

VOPAK TERMINAL LOS ANGELES INC.  
SEVENTH AMENDMENT OF PERMIT NO. 560

THIS SEVENTH AMENDMENT to Permit No. 560 is made and entered into by and between the CITY OF LOS ANGELES, a municipal corporation ("City"), acting by and through its Board of Harbor Commissioners ("Board"), and VOPAK TERMINAL LOS ANGELES INC., formerly known as WILMINGTON LIQUID BULK TERMINAL INC. ("Tenant") as follows:

WHEREAS, on July 9th, 2024, the California State Lands Commission ("CSLC") issued a letter to Tenant identifying the need for severe repairs to the wharf structure at Berths 187-190 based on a review of Tenant's April 2022 Marine Oil Terminal Engineering and Maintenance Standards ("MOTEMS") Audit Report; and

WHEREAS, City and Tenant desire the timely completion of severe repairs (as delineated in Exhibit "G") identified in the April 2022 MOTEMS Audit Report while minimizing business interruption as well as to address the allocation of the costs and responsibilities related to making the severe repairs; and

WHEREAS, City and Tenant agree that the most economical way to address the allocation of costs and responsibilities related to making the severe repairs requires the extension of the Term of Permit No. 560 in order to allow for the extension of a wharfage fee waiver period not to exceed either the specified timeframe or the documented cost of the delineated severe repairs;

WHEREAS, City and Tenant further agree that the ongoing maintenance and repair of the delineated wharf structure shall be the responsibility of the Tenant in accordance with the terms of this Seventh Amendment; and

WHEREAS, Tenant has indicated that Tenant's performance of the repairs would minimize business interruption in the short and long term by managing repairs according to its vessel schedules;

NOW, THEREFORE, Permit No. 560 is hereby amended as follows:

1. Subsection (a) of Section 3 is deleted in its entirety and in lieu thereof is a new subsection (a) which provides as follows:

"(a) The term of this Agreement shall be for a period of Thirty-Eight (38) years, and (for avoidance of doubt) will expire five years from the date of execution of the Seventh Amendment by Executive Director upon authorization of the Board."

2. Rent shall be at the rate provided in accordance with the terms of Permit No. 560 and any previous Amendments thereto.

3. Subsection (b) of Section 4 is deleted in its entirety and in lieu thereof is a new subsection (b) which provides as follows:

“(b) Wharfage.

- (1) All wharfage due at the Premises shall be paid in accordance with the Tariff.
- (2) Beginning on the date of execution of the Seventh Amendment by Executive Director upon authorization of the Board, the City will temporarily waive wharfage payments due under subsection (b)(1) for Berths 187 through 190 only, for costs incurred by the Tenant for repairs listed within subsection 8(a)(13) of this Agreement. This period of temporary waiving of wharfage payments will end upon the earlier of: 1) five years from the date of execution of this Amendment; 2) Tenant reaching full cost recovery of repairs contemplated within subsection 8(a)(13) of this Agreement (including interest as described below); or 3) the amount of waived wharfage payments reaches \$15,109,700 (which amount excludes interest as described below).
- (3) Beginning on the date of execution of the Seventh Amendment by Executive Director, the City will pay Tenant a 5% annual interest rate on verified costs incurred by Tenant for repairs listed within subsection 8(a)(13) of this Agreement up to total repair costs of \$15,109,700. Interest will commence on verified costs incurred to address the scope discussion within subsection 8(a)(13) no earlier than: 1) the date of execution of this Seventh Amendment; and 2) the first day of the month following written approval by the Executive Director of sufficient document evidence (as determined by Executive Director) of costs incurred and submitted by Tenant
- (4) The parties recognize that during the period Tenant is completing the contemplated work under subsection 8(a)(13), numerous Tenant submittals may take place. Further, the parties understand that the Executive Director may approve partial portions of submittals by Tenant if Executive Director determines, as his/her sole discretion, that insufficient document evidence was provided by Tenant to support a specific expense and/or an expense is ineligible for consideration under the terms of the Agreement and this Seventh Amendment.

Costs incurred by Tenant prior to the effective date of this Seventh Amendment to address the scope of work outlined in Section 8(a)(13), are eligible for Tenant to submit for approval and inclusion within the balance amount eligible for the temporary waiving of wharfage credit, however, interest will not commence any earlier than the effective date of this Seventh Amendment.

- (5) Tenant will have eighteen (18) months from the date of execution of this Seventh Amendment to substantially complete the repairs described in subsection 8(a)(13) of this Agreement. Should the described repairs not be substantially complete before the lapse of eighteen months (18) months from the date of execution of this Seventh Amendment by Executive Director, Tenant shall pay to City any wharfage payments temporarily waived pursuant to subsection (b)(2) above less construction expenses (and any accumulated interest) for the subsection 8(a)(13) repairs that have already been paid and City will not waive further wharfage payments. Upon written request and a showing by Tenant of good cause (delay not caused by Tenant) for its failure to comply, Executive Director's approval of an extension of time under this subsection shall not be unreasonably withheld."

4. Subsection (a)(1) of Section 8 is deleted in its entirety and in lieu thereof is a new subsection (a)(1) which provides as follows:

"(1) Maintenance Performed by City at City's Expense (Except as Noted). Except as provided in subsections (a)(3), (a)(4), (a)(7), (a)(8), (a)(12) and (a)(13), City will maintain at its expense the roofs and exteriors of all buildings owned by City and the structural integrity of wharf structures as defined below and buildings owned by City except the Facilities. The 'wharf structure' for purposes of this subsection means the beams, girders, subsurface support slabs, bulkheads and prestressed concrete or wood piling, joists, pile caps and timber decking (except as noted below), and any and all mooring dolphins. The wharf structure does not include the paving, the surface condition of timber decking or the fendering system.

City will maintain and repair at its expense all fire protection sprinkler systems, fire hydrant systems, standpipe systems, fire alarm systems, and other fire protective or extinguishing systems or appliances (portable fire extinguishers and hoses excluded) which have been or may be installed in buildings or structures City owns on the premises except the Facilities. City shall also perform at its expense all electrical substation and switchgear preventative maintenance."

5. Section 8 is amended by adding a new subsection (a)(13) which provides as follows:

“(a)(13) Severe Repair to Wharf Structure. Tenant shall be responsible for the repair of select severe and major defects in the existing wharf at Berths 187 through Berth 190, identified in the April 2022 MOTEMS Audit Report and outlined in the “Repair Data Tables” on sheets 10-12 of the Berths 187-190 Emergency Repairs document attached herein as Exhibit “G”. The attached document includes expenses arising from or incidental to such repairs (e.g. asbestos abatement). Tenant alone shall control the repairs made pursuant to this subsection without unreasonable interference from the Port. Permits issued by the City related to the severe repairs described in this subsection shall not contain any unreasonable conditions or be unreasonably delayed or withheld. As of the date of execution of this Amendment by Executive Director upon authorization of the Board, Tenant shall be solely responsible for all maintenance and repair of the specific wharf structure areas directly affected by the repairs made pursuant to this subsection through the term of this Agreement.”

6. The effective date of this Seventh Amendment shall be upon execution by the Executive Director and Secretary of City’s Board of Harbor Commissioners after approval of the City Council of the Order approving this Seventh Amendment.

7. Except as amended herein, all remaining terms and conditions of the Agreement shall remain the same.

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(Signature page follows)

IN WITNESS WHEREOF, the parties hereto have executed this Seventh Amendment to the Agreement on the date to the left of their signatures.

THE CITY OF LOS ANGELES, by its  
Board of Harbor Commissioners

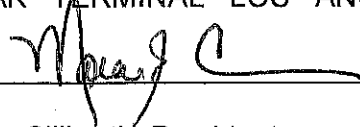
Dated: \_\_\_\_\_

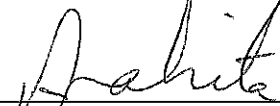
By \_\_\_\_\_  
Executive Director

Attest \_\_\_\_\_  
Board Secretary

VOPAK TERMINAL LOS ANGELES, INC.

Dated: May 7, 2026

By:   
\_\_\_\_\_  
Maria Ciliberti President  
(Print/type name and title)

By:   
\_\_\_\_\_  
Anahita Nariman Secretary & VP Legal  
(Print/type name and title)

APPROVED AS TO FORM AND LEGALITY

May 11, 2026  
HYDEE FELDSTEIN SOTO, City Attorney  
STEVEN Y. OTERA, General Counsel

By   
DEBORAH DORNY, Deputy

REPAIR DATA TABLE - TIMBER FENDER PILE - BERTH 187-188							
CONDITION RATING	ID	BENT	ROW	PILE TYPE	DEFECT TYPE	REPAIR METHOD	ESTIMATED QUANTITY
SEVERE	TFF_ER_01	12.5'	FP-40	TMB	BROKEN	REPLACEMENT	1 EA
SEVERE	TFF_ER_02	12.5'	FP-41	TMB	MB 100% SECT LOSS	REPLACEMENT	1 EA
SEVERE	TFF_ER_03	19.5'	FP-68	TMB	MB 30% SECT LOSS	WRAP	1 EA
SEVERE	TFF_ER_04	19.5'	FP-68	TMB	MB 40% SECT LOSS	REPLACEMENT	1 EA
SEVERE	TFF_ER_05	26.5'	FP-87	TMB	MB 100% SECT LOSS	REPLACEMENT	1 EA
SEVERE	TFF_ER_06	26.5'	FP-87	TMB	BROKEN	REPLACEMENT	1 EA
SEVERE	TFF_ER_07	26.5'	FP-88	TMB	MISSING	REPLACEMENT	1 EA
SEVERE	TFF_ER_08	26.5'	FP-81	TMB	MISSING	REPLACEMENT	1 EA
SEVERE	TFF_ER_09	33.4'	FP-100	TMB	MB 100% SECT LOSS	REPLACEMENT	1 EA
SEVERE	TFF_ER_10	33.4'	FP-103	TMB	MB 100% SECT LOSS	REPLACEMENT	1 EA
SEVERE	TFF_ER_11	33.4'	FP-108	TMB	MB 100% SECT LOSS	REPLACEMENT	1 EA
SEVERE	TFF_ER_12	33.4'	FP-113	TMB	BROKEN	REPLACEMENT	1 EA
SEVERE	TFF_ER_13	42.6'	FP-14	TMB	MB 100% SECT LOSS	REPLACEMENT	1 EA
SEVERE	TFF_ER_14	48.5'	FP-46	TMB	MB 30% SECT LOSS	REPLACEMENT	1 EA

\* INDICATES THE LOCATION OF FIRST PILE IN A PILE CLUSTER

REPAIR DATA TABLE - TIMBER FENDER WALERS - BERTH 187-188							
CONDITION RATING	ID	BENT	ROW	WALER TYPE	DEFECT TYPE	REPAIR METHOD	ESTIMATED QUANTITY
SEVERE	TFW_ER_01	5.97.5	-	TMB	BROKEN AND DETACHED	REPLACEMENT	1 EA
SEVERE	TFW_ER_02	44.46	-	TMB	BROKEN AND DETACHED	REPLACEMENT	1 EA

REPAIR DATA TABLE - TIMBER FENDER CAMELS - BERTH 187-188							
CONDITION RATING	ID	BENT	ROW	CAMEL TYPE	DEFECT TYPE	REPAIR METHOD	ESTIMATED QUANTITY
MAJOR	TFC_ER_01	30.4, 32.1	-	TMB	SECTION LOSS > 25%	REPLACEMENT	1 EA

REPAIR DATA TABLE - TIMBER FENDER ANCHORS - BERTH 187-188							
CONDITION RATING	ID	BENT	ROW	COMPO. TYPE	DEFECT TYPE	REPAIR METHOD	ESTIMATED QUANTITY
SEVERE	TFA_ER_01	6.5	FP-15	WALER	BROKEN AND DETACHED	REPLACEMENT	1 EA
SEVERE	TFA_ER_02	7	FP-19	WALER	BROKEN AND DETACHED	REPLACEMENT	1 EA
SEVERE	TFA_ER_03	7.5	FP-23	PILE	BROKEN AND DETACHED	REPLACEMENT	1 EA
SEVERE	TFA_ER_04	34.2	FP-108	WALER	BROKEN AND DETACHED	REPLACEMENT	1 EA
SEVERE	TFA_ER_05	34.2	FP-110	CYLINDER	BROKEN AND DETACHED	REPLACEMENT	1 EA
SEVERE	TFA_ER_06	32.5	FP-114	CHAIN	BROKEN AND DETACHED	REPLACEMENT	1 EA
SEVERE	TFA_ER_07	44.4	FP-147	PILE	BROKEN AND DETACHED	REPLACEMENT	1 EA

REPAIR DATA TABLE - BD 1 & 2 - BERTH 187-188							
CONDITION RATING	ID	TYPE	ROW	LOCATION	DEFECT TYPE	REPAIR METHOD	ESTIMATED QUANTITY
SEVERE	BD_ER_01	PANEL	BD1	UI PANEL	BRK	REPLACEMENT	1 EA
MAJOR	BD_ER_02	PANEL	BD1	UR PANEL	CCS/COS	SHOTCRETE	1 EA
MAJOR	BD_ER_03	STEEL TRUSS	BD1	NORTHSIDE DIAGONAL STRUT, 4' FROM WHARF	IMPACT	REPLACEMENT	1 EA
SEVERE	BD_ER_04	STEEL CAP	BD1	ENTIRE LENGTH OF CAP PLATE	CCR	REPLACEMENT	1 EA
SEVERE	BD_ER_05	PANEL	BD2	UR PANEL	MECH	SHOTCRETE	1 EA
MAJOR	BD_ER_06	STEEL TRUSS	BD2	NORTHSIDE DIAGONAL STRUT, 4' FROM WHARF	IMPACT	REPLACEMENT	1 EA
MAJOR	BD_ER_07	STEEL TRUSS	BD2	SOUTHSIDE DIAGONAL STRUT, 5' FROM WHARF AND 3' FROM BD WALE	IMPACT	REPLACEMENT	1 EA

REPAIR DATA TABLE - CONCRETE PILES (UNDER WATER) - BERTH 187-188							
CONDITION RATING	ID	BENT	ROW	PILE TYPE	REPAIR DIMENSION H (ft)	DEFECT TYPE	REPAIR METHOD
MAJOR	CP_ER_01	8	C	CONC	3.0	CCS	JACKET
MAJOR	CP_ER_02	10	B	CONC	4.0	3" HDSS	JACKET

REPAIR DATA TABLE - CONCRETE PILES (ABOVE WATER) - BERTH 187-188							
CONDITION RATING	ID	BENT	ROW	PILE TYPE	REPAIR DIMENSION H (ft)	DEFECT TYPE	REPAIR METHOD
SEVERE	OP_ER_03	12	A	CONC	6	BRK	FULL PILE
MAJOR	OP_ER_04	20	A	CONC	6	VCC CCS	JACKET
MAJOR	OP_ER_06	22	D	CONC	5.5	GC	JACKET
MAJOR	OP_ER_07	29	A	CONC	6.5	VCC CCS	JACKET
MAJOR	OP_ER_08	32	A	CONC	5.5	VCC CCS	JACKET
MAJOR	OP_ER_09	34	G	CONC	7	VCC CCS	JACKET
MAJOR	OP_ER_10	38	B	CONC	5.5	CC CCS	JACKET
MAJOR	OP_ER_11	37	B	CONC	4	CC CCS, CCS	JACKET
MAJOR	OP_ER_12	43	B	CONC	7	CC, HW, 3" CCS	JACKET
MAJOR	OP_ER_13	45	D	CONC	6	VCC CCS	JACKET
MAJOR	OP_ER_14	47	B	CONC	4	CCS	JACKET
MAJOR	OP_ER_16	46	B	CONC	5	VCC CCS	JACKET
MAJOR	OP_ER_17	56	G	CONC	6	VCC CCS	JACKET
MAJOR	OP_ER_18	64	C	CONC	7	VCC CCS	JACKET
MAJOR	OP_ER_19	65	G	CONC	5.5	CCS	JACKET
MAJOR	OP_ER_20	68	C	CONC	5.5	CC CCS	JACKET
MAJOR	OP_ER_21	66	E	CONC	6	VCC CCS	JACKET
MAJOR	OP_ER_22	66	G	CONC	6	VCC CCS	JACKET
MAJOR	OP_ER_23	66	A	CONC	6	CC CCS	JACKET
MAJOR	OP_ER_24	68	F	CONC	6	HCC CCS	JACKET
MAJOR	OP_ER_25	69	A	CONC	5.5	CC CCS	JACKET
MAJOR	OP_ER_26	69	G	CONC	5.5	CC CCS	JACKET
MAJOR	OP_ER_27	70	A	CONC	9	CC CCS	JACKET
MAJOR	OP_ER_28	70	B	CONC	6	CC CCS	JACKET

REPAIR DATA TABLE - CONCRETE FRONT MARGINAL BEAMS - BERTH 187-188									
CONDITION RATING	ID	LOCATION	DEFECT TYPE	REPAIR LENGTH (LF)	REPAIR WIDTH (LF)	REPAIR DEPTH (LF)	REPAIR VOLUME (CY)	REPAIR METHOD	REPAIR BEFORE (AS REQUIRED)
MAJOR	FMB_ER_01	FMB BENT 8-10	CCS/CCS	16.0	3.0	0.3	16.0	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_02	FMB / BENT 16	CCS/CCS	13.0	2.8	0.5	18.4	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_03	21.3	MESH SPALL / CCS	1.3	1.3	0.5	0.8	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_04	25.5-27.7	CCS	5.0	2.0	0.5	5.0	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_05	FMB / BENT 28	CCS	1.8	1.3	0.1	0.2	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_06	FMB / BENT 28.4	CCS/CCS	7.0	3.0	0.3	10.5	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_07	FMB / BENT 36.4	CCS/CCS	5.0	3.0	0.6	7.5	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_08	38.5	CCS / CC	6.0	2.0	0.5	6.0	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_09	40.5	CCS	5.0	2.0	0.5	6.0	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_10	FMB / BENT 44.5	CCS/CCS	9.0	2.0	0.5	9.0	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_11	FMB / BENT 48.25	CCS/CCS	8.0	2.5	0.5	10.0	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_12	FMB / BENT 48.5	CCS/CCS	8.0	2.5	0.5	11.3	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_13	FMB / BENT 48.7	CCS/CCS	16.0	3.0	0.4	28.1	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_14	FMB / BENT 56.5	CCS/CCS	11.0	4.0	0.5	22.0	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_15	FMB / BENT 64.5	CCS/CCS	7.0	2.5	0.3	8.8	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_16	FMB / BENT 68.5	CCS	7.0	2.3	0.5	8.2	SHOTCRETE	SHOTCRETE (AS REQUIRED)
MAJOR	FMB_ER_17	FMB / BENT 72.5	CCS/CCS	14.0	2.5	0.5	17.5	SHOTCRETE	SHOTCRETE (AS REQUIRED)

NOTE: "INJECTION BEFORE SHOTCRETE" SHALL BE ASSESSED BY THE CONTRACTOR ON A CASE-BY-CASE BASIS. SHOTCRETE REPAIR MAY NOT REQUIRE GROUT INJECTION.

100% DESIGN SUBMITTAL  
JANUARY, 2026  
NOT FOR CONSTRUCTION

2	01/28/2025	REV	TR	100% CS&C DESIGN SUBMITTAL
1	12/29/2024	YM	TR	100% DESIGN SUBMITTAL
ISSUE	DATE	BY	CHKD	DESCRIPTION

**Vopak** **moffatt & nichol**

TITLE: REPAIR QUANTITY SHEETS 1

ENGINEER: TR DATE: JAN 2025 SHEET: 10 OF: 43  
DRAWING: SR-01  
CHECKED: TR JAN 2025



- NOTES:**
- FOR DETAILED DEFECTS LABELS IDENTIFICATION IN PLAN, SEE SR-21 TO SR-37 SHEETS.
  - FOR REINFORCED CONCRETE JACKET DETAILS, SEE SR-45.
  - FOR PILE 12A REPLACEMENT CONCRETE PLACEMENT DETAILS, SEE SR-61 & SR-62.
  - FOR SHOTCRETE CONCRETE PLACEMENT DETAILS, SEE SR-42.
  - FOR EPOXY INJECTION REPAIR OF OVERSTRESSING CRACK DETAILS, SEE SR-43.
  - FOR TIMBER PILE WRAPPING DETAIL, SEE SR-48.
  - FOR TIMBER PILE SPLICE REPAIR DETAIL, SEE SR-47.



File: C:\EP\6668-121\CADD\Active\_19-197-190\_meters\_egrades\_emergency\_repair\666819 SR-03\_Plotcut - 1/29/2025 12:44 p.m. by DDM\GJLZJ, EDWHS. Saved: 1/27/2025 10:52 a.m. by EDWHS\MOLEZ

REPAIR DATA TABLE - TIMBER DECK - BERTH 189-190							
CONDITION RATING	ID	BENT	ROW	COMPONENT	DEFECT TYPE	REPAIR METHOD	ESTIMATED QUANTITY
SEVERE	TD_ER_01	77	G. CA	PC-P CNXN	COR	REPLACEMENT	1 EA
SEVERE	TD_ER_02	77	A,2	PC-P CNXN	COR	REPLACEMENT	1 EA
MAJOR	TD_ER_03	81	LP5.25	CORBEL & PC	ROT	REPLACEMENT	1 EA
SEVERE	TD_ER_04	81	C. CA	PC-P CNXN	COR	REPLACEMENT	1 EA
SEVERE	TD_ER_05	86	A	PC-P CNXN	COR	REPLACEMENT	1 EA
MAJOR	TD_ER_06	86	A	CORBEL & PC	SPL	REPLACEMENT	1 EA
SEVERE	TD_ER_07	85	C. CA	PC-P CNXN	COR	REPLACEMENT	1 EA
SEVERE	TD_ER_08	86	F	FW CNXN	MSG	REPLACEMENT	1 EA
MAJOR	TD_ER_09	87	A	CORBEL	SPL	REPLACEMENT	1 EA
SEVERE	TD_ER_10	88	A	PC-P CNXN	COR	REPLACEMENT	1 EA
SEVERE	TD_ER_11	89	A,H	BR	MSG	REPLACEMENT	1 EA
MAJOR	TD_ER_12	93	A	CORBEL	SPL, RGT	REPLACEMENT	1 EA
SEVERE	TD_ER_13	93	CA	PC-P CNXN	COR	REPLACEMENT	1 EA
MAJOR	TD_ER_14	95	A	CORBEL	SPL	REPLACEMENT	1 EA
SEVERE	TD_ER_15	96	A	PC-P CNXN	COR	REPLACEMENT	1 EA
SEVERE	TD_ER_16	97	A	PC-P CNXN	COR	REPLACEMENT	1 EA
SEVERE	TD_ER_17	97	G. CA	PC-P CNXN	COR	REPLACEMENT	1 EA
SEVERE	TD_ER_18	101	A	PC-P CNXN	COR	REPLACEMENT	1 EA
MAJOR	TD_ER_19	101	A	PC	SPL	REPLACEMENT	1 EA
SEVERE	TD_ER_20	101	G. CA	PC-P CNXN	COR	REPLACEMENT	1 EA

REPAIR DATA TABLE - CONCRETE DECK - BERTH 189-190										
COND. RATING	ID	BENT	ROW	ELEMENT TYPE	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (ft3)	DEFECT TYPE	REPAIR METHOD
MAJOR	CD_ER_01	74-75	J,1-K	DK	17.0	5.0	0.2	17.7	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_02	75-76	J,1-J,5	DK	17.0	3.0	0.2	8.5	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_03	75-76	K,7-L	DK	16.0	6.0	0.3	24.0	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_04	76-78.3	H-RMB	DK	4.5	26.0	0.2	19.5	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_05	76-79	J-K,7	DK	15.0	13.0	0.2	32.5	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_06	79-80	K,4-RMB	DK	15.0	8.0	0.2	20.0	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_07	80-80.3	K,4-L	DK	5.0	4.0	0.2	3.3	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_08	80-80.6	L-RMB	DK	9.0	5.0	0.2	7.5	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_09	81.2-81.8	L-RMB	DK	11.0	4.0	0.2	7.3	OCS	SHOTCRETE
MAJOR	CD_ER_10	82-82.6	H-H,4	DK	9.0	2.5	0.3	6.8	OCS	SHOTCRETE
MAJOR	CD_ER_11	86,1-86.8	H,2	DK	13.0	2.5	0.3	8.1	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_12	90.3	H,5	DK	9.0	3.5	0.2	6.3	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_13	96.4	I,4-L	DK	6.0	11.0	0.2	11.0	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_14	98-99	K,7-RMB	DK	14.0	7.0	0.3	24.6	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_15	109-110	L,5	DK	15.0	7.0	0.2	17.5	OCS/OCS	SHOTCRETE
MAJOR	CD_ER_16	110.3-110.8	L,2-RMB	DK	11.0	19.0	0.3	52.3	OCS/OCS	SHOTCRETE

REPAIR DATA TABLE - TIMBER PILES (UNDER WATER) - BERTH 189-190							
CONDITION RATING	ID	BENT	ROW	PILE TYPE	REPAIR DIMENSION H (ft)	DEFECT TYPE	REPAIR METHOD
MAJOR	TP_ER_04	92	B	TMB	43.5	30% SL	SPLICE
MAJOR	TP_ER_05	97	A	TMB	46.0	46% SL	SPLICE

REPAIR DATA TABLE - CONCRETE PILES - BERTH 189-190							
CONDITION RATING	ID	BENT	ROW	PILE TYPE	REPAIR DIMENSION H (ft)	DEFECT TYPE	REPAIR METHOD
MAJOR	CP_ER_29	73.	H	CONC	8.0	OCS	JACKET
MAJOR	CP_ER_30	86	L	CONC	7.0	CC, HOSC W2, CCS	JACKET
MAJOR	CP_ER_31	87	J	CONC	6.0	CCS	JACKET
MAJOR	CP_ER_32	92	L	CONC	6.0	CCS	JACKET
MAJOR	CP_ER_33	93	H	CONC	4.5	CC, CCS/OCS	JACKET
MAJOR	CP_ER_34	93	I	CONC	8.0	CC, OCS/OCS	JACKET
MAJOR	CP_ER_35	98	K	CONC	8.5	VCC, CCS	JACKET

REPAIR DATA TABLE - BREASTING DOLPHIN 3 & 4 - BERTH 189-190							
CONDITION RATING	ID	LOCATION	ELEMENT TYPE	DEFECT TYPE	REPAIR METHOD	ESTIMATED QUANTITY	
MAJOR	BD_ER_08	BD3, NORTHMOST DIAGONAL STRUT, NORTH SIDE, MIDPOINT	STRUT	IMPACT	REPLACEMENT	1 EA	
SEVERE	BD_ER_09	BD3, NORTHMOST DIAGONAL STRUT, ATWEAR WALE	STRUT	COR	REPLACEMENT	1 EA	
SEVERE	BD_ER_10	BD3, NORTHTRANSVERSE STRUT, 0'-4" FROM WALE	STRUT	COR	REPLACEMENT	1 EA	
SEVERE	BD_ER_11	BD3, CENTER TRANSVERSE STRUT, 0'-4" FROM WALE	STRUT	COR	REPLACEMENT	1 EA	
SEVERE	BD_ER_12	BD3, SOUTHMOST DIAGONAL STRUT, MID-POINT	STRUT	COR	REPLACEMENT	1 EA	
SEVERE	BD_ER_13	BD3, FILLET PIPES WELDED STRUTS-TO-WALE	STRUT	COR	REPLACEMENT	1 EA	
SEVERE	BD_ER_14	BD4, NORTHMOST DIAGONAL STRUT, MIDPOINT	STRUT	IMPACT	REPLACEMENT	1 EA	
SEVERE	BD_ER_15	BD3 UL PANEL	PANEL	MECH	SHOTCRETE	1 EA	
MAJOR	BD_ER_16	BD3 UL PANEL	PANEL	OVERSTRESSING SPALL	SHOTCRETE	1 EA	
SEVERE	BD_ER_17	BD3 UL PANEL	PANEL	OCS/OCS	SHOTCRETE	1 EA	
SEVERE	BD_ER_18	BD3 UR PANEL	PANEL	OCS/OCS	SHOTCRETE	1 EA	

REPAIR DATA TABLE - LOADING PLATFORM - TIMBER FENDER PILE - BERTH 189-190							
CONDITION RATING	ID	BENT	ROW	PILE TYPE	DEFECT TYPE	REPAIR METHOD	ESTIMATED QUANTITY
SEVERE	TFF_ER_15	77	FP 01	TMB	BRK/MISSING	REPLACEMENT	1 EA
SEVERE	TFF_ER_16	77	FP 02	TMB	TW	REPLACEMENT	1 EA
SEVERE	TFF_ER_17	77.2	FP 03	TMB	BRK/MISSING	REPLACEMENT	1 EA
SEVERE	TFF_ER_18	78.8	FP 07	TMB	BRK/MISSING	REPLACEMENT	1 EA
SEVERE	TFF_ER_19	79.7	FP 09	TMB	BRK/MISSING	REPLACEMENT	1 EA
SEVERE	TFF_ER_20	80.9	FP 15	TMB	BRK/MISSING	REPLACEMENT	1 EA


REPAIR DATA TABLE - CONCRETE PILE CAPS - BERTH 189-190										
CONDITION RATING	ID	BENT	ROW	ELEMENT TYPE	LENGTH (LF)	WIDTH (LF)	DEPTH (LF)	VOLUME (CF)	DEFECT TYPE	REPAIR METHOD
MAJOR	PC_ER_120	73	H,1-RMB	PC	2.0	2.5	0.4	2.1	OCS	SHOTCRETE
MAJOR	PC_ER_121	77	K,8-RMB	PC	2.0	2.0	0.1	2.0	CCS	SHOTCRETE
MAJOR	PC_ER_122	81	L-RMB	PC	5.0	2.0	0.3	2.5	OCS/OCS	SHOTCRETE
MAJOR	PC_ER_123	81	L-RMB	PC	4.0	1.8	0.1	3.7	CCS	SHOTCRETE
MAJOR	PC_ER_124	85	K,9-RMB	PC	5.5	5.0	0.3	8.9	OCS/OCS	SHOTCRETE
MAJOR	PC_ER_125	87	K,9-L,3	PC	5.0	1.8	0.3	2.3	OCS/OCS	SHOTCRETE
MAJOR	PC_ER_126	88	K,9	PC	2.5	1.8	0.3	1.1	OCS/OCS	SHOTCRETE
MAJOR	PC_ER_127	88	K,9-RMB	PC	6.0	1.8	0.3	2.8	OCS/OCS	SHOTCRETE
MAJOR	PC_ER_128	93	L,8	PC	4.5	2.0	0.2	1.5	OCS/OCS	SHOTCRETE
MAJOR	PC_ER_129	94	K,8-RMB	PC	7.0	2.5	0.3	4.4	OCS	SHOTCRETE
MAJOR	PC_ER_130	94	L,9	PC	2.5	3.0	0.3	1.9	OCS/OCS	SHOTCRETE
MAJOR	PC_ER_131	97	K,1-RMB	PC	11.0	2.5	0.3	6.8	OCS/OCS	SHOTCRETE
MAJOR	PC_ER_132	101	K,5-L,2	PC	7.5	2.5	0.3	4.7	OCS/OCS	SHOTCRETE
MAJOR	PC_ER_133	101	K,9-RMB	PC	6.0	3.0	0.3	4.5	OCS/OCS	SHOTCRETE

REPAIR DATA TABLE - TIMBER PILES (ABOVE WATER) - BERTH 189-190							
CONDITION RATING	ID	BENT	ROW	PILE TYPE	REPAIR DIMENSION H (ft)	DEFECT TYPE	REPAIR METHOD
SEVERE	TP_ER_01	85	G	TMB	28.0	>30% SL	SPLICE
MAJOR	TP_ER_02	86	F	TMB	31.0	>30% SL	SPLICE
MAJOR	TP_ER_03	89	A	TMB	41.0	>25% SL	SPLICE

BERTHS 187-190 EMERGENCY REPAIR SUMMARY TABLE						
BERTH	COMPONENT	REPAIR METHOD	ESTIMATED QUANTITY	UNIT	SHEET	
187-188	TIMBER FENDER PILE	REPLACEMENT OR POST WRAP	13	EA	SR-47	
	TIMBER FENDER WALER	REPLACEMENT	2	EA	REFERENCE DRAWINGS	
	TIMBER FENDER CAMEL	REPLACEMENT	1	EA	REFERENCE DRAWINGS	
	TIMBER FENDER ANCHOR	REPLACEMENT	7	EA	REFERENCE DRAWINGS	
	BD 1 & 2	TUBE BRACING	REPLACEMENT	3	EA	REFERENCE DRAWINGS
		STEEL HARDWARE	REPLACEMENT	1	EA	REFERENCE DRAWINGS
		PANEL	REPLACEMENT	2	EA	REFERENCE DRAWINGS
	CONCRETE PILE (UW)	JACKET	7	FT	SR-44, SR-45	
	CONCRETE PILE (AW)	JACKET	148.0	FT	SR-44, SR-45	
		FULL PILE	1	EA	SR-51, SR-52	
CONCRETE FRONT MARGINAL BEAMS	SHOTCRETE (INJECTION BEFORE AS REQUIRED)	182.2	CF	SR-41, SR-42		
	SHOTCRETE	77.0	LF	SR-41, SR-42, SR-44		
CONCRETE PILE CAP	SHOTCRETE (INJECTION BEFORE AS REQUIRED)	390.8	CF	SR-41, SR-42		
	SHOTCRETE	103.3	LF	SR-41, SR-42, SR-44		
189-190	TIMBER FENDER PILE	SPLICE	6	EA	SR-47	
	BD 3 & 4	TUBE BRACING	REPLACEMENT	7	EA	REFERENCE DRAWINGS
		PANEL	SHOTCRETE	4	EA	SR-41, SR-42
	CONCRETE PILE	JACKET	7	EA	SR-44, SR-45	
	TIMBER PILE (AW)	SPLICE	3	EA	SR-47	
	TIMBER PILE (UW)	SPLICE	2	EA	SR-47	
	TIMBER DECK	CORBEL SPLIT	REPLACEMENT	5	EA	SR-50
		PC SPLIT	REPLACEMENT	1	EA	SR-50
		PILE CAP-PILE STRAP	REPLACEMENT	9	EA	SR-50
		BOLLARD-PILE CAP-PILE BRACE	REPLACEMENT	4	EA	SR-49
CONCRETE DECK	SHOTCRETE	264.6	CF	SR-41, SR-42		
CONCRETE PILE CAP	SHOTCRETE	47.1	CF	SR-41, SR-42		

- NOTES:**
- FOR DETAILED DEFECTS LABELS IDENTIFICATION IN PLAN, SEE SR-21 TO SR-37 SHEETS.
  - PC\_ER\_09 AND PC\_ER\_11 NOT INCLUDED IN REPAIRS LIST.
  - FOR REINFORCED CONCRETE JACKET DETAILS, SEE SR-45.
  - FOR PILE 12A REPLACEMENT DETAILS, SEE SR-51 & SR-52.
  - FOR SHOTCRETE CONCRETE PLACEMENT DETAILS, SEE SR-42.
  - FOR EPOXY INJECTION REPAIR OF OVERSTRESSING CRACK DETAILS, SEE SR-43.
  - FOR TIMBER PILE WRAPPING DETAIL, SEE SR-48.
  - FOR TIMBER PILE SPLICE REPAIR DETAIL, SEE SR-47.

100% DESIGN SUBMITTAL  
JANUARY, 2025  
**NOT FOR CONSTRUCTION**

2	01/28/2025	RYV	TR	100% CSLC DESIGN SUBMITTAL
1	12/06/2024	YM	TR	100% DESIGN SUBMITTAL
ISSUE	DATE	DRAWN	CHECKED	DESCRIPTION
				
<b>REPAIR QUANTITY SHEETS 3</b>				
ENGINEER:	TR	DATE:	FORMAT:	SHEET: 12
DRAWN:	YM	JAN 2025	DRAWINGNR.:	OF: 43
CHECKED:	TR	JAN 2025	SR-03	ISSUE: 2

