

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
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**Chapter 1 - LOADING, UNLOADING, CARRIAGE CRUSHING OF MATERIALS AND SETTING OUT**

**1.1 Loading and Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Manual Means**

(i)	Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by manual means including a lead upto 30 m	cum	67.00
(ii)	Loading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m	cum	34.00
(iii)	Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by manual means including a lead upto 30 m	cum	34.00
(iv)	Unloading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m	cum	21.00

**1.2 Loading and Unloading Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Mechanical Means**

(i)	Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by mechanical means including a lead upto 30 m	cum	47.00
(ii)	Loading of Earth, Sand, Moorum, Manure, Flyash by mechanical means including a lead upto 30 m.	cum	24.00
(iii)	Unloading of Earth, Sand, Lime, Moorum, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Manure, Crushed Slag, Flyash, Stone for Masonry Work by mechanical means.	cum	9.00

**1.3 Loading, Unloading and Stacking of Bricks by Manual Means**

(i)	Loading of Bricks by manual means including a lead upto 30 m	1000 Nos.	116.00
(ii)	Unloading and Stacking of Bricks by manual means including a lead upto	1000 Nos.	116.00

**1.4 Loading and Unloading of Cement by Manual Means**

(i)	Loading of Cement by manual means including a lead upto 30 m	t	81.00
(ii)	Unloading of Cement by manual means including a lead upto 30 m	t	81.00

**1.5 Loading and Unloading of Structural Steel and Steel Bars by manual**

(i)	Loading of Structural Steel, Steel Bars by manual means including a lead	t	86.00
(ii)	Unloading of Structural Steel, Steel Bars by manual means including a lead	t	86.00

**1.6 Loading and Unloading of Bitumen Drums by Manual Means**

(i)	Loading of Bitumen Drums by manual means including a lead upto 30 m	t	97.00
(ii)	Unloading of Bitumen Drums by Manual Means including a lead upto 30 m	t	92.00

**1.7 Loading and Unloading of Timber by Manual Means**

(i)	Loading of Timber by manual means including a lead upto 30 m	t	148.00
(ii)	Unloading of Timber by manual means including a lead upto 30 m	t	148.00

**1.8 Loading and Unloading of C.C. Blocks, Kerb, etc.**

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	(i) Loading with care C.C. Blocks, km Stone, 200 m Stone, Boundary Pillar, Kerb, Channel, Bond Stone, etc. by manual means including a lead upto 30 m	cum	215.00
	(ii) Unloading with care C.C. Blocks, km Stone, 200 m Stone, Boundary Pillar, Kerb, Channel, Bond Stone, etc. by manual means including a lead upto 30 m	cum	215.00
<b>1.9</b>	<b>Loading and Unloading of Hume Pipes</b>		
	(i) Loading of RCC Hume pipes by mechanical means including a lead		
	A. 1000 / 1200 mm dia Hume pipe	per pipe	53.00
	B. 750 mm dia Hume pipe	per pipe	32.00
	C. 600/450 mm dia Hume pipe	per pipe	23.00
	(ii) Unloading of RCC Hume pipe by manual means including a lead upto		
	A. 1000/1200 mm dia RCC Hume pipes	per pipe	322.00
	B. 750 mm dia Hume pipe	per pipe	269.00
	C. 600/450 mm dia Hume pipe	per pipe	201.00
	(iii) Unloading of RCC Hume pipes by mechanical means including a lead		
	A. 1000/1200 mm dia Hume pipe	per pipe	36.00
	B. 750 mm dia Hume pipe	per pipe	21.00
	C. 600/450 mm dia Hume pipe	per pipe	15.00
<b>1.10</b>	<b>Haulage excluding Loading &amp; Unloading</b>		
	Haulage of materials by tipper excluding cost of loading, unloading and stacking.		
	Case-I : Surfaced Road	t.km	4.00
	Case-II: Unsurfaced Gravel Road	t.km	5.00
	Case-III: Katcha Track and Track in River Bed/Nallah Bed and Choe Bed	t.km	11.00
<b>1.11</b>	<b>Supply of Quarried stone and hand breaking</b>		
	(i) Supply of quarried stone and hand breaking into coarse aggregate to Grading 1 (90 mm to 45 mm) as per Table 400.8 of Technical Specifications.	cum	797.00
	(ii) Supply of quarried stone and hand breaking into coarse aggregate to Grading 2 (63 mm to 45 mm) as per Table 400.8 of Technical Specifications.	cum	842.00
	(iii) Supply of quarried stone and hand breaking into coarse aggregate to Grading 3 (53 mm to 22.4 mm) as per Table 400.8 of Technical Specifications.	cum	886.00

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<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
1.12	<b>Crushing of Stone Aggregates 100 per cent passing through 53 mm sieve as per Table 500.6 of Technical Specifications.</b> <i>Crushing of stone boulders of 150 mm size in an integrated stone crushing unit of 200 t/h capacity comprising of primary and secondary crushing units, belt conveyor and vibrating screens to obtain stone aggregates 100 per cent passing through 53 mm sieve as per Table 500.6 of Technical Specifications including the cost of stone.</i>	cum	847.00
1.13	<b>Crushing of Stone Aggregates 100 per cent passing through 22.4 mm sieve as per Table 500.6 of Technical Specifications.</b> <i>Crushing of stone boulders of 150 mm size in an integrated stone crushing unit of 200 t/h capacity comprising of primary and secondary crushing units, belt conveyor and vibrating screens to obtain stone aggregates 100 per cent passing through 22.4 mm sieve as per Table 500.6 of Technical Specifications including the cost of stone.</i>	cum	882.00
1.14	<b>Crushing of Stone Aggregates Nominal Size 13.2 mm as per Table 500.9 of Technical Specifications.</b> <i>Crushing of stone boulders of 150 mm size in an integrated stone crushing unit of 200 t/h capacity comprising of primary and secondary crushing units, belt conveyor and vibrating screens to obtain stone aggregates of 13.2 mm nominal size as per Table 500.9 of Technical Specifications including the cost of stone.</i>	cum	1,097.00
1.15	<b>Crushing of Stone Aggregates 9.5 mm Nominal Size as per Table 500.9 of Technical Specifications.</b> <i>Crushing of stone boulders of 150 mm size in an integrated stone crushing unit of 200 t/h capacity comprising of primary and secondary crushing units, belt conveyor and vibrating screens to obtain stone aggregates of 9.5 mm nominal size as per Table 500.9 of Technical Specifications including the cost of stone.</i>	cum	1,155.00
1.16	Setting Out		

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<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
<b>Chapter 2 - SITE CLEARANCE</b>			
2.1	<b>Clearing Grass and Removal of Rubbish</b> <i>Clearing grass and removal of rubbish up to a distance of 30 m outside the periphery of the area as per Technical Specification Clause 201.</i>		
	<i>By Manual Means</i>	hectare	5,940.00
2.2	<b>Clearing and Grubbing Road Land</b> <i>Clearing and grubbing road land including uprooting wild vegetation, grass, bushes, shrubs, saplings and trees of girth upto 300 mm, removal of stumps of such trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, upto a lead of 1000 m including removal and disposal of top organic soil not exceeding 150 mm in thickness as per Technical Specification Clause 201.</i>		
	<b>(I) By Manual Means</b>		
	<b>(A) In area of non-thorny jungle</b>	hectare	22,771.00
	<b>(B) In area of thorny jungle</b>	hectare	30,692.00
	<b>(II) By Mechanical Means</b>		
	<b>(A) In area of non-thorny jungle</b>	hectare	31,308.00
	<b>(B) In area of thorny jungle</b>	hectare	37,896.00
2.3	<b>Cutting of Trees including Cutting of Trunks, Branches and Removal of</b> <i>Cutting of trees, including cutting of trunks, branches and removal of stumps &amp; roots, refilling, compaction of backfilling and stacking of serviceable material by manual means with all lifts as per Technical Specification Clause 201.</i>		
	<b>A. Lead upto 100 m</b>		
	<b>(i) Girth above 300 mm to 600 mm</b>	each	124.00
	<b>(ii) Girth above 600 mm to 900 mm</b>	each	238.00
	<b>(iii) Girth above 900 mm to 1800 mm</b>	each	436.00
	<b>(iv) Girth above 1800 mm to 2700 mm</b>	each	802.00
	<b>(v) Girth above 2700 mm to 4500 mm</b>	each	1,684.00
	<b>(vi) Girth above 4500 mm</b>	each	4,705.00
	<b>B. Lead upto 1000 m</b>		
	<b>(i) Girth above 300 mm to 600 mm</b>	each	139.00
	<b>(ii) Girth above 600 mm to 900 mm</b>	each	282.00
	<b>(iii) Girth above 900 mm to 1800 mm</b>	each	495.00
	<b>(iv) Girth above 1800 mm to 2700 mm</b>	each	892.00
	<b>(v) Girth above 2700 mm to 4500 mm</b>	each	1,783.00
	<b>(vi) Girth above 4500 mm</b>	each	4,953.00

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<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>2.4</b>	<b>Uprooting and Removing Stumps &amp; Roots</b>		
	<b>A. Lead upto 100 m</b>		
	(i) Girth above 300 mm to 600 mm	each	68.00
	(ii) Girth above 600 mm to 900 mm	each	114.00
	(iii) Girth above 900 mm to 1800 mm	each	232.00
	(iv) Girth above 1800 mm to 2700 mm	each	451.00
	(v) Girth above 2700 mm to 4500 mm	each	914.00
	(vi) Girth above 4500 mm	each	2,600.00
	<b>B. Lead upto 1000 m</b>		
	(i) Girth above 300 mm to 600 mm	each	72.00
	(ii) Girth above 600 mm to 900 mm	each	126.00
	(iii) Girth above 900 mm to 1800 mm	each	247.00
	(iv) Girth above 1800 mm to 2700 mm	each	471.00
	(v) Girth above 2700 mm to 4500 mm	each	939.00
	(vi) Girth above 4500 mm	each	2,724.00
<b>2.5</b>	<b>Dismantling of Structures</b>		
	<i>Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&amp;P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 m as per Technical Specification Clause 202.</i>		
	<b>(I) By Manual Means</b>		
	(A) Lime Concrete	cum	226.00
	(B) Cement Concrete	cum	256.00
	(C) Reinforced Cement Concrete	cum	535.00
	<b>(II) By Mechanical Means</b>		
	(A) Cement Concrete	cum	465.00
	(B) Reinforced Cement Concrete	cum	718.00
<b>2.6</b>	<b>Dismantling Brick/Tile Work</b>		
	<i>Dismantling of existing structures like culverts, bridges, retaining walls and other structures comprising of brick masonry, including disposal of unserviceable material and stacking the serviceable material with all lift and lead of 1000 m as per Technical Specification Clause 202.</i>		
	(A) Lime mortar	cum	167.00
	(B) Cement mortar	cum	196.00
	(C) Mud Mortar	cum	155.00
	(D) Dry Brick Pitching or Brick Soling	cum	149.00

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<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
2.7	<b>Dismantling Stone Masonry as per Technical Specification Clause 202.</b> <i>Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of stone masonry, including disposal of unserviceable material and stacking the serviceable material with all lift and lead of 1000 m as per Technical Specification Clause 202.</i>		
	(A) Rubble Stone Masonry in Lime Mortar	cum	178.00
	(B) Rubble Stone Masonry in Cement Mortar	cum	196.00
	(C) Rubble Stone Masonry in Mud Mortar	cum	167.00
	(D) Dry Rubble Masonry	cum	161.00
	(E) Dismantling Stone Pitching / Dry Stone Spalls	cum	155.00
	(F) Dismantling boulders laid in wire crates including opening of crates and stacking dismantled materials	cum	167.00
2.8	<b>Dismantling Wood Work Wrought and Planed Fixed in Frames of Trusses upto a height of 5 m above Plinth Level as per Technical Specification Clause 202.</b>	cum	352.00
2.9	<b>Dismantling Steel Work in all Types of Sections upto a height of 5 m above Plinth Level excluding Cutting of rivet as per Technical Specification Clause 202.</b>		
	(A) Including dismembering	t	718.00
	(B) Excluding dismembering	t	513.00
	(C) Extra over Items (A) and (B) for cutting rivets	t	5.00
2.10	<b>Scraping of bricks dismantled from brick work including stacking as per Technical Specification Clause 202.</b>	1000 Nos.	520.00
2.11	<b>Scraping of Stone from Dismantled Stone Masonry as per Technical Specification Clause 202.</b> <i>In Cement or Lime Mortar</i>	cum	209.00
2.12	<b>Scraping Plaster in Lime or Cement Mortar from Brick / Stone Masonry as per Technical Specification Clause 202.</b>	sqm	8.00
2.13	<b>Removing all types of Hume pipes and stacking within a lead of 1000 m including Earthwork and Dismantling of Masonry Works as per Technical Specification Clause 202.</b>		
	(A) Upto 600 mm dia Hume pipe	m	77.00
	(B) Above 600 mm to 900 mm dia Hume pipe	m	105.00
	(C) Above 900 mm dia Hume pipe	m	179.00
2.14	<b>Dismantling of Flexible Pavements</b> <i>Dismantling of flexible pavements and disposal of dismantled materials upto a lead of 100 m, stacking serviceable and unserviceable materials separately as per Technical Specification Clause 202</i>		
	(I) <b>By Manual Means</b>		
	(A) Bituminous Courses	cum	411.00
	(B) Granular Courses	cum	312.00
	(II) <b>By Mechanical Means</b>		

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<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
	<b>(A) Bituminous Courses</b>	<i>cum</i>	217.00
<b>2.15</b>	<b>Dismantling of Cement Concrete Pavements as per Technical Specification Clause 202.</b>		
	<i>Dismantling of cement concrete pavements by mechanical means using pneumatic tools breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials upto a lead of 1000 m, stacking serviceable and unserviceable materials separately</i>	<i>cum</i>	1,106.00
<b>2.16</b>	<b>Dismantling Guard Rails</b>		
	<i>Dismantling guard rails by manual means and disposal of dismantled material with all lifts and upto a lead of 1000 m, stacking serviceable materials and unserviceable materials separately as per Technical Specification Clause 202.</i>	<i>running m</i>	47.00
<b>2.17</b>	<b>Dismantling Kerb Stones</b>		
	<i>Dismantling kerb stones by manual means and disposal of dismantled material with all lifts and upto a lead of 1000 m as per Technical Specification Clause 202.</i>	<i>running m</i>	12.00
<b>2.18</b>	<b>Dismantling Kerb Stone Channels</b>		
	<i>Dismantling kerb stone channels by manual means and disposal of dismantled material with all lifts and upto a lead of 1000 m as per Technical Specification Clause 202.</i>	<i>running m</i>	18.00
<b>2.19</b>	<b>Dismantling Kilometre Stones</b>		
	<i>Dismantling of kilometre stones including cutting of earth, foundation and disposal of dismantled material with all lifts and lead upto 1000 m and backfilling of pit as per Technical Specification Clause 202.</i>		
	<b>(A) 5th km Stone</b>	<i>m</i>	186.00
	<b>(B) Ordinary km Stones</b>	<i>m</i>	111.00
	<b>(C) 200 m Stones</b>	<i>m</i>	25.00
<b>2.20</b>	<b>Dismantling of Fencing</b>		
	<i>Dismantling of barbed wire fencing / wire mesh fencing including posts, foundation concrete, backfilling of pit by manual means including disposal of dismantled material with all lifts and upto a lead of 1000 m, stacking serviceable material and unserviceable material separately as per Technical Specification Clause 202.</i>	<i>running m</i>	24.00
<b>2.21</b>	<b>Dismantling of CI Water Pipe Line</b>		
	<i>Dismantling of CI water pipe line 600 mm dia including disposal with all lifts and lead upto 1000 m and stacking of serviceable material and unserviceable material separately under supervision of concerned department as per Technical Specification Clause 202.</i>	<i>running m</i>	84.00

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<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>2.22</b>	<b>Removal of Cement Concrete Pipe of Sewer Gutter</b> <i>Removal of cement concrete pipe of sewer gutter 1500 mm dia under the supervision of concerned department including disposal with all lifts and upto a lead of 1000 m and stacking of serviceable and unserviceable material separately but excluding earth excavation and dismantling of masonry works as per Technical Specification Clause 202.</i>	<i>running m</i>	<b>115.00</b>
<b>2.23</b>	<b>Removal of Telephone/Electric Poles and Lines</b> <i>Removal of telephone/electric poles with wires including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and upto a lead of 1000 m and stacking the serviceable and unserviceable material separately as per Technical Specification Clause 202.</i>	<i>each</i>	<b>94.00</b>

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<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>Chapter 3-EARTHWORK, EROSION CONTROL AND DRAINAGE</b>			
<b>3.1</b>	<b>Preparation of Foundation for Embankment</b> <b>Scarifying Existing Granular Surface to a Depth of 50 mm by Manual Means</b> Scarifying existing granular surface to a depth of 50 mm and disposal of scarified material with a lift upto 3 m and leads upto 1000 m as per Technical Specification Clause 301.4.	<i>sqm</i>	13.00
<b>3.2</b>	<b>Preparation of Foundation for Embankment</b> Scarifying Existing Bituminous Surface to a Depth of 150 mm by Mechanical Scarifying the existing bituminous road surface to a depth of 150 mm and disposal of scarified material with a lift upto 3 m and lead upto 1000 m as per Technical Specification Clause 301.4.	<i>sqm</i>	10.00
<b>3.3</b>	<b>Construction of Embankment with Material Obtained from Roadway Cutting</b> Construction of embankment with approved materials deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of Tables 300.1 and 300.2 as per Technical Specification Clause 301.5	<i>cum</i>	81.00
<b>3.4</b>	<b>Construction of Embankment with Material Obtained from Borrow Pits</b> Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5	<i>cum</i>	218.00
<b>3.5</b>	<b>(i) Excavation in Cutting in Soil by manual means with lead upto 50 m</b> Excavation for roadway in soil using manual means for carrying of cut earth to embankment site with a lift upto 1.5 m and lead upto 50 m as per Technical Specification Clause 302.3	<i>cum</i>	56.00
	<b>(ii) Excavation in Soil with Dozer with lead upto 100 m</b> Excavation for roadway in soil by mechanical means including cutting and pushing the earth to site of embankment upto a distance of 100 m, including trimming bottom and side slopes in accordance with requirements of lines, grades and cross-sections.	<i>cum</i>	62.00
	<b>(iii) Excavation in Soil using Hydraulic Excavator and Tippers with disposal upto 1000 m</b> Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross-sections, and transporting to the embankment location with a lift upto 1.5 m and lead upto 1000 m as per Technical Specification Clause 302.3	<i>cum</i>	48.00

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<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>3.6</b>	<b>Excavation in Marshy Soil</b> <i>Excavation for roadway in marshy soil with hydraulic excavator 0.9 cum bucket capacity including cutting and loading in tippers and disposal with a lift upto 1.5 m and lead upto 1000 m, trimming of bottom and side slopes in accordance with requirements of lines, grades and cross- sections as per Technical Specification Clause 302.3.6.</i>	<i>cum</i>	<b>57.00</b>
<b>3.7</b>	<b>Removal of Unsuitable Soil with Disposal upto 1000 m</b> <i>Removal of unsuitable soil including excavation, loading and disposal upto 1000 m lead but excluding compaction ground supporting embankment subgrade replacement by suitable soil, which shall be paid separately as per Clause 303.5.2 as per Technical Specification Clause 302.3.11</i>	<i>cum</i>	<b>48.00</b>
<b>3.8</b>	<b>(i) Excavation in ordinary Rock by manual means</b> <i>Excavation in ordinary rock using manual means including loading in a truck and carrying of excavated material to embankment site with a lift upto 1.5 m and lead upto 50 m as per Technical Specification Clause 302.3.5.</i>	<i>cum</i>	<b>87.00</b>
	<b>(ii) Excavation in Ordinary Rock with Dozer with lead upto 100 m</b> <i>Excavation for roadway in ordinary rock by deploying a dozer D-50 including cutting and pushing the cut earth to site of embankment upto a distance of 100 m (average lead 50 m), trimming bottom and side slopes in accordance with the requirements of lines, grades and cross-sections with lift upto 1.5 m.</i>	<i>cum</i>	<b>65.00</b>
	<b>(iii) Excavation in Ordinary Rock using Hydraulic Excavator and Tippers with disposal upto 1000 m</b> <i>Excavation for roadway in ordinary rock with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, transporting to embankment site with a lift upto 1.5 m and lead upto 1000 m, trimming bottom and side slopes in accordance with requirements of lines, grades and cross-sections as per Technical Specification Clause 302.3.5</i>	<i>cum</i>	<b>82.00</b>
<b>3.9</b>	<b>(i) Excavation in Hard Rock (requiring blasting) with disposal upto 1000</b> <i>Excavation for roadway in hard rock (requiring blasting) by drilling, blasting and breaking, trimming of bottom and side slopes in accordance with requirements of lines, grades and cross-sections, loading and disposal of cut rock with a lift upto 1.5 m and leads upto 1000 m as per Technical Specification Clause 302.3.5</i>	<i>cum</i>	<b>254.00</b>

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	<i>(ii) Excavation in Hard Rock (blasting prohibited)</i> <i>Excavation for roadway in hard rock (blasting prohibited) with rock breakers including breaking rock, loading in tippers and disposal with a lift upto 1.5 m and lead upto 1000 metres, trimming bottom and side slopes in accordance with requirements of lines, grades and cross-sections as per Technical Specification Clause 302.3.5</i>		
	<i>(A) Manual Means</i>	<i>cum</i>	<i>685.00</i>
	<i>(B) Mechanical Means</i>	<i>cum</i>	<i>457.00</i>
	<i>(iii) Excavation in Hard Rock (controlled blasting) with disposal upto 1000</i> <i>Excavation for roadway in hard rock with controlled blasting by drilling, blasting and breaking, trimming of bottom and side slopes in accordance with requirements of lines, grades and cross-sections, loading and disposal of cut rock with a lift upto 1.5 m and leads upto 1000 m as per Technical Specification Clause 302.3.5</i>	<i>cum</i>	<i>250.00</i>
<b>3.10</b>	<b><i>Stripping, Storing and Relaying Top Soil from Right-of-Way (R.O.W)</i></b>	<i>cum</i>	<i>104.00</i>
<b>3.11</b>	<b><i>Stripping, Storing and Relaying Top Soil from Borrow Areas in Agricultural Fields</i></b> <i>Stripping of top soil from borrow areas located in agriculture fields, storing at a suitable place, spreading and relaying after taking the borrow earth to maintain fertility of the agricultural field, finishing it to the required levels to the satisfaction of the farmer/land owner as per Technical Specification Clause 302.3.2.</i>	<i>cum</i>	<i>110.00</i>
<b>3.12</b>	<b><i>Turfing with Sods</i></b> <i>Furnishing and laying of the live sods of perennial turf forming grass on embankment slope, verges or other locations shown on the drawing or as directed by the Engineer including preparation of ground, fetching of sods and watering as per Technical Specification Clause 309.</i>	<i>sqm</i>	<i>132.00</i>
<b>3.13</b>	<b><i>Seeding and Mulching</i></b> <i>Preparation of seed bed on previously laid top soil, furnishing and placing of seeds, fertilizer, mulching material, applying bituminous emulsion @ 0.23 litre per sqm and laying and fixing jute netting, including watering for 3 months all as per Technical Specification Clause 310.</i>	<i>sqm</i>	<i>162.00</i>
<b>3.14</b>	<b><i>Construction of Subgrade and Earthen Shoulders</i></b> <i>Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m as per Technical Specification Clause 303.1.</i>	<i>cum</i>	<i>205.00</i>

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<b>3.15</b>	<b>Compacting Original Ground</b>		
	<b>(i) Compacting original ground supporting embankment</b>		
	Loosening, Levelling and Compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Tables 300.1 and 300.2 for embankment construction as per Technical Specification Clause 301.4.1.	cum	27.00
	<b>(ii) Compacting original ground supporting subgrade</b>		
	Loosening of the ground upto a level of 300 mm below the subgrade level, watered, graded and compacted in layers to meet requirement of Tables 300.1 and 300.2 for subgrade construction as per Technical Specification Clause 303.5.2.	cum	65.00
<b>3.16</b>	<b>Repairs of damages caused by rain/spillage of water</b>		
	Preparation and surface treatment of formation by removing mud and slurry, watering to the extent needed to maintain the desired moisture content, trimming to the required line, grade, profile and rolling with three wheel 80-100 kN static roller, complete as per Technical Specification Clause 301.5.5.1	sqm	2.00
<b>3.17</b>	<b>Presplitting Rock Excavation Slopes</b>		
	Carrying out excavation in hard rock to achive a specified slope of the rock face by controlled use of explosives and blasting accessories in properly aligned and spaced drill holes, collection of the excavated rock by a D-50 dozer, loading in tipper by a front end loader and disposing of the material with a lift upto 1.5 m and lead upto 1000 m as per Technical Specification Clause 304.3	sqm	121.00
<b>3.18</b>	<b>Construction of Embankment with Flyash/Pond ash available from Coal or Lignite Burning Thermal Plants as Waste Material</b>		
	Construction of embankment with flyash conforming to Table 1 of IRC:SP:58 obtained from coal or lignite burning thermal power stations as waste material, spread and compacted in layer of 200 mm thickness each at OMC, all as specified in IRC:SP:58 and as per approved plans with lead upto 1000 m as per Technical Specification Clause 306.	cum	216.00
<b>3.19</b>	<b>(i) Surface Drains in Soil</b>		
	Construction of unlined surface drains of average cross-sectional area 0.40 sqm in soil to specified lines, grades, levels and dimensions. Excavated material to be used in embankment with a lift upto 3m and lead of 50 m (average lead 25 m) as per Technical Specification Clause 307.		
	(A) Manual Means	m	30.00
	(B) Mechanical Means	m	12.00

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
	<i>(ii) Surface Drains in Ordinary Rock</i>		
	<i>Construction of unlined surface drain of average cross-sectional area 0.4 sqm in ordinary rock to specified lines, grades, levels and dimensions as per approved design and Technical Specification Clause 307. Excavated material to be used in embankment at site.</i>		
	<i>(A) Manual Means</i>	<i>m</i>	<i>45.00</i>
	<i>(B) Mechanical Means</i>	<i>m</i>	<i>28.00</i>
	<i>(iii) Surface Drains in Hard Rock</i>		
<i>3.20</i>	<i>Chute Drains</i>		
	<i>A. Providing chute drains across embankment slopes in approaches of bridges and on horizontal curves as per drawings.</i>	<i>m</i>	<i>-</i>
	<i>B. Providing chute drains across embankment slopes in approaches of bridges and on horizontal curves as per drawings.</i>	<i>m</i>	<i>-</i>

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
<b>Chapter 4 - GRANULAR SUB-BASES, BASES (NON-BITUMINOUS) AND SHOULDERS</b>			
<b>4.1</b>	<b>Granular Sub-base with Well Graded Material (Table 400.1)</b>		
	<b>(A) By Mix in Place Method</b>		
	<i>Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.</i>		
	<i>(i) For Grading I Material</i>	<i>cum</i>	<i>1,207.00</i>
	<i>(ii) For Grading II Material</i>	<i>cum</i>	<i>1,204.00</i>
	<i>(iii) For Grading III Material</i>	<i>cum</i>	<i>1,129.00</i>
	<b>(B) Plant Mix Method</b>		
	<i>Construction of granular sub-base by providing well graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site upto lead of 1000 m spreading in uniform layers with motor grader on prepared surface and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401</i>		
	<i>(i) For Grading I Material</i>	<i>cum</i>	<i>1,329.00</i>
	<i>(ii) For Grading II Material</i>	<i>cum</i>	<i>1,331.00</i>
	<i>(iii) For Grading III Material</i>	<i>cum</i>	<i>1,212.00</i>
<b>4.2</b>	<b>i) Gravel/Soil-Aggregate Base (Table 400.2) Grading A</b>		
	<i>Construction of gravel/soil-aggregate base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with three wheel 80-100 kN static roller to achieve the desired density, complete as per Technical Specifications Clause 402</i>	<i>cum</i>	<i>1,230.00</i>
	<b>ii) Gravel/Soil-Aggregate Base (Table 400.2) Grading B</b>		
	<i>Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with three wheel 80-100 kN static roller capacity to achieve the desired density, complete as per Technical Specification Clause 402</i>	<i>cum</i>	<i>1,234.00</i>
	<b>iii) Gravel/Soil-Aggregate Base (Table 400.2) Grading C</b>		
	<i>Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with three wheel 80-100 kN static roller capacity to achieve the desired density, complete as per Technical Specification Clause 402</i>	<i>cum</i>	<i>1,293.00</i>
<b>4.3</b>	<b>Gravel/Soil-Aggregate Surface Course (Table 400.3)</b>	<i>cum</i>	<i>930.00</i>

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
4.4	<b>Lime Stabilisation for Improving Subgrade</b> <i>Laying and spreading available soil in the subgrade on a prepared surface, pulverising, mixing the spread soil in place with rotavator with 2 per cent slaked lime having minimum 70 per cent of contents of CaO, grading with motor grader and compacting with the smooth wheel road roller at OMC to the desired density to form a layer of improved Sub-grade as per Technical Specification Clause 403.</i>		
	<i>(A) By Manual Means</i>	<i>cum</i>	<i>307.00</i>
	<i>(B) By Mechanical Means</i>	<i>cum</i>	<i>354.00</i>
4.5	<b>Lime Treated Soil for Sub-Base</b> <i>Providing, laying and spreading soil on a prepared sub-grade, pulverising, mixing the spread soil in place with rotavator with 4 per cent slaked lime with minimum content of 70 per cent of CaO, grading with motor grader and compacting with the road roller at OMC to achieve atleast 98 per cent of the max dry density to form a layer of sub-base as per Technical Specification Clause 403.</i>	<i>cum</i>	<i>640.00</i>
4.6	<b>Cement Treated Soil Sub-Base/Base</b> <i>Providing, laying and spreading soil on a prepared sub-grade, pulverising, adding the designed quantity of cement to the spread soil, mixing in place with rotavator, grading with the motor grader and compacting with the road roller at OMC to achieve the desired unconfined compressive strength and to form a layer of sub-base/base as per Technical Specification Clause 404.</i>		
	<i>For 4 per cent quantity of cement by weight of soil</i>	<i>cum</i>	<i>751.00</i>
4.7	<b>Water Bound Macadam Sub-base/base</b>		
	<b>1) WBM Grading 1</b> <i>Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming, stone screening/binding materials to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 1 as per Technical Specification Clause 404.</i>		
	<i>(A) By Manual Means</i>	<i>cum</i>	<i>1,459.00</i>
	<i>(B) By Mechanical Means</i>	<i>cum</i>	<i>1,428.00</i>

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
2)	<i>WBM Grading 2</i>		
	<i>Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming, stone screening/binding materials to fill-up the interstices of coarse aggregate, watering and compacting to the required density grading 2 as per Technical Specification Clause 405.</i>		
	<i>(A) By Manual Means</i>	<i>cum</i>	<i>1,608.00</i>
	<i>(B) By Mechanical Means</i>	<i>cum</i>	<i>1,576.00</i>
3)	<i>WBM Grading 3</i>		
	<i>Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming, stone screening to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 3 as per Technical Specification Clause 405.</i>		
	<i>(A) By Manual Means</i>	<i>cum</i>	<i>1,626.00</i>
	<i>(B) By Mechanical Means</i>	<i>cum</i>	<i>1,595.00</i>
4.8	<i>Water Bound Macadam with Crushable Screenings</i>		
1)	<i>WBM Grading 1</i>		
	<i>Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming, crushable screening to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 1 as per Technical Specification Clause 405.</i>		
	<i>(A) By Manual Means</i>	<i>cum</i>	<i>1,325.00</i>
	<i>(B) By Mechanical Means</i>	<i>cum</i>	<i>1,327.00</i>

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
2)	<b>WBM Grading 2</b> <i>Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming, crushable screening to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 2 as per Technical Specification Clause 405.</i>		
	(A) <i>By Manual Means</i>	<i>cum</i>	1,506.00
	(B) <i>By Mechanical Means</i>	<i>cum</i>	1,474.00
3)	<b>WBM Grading 3</b> <i>Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming, crushable screening to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 3 as per Technical Specification Clause 405.</i>		
	(A) <i>By Manual Means</i>	<i>cum</i>	1,590.00
	(B) <i>By Mechanical Means</i>	<i>cum</i>	1,559.00
4.9	<b>Wet Mix Macadam</b> <i>Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mixer (Pug Mill), carriage of mixed material by tipper to site, laying in uniform layers in sub-base/base course on a well prepared sub-base and compacting with smooth wheel roller of 80 to 100kN weight to achieve the desired density including lighting, barricading and maintenance of diversion, etc as per Tables 400.11 &amp; 400.12 and Technical Specification Clause 406.</i>		
	<i>By Mechanical Means with 1 km lead</i>	<i>cum</i>	1,430.00
4.10	<b>Construction of Shoulders as per Technical Specification Clause 407.</b>		
	A. <b>Earthen Shoulders</b> <i>The rate as applicable for sub-grade construction may be adopted.</i>		
	B. <b>Hard Shoulders</b> <i>Rate as applicable for sub-base and/or base may be adopted as per approved design.</i>		
	C. <b>Paved Shoulders</b> <i>The rates may be adopted as applicable for different layers of pavement depending upon approved design of paved shoulders.</i>		

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
4.11	<b>Granular sub-base/base/surface course with local materials (Table 400.13) by mix in place method normal Construction of granular sub-base by providing local material spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at once and compacting with smooth wheel roller to achieve the desired density complete as per Clause 401.4 as per Technical Specification Clause 408.</b>		
	(i) Using naturally occurring gravel	cum	767.00
	(ii) Using Gravel mix soil using	cum	766.00
4.12	<b>Construction of Water Bound Macadam using locally available material</b> Providing, laying spreading and compacting local material in block or large discrete particles, such as kankar, Laterite, Dhandla etc. as per Table 400.13 to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming requisite type of screening /binding materials to fill-up the interstices of laid material watering and compacting to the required density as per Clause 405.3 and Technical Specification Clause 408.	cum	835.00
4.13	<b>Lime-Flyash Stabilised Soil Sub-base</b> Construction of sub-base using lime-flyash admixture with granular soil, free from organic matter/deleterious material or clayey silts and low plasticity clays having PI between 5 and 20 and liquid limit less than 25 and commercial dry lime, slaked at site or pre-slaked with CaO content not less than 50 per cent, flyash to conform to gradation as per Clause 4.3 of IRC:SP:20, lime+flyash content ranging between 10 to 30 per cent, the minimum un-confined compressive strength and CBR value after 28-days curing and 4-days soaking to be 0.75 MPa and 25 per cent respectively, all as specified in IRC:88 including a lead upto 1000 m as per Technical Specification Clause 409.	cum	608.00
4.14	<b>Construction of Sub-base/Course Using Crushed Slag as per Table 400.19</b> Construction of Sub-base by providing crushed slag spreading in uniform layer with motor grader on prepared surface mixing by mix-in-place method with Rotavator @ OMC, and compacting with three wheel 80-100 kN static roller to achieve the desired density complete as per Technical Specifications Clause 402.4 and 410.3.2	cum	623.00
4.15	<b>Water Bound Macadam using crushed slag</b> Providing, laying, spreading and compacting crushed slag to water Bound Macadam specification including spreading in uniform thickness, hand packing rolling with smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming requisite type of screening/binding materials to fill up the interstees of crushed slag watering and compacting to the required density as per Clause 405.3 and Technical Specification Clause 410.3.2.	cum	901.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>4.16</b>	<b>Cement Bound Granular Material sub-base/base</b> <i>Providing laying and spreading granulated blast furnace slag on a prepared sub-grade pulverising adding the designed quantity of cement to the spread granulated blast furnace slag mixing in place with rotavator grading with the mortar grader and compacting with smooth wheel roller 80-100 kN at OMC to achieve the desired unconfined compressive strength and to form a layer of sub-base/base as per Technical Specification Clauses 404.3 and 410.4.2.</i>	<i>cum</i>	<b>733.00</b>
<b>4.17</b>	<b>Crusher Run Macadam Base</b> <i>Providing crushed run stone aggregate grading conforming to table 400.20 depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a three wheel 80-100 kN static roller as per Technical Specification Clause 411 to form a layer of sub-base/base</i>		
	<b>A) By mix-in-place method</b>		
	<i>(i) With 53 mm maximum size of aggregates</i>	<i>cum</i>	<b>1,402.00</b>
	<i>(ii) With 37.5 mm maximum size of aggregates</i>	<i>cum</i>	<b>1,624.00</b>
	<b>B) By mixing plant method</b>		
	<i>(i) With 53 mm maximum size of aggregates</i>	<i>cum</i>	<b>1,727.00</b>
	<i>(ii) With 37.5 mm maximum size of aggregates</i>	<i>cum</i>	<b>1,760.00</b>
<b>4.18</b>	<b>Brick Soling</b> <i>Laying brick soling layer on prepared sub-grade with brick on end edging according to lines, graded and cross-section shown on the drawing filling joints with sand and earth, spreading 25 mm thick layer of earth over brick soling, watering and rolling the same with three wheel road roller 80-100 kN as per Technical Specification Clause 412</i>	<i>sqm</i>	<b>473.00</b>
<b>4.19</b>	<b>Stone Set Pavement</b> <i>Providing and laying stone set pavement on prepared surface with sub-base 100 mm thick compacted Granular Sub-base as per Clause 401.4 and base 75 mm thick compacted water bound macadam grading 2 as per Clause 405.3. The 150 mm thick hammer desired stones are laid in the herring one or stretched bond pattern. The stones are compacted into the bedding sand of 40 mm over the WBM base bounded by edge stone using suitable compacting device. The gaps are filled with fine sand stone dust as per Technical Specification Clause 413.4</i>	<i>sqm</i>	<b>532.00</b>

**SCHEDULE OF RATES 2008**

Item No.	Description	Unit	Rate (Rs.)
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**Chapter 5 - BASES AND SURFACE COURSES (BITUMINOUS)**

**5.1 Prime Coat**

**(i) Low porosity**

<i>Providing and applying primer coat with bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70-1.0 kg/sqm using mechanical means as per Technical Specification Clause 502</i>	sqm	36.00
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**(ii) Medium porosity**

<i>Providing and applying primer coat with Bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90- 1.2 kg/sqm using mechanical means as per Technical Specification Clause 502.</i>	sqm	44.00
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**(iii) High porosity**

<i>Providing and applying primer coat with Bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 1.2-1.5 kg/sqm using mechanical means as per Technical Specification Clause 502.</i>	sqm	56.00
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**5.2 Tack Coat**

<b>(i) Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.20 to 0.25 kg per sqm on the prepared bituminous surface cleaned with Hydraulic broom as per Technical Specification Clause 503.</b>	sqm	11.00
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<b>(ii) Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared dry and hungry bituminous surface cleaned with Hydraulic broom as per Technical Specification Clause 503.</b>	sqm	13.00
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<b>(iii) Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared granular surfaces treated with primer &amp; cleaned with Hydraulic broom as per Technical Specification Clause 503.</b>	sqm	13.00
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<b>(iv) Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion pressure distributor at the rate of 0.30 to 0.35 kg per sqm on the prepared non-bituminous surfaces (cement concrete pavement) cleaned with Hydraulic broom as per Technical Specification Clause 503.</b>	sqm	15.00
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**5.3 Bituminous Macadam**

<i>Providing and laying bituminous macadam with hot mix plant using crushed aggregates of grading as per Table 500.4 premixed with bituminous binder, transported to site upto a lead of 1000 m laid over a previously prepared surface with paver finisher to the required grade, level and alignment and rolled to achieve the desired compaction as per Technical Specification Clause 504.</i>	cum	6,482.00
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**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
5.4	<b>Built-Up Spray Grout</b> <i>Providing, laying and rolling of built-up spray grout layer over prepared base consisting of a two layer composite construction of crushed coarse aggregates using motor grader for aggregates. Key stone chips spreader may be used with application of bituminous binder after each layer, and with key aggregates placed on top of the second layer to serve as a base, conforming to the line, grades and cross-section specified, the compacted layer thickness being 75 mm as per Technical Specification Clause 505.</i>		
	(A) <i>By Manual Means</i>		
	(I) <i>Bitumen (S-90)</i>	<i>sqm</i>	297.00
	(II) <i>Bitumen (S-65)</i>	<i>sqm</i>	305.00
	(B) <i>By Mechanical Means</i>	<i>sqm</i>	281.00
5.5	<b>Modified Penetration Macadam</b> <i>Construction of penetration macadam over prepared base by providing a layer of compacted crushed coarse aggregate using chips spreader with alternate applications of bituminous binder and key aggregates and rolling with a three wheel 80-100 kN static roller to achieve the desired degree of compaction as per Technical Specification Clause 506.</i>		
	(A) <i>50 mm thick</i>		
	(I) <i>Bitumen (S-90)</i>	<i>sqm</i>	169.00
	(B) <i>75 mm thick</i>		
	(I) <i>Bitumen (S-90)</i>	<i>sqm</i>	209.00
	(II) <i>Bitumen (S-65)</i>	<i>sqm</i>	215.00
5.6	<b>Surface Dressing using Bituminous (Penetrations grade / modified bitumen) Binder</b> <i>Providing and laying surface dressing as wearing course consisting of a layer of bituminous binder laid on the prepared surface, followed by a cover of crushed stone aggregates of specified size and rolling with three wheel 80-100 kN static roller including cleaning the road surface as per Technical Specification Clause 507.</i>		
	(A) <i>By Manual Means</i>		
	Case – I: <i>Nominal chipping size 13.2 mm</i>		
	(I) <i>Bitumen (S-90)</i>	<i>sqm</i>	70.00
	(II) <i>Bitumen (S-65)</i>	<i>sqm</i>	73.00
	(III) <i>Polymer Modified Bitumen</i>	<i>sqm</i>	78.00
	Case – II: <i>Nominal chipping size 9.5 mm</i>		
	(I) <i>Bitumen (S-90)</i>	<i>sqm</i>	63.00
	(II) <i>Bitumen (S-65)</i>	<i>sqm</i>	66.00
	(III) <i>Polymer Modified Bitumen</i>	<i>sqm</i>	69.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
	<b>(B) By Mechanical Means</b>		
	<b>Case – I: Nominal chipping size 13.2 mm</b>		
	(I) Bitumen (S-90)	sqm	65.00
	(II) Bitumen (S-65)	sqm	68.00
	(III) Polymer Modified Bitumen	sqm	72.00
	<b>Case – II: Nominal chipping size 9.5 mm</b>		
	(I) Bitumen (S-90)	sqm	59.00
	(II) Bitumen (S-65)	sqm	62.00
	(III) Polymer Modified Bitumen	sqm	66.00
<b>5.7</b>	<b>Surface Dressing using Bitumen Emulsion</b>		
	<i>Providing and laying surface dressing as wearing course consisting of a layer of bitumen emulsion laid on the prepared surface, followed by a cover of crushed stone chippings of specified size and rolling with 80-100 kN roller including cleaning the road surface as per Technical Specification Clause 507.</i>		
	<b>(A) By Manual Means</b>		
	Case – I: Nominal aggregate size 13.2 mm	sqm	87.00
	Case – II: Nominal chipping size 9.5 mm	sqm	79.00
	<b>(B) By Mechanical Means</b>		
	Case – I: Nominal chipping size 13.2 mm	sqm	81.00
	Case – II: Nominal chipping size 9.5 mm	sqm	74.00
<b>5.8</b>	<b>Pre-coating Chips</b>		
	<i>Pre-coating of chips with 1 per cent of paving bitumen by weight of chips in a suitable mixer duly heated to 160 degree C as per Technical Specification Clause 507.2.5</i>		
	(I) Bitumen (S-90)	cum	1,148.00
	(II) Bitumen (S-65)	cum	1,194.00
<b>5.9</b>	<b>20mm thick Open-Graded Premix Carpet using Bituminous (penetration grade/modified bitumen) Binder</b>		
	<i>Providing, laying and rolling of open-graded premix carpet of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates either using penetration grade bitumen or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 80-100 kN static roller capacity, finished to required level and grades to be followed by seal coat of either Type A or Type B or Type C as per Technical Specification Clause 508.</i>		
	<b>Case - I By Manual Means</b>		
	(I) Bitumen (S-90)	sqm	123.00
	(II) Bitumen (S-65)	sqm	127.00
	(III) Polymer Modified Bitumen	sqm	133.00

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
	<b>Case - II By Mechanical Means</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	117.00
	(II) Bitumen (S-65)	<i>sqm</i>	122.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	128.00
5.10	20 mm thick Open Graded Premix Carpet using Bitumen Emulsion as per Technical Specification Clause 508.2	<i>sqm</i>	126.00
5.11	<b>Mix Seal Surfacing</b> Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness composed of 11.2 mm to 0.9 mm (Type-A) or 13.2 mm to 0.9 mm (Type-B) aggregates using penetration grade bitumen to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 8-10 kN static roller and finishing to required level and grades as per Technical Specification Clause 509		
	<b>By Manual Means</b>		
	<b>Type A</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	173.00
	(II) Bitumen (S-65)	<i>sqm</i>	179.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	189.00
	<b>Type B</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	159.00
	(II) Bitumen (S-65)	<i>sqm</i>	165.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	173.00
	<b>By Mechanical Means</b>		
	<b>Type A</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	156.00
	(II) Bitumen (S-65)	<i>sqm</i>	162.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	172.00
	<b>Type B</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	142.00
	(II) Bitumen (S-65)	<i>sqm</i>	148.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	156.00
5.12	<b>Seal Coat</b> Providing and laying seal coat sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall using Type A, Type B and Type C as per Technical Specification Clause 510		
	<b>A. By Manual Means</b>		
	<b>Case - I : Type A</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	62.00
	(II) Bitumen (S-65)	<i>sqm</i>	65.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	69.00

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
	<b>Case - II : Type B</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	41.00
	(II) Bitumen (S-65)	<i>sqm</i>	43.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	46.00
	<b>Case - III : Type C</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	47.00
	(II) Bitumen (S-65)	<i>sqm</i>	49.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	52.00
	<b>B. By Mechanical Means</b>		
	<b>Case - I : Type A</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	63.00
	(II) Bitumen (S-65)	<i>sqm</i>	66.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	70.00
	<b>Case - II : Type B</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	40.00
	(II) Bitumen (S-65)	<i>sqm</i>	42.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	45.00
	<b>Case - III : Type C</b>		
	(I) Bitumen (S-90)	<i>sqm</i>	48.00
	(II) Bitumen (S-65)	<i>sqm</i>	50.00
	(III) Polymer Modified Bitumen	<i>sqm</i>	53.00

**5.13 Supply of Stone Aggregates for Pavement Courses**

*Supply of stone aggregates from approved sources conforming to the physical requirement, specified in the respective clauses, including royalties, fees rents, collection, transportation, stacking and testing and measured in cum as per Clause 511.5.*

**Note:** *Competitive market rates to be ascertained. Alternatively, rates for stone crushing given in Chapter 1 may be adopted, if found economical. In case for supply of aggregates at site are not available, nearest crusher site may be ascertained. Loading and unloading charges and cost of carriage may be added to these rates to arrive at the cost at site.*

**SCHEDULE OF RATES 2008**

Item No.	Description	Unit	Rate (Rs.)
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**Chapter 6 - CEMENT CONCRETE PAVEMENT**

**6.1 Granual Sub-base**

*Rate as per item No.4.1 of Chapter 4*

**6.2 Lime Treated Soil**

*Rate as per item No.4.5 of Chapter 4*

**6.3 Water Bound Macadam (WBM) - Sub-base**

**(A) By Manual Means**

*As per item No.4.7 of Chapter 4*

**(B) By Mechanical Means**

*As per item No.4.7 of Chapter 4*

**6.4 Cement Concrete Pavement**

*Construction of un-reinforced, dowel jointed at expansion and construction joint only, plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including provision of contraction and expansion, construction joints, applying debonding strips, primer, sealant, dowel bars, near approaches to bridge/culvert and construction joints, admixtures as approved, curing of concrete slabs for 14-days, using curing compound (where specified) and water finishing to lines and grade as per drawing and Technical Specification Clause 1501.*

cum

5,680.00

**6.5 Roller Compacted Concrete Pavement**

*Construction of Roller Compacted Concrete Pavement (RCCP) with coarse and fine aggregates conforming to IS:383, the size of coarse aggregate not exceeding 25 mm with minimum aggregate cement ratio of 5:1 mm and with minimum cement content of 310 kg per cum, aggregate gradation to be as per Table 602.2 after blending, mixing in concrete mixer at optimum moisture content, transporting to site, laying with wheel barrows or steel pans or with mechanical paver, compacting with 80-100 kN smooth wheel, tandem vibratory roller, to achieve, the designed flexural strength, finishing and curing as per drawings and Technical Specification Clause 1502*

cum

4,844.00

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
<b>6.6</b>	<b><i>Rectangular Concrete Block Pavement</i></b>		
	<i>Manufacturing, laying of cement concrete blocks of size 0.450 m x 0.300 m x 0.15 m of Cement Concrete (C.C.) M30 grade and spreading 25 mm thick sand under neath and filling joints with sand on existing W.B.M. base as per Technical Specification Clause 1503.</i>	<i>sqm</i>	<b>915.00</b>
<b>6.7</b>	<b><i>Interlocking Concrete Block Pavement</i></b>		
	<i>(1) Providing and Laying of Interlocking Concrete Block Pavements having thickness 80 mm as per drawings and Technical Specification Clause</i>	<i>sqm</i>	<b>898.00</b>
	<i>(2) Providing and Laying of Interlocking Concrete Blcok Pavements having thickness 60 mm as per drawing and Technical Specification Clause 1504</i>	<i>sqm</i>	<b>65.00</b>

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
<b>Chapter 7 - CAUSEWAY AND SUBMERSIBLE BRIDGES</b>			
7.1	<b>Construction of Cut-off Walls/Head Walls</b>		
	(i) <i>Earthwork in excavation for structures as per drawing and technical specification Clause 305.</i>		
	<i>Rate as per item No.11.1 of Chapter 11</i>	<i>cum</i>	
	(ii) <i>Plain cement concrete M15 grade</i>		
	<i>Rate as per item No.11.4 (ii) of Chapter 11</i>	<i>cum</i>	
	(iii) <i>Brick masonry in cement mortar 1:4</i>		
	<i>Rate as per item No.11.5 (ii) of Chapter 11</i>	<i>cum</i>	
	(iv) <i>Stone masonry in cement mortar 1:4</i>		
	<i>Rate as per item No.11.6 (ii) of Chapter 11</i>	<i>cum</i>	
	(v) <i>Providing P.C.C M20 architectural coping on top of wall</i>		
	<i>Rate as per item No.12.13 of Chapter 12</i>	<i>m</i>	
7.2	<b>Preparation of Subgrade</b>		
	<i>Rate as per item No.3.15 of Chapter 3</i>	<i>cum</i>	
7.3	<b>Granular Sub-base</b>		
	<i>Rate as per item No.4.1 of Chapter 4</i>	<i>cum</i>	
7.4	<b>W.B.M. Base Course</b>		
	<i>Rate as per item No.4.7 of Chapter 4</i>	<i>cum</i>	
7.5	<b>Cement Concrete Slab</b>		
	<i>Rate as per item No.6.4 of Chapter 6</i>	<i>cum</i>	
7.6	(i) <b>Providing and Laying Apron with Stone Boulders as per Drawings &amp; Technical Specification Clause 1301</b>		
	<i>Rate as per item No.14.1 of Chapter 14</i>	<i>cum</i>	
	(ii) <b>Providing and Laying of Boulder Apron Laid in Wire Crates as per Drawing and Technical Specification Clause 1301</b>		
	<i>Rate as per item No.14.2 of Chapter 14</i>	<i>cum</i>	
	(iii) <b>Providing and Laying of Apron with Cement Concrete Blocks as per Drawing and Technical Specification Clause 1301</b>		
	<i>Rate as per item No.14.3 of Chapter 14</i>	<i>cum</i>	
7.7	<b>Guide Posts</b>		
	<i>Construction of R.C.C. guide posts of 250 mm dia, M25 grade as per drawing and technical specification Clause 1401.6</i>		
	<i>Rate as per item No.8.8 of Chapter 8</i>	<i>cum</i>	
7.8	<b>Bedding for Causeway</b>		
	(i) <b>Type A (concrete cradle) Bedding Clause 1402.5</b>		
	<i>As per item No.9.2 of Chapter 9</i>	<i>cum</i>	
	(ii) <b>Type B (first class) Bedding Clause 1402.5</b>		
	<i>As per item No.9.2 of Chapter 9</i>	<i>cum</i>	

SCHEDULE OF RATES 2008

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
<i>7.9</i>	<i>Laying Reinforced Cement Concrete Pipe NP3 as per drawing and technical specification Clause 1402.6</i>		
	<i>As per item No.9.3 of Chapter 9</i>	<i>m</i>	
<i>7.10</i>	<i>Laying Reinforced Cement Concrete Pipe NP4 as per technical specification Clause 1402.6</i>		
	<i>As per item No.9.4 of Chapter 9</i>	<i>m</i>	

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
<b>Chapter 8 - HILL ROADS</b>			
8.1	<i>Site Clearance</i>		
8.2	<b>Setting Out</b>		
(1)	<i>Construction of reference pillars as per Fig. 1600.1 (b) as per drawing and Technical Specification Clause 1602.1</i>	<i>each</i>	<b>4,147.00</b>
(2)	<i>Construction of back pillar as per Fig. 1600.1( c) as per drawing and Technical Specification Clause 1602.3</i>	<i>each</i>	<b>16,736.00</b>
(3)	<i>Construction of Job pillars as per Fig. 1600.1 (d) and Technical Specification Clause 1602.4</i>	<i>each</i>	<b>415.00</b>
8.3	<b>Earthwork in Hill Road</b>		
(i)	<b>Excavation in Hilly Areas in Soil by manual means.</b>		
A)	<i>Excavation in soil in Hilly Area by manual means including cutting and trimming of side slopes and disposing of excavated earth with a lift upto 1.5 m and a lead upto 20 m as per drawing and Technical Specification Clause 1603.1</i>	<i>cum</i>	<b>74.00</b>
B)	<i>Extra for Every Additional Lift of 1.5 m or Part thereof</i>	<i>cum</i>	<b>7.00</b>
(ii)	<b>Excavation in Hilly Areas in Soil by mechanical means</b>		
A)	<i>Excavation in soil in Hilly Area by mechanical means including cutting and trimming of side slopes and disposing of excavated earth with a lift upto 1.5 m and a lead upto 20 m as per Technical Specification Clause 1603.1</i>	<i>cum</i>	<b>55.00</b>
B)	<i>Extra for Every Additional Lift of 1.5 m or Part thereof</i>	<i>cum</i>	<b>7.00</b>
(iii)	<b>Excavation in Hilly Area in Ordinary Rock by manual means</b>		
A)	<i>Excavation in ordinary rock using manual means including loading in a truck and carrying of excavated material to embankment site with a lift upto 1.5 m and lead upto 20 m as per Clause 1603.2.</i>	<i>cum</i>	<b>163.00</b>
B)	<i>Extra for Every Additional Lift of 1.5 m or Part thereof</i>	<i>cum</i>	<b>12.00</b>
(iv)	<b>Excavation in Hilly Areas in Ordinary Rock by mechanical means not requiring blasting</b>		
	<i>Excavation in hilly area in ordinary rock not requiring blasting by mechanical means including cutting and trimming of slopes and disposal of cut material with a lift upto 1.5 m and lead upto 20 m as per Clause 1603.2.</i>	<i>cum</i>	<b>95.00</b>
(v)	<b>Excavation in Hilly Areas in Hard Rock requiring blasting</b>		
A)	<i>Excavation in hilly areas in hard rock requiring blasting, by mechanical means, lift upto 1.5 m and disposal of excavated rock upto a lead of 20 m as per Clause 1603.2.</i>	<i>cum</i>	<b>276.00</b>
B)	<i>Extra for Every Additional Lift of 1.5 m or Part thereof</i>	<i>cum</i>	<b>15.00</b>

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>8.4</b>	<b>Retaining Walls / Breast Walls</b>		
	<i>Construction of retaining walls/breast walls in cement mortar 1:5 as per drawing and technical specifications Clause 1604</i>		
	<b>(i) Earthwork in excavation for structures</b>		
	<i>Rate as per item No.11.1 of Chapter 11</i>	<i>cum</i>	
	<b>(ii) Plain cement concrete M 10 grade</b>		
	<i>Rate as per item No.11.4 of Chapter 11</i>	<i>cum</i>	
	<b>(iii) Stone masonry in cement mortar 1:5</b>		
	<i>Rate as per item No. 12.4 (III) (iii) of Chapter 12</i>	<i>cum</i>	
	<b>(iv) Pointing with cement mortar 1:3</b>		
	<i>Rate as per item No.12.2 of Chapter 12</i>	<i>sqm</i>	
	<b>(v) Providing P.C.C. M 20 architectural coping on top of retaining</b>		
	<i>Rate as per item No.12.13 of Chapter 12</i>	<i>m</i>	
	<b>(vi) Filter material behind retaining wall / breast wall as per Specification 1204.3.8 in a width of 600 m</b>		
	<i>Rate as per item No. 12.11 of Chapter 12</i>	<i>cum</i>	
	<b>(vii) Back filling behind retaining wall/breast wall</b>		
	<i>Rate as per item No. 12.10 of Chapter 12</i>	<i>cum</i>	
<b>8.5</b>	<b>Construction of Hill Side Drain</b>		
	<i>Construction of hill side drain in accordance with the requirement of specifications Running m true to lines and grades. Dimesions and other particulars as per drawing and Technical Specification Clause 1606.1</i>		
	<b>Note:</b> <i>Please ensure that quantities of various items are entered in the Rate Analysis</i>		
<b>8.6</b>	<b>Construction of Catch Water / Intercepting Drain</b>		
	<i>Construction of catch water/intercepting drain in random rubble masonry in 1:5 Running m cement mortar true to the specified lines grades levels and dimensions as per the requirement of the specifications Clause 1606.2</i>		
	<b>Note:</b> <i>Please ensure that quantities of various items are entered in the Rate Analysis</i>		
<b>8.7</b>	<b>Construction of Scupper</b>		
	<i>Construction of scupper with dry stone masonry as per drawing and technical specifications as per Clause 1606.5.</i>	<i>Running m</i>	<b>16,571.00</b>
<b>8.8</b>	<b>Construction of RCC guide posts of 250 mm dia M15 grade cast-in-situ with 20 mm nominal size aggregate, true to line and grade, tolerance of vertical RCC posts not to exceed 1 in 500 as per drawing and Technical Specification Clause 1608.2</b>		
	<b>(i) Earth work in excavation for structures</b>		
	<i>Rates as per item No. 11.1 of Chapter 11</i>	<i>cum</i>	
	<b>(ii) RCC M15 grade</b>		
	<i>Rate as per item No. 11.4 of Chapter 11</i>	<i>cum</i>	

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
	<i>(iii) HYSO steel bars</i> <i>Rate as per item No. 12.6 of Chapter 12</i>	<i>t</i>	
	<i>(iv) Painting two coats including prime coat on new concrete surface</i> <i>Rate as per item No.10.5 of Chapter 10</i>	<i>sqm</i>	
<b>8.9</b>	<b><i>Providing edge stones on valley side of formation as per drawing and Technical Specification Clause 1608.2.6</i></b>	<i>m</i>	<b>179.00</b>
<b>8.10</b>	<b><i>Turfing with Sods</i></b> <i>Furnishing and laying of the live sods of perennial turf forming grass on embankment slope, verges or other locations shown on the drawing or as directed by the Engineer including preparation of ground, stacking the sods and watering as per Clause 309</i>	<i>sqm</i>	<b>93.00</b>
<b>8.11</b>	<b><i>Seeding and Mulching</i></b> <i>Preparation of seed bed on previously laid top soil, furnishing and placing of seeds, fertilizer, mulching material, applying bituminous emulsion at the rate of 0.23 l per sqm and laying and fixing jute netting, including watering for 3 months all as per Clause 310.</i>	<i>sqm</i>	<b>163.00</b>

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
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**Chapter 9 - PIPE CULVERTS**

**9.1 Excavation for Structures**

*Earthwork in excavation for foundation of structures upto 3 m depth as per drawing and technical specification Clause 1104 including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material.*

*Rate as per item No.11.1 of Chapter 11*

*cum*

**9.2 Bedding for Pipe**

*(i) Type A (Concrete Cradle) Bedding*

*Laying concrete cradle bedding with M15 Grade Cement Concrete as per Clause 1105 (i)*

*Rate as per Item No.11.4 (II)(i) of Chapter 11*

*cum*

**3,901.00**

*(ii) Type B (First Class) Bedding*

*Laying (First Class) bedding on well compacted sand, moorum or approved granular material as per Clause 1105 (ii)*

*Rate as per Item No.11.2 of Chapter 11*

*cum*

**719.00**

**9.3 Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row**

*Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1106.*

*(A) 1200 mm dia*

*m*

**9,498.00**

*(B) 1000 mm dia*

*m*

**8,636.00**

*(C) 750 mm dia*

*m*

**951.00**

**9.4 Providing and Laying Reinforced Cement Concrete Pipe NP4 as per design in Single Row**

*Providing and laying reinforced cement concrete pipe NP4 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1106.*

*(A) 1200 mm dia*

*m*

**10,398.00**

*(B) 1000 mm dia*

*m*

**8,973.00**

*(C) 750 mm dia*

*m*

**1,176.00**

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
9.5	<i>Providing and Laying Reinforced Cement Concrete Pipe NP3 as per Design in Double Row</i> <i>Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in double row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets as per Clause 1106.</i>		
	<i>(A) 1200 mm dia</i>	<i>m</i>	<i>19,029.00</i>
	<i>(B) 1000 mm dia</i>	<i>m</i>	<i>17,292.00</i>
	<i>(C) 750 mm dia</i>	<i>m</i>	<i>1,902.00</i>
9.6	<i>Providing and Laying Reinforced Cement Concrete Pipe NP4 as per Design in Double Row</i> <i>Providing and laying reinforced cement concrete pipe NP4 for culverts on first class bedding of granular material in double row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets as per Clause 1106.</i>		
	<i>(A) 1200 mm dia</i>	<i>m</i>	<i>20,829.00</i>
	<i>(B) 1000 mm dia</i>	<i>m</i>	<i>17,967.00</i>
	<i>(C) 750 mm dia</i>	<i>m</i>	<i>2,352.00</i>
9.7	<i>Laying Cement Concrete Pipe NP3 (burried conduits) on first class bedding of granular material including fixing collar with cement sand mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry work in head wall and parapets</i> <i>500 mm dia</i>	<i>m</i>	<i>485.00</i>
9.8	<i>Laying Cement Concrete Pipe NP4 (burried conduits) on first class bedding of granular material including fixing collar with cement sand mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry work in head wall and parapets</i> <i>500 mm dia</i>	<i>m</i>	<i>597.00</i>
9.9	<i>Plain Cement Concrete M10 (1:3:6 nominal mix) in levelling course below open foundation of Head walls as per drawings &amp; Technical Specification Clause 1109</i> <i>Rate as per item No.11.4 of Chapter 11</i>	<i>cum</i>	
9.10	<i>Brick Masonry Work in cement mortar in foundation of Head walls complete exculding pointing and plastering as per drawing and technical specification Clause 1109</i> <i>(A) Brick Masonry in 1:4 cement mortar</i> <i>Rate as per item No.11.5 (ii) Chapter 11</i>	<i>cum</i>	

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
	<i>(B) In cement-lime mortar (1:0.5:4.5) Rate as per item No.11.5 (iii) Chapter 11</i>	<i>cum</i>	
<i>9.11</i>	<i>Stone Masonry Work in cement mortar in foundation of Head walls complete as per drawing and technical specification Clause 1109</i>		
	<i>(A) In 1:4 cement mortar Rate as per item No.11.6 (II) (ii) Chapter 11</i>	<i>cum</i>	
	<i>(B) In cement-lime mortar (1:0.5:4.5) Rate as per item No.11.6 (II) (iii) Chapter 11</i>	<i>cum</i>	
<i>9.12</i>	<i>Pointing with Cement Mortar (1:3) on brickwork as per technical specification Clause 613.3 Rate as per item No.12.2 of Chapter 12</i>	<i>sqm</i>	
<i>9.13</i>	<i>Plastering with Cement Mortar (1:4), 15 mm thick on brickwork in substructure as per technical specification Rate as per item No.12.3 of Chapter 12</i>	<i>sqm</i>	
<i>9.14</i>	<i>Backfilling in Foundation Trenches as per drawing and technical specification Clause 1108 Rate as per Item No.11.2 of Chapter 11</i>	<i>sqm</i>	
<i>9.15</i>	<i>Providing PCC M20 Architectural Coping on the top of wing wall, return wall etc. complete as per drawing and technical specification Clause 615 Rate as per Item No.12.13 of Chapter 12</i>	<i>m</i>	

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
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**Chapter 10 - TRAFFIC SIGNS, MARKINGS AND OTHER ROAD APPURTENANCES**

**10.1 Printing New Letters and Figures of any Shade**

*Printing new letter and figures of any shade with synthetic enamel paint black or any other approved colour to give an even shade as per drawings and Technical Specification Clause 1701*

<i>i) Hindi (Matras commas and the like not to be measured and paid for. Half letters shall be counted as half only)</i>	<i>per cm height per letter</i>	<b>0.47</b>
<i>ii) English and Roman</i>	<i>per cm height per letter</i>	<b>0.29</b>

**10.2 Traffic Signs**

**A. Retro-reflectorised Traffic Signs**

*(1) Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3 fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per drawings and Technical Specification Clause 801*

<i>(i) 90 cm equilateral triangle</i>	<i>each</i>	<b>1,869.00</b>
<i>(ii) 60 cm equilateral triangle</i>	<i>each</i>	<b>1,693.00</b>
<i>(iii) 60 cm circular</i>	<i>each</i>	<b>1,808.00</b>
<i>(iv) 80 mm x 60 mm rectangular</i>	<i>each</i>	<b>1,986.00</b>
<i>(v) 60 cm x 45 cm rectangular</i>	<i>each</i>	<b>1,796.00</b>
<i>(vi) 60 cm x 60 cm square</i>	<i>each</i>	<b>1,878.00</b>
<i>(vii) 90 cm high octagon</i>	<i>each</i>	<b>2,160.00</b>

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
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(2) *Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 1.5 mm thick supported on GI pipe 50 mm dia firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per drawings and Technical Specification Clause 1701*

<i>(i) 90 cm equilateral triangle</i>	<i>each</i>	<i>1,650.00</i>
<i>(ii) 60 cm equilateral triangle</i>	<i>each</i>	<i>1,480.00</i>
<i>(iii) 60 cm circular</i>	<i>each</i>	<i>1,591.00</i>
<i>(iv) 80 mm x 60 mm rectangular</i>	<i>each</i>	<i>1,764.00</i>
<i>(v) 60 cm x 45 cm rectangular</i>	<i>each</i>	<i>1,580.00</i>
<i>(vi) 60 cm x 60 cm square</i>	<i>each</i>	<i>1,659.00</i>
<i>(vii) 90 cm high octagon</i>	<i>each</i>	<i>1,932.00</i>

(3) *Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 1.5 mm thick supported on RCC Post 100 mm x 100 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per approved drawing Clause 1701*

<i>(i) 90 cm equilateral triangle</i>	<i>each</i>	<i>7,240.00</i>
<i>(ii) 60 cm equilateral triangle</i>	<i>each</i>	<i>7,064.00</i>
<i>(iii) 60 cm circular</i>	<i>each</i>	<i>7,179.00</i>
<i>(iv) 80 mm x 60 mm rectangular</i>	<i>each</i>	<i>7,357.00</i>
<i>(v) 60 cm x 45 cm rectangular</i>	<i>each</i>	<i>7,167.00</i>
<i>(vi) 60 cm x 60 cm square</i>	<i>each</i>	<i>7,249.00</i>
<i>(vii) 90 cm high octagon</i>	<i>each</i>	<i>7,531.00</i>

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
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**B. Semi Reflective Traffic Signs**

*Providing and fixing of semi reflective cautionary, mandatory and informatory sign board as per IRC:67 made of 1.5 mm thick MS Sheet duly stove white colour in front and gray colour on back with red reflective border of 65 mm width and required letters and figures with reflective tape engineering grade as per Clause 1701.3.9 of MORD for Rural Roads of required shade and colour supported and welded on 47mm x 47 mm x 12 SWG sheet tube firmly fixed to the ground by mean of properly designed foundations with M-15 grade cement concrete 450x450x600 mm, 600 mm below ground level as per approved drawing Clause 1701.2.2*

<i>(i) 90 cm equilateral triangle</i>	<i>each</i>	<i>7,055.00</i>
<i>(ii) 60 cm equilateral triangle</i>	<i>each</i>	<i>6,943.00</i>
<i>(iii) 60 cm circular</i>	<i>each</i>	<i>7,016.00</i>
<i>(iv) 80 mm x 60 mm rectangular</i>	<i>each</i>	<i>7,130.00</i>
<i>(v) 60 cm x 45 cm rectangular</i>	<i>each</i>	<i>7,009.00</i>
<i>(vi) 60 cm x 60 cm square</i>	<i>each</i>	<i>7,061.00</i>
<i>(vii) 90 cm high octagon</i>	<i>each</i>	<i>7,242.00</i>

**10.3 Direction and Place Identification signs upto 0.9 sqm size board**

**A. Retro-reflectorised Traffic Signs**

<i>(i) Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 450 x 450 x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701</i>	<i>sqm</i>	<i>2,629.00</i>
<i>(ii) Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on 2 inch dia GI Pipe firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 450 x 450 x 600 mm, 600 mm below ground level as per approved drawing and Tehnical Specification Clause 1701.</i>	<i>sqm</i>	<i>2,395.00</i>

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
	(iii) <i>Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on RCC Post 100 mm x 100 mm firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 450 x 450 x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701</i>	sqm	2,255.00
	<b>B. Semi-Reflective Traffic signs</b> <b>Direction and place identification signs up to 0.9 sqm size board</b> <i>Providing and erecting direction and place identifications of semi reflective sign boards as per IRC:67 made of 2 mm thick M.S. Sheet duly stove enameled paint in white colour in front and grey colour on back with red reflective border of 70 mm width and required message, letters, figures with reflective engineering grade tape as per MORD specifications of required shade and colour. Supported and welded on 47 mm x 47mm of 12 SWG Square tube of 3050 mm height duly strengthened by 25 mm x 5 mm M/s flat iron on edges on back firmly fixed to the ground by means of properly designed foundations with M-15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701</i>	sqm	20,421.00
<b>10.4</b>	<b>Direction and Place Identification signs with size more than 0.9 sqm size</b>		
	<b>A. Retro-reflectorised Traffic Signs</b>		
	(i) <i>Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 2 mm thick with area exceeding 0.9 sqm supported on mild steel angle iron posts 75 mm x 75 mm x 6 mm, 2 Nos. firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701</i>	sqm	2,960.00
	(ii) <i>Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 2 mm thick with area exceeding 0.9 sqm supported on 2 inch dia GI Pipe firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701</i>	sqm	2,711.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
	<i>(iii) Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 2 mm thick with area exceeding 0.9 sqm supported on RCC Posts 100 mm x 100 mm firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701</i>	<i>sqm</i>	<i>2,540.00</i>
	<b>B. Semi-Reflective Traffic signs</b>		
	<i>Direction and place identification signs more than 0.90 sqm sign</i>		
	<i>Providing and erecting direction and place identification of semi reflective sign boards as per IRC-67 made of 2 mm thick M.S. Sheet duly stove enameled paint white colour in front and grey colour on back with reflective border of 70 mm width and required message, letters, figures with reflective tape of engineering grade as per MORD specifications of required shade and colour. Supported and welded on two nos. 47 mm x 47 mm of 12 SWG square tube of 3050 mm height duly strengthened by 25 mm x 5 mm MS flat iron on edges on back firmly fixed to the ground by means of properly designed foundations with M-15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701</i>	<i>sqm</i>	<i>2,290.00</i>
<b>10.5</b>	<b><i>Painting Two Coats on New Concrete Surfaces</i></b>		
	<i>Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and Technical Specification Clause 1701</i>	<i>sqm</i>	<i>62.00</i>
<b>10.6</b>	<b><i>Painting on Steel Surfaces</i></b>		
	<i>Providing and applying two coats of ready mix paint including primer coat of approved brand on steel surface after through cleaning of surface to give an even shade as per drawing and Technical Specification Clause 1701</i>	<i>sqm</i>	<i>57.00</i>
<b>10.7</b>	<b><i>Painting on Concrete/Steel Surfaces with Epoxy</i></b>		
	<i>Painting two coats including prime coat with epoxy paint of approved brand on concrete/steel surfaces after through cleaning of surface to give an even shade as per drawing and Technical Specification Clause 1701</i>	<i>sqm</i>	<i>124.00</i>
<b>10.8</b>	<b><i>Painting lines, Dashes, Arrows, etc. on Road in Two Coats on New Work</i></b>		
	<i>Painting lines, dashes, arrows, etc. on roads in two coats on new work with ready mixed road marking paint conforming to IS:164 on bituminous/concrete surface, including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control as per drawing and Technical Specification Clause 1702</i>	<i>sqm</i>	<i>66.00</i>

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>10.9</b>	<b>Painting lines, Dashes, Arrows, etc. on Roads in Two Coats on Old Work</b> <i>Painting lines, dashes, arrows, etc. on roads in two coats on old work with ready mixed road marking paint conforming to IS:164 on bituminous/concrete surface, including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control as per drawing and technical specification Clause 1702</i>	<i>sqm</i>	<b>44.00</b>
<b>10.10</b>	<b>Kilometre Stone</b> <i>Reinforced cement concrete M15 grade kilometre stone/local stone of standard design as per IRC:8 fixing in position including painting and printing, etc as per drawing and Technical Specification Clause 1703</i>		
	<i>i) 5th Kilometre Stone (precast)</i>	<i>each</i>	<b>2,752.00</b>
	<i>ii) Ordinary Kilometer Stone (Precast)</i>	<i>each</i>	<b>1,646.00</b>
	<i>iii) 200 m stone (precast)</i>	<i>each</i>	<b>348.00</b>
<b>10.11</b>	<b>Boundary Pillar</b> <i>Reinforced cement concrete M15 grade boundary pillars/local stone of standard design as per IRC:25, fixed in position including finishing and lettering but excluding painting as per drawing and Technical Specification Clause 1704</i>	<i>each</i>	<b>374.00</b>
<b>10.12</b>	<b>G.I Barbed Wire Fencing 1.2 m high</b> <i>Providing and fixing 1.2 m high G.I barbed wire fencing with 1.8 m RCC posts 150 mm x 150 mm placed every 3 m centre-to-centre founded in M15 grade cement concrete, 0.6 m below ground level, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with 9 horizontal lines and 2 diagonals interwoven with horizontal wires, fixed with G.I staples, turn buckles etc. complete as per Clause 1705.</i>	<i>Running m</i>	<b>311.00</b>
<b>10.13</b>	<b>G.I Barbed Wire Fencing 1.8 m high</b> <i>Providing and fixing 1.8 m high G.I barbed wire fencing with 2.4 m RCC M15 grade 150 mm x 150 mm concrete post placed every 3 m centre-to-centre founded in M15 grade cement concrete, 0.6 m below ground level, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with 12 horizontal lines and 2 diagonals interwoven with horizontal wires, fixed with G.I staples, turn buckles etc. complete as per Clause 1705.</i>	<i>Running m</i>	<b>437.00</b>
<b>10.14</b>	<b>Tubular Steel Railing on Medium Weight Steel Channel (ISMC series) 100 mm x 50 mm</b> <i>Providing, fixing and erecting 50 mm dia steel pipe railing in 3 rows duly painted on medium weight steel channels (ISMC series) 100 mm x 50 mm, 1.2 m high above ground, 2 m centre-to-centre, complete as per approved drawings Clause 1706</i>	<i>Running m</i>	<b>1,539.00</b>

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
<b>10.15</b>	<b><i>Tubular Steel Railing on Precast RCC posts, 1.2 m high above Ground</i></b> <i>Providing, fencing and erecting 50 mm dia painted steel pipe railing in 3 rows on precast M-20 grade RCC vertical posts 175 mm x 175 mm x 1.8 m high (1.2 m above G1) with 3 holes 50 mm dia for pipe, fixed 2 m centre-to- centre complete as per approved drawings Clause 1706</i>	<i>Running m</i>	<b>1,409.00</b>
<b>10.16</b>	<b><i>Providing and Fixing 'Logo' of PMGSY Project</i></b> <i>Providing and fixing of typical PMGSY informatory sign board with Logo as per MORD specifications and drawing. Three MS Plates of 1.6 mm thick, top and middle plate duly welded with MS flat iron 25mm x 5m size on back on edges. The lower plate will be welded with MS angle iron frame of 25mm x 25mm x 5mm. The angle iron frame of the lower most plate and flat iron frame of middle plate will be welded to 2 nos. 75mm x 75 mm of 12 SWG sheet tubes posts duly embedded in cement concrete M-15 grade blocks of 450mm x 450mm x 600mm, 600mm below ground level. The top most diamond plate will be welded to middle plate by 47mm x 47mm of 12 SWG steel plate tube. All M.S. will be stove enameled on both sides. Lettering and printing arrows, border etc. will be painted with ready mixed synthetic enamel paint of superior quality in required shade and colour. All sections of framed posts and steel tube will be painted with primer and two coats of epoxy paint as per drawing Clause 1701 and Annexure 1700.1</i>	<i>each</i>	<b>7,464.00</b>
<b>10.17</b>	<b><i>Traffic Cone</i></b> <i>Provision of red fluorescent with white reflective sleeve traffic cone made of Low Density Polyethylene (LDPE) material with a square base of 390 x 390 x 35 mm and a height of 770 mm, 4 kg in weight, placed at 1.5 m interval, all as per BS:873</i>	<i>each</i>	<b>126.00</b>
<b>10.18</b>	<b><i>Rumble Strips</i></b> <i>Provision of 15 nos. rumble strips covered with premix bituminous carpet, 15-20 mm high at centre, 250 mm wide placed at 1 m centre-to-centre at approved locations to control speed, marked with white strips of road marking paint.</i>	<i>sqm</i>	

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
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**10.19 Safety Devices and Signs in Construction Zones**

*Provision and fixing of traffic signs for limited period at suitable locations in construction zone comprising of warning zone, approach transition zone, working zone and terminal transition zone with a minimum distance of 2-3 m from the edge of the carriageway. The bottom edge of the lowest sign plate to be not less than 2 m above the road level, fixed on 600 mm x 600 mm x 6 mm angle iron post, founded and installed as per approved design and drawings, removed and disposed of after completion of construction work, all as per IRC:SP:55-2001.* *each*

- a) Diversion one km ahead*
- b) Traffic sign ahead*
- c) Road ahead closed*
- d) Men at work*
- e) Road narrow*
- f) Un-even road*
- g) Slippery road*
- h) Loose chippings*
- i) Diversion*
- j) Do not enter*
- k) Road closed*
- l) Stop*
- m) Slow*
- n) Speed limit*

**Note:** *The rate for traffic signs are already worked out and given elsewhere in this Chapter. The same may be adopted.*

**10.20 Road Markers/Road Stud with Lens Reflector**

*Providing and fixing of road stud 100 x 100 mm die cast in aluminium, resistant to corrosive effect of salt and grit, fitted with lense reflectors, installed in concrete or asphaltic surface by drilling holes 30 mm upto a depth of 600 mm and bedded in a suitable bituminous grout or epoxy mortar, all as per BS:873 (Part 4) 1973.* *each* **139.00**

**SCHEDULE OF RATES 2008**

<i>Item No.</i>	<i>Description</i>	<i>Unit</i>	<i>Rate (Rs.)</i>
<b>Chapter 11 - FOUNDATION</b>			
11.1	<b>Excavation for Structures</b> <i>Earthwork in excavation for structures as per drawing and technical specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material.</i>		
	<b>I. Ordinary soil</b>		
	(i) Upto 3 m depth	cum	119.00
	(ii) 3 m to 6 m depth	cum	141.00
	<b>II. Ordinary rock (not requiring blasting)</b>		
	Upto 3 m depth	cum	149.00
	<b>III. Hard rock (requiring blasting)</b>	cum	327.00
	<b>IV. Hard rock (blasting prohibited)</b>	cum	524.00
	<b>V. Marshy soil</b>	cum	223.00
11.2	<b>Fillling in foundation trenches as per drawing and technical specification Clause 305.3.9</b>		
	<b>I. Sand filling</b>	cum	719.00
	<b>II. Earth filling (For marshy soil)</b>	cum	79.00
11.3	<b>Fillling annular space around footing in rock as per technical specification Clause 1203.4.3.</b> <i>P.C.C grade M 15 Nominal mix 1:2.5:5</i>	cum	3,817.00
11.4	<b>Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 &amp; 1203</b>		
	<b>I. P.C.C grade M 10</b>		
	(i) Nominal mix 1:3:6	cum	3,876.00
	(ii) Nominal mix 1:3:6 (Hand mixing)	cum	3,792.00
	<b>II. P.C.C grade M 15</b>		
	(i) Nominal mix (1:2.5:5)	cum	3,901.00
	(ii) Nominal mix 1:2.5:5 (Hand mixing)	cum	3,817.00
	<b>III. P.C.C. grade M 20</b>		
	(i) Nominal mix (1:2:4)	cum	4,488.00
	(ii) Nominal mix 1:2:4 (Hand mixed)	cum	4,404.00
	<b>IV. R.C.C grade M 20</b>	cum	4,757.00
	<b>V. R.C.C. grade M 25</b>	cum	5,187.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
11.5	<b>Brick masonry work in cement mortar in foundation complete excluding pointing and plastering as per drawing and technical specifications Clauses 600, 1202 &amp; 1203</b>		
	I. Brick masonry in 1:3 cement mortar	cum	5,059.00
	II. Brick masonry in 1:4 cement mortar	cum	4,813.00
	III. Brick masonry in cement-lime-mortar (1:0.5:4.5)	cum	5,147.00
11.6	<b>Stone masonry work in cement mortar in foundation complete as per drawing and technical specifications Clauses 702, 704, 1202 &amp; 1203.</b>		
	I. <b>Coursed rubble masonry (1st sort)</b>		
	(i) In 1:3 cement mortar	cum	3,067.00
	(ii) In 1:4 cement mortar	cum	2,760.00
	(iii) In cement-lime-sand mortar (1:0.5:4.5)	cum	3,132.00
	II. <b>Coursed rubble masonry (2nd sort)</b>		
	(i) In 1:3 cement mortar	cum	3,010.00
	(ii) In 1:4 cement mortar	cum	2,672.00
	(iii) In cement-lime-mortar (1:0.5:4.5)	cum	3,131.00
	III. <b>Random Rubble Masonry</b>		
	(i) In 1:3 cement mortar	cum	2,954.00
	(ii) In cement mortar 1:4	cum	2,616.00
	(iii) In cement lime mortar (1:0.5:4.5)	cum	3,074.00
11.7	<b>Supplying, fitting and placing HYSD bar reinforcement in foundation complete as per drawings and technical specifications Clauses 1000 and 1202</b>	t	48,791.00
11.8	<b>Supplying, fitting and placing TMT bar reinforcement in foundation complete as per drawings and technical specifications Clauses 1000 and 1202</b>	t	52,571.00
11.9	<b>Supplying, fitting and placing MS bar reinforcement in foundation complete as per drawings and technical specifications Clauses 1000 and 1202</b>	t	48,791.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>Chapter 12 - SUBSTRUCTURE</b>			
12.1	<b>Brick masonry work in cement mortar in substructure complete excepting pointing and plastering, as per drawing and technical specification Clauses 602, 603, 604, 1202 &amp; 1204</b>		
	I. In 1:3 cement mortar	cum	5,285.00
	II. In 1:4 Cement mortar	cum	5,054.00
	III. In 1:5 cement mortar	cum	4,915.00
	IV. In cement lime mortar (1:0.5:4.5)	cum	5,404.00
12.2	<b>Pointing with cement mortar (1:3) on brickwork as per drawing and technical specification Clauses 613.3 and 1204</b>	10 sqm	419.00
12.3	<b>Plastering with cement mortar (1:4), 15 mm thick on brickwork in substructure as per technical specification Clauses 613.4 &amp; 1204</b>	10 sqm	1,239.00
12.4	<b>Stone masonry in cement mortar for substructure complete as per drawing &amp; technical specification Clauses 702, 704, 1202 and 1204</b>		
	<b>I. Coursed rubble masonry (1st sort)</b>		
	(i) In 1:3 cement mortar	cum	3,220.00
	(ii) In 1:4 cement mortar	cum	2,898.00
	(iii) In cement mortar (1:5)	cum	2,650.00
	(iv) In cement lime mortar (1:0.5:4.5)	cum	3,288.00
	<b>II. Coursed Rubble masonry (2nd sort)</b>		
	(i) In cement mortar (1:3)	cum	3,161.00
	(ii) In 1:4 cement mortar	cum	2,806.00
	(iii) In cement mortar (1:5)	cum	2,615.00
	(iv) In cement lime mortar (1:0.5:4.5)	cum	3,287.00
	<b>III. Random rubble masonry</b>		
	(i) In cement mortar (1:3)	cum	3,102.00
	(ii) In 1:4 cement mortar	cum	2,747.00
	(iii) In cement mortar (1:5)	cum	2,556.00
	(iv) In cement lime mortar (1:0.5:4.5)	cum	3,228.00
12.5	<b>Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 and 1204</b>		
	<b>For height upto 5 m</b>		
	<b>I. P.C.C grade M 15</b>		
	(i) Nominal mix (1:2.5:5)	cum	4,126.00
	(ii) Nominal mix 1:2.5:5 (Hand mixing)	cum	4,037.00
	<b>II. P.C.C. grade M 20</b>		
	(i) Nominal mix (1:2:4)	cum	4,747.00
	(ii) Nominal mix 1:2:4 (Hand mixed)	cum	4,658.00
	<b>III. R.C.C grade M 20</b>	cum	5,031.00
	<b>IV. R.C.C. grade M 25</b>		5,499.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
12.6	<i>Supplying, fitting and placing HYSD bar reinforcement (Fe 415) in substructure complete as per drawings and technical specification Clauses 1002, 1005, 1010 &amp; 1202</i>	<i>t</i>	48,839.00
12.7	<i>Supplying, fitting and placing TMT bar reinforcement (Fe 415) in substructure complete as per drawings and technical specification Clauses 1002, 1005, 1010 &amp; 1202</i>	<i>t</i>	52,619.00
12.8	<i>Supplying, fitting and placing with MS bar reinforcement (Fe 415) in substructure complete as per drawings and technical specification Clauses 1002, 1005, 1010 &amp; 1202</i>	<i>t</i>	48,839.00
12.9	<i>Providing weepholes in brick masonry/stone masonry, plain/reinforced concrete abutment, wing wall, return wall with 100 mm dia AC pipe extending through the full width of the structures with slope of 1(V):20(H) towards drawing face complete as per drawing and technical specification Clauses 614, 709, 1204.3.7</i>	<i>Nos.</i>	308.00
12.10	<i>Backfilling behind abutment, wing wall and return wall complete as per drawings &amp; technical specification Clause 1204.3.8</i>		
	<i>I) Granular material</i>	<i>cum</i>	690.00
	<i>II) Sandy material</i>	<i>cum</i>	829.00
12.11	<i>Providing and laying filter media with granular crushed aggregates as per specification to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and providing over the entire surface behind abutment, wing wall, return wall to the full height, compacted to firm condition complete as per drawing and technical specification Clause 1204.3.8</i>	<i>cum</i>	569.00
12.12	<i>Supplying, fitting and fixing in position true to line and level elastomeric bearing conforming to IRC:83 (Part-II) Section IX complete, including all accessories as per drawings and technical specification Clause 1207.1</i>	<i>cucm</i>	0.52
12.13	<i>Providing PCC M-20 architectural coping on the top of wing wall, return wall etc. complete as per drawing and technical specification Clauses 615, 710 and 1204.3.11</i>	<i>Running m</i>	280.00
12.14	<i>Providing pressure relief pipes 100 mm dia in bottom slab of box cell on a filter media base of 500 mm x 500 mm as per drawing and technical specification Clause 1205.5.7</i>	<i>Nos.</i>	350.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>Chapter 13 - SUPERSTRUCTURE</b>			
13.1	<b>Providing and laying reinforced cement concrete in superstructure as per drawing and technical specifications Clauses 800, 1205.4 and 1205.5</b>		
	<b>I. R.C.C grade M 20</b>		
	(i) For nominal mix 1:2:4	cum	5,382.00
	(ii) For nominal mix 1:2:4 (Hand mixed)	cum	5,368.00
	(iii) For design mix RCC M 20	cum	5,300.00
	<b>II. R.C.C M 25</b>	cum	5,862.00
	<b>III. R.C.C. Grade M 30</b>	cum	6,965.00
13.2	<b>Supplying, fitting, and placing HYSD bar reinforcement in superstructure complete as per drawing and technical specifications Clauses 1002, 1010 and</b>	t	49,435.00
13.3	<b>Supplying, fitting, and placing TMT bar reinforcement in superstructure complete as per drawing and technical specifications Clauses 1002, 1010 and</b>	t	53,215.00
13.4	<b>Supplying, fitting, and placing MS bar reinforcement in superstructure complete as per drawing and technical specifications Clauses 1002, 1010 and</b>	t	49,435.00
13.5	<b>Providing and laying cement concrete wearing course M 30 grade including reinforcement complete as per drawing and technical specifications Clauses 800 and 1206.3</b>	cum	9,231.00
13.6	<b>Construction of R.C.C. railing of M 25 grade in cast-in-situ with 20 mm nominal size aggregate, true to line and grade, tolerance of vertical railing post not to exceed 1 in 500, centre-to-centre spacing between vertical posts not to exceed 2000 mm as per drawing and technical specifications Clauses 800, 900 and 1208.3</b>	Running m	2,049.00
13.7	<b>Providing fitting and fixing mild steel railing complete as per drawing and technical specifications Clause 1208.2</b>	Running m	2,224.00
13.8	<b>Providing and fixing in position pipe railing consisting of IS Rolled steel joist posts designation IS MB 100 (100x75) at 2.5 m interval and three rows of 50 mm dia steel pipes (light) including fixing in position on bridge deck complete as per drawing and technical specifications Clause 1208.2</b>	Running m	1,403.00
13.9	<b>Brick masonry work in cement mortar 1:3 in parapet excluding pointing and plastering as per drawing and technical specifications Clauses 600, 900 and 1208.4</b>	cum	5,059.00
13.10	<b>Drainage spouts complete as per drawing and technical specifications Clause</b>	Nos.	1,081.00
13.11	<b>P.C.C. M 15 ordinary grade (1:2.5:5) levelling course below approach slab complete as per drawing and technical specifications Clauses 800 and 1211</b>		
	(i) Nominal mix (1:2.5:5)	cum	3,751.00
	(ii) Nominal mix 1:2.5:5 (Hand mixing)	cum	3,670.00
13.12	<b>Reinforced Cement Concrete M 25 grade approach slab including reinforcement and formwork complete as per drawing and technical specifications Clauses 800 and 1211</b>	cum	8,334.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
13.13	<i>Providing and laying of an elastomeric slab seal expansion joint complete as per approved drawing and approved specifications to be installed by manufacturer/supplier or their authorised representative ensuring compliance to the manufacturer's instructions for installation and as per technical specifications Clause 1207.2.5</i>	Running m	9,617.00
13.14	<i>Providing and laying of compression seal joint consisting of steel armoured nosing at two edges of the joint gap suitably anchored to the deck concrete and a preformed chloroprene elastomer or closed cell foam joint sealer compressed and formed into the joint gap with special adhesive binder as per drawing, and technical specifications Clause 1207.2.4</i>	Running m	3,057.00
13.15	<i>Providing and laying a buried expansion joint, covered with 12 mm thick, 200 mm wide galvanised weldable structural steel plate as per IS:2062, placed symmetrical to centre line of the joint, resting freely over the top surface of the deck concrete, welding of 8 mm dia, 100 mm long galvanised nails spaced 300 mm c/c along the centre line of the plate, as per technical specifications Clauses 1207.2.3</i>	Running m	1,033.00
13.16	<b>Filler Joint</b>		
I)	<i>Providing and fixing 2 mm thick corrugated copper plate in expansion joint as per drawing and technical specifications Clause 1207.2.2</i>	Running m	4,863.00
II)	<i>Providing and fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing and technical specifications</i>	Running m	199.00
III)	<i>Providing and fixing in position 20 mm thick premoulded joint filler in expansion joint for fixed ends of simply supported spans, covered with sealant complete as per drawing and technical specifications</i>	Running m	72.00
IV)	<i>Providing and filling joint sealing compound as per drawings and technical specifications with coarse sand and 6 per cent bitumen by weight.</i>	Running m	23.00
13.17	<b>Stone masonry in cement mortar 1:3 for parapet complete as per drawing and technical specifications Clauses 700 and 1208.4</b>		
I.	<i>Random rubble masonry</i>	cum	3,102.00
II.	<i>Coursed rubble masonry (1st sort)</i>	cum	3,220.00
13.18	<b>Pointing with cement mortar (1:3) on brickwork in parapet as per technical specifications Clauses 613.3 and 1208.4</b>	10 sqm	419.00
13.19	<b>Plastering with cement mortar (1:3) 15 mm thick on brickwork in parapet as per technical specifications Clauses 613.4 and 1208.4</b>	10 sqm	1,239.00
13.20	<b>Providing and laying parapet with PCC M 15 as per drawing &amp; technical specifications Clauses 800 and 1208.4</b>		
I.	<i>Nominal mix 1:2.5:5 (Hand mixing)</i>	cum	4,037.00
II.	<i>Nominal mix (1:2.5:5)</i>	cum	4,126.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
13.21	<i>Providing bituminous wearing coat comprising of 20 mm thick premix carpet with 5 mm thick seal coat Type B for culverts as per drawing and technical specifications Clauses 1206.2 and 500</i>		
	<i>i. Rate for wearing coat as per item No. 5.9 of Chapter 5</i>	<i>sqm</i>	
	<i>ii. Rate for seal coat Type B as per item No. 5.12 of Chapter 5</i>	<i>sqm</i>	
13.22	<i>Providing bituminous wearing coat comprising of 50 mm thick bituminous macadam overlaid by 20 mm thick premix carpet with 5 mm thick seal coat Type B</i>		
	<i>i. Rate for BM layer may be analysed as per item No 5.3 of Chapter 5</i>	<i>cum</i>	
	<i>ii. Rate of 20 mm premix carpet wearing course as per item No.5.9 of Chapter 5</i>	<i>sqm</i>	
	<i>iii. Rate of seal coat Type B as per item No. 5.12 of Chapter 5</i>	<i>sqm</i>	
13.23	<i>Brickwork in arches in cement mortar 1:4 complete including centering and shuttering excluding pointing and plastering as per drawing and technical specifications Clauses 606 and 1205.1</i>	<i>cum</i>	<b>11,357.00</b>
13.24	<i>Coursed rubble stone masonry arch (1st sort) in cement mortar (1:4) complete including centering etc. complete as per drawing and technical specifications Clauses 706 and 1205.1</i>	<i>cum</i>	<b>6,606.00</b>
13.25	<i>Providing &amp; Laying reinforced cement concrete arch complete including centering and shuttering excluding reinforcement as per drawings and technical specifications Clauses 800, 900 and 1205.1</i>		
	<i>I. RCC grade M20 (1:2.4) nominal mix</i>	<i>cum</i>	<b>6,916.00</b>
	<i>II. RCC Grade M 25</i>	<i>cum</i>	<b>7,554.00</b>
13.26	<i>Providing steel R.S.Js/built-up steel sections including cutting, welding/rivetting, hoisting, fixing in position for composite girders with shear connectors complete with painting as per drawing and technical specifications Clause 1205.6</i>		
	<i>A) Steel section</i>	<i>quintal</i>	<b>5,508.00</b>

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>Chapter 14 - PROTECTION WORKS</b>			
14.1	<i>Providing and laying boulder apron for bed protection with stone boulders of minimum size and weight as per Table 1300.1, no fragment weighing less than 25 kg laid dry complete as per drawing and technical specifications Clause 1301</i>	cum	1,077.00
14.2	<i>Providing and laying of boulder apron laid in wire crates with 4 mm dia GI wire conforming to IS:280 and IS:4826 in 100 mm x 100 mm mesh (woven diagonally) including 10 per cent extra for laps and joints laid with stone boulders weighing not less than 25 kg each as per drawing and technical specifications Clause 1301</i>	cum	1,693.00
14.3	<i>Providing and laying of apron with cement concrete blocks of size as per Table 1300.1 cast-in-situ and made with nominal mix of M-15 grade cement concrete as per drawing and technical specifications Clause 1301</i>	cum	3,979.00
14.4	<i>Single bamboo palasiding / walling of whole 2nd class bamboo (Jati or Bethua) 75mm dia and closely packed &amp; driven including fitting fixing with half bamboo kamis horizontally in three rows with cane or tying with wire complete and struts 1.5 m apart longitudinally and providing brush wood as per drawing and technical specifications Clause 1302.5</i>		
	<i>A) Driven at least 900 mm below ground and 1200 mm above ground</i>	Running m	90.00
	<i>B) Driven at least 900 mm below ground and 900 mm above ground on</i>	Running m	80.00
14.5	<i>Providing and laying pitching on slopes laid over prepared filter media as per drawing and technical specifications Clause 1302</i>		
	<i>I. Stone/Boulder</i>	cum	1,077.00
	<i>II. Cement concrete blocks of size as per Table 1300.2 cast in cement concrete of grade M 15</i>		
	<i>a) Concrete grade M 15</i>	cum	3,979.00
	<i>III. Brick pitchng set in cement mortar 1:4</i>	cum	4,817.00
14.6	<i>Providing and laying filter material underneath pitching in slopes complete as per drawing and technical specifications Clause 1302</i>	cum	1,426.00
14.7	<i>Providing and laying flooring laid over cement concrete bedding complete as per drawing and technical specification Clause 1303</i>		
	<i>I. Rubble stone laid in cement mortar 1:3</i>	cum	2,545.00
	<i>Note: Please ensure that quantity of cement concrete bedding is entered in the Rate of Analysis</i>		
	<i>II. Cement concrete blocks grade M 15</i>	cum	3,940.00
	<i>III. Brick on edge laid in cement mortar (1:3)</i>	cum	5,429.00
14.8	<i>Providing and laying of dry rubble flooring complete as per drawings and technical specifications Clause 1303.3</i>	cum	972.00

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>14.9</b>	<b>Providing and laying curtain walls complete as per drawing and technical specification Clause 1304</b>		
	<i>I. Brick masonry in cement mortar (1:4)</i>	<i>cum</i>	<i>4,813.00</i>
	<i>II. Coursed rubble masonry (2nd sort) in cement mortar (1:4)</i>	<i>cum</i>	<i>2,806.00</i>
	<i>III. Cement concrete grade M 10</i>	<i>cum</i>	<i>3,876.00</i>
<b>14.10</b>	<b>Construction of flexible apron 1 m thick comprising of loose stone boulders weighing not less than 25 kg beyond curtain wall</b>	<i>cum</i>	<i>1,091.00</i>
<b>14.11</b>	<b>Construction of toe walls for protection of slopes as per drawing and technical specifications Clause 1302.5</b>		
	<i>I. Random rubble masonry in case of stone pitching laid with cement mortar</i>	<i>cum</i>	<i>2,556.00</i>
	<i>II. Brick masonry in cement mortar 1:4 in case of brick pitching</i>	<i>cum</i>	<i>4,813.00</i>
	<i>III. Cement concrete grade M 10 in case of concrete block pitching P.C.C grade M 20 Nominal mix 1:3:6</i>	<i>cum</i>	<i>3,876.00</i>
<b>14.12</b>	<b>Single bamboo spur and palisading of whole 2nd class bamboo (jati or Bethua) 65 mm to 75 mm dia and closely packed &amp; driven, including fitting, fixing with half bamboo kamis horizontally in three rows with cane or tying wire complete and struts 1500 mm apart longitudinally and providing brush wood as per drawing and technical specifications Clause 1302.5</b>		
	<i>A) Driven at least 900 mm below ground and 1800 mm above ground on</i>	<i>Running m</i>	<i>78.00</i>
	<i>B) Driven at least 900 mm below ground and 900 mm above ground on</i>	<i>Running m</i>	<i>89.00</i>
<b>14.13</b>	<b>Single bamboo spur and palisading of whole 1st class bamboo (Bholuka or Barua) 85 mm to 100 mm dia. Closely packed &amp; driven including fitting, fixing with half 2nd class bamboo (jati or Bethua) horizontally in three rows with cane or tying wire complete and struts 1500 mm apart longitudinally and providing brush wood in the spur as per drawings and technical specifications</b>		
	<i>A) Driven at least 900 mm below ground and 1800 mm above ground</i>	<i>Running m</i>	<i>309.00</i>
	<i>B) Driven at least 900 mm below ground and 900 mm above ground on</i>	<i>Running m</i>	<i>198.00</i>
	<i>C) Driven at least 600 mm below ground and 1200 mm above ground on</i>	<i>Running m</i>	<i>95.00</i>
<b>14.14</b>	<b>Bamboo spur 'A' type with whole bamboo 85mm-100mm dia, placed 230 mm centre to centre driven 900 mm below ground and 1200 mm to 1500 mm above ground tied with 2nd class bamboo (jati or Bethua) on either side at 450 mm apart horizontally with galvanised wire etc. complete as per drawings and technical specifications</b>		
	<i>A) 2nd class bamboo (jati or Bethua) 75 mm dia</i>	<i>Running m</i>	<i>212.00</i>
	<i>B) 1st class bamboo (Bholuka or Barua ) 85 mm to 100 mm dia</i>	<i>Running m</i>	<i>269.00</i>

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
14.15	<i>Providing 'A' type single spur with 1st class bamboo (Bholuka or Barua) 85 mm to 100 mm dia. Driven closely placed 3m to 4m above ground and 1200 mm to 1500 mm below ground tied with cane or coir string, half 2nd class bamboo (jati or Bethua) horizontally on both face placed not more than one metre apart including whole bamboo struts inside one metre apart and 2 nos. of purlin at top and bottom fitted with vertical struts at 1500 mm apart and filling with brushwood or jungle wood inside the spur complete as per drawing and technical specifications</i>	<i>Running m</i>	<b>473.00</b>
14.16	<i>Providing close bamboo toe walling consisting of 65mm to 75mm dia bamboos of length ranging from 1.2 m to 3m driven at 150 mm centre to centre and provided with three horizontal split bamboo runner fixed with nails. All bamboos to be duly protected by coal tar painting.</i>	<i>Running m</i>	<b>95.00</b>
14.17	<i>Double timber spur with two rows at 800 mm c/c apart of 1st class local wood piles with timber of Azar/Nahar/Nageswar / Zarul wood 150 mm to 200 mm dia driven 2000 mm minimum below ground and 3600 mm above ground average placed at 800 mm belts, bracings etc. of 100 mm x 75 mm size 1st class local wood longitudinally &amp; crosswise at ends fitted with 10 mm dia bolts and nuts etc. including coaltarring of timber members and cost of necessary bamboo stagings etc. as directed by the Engineer as per drawing and technical specifications</i>	<i>Running m</i>	<b>15,541.00</b>
14.18	<i>Supplying and filling up hollows of the timber spur to an average height of 3600 mm above ground with jungle wood branches as per drawing and technical specifications as directed by the Engineer.</i>	<i>Running m</i>	<b>34.00</b>

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>Chapter 15 - MAINTENANCE OF ROADS</b>			
<b>15.1</b>	<b>Restoration of Rain Cuts</b>		
	<i>j) Restoration of rain cuts with soil, moorum gravel or a mixture of these, clearing the loose soil, benching for 300mm width laying fresh material in layers not exceeding 250 mm and compaction with plate compactor or power rammer to restore the original alignment, level and slopes as per drawings and technical specifications Clause 1902</i>		
	<i>A. Manual Means</i>	<i>cum</i>	<b>151.00</b>
	<i>B. Mechanical Means</i>	<i>cum</i>	<b>158.00</b>
<b>15.2</b>	<b>1. Maintenance of Earthen shoulder (filling with fresh selected soil)</b>		
	<i>Making up loss of material/irregularities on shoulders to the design level by adding fresh approved selected soil and compacting it with appropriate equipment at OMC upto a lead of 1000 m as per technical specification Clause 1903</i>	<i>sqm</i>	<b>26.00</b>
	<b>2. Maintenance of Earthen shoulder (stripping of excess soil)</b>		
	<i>Stripping excess soil from the shoulder surface to achieve the approved level and compacting with plate compactor at OMC as per drawings and Technical Specification Clause 1903</i>	<i>sqm</i>	<b>11.00</b>
<b>15.3</b>	<b>Maintenance of bituminous surface road</b>		
	<i>i. Repair to pot holes by removal of failed material, trimming the sides to vertical and levelling the bottom, cleaning the same with compressed air or any appropriate method filled with 75mm B.M, applying bitumen emulsion prime coat at the bottom and bitumen emulsion tack coat on sides and on bottom as per technical specifications Clauses 502 and 503.</i>	<i>cum</i>	<b>7,229.00</b>
	<i>ii. Patch repair on already filled pot holes with 75 mm BM with 20 mm premix carpet and seal coat Type B as per drawings and technical specification Clause 1904.2</i>	<i>sqm</i>	<b>182.00</b>
	<i>iii. Repair to pot holes and removal of loose material, trimming of sides, cleaning of surface by providing tack coat, 20 mm thick pre-mix carpet and seal coat type B specification Clause 1904.2</i>	<i>sqm</i>	<b>190.00</b>
	<i>iv. Repair to pot holes and removal of loose material, trimming of sides, cleaning of surface by providing tack coat with bitumen emulsion, 20 mm thick pre-mix carpet using cationic bitumen emulsion and seal coat type B with bitumen emulsion</i>	<i>sqm</i>	<b>216.00</b>
<b>15.4</b>	<b>Maintenance of Gravel Road</b>		
	<i>Maintenance of gravel road including making up the loss of profile, rectifying corrugated surface, filling up of depressions, pot holes and erosion gullies by adding fresh material and compacting it with appropriate equipment or to strip excess of material from the road surface as per drawings and technical specification Clause 1905</i>	<i>sqm</i>	<b>271.00</b>

**SCHEDULE OF RATES 2008**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate (Rs.)</b>
<b>15.5</b>	<b>Maintenance of WBM Road</b> <i>Maintenance of WBM road including filling up of pot holes, ruts and rectifying corrugated surface, damaged edges and ravelling as per technical specification Clause 1906.</i>	<i>sqm</i>	<b>164.00</b>
<b>15.6</b>	<b>Maintenance of Drains</b> <i>The maintenance of drains include erosion, repair, clearing, cleaning, reshaping, regrading, deepening of side drains as well as catch water drains as per technical specification Clause 1907.</i>	<i>m</i>	<b>1.00</b>
<b>15.7</b>	<b>(I) Maintenance of Culverts</b> <i>Maintenance of Hume pipe Culvert by way of Clearing, Cleaning, Erosion repair, repairs to cracks, parapet wall and protection work as per drawing and technical specification Clause 1908</i>	<i>One No.</i>	<b>740.00</b>
	<b>(II) Maintenance of Culverts Slab type</b> <i>Maintenance of Slab type Culverts by way of clearing, Cleaning, Erosion repair, repairs to cracks, parapet walls and Protection works as per drawing and technical specification Clause 1908</i>	<i>Culvert</i>	<b>1,418.00</b>
<b>15.8</b>	<b>Maintenance of Causeway</b> <i>Maintenance of Causeway by way of minor Surface repairs, replacing Guide Posts, repair of flood gauges, removal of debris, providing boulders and protection work and painting as per technical specification Clause 1909</i>	<i>m</i>	<b>45.00</b>
<b>15.9</b>	<b>Maintenance of Road Signs</b> <i>Maintenance of road signs by way of cleaning and repainting of mandatory / regulatory / cautionary / informatory and place identifications sign board as per drawings and technical specification Clause 1910</i>	<i>km</i>	<b>666.00</b>
<b>15.10</b>	<b>Maintenance of steel and RCC Railing</b>		
	<b>(i) Repair of steel railing to bring it to original shape cleaning and repainting as per drawing and technical specification Clause 1911</b> <i>Steel Railing</i>	<i>Running m</i>	<b>201.00</b>
	<b>(ii) Repair of RCC railing to bring it to the original shape, cleaning and repainting as per drawings and technical specification Clause 1911</b> <i>RCC Railing</i>	<i>m</i>	<b>1,404.00</b>
<b>15.11</b>	<b>Maintenance of 200 metre and km stones</b> <i>Maintenance of 200 metre km stone by way of refitting of tilted stones repairing with cement mortar, cleaning, repairing and lettering on 200 metre km stone and 5th km stone as per drawing and technical specification Clause 1912</i>		
	<b>(i) Painting two coats with synthetic enamel paint</b>	<i>km</i>	<b>118.00</b>
	<b>(ii) Printing letters and figures of any shade with synthetic enamel paint of any approved colour to give an even shade</b>	<i>km</i>	<b>472.00</b>