

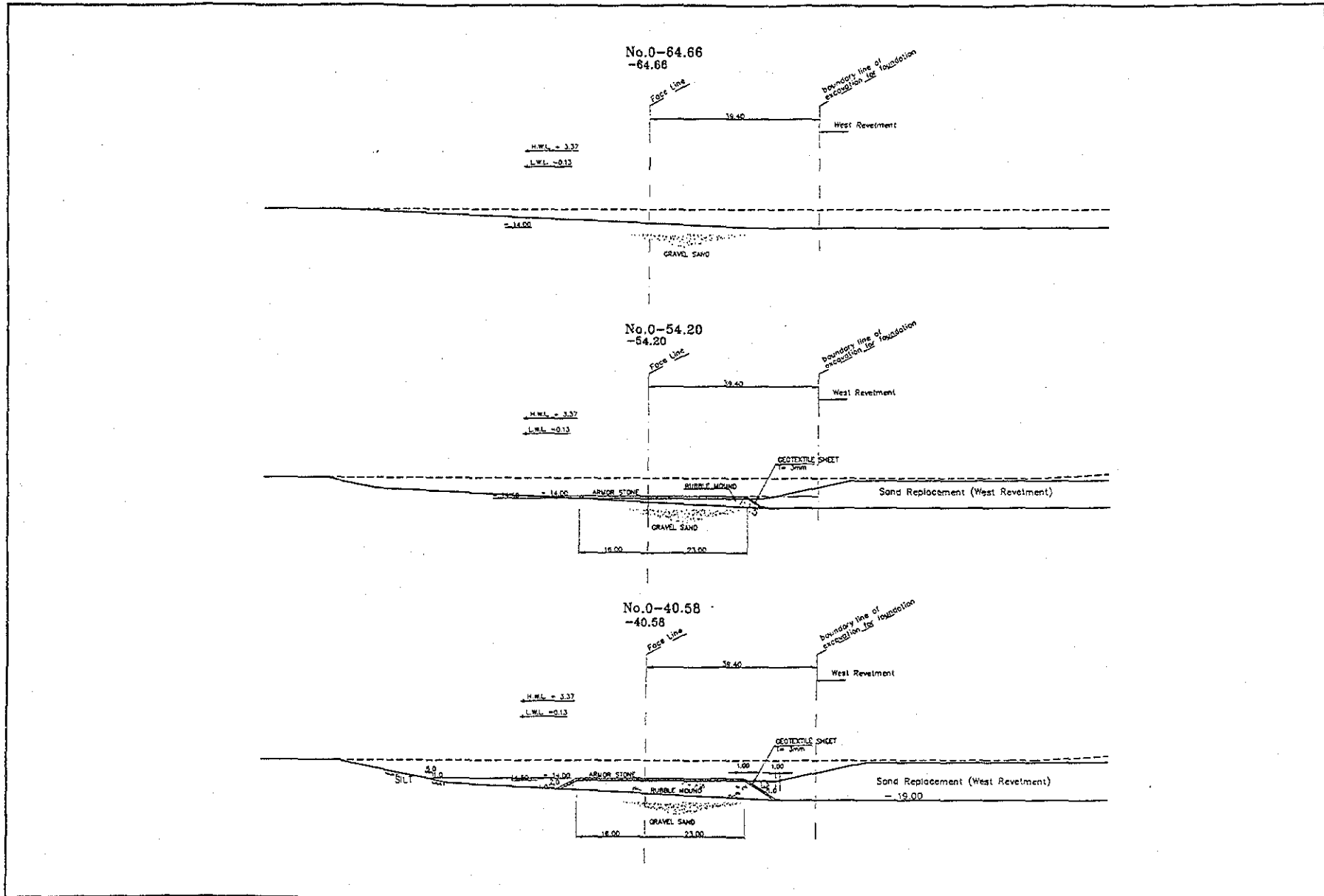
West Revetment

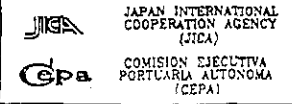

Excavation for Foundation (sea side) Above -9.50m

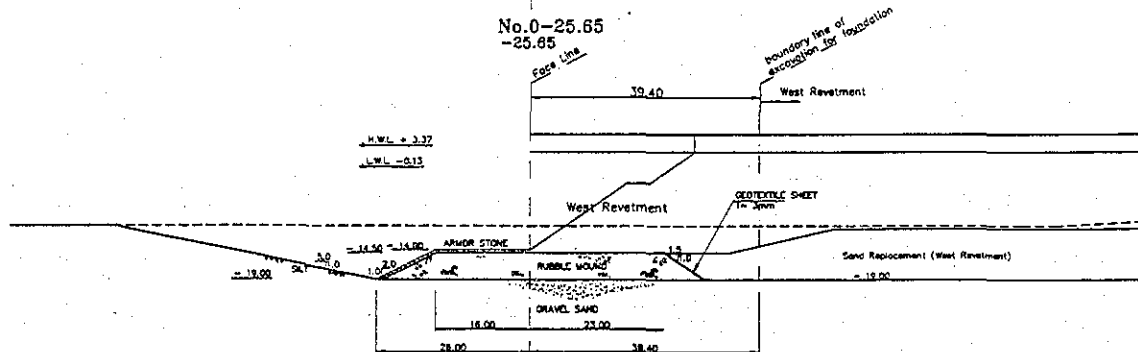
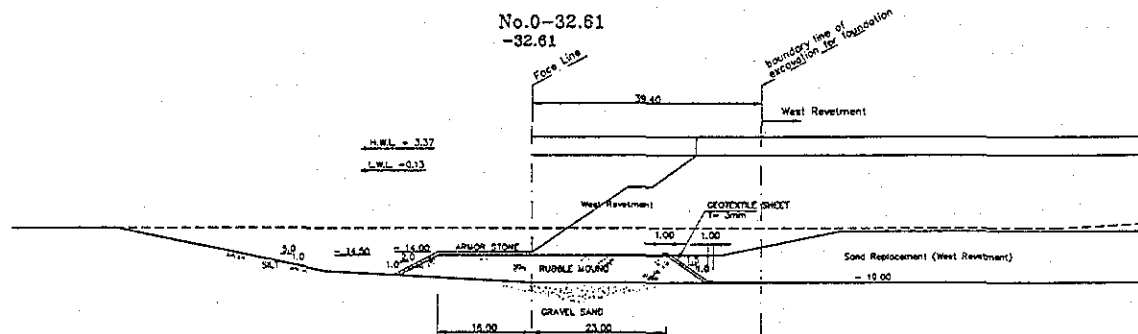
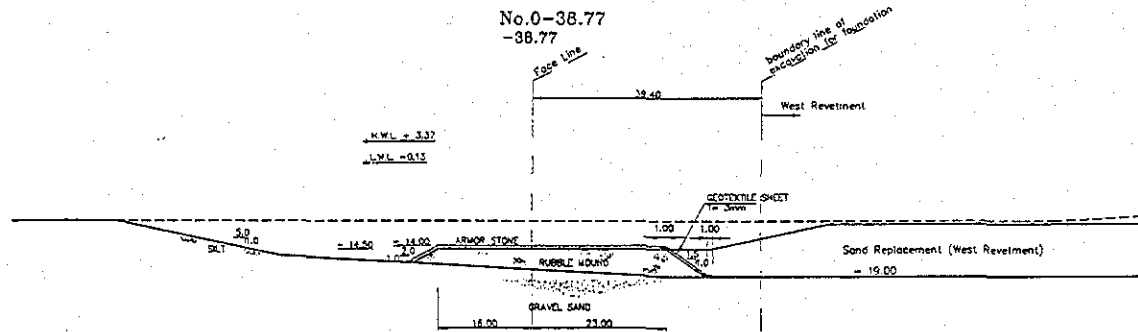
Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.4	0.00			
		0.08	9.80	0.78
No.4+9.80	0.16			
		3.36	5.06	16.98
No.4+14.86	6.55			
		15.24	10.14	154.53
No.5	23.93			
		55.13	15.00	826.95
No.5+15.00	86.33			
		84.39	2.00	168.77
No.5+17.00	82.44			
		92.66	8.00	741.28
No.6	102.88			
		134.41	25.00	3,360.25
No.7	165.94			
		199.86	15.00	2,997.90
No.7+15.00	233.78			
		213.41	6.00	1,280.46
No.7+21.00	193.04			
		199.86	4.00	799.44
No.8	206.68			
		235.38	25.00	5,884.38
No.9	264.07			
		279.45	25.00	6,986.13
No.10	294.82			
		301.20	10.00	3,012.00
No.10+10.00	307.58			
		272.07	6.00	1,632.42
No.10+16.00	236.56			
		245.32	9.00	2,207.84
No.11	254.07			
		268.62	12.50	3,357.75
No.11+12.50	283.17			
		292.75	5.30	1,551.55
No.11+17.80	302.32			
		261.17	3.00	783.50
No.11+20.80	220.01			
		225.91	4.20	948.82
No.12	231.81			
		256.60	25.00	6,415.00
No.13	281.39			
		287.07	11.00	3,157.77
No.13+11.00	292.75			
		298.81	14.00	4,183.27
No.14	304.86			
		304.86	1.00	304.86
No.14+1.00	304.86			
		309.30	8.60	2,659.94
No.14+9.60	313.73			
		318.63	8.40	2,676.45
No.14+18.00	323.52			
		258.19	27.50	7,100.23
No.14+45.50	192.86			
		96.43	19.75	1,904.49
No.14+65.25	0.00			
Total			315.25	65,113.72

≈ 66,000 m³

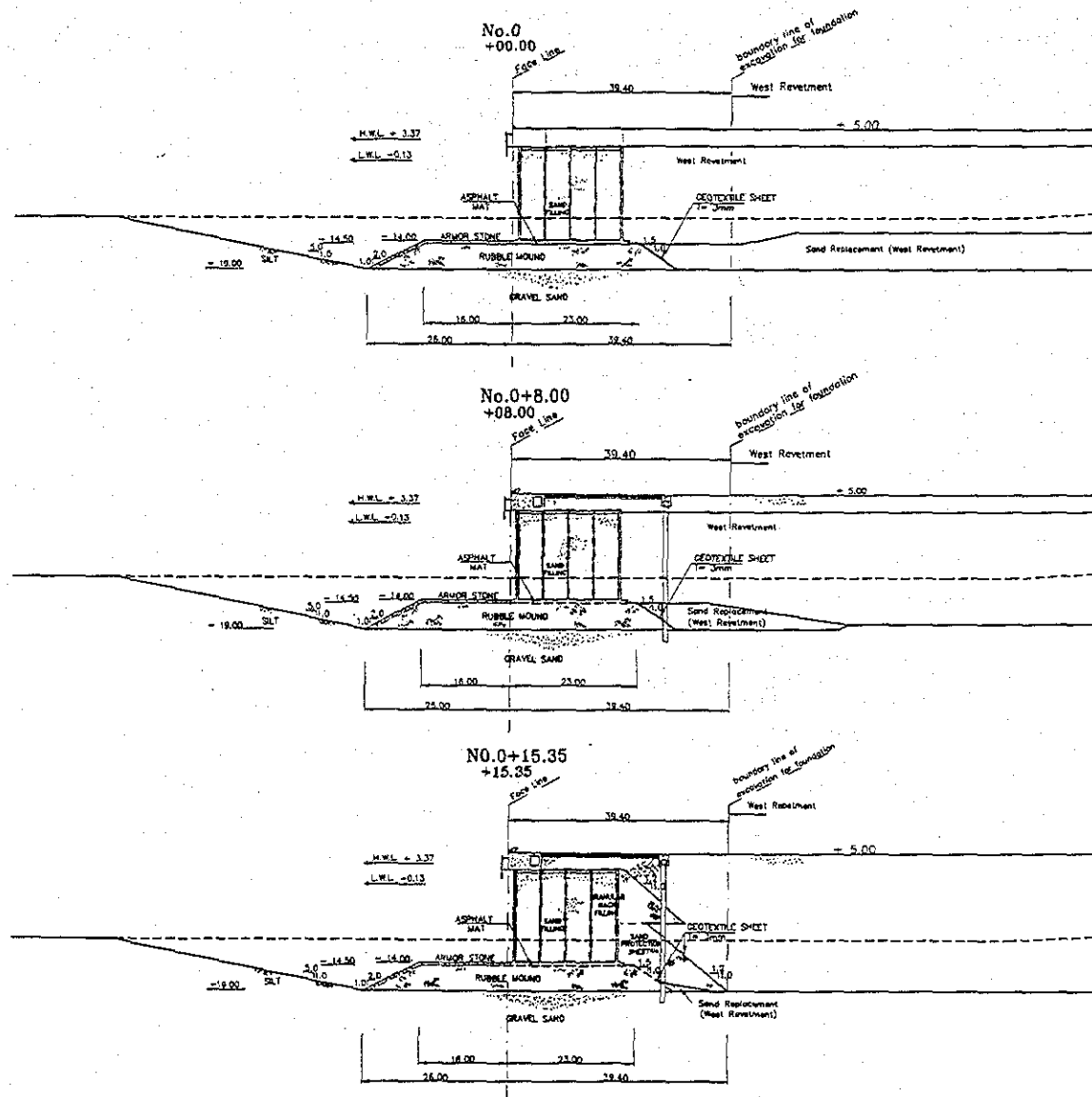
QUANTITY CALCULATION COVER SHEET								
Project	Detailed Design on Port Reactivation Project in La Union Province			Project Code	JC1N004/2N001			
Work Section Title	Container Berth			Pay Item No. (BOQ)	2A-08			
Quantity Item	Offshore dumping			Unit	m ³			
Calculation Procedure Applied								
<ol style="list-style-type: none"> 1. Calculation of Areas of Sections 2. Average of Areas of Sections 3. Calculation of Volume : Average of Areas of Sections times distance between Sections (Excel) 								
References, Calculation Base and Revisions								
<p>DW - GW - 01 - 001</p> <p>DW - GW - 01 - 009 - 018</p>								
Rev	Prepared		No. of Pages	Checked		Reviewed		Superseded by Calc No.
	by	Date		by	Date	by	Date	
0	Karla G.			Mr. Inuma		Mr. Ando		
1								
2								
3								



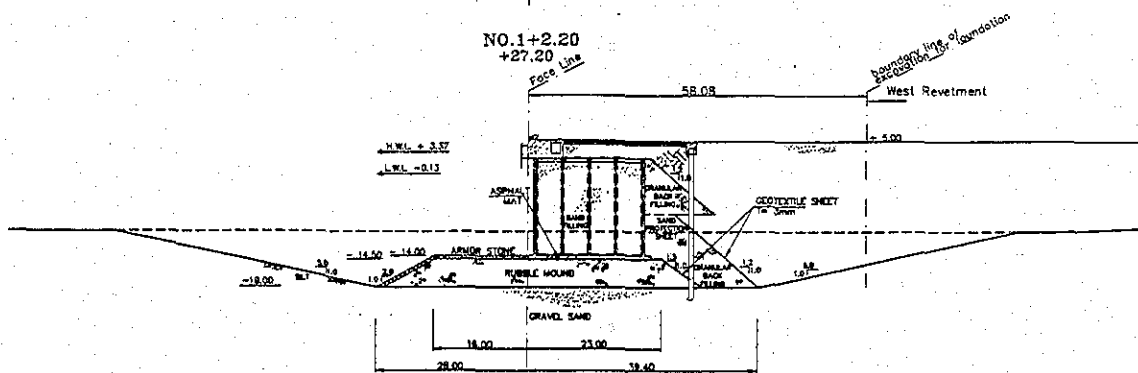
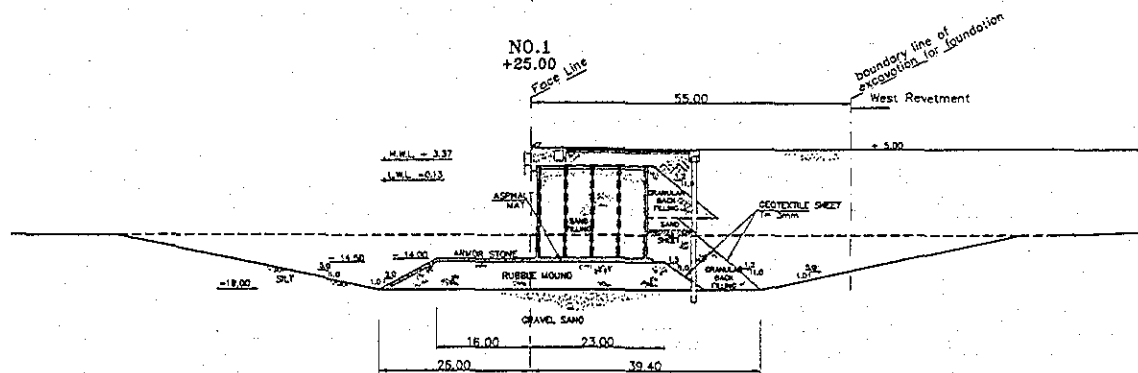
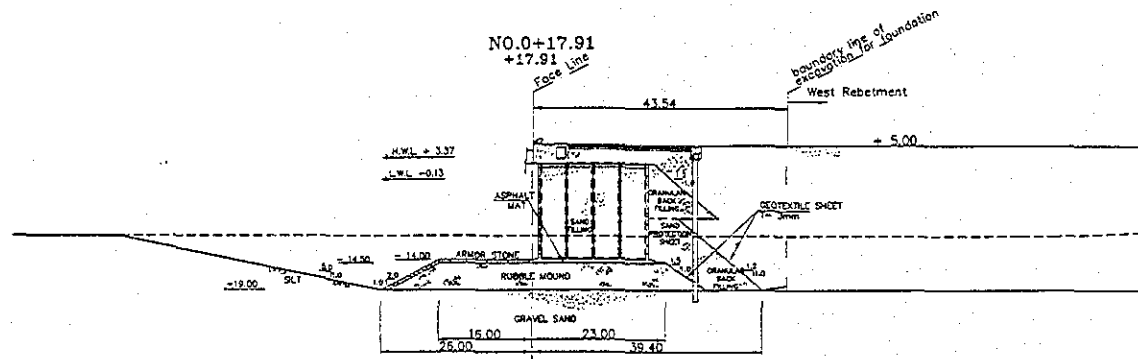
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA ALTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR  NIPPON KOEI CO., LTD.	DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : QUAYWALL WORK SUB-SECTION : CONTAINER AND MULTI-PURPOSE BERTH TITLE : CROSS SECTION (1) (CONTAINER)	DATE : JULY/2002 SCALE : 1:500 DRAWING NO : QW-CW-01-009
			(Empty space for design details)	(Empty space for design details)	(Empty space for design details)
			(Empty space for design details)	(Empty space for design details)	(Empty space for design details)



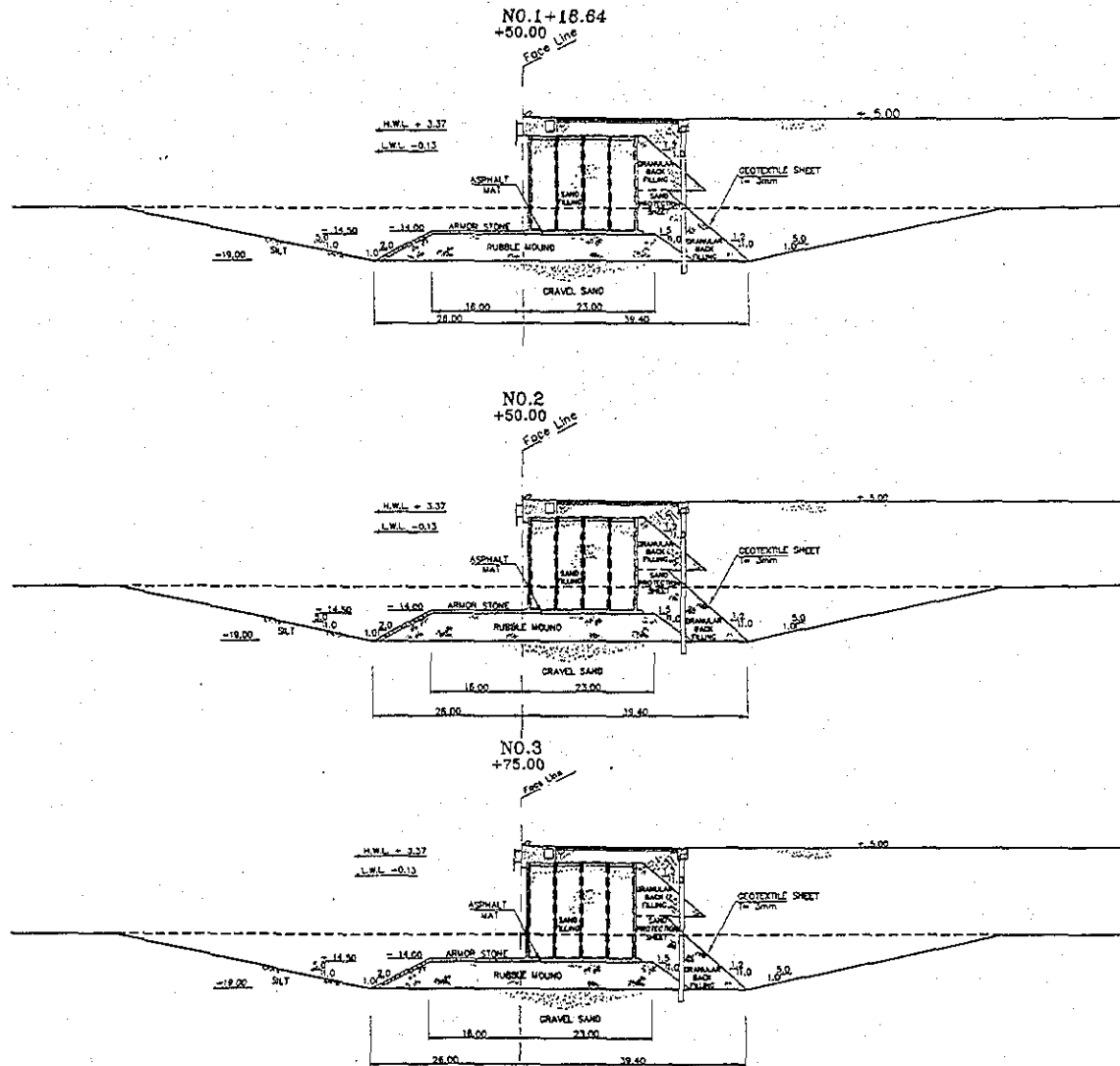
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NIPPON KOEI CO., LTD.	DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : QUAYWALL WORK SUB-SECTION : CONTAINER AND MULTI-PURPOSE BERTH TITLE : CROSS SECTION (2) (CONTAINER)	DATE : JULY/2002 SCALE : 1:800 DRAWING NO : CW-QW-01-D10		
			DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR				



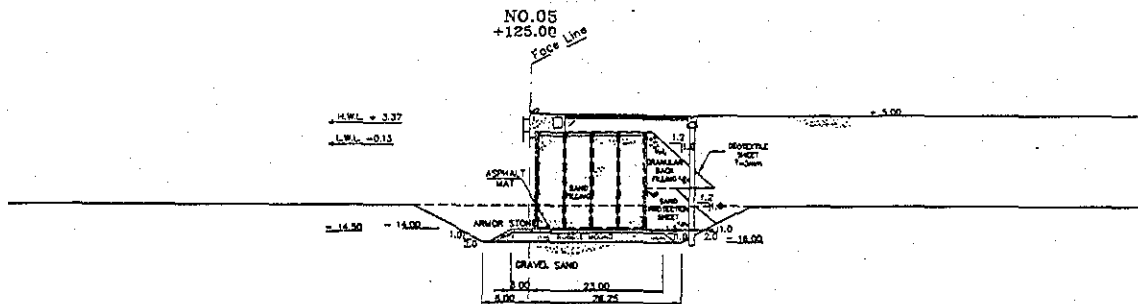
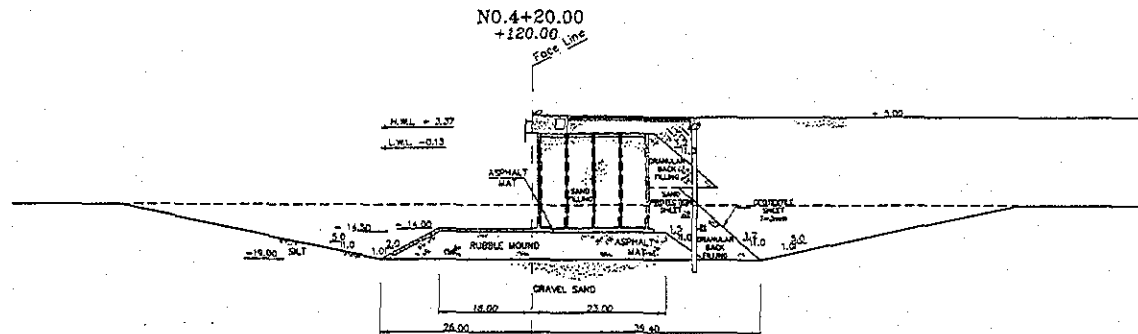
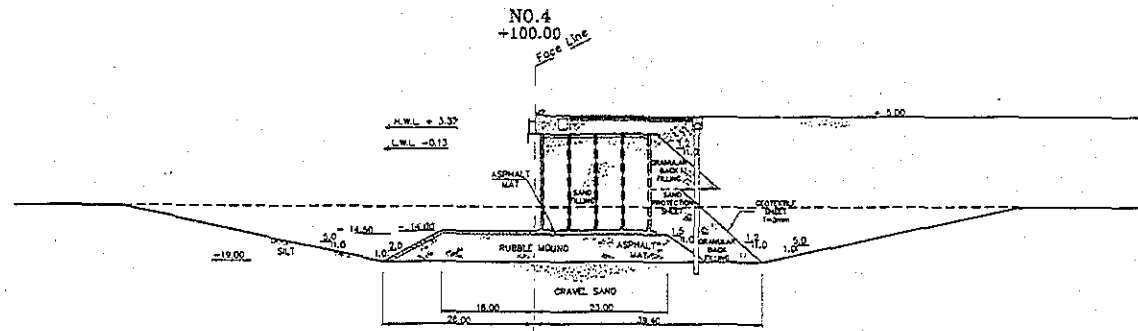
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR 	DESIGNED BY :	SECTION :	DATE :
			DRAWN BY :	SUB-SECTION :	JULY/2002
			APPROVED BY :	TITLE :	SCALE :
				QUAYWALL WORK CONTAINER AND MULTI-PURPOSE BERTH CROSS SECTION (3) (CONTAINER)	1:800 DRAWING NO. QW-QW-01-011



 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	 NIPPON KOEI CO., LTD.	DESIGNED BY:	SECTION: QUAYWALL WORK SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH TITLE: CROSS SECTION (4) (CONTAINER)	DATE: JULY/2022
				CHECKED BY:		SCALE: 1:800
APPROVED BY:				APPROVED BY:	DRAWING NO.: DW-QW-01-012	

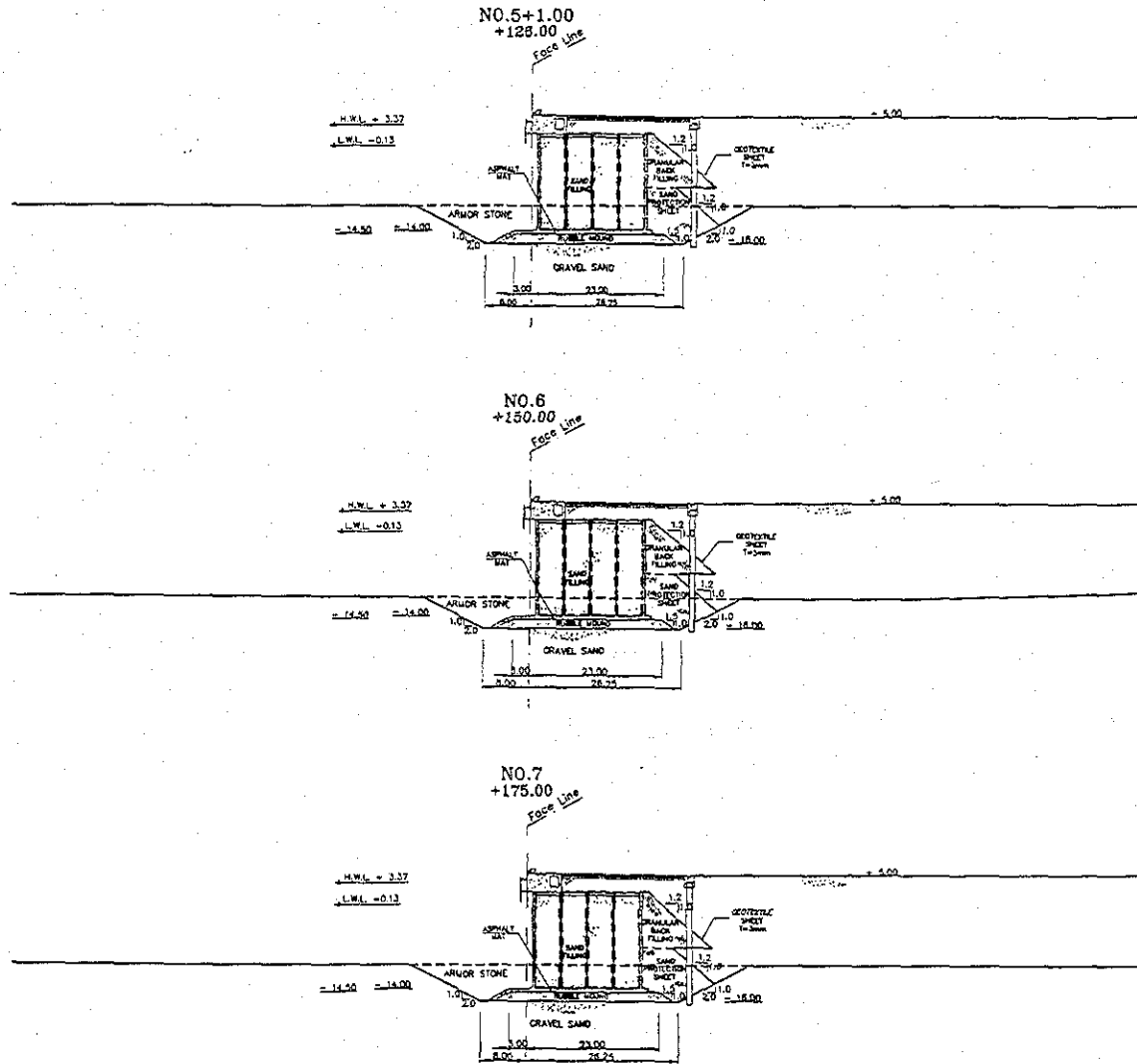


 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY :	SECTION : QUAYWALL WORK	DATE : JULY/2002
			CHECKED BY :	SUB-SECTION : CONTAINER AND MULTI-PURPOSE BERTH	SCALE : 1:500
NIPPON KOKI CO., LTD.			APPROVED BY :	CROSS SECTION (5) (CONTAINER)	DRAWING NO. : DW-OW-01-013

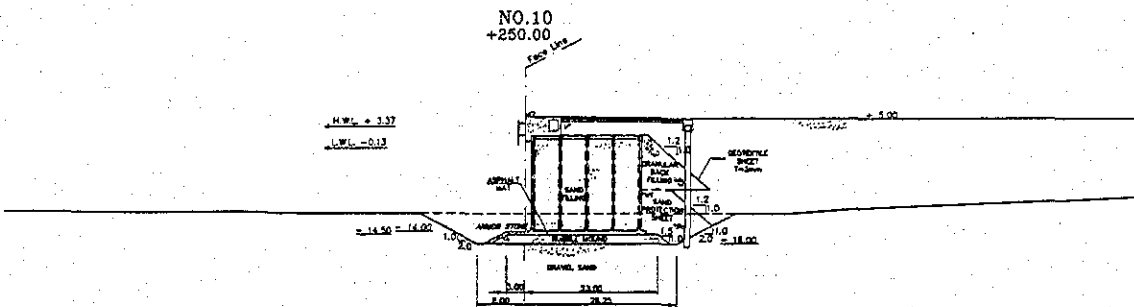
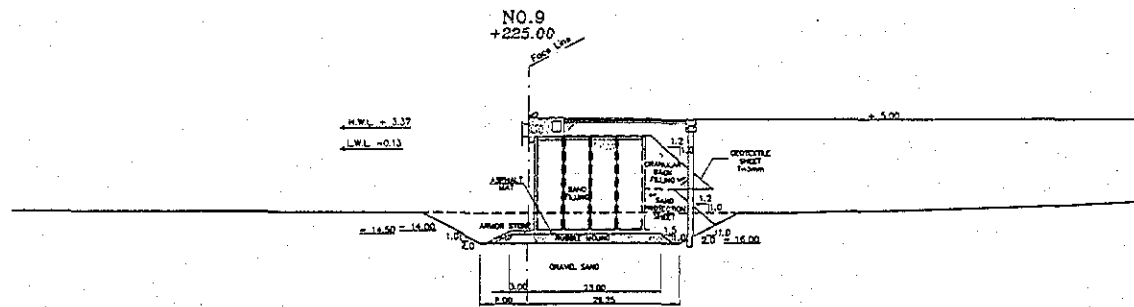
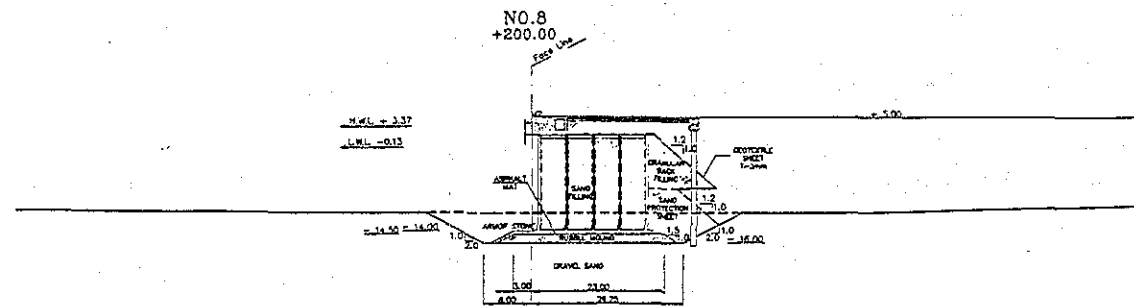


JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR		DRAWN BY : CHECKED BY : APPROVED BY :	SECTION : QUAYWALL WORK SUB-SECTION : CONTAINER AND MULTI-PURPOSE BERTH FILE :	DATE : JULY/2002 SCALE : 1:800 DRAWING NO : DW-CW-01-014
CEPA COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)		NIPPON KOEI CO., LTD.		CROSS SECTION (6) (CONTAINER)		

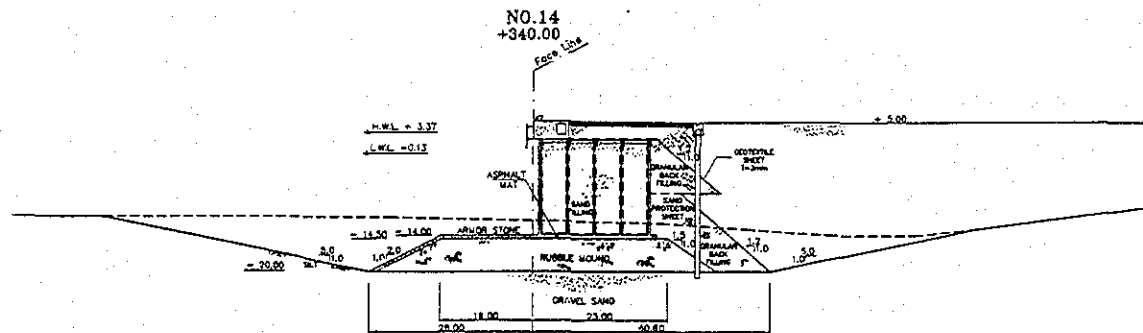
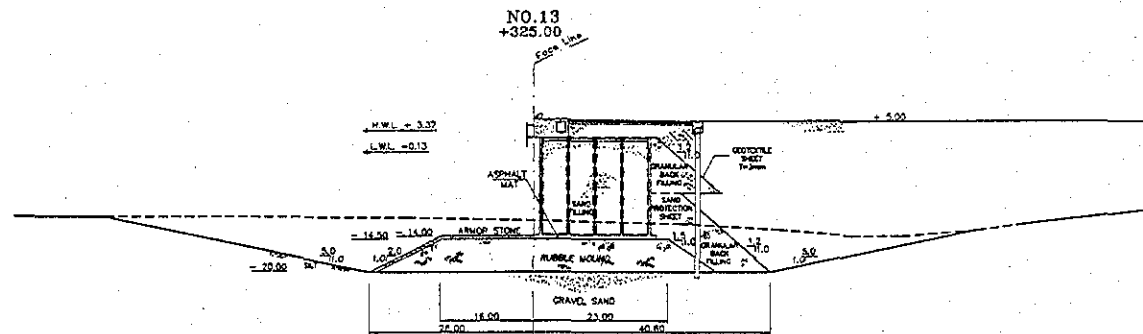
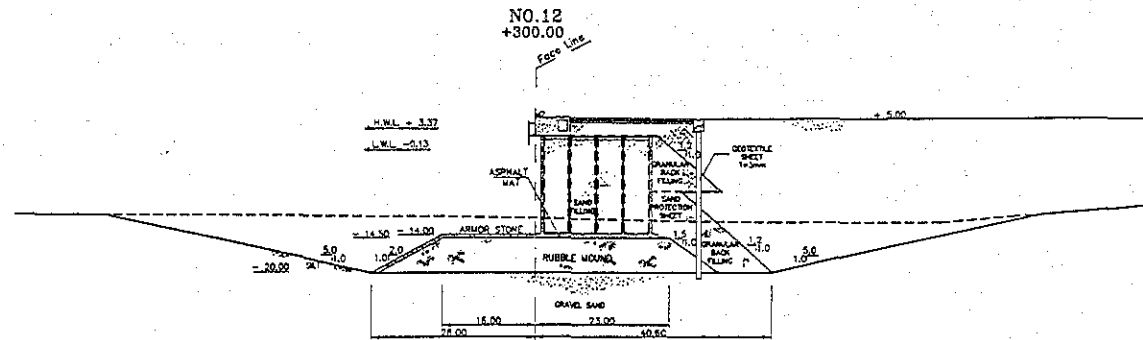
123



	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT BY LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY:	SECTION: QUAYWALL WORK SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH TITLE: CROSS SECTION (7) (CONTAINER)	DATE: JULY/2002
			CHECKED BY:		SCALE: 1:800
			APPROVED BY:		DRAWING NO: DW-QW-01-015



	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY:	SECTION: QUAYWALL WORK	DATE: JULY/2002
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO. LTD.	CHECKED BY:	SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH	SCALE: 1:800
				APPROVED BY:	TITLE: CROSS SECTION (8) (CONTAINER)



	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY:	SECTION: QUAYWALL WORK SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH	DATE: JULY/2002
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.	CHECKED BY:	TITLE: CROSS SECTION (10) (CONTAINER)	SCALE: 1:800
APPROVED DATE:	APPROVED DATE:	APPROVED BY:	APPROVED BY:	DRAWING NO: DW-QW-01-018	

○Container Berth

1. Excavation for Foundation (harbor side)

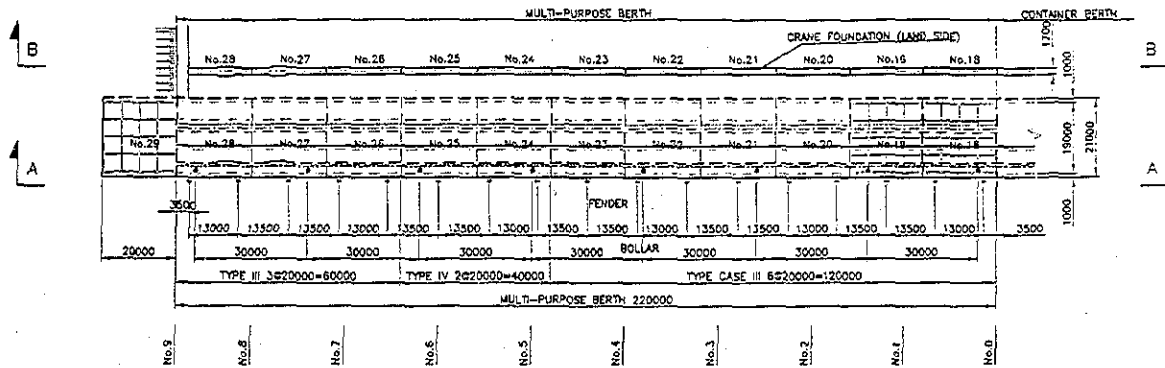
Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.0-80.00	0.00			
		73.41	15.34	1,126.11
No.0-64.66	146.82			
		192.71	10.46	2,015.75
No.0-54.00	238.60			
		285.15	13.62	3,883.74
No.0-40.58	331.70			
		336.31	1.81	608.72
No.0-38.77	340.92			
		347.76	6.16	2,142.20
No.0-32.61	354.60			
		343.15	6.96	2,388.32
No.0-25.65	354.60			
		354.60	25.65	9,095.49
No.0	354.60			
		354.60	8.00	2,836.80
No.0+8.00	354.60			
		354.60	7.35	2,606.31
No.0+15.35	354.60			
		412.63	9.65	3,981.88
No.1	470.66			
		479.25	2.20	1,054.34
No.1+2.20	487.83			
		522.47	16.44	8,589.32
No.1+18.64	557.10			
		557.10	6.36	3,543.16
No.2	557.10			
		557.10	25.00	13,927.50
No.3	557.10			
		557.10	25.00	13,927.50
No.4	557.10			
		557.10	20.00	11,142.00
No.4+20.00	557.10			
		375.30	5.00	1,876.50
No.5	193.50			
		193.50	1.00	193.50
No.5+1.00	193.50			
		176.42	24.00	4,233.96
No.6	159.33			
		176.42	25.00	4,410.38
No.7	193.50			
		174.88	25.00	4,371.88
No.8	156.25			
		156.25	25.00	3,906.25
No.9	156.25			
		156.25	25.00	3,906.25
No.10	156.25			
		156.25	25.00	3,906.25
No.11	156.25			
		156.25	16.73	2,614.06
No.11+16.73	156.25			
		306.84	8.00	2,454.68
No.11+24.73	457.42			
		482.08	0.27	130.16
No.12	506.74			
		466.21	25.00	11,655.13
No.13	425.67			
		420.23	15.00	6,303.38
No.14	414.78			
Total		9,681.88	420.00	132,831.51

○Container Berth

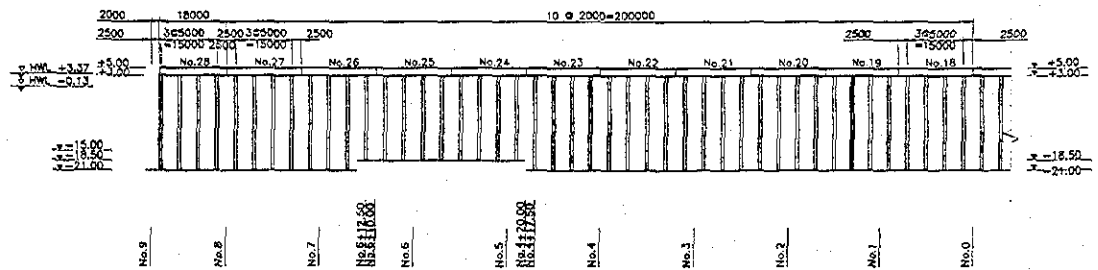
2. Excavation for Foundation (sea side)

Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.0-80.00	0.00			
		53.23	15.34	816.47
No.0-64.66	106.46			
		179.09	10.46	1,873.28
No.0-54.20	251.73			
		301.32	13.62	4,103.98
No.0-40.58	350.91			
		358.65	1.81	649.15
No.0-38.77	366.38			
		389.44	6.16	2,398.92
No.0-32.61	412.49			
		424.50	6.96	2,954.49
No.0-25.65	436.50			
		436.50	25.65	11,196.23
No.0	436.50			
		436.50	8.00	3,492.00
No.0+8.00	436.50			
		436.50	7.35	3,208.28
No.0+15.35	436.50			
		436.50	9.65	4,212.23
No.1	436.50			
		436.50	2.20	960.30
No.1+2.20	436.50			
		436.50	16.44	7,176.06
No.1+18.64	436.50			
		436.50	6.36	2,776.14
No.2	436.50			
		436.50	25.00	10,912.50
No.3	436.50			
		436.50	25.00	10,912.50
No.4	436.50			
		436.50	20.00	8,730.00
No.4+20.00	436.50			
		260.25	5.00	1,301.25
No.5	84.00			
		84.00	1.00	84.00
No.5+1.00	84.00			
		75.98	24.00	1,823.40
No.6	67.95			
		75.98	25.00	1,899.38
No.7	84.00			
		74.59	25.00	1,864.75
No.8	65.18			
		65.15	25.00	1,628.63
No.9	65.11			
		65.06	25.00	1,626.38
No.10	65.00			
		65.01	25.00	1,625.13
No.11	65.01			
		65.05	16.73	1,088.29
No.11+16.73	65.09			
		260.77	8.00	2,086.12
No.11+24.73	456.44			
		456.71	0.27	123.31
No.12	456.98			
		455.32	25.00	11,382.88
No.13	453.65			
		452.78	15.00	6,791.63
No.14	451.90			
Total		8,527.82	420.00	109,697.63

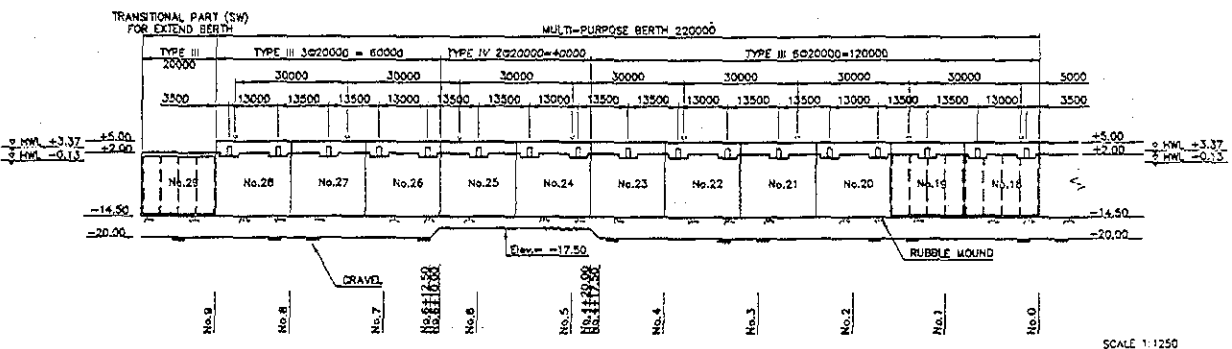
QUANTITY CALCULATION COVER SHEET								
Project	Detailed Design on Port Reactivation Project in La Union Province			Project Code	JC1N004/2N001			
Work Section Title	Multi-purpose Berth			Pay Item No. (BOQ)	2A-09			
Quantity Item	Offshore dumping			Unit	m ³			
<u>Calculation Procedure Applied</u>								
<p>1. Calculation of Areas of Sections</p> <p>2. Average of Areas of Sections</p> <p>3. Calculation of Volume : Average of Areas of Sections times distance between Sections (Excel)</p>								
<u>References, Calculation Base and Revisions</u>								
<p>DW - 6W - 01 - 002</p> <p>DW - 0W - 01 - 019 ~ 026</p>								
Rev	Prepared		No. of Pages	Checked		Reviewed		Superseded by Calc No.
	by	Date		by	Date	by	Date	
0	Karla G.			Mr. Inuma		Mr. Ando		
1								
2								
3								



PLAN



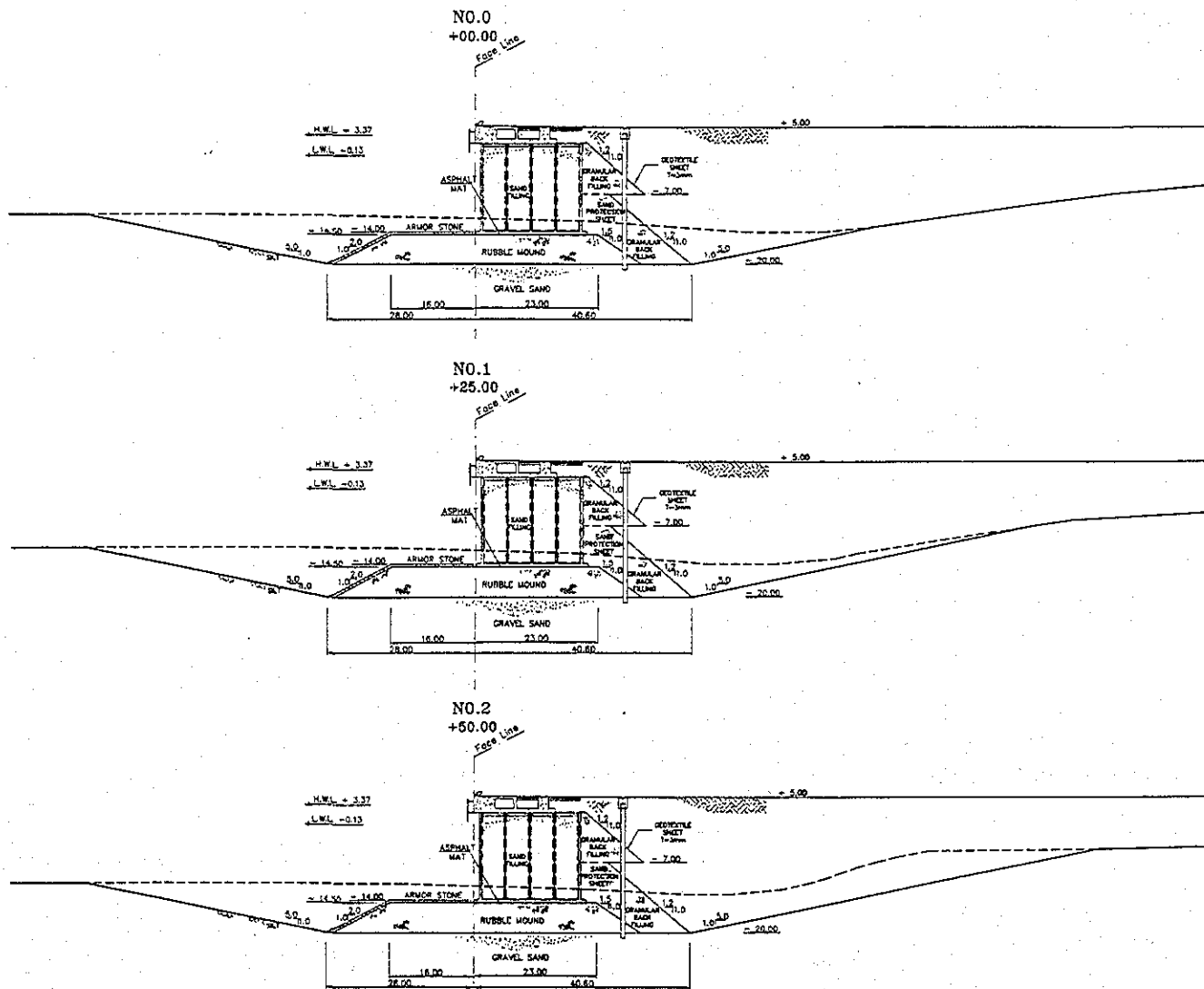
PROFILE B-B



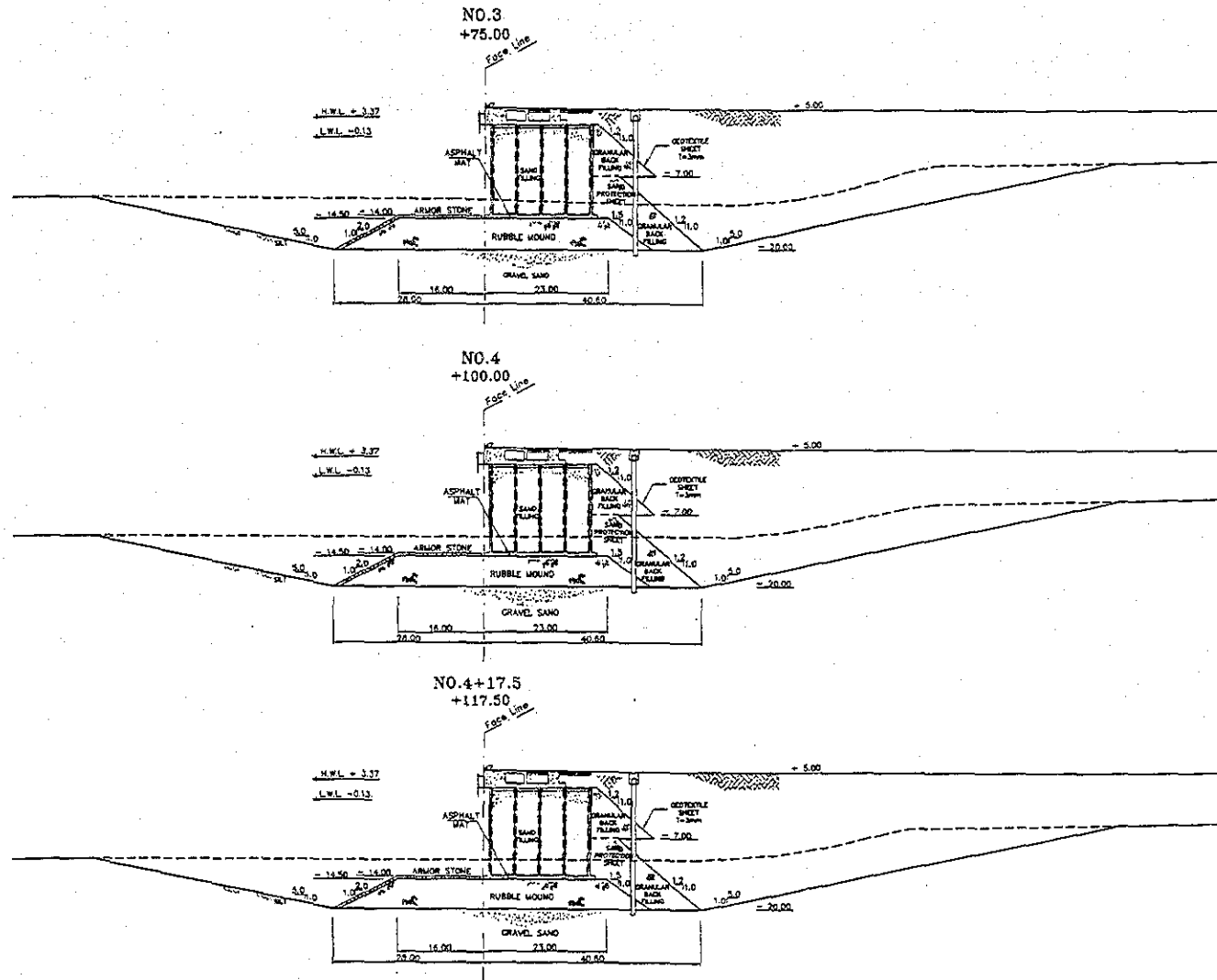
PROFILE A-A


SCALE 1:1250
0 50 100

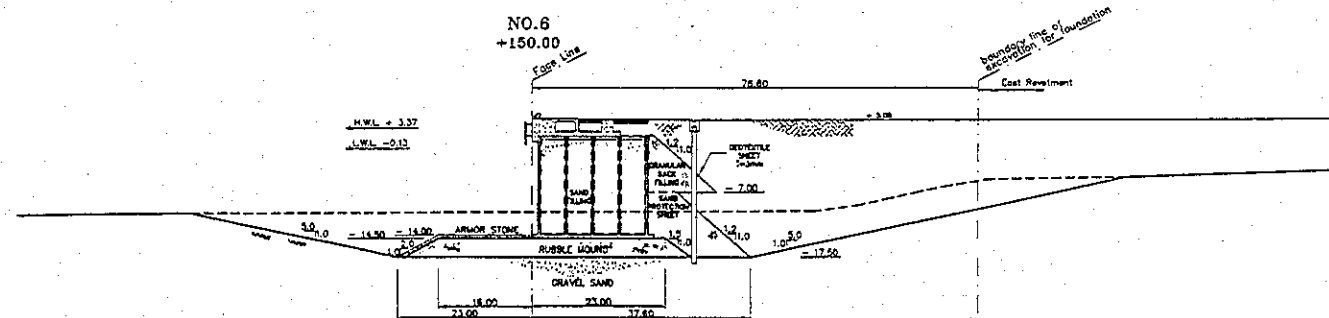
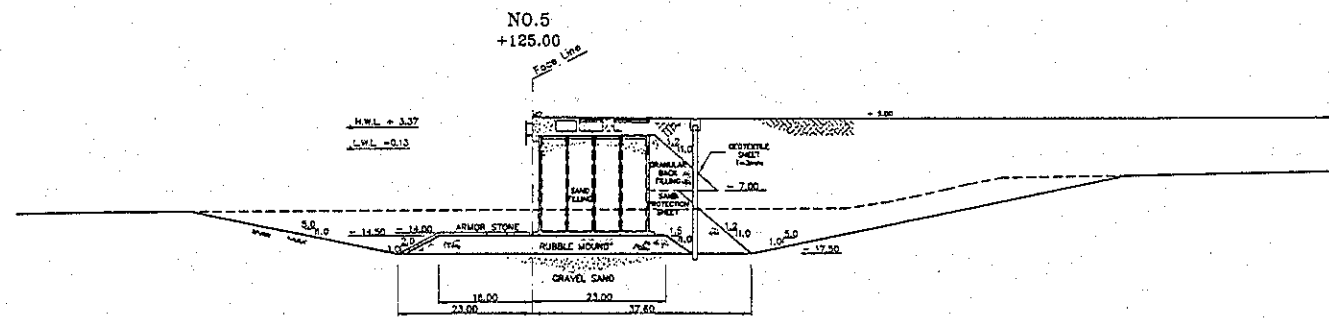
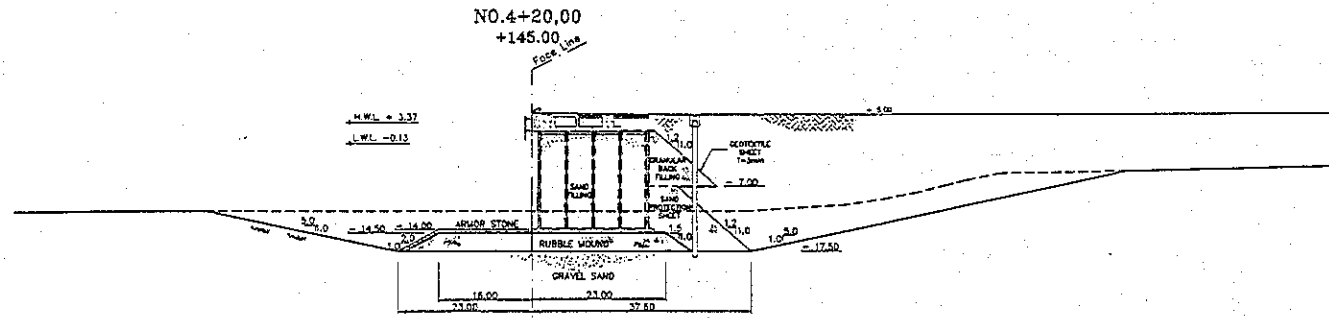
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY:	SECTION: QUAYWALL WORK SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH	DATE: JULY/2002
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOGI CO., LTD.	DRAWN BY:	TITLE: PLAN AND PROFILE MULTI-PURPOSE BERTH	SCALE: 1 : 1250
APPROVED BY:			APPROVED BY:		DRAWING NO: CW-CW-01-002



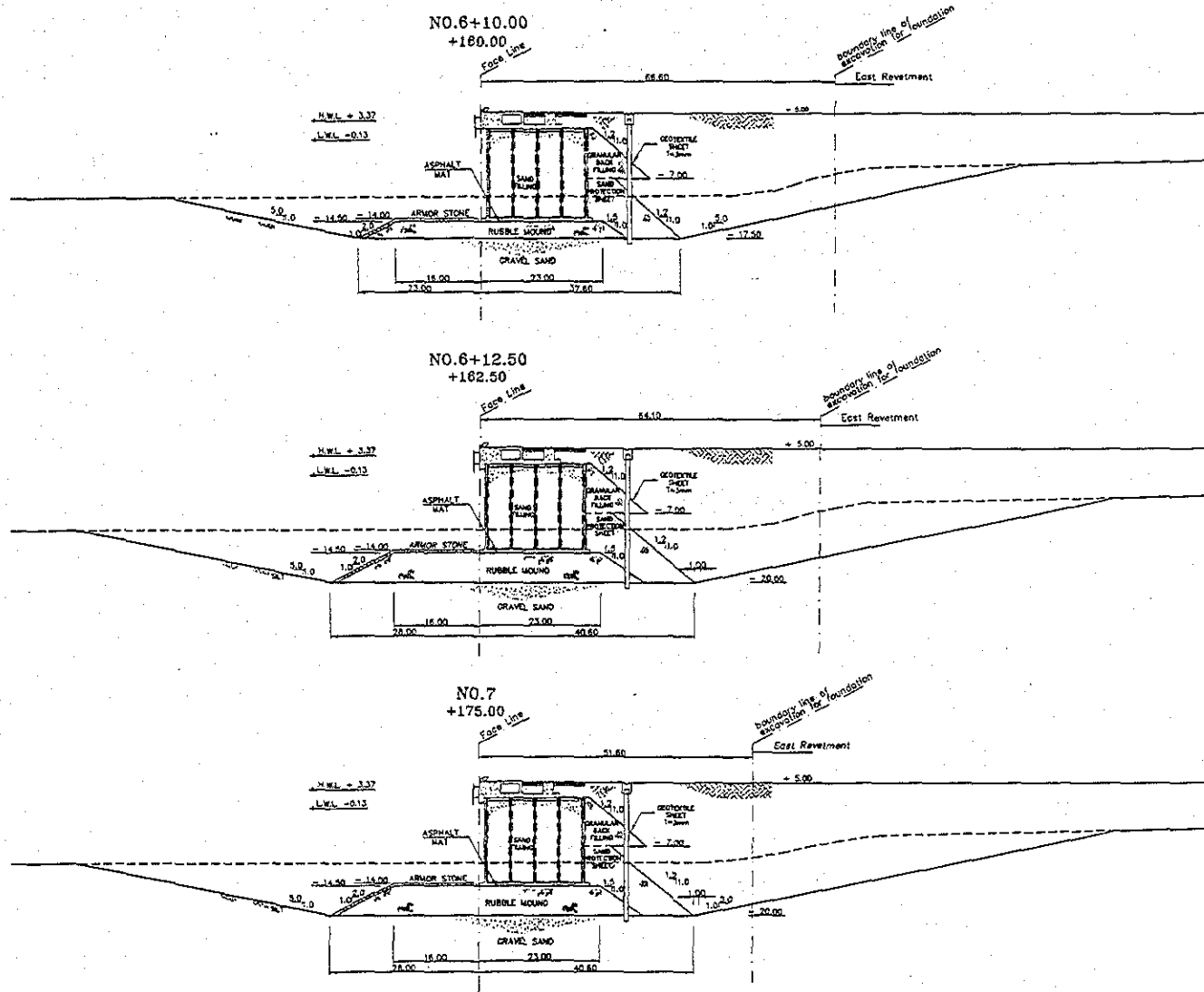
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NIPPON KOEI CO., LTD.	DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : QUAYWALL WORK SUB-SECTION : CONTAINER AND MULTI-PURPOSE BERTH TITLE : CROSS SECTION (1) (MULTI-PURPOSE BERTH)	DATE : JULY/2002 SCALE : 1:800 DRAWING NO. : DW-OW-01-019
			DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR		



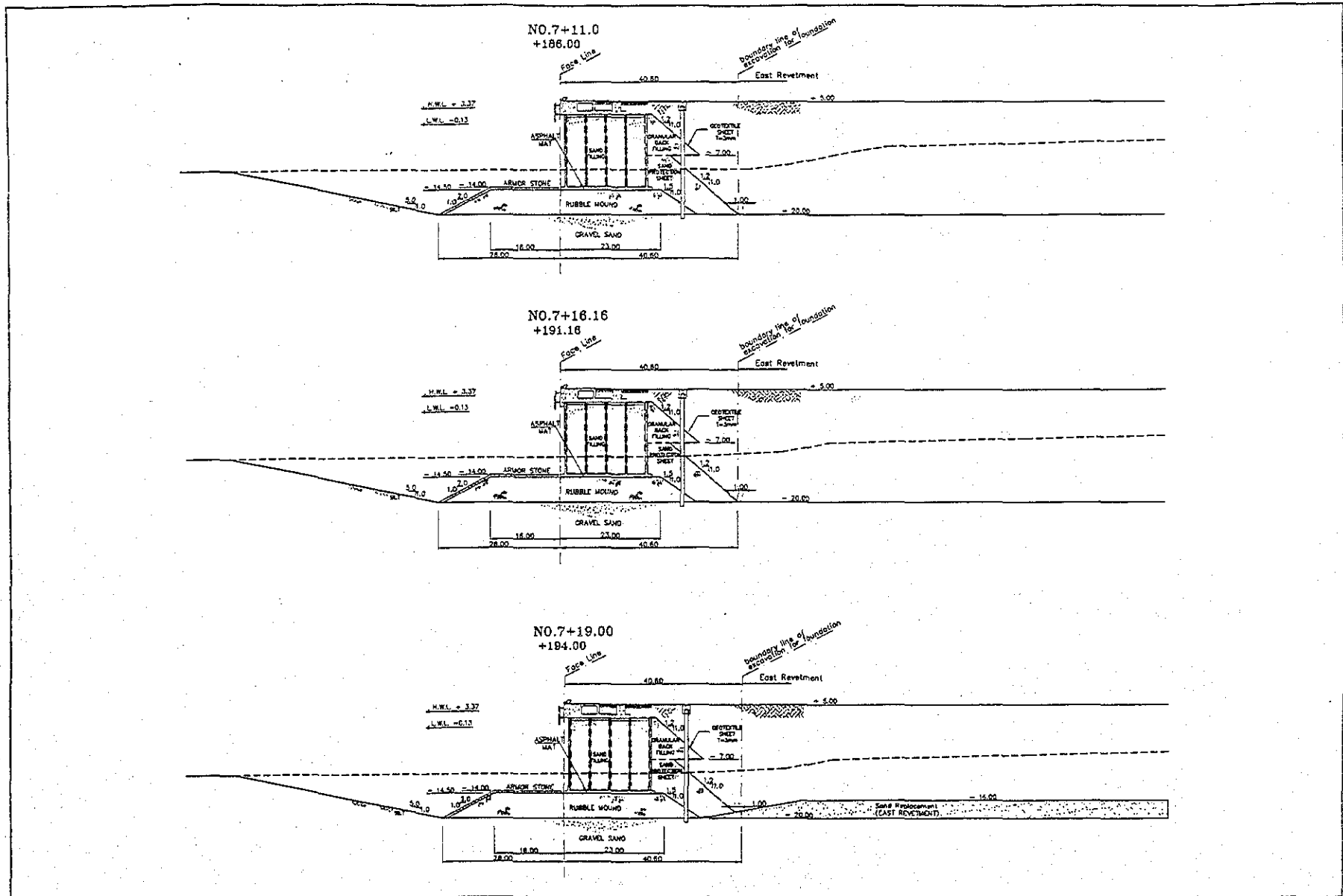
<p>NO. 45 147</p>	<p>JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)</p> <p>Cepa COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)</p>	<p>DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR</p> <p> NIPPON KOEI CO., LTD.</p>	<p>DESIGNED BY: CHECKED BY: APPROVED BY:</p>	<p>SECTION: QUAYWALL WORK SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH TITLE: CROSS SECTION (2) (MULTI-PURPOSE BERTH)</p>	<p>DATE: JULY/2002 SCALE: 1:500 DRAWING NO: DW-CW-01-020</p>
-------------------	--	--	--	---	--



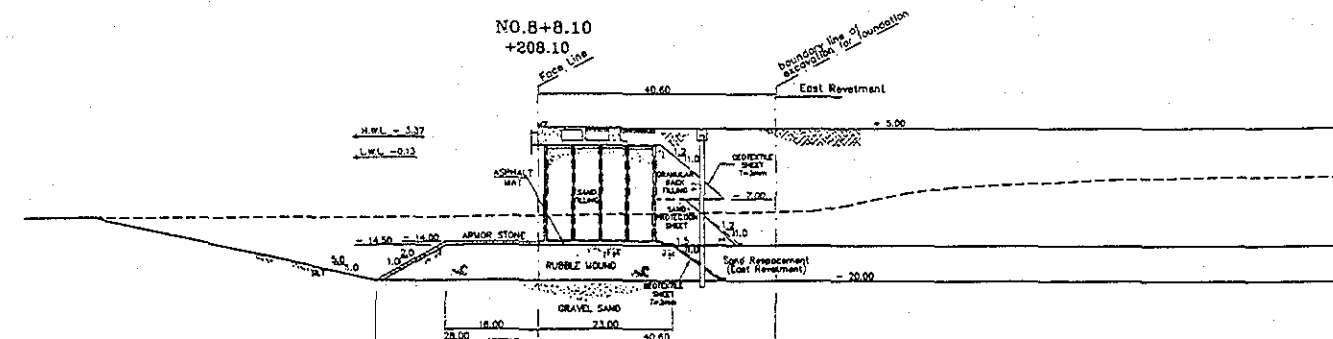
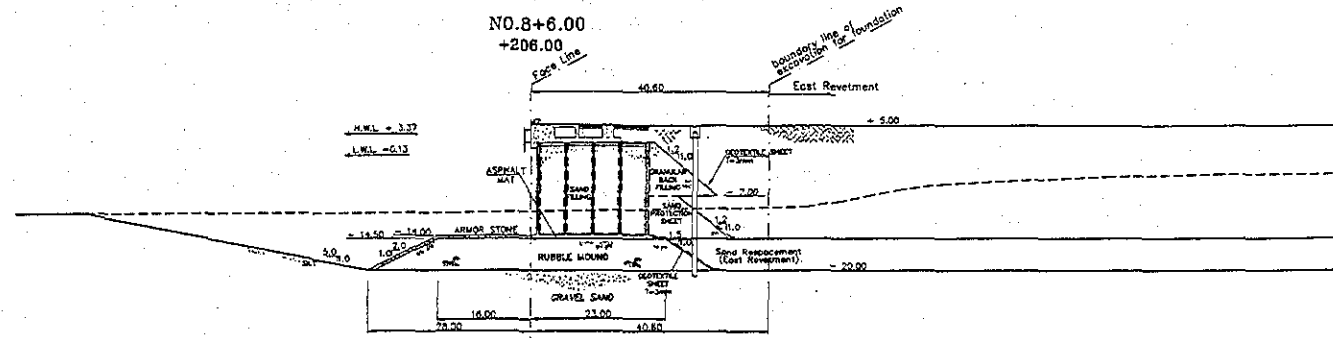
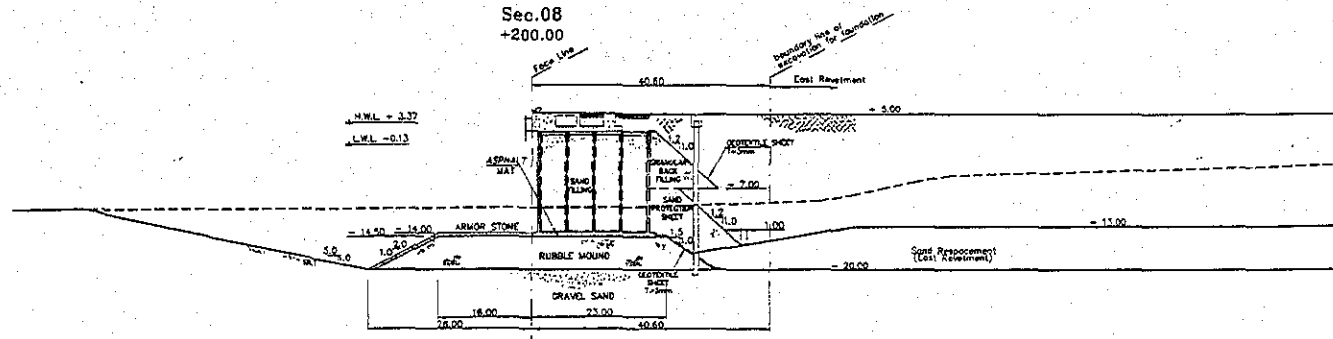
		 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY :	SECTION : QUAYWALL WORK SUB-SECTION : CONTAINER AND MULTI-PURPOSE BERTH	DATE : JULY/2002
				 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)		CHECKED BY :
		 NIPPON KOEI CO., LTD.	APPROVED BY :		CROSS SECTION (3) (MULTI-PURPOSE BERTH)	



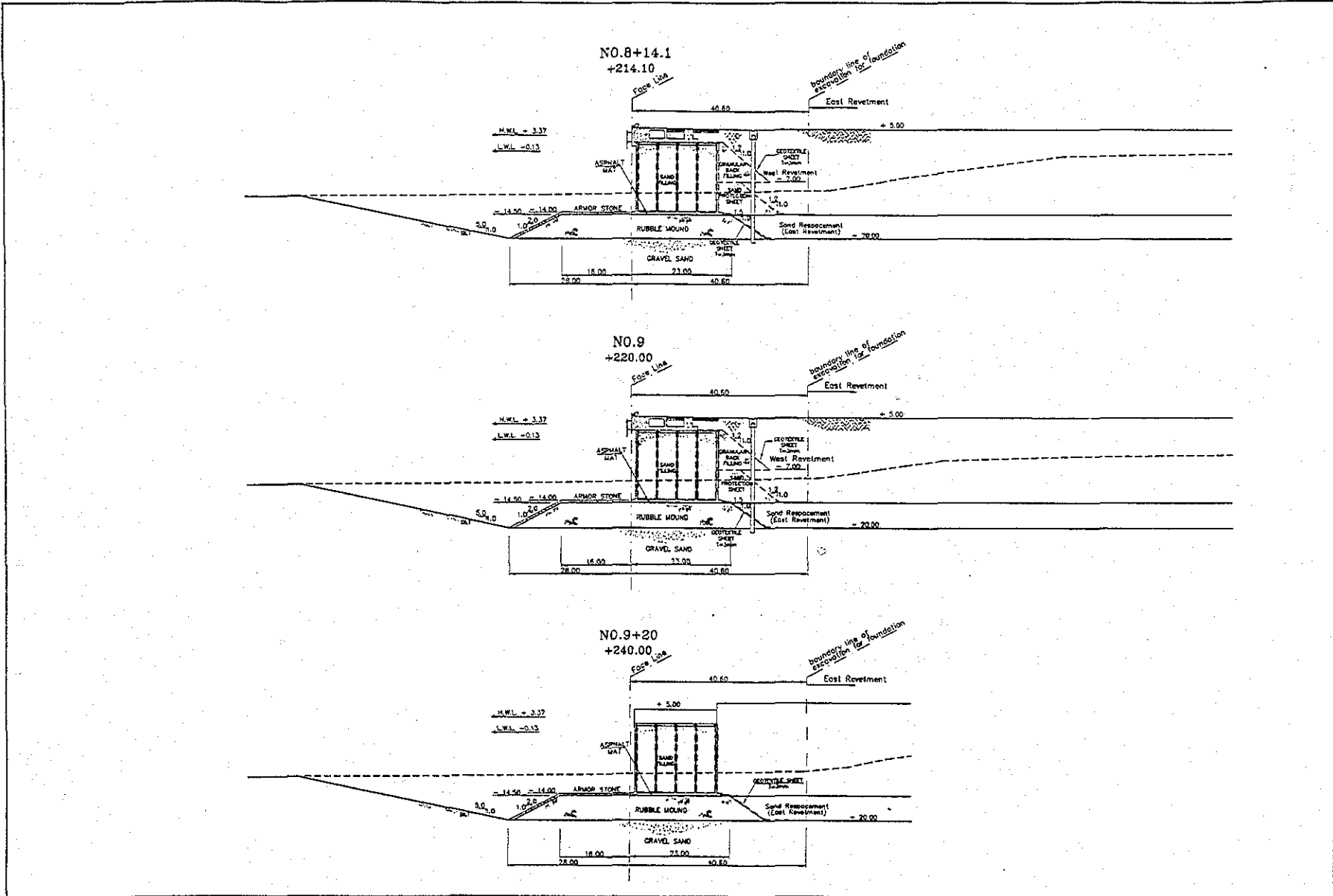
<p>NO. 147</p> <p>DATE: 2002.7.17</p> <p>BY: [Signature]</p>	<p>JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)</p> <p>Cepa COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)</p>	<p>DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR</p> <p>NIPON KOEI CO., LTD.</p>	<p>DESIGNED BY: [Signature]</p> <p>CHECKED BY: [Signature]</p> <p>APPROVED BY: [Signature]</p>	<p>SECTION: QUAYWALL WORK</p> <p>SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH</p> <p>TITLE: CROSS SECTION (4) (MULTI-PURPOSE BERTH)</p>	<p>DATE: JULY/2002</p> <p>SCALE: 1:800</p> <p>DRAWING NO: DW-CW-01-022</p>
--	--	--	--	---	--



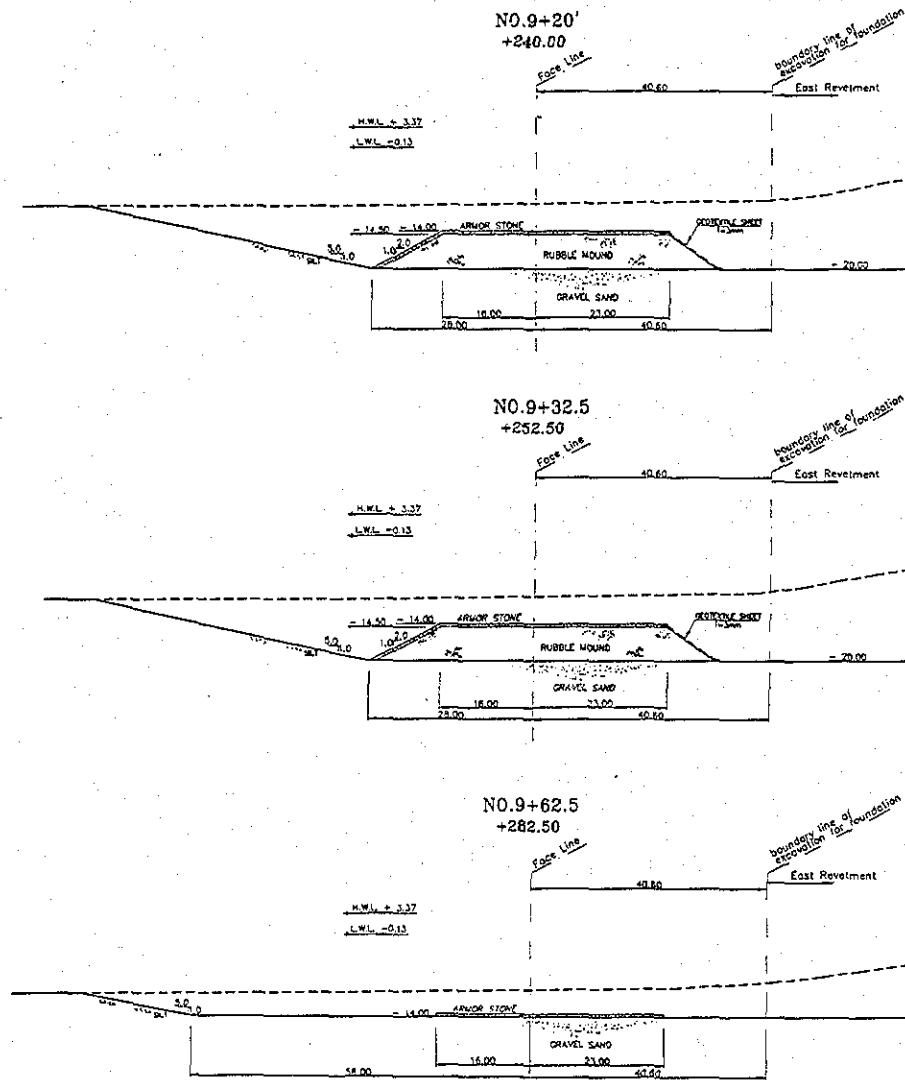
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY:	SECTION: QUAYWALL WORK SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH	DATE: JULY/2002
			CHECKED BY:	CROSS SECTION (5) (MULTI-PURPOSE BERTH)	SCALE: 1:500
			APPROVED BY:	DRAWING NO.: DW-DW-01-023	



 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY:	SECTION: QUAYWALL WORK	DATE: JULY/2002
			 NIPPON KOEI CO., LTD.	SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH TITLE: CROSS SECTION (6) (MULTI-PURPOSE BERTH)	SCALE: 1:800
APPROVED BY:			DRAWING NO: DW-DW-01-024		



JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR		DESIGNED BY: CHECKED BY: APPROVED BY:	SECTION: QUAYWALL WORK SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH TITLE: CROSS SECTION (7) (MULTI-PURPOSE BERTH)	DATE: JULY/2002 SCALE: 1:800 DRAWING NO: QW-QW-01-025
CEPA COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)		NIPPON KOEI CO., LTD.				



 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NIPPON KOEI CO., LTD.	DESIGNED BY:	SECTION: QUAYWALL WORK SUB-SECTION: CONTAINER AND MULTI-PURPOSE BERTH	DATE: JULY/2002
			CHECKED BY:		SCALE: 1:800
			APPROVED BY:	CROSS SECTION (8) (MULTI-PURPOSE BERTH)	DRAWING NO: DW-QW-01-C26

Project	Detailed Design on Port Reactivation Project in La Union	Calc. File No.	
Section	Multi-purpose Berth	Calc. Index No.	
Subject	Excavation of caisson foundation	Page No.	Rev.
		References/ Notes	
harbor side	148,882.81 m ³		
sea side	129,269.29 m ³		
<hr/>			
\approx		<div style="border: 1px solid black; padding: 2px; display: inline-block;">278,141.10</div>	
		\approx	
		<div style="border: 1px solid black; padding: 2px; display: inline-block;">579,000</div>	m ³
Prepared by		Checked by	
		/ /200	
		/ /200	

○Multi-Purpose Berth


1. Excavation for Foundation (harbor side)

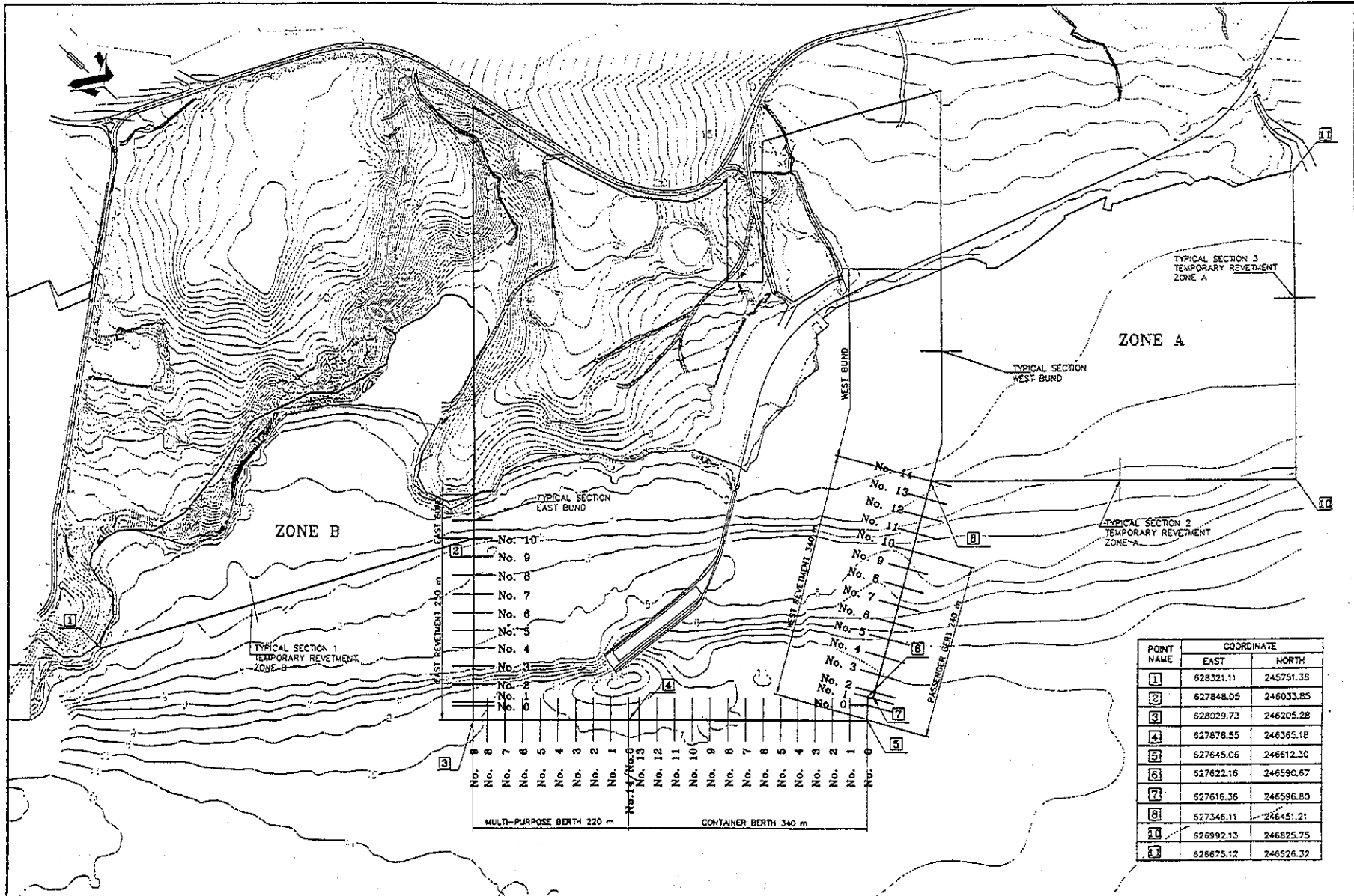
Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.0	414.79			
		427.54	25.00	10,688.50
No.1	440.29			
		552.20	25.00	13,805.00
No.2	664.11			
		685.35	25.00	17,133.75
No.3	706.59			
		742.36	25.00	18,558.88
No.4	778.12			
		787.73	17.50	13,785.28
No.4+17.50	797.34			
		638.61	2.50	1,596.53
No.4+20.00	479.88			
		500.09	5.00	2,500.45
No.5	520.30			
		502.05	25.00	12,551.25
No.6	483.80			
		464.28	10.00	4,642.80
No.6+10.00	444.76			
		526.08	2.50	1,315.19
No.6+12.50	607.39			
		557.63	12.50	6,970.38
No.7	507.87			
		455.31	11.00	5,008.36
No.7+11.00	402.74			
		405.06	5.16	2,090.08
No.7+16.16	407.37			
		407.37	2.84	1,156.93
No.7+19.00	407.37			
		411.28	6.00	2,467.68
No.8	415.19			
		421.89	6.00	2,531.31
No.8+6.00	428.58			
		428.58	2.10	900.02
No.8+8.10	428.58			
		429.72	6.00	2,578.32
No.8+14.10	430.86			
		431.91	5.90	2,548.27
No.9	432.96			
		434.69	20.00	8,693.80
No.9+20.00	436.42			
		436.42	0.00	0.00
No.9+20.00'	436.42			
		431.46	12.50	5,393.19
No.9+32.50	426.49			
		316.00	30.00	9,480.00
No.9+62.50	205.51			
		102.76	24.20	2,486.67
No.9+86.70	0.00			
Total		11,496.34	306.70	148,882.61

OMulti-Purpose Berth

2. Excavation for Foundation (sea side)

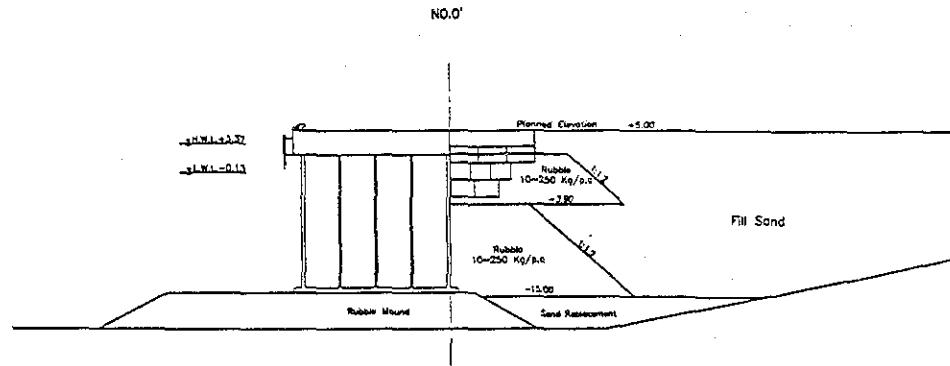
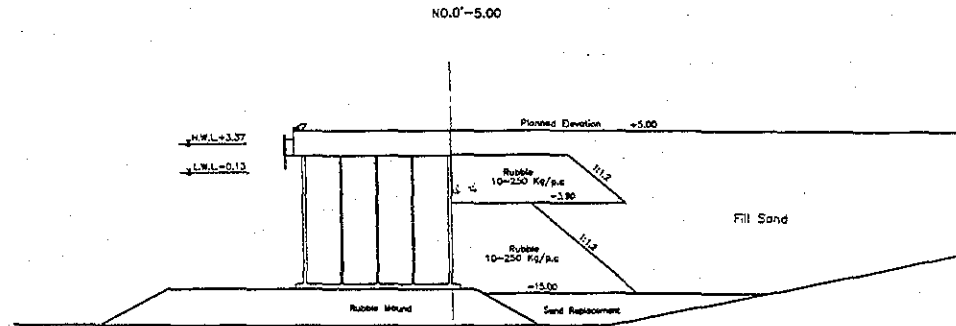
Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.0	451.90			
		453.70	25.00	11,342.50
No.1	455.50			
		456.08	25.00	11,402.00
No.2	456.66			
		458.19	25.00	11,454.75
No.3	459.72			
		457.11	25.00	11,427.75
No.4	454.50			
		454.50	17.50	7,953.75
No.4+17.50	454.50			
		354.82	2.50	887.04
No.4+20.00	255.13			
		275.87	5.00	1,379.33
No.5	296.60			
		296.44	25.00	7,410.88
No.6	296.27			
		296.24	10.00	2,962.35
No.6+10.00	296.20			
		401.16	2.50	1,002.89
No.6+12.50	506.11			
		506.71	12.50	6,333.88
No.7	507.31			
		507.23	11.00	5,579.53
No.7+11.00	507.15			
		508.39	5.16	2,623.29
No.7+16.16	509.63			
		509.63	2.84	1,447.35
No.7+19.00	509.63			
		515.24	6.00	3,091.41
No.8	520.84			
		520.84	6.00	3,125.04
No.8+6.00	520.84			
		520.84	2.10	1,093.76
No.8+8.10	520.84			
		522.11	6.00	3,132.66
No.8+14.10	523.38			
		523.38	5.90	3,087.94
No.9	523.38			
		528.75	20.00	10,575.00
No.9+20.00	534.12			
		534.12	0.00	0.00
No.9+20.00'	534.12			
		524.04	12.50	6,550.50
No.9+32.50	513.96			
		398.79	30.00	11,963.70
No.9+62.50	283.62			
		141.81	24.20	3,431.80
No.9+86.70	0.00			
Total		10,665.96	306.70	129,259.09

QUANTITY CALCULATION COVER SHEET								
Project	Detailed Design on Port Reactivation Project in La Union Province			Project Code	JC1N004/2N001			
Work Section Title	West Revetment			Pay Item No. (BOQ)	2A-1A			
Quantity Item	Offshore dumping			Unit	m ³			
<u>Calculation Procedure Applied</u>								
<p>1. Calculation of Areas of Sections (Excel)</p> <p>2. Average of Areas of Sections (Excel)</p> <p>3. Calculation of Volume : Average of Areas of Sections times distance between Sections (Excel)</p>								
<u>References, Calculation Base and Revisions</u>								
<p>DVI - RV - 00 - 001</p> <p>DVI - RV - 01 - 004 ~ 023.</p>								
Rev	Prepared		No. of Pages	Checked		Reviewed		Superseded by Calc No.
	by	Date		by	Date	by	Date	
0	Karla G. 			Mr. Tawma		Mr. Ando		
1								
2								
3								

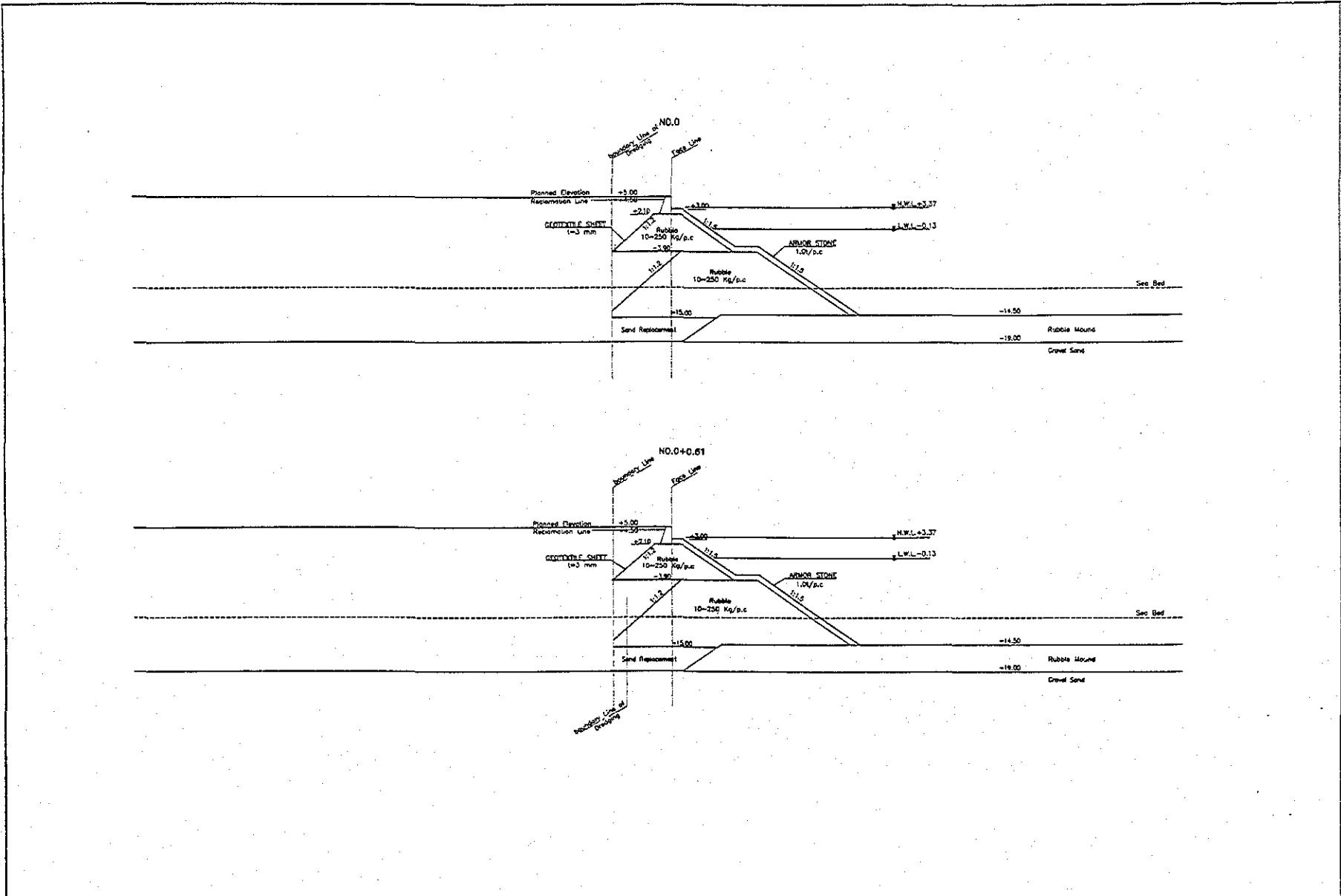


POINT NAME	COORDINATE	
	EAST	NORTH
1	628321.11	245751.38
2	627848.05	246033.85
3	628029.73	246205.28
4	627878.55	246365.18
5	627645.06	246512.30
6	627622.16	246590.67
7	627616.35	246596.80
8	627346.11	246451.21
10	626992.13	246825.75
13	626675.12	246526.32

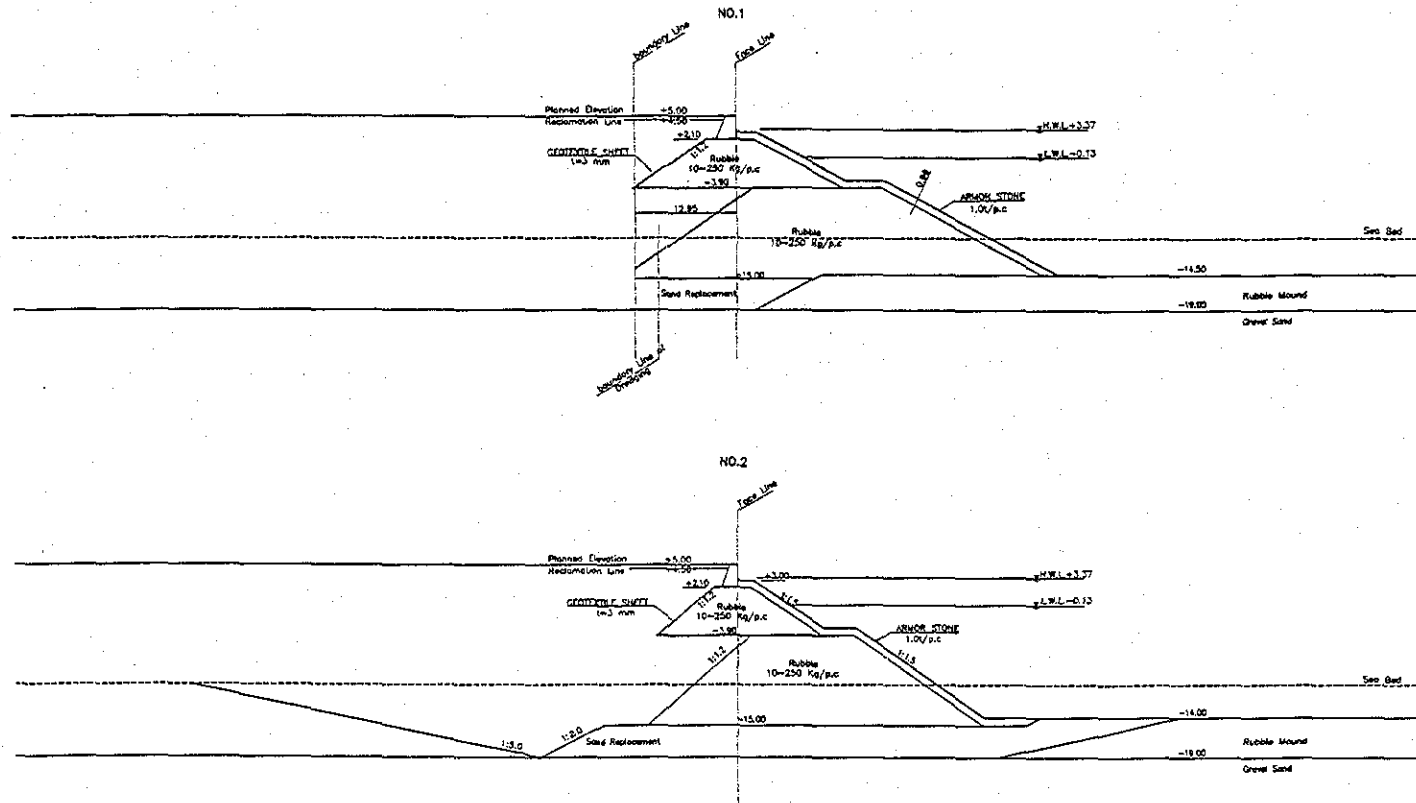
REV. NO. DATE CORRECTED BY APPROVED DATE	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.	CHECKED BY: _____ SECTION: REVETMENT WORK	DATE: JULY/2002
				CHECKED BY: _____ SUB-SECTION: GENERAL	SCALE: 1 : 5,000
				CHECKED BY: _____ TITLE: PLAN OF REVETMENT	DRAWING NO: DW-RV-00-001






	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON POST REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY : ORDERED BY : APPROVED BY :	SECTION : SUB-SECTION : TITLE :	DATE : SCALE : DRAWING NO. :
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.	REVETMENT WORK WEST REVETMENT CROSS SECTION (1)	JULY/2002 1 : 600 DW-RV-01-004	



 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	 NIPPON KOEI CO., LTD.	DRAWN BY:	SECTION: REVETMENT WORK SUB-SECTION: WEST REVETMENT TITLE: CROSS SECTION (2)	DATE: JULY/2002
				CHECKED BY:		SCALE: 1 : 600
				APPROVED BY:		DRAWING NO: OW-RV-01-005



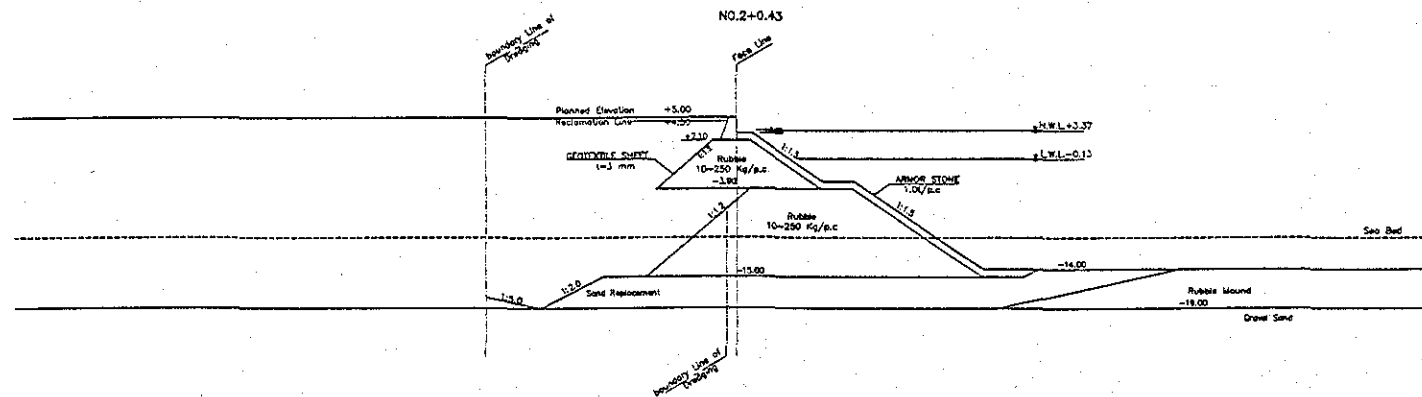
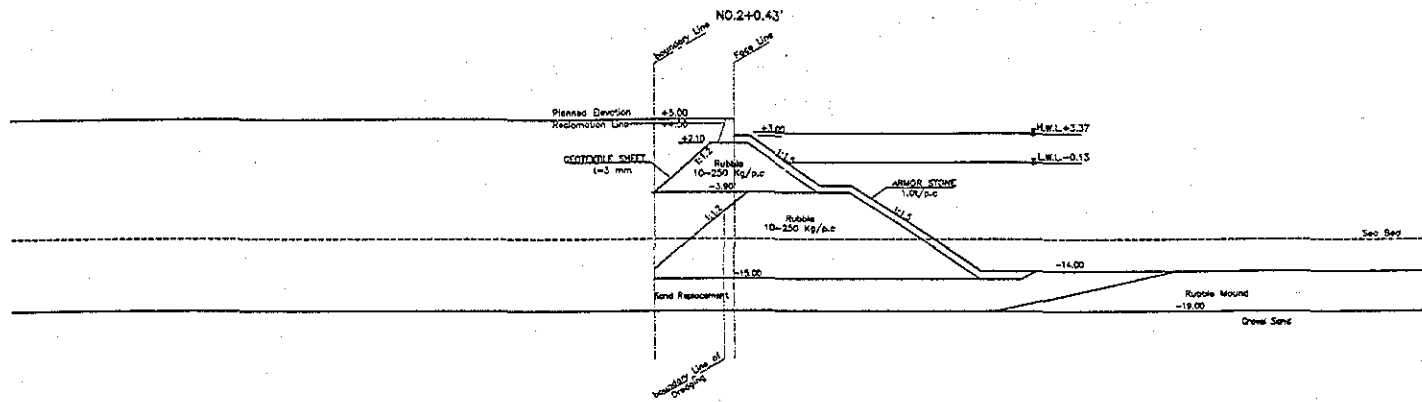

JICA
 JAPAN INTERNATIONAL
 COOPERATION AGENCY
 (JICA)

Cpa
 COMISION EJECUTIVA
 PORTUARIA AUTONOMA
 (CEPA)

DETAILED DESIGN ON PORT REACTIVATION
 PROJECT IN LA UNION PROVINCE
 OF THE REPUBLIC OF EL SALVADOR

NIPPON KOEI CO., LTD.

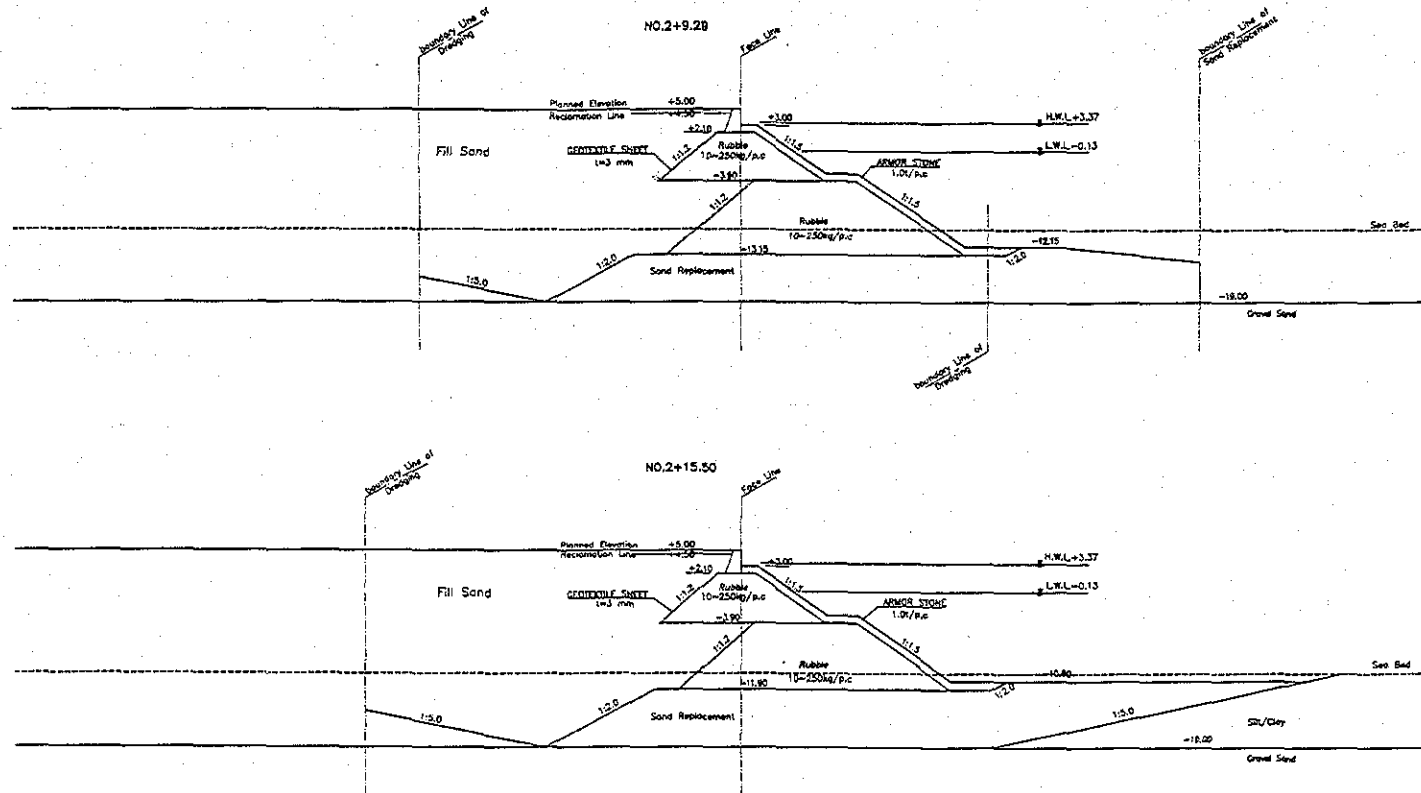
DRAWING BY :
 CHECKED BY :
 APPROVED BY :

SECTION : REVTMENT WORK
 SUB-SECTION : WEST REVTMENT
 FILE :
CROSS SECTION (3)

DATE : JULY/2002
 SCALE : 1 : 500
 DRAWING NO :
 DW-RV-01-036



 JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY : CHIEF DESIGNER BY : APPROVED BY :	SECTION : REVETMENT WORK SUB-SECTION : WEST REVETMENT TITLE : CROSS SECTION (4)	DATE : JULY/2002 SCALE : 1 : 600 DRAWING NO : DW-RV-01-007
			 NIPPON KOEI CO., LTD.		



JICA
 JAPAN INTERNATIONAL
 COOPERATION AGENCY
 (JICA)

Cepa
 COMISION EJECUTIVA
 PORTUARIA AUTONOMA
 (CEPA)

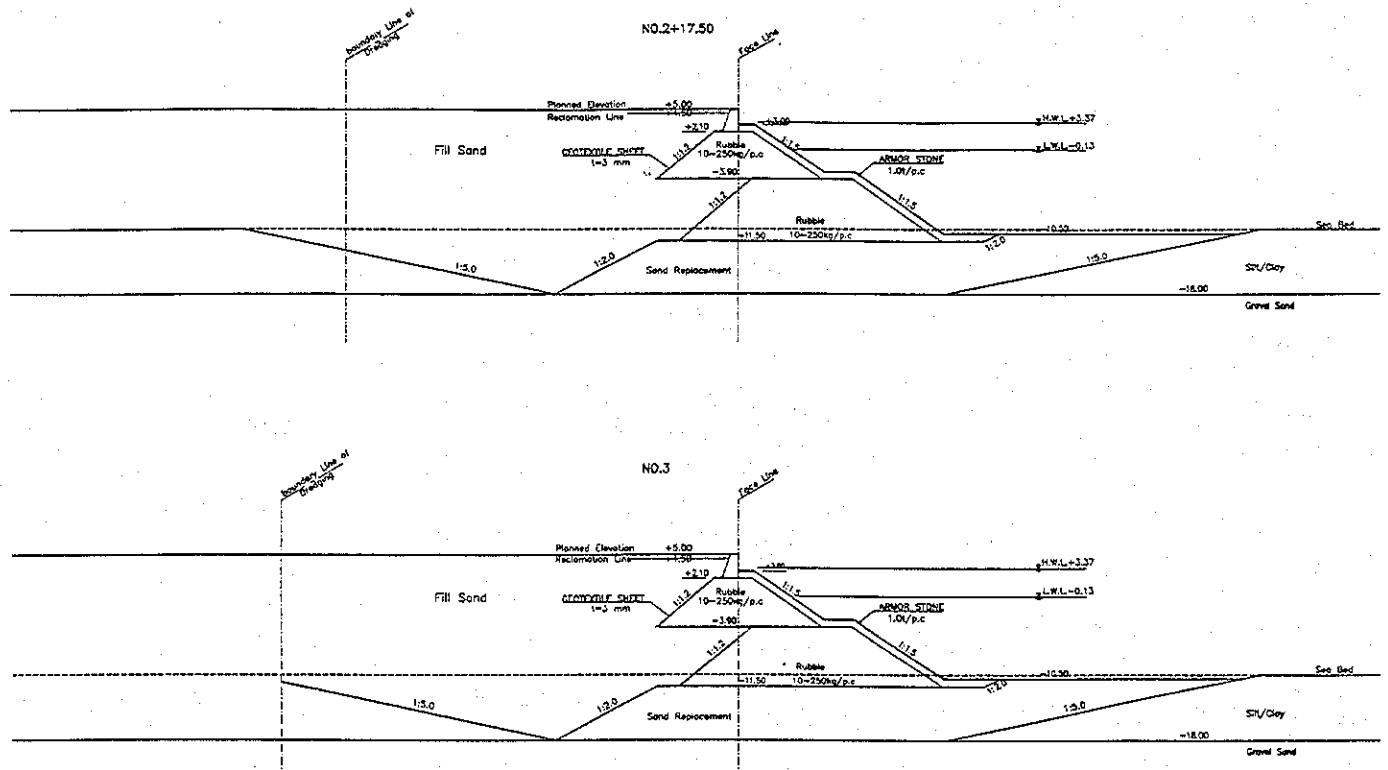
DETAILED DESIGN ON PORT REACTIVATION
 PROJECT IN LA UNION PROVINCE
 OF THE REPUBLIC OF EL SALVADOR




NK
 NIPPON KOEI CO., LTD.

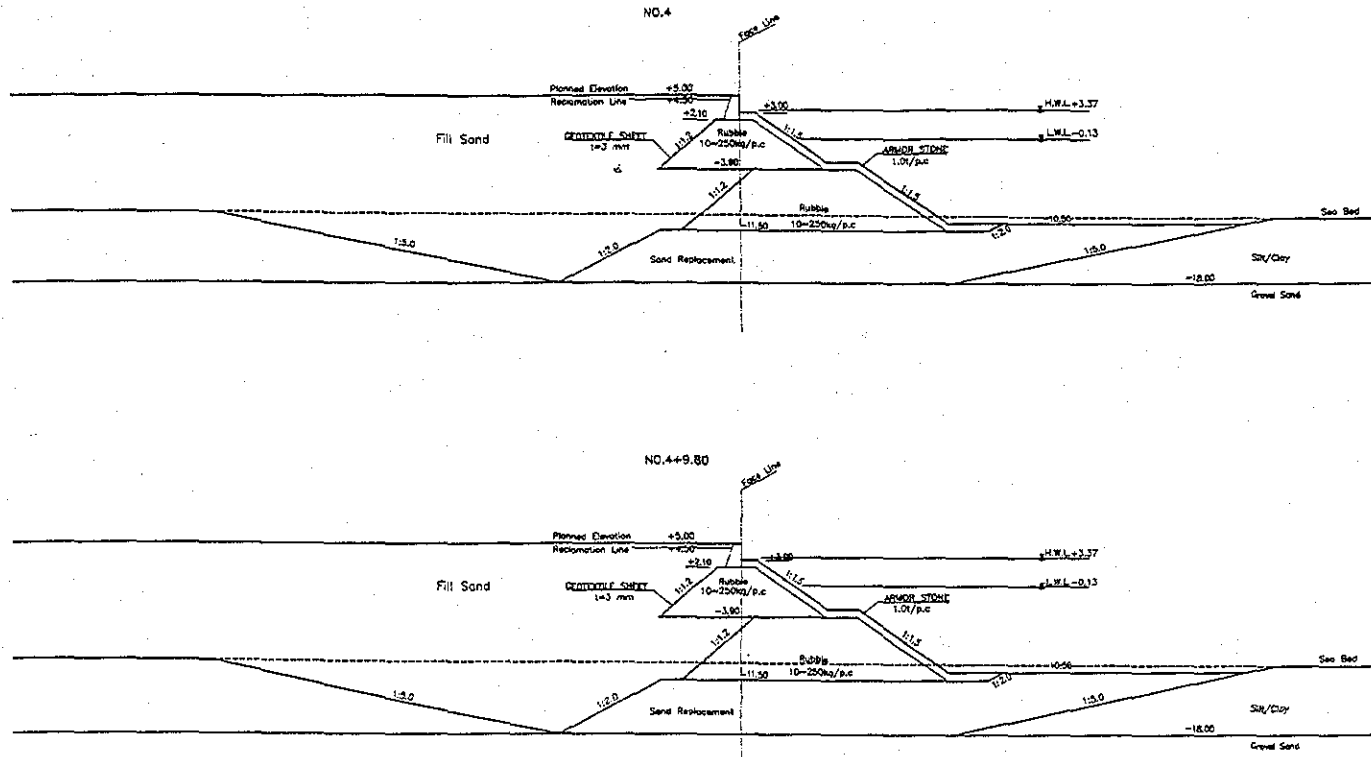
DESIGNED BY :
 CHECKED BY :
 APPROVED BY :




SECTION : REVETMENT WORK
 SUB-SECTION : WEST REVETMENT
 TITLE : CROSS SECTION (5)

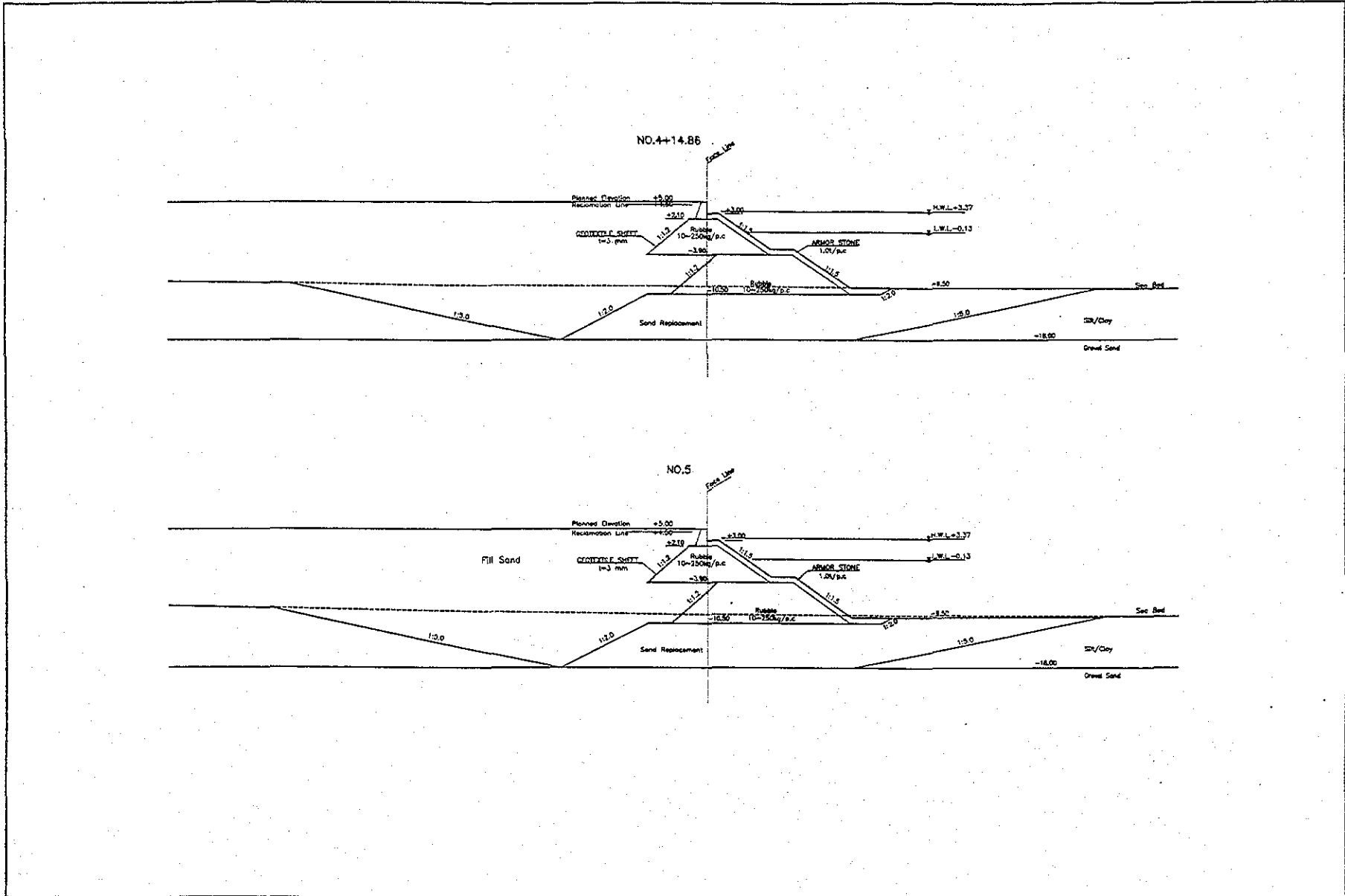
DATE : JULY/2002
 SCALE : 1 : 600
 DRAWING NO : JW-PV-01-008



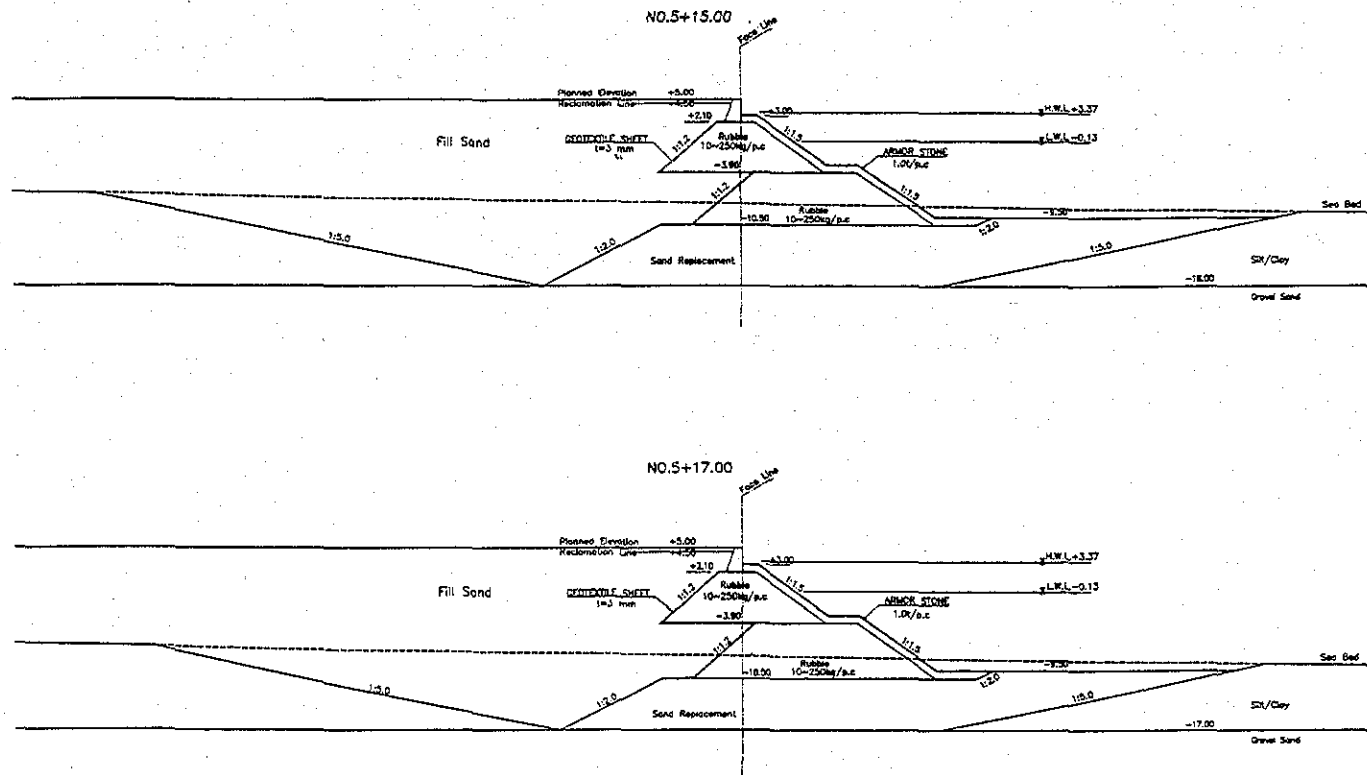
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : REVETMENT WORK	DATE : JULY/2002
			CHECKED BY :	SUB-SECTION : WEST REVETMENT	SCALE : 1 : 600
			APPROVED BY :	TITLE : CROSS SECTION (6)	DRAWING NO. : DW-RV-01-C09



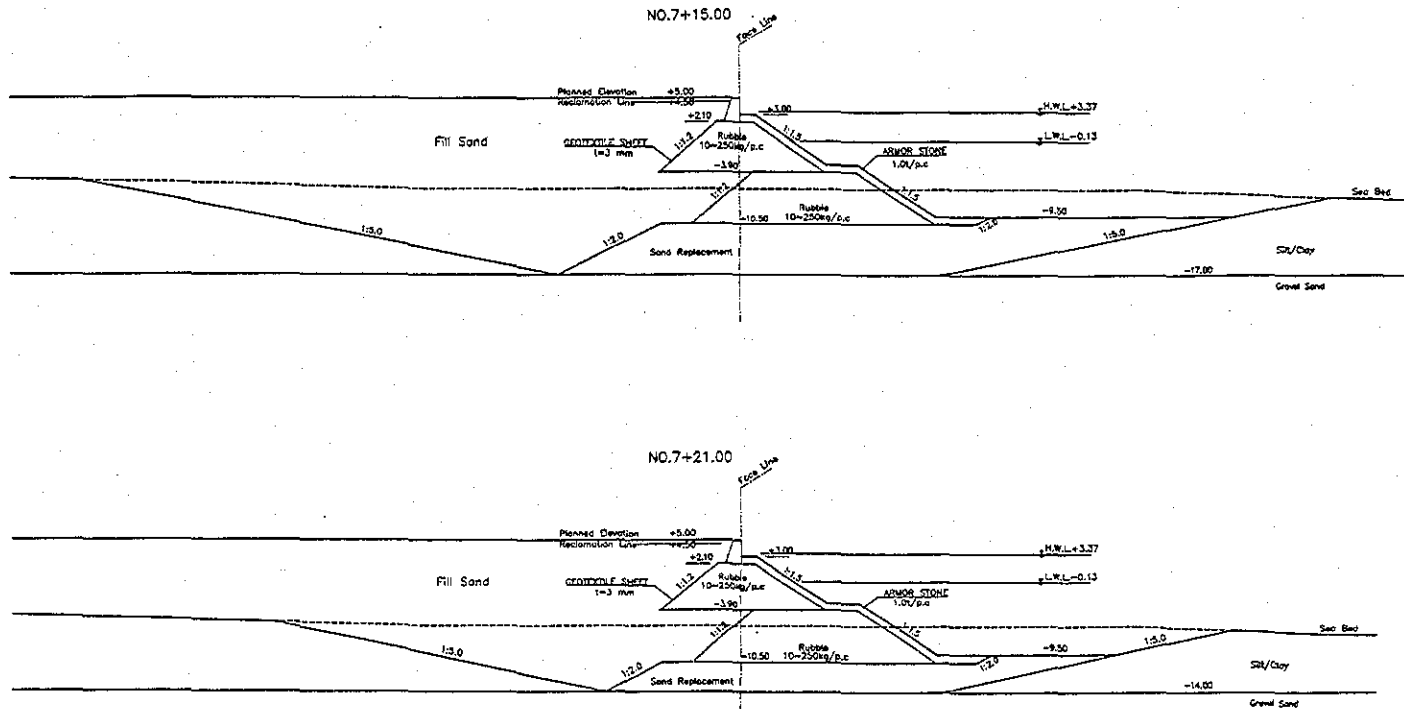
	 JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 CEPA COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NIPPON KOEI CO., LTD.	DRAWN BY :	SECTION : REVETMENT WORK SUB-SECTION : WEST REVETMENT TITLE : CROSS SECTION (7)	DATE : JULY/2002
				DESIGNED BY :		SCALE : 1 : 600
				CHECKED BY :		DRAWING NO.
				APPROVED BY :		SW-PV-01-010



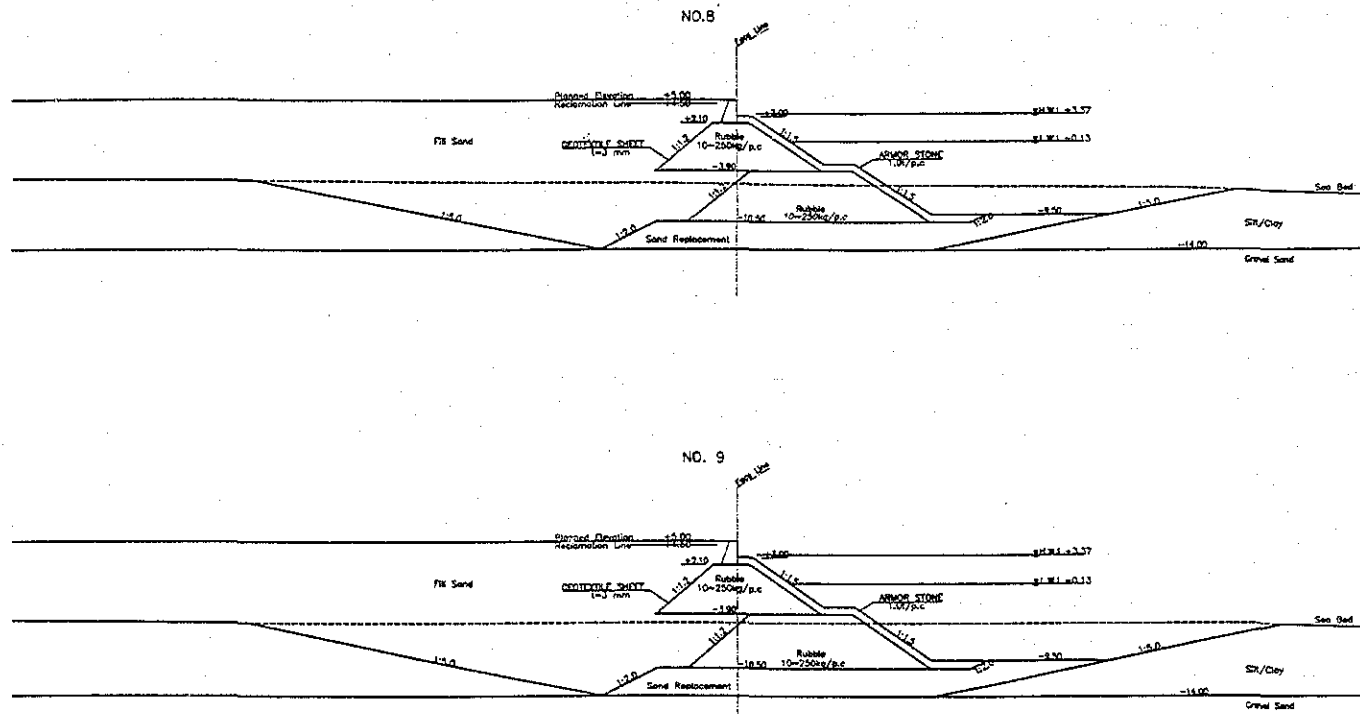
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR		DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : SUB-SECTION : TITLE :	DATE : SCALE : DRAWING NO. :
 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)		 NIPPON KOEI CO., LTD.		REVETMENT WORK WEST REVETMENT CROSS SECTION (8)		JULY/2002 1 : 600 DW-RV-01-011



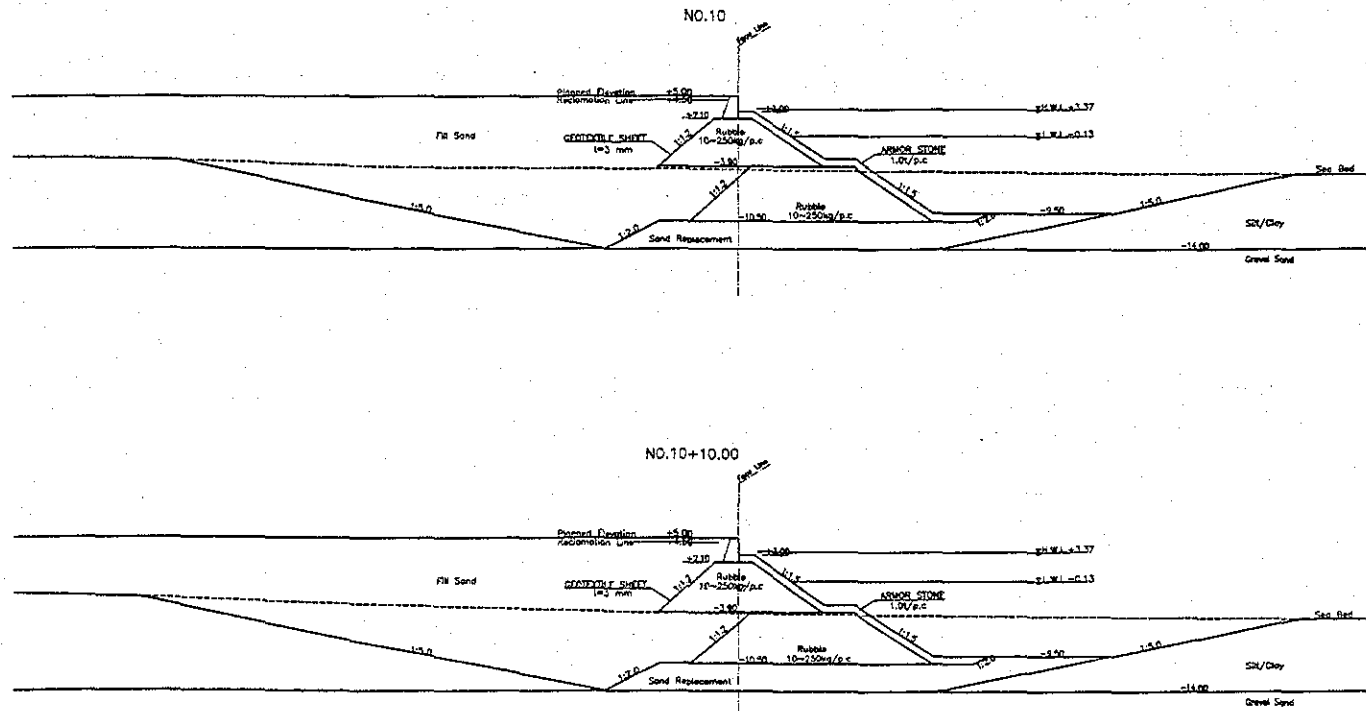
	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN OF PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : SUB-SECTION : TITLE :	DATE : SCALE : DRAWING NO. :
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.	REVETMENT WORK WEST REVETMENT CROSS SECTION (9)	JULY/2002 1 : 500 DW-RV-01-012	
	APPROVED DATE :	APPROVED DATE :	APPROVED DATE :	APPROVED DATE :	






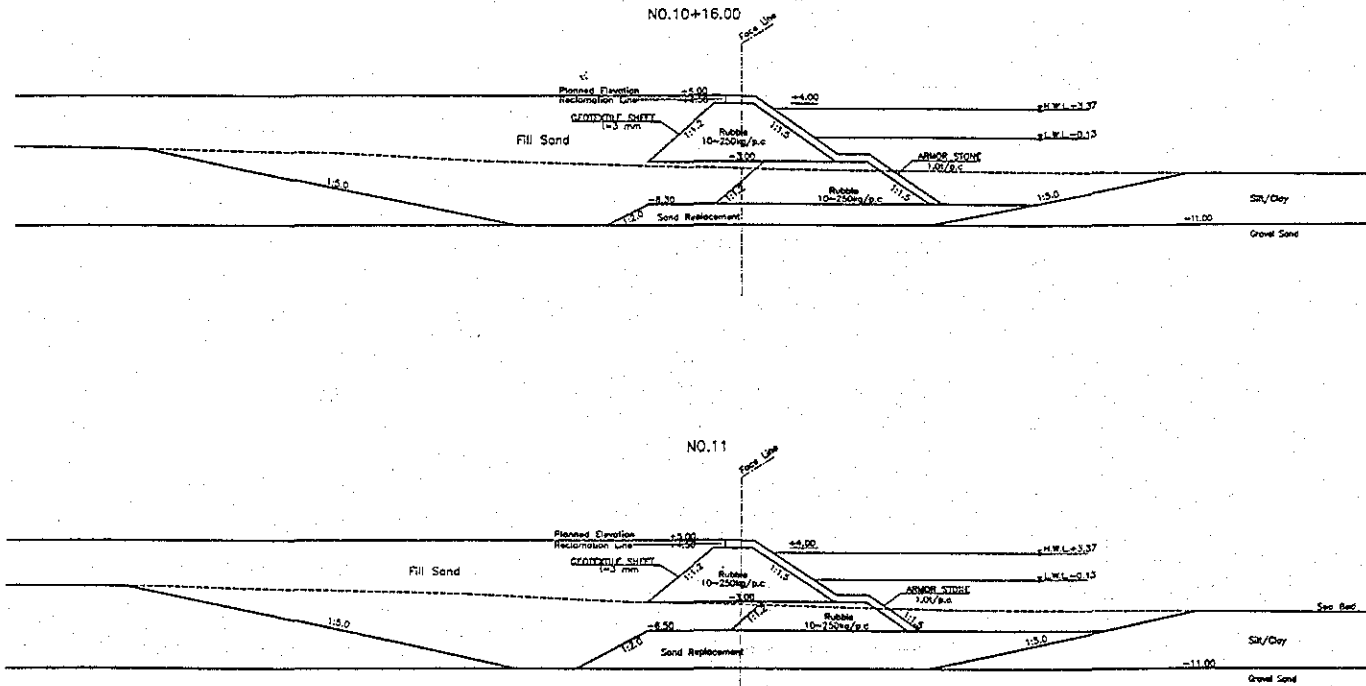
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY:	SECTION: REVELMENT WORK SUB-SECTION: WEST REVELMENT FILE:	DATE: JULY/2002
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOGI CO., LTD.	CHECKED BY:	CROSS SECTION (11)	SCALE: 1 : 500
			APPROVED BY:		DRAWING NO: DW-RV-01-014



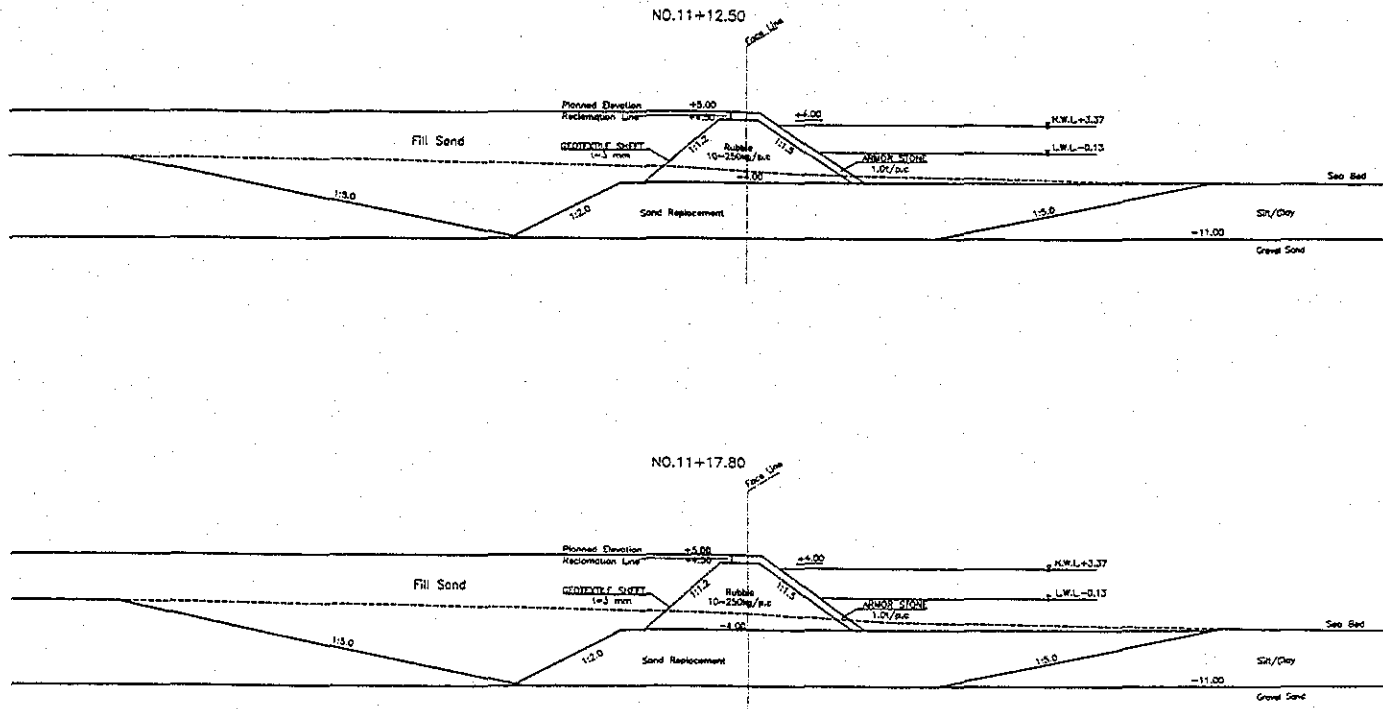
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NIPPON KOEI CO., LTD.	DESIGNED BY : _____	SECTION : _____	REVETMENT WORK WEST REVETMENT CROSS SECTION (12)	DATE : JULY/2002
			CHECKED BY : _____	SUB-SECTION : _____		SCALE : 1 : 600
			APPROVED BY : _____	FILE : _____		DRAWING NO. : _____
			_____	_____		DW-RV-01-015



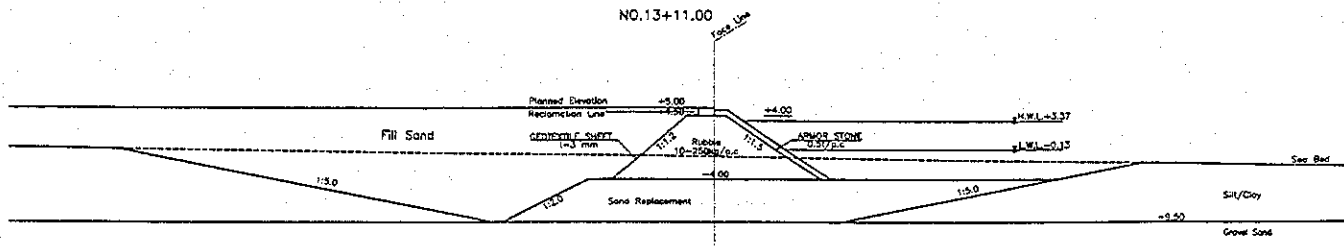
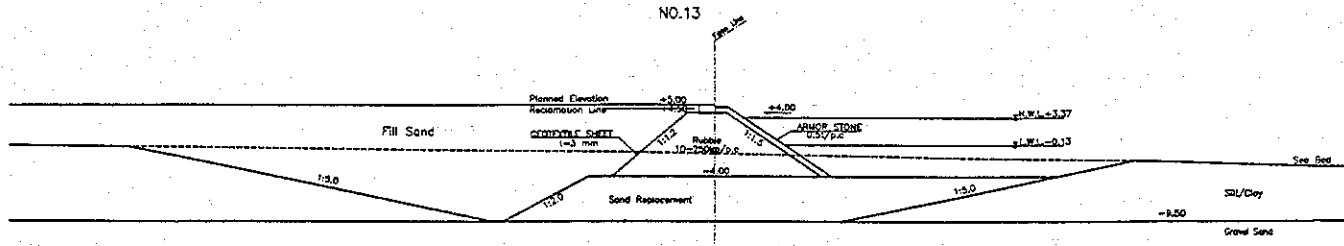
	 	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DRAWN BY : CHECKED BY : APPROVED BY :	SECTION : SUB-SECTION : TITLE :	REVETMENT WORK WEST REVETMENT CROSS SECTION (13)	DATE : JULY/2002 SCALE : 1 : 500 DRAWING NO : DW-RV-01-016
		COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NIPPON KOEI CO., LTD.				



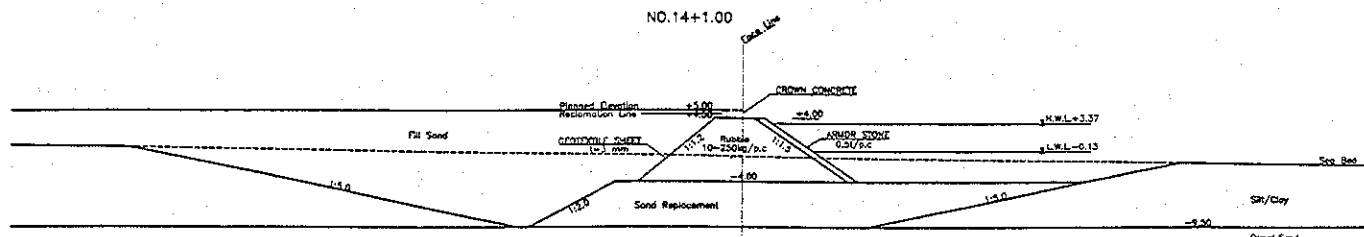
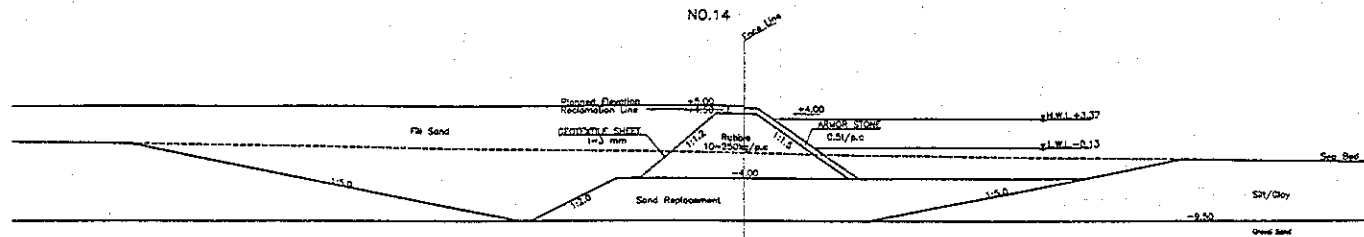
		JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR		CHECKED BY: _____ APPROVED BY: _____		SECTION: _____ SUB-SECTION: _____ FILE: _____		REVELTMENT WORK WEST REVELTMENT CROSS SECTION (14)		DATE: JULY/2002 SCALE: 1: 600 DRAWING NO.: DW-RV-01-017	
		COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)				NIPPON KOEI CO., LTD.							



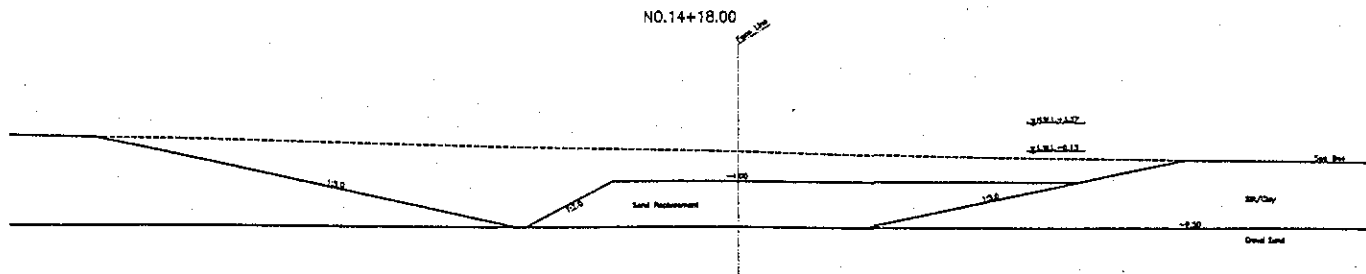
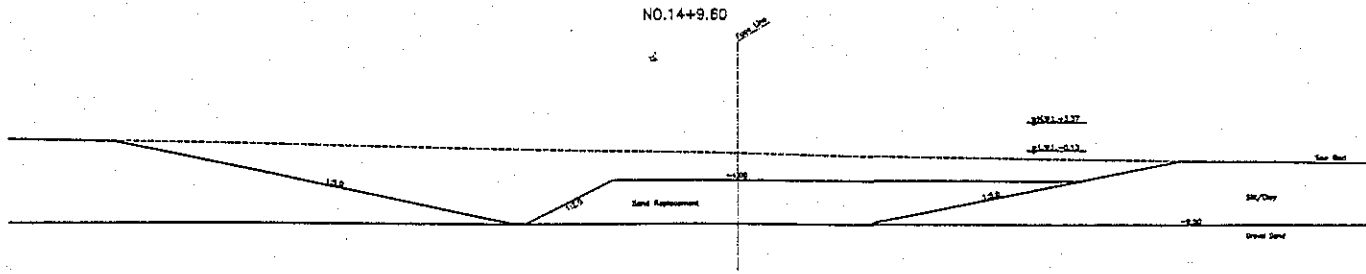
 	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DRAWN BY : CHECKED BY : APPROVED BY :	SECTION : REVETMENT WORK SUB-SECTION : WEST REVETMENT TITLE : CROSS SECTION (15)	DATE : JULY/2002 SCALE : 1 : 500 DRAWING NO. : DW-RV-01-018
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.			



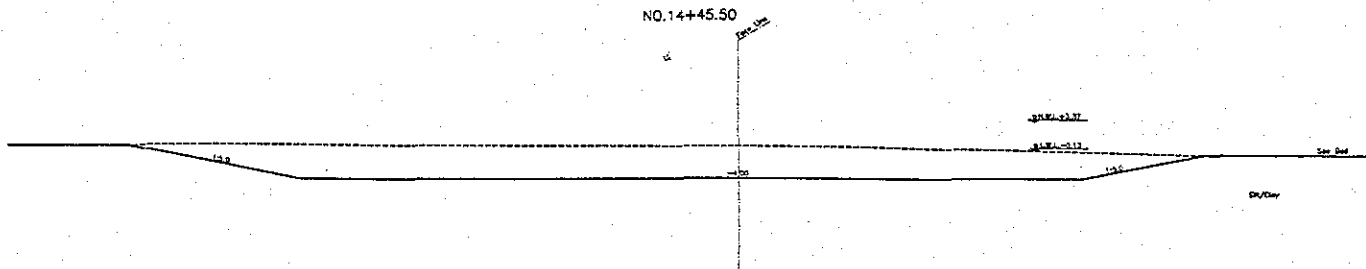
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR		DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : REVELTMENT WORK SUB-SECTION : WEST REVELTMENT FILE : CROSS SECTION (17)	DATE : JULY/2002 SCALE : 1 : 600 DRAWING NO : DW-RV-01-020
 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)		 NIPPON KOEI CO., LTD.				



		JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR		DESIGNED BY : CHECKED BY : APPROVED BY :		SECTION : REVELMENT WORK SUB-SECTION : WEST REVELMENT TITLE : CROSS SECTION (18)		DATE : JULY/2002 SCALE : 1 : 600 DRAWING NO : DW-RV-01-021	
		CEPA COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)				NIPPON KOEI CO., LTD.					



	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.	DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : REVETMENT WORK SUB-SECTION : WEST REVETMENT TITLE : CROSS SECTION (19)	DATE : JULY/2002 SCALE : 1 : 500 DRAWING NO : S-14-18-100		
			DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR				



JICA
 JAPAN INTERNATIONAL
 COOPERATION AGENCY
 (JICA)
 COMISION EJECUTIVA
 PUERTO LIBRE AUTONOMA

DETAILED DESIGN ON PORT REACTIVATION
 PROJECT IN LA UNION PROVINCE
 OF THE REPUBLIC OF EL SALVADOR
 NIKEN
 NIPPON KOEI CO., LTD.

DESIGNED BY:
 DRAWN BY:

SECTION:
 S.B-SECTION:
 TITLE:

REVETMENT WORK
 WEST REVETMENT
 CROSS SECTION (20)

DATE:
 JULY/2002
 SCALE:
 1 : 500
 DRAWING NO.

○West Revetment

1. Excavation for Foundation (harbor side)

Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.2-6.07	0.00			
No.2+0.43	272.04	136.02	6.50	884.13
No.0	22.14			
No.0+0.61	21.42	21.78	0.61	13.29
No.1	26.95	24.19	7.06	170.75
No.2+0.43'	80.01	53.48	7.06	377.57
No.2+9.29	343.04	211.53	8.86	1,874.11
No.2+15.50	379.35	361.20	6.21	2,243.02
No.2+17.50	328.18	353.77	2.00	707.53
No.3	343.30	335.74	7.50	2,518.05
No.4	385.90	364.60	25.00	9,115.00
No.4+9.80	389.22	387.56	9.80	3,798.09
No.4+14.86	428.11	408.67	5.06	2,067.84
No.5	459.98	444.05	10.14	4,502.62
No.5+15.00	561.74	510.86	15.00	7,662.90
No.5+17.00	461.34	511.54	2.00	1,023.08
No.6	494.11	477.73	8.00	3,821.80
No.7	541.95	518.03	25.00	12,950.75
No.7+15.00	578.14	560.05	15.00	8,400.68
No.7+21.00	301.65	439.90	6.00	2,639.37
No.8	335.31	318.48	4.00	1,273.92
No.9	357.30	346.31	25.00	8,657.63
No.10	424.82	391.06	25.00	9,776.50
No.10+10.00	474.99	449.91	10.00	4,499.05
No.10+16.00	407.94	441.47	6.00	2,648.79
No.11	453.43	430.69	9.00	3,876.17
No.11+12.50	506.32	479.88	12.50	5,998.44
No.11+17.80	518.37	512.35	5.30	2,715.43
No.11+20.80	409.17	463.77	3.00	1,391.31
No.12	415.38	412.28	4.20	1,731.56
No.13	445.28	430.33	25.00	10,758.25
No.13+11.00	446.28	445.78	25.00	11,144.50
No.14	480.79	463.54	26.00	12,051.91
		480.79	1.00	480.79

Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No. 14+1.00	480.79			
		491.77	8.60	4,229.22
No. 14+9.60	502.75	517.02	8.40	4,342.97
No. 14+18.00	531.29	406.18	27.50	11,169.95
No. 14+45.50	281.07	140.54	19.75	2,775.57
No. 14+65.25	0.00			
Total			412.05	164,292.50

98,486.57


OWest Revetment

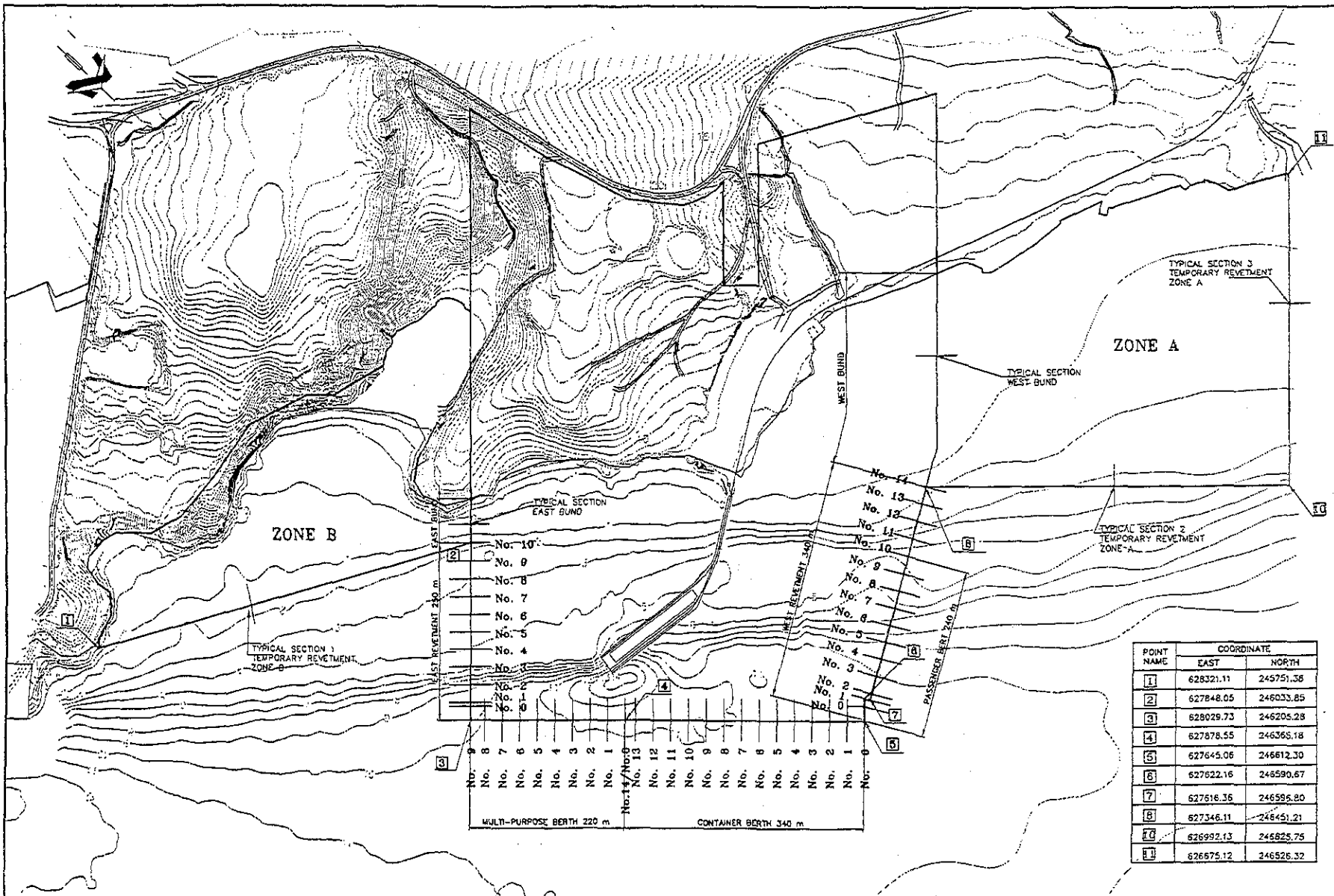
2. Excavation for Foundation (sea side)

Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.2+0.43	0.00			
		191.75	8.86	1,698.91
No.2+9.29	383.50			
		434.75	6.21	2,699.80
No.2+15.50	486.00			
		429.00	2.00	858.00
No.2+17.50	372.00			
		372.00	7.50	2,790.00
No.3	372.00			
		383.20	25.00	9,579.88
No.4	394.39			
		396.61	9.80	3,886.78
No.4+9.80	398.83			
		398.87	5.06	2,018.28
No.4+14.86	398.91			
		407.98	10.14	4,136.92
No.5	417.05			
		448.25	15.00	6,723.75
No.5+15.00	479.45			
		445.01	2.00	890.01
No.5+17.00	410.56			
		420.78	8.00	3,366.24
No.6	431.00			
		462.53	25.00	11,563.25
No.7	494.06			
		527.98	15.00	7,919.70
No.7+15.00	561.90			
		459.04	6.00	2,754.21
No.7+21.00	356.17			
		362.99	4.00	1,451.94
No.8	369.80			
		398.50	25.00	9,962.38
No.9	427.19			
		442.57	25.00	11,064.13
No.10	457.94			
		464.32	10.00	4,643.20
No.10+10.00	470.70			
		374.44	6.00	2,246.64
No.10+16.00	278.18			
		286.94	9.00	2,582.46
No.11	295.70			
		310.25	12.50	3,878.06
No.11+12.50	324.79			
		334.37	5.30	1,772.16
No.11+17.80	343.95			
		281.98	3.00	845.94
No.11+20.80	220.01			
		225.91	4.20	948.82
No.12	231.81			
		256.60	25.00	6,415.00
No.13	281.39			
		287.07	11.00	3,157.77
No.13+11.00	292.75			
		298.81	14.00	4,183.27
No.14	304.86			
		304.86	1.00	304.86

Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.14+1.00	304.86			
		309.30	8.60	2,659.94
No.14+9.60	313.73			
		318.63	8.40	2,676.45
No.14+18.00	323.52			
		258.19	27.50	7,100.23
No.14+45.50	192.86			
		96.43	19.75	1,904.49
No.14+65.25	0.00			
Total			364.82	128,683.44

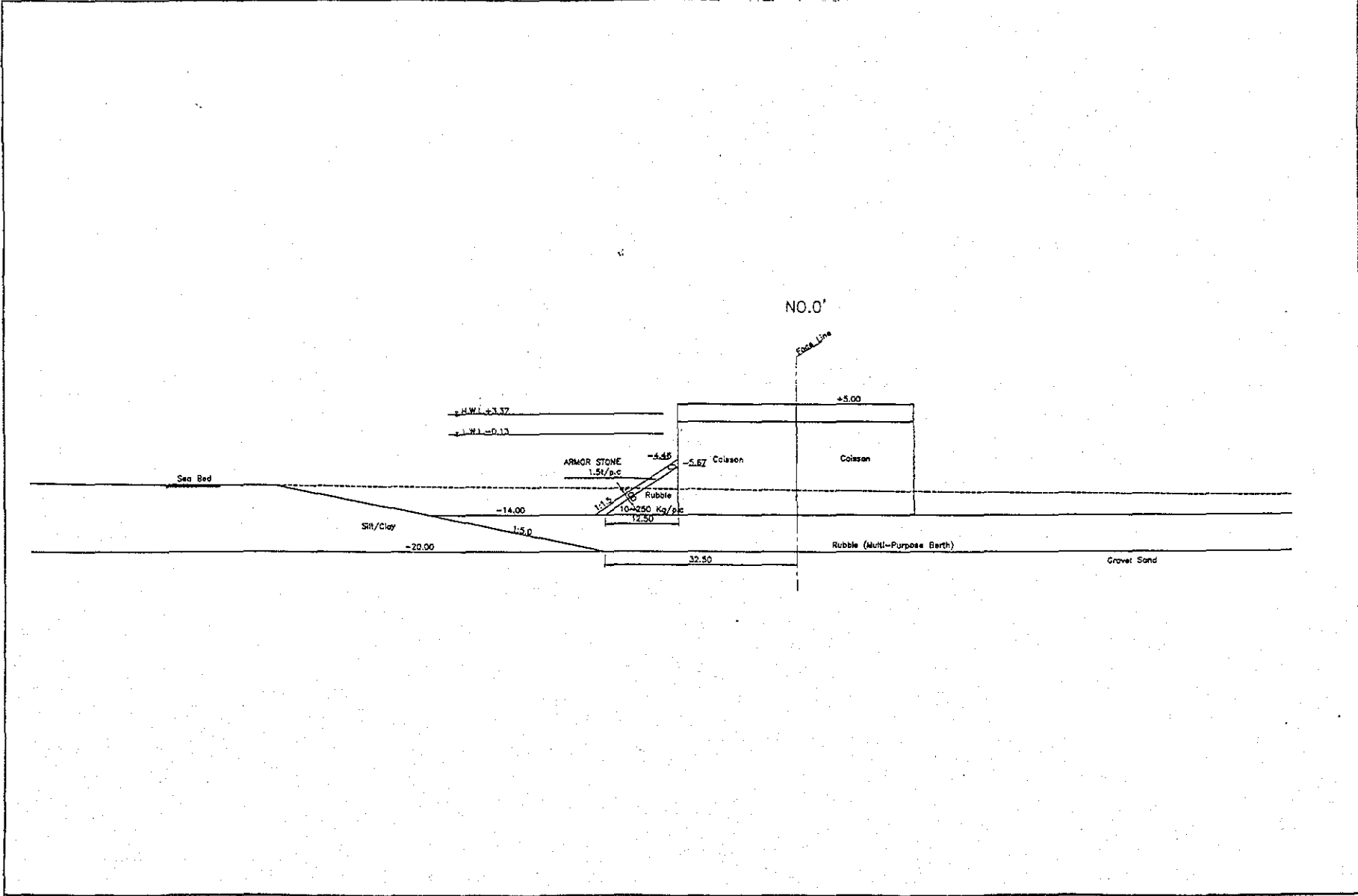
104,216.47

QUANTITY CALCULATION COVER SHEET								
Project	Detailed Design on Port Reactivation Project in La Union Province			Project Code	JC1N004/2N001			
Work Section Title	East Revetment			Pay Item No. (BOQ)	2A-11			
Quantity Item	Offshore dumping			Unit	m ³			
Calculation Procedure Applied								
<ol style="list-style-type: none"> 1. Calculation of Areas of Sections (Excel) 2. Average of Areas of Sections (Excel) 3. Calculation of Volume : Average of Areas of Sections times distance between Sections (Excel) 								
References, Calculation Base and Revisions								
DW - RV - 00 - 001 DW - RV - 02 - 004 ~ 020								
Rev	Prepared		No. of Pages	Checked		Reviewed		Superseded by Calc No.
	by	Date		by	Date	by	Date	
0	Karla G. 			Mr. Truma		Mr. Ando		
1								
2								
3								



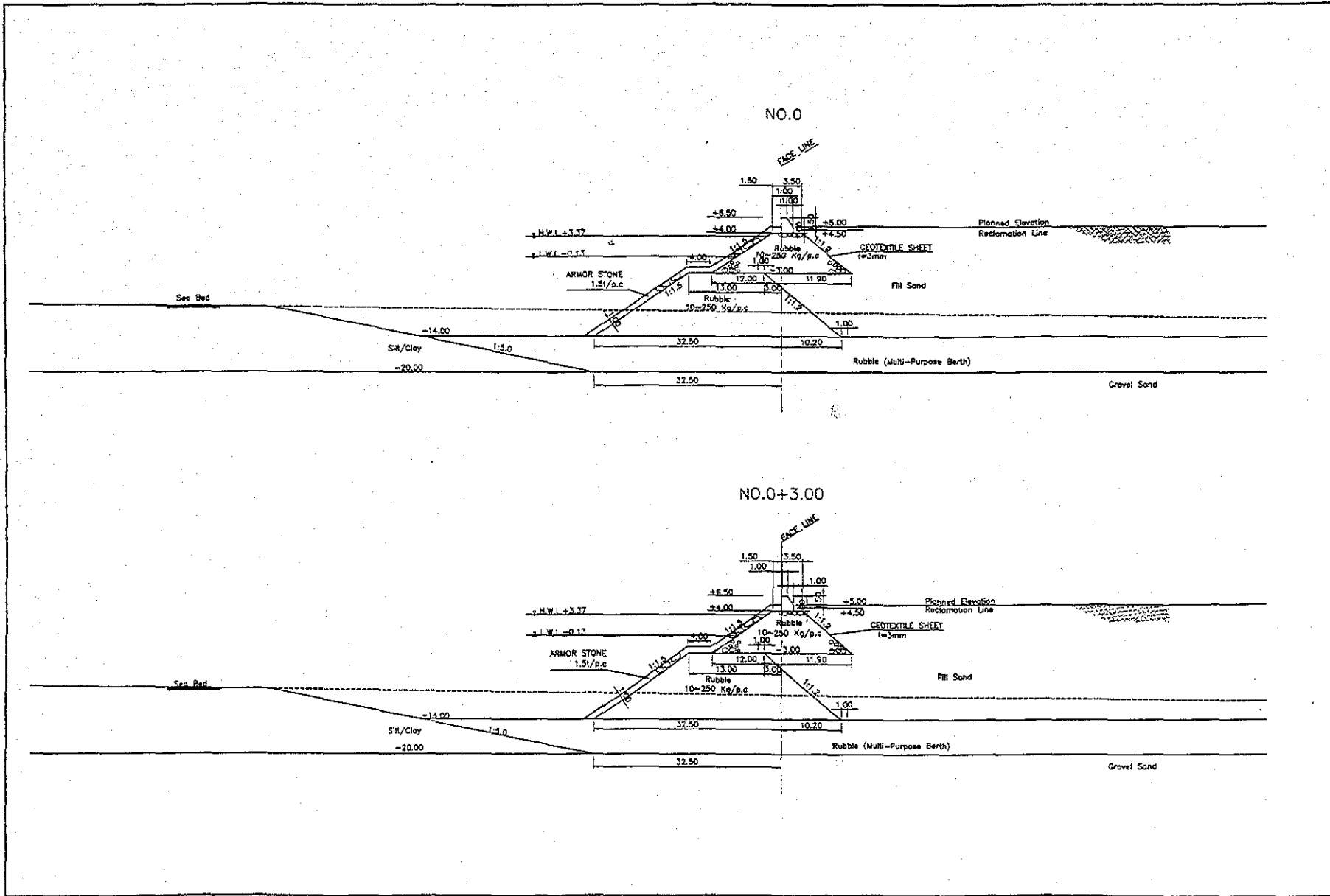
POINT NAME	COORDINATE	
	EAST	NORTH
1	628321.11	245751.58
2	627848.05	246033.85
3	628029.73	246205.28
4	627878.55	246365.18
5	627645.06	246612.30
6	627622.16	246590.67
7	627516.36	246596.80
8	627346.11	246451.21
9	626992.13	246825.75
11	626675.12	246526.32

<p>JICA COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)</p>	<p>DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR</p> <p>NIPPON KOEI CO., LTD.</p>	<p>REVISION BY : CHECKED BY : APPROVED BY :</p>	<p>SECTION : REVETMENT WORK SUB-SECTION : GENERAL TITLE : PLAN OF REVETMENT</p>	<p>DATE : JULY/2002 SCALE : 1 : 5,000 DRAWING NO. : DW-RV-00-001</p>
--	--	---	---	--

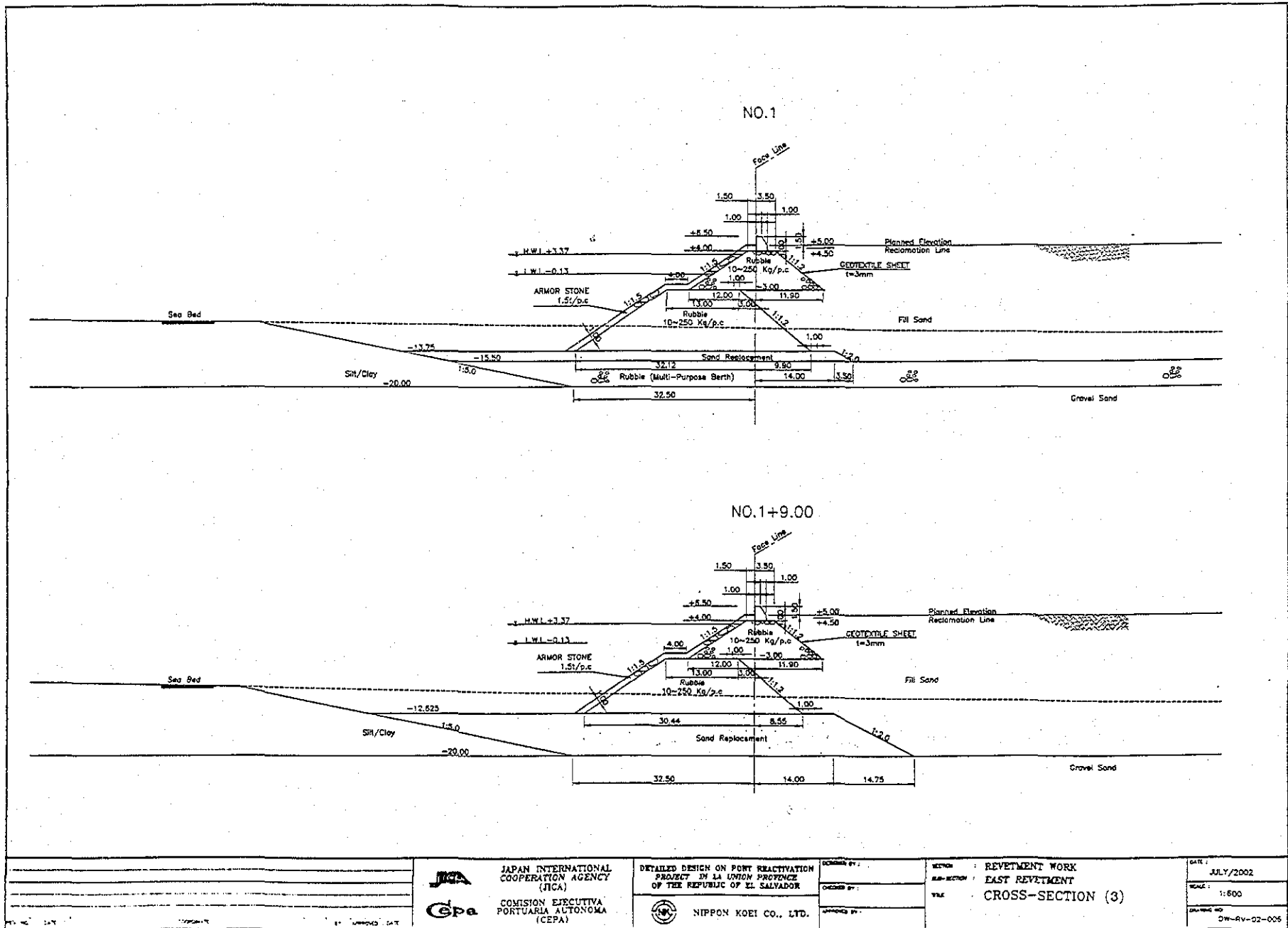


 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DRAWN BY :	SECTION : REYETMENT WORK	DATE : JULY/2002
			CHECKED BY :	SUB-SECTION : EAST REYETMENT	SCALE : 1 : 500
			APPROVED BY :	FILE : CROSS-SECTION (1)	DRAWING NO : DW-RV-02-004
NIPPON KOEI CO., LTD.					

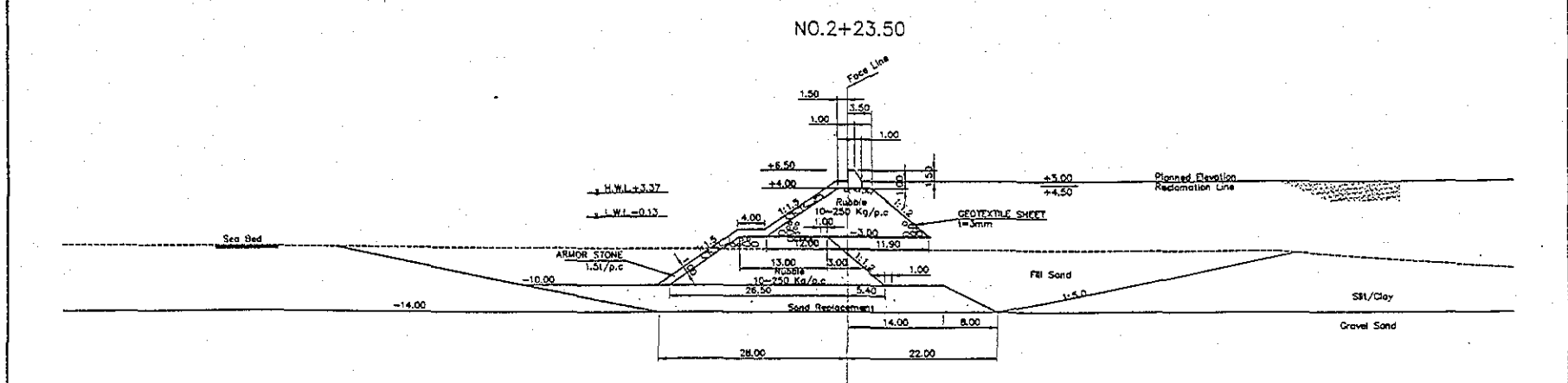
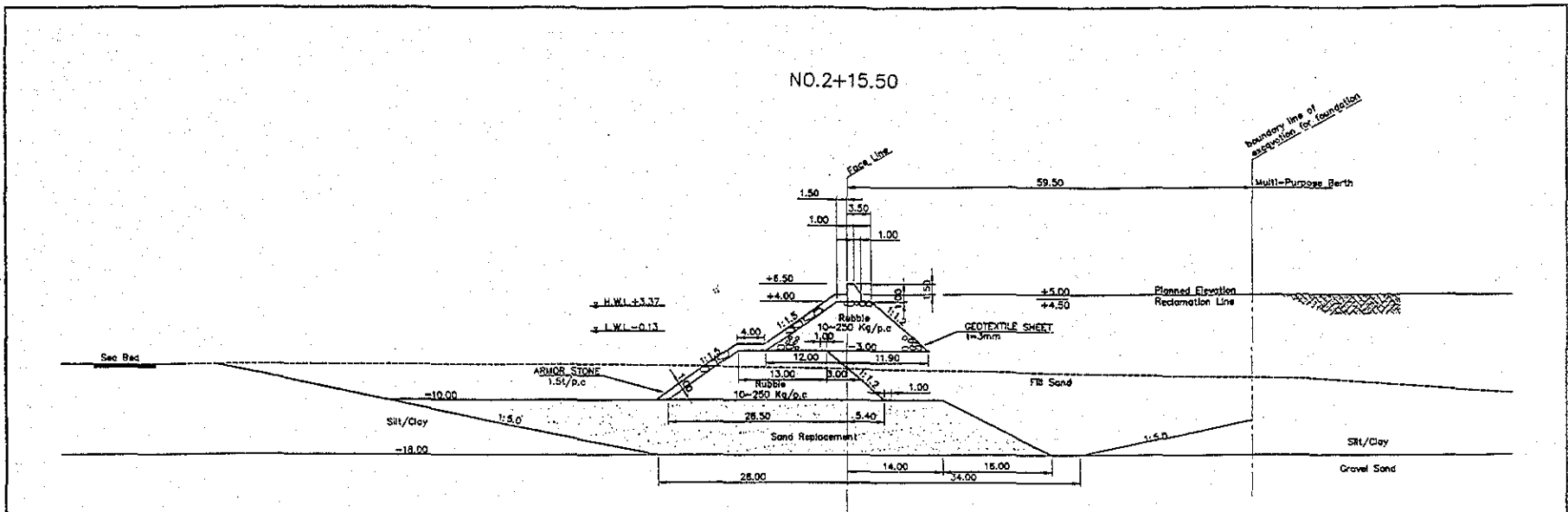
215





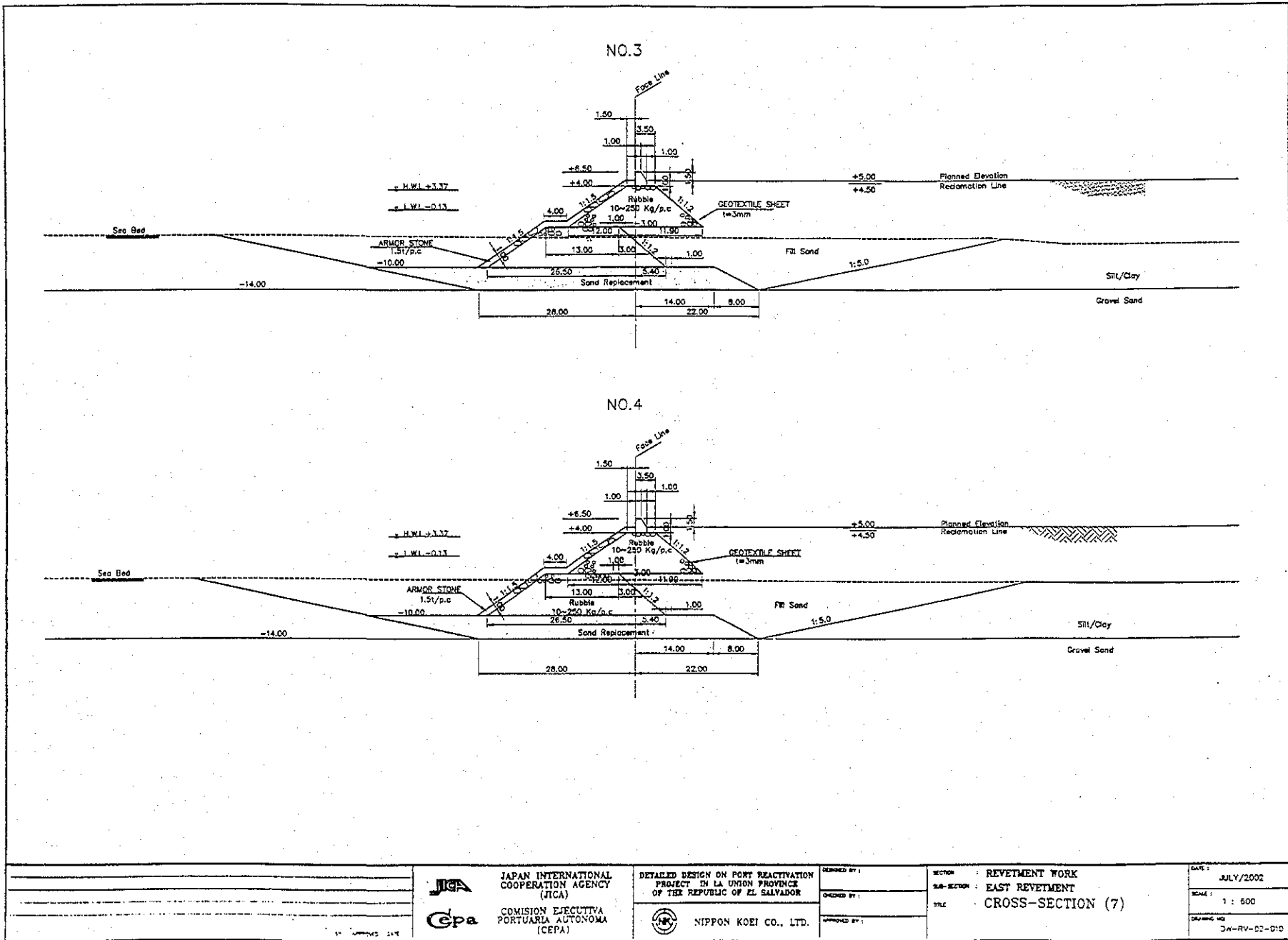
 JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	 NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION :	DATE :
				DESIGNED BY :	SUB-SECTION :	JULY/2002
				APPROVED BY :	FILE :	SCALE :
					CROSS-SECTION (2)	1:600
						DRAWING NO.
						DW-RV-C2-005



	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DRAWN BY : CHECKED BY : APPROVED BY :	SECTION : SUB-SECTION : TITLE :	REVETMENT WORK EAST REVETMENT CROSS-SECTION (3)	DATE : SCALE : DRAWING NO.	JULY/2002 1:500 DW-RV-02-005
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.					

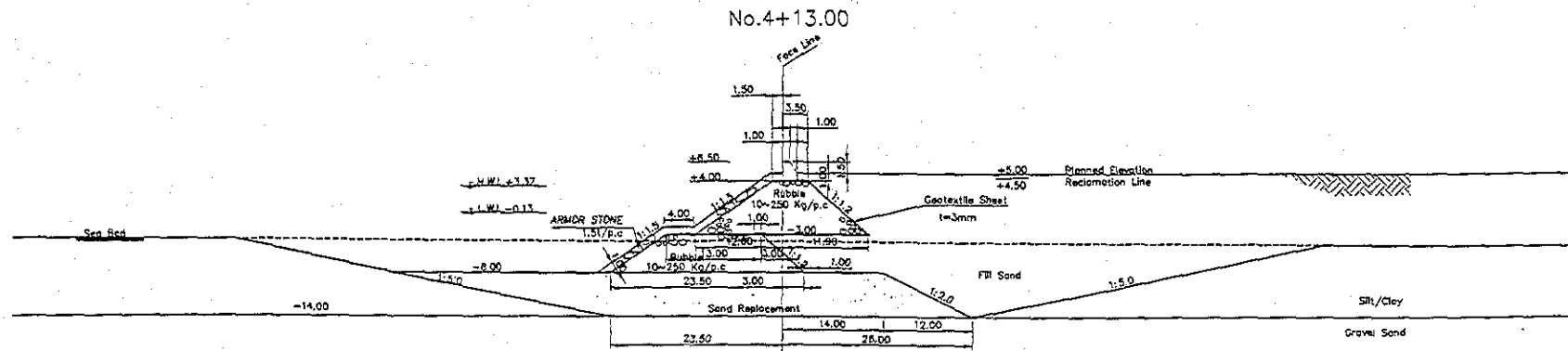
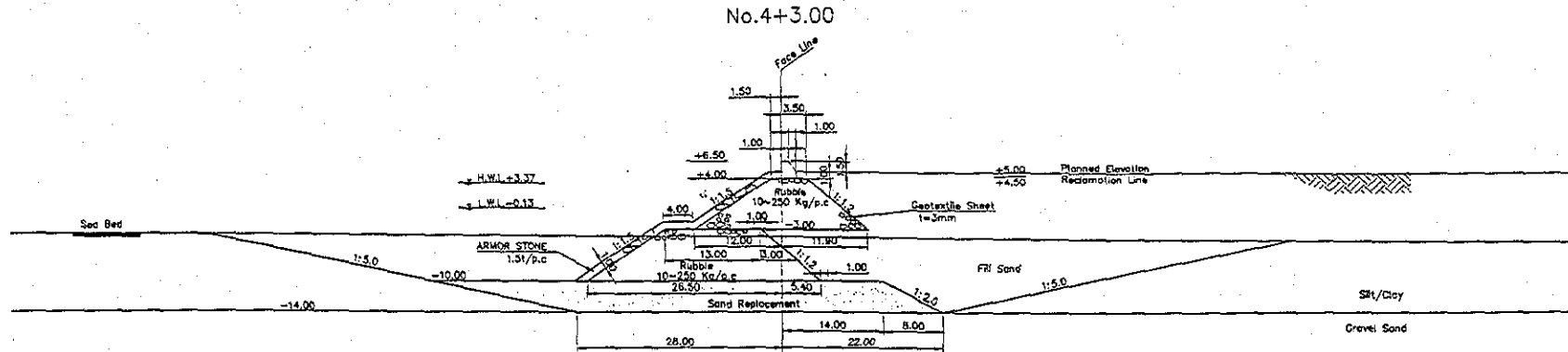


	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NIPPON KOEI CO., LTD.	DESIGNED BY: CHECKED BY: APPROVED BY:	SECTION: REVETMENT WORK SUB-SECTION: EAST REVETMENT TITLE: CROSS-SECTION (6)	DATE: JULY/2002 SCALE: 1 : 500 DRAWING NO: DW-RV-52-009
---	---	---	---	--	---

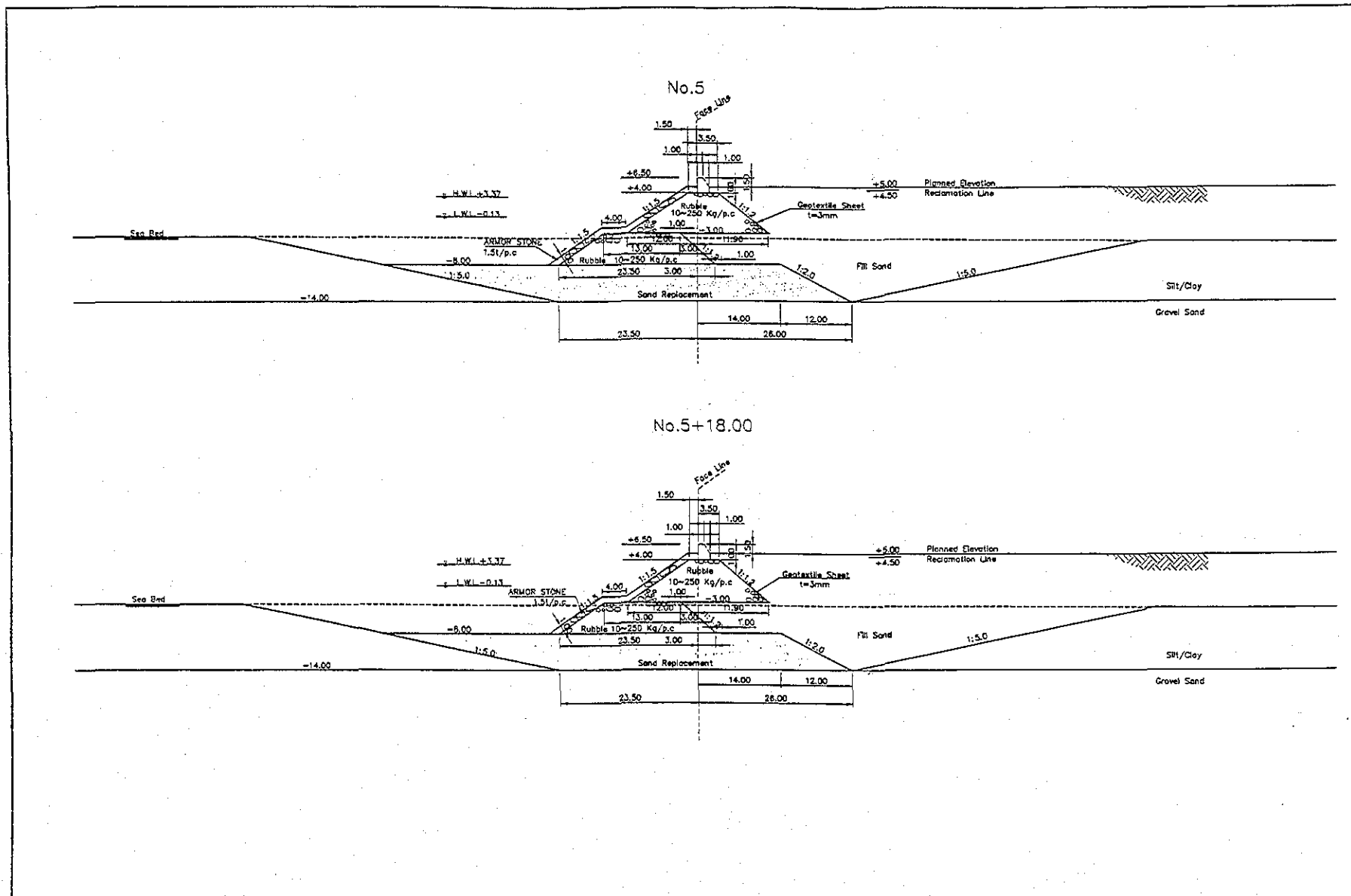


NO.3

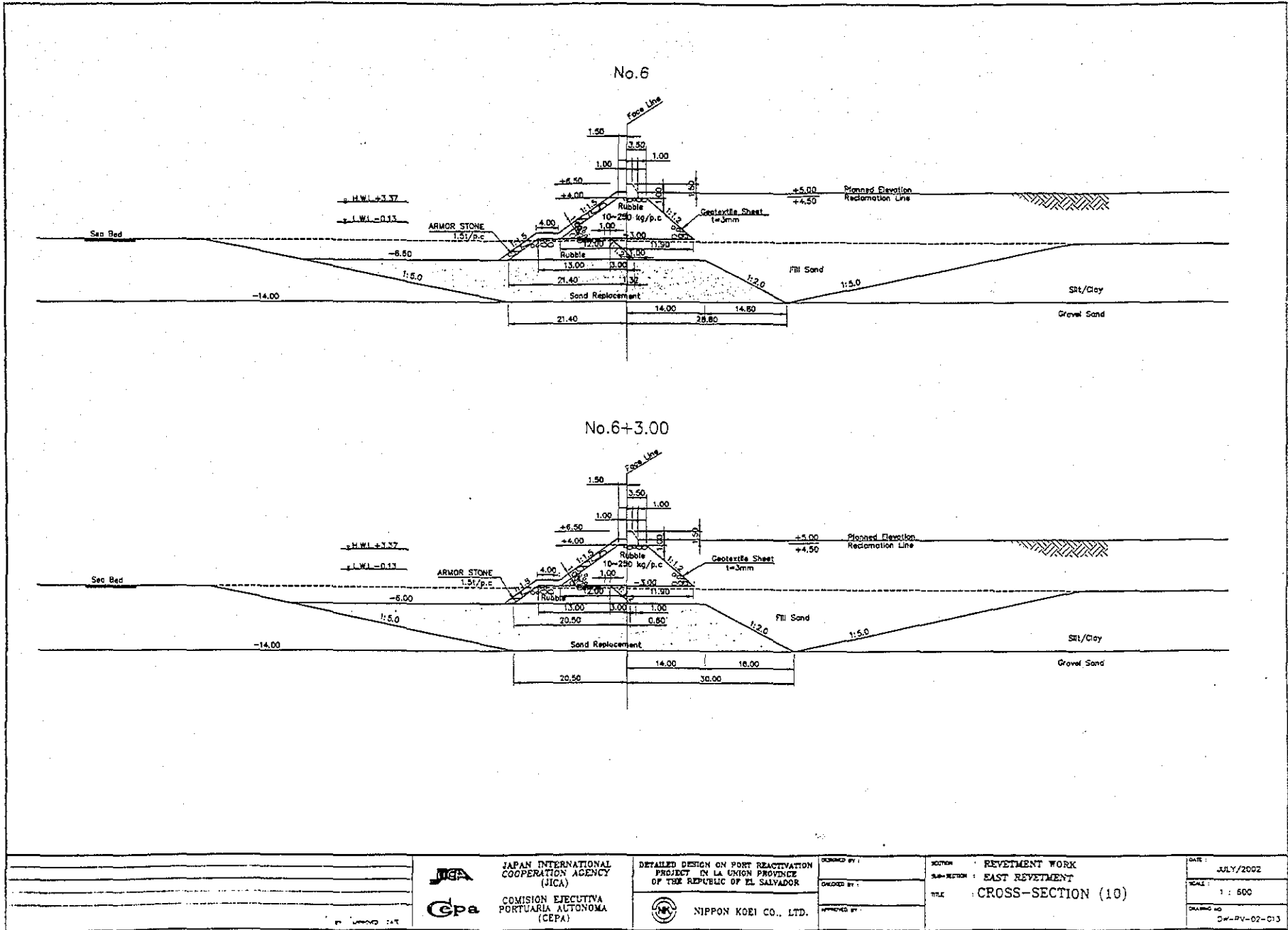
NO.4



	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY:	SECTION: REVETMENT WORK	DATE: JULY/2002
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.	CHECKED BY:	SUB-SECTION: EAST REVELMENT	SCALE: 1 : 600
			APPROVED BY:	TITLE: CROSS-SECTION (B)	DRAWING NO: DW-RV-02-011




	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)		NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : REVETMENT WORK	DATE : JULY/2002
						CHECKED BY :	SUB-SECTION : EAST REVETMENT	SCALE : 1 : 600
						APPROVED BY :	TITLE : CROSS-SECTION (9)	DRAWING NO : DW-RV-02-012




JICA
 JAPAN INTERNATIONAL
 COOPERATION AGENCY
 (JICA)

GPA
 COMISION EJECUTIVA
 PORTUARIA AUTONOMA
 (CEPA)

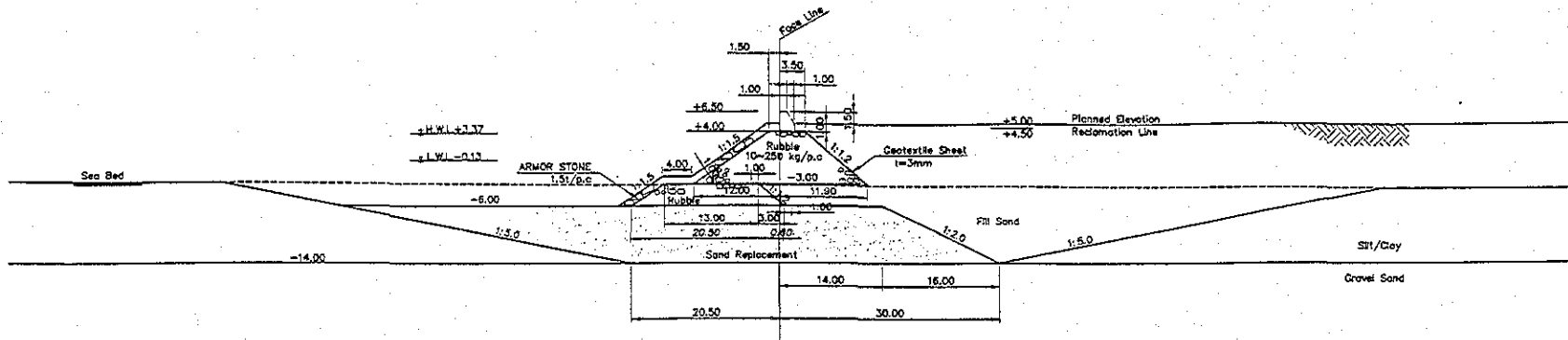
DETAILED DESIGN ON PORT REACTIVATION
 PROJECT IN LA UNION PROVINCE
 OF THE REPUBLIC OF EL SALVADOR

NIPPON KOEI CO., LTD.

DESIGNED BY:
 CHECKED BY:
 APPROVED BY:

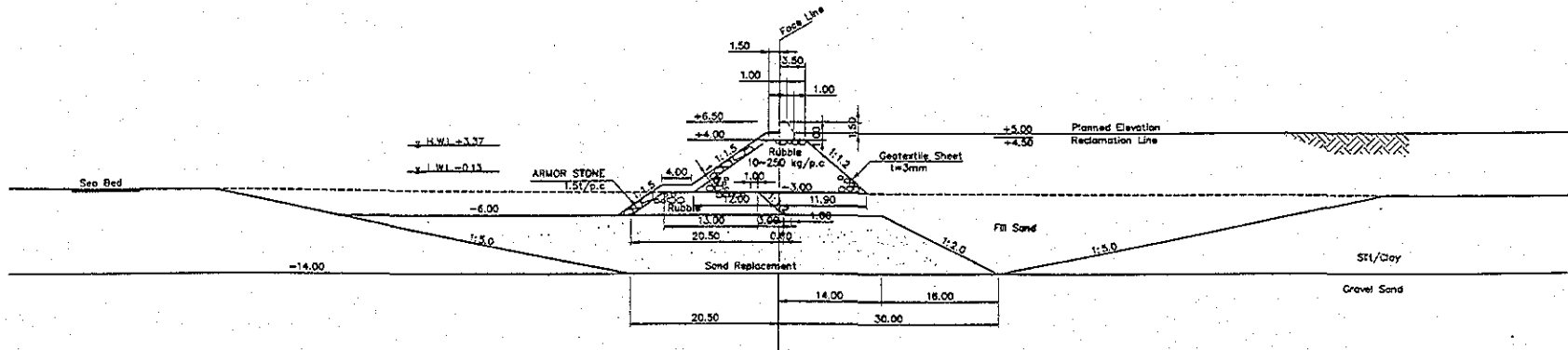
SECTION : REVETMENT WORK
 SUB-SECTION : EAST REVETMENT
 TITLE : CROSS-SECTION (10)

DATE : JULY/2002
 SCALE : 1 : 500
 DRAWING NO. : JW-PV-02-013

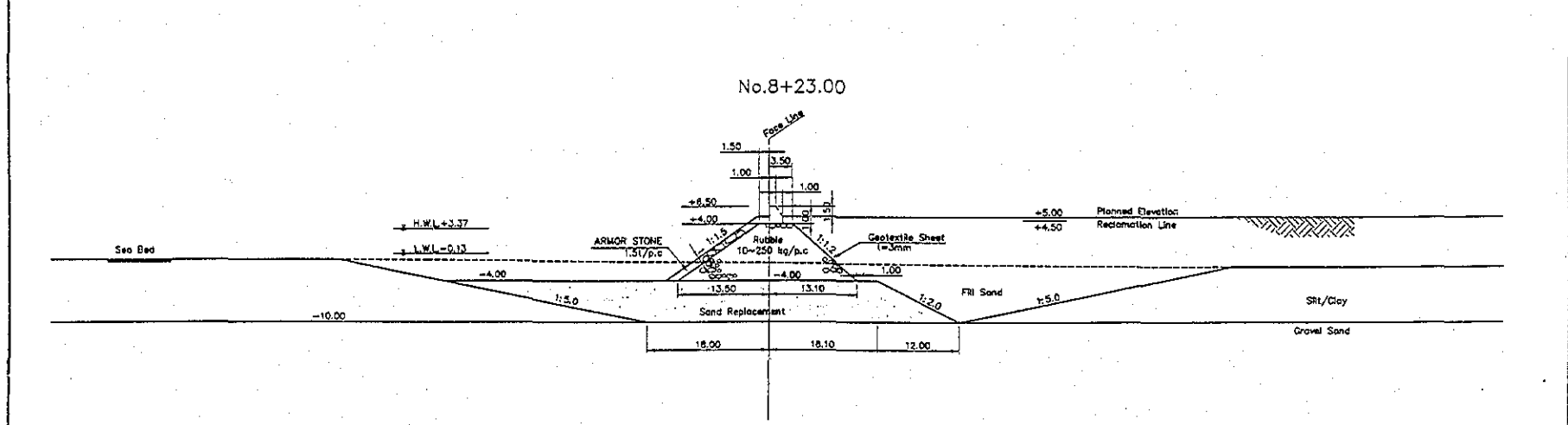
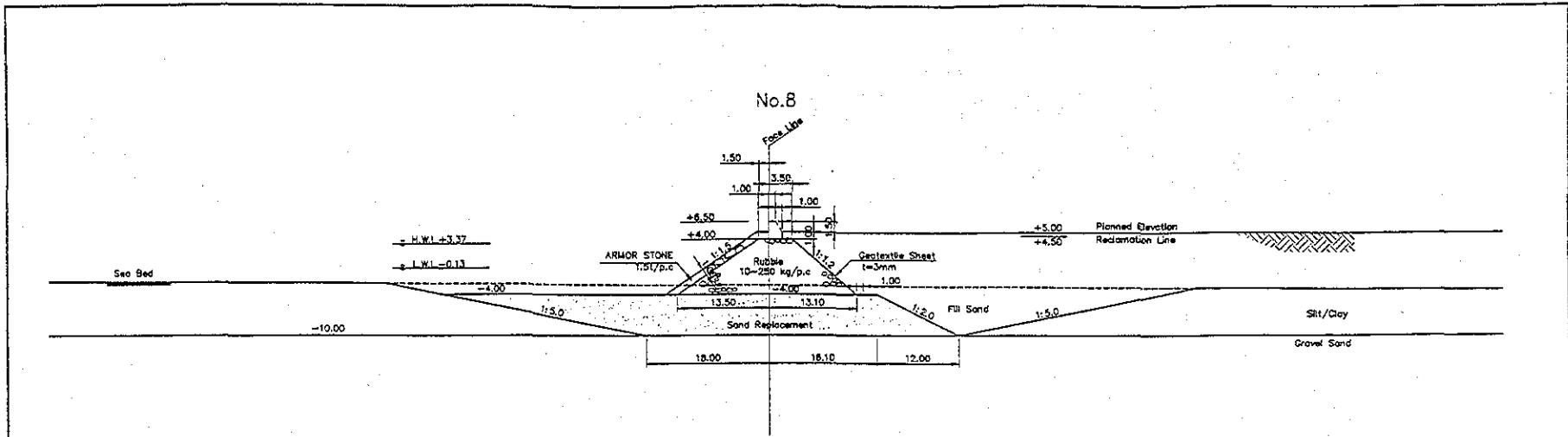
No.7



No.7+8.00

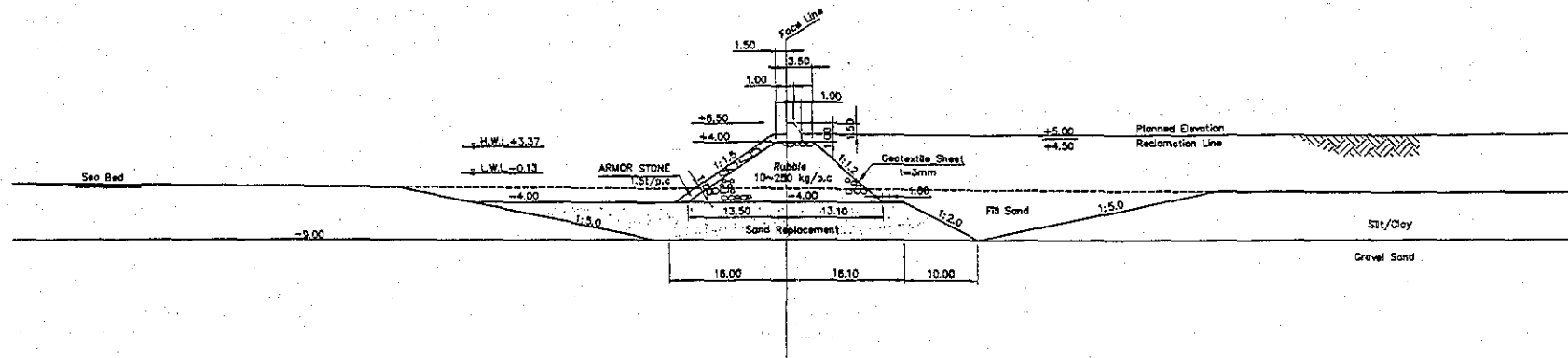


 	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON FORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	ORDERED BY : DESIGNED BY : APPROVED BY :	SECTION : REVIETMENT WORK SUB-SECTION : EAST REVIETMENT TITLE : CROSS-SECTION (11)	DATE : JULY/2002 SCALE : 1 : 600 DRAWING NO. : No. RV-02-014
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.			

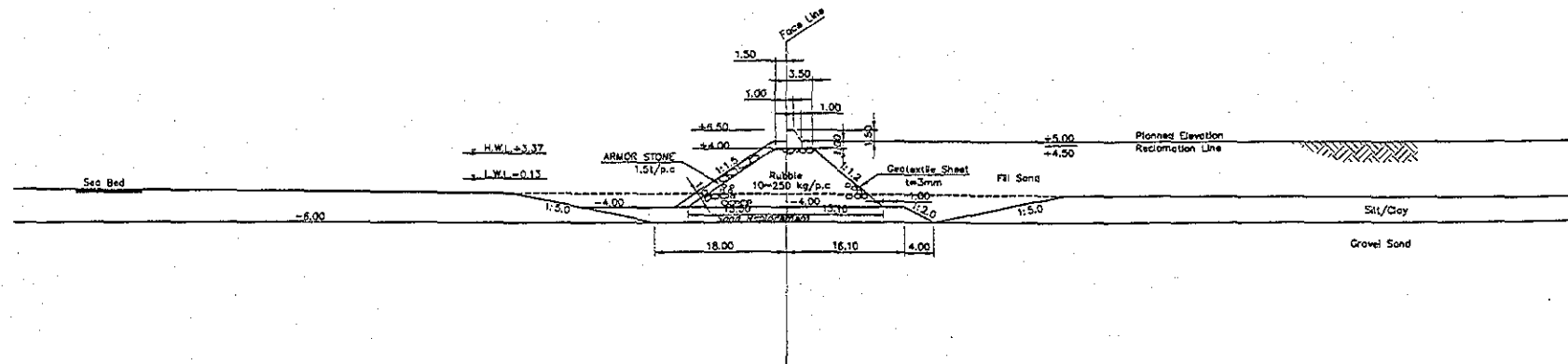


	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION :	DATE :
				CHECKED BY :	SUB-SECTION :	SCALE :
				APPROVED BY :	TITLE :	DRAWING NO.
					REVETMENT WORK EAST REVETMENT CROSS-SECTION (13)	JULY/2002 1 : 600 2W-RV-02-016

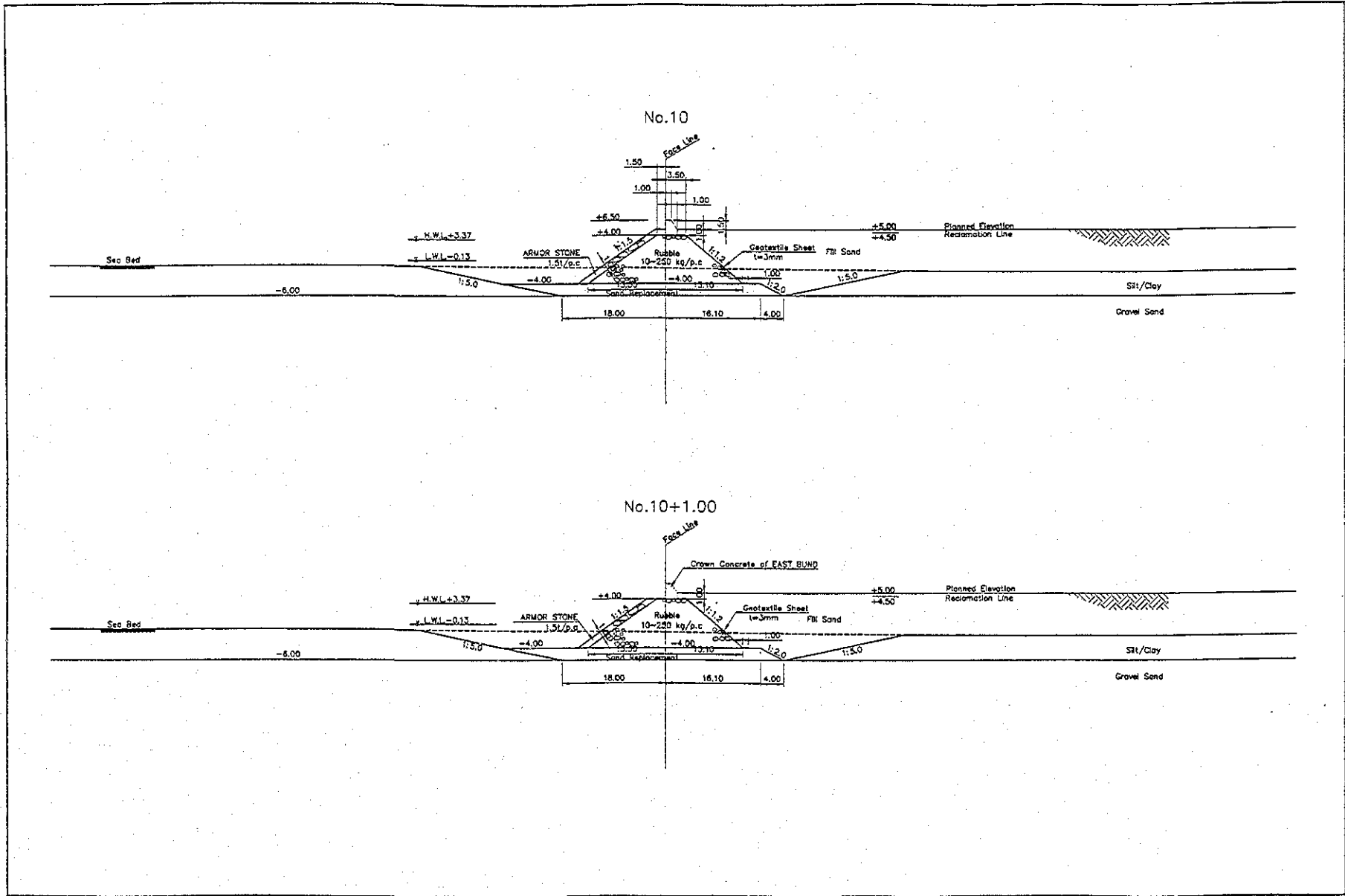
No.9



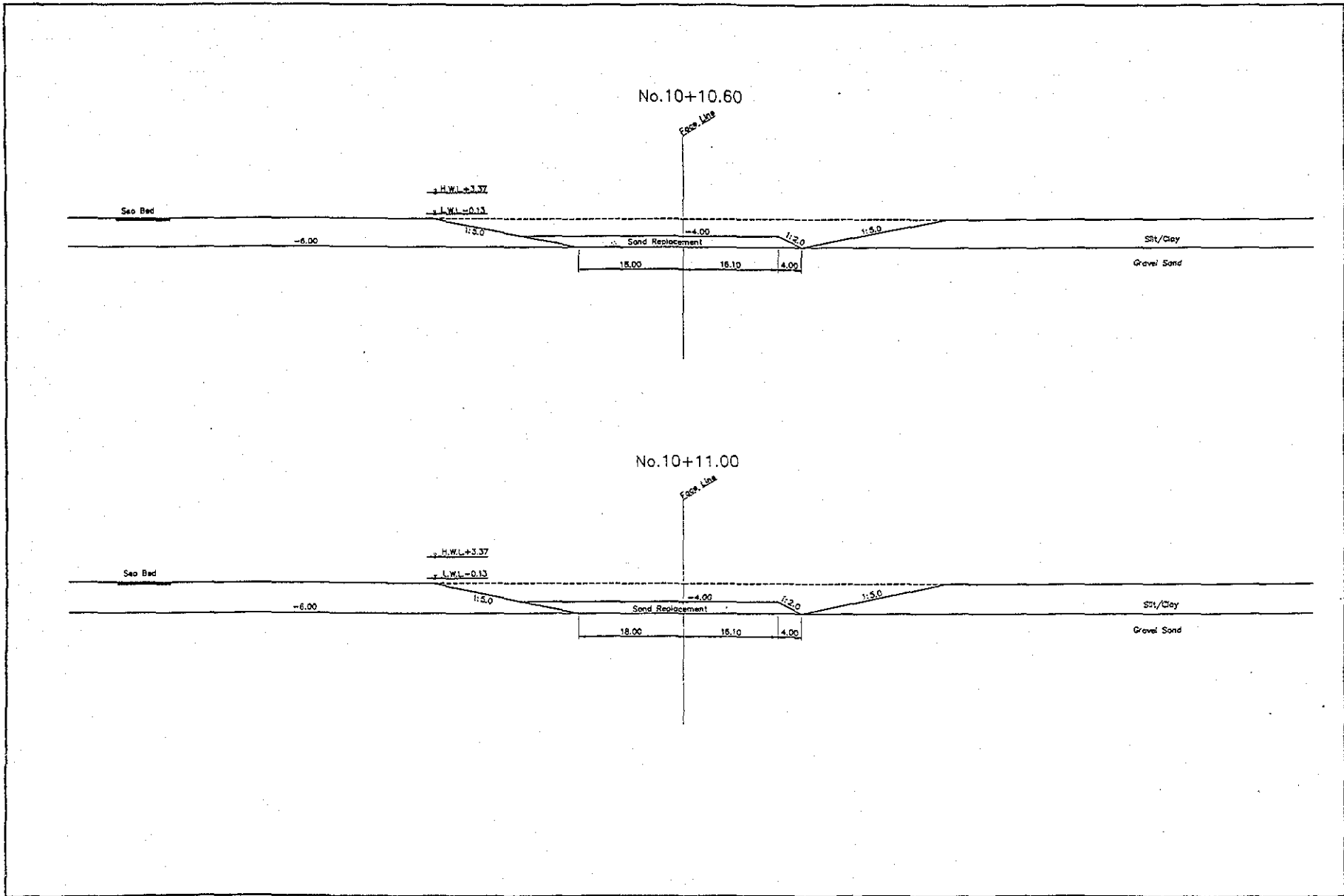
No.9+6.00



	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY :	SECTION : REVETMENT WORK	DATE : JULY/2002
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.	CHECKED BY :	SUB-SECTION : EAST REVETMENT	SCALE : 1 : 600
			APPROVED BY :	TITLE : CROSS-SECTION (14)	DRAWING NO : DW-RV-02-017

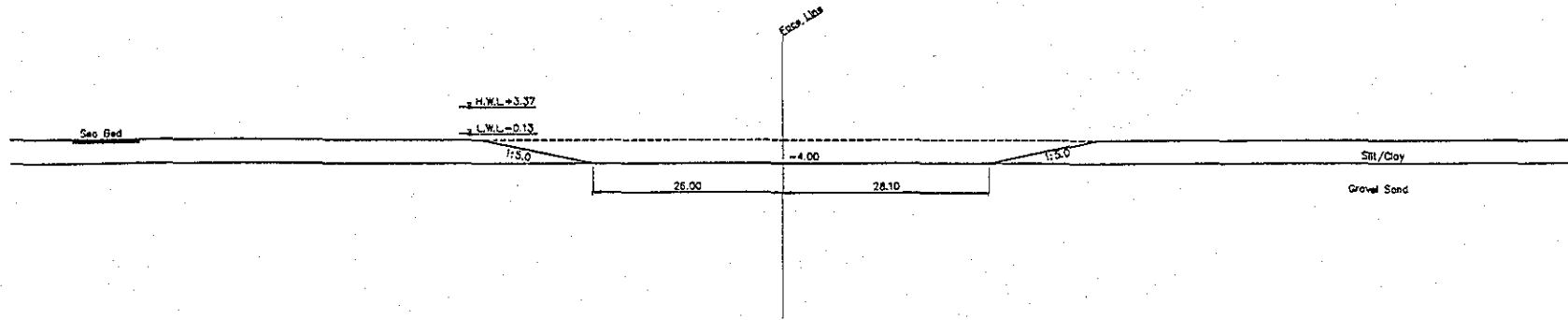




 	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : REVELTMENT WORK SUB-SECTION : EAST REVELTMENT TITLE : CROSS-SECTION (15)	DATE : JULY/2002 SCALE : 1 : 500 DRAWING NO. : DW-PV-02-018
	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.			



 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : REVETMENT WORK	DATE : JULY/2002
			CHECKED BY :	SUB-SECTION : EAST REVETMENT	SCALE : 1 : 500
			APPROVED BY :	TITLE : CROSS-SECTION (16)	DRAWING NO. DW-RV-02-019

No.10+15.00



 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR



NIPPON KOEI CO., LTD.

DESIGNED BY :

CHECKED BY :

APPROVED BY :

SECTION : REVELTMENT WORK

SUB-SECTION : EAST REVELTMENT

FILE : CROSS-SECTION (17)

DATE : JULY/2002

SCALE : 1 : 500

DRAWING NO. DW-RV-02-020

○East Revetment

1. Excavation for Foundation (harbor side)

Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.1+15.60	346.45			
		499.92	9.40	4,699.25
No.2	653.39			
		659.84	1.00	659.84
No.2+1.00	666.28			
		569.39	4.00	2,277.56
No.2+5.00	472.50			
		555.24	10.50	5,830.02
No.2+15.50	637.98			
		520.78	8.00	4,166.24
No.2+23.50	403.58			
		403.55	1.50	605.33
No.3	403.52			
		428.66	25.00	10,716.50
No.4	453.80			
		453.80	3.00	1,361.40
No.4+3.00	453.80			
		478.35	10.00	4,783.45
No.4+13.00	502.89			
		508.12	12.00	6,097.44
No.5	513.35			
		524.92	18.00	9,448.47
No.5+18.00	536.48			
		554.12	7.00	3,878.84
No.6	571.76			
		577.91	3.00	1,733.73
No.6+3.00	584.06			
		593.79	22.00	13,063.38
No.7	603.52			
		607.75	8.00	4,861.96
No.7+8.00	611.97			
		611.97	2.00	1,223.94
No.7+10.00	611.97			
		460.47	8.00	3,683.72
No.7+18.00	308.96			
		318.06	7.00	2,226.42
No.8	327.16			
		363.83	23.00	8,368.09
No.8+23.00	400.50			
		342.04	2.00	684.08
No.9	283.58			
		195.80	6.00	1,174.80
No.9+6.00	108.02			
		121.41	19.00	2,306.79
No.10	134.80			
		148.90	11.00	1,637.90
No.10+11.00	163.00			
		134.90	4.00	539.60
No.10+15.00	106.80			
		53.40	6.57	350.84
No.10+21.57	0.00			
Total			230.97	96,379.58

○East Revetment

2. Excavation for Foundation (sea side)

Section No.	Area (m ²)	Average Area of 2 Sections (m ²)	Distance Between Sections (m)	Volume (m ³)
No.1+15.60	672.35			
		883.55	9.40	8,305.32
No.2	1,094.74			
		1,094.74	1.00	1,094.74
No.2+1.00	1,094.74			
		860.20	4.00	3,440.78
No.2+5.00	625.65			
		700.76	10.50	7,357.93
No.2+15.50	775.86			
		627.64	8.00	5,021.12
No.2+23.50	479.42			
		479.39	1.50	719.08
No.3	479.35			
		508.60	25.00	12,712.50
No.4	537.65			
		537.65	3.00	1,612.95
No.4+3.00	537.65			
		518.90	10.00	5,188.95
No.4+13.00	500.14			
		505.66	12.00	6,067.86
No.5	511.17			
		521.49	18.00	9,386.82
No.5+18.00	531.81			
		525.58	7.00	3,679.06
No.6	519.35			
		514.44	3.00	1,543.31
No.6+3.00	509.52			
		517.77	22.00	11,390.83
No.7	526.01			
		533.22	8.00	4,265.72
No.7+8.00	540.42			
		540.42	2.00	1,080.84
No.7+10.00	540.42			
		398.60	8.00	3,188.80
No.7+18.00	256.78			
		265.35	7.00	1,857.42
No.8	273.91			
		313.43	23.00	7,208.89
No.8+23.00	352.95			
		297.93	2.00	595.85
No.9	242.90			
		174.71	6.00	1,048.26
No.9+6.00	106.52			
		123.79	19.00	2,352.01
No.10	141.06			
		147.32	11.00	1,620.47
No.10+11.00	153.57			
		127.53	4.00	510.10
No.10+16.00	101.48			
		50.74	6.57	333.36
No.10+21.57	0.00			
Total			230.97	101,582.95