

DEPARTMENT OF CIVIL ENGINEERING
NORTH WESTERN UNIVERSITY, KHULNA

PROPOSAL
for
Rate Schedule of
Testing and Consultancy Services (TCS), CIVIL

SN	Name of Test	Rate of TCS, CIVIL (BDT)
Aggregate		
01	Sieve analysis/Gradation/FM (CA)	3500
02	Sieve analysis/Gradation (Base/sub-base)	5000
03	Sieve analysis/FM (FA)	2500
04	% finer than #200 sieve/Fine content/ Silt content	2000
05	Aggregate Crushing Value (ACV)	5000
06	Aggregate Impact Value (AIV)	3500
07	Ten percent fines (10% fines)	7000
08	Angularity number	3500
09	Elongation Index (EI)/Shape test	4000
10	Unit weight of aggregate (CA)	3000
11	Unit weight of aggregate (FA)	3000
12	Absorption and/or Specific Gravity	3000
13	Moisture content	2000
14	Bulking of sand	3000
15	CBR of Base and Sub-base material (lab.)	35000
16	Standard Proctor test of aggregate (MDD)	10000
17	Modified Proctor Test	12000
Brick		
01	Absorption (ASTM/BS)	1500
02	Crushing strength (ASTM/BS standard)	2500
03	Unit weight (ASTM/BS)	2500
04	Efflorescence	2500
Hollow/Special Brick Blocks/ Kerb		
01	Comp. Strength of Hollow bricks, Paving/ Concrete blocks etc.	2500
02	Absorption	1500
03	Unit weight	2000
Bitumen		
01	Specific gravity/ Density	2500
02	Penetration / Grading	2500
03	Flash & Fire points	3000
04	Softening point (R&B)	2500

	Asphalt or Bituminous Material/ Pavement Core	
01	Marshall stability and flow test	5000
	Cement Concrete	
01	Concrete cylinders (100 mmX200 mm), for a set of 3 nos.	1500
02	Concrete cylinders (150 mmX300 mm), , for a set of 3 nos.	2500
03	Cubes (<200 mm), for a set of 3 nos. o3	2500
	Concrete Mix Designs	
04	Design of concrete mixes without admixtures (up to 25 MPa)	40000
	Cement (ASTM/AASHTO Standard)	
01	Compressive strength, 3 or 7 or 28 days	2000+200
02	Setting time/ or normal consistency	3000
03	Fineness	2000
	Soil Boring	
	Per boring	
01	Within Khulna City- depth up to 20m	10000
02	Within Khulna City- depth up to 30m	15000
03	Within Khulna district- depth up to 20m	15000
04	Within Khulna district- depth up to 30m	20000
	<i>Notes: Minimum 3 boring for a particular site; : Up to 3 katha – 3 nos.; 3-5 katha – 5 nos.; 6 – 10 katha- 8 nos. Consult with chairman; mobilization, Accommodation and VAT should be provided by the client</i>	
	Soil test	
	<i>Physical and Index properties</i>	
01	Specific gravity (Sp. Gr.)	1500
02	Unit weight (wet & dry)	1500
03	Moisture content	700
04	Shrinkage limit	1200
05	Liquid limit and plastic limit	3000
06	Hydrometer , wash sieving & specific gravity	4000
	Compaction and density	
01	Standard proctor Compaction Test	5000
02	Modified Proctor Compaction test	6500
	Strength and Deformation Characteristics	
01	Unconfined Compression Test (including Sp. Gr.)	6000
02	Laboratory California Bearing Ratio (CBR) of soils	15000
03	Consolidated drained Direct Shear test for sand	7000

	Test of Water		
01	pH	5000+500*	9000+1000*
02	Color (True or Apparent)		

03	Turbidity		
04	Total Hard ness		
05	Chloride		
06	Total Dissolved Solids (TDS)		
07	Manganese (Mn)		
08	Arsenic (As)		
09	Total iron (Fe)		
10	Total Coliform (TC)		
	Fecal Coliform (FC)		
	Miscellaneous Water Quality Parameters		
01	pH	200	400
02	Colour (True or Apparent)	300	500
03	Turbidity	200	400
04	Carbon-d-Oxide (CO ₂) / Acidity	200	250+50*
05	P-Alkalinity/ M- Alkalinity/ T- Alkalinity	250	450+50*
06	Carbonate (CO ₃) or Bi-carbonate (HCO ₃)	350	600+100*
07	Total Hardness (EDTA)	600	900+100*
08	Chloride (Cl)	450	700+100*
09	Total Solids (TS)	500	1000
10	Total Suspended Solids (TSS)/ Insoluble Solids/ (TSS+TDS=TS)	500	1900+100*
11	Total Dissolved Solids (TDS)	500	900+100*
12	Electrical conductivity (EC)	350	600
13	Biochemical Oxygen Demand (BOD)-5 days	1000	2000
14	Chemical Oxygen Demand (COD)	1000	1800+200*
15	Dissolved Oxygen (DO)	300	600
16	Arsenic (As)- using GFAAS	500+300*	1100+600*
	Bacteriological Analysis		
17	Fecal Coliform (FC)/ Total Coliform (TC) (each)	800	1300+200*
18	E. Coli	800	1300+700*
	Miscellaneous Wastewater/ Effluent Quality Parameters		
19	p ^H	200	400
20	Color (True or Apparent)	300	500+200*
21	Turbidity	200	400+200*

Notes: SA= Site Allowance for the field visit: 12500 TK. within Khulna city. For outside the city or remote locations, it will be decided by the Chairman, TCS (Civil). The transportation, local hospitalities and accommodation (in case of overnight stay) should be paid by the Client.

* Indicates charges for chemical/labor/others.