

Project : Special Repair For NH-06 – Package III [Bilkhawthlir to Kolasib (25 km) km 70+000 to km 95+000 and Khamrang to Sairang (31 km) km 133+000 to km 164+000]						
Cost Abstract						
Special Repair works of Existing road from km 70+000 to km 95+000 <i>Part-1</i>						
Sl No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
		SITE CLEARENCE				
1	10.18 (c)	Bush clearance (Clearing road side vegetation, brush wood mooli bamboos, overgrown grass including removal etc. along existing road side, and disposal of the cut bushes down hill side of the road formation. This jungle clearance should includes minimum height of Clearance of 4.5m from top of pavement on uphill side of the road including road shoulder and all the bushes on the shoulder and down hill side of the road.)	Km	25.000	9,559.00	238975.00
2	10.12	Land slide clearance (Clearance of land slides in soil and ordinary rock by a bull-dozer D 80 A-12, 180 HP and disposal of the same on the valley side). On need basis as & when required. Here it is taken for estimate purpose only	Cum	5000.000	52.00	260000.00
3	10.11	Hill side drain clearances (Removal of earth from the choked hill side drain and disposing it on the valley side manually)	m	25000.000	68.00	1700000.00
4		Hiring of JCB (30Days) Per Day 8 Hrs- On need basis as & when required. Here it is taken for estimate purpose only	Hrs	240.000	2,500.00	600000.00
		Sub Total :				2798975.00
		Black Spot Rectification GRANULAR SUB-BASE & BASE COURSE				
5	4.1 B (IV)	Granular Sub base (GSB) for Grading-IV Material (By Mix in Place Method (Construction of granular sub-base by providing the material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401)	Cum	64.000	2,680.00	171520.00
6	4.11	Wet mix Macadam (WMM) (Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.)	Cum	75.000	3,950.00	296250.00
		Sub Total :				467770.00
		BITUMINOUS BASE AND SURFACE COURSES				
7	5.2	Tack coat on WMM - Granular Surface Treated with Primer (Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at required rate on the prepared bituminous/granular surface cleaned with mechanical broom.)	Sqm	280.000	29.00	8120.00
		Sub Total :				8120.00

Project : Special Repair For NH-06 – Package III [Bilkhawthlir to Kolasib (25 km) km 70+000 to km 95+000 and Khamrang to Sairang (31 km) km 133+000 to km 164+000]

Cost Abstract

Special Repair works of Existing road from km 70+000 to km 95+000

SI No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
		RETAINING 5m height (Total Length 60m)				
8	12.11 B (i)	Earthwork in Excavation (Earth work in excavation of foundation of structures as per drawing and technical specification, 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.)	Cum	331.200	90.00	29808.00
9	12.8 A	PCC M15 Levelling Course (Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications)	Cum	42.508	7,900.00	335812.81
10	13.5 B p	PCC M20 Concrete in Wall (Plain/Reinforced cement concrete in sub-structure complete as per drawing and technical specifications)	Cum	810.000	10,640.00	8618400.00
11	13.5 B p	PCC M20 in Parapet wall (Plain/Reinforced cement concrete in sub-structure complete as per drawing and technical specifications)	Cum	28.800	10,640.00	306432.00
12	13.8	Weep Hole (Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications)	Nos.	360.000	1,733.00	623880.00
13	15.60	Filter Media Filling (Back filling behind abutment, wing wall and return wall complete as per drawing and Technical specification) using Granular Material	Cum	248.400	2,591.00	643604.40
		Sub Total :				10557937.21

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Cost Abstract						
Special Repair works of Existing road from km 70+000 to km 95+000						
Sl No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
		Road side drain (Type I and Type II)				
14		Earth work in excavation of foundation (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work.)				
	12.1 I B (i)	(i) in soil (Depth upto 3 m) by mechanical means	Cum	428.930	90.00	38603.70
	3.11 ii B	(ii) in Ordinary rock (not requiring blasting)	Cum	22.580	119.00	2687.02
15	9.10	PCC M15 (Plain cement concrete 1:3:6 mix with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.)	Cum	21.000	7,900.00	165900.00
16	12.8 B	PCC M-20 in drain Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications	Cum	132.500	10,640.00	1409800.00
17	13.8	Weep holes Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications	No.	800.000	1,733.00	1386400.00
		Sub Total :				3003390.72
		Pipe Culverts (1 New)				
18	12.1 I B (i)	Earth work in excavation of foundation (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work.)	Cum	47.388	90.00	4264.92
19	9.10	PCC M15 in leveling course PCC 1:3:6 in Foundation (Plain cement concrete 1:3:6 mix with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.)	Cum	8.565	7,900.00	67660.34

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Project : Special Repair For NH-06 – Package III [Bilkhawthlir to Kolasib (25 km) km 70+000 to km 95+000 and Khamrang to Sairang (31 km) km 133+000 to km 164+000]

Cost Abstract						
Special Repair works of Existing road from km 70+000 to km 95+000						
Sl No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
20	12.8 B	PCC M20 in head wall (Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications)	Cum	8.040	10,640.00	85545.60
21		RCC NP-4 Pipe laying Laying Reinforced Cement Concrete Pipe NP4/prestressed concrete pipe on first class bedding in single row . (Laying Reinforced cement concrete pipe NP4/prestressed concrete pipe 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 .)				
	9.2B	(a) Laying of NP4 pipe - 1x1200mm dia-	Rm	12.500	21,073.00	263412.50
22	15.1A	Boulder apron (Providing and laying boulders apron for protection against scour with stone boulders weighing not less than 40 kg each complete as per drawing and Technical specification.)	MT	8.649	2,647.00	22892.95
23	15.20	Boulder apron laid in wire crates (Providing and laying of boulder apron laid in wire crates made with 4mm dia GI wire conforming to IS: 280 & IS-4826 in 100mm x 100mm mesh (weaved diagonally) including 10% extra for laps and joints laid with stone boulders weighing less not less than 40 kgs each)	Cum	8.649	4,120.00	35632.40
24	13.10	Filter media (Providing and laying of Filter media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2. of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition complete as per drawing and technical specification.)	Cum	13.370	2,550.00	34093.79
25	13.4A	RR Stone masonry in CM 1:3 (Stone masonry work in cement mortar for substructure complete as per drawing and Technical Specifications-Random Rubble Masonry in cement mortar 1:3)	Cum	8.040	7,409.00	59568.36

Project : Special Repair For NH-06 – Package III [Bilkhawthlir to Kolasib (25 km) km 70+000 to km 95+000 and Khamrang to Sairang (31 km) km 133+000 to km 164+000]

Cost Abstract

Special Repair works of Existing road from km 70+000 to km 95+000

Sl No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
26	13.80	100 mm dia Weep Holes (Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications)	Rm	10.000	1,733.00	17330.00
27	12.8 B	PCC M20 Parapet wall (Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications)	cum	12.000	10,640.00	127680.00
28		Blockage clearances (30 Pipe Culvert) - (3.14*0.6*0.6*12)*30	Cum	406.944	74.00	30113.86
Sub Total :						748194.71
Total						₹ 1,75,84,388

Project : Special Repair For NH-06 – Package III [Bilkhawthlir to Kolasib (25 km) km 70+000 to km 95+000 and Khamrang to Sairang (31 km) km 133+000 to km 164+000] km)]						
Cost Abstract						
Special Repair works of Existing road from 133+000 to Km 164+000 (PKG-III Part 2)						
Sl No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
		SITE CLEARENCE (km 133.000 to km 147.800)				
1	10.12	Land slide clearance (Clearance of land slides in soil and ordinary rock by a bull-dozer D 80 A-12, 180 HP and disposal of the same on the valley side)- On need basis as & when required. Here it is taken for estimate purpose only	Cum	5000.000	52.00	260000.000
2		Hiring of JCB (30Days) Per Day 8 Hrs- On need basis as & when required. Here it is taken for estimate purpose only	Hrs	240.000	2,500.00	600000.000
		SITE CLEARENCE (km 147.800 to km 164.000)				
3	10.18 (c)	Bush clearance (Clearing road side vegetation, brush wood mooli bamboos, overgrown grass including removal etc. along existing road side, and disposal of the cut bushes down hill side of the road formation. This jungle clearance should includes minimum height of Clearance of 4.5m from top of pavement on uphill side of the road including road shoulder and all the bushes on the shoulder and down hill side of the road.)	Km	16.000	9,559.00	152944.000
4	10.12	Land slide clearance (Clearance of land slides in soil and ordinary rock by a bull-dozer D 80 A-12, 180 HP and disposal of the same on the valley side)- On need basis as & when required. Here it is taken for estimate purpose only	Cum	10000.000	52.00	520000.000
5	10.11	Hill side drain clearances (Removal of earth from the choked hill side drain and disposing it on the valley side manually)	m	16200.000	68.00	1101600.000
6		Hiring of JCB (30Days) Per Day 8 Hrs- On need basis as & when required. Here it is taken for estimate purpose only	Hrs	240.000	2,500.00	600000.000
7	10.3	Maintenance of Earth Shoulder (stripping excess soil) (Stripping excess soil from the shoulder surface to achieve the approved level and compacting with plate compactor) Both Sides	Sqm	16000.000	33.00	528000.000
8	10.2	Maintenance of Earthen Shoulder (filling with fresh soil) (Making up loss of material/irregularities on shoulder to the design level by adding fresh approved soil and compacting it with appropriate equipment.) Both Side of Road	Sqm	16000.000	109.00	1744000.000
Sub Total :						5506544.000

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Cost Abstract						
Special Repair works of Existing road from 133+000 to Km 164+000 (PKG-III Part 2)						
Sl No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
		Road Repair Works (km 147.8 to km 164.00)				
9	4.11	Wet mix Macadam (WMM) (Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.)	Cum	375.000	3950.00	1481250.000
10	10.5	Filling Pot- holes and Patch Repairs with Bituminous concrete, 40mm. (Removal of all failed material, trimming of completed excavation to provide firm vertical faces, cleaning of surface, painting of tack coat on the sides and base of excavation as per clause 503, back filling the pot holes with hot bituminous material as per clause 504, compacting, trimming and finishing the surface to form a smooth continuous surface, all as per clause 3004.2)- Grading I - (100 Nos) For 1 m * 1 m	Sqm	500.000	738.00	369000.000
11	5.2	Tack coat on WMM - Granular Surface Treated with Primer (Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at required rate on the prepared bituminous/granular surface cleaned with mechanical broom.)	Sqm	1400.000	29.00	40600.000
		Sub Total :				1890850.000
		RETAINING 5m height (Total Length 60m)				
12	12.11 B (i)	Earthwork in Excavation (Earth work in excavation of foundation of structures as per drawing and technical specification, 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.)	Cum	165.600	90.00	14904.000
13	12.8 A	PCC M15 Levelling Course (Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications)	Cum	21.254	7,900.00	167906.405
14	13.5 B p	PCC M20 Concrete in Wall (Plain/Reinforced cement concrete in sub-structure complete as per drawing and technical specifications)	Cum	405.000	10,640.00	4309200.000
15	13.5 B p	PCC M20 in Parapet wall (Plain/Reinforced cement concrete in sub-structure complete as per drawing and technical specifications)	Cum	14.400	10,640.00	153216.000

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Cost Abstract						
Special Repair works of Existing road from 133+000 to Km 164+000 (PKG-III Part 2)						
SI No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
16	13.8	Weep Hole (Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications)	Nos.	180.000	1,733.00	311040.000
17	15.60	Filter Media Filling (Back filling behind abutment, wing wall and return wall complete as per drawing and Technical specification) using Granular Material	Cum	124.200	2591.00	321802.200
		Road side drain (Type II)				
18		Earth work in excavation of foundation (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work.)				
	12.1 I B (i)	(i) in soil (Depth upto 3 m) by mechanical means	Cum	428.930	90.00	38603.700
	3.11 II B	(ii) in Ordinary rock (not requiring blasting)	Cum	22.580	119.00	2687.020
19	9.10	PCC M15 (Plain cement concrete 1:3:6 mix with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.)	Cum	21.000	7,900.00	165900.000
20	12.8 B	PCC M-20 in drain Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications	Cum	132.500	10,640.00	1409800.000
21	13.8	Weep holes Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications	No.	800.000	1,733.00	1386400.000
Sub Total :						8282359.325

Project : Special Repair For NH-06 – Package III [Bilkhawthlir to Kolasib (25 km) km 70+000 to km 95+000 and Khamrang to Sairang (31 km) km 133+000 to km 164+000] km]						
Cost Abstract						
Special Repair works of Existing road from 133+000 to Km 164+000 (PKG-III Part 2)						
SI No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
		Pipe Culverts (1 no New and 2 nos replacement)				
22	12.11 B (i)	Earth work in excavation of foundation (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work.)	Cum	142.164	90.00	12794.760
23	9.10	PCC M15 in leveling course PCC 1:3:6 in Foundation (Plain cement concrete 1:3:6 mix with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.)	Cum	25.694	7,900.00	202981.020
24	12.8 B	PCC M20 in head wall (Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications)	Cum	24.120	10,640.00	256636.800
25		RCC NP-4 Pipe laying Laying Reinforced Cement Concrete Pipe NP4/prestressed concrete pipe on first class bedding in single row . (Laying Reinforced cement concrete pipe NP4/prestressed concrete pipe 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 .)				
	9.2B	(a) Laying of NP4 pipe - 1x1200mm dia-	Rm	37.500	21,073.00	790237.500
26	15.1A	Boulder apron (Providing and laying boulders apron for protection against scour with stone boulders weighing not less than 40 kg each complete as per drawing and Technical specification.)	MT	25.946	2,647.00	68678.850
27	15.20	Boulder apron laid in wire crates (Providing and laying of boulder apron laid in wire crates made with 4mm dia GI wire conforming to IS: 280 & IS:4826 in 100mm x 100mm mesh (waved diagonally) including 10% extra for laps and joints laid with stone boulders weighing less not less than 40 kgs each)	Cum	25.946	4,120.00	106897.190

Project : Special Repair For NH-06 – Package III [Bilkhawthir to Kolasib (25 km) km 70+000 to km 95+000 and Khamrang to Sairang (31 km) km 133+000 to km 164+000] km)]						
Cost Abstract						
Special Repair works of Existing road from 133+000 to Km 164+000 (PKG-III Part 2)						
SI No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
28	13.10	Filter media (Providing and laying of Filter media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2 of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition complete as per drawing and technical specification.)	Cum	40.110	2,550.00	102281.357
29	13.4A	RR Stone masonry in CM 1:3 (Stone masonry work in cement mortar for substructure complete as per drawing and Technical Specifications- Random Rubble Masonry in cement mortar 1:3)	Cum	24.120	7,409.00	178705.080
30	13.80	100 mm dia Weep Holes (Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications)	Rm	29.000	1,733.00	50257.000
31	12.8 B	PCC M20 Parapet wall (Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications)	cum	24.000	10,640.00	255360.000
Bridge Repair						
32	Approach Slab Repair 6 Nos					
	14.10	PCC M15 Grade leveling course below approach slab complete as per drawing and Technical specification	Cum	52.290	9,257.00	484048.530
	14.11	Reinforced cement concrete approach slab including reinforcement and formwork complete as per drawing and Technical specification	Cum	122.010	20,764.00	2533415.640
33	16.16	Replacement of damaged concrete railing.(only damaged bridge railings)	m	300.000	490.00	147000.000
34	16.16	Replacement of Expansion Joints complete as per drawings (3 No)	m	24.600	6,874.00	169100.400

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Cost Abstract						
Special Repair works of Existing road from 133+000 to Km 164+000 (PKG-III Part 2)						
SI No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
35	14.16	Painting on railing (Painting on concrete surface (Providing and applying 2 coats of water based cement paint to unplastered concrete surface after cleaning the surface of dirt, dust, oil, grease, efflorescence and applying paint @ of 1 litre for 2 Sq.m.) Both Sides	m	400.000	321.00	128400.000
36		Blockage clearances (40 Pipe Culvert) - (3.14*0.6*0.6*12)*40	Cum	542.592	74.00	40151.808
Sub Total :						5526945.935
Total Cost for Part-2 km 133 to km 164						₹ 2,12,06,699
Total Cost for Part-1 km 70 to km 95						₹ 1,75,84,388
Total Cost (including Part-1 and Part-2)						₹ 3,87,91,087
Work Value Less 6% VAT in above Rate						₹ 3,65,95,365
GST (12 %)						₹ 43,91,444
Bid Price (Work Value +GST)						₹ 4,09,86,809
Agency Charges (9%)						₹ 32,93,563
GST (18%) on Agency Charges						₹ 5,92,845
Final Cost (Rs)						₹ 4,48,73,237
Final cost (Cr)						₹ 4.49