Dredged sediments approved for ocean disposal by the U.S Army Corps of Engineers (USACE) and the U. S. Environmental Protection Agency (USEPA) will be loaded into barges and transported to the Ocean Dredged Material Disposal Site (ODMDS) LA-5. LA-5 is a USEPA designated offshore open-water disposal site located on the ridged slope of the continental shelf at a depth of approximately 600 feet, 5.4 nautical miles from Point Loma, off the San Diego Coast. LA.5 is located approximately 13 miles from the Project site. Barges will be equipped with electronic tracking devices to document that dredged sediment releases occur within the LA-5 disposal site boundaries, as specified in the USACE Clean Water Act Section 404 dredging permit.

Dredged sediments not approved for ocean disposal will be classified for disposal at an appropriate upland landfill disposal facility pursuant to Title 23, Chapter 15, and Title 27, Chapter 3 of the California Code of Regulations. Dewatered dredged sediments classified as nonhazardous are currently planned for transportation via truck for disposal at the Otay Sanitary Landfill at 1700 Maxwell Road in Chula Vista,

California which is located approximately 19 miles from the Project site. Dredged sediments classified as hazardous are currently planned for transportation and disposal at the Buttonwillow Hazardous Waste Landfill at 2500 West Lokem Road in Buttonwillow, California which is located approximately 245 miles from the Project site.

Biological resources on the Project site, particularly sedentary or sessile species, will be adversely affected during Project construction as a result of removal of existing structures, dredging, and construction of new structures. Long-term impacts will result from changes in the structural composition of the habitat (net increase in piles, net reduction of bay fill) and the increase in bay surface area coverage (structures covering the surface of the water). Based on current Project design, the Applicant is required to mitigate for approximately 7,969 square feet of increased bay surface area coverage resulting from construction of the new Pier 4.

The Applicant intends to start on-site work on the Project in January, 2013 and complete Project construction in July, 2014.

This Certification incorporates the following Attachments:

1. Project Information
2. Distribution List
3. Location Map
4. Project Site Map
5. Conceptual Design
6. Project Site – Before and After
7. Phased Dredge Areas
8. Monitoring Station Location Scheme for Dredge Areas Designated for Upland Disposal

Federal
Agency/Permit:

U.S. Army Corps of Engineers - §404 Permit, Robert R. Smith

Other Required
Regulatory Approvals:

California Coastal Commission – Coastal Development Permit
California State Lands Commission – Surface Leasing Agreement
San Diego Unified Port District – Project Permit, CEQA,
Coastal Development Permit

California Environmental Quality Act (CEQA) Compliance: *Environmental Impact Report, State Clearinghouse No. 2012031024 BAE Systems Pier 4 Replacement Project, August 1, 2012, San Diego Unified Port District.*

Receiving Water: San Diego Bay

Affected Waters of the United States: San Diego Bay

Dredge Volume: 41,908 cubic yards

Related Projects Implemented/to be Implemented by the Applicant(s):

1. BAE Systems Pride of San Diego, Dry Dock Maintenance Dredging Project. Certification No. 10C-017.
2. Cleanup and Abatement Order No. R9-2012-0024 for the Shipyard Sediment Site San Diego Bay (March 14, 2012).

Compensatory Mitigation: The installation of the new Pier 4 and mooring dolphin will increase bay coverage by 7,969 square feet. To compensate for the increased bay coverage the Applicant must purchase credits at a 1:1 ratio from the San Diego Unified Port District where bay coverage has been reduced in previous projects. The credits come from 6,025 square feet of dock removals at Convair Lagoon in 1995, and 4,800 square feet of dock removals at Silver Gate Yacht Club in 2007. Mitigation for the increase in shade bay coverage shall be finalized and approved prior to any increase in existing shade bay coverage.

A pre-construction eelgrass survey must be completed in accordance with the requirements of the Southern California Eelgrass Mitigation Policy (SCEMP) by a qualified biologist within 60 days prior to initiation of demolition or construction activities at the site. This survey must include both area and density characterization of the beds. A post-construction survey must be performed by a qualified biologist within 30 days following project completion to quantify any unanticipated losses to eelgrass habitat. Impacts must then be determined from a comparison of pre- and post-construction survey results. Impacts to eelgrass, if any, must be mitigated through conformance with the SCEMP, which defines the mitigation ratio and other requirements to achieve mitigation for significant eelgrass impacts. If required following the post-construction survey, the SCEMP defined mitigation must be developed; approved by the San Diego

Water Board, U.S. Army Corps of Engineers and National Marine Fisheries Service; and implemented to offset losses to eelgrass.

In-water construction activities are anticipated to be scheduled to occur outside the California least tern nesting season. Should in-water Project activities be conducted during the least tern breeding season, a qualified Biological Monitor shall be retained by the Applicant to conduct monitoring within 500 feet of construction activities and a silt curtain installed during breeding season. The monitor shall be empowered to delay commencing work, and shall do so if terns are actively foraging (e.g., searching and diving) within the work area. Should adverse impacts to terns occur (e.g., agitation or startling during foraging activities), the Biological Monitor shall be empowered to delay or halt construction, and shall do so until California least terns have left the project site.

Public Notice: On April 6, 2011, receipt of the project application was posted on the San Diego Water Board web site to serve as appropriate notification to the public. No public comments were received.

Fees: Total Project Fee : \$8,883.00
Total Paid: \$ 640.00 (check No. 702207)
\$8,243.00 (check No. 713400)

CIWQS: Regulatory Measure ID: 378272
Place ID: 764828
Party ID: 40631

**ATTACHMENT 2
DISTRIBUTION LIST**

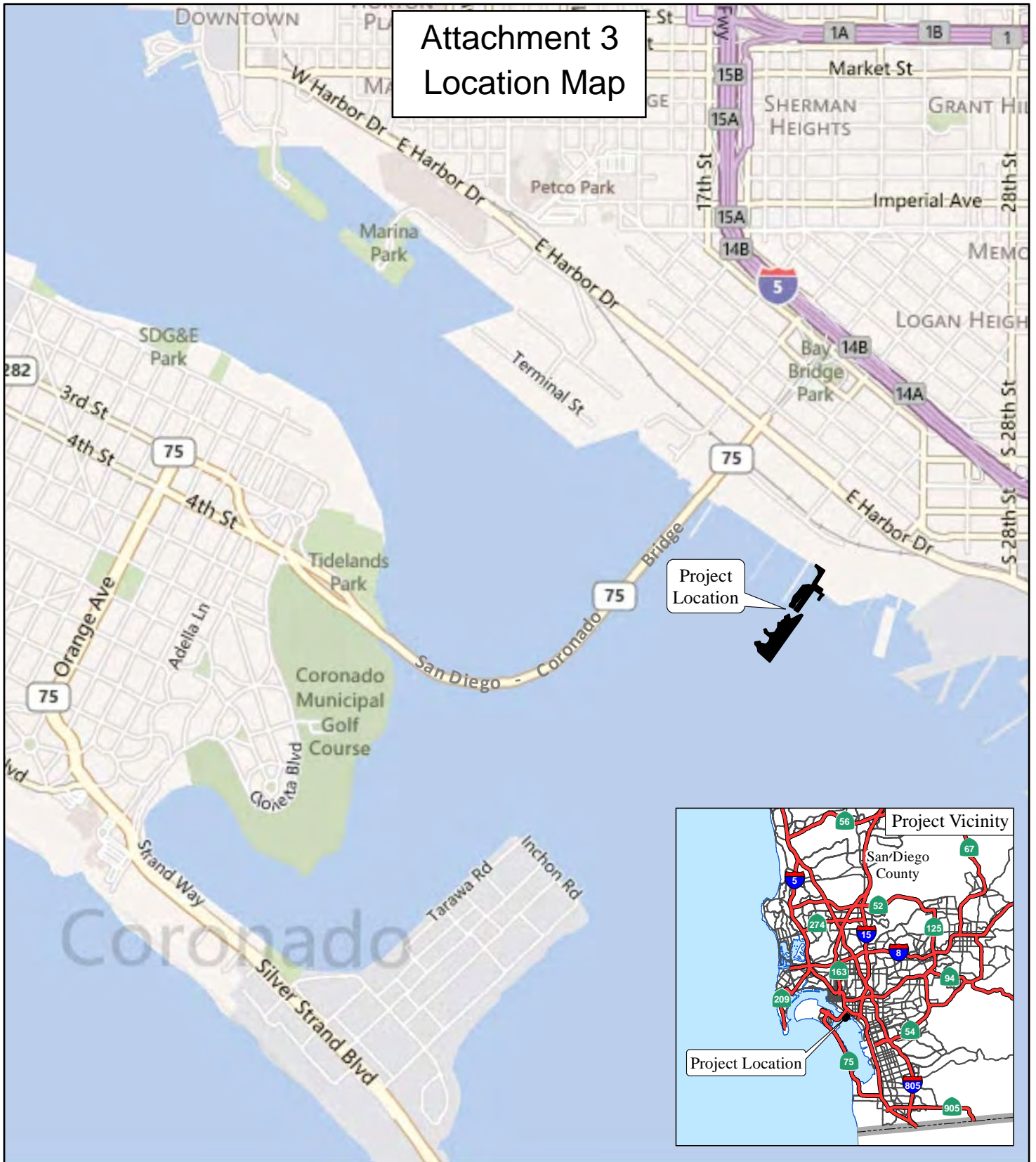
Robert Smith
U.S. Army Corps of Engineers, Regulatory Branch
San Diego Field Office
Robert.R.Smith@usace.army.mil

State Water Resources Control Board, Division of Water Quality
401 Water Quality Certification and Wetlands Unit
Stateboard401@waterboards.ca.gov

U.S. Environmental Protection Agency, Region 9
Wetlands Regulatory Office
R9-WTR8-Mailbox@epa.gov

David Zoutendyk
U.S. Department of the Interior
Fish and Wildlife Service
david_zoutendyk@fws.gov

Attachment 3 Location Map

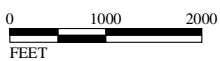


LSA

LEGEND

 Project Location

FIGURE 3.1



SOURCE: Bing Maps (c.2008)

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Pier 4 Replacement Project
Regional Location

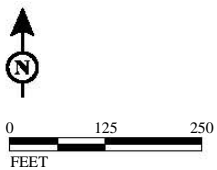
Attachment 4 Project Site Map



LSA

LEGEND

- Demolition Work Area
- Pier 4 and Dolphin After Replacement
- Dredge Area A
- Dredge Area B
- U.S. Pierhead Line
- New Bulkhead
- TCAO BAE Remedial Boundary
- Port District Jurisdiction
- State Lands Commission/
California Coastal Commission
Jurisdiction

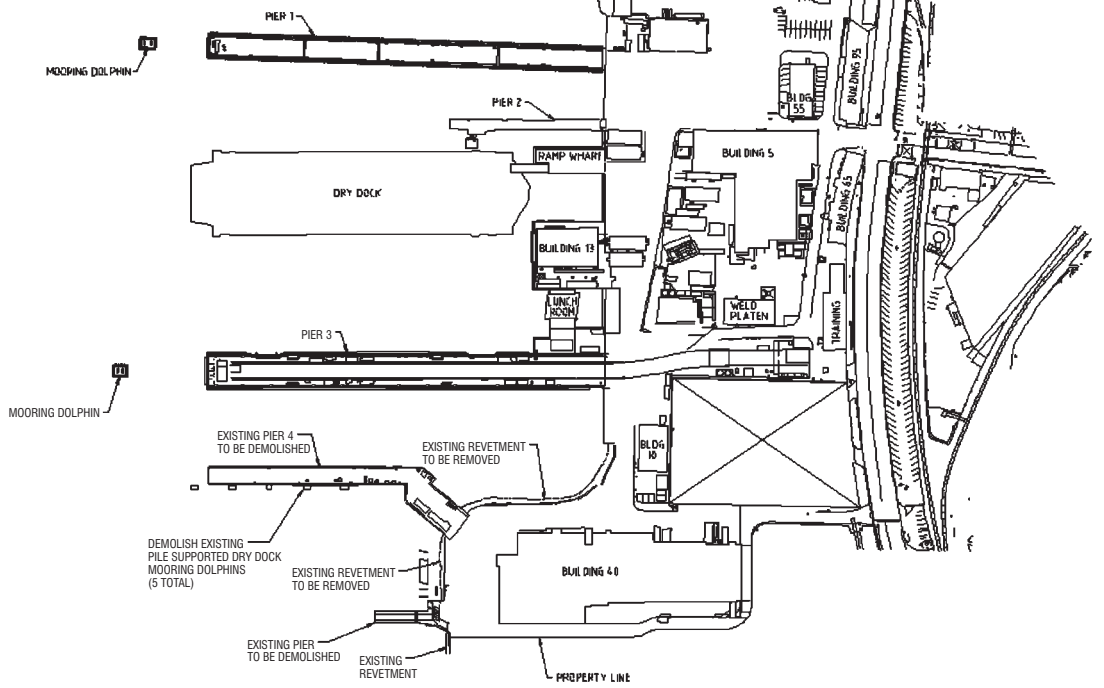


SOURCE: Bing Maps (c.2008)
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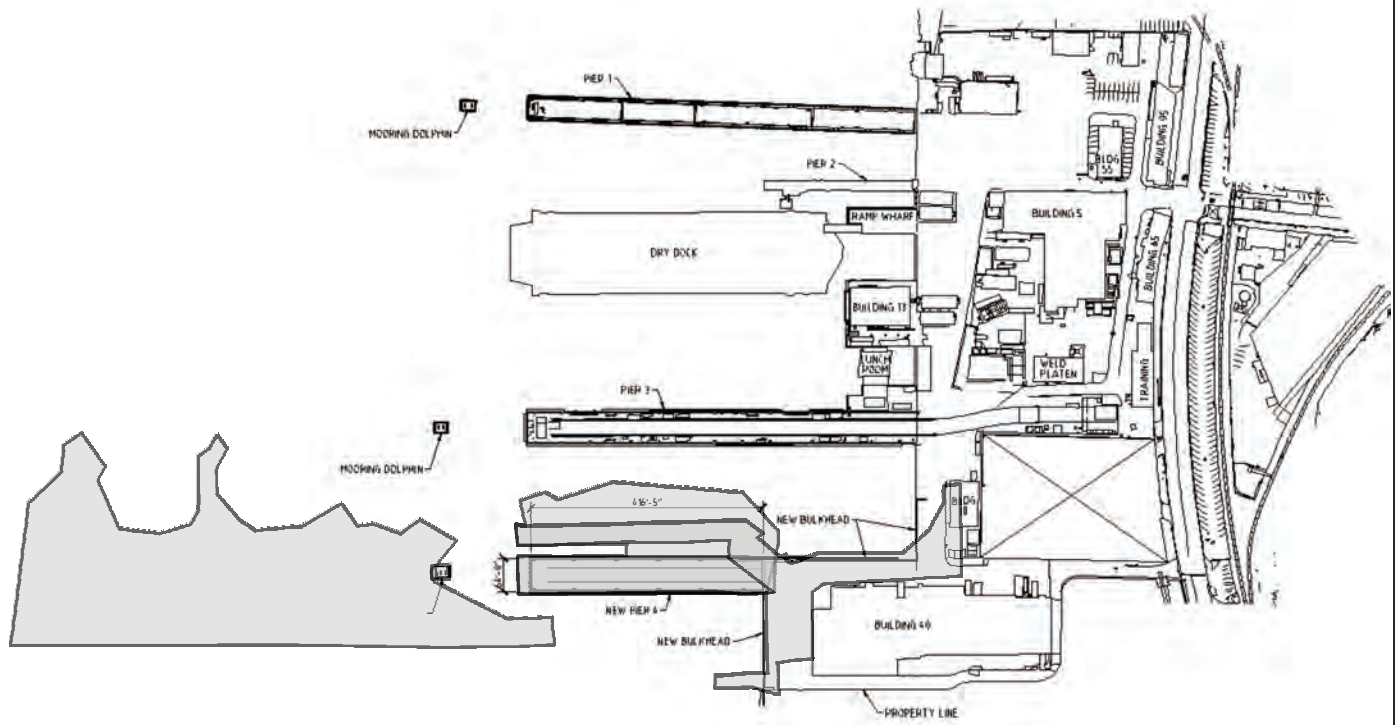
FIGURE 1-7

Pier 4 Replacement Project
Dredging Area
Jurisdictional Overview

Attachment 5 - Conceptual Design



SITE PLAN - EXISTING CONDITIONS



PROPOSED CONCEPTUAL SITE PLAN

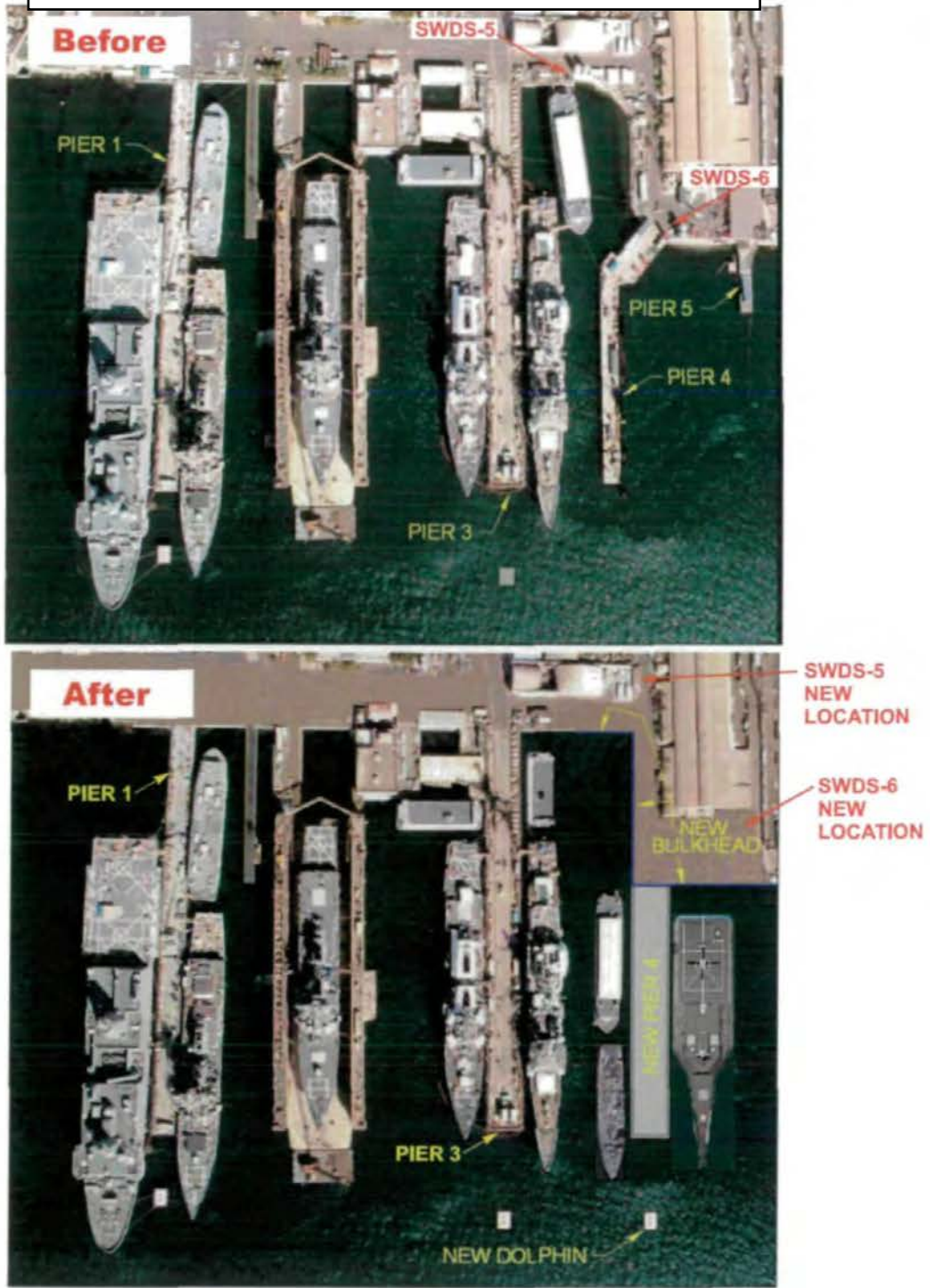
LSA

FIGURE 3.4

■ -Project Boundary



Attachment 6 Project Site - Before and After



LSA

FIGURE 1-5

SWDS = Storm Water Diversion System



*Pier 4 Replacement Project
Project Site Before and After*

SOURCE: BAE Systems, March 2011
 I:\BAE1101\G\Site Before & After.cdr (1/23/12)

Attachment 7 Phased Dredge Areas

It is a violation of law for any person unless he is acting under the direction of a licensed professional engineer to alter this document.
This drawing was prepared at the scale indicated in the title block. Inaccuracies in the stated scale may be introduced when drawings are reproduced by any means. (Use the graphic scale bar to determine the actual scale of this drawing.)

CONSULTANT
cle
CLE ENGINEERING, INC.
41146 Elm Street - Suite C
Murrieta, CA 92562
PHONE 951-696-1830

BAE SYSTEMS, INC. SAN DIEGO SHIP REPAIR PIER 4 REPLACEMENT PROJECT DREDGE PLANS, PHASE A, B, AND C

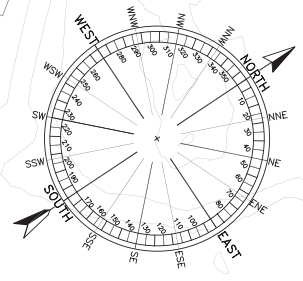
SEAL AND SIGNATURE

REVISIONS	
ADD PHASES A3 AND B3	7/24/2012

SHEET TITLE
SITE-PLAN-PHASE-A

ISSUANCE

SCALE 1"=60'	FIGURE 1
DRAWN BY PF	
CHECKED BY JBR	
PROJECT NO 11015.202	
DATE 2012-07-24	



**PHASE A1
CONTOUR DREDGE
SHADED AREAS TO
-35' MLLW PLUS OD**

**APPROXIMATE
LOCATION OF
NEW MOORING
DOLPHIN**

EXISTING STRUCTURES PER
AERIAL PHOTOGRAMMETRY
SUPPLIED BY BAE SYSTEMS

**PHASE B3
DREDGE TO
-35' MLLW
PLUS OD**

**PHASE B1
DREDGE TO
-35' MLLW
PLUS OD**

**PHASE B2 DREDGE PER
PLAN FROM 6' BELOW
MLLW TO -35' MLLW
PLUS OD AT TOE WITH
3:1 SLOPE**

PROPOSED REPLACEMENT
LOCATION OF PIER 4 (FUTURE)

**PHASE C2
DREDGE
FLAT TO
-42' MLLW
PLUS OD**

**PHASE C1
3:1 SLOPE
TO -28' TO
-42' MLLW
PLUS OD**

**PHASE C1 5' WIDE BENCH
AT 13' THEN 3:1 SLOPE TO
-28' MLLW PLUS OD 50 FT.
FROM BULKHEAD**

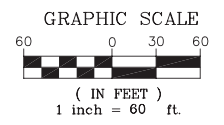
**PHASE A1
CONTOUR DREDGE
SHADED AS TO
-35' MLLW PLUS OD**

**PHASE A2
UPLAND
DISPOSAL TO
-35' MLLW
PLUS OD**

**PHASE A2a
UPLAND DISPOSAL TO -32'
OCEAN DISPOSAL -32' TO
-35' MLLW PLUS OD**

**PHASE A3
INSIDE PIERHEAD
LINE CONTOUR
DREDGE TO -35'
MLLW PLUS OD**

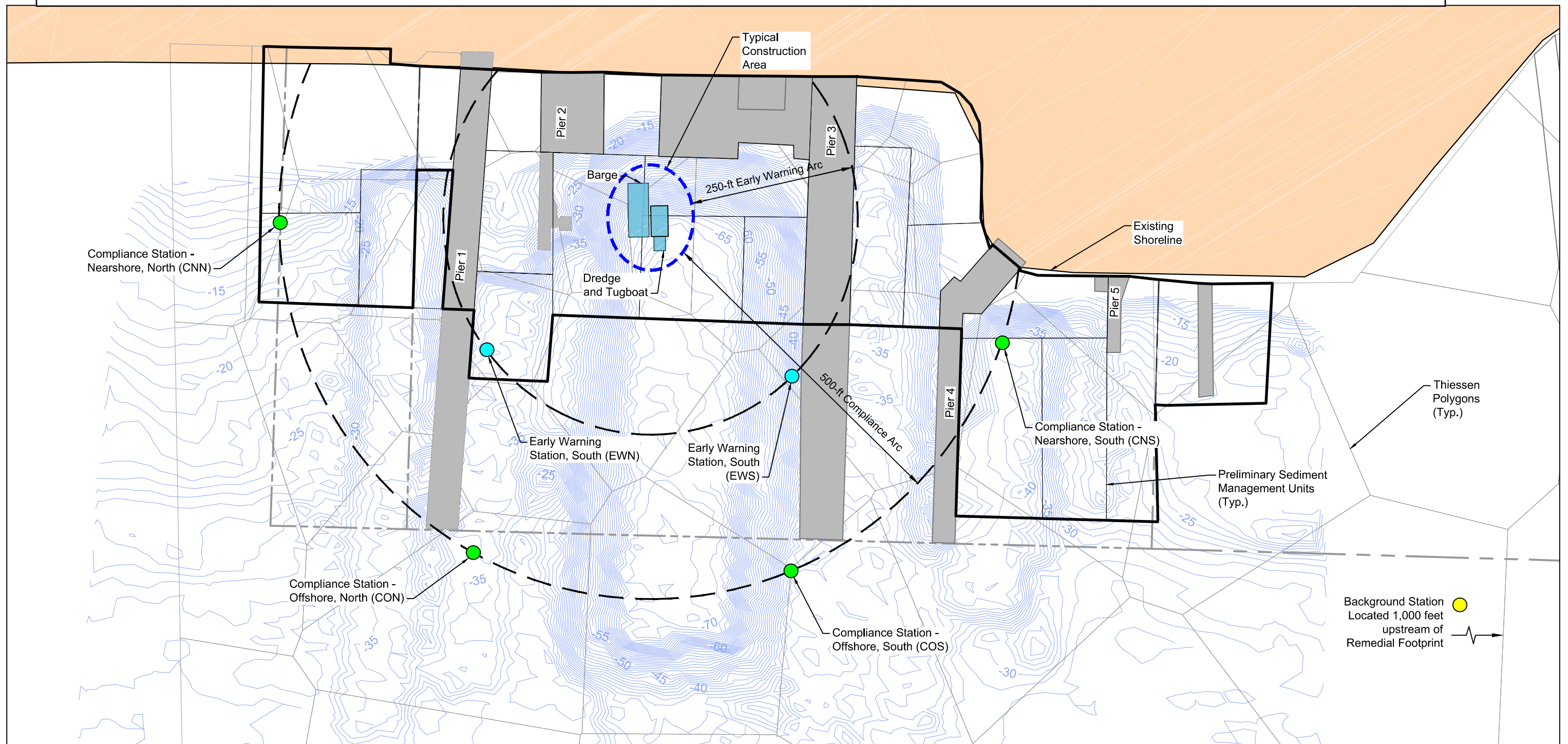
APPROXIMATE
NORTHEAST BOUNDARY
OF SAN DIEGO BAY
MAIN SHIP CHANNEL



- NOTES:
- RESULTS OF HYDROGRAPHY FROM SURVEYS CONDUCTED BY CLE ENGINEERING, INC. OF MURRIETA, CA THROUGH 02/07/2011.
 - SOUNDINGS ARE IN FEET AND TENTHS, AND REFER TO DEPTHS BELOW MEAN LOWER LOW WATER (MLLW). SURVEYS ARE CONDUCTED USING CLASS 1 METHODS PER USACE HYDROGRAPHIC SURVEY MANUAL EM 1110-2-1003 JAN 2002.
 - BENCHMARK IS REFERENCED TO NOAA TIDE STATION "SAN DIEGO" LOCATED AT 10TH AVENUE. COORDINATES ARE BASED ON THE CALIFORNIA STATE PLANE COORDINATE SYSTEM NAD83 ZONE 6.
 - THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF HYDROGRAPHIC SURVEYS PERFORMED ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE SEABED CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS IS NOT GUARANTEED. SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. NO SURVEYS WERE CONDUCTED TO LOCATE PROPERTY LINES, CHANNEL LIMITS, EASEMENTS, UTILITIES, GEOTECHNICAL FEATURES, SHORELINES, STRUCTURES, HABITATS OR ANY OTHER PHYSICAL FEATURES RELATING TO THE PROJECT SITE, NOR DOES CLE WARRANT THE EXISTENCE OR LOCATION OF SAID PHYSICAL FEATURES.
 - POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT, ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF CLE ENGINEERING INC.
 - BACKGROUND AERIAL PHOTOGRAMMETRY WAS PROVIDED BY OTHERS.

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Attachment 8. Monitoring Station Location Scheme for Dredge Areas



SOURCE: Contours from Southwest Marine survey dated January 2012. Sampling locations from Exponent 2003. Shoreline from SAN GIS.
HORIZONTAL DATUM: California State Plane, NAD83, Zone 6, U.S. Feet.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:

- Background Station
- Compliance Station
- Early Warning Station
- Lease Line
- Remedial Footprint
- ~ -20 ~ Existing Bathymetry

Background Station
 Located 1,000 feet
 upstream of
 Remedial Footprint

