

Name of Work :M&R work for Premonsoon Work Of various Roads Under R & B Sub Division, Kadi, Dist. Mehsana.

SPECIFICATION INDEX

It No	Discription of item as per schedule "B" of the tender.	Standard Specification Booklet		Remarks	
		3	4		
1	2	It. No.	Pg. No.	5	
1	Clearing and grubbing road land including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials (C) By mechanical means in area of light jungle	Road	1	10	
2	Earthwork for embankment including breaking clods, dressing with all lead and lift (excluding watering and consolidation)(A) From Borrow pits within land width	Road	3-A	12	
3	Earthwork for embankment including breaking clods, dressing with all lead and lift (excluding watering and consolidation)(D) From Borrow area within 1.0 Km. lead	Road	5	16	
4	Collecting, Carting, stacking and Spreading of Quarry Spall approved quality and gradation on road site etc. comp. including all kind of taxes and royalties and filling measure boxes etc. comp.(A) in Cmt Basis.	Road	29	29	
5	Providing and fixing ordinary Kilometer stone of precast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design in C.C. 1:4:8 including letter and paints etc. complete (For N.H., S.H. and M.D.R.)	Road	45	68	
6	Providing and fixing 5th Kilometer stone of precast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design in C.C. 1:4:8 including painting, lettering etc. complete (For N.H., S.H. and M.D.R.)	Road	46	68	
7	Providing and fixing Pre Cast hectometer stone as per I.R.C. type design including painting, lettering etc. com plate. (II) Fixing in C.C.1:5:10	Road	43	67	
8	Providing and fixing Guard stone as per I.R.C. type design including White washing etc. complete. (a) Fixing in earth.	Road	44	67	
9	Cleaning of Road Surface including engaging Labour/ Tractor/Trolley/Pavada as required and throwing the stuff within all lead and lift as directed by engineer in charge	As per separate sheet attached			
10	Applying White Wash and Geru to trees in three coats as and where directed incl. all cost of materials and labour charges in the work etc.complete as directed.	As per separate sheet attached			

Signature of Contractor

Dy. Executive Engineer
R&B Sub Division
Kadi

Executive Engineer
R & B Division
Mehsana

Specifications

Name Of Work: M&R work for Premonsoon Work Of various Roads Under R & B Sub Division, Kadi, Dist. Mehsana

Item NO. 09:- Cleaning of Road Surface including engaging Labour/Tractor/Trolley/Pavada as required and throwing the stuff within all lead and lift as directed by engineer in charge

1. Scope of Work

The work involves the systematic removal of dust, dirt, mud, loose aggregates, and debris from the existing road surface. This is typically a prerequisite before applying a tack coat, prime coat, or a new layer of asphalt/bitumen.

2. Required Resources

Labour: Skilled and unskilled workers for manual sweeping and collecting debris.

Tractor & Trolley: Used for the immediate collection and transport of waste material to a designated disposal site.

Tools (Pavada/Brooms): Traditional hoes (pavadas), wire brushes, and heavy-duty brooms for loosening compacted mud or grime.

Mechanical Options: While not explicitly mentioned, the use of a mechanical power broom or air compressor is often permitted if the surface requires deeper cleaning.

3. Execution Specifications:-

- i) Loosening All caked mud, cow dung, or organic matter must be loosened using pavadas or wire brushes without damaging the underlying road base.
- ii) Initial Sweep The surface is swept longitudinally from the center toward the edges to clear bulk debris.
- iii) Final Cleaning The surface must be cleaned until the interstices of the metal (aggregates) are clearly visible and free of dust.
- iv) Disposal All collected "stuff" must be loaded into the tractor-trolley and disposed of at a site approved by the Engineer-in-Charge, ensuring no obstruction to local drainage or traffic.
- v) Lead & Lift The rate includes all horizontal distances (Lead) and vertical heights (Lift) required to move the debris from the road to the final disposal point.

4. Quality Control & Safety:-

Surface Condition: The road should be dry and bone-clean before any subsequent bituminous work begins. Any moisture or dust film left behind will prevent proper bonding.

Traffic Management: Since this work often happens on active roads, proper signage and "Men at Work" boards must be placed. Laborers should wear high-visibility safety vests.

Environmental Compliance: Debris should not be thrown into side drains, as this leads to waterlogging during monsoons.

5. Measurements for Payment:-

Measurement shall be made on Sqmt Of Road site Complete Clear as directed by Engineer in charge.

Item No. 10

Applying White Wash and Geru to trees in three coats as and where directed incl. all cost of materials and labour charges in the work etc. complete as directed.

1) Materials and Preparation:-

- i) White Wash (Lime): Shall be prepared from fresh, burnt stone lime of the best quality. It must be mixed with water and screened through a fine cloth to ensure no grit remains.
- ii) Geru (Red Earth): Shall be of a deep red color, free from organic impurities. It should be soaked in water and ground to a fine paste before application.
- iii) Binding Agents: To prevent the wash from peeling off due to rain or wind, an adhesive (such as glue/gum or a small amount of common salt) should be added to the mixture.
- iv) Water: Must be clean and free from harmful salts.

2) Execution & Methodology:-

- i) Surface Prep The tree trunk must be cleaned of loose bark, moss, cobwebs, and dust using a wire brush or gunny bag. This must be done carefully to avoid damaging the living tissue of the tree.
- ii) Height of Band Usually applied up to a height of 1.0 to 1.2 meters from the ground level, or as specifically marked by the Engineer-in-Charge.
- iii) Coating Sequence A total of three coats must be applied. Each coat must be allowed to dry completely before the next one is applied.
- iv) Banding Style Typically, the bottom half of the marked area is painted with Geru and the top half with White Wash, creating a sharp, horizontal dividing line

3) Application Standards:-

- i) Uniformity: The finish must be smooth and uniform in color. No brush marks, drips, or patches should be visible.
- ii) The Dividing Line: The junction between the White Wash and the Geru must be a perfectly straight horizontal line around the circumference of the tree.
- iii) Weather Conditions: Application should not take place during active rainfall or if rain is imminent, as this will wash away the fresh coats.
- iv) Protection: Care must be taken to ensure that the lime or Geru does not spill onto the surrounding soil or roots in excessive quantities.

4) General Requirements:-

- i) Lead and Lift: The rate includes the cost of transporting materials and water to the site, regardless of the distance.
- ii) Labour: The contractor is responsible for providing all necessary brushes, containers, and safety gear for the laborers.
- iii) Cleanup: Any splashes on the road surface, curbs, or nearby structures must be cleaned immediately by the contractor.

5) MEASUREMENTS FOR PAYMENT:

The payment shall be made on the Km Of Road Trees Geruchuno Complete Work As Directed By Engginer In Charge.

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SCHEDULE FOR TESTING OF MATERIALS

For ensuring quality control and workmanship, various tests prescribed below for materials shall be taken at periodical intervals as stipulated below.


The materials shall be a got tested at Government Laboratory (R & B) or field Laboratory of GERI (R & B) for which 1% of the estimated amount put to Tender shall be recovered from the contractor from the R.A. bills and final bills at the testing charges shall be paid to the GERI by the Government. However if the crarges increase over 1% no excess recovery shall be made form the contractor as per resolution of B & C Department dated 10th, May 1985 vide TNC/1085 (4) s.

Item No. as per Schedule 'B'	Brief Description of materials to be tested.	Qty. of Materials	Prescription of test which shall be carried out	Frequency @ which test shall be carried out	Total Nos of test to be taken
1	2	3	4	5	6
	Rubble		*Gradation test	1 to 100 - cum. 1 test	0
			*Impact Value	100 to 500 - cum. 3 test	
			*Flakiness Index of	500 to 1500 - cum. 5 test	
				1500 to 5000 - cum. 7 test	
	26.5 to 53 B.T.Metal		*Gradation test	1 to 100 - cum. 1 test	0
			*Impact Value	100 to 500 - cum. 3 test	
			*Flakiness Index of	500 to 1500 - cum. 5 test	
				1500 to 5000 - cum. 7 test	
	45 to 63 M.C.Metal		*Gradation test	1 to 100 - cum. 1 test	0
			*Impact Value	100 to 500 - cum. 3 test	
			*Flakiness Index of	500 to 1500 - cum. 5 test	
				1500 to 5000 - cum. 7 test	
	Kapchi		*Gradation test	1 to 100 - cum. 1 test	1
			*Impact Value	100 to 500 - cum. 3 test	
			*Flakiness Index of	500 to 1500 - cum. 5 test	
				1500 to 5000 - cum. 7 test	
	Grit		*Stripping Value	One test per work	2
	stone dust		*P.I.Value	One test per work	0
	Supplying of Quarry spall	870.00	*Silt Content	One test per work	5
	Sand		*Gradation	One test per work	2
	Soil		*CBR	One test per work	2
	Bricks		*Water absorption	1 test @ 50,000 Bricks	1
			*Efflorence		
			Size		
			*Strength Comprehensive		
	Cement	6.090	*Consistency	1 test @ 50.0 M.T. 100 T 2 tests, 200 T 3 tests, 300 T 4 tests, 500 T 5 tests, 800 T 6 tests, 1300 T 7 tests & 8 testd for large consingment.	1
			*Setting time		
			*Compressive Strengt		
	Steel	0.000	*Tensile, (TMT)	As per Manual of Quality Control 1 test/40 tonnes / per category	
			Yield		
			*Elongation		
			Size		
			*HYSD Yield		
			*Elongation		
		Size			
	C.C.Cube Test	Cmt	*Compressive Strength.	1 to 5 cmt - 1 No	
	M100			6 to 15 cmt - 2 No	0
	M150			16 to 20 cmt - 3 No	0
	M200			20 to 50 cmt - 4 No	

Item No. as per Schedule 'B'	Brief Description of materials to be tested.	Qty. of Materials	Prescription of test which shall be carried out	Frequency @ which test shall be carried out	Total Nos of test to be taken
1	2	3	4	5	6
	M250		*Compressive Strength.	51 to above - 4+1 additional sample for each 50 cu.mt. Or part there of.	0
	M300				0
	M 1:4:8				
	M 1:3:6				
	M 1:1.5:3				
	M 1:2:4				

The contractor shall have to pay 1% of the estimate cost put to tender towards all testing of materials & the same shall be deducted Testing charges of GERI shall be born by Govt. No refund be made not extra charges over 1% shall be recoverable from the

Signature of Contractor.


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