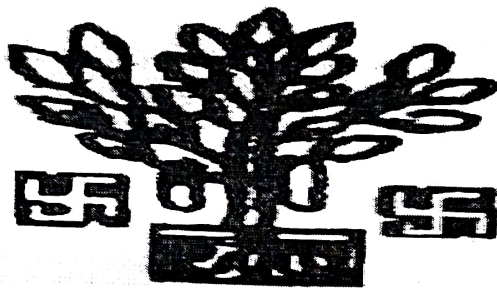


# **RURAL WORKS DEPARTMENT GOVT OF BIHAR**



**NAME OF WORKS :-** Bergaachi Mahalgawan PMGSY Hanuman  
Mandir to Vasidpur Madheli Talikund Tak

**BLOCK :-** JOKIHAT

**FDR**

**Rs. 563939.57**

**YEAR(2024-25)**

**R.W.D., WORKS CIRCLE, KISHANGANJ**

**R.W.D., WORKS DIVISION, ARARIA**

### प्रतिवेदन

पथ का नाम :-

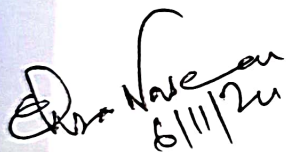
Bergaachi Mahalgawan PMGSY Hanuman Mandir to Vasidpur Madheli Talikund Tak

कार्य का नाम :-

Bergaachi Mahalgawan PMGSY Hanuman Mandir to Vasidpur Madheli Talikund Tak

में बाढ़ से क्षतिग्रस्त भाग में यातायात चालू करने का कार्य।

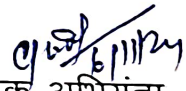
संलग्न प्राक्कलन 2024 को प्रखण्ड में आयी भीषण बाढ़ से क्षतिग्रस्त पथ में बाढ़ क्षतिग्रस्त मरम्मति मद से यातायात चालू करने हेतु तैयार किया गया है जिसकी प्राक्कलित लागत 563939.57 (Five lakh sixty-three thousand nine hundred and thirty-nine rupees and fifty-seven paise) है। उक्त पथ का निर्माण योनान्तर्गत हुआ है एवं योजना अनुरक्षण अवधि में 6 वर्षों के कटे (क्षतिग्रस्त) भाग में आवश्यकता अनुसार Hume Pipe, Bamboo, लोकल बालू एवं Brick Bats देने के बाद यातायात चालू कराया गया है। पथ के विभिन्न हिस्से में कराये गये कार्य का विवरणी स्पष्ट रूप से प्राक्कलन में दर्शाया गया है। प्राक्कलन मदों का दर वर्तमान अनुसूचित दर के अनुरूप है।

  
6/11/24

कनीय अभियंता,  
ग्रामीण कार्य विभाग,  
कार्य प्रशाखा, 311314-01

  
6/11/24

सहायक अभियंता,  
ग्रामीण कार्य विभाग,  
कार्य अवर प्रमण्डल, .....

  
6/11/24

कार्यपालक अभियंता,  
ग्रामीण कार्य विभाग,  
कार्य प्रमण्डल, .....

### प्रतिवेदन

पथ का नाम :-

Bergaachi Mahalgawan PMGSY Hanuman Mandir to Vasidpur Madheli Talikund Tak

कार्य का नाम :-

Bergaachi Mahalgawan PMGSY Hanuman Mandir to Vasidpur Madheli Talikund Tak

में बाढ़ से क्षतिग्रस्त भाग में यातायात चालू करने का कार्य।

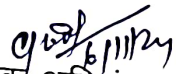
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6/11/24

कनीय अभियंता,  
ग्रामीण कार्य विभाग,  
कार्य प्रशाखा, 311/1/24

  
6/11/24

सहायक अभियंता,  
ग्रामीण कार्य विभाग,  
कार्य अवर प्रमण्डल, 311/1/24

  
6/11/24

कार्यपालक अभियंता,  
ग्रामीण कार्य विभाग,  
कार्य प्रमण्डल, 311/1/24



| SUMMARY OF COST ESTIMATE FOR THE PROJECT |                                                                            |                |
|------------------------------------------|----------------------------------------------------------------------------|----------------|
| NAME OF ROAD :-                          | Bergaachi Mahalgawan PMGSY Hanuman Mandir to Vasidpur Madheli Talikund Tak |                |
| DISTRICT :-                              | ARARIA                                                                     |                |
| BLOCK :-                                 | JOKIHAT                                                                    |                |
| Length of Road:-                         | 1.700 Km                                                                   |                |
| Length of Cutting in mtr :-              | 8.000                                                                      |                |
| Sl. No.                                  | DESCRIPTION                                                                | AMOUNT (LAKHS) |
| 1                                        | Filling of local sand                                                      | 138794.96      |
| 2                                        | Labour for cutting 62mm to 75mm dia bamboo                                 | 162260.43      |
| 3                                        | Labour for fitting 62mm to 75mm dia bamboo                                 | 2876.00        |
| 4                                        | Supplying of EC bag, of local sand                                         | 28610.56       |
| 5                                        | Supply and Carriage of brick bats                                          | 50215.98       |
| 6                                        | Supply, laying and carriage of 1000 mm HPC                                 | 166181.63      |
| 7                                        | Drone videography                                                          | 15000.00       |
| SUB TOTAL COST =                         |                                                                            | 563939.57      |
| TOTAL (RS.) =                            |                                                                            | 563940         |

J.E

A.E

E.E

S.E

Approved.  
Technicolly ~~Sanctioned~~ for ₹ 5,63,940 = 00  
(Rupees Five Lakhs Sixty-three thousand  
Nine-hundred forty) only

Superntending Engineer  
RWD Work Circle  
Kishanganj



# Bill of Quantity

NAME OF ROAD :- Bergaachi Mahalgawan PMGSY Hanuman Mandir to Vasidpur  
DISTRICT :- ARARIA  
BLOCK :- JOKIHAT

| Sl. No.        | DESCRIPTION OF ITEMS                                                                                                                                                                                                                                        | QUANTITY | UNIT | RATE (Rs.) | AMOUNT (Rs.) |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------------|--------------|
| 1              | Filling of local sand obtained from river bed, watering & ramming, all complete job as per specification & direction of Engineer-in-charge                                                                                                                  | 109.05   | CUM  | 1272.78    | 138794.96    |
| 2              | Labour for cutting 62 mm to 75mm dia bamboo piles to size and making shoes & driving by jet machine etc. all complete job as per specification & direction of Engineer- in -charge.                                                                         | 2345.14  | MTR  | 69.19      | 162260.43    |
| 3              | Labour for fitting & fixing 62 mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 38 swg G.I wire including cost of G.I wire or nails etc all complete job as per specification & direction of Engineer-in-charge. | 80.00    | MTR  | 35.95      | 2876.00      |
| 4              | Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge.                                                                                                                                        | 512.00   | Each | 55.88      | 28610.56     |
| 5              | Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job.                                                                                                                                             | 18.20    | CUM  | 2759.12    | 50215.98     |
| 6              | Supplaying and carriage of hume pipe 1000 mm dia , all complete job.                                                                                                                                                                                        | 22.50    | RM   | 7385.85    | 166181.63    |
| A) SUB TOTAL = |                                                                                                                                                                                                                                                             |          |      |            | 548939.57    |
| TOTAL COST =   |                                                                                                                                                                                                                                                             |          |      |            | 548940       |

J.E

A.E

E.E

# ESTIMATE FOR REPAIRING / RESTORATION/ MAKING MOTORABLE ROADS DAMAGED DURING FLOOD

| NAME OF ROAD :-     |                                                                                                                                                                                                                                                             | Bergaachi Mahalgawan PMGSY Hanuman Mandir to Vasidpur Madheli Talikund Tak |      |        |             |                    |          |            |              |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------|--------|-------------|--------------------|----------|------------|--------------|
| DISTRICT :-         |                                                                                                                                                                                                                                                             | ARARIA                                                                     |      |        |             |                    |          |            |              |
| BLOCK :-            |                                                                                                                                                                                                                                                             | JOKIHAT                                                                    |      |        |             |                    |          |            |              |
| Length of Cutting:- |                                                                                                                                                                                                                                                             | 8.00 mtr                                                                   |      |        |             |                    |          |            |              |
| Sl. No.             | DESCRIPTION OF ITEMS                                                                                                                                                                                                                                        | Unit                                                                       | Nos. | L(m)   | B(m)        | D(m)               | QUANTITY | RATE (Rs.) | AMOUNT (Rs.) |
| 1                   | Filling of local sand obtained from river bed, watering & ramming, all complete job as per specification & direction of Engineer-in-charge                                                                                                                  |                                                                            |      |        |             |                    |          |            |              |
|                     | At ch:-760 m                                                                                                                                                                                                                                                | cum                                                                        | 1    | 8.00   | (7.5+5.5)/2 | (3.5+2.85+1.5)/3   | 136.07   |            |              |
|                     | Deduction for H.P 1000MM dia (1.23 x 1.23)=1.52                                                                                                                                                                                                             | cum                                                                        | 3    | 0.79   | 1.52        | 7.50               | 27.02    |            |              |
|                     |                                                                                                                                                                                                                                                             | cum                                                                        |      |        |             |                    |          |            |              |
|                     | total qty :-                                                                                                                                                                                                                                                |                                                                            |      |        |             |                    | 109.049  | 1,272.78   | 138794.96    |
| 2                   | Labour for cutting 62 mm to 75mm dia bamboo piles to size and making shoes & driving by jet machine etc. all complete job as per specification & direction of Engineer-in-charge.                                                                           |                                                                            |      |        |             |                    |          |            |              |
|                     | At ch:-1500 m                                                                                                                                                                                                                                               |                                                                            | 2    | 8/0.25 | 4.50        |                    | 288.00   |            |              |
|                     |                                                                                                                                                                                                                                                             | Mtr.                                                                       |      |        |             |                    |          |            |              |
|                     | total qty :-                                                                                                                                                                                                                                                |                                                                            |      |        |             |                    | 2345.14  | 69.19      | 1,62,260.43  |
| 3                   | Labour for fitting & fixing 62 mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 38 swg G.I wire including cost of G.I wire or nails etc all complete job as per specification & direction of Engineer-in-charge. |                                                                            |      |        |             |                    |          |            |              |
|                     | At ch:-1500 m                                                                                                                                                                                                                                               |                                                                            | 2    | 8.00   | 2.5/0.5     |                    | 80.00    |            |              |
|                     |                                                                                                                                                                                                                                                             | Mtr.                                                                       |      |        |             |                    |          |            |              |
|                     | total qty :-                                                                                                                                                                                                                                                |                                                                            |      |        |             |                    | 80.00    | 35.95      | 2876.00      |
| 4                   | Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge.                                                                                                                                        |                                                                            |      |        |             |                    |          |            |              |
|                     | At ch:-1500 m                                                                                                                                                                                                                                               | cum                                                                        | 2    | 8.00   | (0.6+0.9)/2 | (1.25+2.25+0.85)/3 | 17.40    |            |              |
|                     | Total No of E C Bags(3.4cum=100Bags) =                                                                                                                                                                                                                      |                                                                            |      | 17.40  | /           | 0.034              | 512.00   |            |              |
|                     |                                                                                                                                                                                                                                                             | Each                                                                       |      |        |             |                    |          |            |              |
|                     | Say No of Bage :-                                                                                                                                                                                                                                           |                                                                            |      |        |             |                    | 512.00   | 55.88      | 28610.560    |
| 5                   | Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job.                                                                                                                                             |                                                                            |      |        |             |                    |          |            |              |
|                     | Below Pipe                                                                                                                                                                                                                                                  | cum                                                                        | 1    | 8.00   | 6.50        | 0.35               | 18.20    |            |              |
|                     |                                                                                                                                                                                                                                                             | cum                                                                        |      |        |             |                    |          |            |              |
|                     | total qty :-                                                                                                                                                                                                                                                |                                                                            |      |        |             |                    | 18.20    | 2,759.12   | 50215.98     |

|   |                                                                      |    |              |   |     |  |                |          |           |
|---|----------------------------------------------------------------------|----|--------------|---|-----|--|----------------|----------|-----------|
| 6 | Supplaying and carriage of hume pipe 1000 mm dia , all complete job. |    |              |   |     |  |                |          |           |
|   | At ch-1500m                                                          | RM | 3            | 3 | 2.5 |  | 22.50          |          |           |
|   |                                                                      | RM | total qty :- |   |     |  | 22.50          | 7,385.85 | 166181.63 |
|   |                                                                      |    |              |   |     |  |                |          |           |
|   |                                                                      |    |              |   |     |  | A) SUB TOTAL = |          | 548939.57 |
|   |                                                                      |    |              |   |     |  | TOTAL COST =   |          | 548939.57 |

  
 Junior Engineer

  
 Asstt. Engineer

  
 Executive Engineer

S.E  
 KISHANGANJ



# FINAL RATE UNDER WORKS CIRCLE KISHANGANJ

| S..No | Discription of Item                  | Unit         | Final Rate (Excluding GST,Seigniorage & L.Cess) | Final Rate (Including GST,Seigniorage & L.Cess) | S.F. Per Cum / Per Bag BAG |
|-------|--------------------------------------|--------------|-------------------------------------------------|-------------------------------------------------|----------------------------|
| 1     | EARTH WORK                           | CUM          | 459.003                                         | 549.740                                         | 3.530                      |
| 2     | BRICK BAT                            | CUM          | 2209.576                                        | 2759.115                                        | 129.720                    |
| 3     | G.S,B                                | CUM          | 4328.501                                        | 5172.300                                        | 21.380                     |
| 4     | SAND BAG (Cement Bag)                | Each         | 46.550                                          | 55.880                                          | 0.490                      |
| 5     | BAMBOO PILE                          | Per Mtr.     | 58.140                                          | 69.186                                          |                            |
| 6     | BAMBOO CHACHRI                       | Per Mtr.     | 302.258                                         | 359.690                                         |                            |
| 7     | BAMBOO RUNNER                        | Per Mtr.     | 30.210                                          | 35.950                                          |                            |
| 8     | HUME PIPE (1000 mm Div)              | Per Mtr.     | 6206.598                                        | 7385.850                                        |                            |
| 9     | HUME PIPE (600 mm Div)               | Per Mtr.     | 2492.260                                        | 2965.790                                        |                            |
| 10    | STEEL DRUM SHEET                     | Per Sqr.Mtr. | 215.352                                         | 256.270                                         |                            |
| 11    | GEO BAG WITH SAND                    | EACH         | 967.490                                         | 1152.320                                        | 1.010                      |
| 12    | EACH N.C. BAG WITH SAND (Cement Bag) | Each E.C     | 967.490                                         | 1151.800                                        | 0.490                      |
| 13    | LOCAL SAND                           | CUM          | 721.110                                         | 1272.780                                        | 0.490                      |

*[Signature]*  
6/11/24  
Junior Engineer

*[Signature]*  
6/11/24  
Assistant Engineer

*[Signature]*  
6/11/24  
Executive Engineer

Superintending Engineer  
Rural Works Department  
Works Circle Kishanganj

**BASIC RATES  
(A) Labour**

| Sl. No. | Description of Labour         | Unit | Rate (Rs.) |
|---------|-------------------------------|------|------------|
| L-01    | Bhisti                        | day  | 373        |
| L-02    | Bitumen Sprayer(semi skilled) | day  | 393        |
| L-03    | Blacksmith, special           | day  | 503        |
| L-04    | Blaster, 2nd class            | day  | 619        |
| L-05    | Carpenter 1st Class           | day  | 503        |
| L-06    | Chips spreader, semi-skilled  | day  | 449        |
| L-07    | Chiseller (Skilled)           | day  | 577        |
| L-08    | Dresser (Skilled)             | day  | 472        |
| L-09    | Driller, 2nd class            | day  | 449        |
| L-10    | Electrician, skilled          | day  | 476        |
| L-11    | Fitter, skilled               | day  | 511        |
| L-12    | Mason (1st class)             | day  | 503        |
| L-13    | Mason (2nd Class)             | day  | 449        |
| L-14    | Mate, Semi skilled            | day  | 397        |
| L-15    | Mazdoor (Unskilled)           | day  | 373        |
| L-16    | Mazdoor (Semi skilled)        | day  | 388        |
| L-17    | Mazdoor (Skilled)             | day  | 472        |
| L-18    | Painter (1st class)           | day  | 476        |
| L-19    | Plumber, Special              | day  | 476        |
| L-20    | Surveyor                      | day  | 454        |
| L-21    | White Washer                  | day  | 476        |
| L-22    | Head blacksmith               | day  | 531        |
| L-23    | Welder 1 St Class             | day  | 584        |
|         | Carpenter Head                | day  | 531        |
|         | Night Gurad                   | day  | 415        |

**(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar  
effective from 01/04/2023)**

| BASIC RATES<br>(B) Material |                                                                                                     |      |                     |             |                         |
|-----------------------------|-----------------------------------------------------------------------------------------------------|------|---------------------|-------------|-------------------------|
| Sl. No.                     | Description                                                                                         | Unit | Basic Rates per SOR | Add Royalty | Final Rate With Royalty |
| M-001                       | Bamboo (1st Class) 100 mm - 100 mm dia. 6.0 m -8.0 m long (per mtr.- 23.52 Rs.)                     | No.  | 188.00              |             | 188.00                  |
| M-002                       | Bamboo (1st Class) 100 mm - 100 mm dia. 6.0 m -8.0 m long (per mtr.- 23.52 Rs.)                     | No.  | 188.00              |             | 188.00                  |
| M-003                       | Bamboo (1st Class) 50 mm - 100 mm dia. 6.0 m -8.0 m long (per mtr.- 14.71 Rs.)                      | No.  | 118.00              |             | 118.00                  |
| M-004                       | Bamboo (1st Class) 50 mm - 100 mm dia. 6.0 m -8.0 m long (per mtr.- 14.71 Rs.)                      | No.  | 118.00              |             | 118.00                  |
| M-005                       | Bamboo (2nd Class) 75mm dia. 1.8 m - 6.0 m -8.0 m long (per mtr.- 22.03 Rs.)                        | No.  | 176.00              |             | 176.00                  |
| M-006                       | Bamboo (2nd Class) 75mm dia. 6.0 m -8.0 m long (per mtr.- 22.03 Rs.)                                | No.  | 176.00              |             | 176.00                  |
| M-007                       | Brick Bats                                                                                          | cum  | 1063.00             | 18.00       | 1081.00                 |
| M-008                       | Selected earth (Including @ Rs. 33.00 per cum & compensation @ Rs. 2.25 Per Cum                     | cum  | 2.25                | 33.00       | 35.25                   |
| M-009                       | Empty Cement Bag IS 11652:2000                                                                      | Nos. | 11.11               |             | 11.11                   |
| M-010                       | Steel Drum 300 mm dia 1.2 m high / empty bitumen drum                                               | Nos. | 170.13              |             | 170.13                  |
| M-011                       | Sand bags (Cost of sand and Empty cement bag)                                                       | Nos. | 7.31                | 2.59        | 9.90                    |
| M-012                       | Sutli (Brown)                                                                                       | kg   | 20.59               |             | 20.59                   |
| M-013                       | Granular material (Natural occurring, soil gravel mixture / quarry waste, kankar, laterite, dhandla | cum  | 84.03               | 83.00       | 167.03                  |
| M-014                       | Nails                                                                                               | kg   | 108.00              |             | 108.00                  |
| M-014                       | RCC Pipe NP3 (1000 mm dia)                                                                          | m    | 5787.23             |             | 5787.23                 |
| M-015                       | RCC Pipe NP3 (600 mm dia)                                                                           | m    | 2310.00             |             | 2310.00                 |
| M-015                       | Sand (Fine) at source                                                                               | cum  | 69.75               | 75.00       | 144.75                  |
| M-016                       | Empty Steel Drum 300 mm dia 1.2 m height                                                            | Nos. | 170.13              |             | 170.13                  |
| M-016                       | Water                                                                                               | kl   | 60.30               |             | 60.30                   |
| M-017                       | Geo Bags                                                                                            | Each | 124.00              |             | 124.00                  |
| M-018                       | G.S.B.                                                                                              | cum  | 69.75               | 75.00       | 144.75                  |

(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar effective from 01/04/2023.



**BASIC RATES  
(C) USAGE RATES OF PLANT & MACHINERY**

| Sr. No. | Sor Code | Description of                                       |                                    | Output of Machine |          | Usage Rates in Rs. |          |
|---------|----------|------------------------------------------------------|------------------------------------|-------------------|----------|--------------------|----------|
|         |          | Machine                                              | Activity                           | Unit              | Output   | Unit               | Rate     |
| PM-009  | P&M-012  | Crane upto 80 T                                      | Lifting of materials               |                   |          | per hour           | 5,573.00 |
| PM-010  | P&M-015  | Dozer D 80 - A12 Dozer D 50 - A15                    | Dozing cutting                     | cum/h             | 260.00   | per hour           | 2,997.00 |
| PM-011  |          |                                                      |                                    | cum/h             | 120.00   |                    | 4,326.00 |
| PM-014  | P&M-017  | Front end-loader 1 cum bucket capacity @ 45 cum/hour | Loading Aggregates                 | cum/h             | 45.00    | per hour           | 1,419.00 |
| PM-017  | P&M-026  | Hydraulic Excavator of 1cum bucket                   | Excavation                         | cum/h             | 100.00   | per hour           | 2,272.00 |
| PM-031  | P&M-044  | Three wheel 80-100 kN Static Roller                  | Compaction Rolling                 |                   |          |                    | 1,593.00 |
| PM-032  |          |                                                      | Earth:- Embankment or sub-grade    | cum/h             | 80/70    |                    | 1,593.00 |
| PM-033  |          |                                                      | Sub-base G-I                       | cum/h             | 10.00    |                    | 1,593.00 |
| PM-034  |          |                                                      | Sub-base G-II/G-III                | cum/h             | 8.00     |                    | 1,593.00 |
| PM-035  |          |                                                      | WMM                                | cum/h             | 16.00    |                    | 1,593.00 |
| PM-036  |          |                                                      | BUSG                               | cum/h             | 10.00    | per hour           | 1,593.00 |
| PM-037  |          |                                                      | BM 50/75 mm                        | cum/h             | 12.00    |                    | 1,593.00 |
| PM-038  |          |                                                      | Premix 20 mm                       | sqm/h             | 250.00   |                    | 1,593.00 |
| PM-039  |          |                                                      | Seal Coat                          | sqm/h             | 500.00   |                    | 1,593.00 |
| PM-040  |          |                                                      | Surface Dressing 1st Coat          | sqm/h             | 400.00   |                    | 1,593.00 |
| PM-041  |          |                                                      | Surface Dressing 2nd Coat          | sqm/h             | 500.00   |                    | 1,593.00 |
| PM-042  | P&M-048  | Tipper 5.5 cum/10 t                                  | Carriage                           | cum/trip          | 5.50     | per hour           | 1,426.00 |
| PM-043  | P&M-053  | Tractor with Disc Harrows                            | Pulverisation of soil              | cum/h             | 80.00    | per hour           | 693.00   |
| PM-044  | P&M-055  | Tractor with ripper @ 60 cum per hour                | Ripping Pavements, uprooting trees | cum/h             | 60.00    | per hour           | 697.00   |
| PM-045  | P&M-053  | Tractor with trolley with Grading equipment          | Transportation of materials        | t/trip            | 3 to 5   | per hour           | 676.00   |
| PM-046  | P&M-054  | Tractor with Rotavator                               | Scarifier                          | cum/h             | 25.00    | per hour           | 693.00   |
| PM-047  | P&M-057  | Truck 10 t capacity                                  | Carriage                           | cum trip          | 5.50     | per hour           | 1,054.00 |
| PM-048  | P&M-059  | Vibratory roller 80-100 kN                           | Compaction of soil WMM             | cum/h             | 100.00   | per hour           | 2,053.00 |
| PM-049  |          |                                                      | Compaction of BM                   | cum/h             | 60.00    |                    | 2,053.00 |
| PM-050  | P&M-060  | Water tanker 6 kl capacity (Truck Mounted)           | Carriage of water                  | litre / h         | 12000.00 | per hour           | 752.00   |
| PM-063  | P&M-060  | generator 3KVA                                       | stiching                           | per hour          |          | per hour           | 74.00    |
| PM-064  | P&M-060  | stiching machine                                     | stiching                           | day               |          | day                | 50.00    |

(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar effective from 01/04/2023.

**SUMMARY OF CARRIGE COST**

| Sl. No. | Item                    | Unit     | Amount<br>( Rs.) |
|---------|-------------------------|----------|------------------|
| 1       | Earth Work              | Cum      | 274.42           |
| 2       | Brick Bats              | Cum      | 521.97           |
| 3       | Bamboo                  | Per Mtr. | 3.00             |
| 4       | G.S.B.                  | Cum      | 2960.13          |
| 5       | Local Sand              | Cum      | 345.14           |
| 6       | HUME PIPE (1000 mm DIA) | Per Pipe | 745.93           |
| 7       | HUME PIPE PIR METER     | Per Mtr. | 298.37           |
| 8       | HUME PIPE (600 mm DIA)  | Per Pipe | 310.88           |
| 9       | HUME PIPE (600 mm DIA)  | Per Mtr. | 124.35           |
| 10      | Local Sand              | Cum      | 345.10           |

| Comparison of carriage cost of Material via Road from different sources |                              |          |          |                 |         |          |              |        |  |         |        |                  |                  |         |         |
|-------------------------------------------------------------------------|------------------------------|----------|----------|-----------------|---------|----------|--------------|--------|--|---------|--------|------------------|------------------|---------|---------|
| Sl No                                                                   | Item                         | Unit     | Source   | Pucka / Surface |         |          |              | Katcha |  |         |        | Loading & Unload | Carriage by Road | Total * |         |
|                                                                         |                              |          |          |                 |         |          |              |        |  |         |        |                  |                  |         |         |
| 1                                                                       | By Tractor                   |          |          |                 |         |          |              |        |  |         |        |                  |                  |         |         |
| A                                                                       | Earth Work Via Road          | Cum      | Local    | 3.60            |         |          |              |        |  |         |        |                  |                  |         |         |
|                                                                         |                              |          |          | 2.04            | x 20.04 | x 0 Km   | = Rs 0.00    |        |  | x 31.30 | x 1 Km | = Rs 55.24       | 274.420          |         |         |
| B                                                                       | Brick Bat Via Road           | Cum      | Local    | 3.60            |         |          |              |        |  |         |        |                  |                  |         |         |
|                                                                         |                              |          |          | 2.04            | x 20.04 | x 7 Km   | = Rs 247.55  |        |  | x 31.30 | x 1 Km | = Rs 55.24       | 521.970          |         |         |
| B                                                                       | Bamboo Via Road              | per mtr. | Local    | 3.60            |         |          |              |        |  |         |        |                  |                  |         |         |
|                                                                         |                              |          |          | 126.00          | x 20.04 | x 2 Km   | = Rs 1.15    |        |  | x 31.30 | x 1 Km | = Rs 0.89        | 3.600            |         |         |
| D                                                                       | Local Sand Via Road          | Cum      | Local    | 3.60            |         |          |              |        |  |         |        |                  |                  |         |         |
|                                                                         |                              |          |          | 2.04            | x 20.04 | x 2 Km   | = Rs 70.73   |        |  | x 31.30 | x 1 Km | = Rs 55.24       | 345.140          |         |         |
| 2                                                                       | By Tipper                    |          |          |                 |         |          |              |        |  |         |        |                  |                  |         |         |
| A                                                                       | GSB Via Road                 | Cum      | Siliguri | 8.00            |         |          |              |        |  |         |        |                  |                  |         |         |
|                                                                         |                              |          |          | 4.99            | x 9.83  | x 177 Km | = Rs 2789.43 |        |  | x 23.81 | x 0 Km | = Rs 0.00        | 2960.130         |         |         |
| 3                                                                       | By Truck                     |          |          |                 |         |          |              |        |  |         |        |                  |                  |         |         |
| A                                                                       | Hume Pipe (1000 mm ) Via Rod | Mtr.     | purnea   | 8.00            |         |          |              |        |  |         |        |                  |                  |         |         |
|                                                                         |                              |          |          | 10.00           | x 7.27  | x 53 Km  | = Rs 308.25  |        |  | x 17.60 | x 0 Km | = Rs 0.00        | 745.930          |         |         |
| A1                                                                      | Rate Per Mtr. Pipe           | Mtr.     | purnea   |                 |         |          |              |        |  |         |        |                  |                  |         |         |
|                                                                         |                              |          |          |                 |         |          |              |        |  |         |        |                  |                  | 298.37  | 298.370 |
| B                                                                       | Hume Pipe (600 mm ) Via Road | Mtr.     | purnea   | 8.00            |         |          |              |        |  |         |        |                  |                  |         |         |
|                                                                         |                              |          |          | 25.00           | x 7.27  | x 53 Km  | = Rs 123.30  |        |  | x 17.60 | x 0 Km | = Rs 0.00        | 310.880          |         |         |
| B1                                                                      | Rate Per Mtr. Pipe           | Mtr.     | purnea   |                 |         |          |              |        |  |         |        |                  |                  |         |         |
|                                                                         |                              |          |          |                 |         |          |              |        |  |         |        |                  |                  | 124.35  | 124.350 |

Cost of Haulage Excluding Loading & Unloading as per SO - Subjected to Verification of Lead

*Signature*  
Junior Engineer  
R.W.D. Works Section

Asstt. Engineer  
R.W.D. Works Sub - Division,

*Signature*  
Executive Engineer  
R.W.D. Works



|   | SDB SL No. | MORD Ref No. | DESCRIPTION                                                                                                                                                          | Unit | QTY   | Rate     | Amount In Rs |
|---|------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|----------|--------------|
| I |            |              |                                                                                                                                                                      |      |       |          |              |
|   | 4.4        |              | <b>Carriage Of Material (By Tractor)</b>                                                                                                                             |      |       |          |              |
|   |            |              | Loading and unloading of stone Boulder /stone aggregates sand/ kankar/ moorum                                                                                        |      |       |          |              |
|   |            |              | Placing tractor at loading point loading with front end loader dump on, turning for return trip excluding time for haulage and return trip                           |      |       |          |              |
|   |            |              | Unit = cum                                                                                                                                                           |      |       |          |              |
|   |            |              | Taking output = 2.25 cum                                                                                                                                             |      |       |          |              |
|   |            |              | Time required for                                                                                                                                                    |      |       |          |              |
|   |            | i)           | positioning of tractor at loading point                                                                                                                              | min  | 1 min |          |              |
|   |            | ii)          | Loading by front end loader 1 cum bucket capacity @ 25 cum                                                                                                           | min  | 5 min |          |              |
|   |            |              | Total                                                                                                                                                                |      | 6 min |          |              |
|   |            | a)           | Labour                                                                                                                                                               |      |       |          |              |
|   |            |              | Mate                                                                                                                                                                 |      |       |          |              |
|   |            |              | Mazdoor (Unskilled)                                                                                                                                                  | day  | 0.030 | 397.00   | 11.91        |
|   |            | b)           | Machinery                                                                                                                                                            | day  | 0.720 | 373.00   | 268.56       |
|   |            |              | Tractor 3.60 Tonnes Capacity                                                                                                                                         |      |       |          |              |
|   |            |              | Front end loader 1 cum bucket capacity @ 25 Cum/hour                                                                                                                 | hour | 0.100 | 676.00   | 67.60        |
|   |            |              | Cost for 2.25 cum = a+b+c                                                                                                                                            | hour | 0.083 | 1,419.00 | 117.78       |
|   |            |              | Rate per cum = (a+b+c)/2.25                                                                                                                                          |      |       |          | 465.85       |
|   |            |              | Total per cum                                                                                                                                                        | cum  |       |          | 207.044      |
|   | 1.10       |              | Haulage excluding Loading & Unloading                                                                                                                                | cum  |       |          | 207.044      |
|   |            |              | Haulage of materials by truck excluding cost of Loading, Unloading and stacking                                                                                      |      |       |          |              |
|   |            |              | Unit = 7km                                                                                                                                                           |      |       |          |              |
|   |            |              | Taking output 3.6t load and lead 10km = 36t/km                                                                                                                       |      |       |          |              |
|   |            |              | Case - I : Surfaced Road                                                                                                                                             |      |       |          |              |
|   |            |              | Speed with load : 15km per hour                                                                                                                                      |      |       |          |              |
|   |            |              | Speed while returning empty : 25km per hour                                                                                                                          |      |       |          |              |
|   |            | a)           | Machinery                                                                                                                                                            |      |       |          |              |
|   |            |              | Tractor 3.6 tonnes Capacity                                                                                                                                          |      |       |          |              |
|   |            |              | Haulage with load                                                                                                                                                    | hour | 0.667 | 676.00   | 450.89       |
|   |            |              | Empty return trip                                                                                                                                                    | hour | 0.400 | 676.00   | 270.40       |
|   |            |              | Cost for 36t/km = a+b+c                                                                                                                                              |      |       |          | 721.29       |
|   |            |              | Cost for 1 t.km = a+b/36                                                                                                                                             |      |       |          | 20.040       |
|   |            |              | Total per t per km                                                                                                                                                   |      |       |          | 20.040       |
|   |            |              | Case - II Kutcha Track and Track in River Bed / Nallah Bed and Choe Bed                                                                                              |      |       |          |              |
|   |            |              | Speed with load : 10km per hour                                                                                                                                      |      |       |          |              |
|   |            |              | Speed while returning empty : 15km per hour                                                                                                                          |      |       |          |              |
|   |            | a)           | Machinery                                                                                                                                                            |      |       |          |              |
|   |            |              | Tractor 3.6 tonnes Capacity                                                                                                                                          |      |       |          |              |
|   |            |              | Haulage with load                                                                                                                                                    | hour | 1.00  | 676.00   | 676.00       |
|   |            |              | Empty return trip                                                                                                                                                    | hour | 0.667 | 676.00   | 450.89       |
|   |            |              | Cost for 36t/km = a+b+c                                                                                                                                              |      |       |          | 1126.89      |
|   |            |              | Cost for 1 t.km = a+b/36                                                                                                                                             |      |       |          | 31.300       |
|   |            |              | Total per t per km                                                                                                                                                   |      |       |          | 31.300       |
| 2 |            |              |                                                                                                                                                                      |      |       |          | 31.300       |
|   | 1.1        |              | <b>Carriage Of Material (By Tipper)</b>                                                                                                                              |      |       |          |              |
|   |            |              | Loading and Unloading Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Manual Means                |      |       |          |              |
|   |            | (I)          | Loading of lime, Aggregates, Stone boulder, Brick aggregate, Kankar, Building Rubbish, Crushed Slag Stone for masonry work by manual means including a lead upto 30m |      |       |          |              |
|   |            |              | Unit = cum                                                                                                                                                           |      |       |          |              |
|   |            |              | Taking output = 5.5 cum                                                                                                                                              |      |       |          |              |
|   |            |              | Time required for                                                                                                                                                    |      |       |          |              |
|   |            | (i)          | Position of tipper at loading point                                                                                                                                  |      |       |          |              |
|   |            | (ii)         | loading by front end loader 1 cum bucket capacity @25                                                                                                                |      | 1Min  |          |              |
|   |            | (iii)        | maneuvering, reversing, dumping and turning for return                                                                                                               |      | 13Min |          |              |
|   |            | (iv)         | Waiting time unforeseen contingencies etc.                                                                                                                           |      | 2Min  |          |              |
|   |            |              | Total                                                                                                                                                                |      | 4Min  |          |              |
|   |            | b)           | Machinery                                                                                                                                                            |      | 20Min |          |              |
|   |            |              | Tipper 5.5 Tonnes Capacity                                                                                                                                           |      |       |          |              |
|   |            |              | Front end loader 1 cum bucket capacity @ 25 Cum/hour                                                                                                                 | hour | 0.330 | 1,426.00 | 470.58       |
|   |            |              | Cost for 5.5 cum = a+b+c                                                                                                                                             | hour | 0.330 | 1,419.00 | 468.27       |
|   |            |              |                                                                                                                                                                      |      |       |          | 938.85       |

|      |     |                                                                                 |      |      |         |         |
|------|-----|---------------------------------------------------------------------------------|------|------|---------|---------|
|      |     | Rate per cum = (a+b+c)/5.5                                                      |      |      |         |         |
|      |     | Total per cum                                                                   | cum  |      |         | 170.70  |
| 1.10 |     | Haulage excluding Loading & Unloading                                           | cum  |      |         | 170.700 |
|      |     | Haulage of materials by truck excluding cost of Loading, Unloading and stacking |      |      |         |         |
|      |     | Unit = 1km                                                                      |      |      |         |         |
|      |     | Taking output 10t load and lead 10km = 100t km                                  |      |      |         |         |
|      |     | Case- I : Surfaced Road                                                         |      |      |         |         |
|      |     | Speed with load : 25km per hour                                                 |      |      |         |         |
|      |     | Speed while returning empty : 35km per hour                                     |      |      |         |         |
|      | a)  | Machinery                                                                       |      |      |         |         |
|      |     | Tipper                                                                          |      |      |         |         |
|      |     | Haulage with load                                                               | hour | 0.40 | 1426.00 | 570.40  |
|      |     | Empty return trip                                                               | hour | 0.29 | 1426.00 | 413.54  |
|      |     | Cost for 100t km = a+b+c                                                        |      |      |         | 983.94  |
|      |     | Cost for 1 t km = a+b/100                                                       |      |      |         | 9.830   |
|      |     | Total per t per km                                                              |      |      |         | 9.830   |
|      |     | Case - III Kutcha Track and Track in River Bed / Nallah Bed and Choe Bed        |      |      |         |         |
|      |     | Speed with load : 10km per hour                                                 |      |      |         |         |
|      |     | Speed while returning empty : 15km per hour                                     |      |      |         |         |
|      | a)  | Machinery                                                                       |      |      |         |         |
|      |     | Tipper                                                                          |      |      |         |         |
|      |     | Haulage with load                                                               | hour | 1.00 | 1426.00 | 1426.00 |
|      |     | Empty return trip                                                               | hour | 0.67 | 1426.00 | 955.42  |
|      |     | Cost for 100t km = a+b                                                          |      |      |         | 2381.42 |
|      |     | Cost for 1 t km = a+b+c/100                                                     |      |      |         | 23.81   |
|      |     | Total per t per km                                                              |      |      |         | 23.810  |
| 3    |     | Carriage Of Material (By Truck)                                                 |      |      |         |         |
| 1.10 |     | Haulage excluding Loading & Unloading                                           |      |      |         |         |
|      |     | Haulage of materials by truck excluding cost of Loading, Unloading and stacking |      |      |         |         |
|      |     | Unit = 1km                                                                      |      |      |         |         |
|      |     | Taking output 10t load and lead 10km = 100t / km                                |      |      |         |         |
|      |     | Case- I : Surfaced Road                                                         |      |      |         |         |
|      |     | Speed with load : 25km per hour                                                 |      |      |         |         |
|      |     | Speed while returning empty : 35km per hour                                     |      |      |         |         |
|      | a)  | Machinery                                                                       |      |      |         |         |
|      |     | Truck                                                                           |      |      |         |         |
|      |     | Haulage with load                                                               | hour | 0.40 | 1054.00 | 421.60  |
|      |     | Empty return trip                                                               | hour | 0.29 | 1054.00 | 305.66  |
|      |     | Cost for 100t km = a+b+c                                                        |      |      |         | 727.26  |
|      |     | Cost for 1 t km = a+b/100                                                       |      |      |         | 7.270   |
|      |     | Total per t per km                                                              |      |      |         | 7.270   |
|      |     | Case - III Kutcha Track and Track in River Bed / Nallah Bed and Choe Bed        |      |      |         |         |
|      |     | Speed with load : 10km per hour                                                 |      |      |         |         |
|      |     | Speed while returning empty : 15km per hour                                     |      |      |         |         |
|      | a)  | Machinery                                                                       |      |      |         |         |
|      |     | Truck                                                                           |      |      |         |         |
|      |     | Haulage with load                                                               | hour | 1.00 | 1054.00 | 1054.00 |
|      |     | Empty return trip                                                               | hour | 0.67 | 1054.00 | 706.18  |
|      |     | Cost for 100t km = a+b                                                          |      |      |         | 1760.18 |
|      |     | Cost for 1 t km = a+b+c/100                                                     |      |      |         | 17.60   |
|      |     | Total per t per km                                                              |      |      |         | 17.600  |
| 1.9  |     | Loading and Unloading of Hume Pipes                                             |      |      |         |         |
|      | (i) | Loading of RCC Hume pipes by mechanical means including a lead upto 30 m        |      |      |         |         |
|      | A.  | 1000 / 1200 mm dia Hume pipe                                                    |      |      |         |         |
|      |     | Unit = per pipe                                                                 |      |      |         |         |
|      |     | Taking output = 9 pipes                                                         |      |      |         |         |
|      | a)  | Labour                                                                          |      |      |         |         |
|      |     | Mate                                                                            | day  | 0.02 | 397.00  | 7.94    |
|      |     | Mazdoor (Unskilled)                                                             | day  | 0.50 | 373.00  | 186.50  |
|      | b)  | Machinery                                                                       |      |      |         |         |
|      |     | Truck                                                                           | hour | 0.33 | 1054.00 | 347.82  |
|      |     | Crane                                                                           | hour | 0.33 | 5573.00 | 1839.09 |
|      |     | Cost for 9 pipes = a+b+c+d                                                      |      |      |         | 2381.35 |



|   |     |       |                                                                                                                                                                                                                                                                   |          |       |         |
|---|-----|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|---------|
|   |     |       | Rate per pipe = $(a+b+c)/9$                                                                                                                                                                                                                                       | per p    |       | 264.594 |
|   |     |       | Total per pipe                                                                                                                                                                                                                                                    |          |       | 264.594 |
|   |     | C.    | 600/450 mm dia Hume pipe                                                                                                                                                                                                                                          |          |       |         |
|   |     |       | Unit = per pipe                                                                                                                                                                                                                                                   |          |       |         |
|   |     |       | Taking output = 21 pipe                                                                                                                                                                                                                                           |          |       |         |
|   |     | a)    | Labour                                                                                                                                                                                                                                                            |          |       |         |
|   |     |       | Mate                                                                                                                                                                                                                                                              | day      | 0.02  | 397.00  |
|   |     |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                               | day      | 0.50  | 373.00  |
|   |     | b)    | Machinery                                                                                                                                                                                                                                                         |          |       |         |
|   |     |       | Tractor 3.60 Tonnes Capcally                                                                                                                                                                                                                                      | hour     | 0.33  | 1054.00 |
|   |     |       | Crane                                                                                                                                                                                                                                                             | hour     | 0.33  | 5573.00 |
|   |     |       | Cost for 21 pipes = $a+b+c+d$                                                                                                                                                                                                                                     |          |       | 2381.35 |
|   |     |       | Rate per pipe = $(a+b+c)/21$                                                                                                                                                                                                                                      | per p    |       | 113.398 |
|   |     |       | Total per pipe                                                                                                                                                                                                                                                    |          |       | 113.398 |
|   |     | (iii) | Unloading of RCC Hume pipe by Mechanical means including a lead upto 30 m                                                                                                                                                                                         |          |       |         |
|   |     | A.    | 1000/1200 mm dia RCC Hume pipes                                                                                                                                                                                                                                   |          |       |         |
|   |     |       | Unit = per pipe                                                                                                                                                                                                                                                   |          |       |         |
|   |     |       | Taking output = 9 pipes                                                                                                                                                                                                                                           |          |       |         |
|   |     | a)    | Labour                                                                                                                                                                                                                                                            |          |       |         |
|   |     |       | Mate                                                                                                                                                                                                                                                              | day      | 0.02  | 397.00  |
|   |     |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                               | day      | 0.50  | 373.00  |
|   |     | b)    | Machinery                                                                                                                                                                                                                                                         |          |       |         |
|   |     |       | Truick                                                                                                                                                                                                                                                            | hour     | 0.20  | 1054.00 |
|   |     |       | Crane                                                                                                                                                                                                                                                             | hour     | 0.20  | 5573.00 |
|   |     |       | Cost for 9 pipes = $a+b+c+d$                                                                                                                                                                                                                                      |          |       | 1519.84 |
|   |     |       | Rate per pipe = $(a+b+c)/9$                                                                                                                                                                                                                                       | per p    |       | 168.871 |
|   |     |       | Total per pipe                                                                                                                                                                                                                                                    |          |       | 168.871 |
|   |     | C.    | 600/450 mm dia Hume pipe                                                                                                                                                                                                                                          |          |       |         |
|   |     |       | Unit = per pipe                                                                                                                                                                                                                                                   |          |       |         |
|   |     |       | Taking output = 21 pipes                                                                                                                                                                                                                                          |          |       |         |
|   |     | a)    | Labour                                                                                                                                                                                                                                                            |          |       |         |
|   |     |       | Mate                                                                                                                                                                                                                                                              | day      | 0.020 | 397.00  |
|   |     |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                               | day      | 0.50  | 373.00  |
|   |     | b)    | Machinery                                                                                                                                                                                                                                                         |          |       |         |
|   |     |       | Truick                                                                                                                                                                                                                                                            | hour     | 0.20  | 1054.00 |
|   |     |       | Crane                                                                                                                                                                                                                                                             | hour     | 0.20  | 5573.00 |
|   |     |       | Cost for 21 pipes = $a+b+c+d$                                                                                                                                                                                                                                     |          |       | 1519.84 |
|   |     |       | Rate per pipe = $(a+b+c)/21$                                                                                                                                                                                                                                      | per p    |       | 72.373  |
|   |     |       | Total per pipe                                                                                                                                                                                                                                                    |          |       | 72.373  |
|   |     | 1.9   | Loading and Unloading of Bamboo                                                                                                                                                                                                                                   |          |       |         |
|   |     | (i)   | Loading & unloading Bamboo                                                                                                                                                                                                                                        |          |       |         |
|   |     |       | Unit = per metre                                                                                                                                                                                                                                                  |          |       |         |
|   |     |       | Taking output = per mtr.                                                                                                                                                                                                                                          |          |       |         |
|   |     | a)    | Material                                                                                                                                                                                                                                                          |          |       |         |
|   |     |       | Bamboo =2016/300                                                                                                                                                                                                                                                  | per pipe |       | 6.72    |
|   |     |       | Bamboo Per Mt.                                                                                                                                                                                                                                                    | par mt   |       | 0.96    |
|   |     |       | Total per m                                                                                                                                                                                                                                                       |          |       | 0.960   |
| 4 | 3.3 | 301.5 | Construction of Embankment with material obtained from roadway cutting                                                                                                                                                                                            |          |       |         |
|   |     |       | Construction of Embankment with approved material deposit at site from roadway cutting and excavation from drain and foundation of other structure graded and compacted to meet requirement of Table 300.1 and 300.2 as per Technical Specification Clause 301.5. |          |       |         |
|   |     |       | Unit = cum                                                                                                                                                                                                                                                        |          |       |         |
|   |     |       | Taking output = 100 cum                                                                                                                                                                                                                                           |          |       |         |
|   |     | a)    | Labour                                                                                                                                                                                                                                                            |          |       |         |
|   |     |       | Mate                                                                                                                                                                                                                                                              | day      | 0.02  | 397.00  |
|   |     |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                               | day      | 0.50  | 373.00  |
|   |     | b)    | Machinery                                                                                                                                                                                                                                                         |          |       |         |
|   |     |       | Dozer D-50 for spreading @200 cum per hour                                                                                                                                                                                                                        | hour     | 0.50  | 0.00    |
|   |     |       | Motor Grader for grading @200 Cum per hour                                                                                                                                                                                                                        | hour     | 2.00  | 697.00  |
|   |     |       | Water tanker 6 kl capacity                                                                                                                                                                                                                                        | hour     | 2.00  | 752.00  |
|   |     |       | Three Wheel 80-100 kN Static Roller                                                                                                                                                                                                                               | hour     | 1.25  | 1593.00 |
|   |     | c)    | Material                                                                                                                                                                                                                                                          |          |       |         |
|   |     |       | Water                                                                                                                                                                                                                                                             | kl       | 12.00 | 60.30   |
|   |     |       | Cost for 100 cum = $a+b+c+d+e$                                                                                                                                                                                                                                    |          |       | 5807.29 |



|   |      |       |                                                                                                                                                                                                                                                                                                                                                |      |       |          |           |
|---|------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|----------|-----------|
|   |      |       | Rate per cum = (a+b+c+d)/100                                                                                                                                                                                                                                                                                                                   | cum  |       |          | 58.073    |
|   |      |       | Total per cum                                                                                                                                                                                                                                                                                                                                  | cum  |       |          | 58.073    |
| 5 | 3.5  | 301.5 | Excavation in soil with Dozer with lead upto 100 m                                                                                                                                                                                                                                                                                             |      |       |          |           |
|   | (ii) | (ii)  | 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.                                                                                      |      |       |          |           |
|   |      |       | Unit = cum                                                                                                                                                                                                                                                                                                                                     |      |       |          |           |
|   |      |       | Taking output = 100 cum                                                                                                                                                                                                                                                                                                                        |      |       |          |           |
|   |      | a)    | Labour                                                                                                                                                                                                                                                                                                                                         |      |       |          |           |
|   |      |       | Mate                                                                                                                                                                                                                                                                                                                                           | day  | 0.08  | 397.00   | 31.60     |
|   |      |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                                            | day  | 2.00  | 373.00   | 822.00    |
|   |      | b)    | Machinery                                                                                                                                                                                                                                                                                                                                      |      |       |          |           |
|   |      |       | Dozer D -50 for spreading @200 cum per hour                                                                                                                                                                                                                                                                                                    | hour | 3.60  | 4326.00  | 15,573.60 |
|   |      |       | Cost for 100 cum = a+b+c+d+e                                                                                                                                                                                                                                                                                                                   |      |       |          | 16427.20  |
|   |      |       | Rate per cum = (a+b+c+d)/180                                                                                                                                                                                                                                                                                                                   | cum  |       |          | 91.262    |
|   |      |       | Total per cum                                                                                                                                                                                                                                                                                                                                  | cum  |       |          | 91.260    |
| 6 | 3.3  | 301.5 | 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 Table 300.1 and 300.2 with a lead of 1000 m as per Technical                                                                                |      |       |          |           |
|   |      |       | Unit = cum                                                                                                                                                                                                                                                                                                                                     |      |       |          |           |
|   |      |       | Rate item no. 3.3 Clause 301.5                                                                                                                                                                                                                                                                                                                 |      |       |          | 58.073    |
|   |      |       | Rate item no. 3.5(ii) Clause 301.5                                                                                                                                                                                                                                                                                                             |      |       |          | 91.260    |
|   |      |       | Royalty Compensation for earth taken from private land                                                                                                                                                                                                                                                                                         |      |       |          | 35.250    |
|   |      |       | Carriage of Earth by Tractor Lead 1 K.M.                                                                                                                                                                                                                                                                                                       |      |       |          | 274.420   |
|   |      |       | Total Cost of 1 cum =                                                                                                                                                                                                                                                                                                                          |      |       |          | 459.003   |
|   |      |       | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                                               |      |       |          | 4.590     |
|   |      |       | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                                                   |      |       |          | 82.621    |
|   |      |       | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                                        | cum  | 1.00  | 35.25    | 3.53      |
|   |      |       | Total Cost of 1 cum 1% Cess & 18 % GST =                                                                                                                                                                                                                                                                                                       |      |       |          | 549.743   |
| 7 | 4.5  |       | Providing and Laying of Brick Bats                                                                                                                                                                                                                                                                                                             |      |       |          |           |
|   |      |       | Placing tractor at loading point loading with front end loader dumpoing ,turning for return trip excludng time for haulage and return trip                                                                                                                                                                                                     |      |       |          |           |
|   |      |       | Unit = cum                                                                                                                                                                                                                                                                                                                                     |      |       |          |           |
|   |      |       | Taking output = 2.83 cum                                                                                                                                                                                                                                                                                                                       |      |       |          |           |
|   |      | a)    | Labour                                                                                                                                                                                                                                                                                                                                         |      |       |          |           |
|   |      |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                                            | day  | 2.170 | 373.00   | 809.41    |
|   |      | b)    | Materials                                                                                                                                                                                                                                                                                                                                      |      |       |          |           |
|   |      |       | Brick Bats                                                                                                                                                                                                                                                                                                                                     | cum  | 3.396 | 1,081.00 | 3671.08   |
|   |      |       | Total (a+b) =                                                                                                                                                                                                                                                                                                                                  |      |       |          | 4480.49   |
|   |      |       | Total (a+b+c) =                                                                                                                                                                                                                                                                                                                                |      |       |          | 4480.49   |
|   |      | d)    | Carriage                                                                                                                                                                                                                                                                                                                                       |      |       |          |           |
|   |      |       | Brick Bats                                                                                                                                                                                                                                                                                                                                     | cum  | 3.396 | 521.97   | 1772.61   |
|   |      |       | TOTAL                                                                                                                                                                                                                                                                                                                                          |      |       |          | 6253.10   |
|   |      |       | Rate per cum = (a+b+c+d)/2.83                                                                                                                                                                                                                                                                                                                  | cum  |       |          | 2209.576  |
|   |      |       | Total per cum                                                                                                                                                                                                                                                                                                                                  | cum  |       |          | 2209.576  |
|   |      |       | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                                               |      |       |          | 22.096    |
|   |      |       | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                                                   |      |       |          | 397.724   |
|   |      |       | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                                        | cum  | 1.20  | 1,081.00 | 129.72    |
|   |      |       | Total Cost of 1 cum 1% Cess & 18 % GST =                                                                                                                                                                                                                                                                                                       |      |       |          | 2,759.115 |
| 8 | 4.1  | 401   | PAVEMENT CRUST LAYERS                                                                                                                                                                                                                                                                                                                          |      |       |          |           |
|   |      |       | For Grading II Material                                                                                                                                                                                                                                                                                                                        |      |       |          |           |
|   |      |       | Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement 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. |      |       |          |           |
|   |      | (ii)  | For Grading II Material                                                                                                                                                                                                                                                                                                                        |      |       |          |           |
|   |      |       | Unit = cum                                                                                                                                                                                                                                                                                                                                     |      |       |          |           |
|   |      |       | Taking output = 300 cum                                                                                                                                                                                                                                                                                                                        |      |       |          |           |
|   |      | a)    | Labour                                                                                                                                                                                                                                                                                                                                         |      |       |          |           |
|   |      |       | Mate                                                                                                                                                                                                                                                                                                                                           | day  | 0.48  | 397.00   | 190.56    |
|   |      |       | Mazdoor (Skilled)                                                                                                                                                                                                                                                                                                                              | day  | 2.00  | 472.00   | 944.00    |
|   |      |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                                            | day  | 10.00 | 373.00   | 3730.00   |

|   |          |      |                                                                                                                                                                                                                                                                                                            |      |        |         |            |
|---|----------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|---------|------------|
|   |          | b)   | Machinery                                                                                                                                                                                                                                                                                                  |      |        |         | 4864.56    |
|   |          |      | Tractor mounted grader arrangement                                                                                                                                                                                                                                                                         | hour | 12.00  | 676.00  | 8112.00    |
|   |          |      | Three wheel 80-100 kN static roller @ 10 cum per hour                                                                                                                                                                                                                                                      | hour | 30.00  | 1593.00 | 47790.00   |
|   |          |      | Tractor with Rotavator 25 cum per hour                                                                                                                                                                                                                                                                     | hour | 12.00  | 693.00  | 8316.00    |
|   |          |      | Water tanker 6 kl capacity                                                                                                                                                                                                                                                                                 | hour | 5.00   | 752.00  | 3760.00    |
|   |          | c)   | Material                                                                                                                                                                                                                                                                                                   |      |        |         | 67978.00   |
|   |          |      | Well graded granular sub-base material as per Table 400.1                                                                                                                                                                                                                                                  |      |        |         |            |
|   |          |      | G.S.B.                                                                                                                                                                                                                                                                                                     | cum  | 1.28   | 167.03  | 213.00     |
|   |          |      | Cost of 300 cum without Carriage = (a+b+c+d+e)                                                                                                                                                                                                                                                             |      |        |         | 73056.36   |
|   |          |      | A) Basic Cost per cum = (a+b+c+d+e)/300                                                                                                                                                                                                                                                                    | cum  |        |         | 243.521    |
|   |          |      | CARRIAGE                                                                                                                                                                                                                                                                                                   |      |        |         |            |
|   |          |      | G.S.B.                                                                                                                                                                                                                                                                                                     | Cum  | 414.00 | 2960.13 | 1225493.82 |
|   |          |      | Carriage cost of 300 cum                                                                                                                                                                                                                                                                                   |      |        |         | 1225493.82 |
|   |          |      | B) Carriage cost per cum                                                                                                                                                                                                                                                                                   |      |        |         | 4084.98    |
|   |          |      | Rate per cum = (A+B)                                                                                                                                                                                                                                                                                       | CUM  |        |         | 4328.501   |
|   |          |      | Total per cum                                                                                                                                                                                                                                                                                              | CUM  |        |         | 4328.501   |
|   |          |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                           |      |        |         | 43.285     |
|   |          |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                               |      |        |         | 779.130    |
|   |          |      | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                    | cum  | 1.28   | 167.03  | 21.38      |
|   |          |      | Total Cost of 1 cum 1% Cess & 18 % GST =                                                                                                                                                                                                                                                                   |      |        |         | 5,172.296  |
| 9 | 9.3      | 1100 | 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. |      |        |         |            |
|   |          | B.   | 1000 MM DIA (Single Row)                                                                                                                                                                                                                                                                                   |      |        |         |            |
|   |          | a)   | Material                                                                                                                                                                                                                                                                                                   |      |        |         |            |
|   |          |      | RCC NP3 pipe including collar                                                                                                                                                                                                                                                                              | m    | 7.50   | 5787.23 | 43404.23   |
|   |          | b)   | Labour                                                                                                                                                                                                                                                                                                     |      |        |         |            |
|   |          |      | Mate                                                                                                                                                                                                                                                                                                       | day  | 0.09   | 397.00  | 35.73      |
|   |          |      | Mason ( 1st class )                                                                                                                                                                                                                                                                                        | day  | 0.25   | 503.00  | 125.75     |
|   |          |      | Mazdoor ( Unskilled )                                                                                                                                                                                                                                                                                      | day  | 2.00   | 373.00  | 746.00     |
|   |          |      | Cost for 7.5m = ( a+b+c )                                                                                                                                                                                                                                                                                  |      |        |         | 44311.71   |
|   |          |      | A) Basic Cost per m = (a+b)/7.5                                                                                                                                                                                                                                                                            | m    |        |         | 5908.23    |
|   |          |      | Rate per m of Pipe                                                                                                                                                                                                                                                                                         |      |        |         | 5908.23    |
|   |          | (d)  | CARRIAGE COST                                                                                                                                                                                                                                                                                              |      |        |         |            |
|   |          |      | NP3 Pipe                                                                                                                                                                                                                                                                                                   | m    | 7.5    | 298.37  | 2237.78    |
|   |          |      | Carriage cost of 7.5 m                                                                                                                                                                                                                                                                                     |      |        |         | 2237.78    |
|   |          |      | Carriage cost per m                                                                                                                                                                                                                                                                                        | m    |        |         | 298.37     |
|   |          |      | Rate per m with Carriage                                                                                                                                                                                                                                                                                   | m    |        |         | 6,206.598  |
|   |          |      | Total per m                                                                                                                                                                                                                                                                                                | m    |        |         | 6,206.598  |
|   |          |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                           |      |        |         | 62.066     |
|   |          |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                               |      |        |         | 1,117.188  |
|   |          |      | Total Cost of 1 mtr. 1% Cess & 18 % GST =                                                                                                                                                                                                                                                                  |      |        |         | 7,385.852  |
| 2 |          | C.   | 600 MM DIA (Single Row)                                                                                                                                                                                                                                                                                    |      |        |         |            |
|   |          | a)   | Material                                                                                                                                                                                                                                                                                                   |      |        |         |            |
|   |          |      | RCC NP3 pipe including collar                                                                                                                                                                                                                                                                              | m    | 7.50   | 2310.00 | 17325.00   |
|   |          | b)   | Labour                                                                                                                                                                                                                                                                                                     |      |        |         |            |
|   |          |      | Mate                                                                                                                                                                                                                                                                                                       | day  | 0.04   | 397.00  | 15.88      |
|   |          |      | Mason ( 1st class )                                                                                                                                                                                                                                                                                        | day  | 0.12   | 503.00  | 60.36      |
|   |          |      | Mazdoor ( Unskilled )                                                                                                                                                                                                                                                                                      | day  | 0.96   | 373.00  | 358.08     |
|   |          |      | Cost of 7.5m = (a+b+c+d)                                                                                                                                                                                                                                                                                   |      |        |         | 17759.32   |
|   |          |      | A) Basic Cost per m = (a+b)/7.5                                                                                                                                                                                                                                                                            | m    |        |         | 2367.91    |
|   |          |      | Rate per m of Pipe                                                                                                                                                                                                                                                                                         |      |        |         | 2367.91    |
|   |          |      | CARRIAGE COST                                                                                                                                                                                                                                                                                              |      |        |         |            |
|   |          |      | NP3 Pipe                                                                                                                                                                                                                                                                                                   | m    | 7.5    | 124.35  | 932.63     |
|   |          |      | Carriage cost of 7.5 m                                                                                                                                                                                                                                                                                     |      |        |         | 932.63     |
|   |          |      | B) Carriage cost per m                                                                                                                                                                                                                                                                                     | m    |        |         | 124.35     |
|   |          |      | Rate per m with Carriage                                                                                                                                                                                                                                                                                   | m    |        |         | 2,492.260  |
|   |          |      | Total per m                                                                                                                                                                                                                                                                                                | m    |        |         | 2,492.260  |
|   |          |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                           |      |        |         | 24.923     |
|   |          |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                               |      |        |         | 448.607    |
|   |          |      | Total Cost of 1 mtr. 1% Cess & 18 % GST =                                                                                                                                                                                                                                                                  |      |        |         | 2,965.789  |
| 3 | 5.7.40.1 |      | Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutti etc. all complete as per approved design, specification and direction E/I.                                                                                                                  |      |        |         |            |



|   |       |                                                                                                                                                                                                                                       |          |       |        |         |
|---|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|---------|
|   |       | Unit = Per % Nos.                                                                                                                                                                                                                     |          |       |        |         |
|   |       | (A) For Filling & Stitching & Stacking                                                                                                                                                                                                |          |       |        |         |
|   |       | Labour                                                                                                                                                                                                                                |          |       |        |         |
|   |       | Skilled Labour for filling sand into bags and sewing                                                                                                                                                                                  | No.      | 2.00  | 472.00 | 944.00  |
|   |       | sutali                                                                                                                                                                                                                                | kg       | 0.50  | 20.59  | 10.30   |
|   |       | (B) Labour Rate For Carrying & Placing filed E.C. Bags.                                                                                                                                                                               |          |       |        |         |
|   |       | Labour                                                                                                                                                                                                                                |          |       |        |         |
|   |       | Skilled Labour for Carrying filed bags and placing to work site                                                                                                                                                                       | No.      | 3.00  | 472.00 | 1416.00 |
|   |       | TOTAL =                                                                                                                                                                                                                               |          |       |        | 2370.30 |
|   |       | Per % Nos. (B) =                                                                                                                                                                                                                      |          |       | Say.   | 2370.30 |
|   |       | Rate per bag (A+B) = /100                                                                                                                                                                                                             |          |       |        | 23.70   |
|   |       | (C) Cost of empty cement bag & cost of sand                                                                                                                                                                                           | each     |       |        | 11.11   |
|   |       | (D) Carriage cost                                                                                                                                                                                                                     |          |       |        |         |
|   |       | Tractor with trolley                                                                                                                                                                                                                  | cum      | 0.034 | 345.14 | 11.73   |
|   |       | (G) Total = (A+B+C+D) =                                                                                                                                                                                                               |          |       |        | 46.55   |
|   |       | Labour Cess @ 1%                                                                                                                                                                                                                      |          |       |        | 0.465   |
|   |       | G.S.T. @ 18%                                                                                                                                                                                                                          |          |       |        | 8.379   |
|   |       | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                               | cum      | 0.034 | 144.75 | 0.49    |
|   |       | Total Cost of 1 E.C. Bag 1% Cess & 18 % GST =                                                                                                                                                                                         |          |       |        | 55.882  |
| 4 | 5.7.9 | Supply Labour for fitting and fixing 62 mm to 75 mm dia bamboo runners in position at every verticle pile with 150 mm long nails or 38 swg G. I. wire including cost of G.I. or nails complete job as per specification and direction |          |       |        |         |
|   |       | Unit = Per mt.                                                                                                                                                                                                                        |          |       |        |         |
|   |       | Taking Out Put = 30.50 m                                                                                                                                                                                                              |          |       |        |         |
|   | (i)   | Materials                                                                                                                                                                                                                             |          |       |        |         |
|   |       | Bamboo                                                                                                                                                                                                                                | m        | 30.50 | 20.21  | 616.41  |
|   |       | Nails                                                                                                                                                                                                                                 | kg       | 0.50  | 108.00 | 54.00   |
|   | (ii)  | Labour                                                                                                                                                                                                                                |          |       |        |         |
|   |       | Carpenter Gr -II                                                                                                                                                                                                                      | No.      | 0.125 | 531.00 | 66.38   |
|   |       | Unskilled Labour                                                                                                                                                                                                                      | No.      | 0.25  | 373.00 | 93.25   |
|   |       | Rate for 30.5 m                                                                                                                                                                                                                       |          |       |        | 830.04  |
|   |       | TOTAL =                                                                                                                                                                                                                               |          |       |        | 830.04  |
|   |       | Rate per mt                                                                                                                                                                                                                           |          |       |        | 27.21   |
|   | (iii) | Carriage cost                                                                                                                                                                                                                         |          |       |        |         |
|   |       | bamboo                                                                                                                                                                                                                                | mt       | 1     | 3.00   | 3       |
|   |       | Total Cost with Carriage                                                                                                                                                                                                              |          |       |        | 30.21   |
|   |       | Labour Cess @ 1%                                                                                                                                                                                                                      |          |       |        | 0.302   |
|   |       | G.S.T. @ 18%                                                                                                                                                                                                                          |          |       |        | 5.439   |
|   |       | Total Cost of 1 mtr. 1% Cess & 18 % GST =                                                                                                                                                                                             |          |       |        | 35.955  |
| 5 | 5.7.7 | Labour for cutting 62 mm to 75 mm dia bamboo piles in size and making shoes and driving etc. complete bob as per specification and direction E/I.                                                                                     |          |       |        |         |
|   |       | Unit = Per mt.                                                                                                                                                                                                                        |          |       |        |         |
|   |       | Taking Out Put = 30.50 m                                                                                                                                                                                                              |          |       |        |         |
|   |       | Assurning                                                                                                                                                                                                                             |          |       |        |         |
|   |       | 20 no pile sunk 1.525 m deeps                                                                                                                                                                                                         |          |       |        |         |
|   |       | Total depth sunk 30.50 m                                                                                                                                                                                                              |          |       |        |         |
|   | (i)   | Materials                                                                                                                                                                                                                             |          |       |        |         |
|   |       | Bamboo                                                                                                                                                                                                                                | m        | 30.50 | 20.21  | 616.41  |
|   | (i)   | Labour                                                                                                                                                                                                                                |          |       |        |         |
|   |       | Carpenter Gr -II                                                                                                                                                                                                                      | No.      | 0.25  | 531.00 | 132.75  |
|   |       | Unskilled Labour for piling                                                                                                                                                                                                           | No.      | 2.50  | 373.00 | 932.5   |
|   |       | Rate for 30.5 m                                                                                                                                                                                                                       |          |       |        | 1681.66 |
|   |       | Total                                                                                                                                                                                                                                 |          |       |        | 1681.66 |
|   |       | Rate for 1 m                                                                                                                                                                                                                          |          |       |        | 55.14   |
|   |       | Carriage Cost of Bamboo                                                                                                                                                                                                               | per mtr. |       |        | 3.00    |
|   |       | Total Cost with Carriage                                                                                                                                                                                                              |          |       |        | 58.14   |
|   |       | Labour Cess @ 1%                                                                                                                                                                                                                      |          |       |        | 0.581   |
|   |       | G.S.T. @ 18%                                                                                                                                                                                                                          |          |       |        | 10.465  |
|   |       | Total Cost of 1 mtr. 1% Cess & 18 % GST =                                                                                                                                                                                             |          |       |        | 69.182  |



|   |        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       |           |
|---|--------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-----------|
| 6 |        |      | Labour for fitting and and fixing Steel Drum 300 mm dia 1.2 m high as per specification and direction                                                                                                                                                                                                                                                                                                                                               |      |       |           |
|   |        |      | (Assuming Per Mtr. = $3.14 \times 0.30 = 0.942$ mtr.)                                                                                                                                                                                                                                                                                                                                                                                               |      |       |           |
|   |        |      | Area of Assuming in one Drum = $0.942 \times 1.20 = 1.130$ Sqm                                                                                                                                                                                                                                                                                                                                                                                      |      |       |           |
|   |        |      | One Sqm sheet Cost = $127.80 / 1.130 = 113.12$ Cost                                                                                                                                                                                                                                                                                                                                                                                                 |      |       |           |
|   |        |      | Unit = per sqm                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |       |           |
|   |        |      | Taking Out = 100 sqm                                                                                                                                                                                                                                                                                                                                                                                                                                |      |       |           |
|   |        | a    | Labour                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |       |           |
|   |        |      | Hammer man                                                                                                                                                                                                                                                                                                                                                                                                                                          | No.  | 4.00  | 531.00    |
|   |        |      | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                                                                                                                                                 | No.  | 4.00  | 373.00    |
|   |        |      | Carpenter 1st Class                                                                                                                                                                                                                                                                                                                                                                                                                                 | No.  | 4.00  | 503.00    |
|   |        | b    | Materials                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |           |
|   |        |      | Nails                                                                                                                                                                                                                                                                                                                                                                                                                                               | kg   | 5.00  | 170.13    |
|   |        |      | Steel Drum sheet                                                                                                                                                                                                                                                                                                                                                                                                                                    | Nos. | 88.5  | 170.13    |
|   |        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 21535.160 |
|   |        |      | Rate Per m = $(a+b+c)/100$                                                                                                                                                                                                                                                                                                                                                                                                                          |      |       |           |
|   |        |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |       |           |
|   |        |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |       |           |
|   |        |      | Total Cost of 1 mtr. 1% Cess & 18 % GST =                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |           |
|   |        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 256.268   |
|   | 5.7.8  | WRD  | Labour for fitting and and fixing split bamboo woven chachari in position with 20 swg G.I. wire of 75 mm to 100 mm long nails alternatively including cost of G.I. wire or nails complete job as per specification and direction of E/I.                                                                                                                                                                                                            |      |       |           |
|   |        |      | (Assuming strip of $3.05 \times 3.05 = 9.30$ sqm                                                                                                                                                                                                                                                                                                                                                                                                    |      |       |           |
|   |        |      | Unit = per sqm                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |       |           |
|   |        |      | Taking Out = 9.30 sqm                                                                                                                                                                                                                                                                                                                                                                                                                               |      |       |           |
|   |        | a    | Labour                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |       |           |
|   |        |      | Carpenter Gr-II                                                                                                                                                                                                                                                                                                                                                                                                                                     | No.  | 1.00  | 531.00    |
|   |        |      | Mazdoor (Unskilled) for pilling                                                                                                                                                                                                                                                                                                                                                                                                                     | No.  | 1.00  | 373.00    |
|   |        | b    | Materials                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |           |
|   |        |      | Bamboo                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mtr. | 10.00 | 188.00    |
|   |        |      | Nails                                                                                                                                                                                                                                                                                                                                                                                                                                               | kg   | 0.25  | 108.00    |
|   |        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 2811.000  |
|   |        |      | Rate Per m = $(a+b+c)/9.30$                                                                                                                                                                                                                                                                                                                                                                                                                         |      |       |           |
|   |        |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |       |           |
|   |        |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |       |           |
|   |        |      | Total Cost of 1 mtr. 1% Cess & 18 % GST =                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |           |
|   |        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 359.687   |
|   | 5.7.50 |      | Providing laying & filling Geo bags of size 1m X 0.700m (Type A) 300 GSM nonwoven weight 420 gm volume of filled bag 0.070 cum Weight of filled Geo bag 126 kg with local sand including stitching in four lines by approved Nylon thread with Staching machine and generator, stacking and placing after loading, Unloading and carriage with the help of Trolley within 150 mtr. lead and all complete as per specification and direction of E/I. |      |       |           |
|   |        |      | Unit = Each Bag                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       |           |
|   |        |      | Taking Out = 40 Nso.                                                                                                                                                                                                                                                                                                                                                                                                                                |      |       |           |
|   |        |      | Labour                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |       |           |
|   |        |      | Unskilled Loading For filling stacking                                                                                                                                                                                                                                                                                                                                                                                                              | nos  | 2     | 373.00    |
|   |        |      | Skilled labour for stacking                                                                                                                                                                                                                                                                                                                                                                                                                         | nos  | 0.33  | 472.00    |
|   |        |      | Unskild labour for carring and placing                                                                                                                                                                                                                                                                                                                                                                                                              | nos  | 4.00  | 373.00    |
|   |        |      | Mate                                                                                                                                                                                                                                                                                                                                                                                                                                                | nos  | 0.25  | 397.00    |
|   |        |      | Stiching Machine                                                                                                                                                                                                                                                                                                                                                                                                                                    | day  | 0.33  | 50.00     |
|   |        |      | Tractor with trolley                                                                                                                                                                                                                                                                                                                                                                                                                                | day  | 1.00  | 676.00    |
|   |        |      | Generator 3KVA                                                                                                                                                                                                                                                                                                                                                                                                                                      | hrs  | 20.67 | 74.00     |
|   |        |      | Total                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |       | 1529.58   |
|   |        |      | Rate per bag (total/40) (A)                                                                                                                                                                                                                                                                                                                                                                                                                         |      |       |           |
|   |        |      | charge for placing & dumping                                                                                                                                                                                                                                                                                                                                                                                                                        |      |       |           |
|   |        | (II) | unskilled labour for loading unloading & dumping                                                                                                                                                                                                                                                                                                                                                                                                    |      |       |           |
|   |        |      | Mate                                                                                                                                                                                                                                                                                                                                                                                                                                                | nos  | 16    | 373.00    |
|   |        |      | Tractor with trolley                                                                                                                                                                                                                                                                                                                                                                                                                                | nos  | 1     | 397.00    |
|   |        |      | Total                                                                                                                                                                                                                                                                                                                                                                                                                                               | each | 4     | 676.00    |
|   |        |      | Rate per bag (Total/256) (B)                                                                                                                                                                                                                                                                                                                                                                                                                        |      |       |           |
|   |        |      | Matroials                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |           |
|   |        |      | cost of Geo Bag                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       |           |
|   |        |      | Total cost (a+b+c)                                                                                                                                                                                                                                                                                                                                                                                                                                  | each | 1     | 124.00    |
|   |        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 278.764   |

|          |      |                                                                                                                                                                                                                                                                                                                          |     |        |        |           |
|----------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--------|--------|-----------|
|          |      | Rate per bag                                                                                                                                                                                                                                                                                                             |     |        |        | 278.764   |
|          |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                         |     |        |        | 2.788     |
|          |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                             |     |        |        | 50.178    |
|          |      | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                  | cum | 0.070  | 144.75 | 1.01      |
|          |      | Total Cost of 1 Geo Bag 1% Cess & 18 % GST =                                                                                                                                                                                                                                                                             |     |        |        | 332.739   |
| 5.7.40.3 |      | Labour for filling empty cement bags with local sand, stitching the bags and pitching in Nylon crate of size (1m x 1m x 1m) with a lead of 150 m including supply of suti etc. and placing the filed crates in water portion within a lead 30 m all complete as per approved design, specification and direction of E/I. |     |        |        |           |
|          |      | Unit = Each N.C.                                                                                                                                                                                                                                                                                                         |     |        |        |           |
|          | (i)  | (i) Labour Cost for filling bags in one Nylon crate in dry portion                                                                                                                                                                                                                                                       | No. | 1      | 472.00 | 411.00    |
|          | (ii) | (i) Labour Cost for filling bags in one Nylon crate in dry portion                                                                                                                                                                                                                                                       | No. | 1      | 472.00 | 611.00    |
|          |      | (II) Placing of filed N/C with 30 m lead in water portion                                                                                                                                                                                                                                                                |     |        |        |           |
|          |      | Labour                                                                                                                                                                                                                                                                                                                   |     |        |        |           |
|          |      | Mate                                                                                                                                                                                                                                                                                                                     | No. | 0.37   | 397.00 | 146.89    |
|          |      | Labour(Skilled )                                                                                                                                                                                                                                                                                                         | No. | 1.00   | 472.00 | 472.00    |
|          |      | Labour(Unskilled )                                                                                                                                                                                                                                                                                                       | No. | 1.00   | 373.00 | 373.00    |
|          |      |                                                                                                                                                                                                                                                                                                                          |     |        |        | 2013.89   |
|          |      | Hence, Total Labour for 100 Cft.                                                                                                                                                                                                                                                                                         |     |        |        | 2013.89   |
|          |      | Taking one E.C. Bags to contain 1.20 Cft. Of sand                                                                                                                                                                                                                                                                        |     |        |        |           |
|          | (ii) | Hence, labour rate for placing one filed N.C.                                                                                                                                                                                                                                                                            |     | 356.49 |        | 356.49    |
|          |      | Hence rate [er mu;pm crate om water portion (I+II)                                                                                                                                                                                                                                                                       |     |        | Say.   | 967.49    |
|          |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                         |     |        |        | 9.675     |
|          |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                             |     |        |        | 174.148   |
|          |      | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                  | cum | 0.034  | 144.75 | 0.49      |
|          |      | Total Cost of 1 E.C.1% Cess & 18 % GST =                                                                                                                                                                                                                                                                                 |     |        |        | 1,151.803 |
| (I)      | 800  | local sand Filling in foundation trenches as per drawing and technical specification                                                                                                                                                                                                                                     |     |        |        |           |
|          |      | local sand Filling in foundation trenches as per drawing and technical specification Clause 305.3.9                                                                                                                                                                                                                      |     |        |        |           |
|          | I.   | Sand filling                                                                                                                                                                                                                                                                                                             |     |        |        |           |
|          |      | Unit = cum                                                                                                                                                                                                                                                                                                               |     |        |        |           |
|          | a)   | Labour                                                                                                                                                                                                                                                                                                                   |     |        |        |           |
|          |      | Mate                                                                                                                                                                                                                                                                                                                     | day | 0.01   | 397.00 | 3.97      |
|          |      | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                      | day | 0.30   | 373.00 | 111.90    |
|          | b)   | Material                                                                                                                                                                                                                                                                                                                 |     |        |        |           |
|          |      | Sand (assuming 20 per cent voids)                                                                                                                                                                                                                                                                                        | cum | 1.20   | 144.75 | 173.70    |
|          |      | Overheads @ 6 % on (a)                                                                                                                                                                                                                                                                                                   |     |        |        | 17.37     |
|          |      |                                                                                                                                                                                                                                                                                                                          |     |        |        | 306.94    |
|          |      | <u>CARRIAGE COST</u>                                                                                                                                                                                                                                                                                                     |     |        |        |           |
|          |      | sand                                                                                                                                                                                                                                                                                                                     | Cum | 1.2    | 345.14 | 414.17    |
|          |      | Rate per cum = a+b+c                                                                                                                                                                                                                                                                                                     |     |        |        | 721.11    |
|          |      | Total Cost including 1 % LABOUR CESS                                                                                                                                                                                                                                                                                     |     |        |        | 7.21      |
|          |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                             |     |        |        | 129.80    |
|          |      | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                  |     |        |        | 0.49      |
|          |      | Total Cost of 1 E.C.1% Cess & 18 % GST =                                                                                                                                                                                                                                                                                 |     |        |        | 1272.78   |