

Table 8.5.2 (2/9) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-2

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P2-Bq-34	B.4.2	Concrete, Type C1 including Formwork	m ³	41	162,480	44,160	612,020	818,660	6,661,680	1,810,560	25,092,820	33,565,060
U-P2-Bq-35	B.4.3	Deformed Reinforcing Bars	kg	4920	1,367	3,121	3,667	8,154	6,723,672	15,354,828	18,040,656	40,119,156
U-P2-Bq-36	B.5	Dike Raising										
U-P2-Bq-37	B.5.1	Structural Excavation	m ³	260	18,170	350	14,250	32,770	4,724,200	91,000	3,705,000	8,520,200
U-P2-Bq-38	B.5.2	Backfill with Selected Soil	m ³	129	12,720	770	20,480	33,970	1,640,880	99,330	2,641,920	4,382,130
U-P2-Bq-39	B.5.3	Sand Bedding	m ³	30	7,420	1,490	35,340	44,250	222,600	44,700	1,060,200	1,327,500
U-P2-Bq-40	B.5.4	Wet Stone Masonry	m ³	290	46,070	28,800	200,020	274,890	13,360,300	8,352,000	58,005,800	79,718,100
U-P2-Bq-41	B.5.5	Joint Filler, 10mm thick (Elastic Material)	m ²	15	6,750	9,260	24,250	40,260	101,250	138,900	363,750	603,900
U-P2-Bq-42	B.5.6	Pointing	m ²	625	2,000	1,010	8,900	11,910	1,250,000	631,250	5,562,500	7,443,750
U-P2-Bq-43	B.6	Inspection Road										
U-P2-Bq-44	B.6.1	Stripping of Top Soil	m ³	1256	16,920	350	11,920	29,190	21,251,520	439,600	14,971,520	36,662,640
U-P2-Bq-45	B.6.2	Embankment	m ³	5598	26,300	1,210	38,300	65,810	147,227,400	6,773,580	214,403,400	368,404,380
U-P2-Bq-46	B.6.3	Aggregate Class A	m ³	1042	35,670	4,370	97,910	137,950	37,168,140	4,553,540	102,022,220	143,743,900
U-P2-Bq-47	B.6.4	Aggregate Class B	m ³	1573	35,010	4,370	97,420	136,800	55,070,730	6,874,010	153,241,660	215,186,400
U-P2-Bq-48	B.6.5	Sand Bedding	m ³	505	7,420	1,490	35,340	44,250	3,747,100	752,450	17,846,700	22,346,250
U-P2-Bq-49	B.6.6	Concrete Block Pavement	m ²	8034	10,710	5,700	47,480	63,890	86,044,140	45,793,800	381,454,320	513,292,260
U-P2-Bq-50	B.6.7	Cement Mortar	m ³	19	15,900	8,000	70,700	94,600	302,100	152,000	1,343,300	1,797,400
U-P2-Bq-51	B.6.8	Concrete Kerb	m ³	194	155,430	43,070	578,300	776,800	30,153,420	8,355,580	112,190,200	150,699,200
U-P2-Bq-52	B.6.9	Sodding	m ²	6029	1,230	0	6,070	7,300	7,415,670	0	36,596,030	44,011,700
U-P2-Bq-53	C	ASIN RIVER IMPROVEMENT										
U-P2-Bq-54	C.1	Preparatory Works										
U-P2-Bq-55	C.1.1	Coffering and Dewatering	L.S.	1	1,109,903,000	26,247,400	574,216,100	1,710,366,500	1,109,903,000	26,247,400	574,216,100	1,710,366,500
U-P2-Bq-56	C.1.2	Clearing of Garbage	L.S.	1	1,309,100	14,300	1,244,200	2,567,600	1,309,100	14,300	1,244,200	2,567,600
U-P2-Bq-57	C.1.3	Demolition of Existing Revetment	L.S.	1	167,231,000	3,263,000	154,297,000	324,791,000	167,231,000	3,263,000	154,297,000	324,791,000
U-P2-Bq-58	C.2	Channel Excavation										
U-P2-Bq-59	C.2.1	Common channel excavation including hauling and treatment of contaminated soil	m ³	35000	78,357	8,944	85,038	172,339	2,742,495,000	313,040,000	2,976,330,000	6,031,865,000
U-P2-Bq-60	C.3	Revetment Type A-2 (lower channel)										
U-P2-Bq-61	C.3.1	Structural Excavation	m ³	6060	18,170	350	14,250	32,770	110,110,200	2,121,000	86,355,000	198,586,200
U-P2-Bq-62	C.3.2	Backfill with Cobble	m ³	689	17,827	2,154	48,252	68,233	12,282,803	1,484,106	33,245,628	47,012,537
U-P2-Bq-63	C.3.3	Backfill with Gravel	m ³	2106	18,580	4,060	88,210	110,850	39,129,480	8,550,360	185,770,260	233,450,100
U-P2-Bq-64	C.3.4	Concrete, Type C1 including Formwork	m ³	1108	159,090	42,250	484,610	685,950	176,271,720	46,813,000	536,947,880	760,032,600
U-P2-Bq-65	C.3.5	Concrete, Type E including Formwork	m ³	309	97,390	37,610	304,890	439,890	30,093,510	11,621,490	94,211,010	135,926,010
U-P2-Bq-66	C.3.6	Deformed Reinforcing Bars	kg	53480	1,230	2,809	3,300	7,339	65,775,052	150,219,972	176,489,348	392,484,372
U-P2-Bq-67	C.3.7	Wet Stone Masonry	m ³	1670	46,070	28,800	200,020	274,890	76,936,900	48,096,000	334,033,400	459,066,300
U-P2-Bq-68	C.3.8	Weep Hole, Dia.50mm	No.	2158	3,147	909	14,500	18,556	6,790,909	1,961,818	31,291,000	40,043,727
U-P2-Bq-69	C.3.9	Log Pile, Dia. 150mm, L=4m	m	8890	13,817	133	17,775	31,725	122,830,167	1,185,333	158,019,750	282,035,250
U-P2-Bq-70	C.3.10	Joint Filler, 10mm thick (Elastic Material)	m ²	66	6,750	9,260	24,250	40,260	445,500	611,160	1,600,500	2,657,160
U-P2-Bq-71	C.4	Revetment Type B (higher channel)										
U-P2-Bq-72	C.4.1	Structural Excavation	m ³	30840	18,170	350	14,250	32,770	560,362,800	10,794,000	439,470,000	1,010,626,800
U-P2-Bq-73	C.4.2	Backfill with Cobble	m ³	2260	17,827	2,154	48,252	68,233	40,289,020	4,868,040	109,049,520	154,206,580
U-P2-Bq-74	C.4.3	Backfill with Gravel	m ³	4730	18,580	4,060	88,210	110,850	87,883,400	19,203,800	417,233,300	524,320,500
U-P2-Bq-75	C.4.4	Backfill with Sandy Soil	m ³	16823	16,300	1,620	37,430	55,350	274,214,900	27,253,260	629,684,890	931,153,050
U-P2-Bq-76	C.4.5	Concrete, Type E including Formwork	m ³	675	79,400	37,610	215,560	332,570	53,595,000	25,386,750	145,503,000	224,484,750

Table 8.5.2 (3/9) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-2

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P2-Bq-77	C.4.6	Wet Stone Masonry	m ³	9150	46,070	28,800	200,020	274,890	421,540,500	263,520,000	1,830,183,000	2,515,243,500
U-P2-Bq-78	C.4.7	Pointing	m ²	1246	2,000	1,010	8,900	11,910	2,492,000	1,258,460	11,089,400	14,839,860
U-P2-Bq-79	C.4.8	Weep Hole, Dia.50mm	No.	4316	3,147	909	14,500	18,556	13,581,818	3,923,636	62,582,000	80,087,455
U-P2-Bq-80	C.4.9	Log Pile, Dia. 150mm, L=4m	m	71119	13,817	133	17,775	31,725	982,627,517	9,482,533	1,264,140,225	2,256,250,275
U-P2-Bq-81	C.5	Revetment Type C (concrete sheet pile)										
U-P2-Bq-82	C.5.1	Furnishing and Driving PC Sheet Pile (t=220 mm)	m	2522	253,780	140	35,080	289,000	640,033,160	353,080	88,471,760	728,858,000
U-P2-Bq-83	C.5.2	Concrete, Type C1 including Formwork	m ³	15	159,440	44,160	597,050	800,650	2,391,600	662,400	8,955,750	12,009,750
U-P2-Bq-84	C.5.3	Deformed Reinforcing Bars	kg	860	1,367	3,121	3,667	8,154	1,175,276	2,683,974	3,153,448	7,012,698
U-P2-Bq-85	C.6	Inspection Road										
U-P2-Bq-86	C.6.1	Sand Bedding	m ³	740	7,420	1,490	35,340	44,250	5,490,800	1,102,600	26,151,600	32,745,000
U-P2-Bq-87	C.6.2	Concrete Block Pavement	m ²	11764	10,710	5,700	47,480	63,890	125,992,440	67,054,800	558,554,720	751,601,960
U-P2-Bq-88	C.6.3	Cement Mortar	m ³	29	15,900	8,000	70,700	94,600	461,100	232,000	2,050,300	2,743,400
U-P2-Bq-89	C.6.4	Concrete Kerb	m ³	283	155,430	43,070	578,300	776,800	43,986,690	12,188,810	163,658,900	219,834,400
U-P2-Bq-90	C.6.5	Aggregate Class A	m ³	220	35,670	4,370	97,910	137,950	7,847,400	961,400	21,540,200	30,349,000
U-P2-Bq-91	C.6.6	Aggregate Class B	m ³	247	35,010	4,370	97,420	136,800	8,647,470	1,079,390	24,062,740	33,789,600
U-P2-Bq-92	C.7	Asin Box Culvert										
U-P2-Bq-93	C.7.1	Coffering and Dewatering	L.S.	1	73,223,100	1,119,800	21,263,500	95,606,400	73,223,100	1,119,800	21,263,500	95,606,400
U-P2-Bq-94	C.7.2	Structural Excavation with Shoring	m ³	5740	186,425	376	46,809	233,610	1,070,080,563	2,159,941	268,683,022	1,340,923,526
U-P2-Bq-95	C.7.3	Backfill with Sandy Soil	m ³	2337	16,300	1,620	37,430	55,350	38,093,100	3,785,940	87,473,910	129,352,950
U-P2-Bq-96	C.7.4	Concrete, Type C1 including Formwork, Scaffolding, and Falsework	m ³	1056	271,200	42,670	478,090	791,960	286,387,200	45,059,520	504,863,040	836,309,760
U-P2-Bq-97	C.7.5	Concrete, Type E including Formwork	m ³	96	99,470	37,610	315,240	452,320	9,549,120	3,610,560	30,263,040	43,422,720
U-P2-Bq-98	C.7.6	Deformed Reinforcing Bars	kg	100980	1,402	2,810	3,418	7,629	141,563,862	283,733,604	345,109,248	770,406,714
U-P2-Bq-99	C.7.7	Water Stop, 200 mm wide	m	223	61,278	0	6,022	67,300	13,664,994	0	1,342,906	15,007,900
U-P2-Bq-100	C.7.8	Gravel Bedding	m ³	132	6,920	1,360	32,990	41,270	913,440	179,520	4,354,680	5,447,640
U-P2-Bq-101	C.7.9	Cobble Stone	m ³	20	14,250	2,120	45,410	61,780	285,000	42,400	908,200	1,235,600
U-P2-Bq-102	C.7.10	Wet Stone Masonry	m ³	610	46,070	28,800	200,020	274,890	28,102,700	17,568,000	122,012,200	167,682,900
U-P2-Bq-103	C.7.11	Log Pile, Dia. 150mm, L=3.0m	m	455	15,658	150	18,917	34,725	7,124,542	68,250	8,607,083	15,799,875
U-P2-Bq-104	C.7.12	Weep Hole, Dia.50mm	No.	75	3,147	909	14,500	18,556	236,014	68,182	1,087,500	1,391,696
U-P2-Bq-105	C.7.13	Pointing	m ²	465	2,000	1,010	8,900	11,910	930,000	469,650	4,138,500	5,538,150
U-P2-Bq-106	C.7.14	Asphalt Concrete	ton	115	874	548	2,151	3,573	100,510	63,020	247,365	410,895
U-P2-Bq-107	C.7.15	Asphalt Treated Base	ton	115	867	547	2,179	3,594	99,750	62,953	250,599	413,302
U-P2-Bq-108	C.7.16	Aggregate Class A	m ³	195	35,670	4,370	97,910	137,950	6,955,650	852,150	19,092,450	26,900,250
U-P2-Bq-109	C.7.17	Aggregate Class B	m ³	279	35,010	4,370	97,420	136,800	9,767,790	1,219,230	27,180,180	38,167,200
U-P2-Bq-110	C.8	Asin No.1 Bridge										
U-P2-Bq-111		(Superstructure)										
U-P2-Bq-112	C.8.1	Precast Prestressed Concrete Beam including tensioning and erection	L.S.	1	358,707,100	34,368,600	395,325,500	788,401,200	358,707,100	34,368,600	395,325,500	788,401,200
U-P2-Bq-113	C.8.2	Precast Prestressed Concrete Diaphragm including tensioning and erection	L.S.	1	43,206,100	5,889,200	30,891,900	79,987,200	43,206,100	5,889,200	30,891,900	79,987,200
U-P2-Bq-114	C.8.3	Precast Concrete Panel Including Erection	L.S.	1	4,709,600	4,759,200	17,257,500	26,726,300	4,709,600	4,759,200	17,257,500	26,726,300
U-P2-Bq-115	C.8.4	Deformed Reinforcing Bars	kg	15120	1,402	2,810	3,418	7,629	21,196,728	42,484,176	51,674,112	115,355,016
U-P2-Bq-116	C.8.5	Concrete, Type B including Scaffolding and Formwork	m ³	71	146,070	44,450	320,190	510,710	10,370,970	3,155,950	22,733,490	36,260,410
U-P2-Bq-117	C.8.6	Asphalt concrete	ton	34	874	548	2,151	3,573	29,716	18,632	73,134	121,482
U-P2-Bq-118	C.8.7	Expansion Joint	m	21	11,571	657	10,657	22,886	243,000	13,800	223,800	480,600

Table 8.5.2 (4/9) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-2

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P2-Bq-119	C.8.8	Hand Rail	kg	50	2,298	1,051	4,848	8,197	114,900	52,550	242,400	409,850
U-P2-Bq-120	C.8.9	Drain Pipe, PVC Pipe Dia. 100 mm	m	12	3,920	4,240	15,210	23,370	47,040	50,880	182,520	280,440
U-P2-Bq-121	C.8.10	Utility Pipe, PVC Pipe Dia. 150 mm	m	63	13,110	17,250	47,850	78,210	825,930	1,086,750	3,014,550	4,927,230
U-P2-Bq-122	C.8.11	Elastomeric Bearing Pad (350 x 280 x 73)	No.	12	511,000	602,000	1,011,500	2,124,500	6,132,000	7,224,000	12,138,000	25,494,000
U-P2-Bq-123	C.8.12	Rubber Sheet (40 x 10 x 3)	No.	12	103,540	231,000	283,280	617,820	1,242,480	2,772,000	3,399,360	7,413,840
U-P2-Bq-124		(Sub Structure)										
U-P2-Bq-125	C.8.13	Structural Excavation	m ³	1350	18,170	350	14,250	32,770	24,529,500	472,500	19,237,500	44,239,500
U-P2-Bq-126	C.8.14	Backfill with Sandy Soil	m ³	465	16,300	1,620	37,430	55,350	7,579,500	753,300	17,404,950	25,737,750
U-P2-Bq-127	C.8.15	Embankment	m ³	446	26,300	1,210	38,300	65,810	11,729,800	539,660	17,081,800	29,351,260
U-P2-Bq-128	C.8.16	Furnishing and Driving PC Piles, Dia. 500 mm, Type A	m	1298	291,290	300	78,730	370,320	378,094,420	389,400	102,191,540	480,675,360
U-P2-Bq-129	C.8.17	Furnishing and Driving PC Test Pile, Dia. 500mm, Type A	m	19	326,780	330	118,200	445,310	6,208,820	6,270	2,245,800	8,460,890
U-P2-Bq-130	C.8.18	Concrete, Type C1 including Formwork and Scaffolding	m ³	326	167,090	42,400	313,630	523,120	54,471,340	13,822,400	102,243,380	170,537,120
U-P2-Bq-131	C.8.19	Concrete, Type E including Formwork	m ³	15	78,060	37,610	208,920	324,590	1,170,900	564,150	3,133,800	4,868,850
U-P2-Bq-132	C.8.20	Deformed Reinforcing Bars	kg	20970	1,402	2,810	3,418	7,629	29,397,843	58,921,506	71,667,072	159,986,421
U-P2-Bq-133	C.8.21	Wet Stone Masonry	m ³	200	46,070	28,800	200,020	274,890	9,214,000	5,760,000	40,004,000	54,978,000
U-P2-Bq-134	C.8.22	Weep Hole, Dia.50mm	No.	70	3,147	909	14,500	18,556	220,280	63,636	1,015,000	1,298,916
U-P2-Bq-135	C.8.23	Pointing	m ²	235	2,000	1,010	8,900	11,910	470,000	237,350	2,091,500	2,798,850
U-P2-Bq-136	C.9	Asin No.2 Bridge										
U-P2-Bq-137		(Super Structure)										
U-P2-Bq-138	C.9.1	Precast Prestressed Concrete Beam including tensioning and erection	L.S.	1	298,922,600	28,640,500	329,437,900	657,001,000	298,922,600	28,640,500	329,437,900	657,001,000
U-P2-Bq-139	C.9.2	Precast Prestressed Concrete Diaphragm including tensioning and erection	L.S.	1	34,564,900	4,711,300	24,713,600	63,989,800	34,564,900	4,711,300	24,713,600	63,989,800
U-P2-Bq-140	C.9.3	Precast Concrete Panel Including Erection	L.S.	1	3,767,700	3,807,400	13,806,000	21,381,100	3,767,700	3,807,400	13,806,000	21,381,100
U-P2-Bq-141	C.9.4	Deformed Reinforcing Bars	kg	5360	1,402	2,810	3,418	7,629	7,514,184	15,060,528	18,318,336	40,893,048
U-P2-Bq-142	C.9.5	Concrete, Type B including Scaffolding and Formwork	m ³	51	257,880	44,730	488,400	791,010	13,151,880	2,281,230	24,908,400	40,341,510
U-P2-Bq-143	C.9.6	Asphalt Concrete	ton	29	874	548	2,151	3,573	25,346	15,892	62,379	103,617
U-P2-Bq-144	C.9.7	Expansion Joint	m	19	11,571	657	10,657	22,886	219,857	12,486	202,486	434,829
U-P2-Bq-145	C.9.8	Hand Rail	kg	50	2,298	1,051	4,848	8,197	114,900	52,550	242,400	409,850
U-P2-Bq-146	C.9.9	Drain Pipe, PVC Pipe Dia. 100 mm	m	12	3,920	4,240	15,210	23,370	47,040	50,880	182,520	280,440
U-P2-Bq-147	C.9.11	Elastomeric Bearing Pad (Size 350 x 280 x 73)	No.	10	511,000	602,000	1,011,500	2,124,500	5,110,000	6,020,000	10,115,000	21,245,000
U-P2-Bq-148	C.9.12	Rubber Sheet (40 x 10 x 3)	No.	10	103,540	231,000	283,280	617,820	1,035,400	2,310,000	2,832,800	6,178,200
U-P2-Bq-149		(Sub Structure)										
U-P2-Bq-150	C.9.13	Structure Excavation	m ³	1120	18,170	350	14,250	32,770	20,350,400	392,000	15,960,000	36,702,400
U-P2-Bq-151	C.9.14	Backfill with Sandy Soil	m ³	380	16,300	1,620	37,430	55,350	6,194,000	615,600	14,223,400	21,033,000
U-P2-Bq-152	C.9.15	Embankment	m ³	378	26,300	1,210	38,300	65,810	9,941,400	457,380	14,477,400	24,876,180
U-P2-Bq-153	C.9.16	Furnishing and Driving PC Piles, Dia. 500 mm, Type A	m	1113	288,190	290	76,240	364,720	320,755,470	322,770	84,855,120	405,933,360
U-P2-Bq-154	C.9.17	Furnishing and Driving PC Test Pile, Dia. 500mm, Type A	m	38	322,900	320	115,080	438,300	12,270,200	12,160	4,373,040	16,655,400
U-P2-Bq-155	C.9.18	Concrete, Type C1 including Formwork and Scaffolding	m ³	277	169,090	42,410	318,050	529,550	46,837,930	11,747,570	88,099,850	146,685,350
U-P2-Bq-156	C.9.19	Concrete, Type E including Formwork	m ³	14	77,760	37,610	207,440	322,810	1,088,640	526,540	2,904,160	4,519,340
U-P2-Bq-157	C.9.20	Deformed Reinforcing Bars	kg	15110	1,402	2,810	3,418	7,629	21,182,709	42,456,078	51,639,936	115,278,723
U-P2-Bq-158	C.9.21	Wet Stone Masonry	m ³	230	46,070	28,800	200,020	274,890	10,596,100	6,624,000	46,004,600	63,224,700

Table 8.5.2 (5/9) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-2

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P2-Bq-159	C.9.22	Weep Hole, Dia.50mm	No.	60	3,147	909	14,500	18,556	188,811	54,545	870,000	1,113,357
U-P2-Bq-160	C.9.23	Pointing	m ²	244	2,000	1,010	8,900	11,910	488,000	246,440	2,171,600	2,906,040
U-P2-Bq-161	C.10	Water Supply Pipe Reconstruction										
U-P2-Bq-162	C.10.1	Coffering and Dewatering	L.S.	1	13,403,500	364,100	8,656,400	22,424,000	13,403,500	364,100	8,656,400	22,424,000
U-P2-Bq-163	C.10.2	Structural Excavation	m ³	620	18,170	350	14,250	32,770	11,265,400	217,000	8,835,000	20,317,400
U-P2-Bq-164	C.10.3	Backfill	m ³	577	9,940	120	7,340	17,400	5,735,380	69,240	4,235,180	10,039,800
U-P2-Bq-165	C.10.4	Concrete, Type C1 including Formwork	m ³	37	125,720	44,160	430,700	600,580	4,651,640	1,633,920	15,935,900	22,221,460
U-P2-Bq-166	C.10.5	Concrete, Type E including Formwork	m ³	3	81,930	37,610	228,140	347,680	245,790	112,830	684,420	1,043,040
U-P2-Bq-167	C.10.6	Deformed Reinforcing Bars	kg	3430	1,367	3,121	3,667	8,154	4,687,438	10,704,687	12,577,124	27,969,249
U-P2-Bq-168	C.10.7	Pipe Connection Works	L.S.	1	3,322,000	0	4,268,000	7,590,000	3,322,000	0	4,268,000	7,590,000
U-P2-Bq-169	C.11	Telephone Cable Duct Reconstruction										
U-P2-Bq-170	C.11.1	Coffering and Dewatering	L.S.	1	13,403,500	364,100	8,656,400	22,424,000	13,403,500	364,100	8,656,400	22,424,000
U-P2-Bq-171	C.11.2	Structural Excavation	m ³	310	18,170	350	14,250	32,770	5,632,700	108,500	4,417,500	10,158,700
U-P2-Bq-172	C.11.3	Backfill	m ³	297	9,940	120	7,340	17,400	2,952,180	35,640	2,179,980	5,167,800
U-P2-Bq-173	C.11.4	Concrete, Type C1 including Formwork	m ³	11	108,260	44,160	344,610	497,030	1,190,860	485,760	3,790,710	5,467,330
U-P2-Bq-174	C.11.5	Concrete, Type E including Formwork	m ³	2	89,670	37,610	266,580	393,860	179,340	75,220	533,160	787,720
U-P2-Bq-175	C.11.6	Deformed Reinforcing Bars	kg	950	1,367	3,121	3,667	8,154	1,298,270	2,964,855	3,483,460	7,746,585
U-P2-Bq-176	C.11.7	Cable Connection Works	L.S.	1	34,840,000	0	53,710,000	88,550,000	34,840,000	0	53,710,000	88,550,000
U-P2-Bq-177	C.12	Secondary Channel Outlet Reconstruction										
U-P2-Bq-178	C.12.1	Structural Excavation	m ³	430	18,170	350	14,250	32,770	7,813,100	150,500	6,127,500	14,091,100
U-P2-Bq-179	C.12.2	Backfill	m ³	110	9,940	120	7,340	17,400	1,093,400	13,200	807,400	1,914,000
U-P2-Bq-180	C.12.3	Concrete, Type C1 including Formwork and Falsework	m ³	39	106,420	44,210	273,720	424,350	4,150,380	1,724,190	10,675,080	16,549,650
U-P2-Bq-181	C.12.4	Concrete, Type E including Formwork	m ³	8	85,250	37,610	244,610	367,470	682,000	300,880	1,956,880	2,939,760
U-P2-Bq-182	C.12.5	Deformed Reinforcing Bars	kg	3330	1,367	3,121	3,667	8,154	4,550,778	10,392,597	12,210,444	27,153,819
U-P2-Bq-183	C.12.6	Wet Stone Masonry	m ³	210	46,070	28,800	200,020	274,890	9,674,700	6,048,000	42,004,200	57,726,900
U-P2-Bq-184	C.12.7	Pointing	m ²	35	2,000	1,010	8,900	11,910	70,000	35,350	311,500	416,850
U-P2-Bq-185	C.12.8	Gravel Filling	m ³	148	20,840	3,680	76,610	101,130	3,084,320	544,640	11,338,280	14,967,240
U-P2-Bq-186	C.12.9	Gravel Bedding	m ³	130	6,920	1,360	32,990	41,270	899,600	176,800	4,288,700	5,365,100
U-P2-Bq-187	C.12.10	Cobble Stone	m ³	2	14,250	2,120	45,410	61,780	28,500	4,240	90,820	123,560
U-P2-Bq-188	C.12.11	Weep Hole, Dia.50mm	No.	132	3,147	909	14,500	18,556	415,385	120,000	1,914,000	2,449,385
U-P2-Bq-189	C.12.12	Log Pile, Dia. 150 mm L=2.0 m	m	195	18,940	190	20,950	40,080	3,693,300	37,050	4,085,250	7,815,600
U-P2-Bq-190	D	ASIN PUMPING STATION										
U-P2-Bq-191	D.1	Preparatory Works										
U-P2-Bq-192	D.1.1	Coffering and Dewatering	L.S.	1	497,173,200	15,321,100	309,713,900	822,208,200	497,173,200	15,321,100	309,713,900	822,208,200
U-P2-Bq-193	D.1.2	Clearing of Garbage	L.S.	1	731,100	9,500	700,600	1,441,200	731,100	9,500	700,600	1,441,200
U-P2-Bq-194	D.1.3	Demolition of Existing Revetment	L.S.	1	1,325,000	21,000	1,004,000	2,350,000	1,325,000	21,000	1,004,000	2,350,000
U-P2-Bq-195	D.2	Pumping Station										
U-P2-Bq-196	D.2.1	Structural Excavation	m ³	1400	18,170	350	14,250	32,770	25,438,000	490,000	19,950,000	45,878,000
U-P2-Bq-197	D.2.2	Backfill	m ³	115	9,940	120	7,340	17,400	1,143,100	13,800	844,100	2,001,000
U-P2-Bq-198	D.2.3	Embankment	m ³	1005	26,300	1,210	38,300	65,810	26,431,500	1,216,050	38,491,500	66,139,050
U-P2-Bq-199	D.2.4	Concrete, Type C1 including Formwork, Scaffolding and Falsework	m ³	1176	203,460	42,500	370,080	616,040	239,268,960	49,980,000	435,214,080	724,463,040
U-P2-Bq-200	D.2.5	Concrete, Type E including Formwork	m ³	70	76,190	37,610	199,600	313,400	5,333,300	2,632,700	13,972,000	21,938,000
U-P2-Bq-201	D.2.6	Secondary Concrete, Type C2	m ³	138	104,810	42,250	216,900	363,960	14,463,780	5,830,500	29,932,200	50,226,480

Table 8.5.2 (6/9) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-2

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P2-Bq-202	D.2.7	Deformed Reinforcing Bars	kg	82760	1,402	2,810	3,418	7,629	116,021,244	232,539,048	282,840,576	631,400,868
U-P2-Bq-203	D.2.8	Water Stop, 200 mm wide	m	47	61,278	0	6,022	67,300	2,880,066	0	283,034	3,163,100
U-P2-Bq-204	D.2.9	Dowel Bar Dia. 19 mm, 1 m Long (Round Bar and PVC Pipe)	kg	308	3,370	5,710	11,010	20,090	1,037,960	1,758,680	3,391,080	6,187,720
U-P2-Bq-205	D.2.10	Furnishing and Driving PC Piles, Dia. 500 mm, Type A	m	3765	281,680	260	70,990	352,930	1,060,525,200	978,900	267,277,350	1,328,781,450
U-P2-Bq-206	D.2.11	Furnishing and Driving PC Test Pile, Dia. 500 mm, Type A	m	21	319,150	290	110,490	429,930	6,702,150	6,090	2,320,290	9,028,530
U-P2-Bq-207	D.2.12	Furnishing and Driving Steel Sheet Pile, Type II	m	503	348,510	80	39,230	387,820	175,300,530	40,240	19,732,690	195,073,460
U-P2-Bq-208	D.2.13	Furnishing and Driving PC Sheet Piles (t=220 mm)	m	499	253,780	140	35,080	289,000	126,636,220	69,860	17,504,920	144,211,000
U-P2-Bq-209	D.2.17	Gabion Mattress, t=500 mm (Galvanized)	m ³	52	659,260	3,060	142,060	804,380	34,281,520	159,120	7,387,120	41,827,760
U-P2-Bq-210	D.2.14	Safety Hand Rail (Type-I)	kg	1180	2,049	481	4,231	6,761	2,417,820	567,580	4,992,580	7,977,980
U-P2-Bq-211	D.2.15	Safety Hand Rail (Type-II)	kg	630	2,049	481	4,231	6,761	1,290,870	303,030	2,665,530	4,259,430
U-P2-Bq-212	D.2.16	Wet Stone Masonry	m ³	40	46,070	28,800	200,020	274,890	1,842,800	1,152,000	8,000,800	10,995,600
U-P2-Bq-213	D.2.18	Pointing	m ²	45	2,000	1,010	8,900	11,910	90,000	45,450	400,500	535,950
U-P2-Bq-214	D.2.19	Weep Hole, Dia.50mm	No.	12	3,147	909	14,500	18,556	37,762	10,909	174,000	222,671
U-P2-Bq-215	D.3	Pump Mechanical Works										
U-P2-Bq-216	D.3.1	Furnishing and Installing Main Pump Units	set	3	2,424,057,500	0	333,525,900	2,757,583,400	7,272,172,500	0	1,000,577,700	8,272,750,200
U-P2-Bq-217	D.3.2	Gear Boxes	set	3	654,759,300	0	90,088,300	744,847,600	1,964,277,900	0	270,264,900	2,234,542,800
U-P2-Bq-218	D.3.3	Diesel Engine Units	set	3	800,068,800	0	110,081,500	910,150,300	2,400,206,400	0	330,244,500	2,730,450,900
U-P2-Bq-219	D.3.4	Fuel Service Tank	set	1	88,570,800	0	12,186,500	100,757,300	88,570,800	0	12,186,500	100,757,300
U-P2-Bq-220	D.3.5	Fuel Transfer Pump	set	1	27,905,200	0	3,839,500	31,744,700	27,905,200	0	3,839,500	31,744,700
U-P2-Bq-221	D.3.6	Auxiliary Drainage Pump System	L.S.	1	304,531,500	0	41,900,500	346,432,000	304,531,500	0	41,900,500	346,432,000
U-P2-Bq-222	D.3.7	Overhead Crane	set	1	274,478,500	0	37,765,500	312,244,000	274,478,500	0	37,765,500	312,244,000
U-P2-Bq-223	D.3.8	Piping System	L.S.	1	83,400,000	0	11,475,000	94,875,000	83,400,000	0	11,475,000	94,875,000
U-P2-Bq-224	D.3.9	Inspection and Test	L.S.	1	75,289,100	0	54,320,300	129,609,400	75,289,100	0	54,320,300	129,609,400
U-P2-Bq-225	D.3.10	Spare Parts	L.S.	1	153,990,500	0	21,187,600	175,178,100	153,990,500	0	21,187,600	175,178,100
U-P2-Bq-226	D.3.11	Maintenance Tools	L.S.	1	43,112,300	0	5,931,900	49,044,200	43,112,300	0	5,931,900	49,044,200
U-P2-Bq-227	D.4	Pump Electrical Works										
U-P2-Bq-228	D.4.1	Main Control Panel	L.S.	1	899,582,500	0	123,773,500	1,023,356,000	899,582,500	0	123,773,500	1,023,356,000
U-P2-Bq-229	D.4.2	Local Switch	L.S.	1	17,447,900	0	2,400,700	19,848,600	17,447,900	0	2,400,700	19,848,600
U-P2-Bq-230	D.4.3	Inspection and Test	L.S.	1	26,778,100	0	3,684,400	30,462,500	26,778,100	0	3,684,400	30,462,500
U-P2-Bq-231	D.4.4	Spare Parts	L.S.	1	33,532,400	0	4,613,800	38,146,200	33,532,400	0	4,613,800	38,146,200
U-P2-Bq-232	D.4.5	Maintenance Tools	L.S.	1	37,680,200	0	5,184,500	42,864,700	37,680,200	0	5,184,500	42,864,700
U-P2-Bq-233	D.4.6	Control Panels for Auxiliary Drainage Pumps	L.S.	1	85,157,000	0	11,716,800	96,873,800	85,157,000	0	11,716,800	96,873,800
U-P2-Bq-234	D.4.7	Generator System	L.S.									
U-P2-Bq-235	D.5	Inspection Bridges										
U-P2-Bq-236	D.5.1	Concrete, Type B including Formwork	m ³	57	157,340	44,490	348,230	550,060	8,968,380	2,535,930	19,849,110	31,353,420
U-P2-Bq-237	D.5.2	Deformed Reinforcing Bars	kg	3150	1,558	3,122	3,797	8,477	4,906,755	9,834,300	11,961,810	26,702,865
U-P2-Bq-238	D.5.3	Safety Hand Rail (Type I)	kg	210	2,298	1,051	4,848	8,197	482,580	220,710	1,018,080	1,721,370
U-P2-Bq-239	D.6	Asin Pumping Station Bridge										
U-P2-Bq-240		Superstructure										
U-P2-Bq-241	D.6.1	Precast Prestressed Concrete Beam including Tensioning and Erection	L.S.	1	179,353,600	17,184,300	197,662,800	394,200,700	179,353,600	17,184,300	197,662,800	394,200,700
U-P2-Bq-242	D.6.2	Precast Prestressed Concrete Diaphragm including Tensioning and Erection	L.S.	1	17,282,500	2,355,700	12,356,800	31,995,000	17,282,500	2,355,700	12,356,800	31,995,000
U-P2-Bq-243	D.6.3	Precast Concrete Panel including Erection	L.S.	1	1,955,000	1,975,500	7,163,500	11,094,000	1,955,000	1,975,500	7,163,500	11,094,000

Table 8.5.2 (7/9) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-2

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P2-Bq-244	D.6.4	Deformed Reinforcing Bars	kg	4760	1,402	2,810	3,418	7,629	6,673,044	13,374,648	16,267,776	36,315,468
U-P2-Bq-245	D.6.5	Concrete, Type B including Formwork	m ³	35	177,400	44,550	398,150	620,100	6,209,000	1,559,250	13,935,250	21,703,500
U-P2-Bq-246	D.6.6	Asphalt Concrete	ton	20	874	548	2,151	3,573	17,480	10,960	43,020	71,460
U-P2-Bq-247	D.6.7	Expansion Joint	m	12	11,571	657	10,657	22,886	138,857	7,886	127,886	274,629
U-P2-Bq-248	D.6.8	Hand Rail	kg	50	2,298	1,051	4,848	8,197	114,900	52,550	242,400	409,850
U-P2-Bq-249	D.6.9	Drain Pipe, PVC Pipe Dia. 100 mm	m	12	3,920	4,240	15,210	23,370	47,040	50,880	182,520	280,440
U-P2-Bq-250	D.6.11	Elastomeric Bearing Pad (350 x280 x 73)	No.	6	511,000	602,000	1,011,500	2,124,500	3,066,000	3,612,000	6,069,000	12,747,000
U-P2-Bq-251	D.6.12	Rubber Sheet (40 x 10 x 3)	No.	6	103,540	231,000	283,280	617,820	621,240	1,386,000	1,699,680	3,706,920
U-P2-Bq-252		(Sub Structure)										
U-P2-Bq-253	D.6.13	Structure Excavation	m ³	340	18,170	350	14,250	32,770	6,177,800	119,000	4,845,000	11,141,800
U-P2-Bq-254	D.6.14	Backfill with Sandy Soil	m ³	292	16,300	1,620	37,430	55,350	4,759,600	473,040	10,929,560	16,162,200
U-P2-Bq-255	D.6.15	Furnishing and Driving PC Piles, Dia. 500 mm	m	927	288,190	290	76,240	364,720	267,152,130	268,830	70,674,480	338,095,440
U-P2-Bq-256	D.6.16	Furnishing and Driving PC Test Pile, Dia. 500mm	m	38	322,900	320	115,080	438,300	12,270,200	12,160	4,373,040	16,655,400
U-P2-Bq-257	D.6.17	Concrete, Type C1 including Formwork and Scaffolding	m ³	140	198,110	42,490	372,140	612,740	27,735,400	5,948,600	52,099,600	85,783,600
U-P2-Bq-258	D.6.18	Concrete, Type E including Formwork	m ³	10	77,630	37,610	206,780	322,020	776,300	376,100	2,067,800	3,220,200
U-P2-Bq-259	D.6.19	Deformed Reinforcing Bars	kg	14610	1,402	2,810	3,418	7,629	20,481,759	41,051,178	49,931,136	111,464,073
U-P2-Bq-260	D.7	Fuel Tank										
U-P2-Bq-261	D.7.1	Structural Excavation	m ³	690	18,170	350	14,250	32,770	12,537,300	241,500	9,832,500	22,611,300
U-P2-Bq-262	D.7.2	Backfill	m ³	564	9,940	120	7,340	17,400	5,606,160	67,680	4,139,760	9,813,600
U-P2-Bq-263	D.7.3	Concrete, Type C1 including Formwork	m ³	52	306,400	42,750	523,460	872,610	15,932,800	2,223,000	27,219,920	45,375,720
U-P2-Bq-264	D.7.4	Concrete, Type E including Formwork	m ³	4	81,930	37,610	228,140	347,680	327,720	150,440	912,560	1,390,720
U-P2-Bq-265	D.7.5	Deformed Reinforcing Bars	kg	7220	1,558	3,122	3,797	8,477	11,246,594	22,540,840	27,417,228	61,204,662
U-P2-Bq-266	D.7.6	Fuel Tank and Accessories	L.S.	1	200,271,200	0	27,555,300	227,826,500	200,271,200	0	27,555,300	227,826,500
U-P2-Bq-267	D.7.7	Grounding	L.S.	1	10,842,000	0	1,491,800	12,333,800	10,842,000	0	1,491,800	12,333,800
U-P2-Bq-268	E	ASIN PUMPING STATION GATE										
U-P2-Bq-269	E.1	Gate Pier and Foundation										
U-P2-Bq-270	E.1.1	Structural Excavation	m ³	470	18,170	350	14,250	32,770	8,539,900	164,500	6,697,500	15,401,900
U-P2-Bq-271	E.1.2	Backfill with Sandy Soil	m ³	225	16,300	1,620	37,430	55,350	3,667,500	364,500	8,421,750	12,453,750
U-P2-Bq-272	E.1.3	Concrete, Type C1 including Formwork, Scaffolding, and Falsework	m ³	406	232,650	42,570	399,930	675,150	94,455,900	17,283,420	162,371,580	274,110,900
U-P2-Bq-273	E.1.4	Concrete, Type E including Formwork	m ³	19	76,340	37,610	200,370	314,320	1,450,460	714,590	3,807,030	5,972,080
U-P2-Bq-274	E.1.5	Secondary Concrete, Type C2	m ³	10	116,320	42,250	273,650	432,220	1,163,200	422,500	2,736,500	4,322,200
U-P2-Bq-275	E.1.6	Deformed Reinforcing Bars	kg	26710	1,402	2,810	3,418	7,629	37,444,749	75,049,758	91,284,096	203,778,603
U-P2-Bq-276	E.1.7	Water Stop, 200 mm wide	m	13	61,278	0	6,022	67,300	796,614	0	78,286	874,900
U-P2-Bq-277	E.1.8	Dowel Bar, Dia. 19 mm, 1.0 m Long (Round Bar and PVC Pipe)	kg	120	3,370	5,710	11,010	20,090	404,400	685,200	1,321,200	2,410,800
U-P2-Bq-278	E.1.9	Furnishing and Driving PC Piles, Dia. 500 mm	m	582	281,060	260	70,490	351,810	163,576,920	151,320	41,025,180	204,753,420
U-P2-Bq-279	E.1.10	Furnishing and Driving Steel Sheet Pile, Type	m	454	348,510	80	39,230	387,820	158,223,540	36,320	17,810,420	176,070,280
U-P2-Bq-280	E.1.11	Gabion Mattress t=500 mm (Galvanized)	m ³	38	659,260	3,060	142,060	804,380	25,051,880	116,280	5,398,280	30,566,440
U-P2-Bq-281	E.1.12	Safety Hand Rail (Type-I)	kg	300	2,049	481	4,231	6,761	614,700	144,300	1,269,300	2,028,300
U-P2-Bq-282	E.1.13	Ladder	L.S.	1	200,800	47,100	414,600	662,500	200,800	47,100	414,600	662,500
U-P2-Bq-283	E.1.14	Window	L.S.	1	68,000	33,400	304,200	405,600	68,000	33,400	304,200	405,600
U-P2-Bq-284	E.1.15	Door	L.S.	1	30,900	0	153,200	184,100	30,900	0	153,200	184,100
U-P2-Bq-285	E.1.16	Roof Sealing	L.S.	1	2,932,900	2,216,900	7,211,100	12,360,900	2,932,900	2,216,900	7,211,100	12,360,900
U-P2-Bq-286	E.2	Gate Mechanical Works										
U-P2-Bq-287	E.2.1	Gate Leaf	set	2	172,364,400	0	201,690,500	374,054,900	344,728,800	0	403,381,000	748,109,800
U-P2-Bq-288	E.2.2	Guide Frame	set	2	50,626,700	0	148,754,700	199,381,400	101,253,400	0	297,509,400	398,762,800

Table 8.5.2 (8/9) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-2

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P2-Bq-289	E.2.3	Hoist	set	2	590,512,100	0	158,037,400	748,549,500	1,181,024,200	0	316,074,800	1,497,099,000
U-P2-Bq-290	E.2.4	Stop Log	set	2	104,432,300	0	113,073,300	217,505,600	208,864,600	0	226,146,600	435,011,200
U-P2-Bq-291	E.2.5	Spare Part	L.S.	1	104,432,300	0	113,073,300	217,505,600	104,432,300	0	113,073,300	217,505,600
U-P2-Bq-292	F	BUILDINGS										
U-P2-Bq-293	F.1	Buildings										
U-P2-Bq-294	F.1.1	Pump Control Building	L.S.	1	100,372,200	22,375,900	241,546,000	364,294,100	100,372,200	22,375,900	241,546,000	364,294,100
U-P2-Bq-295	F.1.2	Management Office	L.S.	1	37,551,400	14,961,500	169,053,400	221,566,300	37,551,400	14,961,500	169,053,400	221,566,300
U-P2-Bq-296	F.1.3	Garage	L.S.	1	42,464,800	17,172,400	191,106,900	250,744,100	42,464,800	17,172,400	191,106,900	250,744,100
U-P2-Bq-297	F.1.4	Staff House	L.S.	1	21,255,300	7,906,500	96,930,600	126,092,400	21,255,300	7,906,500	96,930,600	126,092,400
U-P2-Bq-298	F.1.5	External Works	L.S.	1	30,998,800	6,912,200	98,294,900	136,205,900	30,998,800	6,912,200	98,294,900	136,205,900
U-P2-Bq-299	G	ASIN RETARDING POND										
U-P2-Bq-300	G.1	Earth Works										
U-P2-Bq-301	G.1.1	Common Excavation including Hauling and Spoiling	m ³	34200	20,350	410	15,830	36,590	695,970,000	14,022,000	541,386,000	1,251,378,000
U-P2-Bq-302	G.1.2	Embankment	m ³	4843	26,300	1,210	38,300	65,810	127,370,900	5,860,030	185,486,900	318,717,830
U-P2-Bq-303	G.2	Revetment Works										
U-P2-Bq-304	G.2.1	Coffering and Dewatering	L.S.	1	50,055,800	1,487,500	44,368,200	95,911,500	50,055,800	1,487,500	44,368,200	95,911,500
U-P2-Bq-305	G.2.2	Structural Excavation	m ³	3090	18,170	350	14,250	32,770	56,145,300	1,081,500	44,032,500	101,259,300
U-P2-Bq-306	G.2.3	Backfill with Cobble	m ³	649	17,827	2,154	48,252	68,233	11,569,723	1,397,946	31,315,548	44,283,217
U-P2-Bq-307	G.2.4	Backfill with Gravel	m ³	557	18,580	4,060	88,210	110,850	10,349,060	2,261,420	49,132,970	61,743,450
U-P2-Bq-308	G.2.5	Backfill with Sandy Soil	m ³	6	16,300	1,620	37,430	55,350	97,800	9,720	224,580	332,100
U-P2-Bq-309	G.2.6	Wet Stone Masonry	m ³	1440	46,070	28,800	200,020	274,890	66,340,800	41,472,000	288,028,800	395,841,600
U-P2-Bq-310	G.2.7	Concrete, Type C1 including Formwork	m ³	155	151,350	44,160	557,130	752,640	23,459,250	6,844,800	86,355,150	116,659,200
U-P2-Bq-311	G.2.8	Concrete, Type E including Formwork	m ³	36	99,690	37,610	316,340	453,640	3,588,840	1,353,960	11,388,240	16,331,040
U-P2-Bq-312	G.2.9	Deformed Reinforcing Bars	kg	15990	1,367	3,121	3,667	8,154	21,851,934	49,903,191	58,632,132	130,387,257
U-P2-Bq-313	G.2.10	Pointing	m ²	1895	2,000	1,010	8,900	11,910	3,790,000	1,913,950	16,865,500	22,569,450
U-P2-Bq-314	G.2.11	Weep Hole, Dia. 50mm	No.	292	3,147	909	14,500	18,556	918,881	265,455	4,234,000	5,418,336
U-P2-Bq-315	G.2.12	Log Pile, Dia. 150 mm L=2.0 m	m	2225	18,940	190	20,950	40,080	42,141,500	422,750	46,613,750	89,178,000
U-P2-Bq-316	G.2.13	Furnishing and Driving PC Sheet Pile (t=220 mm)	m	8789	253,780	140	35,080	289,000	2,230,472,420	1,230,460	308,318,120	2,540,021,000
U-P2-Bq-317	G.3	Inspection Road										
U-P2-Bq-318	G.3.1	Stripping of Top Soil	m ³	748	16,920	350	11,920	29,190	12,656,160	261,800	8,916,160	21,834,120
U-P2-Bq-319	G.3.2	Embankment	m ³	951	26,300	1,210	38,300	65,810	25,011,300	1,150,710	36,423,300	62,585,310
U-P2-Bq-320	G.3.3	Aggregate Class A	m ³	588	35,670	4,370	97,910	137,950	20,973,960	2,569,560	57,571,080	81,114,600
U-P2-Bq-321	G.3.4	Aggregate Class B	m ³	893	35,010	4,370	97,420	136,800	31,263,930	3,902,410	86,996,060	122,162,400
U-P2-Bq-322	G.3.5	Sand Bedding	m ³	236	7,420	1,490	35,340	44,250	1,751,120	351,640	8,340,240	10,443,000
U-P2-Bq-323	G.3.6	Concrete Block Pavement	m ²	3736	10,710	5,700	47,480	63,890	40,012,560	21,295,200	177,385,280	238,693,040
U-P2-Bq-324	G.3.7	Cement Mortar	m ³	10	15,900	8,000	70,700	94,600	159,000	80,000	707,000	946,000
U-P2-Bq-325	G.3.8	Concrete Kerb	m ³	91	155,430	43,070	578,300	776,800	14,144,130	3,919,370	52,625,300	70,688,800
U-P2-Bq-326	H	MISCELLANEOUS WORKS										
U-P2-Bq-327	H.1	Tree Planting	L.S.	1	31,609,300	139,500	156,863,200	188,612,000	31,609,300	139,500	156,863,200	188,612,000
U-P2-Bq-328	H.2	Staff Gauge	L.S.	1	20,736,300	352,650	54,964,950	76,053,900	20,736,300	352,650	54,964,950	76,053,900
U-P2-Bq-329	I	SUPPLYING MAINTENANCE EQUIPMENT										
U-P2-Bq-330	I.1	Supplying Maintenance Equipment		1	1,609,325,300	200,000	72,262,300	1,681,787,600	1,609,325,300	200,000	72,262,300	1,681,787,600

Table 8.5.2 (9/9) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-2

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost				
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost	
U-P2-Bq-331	I.1.1	Supply of Backhoe	No.	1									
U-P2-Bq-332	I.1.2	Supply of Dump Truck	No.	1									
U-P2-Bq-333	I.1.3	Supply of Truck Crane	No.	1									
U-P2-Bq-334	I.1.4	Supply of Garbage Container	No.	2									
U-P2-Bq-335	I.1.5	Supply of Outboard Motor Boat	No.	1									
Total Cost									46,135,281,652	3,286,240,717	32,188,662,029	81,610,184,398	

Table 8.5.3 (1/8) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-3

FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT
IN SEMARANG

Component: Urban Drainage System Improvement
Package 3: Bandarharjo Drainage System Improvement
BILL OF QUANTITIES

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P3-Bq-1	A	GENERAL										
U-P3-Bq-2	A.1	Mobilization and Demobilization	L.S.	1	74,654,900	1,430,000	52,591,100	128,676,000	74,654,900	1,430,000	52,591,100	128,676,000
U-P3-Bq-3	A.2	Establishment										
U-P3-Bq-4	A.2.1	Contractor's Site Office and Facilities	L.S.	1	38,746,200	10,067,200	122,313,400	171,126,800	38,746,200	10,067,200	122,313,400	171,126,800
U-P3-Bq-5	A.2.2	Engineer's Site Office and Facilities	L.S.	1	38,746,200	10,067,200	122,313,400	171,126,800	38,746,200	10,067,200	122,313,400	171,126,800
U-P3-Bq-6	A.3	Drawings	L.S.	1	12,218,200	600,000	48,630,600	61,448,800	12,218,200	600,000	48,630,600	61,448,800
U-P3-Bq-7	A.4	Surveying	L.S.	1	1,484,000	0	7,371,000	8,855,000	1,484,000	0	7,371,000	8,855,000
U-P3-Bq-8	A.5	Relocation/Demolition of Existing Facilities										
U-P3-Bq-9	A.5.1	Relocation of Existing Utilities	L.S.	1	1,313,700	0	6,525,000	7,838,700	1,313,700	0	6,525,000	7,838,700
U-P3-Bq-10	B	BARU RIVER IMPROVEMENT										
U-P3-Bq-11	B.1	Preparatory Works										
U-P3-Bq-12	B.1.1	Coffering and Dewatering	L.S.	1	1,095,158,600	19,559,100	452,120,900	1,566,838,600	1,095,158,600	19,559,100	452,120,900	1,566,838,600
U-P3-Bq-13	B.1.2	Clearing of Garbage	L.S.	1	1,309,100	14,300	1,244,200	2,567,600	1,309,100	14,300	1,244,200	2,567,600
U-P3-Bq-14	B.1.3	Demolition of Existing Revetment	L.S.	1	102,557,000	642,000	72,431,000	175,630,000	102,557,000	642,000	72,431,000	175,630,000
U-P3-Bq-15	B.2	Earthwork										
U-P3-Bq-16	B.2.1	Common Channel Excavation including hauling and treatment of contaminated soil	m ³	28000	72,507	8,801	80,991	162,299	2,030,196,000	246,428,000	2,267,748,000	4,544,372,000
U-P3-Bq-17	B.2.2	Channel Excavation below Water Level including hauling and treatment of contaminated soil	m ³	5200	99,804	8,788	93,266	201,858	518,980,800	45,697,600	484,983,200	1,049,661,600
U-P3-Bq-18	B.2.3	Stripping of Top Soil	m ³	1508	16,920	350	11,920	29,190	25,515,360	527,800	17,975,360	44,018,520
U-P3-Bq-19	B.2.4	Embankment	m ³	2974	26,300	1,210	38,300	65,810	78,216,200	3,598,540	113,904,200	195,718,940
U-P3-Bq-20	B.3	Revetment Type A-3 (wet masonry)										
U-P3-Bq-21	B.3.1	Structural Excavation	m ³	12460	18,170	350	14,250	32,770	226,398,200	4,361,000	177,555,000	408,314,200
U-P3-Bq-22	B.3.2	Backfill with Cobble	m ³	2365	17,827	2,154	48,252	68,233	42,160,855	5,094,210	114,115,980	161,371,045
U-P3-Bq-23	B.3.3	Backfill with Gravel	m ³	3740	18,580	4,060	88,210	110,850	69,489,200	15,184,400	329,905,400	414,579,000
U-P3-Bq-24	B.3.4	Backfill with Sandy Soil	m ³	545	16,300	1,620	37,430	55,350	8,883,500	882,900	20,399,350	30,165,750
U-P3-Bq-25	B.3.5	Concrete, Type C1 including Formwork	m ³	1512	161,680	42,250	497,380	701,310	244,460,160	63,882,000	752,038,560	1,060,380,720
U-P3-Bq-26	B.3.6	Concrete, Type E including Formwork	m ³	398	100,690	37,610	321,280	459,580	40,074,620	14,968,780	127,869,440	182,912,840
U-P3-Bq-27	B.3.7	Deformed Reinforcing Bars	kg	70120	1,230	2,809	3,300	7,339	86,240,588	196,960,068	231,403,012	514,603,668
U-P3-Bq-28	B.3.8	Wet Stone Masonry	m ³	3510	46,070	28,800	200,020	274,890	161,705,700	101,088,000	702,070,200	964,863,900
U-P3-Bq-29	B.3.9	Pointing	m ²	12731	2,000	1,010	8,900	11,910	25,462,000	12,858,310	113,305,900	151,626,210
U-P3-Bq-30	B.3.10	Weep Hole, Dia. 50 mm	No.	4472	3,147	909	14,500	18,556	14,072,727	4,065,455	64,844,000	82,982,182
U-P3-Bq-31	B.4	Revetment Type-C (concrete sheet pile)										
U-P3-Bq-32	B.4.1	Furnishing and Driving PC Sheet Pile (t=220 mm)	m	5356	253,780	140	35,080	289,000	1,359,245,680	749,840	187,888,480	1,547,884,000

Table 8.5.3 (2/8) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-3

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P3-Bq-33	B.4.2	Concrete, Type C1 including Formwork	m ³	9	150,200	44,160	551,450	745,810	1,351,800	397,440	4,963,050	6,712,290
U-P3-Bq-34	B.4.3	Deformed Reinforcing Bars	kg	2650	1,367	3,121	3,667	8,154	3,621,490	8,270,385	9,717,020	21,608,895
U-P3-Bq-35	B.5	Inspection Road										
U-P3-Bq-41.1	B.5.1	Sand Bedding	m ³	542	7,420	1,490	35,340	44,250	4,021,640	807,580	19,154,280	23,983,500
U-P3-Bq-41.2	B.5.2	Concrete Block Pavement	m ²	8610	10,710	5,700	47,480	63,890	92,213,100	49,077,000	408,802,800	550,092,900
U-P3-Bq-41.3	B.5.3	Cement Mortar	m ³	21	15,900	8,000	70,700	94,600	333,900	168,000	1,484,700	1,986,600
U-P3-Bq-41.4	B.5.4	Concrete Kerb	m ³	207	155,430	43,070	578,300	776,800	32,174,010	8,915,490	119,708,100	160,797,600
U-P3-Bq-42	B.6	Closing Structure of Baru River										
U-P3-Bq-50	B.6.1	Coffering and Dewatering	L.S.	1	29,384,600	1,079,000	18,057,100	48,520,700	29,384,600	1,079,000	18,057,100	48,520,700
U-P3-Bq-43	B.6.2	Structural Excavation	m ³	10	18,170	350	14,250	32,770	181,700	3,500	142,500	327,700
U-P3-Bq-44	B.6.3	Backfill	m ³	2	9,940	120	7,340	17,400	19,880	240	14,680	34,800
U-P3-Bq-45	B.6.4	Chipping of Existing Concrete Surface	m ²	11	3,690	0	18,310	22,000	40,590	0	201,410	242,000
U-P3-Bq-46	B.6.5	Concrete, Type C1 including Formwork	m ³	38	96,130	44,160	284,740	425,030	3,652,940	1,678,080	10,820,120	16,151,140
U-P3-Bq-47	B.6.6	Concrete, Type E including Formwork	m ³	2	81,930	37,610	228,140	347,680	163,860	75,220	456,280	695,360
U-P3-Bq-48	B.6.7	Deformed Reinforcing Bars	kg	2210	1,367	3,121	3,667	8,154	3,020,186	6,897,189	8,103,628	18,021,003
U-P3-Bq-49	B.6.8	Furnishing and Driving Steel Sheet Pile, Type II	m	235	348,510	80	39,230	387,820	81,899,850	18,800	9,219,050	91,137,700
U-P3-Bq-51	B.7	Outlet Works of Baru Conveyance Channel										
U-P3-Bq-52	B.7.1	Structural Excavation	m ³	250	18,170	350	14,250	32,770	4,542,500	87,500	3,562,500	8,192,500
U-P3-Bq-53	B.7.2	Backfill with Sandy Soil	m ³	169	16,300	1,620	37,430	55,350	2,754,700	273,780	6,325,670	9,354,150
U-P3-Bq-54	B.7.3	Concrete, Type C1 including Formwork, Scaffolding and Falsework	m ³	35	322,400	42,790	547,100	912,290	11,284,000	1,497,650	19,148,500	31,930,150
U-P3-Bq-55	B.7.4	Concrete, Type E including Formwork	m ³	3	81,930	37,610	228,140	347,680	245,790	112,830	684,420	1,043,040
U-P3-Bq-56	B.7.5	Deformed Reinforcing Bars	kg	2470	1,558	3,122	3,797	8,477	3,847,519	7,711,340	9,379,578	20,938,437
U-P3-Bq-57	B.7.6	Wet Stone Masonry	m ³	20	46,070	28,800	200,020	274,890	921,400	576,000	4,000,400	5,497,800
U-P3-Bq-57.1	B.7.7	Weep Hole, Dia. 50 mm	No.	14	3,147	909	14,500	18,556	44,056	12,727	203,000	259,783
U-P3-Bq-57.2	B.7.8	Pointing	m ²	19	2,000	1,010	8,900	11,910	38,000	19,190	169,100	226,290
U-P3-Bq-62	B.8	Outlet Works of Bandarhardjo East Secondary Channel										
U-P3-Bq-63	B.8.1	Structural Excavation	m ³	250	18,170	350	14,250	32,770	4,542,500	87,500	3,562,500	8,192,500
U-P3-Bq-64	B.8.2	Backfill	m ³	145	9,940	120	7,340	17,400	1,441,300	17,400	1,064,300	2,523,000
U-P3-Bq-65	B.8.3	Concrete, Type C1 including Formwork, Scaffolding and Falsework	m ³	30	341,470	42,850	583,380	967,700	10,244,100	1,285,500	17,501,400	29,031,000
U-P3-Bq-66	B.8.4	Concrete, Type E including Formwork	m ³	3	89,670	37,610	266,580	393,860	269,010	112,830	799,740	1,181,580
U-P3-Bq-67	B.8.5	Deformed Reinforcing Bars	kg	1710	1,558	3,122	3,797	8,477	2,663,667	5,338,620	6,493,554	14,495,841
U-P3-Bq-68	B.9	Secondary Channel Outlet Reconstruction										
U-P3-Bq-69	B.9.1	Structural Excavation	m ³	850	18,170	350	14,250	32,770	15,444,500	297,500	12,112,500	27,854,500
U-P3-Bq-70	B.9.2	Backfill	m ³	708	9,940	120	7,340	17,400	7,037,520	84,960	5,196,720	12,319,200
U-P3-Bq-71	B.9.3	Concrete, Type C1 including Formwork	m ³	24	239,960	42,670	553,170	835,800	5,759,040	1,024,080	13,276,080	20,059,200
U-P3-Bq-72	B.9.4	Concrete, Type E including Formwork	m ³	7	99,990	37,610	317,840	455,440	699,930	263,270	2,224,880	3,188,080
U-P3-Bq-73	B.9.5	Deformed Reinforcing Bars	kg	760	1,558	3,122	3,797	8,477	1,183,852	2,372,720	2,886,024	6,442,596
U-P3-Bq-74	B.9.6	Wet Stone Masonry	m ³	150	46,070	28,800	200,020	274,890	6,910,500	4,320,000	30,003,000	41,233,500
U-P3-Bq-79	B.9.7	Gravel Bedding	m ³	104	6,920	1,360	32,990	41,270	719,680	141,440	3,430,960	4,292,080
U-P3-Bq-80	B.9.8	Cobble Stone	m ³	4	14,250	2,120	45,410	61,780	57,000	8,480	181,640	247,120

Table 8.5.3 (3/8) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-3

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P3-Bq-81	B.9.9	Weep Hole, Dia. 50 mm	No.	70	3,147	909	14,500	18,556	220,280	63,636	1,015,000	1,298,916
U-P3-Bq-81.1	B.9.10	Pointing	m ²	384	2,000	1,010	8,900	11,910	768,000	387,840	3,417,600	4,573,440
U-P3-Bq-82	B.9.11	Log Pile, Dia. 150 mm L=2.0m	m	11	18,940	190	20,950	40,080	208,340	2,090	230,450	440,880
U-P3-Bq-83	B.9.12	Precast Concrete Pipe, Dia. 800 mm	m	88	131,150	109,110	317,380	557,640	11,541,200	9,601,680	27,929,440	49,072,320
U-P3-Bq-84	B.10	Bridge Protection										
U-P3-Bq-89	B.10.1	Concrete, Type C1 including Formwork	m ³	6	155,890	44,160	579,540	779,590	935,340	264,960	3,477,240	4,677,540
U-P3-Bq-91	B.10.2	Deformed Reinforcing Bars	kg	950	1,367	3,121	3,667	8,154	1,298,270	2,964,855	3,483,460	7,746,585
U-P3-Bq-95	B.10.3	Furnishing and Driving PC Sheet Pile (t=220 mm)	m	588	253,780	140	35,080	289,000	149,222,640	82,320	20,627,040	169,932,000
U-P3-Bq-96	C	BARU PUMPING STATION										
U-P3-Bq-97	C.1	Preparatory Works										
U-P3-Bq-98	C.1.1	Demolition of Existing Revetment	L.S.	1	21,182,000	409,000	19,352,000	40,943,000	21,182,000	409,000	19,352,000	40,943,000
U-P3-Bq-99	C.2	Pumping Station										
U-P3-Bq-100	C.2.1	Structural Excavation	m ³	950	18,170	350	14,250	32,770	17,261,500	332,500	13,537,500	31,131,500
U-P3-Bq-101	C.2.2	Backfill	m ³	167	9,940	120	7,340	17,400	1,659,980	20,040	1,225,780	2,905,800
U-P3-Bq-102	C.2.3	Embankment	m ³	968	26,300	1,210	38,300	65,810	25,458,400	1,171,280	37,074,400	63,704,080
U-P3-Bq-103	C.2.4	Concrete, Type C1 including Formwork, Scaffolding and Falsework	m ³	996	187,650	42,460	342,700	572,810	186,899,400	42,290,160	341,329,200	570,518,760
U-P3-Bq-104	C.2.5	Concrete, Type E including Formwork	m ³	41	78,360	37,610	210,390	326,360	3,212,760	1,542,010	8,625,990	13,380,760
U-P3-Bq-104.	C.2.6	Secondary Concrete, Type C2	m ³	88	142,240	42,250	401,500	585,990	12,517,120	3,718,000	35,332,000	51,567,120
U-P3-Bq-105	C.2.7	Deformed Reinforcing Bars	kg	52040	1,402	2,810	3,418	7,629	72,954,876	146,221,992	177,851,904	397,028,772
U-P3-Bq-106	C.2.8	Water Stop, 200 mm wide	m	32	61,278	0	6,022	67,300	1,960,896	0	192,704	2,153,600
U-P3-Bq-107	C.2.9	Furnishing and Driving PC Pile, Dia. 500 mm, Type A	m	2994	281,830	260	71,120	353,210	843,799,020	778,440	212,933,280	1,057,510,740
U-P3-Bq-108	C.2.10	Furnishing and Driving PC Test Pile, Dia. 500 mm, Type A	m	21	316,550	290	109,960	426,800	6,647,550	6,090	2,309,160	8,962,800
U-P3-Bq-109	C.2.11	Furnishing and Driving Steel Sheet Pile, Furnishing and Driving PC Sheet Pile	m	399	348,510	80	39,230	387,820	139,055,490	31,920	15,652,770	154,740,180
U-P3-Bq-110	C.2.12	Furnishing and Driving PC Sheet Pile (t=220 mm)	m	944	253,780	140	35,080	289,000	239,568,320	132,160	33,115,520	272,816,000
U-P3-Bq-110.	C.2.13	Gabion Mattress, t=500 mm (Galvanized)	m ³	36	659,260	3,060	142,060	804,380	23,733,360	110,160	5,114,160	28,957,680
U-P3-Bq-111	C.2.14	Safety Hand Rail (Type-I)	kg	910	2,049	481	4,231	6,761	1,864,590	437,710	3,850,210	6,152,510
U-P3-Bq-112	C.2.15	Safety Hand Rail (Type-II)	kg	510	2,049	481	4,231	6,761	1,044,990	245,310	2,157,810	3,448,110
U-P3-Bq-112.	C.2.16	Dowel Bar, Dia. 19 mm, 1.0 m Long (Round Bar and PVC Pipe)	kg	130	3,370	5,710	11,010	20,090	438,100	742,300	1,431,300	2,611,700
U-P3-Bq-113	C.2.17	Wet Stone Masonry	m ³	30	46,070	28,800	200,020	274,890	1,382,100	864,000	6,000,600	8,246,700
U-P3-Bq-113.	C.2.18	Weep Hole, Dia. 50 mm	No.	15	3,147	909	14,500	18,556	47,203	13,636	217,500	278,339
U-P3-Bq-113.	C.2.19	Pointing	m ²	40	2,000	1,010	8,900	11,910	80,000	40,400	356,000	476,400
U-P3-Bq-115	C.3	Pump Mechanical Works										
U-P3-Bq-116	C.3.1	Furnishing and Installing Main Pump Units	set	2	2,309,484,200	0	317,761,800	2,627,246,000	4,618,968,400	0	635,523,600	5,254,492,000
U-P3-Bq-117	C.3.2	Gear Boxes	set	2	651,506,700	0	89,640,800	741,147,500	1,303,013,400	0	179,281,600	1,482,295,000
U-P3-Bq-118	C.3.3	Diesel Engine Units	set	2	709,509,800	0	97,621,400	807,131,200	1,419,019,600	0	195,242,800	1,614,262,400
U-P3-Bq-120	C.3.4	Fuel Service Tank	set	1	86,235,600	0	11,865,200	98,100,800	86,235,600	0	11,865,200	98,100,800
U-P3-Bq-121	C.3.5	Fuel Transfer Pump	set	1	27,905,200	0	3,839,500	31,744,700	27,905,200	0	3,839,500	31,744,700
U-P3-Bq-124	C.3.6	Auxiliary Drainage Pump System	L.S.	1	200,982,500	0	27,653,200	228,635,700	200,982,500	0	27,653,200	228,635,700

Table 8.5.3 (4/8) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-3

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P3-Bq-126	C.3.7	Overhead Crane	set	1	274,478,500	0	37,765,500	312,244,000	274,478,500	0	37,765,500	312,244,000
U-P3-Bq-127	C.3.8	Piping System	L.S.	1	83,400,000	0	11,475,000	94,875,000	83,400,000	0	11,475,000	94,875,000
U-P3-Bq-129	C.3.9	Inspection and Test	L.S.	1	67,359,600	0	39,207,900	106,567,500	67,359,600	0	39,207,900	106,567,500
U-P3-Bq-130	C.3.10	Spare Parts	L.S.	1	122,832,300	0	16,900,500	139,732,800	122,832,300	0	16,900,500	139,732,800
U-P3-Bq-131	C.3.11	Maintenance Tools	L.S.	1	39,284,200	0	5,405,200	44,689,400	39,284,200	0	5,405,200	44,689,400
U-P3-Bq-133	C.4	Pump Electrical Works										
U-P3-Bq-134	C.4.1	Main Control Panel	L.S.	1	840,994,500	0	115,712,400	956,706,900	840,994,500	0	115,712,400	956,706,900
U-P3-Bq-135	C.4.2	Local Switch	L.S.	1	17,169,900	0	2,362,400	19,532,300	17,169,900	0	2,362,400	19,532,300
U-P3-Bq-138	C.4.3	Inspection and Test	L.S.	1	26,778,100	0	3,684,400	30,462,500	26,778,100	0	3,684,400	30,462,500
U-P3-Bq-139	C.4.4	Spare Parts	L.S.	1	33,532,400	0	4,613,800	38,146,200	33,532,400	0	4,613,800	38,146,200
U-P3-Bq-140	C.4.5	Maintenance Tools	L.S.	1	37,680,200	0	5,184,500	42,864,700	37,680,200	0	5,184,500	42,864,700
U-P3-Bq-143	C.4.6	Control Panel for Auxiliary Drainage Pumps	L.S.	1	86,825,000	0	11,946,300	98,771,300	86,825,000	0	11,946,300	98,771,300
U-P3-Bq-143	C.4.7	Generator System	L.S.	1	60,109,900	0	8,270,600	68,380,500	60,109,900	0	8,270,600	68,380,500
U-P3-Bq-144	C.5	Inspection Bridges										
U-P3-Bq-145	C.5.1	Concrete, Type B including Formwork	m ³	58	152,490	44,470	336,180	533,140	8,844,420	2,579,260	19,498,440	30,922,120
U-P3-Bq-146	C.5.2	Deformed Reinforcing Bars	kg	3150	1,558	3,122	3,797	8,477	4,906,755	9,834,300	11,961,810	26,702,865
U-P3-Bq-147	C.5.3	Safety Hand Rail	kg	50	2,298	1,051	4,848	8,197	114,900	52,550	242,400	409,850
U-P3-Bq-148	C.6	Fuel Tank										
U-P3-Bq-149	C.6.1	Structural Excavation	m ³	690	18,170	350	14,250	32,770	12,537,300	241,500	9,832,500	22,611,300
U-P3-Bq-150	C.6.2	Backfill	m ³	564	9,940	120	7,340	17,400	5,606,160	67,680	4,139,760	9,813,600
U-P3-Bq-151	C.6.3	Concrete, Type C1 including Formwork, Scaffolding and Falsework	m ³	52	306,400	42,750	523,460	872,610	15,932,800	2,223,000	27,219,920	45,375,720
U-P3-Bq-152	C.6.4	Concrete, Type E including Formwork	m ³	4	81,930	37,610	228,140	347,680	327,720	150,440	912,560	1,390,720
U-P3-Bq-153	C.6.5	Deformed Reinforcing Bars	kg	7220	1,558	3,122	3,797	8,477	11,246,594	22,540,840	27,417,228	61,204,662
U-P3-Bq-154	C.6.6	Fuel Tank and Accessories	L.S.	1	194,766,800	0	26,798,000	221,564,800	194,766,800	0	26,798,000	221,564,800
U-P3-Bq-155	C.6.7	Grounding	L.S.	1	14,261,400	0	1,962,300	16,223,700	14,261,400	0	1,962,300	16,223,700
U-P3-Bq-158	C.7	Parapet Wall										
U-P3-Bq-159	C.7.1	Structural Excavation	m ³	10	18,170	350	14,250	32,770	181,700	3,500	142,500	327,700
U-P3-Bq-160	C.7.2	Backfill with Sandy Soil	m ³	4	16,300	1,620	37,430	55,350	65,200	6,480	149,720	221,400
U-P3-Bq-161	C.7.3	Wet Stone Masonry	m ³	10	46,070	28,800	200,020	274,890	460,700	288,000	2,000,200	2,748,900
U-P3-Bq-162	C.7.4	Pointing	m ²	53	2,000	1,010	8,900	11,910	106,000	53,530	471,700	631,230
U-P3-Bq-163	D	BARU PUMPING STATION GATE										
U-P3-Bq-164	D.1	Gate Pier and Foundation										
U-P3-Bq-165	D.1.1	Structural Excavation	m ³	370	18,170	350	14,250	32,770	6,722,900	129,500	5,272,500	12,124,900
U-P3-Bq-166	D.1.2	Backfill with Sandy Soil	m ³	152	16,300	1,620	37,430	55,350	2,477,600	246,240	5,689,360	8,413,200
U-P3-Bq-167	D.1.3	Concrete, Type C1 including Formwork, Scaffolding and Falsework	m ³	203	407,770	43,020	689,310	1,140,100	82,777,310	8,733,060	139,929,930	231,440,300
U-P3-Bq-168	D.1.4	Concrete, Type E including Formwork	m ³	10	81,930	37,610	228,140	347,680	819,300	376,100	2,281,400	3,476,800
U-P3-Bq-168	D.1.5	Secondary Concrete, Type C2	m ³	10	146,230	42,250	421,190	609,670	1,462,300	422,500	4,211,900	6,096,700
U-P3-Bq-169	D.1.6	Deformed Reinforcing Bars	kg	17500	1,558	3,122	3,797	8,477	27,259,750	54,635,000	66,454,500	148,349,250
U-P3-Bq-170	D.1.7	Water Stop, 200 mm wide	m	20	61,278	0	6,022	67,300	1,225,560	0	120,440	1,346,000

Table 8.5.3 (5/8) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-3

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P3-Bq-170.	D.1.8	Dowel Bar, Dia. 19 mm, 1.0 m long (Round Bar and PVC Pipe)	kg	170	3,370	5,710	11,010	20,090	572,900	970,700	1,871,700	3,415,300
U-P3-Bq-171	D.1.9	Furnishing and Driving PC Piles, Dia. 500 mm, Type A	m	350	282,610	270	71,740		98,913,500	94,500	25,109,000	124,117,000
U-P3-Bq-172	D.1.10	Furnishing and Driving Steel Sheet Pile, Type II	m	282	348,510	80	39,230	387,820	98,279,820	22,560	11,062,860	109,365,240
U-P3-Bq-172.	D.1.11	Gabion Mattress, t= 500 mm (Galvanized)	m ³	19	659,260	3,060	142,060	804,380	12,525,940	58,140	2,699,140	15,283,220
U-P3-Bq-173	D.1.12	Safety Hand Rail (Type-I)	kg	120	2,049	481	4,231	6,761	245,880	57,720	507,720	811,320
U-P3-Bq-174	D.1.13	Ladder	L.S.	1	200,800	47,100	414,600	662,500	200,800	47,100	414,600	662,500
U-P3-Bq-175	D.1.14	Window	L.S.	1	68,000	33,400	304,200	405,600	68,000	33,400	304,200	405,600
U-P3-Bq-176	D.1.15	Door	L.S.	1	30,900	0	153,200	184,100	30,900	0	153,200	184,100
U-P3-Bq-176.	D.1.16	Roof Sealing	L.S.	1	2,932,900	2,216,900	7,211,100	12,360,900	2,932,900	2,216,900	7,211,100	12,360,900
U-P3-Bq-177	D.2	Gate Mechanical Works										
U-P3-Bq-178	D.2.1	Gate Leaf	set	1	156,447,200	0	200,708,100	357,155,300	156,447,200	0	200,708,100	357,155,300
U-P3-Bq-179	D.2.2	Guide Frame	set	1	64,420,200	0	185,409,100	249,829,300	64,420,200	0	185,409,100	249,829,300
U-P3-Bq-180	D.2.3	Hoist	set	1	590,352,500	0	157,244,900	747,597,400	590,352,500	0	157,244,900	747,597,400
U-P3-Bq-181	D.2.4	Stop Log	set	3	78,780,000	0	47,940,100	126,720,100	236,340,000	0	143,820,300	380,160,300
U-P3-Bq-181.	D.2.5	Spare Parts	L.S.	1	78,780,000	0	47,940,100	126,720,100	78,780,000	0	47,940,100	126,720,100
U-P3-Bq-182	E	BUILDINGS										
U-P3-Bq-185	E.1	Buildings										
U-P3-Bq-186	E.1.1	Pump Control Building	L.S.	1	75,257,500	16,223,000	178,184,900	269,665,400	75,257,500	16,223,000	178,184,900	269,665,400
U-P3-Bq-187	E.1.2	Management Office	L.S.	1	37,861,800	14,956,400	170,651,800	223,470,000	37,861,800	14,956,400	170,651,800	223,470,000
U-P3-Bq-188	E.1.3	Garage	L.S.	1	42,491,000	17,179,300	191,230,100	250,900,400	42,491,000	17,179,300	191,230,100	250,900,400
U-P3-Bq-189	E.1.4	Staff House	L.S.	1	21,461,100	7,907,000	97,952,000	127,320,100	21,461,100	7,907,000	97,952,000	127,320,100
U-P3-Bq-190	E.1.5	External Works	L.S.	1	28,020,200	6,426,500	84,579,200	119,025,900	28,020,200	6,426,500	84,579,200	119,025,900
U-P3-Bq-191	F	BARU RETARDING POND										
U-P3-Bq-192	F.1	Preparatory Works										
U-P3-Bq-193	F.1.1	Coffering and Dewatering	L.S.	1	62,012,100	2,345,100	38,329,300	102,686,500	62,012,100	2,345,100	38,329,300	102,686,500
U-P3-Bq-194	F.2	Earth Work										
U-P3-Bq-195	F.2.1	Common Excavation Including Hauling and Spoiling	m ³	33500	17,400	330	13,700	31,430	582,900,000	11,055,000	458,950,000	1,052,905,000
U-P3-Bq-196	F.3	Revetment Type A-4										
U-P3-Bq-197	F.3.1	Structural Excavation	m ³	3120	18,170	350	14,250	32,770	56,690,400	1,092,000	44,460,000	102,242,400
U-P3-Bq-198	F.3.2	Backfill with Cobble	m ³	666	17,827	2,154	48,252	68,233	11,872,782	1,434,564	32,135,832	45,443,178
U-P3-Bq-199	F.3.3	Backfill with Gravel	m ³	905	18,580	4,060	88,210	110,850	16,814,900	3,674,300	79,830,050	100,319,250
U-P3-Bq-200	F.3.4	Backfill with Sandy Soil	m ³	266	16,300	1,620	37,430	55,350	4,335,800	430,920	9,956,380	14,723,100
U-P3-Bq-201	F.3.5	Wet Stone Masonry	m ³	870	46,070	28,800	200,020	274,890	40,080,900	25,056,000	174,017,400	239,154,300
U-P3-Bq-202	F.3.6	Concrete, Type C1 including Formwork	m ³	336	154,640	42,250	462,680	659,570	51,959,040	14,196,000	155,460,480	221,615,520
U-P3-Bq-203	F.3.7	Concrete, Type E including Formwork	m ³	105	96,480	37,610	300,410	434,500	10,130,400	3,949,050	31,543,050	45,622,500
U-P3-Bq-204	F.3.8	Deformed Reinforcing Bars	kg	13730	1,230	2,809	3,300	7,339	16,886,527	38,566,197	45,310,373	100,763,097
U-P3-Bq-205	F.3.9	Pointing	m ²	3376	2,000	1,010	8,900	11,910	6,752,000	3,409,760	30,046,400	40,208,160

Table 8.5.3 (6/8) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-3

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P3-Bq-206	F.3.10	Weep Hole, Dia. 50 mm	No.	482	3,147	909	14,500	18,556	1,516,783	438,182	6,989,000	8,943,965
U-P3-Bq-206.	F.3.11	Log Pile, Dia. 150 mm, L = 3.0 m	m	745	15,658	150	18,917	34,725	11,665,458	111,750	14,092,917	25,870,125
U-P3-Bq-207	F.3.12	Sodding	m ²	702	1,230	0	6,070	7,300	863,460	0	4,261,140	5,124,600
U-P3-Bq-208	F.4	Outlet Works of Bandarharjo West Secondary Channel										
U-P3-Bq-209	F.4.1	Structural Excavation	m ³	1240	18,170	350	14,250	32,770	22,530,800	434,000	17,670,000	40,634,800
U-P3-Bq-210	F.4.2	Backfill	m ³	299	9,940	120	7,340	17,400	2,972,060	35,880	2,194,660	5,202,600
U-P3-Bq-211	F.4.3	Backfill with Gravel	m ³	35	18,580	4,060	88,210	110,850	650,300	142,100	3,087,350	3,879,750
U-P3-Bq-211.	F.4.4	Cobble Stone	m ³	14	14,250	2,120	45,410	61,780	199,500	29,680	635,740	864,920
U-P3-Bq-212	F.4.5	Concrete, Type C1 including Formwork and Falsework	m ³	39	150,330	44,260	412,150	606,740	5,862,870	1,726,140	16,073,850	23,662,860
U-P3-Bq-213	F.4.6	Concrete, Type E including Formwork	m ³	6	102,060	37,610	328,090	467,760	612,360	225,660	1,968,540	2,806,560
U-P3-Bq-214	F.4.7	Deformed Reinforcing Bars	kg	2430	1,367	3,121	3,667	8,154	3,320,838	7,583,787	8,910,324	19,814,949
U-P3-Bq-215	F.4.8	Wet Stone Masonry	m ³	280	46,070	28,800	200,020	274,890	12,899,600	8,064,000	56,005,600	76,969,200
U-P3-Bq-216	F.4.9	Log Pile, Dia. 150 mm L=2.0 m	m	149	18,940	190	20,950	40,080	2,822,060	28,310	3,121,550	5,971,920
U-P3-Bq-217	F.4.10	Weep Hole, Dia. 50 mm	No.	48	3,147	909	14,500	18,556	151,049	43,636	696,000	890,685
U-P3-Bq-217.	F.4.11	Pointing	m ²	149	2,000	1,010	8,900	11,910	298,000	150,490	1,326,100	1,774,590
U-P3-Bq-218	F.4.12	Stop Log (wood)	L.S.	1	0	0	0	0	0	0	0	0
U-P3-Bq-219	F.5	Inlet Works of Baru Conveyance Channel										
U-P3-Bq-220	F.5.1	Structural Excavation	m ³	370	18,170	350	14,250	32,770	6,722,900	129,500	5,272,500	12,124,900
U-P3-Bq-221	F.5.2	Backfill	m ³	242	9,940	120	7,340	17,400	2,405,480	29,040	1,776,280	4,210,800
U-P3-Bq-222	F.5.3	Backfill with Gravel	m ³	47	18,580	4,060	88,210	110,850	873,260	190,820	4,145,870	5,209,950
U-P3-Bq-222.	F.5.4	Cobble Stone	m ³	7	14,250	2,120	45,410	61,780	99,750	14,840	317,870	432,460
U-P3-Bq-223	F.5.5	Concrete, Type C1 including Formwork, Scaffolding and Falsework	m ³	59	308,890	42,770	545,910	897,570	18,224,510	2,523,430	32,208,690	52,956,630
U-P3-Bq-224	F.5.6	Deformed Reinforcing Bars	kg	3840	1,558	3,122	3,797	8,477	5,981,568	11,988,480	14,582,016	32,552,064
U-P3-Bq-225	F.5.7	Concrete, Type E including Formwork	m ³	6	88,120	37,610	258,890	384,620	528,720	225,660	1,553,340	2,307,720
U-P3-Bq-226	F.5.8	Wet Stone Masonry	m ³	100	46,070	28,800	200,020	274,890	4,607,000	2,880,000	20,002,000	27,489,000
U-P3-Bq-227	F.5.9	Log Pile, Dia. 150 mm L= 2.0 m	m	93	18,940	190	20,950	40,080	1,761,420	17,670	1,948,350	3,727,440
U-P3-Bq-228	F.5.10	Weep Hole, Dia. 50 mm	No.	140	3,147	909	14,500	18,556	440,559	127,273	2,030,000	2,597,832
U-P3-Bq-228.	F.5.11	Pointing	m ²	118	2,000	1,010	8,900	11,910	236,000	119,180	1,050,200	1,405,380
U-P3-Bq-229	F.6	Outlet Works of Future Secondary Channel										
U-P3-Bq-230	F.6.1	Structure Excavation	m ³	420	18,170	350	14,250	32,770	7,631,400	147,000	5,985,000	13,763,400
U-P3-Bq-231	F.6.2	Backfill	m ³	230	9,940	120	7,340	17,400	2,286,200	27,600	1,688,200	4,002,000
U-P3-Bq-232	F.6.3	Backfill with Gravel	m ³	20	18,580	4,060	88,210	110,850	371,600	81,200	1,764,200	2,217,000
U-P3-Bq-232.	F.6.4	Cobble Stone	m ³	7	14,250	2,120	45,410	61,780	99,750	14,840	317,870	432,460
U-P3-Bq-233	F.6.5	Concrete, Type C1 including Formwork	m ³	16	291,030	42,780	539,530	873,340	4,656,480	684,480	8,632,480	13,973,440
U-P3-Bq-234	F.6.6	Concrete, Type E including Formwork	m ³	3	93,540	37,610	285,810	416,960	280,620	112,830	857,430	1,250,880
U-P3-Bq-235	F.6.7	Deformed Reinforcing Bars	kg	890	1,558	3,122	3,797	8,477	1,386,353	2,778,580	3,379,686	7,544,619
U-P3-Bq-236	F.6.8	Wet Stone Masonry	m ³	150	46,070	28,800	200,020	274,890	6,910,500	4,320,000	30,003,000	41,233,500
U-P3-Bq-237	F.6.9	Log Pile, Dia. 150mm L=2.0 m	m	161	18,940	190	20,950	40,080	3,049,340	30,590	3,372,950	6,452,880
U-P3-Bq-238	F.6.10	Weep Hole, Dia. 50 mm	No.	26	3,147	909	14,500	18,556	81,818	23,636	377,000	482,455
U-P3-Bq-238.	F.6.11	Pointing	m ²	157	2,000	1,010	8,900	11,910	314,000	158,570	1,397,300	1,869,870

Table 8.5.3 (7/8) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-3

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost				
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost	
U-P3-Bq-239	F.7	Inspection Road											
U-P3-Bq-240	F.7.1	Stripping of Top Soil	m ³	394	16,920	350	11,920	29,190	6,666,480	137,900	4,696,480	11,500,860	
U-P3-Bq-241	F.7.2	Embankment	m ³	1669	26,300	1,210	38,300	65,810	43,894,700	2,019,490	63,922,700	109,836,890	
U-P3-Bq-244	F.7.3	Aggregate Class A	m ³	444	35,670	4,370	97,910	137,950	15,837,480	1,940,280	43,472,040	61,249,800	
U-P3-Bq-245	F.7.4	Aggregate Class B	m ³	611	35,010	4,370	97,420	136,800	21,391,110	2,670,070	59,523,620	83,584,800	
U-P3-Bq-245.	F.7.5	Sand Bedding	m ³	172	7,420	1,490	35,340	44,250	1,276,240	256,280	6,078,480	7,611,000	
U-P3-Bq-245.	F.7.6	Concrete Block Pavement	m ²	2730	10,710	5,700	47,480	63,890	29,238,300	15,561,000	129,620,400	174,419,700	
U-P3-Bq-245.	F.7.7	Cement Mortar	m ³	8	15,900	8,000	70,700	94,600	127,200	64,000	565,600	756,800	
U-P3-Bq-245.	F.7.8	Concrete Kerb	m ³	67	155,430	43,070	578,300	776,800	10,413,810	2,885,690	38,746,100	52,045,600	
U-P3-Bq-245.	F.7.9	Sodding	m ²	1006	1,230	0	6,070	7,300	1,237,380	0	6,106,420	7,343,800	
U-P3-Bq-246	G	BARU CONVEYANCE CHANNEL											
U-P3-Bq-247	G.1	Preparatory Works											
U-P3-Bq-248	G.1.1	Coffering and Dewatering	L.S.	1	62,828,800	2,880,200	41,478,700	107,187,700	62,828,800	2,880,200	41,478,700	107,187,700	
U-P3-Bq-249	G.2	Channel Works						0	0	0	0	0	
U-P3-Bq-250	G.2.1	Structural Excavation	m ³	15440	18,170	350	14,250	32,770	280,544,800	5,404,000	220,020,000	505,968,800	
U-P3-Bq-251	G.2.2	Structural Excavation with Shoring	m ³	9400	162,093	347	43,987	206,427	1,523,677,333	3,258,667	413,474,667	1,940,410,667	
U-P3-Bq-252	G.2.3	Backfill with Sandy Soil	m ³	17721	16,300	1,620	37,430	55,350	288,852,300	28,708,020	663,297,030	980,857,350	
U-P3-Bq-253	G.2.4	Concrete, Type C1 including Formwork, Scaffolding and Falsework	m ³	3132	288,880	42,720	518,670	850,270	904,772,160	133,799,040	1,624,474,440	2,663,045,640	
U-P3-Bq-254	G.2.5	Concrete, Type E including Formwork	m ³	254	79,520	37,610	216,170	333,300	20,198,080	9,552,940	54,907,180	84,658,200	
U-P3-Bq-255	G.2.6	Deformed Reinforcing Bars	kg	238740	1,402	2,810	3,418	7,629	334,689,606	670,811,652	815,917,824	1,821,419,082	
U-P3-Bq-256	G.2.7	Water Stop 200 mm wide	m	402	61,278	0	6,022	67,300	24,633,756	0	2,420,844	27,054,600	
U-P3-Bq-257	G.3	Inspection Road											
U-P3-Bq-258	G.3.1	Embankment	m ³	2139	26,300	1,210	38,300	65,810	56,255,700	2,588,190	81,923,700	140,767,590	
U-P3-Bq-261	G.3.2	Aggregate Class A	m ³	248	35,670	4,370	97,910	137,950	8,846,160	1,083,760	24,281,680	34,211,600	
U-P3-Bq-262.	G.3.3	Sand Bedding	m ³	87	7,420	1,490	35,340	44,250	645,540	129,630	3,074,580	3,849,750	
U-P3-Bq-262.	G.3.4	Concrete Block Pavement	m ²	1381	10,710	5,700	47,480	63,890	14,790,510	7,871,700	65,569,880	88,232,090	
U-P3-Bq-262.	G.3.5	Cement Mortar	m ³	4	15,900	8,000	70,700	94,600	63,600	32,000	282,800	378,400	
U-P3-Bq-262.	G.3.6	Concrete Kerb	m ³	34	155,430	43,070	578,300	776,800	5,284,620	1,464,380	19,662,200	26,411,200	
U-P3-Bq-263	H	BANDARHARJO WEST SECONDARY CHANNEL											
U-P3-Bq-264	H.1	Preparatory Works											
U-P3-Bq-265	H.1.1	Coffering and Dewatering	L.S.	1	62,234,500	2,490,800	39,187,000	103,912,300	62,234,500	2,490,800	39,187,000	103,912,300	
U-P3-Bq-266	H.2	Channel Works											
U-P3-Bq-267	H.2.1	Common Excavation including hauling and spoiling	m ³	12400	19,170	360	14,850	34,380	237,708,000	4,464,000	184,140,000	426,312,000	
U-P3-Bq-268	H.2.2	Structural Excavation	m ³	2170	18,170	350	14,250	32,770	39,428,900	759,500	30,922,500	71,110,900	
U-P3-Bq-269	H.2.3	Backfill with Sandy Soil	m ³	8634	16,300	1,620	37,430	55,350	140,734,200	13,987,080	323,170,620	477,891,900	
U-P3-Bq-269.	H.2.4	Cobble Stone	m ³	256	14,250	2,120	45,410	61,780	3,648,000	542,720	11,624,960	15,815,680	
U-P3-Bq-270	H.2.5	Wet Stone Masonry	m ³	3950	46,070	28,800	200,020	274,890	181,976,500	113,760,000	790,079,000	1,085,815,500	
U-P3-Bq-271	H.2.6	Cement Mortar Plastering	m ³	17	15,900	8,000	70,700	94,600	270,300	136,000	1,201,900	1,608,200	

Table 8.5.3 (8/8) PAYMENT ITEMS AND THE COSTS FOR PACKAGE-3

ID No.	Item No.	Description	Unit	Quantity	Unit Cost				Cost			
					PF/C	IF/C	L/C	Total Unit Cost	PF/C	IF/C	L/C	Total Cost
U-P3-Bq-272	H.2.7	Pointing	m ²	2519	2,000	1,010	8,900	11,910	5,038,000	2,544,190	22,419,100	30,001,290
U-P3-Bq-272.	H.2.8	Weep Hole, Dia. 50 mm	No.	1433	3,147	909	14,500	18,556	4,509,441	1,302,727	20,778,500	26,590,668
U-P3-Bq-273	H.2.9	Water Stop, 200 mm wide	m	208	61,278	0	6,022	67,300	12,745,824	0	1,252,576	13,998,400
U-P3-Bq-273.	H.2.10	Log Pile, Dia 150 mm L= 2.0 m	m	7070	18,940	190	20,950	40,080	133,905,800	1,343,300	148,116,500	283,365,600
U-P3-Bq-275	H.3	Inspection Road										
U-P3-Bq-276	H.3.1	Stripping of Top Soil	m ³	365	16,920	350	11,920	29,190	6,175,800	127,750	4,350,800	10,654,350
U-P3-Bq-277	H.3.2	Embankment	m ³	1259	26,300	1,210	38,300	65,810	33,111,700	1,523,390	48,219,700	82,854,790
U-P3-Bq-280	H.3.3	Aggregate Class A	m ³	526	35,670	4,370	97,910	137,950	18,762,420	2,298,620	51,500,660	72,561,700
U-P3-Bq-281	H.3.4	Aggregate Class B	m ³	656	35,010	4,370	97,420	136,800	22,966,560	2,866,720	63,907,520	89,740,800
U-P3-Bq-281.	H.3.5	Sand Bedding	m ³	192	7,420	1,490	35,340	44,250	1,424,640	286,080	6,785,280	8,496,000
U-P3-Bq-281.	H.3.6	Concrete Block Pavement	m ²	3031	10,710	5,700	47,480	63,890	32,462,010	17,276,700	143,911,880	193,650,590
U-P3-Bq-281.	H.3.7	Cement Mortar	m ³	8	15,900	8,000	70,700	94,600	127,200	64,000	565,600	756,800
U-P3-Bq-281.	H.3.8	Concrete Kerb	m ³	67	155,430	43,070	578,300	776,800	10,413,810	2,885,690	38,746,100	52,045,600
U-P3-Bq-282	I	BANDARHARJO EAST SECONDARY CHANNEL										
U-P3-Bq-283	I.1	Preparatory Works										
U-P3-Bq-284	I.1.1	Coffering and Dewatering	L.S.	1	193,770,600	2,835,700	137,412,900	334,019,200	193,770,600	2,835,700	137,412,900	334,019,200
U-P3-Bq-285	I.2	Channel Works										
U-P3-Bq-286	I.2.1	Structural Excavation	m ³	3450	18,170	350	14,250	32,770	62,686,500	1,207,500	49,162,500	113,056,500
U-P3-Bq-287	I.2.2	Backfill with Sandy Soil	m ³	2701	16,300	1,620	37,430	55,350	44,026,300	4,375,620	101,098,430	149,500,350
U-P3-Bq-288	I.2.3	Concrete, Type C1 including Formwork, Scaffolding and Falsework	m ³	461	304,870	42,750	526,450	874,070	140,545,070	19,707,750	242,693,450	402,946,270
U-P3-Bq-289	I.2.4	Concrete, Type E including Formwork	m ³	38	79,570	37,610	216,390	333,570	3,023,660	1,429,180	8,222,820	12,675,660
U-P3-Bq-290	I.2.5	Deformed Reinforcing Bars	kg	34850	1,402	2,810	3,418	7,629	48,856,215	97,921,530	119,103,360	265,881,105
U-P3-Bq-291	I.2.6	Water Stop, 200 mm wide	m	69	61,278	0	6,022	67,300	4,228,182	0	415,518	4,643,700
U-P3-Bq-298	J	MISCELLANEOUS WORKS										
U-P3-Bq-299	J.1	Tree Planting	L.S.	1	13,411,800	91,500	66,524,600	80,027,900	13,411,800	91,500	66,524,600	80,027,900
U-P3-Bq-291.	J.2	Staff Gauge	L.S.	1	20,736,300	352,650	54,964,950	76,053,900	20,736,300	352,650	54,964,950	76,053,900
U-P3-Bq-300	K	MAINTENANCE EQUIPMENT										
U-P3-Bq-301	K.1	Supplying Maintenance Equipment		1	1,191,670,300	0	52,111,000	1,243,781,300	1,191,670,300	0	52,111,000	1,243,781,300
U-P3-Bq-302	K.1.1	Supply of Backhoe, 0.35 m ³	No.	1								
U-P3-Bq-303	K.1.2	Supply of Dump Truck, 8 t	No.	1								
U-P3-Bq-304	K.1.3	Supply of Truck-crane, 2.2 t	No.	1								
U-P3-Bq-305	K.1.4	Supply of Garbage Container, 6 m ³	No.	2								
Total Cost									27,001,369,347	2,583,558,445	20,027,976,728	49,612,904,520

Table 8.5.4 ENGINEERING SERVICE COST

COST FOR ENGINEERING SERVICES ON CONSTRUCTION SUPERVISION SUMMARY

I.	FOREIGN CURRENCY IN YEN	¥136,266,958
	1.1 Remuneration (Professional A)	¥124,854,170
	1.2 Direct Cost	¥11,412,788
II.	LOCAL CURRENCY PORTION	Rp.3,788,754,000
	3.1 Remuneration (Professional B)	Rp.1,536,500,000
	3.2 Direct Cost	Rp.1,921,154,000
	3.3 Equipment Cost	Rp.331,100,000
III.	TOTAL (I + II + III)	Rp.12,018,561,038
	Foreign Currency in Yen	Rp.8,229,807,038
	Local Currency in Rupiah	Rp.3,788,754,000
		or equivalent to ¥199,000,139
IV.	PHYSICAL CONTINGENCY (6%)	Rp.721,113,662
	Foreign Currency in Yen	Rp.493,788,422
	Local Currency in Rupiah	Rp.227,325,240
		or equivalent to ¥11,940,008
V.	PRICE CONTINGENCY (F/C 3%, L/C 8%)	Rp.582,994,203
	Foreign Currency in Yen	Rp.261,707,864
	Local Currency in Rupiah	Rp.321,286,339
		or equivalent to ¥9,653,063
VI.	VAT (10% OF III + IV + V)	Rp.1,332,266,890
VII.	TOTAL (III + IV + V + VI)	Rp.14,654,935,794
		or equivalent to ¥242,652,532

Note: Applied Conversion Rate as of July 31, 1999

Table 8.5.5 CALCULATION SHEET FOR COMPENSATION COST

Description	Unit	Quantities	Unit Cost			Total Cost			Remarks
			PF/C	IF/C	L/C	PF/C	IF/C	L/C	
Demolition of Existing House	houses	3	0	0	1,000,000	0	0	3,000,000	
Construction of House newly	houses	3	0	0	30,000,000	0	0	90,000,000	
Purchasing of Land	m2	47,000	0	0	100,000	0	0	4,700,000,000	
Total			0	0	31,100,000	0	0	4,793,000,000	

Table 8.5.6 PRICE CONTINGENCY

	P/F	I/F	L/F	Total Cost
Construction Base Cost	8,300,600,545	743,337,944	18,905,119,617	27,949,058,106
Engineering Service Cost	261,707,864		321,286,339	582,994,203
Compensation Cost			845,408,512	845,408,512
Administration Cost			2,015,612,663	2,015,612,663
Total	8,562,308,409	743,337,944	22,087,427,131	31,393,073,484

Note : All costs are exclusive of Tax.

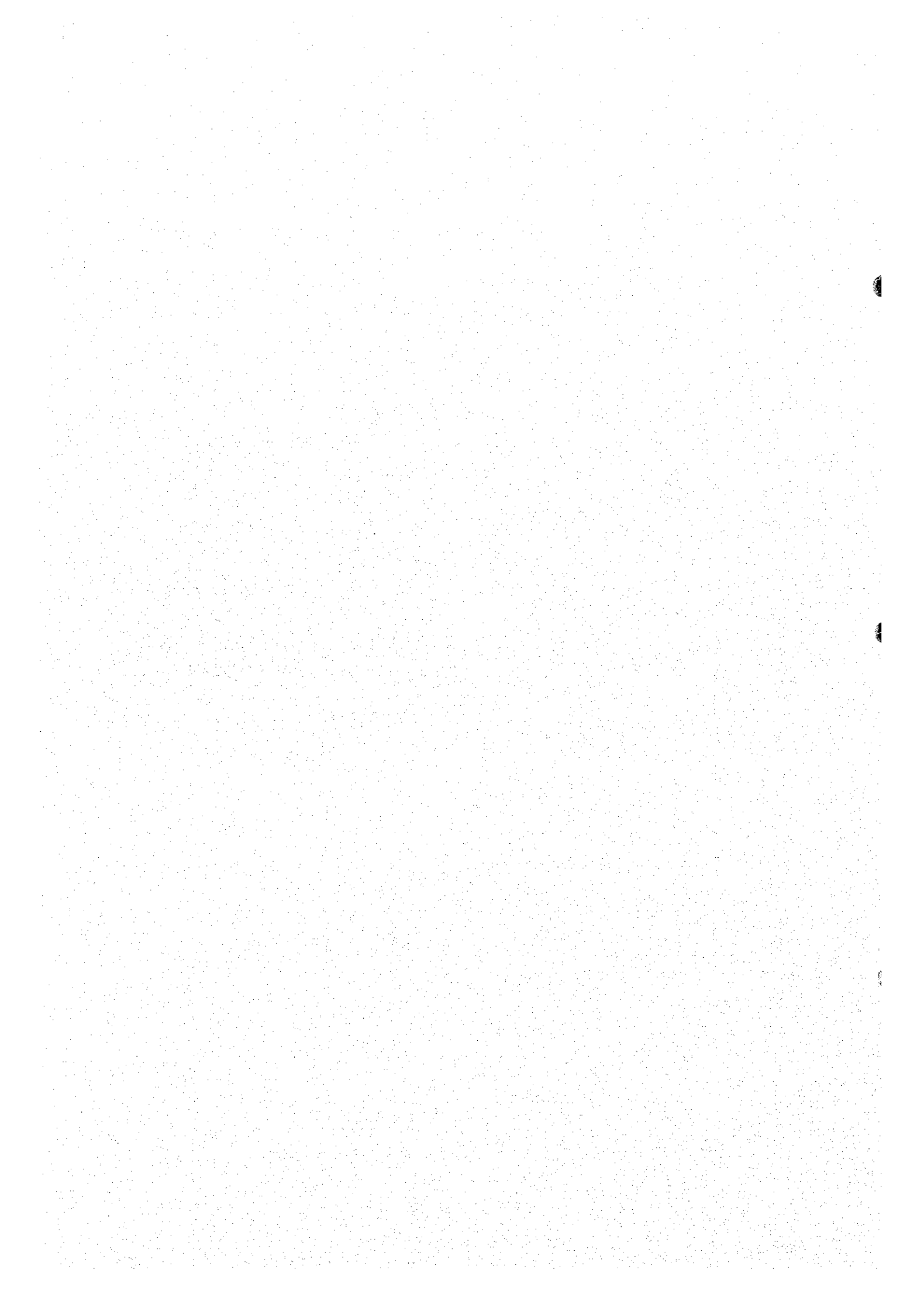
Table 8.5.7 DISBURSEMENT SCHEDULE

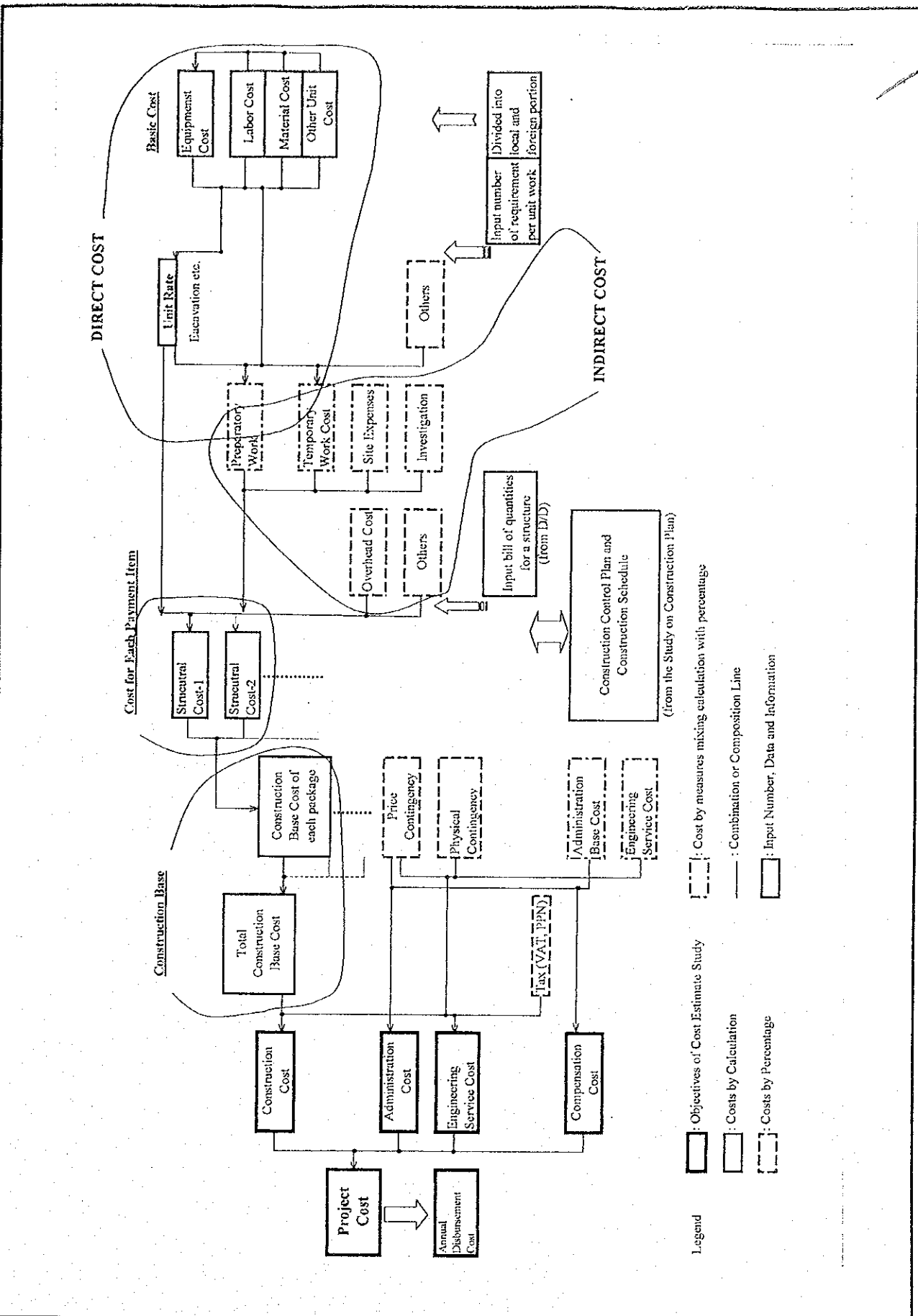
Work Name	Currency	2000	2001	2002	2003	Total
Package-1	Rupiah	0	0	11,063,148,297	16,699,644,835	27,762,793,133
	Converting into Yen	0	0	183,180,669	276,508,280	459,688,949
Package-2	Rupiah	0	19,579,862,100	56,025,758,738	35,823,218,236	111,428,839,074
	Converting into Yen	0	324,198,152	927,659,622	593,151,326	1,845,009,100
Package-3	Rupiah	0	12,908,890,245	42,034,074,564	12,128,854,209	67,071,819,018
	Converting into Yen	0	213,741,974	695,989,034	200,826,344	1,110,557,352
Administration Cost	Rupiah	0	2,365,258,874	6,551,122,394	3,881,320,934	12,797,702,202
	Converting into Yen	0	39,163,328	108,471,743	64,265,880	211,900,952
Engineering Service Cost	Rupiah	439,648,074	2,239,063,487	7,520,549,914	4,455,674,320	14,654,935,794
	Converting into Yen	7,279,576	37,073,818	124,523,267	73,775,871	242,652,532
Compensation Cost	Rupiah		5,925,988,512			5,925,988,512
	Converting into Yen	0	98,120,943	0	0	98,120,943
Total	Rupiah	439,648,074	43,019,063,217	123,194,653,908	72,988,712,534	239,642,077,734
	Converting into Yen	7,279,576	712,298,214	2,039,824,335	1,208,527,702	3,967,929,827

Note : All costs include price and physical contingencies and tax.

FIGURE

CHAPTER 8
COST ESTIMATE





THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 8.2.1

FLOWCHART OF COST ESTIMATE