	QUANTITY CALCULATION C									
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001							
Work Section Title	APPON CONCRETE PAVEMENT	Pay Item No. (BOQ)	2C - 1001							
Quantity Item CONCRETE. Unit m2										

Volume of concrete for apron concrete parement was computed multiplying apron concrete povement area by thickness.

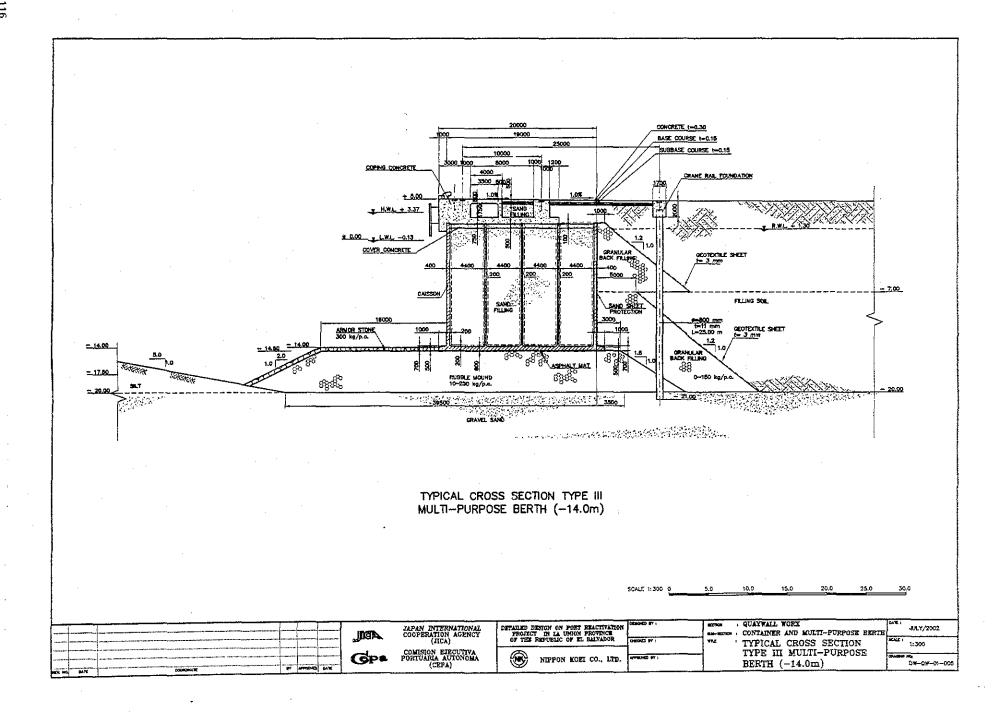
References, Calculation Base and Revisions

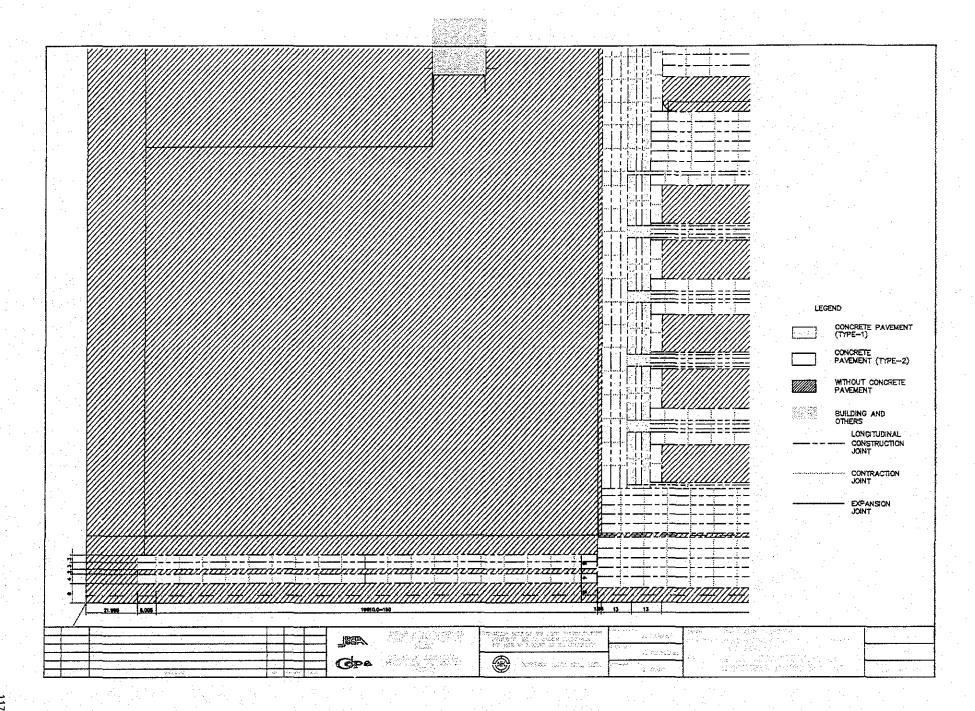
Refrances: Tender Drawings:

DW-19W-01-005 Typical Goss Section Type III

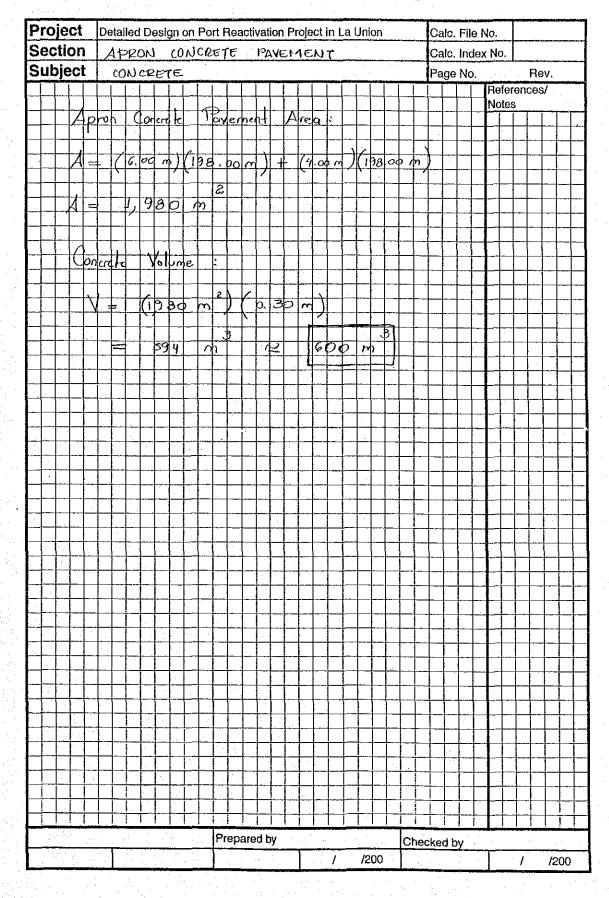
DW. - PV - 01 - 007 Joint Amongement of Conerche Povement (3)

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MIPPON KOEI CO.,LTD.



	QUANTITY CALCULATION COVER SHEET									
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001							
Work Section Title	APPON CONCRETE PAVEMENT	Pay Item No. (BOQ)	2c-1002							
Quantity Item	BASE CONCRETE	Unit	m³							

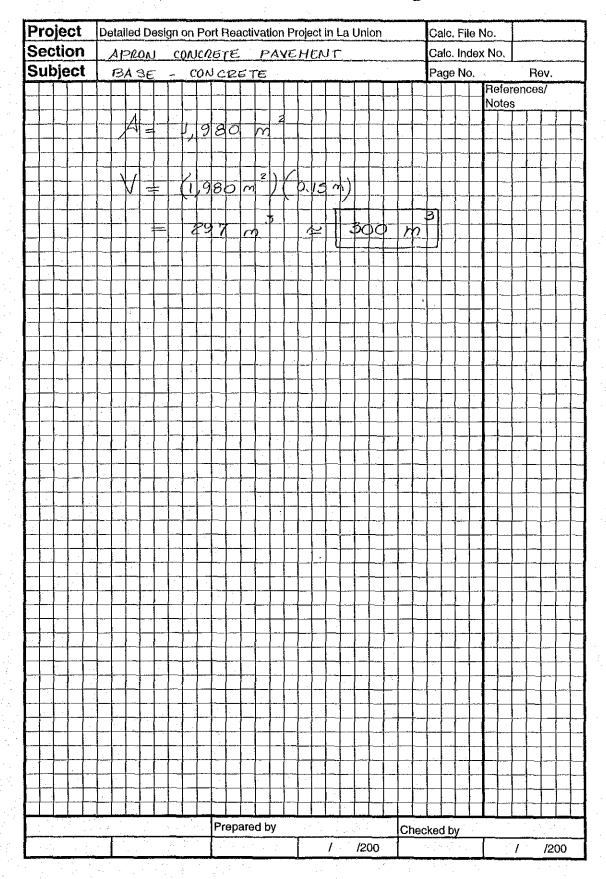
Volume of base concrete was computed by multiplying apron concrete povement by thickness.

References, Calculation Base and Revisions

References: Tinder Drawings:

0W-QW-01-005 Typical Goss Section Type III
0W-PV-01-007 Joint Arrongement of Concrete Povement (3)

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	QUANTITY CALCULATION COVER SHEET										
Project Detailed Design on Port Reactivation Project Project Code JC1N004/2											
Work Section Title	APRON PAVEMENT CONCRETE	Pay Item No. (BOQ)	2C -1003								
Quantity Item	SUB-BASE CONCRETE	Unit	м ^з								

Volume of sub-base concrete was computed by multiplying apron concrete povement area by thickness.

References, Calculation Base and Revisions

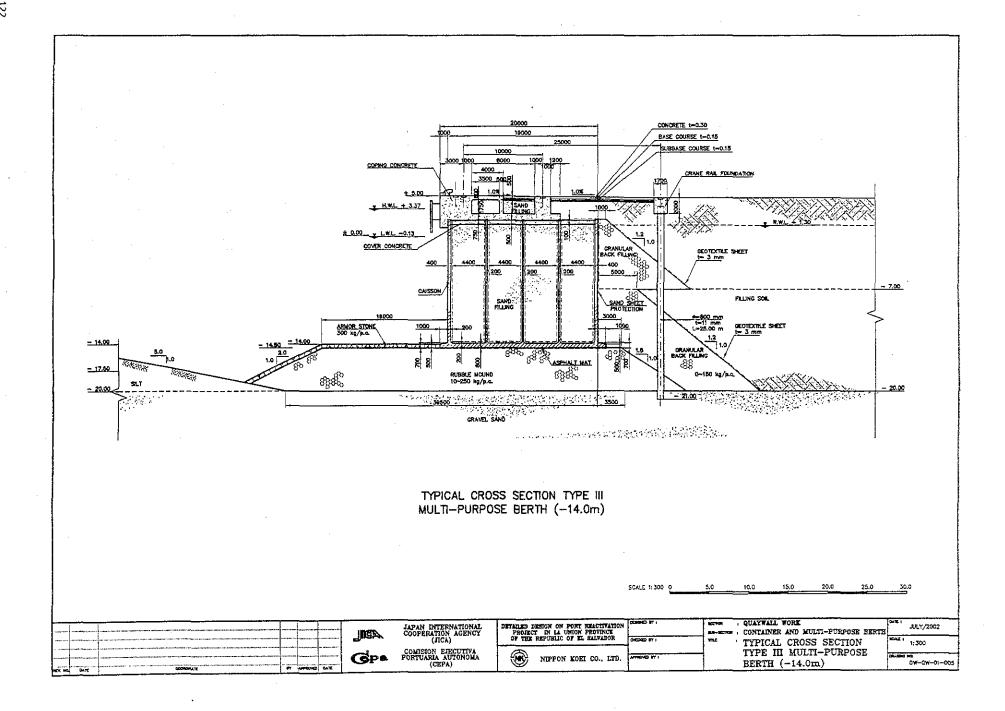
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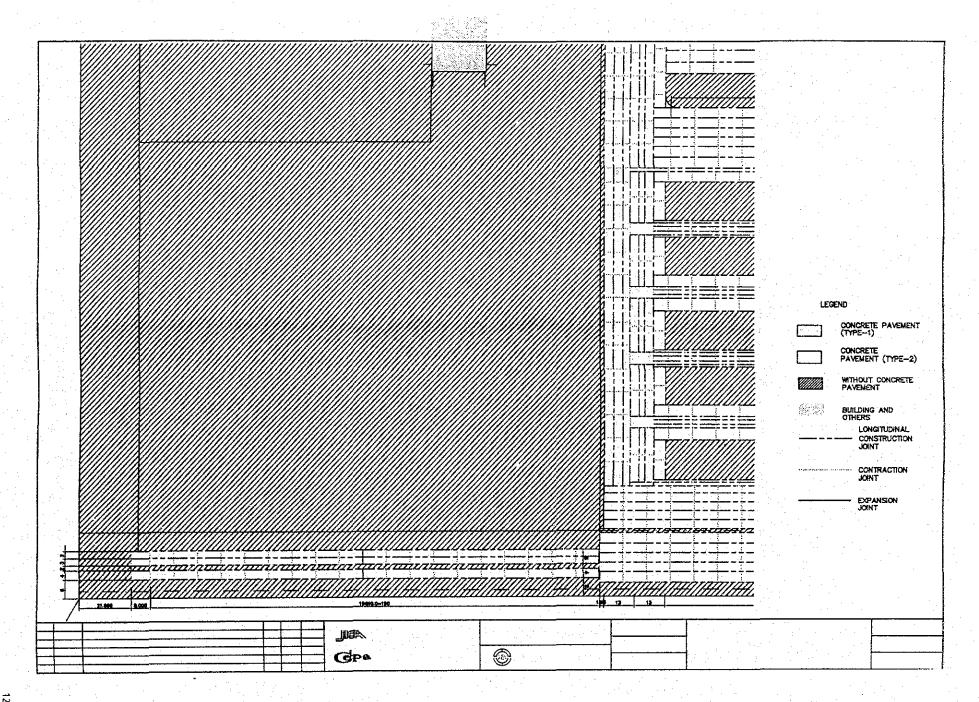
DW-QW-01-005 Typical Gors Section Type III.

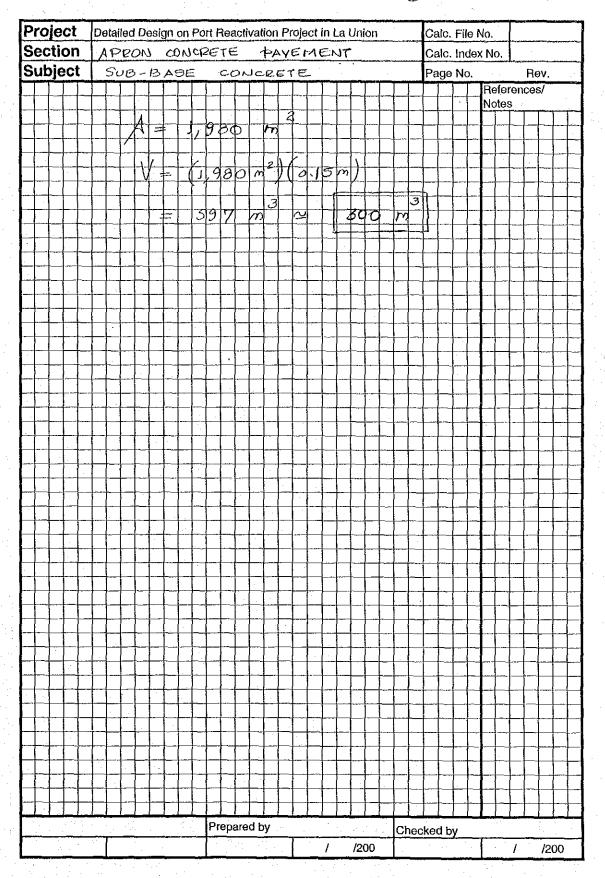
DW-PV-01-007 Joint Amongement of Concrete Povement (3)

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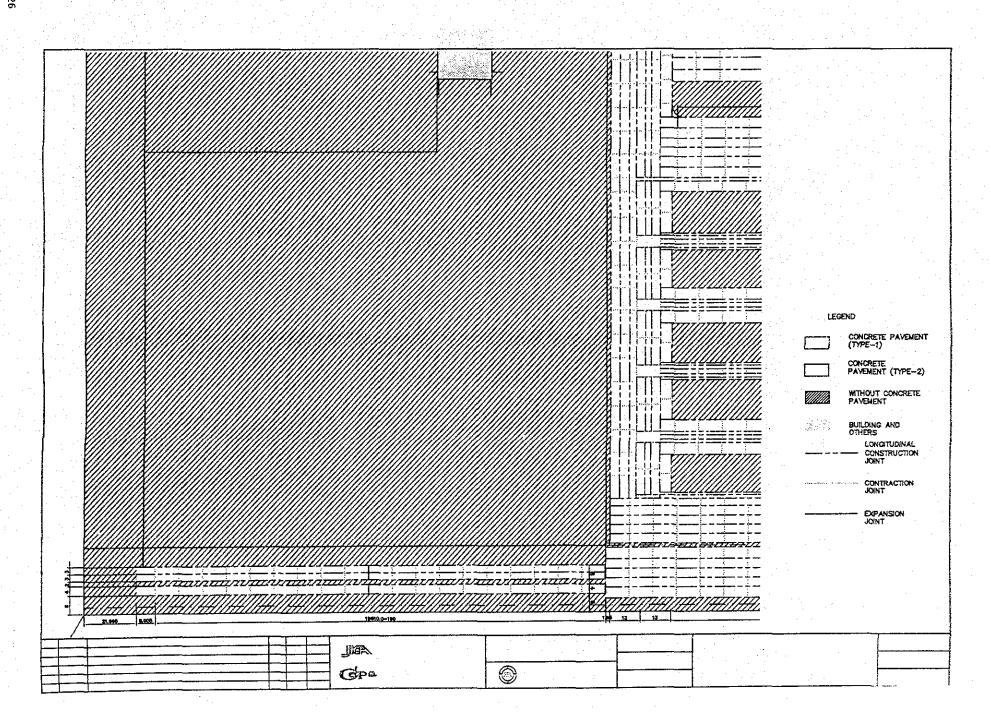
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Work Section Title	APIZON CONCRETE PAVEMENT	Pay Item No. (BOQ)	20-1004						
Quantity Item	PRIME COATING	Unit	mæ						

Area of prime coating was computed. This coating will cover all area of apron concrete povement.

References, Calculation Base and Revisions

References: Tender Drawings:

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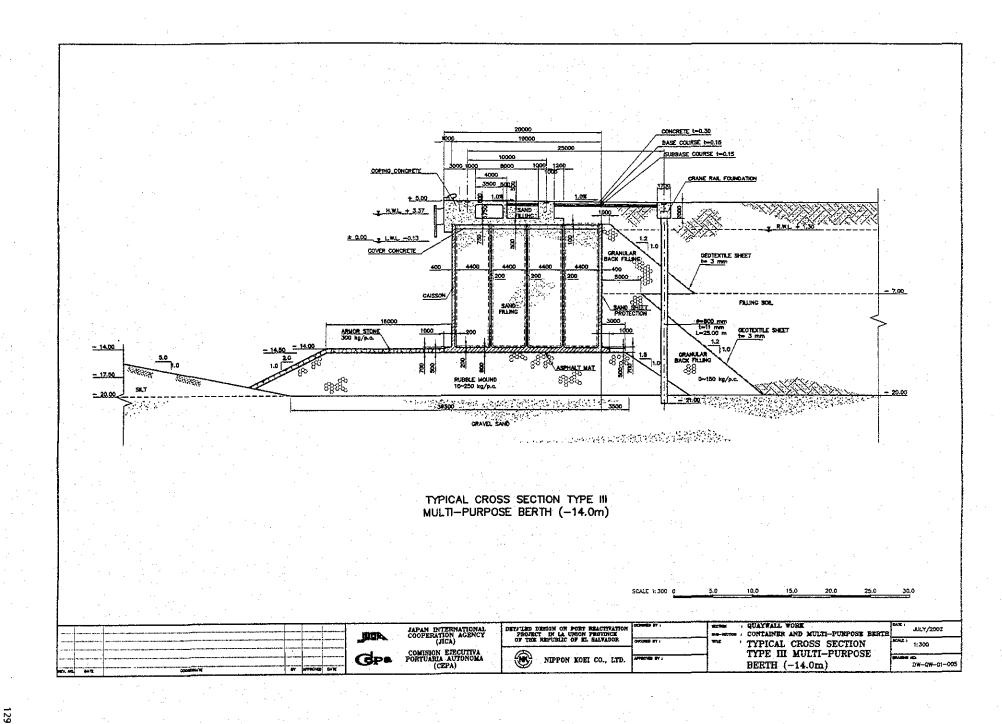
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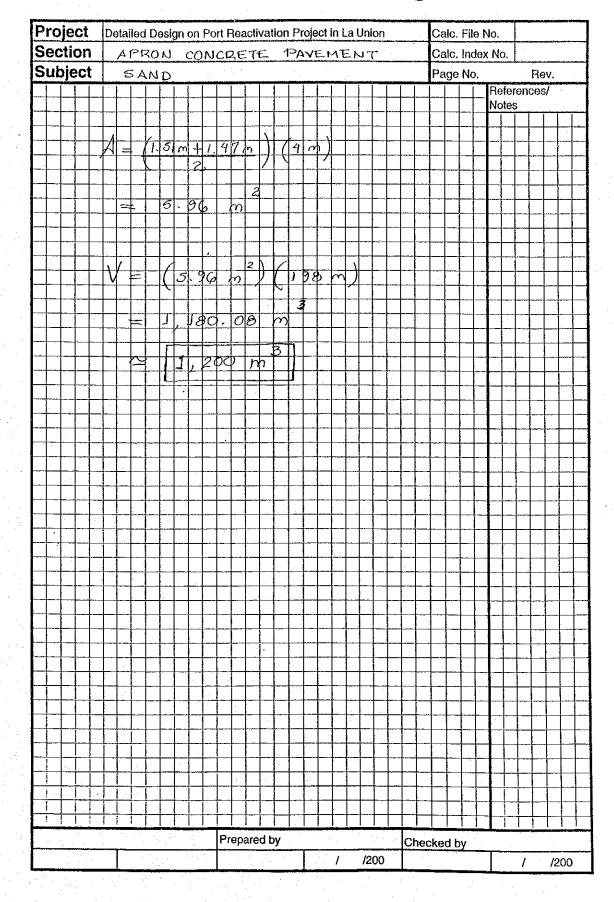
	QUANTITY CALCULATION COVER SHEET									
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001							
Work Section Title	APRON CONCRETE PAVENENT	Pay Item No. (BOQ)	2C-1005							
Quantity Item	SAND	Unit	m ³							

Sond filling volume was computed for Multi-purpose Berth only. Cross Section area was computed by geometric formula and multiplied to the length.

References: Tender Drawings: DW-QW-01-005 Typical Coss Section Type III

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	QUANTITY CALCULATION C		
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Work Section Title	APRON CONCRETE PAYEMENT	Pay Item No. (BOQ)	20-1006
Quantity Item	PEINTORIE MENT AND JOINT BAR	Unit	Ka

Reinforcement and joint bor was computed for Hullipurpose opron povement.

Reinforcement length was computed summaring all distonces of the minforcement.

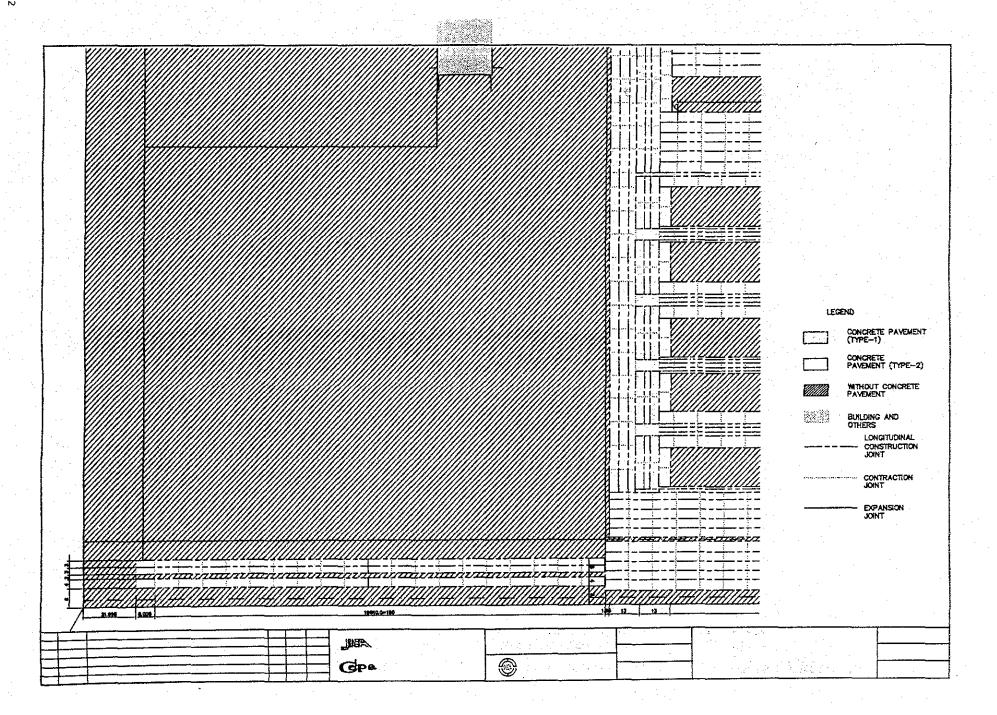
References, Calculation Base and Revisions

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Deterences: Temder Drawings:

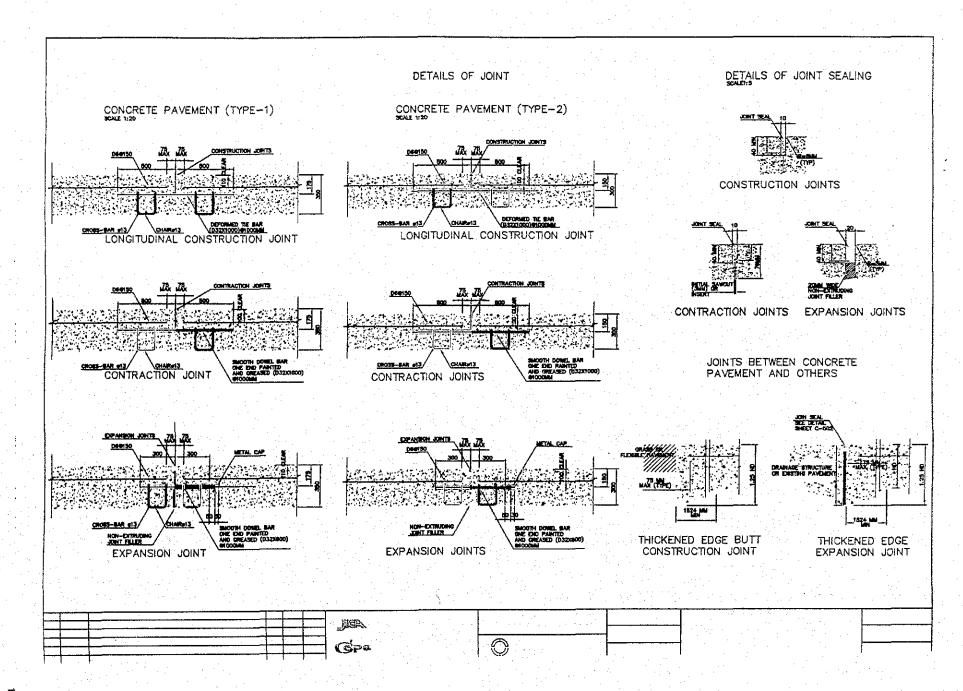
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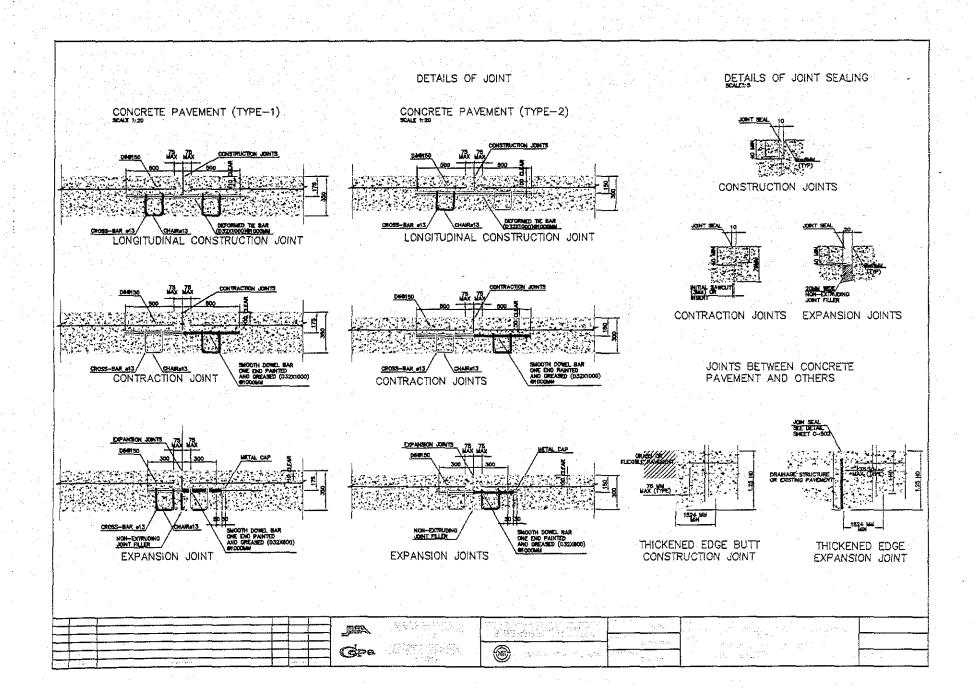
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	QUANTITY CALCULATION C		
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	APRON CONCRETE PAVENENT	Pay Item No. (BOQ)	20-1007
Quantity Item	ELAS TIGH BOARD	Unit	m ²

Elas high board orea was computed for multi-purpose apron povement.

Area was computed multiplying the length of elas high to the width.

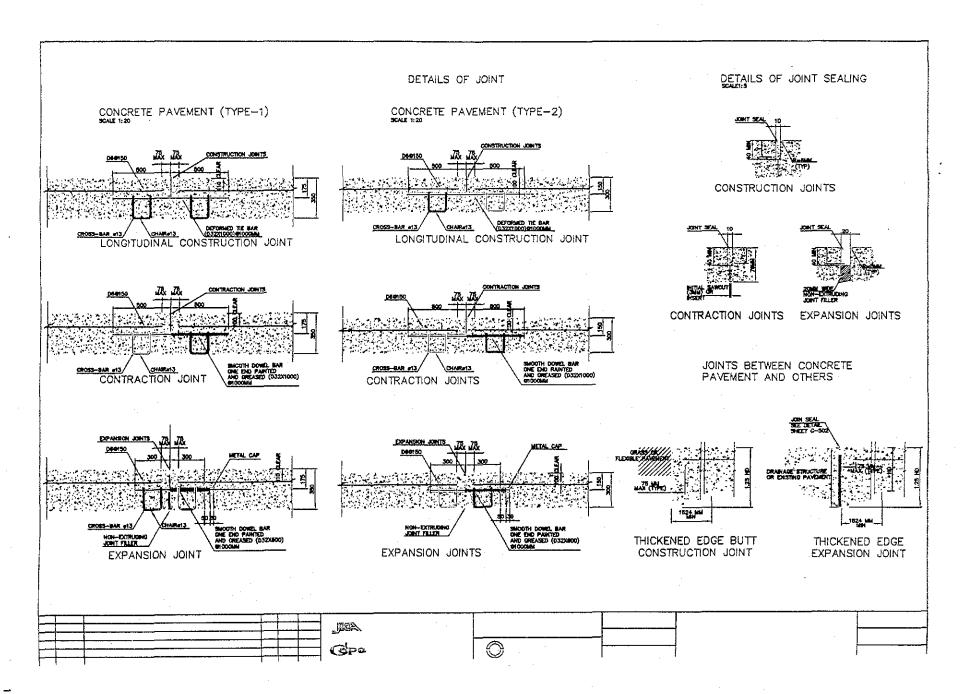
References, Calculation Base and Revisions

Reterences: Tender Drawings: DW-PV-01-009 Detoils of Concrete Povement

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Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	APRON CONCLETE PAVEHENT	Pay Item No. (BOQ)	2C-1008
Quantity Item	TOINT FILTER	Unit	m ²

Joint filler area was computed for Multi-purpose Apron Povement.

Area was computed multiplying the length of joint filter to the width.

References, Calculation Base and Revisions

0W-PV-02-009

References: Tender Drawings:

DW-PV-01-009 Details of Convole Povement.

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	QUANTITY CALCULATION C		
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	APRON CONCRETE PAVEMENT	Pay Item No. (BOQ)	2C-1009
Quantity Item	IEON MESH	Unit	m ²

Iron mesh ora was composed for Multipurpose Apron Povement. And was computed using geometric formulas.

References, Calculation Base and Revisions

DW-PV-02-007

References: Tender Drawings: DW - PV - 01 - 007 Joint Strongement of Convole Povement (3)

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QUANTITY CALCULATION COVER SHEET						
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001			
Work Section Title	SAND PROTECTION SHEET	Pay Item No. (BOQ)	20-1101			
Quantity Item	SAND PROTECTION SHEET.	Unit	LM			

Caisson sond protection sheet was computed for Multipurpose Beith.

The lotal length was computed multiplying the perimeter of sond protection sheet to the total of caissons for each type of cross section.

The length was computed with zero decimal for total.

References, Calculation Base and Revisions

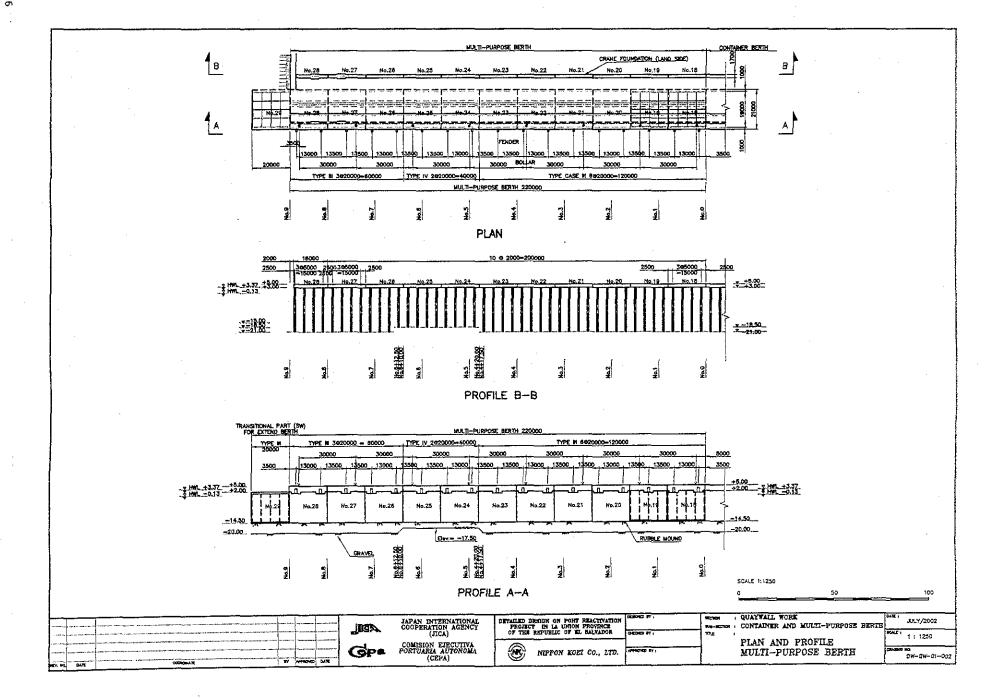
Reference: Tender Drowings:

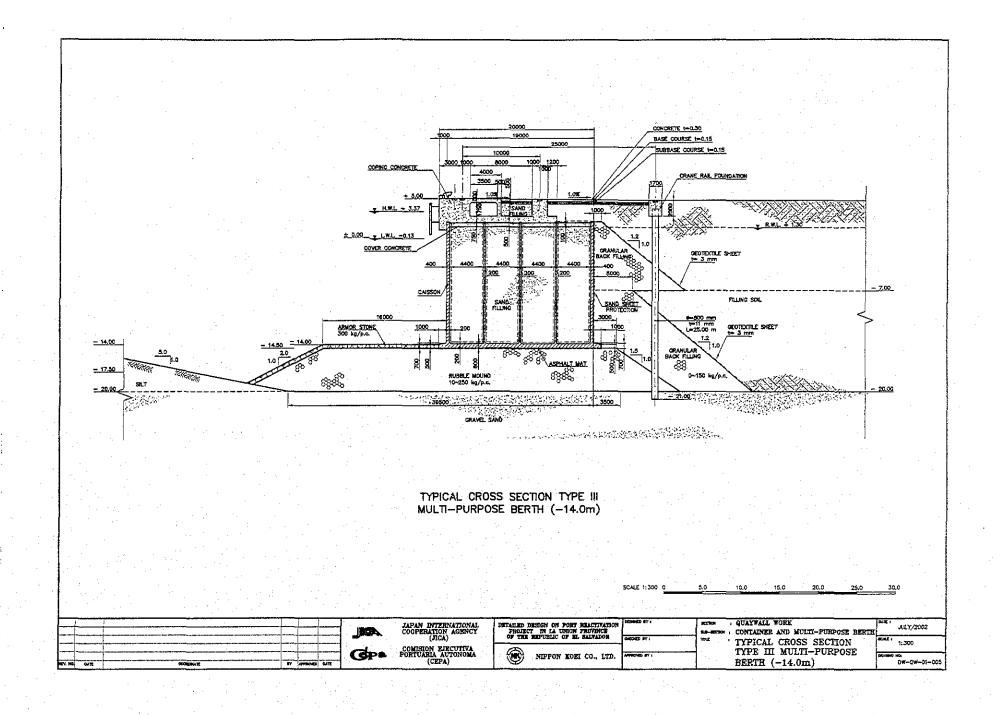
DW-QW-00-002 Plon and Proble Hulkipurpose Bulh

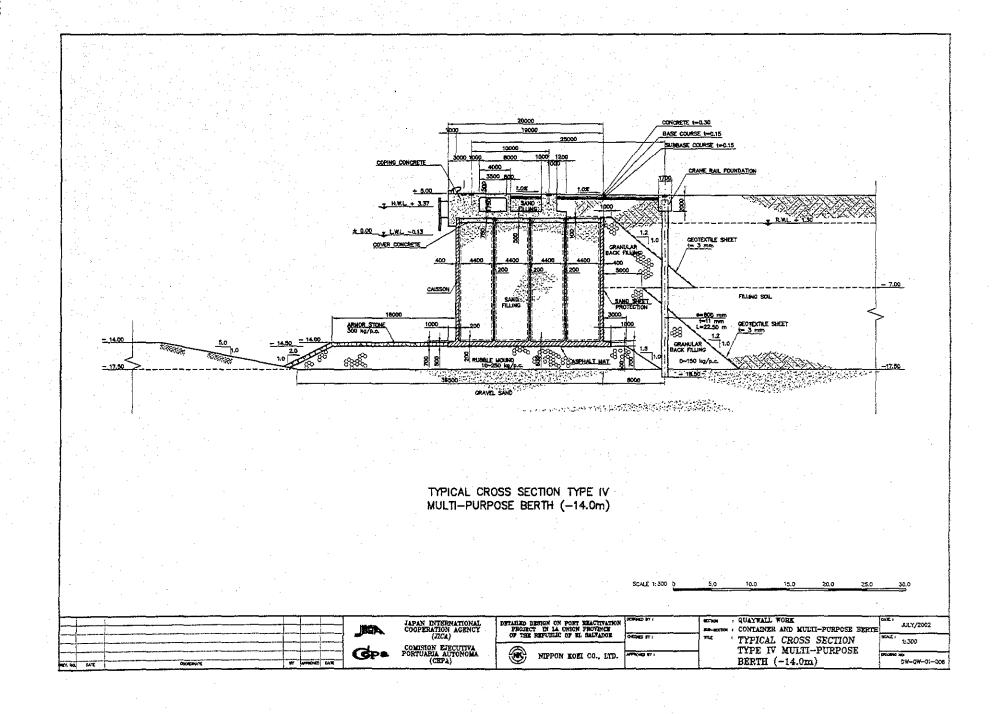
DW-QW-00-005 Typical Coss Section Type III Hulkipurpose Bulh

DW-QW-01-006 Typical Goss School Type IV Hullepurpose Bill

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QUANTITY CALCULATION COVER SHEET						
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001			
Work Section Title	SAND PROTECTION SHEET	Pay Item No. (BOQ)	20-1102			
Quantity Item	STEEL PLATE	Unit	Ka			

Steel plate will be used for base plate of sond protection sheet. Two steel plates will be used on each edge of sond protection sand.

References, Calculation Base and Revisions

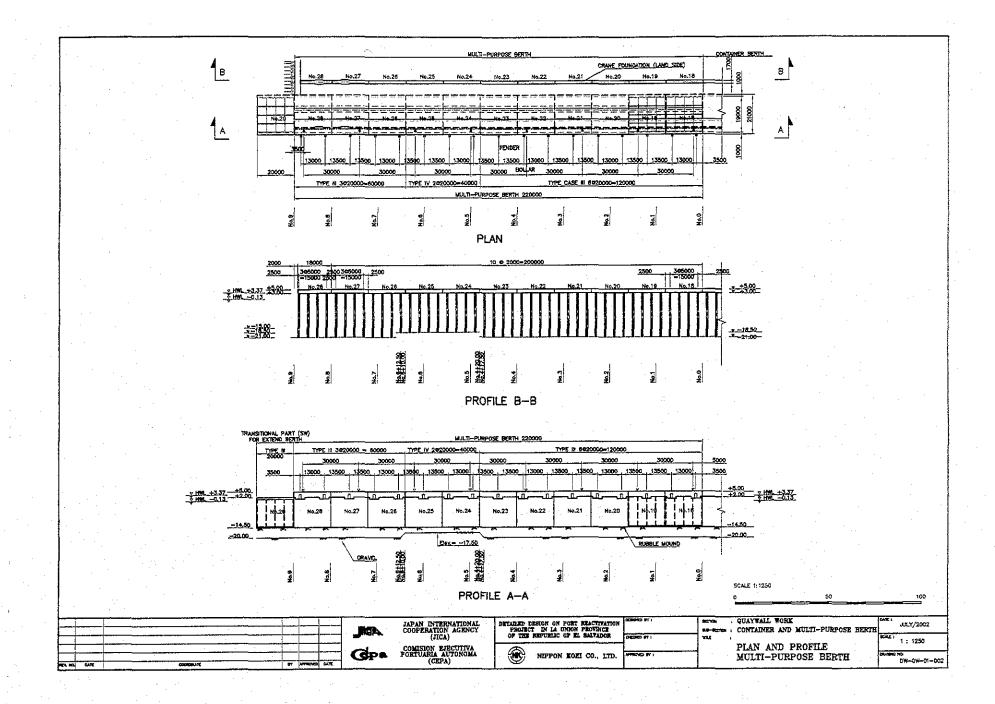
Preferences: Tender Drawings:

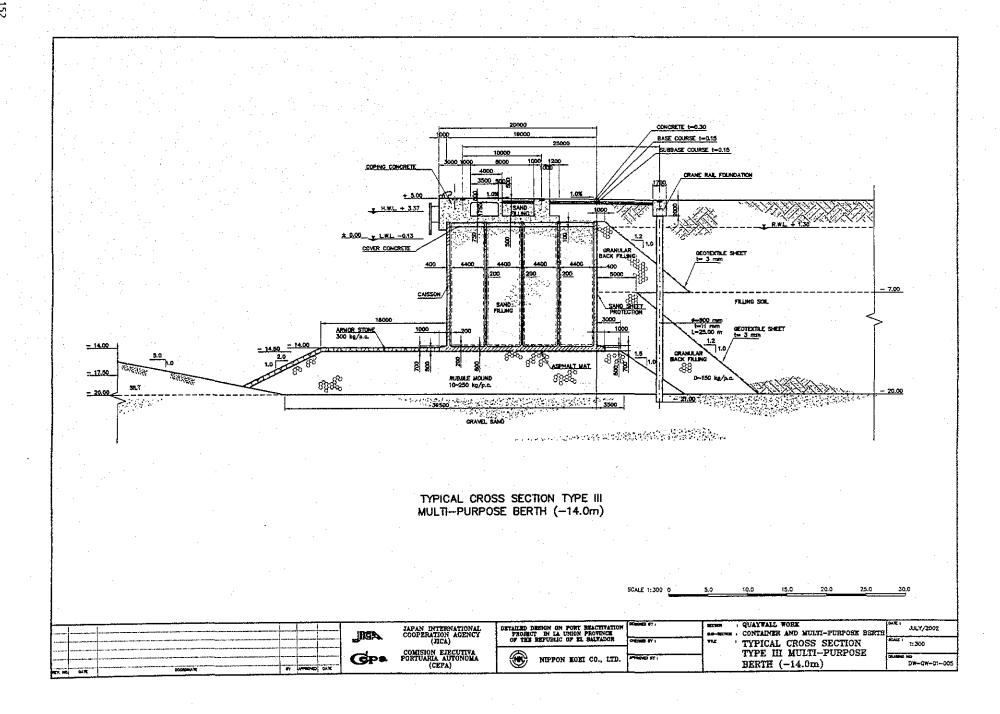
DW-QW-01-002 Plon and Proble Hullipurpose Berth

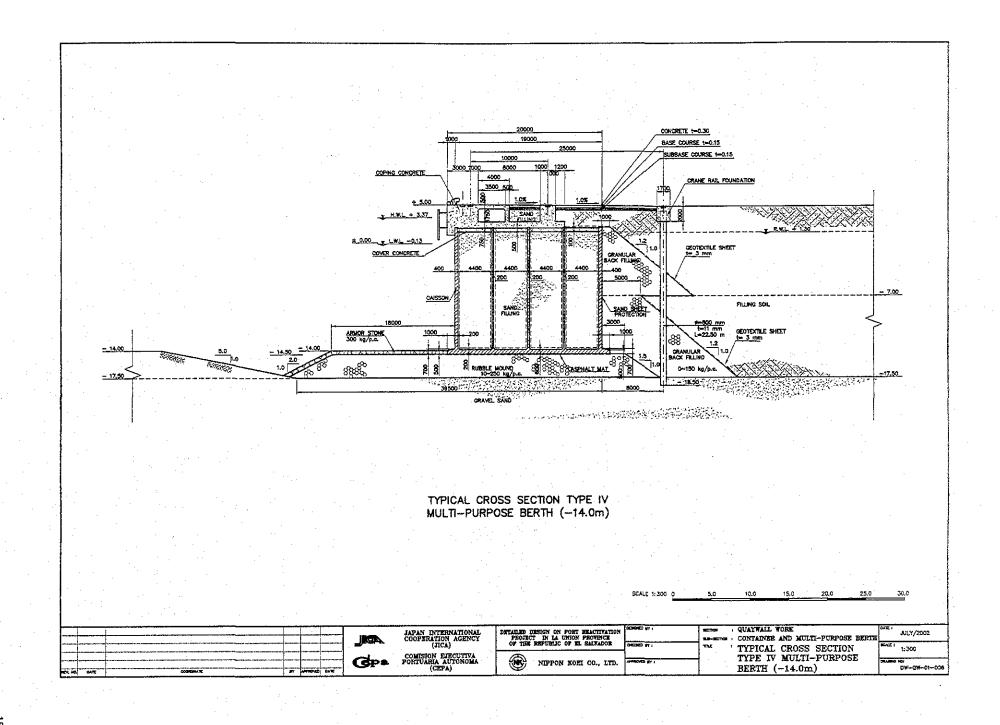
DW-QW-01-005 Typical Goss Section Type III Multipurpose Belle

DW-QW-01-006 Typical Goss Section Type II Hullipurpose Belle

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	QUANTITY CALCULATION COVER SHEET											
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001									
Work Section Title	BACKFILLING BEHIND CAISION	Pay Item No. (BOQ)	20-1201									
Quantity Item	BACKFILL STONE	Unit	m³									

Calculation Procedure Applied

- Colwhation of Areas of Sections
- 2. Average of Areas of sections.

 3. Calulation of volume: Average of Ireas of Sections
 himes distance between sections.

(Excel).

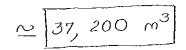
References, Calculation Base and Revisions

Rdiances: Tinder Prowings: From DW-QW-01-019 Cross Section (1) (Hullipurpose Bally)
To DW-QW-01-025 Cross Section (7) (Hullipurpose Belly) (Some as "Rubble Hound of Coisson")

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OMulti-Purpose Berth 9. Backfill Rublle

9. Backfill Rublle				
		Average Arca	Distance	
Section No.	Area (m²)	of 2 Sections	Between	Volume (m³)
	, ,	(m^2)	Sections (m)	` .
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		184.21	25.00	4,605.25
No.2	184.21			
		184.21	25.00	4,605.25
No.3	184.21			
		184.21	25.00	4,605.25
No.4	184.21			
		184.21	17.50	3,223.68
No.4+17.50	184.21			
		172.06	2.50	430.14
No.4+20.00	159.90			
	3	159.90	5.00	799.50
No.5	159.90		~	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		159.90	25.00	3,997.50
No.6	159.90	150.00	10.00	
11 0:10 00	150.00	159.90	10.00	1,599.00
No.6+10.00	159.90	150.00		400.14
No.6+12.50	184.21	172.06	2.50	430.14
140.0712.50	104.21	184.21	12.50	0.200.00
No.7	184.21	104.41	12.00	2,302.63
140.1	104.21	184.21	11.00	2,026.31
No.7+11.0	184.21	104.21	11.00	2,020.31
140,7111.0	104.21	184.21	5.16	950.52
No.7+16.16	184.21	10-1.21	0.10	330.02
110.11.20.10	. 104.21	181.16	2.84	514.47
No.7+19.00	178.09	101.10	2.01	014.41
21011-20100	210.00	164.39	6.00	986.34
No.8	150.69	202.00	V.00	200.04
		139.47	6.00	836.82
No.8+6.00	128.25			- 5 0 1 0 2
		128.25	2.10	269.33
No.8+8.10	128.25			
		64.13	6.00	384.75
No.8+14.10	0.00			
				
Total		2,974.88	214.10	37,172.11



	QUANTITY CALCULATION COVER SHEET											
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001									
Work Section Title	BACKFILLING BEHIND CAISSON	Pay Item No. (BOQ)	2C-1202									
Quantity Item	LEVELING	Unit	m ³									

Calculation Procedure Applied

- 1. Calculation of lengths of sections.
- 2. Average of lengths of Sections.
- 3. Calculation of Area: Average of lengths of sections times distance between sections.

 (Excel)

References, Calculation Base and Revisions

References: Tonder Drawings:

From DW-QW-01-019 Cross Section (1). Hullipurpox Bible

To DW-QW-01-025 Cross Section (7) Multipurposa Buble

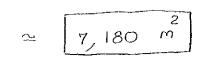
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OMulti-Purpose Berth

10. Trimming of Backfill Rublle

		Average	Distance	_
Section No.	Length (m)	Length of 2	Between	Area (m²)
		Sections (m)	Sections (m)	
No.0	35.27			
		35.27	25.00	881.76
No.1	35.27			
		35.27	25.00	881.75
No.2	35.27			
N- 0	nr og	35.27	25.00	881.75
No.3	35.27	35,27	25.00	881.75
No.4	35.27	30.41	20,00	001.10
	30.27	35.27	17.50	617.23
No.4+17.50	35.27			
		33.37	2.50	83.41
No.4+20.00	31.46			
		31.46	5.00	157.30
No.5	31.46			
NI C	01.40	31.46	25.00	786.50
No.6	31.46	31.46	10.00	214.00
No.6+10.00	31.46	31.40	10.00	314.60
110.0 / 10.00	01.40	33,42	2.50	83,54
No.6+12.50	35.37			
		35.37	12.50	442.13
No.7	35.37			
		35.37	11.00	389.07
No.7+11.0	35.37			
V 7 10 10	05.65	35.37	5.16	182.51
No.7+16.16	35.37	04.05		05.54
No.7+19.00	33.32	34.35	2.84	97.54
110.7110.00	00.02	31.17	6.00	187.02
No.8	29.02	52.11	v.00	101.02
		28.40	6.00	170.37
No.8+6.00	27.77			
		27.77	2.10	58.32
No.8+8.10	27.77			
17 0.11		13.89	6.00	83.31
No.8+14.10	0.00			
Total		579.19	214.10	7,179.84
20064	<u> </u>	010.10	#14.10	1,113.04



	QUANTITY CALCULATION O	OVER SHEET	
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	BACKFILLING BUHIND CAISSON	Pay Item No. (BOQ)	2C-1203
Quantity Item	GEOTEXTILE SHEET	Unit	ws.

Calculation Procedure Applied

- 1. Colwlation of lengths of sections.
- 2. Average of lengths of sections.
- 3. Calculation of Area: Average of lengths of sections times distance between sections.

(Excel).

References, Calculation Base and Revisions

Reference: India promings:

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OMulti-Purpose Berth

11, Filter Fabric (Backfill Rublle)

(Backfill Rubile)	·····		
Length (m)			Area (m²)
	Sections (m)	Sections (m)	
46.17			
	46.17	25.00	1,154.25
46.17	10.17	05.00	
AG 17	46.17	25.00	1,154.25
10.17	46.17	25.00	1,154.25
46.17			
46 17	46.17	25.00	1,154.25
40.17	46.17	17.50	807.98
46.17			
	44.22	2.50	110.54
42.26	42.26	5.00	211.30
42.26	*2.20	0.00	211,50
	42.26	25.00	1,056.50
42.26			
	42.26	10.00	422.60
42.26			
40.07	46.12	2.50	115.29
49.97	49.97	19.50	624.63
49.97	79.01	12.00	024.00
	49.97	11.00	549.67
49.97			
	49.97	5.16	257.85
49.97			
47.00	48.95	2.84	139.00
47.92	45 77	6.00	274.62
43.62	-20.11	0.00	414.02
15.02	40.60	6.00	243.57
37.57			
	37.57	2.10	78.90
37.57	20.75		
0.00	18.79	6.00	112.71
0.00			
<u> </u>	789.54	214.10	9,622.14
	Length (m) 46.17 46.17 46.17 46.17 46.17 42.26 42.26 42.26 42.96 49.97 49.97 49.97 49.97 49.97	Length (m) Average Length of 2 Sections (m) 46.17 46.17 46.17 46.17 46.17 46.17 46.17 46.17 46.17 46.17 42.26 43.62 40.60 37.57 37.57 37.57	Length (m) Average Longth of 2 Sections (m) Distance Between Sections (m) 46.17 46.17 25.00 46.17 46.17 25.00 46.17 46.17 25.00 46.17 46.17 25.00 46.17 46.17 17.50 46.17 44.22 2.50 42.26 42.26 5.00 42.26 42.26 25.00 42.26 42.26 10.00 42.26 46.12 2.50 49.97 49.97 12.50 49.97 49.97 5.16 49.97 48.95 2.84 47.92 45.77 6.00 43.62 40.60 6.00 37.57 2.10 37.57 18.79 6.00

OMulti-Purposo Berth 12. Filter Fabric (Rubble Mound)

Section No.	Length (m)	Average Length of 2 Sections (m)	Distance Between Sections (m)	Area (m²)
		·		
No.7+19.00	13.42			
		13.42	6.00	80.52
No.8	13.42			
		13.42	20.00	268.40
No.9	13.42			
		13.42	20.00	268.40
No9+20.00	13.42		1 1	
	:	12.67	0.00	0.00
No9+20.00'	11.92			
	1 1	11.92	12.50	149.00
No.9+32.50	11.92			14 14
		5.96	30.00	178.80
No.9+62.50	0.00			
71.				
Total		70.81	88.50	945,12

NIPPON KOEI CO,,LTD.

