

# AZAD GOVERNMENT OF THE STATE OF JAMMU AND KASHMIR

#### **COMPOSITE SCHEDULE OF RATES**

Updated for 1st Semi-Annual (July - December) 2016

#### **DISTRICT HATTIAN**

PLANNING AND DEVELOPMENT DEPARTMENT, KASHMIR PLAN HOUSE.

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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 submited 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/mm <sup>2</sup>
Maund	Mnd	Hundred	Hund
Dozen	Dz		



# **CONVERSION FACTORS**

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 Ounce Gram Quintal Grain Hundred Weight Tonne Ton MASS WEIGHT	Kilogram Pound Gram Ounce Kilogram Milligram Kilogram Hundred Weight Kilogram	0.4536 0.2046 28.3495 0.0353 100.00 64.7989 50.8023 19.6841 1016.047
Ton Tonne Seer Maund Tola Short Ton (2000 lbs)	Tonne Ton Kilogram Kilogram Gram Tonne	1.0160 0.9842 0.9331 37.324 11.664 0.9072



# **CONVERSION FACTORS**

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 meter         0.8361         0.8361           Square meter         0.8361         0.8361           Square meter         4046.8564         0.4047           Acre         Hectare         0.4047           Hectare         Acre         10000           Hectare         Square meter         10000           Square mile         Square kilometer         2.5899           Square mile         9.3861         0.3861           Square mile         9.3861         0.03861           CAPACITY, VOLUME AND MODULES OF SECTION         0.00386           CAPACITY, VOLUME AND MODULES OF SECTION         0.00386           CAPACITY, VOLUME AND MODULES OF SECTION         0.5683           Gallon (imperial)         1.5461           Cubic foot         1.5461           Cubic meter         1.63871           Fluid ounce         Millimeter         16.3871           Fluid ounce         Millimeter         16.3871           Cubic foo	TO CONVERT	INTO	MULTIDLY DY
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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 mile         0.3861           Square mile         9.3861           Square mile         0.00386           CAPACITY, VOLUME AND MODULES OF SECTION           Pint (UK)         Liter         0.5683           Gallon (imperial)         Liter         28.3168           Cubic foot         Liter         28.3168           Cubic meter         Liter         1000           Liter         20.0353         20.0353           Cubic inch         Millimeter         16.3871           Fluid ounce         Millimeter         28.413           Liter         Gallon (imperial)         0.2199           Cubic Inch         Cubic meter         0.0283           Cubic foot         Cubic meter         0.0283           Cubic meter         Cubic meter         0.7645           Cubic meter         Cubic meter         0.7645	Square meter	Square foot	10.7639
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Cubic meter Cubic yard 1.3080			
•			
3GG 1GG 1GG 1GG 1GG 1GG 1GG 1GG 1GG 1GG	Acre foot	Hectare meter	0.1233

0.6720

0.6313



Kilogram per meter

Ton per mile

CON	NVERSION FACTORS				
TO CONVERT	INTO	MULTIPLY BY			
TO CONVERT	INTO	MULTIPLY BY			
VLOCITY AND SPEED					
Foot per second	Meter per second	0.3048			
Foot per minute	Meter per second	0.0051			
Foot per second	Kilometer per hour	1.0973			
Kilometer per hour	Foot per second	0.9113			
Mile per hour	Meter per second	0.4470			
Kilometer per hour	Mile per hour	0.6214			
Mile per hour	Kilometer per hour	1.6093			
<u>FORCE</u>					
Kilogram force	Newton	0.8066			
Pound force	Newton	4.4482			
Ton force	Kilo Newton	9.9640			
Newton	Pound force	0.2248			
Kilo Newton	Ton force	0.1004			
FORCE PER UNITE LENGTH	<u> </u>				
Pound force per foot	Newton per meter	14.5939			
DDECCLIDE CTDECC AND A		00 4 NI/m²)			
PRESSURE, STRESS AND I	MODULES OF ELASTICITY (1P	<u>'a=11\/111<sup>-7</sup></u>			
Pound per Square foot	Pascals	47.8803			
Pound force per square inch	Kilo Pascals	6.8948			
Ton force per square inch	Kilo Pascals	107.252			
Kilo Pascals	Pound force per square foot	20.8354			
Ton force per square inch	Mega pascals	15.4443			
Mega Pascals	Pound force per square inch	145.038			
MASS PER UNIT LENGTH					
Pound per foot	Kilogram per meter	1.4882			
Kilogram par mater	Pound par foot	0.6720			

Pound per foot

Ton per kilometer



# **CONVERSION FACTORS**

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						



# **CONVERSION FACTORS**

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		Battar	Under	marginal use	
	Gravel			prospection	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	
15.			Hill Seri Dara	Under	With Project Specific	
				prospection	studies	
16.			Zahid Chowk	Under		
			Pirchinasi road	prospection		
17.	Noseri Dolorite	Dolorite	Noseri Chelhana	7.0 million M <sup>3</sup>		
18.	Lamnian Dolerite	Dolorite	Lamnian	1		u
19.	Eran Sandstone	Sandstone	Near Kohala	Under prospection	Only for marginal use	Muzaffarabad/ Hattian
20.	Chattar Kalas	Gravel	Agar Naullah	Under	concrete (upto 2000psi	[ /p
	sandstone gravels		Chattar Kalas	prospection	strength) with	aba
21.	Komikot sandstone	Sandstone	Komikot	Under	OPC	fars
	N. D. 1. 1.1	* * .	) T'	prospection	A 11	zaf
22.	Niazpura Dolomitic Limestone	Limestone	Niazpura	5.0 M <sup>3</sup>	All type of concrete work With Project Specific studies	Mu
23.	Lamnian Meta Basalt	Igneous Bodies	Lamnian	7.0 M <sup>3</sup>	All type of Concrete work Except High Strength Concrete (upto 2000psi And Asphalt Layer	
24.	Goi Dandli	Dolomite	Kotli Goi Dandli road	Abundant deposit	All type of concrete work	Kotli



		T	T	T	T	T
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 Rive terraces	L/S	Only for marginal use	
27.	Poonch terraces		do	L/S	concrete (upto	
28.	Khorban Nullah gravel		do	L/S	2000 psi strength) with	
29.	Khari Sharief	Gravel	Khari Sharif	Under prospection	Only for marginal use	Mirpur
30.	Mangla jatli road		Mangla	Under prospection	concrete (upto 2000 psi strength) with	
31.	Jeri Kas		Jeri Kas	Under prospection	OPC	
32.	Skater		Skater Naullah	Under prospection		
33.	Kanali Kas		Kanali Kas	Under prospection	3/2	
34.	Kot Sarsawa		Kot Sarsawa	Under prospection	4 (C)	
35.	Hari Kas		Hari Kas	Under prospection		
36.	Panjari Nullah	Gravel	Panjari	Under prospection	Only for marginal use	Bhimber
37.	Dandhar Nullah		Dandar	Under prospection	concrete (upto 2000 psi strength) with	
38.	Chaprian		Chaprian	Under prospection	OPC	
39.	Bakot Nathia-Gali	limestone	Bakot	30.0 million M <sup>3</sup>	All type of concrete work With Project	Abbotatabad
40.	Bakot Kas				Specific	Abbottabad
41.	Noseri Dolorite	Dolorite	Neelum Valley	1.5 million M <sup>3</sup>	studies	Abbottabau
42.	Noseri volcanics	Metabasalt	Road along Noseri - Marble	9.03 million M <sup>3</sup>	marginal use with OPC	
43.	Islampur-Jura Granite	Granite	Sandoq- Islampura	Under prospection	Stone Masonry	
44.	Neelum Granite Keran	Granite	Danjar - Keran	Under prospection		bad
45.	Dudhnial Arenaceous Carbonates	Metacarbonates	MT Bazar Dudhnial	1.656 million M <sup>3</sup>	Bitumen, plain Concrete but not for pre-	uzaffara
46.	Malik Seri Dolorite Kharigam	Dolorite	Between Khawaja Seri and Kharigam along Neelum Valley	13.5 million M <sup>3</sup>	stress concrete	Neelum / Muzaffarabad
47.	Kel Dolorite dykes	Dolorite	Kelser - Kel Road	Under prospection	All type of concrete work	
48.	Changan Meta Dolorite	Dolorite	Changan - Dudhnial Road	1.776 million M <sup>3</sup>	With Project Specific studies	
49.	Dhokran Gneiss Kel	Granitic Gneiss	Kel-Dhokran Road	Under prospection	Stone Masonry	



50.	Arja - Dalkot Section	Sandstone	Near Arja	Under prospection	Only for marginal use concrete (upto	Poonch
51.	Gio Nullah Rawalakot			Under prospection	2000psi strength) with	
52.	Khaigalla-Hajira outcrop		Near Hajira	Under prospection	OPC	
53.	Hajira Abbaspur road out crop		Hijira Abbaspur road out crop	Under prospection		
54.	Hajira Nar outcrop			Under prospection		
55.	Ban Ni Bhek Toli Pir Road		Along Toli Pir road	Under prospection		
56.	Jhandala Sandstone		Arja Tain Road Jhandal Locality	Under prospection		
57.	Pappay Nar	Sandstone	Along Tararkhal to Palandri Road	Under prospection		
58.	Tarar Khal			Under prospection		ıuti
59.	Nar near Tarar khal Bazar along Hajira road		Along Tararkhal to Hajira Road	Under prospection		Sudhnuti
60	Azad Pattan (Madan)		Azad Pattan - Kalri road	Under prospection		

Dr m 18/8/2016

(Naveed Azad)
Geologist/Material Engineer

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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: i. TRACTOR 6%
    - ii. BULLDOZERS 4%
    - iii. SCRAPERS 3%

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.



#### **SECTON-4**

# DISMANTLING (DEMOLISHING)

- 1. 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  $2^{\rm ND}$  &  $3^{\rm RD}$  AND 30% FOR  $4^{\rm TH}$  & 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

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

- 1. 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.
- 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

 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

1. 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.