

# AZAD GOVERNMENT OF THE STATE OF JAMMU AND KASHMIR

### **COMPOSITE SCHEDULE OF RATES**

Updated for 2<sup>nd</sup> Semi-Annual (Jan - June) 2016-17

#### **DISTRICT NEELUM**

PLANNING AND DEVELOPMENT DEPARTMENT, KASHMIR PLAN HOUSE.

BLOCK NO. 11, NEW CIVIL SECRETARIAT, GO.AJK MUZAFFARABAD.

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### **PREFACE**

The Planning & Development Department, Government of AJ&K felt the need to have a Composite Schedule of Rates (CSR) for AJ&K. The Composite Schedule of Rates was required to introduce a common basis for value engineering in accordance with the geophysical conditions and available resources of AJ&K. National Engineering Services Pakistan (Pvt.) Limited (NESPAK), being the largest Consultant firm and having a rich experience of various projects in AJ&K was engaged to carry out the assignment. It was agreed that due to urgency of implementing a CSR for ongoing development works in AJ&K, NESPAK has submitted CSR in three stages i.e. Pre-Interim, Interim and Final. Pre-Interim CSR was submitted in March, 2008 and after receiving feedback from all the stakeholders Interim CSR was submitted and its enforcement was approved by the AJK Cabinet in its meeting held on August 19, 2009. Additional items of work have been added upon the recommendations of various Departments. The rates used for the preparation of this Composite Schedule of Rates have been updated to the prevailing prices of construction materials, machinery and labour for the month of January 2016 in all ten districts of AJ&K on semi-annual basis.

The CSR-2009 (updated) has been computerized in such a manner that links exist between the basic data file, comprising rates of construction materials, labor and rental of machinery. Furthermore those calculation carried out in files of detailed analysis (Volume-II, A & B) and resulted to modify the files of Composite Schedule of Rates (Volume-I). Any revision initiated in the "basic data" file would correspondingly revise the relevant item rate.

The Schedule consists of two Volumes; namely Composite Schedule and Detailed Analysis for each district of AJ&K. Each page of the CSR bears identification details with respect to its edition, volume and district.

Minor adjustment in the market rates have been made using best professional judgment and using data from our survey of various districts of AJ&K and other cities of Pakistan. The Rate Analysis Section constituted by the Government of AJ&K is deputed to monitor and resolve difficulties that may arise in the application of the rates contained in this schedule to cope with regional imbalances at a given time.

All cost estimates for administrative approval and detailed estimates for technical sanction shall be prepared on the basis of rates provided in the Schedule. This Schedule will form bench mark for inviting tenders for which specific item of works included in the estimate shall be identified for quotation above or below the rates.

The rates for items other than those given in this Schedule shall be treated as non-scheduled items. The analysis of rates for such items shall be prepared by the concerned Executive Engineer and approved by the competent authority (Superintending Engineer) before the work undertaken, keeping in view the provisions of the delegations of the financial powers. Copies of the approved rate analysis shall be forwarded to Rate Analysis Section P&DD for reference and review where-ever found necessary and then incorporation in next updation, if justified. This Schedule of Rates supersedes all previous documents and shall become effective from the date of issuance.



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#### **GENERAL CONDITIONS**

- 1. The work contained in this Schedule of Rates shall be carried out in accordance with the specifications given briefly for each item and the applicable provisions of the West Pakistan Schedule of Rates Committee Specifications as adopted by the Government of AJ&K duly amended from time to time
- 2. The rates entered against all items in the Schedule of Rates are those referred to in contract as the basic rates which cover the cost of all materials, transportation to site of work, labour, equipment, tools, plants, supervision charges, all Government levies, imports, octroi charges, overheads, profits and incidental cost thereto required for the satisfactory completion of the work. Charges for testing the Public Health engineering and Electrical works are also included in this schedule.
- 3. Unless otherwise stipulated, measurements for payment for the work done shall confirm to the specification for the execution of works West Pakistan Standing Rates Committee adopted by the Government of AJ&K.
- 4. For certain items of the work floor-wise rates have been entered in this schedule. For this purpose, the rates for the basement shall be applied to all works below the foundation up to the top of roof of basement. Rates for the ground floor include the cost of all works from the top of the basement roof up to the top of ground floor and so on. Parapet, water tank and stair wall etc. shall be considered as part of the floor above which these are constructed.
- 5. If a discrepancy is found between various documents, the order of precedence given below shall govern to determine the scope of the contracted work forming part of the contract based on this schedule:
  - Schedule of Quantities
  - West Pakistan Standing Rates Committee Specifications as adopted by the Government of AJ&K.
  - Special condition of the agreement
  - Conditions of contract
  - Drawings
- 6. The unit rates of plant, materials and labor given in this schedule are indicative and shall not form bases for a claim by the contractor for the works let out on percentage above or below the composite schedule of items.
- 7. Nominal conversion figures from System International to System Imperial have been given as complete switch over has not yet been achieved.
  - i. Cost of Manpower not charged to the items directly such as Contractor's Head Office, Project Office, Security, Laboratory, Survey, Account, Stone and Administration staff.
  - ii. Expenses on Laboratory, Camp, Workshop, Office and allied equipments and fixtures.
  - iii. Small equipment, tools and attachments.
  - iv. Advance tax deductible at source.



# ABBRIVATIONS USED

SYSTEM IMPERIAL		SYSTEM INTERNATIONAL	
Running foot	R.ft.	Millimeter	mm
Square foot	Sq.ft.	Centimeter	cm
Cubic foot	Cu.ft.	Running Meter	RM
Pound	Lb	Square Meter	Sq.m
Ounce	Oz	Cubic Meter	Cu.m.
Pounds per Square inch	Psi	Kilogram	Kg.
Gross	Grs	Newton per millimeter square	N/mm²
Maund	Mnd	Hundred	Hund
Dozen	Dz		



TO CONVERT	INTO	MULTIPLY BY
LENGTH		
Inch	Millimeter	25.40
Millimeter	Inch	0.0394
Foot	Meter	0.3048
Meter	Foot	3.2808
Yard	Meter	0.9144
Meter	Kilometer	1.6093
Kilometer	Mile	0.6214
Canal Mile (500 feet)	Kilometer	1.524
Kilometer	Canal Mile	0.6562
Girah	Millimeter	57.15
Mile International		
Nautical (6076.12 feet)	Meter	1852.00
Mile UK nautical (6080 feet)	Meter	1853.18
MASS WEIGHT		
Pound	Kilogram	0.4536
Kilogram	Pound	0.2046
Ounce	Gram	28.3495
Gram	Ounce	0.0353
Quintal	Kilogram	100.00
Grain	Milligram	64.7989
Hundred Weight	Kilogram	50.8023
Tonne	Hundred Weight	19.6841
Ton	Kilogram	1016.047
MASS WEIGHT	Ŭ	
Ton	Tonne	1.0160
Tonne	Ton	0.9842
Seer	Kilogram	0.9331
Maund	Kilogram	37.324
Tola	Gram	11.664
Short Ton (2000 lbs)	Tonne	0.9072
, ,		



TO CONVERT	INTO	MULTIPLY BY
AREA		
Square Inch	Square Millimeter	645.16
Square millimeter	Square inch	0.0015
Square Foot	Square Meter	0.0929
Square meter	Square foot	10.7639
Square Yard	Square meter	0.8361
Square meter	Square Yard	1.1960
Acre	Square meter	4046.8564
Acre	Hectare	0.4047
Hectare	Acre	2.4787
Hectare	Square meter	10000
Square mile	Square kilometer	2.5899
Square Kilometer	Square mile	0.3861
Square mile	Hectare	258.999
Hectare	Square mile	0.00386
CAPACITY, VOLUME AND MOD	DULES OF SECTION	
Pint (UK)	Liter	0.5683
Gallon (imperial)	Liter	4.5461
Cubic foot	Liter	28.3168
Cubic meter	Liter	1000
Liter	Cubic foot	0.0353
Cubic inch	Millimeter	16.3871
Fluid ounce	Millimeter	28.413
Liter	Gallon (imperial)	0.2199
Cubic Inch	Cubic millimeter	16387.1
Cubic foot	Cubic meter	0.0283
Cubic meter	Cubic foot	35.3147
Cubic Yard	Cubic meter	0.7645
Cubic rard Cubic meter	Cubic meter Cubic yard	1.3080
Acre foot	Hectare meter	0.1233
71010 1001	i icotare motor	0.1200



CONVERSION FACTORS						
TO CONVERT	INTO	MULTIPLY BY				
VLOCITY AND SPEED						
Foot per second Foot per minute Foot per second Kilometer per hour Mile per hour Kilometer per hour Mile per hour	Meter per second Meter per second Kilometer per hour Foot per second Meter per second Mile per hour Kilometer per hour	0.3048 0.0051 1.0973 0.9113 0.4470 0.6214 1.6093				
FORCE						
Kilogram force Pound force Ton force Newton Kilo Newton	Newton Newton Kilo Newton Pound force Ton force	0.8066 4.4482 9.9640 0.2248 0.1004				
FORCE PER UNITE LENGTH						
Pound force per foot	Newton per meter	14.5939				
PRESSURE, STRESS AND MOD	DULES OF ELASTICITY (1Pa	=1N/m <sup>2)</sup>				
Pound per Square foot Pound force per square inch Ton force per square inch Kilo Pascals Ton force per square inch Mega Pascals	Pascals Kilo Pascals Kilo Pascals Pound force per square foot Mega pascals Pound force per square inch	47.8803 6.8948 107.252 20.8354 15.4443 145.038				
MASS PER UNIT LENGTH						
Pound per foot Kilogram per meter Ton per mile	Kilogram per meter Pound per foot Ton per kilometer	1.4882 0.6720 0.6313				



TO CONVERT	INTO	MULTIPLY BY				
MASS PER UNIT AREA						
Ton per Square mile Pound per square foot Kilogram per square meter	Kilogram per square kilometer Kilogram per square meter Pound per square foot	392.298 4.8824 0.2048				
MASS PER UNIT VOLUME						
Pound per Cubic foot Pound per Cubic foot Kilogram per Cubic meter Grams per Liter	Kilogram per Cubic meter Grams per liter Pound per cubic foot Pound per cubic foot	16.0185 16.0185 0.06243 0.06243				
VOLUME RATE OF FLOW						
Cubic foot per second (cusec) Cubic foot per second (cusec) Gallon per minute Cubic foot per thousand acres Cubic foot per thousand acres	Cubic meter per second (cusec) Liter per second Liter per second Liter per hectare Cubic meter per square kilomete	0.02832 28.3168 0.0757 0.0670 or 0.0070				
FUEL CONSUMPTION						
Gallon per mile Mile per Gallon	Liter per kilometer Kilometer per liter	2.825 0.354				
MOVEMENT OF FORCE TORQUE						
Pound force foot Pound force inch Ton force foot Ton force inch	Newton meter Newton meter Kilonewton meter Kilonewton meter	1.3558 0.1130 3.0370 0.2531				



TO CONVERT	INTO	MULTIPLY BY
SECOND MOMEMT OF AREA		
Inch <sup>4</sup>	Millimeter <sup>4</sup>	416231
PLANE ANGLE		
Degree	Radian	0.0174
WORK, ENERGY, POWER (1J =1Ws)		
Kilowatt hour Foot pound force Horse Power Horse power	Kilo joule Joule Kilowatt Kilogram force meter per sec	3600 1.3558 0.7457 76.0402

<sup>\*</sup>For exact values, please consult Standard Hand Books



#### Recommended Construction Material Sources located in ten Districts & Around AJ&K

S.No	Name of Source	Rock Name	Location of Deposit	Estimated Reserve	Remarks	District
1.	Khurshidabad Limestone	limestone	Khurshidabad Village	15.0 million M <sup>3</sup>	All type of concrete work	Kahuta
2.	Khurshidabad Dolorite	Dolorite	Khurshidabad Village	4.0 million M <sup>3</sup>		
3.	Palangi Nullah Gravel	Gravel	Palangi	L/S	Only for	
4.	Tangari Battar River Gravel		Battar	Under prospection	marginal use concrete (2000psi	
5.	Malal Bagla sandstone	Sandstone	Malal Bagla	6.0 million M <sup>3</sup>	strength) with	Bagh
6.	DanaSandstone		Dana	8.0 million M <sup>3</sup>	OPC	
7.	Chamankot sandstone		Chaman Kot	12.0 million M <sup>3</sup>		
8.	Bess Bagla sandstone		Bess Bagla	12.0 million M <sup>3</sup>		
9.	Dhulli Sandstone		Sandstone	6.0 million M <sup>3</sup>		
10.	Shujahabad sandstone		Shujaabad	10.0 million M <sup>3</sup>		
11.	Patraita Sandstone		Patriata	3.0 million M <sup>3</sup>		
12.	Lassdanna Sandstone		Lassdanna	20.0 million M <sup>3</sup>		
13.	Yadgar limestone	Limestone	Yadgar	25.50 million M <sup>3</sup>	All type of	
14.			Batmang		concrete work With Project	
15.			Hill Seri Dara	Under prospection	Specific studies	
16.			Zahid Chowk Pirchinasi road	Under prospection		ian
17.	Noseri Dolorite	Dolorite	Noseri Chelhana	7.0 million M <sup>3</sup>		[att
18.	Lamnian Dolerite	Dolorite	Lamnian			g/ H
19.	Eran Sandstone	Sandstone	Near Kohala	Under prospection	Only for marginal use	Muzaffarabad/ Hattian
20.	Chattar Kalas sandstone gravels	Gravel	Agar Naullah Chattar Kalas	Under prospection	concrete (upto 2000psi strength) with	Auzaff
21.	Komikot sandstone	Sandstone	Komikot	Under prospection	OPC	
22.	Niazpura Dolomitic Limestone	Limestone	Niazpura	5.0 M <sup>3</sup>	All type of concrete work With Project Specific studies	



23.	Lamnian Meta Basalt	Igneous Bodies	Lamnian	$7.0  \mathrm{M}^3$	All type of	
23.	Danman Weta Basart	Igneous Boules	Lamman	7.0 111	Concrete work	
					Except High	
					Strength	
					Concrete (upto	
					2000psi And	
					Asphalt Layer	
24.	Goi Dandli	Dolomite	Kotli Goi Dandli	Abundant	All type of	Kotli
			road	deposit	concrete work	
25.	Kamroti Dolomite		Kotli Nakial road	30.0 million M <sup>3</sup>	with project specific study	
					except Pre-	
					stress concrete	
26.	Poonch river gravel	Gravel	Distributed along	L/S	Only for	
			Rive terraces		marginal use	
27.	Poonch terraces		do	L/S	concrete (upto	
28.	Khorban Nullah gravel		do	L/S	2000 psi	
20.	Timoroum reaman graver		u o	L/S	strength) with	
29.	Khari Sharief	Gravel	Khari Sharif	Under	Only for	Mirpur
				prospection	marginal use	pur
20	Mongle intliner	-	Manala	Under	concrete (upto	
30.	Mangla jatli road		Mangla		2000 psi	
				prospection	strength) with	
31.	Jeri Kas		Jeri Kas	Under	OPC	
				prospection	0.20	
32.	Skater		Skater Naullah	Under	وسماليت	
				prospection	$M_{\nu} q_{\nu}^{*\prime}$	
33.	Kanali Kas	-	Kanali Kas	Under	11.1	
33.	Kanan Kas		Kallali Kas		3/200 m	
				prospection	10	
34.	Kot Sarsawa		Kot Sarsawa	Under	40 2	
				prospection	η Ο ,	
35.	Hari Kas		Hari Kas	Under		
				prospection		
36.	Panjari Nullah	Gravel	Panjari	Under	Only for	Bhimber
30.	T diffair T diffair	Giuvei	i unjun	prospection	marginal use	Diffinite
37.	Dandhar Nullah	-	Dandar	Under	concrete (upto	
37.	Dandhai Nullan		Dalidai		2000 psi	
				prospection	strength) with	
38.	Chaprian		Chaprian	Under	OPC	
				prospection		
39.	Bakot Nathia-Gali	limestone	Bakot	30.0 million M <sup>3</sup>	All type of	
					concrete work	Abbotatabad
					With Project	
40.	Bakot Kas				Specific studies	Abbottabad
41.	Noseri Dolorite	Dolorite	Neelum Valley	1.5 million M <sup>3</sup>	studies	_
42.	Noseri volcanics	Metabasalt	Road along	9.03 million M <sup>3</sup>	marginal use	Neelum / Muzaffarabad
			Noseri - Marble		with OPC	ral
43.	Islampur-Jura Granite	Granite	Sandoq-	Under	Stone Masonry	ffa
	r		Islampura	prospection		IZai
44.	Neelum Granite Keran	Granite	Danjar - Keran	Under		Mu
44.	1400ium Oranne Kerali	Granite	Danjai - Ketali	prospection		1/1
						am
45.	Dudhnial Arenaceous	Metacarbonates	MT Bazar	1.656 million M <sup>3</sup>	Bitumen, plain	eel
	Carbonates		Dudhnial		Concrete but	Ž
					not for pre-	



Kharigam   Seri and Kharigam along Neelum Valley	46.	Malik Seri Dolorite	Dolorite	Between Khawaja	13.5 million M <sup>3</sup>	stress concrete	
Neelum Valley				Seri and			
47. Kel Dolorite dykes   Dolorite   Kelser - Kel Road   Under prospection							
Along Toli Pir Road   Dolorite   Changan - Dudhnial Road   Dolorite   Changan - Dudhnial Road   Dolorite   Changan - Dudhnial Road   Dolorite   Specific studies   Specific studies   Specific studies   Specific studies   Specific studies   Specific studies   Stone Masonry				Neelum Valley			
As.   Changan Meta   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dudhnial Road   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dudhnial Road   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dudhnial Road   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dolorite   Dolorite   Dolorite   Dudhnial Road   Dolorite   Dolorite   Dolorite   Dudhnial Road   Dolorite	47.	Kel Dolorite dykes	Dolorite	Kelser - Kel Road	Under	• •	
As. Changan Meta Dolorite   Changan - Dudhnial Road   Dudhnial Road   Specific studies					prospection		
Dolorite   Dudhnial Road   Studies   Stone Masonry	48.	Changan Meta	Dolorite	Changan -	1.776 million M <sup>3</sup>	3	
Road   prospection		Dolorite				studies	
Sandstone   Near Arja   Under prospection	49.	Dhokran Gneiss Kel	Granitic Gneiss			Stone Masonry	
Since the prospection   Since the prospection   Since the prospection				Road	prospection		
Since   Sinc	50.	Arja - Dalkot Section	Sandstone	Near Arja		•	Poonch
S1.   Gio Nullah Rawalakot   S2.   Khaigalla-Hajira outcrop   Near Hajira   Under prospection					prospection		
Section   Strength) with OPC   Strength	51.	Gio Nullah Rawalakot			Under		
Signature   Sign					prospection		
Sandstone   Sand	52.	Khaigalla-Hajira		Near Hajira	Under	OPC	
out crop  54. Hajira Nar outcrop  55. Ban Ni Bhek Toli Pir Road  56. Jhandala Sandstone  57. Pappay Nar  Sandstone  Sandstone  Sandstone  Sandstone  Along Toli Pir road  Arja Tain Road Jhandal Locality  Prospection  Along Tararkhal to Palandri Road  Under prospection  Under prospection  Figure 4  Along Tararkhal to Palandri Road  Figure 4  Along Tararkhal to Hajira Road  Under prospection  Along Tararkhal to Hajira Road  Under prospection  Figure 4  Along Tararkhal to Hajira Road  Figure 4  Under prospection  Along Tararkhal to Hajira Road  Figure 4  Under prospection		outcrop			prospection		
out crop  54. Hajira Nar outcrop  55. Ban Ni Bhek Toli Pir Road  56. Jhandala Sandstone  57. Pappay Nar  Sandstone  Sandstone  Sandstone  Sandstone  Along Toli Pir road  Arja Tain Road Jhandal Locality  Prospection  Along Tararkhal to Palandri Road  Under prospection  Under prospection  Figure 4  Along Tararkhal to Palandri Road  Figure 4  Along Tararkhal to Hajira Road  Under prospection  Along Tararkhal to Hajira Road  Under prospection  Figure 4  Along Tararkhal to Hajira Road  Figure 4  Under prospection  Along Tararkhal to Hajira Road  Figure 4  Under prospection	53.	Hajira Abbaspur road	=	Hijira Abbaspur	Under		
Solution   Solution		3			prospection		
Solution   Solution	54.	Hajira Nar outcrop			Under		
Solution   Sandstone   Along Toli Pir road   Under prospection		J			prospection		
Road road prospection  56. Jhandala Sandstone Arja Tain Road Jhandal Locality prospection  57. Pappay Nar Sandstone Along Tararkhal to Palandri Road Under prospection  58. Tarar Khal Under prospection  59. Nar near Tarar khal Bazar along Hajira road Under prospection  Along Tararkhal Under prospection  Along Tararkhal to Hajira Road prospection	55.	Ban Ni Bhek Toli Pir		Along Toli Pir			
Jandal Locality prospection  57. Pappay Nar Sandstone Along Tararkhal to Palandri Road Under prospection  58. Tarar Khal Under prospection  59. Nar near Tarar khal Bazar along Hajira road Under prospection  Along Tararkhal to Hajira Road prospection		Road		_	prospection		
Jandal Locality prospection  57. Pappay Nar Sandstone Along Tararkhal to Palandri Road Under prospection  58. Tarar Khal Under prospection  59. Nar near Tarar khal Bazar along Hajira road Under prospection  Along Tararkhal to Hajira Road prospection	56	Ihandala Sandstone		Aria Tain Road	Under		
57. Pappay Nar  Sandstone  Along Tararkhal to Palandri Road  Under prospection  58. Tarar Khal  Under prospection  Along Tararkhal Under prospection  Along Tararkhal Under prospection  Along Tararkhal Under prospection  Hajira Road  Along Tararkhal prospection	30.	Junidara Sandstone		3	011001		
to Palandri Road prospection  58. Tarar Khal  Under prospection  59. Nar near Tarar khal Bazar along Hajira road  to Palandri Road prospection  Along Tararkhal Under prospection	57	Pannay Nar	Sandstone	•			
58. Tarar Khal  Under prospection  59. Nar near Tarar khal Bazar along Hajira road  Along Tararkhal Under prospection  to Hajira Road prospection	37.	Tappay Ivai	Sandstone	_			
59. Nar near Tarar khal Bazar along Hajira road  prospection  Along Tararkhal to Hajira Road prospection  Under prospection	58	Tarar Khal	1				
road	36.	Tarat Kilat					<b>:</b>
road	50	Non noor Toron labot	-	Along Toroglahal			hmt
road	39.						Ipn
				io majna Road	prospection		Š
60 Azad Pattan (Madan) Azad Pattan - Under	60		1	Azad Pattan -	Under		
Kalri road prospection		(Irinouil)					

10 per met 18/8/201

(Naveed Azad)

Geologist/Material Engineer

(Syed Ahmed Hassan)
Geotechnical/Material Engineer

(Engr.Altaf Ahmed)
Chief Rate Analysis-P&DD



#### **CARRIAGE**

- CARRIAGE OF MATERIALS INCLUDE LOADING, UNLOADING AND STACKING AT SITE.
- 2. THE RATES ARE APPLICABLE TO CARRIAGE OF MATERIAL ON PACCA ROAD ONLY.
  FOR KACHA ROADS AN ALLOWANCE OF 25% EXTRA SHALL BE ALLOWED FOR 2<sup>ND</sup> SUBSEQUENT DISTANCE COVERED IN KM.(MILES) RATES.
  RATES UP TO 1<sup>ST</sup> MILE (1<sup>ST</sup> KM.) IS HOWEVER COMMON TO BOTH KACH AND PACCA ROADS.
- 3. FOR HILLY AREAS 25% ABOVE THE RATES IN THE PLAIN AREAS BE ALLOWED FOR TOTAL DISTANCE COVERED IN KM.(MILES).
- 4. THE TERM "KM." WHENEVER USED IS TO MEAN STATUE KILOMETER.
- 5. THE RATES FOR CARRIAGE BY BOAT OR STREAMER SHALL BE THE SAME AS BY ANY OTHER MECHANICAL MEANS ON LAND.



# LOADING, UN-LOADING AND STACKING

1. THE RATE FOR LOADING INTO AND UN-LOADING FROM TROLLIES & BOATS WILL BE THE SAME AS FOR MOBILE TRUCKS.



#### **EARTH WORK**

- THE SOIL CLASSIFACTION (HARD, VERY HARD, WET AND SLUSH) WILL BE APPROVED BY THE SUPERINTENDING ENGINEER.
- 2. IN CASE OF EMBANKMENT FILL, THE MODE OF MEASUREMETN WILL BE INDICATED IN THE TENDER.
- 3. IN CASE BANK MEASUREMENT IS NECESSARY, FOLLOWING ALLOWANCES SHOULD BE PROVIDED FOR:
  - a) DEDUCATION FOR SHRINKAGE FROM THE BANK MEASUREMENT WHEN THE EARTWORK IS DONE BY MANUAL LABOUR = 10%.
  - b) DEDUCATION FOR SETTLEMENT FROM THE BANK MEASUREMENTS WHEN THE EARTH-WORK IS DONE BY DIFFERENT TYPE OF MACHIANARY WILL BE AS UNDR:
    - ii. BULLDOZERS 4% iii. SCRAPERS 3%

i. TRACTOR 6%

- Where the above equipment is deployed in fleet the minimum factor specified will be applied.
- 4. NO DEDUCATION WILL BE MADE FOR RAMMED/ COMPACTED FILL.



# DISMANTLING (DEMOLISHING)

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL AND BY PRODUCTS.
- 2. THE RATES FOR DISMANTLING ROOFS OR UPPER STORY FLOOR INCLUDE THE DISMANTLING OF ALL MATEHIALS, EXCEPT ROOF SUPPORTS SUCH AS BEAM AND TRUSSES.
- 3. ADD EXTRA 20% AND 25% FOR  $2^{ND}$  &  $3^{RD}$  AND 30% FOR  $4^{TH}$  & SUBSEQUENT FLOORS RESPECTIVELY.



#### PLAIN AND REINFORCED CONCRETE

- 1. RATES FOR ITEM 5-2 TO 5-4 ARE FOR UNFORMED CONCRETE
- 2. RATES FOR OTHER ITEMS ARE FOR MACHINE MIXED FORMED CONCRETE IN CASE EXIGENCY OF THE WORK SO WARRANTS, HAND MIXING MAY BE DONE WITH ADDITION OF 10% EXTRA CEMENT AT NO EXTRA COST.
- 3. THE CEMENT CONCRETE MAY EITHER BE PLAIN OR REINFORCED AND SHALL BE PAYABLE AT THE RATES SPECIFIED AGAINST RESPECTIVE ITEMS. THE STEEL REINFORCEMENT SHALL HOWEVER BE PAYABLE SEPARATELY UNDER APPLICABLE ITEMS 5-44 OF THE SCHEDULE.
- 4. RATES FOR ALL FINSHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSEK MATERIAL, BY PRODUCTS AND SITE CLEARANCE.



# PRESTRESSED CONCRETE

- RATES FOR ALL FINSHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRAI, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.
- 2. THE PRESTRESSED CONCERETE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH SPECIFICATIONS LAID DOWN BY FREYSSINET OR SIMILAR SYSTEM.



#### PILE FOUNDATION CONCRETE

- 1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.
- 2. RATES FOR DRILLING FOR DIFFERENT SIZES OF PILE SHALL BE THE SAME AS FOR TUBEWELL GIVEN IN SECTION 27.



### DAMP PROOF COURSE AND WATER PROOFING

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL BY PRODUCTS AND SITE CLEARANCE.



#### CEMENT CONCRETE BLOCK MASONRY

- 1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL BY PRODUCTS AND SITE CLEARANCE.
- 2. NO PAYMENT SHALL BE MADE FOR FORMING CAVITIES IN BLOCK AND NO DEDUCTION TO BE MADE FOR HOLLOWNESS IN BLOCKS.
- 3. SKIN THICKNESS OF HOLLOW BLOCKS SHALL BE 1" (25 mm) FOR BLOCK SIZE 300 x 100 x 200, 300 x 150 x 200, 225 x 100 x 150 AND 300 x 100 x 200.
- 4. SKIN THICKNESS OF HOLLOW BLOCKS SHALL BE 1.5" (38 mm) FOR BLOCK SIZE 300 x 200 x 200, 300 x 300 x 200, 225 x 200 x 150 AND 225 x 300 x 150.
- 5. CONCRETE BLOCK SHOULD MEET THE REQUIREMENT OF 2000 PSI CRUSHING STRENGTH.



# **Bridges**

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY- PRODUCTS AND SITE CLEARANCE.
- 2. IF CONCRETE MIXER OR HIGH FREQUENCY VIBRATOR, ETC. SUPPLIED BY THE GOVERNMENT, ALL CHARGES INCLUDING DEPRECIATING WILL BE RECOVERED FROM THE CONTRACTOR.
- 3. SUBSEQUENT CARRIAGE OF CRUSH STONE AGGREGATE WILL BE PAID ACCORDING TO THE WHOLE DISTANCE TO THE SITE OF WORK, SHALL BE CALCULATED ON THE BASIS OF RATE OF THE ACTUAL MEAN OF TRANSPORT USED IN CARRIAGE. IT SHALL BE PAYABLE FROM THE NEAREST APPROVED QUARRY.



#### **BRICK WORK**

- 1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.
- 2. THE RATE APPLIES TO ALL SIZES OF BRICKS.
- 3. IN 2<sup>ND</sup> OR 3<sup>RD</sup> CLASS BRICKS ARE USED INSTEAD OF FIRST CLASS, THE DIFFERENCE IN RATE OF BRICKS IS DEDUCTED.
- 4. NO DEDUCTION IN MEASUREMENTS SHALL BE MADE FOR OPENING HAVING SUPERFICIAL AREA NOT EXCEEDING ONE SQUARE FOOT (0.35 SQUARE METERS).



# STONE MASONRY

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.



#### **ROOFING**

- 1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.
- 2. ADD EXTRA 5% AND 10% SECOND, THIRD, 15% FOR FOURTH AND SUBSEQUENT FLOOR RESPECTIVELY.



#### **FLOORING**

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.



### **FINISHING**

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.



### **WOOD WORK**

- 1. NO EXTRA RATE IS TO BE PAID FOR SAWING.
- 2. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS.



# PAINTING AND VARNISHING

- 1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.
- 2. RATES INCLUDE CHARGES FOR SCAFFOLDING AND OTHER ARRANGEMENTS AT ANY HEIGHT AND IN ANY FLOOR.
- 3. RATES FOR PAINTING SASHES, FANLIGHT, FULLY GLAZED OR FULLY GAUGED DOORS AND WINDOWS SHALL BE 60% OF RESPECTIVE ITEMS.



# LINING OF CANALS

- 1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.
- 2. RATES ALSO INCLUDE CURING FOR SPECIFIED PERIOD WHEREVER NECESSARY.
- 3. NOMINAL DIMENSIONS OF TILE OR BRICK SHALL BE TAKEN FOR THE PURPOSE OF MEASUREMENT AND PAYMENT.
- 4. JOINTS TREATMENT WILL BE PAID FOR RESPECTIVE ITEMS IN SECTION 5 "CONCRETE"



# PROTECTION AND DIVERSION WORKS

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL BY PRODUCTS AND SITE CLEARANCE.
- 2. THE COMPOSITE RATES OF THE ITEMS IN WHICH STONE, BOULDER, SHINGLE ETC. AND USED DO NOT CONTAIN THE CARRIAGES OF THESE MATERIALS WHICH WILL BE PAID SEPARATELY WHICHEVER MEANS OF TRANSPORT IS ADOPTED. THE SUPPLY AND CARRIAGE TO SITE OF WORK OF ALL OTHER MATERIAL, REQUIRED IN ITEM IS INCLUDED IN THE COMPOSITE RATE.
- 3. THE CARRIAGE OF STONE OR SPAWL WILL BE PAID ON THE BASIS OF ACTUAL STACK MEASUREMENT (WITHOUT ANY REDUCTION FACTOR) OF THE STONE, BOULDERS, SHINGLE OR SPAWL CARRIED.
- 4. THE STONE, BOULDERS OR SPAWL IS WHERE ISSUED FORM STOCK AND THE CONTRACTOR IS PAID FOR CARRIAGE AND /OR LABOUR ONLY OR WHERE SUCH STONE PRODUCT IS SUPLLIED, CARRIED OR HANDLED BY THE CONTRACTOR IN WHICH NO LAYING IS REQUIRED, THE ACTUAL STACK MEASUREMENT (WITHOUT ANY REDUCTION FACTOR) SHALL FORM THE BASIS OF PAYMENT OF SUPPLY OR CARRIAGE OF THE STONE, BOULDER OR SPAWL ETC. THE QUANTITY OF FINSHED AND COMPLETED ITEM OF WORK SHALL FORM THE BASIS OF THE LAYING.
- 5. IN CASE OF THE ITEMS IN WHICH THE RATES INCLUDE CARRIAGE OF STAKES, BUSHING, PILCHI, SARKANDA OR FRASH ETC. WITHIN ONE KM.
  - a) THE COST OF THE CARRIAGE WITHIN ONE KM. SHALL NOT BE DEDUCTED FROM THE CARRIAGE CHARGES TO FOLLOW THEREAFTER FROM THE POINT OF SUPPLY.
  - b) IF THE SITE OF WOK HAPPENS TO BE WITHIN ONE KM. OF THE SOURCE OF SUPPLY, THE MATERIAL WILL BE COLLECTED AND MEASURED AT SITE OF WORK AND NO EXTRA CARRIAGE WOULD BE ADMISSIBLE IN SUCH CASES.
  - C) WHERE THE SITE OF THE WORK IS SITUATED AT MORE THAN ONE KM. DISTANCE FROM THE SOURCE OF SUPPLY, THE POINT OF SUPPLY WILL BE FIXED CAREFULLY BY THE ENGINEER-IN-CHARGE IN SUCH A WAY THAT THE CARRIAGE CHARGES WOULD BE ARRIVED AT THE MOST ECONOMICALLY.EXTRA CHARGES WILL BE ADMISSIBLE FROM THE PLACE OF STARTING POINT. THE DEMARCATION OF THE PLACE OF SUPPLY SHALL BE PRE-DETERMINED BEFORE CALLING THE TENDERS.
- 6. IN CASE OF STONE PITCHING WORK, NO VOIDS DEDUCTION WILL BE MADE WHILE MEASURING THE FINISHED WORK.



#### **OUTLETS**

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.
- 2. THE ITEMS OF WORK INVOLVED IN CONSTRUCTION OF OUTLETS SUCH AS EARTHWORK, CONCRETE AND BRICK WORK SHALL BE PAID FOR UNDER RESPECTIVE ITEMS OF THE RELEVANT SECTION.
- 3. THE MANUFACTURE, SUPPLY AND DELIVERY TO SITE OF A.P.M. AND/OR O.F. OUTLETS IRON BLOCKS SHALL BE THE RESPONSIBILITY OF THE DEPARTMENT.



### ROAD AND ROAD STRUCTURES

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.
- 2. THE RATES INCLUDE PROVISION AND MAINTENANCE OF FIELD TEST LABOUATORY STAFF, COST OF MATERIAL FOR TESTING ETC.
- 3. PAYMENTS FOR ITEMS OF ROADS AND ROAD STRUCTURE SHALL BE MADE FROM THIS SECTION.



# SHEET PILING

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS.



# PLUMBING, SANITARY INSTALLATIO & GAS FITTINGS

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS.
- 2. THE RATES INCLUDE CUTTING AND MAKING GOOD OF THE SURFACE OF WALLS, ROOFS, AND FLOORS ETC. WHER NECESSARY.
- 3. ADD 10% EXTRA FOR FIXING SPECIALS IN REPAIR WORK FOR ITEM 23-46.



### SURFACE DRAINAGE

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS.
- 2. CEMENT PLASTER WHERE APPLIED SHALL BE MEASURED FOR PAYMENT SEPERATELY.



#### **SEWERAGE**

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS.
- 2. EXCAVATION AND BACKFILLING FOR FOUNDATION AND TRENCHES SHALL BE PAID FOR SEPARATELY.
- 3. DEPTH OF CHAMBER SHALL BE MEASURED VERTICALLY FROM TOP OF COST IRON COVER TO TOP SURFACE OF FLOORING.
- 4. IF SPECIFACATIONS OF MANHOLES AS MENTIONES IN ITEM NO. 25-4 TO 25-8 ARE NOT MET THAN PAYMENT SHALL BE MADE FOR DIFFERENT ITEMS FROM OTHER SECTIONS OF THIS SCHEDULE.



# SINKING OF WELLS

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS.
- 2. WELL CURBS TO BE LAID AT SPRING LEVEL OR AS DEEP AS POSSIBLE.
- 3. THE OUTER DIMENSIONS OF THE CURB SHALL FORM BASIS OF PAYMENT.



# TUBEWELL AND WATER SUPPLY

- RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.
- 2. THE CAST IRON PIPES AND FITTINGS SHALL COMPLY WITH B.S. 78 FOR SPIGOT AND SOCKET, CAST IRON VERTICALS PIPES AND B.S. 2035 FOR FLANGED PIPES.
- 3. P.V.C. PIPES AND FITTINGS SHALL COMPLY WITH B.S. 3505.
- 4. ASBESTOS CEMENT PIPES AND FITTINGS SHALL COMPLY WITH B.S. 486
- 5. GALVANIZED IRON PIPES AND FITTINGS SHALL COMPLY WITH B.S. 1387-1967



# IRON STEEL & ALUMINIUM WORK

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS.



# **HORTICULTURE**

 RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS.



# ELECTRICAL INSTALLATIONS

 RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE.



#### **BASIC DATA**

THE BASIC RATES OF CONSTRUCTION MATERIALS, LABOUR AND HIRE CHARGES OF PLANT & EQUIPMENT HAVE BEEN LINKED WITH FILES IN DETAILED ANALYSIS (Volume-1). ANY REVISION INITIATED IN THE "BASIC DATA" FILE CORRESPONDINGLY REVISE THE RELEVENT ITEM RATE. THESE RATES HAVE BEEN OBTAIND AFTER EXTENSIVE MARKET SURVEY.