

SCHEDULE OF QUANTITIES, RATES AND PRICES

GROUP 1 : GENERAL

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE BAHT	AMOUNT BAHT
S1.15(3)	Section 1 : General Requirement				
	Field offices and permanent housing				
	i) Field office for Employer size 200 sqm	LS	1		
	ii) Field office for Engineer size 120 sqm	LS	1		
	Sub - total Section 1				
GRAND TOTAL OF GROUP 1					



SCHEDULE OF QUANTITIES, RATES AND PRICES
GROUP 2 : WEIR AND ASSOCIATED WORKS

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE BAHT	AMOUNT BAHT
S2.06(1) S2.06(4)	Section 2 : Water Control and Dewatering Diversion and control of River during construction Dewatering of surface construction	LS LS	1 1		
	Sub - total Section 2				
S3.09(2) S3.09(5) S3.09(6)	Section 3 : Surface Excavation Clearing and Grubbing Roughed clean weir surface i) Remove exiting weir surface Drilling hole on weir surface	sq.m cu.m m	35 35 430		
	Sub - total Section 3				
S4.07(1) S4.07(2)	Section 4 : Fill and Backfill Earthfill Random backfill	cu.m cu.m	1,555 2,400		
	Sub - total Section 4				
S7.04(8)	Section 7 : Protection and Support Excavation Anchor bars dia. 12 mm, L = 0.50 m	m.	457		
	Sub - total Section 7				
S9.10(3) S9.10(6) S9.10(8) S9.10(11)	Section 9 : Concrete Works Reinforcing bars Structure concrete i) Concrete pavement $f_c' = 210$ ksc. Miscellaneous concrete i) Mortar grout Joint fillers and sealer i) Bonding agent	kg. cu.m cu.m sq.m	4,230 104 1 290		
	Sub - total Section 9				
S12.12(8) S12.12(9)	Section 12 : Permanent Equipment and Miscellaneous Works Supply and installation gate and hoist i) Vertical gate size 1.10 x 1.10 m with predestal lift 3.0 tons and gear motor ii) Vertical gate dia. 1.20 m with predestal lift 3.0 tons and gear motor iii) Generator 0.75x2 kW Miscellaneous metal works i) Steel plate ii) Steel structure	set set set kg. kg.	1 1 1 64 595		
	Sub - total Section 12				
GRAND TOTAL OF GROUP 2					

SCHEDULE OF QUANTITIES, RATES AND PRICES
GROUP 3 : ACCESS ROAD 2 LINES AND ASSOCIATED WORKS

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE BAHT	AMOUNT BAHT
	Section 3 : Surface Excavation				
S3.09(2)	Clearing and Grubbing	sq.m	12,514		
S3.09(3)	Stripping	cu.m	1,700		
S3.09(4)	Common Excavation	cu.m	15,580		
S3.09(5)	Rock Excavation				
	i) Weathered rock	cu.m	1		
	ii) Sound rock	cu.m	5,260		
	Sub - total Section 3				
	Section 4 : Fill and Backfill				
S4.07(1)	Earthfill	cu.m	4,330		
S4.07(2)	Random backfill	cu.m	6,140		
S4.07(3)	Free Draining Backfill				
	i) Compacted coarse sand	cu.m	720		
	ii) Soil aggregate	cu.m	2,310		
	iii) Selected material	cu.m	2,530		
	iv) Laterite compaction	cu.m	930		
	Sub - total Section 4				
	Section 5 : Drainage				
S5.10(2)	Side ditch	m.	3,441		
S5.10(6)	Drain pipes				
	i) Furnishing and installing RC. Ø 1.20 m.	m.	295		
S5.10(7)	Headwall, wingwall, and apron for culverts				
	i) Structure Concrete $f_c' = 140$ ksc.	cu.m	369		
	ii) Reinforcing bars	kg.	28,450		
	iii) Lean concrete	cu.m.	58		
	Sub - total Section 5				

SCHEDULE OF QUANTITIES, RATES AND PRICES
GROUP 3 : ACCESS ROAD 2 LINES AND ASSOCIATED WORKS

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE BAHT	AMOUNT BAHT
	Section 6 : Road Construction				
S6.13(8)	Guide posts	No.	170		
S6.13(10)	Guardrails	m.	120		
S6.13(11)	Road signs				
	i) Traffic regulating signs	No.	2		
	ii) Traffic warning signs	No.	44		
	iii) Destination signs	No.	2		
	iv) Distance signs	No.	2		
	Sub - total Section 6				
	Section 7 : Protection and Support Excavation				
S7.04(1)	Placed riprap	cu.m	190		
S7.04(5)	Geotextile	sq.m	614		
S7.04(6)	Sodding	sq.m	3,708		
	Sub - total Section 7				
	Section 9 : Concrete Works				
S9.10(3)	Reinforcing bars	kg.	45,100		
S9.10(6)	Structure concrete				
	i) Concrete $f_c' = 210$ ksc.	cu.m	1,290		
S9.10(11)	Joint fillers and sealer				
	i) Plastic sheet	sq.m	870		
	ii) Contraction Joint: Dowel bar to be painted and greasee	No	2,900		
	iii) Expansion Joint: Dowel bar to be painted and greasee, with metal cap	No	276		
	iv) Longitudinal Joint: Deformed tie bar	No	3,043		
	Sub - total Section 9				
GRAND TOTAL OF GROUP 3					



SCHEDULE OF QUANTITIES, RATES AND PRICES
GROUP 4 : HEADRACE AND FOREBAY

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE BAHT	AMOUNT BAHT
	Section 3 : Surface Excavation				
S3.09(2)	Clearing and Grubbing	sq.m	8,760		
S3.09(3)	Stripping	cu.m	9,021		
S3.09(4)	Common Excavation	cu.m	16,780		
S3.09(5)	Rock Excavation				
	i) Weathered rock	cu.m	1		
	ii) Sound rock	cu.m	13,300		
S3.09(9)	Demolish Existing Structure				
	i) Concrete of diversion pipe	cu.m	1,910		
	ii) Concrete of Intake	cu.m	10		
	iii) Steel	kg.	174,470		
	Sub - total Section 3				
	Section 4 : Fill and Backfill				
S4.07(2)	Earthfill	cu.m	18,380		
S4.07(3)	Free Draining Backfill				
	i) Compacted coarse sand	cu.m	1,390		
	ii) Soil aggregate	cu.m	3,850		
	iii) Selected material	cu.m	4,010		
	iv) Laterite compaction	cu.m	1,392		
	Sub - total Section 4				
	Section 5 : Drainage				
S5.10(2)	Lined surface drains				
	i) Side ditch	m.	3,465		
	ii) Riprap thk. 0.30 m	cu.m	5		
	Sub - total Section 5				
	Section 9 : Concrete Works				
S9.10(3)	Reinforcing bars	kg.	985,470		
S9.10(6)	Structure concrete				
	i) Concrete fc' = 210 ksc.	cu.m	6,750		
S9.10(8)	Miscellaneous concrete				
	i) Concrete connection at headrace to surge tank	cu.m			
	ii) Lean concrete	cu.m	585		
S9.10(9)	Waterstops				
	i) PVC waterstop type A	m.	1,485		
	Sub - total Section 9				
	Section 12 : Permanent Equipment and Miscellaneous Works				
S12.12(1)	Permanent equipment				
	i) Supply and installation gate valve dia. 1.00 m	set	2		
	ii) Installation and grouting steel pipe dia. 1.00 m in Intake	set	1		
S12.12(8)	Miscellaneous metal works				
	i) Steel plate	kg.	7,140		
	ii) Steel structure	kg.	1,490		
	iii) Handrail	m.	234		
	iv) Ladder rung	kg.	40		
	v) Embed steel	kg.	379		
	Sub - total Section 12				
	Section 13 : Steel Liners and Steel Conduit Pipes				
S13.14(2)	Steel Liners and steel conduit pipes				
	i) Steel liners dia.1.00 m.	m.	3,460		
	Sub - total Section 13				
	Section 14 : Miscellaneous Works				
S14.06(4)	PVC pipe and component				
	i) PVC pipe dia. 100 mm	m	3,000		
	Sub - total Section 14				
GRAND TOTAL OF GROUP 4					

SCHEDULE OF QUANTITIES, RATES AND PRICES
GROUP 5 : PENSTOCK

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE BAHT	AMOUNT BAHT
	Section 3 : Surface Excavation				
S3.09(2)	Clearing and Grubbing	sq.m	1,070		
S3.09(3)	Stripping	cu.m	190		
S3.09(4)	Common Excavation	cu.m	115		
	i) Common excavation by machine	cu.m	115		
	ii) Common excavation by labor	cu.m	54		
	Rock Excavation				
S3.09(5)	i) Weathered rock	cu.m	1		
	ii) Sound rock	cu.m	241		
	Sub - total Section 3				
	Section 4 : Fill and Backfill				
S4.07(2)	Earthfill	cu.m	65		
	Sub - total Section 4				
	Section 9 : Concrete Works				
S9.10(3)	Reinforcing bars	kg.	7,160		
S9.10(6)	Structure concrete				
	i) Concrete $f_c' = 210$ ksc.	cu.m	786		
S9.10(8)	Miscellaneous concrete				
	i) Lean concrete	cu.m	16		
	ii) Concrete lining	cu.m	31		
	iii) Asbestos sheet thk. 12 mm	sq.m	2		
	Sub - total Section 9				
	Section 12 : Permanent Equipment and Miscellaneous Works				
S12.12(1)	Permanent equipment				
	i) Supply and installation gate valve dia. 0.90 m	set	1		
	ii) Air release valve dia.200 mm	set	1		
S12.12(8)	Miscellaneous metal works				
	i) Ring girder	kg.	372		
	Sub - total Section 12				
	Section 13 : Steel Liners and Steel Conduit Pipes				
S13.14(2)	Steel Liners and steel conduit pipes				
	i) Steel liners dia.0.90 m.	m.	140		
	ii) Steel liners dia.0.60 m.	m.	18		
	iii) Wye branch dia.0.90 m to dia.2-0.60 m	set	1		
	iv) Pipe bend dia. 0.60 m	set	1		
	v) Expansion joint dia.0.90 m	set	2		
	Sub - total Section 13				
GRAND TOTAL OF GROUP 5					

SCHEDULE OF QUANTITIES, RATES AND PRICES
GROUP 6 : POWERHOUSE AND TAILRACE

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE BAHT	AMOUNT BAHT
	Section 3 : Surface Excavation				
S3.09(2)	Clearing and Grubbing	sq.m	440		
S3.09(4)	Common Excavation	cu.m	580		
S3.09(5)	Rock Excavation				
	i) Weathered rock	cu.m	1		
	ii) Sound rock	cu.m	545		
S3.09(9)	Demolish Existing Structure				
	i) Concrete	cu.m	66		
	Sub - total Section 3				
	Section 4 : Fill and Backfill				
S4.07(1)	Earth fill	cu.m	450		
	Sub - total Section 4				
	Section 5 : Drainage				
S5.10(2)	Lined surface drains				
	i) Gutter drain	m.	65		
	Sub - total Section 5				
	Section 7 : Protection and Support Excavation				
S7.04(1)	Placed riprap	cu.m	150		
S7.04(2)	Bedding	cu.m	75		
S7.04(6)	Sodding	sq.m	40		
	Sub - total Section 7				
	Section 9 : Concrete Works				
S9.10(3)	Reinforcing bars	kg.	75,780		
S9.10(6)	Structure concrete				
	i) Concrete fc' = 210 ksc.	cu.m	606		
S9.10(8)	Miscellaneous concrete				
	i) Secondary concrete fc' = 210 ksc.	cu.m	5		
	ii) Lean concrete	cu.m	4		
S9.10(9)	Waterstops				
	i) PVC waterstop type A	m.	21		
S9.10(11)	Joint fillers and sealer				
	i) Elastic filler	sq.m	1		
	ii) Joint sealant	sq.m	2		
	Sub - total Section 9				
Amount Carried Forward					

SCHEDULE OF QUANTITIES, RATES AND PRICES
GROUP 6 : POWERHOUSE AND TAILRACE

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE BAHT	AMOUNT BAHT
Amount Brought Forward					
	Section 11 : Building Construction				
S11.14(2)	Brick walls				
	i) Wall 1-Plastering w/plant	sq.m	1,416		
	ii) Wall 2-8"x8" Non slip ceramic tiles	sq.m	31		
S11.14(3)	Cement plastering brick walls	sq.m	2,832		
S11.14(4)	Doors and windows				
	i) D2-Glass door 1.80 x 2.00 m	set	2		
	ii) D3-Steel door 1.80 x 2.00 m	set	1		
	iii) D4-Glass door 0.90 x 2.00 m	set	1		
	iv) D5-Steel door 0.90 x 2.00 m	set	2		
	v) D6-PVC door 0.80 x 2.00 m	set	1		
	vi) W1-Opening window 3.40 x 1.10 m	set	10		
	vii) W2-Sliding window 1.70 x 1.10 m	set	1		
	viii) W3 Fixed glass window 3.40 x 1.50 m	set	8		
	ix) W4 Louver window 1.70 x 1.65 m	set	2		
	x) W5-Opening window 1.20 x 0.50 m	set	3		
S11.14(5)	Furnishing and Installing Steel Rolling Shutter Doors				
	i) D1-Steel roller shutter door size 4.35x6.00 m.	LS	1		
S11.14(7)	Floor finishes				
	i) Floor 1-Coarse finished	sq.m	14		
	ii) Floor 2-Coarse finished w/waterproof	sq.m	300		
	iii) Floor 3-8"x8" Non slip ceramic floor tiles	sq.m	8		
	iv) Floor 4-8"x8" Ceramic floor tiles	sq.m	97		
	v) Floor 5-Acid proof epoxy	sq.m	177		
S11.14(8)	Wall finished				
	i) Wall 1-Plastering w/plant	sq.m	1,416		
	ii) Wall 2-8"x8" Non slip ceramic tiles	sq.m	31		
	iii) Wall 3-Glass w/aluminium frame	sq.m	25		
S11.14(8)	Ceiling works				
	i) Plastering w/plant	sq.m	107		
	ii) Gypsum board with T-bar stud 0.60 x 0.60 m, 9.0 mm thk.	sq.m	8		
S11.14(11)	Signboard	L.S.	1		
S11.14(12)	Flag pole	L.S.	1		
S11.14(13)	Guard shed	L.S.	1		
S11.14(14)	Water supply and sanitary services	L.S.	1		
S11.14(15)	Seepage tank	L.S.	1		
S11.14(16)	Chain link fence	m.	110		
S11.14(17)	Lightning protection system	L.S.	1		
S11.14(19)	Roof drain	m.	135		
	Sub - total Section 11				
	Section 12 : Permanent Equipment and Miscellaneous Works				
S12.10(8)	Miscellaneous metal works				
	i) Galvanize steel Handrail	m.	14		
	ii) Steel grating	kg.	1,420		
	iii) Cable trench type A	m.	40		
	iv) Embedded steel	kg.	5,600		
	Sub - total Section 12				
	Section 15 : Illumination Equipment				
S15.05(1)	Indoor illumination equipment	L.S.	1		
S15.05(2)	Outdoor illumination equipment and main low power cable				
	i) Outdoor illumination equipment	L.S.	1		
	ii) Main low power cable in powerhouse	L.S.	1		
S15.05(3)	Air condition 36,000 BTU	set	1		
S15.05(4)	Ventilator 12"	set	1		
S15.05(5)	Miscellaneous equipments	L.S.	1		
	Sub - total Section 15				
GRAND TOTAL OF GROUP 6					