	QUANTITY CALCULATION C	OVER SHEET	
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	U type ditch (B)	Pay Item No. (BOQ)	2H-070408
Quantity Item	Elastiah board	Unit	m ² .

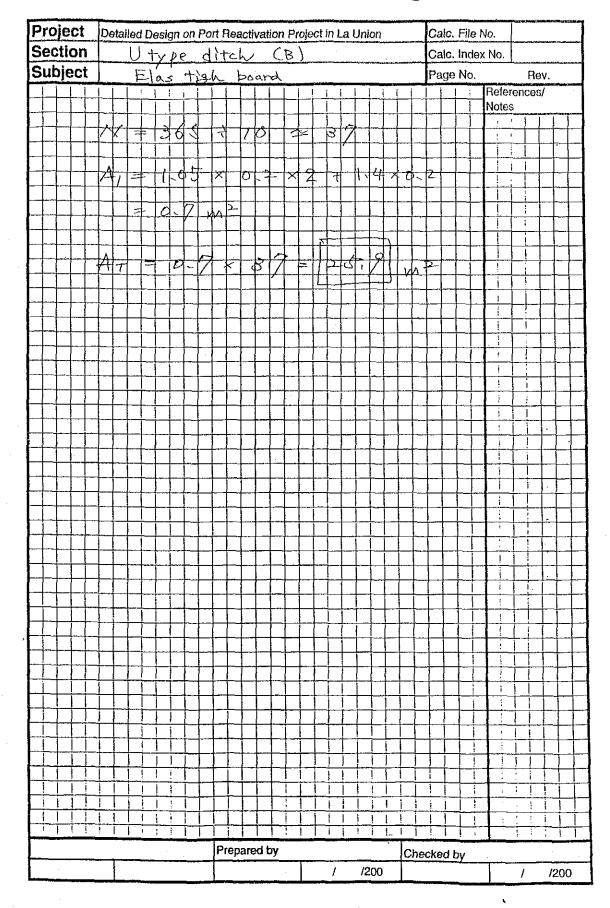
Elas tigh board will be used as a joint, every row.

References, Calculation Base and Revisions

See the item of excavation and disposal of Otype ditch. (2H-0704)

Rev	Prepa	ared	No. of	Chec	ked	Revie	wed	Superseded
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	QUANTITY CALCULATION C	OVER SHEET	(1 1 1 1 1 1 1 1
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Utype ditch (B)	Pay Item No. (BOQ)	2H-070409
Quantity Item	Backfill	Unit	V/.3

Backfill volume was computed by excavation volume minus crushed stone, lean concrete and Utype ditch.

References, Calculation Base and Revisions

See the item of excavation and disposal of Utype ditch. (2H - 0704)

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	QUANTITY CALCULATION C	OVER SHEET	
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Plate type ditch (B)	Pay Item No. (BOQ)	2H-070410
Quantity Item	Compaction	Unit	w ² -

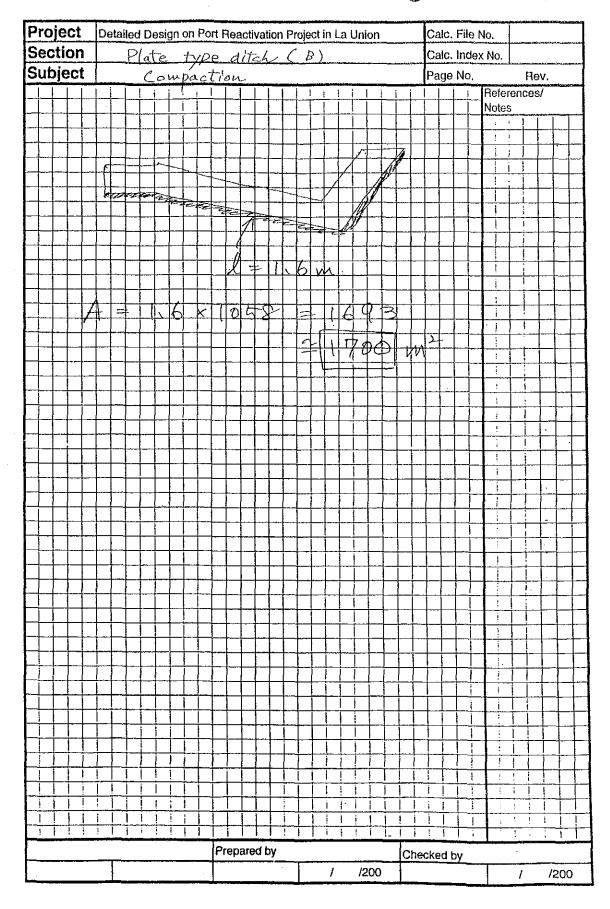
Compaction area was computed by sectional length by the length.

References, Calculation Base and Revisions

See the item of excavation and disposal of Utype ditch. (2H-0704)

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(I) NIPPON KOEI CO.,LTD.



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Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Plate type ditch (B)	Pay Item No. (BOQ)	2H-0704//
Quantity Item	Concrete	Unit	M3·

Concrete volume for plate type ditch was computed by multiplying sectional area by the length.

References, Calculation Base and Revisions

See the item of excavation and disposal of (2H-6704)

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Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Vertical drainage (B)	Pay Item No. (BOQ)	2H-0704/)
Quantity Item	Exavation and Disposal	Unit	M3

Excavation volume was computed by multiplying volume/ispot by numbers.

References, Calculation Base and Revisions

See the item of excavation and disposal of Utype ditch. (2H-0704)

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	QUANTITY CALCULATION O	OVER SHEET	
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Vertical drainage (B)	Pay Item No. (BOQ)	2H-070413
Quantity Item	Compaction	Unit	W
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Compaction area was computed by multiplying area/1=pot by numbers.

### References, Calculation Base and Revisions

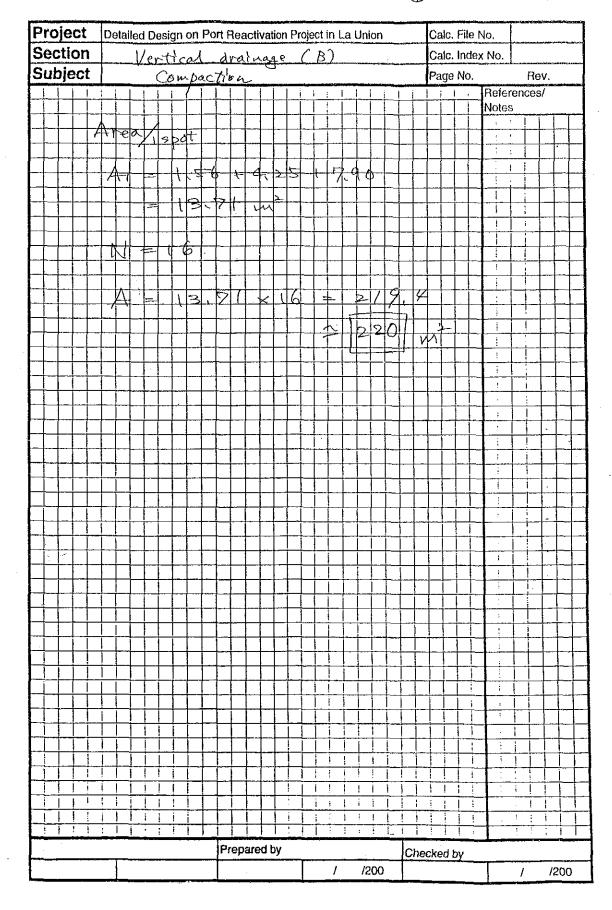
See the item of excavation and disposal of Utype ditch. (2H-0704)

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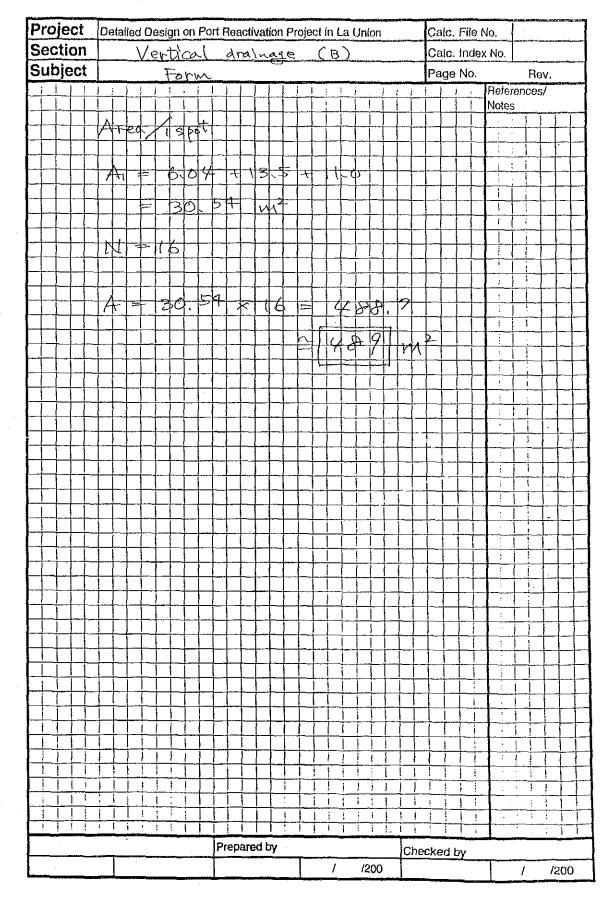
	QUANTITY CALCULATION C	OVER SHEET	
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Vertical drainage (B)	Pay Item No. (BOQ)	2H-070414
Quantity Item	Torm	Unit	M ²

Area of form for vertical drainage was computed by multiplying area/spot by numbers.

### References, Calculation Base and Revisions

See the item of excavation and disposal of Utype ditch. (2H-0704)

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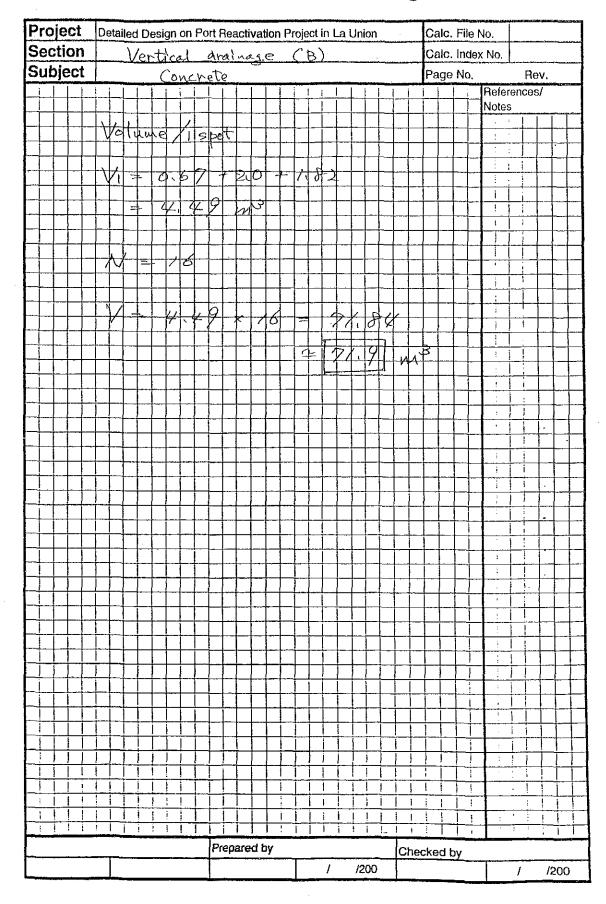
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Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Vertical drainage (B)	Pay item No. (BOQ)	과H-070415
Quantity Item	Concrete	Unit	M ³

Concrete volume for vertical drainage was computed by multiplying volume/ispot by numbers.

### References, Calculation Base and Revisions

See the item of excavation and disposal of U type ditch. (2H-0704)

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	QUANTITY CALCULATION C	OVER SHEET	
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Work Section Title	Vertical drainage (B)	Pay Item No. (BOQ)	24-070416
Quantity Item	Backfill	Unit	m ³ .
Calculation Present			711

Backfill volume for vertical drainage was computed by multiplying volume/spot by numbers.

### References, Calculation Base and Revisions

See the item of excavation and disposal of Utype ditch. (2H-0704)

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	QUANTITY CALCULATION C	OVER SHEET	
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Manhole 1200 mm	Pay Item No. (BOQ)	2H-080/
Quantity Item	Excavation and Disposal	Unit	m ³ .

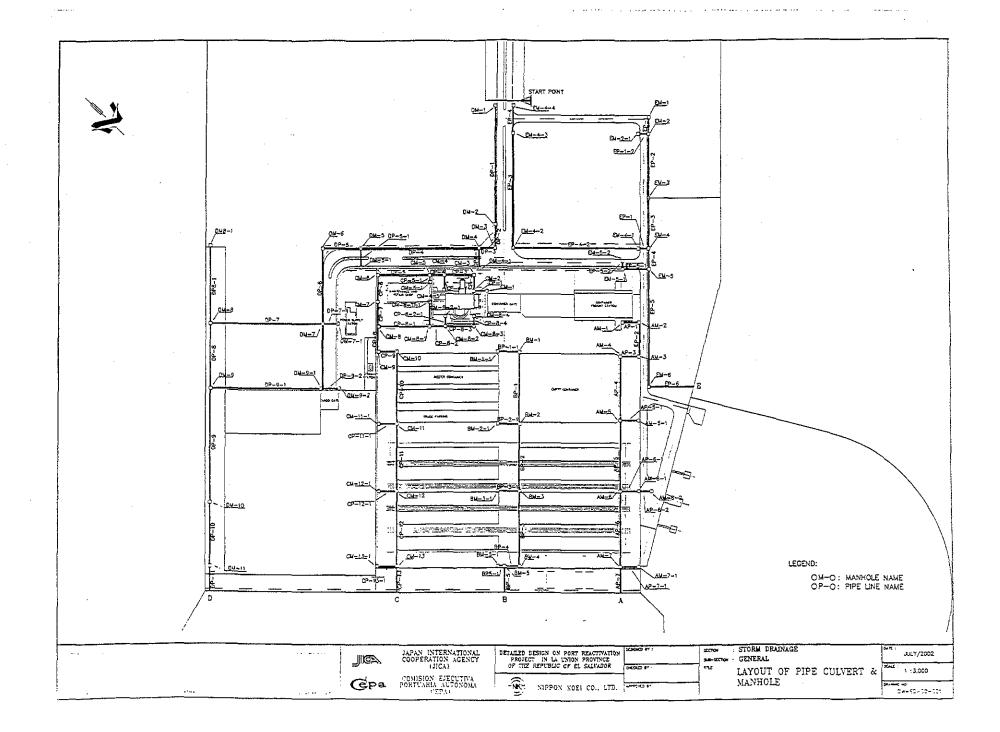
- 1. Calculation of depth of manhole
- 2. Calculation of volume of excavation (Excel)

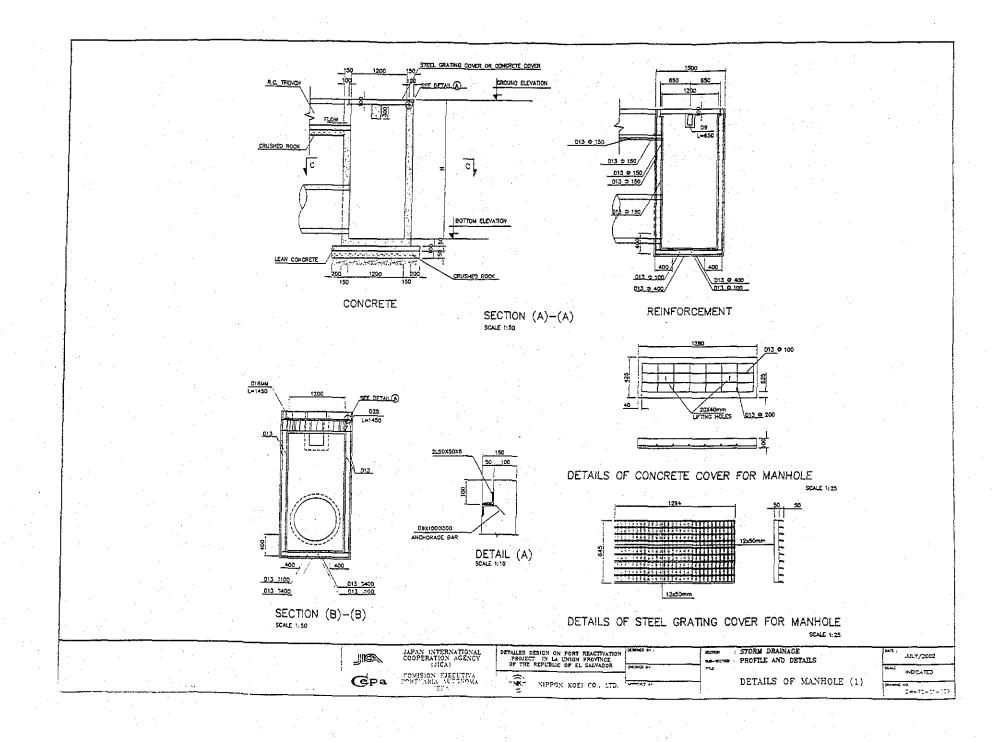
### References, Calculation Base and Revisions

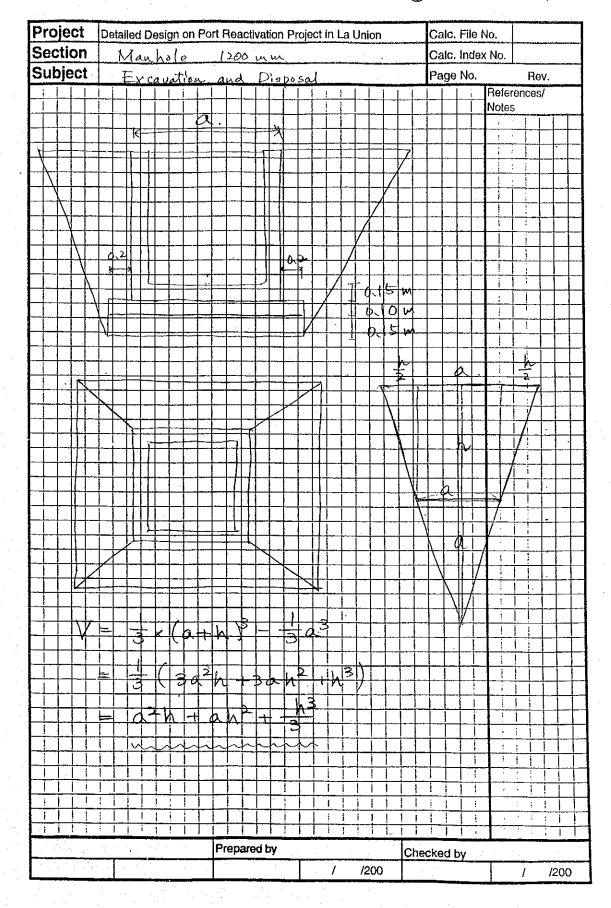
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Rev	Prepa	ıred	No. of	Chec	ked	Revie	wed	Superseded
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Concrete cover													Manhole,
Concrete cover	W	а	G,L,	B,L,	h	Véx	Vcs	Vlo	Vbf	Cmpct	Form	Re-bar	Concrete
	(m)	(m)	(m)	(m)	(m)	(m3)	(m3)	(m3)	(m3)	(m2)	(m2)	(kg)	(m3)
1 AM~1	1.2	1.9	5,522	2,444	3,478	49.6	0.55	0.37	42.4	26.7	38,47	846	3.16
2 CM-1	1,2	1.9	5.562	3.399	2,563	27.4	0.55	0.37	21.9	17.7	28.59	623	2,42
3 CM-2	1.2	1.9	5,537	3,343	2,594	28	0,55	0,37	22.4	18	28.92	631	2.44
4 CM-3 5 CM-4	1.2	1.9	5,437	3,303 3,229	2,534	26,8	0,56 0,55	0.37	21.3	17.5 18.1	28,27 29,07	616 634	2,4
5 CM-4 8 CM-4-1	1,2	1.9 1.9	5.437 5.537	3.269	2,608 2,668	28,3 29,5	0,55	0.37	23.8	18.7	29.72	649	2.45 2.5
7 CM-5	1.2	1.9	5,637	3.189	2.848	33.4	0.55	0.37	27,3	20.3	31.66	693	2.65
8 CM-5-1	1.2	1.9	5.637	3,205	2.832	33.1	0.55	0.37	27.1	20.2	31.49	689	2.64
9 CM-6	1.2	1.9	5,637	3,055	2,982	36.5	0.55	0.37	30,2	21.6	33.11	725	2.70
10 CM-7	1.2	1.9	5,857	2,691	3.566	52.2	0.55	0.37	44.8	27.7	39,42	867	3.23
11 CM8-1	1.2	1.9	5,507	2.755	3,152	40.7	0.55	0.37	34.1	23.3	34,95	766	2.9
12 CM8-1-1	1.2	1.9	5.592	2,819	3.173	41.3	0.55	0.37	34.6	23.5	35,17	772	2,91
13 CM-8-2	1.2	1.9	5.507	2.795	3,112	39.7	0.55	0.37	33.2	22.9	34.51	757	2.86
14 OM-8-2-	1 1.2	1.9	5.802	2.821	3.181	41.5	0.55	0.37	34.8	23,6	35.26	773	2.92
15 CM-8-3	1.2	1,9	5.507	2.258	3,649	54.7	0,55	0.37	47.2	28,6	40,31	887	3,3
16 CM-8-4	1.2	1.9	5.507	2.895	3,012	37.3	0,55	0.37	30.9	21.9	33.43	732	2.78
17 DM-1	1.2	1.9	6.25	4.797	1,853	15.4	0,55	0.37	11.2	11.9	20.92	451	1.84
18 DM-2	1.2	1.9	5.5	3.147	2,753	31.3	0.55	0.37	25,4	19.5	30.64	669	2.57
19 DM-3 20 DM-4	1.2	1.9	5.2	3,045	2,555	27.2	0.55	0.37	21,7	17.6 18.2	28.5 29,15	621 638	2.41
20 DM-4 21 DM-4-1	1.2	1.9	5.34 5.34	3.125 3.047	2.615	28,4	0.55	0.37	22.8 24.3	18.9	29,99	655	2.46 2.52
22 DM-5	1.2	1.9	5,34	2,865	2.693 2.875	30.i 34.1	0.55 0.55	0.37	24.3	20.6	31.95	699	2.67
23 DM-5-1	1.2	1.9	5,34	2.887	2.853	33.6	0.55	0.37	27,5	20.4	31.72	694	2.65
24 DM-7-1	1.2	1.9	5,17	2.683	2.887	34.3	0.55	0.37	28,2	20.7	32.08	702	2.68
25 DM-8-1	1.2	1.9	4.625	2.003	2.325	22.9	0.55	0.37	17.8	15.7	26.01	565	2,23
26 DM-9-1	1.2	1.9	5.01	2.546	2.864	33.8	0.55	0.37	27.7	20.5	31.84	696	2,86
27 DM-9-2	1.2	1.9	5.01	2.564	2.846	33.4	0.55	0.37	27.3	20,3	31.64	692	2,65
28 EM-1	1.2	1.9	6.06	3.897	2,583	27.4	0.55	0.37	21.9	17.7	28.59	623	2.42
29 EM-2	1,2	1,9	5.97	3.799	2.571	27.6	0,55	0.37	22	17.8	28.67	625	2,43
30 EM-2-1	1.2	1.9	5.97	3.808	2,562	27.4	0.55	0.37	21.9	17.7	28.57	623	2.42
31 EM-3	1.2	1.9	5.59	3.39	2.6	28.1	0.55	0.37	22.5	18	28.98	632	2,45
32 EM-4-2	1.2	1,9	5.43	3.972	1.858	15.5	0.55	0.37	11.2	11.9	20.97	452	1.85
33 EM-4-3	1.2	1.9	6.14	4.687	1.853	15.4	0.55	0.37	11.2	11.9	20,92	451	1.84
34 EM-4-4	1.2	1,9	6.25	4.797	1.853	15.4	0,55	0.37	11.2	11.9	20.92	451	1.84
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Total						1,090	18.7	12.6	883	662	1,040	22,600	87.0
Concrete cover	.												
1 AM-2	1.5	2,2	5,522	2.408	3,516	58,8	0.73	0.49	48.1	29,5	47.5	932	3.97
2 AM-3	1.5	2.2	5.332	2.328	3,404	55.2	0.73	0.49	44.8	28.2	46.02	903	3.86
3 AM-5-1	1.5	2.2	5.132	2.158	3,374	54.2	0.73	0.49	43.8	27.9	45.62	895	3.83
4 AM-6-1	1.5	2,2	4.928	1.982	3,346	53,4	0.73	0.49	43.1	27.6	45.25	887	3,8
5 AM-8-2	1.5	2,2	4,928	2,007	3.321	52,6	0.73	0.49	42.4	27.3	44.92	881	3.78
6 AM-7-1	1.5	2.2	4.711	1.797	3.314	52.4	0,73	0.49	42.2	27,2	44.83	879	3.77
7 BM-4	1.5	2.2	4.711	1.395	3.716	65,5	0.73	0.49	54.2	31.8	50.14	985	4.17
8 BM-5-1	1.5	2.2	4.711	1.373	3.738	66.3	0.73	0.49	55 37.8	32,1	50.43	991	4.19
9 CM-11-1	1.5	2,2	5.132	2.379	3.153	47.6	0.73	0.49	37.8	25.5	42.7	836	3.61
10 CM-12-1	1.5	2.2	4.928	2.247	3.081	45.6	0,73	0.49	36	24.7	41.75	817	3.54
11 CM-13-1	1.5	2.2	4,711	1,44	3,671	64	0.73	0.49	52.8	31,3	49.54 44.47	973	4.13
12 CM-8 13 CM-9	1.5 1.5	2,2	5.507 5.332	2,62 2,55	3.287	51.6	0.73	0.49	41.5	26.9 25.8	43,09	872 844	3.75
14 DM-10	1.5	2,2	4,844	2.084	3.182 3.16	48.5 47.8	0.73	0,49	38.7 38	25.5	42.8	838	3.64 3.62
15 DM-6	1.5	2.2	4.625	2.836	2.189	24.7	0.73	0.49	17.6	16.1	29.98	581	2.66
16 DM-7	1.5	2.2	5.17	2.665	2.905	40.8	0.73	0.49	31.7	22.9	39.43	770	3.37
17 DM-8	1.5	2.2	5,119	2,519	3	43.4	0.73	0.49	34.1	23.8	40,68	795	3.46
18 DM-9	1.5	2.2	5.019	2.739	2.68	35.2	0.73	0.49	26.7	20.6	36,46	711	3.14
19 EM-4	1.5	2.2	5.33	3,114	2,616	33.7	0.73	0.49	25.4	20	35.62	694	3,08
20 EM-4-1	1.5	2,2	5,33	3.306	2.424	29.5	0.73	0.49	21.7	18.2	33.08	643	2.89
21 EM-5	1,5	2,2	5,22	2.979	2.641	34.3	0.73	0.49	25.9	20.2	35,95	700	3.11
22 EM-5-1	1.5	2,2	5.22	3,001	2.619	33.8	0.73	0.49	25.5	20	35.66	695	3.08
23 EM-5-2	1.5	2.2	5.22	3.011	2.609	33.6	0.73	0.49	25.3	19.9	35.52	692	3.07
24 EM-6	1.5	2.2	4.89	2.869	2.621	33.9	0.73	0.49	25.6	20.1	35.68	695	3,09
	<b> </b>					4 440	170	110	000	600	1,000	10 000	- 05
Total	l					1,110	17.6	11.8	880	600	1,000	19,800	85
Grating cover	!												
1 AM-4	1.5	2.2	5.332	2,28	3.452	56.7	0.73	0.49	46.1	28.8	46.65	915	3.91
2 AM-5	1.5	2,2	5.132	2,109	3,423	55,8	0.73	0.49	45.3	28.4	46.27	908	3.88
3 AM-6	1.5	2,2	4,928	1,934	3.394	54.9	0.73	0.49	44.5	28.1	45.89	900	3.85
4 BM-1	1.5	2.2	5,332	1.881	3.851	70.4	0.73	0.49	58.7	33.4	51.92	1021	4.3
5 BM-1-1	1.5	2.2	5,332	1.929	3.803	68.6	0.73	0.49	57.1	32.8	51.28	1008	4.26
6 BM-2	1.5	2.2	5.132	1,71	3.822	69.3	0.73	0.49	57.7	33.1	51.54	1013	4.27
7 BM-2-1	1.5	2,2	5.132	1.758	3.774	67.6	0.73	0.49	56.2	32.5	50.9	1001	4.23
8 BM-3	1.5	2.2	4.928	1.534	3.794	68.3	0.73	0.49	56.8	32.7	51.17	1006	4.25
9 BM-3-1	1.5	2.2	4.928	1.582	3.746	66.6	0.73	0.49	55.2	32.2	50.53	993	4.2
10 CM-10	1.5	2.2	5.332	2.502	3.23	49.9	0.73	0.49	39.9	26.3	43.72	856	3,69
11 CM-11	1.5	2.2	5.132	2.331	3.201	49	0.73	0.49	39.1	26	43.34	849	3.66
12 CM-12	1.5	2.2	4.928	2.199	3.129	46.9	0,73	0.49	37.2	25.2	42.39	830	3.59
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Total	ĺ					730	8.8	5.9	600	360	576	11,300	49
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To oil separator	1												•
1 AM-7	1.5	2,2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9,30
2 BM-5	1.5	2.2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
3 CM-13	1.5		4.711	0.993	4.118	93.4	1.09	0.73	68,2	41.7	73.89	1504	9.30
4 DM-11	1.5		4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	
	1			7.230	2110	99.1	- ,.00		-0.1			.,,,,,	3,00
Total						380	4.4	3.0	273	167	296	6,020	38

	QUANTITY CALCULATION C		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Manhole 1200 mm	Pay Item No. (BOQ)	24-2502
Quantity Item	Crusted stone	Unit	Im ³

Volume of crushed stone was computed by multiplying area by thickness.

#### References, Calculation Base and Revisions

See the item of excavation and disposal of 1500mm.

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Conc	crete cover					· · ·							·	Manhole,
		W	a	G.I.	B.L.	h	Vex	Vcs	Vic	Vbf	Cmpct	Form	Re-bar	Concrete
1	AM-1	(m) 1.2	(m)   1,9	(m) 5,522	(m) 2.444	(m) 3,478	(m3) ] 49.6	(m3) 0,55	(m3) 0.37	(m3) 42.4	(m2) 26,7	(m2) 38.47	(kg) 846	(m3) 3.16
2	CM-1	1.2	1.9	5.562	3,399	2,563	27.4	0.55	0.37	21.9	17.7	28.59	623	2.42
3	CM-2	1.2	1,9	5.537	3,343	2,594	28	0.55	0.37	22.4	18	28,92	631	2.44
4	CM-3	1.2	1.9	5,437	3.303	2,534	26.8	0,55	0.37	21,3	17.5	28.27	616	2.4
5	CM-4	1.2	1.9	5,437	3.229	2,608	28,3 29,5	0,55 0,55	0.37	22.7 23.8	18.1 18.7	29.07 29.72	634 649	2,45 2.5
7	CM-4-1 CM-5	1.2	1,9	5.537 5.637	3,269 3,189	2,668 2,848	33.4	0,55	0.37	27.3	20.3	31.66	693	2.85
8	CM-5-1	1,2	1,9_	5.637	3,205	2,832	33.1	0,55	0.37	27.1	20.2	31,49	689	2.64
9	CM-6	1.2	1.9	5,637	3.055	2,982	36,5	0.55	0.37	30,2	21.6	33.11	725	2,76
10	CM-7	1.2	1.9	5,857	2,691	3,566	52.2	0.55	0.37	44.8	27.7	39.42	867	3,23
11	CM8-1_	1.2	1.9	5,507	2,755	3,152	40.7	0.55	0.37	34.1	23.3	34,95	766 772	2.9 2.91
12	CM8-1-1	1.2	1.9	5.592_	2,819	3,173 3,112	41.3 39.7	0.55 0.55	0.37	34.6 33.2	23.5 22.9	35,17 34,51	757	2.86
13	CM-8-2-1	1.2	1.9	5.507 5.602	2,795 2,821	3,181	41.5	0.55	0.37	34.8	23.6	35,26	773	2.92
15	CM-8-3	1.2	1.9	5.507	2,258	3,649	54.7	0.55	0.37	47.2	28.6	40,31	887	3,3
16	CM-8-4	1.2	1.9	5,507	2,895	3,012	37.3	0.55	0.37	30.9	21.9	33.43	732	2.78
17	DM-1	1.2	1,9	6.25	4.797	1,853	15.4	0.55	0,37	11.2	11.9	20.92	451	1.84
18	DM-2	1,2	1.9	5.5	3.147	2,753	31.3	0.55	0.37	25.4	19,5	30.64 28,5	669 621	2,57 2,41
19	DM-3 DM-4	1,2	1.9	5,2 5,34	3.045 3.125	2,555 2,615	27.2 28.4	0.55 0.55	0,37	21.7 22.8	17.6 18.2	29.15	636	2.46
21	DM-4-1	1,2	1.9	5.34	3.047	2.693	30.1	0,55	0.37	24.3	18.9	29,99	655	2.52
22	DM-5	1.2	1.9	5.34	2,865	2.875	34.1	0.55	0.37	28	20.6	31.95	699	2,67
23	DM-5-1	1.2	1.9	5,34	2.887	2,853	33.6	0.55	0,37	27.5	20.4	31,72	694	2.65
24	DM-7-1	1.2	1.9	5.17	2.683	2.887	34.3	0,55	0.37	28,2	20,7	32,08	702	2.68
25	DM-8-1	1.2	1.9	4.625	2.7	2,325	22.9	0,55	0.37	17.8	15.7	26,01 31,84	565 696	2,23
26 27	DM-9-1 DM-9-2	1.2	1.9	5.01 5.01	2.546 2.564	2.864 2.846	33.8 33.4	0.55 0.55	0.37	27.7	20.5 20.3	31.64	692	2.65
28	EM-1	1.2	1.9	6.06	3,897	2,583	27.4	0.55	0.37	21.9	17.7	28.59	623	2,42
29	EM-2	1.2	1.9	5.97	3.799	2,571	27.6	0.55	0.37	22	17.8	28,67	625	2.43
30	EM-2-1	1.2	1.9	5,97	3.808	2.562	27.4	0.55	0.37	21.9	17.7	28,57	823	2,42
31	EM-3	1.2	1.9	5.59	3.39	2.6	28.1	0,55	0,37	22.5	18	28.98	632	2.45
32	EM-4-2	1.2	1.9	5.43	3.972	1,858	15.5	0,5\$ 0.55	0.37	11.2	11.9 11.9	20,97 20,92	452 451	1,85 1,84
33	EM-4-3 EM-4-4	1,2 1,2	1.9	6.14 6.25	4.687 4.797	1,853 1,853	15.4 15.4	0.55	0.37	11.2	11.9	20.92	451	1.84
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	Total						1,090	18.7 [	12.6	883	662	1,040	22,600	87.0
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1	AM-2	1.5	2.2	5,522	2.406	3.516	58.8	0.73	0,49	48.1	29,5	47.5	932	3.97
2	AM-3	1.5	2,2	5.332	2.328	3.404	55.2	0.73	0.49	44.8	28.2	46.02	903	3.86
3	AM-5-1	1.5	2.2	5.132	2,158	3,374	54.2	0.73	0.49	43.8	27.9	45,62	895	3,83
4	AM-6-1	1.5	2.2	4.928	1.982	3.346	53.4	0.73	0.49	43.1	27.6	45.25	887	3.8
5_	AM-6-2	1.5	2.2	4,928	2,007	3.321	52.6 52.4	0.73 0.73	0.49	42,4 42,2	27.3 27.2	44.92 44.83	881 879	3.78 3.77
6	AM-7-1 BM-4	1.5 1.5	2.2	4.711	1.797 1.395	3.314 3.716	65.5	0.73	0.49	54.2	31.8	50,14	985	4.17
B	9M-5-1	1.5	2.2	4,711	1,373	3.738	66.3	0.73	0.49	55	32.1	50.43	991	4.19
9_	CM-11-1	1.5	2.2	5.132	2.379	3.153	47.6	0.73	0.49	37.8	25.5	42.7	836	3.61
10	CM-12-1	1.5	2.2	4.928	2,247	3.081	45.6	0.73	0.49	36	24.7	41,75	817	3,54
11	CM-13-1	1.5	2.2	4.711	1.44	3,671	64	0.73	0.49	52.8 41.5	31.3 26.9	49,54 44.47	973 872	4.13 3.75
12	CM-8 CM-9	1.5	2,2	5.507 5.332	2.62 2.55	3.287 3.182	51.6 48.5	0.73 0.73	0.49	38.7	25.8	43.09	844	3.64
14	DM-10	1.5	2.2	4.844	2.084	3,16	47.8	0.73	0.49	38	25.5	42.8	838	3.62
15	DM-6	1.5	2.2	4.625	2,836	2.189	24.7	0.73	0.49	17.6	16.1	29,98	581	2.66
16	DM-7	1.5	2,2	5.17	2.665	2.905	40.8	0.73	0.49	31.7	22,9	39,43	770	3.37
17	DM-8	1.5	2.2	5.119	2.519	3	43.4	0.73	0.49	34.1 28.7	23.8	40.68 38.46	795 711	3.46 3.14
18	DM-9 EM-4	1, <u>5</u> 1.5	2.2	5.019 5.33	2.739 3.114	2.68 2.616	35.2 33.7	0.73 0.73	0.49	25.4	20.0	35.62	694	3.08
20	EM-4-1	1.5	2.2	5.33	3.306	2.424	29.5	0.73	0.49	21.7	18.2	33.08	643	2.89
21	EM-5	1.5	2.2	5,22	2.979	2.641	34.3	0.73	0.49	25.9	20,2	35.95	700	3.11
	EM-5-1	1,5	2,2	5.22	3.001	2.619	33.8	0.73	0.49	25.5	20	35.66		3.08
	EM-5-2 EM-6	1.5	2.2	5.22 4.89	3.011	2,609 2,621	33.6 33.9	0.73 0.73	0.49	25.3 25.6	19 <u>.9</u> 20.1	35,52 35,68	692 695	3.07
1-27	LM 0	1.5	2.2	CO.P	2.669	2,021	00.0	J. 10			. <u> </u>	20.00		
	Total .						1,110	17,6	11.8	880	600	1,000	19,600	85
Gent!	ng cover						:							
	AM-4	- 1.5	2.2	5,332	2.28	3,452	56.7	0.73	0.49	46.1	28.8	46,65	915	3.91
2	AM-5	1.5	2.2	5,132	2.109	3.423	55.8	0.73	0.49	45.3	28.4	46.27	908	3.88
3	AM-6	1,5	2.2	4.928	1.934	3.394	54.9	0.73	0.49	44.5	28.1	45.89	900	3.85
	BM-1	1.5	2.2	5.332	1.881	3.851	70.4	0.73	0.49	58.7	33.4	51.92	1021	4.3
	BM-1-1	1.5	2.2	5.332	1.929	3.803	68.6	0.73 0.73	0,49	57.1 57.7	32.8	51.28 51.54	1008	4.26 4.27
7	8M-2-1	1.5 1.5	2.2	5.132 5.132	1.71 1,758	3.822 3.774	69.3 67.6	0.73	0.49	56.2	32.5	50.9		4.23
8	BM-3	1.5	2.2	4.928	1,534	3.794	68,3	0.73	0.49	56.8	32.7	51.17		4,25
9	BM-3-1	1.5	2.2	4.928	1.582	3,746	66.6	0.73	0.49	55.2	32,2	50.53	993	4.2
	CM-10	1.5	2.2	5,332	2,502	3,23	49.9	0.73	0.49	39.9	26.3	43.72		3.69
11	CM-11	1.5	2.2	5.132	2,331	3.201	49	0.73	0.49	39.1 37.2	26 25.2	43.34 42.39	849 830	3.68 3.59
12	CM-12	1.5	2.2	4.928	2,199	3.129	46.9	0.73	0.40	31.2	20.2	72.00	000	0.00
	Total						730	8,8	5.9	600	360	576	11,300	49
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Ta oi	i separator													
1	AM-7	1.5	2.2	4.711	0,993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
	BM-5	1,5	2.2	4,711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
	CM-13	1.5	2.2	4.711	0.993	4.118	93.4	1.09	0.73	£8.2 68.2	41.7	73.89	1504 1504	9,30 9,30
4	DM-11	1.5	2.2	4.711	0.993	4,118	93.4	1.09	0.13	UO.2	41,7	73,89	1004	9.30
	Total	<u> </u>					380	4.4	3.0	273	. 167	296	6,020	. 38
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	QUANTITY CALCULATION C	OVER SHEET	
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Manhole 1800 mm	Pay Item No. (BOQ)	2H - 0203
Quantity Item	Lean concrete	Unit	w ₃

Volume of lean concrete was computed by multiplying area by thickness.

### References, Calculation Base and Revisions

See the item of excavation and disposal of 1200mm. (2H-0801).

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Cont	crete cover													Manhole_
1		W (m)	a (m)	G.L. (m)	B.L. (m)	հյ (m)	Vex (m3)	Ves (m3)	Via (m3)	Vbf (m3)	Cmpct (m2)	Form (m2)	Re-bar (kg)	Concrete (m3)
1	AM-1	1,2	1.9	5.522	2,444	3.478	49.6	0.55	0.37	42.4	26.7	38,47	848	3.16
2	CM-1	1.2	1.9	5,582	3,399	2.563	27.4	0,65	0.37	21.9	17.7	28,59	823	2,42
_3	CM-2	1.2	1.9	5.537	3.343	2.594	28	0,55	0.37	22.4	18	28.92	631	2.44
_4	CM-3	1.2	1,9	5.437	3,303	2,534	26,8	0,55	0.37	21.3	17.5	28.27	816	2.4
5	CM-4	1.2	1.9	5,437	3,229	2,608	28,3	0.55	0.37	22.7	18.1	29.07	634	2,45
6	CM-4-1	1.2	1.9	5,537	3.269	2.668	29.5	0.55	0.37	23,8	18.7	29,72	649	2.5
-7-8	CM-5	1.2	1.9	5,637	3.189	2.848	33.4	0.55	0.37	27.3	20.3	31.66	693	2.65
9	CM-5-1 CM-6	1,2	1,9	5,637 5,637	3.205 3.055	2.832 2,982	33.1 36.5	0.55 0.55	0.37	27.1 30.2	20.2 21.6	31.49 33.11	689 725	2,64 2,78
10	CM-7	1,2	1,9	5.857	2,691	3,566	52.2	0,55	0.37	44.8	27.7	39.42	867	3.23
11	CM8-1	1.2	1,9	5.507	2,755	3.152	40.7	0.55	0.37	34.1	23.3	34.95	766	2,9
12	CM8-1-1	1.2	1,9	5.592	2.819	3,173	41.3	0,55	0.37	34.6	23.5	35,17	772	2,91
13	CM-8-2	1.2	1,9	5.507	2,795	3.112	39.7	0.55	0.37	33,2	22.9	34.51	757	2,86
14	CM-8-2-1	1.2	1.9	5.602	2.821	3.181	41.5	0.55	0,37	34.8	23.6	35,26	773	2,92
15	CM-8-3	1.2	1.9	5,507	2.258	3.649	54.7	0.55	0.37	47.2	28.6	40,31	887	3.3
16	CM~8~4	1.2	1.9	5.507	2,895	3.012	37.3	0.55	0,37	30.9	21.9	33,43	732	2.78
17	DM-1	1.2	1.9	6,25	4.797	1.853	15,4	0.55	0,37	11.2	11.9	20.92	451	1,84
18 19	DM-2	1.2	1.9	5,5	3.147	2,753	31,3 27,2	0.55	0,37	25,4	19.5	30,64	669	2.57
20	DM-3 DM-4	1.2	1,9	5,2 5.34	3.045 3.125	2,555 2,615	28,4	0,55 0,55	0,37 0.37	21.7 22.8	17.6 18.2	28.5 29.15	621 638	2.41 2.46
21	DM-4-1	1.2	1.9	5.34	3.047	2,693	30.1	0.55	0.37	24.3	18.9	29,99	655	2,52
22	DM-5	1.2	1.9	5.34	2.865	2.875	34.1	0,55	0.37	28	20.6	31.95	699	2.67
23	DM-5-1	1.2	1.9	5.34	2.887	2,853	33.6	0,55	0.37	27.5	20.4	31.72	694	2.65
24	DM-7-1	1,2	1.9	5.17	2,683	2.887	34.3	0.55	0.37	28.2	20,7	32.08	702	2.68
25	DM-8-1	1.2	1.9	4.625	2.7	2.325	22.9	0.55	0.37	17.8	15.7	28.01	565	2.23
26	DM~9~1	1,2	1.9	5,01	2.546	2,864	33,8	0.55	0,37	27.7	20,5	31.84	696	2.86
27	DM-9-2	1.2	1.9	5.01	2.564	2.846	33.4	0,55	0,37	27.3	20.3	31.64	692	2,85
28	EM-1	1.2	1.9	8.06	3.897	2.583	27.4	0.55	0.37	21.9	17.7	28,59	623	2,42
29	EM-2	1.2	1.9	5.97	3,799	2.571	27.6	0,55	0.37	22	17.8	28,67	825	2.43
30	EM-2-1	1.2	1.9	5.97	3.808	2.562	27.4	0.55	0.37	21.9	17.7	28.57	623	2.42
31	EM-3 EM-4-2	1.2	1.9	5.59 5.43	3.39 3.972	2,8 1.858	28,1 15,5	0.55	0.37	22.5	1 <u>8</u> 11.9	28.98	632 452	2.45 1,85
33	EM-4-3	1.2	1 <u>.9</u> 1.9	6.14	4.687	1.853	15.4	0.55 0.55	0.37	11.2 11.2	11.9	20.97	451	1.84
34	EM-4-4	1.2	1.9	6,25	4.797	1.853	15.4	0.55	0.37	11.2	11.9	20,92	451	1.84
	Total						1,090	18.7	12,6	883	662	1,040	22,600	87.0
اما														
	crete cover	1		5.522	2.406	3.516	58.8	0.70	0.40	40.1	00 E	42.5	932	2.07
1 2	AM-2 AM-3	1.5	2.2	5.332	2,328	3,404	55.2	0.73	0.49 0.49	48.1 44.8	29,5 28,2	47.5 46.02	903	3.97 3.86
3	AM-5-1	1.5 1.5	2.2	5,132	2.158	3.374	54.2	0,73 0.73	0.49	43.8	27.9	45.62	895	3,83
4	AM-6-1	1.5	2.2	4.928	1.982	3.346	53,4	0.73	0.49	43.1	27.6	45.25	887	3.8
5	AM-6-2	1.5	2.2	4.928	2.007	3.321	52.6	0.73	0,49	42.4	27,3	44.92	881	3.78
6	AM-7-1	1.5	2,2	4.711	1,797	3.314	52.4	0.73	0.49	42.2	27.2	44,83	879	3.77
7	BM-4	1.5	2,2	4.711	1.395	3.716	65,5	0.73	0.49	54.2	31.8	50.14	985	4,17
8	BM-5-1	1.5	2.2	4.711	1.373	3,738	66,3	0,73	0.49	55	32.1	50.43	991	4.19
9	CM-11-1	1.5	2.2	5.132	2,379	3.153	47.6	0.73	0.49	37.8	25.5	42.7	836	3.61
10	CM-12-1	1.5	2,2	4.928	2.247	3,081	45,6	0.73	0.49	36	24.7	41.75	817	3,54
12	CM-13-1 CM-8	1.5 1.5	2.2	4.711 5.507	1.44 2.62	3.671 3.287	64 51,6	0.73	0.49	52.8 41.5	31.3 26.9	49.54 44.47	973 872	4.13 3.75
13	CM-9	1.5	2.2	5.332	2.55	3.182	48.5	0.73	0.43	38.7	25.8	43.09	844	3.64
14	DM-10	1.5	2.2	4.844	2.084	3.16	47.8	0.73	0.49	38	25.5	42.8	838	3.62
15	DM-6	1.5	2,2	4.825	2.836	2.189	24.7	0.73	0.49	17.6	16.1	29.98	581	2.66
16	DM-7	1.5	2.2	5.17	2,665	2.905	40,8	0,73	0.49	31.7	22.9	39,43	770	3.37
17	DM-8	1.5	2.2	5,119	2,519	3	43.4	0.73	0.49	34.1	23.8	40,68	795	3.46
18	DM-9	1.5	2.2	5.019	2.739	2.68	35.2	0.73	0.49	26.7	20.6	38,46	711	3,14
19	EM-4	1.5	2.2	5.33	3.114	2.616	33.7	0.73	0.49	25.4	20	35.62	694	. 3.08
20	EM-4-1 EM-5	1.5	2.2	5,33	3,308	2,424 2,641	29,5	0.73	0.49	21.7	18.2	33.08	643	2.89
	EM-5-1	1.5	2.2	5.22 5.22	3.001	2.619	34.3	0,73	0.49	25,9	20.2	35.95	700 695	3,11
	EM-5-2	1.5	2.2	5,22	3.011	2.609	33.8 33.6	0.73 0.73	0.49 0.49	25.5 25.3	19.9	35.66 35.52	695 692	3,08
	EM-6	1.5	2.2	4.89	2,669	2.621	33.9	0.73	0.49	25.6	20.1	35.68	695	3.09
	1		<u>-</u> -		-,		-4.0		V. 73	~~~		25.00	0,55	<u></u>
	Total	•					1,110	17.6	11.8	880	600	1,000	19,600	85
	ing cover			FOAC	0.00	0.400			p 40					<del> </del>
1-2-	AM-4	1,5	2,2	5.332	2,28	3,452	56.7	0.73	0.49	46.1	28.8	46.65	915	3.91
2 3	AM-5 AM-6	1,5	2,2	5.132 4.928	2.109	3.423 3.394	55.8 54.0	0.73	0.49	45.3	28,4	46,27	908	3,88
4	BM-1	1,5	2,2	5.332	1.934 1.881	3.851	54.9 70.4	0.73 0.73	0.49 0.49	44.5 58.7	28,1 33,4	45,89 51,92	1021	3.85 4.3
5	8M-1-1	1,5	2,2	5.332	1.929	3.803	68.6	0.73	0.49	57.1	32.8	51.92	1008	4.26
6	BM-2	1,5	2,2	5.132	1.71	3,822	69.3	0.73	0.49	57.7	33.1	51,20	1013	4.27
7	BM-2-1	1,5	2.2	5.132	1.758	3.774	67.6	0.73	0.49	56.2	32.5	50.9	1001	4.23
8	BM-3	1,5	2,2	4.928	1.534	3.794	68.3	0.73	0.49	56.8	32.7	51.17	1006	4,25
9	BM-3-1	1,5	2.2	4.928	1.582	3.746	66.6	0.73	0.49	55.2	32.2	50.53	993	
		1,5	2.2	5,332	2,502	3.23	49.9	0.73	0.49	39.9	26.3	43.72	856	
11	CM-11	1,5	2.2	5.132	2.331	3.201	49	0.73	0.49	39,1	26	43.34	849	3.66
12	CM-12	1,5	2,2	4.928	2.199	3.129	46.9	0.73	0.49	37.2	25.2	42,39	830	3.59
	Total						720	60	F.0	600	360	E 16	15 200	40
	Total						730	8,8	5,9	600	360	576	11,300	49[
							·		<del> = - · · ·</del>			L		لسحبسا
To o	il separator							-						
	AM-7	1.5	2,2	4.711	0.993	4.118	93,4	1.09	0.73	68.2	41.7	73.89	1504	9.30
2	BM-5	1.5		4.711	0,993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1594	9,30
3		1.5	2,2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
4	DM-11	1.5	2.2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
-	Total	<del> </del>					380	4.4	3.0	273	167	296	6 020	<del> </del>
l	, ota:	•					380	4.4	3.0	213	107	295	6,020	38
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	QUANTITY CALCULATION C	OVER SHEET	mmamah AA eta yaz 300 milikalaru ya godinin. Miribili ya aziri 100 milika 3 Cibera Mandeya
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Manhole 1200 mm	Pay Item No. (BOQ)	2H-0804
Quantity Item	Relaforcement	Unit	kg .

Weight of reinforcement was computed by multiplying unit weight by the height. Unit weight was computed on assumption that the height was 2m.

#### References. Calculation Base and Revisions

See the item of excavation and disposal of 1200mm. (2H-0801)

Rev	Prep	ared	No. of	Chec	ked	Revie	ewed	Superseded
	by	Date	Pages	by	Date	by	Date	by Calc No.
0	Koila Gorão -	<u> </u>		Mr. Journa		Mr. Ando		
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3	<del></del>	<del></del>	<del> </del>	<del> </del>				

TABLE OF REINFORCEMENT (MANHOLE)

No.	D	L (m)	Qty	W/bar (kg)	W (kg)	Remarks
Manhole (	H=2m, 1500				, 0,	
A1	D13	4.00	28	3.98	111.44	
A2	D13	3.40	26	3.383	87.96	
B1	D13	2.55	48	2.53725	121.79	
B2	D13	2.40	44	2.388	105.07	
Cl ·	D13	2.60	22	2,587	56.91	
C2	D13	2.30	20	2.2885	45.77	
			]			
				total	528.94	1 spot
					265	1 spot / m
						-
Manhole (	H=2m, 1200	0)				
<b>A</b> 1	D13	3.40	28	3.383	94.72	
A2	D13	2.80	26	2.786	72.44	1 1
В1	- D13	2.55	48	2.53725	121.79	14 (1)
B2	D13	2.40	44	2.388	105.07	
C1	D13	2.30	22	2.2885	50.35	
C2	D13	2.00	20	1.99	39.8	
				total	484.17	1 spot
					243	1 spot / m
				:		
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Cono	rete cover	te cover Manhole,												
		W	a	۵L	B.L.	h	Vex	Vos	Vio	Vbf	Cmpct	Form	Re-bar	Concrete
1	AM-1	(m) 1,2	(m)   1.9	(m) 5,522	(m) 2.444	(m) 3.478	(m3) 49.6	(m3) 0.55	(m3) 0.37	(m3) 42,4	(m2) 26,7	(m2) 38.47	(kg) 846	(m3) 3.18
2	CM-1	1.2	1.9	5.562	3.399	2,563	27.4	0.55	0.37	21.9	17.7	28,59	623	2,42
3	CM-2	1.2	1.9	5.537	3,343	2,594	28	0.55	0.37	22.4	18	28.92	631	2.44
4	CM-3	1.2	1.9	5.437	3,303	2,534	26.8	0,55	0.37	21.3	17.5	28.27	616	2.4
5	CM-4	1.2	1.9	5.437	3,229	2,608	28,3	0.55	0.37	22.7	18,1	29,07	634	2,45
6	CM-4-1	1.2	1,9	5,537	3.269	2,668	29.5	0,55	0.37	23,8	18.7	29,72	649	2.5
7	CM-5	1.2	1.9	5,637	3.189	2.848	33.4	0.55	0,37	27,3	20,3	31,86	693	2,65
8	CM-5-1_	1.2	1.9	5.637	3.205	2.832	33.1	0.55	0,37	27.1	20.2	31.49	689	2.64
9_	CM-6	1.2	1.9	5.637	3,055	2.982	36.5	0,55	0,37	30,2	21.6	33.11	725	2.76
10	CM-7	1.2	1,9	5.857	2.691	3.566	52,2	0.55	0.37	44.8	27.7	39.42	867	3.23
11	CM8-1	1.2	1.9	5,507	2.755	3,152	40,7	0.55	0.37	34.1	23,3	34,95	766	2.9
12	CM8-1-1	1,2	1.9	5,592	2.819	3,173	41,3	0.55	0.37	34.6	23.5	35,17	772	2.91
13	CM-8-2	1.2	1.9	5,507	2.795	3,112	39.7	0.55	0.37	33.2	22,9	34.51	757	2.86
14	CM-8-2-1	1.2	1.9	5,602	2,821	3,181	41.5	0,55	0.37	34.8	23.6	35,26	773 887	2.92
15	CM-8-3 CM-8-4	1.2	1.9	5.507 5.507	2,258 2,895	3.649 3.012	54.7	0.55 0.55	0.37	47,2 30.9	28,6 21,9	40.31 33.43	732	2.78
17	DM-1	1.2	<u>1,9</u> 1,9	6.25	4,797	1.853	37.3 15.4	0,55	0.37	11.2	11.9	20.92	451	1.84
18	DM-2	1.2	1.9	5.5	3.147	2,753	31,3	0.55	0.37	25.4	19.5	30.64	669	2.57
	DM-3	1.2	1.9	5.2	3,045	2,555	27.2	0.55	0.37	21.7	17.6	28.5	621	2.41
	DM-4	1.2	1.9	5,34	3,125	2.615	28.4	0.55	0,37	22.8	18.2	29.15	636	2.46
21	DM-4-1	1,2	1.9	5.34	3.047	2.893	30.1	0.55	0.37	24,3	18.9	29.99	655	2.52
22	DM-5	1.2	1.9	5.34	2.865	2,875	34.1	0,55	0.37	28	20.6	31.95	699	2.67
23	DM-5-1	1.2	1.9	5.34	2.887	2,853	33.6	0.55	0.37	27.5	20,4	31.72	694	2.65
24	DM-7-1	1,2	1.9	5,17	2.683	2,887	34.3	0.55	0.37	28,2	20.7	32,08	702	2,68
25	DM-8-1	1.2	1.9	4.625	2.7	2.325	22,9	0.55	0.37	17.8	15.7	26.01	565	2,23
28	DM-9-1	1,2	1.9	5.01	2,546	2.864	33.8	0.55	0.37	27.7	20,5	31,84	696	2.66
27	DM-9-2	1.2	1.9_	5.01	2,564	2.848	33,4	0.55	0,37	27.3	20.3	31.64	692	2.65
28	EM-1	1.2	1.9	6.08	3,897	2.563	27.4	0.55	0,37	21.9	17.7	28.59	823	2.42
	EM-2	1.2	1.9	5.97	3,799	2,571	27.6	0.55	0.37	22	17.8	28.67	825	2.43
	EM-2-1	1.2	1.9	5,97	3.808	2,562	27.4	0.55	0.37	21.9	17.7	28.57	623	2.42
31	EM-3	1.2	1.9	5.59	3.39	2.8	28.1	0.55	0.37	22,5	18	28.98	832	2.45
	EM-4-2	1.2	1.9 -	5.43	3,972	1.858	15.5	0.55	0.37	11.2	11.9	20,97	452 451	1.85
33	EM-4-3 EM-4-4	1,2	1.9	6.14 6.25	4.687 4.797	1.853 1.853	15.4 15.4	0.55 0.55	0.37	11.2	11.9 11.9	20.92	451	1.84
	LIM 7 7	1.4	1.5	0.25	7,131	1.000	10,7	0,13	0.07	11.2		20.32	771	
<del></del>	Total		~				1,090	18.7	12.6	883	662	1,040	22,600	87.0
ļ							.,							•
	rete cover							<u>-</u>				<u> </u>		
	AM-2	1.5	2,2	5.522	2.406	3.516	58.8	0.73	0.49	48.1	29,5	47.5	932	3.97
2	AM-3	1.5	2,2	5.332	2,328	3,404	55.2	0.73	0.49	44.8	28.2	46.02	903	3,86
3	AM-5-1	1.5	2,2	5.132	2,15B	3.374	54.2	0.73	0.49	43.8	27.9	45.62	895	3.83
4	AM-6-1	1.5	2.2	4.928	1.982	3,346	53.4	0.73	0.49	43.1	27.6	45.25	887 881	3.8 3.78
6	AM-8-2	1.5	2,2	4.928 4.711	2.007	3.321 3.314	52.6	0.73 0.73	0,49	42.4 42.2	27,3 27.2	44.92 44.83	879	3.77
7	AM-7-1 BM-4	1.5	2.2	4.711	1.797 1.395	3.716	52.4 65.5	0.73	0.49	54.2	31.8	50.14	985	4.17
8	BM-5-1	1.5	2.2	4.711	1.373	3.738	88.3	0.73	0.49	55	32.1	50.43	991	4.19
9	CM-11-1	1.5	2,2	5.132	2.379	3.153	47.6	0.73	0.49	37.8	25.5	42.7	836	3,61
10	CM-12-1	1.5	2.2	4.928	2,247	3.081	45.6	0.73	0.49	36	24.7	41,75	817	3,54
11.	CM-13-1	1.5	2.2	4.711	1.44	3.671	64	0.73	0.49	52,8	31.3	49.54	973	4,13
12	CM-8	1.5	2.2	5,507	2,62	3.287	51.6	0.73	0.49	41.5	26.9	44.47	872	3.75
13	CM-9	1.5	2.2	5.332	2,55	3,182	48.5	0.73	0.49	38.7	25,8	43.09	844	3.64
14	DM-10	1.5	2,2	4.844	2.084	3.16	47.8	0.73	0.49	38	25.5	42.8	838	3.62
15	DM-6.	1.5	2.2	4.625	2,836	2,189	. 24,7	0.73	0.49	17.6	16.1	29.98	581	2.66
16	DM-7	1.5	2.2	5.17	2.665	2,905	40,8	0.73	0.49	31.7	22.9	39.43	770	3.37
17	DM-8	1.5	2,2	5,119	2.519	2.68	43.4	0.73	0.49	34.1	23.8	40.68	795 711	3.46
19	DM-9 EM-4	1.5	2,2	5.019 5.33	2.739 3.114	2.616	35.2 33.7	0.73	0.49	26.7 25.4	20.6 20	38.46 35.62	694	3.14
	EM-4-1	1.5	2.2	5.33	3,114	2,424	29.5	0.73	0.49	21.7	18.2	33.08	643	2.89
	EM-5	1.5	2,2	5.22	2.979	2.641	34.3	0.73	0.49	25.9	20.2	35.95	700	3.11
	EM-5-1	1.5	2.2	5.22	3.001	2.619	33.8	0.73	0.49	25.5	20.2	35,66	695	3.08
	EM-5-2	1.5	2.2	5.22	3.011	2,609	33.6	0.73	0.49	25.3	19.9	35.52	692	3.07
	EM-6	1.5	2.2	4.89	2,669	2.621	33,9	0.73	0.49	25.6	20.1	35.68	695	3.09
ļ												,	45.55	
	Total						1,110	17.6	11.8	880	600	1,000	19,600	85
0			***										.	
	AM-4	1.5	2,2	5.332	2.28	3.452	56.7	0.73	0.49	46.1	28.8	46.65	915	3.91
	AM-9 AM-5	1.5	2.2	5,132	2,109	3.423	55.8	0.73	0.49	45.3	28.4	46.27	908	3.88
	AM-6	1.5	2.2	4.920	1.934	3.394	54.9	0.73	0.49	44.5	28.1	45.89	900	3.85
	BM-1	1.5	2.2	5,332	1.881	3.851	70.4	0.73	0,49	58.7	33,4	51.92	1021	4.3
	BM-1-1	1.5	2.2	5,332	1.929	3.803	68.6	0.73	0.49	57.1	32,8	51.28	1008	4.26
	BM-2	1.5	2.2	5,132	1.71	3.822	69.3	0.73	0.49	57.7	33.1	51.54	1013	4.27
	BM-2-1.	1,5	2.2	5,132	1.758	3.774	67.6	0.73	0.49	56.2	32.5	50.9	1001	4.23
	BM-3	1.5	2.2	4,928	1.534	3.794	68.3	0.73	0.49	56.8	32.7	51.17	1006	4.25
	BM-3-1	1.5	2.2	4.928	1.582	3,746	66.6	0.73	0.49	55.2	32.2	50.53	993	4.2
10	CM-10	1.5	2.2	5.332	2,502	3.23	49.9	0.73	0.49	39,9	26.3	43.72	856	3.69
-11	CM-11	1.5	2.2	5.132	2.331	3.201	49	0.73	0.49	39.1	26	43.34	849	3.68
12	CM-12	1.5	2,2	4,928	2.199	3,129	46.9	. 0.73	0.49	37.2	25,2	42,39	830	3.59
<u> </u>	L													
	Total						730	8.8	5.9	600	360	576	11,300	49
L		L				J		<del></del>		<del></del>		<del></del>	L	L
To oil	separator					J		. *	1		j		. 1	]
	AM-7	1.5	2,2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
	BM-5	1.5	2,2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
	CM-13	1.5	2.2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
	DM~11	1.5	2.2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
	Total						380	4.4	3.0	273	167	296	6,020	38
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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	Manhole 1200 mm	Pay Item No. (BOQ)	2H-0805									
Quantity Item	Coner Angle	Unit	ks									

Weight of corner angle was compaired by multiplying unit weight by the length.

#### References, Calculation Base and Revisions

See the Item of excavation and disposal of 1900 mm. (2H-0201)

Rev	Prepared		No. of	Chec	ked	Revie	wed	Superseded
	by	Date	Pages	by	Date	by	Date	by Calc No.
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Grating type size (mm) 1594x795x100x2

N=

12 spots

	Form (side) (m2)	Form (bottom (m2)	Re-bar (D13) (kg)	Concrete (m3)	L50x50x6 (m)	(kg)	Re-bar (D9) (kg)
spot					7.2	31.9	1.2
total					86.4	383	14.4

Concrete type size (mm) 1280 x 425 x 100 x 3

N=

spots

	Form (side) (m2)	Form (bottom (m2)	Re-bar (D13) (kg)	Concrete (m3)	L50x50x6 (m)	(kg)	Re-bar (D9) (kg)
one	0.168	0.55	6.87	0.055			
spot	0.504	1.65	20.61	0.165	6	26.6	1.0
total	17.2	56.1	701	5.61	204.0	905	ሽ 34.0

size (mm)  $1580 \times 520 \times 100 \times 3$ 

24

spots

	E		Re-bar (D13)		L50x50x6		Re-bar (D9)
	(m2)	(m2)	(kg)	(m3)	(m)	(kg)	(kg)
one	0.42	0.83	10.15	0.083			
spot	1.26	2.49	30.45	0.249	7.2	31.9	1.2
total	30.3	59.8	730.8	5.98	172.8	766	28.8

size (mm) 1580 x 520 x 100 x 2

N=

spots

	Form (side) (m2)	Form (bottom (m2)	Re-bar (D13) (kg)	Concrete (m3)	L50x50x6 (m)	(kg)	Re-bar (D9) (kg)
one	0.42	0.83	10.15	0.083			
spot	0.84	1.66	20.3	0.166	7.2	31.9	1.2
total	3.4	6.7	81.2	0.7	28.8	128	4.8

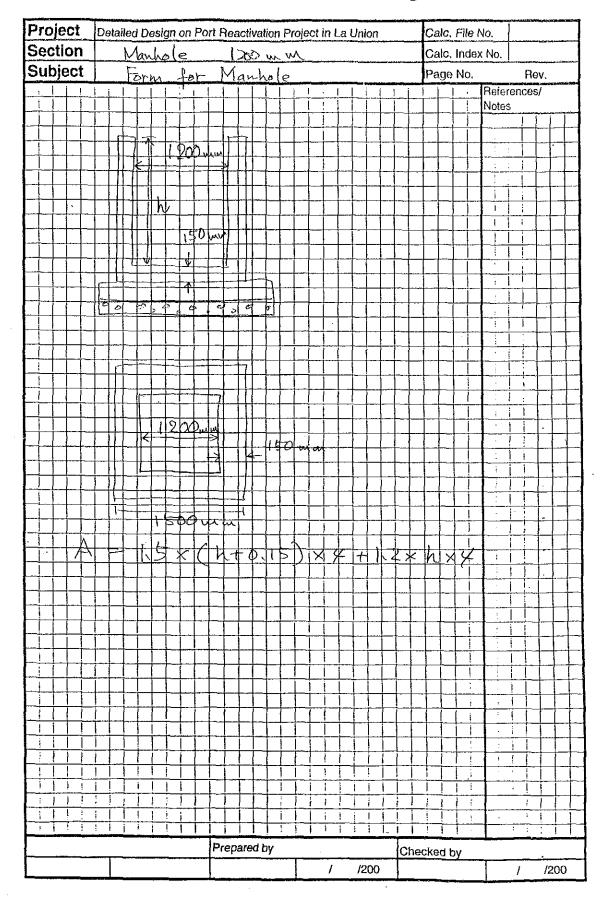
	QUANTITY CALCULATION COVER SHEET											
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001									
Work Section Title	Mayhole 1500 mm	Pay Item No. (BOQ)	21-080601									
Quantity Item	Form for Manhole	Unit	M ²									

tired of form for montale was computed by combining inside with outside.

### References, Calculation Base and Revisions

See the Item of excavation and disposal of 1200mm. (2H-0201)

Rev	Prepared		No. of	Checked			Revie	wed	Superseded	
	by	by o Date Pages			by	Date	by	Date	by Calc No.	
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Conc	rete cover						т	·						Maillioio
		W.	a (m)	GL (m)	B.L. (m)	h (m)	Vex	Vos (m3)	Vic	Vbf	Ompot (m2)	Form (m2)	Re-bar	Concrete (m3)
1	IAM-1	(m) 1,2	(m) 1.9	(m) 5,522	2,444	3,478	(m3) 49.6	0,55	(m3) 0,37	(m3)   42.4	26,7	38.47	(kg) 846	3.16
2	CM-1	1,2	1,9	5.562	3.399	2.563	27.4	0.55	0.37	21.9	17.7	28.59	623	2.42
3	CM-2	1.2	1.9	5,537	3,343	2.594	28	0.55	0.37	22,4	18	28.92	631	2.44
4	CM-3	1.2	1.9	5,437	3,303	2,534	26.8	0.55	0.37	21.3	17.5	28.27	616	2,4
5	CM-4	1.2	1,9	5.437	3,229	2,608	28,3	0,55	0,37	22,7	18.1	29,07	634	2,45
8	CM-4-1	1,2	1.9	5.537	3.269	2.668	29.5	0.55	0.37	23.8	18.7	29.72	649	2.5
<u>۲</u>	CM-5	1,2	1.9	5.637	3,189	2.848	33.4	0.55	0.37	27.3	20.3	31.68	693	2.65
8	CM-5-1	1,2	1.9	5.637	3,205	2,832	33.1	0.55	0,37	27.1	20.2	31.49	689	2.64
9	CM-6	1.2	1.9	5.637	3.055	2,982	36.5	0.55	0,37	30.2	21.6	33.11	725	2,76
10	CM-7	1,2	1.9	5,857	2.691	3,566	52.2	0.55	0.37	44,8	27.7	39.42	867	3,23
11	CMB-1	1.2	1.9	5.507	2.755	3,152	40,7	0.55	0,37	34.1	23.3	34.95	766	2.9
12	CM8-1-1	1.2	1.9	5,592	2.819	3,173	41.3	0,55	0.37	34.6	23,5	35.17	772	2.91
13	CM-8-2	1.2	1.9	5.507	2.795	3.112	39.7	0,55	0.37	33.2	22,9	34.51	757	2.86
14	CM-8-2-1	1.2	1.9	5.602	2.821	3.181	41.5	0.55	0.37	34.8	23.6	35.26	773	2.92
15	CM-8-3	1.2	1.9	5.507	2,258	3.649	54.7	0.55	0.37	47.2	28,6	40,31	887	33
16	CM-8-4	1.2	1.9	5.507	2.895	3.012	37.3	0,55	0.37	30.9	21.9	33,43	732	3,3 2,78
17	DM-1	1.2	1.9	6.25	4,797	1.853		0.55	0.37	11.2	11.9	20,92	451	1.84
18	DM-2	1.2	1.9	5.5	3.147	2.753	15.4 31,3	0.55	0,37	25.4	19.5	30.64	669	2.57
19	DM-3	1.2	1.9	5.2	3.045	2,755	27.2	0,55	0.37	21.7	17.6	28.5	621	2.41
20	DM-4	1.2	1.9	5.34	3.125	2,615	28,4	0.55	0.37	22.8	18.2	29,15	636	2.46
				5.34					0.37					2,52
21	DM-4-1	1.2	1.9		3.047	2,693 2,875	30,1	0.55		24.3	18,9	29,99	655	2.67
	DM-5	1.2	1.9	5.34	2.865		34.1	0.55	0.37	28	20,6	31,95	699	
23	DM-5-1	1,2	1,9	5.34	2.887	2.853	33.6	0.55	0.37	27.5	20,4	31,72	694	2.65
24	DM-7-1	1,2	1,9	5,17	2,683	2,887	34.3	0.55	0.37	28.2	20,7	32.08	702	2,68
25	DM-8-1	1.2	1.9	4.625	2,7	2,325	22.9	0,55	0.37	17.8	15.7	26.01	565	2,23
26	DM-9-1	1.2	1.9	5.01	2.546	2,864	33,8	0.55	0.37	27.7	20.5	31.84	696	2.66
27	<u>IDM-9-2</u>	1.2	1.9	5.01	2.584	2,848	33,4	0.55	0.37	27.3	20.3	31.64	692	2.65
28	EM-1	1.2	1.9	6.06	3.897	2.563	27.4	0.55	0.37	21.9	17.7	28,59	623	2.42
29	EM-2	1.2	1.9	5,97	3.799	2.571	27.6	0.55	0.37	22	17.8	28.67	825	2,43
30	EM-2-1	1,2	1.9	5.97	3.808	2.562	27.4	0.55	0.37	21,9	17.7	28.57	623	2.42
31	EM-3	1,2	1.9	5,59	3,39	2.6	28,1	0,55	0.37	22.5	18	28.98	632	2.45
32	EM-4-2	1.2	1.9	5.43	3.972	1.858	15.5	0.55	0.37	11.2	11.9	20.97	452	1.85
33	EM~4-3	1.2	1,9	6.14	4.687	1.853	15.4	0.55	0.37	11.2	11.9	20,92	451	1.84
34	EM-4-4	1.2	1.9	6.25	4.797	1.853	15.4	0.55	0.37	11.2	f 1.9	20.92	451	1,84
<u></u>	L													
1	Total						1,090	18.7	12.6	883	662	1,040	22,600	.87.0
_												,		
Conc	rete cover	- 10	0.0	F F40	0.400	0.510		0.70	0.40	10.1	- 00 6	43.5		202
<u> </u>	AM-2	1.5	2,2	5.522	2,406	3.516	58.8	0.73	0.49	48.1	29.5	47.5	932	3.97
_2_	AM-3	1,5	2.2	5.332	2.328	3,404	55.2	0.73	0.49	44.8	28.2	46.02	903	3.86
<u>3</u>	AM-5-1	1.5	2.2	5.132	2.158	3.374	54.2	0,73	0.49	43.8	27.9	45.62	895	3.83
4	AM-6-1	1.5	2,2	4.928	1.982	3,346	53.4	0.73	0.49	43.1	27.6	45.25	887	3.8
5	AM-8-2	1.5	2.2	4,928	2,007	3,321	52.8	0.73	0.49	42,4	27.3	44.92	881	3.78
8	AM-7-1	1.5	2.2	4.711	1.797	3.314	52.4	0.73	0.49	42.2	27.2	44,83	879	3.77
7	8M-4	1.5	2,2	4.711	1.395	3,716	65.5	0.73	0,49	54.2	31.8	50.14	985	4.17
8	BM-5-1	1.5	2,2	4.711	1.373	3.738	66.3	0.73	0,49	55	32.1	50.43	991	4.19
9_	CM-11-1	1,5	2.2	5.132	2,379	3.153	47.6	0.73	0.49	37.8	25.5	42.7	836	3.61
10	CM-12-1	1.5	2,2	4.928	2.247	3.081	45,6	0,73	0.49	36	24.7	41.75	817	3.54
11	CM-13-1	1,5	2,2	4.711	1.44	3,871	64	0,73	0.49	52.8	31.3	49.54	973	4.13
12	CM-8	1.5	2.2	5.507	2,62	3.287	51.6	0.73	0.49	41.5	26,9	44.47	872	3.75
13	CM-9	1.5	2.2	5.332	2.55	3.182	48.5	0.73	0.49	38.7	25.8	43,09	844	3.64
14	DM-10	1.5	2.2	4.844	2.084	3.16	47.8	0.73	0.49	38	25.5	42.8	838	3.62
	DM-6	1.5	2.2	4.625	2.836	2,189	24.7	0.73	0.49	17.6	16.1	29.98	581	2.66
16	DM-7	1.5	2.2	5,17	2.665	2.905	40.8	0.73	0.49	31.7	22.9	39,43	770	3.37
17	DM-8	1.5	2,2	5.119	2,519	3	43,4	0.73	0.49	34.1	23.8	40.68	795	3.46
18	DM-9	1.5	2.2	5.019	2.739	2.68	35.2	0.73	0,49	26.7	20.6	38.46	711	3.14
19	EM-4	1,5	2.2	5.33	3.114	2,616	33.7	0.73	0.49	25.4	20	35.62	694	3.08
	EM-4-1	1.5	2.2	5.33	3.306	2.424	29.5	0.73	0.49	21.7	18.2	33.08	643	2.89
	EM-5	1.5	2,2	5,22	2,979	2.641	34.3	0.73	0.49	25.9	20.2	35.95	700	3.11
	EM-5-1	1.5	2.2	5.22	3.001	2,619	33.8	0,73	0.49	25,5	20	35.66	695	3.08
	EM-5-2	1.5_	2.2	5.22	3.011	2,609	33.6	0.73	0.49	25,3	19.9	35.52	692	3.07
24	EM-6	1.5	2.2	4.89	2,669	2.621	33.9	0.73	0.49	25.6	20.1	35.68	695	3.09
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	Total						1,110	17.6	11.8	880	600	1,000	19,600	85
	ng cover			5 000	0.00			~~~~	0.10	10.7				
	AM-4	1.5	2,2	5,332	2.28	3,452	56.7	0.73	0.49	46.1	28.8	48.85	915	3.91
	AM-5	1.5	2.2	5.132	2,109	3.423	55.8	0.73	0,49	45.3	28.4	48.27	908	3.88
	AM-6	1.5	2.2	4.928	1.934	3,394	54.9	0.73	0,49	44.5	28,1	45.89	900	3.85
4	8M-1	1.5	2.2	5.332	1.881	3,851	70.4	0.73	0.49	58.7	33.4	51.92	1021	4.3
_5_	BM-1-1	1.5	2.2	5.332	1.929	3.803	68.6	0.73	0,49	57.1	32,8	51.28	1008	4.28
6	BM-2	1.5	2.2	5.132	1.71	3.822	69.3	0.73	0.49	57.7	33.1	51.54	1013	4.27
7	BM-2-1	1.5	2.2	5.132	1.758	3.774	67.6	0.73	0.49	56.2	32.5	50.9	1001	4.23
8	BM-3	1.5	2.2	4,928	1.534	3.794	68.3	0.73	0.49	56.8	32.7	51.17	1006	4.25
9	BM-3-1	1.5	2.2	4.928	1.582	3,746	66.6	0.73	0.49	55.2	32,2	50.53	993	4.2
10	CM-10	1.5	2.2	5,332	2.502	3.23	49.9	0.73	0.49	39.9	26.3	43.72	856	3.69
11	CM-11	1.5	2.2	5.132	2.331	3,201	49	0.73	0.49	39.1	26	43.34	849	3.66
12	CM-12	1.5	2.2	4.928	2.199	3.129	46.9	0.73	0.49	37.2	25.2	42.39	830	3.59
ļ	<u></u>													
	Total						730	8.8	5.9	600	360	576	11,300	49
To oi	l separator										1		l	1
1	AM-7	1.5	2.2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
2	BM-5	1.5	2.2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
3	CM-13	1,5	2,2	4.711	0.993	4.118	93.4	1,09	0.73	68.2	41.7	73.89	1504	9.30
4	DM-11	1.5	2,2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
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	Total	_ ····					380	4.4	3.0	273	167	296	6,020	38
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Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Manhole 1200 mm	Pay Item No. (BOQ)	24-080602
Quantity Item	Concrete for manhole	Սոit	w ³ .

Height = Ground Level - Bottom Level + 0.15 (m)

Volume of concrete for manhole was computed by outer

Volume minus inner volume.



Top view



side view

## References, Calculation Base and Revisions

See the Item of excavation and disposal of 1200mm. (2H-0801)

Rev	Prep	ared	No. of	Check	ked	Revie	wed	Superseded
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Project		t Reactivation Pr		Calc, File No.	
Section	Manhole	1200 mm		Calc. Index No.	
Subject	Concrete à	or manho	e	Page No.	Rev.
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				Not	es
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						-							,	Manhole
	Concrete cove	W	а	G,L,	B.L.	h l	Vex	Ves	Vlc	Vbt	Cmpct	Form	Re-bar	Concrete
	1 AM-1	(m) 1,2	(m) 1.9	(m) 5.522	(m) 2,444	(m) 3.478	(m3) 49.6	_(m3)   0.55	(m3) 0.37	(m3) 42.4	(m2) 28.7	(m2) 38.47	(kg) 946	(m3) 3.16
	2 CM-1	1.2	1.9	5,562	3.399	2.563	27.4	0,55	0.37	21,9 22,4	17.7	28,59 28,92	623 631	2,42 2,44
	3 CM-2 4 CM-3	1.2	1,9 1,9	5.537 5.437	3.343 3.303	2,594 2,534	28 26.8	0,55 0,55	0.37 0.37	21.3	18 17.5	28.27	616	2,4
	5 CM-4	1.2	1.9	5.437	3.229 3.269	2.608 2.668	28,3 29.5	0.55 0.55	0,37	22.7 23.8	18.1 18.7	29.07 29.72	634 649	2,45 2,5
	8 CM-4-1 7 CM-5	1.2	1.9	5,537 5,637	3.189	2.848	33.4	0.55	0.37	27.3	20.3	31.66	693	2,85
	8 CM-5-1	1.2	1,9	5,637	3,205	2.832	33.1	0,55	0.37	27.1 30.2	20.2 21.6	31,49 33.11	689 725	2.84 2.76
•	9 CM-6 10 CM-7	1.2	1,9	5,637 5,857	3.055 2.691	2,982 3,566	36.5 52.2	0,55 0.55	0,37	44.8	27.7	39.42	867	3.23
	11 CM8-1	1.2	1.9	5.507	2.755	3,152	40.7	0.55	0.37	34.1	23,3	34,95	766 772	2.9
	12 CM8-1-1 13 CM-8-2	1.2	1,9 1.9	5.592 5.507	2.819 2.795	3,173	41.3 39.7	0.55 0.55	0.37	34.6 33,2	23,5 22,9	35,17 34,51	757	2.91 2.86
	14 CM-8-2-	1.2	1.9	5.602	2,821	3,181	41.5	0,55	0.37	34.8	23.6	35,26	773	2.92
	15 CM-8-3 16 CM-8-4	1,2	1.9 1.9	5.507 5.507	2,258 2,895	3,649 3,012	54.7 37.3	0,55 0,55	0.37	47.2 30.9	28,6 21.9	40.31 33.43	887 732	2.78
	17 DM-1	1.2	1.9	6,25	4.797	1.853	15.4	0.55	0.37	11.2	11.9	20.92	451	1,84
-	18 DM-2 19 DM-3	1,2	1.9 1.9	5,5 5,2	3,147 3,045	2.753	31.3 27.2	0,55	0.37	25.4 21.7	19.5 17.6	30.64 28.5	669 621	2.57 2.41
	20 DM-4	1.2	1.9	5.34	3.125	2,615	28.4	0,55	0.37	22,8	18.2	29,15	636	2,46 2,52
	21 DM-4-1 22 DM-5	1.2	1.9	5.34 5.34	3.047 2.865	2.693 2.875	30.1 34.1	0,55 0.55	0.37	24.3	18.9 20.6	29,99 31,95	655 699	2.67
	23 DM-5-1	1.2	1.9	5.34	2.887	2,853	33.6	0.55	0.37	27,5	20.4	31,72	694	2.65
	24 DM-7-1 25 DM-8-1	1,2	1.9	5.17 4.625	2.683 2.7	2,887 2,325	34.3 22.9	0.55 0.55	0.37 0.37	28,2 17.8	20.7 15.7	32.08 26.01	702 565	2,68 2,23
	26 DM-9-1	1.2	1.9_	5.01	2.546	2.864	33,8	0.55	0.37	27.7 · 27.3	20.5	31.84	696 692	2,66 2.65
	27 DM-9-2 28 EM-1	1.2	1.9	5,01 6.06	2.564 3.897	2.846 2.563	33.4 27.4	0,55 0,55	0,37 0.37	21.9	20.3 17.7	31.64 28.59	623	2.42 2.43
	29 EM-2	1.2	1.9	5.97	3.799	2,571	27.6	0.55	0.37	22 21.9	17.8	28,67 28,57	625	2.43 2.42
	30 EM-2-1 31 EM-3	1.2	1.9	5.97 5.59	3,808 3,39	2,562 2.6	27.4 28.1	0.55 0.55	0.37	22.5	17,7 18	28.57 28.98	623 632	2,45
	32 EM-4-2	1.2	1,9	5,43 6.14	3.972	1.858 1.853	15.5 15.4	0.55 0.55	0.37 0.37	11.2 11.2	11.9 11.9	20.97 20.92	452 451	1.85 1.84
	33 EM-4-3 34 EM-4-4	1.2	1.9	6.25	4.687 4.797	1.853	15.4	0.55	0.37	11.2	11.9	20,92	451	1.84
							1,090	18.7	12.6	883	662	1,040	22,600	87.0
	Total						1,030	10.7	12.0	003	002	1,040	22,000	101.0
	Concrete cove		0.2	5,522	2.406	3,516	58.8	0.73	0.49	48.1	29,5	47.5	932	3.97
	1 AM-2 2 AM-3	1.5	2.2	5.332	2.328	3.404	55.2	0.73	0.49	44.8	28.2	46,02	903	3,86
	3 AM-5-1 4 AM-6-1	1,5	2.2	5,132 4.928	2,158 1.982	3,374	54.2 53.4	0.73	0.49	43.8 43.1	27.9 27.6	45,62 45,25	895 887	3.83
• •	4 AM-6-1 5 AM-6-2	1.5 1.5	2.2	4,928	2.007	3,321	52.6	0.73	0.49	42.4	27.3	44.92	881	3.78
	6 AM-7-1	1.5	2,2	4.711 4.711	1.797 1.395	3.314 3.716	52.4 65.5	0,73	0.49 0.49	42.2 54.2	27.2 31.8	44,83 50.14	879 985	3.77 4.17
	7 BM-4 8 BM-5-1	1.5 1.5	2,2	4.711	1.373	3.738	66.3	0.73	0.49	55	32.1	50.43	991	4.19
	9 CM-11-1		2.2	5,132 4,928	2.379 2.247	3.153 3.081	47.6 45.6	0.73	0,49 0,49	37.8 36	25.5 24.7	42.7 41.75	836 817	3.61 3.54
	10 CM-12-1 11 CM-13-1	1.5 1.5	2.2	4.711	1,44	3.671	64	0.73	0.49	52.8	31.3	49.54	973	4.13
	12 CM-8	1.5	2,2	5.507	2,62 2,55	3.287 3.182	51.6 48,5	0.73	0.49 0.49	41.5 38.7	26.9 25.8	44.47 43.09	872 844	3.75 3.64
	13 CM-9 14 DM-10	1.5 1.5	2.2	5,332 4.844	2.084	3.18	47.8	0.73	0.49	38	25.5	42.8	838	3.62
	15 DM-6	1.5	2,2	4.625	2.836	2,189 2,905	24.7 40.8	0.73 0.73	0.49 0.49	17.6 31.7	16.1 22.9	29,98 39.43	581 770	2.66 3.37
	16 DM-7 17 DM-8	1.5 1.5	2.2	5.17 5.119	2.665 · 2.519	. 3	43.4	0.73	0.49	34.1	23.8	40.68	795	3.46
	18 DM-9 19 EM-4	1.5	2.2	5.019 5.33	2.739 3.114	2,68 2,616	35.2 33.7	0.73 0.73	0.49	26.7 25.4	20.6 20	36.48 35.62	711 694	3.14 3.08
•	20 EM-4-1	1.5 1.5	2.2	5.33	3.306	2.424	29.5	0.73	0.49	21.7	18.2	33,08	643	2,89
	21 EM-5 22 EM-5-1	1.5	2.2	5.22 5.22	2.979 3.001	2.641	34.3 33.8	0.73 0.73	0.49 0.49	25.9 25.5	20.2 20	35.95 35.66	700 695	3.11
	22 EM-5-1 23 EM-5-2	1.5 1.5	2.2	5.22	3.011	2.609	33,6	0.73	0.49	25.3	19.9	35.52	692	3.07
	24 EM-6	1.5	2.2	4.89	2.669	2,621	33.9	0.73	0.49	25.6	20.1	35.88	895	3.09
	Total	<del> </del>			<del></del>		1,110	17.6	11.8	880	600	1,000	19,600	85
•	Casting names													
	Grating cover 1 AM-4	1.5	2.2	5.332	2.28	3.452	56.7	0.73	0.49	48.1	28,8	46.65	915	3.91
	2 AM-5 3 AM-6	1.5	2,2 2,2	5.132 4.928	2.109 1.934	3.423 3.394	55.8 54.9	0.73	0.49 0.49	45.3 44.5	28.4 28.1	46.27 45.89	908	3.88 3.85
	4 BM-1	1.5 1.5	2,2	5,332	1.881	3.851	70.4	0.73	0.49	58.7	33.4	51.92	1021	4,3
	5 BM-1-1 6 BM-2	1.5 1.5	2,2	5,332 5,132	1.929 1.71	3,803 3,822	68.6 69.3	0.73 0.73	0.49	57.1 57.7	32,8 33.1	51,28 51,54	1008 1013	4.26 4.27
	7 BM-2-1	1.5	2,2	5.132	1.758	3.774	67.6	0.73	0.49	56.2	32.5	50.9	1001	4.23
	8 BM-3 9 BM-3-1	1.5 1.5	2.2	4.928 4.928	1.534 1.582	3.794 3.746	68.3 66.6	0.73 0.73	0.49	56.8 55.2	32.7 32.2	51.17 50.53	1006	4.25 4.2
	10 CM-10	1.5	2,2	5.332	2,502	3.23	49.9	0.73	0.49	39.9	26.3	43.72	856	3.69
	11 CM-11	1.5	2.2	5.132	2.331	3.201	49 48 9	0.73	0.49	39.1 37.2	26 25.2	43.34 42.39	849 830	3.66 3.59
•	12 CM-12	1.5	2.2	4,928	2.199	3.129	46.9	0.73	0.49					
	Total			-			730	8,8	5.9	600	360	576	11,300	49
	To oil separato	1.5	2.2	4,711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
	2 BM-5	1.5	2.2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73,89	1504	9,30
		1.5	2.2	4.711	0.993 0.993	4.118 4.118	93.4 93.4	1.09 1.09	0.73 0.73	68.2 68.2	41.7 41.7	73.89 73.89	1504 1504	9.30 9.30
	3 CM-13		2.2											
	4 DM-11	1.5	2,2	4.711	0.353									
•			2.2	4,711	0.933		380	4.4	3.0	273	187	296	6,020	38

	QUANTITY CALCULATION C	OVER SHEET	
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Marchole 1200 mm	Pay Item No. (BOQ)	2H-080603
Quantity Item	Form for muchate muor	Unit	W/ ²

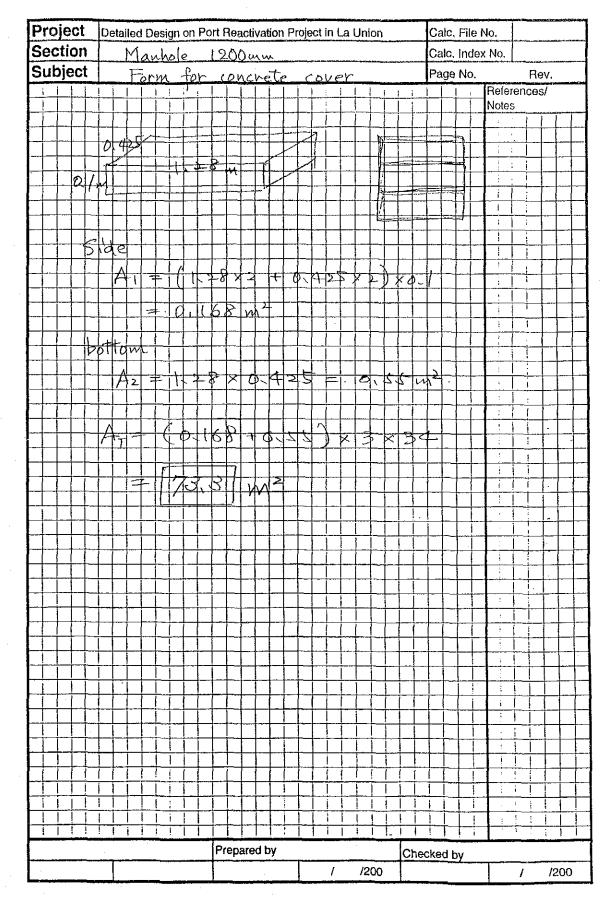
Area of form for concrete cover was computed by unit area by the number.

### References, Calculation Base and Revisions

See the item of excavation and disposal of 1500mm. (2H-0801)

Rev	Prep	ared	No. of	Chec	ked	Revie	wed	Superseded
	by	Date	Pages	by	Date	by	Date	by Calc No.
0	horla Gorão -s	<b>A</b>		Hr. Thoma		Mr. Ando		
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Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Marinole 1200 mm	Pay Item No. (BOQ)	24-080604
Quantity Item	Reinforcement for concrete	Unit	(c)=

Weight of reinforcement was computed by multiplying unit weight by the length.

## References, Calculation Base and Revisions

See the item of excavation and disposal of 1200 mm. (2H-0201)

Rev	Prepa	red	No. of	Chec	ked	Revie	wed	Superseded
	by h	Date	Pages	by	Date	by	Date	by Calc No.
0	hoila Gorão			Mr. Inoma		Mr. Indo		
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TABLE OF REINFORCEMENT (MANHOLE COVER)

No.	D	L (m)	Remarks			
Manhole co	ver (1500t	уре)				
A1	D13	1.40	5	1.393	6.97	
A2	D13	0.40	8	0.398	3.18	
				total	10.15	1590520100
			<u> </u>	total/spot	30.45	1580x520x100
				1		
L50x50x6		7.20		_	31.9	per spot
Re-bar	D9	0.10	24	0.05	1.2	per spot
Manhole eo						
<u>A1</u>	D13	1.20	4	1.194	4.78	
A2	D13	0.30	7	0.2985	2.09	
				total	6.87	1280x425x100
		, , , , , , , , , , , , , , , , , , ,		total/spot	20.61	
L50x50x6		6.00			26.6	per spot
Re-bar	D9	0.10	20	0.05	1.0	per spot
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Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Manhole 1200 mm	Pay Item No. (BOQ)	24-080605
Quantity Item	Concrete for concrete cover	Unit	W3

Concrete volume for concrete cover was computed by multiplying unit volume by the number.

## References, Calculation Base and Revisions

See the item of excavation and disposal of 1200 mm. (2H-0801)

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## (I) NIPPON KOEI CO., LTD.

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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	Manhole 1208 mm	Pay Item No. (BOQ)	2H-080701											
Quantity Item	Bockfill sand	Unit	m³ ·											

Volume of backfill sand was computed by deduction of crushed stone, lean concrete and manhole from the excavation volume.

### References. Calculation Base and Revisions

See the item of excavation and disposal of 1200mm. (2H - 0 to 1)

Rev	Prepa	red	No. of	Chec	ked	Revie	wed	Superseded by Calc No.
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## (I) NIPPON KOEI CO.,LTD.

Project	Detailed Design on Po	rt Reactivation Project in La Union	Calc. File No.	
Section	Manhole	1200 mm	Calc. Index No.	
Subject		·	Page No. F	lev.
Subject  Back Fill	BoxfIII	Sand  Backfill		Rev.
	Taunote:  V, = 1.5  BF = VFX	× 1.5 × (N+0.15)		
	VBF N	: Volume of excavation		
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Concrete cover													Manhole	
		W	а	Q.L.	B,L	h	Vex	Vos	Vio	Vbf	Cmpct	Form	Re-bar	Concrete
1	1444	(m)	(m) 1	(m)	(m)	(m)	(m3)	(m3)	(m3)	(m3)	(m2)	(m2)	(kg) 846	(m3) 3.18
2	AM~1 CM~1	1.2	1.9 1.9	5.522 5.562	2,444 3,399	3,478 2,563	49.6 27.4	0.55	0.37 0.37	42.4 21.9	26.7 17.7	38.47 28.59	623	2.42
3	CM-2	1.2	1.9	5,537	3.343	2.594	28	0.55	0.37	22.4	18	28,92	631	2.44
4	CM-3	1.2	1.9	5,437	3,303	2.534	26.8	0.55	0.37	21,3	17.5	28.27	616	2,4
5	CM-4	1.2	1.9	5,437	3.229	2,608	28.3	0.55	0.37	22,7	18.1	29.07	634	2.45
8	CM-4-1	1.2	1.9	5.537	3.269	2,668	29,5	0.55	0.37	23,8	18.7	29.72	649	2.5
7	CM-5	1.2	1,9	5.637	3.189	2.848	33.4	0.55	0,37	27.3	20.3	31,66	693	2.65
8	CM-5-1	1.2	1.9	5.637	3,205	2.832	33.1	0,55	0.37	27.1	20.2	31.49	689	2.64
9	CM-6	1.2	1.9	5,637	3,055	2,982	36.5	0.55	0.37	30.2	21.6	33,11	725	2.76
10	CM-7	1.2	1,9	5,857	2.691	3,566	52.2	0,55	0,37	44.8	27.7	39.42	867	3.23
11	CM8-1	1,2	1.9	5.507	2,755	3,152	40.7	0,55	0,37	34.1	23.3	34.95	766	2.9
12	CM8-1-1	1.2	1.9	5.592	2.819	3,173	41.3	0,55	0.37	34.6	23.5	35.17	772	2.91
13	CM-8-2	1.2	1.9	5.507	2.795	3.112	39,7	0.55	0.37	33.2	22.9	34,51	757	2,86
14	CM-8-2-1	1.2	1.9	5.602	2,821	3.181	41.5	0.55	0.37	34.8	23.6	35.26	773 887	2,92 3.3
15	CM-8-3	1.2	1.9	5,507	2,258	3.649	54.7	0.55	0.37	47,2	28.6 21.9	40.31	732	2,78
16	CM-8-4	1.2	1.9	5.507	2.895 4.797	3.012 1.853	37.3 15.4	0.55 0.55	0.37	30.9 11.2		33.43 20.92	451	1.84
17	DM-1 DM-2	1.2	1.9	6,25 5,5	3.147	2.753	31.3	0.55	0.37	25.4	11.9	30.64	669	2.57
19	DM-3	1.2	1.9	5,2	3.045	2.555	27.2	0.55	0.37	21.7	17.6	28.5	621	2.41
20	DM-4	1.2	1.9	5.34	3,125	2.615	28.4	0.55	0.37	22,8	18.2	29,15	636	2,46
21	DM-4-1	1.2	1.9	5.34	3,047	2,693	30.1	0.55	0.37	24.3	18.9	29,99	855	2,52
22	DM-5	1.2	1.9	5.34	2.865	2,875	34.1	0,55	0.37	. 28	20.6	31.95	699	2,67
23	DM-5-1	1.2	1.9	5,34	2.887	2,853	33,6	0.55	0.37	27.5	20.4	31.72	694	2,65
24	DM-7-1	1.2	1.9	5.17	2,683	2,887	34.3	0.55	0,37	28,2	20.7	32,08	702	2,68
25	DM-8-1	1,2	1.9	4.625	2.7	2,325	22.9	0.55	0,37	17.8	15.7	28,01	565	2.23
	DM-9-1	1,2	1.9	5.01	2,546	2,864	33.8	0,55	0,37	27.7	20.5	31.84	696	2.66
27	DM-9-2	1,2	1.9	5,01	2,564	2.846	33.4	0.55	0.37	27.3	20.3	31.64	692	2.65
28	EM-1	1.2	1.9	6.06	3.897	2,563	27.4	0.55	0.37	21.9	17.7	28.59	623	2.42
	EM~2	1.2	1.9	5.97	3.799	2.571	27,6	0.55	0.37	22	17.8	28.67	625	2,43
	EM-2-1	1.2	1.9	5.97	3,808	2,562	27.4	0.55	0.37	21,9	17.7	28.57	623	2.42
31	EM-3	1,2	1.9	5.59	3,39	2.6	28.1	0.55	0,37	22.5	18	28.98	632	2.45
32	EM-4-2	1.2	1.9	5.43	3.972	1.858	15.5	0.55	0.37	11.2	11.9	20.97	452	1.85
33	EM-4-3	1.2	1.9	6.14	4.687	1.853	15.4	0.55	0.37	11.2	11.9	20.92	451	1.84
34	EM-4-4	1.2	1.9	6.25	4.797	1.853	15.4	0,55	0.37	11.2	11.9	20.92	451	1.84
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1	AM-2	1.5	2.2	5.522	2,406	3,516 3,404	58.8	0.73	0.49	48.1	29.5	47.5	932	3.97 3.86
3	AM-3 AM-5-1	1.5	2.2	5.332 5.132	2,328 2.158	3,404	55.2 54.2	0.73	0.49 0.49	44.8	28.2	46.02 45.62	895	3.83
4	AM-6-1	1.5	2.2	4.928	1.982	3.348	53.4	0.73	0.49	43.1	27.6	45.25	887	3.8
5	AM-6-2	1,5	2.2	4.928	2.007	3.321	52,8	0.73	0.43	42.4	27.3	44.92	881	3.78
6	AM-7-1	1.5	2.2	4.711	1.797	3.314	52.4	0.73	0.49	42.2	27.2	44.83	879	3.77
7_	BM-4	1,5	2.2	4.711	1,395	3.716	65.5	0.73	0.49	54.2	31.8	50.14	985	4.17
8	BM-5-1	1.5	2.2	4.711	1.373	3.738	66.3	0.73	0.49	55	32.1	50.43	991	4.19
9	CM-11-1	1.5	2.2	5.132	2.379	3.153	47.6	0.73	0.49	37.8	25.5	42.7	836	3.61
10	CM-12-1	1.5	2.2	4.928	2,247	3.081	45.6	0.73	0.49	36	24.7	41.75	817	3.54
11	CM-13-1	1.5	2.2	4.711	1.44	3.671	64	0.73	0.49	52.8	31.3	49.54	973	4.13
12	CM-8	1.5	2.2	5.507	2.62	3.287	51.6	0,73	0.49	41.5	26.9	44.47	872	3.75
13	CM-9	1.5	2.2	5.332	2.55	3.182	48.5	0.73	0.49	38.7	25.8	43.09	844	3.64
14	DM-10	1.5	2,2	4.844	2.084	3.16	47.8	0.73	0.49	38	25.5	42.8	838	3.62
15	DM-6.	1.5	2,2	4.625	2.836	2,189	24.7	0.73	0.49	17.6	16.1	29.98	581	2.66
16	DM-7	1.5	2.2	5.17	2.665 .	2,905	40.8	0.73	0.49	31,7	22.9	39,43	770	3.37
17	<u>DM-8</u>	1.5	2,2	5,119	2.519	3	43,4	0,73	0.49	34.1	23.8	40.58	795	3.46
18	DM-9	1.5	2,2	5.019	2.739	2.68	35.2	0.73	0.49	26.7	20.6	36.46	711	3.14
19	EM-4	1.5	2.2	5.33	3.114	2.616	33.7	0.73	0.49	25.4	20	35.62	694	3.08
	EM-4-1	1.5	2,2	5.33	3.306	2,424	29.5	0.73	0.49	21.7	18.2	33.08	643	2.89
	EM-5	1.5	2.2	5.22	2,979	2.641	34.3	0.73	0.49	25.9	20.2	35.95	700	3.11
22	EM-5-1 EM-5-2	1.5	2,2	5.22	3.001	2,619	33,8	0.73	0.49	25.5 25.3	10.0	35.86	695 692	3.08
	EM-5-2 EM-6	1.5	2,2	5.22 4.89	3,011 2,669	2,609 2.621	33,6 . 33,9	0.73 0.73	0.49	25.6	19.9 20.1	35.52 35.68	895	3.07
1 29	-101-0	1.5	2,2	4.69	2,009	C.UC	. 33,3	0.13	0.45	2.J.D	£V.1	50.08	033	0.09
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	AM-4	1.5	2.2	5.332	2.28	3.452	58.7	0.73	0.49	46.1	28.8	46.65	915	3.91
	<u>A</u> M-5	1.5	2.2	5.132	2.109	3.423	55,8	0.73	0.49	45.3	28.4	46.27	908	3.88
	AM-6	1.5	2.2	4.928	1.934	3.394	54.9	0.73	0.49	44.5	28.1	45.89	900	3.85
	BM-1	1.5	2.2	5.332	1.881	3.851	70.4	0.73	0.49	58.7	33.4	51.92	1021	4.3
	BM-1-1	1.5	2.2	5.332	1.929	3.803	88.6	0.73	0.49	57,1	32.8	51.28	1008	4.26
	BM-2	1.5	2.2	5.132	1,71	3.822	69,3	0.73	0.49	57,7	33.1	51.54	1013	4.27
	BM-2-1	1.5	2.2	5.132	1.758	3.774	67.6	0.73	0.49	58.2	32.5	50.9	1001	4.23
8	BM-3	1.5	2,2	4.928	1.534	3,794	88.3	0.73	0.49	56.8	32.7	51.17	1006	4.25
9	BM-3-1	1.5	2.2	4.928	1,582	3.746	86.6	0.73	0.49	55,2	32.2	50.53	993	4.2
	CM-10	1.5	2.2	5,332	2,502	3.23	49.9	0.73	0.49	39.9	26.3	43.72	856	3.69
11	CM-11	1.5	2.2	5.132	2.331	3.201	49	0.73	0.49	39.1	26	43,34	849	3.66
12	CM-12	1.5	2.2	4.928	2.199	3,129	48.9	0.73	0.49	37.2	25.2	42.39	830	3.59
<u> </u>														
	Total					i	730	8,8	5,9	600	360	576	11,300	49
L		L							·····					L
l- "		١.		:							1			Į.
	separator	4.5		4.711	0.000	4.118	93.4	1.00	0.70	60.0	41.7	72.00	1501	0.00
	AM-7	1.5	2.2		0.993			1.09	0.73	68.2		73.89	1504	9.30
	BM-5	1.5	2.2	4.711	0.993	4.118	93,4	1.09	0.73	68.2	41.7	73.89	1504	9.30
	CM-13	1.5	2.2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9,30
4	DM-11	1.5	. 2.2	4.711	0,993	4.118	93.4	1.09	0.73	68.2	41.7	73.89	1504	9.30
$\vdash$	Total	<del></del>		<del> </del>	<del></del>		380	4.4	3.0	273	167	200	6,020	90
	10(9)					!	200	7.4	4.0	2/3	10/	296	0,020	38
														L

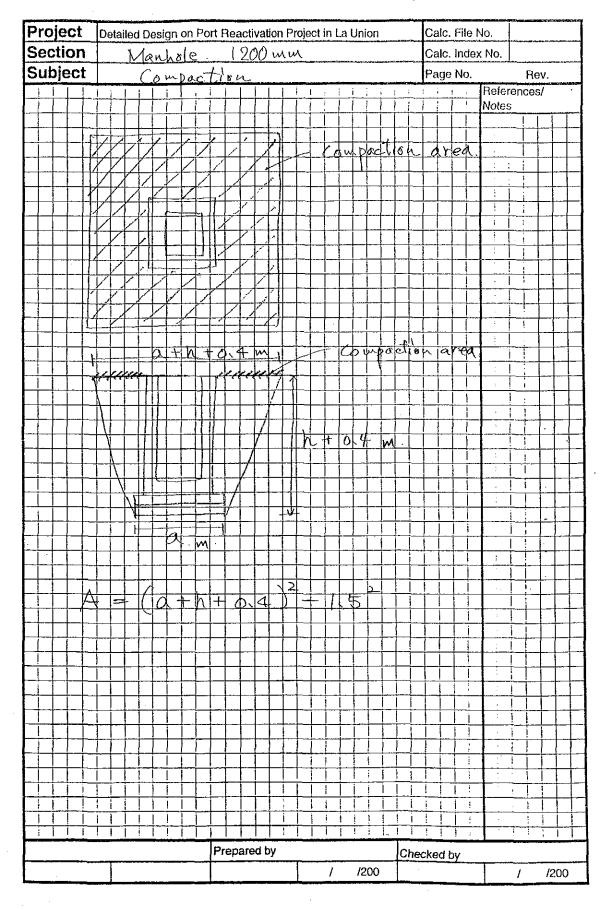
	QUANTITY CALCULATION COVER SHEET												
Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001										
Work Section Title	Manhole 1200 mm	Pay Item No. (BOQ)	2H-080702										
Quantity item	Compartion	Unit	M ₂										

Compaction area was to be the surface of excavation rea.

### References, Calculation Base and Revisions

See the item of excavation and disposal of 1200 mm. (2H-0801)

Rev	Prep	ared	No. of	Chec	ked	Revie	wed	Superseded
, ,,,,,	by	Date	Pages	by	y Date		Date	by Calc No.
0	Korla Goria-	刺	177.7	Mr. Jauma		Mr. Ando		
1								-
2			1				<del></del>	
3			st with	4 4 4				



Conc	rete cover													Manhole,
00110	1010 00101	W f	a	QL,	B.L.	h	Vex	Vcs	Vic	Vbf	Cmpct	Form	Re-bar	Concrete
l		(m)	(m)	(m)	(m)	(m)	(m3)	(m3)	(m3)	(m3)	(m2)	(m2)	(kg)	(m3)
1	AM-1	1.2	1.9	5.522	2,444	3,478	49,6	0.55	0.37	42.4	26,7	38,47	846	3.16
2	CM-1	1.2	1.9	5.562	3,399	2,563	27.4	0.55	0.37	21.9	17.7	28,59	623	2,42
3	CM-2	1.2	1.9	5,537	3,343	2,594	28	0.55	0.37	22.4	18	28.92	631	2,44 2,4
4	CM-3	1.2	1.9	5,437	3.303	2.534	26,8	0,55	0,37	21.3	17.5	28.27	616	2.4
5	CM-4	1.2	1.9	5.437	3.229	2,608	28,3	0.55	0.37	22.7	18.1	29,07	634	2.45
6	CM~4~1	1,2	1.9	5.537	3,269	2,668	29,5	0.55	0.37	23,8	18,7	29,72	649	2,5
7	CM-5	1.2	1.9	5.637	3,189	2,848	33.4	0.55	0.37	27,3	20.3	31.66	693	2.65
8	CM-5-1	1.2	1.9	5.637	3,205	2.832	33.1	0.55	0.37	27.1	20.2	31.49	689	2.64
9	CM-6	1.2	1.9	5,637	3.055	2.982	36.5	0.55	0.37	30,2	21.6	33.11	725	2.76
10	CM-7	1.2	1.9	5.857	2.691	3.566	52.2	0.55	0.37	44.8	27.7	39.42	867	3.23
11	CM8-1	1.2	1.9	5.507	2,755	3.152	40.7	0.55	0.37	34.1	23.3	34.95	766	2,9
12	CM8-1-1	1.2	1.9	5.592	2.819	3.173	41,3	0.55	0.37	34.6	23.5	35.17	772	2.91
13	CM-8-2	1.2	1.9	5.507	2.795	3.112	39.7	0.55	0,37	33.2	22.9	34.51	757	2,86
14	CM-8-2-1	1.2	1.9	5.602	2,821	3,181	41.5	0,55	0.37	34.8	23.6	35,26	773	2,92
15	CM-8-3	1.2	1.9	5,507	2,258	3,649	54.7	0,55	0.37	47.2	28,6	40.31	887	3.3
16	CM-8-4	1.2	1.9	5.507	2,895	3,012	37.3	0.55	0,37	30,9	21,8	33.43	732	2.78
17	DM-1	1.2	1.9	6,25	4.797	1.853	15.4	0.55	0.37	11,2	11.9	20.92	451	1.84
18	DM-2	1.2	1.9	5.5	3.147	2.753	31,3	0.55	0.37	25.4	19.5	30.64	669	2.57
19	DM-3	1.2	1.9	5.2		2.555	27.2	0.55	0,37	21.7	17.6	28.5	621	2.41
20		1.2			3,045							29,15	638	2.46
21	DM-4	1.2	1.9	5.34	3.125	2.615	28.4	0.55	0.37	22.8	18.2	29.99	655	2,52
	DM-4-1		1.9	5.34	3.047	2.693	30.1	0.55	0.37	24.3	18.9			
	DM-5	1.2	1.9	5.34	2.865	2.875	34.1	0.55	0.37	28	20.6	31.95	699	2.67
23	DM-5-1	1,2	1,9	5,34	2.887	2,853	33.6	0.55	0.37	27.5	20.4	31.72	694	2,65
	DM-7-1	1,2	1.9	5,17	2.683	2,887	34.3	0,55	0,37	28.2	20,7	32.08	702	2.68
25	DM-8-1	1.2	1.9	4.625	2.7	2,325	22.9	0.55	0.37	17.8	15.7	26.01	565	2.23
	DM-9-1	1.2	1.9	5.01	2,546	2.864	33.8	0.55	0,37	27.7	20,5	31,84	696	2.66
27	DM-9-2	1.2	1.9	5.01	2.564	2.846	33.4	0.55	0.37	27.3	20.3	31.64	692	2.65
_28	EM-1	1.2	1.9	6.06	3,897	2.583	27.4	0.55	0.37	21.9	17.7	28.59	623	2.42
29	EM-2	1.2	1.9	5.97	3.799	2.571	27.6	0,55	0.37	22	17.8	28.67	625	2,43
30	EM-2-1	1.2	1.9	5.97	3.808	2,562	27.4	0,55	0,37	21,9	17.7	28.57	623	2,42
31	ЕМ-3	1.2	1.9	5.59	3.39	2.6	28,1	0.55	0.37	22.5	18	28.98	632	2.45
32	EM-4-2	1.2	1.9	5.43	3.972	1.858	15.5	0.55	0.37	11.2	11.9	20.97	452	1.85
33	EM-4-3_	1,2	1.9	6.14	4.687	1.853	15.4	0.55	0.37	11.2	11.9	20.92	451	1.84
34	EM-4-4	1.2	1.9	6.25	4.797	1.853	15.4	0,55	0.37	11.2	11.9	20.92	451	1.84
						•				No.		,		
	Total						1,090	18.7	12.6	883	662	1,040	22,600	87.0
1											L	,		
Conc	rete cover	<u> </u>												
1_1_	AM-2	1.5	2.2	5,522	2,406	3.516	58,8	0.73	0.49	48.1	29.5	47.5	932	3.97
2	AM-3	1.5	2.2	5.332	2,328	3.404	55.2	0.73	0.49	44.8	28.2	46.02	903	3,86
3	AM-5-1	1.5	2.2	5.132	2.158	3.374	54.2	0.73	0.49	43.8	27.9	45.62	895	3,83
4_	AM-6-1	1.5	2.2	4.928	1.982	3,348	53,4	0.73	0.49	43.1	27.6	45.25	887	3.8
5	AM-8-2	1,5	2,2	4.928	2.007	3.321	52.6	0.73	0.49	42.4	27.3	44.92	881	3.78
6	AM-7-1	1.5	2.2	4.711	1.797	3.314	52.4	0.73	0.49	42.2	27.2	44.83	879	3.77
7	BM-4	1.5	2.2	4.711	1,395	3.716	65.5	0.73	0.49	54.2	31.8	50,14	985	4.17
8	BM-5-1	1,5	2,2	4.711	1.373	3.738	66.3	0.73	0.49	55	32.1	50,43	991	4.19
9	CM-11-1	1.5	2.2	5.132	2.379	3.153	47.6	0.73	0.49	37.8	25.5	42.7	836	3.61
10	CM-12-1	1.5	2.2	4.928	2.247	3,081	45.6	0.73	0.49	36	24.7	41.75	817	3.54
11	CM-13-1	1,5	2,2	4.711	1.44	3.671	64	0,73	0.49	52.8	31.3	49,54	973	4.13
12	CM-8	1.5	2.2	5.507	2,62	3.287	51.6	0.73	0.49	41.5	26.9	44.47	872	3.75
13	CM-9	1.5	2.2	5.332	2.55	3.182	48.5	0.73	0.49	38.7	25.8	43.09	844	3.75 3.64
14	DM-10	1.5	2,2	4.844	2,084	3,16	47.8	0.73	0.49	38	25.5	42.8	838	3.62
15	DM-6	1.5	2,2	4.625	2.836	2.189	24.7	0.73	0.49	17.6	16,1	29,98	581	2.66
16	DM-7	1.5	2.2	5.17	2.665	2,905	40.8	0.73	0.49	31.7	22.9	39.43	770	3.37
	DM-8	1.5	2,2	5.119	2.519	3	43.4	0.73	0.49	34.1	23.8	40.68	795	3.46
18	DM-9	1.5	2.2	5.019	2.739	2.68	35.2	0.73	0.49	26.7	20.6	36,48	711	3.14
19	EM-4	1.5	2.2	5.33	3,114	2.616	33.7	0.73	0.49	25,4	20	35.62	694	3.08
20	EM-4-1	1.5	2.2	5.33	3.306	2,424	29.5	0.73	0.49	21.7	18.2	33,08	643	2.89
21	EM-5	1.5	2,2	5.22	2.979	2.641	34.3	0.73	0.49	25.9	20.2	35.95	700	3.11
	EM-5-1	1.5	2,2	5.22	3.001	2.619	33.8	0.73	0.49	25.5	20	35.66		3.08
	EM-5-2	1.5	2,2	5.22	3.011	2.609	33.6	0.73	0.49	25.3	19.9	35.52	692	3.07
	EM-6	1.5	2.2	4.89	2.669	2.621	33.9	0.73	0.49	25.6	20.1	35.68	695	3.09
		l' <u></u>			,,,,,				v	20.0		30.00		
	Total	Ī					1,110	17.6	11.8	880	600	1,000	19,600	85
		ļ					,					.,		
Gratic	ng cover	L.												
	AM-4	1.5	2.2	5,332	2.28	3.452	56.7	0.73	0.49	46.1	28,8	46.65	915	3.91
	AM-5	1.5	2.2	5.132	2.109	3.423	55.8	0.73	0.49	45.3	-28,4	46.27	908	3.88
	AM-6	1.5	2,2	4.928	1.934	3.394	54.9	0.73	0.49	44.5	28.1	45.89	900	3.85
	BM-1	1.5	2.2	5.332	1.881	3.851	70.4	0.73	0.49	58.7	33.4	51.92	1021	4.3
	8M-1-1	1.5	2.2	5.332	1,929	3.803	68.6	0.73	0.49	57.1	32.8	51.28	1008	4.26
	BM-2	1.5	2.2	5.132	1.71	3,822	69.3	0.73	0.49	57.7	33.1	51.54	1013	4.27
	BM-2-1	1.5	2.2	5.132	1.758	3.774	67.6	0.73	0.49	56.2	32,5	50.9	1001	4.23
	BM-3	1.5	2.2	4,928	1.534	3.794	68.3	0.73	0.49	56.8	32,7	51.17	1006	4.25
	BM-3-1	1.5	2,2	4.928	1.582	3.746	66.6	0.73	0.49	55.2	32.2	50.53		4.2
	CM-10	1.5	2.2	5,332	2,502	3.23	49.9	0.73	0.49	39.9	26.3	43.72		3.69
	CM-11	1.5	2.2	5,132	2,331	3.201	49.5	0.73			26.3	43.72		3.66
	CM-12	1.5	2.2	4,928	2,199	3,129			0.49	39.1			-	3,59
屵ᅩ	OIT IZ	1.3	£.4	7,328	5,199	3,129	46.9	0.73	0.49	37.2	25.2	42.39	- 630	3,95
	Total	<del> </del>					730	8.8	5.9	600	260	576	11,300	49
j	i Vidi	1					/30	5.5	5.9	OUU	360	576	11,300	"9
l		J											1	<u> </u>
To oi	il separator	ı									ı			}
	AM-7	1.5	2.2	4.711	0.993	4.118	93,4	1.09	0.73	68.2	41,7	73.89	1504	9.30
	BM-5	1.5	2.2	4.711	0.993	4,118	93.4	1.09	0.73	68.2	41.7	73.89		9.30
	CM-13	1,5	2,2	4.711	0.993	4.118	93.4	1.09	0.73	68.2	41.7	73.89		9.30
	DM-11	1.5	2,2	4.711	0.993	4.118	93.4	1.09	0.73			73,89		
<b>⊢</b> "	J.,, 11	<u>'</u> '		7.731	0.333	7.110	30,4	1.03	0.13	68.2	41.7	73,05	1304	9.00
<u> </u>	Total	1					380	4.4	3,0	273	167	296	6,020	38
l	, 0 (0)	1					000	7.4	0,0	510	101	230	0,020	"