Appendix 6

Table 6A: Indicative Program Investment Plan by Tranche(in USD million)

	Tranche1	Tranche2	Tranche3	Total
1. Urban Infrastructure and Service Improvement				
Water Supply	9.77	62.21	24.39	96.37
Sewerage	-	-	51.80	51.80
Solid waste management	3.82	5.72	4.34	13.87
Resettlement and Land Acquisition	-	3.76	7.40	11.17
·	13.59	71.69	87.93	173.21
2. Capacity Development and Investment Program Management				
Investment Program Management	11.69	0.47	0.47	12.64
Institutional Cpaocity Development	2.35	3.53	-	5.88
Staff and Incremental Recurrent cost	3.00	3.00	0.14	6.14
	17.05	7.00	0.61	24.66
3. Taxes and Duties	4.21	10.33	12.27	26.80
Subtotal (A)	34.84	89.03	100.80	224.67
B. Contingencies ^b				
Physical contingency	0.85	3.89	5.20	9.94
Price contingency	2.19	7.97	11.78	21.94
	3.04	11.86	16.98	31.88
C. Financing Charges During Implementation ^c	4.79	12.27	12.06	29.12
Total (A+B+C)	42.66	113.16	129.85	285.67

^a In end 2008 prices.

^b Physical contingencies computed at 10% for civil works; and 5% for equipment. Price contingencies are computed at 0.5% for domestic inflation and at 0.4%–1.4% for international inflation.

^c Includes interest and commitment charges. Financing charges are estimated, assuming an interest rate computed at the six-months London interbank offered rate and a spread of 20 basis point and a commitment fee of 0.15%.

(http://www.adb.org/Media/Articles/2007/12313-asian-loans-charges/)

Source: Asian Development Bank estimates.

			(\$000)				
	Agartala	Aizawl	Gangtok	Kohima	Shillong	Program	
Item	Tripura	Mizoram	Sikkim	Nagaland	Meghalaya	Coordination	Total
A. Base Cost ^a							
1. Urban Infrastructure and							
Service Improvement							
a. Water Supply							
Tranche 1	1,340.7	2,342.4	4,832.8	1,254.4	0.0	0.0	9,770.2
Tranche 2	33,442.6	18,724.5	2,693.0	9,206.1	0.0	0.0	64,066.2
Tranche 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Sewerage and Sanitation							
Tranche 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tranche 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tranche 3	0.0	17,636.8	17,477.6	20,370.2	27,898.9	0.0	83,383.5
c. Solid-Waste Management							
Tranche 1	0.0	0.0	0.0	3,511.3	304.3	0.0	3,815.7
Tranche 2	2,430.1	982.1	1,683.3	398.0	2,134.0	0.0	7,627.4
Tranche 3	552.5	2,516.2	0.0	0.0	1,474.3	0.0	4,542.9
2. Capacity Development		,					
and Investment Program							
Management							
a. Capacity Building							
Tranche 1	1,176.2	0.0	0.0	0.0	1,176.2	0.0	2,352.4
Tranche 2	0.0	1,176.2	1,176.2	1,176.2	0.0	0.0	3,528.6
Tranche 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Investment Program							
Management							
Tranche 1	2,801.7	2,942.1	2,779.3	2,787.3	2,769.3	613.1	14,692.9
Tranche 2	572.5	572.5	572.5	572.5	572.5	613.1	3,475.7
Tranche 3	0.0	0.0	0.0	0.0	0.0	613.1	613.1
3. Taxes and Duties	5,742.2	6,275.1	4,339.7	5,618.3	4,579.8	246.8	26,801.9
Subtotal (A)	48,058.5	53,167.8	35,554.5	44,894.3	40,909.4	2,086.1	224,670.5
B. Contingencies ^b	6,255.1	7,725.5	5,175.9	6,800.1	5,790.0	135.3	31,881.9
C. Financing Charges					-		-
During Implementation ^c	6,625.8	6,925.5	4,544.8	5,802.8	4,960.8	258.7	29,118.4
Total (A+B+C)	60,939.4	67,818.7	45,275.1	57,497.2	51,660.1	2,480.0	285,670.7
^a In and 2008 prices	,	,	,	,	, -	,	,

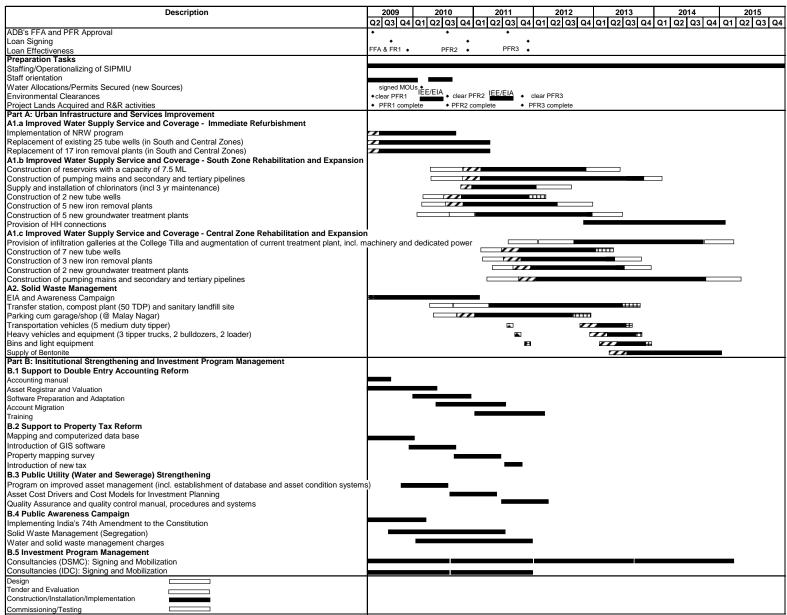
Table 6B: Indicative Program Investment Plan

^a In end 2008 prices.

^b Physical contingencies computed at 10% for civil works; and 5% for equipment. Price contingencies are computed at 0.5% for domestic inflation and at 0.4%–1.4% for international inflation.
 ^c Includes interest and commitment charges. Financing charges are estimated, assuming an interest rate computed

^c Includes interest and commitment charges. Financing charges are estimated, assuming an interest rate computed at the six-months London interbank offered rate and a spread of 20 basis point and a commitment fee of 0.15%. (http://www.adb.org/Media/Articles/2007/12313-asian-loans-charges/)

Source: Asian Development Bank estimates.



AGARTALA - SUMMARY INVESTMENT PROGRAM IMPLEMENTATION

	-	1	1	-		-	1
Description	2009	2010	2011	2012	2013	2014	2015
	Q2 Q3 Q4	4 Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q	4 Q1 Q2 Q3 Q	4 Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q	4 Q1 Q2 Q3 Q4
ADB's FFA and PFR Approval	•	•	•				
Loan Signing	FFA & FR1	•	PFR3	•			
Loan Effectiveness	FFA & FKI .	PFR2 ◆	PFR3	•			
Preliminary Tasks							
Staffing/Operationalizing of SIPMIU							
Staff orientation Environmental Clearances	 clear PFR1 		FR2 IEE/EIA	clear PFR3			
	 Clear PER1 PER1 com 	IEE/EIA	-FR2 •	PFR3 complete			
Project Lands Acquired and R&R activities Part A: Urban Infrastructure and Services Improvement	PFR1 com	PFR2	complete +	PFR3 complete			
A1.a Improved Water Supply Service and Coverage - Immediate Refurbishment							
NRW program							
Supply and installation of household meters (13,000)							
Supply and installation of chlorinators are major reservoirs (2)							
Replacement of zonal reservoirs (7)							
Water testing laboratory equipment							
A1.b Improved Water Supply Service and Coverage - Rehabilitation and Expansion							
Provision of a dedicated power supply 132 KV line							
Feeder mains, primary (37km) and secondary and tertiary (122 km) distribution							
Construction of 9 new reservoirs							
A2. Sewerage and Sanitation							
Primary (23 km) and Secondary (30 km) Sewerage Network							
Sewage Treatment Plant (1) and Disposal (+5 yr maintenance contract)			1				
Provision of HH connections (incl. inspection chambers, 9152) and community blocks (6), HH assistar	nce (1000)						
Sewerage maintenance equipment, tools and lab equipment	1						
A3. Solid Waste Management					-		
EIA and Awareness Campaign							
Transfer station, compost plant (50 TDP) and weighbridge							
Parking cum garage/shop (@ Thumpui)							
New disposal site (Muallungthu) and rehabilitation of existing one (Tuirial)							
Primary and Secondary Collection equipment: light equip and vehicles (10 medium duty tipper, 6 tippe	r trucks, 8 du	mper placer truck	s)				
Equipment for compost plant				<i>711</i>			
Equipment for landfill site		i			=		
Part B: Insititutional Strengthening and Investment Program Management							
B.1 Support to Double Entry Accounting Reform							
Accounting manual							
Asset Registrar and Valuation							
Software Preparation and Adaptation							
Account Migration			_				
Training							
B2 Support to Property Tax Reform							
Mapping and computerized data base							
Introduction of GIS software							
Property mapping survey							
Introduction of new tax							
B3. Public Utility (Water and Sewerage) Strengthening	1						
Program on improved asset management (incl. establishment of database and asset condition system	is)			-			
Asset Cost Drivers and Cost Models for Investment Planning							
Quality Assurance and quality control manual, procedures and systems							
B4. Public Awareness Campaign							
Implementing India's 74th Amendment to the Constitution							
Solid Waste Management (Segregation)							
Water and solid waste management charges							
B5. Investment Program Management							
Consultancies (DSMC): Signing and Mobilization							
Consultancies (IDC): Signing and Mobilization							
Design							
Tender and Evaluation							
Construction/Installation/Implementation							
Commissioning/Testing							

AIZAWL - SUMMARY INVESTMENT PROGRAM IMPLEMENTATION

GANGTOK - SUMMARY INVESTMENT PROGRAM IMPLEMENTATION

Description 2009 2014 2012 2014 2014 2015 DBD FFA and PApproxII 102 (00) (00 /	B 1.4	
ALBS FFA and PFR Approval Loss Spans Part and PFR Approval Performing Yeaks Performing Yeak	Description	
Lan Brainway (1997) (19		Q2 Q3 Q4 Q1 Q2 Q3 Q4
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Preliminary Tasks SuffingOperationalizing of SIPAUU Suff information SuffingOperationalizing of SIPAUU Suff information SuffingOperationalizing of SIPAUU Suff information Construction of a suffix of Safe activities PRE compute PRE com	Loan Signing	• • •
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Design		
Tender and Evaluation Construction/Implementation		
Construction/Installation/Implementation		

KOHIMA - SUMMARY INVESTMENT PROGRAM IMPLEMENTATION

Description	2009	2010	2011	2012	2013	2014	2015
ADB's FFA and PFR Approval		Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Loan Signing	· ·	•	•				
Loan Effectiveness	FFA & FR1 🔸	FR2 •	PFR3				
Preliminary Tasks	-						
Staffing/Operationalizing of SIPMIU							
Staff orientation							
Water Allocations/Permits Secured (new Sources)	signed MOU						
Environmental Clearances	 clear PFR1 	IEE/EIA + clear Pf		clear PFR3			
Project Lands Acquired and R&R activities	 PFR1 compl 	ete + PFR2 co	omplete • P	FR3 complete			
Part A: Urban Infrastructure and Services Improvement A1a Improved Water Supply Service and Coverage - Rehabilitation and Expansion							
Construction of 19 replacement R.C.C. Zonal Service Reservoirs			_				
Refurbishment of existing WTP							
Construction and installation of 2 chlorinators					incl.	3 yr maintenance	
Provision of 30 bulk meters							
UFW program							
A1.b Improved Water Supply Service and Coverage - Rehabilitation and Expansion							
Construction of 31 kilometers of primary pipelines and 38 km of secondary lines							incl. 3 yr
Construction of 5 new R.C.C. Zonal Service Reservoirs	1						maintenance
Provision of 11,500 metered service connections	1						
A2 Improved Sanitation and Sewerage (Zone II and III and Community Latrines)	1						
Primary (12 km) and Secondary (30 km) Severage Network for Zone 2							
Primary (12 km) and Secondary (30 km) Sewerage Network for Zone 3 Construction of sewage treatment plants for Zones II and III							
Sewerage maintenance equipment, tools and lab equipment							
Community latrines							
B3 Solid Waste Management							
EIA and Awareness Campaign							
Transfer station	M						
Parking cum garage/shop							
New disposal site and compost plant							
Primary and Secondary Collection equipment: light equip and vehicles							
Equipment for compost plant				•			
Equipment for landfill site				1			
Part B: Institutional Strengthening and Investment Program Management							
B1.Support to Double Entry Accounting Reform Accounting manual							
Asset Registrar and Valuation							
Software Preparation and Adaptation							
Account Migration							
Training	1						
B2. Support to Property Tax Reform	1						
Mapping and computerized data base	1						
Introduction of GIS software	1		-				
Property mapping survey	1						
Introduction of new tax	1		I				
B3. Public Utility (Water and Sewerage) Strengthening	1						
Program on improved asset management (incl. establishment of database and asset condition system	ns)						
Asset Cost Drivers and Cost Models for Investment Planning							
Quality Assurance and quality control manual, procedures and systems	1						
B4. Public Awareness Campaign							
Implementing India's 74th Amendment to the Constitution							
Solid Waste Management (Segregation)		_					
Water and solid waste management charges	1						
B5. Investment Program Management							
Consultancies (DSMC): Signing and Mobilization							
Consultancies (IDC): Signing and Mobilization	_ ∎						
Design	1						
Tender and Evaluation	1						
Construction/Installation/Implementation	1						
Commissioning/Testing	_						

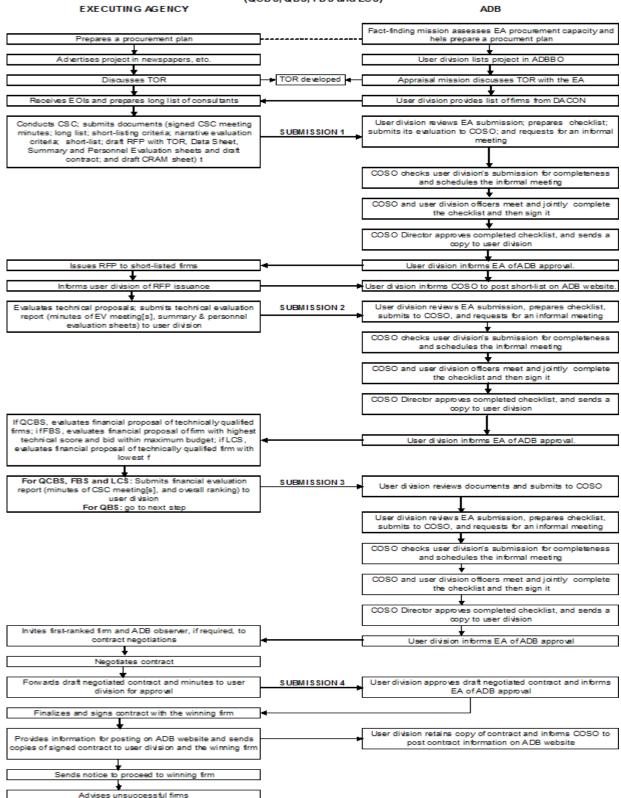
SHILLONG - SUMMARY INVESTMENT PROGRAM IMPLEMENTATION

								-			
Description	2009		2010	2011		2012	2013	2014		2015	
	Q2 Q3 Q	Q4 Q1 Q	2 Q3 Q4	Q1 Q2 Q	3 Q4 C	1 Q2 Q3 Q	Q4 Q1 Q2 Q3 Q4	Q1 Q2 Q	3 Q4	Q1 Q2 Q3	Q4
ADB's FFA and PFR Approval	•		•		•						
Loan Signing	•		•		•						
Loan Effectiveness	FFA & FR1	•	FR2 🔸	PI	FR3 🔸						
Preliminary Tasks Staffing/Operationalizing of SIPMIU											
Staff orientation Environmental Clearances	♦ clear PFR ²	·∕···	IA 🔹 clear P	IEE/EI/	A • clea	ar PFR3					
Project Lands Acquired and R&R activities	 PFR1 cor 		◆ PFR2 c			3 complete					
Part A: Urban Infrastructure and Services Improvement	▼ FFK1 C01	Inplete	▼ FFK2 0	Jompiele	▼ FFF	13 complete					
A1 Improved Sanitation and Sewerage (Zone I and Community Latrines)											
Primary (33 km) and Secondary and tertiary (60 km) Sewerage Network											
Sewage Treatment Plant (1, 10 MLD) and Disposal (+5 yr maintenance contract)				l.							
Provision of HH connections (incl. inspection chambers, 6536) and community blocks (6), HH assistar	nce (1000)										
Sewerage maintenance equipment, tools and lab equipment	I				2						
					_				-		
A2. Solid Waste Management	1										
EIA and Awareness Campaign											
Short term landfill site											
Transfer station (@ Maulai), and weighbridge					1						
Parking cum garage/shop (@ compost plant)]			
New disposal site (@ Mawiong) and rehabilitation of existing one (Mawlai)											
Primary and Secondary Collection equipment: light equip and vehicles (5 medium duty tipper, 6 tipper	trucks, 7 du	ımper pla	cer trucks)) 🖬				8			
Equipment for compost plant								H			
Equipment for landfill site					X		///				
Part B: Insititutional Strengthening and Investment Program Management											
B.1 Support to Double Entry Accounting Reform											
Accounting manual			-								
Asset Registrar and Valuation											
Software Preparation and Adaptation											
Account Migration Training											
B.2 Support to Property Tax Reform											
Mapping and computerized data base											
Introduction of GIS software			_								
			•								
Property mapping survey Introduction of new tax	1										
B.3 Public Utility (Water and Sewerage) Strengthening	1			-							
Program on improved asset management (incl. establishment of database and asset condition system	I										
Asset Cost Drivers and Cost Models for Investment Planning	is) 🗖										
Quality Assurance and quality control manual, procedures and systems											
	1										
B.4 Public Awareness Campaign Implementing India's 74th Amendment to the Constitution											
Solid Waste Management (Segregation) Water and solid waste management charges											
B.5 Investment Program Management Consultancies (DSMC): Signing and Mobilization											
Consultancies (DSMC): Signing and Mobilization Consultancies (IDC): Signing and Mobilization											
Design											
Tender and Evaluation	1										
Construction/Installation/Implementation	1										
Commissioning/Testing											
	4										

Investment Program Implementation Schedule

Description	2	2009		2010		2011		2012		2013		2014		2	015
	Q2	Q3 (24 Q	1 Q2 Q3	Q4	Q1 Q2 Q3	Q4	Q1 Q2 Q3 Q4	Q1 Q	2 Q3 Q4	Q1	Q2 Q3	Q4	Q1 Q2	2 Q3 Q4
ADB's FFA and PFR Approval	•			•		•									
Loan Signing		٠			٠		•								
Loan Effectiveness	FFA 8	& FR1	•	FR2	2 🔸	PFF	R3 🔸								
Preliminary Tasks															
Staffing/Operationalizing of SIPMIU															
Staff orientation						IEE/EIA									
Environmental Clearances	♦ cl	ear PF	R1	EE/EIA + cl	ear Pl	FR2	•	clear PFR3							
Project Lands Acquired and R&R activities	♦ PF	FR1 co	mplete	• PF	R2 c	omplete	+ F	PFR3 complete							
Tranche 1 (ADB loan \$30 million including financial charges)															
Optimization of water supply systems															
Introduction of NRW programs in all 5 States															
Immediate refurfishment and emergency repairs															
Sample water supply rehabilitation and expansion scheme for Gangtok															
Sample SWM comprehensive site in Kohima and emergency scheme in Shillong															
DCMS consultancy for all 5 States															
IDC consultancy in Agartala and Shillong															
Tranche 2 (ADB loan \$79.3 million including financial charges)															
Water supply rehabilitation and expansion schemes for Agartala (South Zone), Aizawl and						_									
SWM schemes for Agartala, Aizawl, Gangtok and Shillong															
SWM equipment for Kohima											_				
IDC consultancy in Aizawl, Gangtok and Kohima															
										_					
Tranche 3 (ADB Ioan \$90.8 million including financial charges)															
Water supply rehabilitation and expansion schemes for Agartala (Central Zone) and Shillong															
SWM equipment for Aizawl, Gangtok and Shillong								_							
Sewerage schemes for Aizawl, Gangtok and Kohima															

Appendix 13A.1

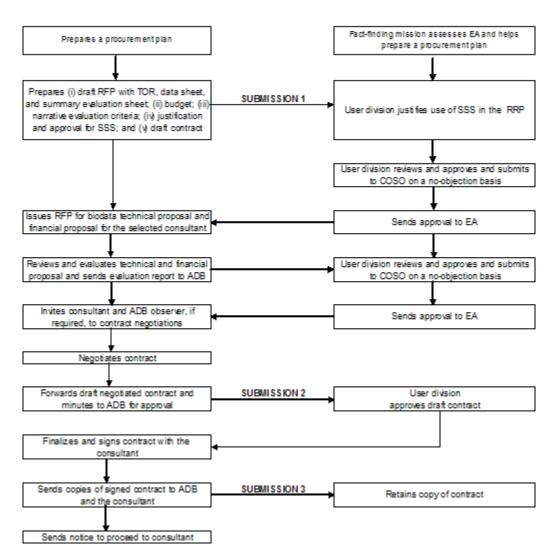


RECRUITING CONSULTING FIRMS FOR LOANS (QCBS, QBS, FBS and LCS)

RECRUITING CON SULTING FIRMS FOR LOANS USING SSS



ADB



Indicative Procurement Plan for the Investment Program

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
Agar	rtala – Water Supply						
A1	TW&IRP/WS/AGT/T1/NCB	 Civil works, electromechanical works and associated pumping machinery, testing and commissioning pertaining to the construction of 1. 18 (replacement) deep tube wells to serve Agartala's South Zone; 2. 7 (replacement) deep tube wells to serve Agartala's Central Zone; 3. 10 (replacement) iron removal plants (IRPs) in Agartala's South Zone; 4. 7 (replacement) iron removal plants (IRPs) in Agartala's Central Zone; 5. Chlorinators in all IRPs. 	0.9	NCB	Ν	Q1 2009	Civil Works Contract (Itemized BOQ)
A2	LD/WS/AGT/T1/SHP	Procurement of leak detection equipment and ancillary supplies, testing and training	0.08	SHP	N	Q1 2009	Goods (Itemized BOQ)
A3	WW&T/WS/AGT/T2/ICB	 Procurement of equipment and ancillary supplies, civil works, testing and commissioning pertaining to 1. Construction of infiltration galleries 2. Replacement of machinery and equipments at the College Tilla WTP 3. Construction of sludge drying and disposal facilities as required at the two treatment plants 4. Installation of pumping machineries at the intake well and construction of aeration cum pre-sedimentation tanks at the existing water treatment plants 5. 9 new tube wells (7 in Central Zone and 2 in South Zone), including dedicated power supply 6. 8 iron removal plants (5 in South 	5.52	ICB	N	Q1 2010	Civil Works Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		Zone and 3 in Central Zone) 7. 7 new groundwater treatment plants, clear water reservoirs and pumping stations (5 in South Zone and 2 in Central Zone). 5. Chlorinators in all treatment plants.					
A4	LAB&ST/AGT/T1/NCB	Laboratory testing equipment and stores equipment	0.2	NCB	N	Q1 2010	Goods (Itemized BOQ)
A5	PM&S/WS/AGTSZ/T2/NCB	Supply, laying and jointing of DI pipes for pumping mains , secondary and tertiary network pipe lines , provision of 20,000 household connections and bulk meters in the Southern Zone including those going to newly developing areas inclusive of fixing of valves and specials, construction of valve chambers, making connections, testing of entire distribution system complete job as per primary network design for following sizes of pipes.	7.53	ICB	Ν	Q1 2010	Civil Worł Contract (Itemized BOQ)
A6	OHT/WS/AGTSZ/T2/NCB	Construction of 8 RCC zonal overhead tanks (7.5 ML) in the Southern Zone to serve as service reservoir including fixing of Inlet, outlet and other pipes, its' commissioning and testing, land cost, site clearance etc. complete for following zones.	3.4	NCB	N	Q1 2010	Civil Work Contract (Itemized BOQ)
A7	PM&S/WS/AGTCZ/T3/NCB	Supply, laying and jointing of DI pipes for pumping mains , secondary and tertiary network pipe lines , provision of 50,000 household connections and bulk meters in the Central Zone including those going to newly developing areas inclusive of fixing of valves and specials, construction of valve chambers, making connections,	8.70	ICB	N	Q1 2011	Civil Work Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		testing of entire distribution system complete job as per primary network design for following sizes of pipes.					
A8	OHT/WS/AGTCZ/T3/NCB	Construction of 10 RCC zonal overhead tanks (10 ML) in the Central Zone to serve as service reservoir including fixing of Inlet, outlet and other pipes, its' commissioning and testing, land cost, site clearance etc. complete for following zones.	4.66	NCB	N	Q1 2011	Civil Works Contract (Itemized BOQ)
A9	WM/WS/AGT/T3/ICB	Supply of all 70,000 consumer water meters including, as well as leak detection equipment. Including 3-year meter reading program.	1.46	ICB	N	Q4 2011	Goods Contract (Itemized BOQ)
Agar A10	tala – Solid Waste Manageme PC&T/SWM/AGT/T2/NCB	Provision of primary collection and	0.4	NCB	N	Q4 2010	Goods
		storage, including wheel plastic bins, dumper placer bins, autovans w/ containers. Provision of transportation vehicles: tipper trucks, dumper placer trucks, tractors, JBC, bulldozers etc			IN		(Itemized BOQ)
A11	CP&LF/SWM/AGT/T2/NCB	 Procurement of equipment and ancillary supplies, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: 1. compost plant – civil buildings godowns, waste segregation facility, other infrastructure, plant and machinery, material handling automobiles at site; 2. development of sanitary landfill at Naginara. 3. development of transfer station and garage facilities 	2.5	NCB	Ν	Q4 2009	Civil Work Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
Aizav	wl – Water Supply						
B1	OHT1/WS/AIZ/T1/NCB	Construction of 7 (replacement) ground level RCC zonal tank to serve as service reservoir including fixing of Inlet, outlet and other pipes, its' commissioning and testing, land cost, site clearance etc. complete for following zones. Zones 1, 3, 14, 15, 17, 25 and 27 (Tlangnuam, Seventh Day Tlang, Government Complex, Armed Veng, Bawngkawn, Mission Vengthlang, TB Tlang Zemabawk)	0.97	NCB	Ν	Q1 2009	Civil Work Contract (Itemized BOQ)
B2	CHL/WS/AIZ/T1/NCB	Procurement of equipment and ancillary supplies, civil works, testing and commissioning pertaining to the installation of chlorinators of Aizawl's Main Reservoir (1000MAC) and Chandmari Booster (500 MAC). Includes chlorinator rooms.	0.17	NCB	N	Q1 2009	Civil Work Contract (Itemized BOQ)
Β3	WM1/WS/AIZ/T1/NCB	Providing and installing and giving satisfactory field testing of 13,000 domestic water meter, horizontal, inferential, multi jet, dry dial suitable for potable water and for 450C temperature, hermetically sealed totalizer and meter duly sealed against tempering, complete with couplings on both ends, and with pressure rating maximum 20 Kg/cm2 manufactured by ISO certified firms in India and minimum, maximum and transitional flows conforming to ISO : 4064/1 and IS 779: 1994, class B, marked in metric system, along with manufacture's test and guarantee certificates including all Taxes duties etc. inclusive of cost of Installation and	0.70	NCB	Ν	Q1 2009	Goods (Itemized BOQ)?

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
B4	BWM/WS/AIZ/T2/NCB	Maintenance for 3 year PeriodProvision for Supply, InstallationTesting of Electro Magnetic BulkMeters as per relevant 1. S.S. inclusiveof 5 years of Maintenance includingreplacement of Parts of following sizesat designated places including fittings,specials, fixtures etc. complete.1. 26 bulk meters (80 mm-450mm)	0.20	NCB	N	Q4 2009	Goods (Itemized BOQ)?
B5	OHT2/WS/AIZ/T2/NCB	2. portable ultrasonic flowmeter Design and construction of 13 ground level RCC zonal tank to serve as service reservoir including fixing of Inlet, outlet and other pipes, its' commissioning and testing, land cost, site clearance etc. complete for following zones. Zones (3, 34 & 36), (9 & 37), (24&44), 28, 30, 31, 32, 33, 46, 38, 39, 40 and 41.	1.02	NCB	N	Q1 2010	Civil Works Contract (Itemized BOQ)
B6	EM&S/WS/AIZ/T2/NCB	E&M works testing, equipment provision, installation of pumps, commissioning, provision of record drawings for: 1. Bangwan Booster 2. Neiwbah Booster	0.08	NCB	N	Q4 2009	Civil Works Contract (Itemized BOQ)
B7	PS/WS/AIZ/T2/FA	 Provision 132 KV dedicated Power line, 16.5 KM and installation, including cables and all other accessories, control panels etc. 1. Construction of 132 KV Single Circuit Transmission line from central substation, Melriat to PHE water pumping scheme at Dihmunzawl - 16 CKM 2. Cost of 132kv outgoing bay for PHE 	4.13	NCB	Ν	NA	Civil Works Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		feeder at central substation, Melriat. 3. Cost of 132/33kv power substation at Dihmunzawl PHE department complex with 2*12.5MVA transformers, 3 nos. 132kv Bays, 5 Nos. 33kv bays with associate equipments					
B8	P&SN/WS/AIZ/T2/NCB	Supply, laying and jointing of DI pipes for main feeder pipe lines (56 km), secondary and tertiary network pipe lines (110 km) and new connections including those going to newly developing areas inclusive of fixing of valves and specials, construction of valve chambers, making connections, testing of entire distribution system complete job as per primary network design for following sizes of pipes.	11.06	ICB	N	Q1 2010	Civil Works Contract (Itemized BOQ)
B9	WM2/WS/AIZ/T2/ICB	Providing and installing and giving satisfactory field testing of 20,000 domestic water meter, horizontal, inferential, multi jet, dry dial suitable for potable water and for 450C temperature, hermetically sealed totalizer and meter duly sealed against tempering, complete with couplings on both ends, and with pressure rating maximum 20 Kg/cm2 manufactured by ISO certified firms in India and minimum, maximum and transitional flows conforming to ISO : 4064/1 and IS 779: 1994, class B, marked in metric system, along with manufacture's test and guarantee certificates including all Taxes duties etc. inclusive of cost of Installation and Maintenance for 3 year Period	0.90	NCB	N	Q4 2010	Goods Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
B10	PC&T/SWM/AIZ/T3/NCB	Provision of primary collection and storage, including wheel plastic bins, dumper placer bins, autovans w/ containers. Provision of transportation vehicles: tipper trucks, dumper placer trucks, tractors,	0.83	NCB	N	Q4 2010	Goods (Itemized BOQ)
B11	CP&LF/SWM/AIZ/T2/NCB	Procurement of equipment, vehicles and ancillary supplies, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: 1. compost plant – civil buildings godowns, waste segregation facility, other infrastructure, plant and machinery, material handling automobiles at Muallungthu site; 2. development of sanitary landfill at Muallungthu.	3.06	NCB	Ν	Q4 2009	Civil Works Contract (Itemized BOQ)
Aizav	wl – Sewerage		•				
B12	P&SN/SEW/AIZ/T3/ICB	 Clearance of vegetation. Procurement of 23 km DI K-7 grade pipes and ancillary supplies for primary sewer network (150-900 mm dia) and 30 km secondary network, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff. Construction of Circular R.C.C. Manholes and ventilation shafts as per type design/drawing on sewer line and provided with tight fitting FRC manhole frames and covers ISI marked or of approved make and provision of encapsulated PVC foot rests for the following diameter. 	14.89	ICB	Ν	Q4 2010	Civil Works Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		 4. Construction of 3.34 m wide approach road of WBM plus BT from the existing road to the STP, including culverts. 5. Supply and lay of 30 km secondary collectors and mains along the existing road stretches and along hillsides, by 					
		gravity.					
B13	STP/SEW/AIZ/T3/NCB	 6. 3,600 household connections. Procurement of equipment and ancillary supplies, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: Construction of biotower sewage treatment plant with capacity of 7 MLD 	0.79	NCB	N	Q4 2010	Civil Work Contract (Itemized BOQ)
B14	SCM/SEW/AIZ/T3/NCB	Procurement of Sewer Cleaning Machinery for maintenance of networks	0.17	NCB	N	Q2 2011	Goods (Itemized BOQ)
B15	LCS/SEW/AIZ/T3/NCB	Civil works, equipment and ancillary supplies pertaining to the construction of community toilets households, who neither have toilets nor have toilet spaces in their households	0.33	NCB	N	Q4 2010	Civil Wor Contrac (Itemize BOQ)
Gang	tok – Water Supply	· ·	·	•	·	·	·
C1	OHT1/WS/GTK/T1/NCB	Construction of 3 new ground level RCC zonal tank to serve as service reservoir including fixing of Inlet, outlet and other pipes, its' commissioning and testing, land cost, site clearance etc. complete for following zones.	0.29	NCB	N	Q1 2009	Civil Wor Contrac (Itemize BOQ)
C2	P&S/WS/GTK/T1/NCB	Supply, laying and jointing of 29 km DI pipes for main feeder pipe lines, 38 km of secondary and tertiary network pipe lines and 18,000 connections including those going to newly developing areas	5.07	ICB	N	Q1 2009	Civil Wor Contrac (Itemize BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		inclusive of fixing of valves and specials, construction of valve chambers, making connections, testing of entire distribution system complete job as per primary network design for following sizes of pipes.					
C3	EMZ5/WS/GTK/T1/NCB	 Civil works testing, commissioning, provision of record drawings for: 1. Construction of sump of 10.5 m diameter with all pipes valves and appurtenances. 2. Construction of pump house of 3.5 x 3m size with all pipes valves and appurtenances. 3. Supply and installation of 2 pump set of 45 kw with all accessories and making electric connection. 	0.06	NCB	N	Q1 2009	Civil Work Contract (Itemized BOQ)
C4	CHL/WS/GTK/T1/NCB	Procurement of equipment and ancillary supplies, civil works, testing and commissioning pertaining to the installation of 4 chlorinators of Gantok's Main Reservoir, Enchey reservoir, Housing Tank, Hanuman Tok.	0.16	NCB	N	Q1 2009	Civil Work Contract (Itemized BOQ)
C5	WM1/WS/GTK/T2/ICB	Supply and installation of all 43 bulk and 18,000 consumer water meters including, as well as leak detection equipment. Three year maintenance program.	1.21	ICB	N	Q4 2010	Goods Contract (Itemized BOQ)
	gtok – Sewerage		1			-	
C6	P&SNZ2/SEW/GTK/T3/ICB	 Clearance of vegetation. Procurement of 12 km DI K-7 grade pipes and ancillary supplies for primary sewer network (150-900 mm dia) and 30 km secondary network, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational 	8.77	ICB	N	Q4 2010	Civil Work Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		 staff. 3. Construction of Circular R.C.C. Manholes and ventilation shafts as per type design/drawing on sewer line and provided with tight fitting FRC manhole frames and covers ISI marked or of approved make and provision of encapsulated PVC foot rests for the following diameter. 4. Construction of 1.9 km 3.34 m wide approach road of WBM plus BT from the existing road to the STP, including culverts. 5. Supply and lay of 30 km secondary collectors and mains along the existing road stretches and along hillsides, by gravity. 					
C7	STPZ2/SEW/GTK/T3/NCB	 6. 3,700 household connections. Procurement of equipment and ancillary supplies, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: 1. Construction of Extended Aeration with Sludge drying beds / filter press sewage treatment plant with capacity of 4 MLD 	0.7	NCB	N	Q4 2010	Civil Wor Contrac (Itemize BOQ)
C8	P&SNZ3/SEW/GTK/T3/ICB	 Clearance of vegetation. Procurement of 12 km DI K-7 grade pipes and ancillary supplies for primary sewer network (150-900 mm dia) and 30 km secondary network, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff. Construction of Circular R.C.C. 	7.86	ICB	N	Q4 2010	Civil Wor Contrac (Itemize BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		 Manholes and ventilation shafts as per type design/drawing on sewer line and provided with tight fitting FRC manhole frames and covers ISI marked or of approved make and provision of encapsulated PVC foot rests for the following diameter. 4. Construction of 1.9 km 3.34 m wide approach road of WBM plus BT from the existing road to the STP, including culverts. 5. Supply and lay of 30 km secondary collectors and mains along the existing road stretches and along hillsides, by gravity. 6. 4,200 household connections. 					
C9	STPZ3/SEW/GTK/T3/NCB	Procurement of equipment and ancillary supplies, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: 1. Construction of Extended Aeration with Sludge drying beds / filter press sewage treatment plant with capacity of 4 MLD	0.8	NCB	N	Q4 2010	Civil Works Contract (Itemized BOQ)
C10	SCM/SEW/GTK/T3/NCB	Procurement of Sewer Cleaning Machinery for maintenance of networks	0.17	NCB	Ν	Q2 2011	Goods (Itemized BOQ)
C11	LCS/SEW/GTK/T3/NCB	Civil works, equipment and ancillary supplies pertaining to the construction of community toilets households, who neither have toilets nor have toilet spaces in their households	0.58	NCB	N	Q4 2010	Civil Works Contract (Itemized BOQ)
Gano	gtok – Solid Waste						
C12	PC&T/SWM/AIZ/T2/NCB	Provision of primary collection and storage, including wheel plastic bins,	0.76	NCB	N	Q4 2009	Goods (Itemized

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		dumper placer bins, autovans w/ containers. Provision of transportation vehicles: tipper trucks, dumper placer trucks, tractors,					BOQ)
C13	LF/SWM/AIZ/T2/NCB	 Procurement of equipment, vehicles and ancillary supplies, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: 1. compost plant – civil buildings godowns, waste segregation facility, other infrastructure, plant and machinery, material handling automobiles at Muallungthu site; 2. development of sanitary landfill at Muallungthu. 	0.61	NCB	Ν	Q4 2009	Civil Work Contract (Itemized BOQ)
Kohi	ma - Urban Water Supply						
D1	OHT1/WS/KOH/T1/NCB	Construction of 19 (replacement) ground level RCC zonal tank to serve as service reservoir including fixing of Inlet, outlet and other pipes, its' commissioning and testing, I and cost, site clearance etc. complete for following zones (School Ed'n, L- Khel Village, Gov't High School, Raj Bhawan, PR Hills, Assamese Church, VIP Quarters, Assam Riffles, Forest Colony, Old Zoon, Naga Hospital, DC Hospital, Assam Riffles Camp, South Police St, Fernwood + 5).	0.32	NCB	N	Q1 2009	Civil Work Contract (Itemized BOQ)
D2	WTP/WS/KOH/T1/NCB	Refurbishment of the 1.5 MLD treatment plant, including replacement of clarifiers, lining and structural assessments of receiving tanks, replacement of pumps and other	0.35	NCB	N	Q1 2009	Civil Work Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		machinery, slow sand filter media, electrics and painting					
D3	CHL/WS/KOH/T1/NCB	 Provision for procurement and installation of chlorinators at main reservoir at Filter plant site along with pump and other accessories fittings, fixtures etc. complete of following capacities. Civil works for Chlorinator Room of Suitable size (4 M x 3 M x 4 M). Provision for Purchase of Chlorine Cylinder Termed as 'Tonner' including stand bye 	0.12	NCB	Ν	Q1 2009	Civil Works Contract (Itemized BOQ)
D4	WM/WS/KOH/T1/ICB	Provision for Supply, Installation Testing of 30 Electro Magnetic Bulk Meters as per relevant 1. S.S. inclusive of 5 years of Maintenance including replacement of Parts of following sizes at designated places including fittings, specials, fixtures etc.	0.19	NCB	Ν	Q1 2009	Goods Contract (Itemized BOQ)
D5	UFW/WS/KOH/T1/QCBS	Carrying Unaccounted For Water Assessment in the Project area to minimize water loss in distribution and transmission system inclusive of Salaries to Staff, equipments , materials etc.,	0.26	NCB	N	Q1 2009	Goods Contract (Itemized BOQ)
D6	OHT2/WS/KOH/T2/NCB	Design and construction of 5 ground level RCC zonal tank to serve as service reservoir including fixing of Inlet, outlet and other pipes, its' commissioning and testing, land cost, site clearance etc. complete for following zones.	0.92	NCB	N	Q1 2010	Civil Works Contract (Itemized BOQ)
D7	P&SN/WS/KOH/T2/ICB	Supply, laying and jointing of DI pipes for main feeder pipe lines (28 km), secondary and tertiary network pipe lines (91 km) and 11,500 service	9.03 or 3.6	ICB or NCB	N	Q1 2010	Civil Works Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		connections including those going to newly developing areas inclusive of fixing of valves and specials, construction of valve chambers, making connections, testing of entire distribution system complete job as per primary network design for following sizes of pipes.					
D8	WM/WS/KOH/T2/ICB	Supply of all 13? bulk and 19,000 consumer water meters including, as well as leak detection equipment. Including 3-year program for maintenance and meter reading. Providing and Installing and giving satisfactory field testing of domestic water meter, horizontal, inferential, multi jet, dry dial suitable for potable water and for 450C temperature, hermetically sealed totalizer and meter duly sealed against tempering, complete with couplings on both ends, and with pressure rating maximum 20 Kg/cm2 manufactured by ISO certified firms in India and minimum, maximum and transitional flows conforming to ISO : 4064/1 and IS 779: 1994 , class B, marked in metric system, along with manufacture's test and guarantee certificates including all Taxes duties etc	X.XX	ICB	Ν	Q4 2010	Goods Contract (Itemized BOQ)
D9	ma – Solid Waste PC&T/SWM/KOH/T2/NCB	Provision of primary collection and storage, including wheel plastic bins, dumper placer bins, autovans w/ containers. Provision of transportation vehicles: tipper trucks, dumper placer trucks, tractors,	0.28	NCB	N	Q4 2009	Goods (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
D10	CP&LF/SWM/KOH/T1/NCB	Procurement of equipment and ancillary supplies, civil works, mechanical and electrical works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: 1. compost plant – land development waste segregation facility, other infrastructure, plant and machinery, material handling automobiles at site; 2. development of sanitary landfill. 3. Civil works and construction/surfacing associated with the construction of access	4.55	NCB	Ν	Q1 2009	Civil Work Contract (Itemized BOQ)
D11	RD/SWM/KOH/T2/NCB	Approach road and complementary buildings	Tbc	NCB	Ν	Q1 2010	Civil Works Contract (Itemized BOQ)
Kohi	ima – Sewerage						
D12	P&SNZ1/SEW/KOH/T3/ICB	Sewerage for Zone 1 1. Clearance of vegetation. 2. Procurement of 14 km DI K-7 grade pipes and ancillary supplies for primary sewer network (150-900 mm dia) and 15 km secondary network, and 3200 connections, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff. 3. Construction of Circular R.C.C. Manholes and ventilation shafts as per type design/drawing on sewer line and provided with tight fitting FRC manhole frames and covers ISI marked or of approved make and provision of encapsulated PVC foot rests for the following diameter.	9.44	ICB	Ν	Q4 2010	Civil Work Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		4. Construction of 3.34 m wide approach road of WBM plus BT from the existing road to the STP, including culverts.					
D13	P&SNZ2/SEW/KOH/T3/ICB	 Sewerage for Zone 2 Clearance of vegetation. Procurement of 17 km DI K-7 grade pipes and ancillary supplies for primary sewer network (150-900 mm dia) and 11 km secondary network, and 3,500 connections, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff. Construction of Circular R.C.C. Manholes and ventilation shafts as per type design/drawing on sewer line and provided with tight fitting FRC manhole frames and covers ISI marked or of approved make and provision of encapsulated PVC foot rests for the following diameter. Construction of 3.34 m wide approach road of WBM plus BT from the existing road to the STP, including culverts. 	8.24	ICB	N	Q4 2010	Civil Works Contract (Itemized BOQ)
D14	STP/SEW/KOH/T3/NCB	 Procurement of equipment and ancillary supplies, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: 1. Construction of extended aeration treatment plant with capacity of 7 MLD (Zone 1). 2. Construction of extended aeration treatment plant with capacity of 5 MLD (Zone 2). 	2.71	NCB	Ν	Q4 2010	Civil Works Contract (Itemized BOQ)

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
D15	SCM/SEW/KOH/T3/NCB	Procurement of Sewer Cleaning Machinery for maintenance of networks	0.19	NCB	N	Q2 2011	Goods (Itemized BOQ)
D16	LCS/SEW/AKOH/T3/NCB	Civil works, equipment and ancillary supplies pertaining to the construction of community toilets households, who neither have toilets nor have toilet spaces in their households.	0.39	NCB	N	Q4 2010	Civil Work Contract (Itemized BOQ)
Shill	ong – Solid Waste Manageme	nt	1				I
E1	PC&T/SWM/SHI/T3/NCB	Provision of primary collection and storage, including wheel plastic bins, dumper placer bins, autovans w/ containers. Provision of transportation vehicles: tipper trucks, dumper placer trucks, tractors,	1.55	ICB	N	Q1 2010	Goods (Itemized BOQ)
E2	LF&TG/SWM/SHI/T2/NCB	 Procurement of equipment and ancillary supplies, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: 1. development of new sanitary landfill. 2. development of transfer and garage station. 	1.51	NCB	Ν	Q1 2009	Civil Work Contract (Itemized BOQ)
E3	LF&R/SWM/SHI/T1/NCB	Procurement of equipment and ancillary supplies, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff for short term landfill site at Mawlai's site (approx. 6 acres) as well as 1 bulldozer	0.41	NCB	N	Q1 2009	Civil Work (Itemized BOQ)
	ong – Sewerage						
E4	STP/SEW/SHI/T3/NCB	Procurement of equipment and ancillary supplies, civil works, testing,	1.61 (tbc)	NCB	N	Q4 2010	Civil Work Contract

No	Contract No.	General Description	Contract Value	Procurement Method	Prequalification Of Bidders (y/n)	Advtsmt. Date (Q/Y)	Comments
		 commissioning, provision of record drawings and Operating Manuals and training of operational staff; including the following: 1. Construction of aerated lagoons sewage treatment plant with capacity of 15 MLD 					(Itemized BOQ)
E5	P&SN/SEW/SHI/T3/ICB	 Clearance of vegetation. Procurement of 33 km DI K-7 grade pipes and ancillary supplies for primary sewer network (150-900 mm dia) and 60 km secondary network, civil works, testing, commissioning, provision of record drawings and Operating Manuals and training of operational staff. Construction of Circular R.C.C. Manholes and ventilation shafts as per type design/drawing on sewer line and provided with tight fitting FRC manhole frames and covers ISI marked or of approved make and provision of encapsulated PVC foot rests for the following diameter. Construction of 3.34 m wide approach road of WBM plus BT from the existing road to the STP, including culverts. Providing connections to 6500 HHs 	22.44 (tbc)	ICB	N	Q4 2010	Civil Works Contract (Itemized BOQ)
E6	SCM/SEW/SHI/T3/NCB	Procurement of Sewer Cleaning Machinery for maintenance of networks	0.16	NCB	Ν	Q2 2011	Goods (Itemized BOQ)
E7	LCS/SEW/SHI/T3/NCB	Civil works, equipment and ancillary supplies pertaining to the construction of community toilets households, who neither have toilets nor have toilet spaces in their households	0.85	NCB	N	Q4 2010	Civil Works Contract (Itemized BOQ)

Notes:

- Contract values have been estimated as base costs exclusive of taxes and contingencies.
 All pipe laying costs are inclusive of road reinstatement costs.

SUGGESTIONS FOR IMPROVED CLAIM SUBMISSION

1. **Periodicity and Timeliness.** A claim is to be submitted, preferably at least once a month, if the aggregate expenditure eligible for ADB financing is equivalent to \$100,000 or more. In any case, a claim should be submitted within three months of its being incurred. For claims submitted after this period, an explanation should be provided for the delay.

2. **Delay, Omission and Duplication.** There have been some instances of duplicate claim submission and others where reimbursement claims are submitted with a long delay (6 months or even one year). This is particularly applicable where there are several field offices incurring expenditure. It is suggested that the head office of the executing agency insist on submission of claims for each month from every field office. Any office that has not incurred expenditure in a month should send a NIL report. This will ensure that issues of omission, delay and duplication of claims are eliminated.

3. Format of Invoices for Civil Works. While it is impossible to standardize a civil works invoice as the detailed items of work are different for different contracts, it is possible to standardize a summary invoice. We are attaching a draft invoice format, which contains a reasonable amount of basic information. It is suggested that a summary invoice in a format similar to the attached format be submitted to ADB, and the detailed invoices retained by the EAs in their offices. This will reduce the volume of documents that are being submitted to ADB, without in any way reducing their quality. The attached format may be modified suitably, so long as the basic information is provided as indicated.

4. **Format of Receipt.** A draft format in which a receipt should be obtained from the contractor is also attached. We wish to emphasize that a receipt should always indicate the details, such as cheque number and date and name of the bank on which the cheque was drawn, as well as details of the invoice(s) against which the payment was received. In case payment has been made through Real Time Gross Settlement (RTGS) or National Electronic Fund Transfer (NEFT), this may be mentioned together with value date of credit in place of cheque number and date. This format may also be modified, so long as the basic information is provided as indicated. The "pre-receipt" which is in vogue in India is not acceptable.

Source: INRM

Appendix 17

Draft Format for Receipt

(Preferably on Letterhead of Contractor)

Date of Receipt:

Received an amount of Rs (or other currency)... (in figures, followed by words) through RTGS / NEFT / cheque no. Dated ... drawn on (Name of Bank) per following details:

Invoice No.	Date	Gross Amount	Net Amount		
Total					

This should be signed by the contractor's representative with name and designation.

Date of Invoice:

Date Received:

Draft Invoice Format for Civil Works

Name of Package: EA Contract No. Name of Contractor: Name of Consultant: Interim Payment Certificate No..... for the period

Cumulative Value for Cumulative Value up to Previous IPC SI. No Value Up to date this IPC Description Á Value of Work Done 1 Work Done against BOQ Items 2 Variation against BOQ Items Extra (non-BOQ) Items 3 4 Variation against non-BOQ Items 5 Price Adjustment Sub-total A **Total Value of Work Done** В Advances Released Material Advance at Site 1 Mobilization Advance 2 Sub-total B Advances Released C Recoveries 1 Material Advance incorporated in works Mobilization Advance Retention Money Sub-total C Recoveries D Penalties and Deductions 1 Liquidated Damages Withheld as advised by Engineer 2 3 Any other recovery (please specify) **Total Penalties and Deductions** Sub-total D Recovery of Taxes and Duties Ê Income-tax including surcharges and Cess 1 Ž Value Added Tax Works Contract Tax 3 Royalty or Seigniorage Charges 4 5 Any other tax (please specify) Total taxes and duties recovered Sub-total E Sub-total F Total Deductions (C+D+E) G Net Amount Payable (A+B-F)

Approvals and Verifications

Certified that the works have been measured and quality verified as stipulated in terms of the contract and applicable construction standards.

 Contractor's
 Employer's

 Representative
 Consultant's Representative
 Representative

 All persons should sign with name and date.
 Representative

 PAYMENT PARTICULARS
 1. Ad Hoc Payment: Gross Amount Rs..., Less Recovery of taxes and/or advances, Net

 2. Balance Payment: Net Amount Finally Payable, Less already paid

 This can be attached as an additional table, if space is insufficient.

GUIDELINES FOR CALCULATING PROJECT PROGRESS

A. Introduction

1. Physical and precommencement activities are considered in calculating project implementation progress. These activities, which may include recruitment of consultants, capacity building, detailed design, preparation of bid and prequalification documents, etc., could constitute a significant proportion of overall implementation and therefore should be counted.

2. Each activity in the implementation schedule will be weighted according to its overall contribution (using time as a reference) to progress of project implementation. These weights will then be used to calculate the percentage of project progress along the entire time span of the project. This is to provide a holistic view of the pace of implementation.

B. Framework for Compiling Activity List and Assigning Weights

3. The actual project implementation progress of these activities should be reported regularly through the EA's quarterly project progress report. To ensure ADB-wide consistency, the following framework has been established; its application will be monitored through the ADB's Project Performance Report.

1. Compilation of Activity List

4. The IPCC in consultation with the SIPMIUs should identify major implementation activities and include them in the implementation schedule, which is attached as an appendix in the grant assistance report. The implementation schedule should follow the critical path of the project's major activities in project implementation taking account of various country, sector, and project constraints.

2. Assignment of Weights

5. Corresponding weights for each activity should be assigned to ensure that "project progress" measures the percentage of achievement (nonfinancial except when the project has credit components) for all events during the entire duration of the implementation schedule. To avoid disproportionate assignment of weights, to the extent possible these should be evenly distributed along the implementation schedule. When activities are concurrent, avoid "double counting."

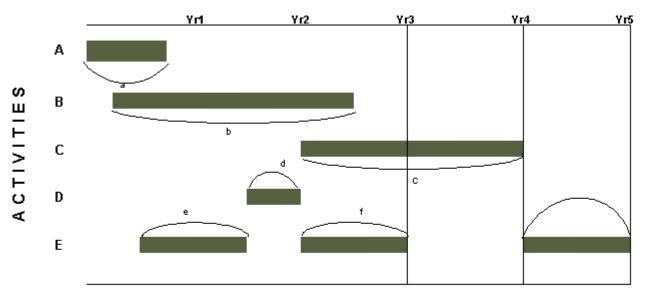
3. Computation of Project Progress

6. Once all activities are identified and corresponding weights assigned, project progress should be calculated using the following steps:

- (i) Determine the actual percentage progress (nonfinancial) of each activity.
- (ii) Multiply these percentages by the assigned weight of each activity to arrive at the weighted progress.
- (iii) Add up the resulting weighted progress of all activities to determine the project progress.

7. Attachment to this Appendix provides an illustration of this calculation using a generic sample implementation schedule and a specific example in the education sector.

Implementation Schedule with Activities and Weights



- 1.
- Sum of all weights should equal 100 percent (a+b+c+d+e+f+g = 100%) When calculating the percentage of "project progress." all completed activities should be counted as accomplished, regardless of when they 2. When calculating the bencemade of broker brokers, an completed activities should be connect as accombished, redardless of when they were scheduled to be completed. For example, when calculating the percentage of "project progress" after year 3. if activity D is completed in year 3 rather than in year 2, it should still be included in the computation.
 Total weight of each activity is as follows: Activity A-a; Activity B-b; Activity C-c; Activity D-d; and Activity E-e + f +g
 Project progress of a project is the summation of the actual percentage of progress for each activity multiplied by the total weight of each activity multiplied by the total weight of each
- activity.

Activities	Year 1	Year 2	Year 3	Year 4	(a) Assigned Weight	(b) Actual Progress	(a) x (b) Weighted Progress
Establish PIU					5%	100%	6%
Establish Accreditation Board, etc.					5%	0%	0%
Appoint Staff and Budget					4%	75%	3%
Adopt Architecture Plans					2%	100%	2%
Shortist Consulting Firms					6%	100%	6%
Prepare Fellowship Program					6%	76%	4%
Prepare Civil Works Tendering					30%	0%	0%
Civil Works: Classrooms, Dorms, etc.					6%	0%	0%
Procurement of Furniture and Equipment					16%	10%	2%
Field Work of Consultants					7%	0%	0%
Provide Fellowships					6%	0%	0%
Conduct StudyTours					6%	0%	0%
Provide Curriculum Standards					6%	0%	0%
				Total Weight Imp. Progress	100%		24%

Sample Implementation Schedule

(a) As signed weight for each activity

(b) Actual progress of each activity (a) x (b) weighted progress for each activity

Project progress = sum of all weighted progress for each activity

LOAN PROCESSING HISTORY

MULTITRANCHE FINANCING FACILITY (MFF)

1.	Approval of Project Preparatory Technical Assistance	8 June 2004
2.	Concept Paper Approval	
3.	Fact-Finding/Reconnaissance Mission	15 May-2 Jun 2006
4.	Management Review Meeting (MRM)	09 February 2007
5.	Pre-Appraisal Mission	5 Oct – 10 Nov 2008
6.	Appraisal Mission	13-16 January 2009
7.	Staff Review Committee Meeting	05 February 2009
8.	Negotiation of Framework Financing Agreement (FFA)	1 – 2 April 2009?
9.	FFA Signing	14 May 2009
10.	Submission of FFA to Management	
11.	Board Circulation of RRP-MFF	
12.	Board Consideration and Approval of RRP-MFF	1 June 2009
13.	Last Periodic Financing Request Submission (estimated)	31 December 2012
14.	Estimated Investment Program Completion Date	31 December 2015
15.	Period of Utilization	30 June 2016

FIRST PERIODIC FINANCING REQUEST (PFR) PROCESSING HISTORY

1.	Approval of Project Preparatory Technical Assistance	8 June 2004
2.	Concept Paper Approval (as a part of MFF)	
3.	Fact-Finding/Reconnaissance Mission (as a part of MFF)	15 May-2 Jun 2006
4.	Management Review Meeting (MRM)	09 February 2007
5.	Pre-Appraisal Mission (as a part of MFF)	5 Oct - 10 Nov 2008
6.	Appraisal Mission (as a part of MFF)	13-16 January 2009
7.	Staff Review Committee Meeting (as a part of MFF)	05 February 2009
8.	Loan Negotiations (as a part of MFF)	1 – 2 April 2009?
9.	1 st Periodic Financing Request Submission (as a part of MFF)	
10.	Approval of 1 st PFR	1 July 2009
11.	Signing of Loan and Project Agreements on 1 st PFR	4 August 2009
12.	Loan Effectiveness on 1 st PFR	19 November 2009
13.	Estimated Project Completion Date	31 October 2015
14.	Loan Closing Date* on 1st PFR	30 April 2016