

HSR -2024

ANALYSIS

PUTTALAM DISTRICT

Ministry of Transport and Highways
Sri Lanka

HSR - 2024
Engineering Division
Ministry of Transport and Highways

HSR ANALYSIS – 2024

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ROAD DEVELOPMENT AUTHORITY – HSR ANALYSIS (METRIC)**GENERAL NOTES**

1. This **Highway Schedule of Rates (HSR)** becomes operative from **01.01.2024**. HSR has given the maximum rates adoptable in the estimation of projects. In case, the resources are available at lesser rates depending on area and locality, the Engineer shall use such rates in the BOQ for the preparation of Estimates.
2. Basic prices of materials used to derive the rates in this schedule are considered **without the Value Added Tax (VAT)**.
3. The rates are not included with overheads and profits component. For the purpose of preparation of Engineer's Estimates, these basic rates should be added with 20% for road works and 20% for bridge works. Provisions should be made separately in the estimate for the payment of **VAT**.
4. Work has to be carried out as per **(i) Standard Specifications for Construction & Maintenance of Roads and Bridges (S.S.C.M.)**, issued by the CIDA and **(ii) Road Maintenance Manual** issued by the RDA.
5. The description of all items in the bills shall briefly conform to that in the relevant items appearing in this schedule so as to avoid any ambiguity. Control of works, control of material and measuring & paying shall be carried out as per S.S.C.M. 104 to 106.6. However, where provision for control of traffic and safety measures for the road users are not included under such items, rate shall be provided separately and paid under the relevant HSR B0-704/B0-705 or on approved S.S.RR or on closely monitored work.
6. The basic labour rates given in this schedule are inclusive of 12% E.P.F., 3% E.T.F., and the special allowances ordered by the Government.
7. **For works under Force Account, in exceptional cases, Sk'A" labour at higher rates than that given in this schedule may be engaged on adhoc basis with the DG/RDA's prior approval only.**
8. For items where cement and/or steel are used, the transport of same is included in the basic price. The rate of Emulsion per liter given in the HSR is exclusive of transport and shall be paid separately.
9. All cement to be used for Concrete, Structural and Masonry/Rendering work shall be of approved quality and shall conform to the specifications required by the Road Development Authority.
10. Materials from approved manufacturers only shall be used in all works (S.S.C.M. 1700). The borrow materials such as soil, aggregate and materials such as Bitumen binder etc. shall be subjected for quality assurance by sample checks during the construction as per S.S.C.M. 1602
11. **S.S.RR. and day work items** shall be approved by the Provincial Director, subject to the following conditions:
 - (a) Any **S.S.R.** where the amount of respective B.O.Q. item does not exceed Rs. **500,000/-**, irrespective of whether the S.S.R. is based on HSR, or not.
 - (b) All the **S.S.RR** and day work items, which are based on HSR, irrespective of the amount of B.O.Q. item, or as per directives issued by the Director General/R.D.A. during the year.
12. Concrete mixers should be used for mixing of all reinforced concrete or concrete specified by their Grade and in other concrete mixing exceeding 3 cu.m, unless otherwise directed. Weigh batch mixers shall be used for all concrete specified on Grade 25 and above.
13. In respect of all works involving improvements to existing roads, contractor shall control traffic as per S.S.C.M. 103.
14. **Hire Charges**
 1. Hire charges given in this schedule are exclusive of overhead and profit component and taxes.
 2. Actual work done in a day in machine hours (mhr) has to be paid. The minimum mhr/Day is 4 machine hours and if the actual work done is less than 4 mhr then the cost for 4 mhr is to be paid without the cost of fuel.
 3. Plant hire charges not included in the HSR could be obtained from RDA schedule of hire charges for Machinery & Equipment given from Director/Mechanical. Otherwise procurement procedure as in General Notes Clause No. 18 should be followed.

4. Hire charges given in this schedule are provided by the Director/ Mechanical, RDA based on the fuel rates prevailed at the time of publication (Rs. 371.00 for Petrol and Rs. 363.00 for Diesel). These Hire charges should be adjusted with the price fluctuations of fuel by referring to the following formula.

$$\text{Modified Hire Charge} = R [1 + (n - n_0)/r]$$

Where,

R = Hire charge issued in this HSR

r = Rate of fuel usage in l/km or l/hr

n = New price of fuel issued by the Ceylon Petroleum Corporation

n₀ = Price of fuel considered for the hire charge as mentioned in this HSR

15. In the case of building construction works, rates in BSR-2024 prices prepared by the State Organizations on building construction, shall be adopted.

16. S.S.RR. approved with rates/prices applicable for a particular year, may be adopted for subsequent year/s where necessary, provided that only rates/prices are revised as applicable to the relevant year.

17. **Materials available/recovered during execution of works:**

All suitable earth, rock, steel or precast material and components available or recovered from road way excavations or demolition works shall be utilized in construction work with the approval of the Engineer and surplus disposed as directed. In the case of bridge re-construction works all bridge components such as steel girders, deck plates, and reinforcements etc., which are dismantled, shall be recovered and repaired for re-use. These items should be taken to an inventory by the Engineer and kept in stock under good care for reuse.

Separate items shall be included in the Estimates for reuse of such materials at recovery cost.

18. **Procurement:**

In cases where the resources have to be procured by tender procedure, the **Tender Committee shall take decisions** to make such awards according to the guide lines given in "**Procurement Manual/Procurement Guide Lines 2006 – Goods & Works**" and its subsequent amendments, issued by the National Procurement Agency, Sri Lanka.

- a. **All tender committees to procure materials for RDA work on works orders shall have a member from RDA authorized by the relevant Director/Provincial Director, and prior concurrence of the relevant Director/Provincial Director shall be obtained for the prices so decided before executing the work.**

- b. In case where Project Directors/ Provincial Directors procure materials at tender prices different to HSR or approve tender prices different to HSR fixed by other tender boards following government tender procedure as stated in above para, he shall take action to pay the contractor on prices approved by the tender board and amend / revise the relevant rates and the Estimates accordingly.

19. **Payments under provisional sums:**

"Provisional sum" means a sum included in the bill of quantities for the construction management services, execution of work, supply of goods/materials/ services or contingencies where the work items cannot be quantified accurately. The provisional sum amounts shall be included in the BOQ, by the **Engineer/Provincial Director** as per relevant assumptions on the matter and should be reasonable and justifiable respect to the site conditions and design requirements. This shall be executed in whole or in part or not at all at the direction and discretion of the Resident Engineer /Chief Engineer/Provincial Director. In case the provisional sum provided is not sufficient, funds allocated for contingencies item in the estimate shall be utilized to cover additional cost subject to the approval of the Provincial Director.

All such works, supplies, services or sub-contracts carried out by order of **Resident Engineer/Chief Engineer/Provincial Director** shall be valued at the relevant rates in the approved B.O.Q. or HSR if available. if the B.O.Q. or HSR does not contain any rates, then suitable S.S.RR or day works shall be agreed upon between Resident Engineer/Chief Engineer/Provincial Director and the contractor shall carry out work according to such approved S.S.RR.

20. Royalty/rental for materials mined:

Royalty/rental for approved borrow earth and aggregate materials mined from state land/private land shall be reimbursed **without overheads** to the contractor, on confirmation of the payment of royalty/rental by the Provincial Director of the relevant area where the mining is being executed. Royalty/rental rate shall not be more than the rate approved by the Government Agent/Divisional Secretary of the relevant area. In case the materials cannot be mined from state lands, government procurement procedure shall be followed as given in the General Notes **Clause No.18**.

21. Prior to preparation of the BOQ, suitable borrow pits shall be identified at locations as close as possible for economical transport and to the required quality, by the Resident Engineer/Chief Engineer//Provincial Director and transport distance shall be included accordingly in the BOQ and Estimates.

22. a. For any price variations other than works carried out on works orders, use the **ICTAD** formula guidelines and indices. **December 2023** shall be considered as the **base month** for computation of fluctuations. **However for contracts/work below Rs 2.0 million, payment on price variations shall not be considered.** Clause **22 b**, applies for works carried out on work orders.

b. If there is a change of ex-factory/manufacture's or ware- house price of different brands of cements, considered in the build-up of **basic price of cement** in the HSR, Director/ Provincial Director shall amend the basic price of cement after verification and pay on approved SSR. Similar procedure to be followed in case of **price changes in reinforcement steel & Bitumen**.

23. Transport

Note:

1. The rates for "transport" include all modes of transport up to a maximum distance of the stipulated range.

2. The most economical mode of transport shall be always adopted. In transporting materials (soil, sand, aggregate and rubble), if the average output of the transport vehicles cannot be achieved due to unavoidable delays or any other reason justifiable and acceptable to the **Chief Engineer/Provincial Director**. The rate of payment for transport shall be made under any relevant item selected from codes **T1-001 to T1-003b** irrespective of the type of vehicles to be used. However in case the quantity involved is more than 200 cu.m. per kilometer run and in situations other than stipulated in para above, the rate of payment for transport shall be selected from item codes **T1-006** or **T1-007** or **T1-007a** in the schedule whichever is relevant, For transport of plant made Premix, rate shall be as per item **T1-009**.

3. Transport of aggregate, soil, Emulsion and Premix materials **shall always be paid separately** unless otherwise directed.

4. Rate for rubble transport up to 3 km may be selected from item codes **T1-002** to **T1-003b** supported with justifiable reasons.

24. Excavation (S.S.C.M. 301 - 303)

Note:

1. a. Manual rates:

The rates given in this schedule if not otherwise stated are intended for manual excavation.

b. Bulk rate:

In the case of borrow earth supply where the estimated quantity **exceeds 200 cu. m** (for the whole project), the rates given under **B0-201, B0-202** or item codes **EW1-013 & EW1-014** shall be adopted. Similarly for Roadway **Excavations with quantities more than 200 cu.m.**, rates given under item codes **E1-027, E1-028 and E1-029** shall be adopted. When deviation from above rates is necessary, payment shall be made on approved S.S.RR. Based on actual site records (machine hours) or on work-studies carried out under close supervision by the Engineer, after obtaining approval of the Technical Committee.

2. The rates include for excavation and loading or depositing up to 25 meters. Transport of excavated material more than 25 meters shall always be paid separately unless otherwise directed. In case of foundation excavation for structures, backfilling and compaction to be considered separately unless otherwise specified.

3. Foundation excavation shall be paid at the modified rate applicable to the item to cover up the additional excavation to maintain required slope and working space.

Modification factor for rates applicable to the item = $1+iH/L+iH/W$

Where, $i = 0.1$ for hard clay soil or similar soil, can be cut nearly vertical walls

$i = 0.2$ for sandy clay (SC)soil or similar soil, can be cut walls with a slope of about 15°

$H =$ Excavation depth of the foundation according to the approved drawing

W = Width of the excavation according to the approved drawing
L = Length of the excavation according to the approved drawing

Cost for additional excavations for shoring shall be considered separately.

4. Soils are generally classified as in the Standard Specifications. (S.S.C.M. 301.2)
5. Construction of cofferdams that are necessary shall be paid separately. (S.S.C.M. 302(6)). Rates under items **ST1-018, ST1-019 & ST1-020 are not applicable for bridge construction work**. For bridge works, it shall be payable on S.S.RR based on closely monitored work-studies or on day works at HSR/machine hours, depending on the site conditions.
6. De-watering necessary for cofferdams shall be paid separately. (S.S.C.M. 302(6)).
7. Rates under items **E1-011 to E1-019** are not applicable for the excavation for **foundations of bridge structures**. Payment for such excavations shall be made on approved S.S.RR based on closely monitored work-studies or on day works at HSR/machine hours, depending on the site conditions.
8. Trench excavation for utility services and reinstatement shall be according to S.S.C.M. 305 and shall be read in conjunction with the procedures to be followed by agencies when trenching highways. Under no circumstances pedestrians and traffic using the road shall be allowed to suffer or inconvenienced due to trenching work, adequate notice have to be given to the public and necessary safety precautions have to be taken in advance.

25. Aggregate/rubble (including loading & piling)

Note:

1. Except where otherwise stated, the rates include preparing depots, loading and piling.
2. The rates for items B0-302 to B0-313 include the cost of blasting materials.
3. In exceptional cases such as limestone, "dug out" aggregate, special rates for items B0-302 to B0-313 shall be approved by the Provincial Director.
4. Transport of aggregate and rubble not included in the rates shall be paid separately.
5. Blasting operations shall be carried out as recommended in S.S.C.M. 306 and all works in blasting operations shall conform to the guidelines given in the National Environmental Act No. 47 of 1980 and any subsequent amendments.
6. Prior approval shall be obtained from the Provincial Director for the use of 19 mm hand broken aggregate.

26. Earth filling & compaction (S.S.C.M. 304, 400 & 600)

Note:

1. Approved soil that is piled shall be spread, watered and well compacted by rolling as per Standard Specifications.
2. The rates for earth compaction include the cost of watering.
3. In the case of force account works, where the royalty or similar payments has to be paid for gravel, earth, clay, turf, etc., a claim shall be prepared separately for approval of the Provincial Director, subject to the conditions given under the **Clause 20 of the General Notes**. In case of works awarded on tender rates, the royalty is deemed to be included into the rates.
4. Rates given for the items EW1-003, EW1-004, EW1-005, EW1-006, EW1-007, EW1-008 and EW1-009 on loose volume are for the work where the % density is not specified. If the rates are to be decided on compacted volume basis, the rate for loose volume shall be adjusted by multiplying the specified factor corresponding to the required % density by the factor given in table below.

% Density	Factor
1. For standard density not less than 95 %	1.35
2. For standard density not less than 100 %	1.42

For rates on other densities, S.S.RR. should be approved by the Provincial Director.

5. Transport of water beyond 25 Meters shall be paid separately.
6. (i) The normal output of earth compaction per day will be 66 Cubic Meters using 8-10 ton Road Roller.
(ii) For earthworks in widening of existing roads where the average width is less than 1.5 meters, the output of earth compaction using 8-10 ton Roller shall be considered as 50 Cubic Meters per day.
7. Use of small compaction equipment shall be allowed only if the space is restricted for operating 10-ton Road Rollers or equivalent.

27. Rubble paving (rip rap protection - S.S.C.M. 804)

1. P1-001 to P1-004 does not include the cost of rubble, which shall be paid for separately. The coverage rates of paving are as follows:
 - (i) For pitch paving 225 mm thick 0.26 cu.m. of rubble per square Meter.
 - (ii) For pitch paving 150 mm thick 0.17 cu.m. of rubble per square Meter.
 - (iii) For flat paving 225 mm thick 0.21 cu.m. rubble per square Meter.
 - (iv) For flat paving 150 mm thick 0.15 cu.m. rubble for square Meter.
2. Rubble/rip rap paving shall be carried out to avoid damages by watercourses, slips, and slides to road embankments. Action shall be taken to include this item to routine/periodic maintenance flood damage items.

28. Aggregate Compaction (S.S.C.M. 403 - 408)

1. The normal coverage areas shall be as follows:
 - (i) For paved roads scarified for full width and for strip metaling 14.5 to 19.7 sq.m. shall be compacted with 1 cu.m. of new 50 mm aggregate.
 - (ii) For construction of new bases and for edge correction 100 sq.m. shall be compacted with 8.5 - 10.0 cu.m. of new 50 mm aggregate spread in two layers to 100 mm loose thickness.
2. Edge correction shall be 0.6 m (approx.) in width and edge strengthening shall be 1.2 m (approx.) in width, using 100, 50 & 19 mm aggregate conforming to S.S.C.M. 1103.
3. Strip metaling shall be considered only when the surface sections to be metaled are in narrow strips less than 1.2 m in width.
4. For construction of new bases, where aggregate compaction of the 19-mm and 50 mm is required 1.0 cu.m. of 19 mm aggregate is adequate for compacting with 10 cu.m. of 50 mm.
5. The normal quantities of aggregate that shall be compacted per day are as follows:
 - (i) For full width of paved road including scarifying and/or hand picking the surface will be, 12.75 cu.m. of new aggregate per day.
 - (ii) For construction of new bases, 23.5 cu.m. of new aggregate per day.
 - (iii) For strip or edge correction including loading scarifying and/or handpicking the surface, 9.90 cu.m per day.
6. The average rate of travelling of Oil/Diesel Roller is 20 km per day.
7. The rates for items M1-001, M1-004 & M1-007 to M1-013 include the necessary re-transport of aggregate and no further re-transport costs shall be paid.
8. The actual scarified area (which is not necessarily the Bitumen surfaced area) shall be paid for in items M1-002 & M1-003. Normally 0.3 m width (approx.) shall be reckoned as requiring scarifying for edge correction.
9. Tempering and sharpening of scarifier tines are included in the rates for item M1-003 and shall not be paid for separately.

10. The rates for aggregate compaction include the cost of watering.

11. Transport of water beyond 25 Meters shall be paid separately.

29. Road surface treatment (S.S.C.M. 501 - 507)

1. The various Grades of Bitumen generally used for road works shall be as stipulated in the standard specifications.
2. The rates for Bitumen in surfacing include cost of Bitumen firewood/fuel and blinding materials. Transport of blinding materials exceeding 16 km shall be paid for separately. One cu.m. of blinding material is allowable for 125 sq.m. of Bitumen surfacing.
3. The rates include the cost of internal transport of Bitumen up to 16 km from contractors yard.
4. Approved sand shall be used for blinding.
5. The aggregate quantities and binder required per sq. Meter of **D.B.S.T** or **S.B.S.T** work shall be as per the **tables 505-1 or 505-3 of the S.S.C.M.** depending on the method adopted. The application rates specified shall always be included in the description of the BOQ item for **D.B.S.T** or **S.B.S.T**.
6. In case of force account works, the Officer in-Charge shall study the average consumption per sq.m. obtained by dividing the actual quantity of Bitumen used, in liters, by the area treated in sq.m. for first/subsequent coat Bitumen surfacing. The Engineer approving the item shall, after satisfying himself that the quantities claimed are reasonable and within the limits specified in the HSR, approve the quantities accounted for. If the quantities are outside the specified limits, the approval of the Provincial Director should be obtained.
7. Cost of Binder and cover aggregate for seal coat treatment work shall be paid separately **only if specified**.
8. The basic rates for the Asphalt Concrete items **B0-361A, B0-362 and B0-362A** have been worked out taking 60/70 Penetration grade bitumen as the binder. For item **B0-365**, it is worked out with Cut-Back of 60/70 penetration grade Bitumen and for item **B0-366**, it is Bitumen Emulsion CSS-1.% Binder content used for different types of Asphalt Concrete is based on generally accepted mix designs specific to the plant location recommended by the R&D division of the RDA.

Different Bitumen penetration grades and or different binder contents may be specified for the asphalt concrete mixes for special cases. Then approved binder Type and the content as a % shall be included in the description of the item in such variations.

9. (i) **Densities of Asphalt Premix in compacted state** for general estimation purposes shall be as follows.

- a. **Wearing Course 2.450 m.t. per cu.m.**
- b. **Binder Course 2.430 m.t. per cu.m.**

For actual payments, design densities shall be adopted.

(ii) Average density of Asphalt Premix in loose state shall be assumed as **1.48 m.ton per cu.m.**

10. The quantity of aggregate necessary for the production of 1 metric ton of Asphalt Premix (average for all six types considered in the HSR) by plant shall be taken as **0.6270 cubic meters**.
11. The transport of aggregate for the production of Premix shall be paid separately and shall be decided according to the location of the mixing plant.
12. The transport of Emulsion CSS-1 for the production of cold mix by plant shall be added to the rate per metric ton and shall be decided according to the location of the mixing plant. 59.17 liters of Emulsion CSS-1 are required for each metric ton of cold mix.

30. Road surface maintenance (S.S.C.M. 1100 - 1102)

1. Where method of patching per half a kilometer is adopted, the quantity of Bitumen per half a kilometer per month approved in the routine Maintenance Estimates, may be increased or decreased when necessary. But the rate payable to the contractor for the monthly maintenance of the road surface per half kilometer shall be the rate approved for that half kilometer by the Chief Engineer at the commencement of the Financial Year. The actual rate payable for patching with Bitumen will be according to the appropriate items.

2. All roads/sections of roads in the district for which 14, 21, 28, etc. liters per half kilometer per month have been approved shall be listed under groups 1,2, 3, etc., respectively in a schedule of roads, which will be approved by Chief Engineer, and shall become an attachment of the HSR after **Section xiv**.
3. If during the course of the year, there is considerable variation between the estimated quantity of Bitumen per half a kilometer per month and quantity actually used in respect of any road or section of road, the Executive Engineer will examine the reasons therefore and seek the Chief Engineer's approval to amend the rate payable for Bitumen patching of that road or section of road during the same and/or subsequent Financial Year and amend the schedule referred to in **General Note 30 Item 2.**, above.
4. The prior approval of the Chief Engineer should be obtained for extensive patching. Where extensive patching is carried out, no payment should be made for normal patching on the same half kilometer in the same month.

31. Patch sealing :(S.S.C.M. 1104)

Where the road surface shows signs of deficiency of Bitumen and pitted with numerous potholes, patch sealing shall be adopted.

32. Road side and drainage systems (S.S.C.M. 701 - 707, 1302)

1. The rates exclude the cost of loading, unloading and transporting but include spreading suitably in the vicinity unless otherwise directed.
2. Culvert inlets and outlets should be cleaned before and after the rains.
3. For cleaning choked culverts (item DR1-012) with head room/diameter less than 1 meter, day works rates shall be adopted.
4. Drains should be cleared before commencing any types of surfacing (S.S.C.M. 501 - 507).

33. Bridges, culverts, retaining walls, etc. (S.S.C.M. 1001 - 1010)

Note:

1. Concrete work

- i. The cost of shuttering is not included in the rates, and shall be paid separately.
- ii. The cost of hire charge for concrete mixer is included in the rates for concrete 'using mixers'.
- iii. Construction of necessary cofferdams, shoring, forming islands and de-watering shall be paid separately.
- iv. For all concrete with 19mm aggregate, crusher plant materials shall be used unless otherwise directed.
2. Only sand of approved quality shall be used for cement mixes, mortars & concretes.
3. The rates include the cost of transport up to 25 meters on level ground in the relevant items. Any vertical transport required in excess of first 1.5 meters upwards or down wards shall be separately considered.
4. Transport of water beyond 25 meters shall be paid separately.
5. Extra payment for scaffolding/staging where necessary is allowable if not included in the rate.
6. To obtain the nominal mix of cement concrete 1:2:4 (19mm); batching of materials in the field under average conditions will be in the proportions 1:2 1/2:4 by volume. Cement concrete 1:3:6 (37.5 mm) and cement concrete 1:4:8 (50mm) may continue to be batched by volume in the specified nominal proportions; cement should be by bags of 50 kg. and bags shall be deemed to be 0.035 cu. m. in volume.
7. The quantities of the various materials for cement concrete and cement mortars required to yield an average workable mix shall be as follows.

Description	Proportion [nominal mix] or Grade	Yield Unit	Cement in 50 kg	Sand (cu.m)	Aggregate /rubble (cu.m)
1. Cement concrete	g 40(19 mm)	cu.m	9.87*	0.6*	0.91*
2. Cement concrete	g 30(19 mm)	cu.m	8.17*	0.6*	0.90*
3. Cement concrete	g 25(19 mm)	cu.m	6.35*	0.6*	0.90*
4. Cement concrete	g 25(37.5mm+19mm) 70% 30%	cu.m	5.86*	0.6*	37.5=0.54* 19.0=0.24*
5. Cement concrete	g 20(19 mm)	cu.m	6.04*	0.53*	0.79*
6. Cement concrete	1:1½ :3(19 mm)	cu.m	8.12	0.60	0.91
7. Cement concrete	1:2:4 (19 mm)	cu.m	5.65	0.60	0.90
8. Cement concrete	1:2:4 (37.5 mm)	cu.m	5.65	0.60	1.00
9. Cement concrete	1:3:6 (19 mm)	cu.m	4.38	0.60	0.91
10. Cement concrete	1:3:6(37.5 mm)	cu.m	4.38	0.60	1.00
11. Cement concrete	1:4:8(50 mm)	cu.m	3.18	0.60	1.00
12. 12.5mm Cement render	1:2 mix	sq.m	0.15#	0.013	-
13. 19.0mm Cement render	1:2 mix	sq.m	0.23#	0.020	-
14. 12.5mm Cement render	1:3 mix	sq.m	0.12#	0.016	-
15. 19.0mm Cement render	1:3 mix	sq.m	0.19#	0.024	-
16. Random Rubble masonry in cement/sand mortar	1:6 mix	cu.m	1.77	0.40	1.10

In items 12 - 15 the cement quantity is exclusive of that required for smoothing where necessary.

* The above mix proportions for Grade concrete are given for estimation purposes. The actual proportions for Grade concrete shall be decided by mix designs at site and the rates shall be adjusted with the approval of the Provincial Director.

8. Ready mixed concrete:

Ready mix concrete shall be used only on the written approval of the Director/Provincial Director and for the procurement of the material government tender procedure as given under **General Notes Clause No. 18** to be followed. The contractor for ready mix concrete shall be a copious supplier having minimum of one year experience of supplying ready mix concrete to projects acceptable to the tender board and shall have sufficient transport & pumping facilities, laboratory facilities for quality control and a qualified staff.

9. Wedge stones shall mean stones that are wedged and squared on one face and roughly dressed on the other five faces to enable them to be laid in courses.

10. Wearing surface for R.C.C/P.C.C decking (S.S.C.M. 1403)

Generally for 74.5 sq.m. of **50 mm. thick compacted wearing surface**, the quantities of material required will be 3.5 cu.m. 19 mm to 3.2 mm. Graded aggregate, 2.3 cu.m. sand and 381 liters Bitumen and 91 liters of kerosene. If Emulsion is used, the quantity of material required is 500 liters of Emulsion and 273 liters of water.

11. Concrete pipe culverts (S.S.C.M. 1403)

i. The diameter of pipes indicated refers to the internal diameter.

ii. The rates include the cost of pipe, collars, rolling up to a distance of 25 m & lowering to bed up to 1.8 Meter depth, aligning and fixing.

iii. Excavation and backfilling of trench is not included in the rates unless otherwise mentioned.

34. Labour, plant and materials

1. All labour, plant, equipment and materials have to be provided by the contractor.
2. **The Engineer should maintain performance records of all types of machinery for future reference.**

35. Day works

1. **Day works shall be defined and adopted by the Engineer under exceptional circumstances.**
2. Labour rates fixed under **section xiv of the HSR (Surveying, Leveling and Day works)** shall be used in pricing day works. **In cases of very special labour**, such as skin divers etc., procurement of same shall be as per **General Notes clause 18**.
3. Rate for materials in day works shall be the **purchase price subject to the condition that procurement of same is done as per General Notes Clause No.18**.
4. It is necessary that **appropriate plant is used and works are programmed to minimize the costs to the satisfaction of the Engineer.**

36. Maintenance of road signs and markings: (S.S.C.M. 1501-1502)

All traffic signs, kerbs , parapets, guardrails, barricading and k.m. posts should be painted at least once a year unless otherwise directed by the Engineer.

37. Quality control work: (S.S.C.M. 1600)

- a. **The Engineer is responsible for carrying out tests on all works before recommending for payments and maintenance of records. In case of dispute, it may be referred to Provincial Director. /Director (R & D) for a final decision. (S.S.C.M. 1602)**
- b. **Special attention should be made to control the alignment, thickness and surface regularities of pavement layers as per section 1601 of the S.S.C.M. using geodetic levels, camber boards and 3-Meter straight edges.**

38. Piece rates and allowances:

The amounts allowed for the items under "piece rates and allowances" are the anticipated basic costs to cover the expenses to be incurred, during the execution of the work.

39. Labour Inputs

The labour inputs shown against the work items in this schedule do not include the Plant and Equipment Operator costs which are deemed to have been covered under the hire charges of the Plant and Equipment.

40. HSR Analysis is for internal use only. It cannot be produced in Court of Law as reference/authority and thus is a privilege document.

HSR - 2024
Engineering Division
Ministry of Transport and Highways

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2024
PUTTALAM DISTRICT

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
LABOUR RATES (BASIC)			
B0-001	SKILLED A - (SK 'A') * (Welders, Electricians, Carpenters, Masons, Miners, Painters. Hvy/Mach Operators, Ch.Hand)	DAY (8 HRS)	3,800.00
B0-002	SKILLED B - (SK 'B')	DAY (8 HRS)	3,500.00
B0-003	SEMI SKILLED - (S/SK)	DAY (8 HRS)	3,000.00
B0-004	UNSKILLED - (U/SK)	DAY (8 HRS)	2,800.00

* **Note:** For works under Force Account **in exceptional cases, Sk'A' labour** at higher rates than above may be engaged on **adhoc basis** with **DG/RDA's prior approval**. See General Notes **Section 6**.

HIRE CHARGES (WET LEASE BASIS - INCLUDING OPERATOR UNLESS OTHERWISE SPECIALLY MENTIONED)

B0-101	TAR BOILER(HEATING WITH FIREWOOD)(Less Operator)#	DAY	100.00
B0-102	CONCRETE / ASPHALT MIXER (400 LTRS)	DAY	8,583.62
B0-103	BITUMEN SPRAYER (Less Operator)#	DAY	110.00
B0-104	WATER TANK + 50 MM. PUMP(Less Operator) #	DAY	3,725.96
B0-105	WELDING PLANT ENGIN DRIVEN: WITH WELDER	DAY	15,812.80
B0-106	PORKER VIBRATER (Less Operator)	DAY	2,223.09
B0-107	PLATE COMPACTOR (90 KG)(Less Operator)	DAY	4,208.09
B0-108	VIBRATING RAMMER (60 KG)(Less Operator)	DAY	4,046.99
B0-109	VIBRATING ROLLER (1/2 - 1 Ton)	DAY	9,100.21
B0-110	VIBRATING ROLLER (SMOOTH-10 TONS)	DAY	35,810.63
B0-111	SMOOTH/ROAD ROLLER (8 -10 TONS:STATIC)	DAY	19,579.80
B0-112	PNEUMATIC ROAD ROLLER (8 - 10 TONS)	HOUR	7,365.97
B0-113	MOTOR GRADER (65 HP)	DAY	29,859.06
B0-114	MOTOR GRADER (120 -140 HP)	DAY	45,775.57
B0-115	BACKHOE LOADER (JCB)	DAY	34,514.65
B0-116	WHEEL LOADER (1.4 CU.M)	DAY	35,731.42
B0-116A	WHEEL LOADER (1.7 CU.M)	DAY	36,941.45
B0-117	TRACTOR & TRAILOR (3T)	DAY	10,684.90
B0-118	MATERIAL TRANSPORT BY LORRY/TIPPER/DT (EXCEEDING 10 KM DISTANCES).	KM/CU.M.	49.41
B0-119	-Do- BY LORRY/TIPPER/DT ((FOR MORE THAN 3 KM LESS THAN 10 KM. DISTANCES)	KM/CU.M.	51.45
B0-120	TRANSPORT OF PREMIX BY DUMP TRUCK	KM/M.TONNE	34.07
B0-121	SAND/CHIP SPREADER - PROPELLED	DAY	45,022.79
B0-121A	SAND/CHIP SPREADER - TOWED	DAY	2,908.02
B0-122	FARM TRACTOR & BROOM	DAY	12,496.17
B0-123	EMULSION SPRAYER SELF PROP. (4000 LITRES)	DAY	29,046.35
B0-124	WHEEL LOADER (2.7 - 3.1 CU.M)	DAY	50,265.25
B0-124A	WHEEL LOADER (2.0 - 2.3 CU.M)	DAY	40,571.53
B0-125	LORRY 3 TON(2.5 CU.M) *	KM	114.78
B0-126	LORRY 5 TON(3.5 CU.M) *	KM	137.72
B0-127	LORRY 7 TON(4.5 CU.M) *	KM	162.46
B0-128	WATER BOWSER (6000 LITRES)	DAY	23,058.11
B0-129	ASPHALT PAVER (Crawler)	HOUR	11,124.35
B0-129A	ASPHALT PAVER (Wheel)	HOUR	11,318.41
B0-130	TANKER ONLY(20,000 LITRES)	HOUR	240.84
B0-130A	LOW BED TRAILER 30 TONS *	KM	82.05
B0-131	PRIME MOVER OLD (FOR 20,000 L TANKER)	HOUR	10,035.49
B0-131A	PRIME MOVER NEW (FOR 30 T TRAILER) TIME BASIS	HOUR	10,035.49
B0-131B	PRIME MOVER NEW (FOR 30 TON TRAILER) DISTANCE BASIS *	KM	456.16
B0-132	BABY DUMPER .75 cu.m (less Operator)	HOUR	1,963.00
B0-133	WATER PUMP 4"	HOUR	1,874.49
B0-133A	WATER PUMP 2" (less Operator)	HOUR	887.49
B0-134	SLUDGE PUMP 4"	HOUR	2,541.75
B0-135	VIBRATING ROLLER (6 -7 TONS) TANDEM	HOUR	3,770.57
B0-136	CONCRETE MIXER WITH LOAD CELL WEIGH BATCHER 14/10	DAY	13,132.37
B0-137	TROLLEY EMULSION (less Operator)	HOUR	104.48
B0-138	SPRAYER EMULSION HAND CART	HOUR	1,283.61
B0-139	ROAD MARKER HAND CART GAS HEATER	HOUR	1,628.46
B0-140	BITUMEN DISTRIBUTOR 750 LITRES	HOUR	2,418.08
B0-141	TANK TRUCK BITUMEN 10000 LTR	HOUR	6,005.12
B0-142	CRUSHER STONE 40T/H	HOUR	19,617.91
B0-143	TRACK DRILL CRAWLER	HOUR	2,521.36
B0-144	COMPRESSOR AIR 750 CFM	HOUR	11,110.91
B0-145	SLURRY SEALING MACHINE	HOUR	18,236.38
B0-146	MOBILE CRANE 25 TONS	HOUR	11,293.55
B0-146A	MOBILE CRANE 30 TONS	HOUR	14,916.96
B0-147	ASPHALT PLANT 60T/H HOT MIX	HOUR	30,970.89
B0-147A	COLD MIX PLANT 30 T/H	HOUR	18,090.90
B0-148	LORRY 10 TON *	KM	209.94
B0-149	ITEM DELETED		
B0-150	FARM TRACTOR WITH WATER BOWSER	HOUR	1,781.22
B0-151	LORRY 17 TON SELF LOADING, WITH 10T CRANE - BOOM TRUCK (WET) *	KM	289.84
B0-151A	LORRY 17 TON SELF LOADING, WITH 10T CRANE - BOOM TRUCK (WET) *	HOUR	5,140.64

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2024

PUTTALAM DISTRICT

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
HIRE CHARGES (WET LEASE BASIS - INCLUDING OPERATOR UNLESS OTHERWISE SPECIALLY MENTIONED) (Continued)			
B0-152	TRACTOR WITH EMULSION BOWSER	HOUR	1,781.22
B0-153	EMULSION TANK TRUCK (8000 LITRES) *	KM	248.25
B0-154	DOZER(CRAWLER TRACTOR) D-4,D-41(80-100 HP)	HOUR	7,741.10
B0-155	EXCAVATOR MOBILE	HOUR	11,433.47
B0-156	AIR COMPRESSOR 250 CFM	HOUR	6,972.89
B0-157	HAND HELD BREAKER / DEMOLISHER) (Less Operator)	DAY	679.05
B0-158	ROCK DRILL HAND HELD (LESS DRILL STEEL)	HOUR	494.41
B0-159	TRUCK SNOOPER 750 KG (SKY LIFT)	HOUR	5,819.50
B0-160	CHAINSAW (less Operator DRY LEASE)	DAY	3,500.00
B0-161	CHAINSAW (less Operator)	DAY	7,000.00
B0-162	ASPHALT CUTTER (with cutting blade)	HOUR	3,750.00
Note:	* Cost of return trip not considered under this rate		
	* Above rates are generated based on the latest fuel costs (Petrol = Rs. 371.00, Diesel = Rs. 363.00). These rates should be adjusted when the costs of fuel changed. See General Notes for further details.		
SUPPLY OF SOIL FROM BORROW PITS INCLUDING LOADING. (FOR QUANTITIES MORE THAN 200 CU.M.)			
	* SEE GENERAL NOTES FOR FURTHER DETAILS ON USING THIS RATE		
Note:	If the items from B0-201 to B0-332 are transported outside the district, the rates given for the specific district shall be used.		
B0-201	APPROVED SOIL TYPE I & II FOR SUB BASES & SHOULDERS	CU.M	1,590.11
B0-202	APPROVED SOIL TYPE I & II FOR EMBANKMENTS	CU.M	1,060.07
AGGREGATE & RUBBLE (EX-QUARRY - BASIC) INCLUDING BLASTING, LOADING & PILING			
(ROYALTY / RENTAL TO BE ADDED SEPARATELY IN THE BOQ WITHOUT ADDING OVERHEADS, IF REQUIRED TO BE REIMBURSED.)			
B0-301	(150MM - 225MM) RUBBLE - (VEHICLE MEASUREMENT, EXCLUDING PILING)	CU.M	2,650.18
B0-302	(150MM - 225MM) RUBBLE PILED	CU.M	3,193.48
MANUAL PRODUCTION			
B0-303	(100MM) AGGREGATE	CU.M	3,180.21
B0-304	(75MM) AGGREGATE	CU.M	3,180.21
B0-305	(50MM) AGGREGATE	CU.M	3,533.57
PLANT PRODUCTION			
B0-308A	(19MM) AGGREGATE	CU.M	3,710.25
B0-309	(12.5MM) AGGREGATE	CU.M	3,710.25
B0-310	(37.5MM) - DO - , (S.S.C.M. TB : 1701-1 / 1701-4)	CU.M	3,533.57
B0-311	(50MM) - DO - , (S.S.C.M. TB : 1701-4)	CU.M	3,533.57
B0-312	CRUSHER FINES (6.3MM. DOWN WARDS)	CU.M	3,533.57
B0-313	(37.5MM) GRADED (TABLE 1701.5 FOR ABC)	CU.M	3,533.57
AGGREGATE FOR SEAL COAT TREATMENTS			
(GRADING AS PER SSCM TABLE 1701-8)			
B0-314	AGGREGATE 19 MM	CU.M	3,710.25
B0-315	AGGREGATE 12.5 MM	CU.M	3,220.00
B0-316	AGGREGATE 9.5 MM	CU.M	3,220.00
SAND (RATE TO INCLUDE TRANSPORT UP TO 16 KM.) (ADDITIONAL TRANSPORT TO BE PAID SEPARATELY)			
B0-331	RIVER SAND FOR ROAD SURFACE APPLICATIONS (SSCM TABLE 1701-9)	CU.M	8,588.81
B0-332	RIVER SAND FOR CONCRETE AND MASONRY WORK (SSCM TABLE 1701-2)	CU.M	8,588.81
BRICKS (WITHOUT TRANSPORT)			
B0-340	COMMON BURNT CLAY BUILDING BRICKS (SLS 39:1978)	1000 NOS.	18,000.00

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2024
PUTTALAM DISTRICT

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
BITUMEN & EMULSION			
(TRANSPORT TO BE ADDED SEPARATELY)			
B0-351	BITUMEN 80/100 *[DRUMS] (Purchases>25 drums)	LITRE	188.89
B0-351A	BITUMEN 60/70[DRUMS] (Purchases>25 drums)	LITRE	188.89
B0-352	EMULSION - C.S.S. 1* (EXCLUDING TRANSP.)	LITRE	149.00
B0-353	EMULSION - C.R.S. 1* (EXCLUDING TRANSP.)	LITRE	149.00
B0-354	EMULSION - C.R.S. 2 * (EXCLUDING TRANSP.)	LITRE	154.00
B0-355	BITUMEN 80/100 * [BULK] [with De-cant cost]	KG	179.50
B0-355A	BITUMEN 60/70 [BULK][with De-cant cost]	KG	179.50
B0-355B	BITUMEN 80/100* [BULK]	KG	175.83
B0-355C	BITUMEN 60/70 [BULK]	KG	175.83
B0-356	CUTBACK BITUMEN- MC-30	LITRE	261.33
B0-357	POLYMER MODIFIED BITUMEN (PG 76-10)	LITRE	260.00
B0-358	POLYMER MODIFIED BITUMEN EMULSION	LITRE	275.00
B0-359	DELETED		

PREMIXED BITUMINOUS MATERIALS
(PRICE INCLUSIVE OF ALL RAW MATERIAL TRANSPORT AND ROYALTY ON AGGREGATE)

BINDER CONTENT IS TO BE DECIDED ACCORDING TO THE JOB MIX FORMULA OF THE PLANT AND ADDED TO THE 361B AND 362B RATE.

(FOR PROJECT USE)-

B0-361A	ASPHALT CONCRETE: SURFACING MATERIAL- BINDER 60/70 BITUMEN @ 4.7% OF MIX	M.TON	16,849.00
B0-361B	ASPHALT CONCRETE: SURFACING MATERIAL- without adding BINDER	M.TON	7,951.00
B0-362	ASPHALT/BITUMEN: BOUND BASE MATERIAL- BINDER 60/70 BITUMEN @ 3.4% OF MIX	M.TON	15,205.00
B0-362A	ASPHALT CONCRETE: BINDER COURSE MATERIAL- BINDER 60/70 BITUMEN @ 4.1% OF MIX	M.TON	16,487.00
B0-362B	ASPHALT CONCRETE: BINDER COURSE MATERIAL- without adding BINDER	M.TON	8,689.00

(FOR PROJECTS & MAINTENANCE)-

B0-365	CUT BACK ASPHALT-AGGREGATE COLD MIX WITH 15% CUT BACK 60/70 @ 5.5% OF MIX (19 mm)	M.TON	19,724.00
B0-365A	CUT BACK ASPHALT-AGGREGATE COLD MIX WITH 16% CUT BACK 60/70 @ 5.5% OF MIX (12.5 mm)	M.TON	19,831.00
B0-366	EMULSIFIED ASPHALT AGGREGATE COLD MIX WITH EMULTION CSS1 @ 6.67% OF AGGREGATE	M.TON	14,276.00
B0-366A	EMULSIFIED ASPHALT AGGREGATE COLD MIX WITH EMULTION CSS1 @ 5.9% OF MIX (12.5 MM 45% AND QUARRY DUST 55% OF AGGREGATE)	M.TON	14,120.00

NOTE: 1. ABOVE RATES INCLUDE TRANSPORT COST FOR: AGGREGATES -40 KM ;DEISEL- 25 KM ; K OIL - 25 KM ;BINDER- 150 KM
2. TRANSPORT COST FROM PLANT TO THE LAYING SITE TO BE PAID SEPARATELY.

*** WHEN ASPHALT PLANTS ARE NOT AVAILABLE WITHIN THE DISTRICT, USE EX PLANT BASIC PRICES SELECTED FROM THE TABLE GIVEN IN ANNEX I, RELEVANT TO THE MIXING PLANT CLOSEST TO THE SITE, DEPENDING ON THE AVAILABILITY OF THE REQUIRED TYPE AND THE MOST ECONOMICAL RATE WITH TRANSPORT.**

READY-MIX CONCRETE (EXCLUDING HANDLING COST)

B0-380	GRADE 15 / 20 /120mm	CU.M	23,261.70
B0-381	GRADE 20 / 20 /120mm	CU.M	24,763.08
B0-382	GRADE 25 / 20 /120mm	CU.M	25,857.48
B0-383	GRADE 30 / 20 /120mm	CU.M	26,590.83
B0-384	GRADE 35 / 20 /120mm	CU.M	27,900.00
B0-385	GRADE 40 / 20 /120mm	CU.M	30,865.07

NOTE: 1. ABOVE RATES ARE CONSIDERED WITHIN 15KM FOR 120MM SLUMP AT SITE
2. NOMINAL AGGREGATE SIZE 20MM

B0-386	TRANSPORT OF READY MIX CONCRETE MORE THAN 15 KM RADIUS FROM THE PLANT	CU.M/KM	180.00
B0-387	PLACING OF CONCRETE BY USING PUMP CAR (ALL INCLUSIVE)	CU.M	1,500.00
B0-388	TRANSPORT OF PUMP CAR TO THE SITE	KM	350.00

TIMBER & FIREWOOD (INCLUDING TRANSPORT COST)

B0-391	SAWN TIMBER CLASS 1 (LOCAL)	CU.DECI.M	252.70
B0-392	SAWN TIMBER CLASS 2 (LOCAL)	CU.DECI.M	114.70
B0-393	TIMBER ROUND JUNGLE - 100 MM (MINIMUM) TO 150 MM DIAMETER	METRE	128.00
B0-394	TIMBER ROUND JUNGLE - 150 MM (MINIMUM) TO 200 MM DIAMETER	METRE	125.00
B0-395	FIREWOOD	CU.M	2,790.10
B0-396	PLYWOOD(MR) FOR FORMWORK - 15 MM THICK	SQ.M	1,922.40
B0-397	BAMBOO TREE LENGTH GREATER THAN 8 METERS	NO.	555.00

CEMENT (INCLUDING TRANSPORT COST)

B0-401	PORTLAND CEMENT(FOR ALL WORK)	BAG (50.Kg)	1,844.00
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STEEL AND STEEL ITEMS
(INCLUDING TRANSPORT COST)

B0-411	MILD STEEL	KG	288.08
B0-411A	TOR STEEL	KG	297.00
B0-431	BINDING WIRE	KG	379.70
B0-432	WIRE NAILS, M.S.BOLTS & NUTS	KG	383.80
B0-433	STAINLESS STEEL 20 MM DIA.(FOR DOWELS)	METER	1,962.65
B0-434	GI PIPES, 50 MM DIAMETER: HEAVY DUTY TYPE	METER	3,420.85
B0-435	M.S. SHEET, 2 MM THICK	SQ.METRE	5,735.50

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2024
PUTTALAM DISTRICT

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
PRECAST CONCRETE ITEMS			
EX - FACTORY: AVERAGE PRICE EXCLUDING VAT			
REINFORCED CONCRETE PIPES & COLLARS			
	DIAMETER (M.M)	LENGTH (M.M)	
PIPES			
B0-441	153 (6")	2438 (8')	01 NO. 7,800.00
B0-442	229 (9")	2438 (8')	01 NO. 9,500.00
B0-443	305 (12")	2438 (8')	01 NO. 9,000.00
B0-444	450 (1' 6")	2438 (8')	01 NO. 17,250.00
B0-445	610 (2' 0")	2438 (8')	01 NO. 28,200.00
B0-446	914 (3' 0")	1219 (4')	01 NO. 21,050.00
B0-446A	914 (3' 0")	2438 (8')	01 NO. 42,100.00
B0-447	1219 (4' 0")	1219 (4')	01 NO. 33,300.00
B0-447A	1219 (4' 0")	2438 (8')	01 NO. 66,600.00
COLLARS			
B0-441B	153 (6")		01 NO. 1,200.00
B0-442B	229 (9")		01 NO. 1,400.00
B0-443B	305 (12")		01 NO. 1,900.00
B0-444B	450 (1' 6")		01 NO. 2,250.00
B0-445B	610 (2' 0")		01 NO. 2,900.00
B0-446B	914 (3' 0")		01 NO. 3,800.00
B0-447B	1219 (4' 0")		01 NO. 4,500.00
PRECAST CONCRETE ITEMS			
B0-448	STD ROAD KERB 125X250X900 G25 CONCRETE		01 NO. 1,750.00
B0-449	PAVING SLAB 450X450X50 MM G20 WITH R/F CONCRETE		01 NO. 975.00
B0-449A	PAVING SLAB 450X450X50 MM G20 CONCRETE		01 NO. 625.00
B0-450	BRIDGE KERB 915		01 NO. 3,475.00
B0-451	STD. UPRIGHTS FOR BRIDGES (NEW DESIGN)		01 NO. 4,100.00
B0-452	STD. HAND RAILS FOR BRIDGES (NEW DESIGN)		01 NO. 3,900.00
B0-453	COUPING PAIRS FOR HAND RAILS		01 PAIR. 1,700.00
B0-454	RAIN WATER CHANNELS 609 MM LONG		01 NO. 2,000.00
B0-455	CEMENT SAND HOLLOW BLOCK 16"X8"X4"		01 NO. 65.00
B0-456	FACIA SLAB 4' X 2'		01 NO. 3,600.00
B0-457	GUARD STONES (STANDARD)		01 NO. 4,300.00
B0-458	KILOMETER POST (STANDARD)		01 NO. 10,000.00
B0-459	BOUNDARY MARKER (STANDARD)		01 NO. 4,600.00
B0-460	G25 CONCRETE PAVING BLOCK (220mm × 110mm × 80mm)		01 NO. 65.00
B0-461	G40 CONCRETE PAVING BLOCK (220mm × 110mm × 80mm)		01 NO. 74.00
BLASTING MATERIALS (INCLUDING TRANSPORT COST)			
B0-501	BLASTING POWDER	KG.	2,054.30
B0-502	FUSE WIRE	M.	830.90
B0-503	STEEL, JUMPER	KG.	699.55
B0-504	ELECTRIC DETONATORS	NO.	165.30
B0-505	DYNA CORD	M.	77.20
B0-506	WATER GEL	KG.	3,722.90
B0-507	AMMONIUM NITRATE	KG.	1,404.00
B0-508	ORDINARY DETONATOR	NO.	12.00
B0-509	CRACKING POWDER	KG.	183.35
PAINTS (INCLUDING TRANSPORT COST)			
B0-531	BITUMINOUS EMULSION PAINT(CRS-2)	LITRE	154.00
B0-534	GLUE	KG	615.00
B0-537	LIME - BOILED	KG	34.85
B0-541	PAINT-ENAMEL	LITRE	1,462.40
B0-542	PAINT - ANTI COROSIVE	LITRE	1,366.55
B0-543	DELETED		-
B0-544	PAINT - EMULSION	LITRE	869.00
B0-545	RUST REMOVER	LITRE	3,398.73
B0-546	EMULSION FOR EXTERIOR USE (WEATHERSHIELD)	LITRE	974.58
B0-547	ROAD MARKING PAINTS (YELLOW)	LITRE	1,893.54
B0-548	ROAD MARKING PAINTS (WHITE)	LITRE	1,893.54
FUEL, OILS & LUBRICANTS			
B0-601	INDUSTRIAL KEROSENE OIL (COLOMBO)	LITRE	251.00
B0-602	MOULD OIL	LITRE	159.00
B0-611	LUBRICANT(OIL)	LITRE	1,520.57
B0-612	AUTO DIESEL (COLOMBO)	LITRE	363.00
B0-613	PETROL (COLOMBO)	LITRE	371.00
B0-614	FURNACE OIL FOR BURNERS	LITRE	132.00
B0-615	LP GAS	KG	347.70
B0-616	LUBRICANT(GREASE))	KG	3,266.67

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2024
PUTTALAM DISTRICT

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
MISCELLANEOUS MATERIALS			
B0-631	BASKETS (WITH TRANSPORT)	01 NO.	300.00
B0-632	GUNNY BAGS NEW(LARGE) (WITH TRANSPORT)	01 NO.	101.50
B0-632A	POLY SACS (65 KG CAPACITY) (WITH TRANSPORT)	01 NO.	68.30
B0-633	COTTON WASTE (WITH TRANSPORT)	KG	133.25
B0-634	SALT (WITH TRANSPORT)	KG	75.00
B0-635	EMPTY TAR BARRELS (140 LTRS) WITH TRANSPORT)	NO	90.55
B0-636	P.V.C. PIPE 110 MM DIA TYPE 250 PE (WITH TRANS.)	METRE	1,058.20
B0-636B	P.V.C. PIPE 110 MM DIA TYPE 400 PE (WITH TRANS.)	METRE	1,606.80
B0-636C	PVC PIPE 110MM DIA TYPE 600 PE (WITH TRANSPORT)	METER	1,886.45
B0-636D	PVC PIPE 110MM DIA TYPE 1000 PE (WITH TRANSPORT)	METER	2,839.85
B0-636E	PVC PIPE 110MM DIA TYPE 1000 PE BEND (WITH TRANSPORT)	NOS	4,843.80
B0-637	P.V.C. PIPE 50 MM DIA TYPE 400 PE (WITH TRANS.)	METRE	328.55
B0-637A	P.V.C. PIPE 25 MM DIA TYPE 1000 PE (WITH TRANS.)	METRE	282.50
B0-637B	P.V.C. PIPE 90 MM DIA TYPE 400 PE (WITH TRANS.)	METRE	961.35
B0-637C	P.V.C. PIPE 90 MM DIA TYPE 600 PE (WITH TRANS.)	METRE	1,568.65
B0-637D	P.V.C. PIPE 160 MM DIA TYPE 250 PE (WITH TRANS.)	METRE	3,184.50
B0-637E	P.V.C. PIPE 160 MM DIA TYPE 400 PE (WITH TRANS.)	METRE	3,111.05
B0-637F	P.V.C. PIPE 160 MM DIA TYPE 600 PE (WITH TRANS.)	METRE	3,856.80
B0-637G	P.V.C. PIPE 160 MM DIA TYPE 1000 PE (WITH TRANS.)	METRE	5,926.00
B0-638	HARD RUBBER 12MM THICK X 75 MM WIDE (WITH TRANS)	METRE	2,694.73
B0-639	POLYTHENE 325 MM DIA GAUGE 300 (APPROX.14.0 METERS/KG) (TUBULAR FLAT WIDTH APP. 505 MM, WITH TRANS.)	KG	689.30
B0-639A	POLYTHENE 230 MM DIA GAUGE 300 (APPROX.19.5 METERS/KG) (TUBULAR FLAT WIDTH APP. 355 MM, WITH TRANS.)	KG	689.30
B0-639B	POLYTHENE 150 MM DIA GAUGE 300 (APPROX.28.0 METERS/KG) (TUBULAR FLAT WIDTH APP. 241 MM, WITH TRANS.)	KG	689.30
B0-640	ALLUMINIUM SHEET 24 SWG (WITH TRANSPORT)	SQ.METRE	2,354.55
B0-641	ANGLE IRON 50X50X6 MM (WITH TRANSPORT)	METRE	1,282.65
B0-642	M.S. PLATE 12 MM THICK (WITH TRANSPORT)	SQ.M	33,301.55
B0-643	ADHESIVE (WATER RESISTANT)	KG	1,308.75
B0-644	EMULSIFIER-CSS/CRS	KG	2,560.00
B0-645	EARLY STRENGTH ADMIXER (Usage:300 ml per 50 kg Cement bag)	LTR	495.95
B0-646	TRAFFIC CONES	NO.	3,130.00
B0-647	75 MM X 8 MM DIA NUTS AND BOLTS	NO.	33.85
B0-648	SAW DUST (LOOSE)	CU.M	127.55
B0-649	DRILL STEEL	METER	150.06

PIECE RATES & ALLOWANCES

ALLOW FOR:

B0-704	BARRICADING (SMALL WORK ITEMS)	ITEM	1,100.00
B0-705	BARRICADING, LIGHTING, SIGNALLING ETCFOR100M (STATIONARY OPERATIONS)	DAY	2,750.00
B0-711	CEMENT, SAND & WATER FOR JOINTING HUME (PIPES 152 MM DIAMETER	JOINT	110.00
B0-712	- DO - 229 TO 610 MM DIAMETER	JOINT	220.00
B0-713	- DO - 915 MM DIAMETER	JOINT	440.00
B0-714	- DO - 1220 MM DIAMETER	JOINT	770.00
B0-715	COIR ROPE (FOR SCAFFOLDING 93 SQ.M AREA)	ITEM	550.00
B0-716	COIR STRING FOR CUTTING SIDE DRAINS (PER 2.83 CU.M)	ITEM	82.50
B0-717	- DO - FIXING SCAFFOLDING (PER 93 SQ.M)	ITEM	440.00
B0-718	MINOR REPAIRS OF PARAPETS WITH CEMENT, SAND & WATER (PER 9.29 SQ.M)	ITEM	550.00
B0-720	FUEL *(FOR LOOSENING ROAD SURFACE IN MANUAL BREAKING 50 MM DEPTH X 307 SQ.M)	ITEM	110.00
B0-723	FUEL, FORGE ETC.(PER 2.83 CU.M BLASTING)	ITEM	220.00
B0-732	LADDERS (PER 93 SQ.M)	ITEM	550.00
B0-741	PAINT (FOR LETTERING & NUMBERING ITEMS)	ITEM	220.00
B0-746	PEGS (FOR TURFING IN 19 SQ.M AREA)	ITEM	550.00
B0-751	SAND PAPER & COTT. WASTE (PER 9.29 SQ.M)	ITEM	330.00
B0-752	SHARP. SCARIFIER TYNES (FOR 307 SQ.M)	ITEM	110.00
B0-761	TIMBER PLANKS & BAMBOOS (FOR 93 SQ.M))	ITEM	1,430.00
B0-762	TIMBER POST, HORIZONTAL ETC. (FOR BARRICADING WORK IN 4 L.M.)	ITEM	2,200.00

WATER FOR CONCRETING:

B0-781	ALLOW FOR WATER (FOR MIXING BY MACHINE) PER	CU.M	55.00
B0-782	ALLOW FOR WATER (FOR MIXING MANUALLY) PER	CU.M	55.00

WATER FOR COMPACTION & GENERAL USE

B0-784	ALLOW FOR WATER (GRAVEL COMPACTION) PER	CU.M	27.50
B0-785	ALLOW FOR WATER (AGGREGATE COMPACTION) PER	CU.M	38.50
B0-786	ALLOW FOR WATER (MOISTENING ROAD SURFACE)	ITEM	110.00
B0-787	ALLOW FOR WATER SUPPLY (BY BUCKET & COIR ROPE)	ITEM	110.00
B0-788	WATER FOR GENERAL PURPOSES	LITRE	27.50

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2024
PUTTALAM DISTRICT

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
WHITE WASHING FOR BARRICADING			
B0-791	WHITE WASHING EMPTY BARRELS (BITUMEN)	01 NO.	250.00
B0-792	WHITE WASHING TIMBER POSTS, HORIZONTALS, ETC. (IN 4 L.M. BARRICADING)	01 ITEM	93.75

FOLLOWING MATERIAL PRICES ARE FOR ESTIMATION ONLY
(PAYMENTS SHOULD BE BASED ON APPROVED TENDER PRICES)

THERMOPLASTIC ROAD MARKING MATERIALS EXCLUDING TRANSPORT & VAT			
B0-800	THERMO PLASTIC ROAD MARKING MATERIAL(WHITE)	KG	296.16
B0-801	THERMO PLASTIC -DO- (YELLOW)	KG	252.50
B0-802	GLASS BEADS	KG	252.50
B0-803	CATS EYE (ALUMINIUM ROAD STUD, DOUBLE SIDED)	NO.	4,675.00
B0-804	DELETED		-
B0-805	DELETED		-
B0-806	ZEBRA BARRICADING TAPE (POLYTHENE)	METRE	349.00

P.C.C. BEAMS (Wires) EXCLUDING TRANSPORT & VAT

NOTE: Specifications of the beams should be in compliance to the national highways
RN indicates Rates are to be negotiated and decide

	BEAM LENGTH	FT.	M	WT.(Tonnes)		
B0-810	P.C.C BEAM	11'0	3.35	0.89	PER BEAM	52,300.00
B0-811	P.C.C BEAM	14'0	4.26	1.13	PER BEAM	67,400.00
B0-812	P.C.C BEAM	17'0	5.18	1.57	PER BEAM	83,700.00
B0-813	P.C.C BEAM	20'0	6.09	2.08	PER BEAM	113,300.00
B0-814	P.C.C BEAM	23'0	7.01	2.26	PER BEAM	130,000.00
B0-814A	P.C.C BEAM	27'0	8.23	2.19	PER BEAM	162,500.00
B0-815	P.C.C BEAM	32'0	9.75	2.59	PER BEAM	176,400.00
B0-816	P.C.C BEAM	35'0	10.67	2.86	PER BEAM	200,000.00
B0-817	P.C.C BEAM	40'0	12.19	3.80	PER BEAM	RN
B0-818	P.C.C BEAM	44'0	13.41	4.22	PER BEAM	RN
B0-819	P.C.C BEAM	53'0	16.15	5.07	PER BEAM	RN

P.C.C. BEAMS(Strands) EXCLUDING TRANSPORT & VAT

NOTE: Specifications of the beams should be in compliance to the national highways

	BEAM LENGTH	FT.	M	WT.(Tonnes)		
B0-830	P.C.C BEAM	31.16'	9.5	2.32	PER BEAM	138,000.00
B0-831	P.C.C BEAM	37.72'	11.5	3.21	PER BEAM	180,500.00
B0-832	P.C.C BEAM	44.28'	13.5	4.20	PER BEAM	217,000.00
B0-833	P.C.C BEAM	47.56'	14.5	4.71	PER BEAM	270,000.00
B0-834	P.C.C BEAM	50.84'	15.5	5.44	PER BEAM	300,000.00
B0-835	P.C.C BEAM	54.12'	16.5	6.16	PER BEAM	335,000.00

GABION MESH EXCLUDING TRANSPORT & VAT

ZINC COATED GABION BOXES

B0-850	1X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	8,940.70
B0-851	2X1X0.5M INCLU. COATED TIE(BINDING) WIRE @ 5% OF GABION WEIGHT	PER BOX	11,177.95
B0-852	1.5X1X1M INCLU. COATED TIE (BINDING) WIRE @ 5% OF GABION WEIGHT	PER BOX	11,923.75
B0-853	2X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	16,389.85
B0-854	3X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	23,339.00

PVC COATED GABION BOXES

B0-850A	1X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	11,331.80
B0-851A	2X1X0.5M INCLU. COATED TIE(BINDING) WIRE @ 5% OF GABION WEIGHT	PER BOX	14,175.80
B0-852A	1.5X1X1M INCLU. COATED TIE (BINDING) WIRE @ 5% OF GABION WEIGHT	PER BOX	15,066.35
B0-853A	2X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	21,191.15
B0-854A	3X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	30,231.00

GEOTEXTILES EXCLUDING TRANSPORT & VAT

B0-860	GEOTEXTILE	PER 1 SQ.M	360.00
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H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2024
PUTTALAM DISTRICT

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
SIGNALIZATION EXCLUDING TRANSPORT AND VAT			
B0-900	SIGNAL POLE 4M THICKNESS 5MM, DIA 125MM, OCTAGANAL STEEL POLE HOT DIPPED GALVANIZED, PLASTIC COATING INCLUDING WASHER NUT, WASHER PLATE 32MM NUTS AND BOLTS	NOS	
B0-901	5M ARM WITH POLE, MATERIAL Q235, THICKNESS 5MM ,DIA. 230MM, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-902	6M ARM WITH POLE, MATERIAL Q235, THICKNESS 5MM , DIA. 230MM, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-903	7M ARM WITH POLE, MATERIAL Q235, THICKNESS 5MM ,DIA. 230MM, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-904	9M ARM WITH POLE, MATERIAL Q235, THICKNESS 5MM ,DIA. 230MM, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-905	10.5M ARM WITH POLE, MATERIAL Q235, THICKNESS 8MM , DIA. 230MM, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-906	12M ARM WITH POLE, MATERIAL Q235, THICKNESS 8MM , DIA 330MM BOTTOM, 280MM TOP, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-907	7M DOUBLE ARM WITH POLE, MATERIAL Q235, THICKNESS 8MM ,DIA 330MM BOTTOM, 280MM TOP, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-908	9M DOUBLE ARM WITH POLE, MATERIAL Q235, THICKNESS 8MM ,DIA 330MM BOTTOM, 280MM TOP, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-909	12M DOUBLE ARM WITH POLE, MATERIAL Q235, THICKNESS 8MM ,DIA 330MM BOTTOM, 280MM TOP, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-910	7M ARM WITH ROTATABLE ARM, MATERIAL Q235, THICKNESS 8MM, DIA 320MM BOTTOM, 219MM TOP, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, AND THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-911	9M ARM WITH ROTATABLE ARM, MATERIAL Q235, THICKNESS 8MM ,DIA 230MM BOTTOM, 219MM TOP, OCTAGONAL CROSS SHAPE, HOT DIPPED GALVANIZED AFTER MANUFACTURED, THEN SPRAY PLASTIC WHITE COLOR, 6.3M POLE HEIGHT	NOS	
B0-912	3 CORE ARMoured CABLE 3NOSX1.5MM2 (CU/PVC/SWA/PVC)	METER	
B0-913	4 CORE ARMoured CABLE 4NOSX1.5MM2 (CU/PVC/SWA/PVC)	METER	
B0-914	24/0.20 3 CORE FLEXIBLE CABLE (CU/PVC/PVC/FLEXIBLE)	METER	
B0-915	24/0.20 4 CORE FLEXIBLE CABLE (CU/PVC/PVC/FLEXIBLE)	METER	
B0-916	SLT FIBER CABLE 4 CORE	NOS	
B0-917	3 ASPECT SIGNAL HEAD 300MM DIA (LED DOUBLE COBWEB LENCE) WITH BRACKETS (IP 55 INCLUDING PLASTIC HOUSING)	NOS	
B0-918	2 ASPECT SIGNAL HEAD 300MM DIA (LED) WITH RED & GREEN 230VAC WITH BRACKETS (IP 55 INCLUDING PLASTIC HOUSING)	NOS	To be Published in Future
B0-919	2 ASPECT SIGNAL HEAD WITH COUNTDOWN 300MM DIA (LED) WITH RED & GREEN 230VAC WITH BRACKETS	NOS	
B0-920	SINGAL ASPECT SIGNAL HEAD 300MM DIA (LED DOUBLE COBWEB LENSE) 230VAC WITH BRACKETS (IP 55 INCLUDING PLASTIC HOUSING)	NOS	
B0-921	COUNTDOWN RED AND GREEN 400MM DIA, 2DIGIT, LED, 230V INCLUDING BRACKETS, NUT AND BOLTS	NOS	
B0-922	COUNTDOWN RED 400MM DIA, 2 DIGIT, LED, 230V INCLUDING BRACKETS, NUT AND BOLTS		
B0-923	COUNTDOWN RED 400MM DIA, 3 DIGIT, LED, 230V INCLUDING BRACKETS, NUT AND BOLTS		
B0-924	LED PATHWAY LIGHTS (30W, 230VAC)	NOS	
B0-925	SIGNAL CONTROLLER INCLUDING SSR, SURGE ARRESTERS FOR JUNCTION (SIZE 500MM X 350MM X 1200MM AND POWDER COATING, CONSIST WITH SIEMENS PLC + OUTPUT MODULE WITH SSR, 230VAC POWER, DC/RELAY, 1/0:14/10 INCLUDING CLOCK MODULE)	NOS	
B0-926	SIGNAL CONTROLLER INCLUDING SSR, SURGE ARRESTERS FOR PELICAN CROSSING (SIZE 500MM X 350MM X 1200MM AND POWDER COATING, CONSIST WITH SIEMENS PLC + OUTPUT MODULE WITH SSR, 230VAC POWER, DC/RELAY, 1/0:14/10 INCLUDING CLOCK MODULE)	NOS	
B0-927	SIGNAL CONTROLLER INCLUDING SSR, SURGE ARRESTERS FOR FOR MULTIPLE COMBINED JUNCTIONS (SIZE 500MM X 350MM X 1200MM AND POWDER COATING, CONSIST WITH SIEMENS PLC + OUTPUT MODULE WITH SSR, 230VAC POWER, DC/RELAY, 1/0:14/10 INCLUDING CLOCK MODULE)	NOS	
B0-928	PUSH BUTTON BOX WITH WAIT INDICATOR(320MM X 200MM DIE CAST ALUMINUM HOUSEING WITH PRINTED PERSPEX TRANSPARENT SHEET, MACHANICLE PUSH BUTTON AND 24VDC LED WAIT INDICATOR, 24VDC SWITCHED)	NOS	
B0-929	PEDESTRIAN ILLUMINATION LIGHT BOX (POWDER COATED BOX WITH FRONT COVER MADE OF PRINTED TRANSPARENT PERSPECT BLUE COLOUR 750MM X 750MM X 130MM AND 230Vac TUBE LIGHTS)	NOS	
B0-930	ARROW SIGN BOARD 3M STICKER IN CLADDING SHEET WHITE AND GREEN	NOS	
B0-931	TARGET BOARD FOR 300MM 3 ASPECT SIGNAL HEAD (3MM, SS NUT & BOLT)	NOS	
B0-932	TARGET BOARD FOR 300MM 2 ASPECT SIGNAL HEAD (3MM, SS NUT & BOLT)	NOS	
B0-933	TARGET BOARD FOR 300MM SINGLE (1A) ASPECT SIGNAL HEAD (3MM, SS NUT & BOLT)	NOS	
B0-165	MOUNTING BRACKET	NOS	
B0-934	SOUND SYSTEM FOR BLIND PEDESTRIANS (MAX WORK POWER <18W, VOICE PROMPT RATE = 70±5 TIMES/MIN (RED), 700±5 TIMES/MIN (GREEN), AC 85V-AC230V)	NOS	

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2024
PUTTALAM DISTRICT

CODE		UNIT	PRICE(RS.)
B0-935	SAFETY COVER FOR POLE FOOTING (FIBER MATERIAL)	NOS	
B0-936	COIL LOOP SYSTEM WITH RELAYS	NOS	
B0-937	SURGE ARRESTERS 230V	NOS	
B0-938	POWER SUPPLY UNIT (12VDC, 4A)	NOS	
B0-939	POWER SUPPLY UNIT (24VDC, 4A)	NOS	
B0-940	CONTROL PANEL (FIBER HOUSING, IP64)	NOS	
B0-941	CCTV CAMERA FOR DETECTING PEDESTRIANS (24VAC - 230VAC, BLUETOOTH FACILITY, IP 65, MIN. AMBIENT LIGHTING 10 LUX, 180MA @ 24VAC, RELAY TYPE DIRECT OUTPUT, 3M TO 2M DETECTION ZONE)	NOS	

STRUCTURAL STEEL ITEMS EXCLUDING TRANSPORT AND VAT

NOMINAL SIZE (mmxmmxmm)

H IRON

B0-1001	100x100x6-8	METER	5,650.00
B0-1002	125x125x6.5-9	METER	7,452.00
B0-1003	150x75x5-7	METER	4,494.67
B0-1004	150x100x6-9	METER	6,569.67
B0-1005	150x150x6.5-9	METER	7,016.67
B0-1006	200x100x5.5-8	METER	6,566.67
B0-1008	200x200x8-12	METER	15,655.50
B0-1009	250x125x6-9	METER	9,474.67
B0-1010	250x150x6.10-8.60	METER	10,666.67
B0-1011	250x250x9-14	METER	24,831.67
B0-1012	300x150x6.5-9	METER	12,239.67

GALVANIZED IRON BOX BARS

B0-1021	12x12x1.2	METER	190.73
B0-1022	20x20x2	METER	436.36
B0-1023	25x25x2	METER	429.25
B0-1024	30x30x2	METER	542.29
B0-1025	40x20x1.4	METER	378.66
B0-1026	40x40x2	METER	564.03
B0-1027	50x25x2	METER	801.98
B0-1028	50x50x2	METER	906.72
B0-1029	80x25x2	METER	1,109.09
B0-1030	80x80x2	METER	1,604.32

GALVANIZED IRON C PURLIN

B0-1041	100x50x2	METER	1,218.79
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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION I - TRANSPORT							
* SEE SECTION 23 OF GENERAL NOTES FOR SELECTION OF MODE OF TRANSPORT							
T1-001	TRANSPORT OF SOIL 25M TO 100M BY ANY MEANS (INCLU. LOADING AND UNLOADING): DATA FOR 4 CU.M ----- LABOUR (U/SK) TOOLS: 2.5% OF LABOUR	1.10	DAY	B0-004	3,080.00 77.00 ----- 3,157.00 ----- 3,157.00		
	TOTAL COST FOR 4.0 CU.M				3,157.00		
	RATE PER 1 CUBIC METRE			T1-001	789.25 =====		
				SAY	789.25	770.00	19.25
T1-002	TRANSPORT 100M TO 0.5 KM BY ANY MEANS (EXCLUDING LOADING): DATA FOR 10.5 CU.M ----- TRACTOR & TRAILOR WITH DRIVER FUEL, OIL ETC. FOR 10.5 CU.M	0.42	DAY	B0-117	4,487.66 ----- 4,487.66		
	TOTAL COST FOR 10.50 CU.M				4,487.66		
	RATE PER 1 CUBIC METRE			T1-002	427.40 =====		
				SAY	427.40	0.00	427.40
T1-003	TRANSPORT 0.5 KM TO 1.0 KM BY ANY MEANS (EXCLUDING LOADING): DATA FOR 10.5 CU.M ----- TRACTOR & TRAILOR WITH DRIVER FUEL, OIL ETC. FOR 10.5 CU.M	0.45	DAY	B0-117	4,808.21 ----- 4,808.21		
	TOTAL COST FOR 10.5 CU.M				4,808.21		
	RATE PER 1 CUBIC METRE			T1-003	457.92 =====		
				SAY	457.90	0.00	457.90
T1-003A	TRANSPORT OF EACH SUBSEQUENT 1 KM FROM 1.0 - 8.0 KM BY ANY MEANS: (EXCLUDING LOADING) DATA FOR 10.5 CU.M ----- TRACTOR & TRAILOR WITH DRIVER FUEL, OIL ETC. FOR 10.5 CU.M	0.07	DAY	B0-117	747.94 ----- 747.94		
	TOTAL COST FOR 10.5 CU.M				747.94		
	RATE PER 1 CUBIC METRE			T1-003A	71.23 =====		
				SAY	71.25	0.00	71.25

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-003B	TRANSPORT OF EACH SUBSEQUENT 1.0 KM BEYOND 8 KM. BY ANY MEANS: (EXCLUDING LOADING)						
	DATA FOR 10.6 CU.M						
	TRACTOR & TRAILOR WITH DRIVER FUEL, OIL ETC. FOR 10.5 CU.M	0.05	DAY	B0-117	502.19		
	TOTAL COST FOR 10.5 CU.M				502.19		
	RATE PER 1 CUBIC METRE			T1-003B	47.83		
				SAY	47.85	0.00	47.85
	* T1-004, T1-005: CODES CHANGED AS T1-003A AND T1-003B						
T1-006	TRANSPORT OF MATERIAL IN BULK EXCLUDING LOADING (FOR DISTANCE LESS THAN OR EQUAL 3 KILO METRES):						
	DATA FOR 1.0 CU.M						
	HIRE CHARGES PER CU.M PER 3 KILO METRES	3.00	CU.M/KM	B0-119	154.35		
	TOTAL COST				154.35		
	RATE PER 1 CUBIC METRE (FIXED RATE UP TO 3 KM)			T1-006	154.35		
				SAY	154.35	0.00	154.35
T1-007	TRANSPORT OF MATERIAL IN BULK EXCLUDING LOADING (FROM 3 KM UPTO 10 KILO METRES DISTANCE):						
	DATA FOR 1.0 CU.M						
	HIRE CHARGES PER CU.M PER KILO METRE	1.00	CU.M/KM	B0-119	51.45		
	TOTAL COST				51.45		
	RATE PER 1 CUBIC METRE PER 1 KM			T1-007	51.45		
				SAY	51.45	0.00	51.45
T1-007A	TRANSPORT OF MATERIAL IN BULK EXCLUDING LOADING (FOR DISTANCE MORE THAN 10 KILO METRES):						
	DATA FOR 1.0 CU.M						
	HIRE CHARGES PER CU.M PER KILO METRE	1.00	CU.M/KM	B0-118	49.41		
	TOTAL COST				49.41		
	RATE PER 1 CUBIC METRE PER 1 KM			T1-007A	49.41		
				SAY	49.40	0.00	49.40
	* T1-008: CODE AMENDED AS T1-007A						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-009	TRANSPORT OF PREMIX IN BULK, EXCLUDING LOADING OTHER THAN AT MIXING PLANT						
	DATA FOR 1.0 CU.M						
	HIRE CHARGES PER M.TON PER KILO METRE	1.00	M.TON/KM	B0-120	34.07		
	TOTAL COST				34.07		
	RATE PER 1 M.TON PER 1 KM			T1-009	34.07		
				SAY	34.05	0.00	34.05
T1-010	TRANSPORT OF BARRELS OF BITUMEN FOR FIRST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING):						
	DATA FOR 16 NOS. BARRELS						
	16 BARRELS-ASSUME 2.1 CU.M * IDLE TIME ON LABOUR DURING TRANSPORT (3 LABOURERS X.11HRS)	2.10	CU.M	T1-003	961.64		
		0.04	DAY	B0-004	114.80		
					1,076.44		
	COST OF TRANSPORT FOR 16 BARRELS	16	NOS.		1,076.44		
	RATE PER 1 BARREL			T1-010	67.28		
				SAY	67.30	7.18	60.13
T1-010A	TRANSPORT OF BARRELS OF BITUMEN FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM. (EXCLUDING LOADING AND UNLOADING):						
	DATA FOR 16 NOS. BARRELS						
	DATA FOR 16 NOS. BARRELS						
	16 BARRELS-ASSUME 2.1 CU.M * IDLE TIME ON LABOUR DURING TRANSPORT (AS ABOVE R1-006M)	2.10	CU.M	T1-003A	149.59		
		0.04	DAY	B0-004	114.80		
					264.39		
	COST OF TRANSPORT FOR 16 BARRELS	16	NOS.		264.39		
	RATE PER 1 BARREL			T1-010A	16.52		
				SAY	16.50	7.18	9.33
T1-010B	TRANSPORT OF BARRELS OF BITUMEN FOR EACH SUBSEQUENT 1.0 KM BEYOND 8 KM. (EXCLUDING LOADING AND UNLOADING):						
	DATA FOR 16 NOS. BARRELS						
	DATA FOR 16 NOS. BARRELS						
	16 BARRELS-ASSUME 2.1 CU.M * IDLE TIME ON LABOUR DURING TRANSPORT (3 LABOURERS X.08HRS)	2.10	CU.M	T1-003B	100.44		
		0.03	DAY	B0-004	84.00		
					184.44		
	COST OF TRANSPORT FOR 16 BARRELS	16	NOS.		184.44		
	RATE PER 1 BARREL			T1-010B	11.53		
				SAY	11.55	5.25	6.30
	* T1-011 & T1-012 CODE CHANGED						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-013	LOADING BARRELS OF BITUMEN INCLUSIVE OF ROLLING UPTO 25M : DATA FOR ONE NO. BARREL						
	DATA FOR 1 NO. BARRELS (190 SECONDS/BARREL)						
	190X1X1						
	LABOUR U/SK	0.01	DAY	B0-004	19.60		
	60X60X8						
	ADD. 150% FOR IDLE TIME OR FATIGUE ETC.				29.40		
					49.00		
	RATE FOR LOADING PER 1 BARREL			T1-013	49.00		
				SAY	49.00	49.00	0.00
T1-014	UNLOADING BARRELS OF BITUMEN INCLUSIVE OF ROLLING AND STACKING :						
	DATA FOR 1 NO. BARREL (100 SECONDS/BARREL)						
	100x1x1						
	LABOUR U/SK	0.00	DAY	B0-004	8.40		
	60x60x8						
	ADD.150% FOR IDLE TIME OR FATIGUE ETC.				12.60		
					21.00		
	RATE FOR UNLOADING PER 1 BARREL			T1-014	21.00		
				SAY	21.00	21.00	0.00
T1-015	TRANSPORT OF HUME PIPES 152MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 21.96 M (9 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(9 PIPES/LOAD) 9 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	961.64		
	IDLE TIME (4 LABOURERS X.11 HRS.) U/SK	0.06	DAY	B0-004	154.00		
					1,115.64		
	COST OF TRANSPORT FOR 21.96 M				1,115.64		
	COST OF TRANSPORT PER 1 L.METRE			T1-015	50.80		
				SAY	50.80	7.01	43.79
T1-015A	TRANSPORT OF HUME PIPES 152MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 21.96 M (9 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(9 PIPES/LOAD) 9 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	149.59		
	IDLE TIME AS ABOVE (T1-015) U/SK	0.06	DAY	B0-004	154.00		
					303.59		
	COST OF TRANSPORT OF 21.96 M				303.59		
	COST OF TRANSPORT PER 1 L.METRE			T1-015A	13.82		
				SAY	13.80	7.01	6.79

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-015B	TRANSPORT OF HUME PIPES 152MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 21.96 M (9 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(12 PIPES/LOAD) 9 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	100.44		
	IDLE TIME(4 LABOURERS X 1/12 HRS)U/SK	0.04	DAY	B0-004	117.60		
					218.04		
	COST OF TRANSPORT OF 21.96 M				218.04		
	COST OF TRANSPORT PER 1 L. METRE			T1-015B	9.93		
				SAY	9.95	5.36	4.59
	* T1-016 & T1-017 CODE CHANGED						
T1-018	TRANSPORT OF HUME PIPES 229 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 19.52 M (8 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(8 PIPES/LOAD) 8 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	961.64		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	154.00		
					1,115.64		
	COST OF TRANSPORT OF 19.52 M				1,115.64		
	COST OF TRANSPORT PER 1 L.METRE			T1-018	57.15		
				SAY	57.15	7.89	49.26
T1-018A	TRANSPORT OF HUME PIPES 229 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 19.52 M (8 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(8 PIPES/LOAD) 8 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	149.59		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	154.00		
					303.59		
	COST OF TRANSPORT OF 19.52 M				303.59		
	COST OF TRANSPORT PER 1 L.METRE			T1-018A	15.55		
				SAY	15.55	7.89	7.66

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-018B	TRANSPORT OF HUME PIPES 229 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 19.52 M (8 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(8 PIPES/LOAD)	2.10	CU.M	T1-003B	100.44		
	8 PIPES-ASSUME 2.1 CU.M *	0.04	DAY	B0-004	117.60		
	IDLE TIME(4 LABOURERS X 1/12 HRS)U/SK						
					218.04		
	COST OF TRANSPORT OF 19.52 M				218.04		
	COST OF TRANSPORT PER 1 L.METRE			T1-018B	11.17		
				SAY	11.15	6.02	5.13
	* T1-019 & T1-020 : CODE CHANGED						
T1-021	TRANSPORT OF HUME PIPES 305 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 14.64 M (6 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(6 PIPES/LOAD)	2.10	CU.M	T1-003	961.64		
	6 PIPES-ASSUME 2.1 CU.M *	0.06	DAY	B0-004	154.00		
	IDLE TIME AS ABOVE (T1-015)U/SK						
					1,115.64		
	COST OF TRANSPORT OF 14.64 M				1,115.64		
	COST OF TRANSPORT PER 1 L.METRE			T1-021	76.20		
				SAY	76.20	10.52	65.68
T1-021A	TRANSPORT OF HUME PIPES 305 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 14.64 M (6 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(6 PIPES/LOAD)	2.10	CU.M	T1-003A	149.59		
	6 PIPES-ASSUME 2.1 CU.M *	0.06	DAY	B0-004	154.00		
	IDLE TIME AS ABOVE (T1-015)U/SK						
					303.59		
	COST OF TRANSPORT OF 14.64 M				303.59		
	COST OF TRANSPORT PER 1 L.METRE			T1-021A	20.74		
				SAY	20.75	10.52	10.23

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-021B	TRANSPORT OF HUME PIPES 305 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 14.64 M (6 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(6 PIPES/LOAD) 6 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	100.44		
	IDLE TIME AS ABOVE (T1-017)U/SK	0.04	DAY	B0-004	117.60		
					218.04		
	COST OF TRANSPORT OF 14.64 M				218.04		
	COST OF TRANSPORT PER 1 L.METRE			T1-021B	14.89		
				SAY	14.90	8.03	6.87
	* T1-022 & T1-023: CODE CHANGED						
T1-024	TRANSPORT OF HUME PIPES 457 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 9.76 M (4 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	961.64		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	154.00		
					1,115.64		
	COST OF TRANSPORT OF 9.76 M				1,115.64		
	COST OF TRANSPORT PER 1 L.METRE			T1-024	114.31		
				SAY	114.30	15.78	98.52
T1-024A	TRANSPORT OF HUME PIPES 457 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 9.76 M (4 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	149.59		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	154.00		
					303.59		
	COST OF TRANSPORT OF 9.76 M				303.59		
	COST OF TRANSPORT PER 1 L.METRE			T1-024A	31.11		
				SAY	31.10	15.78	15.32

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-024B	TRANSPORT OF HUME PIPES 457 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 9.76 M (4 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	100.44		
	IDLE TIME AS ABOVE (T1-017)U/SK	0.04	DAY	B0-004	117.60		
					218.04		
	COST OF TRANSPORT OF 9.76 M				218.04		
	COST OF TRANSPORT PER 1 L.METRE			T1-024B	22.34		
				SAY	22.35	12.05	10.30
	* T1-025 & T1-026: CODE CHANGED						
T1-027	TRANSPORT OF HUME PIPES 610 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 7.32 M (3 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(3 PIPES/LOAD) 3 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	961.64		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	154.00		
					1,115.64		
	COST OF TRANSPORT OF 7.32 M				1,115.64		
	COST OF TRANSPORT PER 1 L.METRE			T1-027	152.41		
				SAY	152.40	21.04	131.36
T1-027A	TRANSPORT OF HUME PIPES 610 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 7.32 M (3 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(3 PIPES/LOAD) 3 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	149.59		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	154.00		
					303.59		
	COST OF TRANSPORT OF 7.32 M				303.59		
	COST OF TRANSPORT PER 1 L.METRE			T1-027A	41.47		
				SAY	41.45	21.04	20.41

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-027B	TRANSPORT OF HUME PIPES 610 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 7.32 M (3 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(3 PIPES/LOAD) 3 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	100.44		
	IDLE TIME AS ABOVE (T1-017)U/SK	0.04	DAY	B0-004	117.60		
					218.04		
	COST OF TRANSPORT OF 7.32 M				218.04		
	COST OF TRANSPORT PER 1 L.METRE			T1-027B	29.79		
				SAY	29.80	16.07	13.73
	* T1-028 & T1-029: CODE CHANGED						
T1-030	TRANSPORT OF HUME PIPES 915 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 4.88 M (4 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	961.64		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	154.00		
					1,115.64		
	COST OF TRANSPORT OF 4.88 M				1,115.64		
	COST OF TRANSPORT PER 1 L.METRE			T1-030	228.61		
				SAY	228.60	31.56	197.04
T1-030A	TRANSPORT OF HUME PIPES 915 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 4.88 M (4 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	149.59		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	154.00		
					303.59		
	COST OF TRANSPORT OF 4.88 M				303.59		
	COST OF TRANSPORT PER 1 L.METRE			T1-030A	62.21		
				SAY	62.20	31.56	30.64

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-030B	TRANSPORT OF HUME PIPES 915 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 4.88 M (4 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	100.44		
	IDLE TIME AS ABOVE (T1-017)U/SK	0.04	DAY	B0-004	117.60		
					218.04		
	COST OF TRANSPORT OF 4.88 M				218.04		
	COST OF TRANSPORT PER 1 L.METRE			T1-030B	44.68		
				SAY	44.70	24.10	20.60
	* T1-031 & T1-032: CODE CHANGED						
T1-033	TRANSPORT OF HUME PIPES 1220 MM DIA. DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 2.44 M (2 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(2 PIPES/LOAD) 2 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	961.64		
	IDLE TIME (4 LABOURERS X.22 HRS.)U/SK	0.11	DAY	B0-004	308.00		
					1,269.64		
	COST OF TRANSPORT OF 2.44 M				1,269.64		
	COST OF TRANSPORT PER 1 L.METRE			T1-033	520.34		
				SAY	520.35	126.23	394.12
T1-033A	TRANSPORT OF HUME PIPES 1220 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 2.44 M (2 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(2 PIPES/LOAD) 2 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	149.59		
	IDLE TIME (4 LABOURERS X.22 HRS.)U/SK	0.11	DAY	B0-004	308.00		
					457.59		
	COST OF TRANSPORT OF 2.44 M				457.59		
	COST OF TRANSPORT PER 1 L.METRE			T1-033A	187.54		
				SAY	187.55	126.23	61.32

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-033B	TRANSPORT OF HUME PIPES 1220 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 2.44 M (2 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(2 PIPES/LOAD)	2.10	CU.M	T1-003B	100.44		
	2 PIPES-ASSUME 2.1 CU.M *	0.08	DAY	B0-004	232.40		
	IDLE TIME (4 LABOURERS X 1/6 HRS.)U/SK						
					332.84		
	COST OF TRANSPORT OF 2.44 M				332.84		
	COST OF TRANSPORT PER 1 L.METRE			T1-033B	136.41		
				SAY	136.40	95.25	41.15
	* T1-034 & T1-035: CODE CHANGED						
T1-036	LOADING AND UNLOADING 152 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK (2 X 13 MINUTES)	0.05	DAY	B0-004	151.20		
					151.20		
	RATE FOR 152 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-036	151.20		
				SAY	151.20	151.20	0.00
T1-037	LOADING AND UNLOADING 229 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK (3 X 10 MINUTES)	0.06	DAY	B0-004	176.40		
					176.40		
	RATE FOR 229 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-037	176.40		
				SAY	176.40	176.40	0.00
T1-038	LOADING AND UNLOADING 305 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK (6 X 10 MINUTES)	0.13	DAY	B0-004	350.00		
					350.00		
	RATE FOR 305 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-038	350.00		
				SAY	350.00	350.00	0.00

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-039	LOADING AND UNLOADING 457 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK (10 X 10 MINUTES)	0.21	DAY	B0-004	582.40		
					582.40		
	RATE FOR 457 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-039	582.40		
				SAY	582.40	582.40	0.00
T1-040	LOADING AND UNLOADING 610 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK ((9+4) X 10 MINUTES)	0.27	DAY	B0-004	758.80		
					758.80		
	RATE FOR 610 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-040	758.80		
				SAY	758.80	758.80	0.00
T1-041	LOADING AND UNLOADING 915 MM DIA. 1.22 M LONG HUME PIPES :						
	DATA FOR TWO 1.22 M LONG PIPES						
	LABOUR U/SK (8 X 1 HOUR)	1.00	DAY	B0-004	2,800.00		
					2,800.00		
	RATE FOR 915 MM DIA., 1.22 M LONG, 1 NO. PIPE			T1-041	1,400.00		
				SAY	1,400.00	1,400.00	0.00
T1-042	LOADING AND UNLOADING 1220 MM DIA. 1.22 M LONG HUME PIPES :						
	DATA FOR TWO 1.22 M LONG PIPES						
	LABOUR U/SK (8 X 2 HRS.)	2.00	DAY	B0-004	5,600.00		
					5,600.00		
	RATE FOR 1220 MM DIA., 1.22 M LONG, 1 NO. PIPE			T1-042	2,800.00		
				SAY	2,800.00	2,800.00	0.00
T1-043	TRANSPORT OF PRECAST KERB STONES (ALL TYPES) FOR ROAD WORKS, INCLUDING LOADING AND UNLOADING :						
	DATA FOR 99 METRES(110 KERBS)						
	AVERAGE WEIGHT OF A KERB STONE	62.90	KG				
	NO.OF KERBS PER TRIP IN A 7 TON LORRY SAY	110.00	NOS.				
	AVERAGE TRANSPORT DISTANCE	100.00	KM				
	HIRE CHARGES TWO WAY FOR LORRY FOR LOADING & UNLOADING:	200.00	KM	B0-127	32,492.00		
	LABOUR U/SK (4 X 2 HOURS)	1.00	DAY	B0-004	2,800.00		
					35,292.00		
	TOTAL FOR 99 METRE LENGTH FOR 100 KM TRANSPORT				35,292.00		
	RATE FOR 1 LINEAR METRE-KILO METRE			T1-043	3.56		
				SAY	3.55	0.28	3.27

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-044	FOR BRIDGE WORKS, INCLUDING LOADING AND UNLOADING :						
	DATA FOR 68.5 METRES(75 KERBS)						
	AVERAGE WEIGHT OF A KERB STONE	91.00	KG				
	NO.OF KERBS PER TRIP IN A 7 TON LORRY	(7000/91 = 76.92)					
	AVERAGE TRANSPORT DISTANCE SAY	75.00	NOS.				
	HIRE CHARGES TWO WAY FOR LORRY	100.00	KM				
	FOR LOADING & UNLOADING:	200.00	KM	B0-127	32,492.00		
	LABOUR U/SK (6 X 2 HOURS)	1.50	DAY	B0-004	4,200.00		
					36,692.00		
	TOTAL FOR 68.5 METRE LENGTH FOR 100 KM TRANSPORT				36,692.00		
	RATE FOR 1 LINEAR METRE-KILO METRE			T1-044	5.36		
				SAY	5.35	0.61	4.74
T1-045	TRANSPORT OF PRECAST CONCRETE HAND RAILS, UP-RIGHTS AND JOINTS FOR BRIDGE WORKS, INCLUDING LOADING AND UNLOADING :						
	DATA FOR TOTAL 38 METRES LENGTH HAND						
	RAILING (19 METRE LENGTH PER SIDE) (PER STD TYPE DRAWING-T/B/102/B) :						
	AVERAGE WEIGHT OF A HAND RAIL	47.85	KG				
	AVERAGE WEIGHT OF AN UPRIGHT	55.49	KG				
	AVER. WEIGHT OF A COLLAR JOINT HALF	3.05	KG				
	TOTAL NOS. HAND RAILS	48.00	NOS.				
	TOTAL NOS. UPRIGHTS	36.00	NOS.				
	TOTAL NOS. COLLAR JOINT HALVES	54.00	NOS.				
	TOTAL WEIGHT TO TRANSPORT	5,125.25	KG				
	AVERAGE TRANSPORT DISTANCE SAY	100.00	KM				
	HIRE CHARGES TWO WAY FOR 5 TON LORRY	200.00	KM	B0-126	27,544.00		
	FOR LOADING & UNLOADING:						
	LABOUR U/SK (4 X 2 HOURS)	1.00	DAY	B0-004	2,800.00		
					30,344.00		
	TOTAL FOR 38 METRE LENGTH FOR 100 KM TRANSPORT				30,344.00		
	RATE FOR 1 LINEAR METRE-KILO METRE			T1--045	7.99		
				SAY	8.00	0.74	7.26
T1-046	TRANSPORT OF PRECAST CONCRETE SLABS 450X450X50 MM FOR FOOT WALKS, INCLUDING LOADING AND UNLOADING :						
	DATA FOR 25 SQ.METERS(124 SLABS)						
	AVERAGE WEIGHT OF A SLAB	23.00	KG				
	NO.OF SLABS PER TRIP IN A 3 TON LORRY	(124 X 23 KG = 2852 KG)					
	AVERAGE TRANSPORT DISTANCE SAY	124.00	NOS.				
	HIRE CHARGES TWO WAY FOR LORRY	100.00	KM				
	FOR LOADING & UNLOADING:	200.00	KM	B0-125	22,956.00		
	LABOUR U/SK (4 X 1.5 HOURS)	0.75	DAY	B0-004	2,100.00		
					25,056.00		
	TOTAL FOR 25 SQ.METRE AREA FOR 100 KM TRANSPORT				25,056.00		
	RATE FOR 1 SQ.METRE-KILO METRE			T1-046	10.02		
				SAY	10.00	0.84	9.16

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-047	TRANSPORT OF PRECAST STANDARD BOUNDARY MARKERS INCLUDING UNLOADING ONLY * ;						
	DATA FOR 70 STANDARD BOUNDARY MARKERS						
	AVERAGE WEIGHT OF A BOUND. MARKER	94.81	KG				
	NO.OF MARKERS PER TRIP IN A 7 TON LORRY (7000/95 = 73.68)						
	AVERAGE TRANSPORT DISTANCE	70.00	NOS.				
	HIRE CHARGES TWO WAY FOR LORRY	100.00	KM				
	FOR UNLOADING ONLY:	200.00	KM	B0-127	32,492.00		
	LABOUR U/SK (6 X 1 HOUR)	0.75	DAY	B0-004	2,100.00		
					34,592.00		
	TOTAL FOR 70 MARKERS PER 100 KM TRANSPORT				34,592.00		
	RATE FOR 1 NO PER KILO METRE			T1-047	4.94		
				SAY	4.95	0.30	4.65
	* SUPPLY RATE INCLUDE LOADING AT YARD.						
T1-048	TRANSPORT OF EMULSION						
	DATA FOR 8000 LITERS PER 1 KM						
	HIRE CHARGE FOR TANK TRUCK EMULSION	1.00	KM	B0-153	248.25		
	LITERS OF EMULSION TRANSPORTED	8,000.00	LITERS				
	TRANSPORT COST PER 100 LITERS OF EMULSION	1.00	100LTR/KM		6.21		
	RATE FOR 100 LITERS PER KILO METRE			T1-048	6.21		
				SAY	6.25	0.00	6.25
T1-049	TRANSPORT OF GABION MESH 4X1X1 M SIZE						
	DATA FOR 206 NOS PER 188 KM						
	AVERAGE TRANSPORT DISTANCE	188.00	KM				
	NUMBER OF MESH BOXES TO BE TRANSPORTED BY TWO LORRIES	206.00	NOS				
	LORRY 3 TONN	376.00	KM	B0-125	43,157.28		
	LORRY 5 TONN	376.00	KM	B0-126	51,782.72		
	LABOUR - U/SK FOR LOADING AND UNLOADING	0.50	DAY	B0-004	1,400.00		
	TRANSPORT COST FOR 206 NOS FOR 188 KM				96,340.00		
	TRANSPORT RATE FOR 1 NO. MESH PER 1 KM			T1-050	2.49		
				SAY	2.50	0.04	2.46

* * *

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION II							
=====							
ROADWAY AND FOUNDATION / TRENCH EXCAVATION							
(INCLUDING LOADING, UNLOADING AND TRANSPORTING WITHIN 25 METERS DISTANCE UNLESS OTHERWISE SPECIFIED.)							
* NOTE: FOR ROADWAY EXCAVATIONS INVOLVING MORE THAN 200 CU.M, MACHINE RATES SHOULD BE ADOPTED							

E1-001	EXCAVATION IN LOOSE SOIL (DRY) [SSCM 301.2(IV)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	70.00 100.00		
					----- 2,970.00		
	COST PER 2.83 CU.M				----- 2,970.00		
	RATE PER 1 CU.M			E1-001	1,049.47		
				SAY	=====		
					1,049.45	989.40	60.05
E1-002	EXCAVATION IN LOOSE SOIL (WET) IN SLIPS [SSCM 301.3(0)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.25	DAY	B0-004	3,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	87.50 100.00		
					----- 3,687.50		
	COST PER 2.83 CU.M				----- 3,687.50		
	RATE PER 1 CU.M			E1-002	1,303.00		
				SAY	=====		
					1,303.00	1,236.75	66.25
E1-003	EXCAVATION IN ORDINARY SOIL (CUTTING MEASUREMENT) [SSCM 301.2(V)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.50	DAY	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	105.00 100.00		
					----- 4,405.00		
	COST PER 2.83 CU.M				----- 4,405.00		
	RATE PER 1 CU.M			E1-003	1,556.54		
				SAY	=====		
					1,556.55	1,484.10	72.45

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-004	EXCAVATION IN ORDINARY SOIL (VEHICLE MEASUREMENT) [SSCM 301.2(V)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.50	DAY	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				105.00		
	BASKETS	0.33	NO.	B0-631	100.00		
	LESS 10% OF TOTAL FOR BULKING				440.50		

					3,964.50		
	COST PER 2.83 CU.M				-----		
					3,964.50		
	RATE PER 1 CU.M			E1-004	1,400.88		
					=====		
				SAY	1,400.90	1,335.69	65.21
E1-005	EXCAVATION IN MEDIUM SOIL (CUTTING MEASUREMENT) [SSCM 301.2(VI)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				140.00		
	BASKETS	0.33	NO.	B0-631	100.00		

					5,840.00		
	COST PER 2.83 CU.M				-----		
					5,840.00		
	RATE PER 1 CU.M			E1-005	2,063.60		
					=====		
				SAY	2,063.60	1,978.80	84.80
E1-006	EXCAVATION IN MEDIUM SOIL (VEHICLE MEASUREMENT) [SSCM 301.2(VI)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				140.00		
	BASKETS	0.33	NO.	B0-631	100.00		
	LESS 15% OF TOTAL FOR BULKING				876.00		

					4,964.00		
	COST PER 2.83 CU.M				-----		
					4,964.00		
	RATE PER 1 CU.M			E1-006	1,754.06		
					=====		
				SAY	1,754.05	1,681.98	72.07
E1-007	EXCAVATION IN HARD SOIL (CUTTING MEASUREMENT) [SSCM 301.2(VII)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.00	DAYS	B0-004	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				210.00		
	BASKETS	0.33	NO.	B0-631	100.00		

					8,710.00		
	COST PER 2.83 CU.M				-----		
					8,710.00		
	RATE PER 1 CU.M			E1-007	3,077.74		
					=====		
				SAY	3,077.75	2,968.20	109.55

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-008	EXCAVATION IN HARD SOIL (VEHICLE MEASUREMENT) [SSCM 301.2(VII)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.00	DAYS	B0-004	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				210.00		
	BASKETS	0.33	NO.	B0-631	100.00		
	LESS 15% OF TOTAL FOR BULKING				1,306.50		

					7,403.50		
	COST PER 2.83 CU.M				-----		
					7,403.50		
	RATE PER 1 CU.M			E1-008	2,616.08		
				SAY	=====		
					2,616.10	2,522.97	93.13
E1-009	EXCAVATION IN UNCLASSIFIED SOIL (CUTTING MEASUREMENT) [SSCM 301.2 a(I)] :						
	DATA FOR 1 CU.M						
	RATE @ E1-003				1,556.54		
	RATE @ E1-005				2,063.60		
	RATE @ E1-007				3,077.74		

	AVERAGE COST PER 1 CU. M				2,232.63		

	RATE PER 1 CU.M			E1-009	2,232.63		
				SAY	=====		
					2,232.65	2,143.70	88.95
NOTE : SEE ITEM NOS. FROM E1-027 ON PAGE 27 FOR ROADWAY EXCAVATION USING MACHINERY.							
E1-010	EXCAVATION IN SOFT ROCK (CUTTING MEASUREMENT) [SSCM 301.2(VII)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.25	DAYS	B0-004	9,100.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				227.50		
	BASKETS	0.33	NO.	B0-631	100.00		

					9,427.50		
	COST PER 2.83 CU.M				-----		
					9,427.50		
	RATE PER 1 CU.M			E1-010	3,331.27		
				SAY	=====		
					3,331.25	3,215.55	115.70
E1-010 A	EXCAVATION IN MUD/MARSHY MATERIAL (CUTTING MEASUREMENT) [SSCM 301.2(VII)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.50	DAYS	B0-004	7,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				175.00		
	BASKETS	0.33	NO.	B0-631	100.00		

					7,275.00		
	COST PER 2.83 CU.M				-----		
					7,275.00		
	RATE PER 1 CU.M			E1-010 A	2,570.67		
				SAY	=====		
					2,570.65	2,473.50	97.15

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-011	EXCAVATION PIT/TRENCH FOR FOUNDATION IN ORDINARY SOIL NOT EXCEEDING 1.5 M. DEEP, INCLUDING LEVELLING AND RAMMING BOTTOM, EXCAVATED MATERIAL DEPOSITED AT SITE WITH IN 25 M OR AS DIRECTED. * (SHORING, DEWATERING IF NECESSARY SHALL BE PAID SEPARATELY) [SSCM 302.1-302.3] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	100.00		
					5,840.00		
	COST PER 2.83 CU.M				5,840.00		
	RATE PER 1 CU.M			E1-011	2,063.60		
				SAY	2,063.60	1,978.80	84.80
	* SEE GENERAL NOTES 24(3) FOR DETAILS REGARDING ADDITIONAL EXCAVATION REQUIRED FOR WORKING SPACE.						
E1-012	DITTO - MEDIUM SOIL, - DO - DO - :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.50	DAYS	B0-004	7,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	100.00		
					7,275.00		
	COST PER 2.83 CU.M				7,275.00		
	RATE PER 1 CU.M			E1-012	2,570.67		
				SAY	2,570.65	2,473.50	97.15
E1-013	DITTO - HARD SOIL, - DO - DO - :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.50	DAYS	B0-004	9,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	100.00		
					10,145.00		
	COST PER 2.83 CU.M				10,145.00		
	RATE PER 1 CU.M			E1-013	3,584.81		
				SAY	3,584.80	3,462.90	121.90
E1-014	DITTO - IN UNCLASSIFIED SOIL, - DO - DO - :						
	DATA FOR 1 CU.M						
	RATE @ E1-011M				2,063.60		
	RATE @ E1-012M				2,570.67		
	RATE @ E1-013M				3,584.81		
	AVERAGE COST PER 1 CU. M				2,739.69		
	RATE PER 1 CU.M			E1-014	2,739.69		
				SAY	2,739.70	2,638.40	101.30

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-015	DITTO - MUD/MARSHY MATERIAL, - DO - DO - :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.00	DAYS	B0-004	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				210.00		
	BASKETS(PANS)	0.33	NO.	B0-631	100.00		
					8,710.00		
	COST PER 2.83 CU.M				8,710.00		
	RATE PER 1 CU.M			E1-015	3,077.74		
				SAY	3,077.75	2,968.20	109.55
	* ITEM NOS. E1-016 TO E1-018 DELETED						
E1-019	EXCAVATING SOFT ROCK, NOT EXCEEDING 1.5 M DEPTH [SSCM 301.2(II)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				280.00		
	BASKETS	0.33	NO.	B0-631	100.00		
					11,580.00		
	COST PER 2.83 CU.M				11,580.00		
	RATE PER 1 CU.M			E1-019	4,091.87		
				SAY	4,091.85	3,957.60	134.25
	* NOTE: EXCAVATING ROCK FOR FOUNDATION TO BE PAID ON S.S.R.						
	* ITEM NO. E1-020 DELETED.						
E1-021	PILING AVAILABLE SOIL :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	0.25	DAYS	B0-004	700.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				17.50		
					717.50		
	COST PER 2.83 CU.M				717.50		
	RATE PER 1 CU.M			E1-021	253.53		
				SAY	253.55	247.35	6.20
E1-022	LOADING AVAILABLE SOIL TO A TRACTOR OR: EQUIVALENT .						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	0.33	DAYS	B0-004	924.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				23.10		
					947.10		
	COST PER 2.83 CU.M				947.10		
	RATE PER 1 CU.M			E1-022	334.66		
				SAY	334.65	326.50	8.15

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-023	EXCAVATING ROCK, REQUIRING BLASTING, FOR ROADWAY AND AT QUARRY FOR BOULDERS (EXCLUDING DOZING AWAY [SSCM 301.2(III) & 306.1 - 306.4] : DATA FOR 32 CU.M (BANK MEASUREMENT)						
	(A) BLAST HOLE DRILLING						
	CONSIDER 1.5 M X 1.5 M HOLE PATTERN DRILL RATE = 68 M/8 HRS OUTPUT PER HR = 32 CU.M EQUIPMENT (DRILLING)						
	* TRACK DRILL CRAWLER (Wet lease)	1.50	HOUR	B0-143	3,782.04		
	* COMPRESSOR AIR CFM 750(Wet lease)	1.50	HOUR	B0-144	16,666.37		
	COST PER 32 CU.M			(A)	20,448.41		
	(B) CHARGING/STEMMING BLAST HOLES						
	MATERIAL						
	WATER GEL	13.50	KG	B0-506	50,259.15		
	AMMONIUM NITRATE	15.39	KG	B0-507	21,607.56		
	DETONATORS	7.00	NO	B0-504	1,157.10		
	FUSE	8.00	M	B0-502	6,647.20		
	DIESELENE	1.85	LTR.	B0-612	671.55		
	SUB TOTAL				80,342.56		
	LABOUR						
	BLASTER (SK A) 1 NO X 1 HOUR	0.13	DAY	B0-001	475.00		
	LABOUR (SK B) 2 NOS X 1 HOUR	0.25	DAY	B0-002	875.00		
	LABOUR (S/SK.) 2 NOS X 1 HOUR	0.25	DAY	B0-003	750.00		
	SUB TOTAL				2,100.00		
	COST PER 32 CU.M			(B)	82,442.56		
				(A)+(B)	102,890.97		
	TOTAL COST PER 32 CU.M				102,890.97		
	RATE PER 1 CU.M (Bank Measure))			E1-023	3,215.34		
				SAY	3,215.35	65.63	3,149.73
E1-024	BOULDERS SLEDGING, PILING, ETC.:						
	DATA FOR 2.83 CU.M						
	LABOUR (SK-B)	1.00	DAY	B0-002	3,500.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	5,600.00		
	FOR COLLECT, PREPARE DEPOT & PILING:						
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	LABOUR (S/SK)	0.50	DAY	B0-003	1,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				335.00		
					13,735.00		
	COST PER 2.83 CU.M				13,735.00		
	RATE PER 1 CU.M			E1-024	4,853.36		
				SAY	4,853.35	4,734.98	118.37

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-025	ROCK REQUIRING BLASTING :						
	DATA FOR 2.83 CU.M (BANK MEASUREMENT)						
	LABOUR (SK A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (SK B)	2.00	DAYS	B0-002	7,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				270.00		
	ALLOW FOR FUEL FORGE ETC.	1.00	ITEM	B0-723	220.00		
	POWDER	0.34	KG	B0-501	698.87		
	FUSE	3.05	M	B0-502	2,532.58		
	STEEL	0.45	KG	B0-503	317.32		
					14,838.77		
	COST PER 2.83 CU.M				14,838.77		
	RATE PER 1 CU.M			E1-025	5,243.38		
				SAY	5,243.40	3,816.25	1,427.15
E1-026	ROCK REQUIRING BLASTING SLEDGING AND PILING :						
	DATA FOR 2.83 CU.M (BANK MEASUREMENT)						
	LABOUR (SK A) MINER	1.00	DAY	B0-001	3,800.00		
	LABOUR (SK B) SLEDGER	1.50	DAYS	B0-002	5,250.00		
	LABOUR (U/SK) COLLECT	1.50	DAY	B0-004	4,200.00		
	LABOUR (S/SK) PILING	0.50	DAY	B0-003	1,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				368.75		
	ALLOW FOR FUEL FORGE ETC.	1.00	ITEM	B0-723	220.00		
	POWDER	0.34	KG	B0-501	698.87		
	FUSE	3.05	M	B0-502	2,532.58		
	STEEL	0.45	KG	B0-503	317.32		
					18,887.52		
	COST PER 2.83 CU.M				18,887.52		
	RATE PER 1 CU.M			E1-026	6,674.04		
				SAY	6,674.05	5,212.01	1,462.04
E1-027	ROADWAY EXCAVATION IN UNCLASSIFIED SOIL USING MACHINERY EXCLUDING LOADING AND PILING. (CUTTING MEASUREMENT)						
	DATA FOR 1 HOUR EXCAVATION MACHINE EXCAVATOR MOBILE .4 CU.M BUCKET DOZER TYPE D4-E						
	DOZER EXCAVATION PER HR.	16.11	CU.M (BANK VOL)				
	EXCAVATOR OUTPUT PER HOUR	38.96	CU.M (BANK VOL)				
	TOTAL OUTPUT PER HOUR	55.07	CU.M (BANK VOL)				
	HIRE RATE FOR DOZER WET LEASE	1.00	HOUR	B0-154	7,741.10		
	HIRE RATE FOR EXCAVATOR WET LEASE	1.00	HOUR	B0-155	11,433.47		
	COST OF BANKS MEN S/SK	2.00	HOUR	B0-003	750.00		
	TOTAL COST ON EXCAVATION PER HOUR				19,924.57		
	RATE PER 1 CU.M (CUTTING MEASUREMENT)			E1-027	361.80		
				SAY	361.80	13.62	348.18

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-028	LOADING MATERIAL BY MACHINERY IN ROADWAY EXCAVATIONS (CUTTING MEASUREMENT)						
	DATA FOR 5 HOUR WORKING BY LOADER AS IN BORROW EXCAVATION						
	OUTPUT FOR 5 HOURS	337.50	CU.M(LOOSE)				
	EFFICENCY OF WORKING	85.00	%				
	OUTPUT IN 5 HOURS AT 85% EFFICENCY	286.88	CU.M(LOOSE)				
	BULKING	15.00	%				
	OUTPUT IN 5 HOURS AT 85% EFFICENCY	249.46	CU.M (BANK VOL)				
	OUT PUT PER HOUR	49.89	CU.M (BANK VOL)				
	HIRE CHARGES FOR LOADER FOR	1.00	HOURS	B0-124	6,283.16		
	COST OF BANKS MAN S/SK	1.00	HOUR	B0-003	375.00		
	TOTAL COST PER	49.89	CU.M (BANK VOL)		6,658.16		
	RATE PER 1 CU.M (CUTTING MEASUREMENT)			E1-028	133.45		
				SAY	133.45	7.52	125.93
E1-029	TRIMMING / CAMBERING BY MOTOR GRADER (CUTTING MEASUREMENT)						
	DATA FOR 1025 SQ.M FOR A 200 MM THICK LAYER						
	VOLUME OF SOIL IN THE AREA	205.00	CU.M (BANK VOL)				
	GRADER BLADE EFFICENCY	85.00	%				
	TIME FOR 4 PASSES IN 1025 SQ M AREA	1.50	HOURS				
	HIRE CHARGES 120-140 HP MOTOR GRADER	1.50	HOURS	B0-114	8,582.92		
	COST OF BANKS MAN S/SK	1.50	HOUR	B0-003	562.50		
	TOTAL COST PER	205.00	CU.M (BANK VOL)		9,145.42		
	RATE PER 1 CU.M (CUTTING MEASUREMENT)			E1-029	44.61		
				SAY	44.60	2.74	41.86
E1-029A	TRIMMING / CAMBERING BY MOTOR GRADER (CUTTING MEASUREMENT)						
	RATE PER 1 SQ.M			E1-029A	8.92		
				SAY	8.90	0.55	8.35
E1 - 030	ROCK BLASTING USING CHEMICAL POWDER FALLEN ROCKS OF BOULDERS > 1 M3 (ONLY FOR ESSENTIAL CONDITIONS) EXCLUDING LOADING & TRANSPORTING AFTER BREAKING						
	DATA FOR 300 CU.M						
	LABOUR (SK A)	25.00	DAYS	B0-001	95,000.00		
	LABOUR (U/SK)	25.00	DAYS	B0-004	70,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				4,125.00		
	CRACKING POWDER	5,500.00	KG	B0-509	1,008,425.00		
	ALLOW 2.5% FOR TRANSPORT OF CRACKING POWDER				25,210.63		
	ROCK DRILL HAND HELD	300.00	HOURS	B0-158	148,323.00		
	AIR COMPRESSOR (250 C.F.M.)	300.00	HOURS	B0-156	2,091,867.00		
	TOTAL COST PER 300 CU.M.				3,442,950.63		
	TOTAL COST PER 1 CU.M.			E1 - 030	11,476.50		
				SAY	11,476.50	550.00	10,926.50

* * *

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION III =====							
AGGREGATE / RUBBLE PILING INCLUDING LOADING							
A1-001	SLEDGING AVAILABLE ROCK 150-225 MM RUBBLE INCLUDING PILING & LOADING :						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/B)	1.00	DAY	B0-002	3,500.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				267.50		

					10,967.50		

	COST PER 2.83 CU.M				10,967.50		
	RATE PER 1 CU.M			A1-001	3,875.44		
					=====		
				SAY	3,875.45	3,780.92	94.53
A1-002	BLASTING ETC. & PILING 150-225MM RUBBLE INCLUDING LOADING :						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/A) MINER	1.00	DAY	B0-001	3,800.00		
	LABOUR (SK/B) SLEDGER	1.00	DAY	B0-002	3,500.00		
	COLLECT, PREPARE DEPOT PILING, LOADING ETC.						
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	LABOUR (S/SK) LOADING, PILING ETC.	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				362.50		
	ALLOW FOR FUEL FORGE ETC.	1.00	ITEM	B0-723	220.00		
	POWDER	0.34	KG	B0-501	698.87		
	FUSE	3.05	M	B0-502	2,532.58		
	STEEL	0.45	KG	B0-503	317.32		

					18,631.27		

	COST PER 2.83 CU.M				18,631.27		
	RATE PER 1 CU.M(PILED) INCLUDING LOADING			A1-002	6,583.49		
					=====		
				SAY	6,583.50	5123.67	1,459.83

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-002A	BLASTING SLEDGING ETC. & PILING 150-225MM RUBBLE USING COMPRESSOR & HAND HELD DRILLS INCLUDING LOADING :						
	DATA FOR 60 CU.M (BANK MEASURE)						
	AIR COMPRESSOR 250 CFM						
	2 NOS. ROCK DRILL 37.5 MM BIT 100 CFM						
	CONSIDER DRILLING PATTERN 1MX1M GRID X 1.7M DEPTH	1.70	M HOLE DEPTH				
	BLAST DEPTH	1.50	M				
	PRODUCTION PER HOLE [1X1X1.5]	1.50	CU.M				
	ASSUME NO. OF HOLES PER BLAST	20.00	NOS.				
	PRODUCTION PER BLAST CYCLE	30.00	CU.M (BANK MEASURE)				
	RATE OF DRILLING PER MINUTE	0.15	M				
	TIME FOR 2 DRILLS FOR 20 HOLES [((1.7/.15)X20)/2/60]	1.89	HOURS				
	ASSUME TIME PER CYCLE INCLUDING CHARGING, BLASTING						
	DOZING ETC.	4.00	HOURS				
	PRODUCTION PER DAY	60.00	CU.M (BANK MEASURE)				
	ASSUMED BULKING AFTER PILING	20.00	%				
	LABOUR SK'A' MINER	1.00	DAY	B0-001	3,800.00		
	LABOUR U/SK SLEDGING	20.00	DAY	B0-004	56,000.00		
	LABOUR S/SK PILING ETC.	15.00	DAY	B0-003	45,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				2,620.00		
	DRILL STEEL	68.00	METER	B0-649	10,204.08		
	WATER GEL	25.20	KG	B0-506	93,817.08		
	AMMONIUM NITRATE	28.80	KG	B0-507	40,435.20		
	DETONATORS	13.00	NO.	B0-504	2,148.90		
	FUSE	15.00	M	B0-502	12,463.50		
	DIESELENE	3.46	LTR	B0-612	1,254.53		
	COMPRESSOR 250 CFM	8.00	HOURS	B0-156	55,783.12		
	ROCK DRILL HAND HELD	8.00	HOURS	B0-158	3,955.28		
	WHEEL LOADER	0.75	DAY	B0-124A	30,428.65		
	COST PER 60 CU.M				357,910.34		
	COST PER 60 CU.M (BANK MEASURE)				357,910.34		
	RATE PER 1 CU.M (BANK MEASURE)				5,965.17		
	RATE PER 1 CU.M (PILED)						
				A1-002A	4,970.98		
				SAY	4,971.00	1,455.56	3,515.44
A1-003	BLASTING ETC. & PILING 100 MM AGGREGATE, INCLUDING LOADING :	1.00	CU.M	B0-303	3,180.21		
	RATE PER 1 CU.M			A1-003	3,180.21		
				SAY	3,180.20	External Sources	

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

<u>CODE</u>	<u>DESCRIPTION OF ITEM</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>PRICE CODE</u>	<u>AMOUNT</u> <u>(Rs.)</u>	<u>LABOUR</u> <u>INPUT</u>	<u>OTHER</u> <u>INPUTS</u>
A1-004	BLASTING ETC. & PILING 75 MM AGGREGATE INCLUDING LOADING :	1.00	CU.M	B0-304	3,180.21		
	RATE PER 1 CU.M			A1-004	3,180.21		
				SAY	3,180.20	External Sources	
A1-005	BLASTING ETC. & PILING 50 MM AGGREGATE INCLUDING LOADING :	1.00	CU.M	B0-305	3,533.57		
	RATE PER 1 CU.M			A1-005	3,533.57		
				SAY	3,533.55	External Sources	
A1-006	BLASTING ETC. & PILING 37.5 MM AGGREGATE INCLUDING LOADING :		ITEM DELETED				

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-007	BLASTING ETC. & PILING 25 MM AGGREGATE INCLUDING LOADING :						
				ITEM DELETED			
A1-008	BLASTING ETC. & PILING 19 MM AGGREGATE INCLUDING LOADING : *						
				ITEM DELETED			
	* PRIOR APPROVAL OF THE P.DD SHOULD BE OBTAINED FOR THE USE OF 19 MM, 25 MM AND 37.5 MM HAND BROKEN AGGREGATE.						
A1-009	50 MM AGGREGATE, SINGLE SIZE, CRUSHER PRODUCTION INCLUDING PILING AND LOADING [SSCM404.1-406.1] :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-311	3,533.57		
	RATE PER 1 CU.M			A1-009	3,533.57		
				SAY	3,533.55		External Sources

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-010	37.5 MM AGGREGATE, SINGLE SIZE CRUSHER PRODUCTION INCLUDING PILING AND LOADING [SSCM404.1-406.1] :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-310	3,533.57		
	RATE PER 1 CU.M			A1-010	3,533.57		
				SAY	3,533.55		External Sources
A1-011	19 MM AGGREGATE, SINGLE SIZE CRUSHER PRODUCTION INCLUDING PILING AND LOADING [SSCM404.1-406.1] :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-308A	3,710.25		
	RATE PER 1 CU.M			A1-011	3,710.25		
				SAY	3,710.25		External Sources
A1-012	12.5 MM AGGREGATE, SINGLE SIZE CRUSHER PRODUCTION INCLUDING PILING AND LOADING FOR 1.0 CU.M :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-309	3,710.25		
	RATE PER 1 CU.M			A1-012	3,710.25		
				SAY	3,710.25		External Sources
	PLANT PRODUCED AGGREGATE FOR DENSE GRADED AGGREGATE BASE COURSE						
A1-013	AGGREGATE 37.5 MM, DOWN GRADED (SSCM - TABLE 1701.5) INCLUDING PILING & LOADING :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-313	3,533.57		
	RATE PER 1 CU.M			A1-013	3,533.57		
				SAY	3,533.55		External Sources
A1-014	CRUSHER FINES 6.3 MM DOWN, INCLUDING PILING AND LOADING FOR 1.0 CU.M :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-312	3,533.57		
	RATE PER 1 CU.M			A1-014	3,533.57		
				SAY	3,533.55		External Sources

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-015	AGGREGATE 19 MM FOR SEAL COAT TREATMENTS AS PER SSCM TABLE 1701-8, INCLUDING - DO - DATA FOR 1 CU.M ----- EX-PLANT	1.00	CU.M	B0-314	3,710.25		
	RATE PER 1 CU.M			A1-015	3,710.25		
				SAY	3,710.25	External Sources	
A1-016	AGGREGATE 12.5 MM FOR SEAL COAT TREATMENTS AS PER SSCM TABLE 1701-8, INCLUDING - DO - DATA FOR 1 CU.M ----- EX-PLANT	1.00	CU.M	B0-315	3,220.00		
	RATE PER 1 CU.M			A1-016	3,220.00		
				SAY	3,220.00	External Sources	
A1-017	BLENDED AGGREGATE FOR RECTIFICATION OVERLAY, WITH 37.5 MM SINGLE SIZE AGGREGATE AND 19 MM & 12.5 MM CRUSHED AGGREGATE MIXED IN THE VOLUME RATIO OF 7:2:1 INCLUDING MIXING AND LOADING.(PILING TO PAY SEPARATELY): * DATA FOR MIXED VOLUME OF 28.3 CU.M ----- ASSUME 15% & 20% EXTRA VOLUME FOR 19 MM AND 12.5 MM AGGREGATE RESPECTIVELY ON ACCOUNT OF FILLING UP OF VOIDS. 37.5 MM AGGRREGATE (LESS PILING) 19.81 CU.M B0-310 64,618.61 19 MM AGGREGATE - DO - (2X2.83X1.15) 6.51 CU.M B0-308A 22,385.27 12.5 MM AGG. - DO - (1X2.83X1.20) 3.40 CU.M B0-309 11,691.23 PLANT FOR MIXING: LOADER-1.7 CU.M, @ 100 CU.M/4 HRS. 0.14 DAY B0-116A 5,227.22				103,922.33		
	COST OF 28.3 CU.M INCLUDING BLENDING				103,922.33		
	RATE PER 1 CU.M OF BLENDED AGGREGATE			A1-017	3,672.17		
				SAY	3,672.15	0.00	3,672.15
NOTE: PRIOR APPROVAL OF THE P.DD SHOULD BE OBTAINED FOR THE USE OF BLENDED AGGREGATE IN RECTIFICATION OVERLAY CONSTRUCTION WORK.							
A1-018	PILING AVAILABLE AGGREGATE: DATA FOR 2.83 CU.M ----- LABOUR (S/SK) 0.25 DAY B0-003 750.00 ALLOW 2.5% ON LABOUR FOR TOOLS 18.75	0.25	DAY	B0-003	768.75		
	COST PER 2.83 CU.M				768.75		
	RATE PER 1 CU.M			A1-018	271.64		
				SAY	271.65	265.02	6.63

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-019	PILING AVAILABLE RUBBLE:						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	0.50	DAY	B0-003	1,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				37.50		
					1,537.50		
	COST PER 2.83 CU.M				1,537.50		
	RATE PER 1 CU.M			A1-019	543.29		
				SAY	543.30	530.04	13.26
A1-020	LOADING AVAILABLE AGGREGATE/RUBBLE :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				35.00		
					1,435.00		
	COST PER 2.83 CU.M				1,435.00		
	RATE PER 1 CU.M			A1-020	507.07		
				SAY	507.05	494.70	12.35

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
	SECTION IV =====						
	APPROVED EARTH FILLING & COMPACTION -----						
	* NOTE -----						
	RATES FOR BORROW EARTH SUPPLY GIVEN UNDER ITEM CODES EW1-001 & EW1-011 IN THIS SHEDULE ARE BASED ON MANUAL EXCAVATION AND INTENDED FOR SMALL WORKS INVOLVING LESS THAN 200 CU.M. IN THE CASE OF BORROW EARTH SUPPLY EXCEEDS 200 CU.M(FOR THE WHOLE PROJECT), RATES BASED ON MACHINE EXCAVATION AS PER B0-201, B0-202, EW1-013 OR EW1-014 SHALL BE ADOPTED. FOR ANY DEVIATIONS THE PROCEDURE GIVEN IN "GENERAL NOTES SHALL BE FOLLOWED.						
EW1-001	APPROVED SOIL (TYPE I & II MATERIALS) EXCAVATION FOR SUB BASES & SHOULDER CONSTRUCTION INCLUDING LOADING AND PILING. (LOOSE VOLUME) [SSCM 601.1 TO 601.4] :						
	DATA FOR 2.83 CU.M -----						
	EXCAVATING-AS IN E1-008	2.83	CU.M	E1-008	7,403.56		
	LABOUR (U/SK)	0.33	DAY	B0-004	924.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				23.10		
	BASKETS (1/6)	0.17	NO.	B0-631	50.00		

					8,400.66		

	COST PER 2.83 CU.M				8,400.66		
	RATE PER 1 CU.M (LOOSE VOLUME)				-----		
				EW1-001	2,968.43		
				SAY	2,968.45	2,849.47	118.98
					=====		
EW1-002	SPREADING PILED APPROVED SOIL (LOOSE VOLUME):						
	DATA FOR 22.65 CU.M -----						
	LABOUR (U/SK)	2.50	DAYS	B0-004	7,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				175.00		
	BASKETS	2.25	NOS.	B0-631	675.00		

					7,850.00		

	COST PER 22.65 CU.M				7,850.00		
	RATE PER 1 CU.M (LOOSE VOLUME)				-----		
				EW1-002	346.58		
				SAY	346.60	309.05	37.55
					=====		

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
EW1-003	APPROVED SOIL SPREAD & ROLLED INCLUDING ROLLER HIRE CHARGES, FUEL & WATERING (LOOSE VOLUME)* [SSCM 601.1 TO 4] :						
	* SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.						
	DATA FOR 2.83 CU.M						
	SPREADING-AS IN EW1-002	2.83	CU.M	EW1-002	980.88		
	WATERING	2.83	CU.M	B0-784	77.83		
	ROLLER CHARGES(8-10 TONS)	0.04255	DAY	B0-111	833.18		
					1,891.89		
	COST PER 2.83 CU.M				1,891.89		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-003	668.51		
				SAY	668.50	309.05	359.45
	NOTE* THE ITEMS EW1-003 OR EW1-004 ON MANUAL SPREADING SHOULD BE ADOPTED ON APPROVAL BY PD / CE FOR SMALL WORKS ONLY. WHEN MACHINERY IS USED FOR SPREADING AND COMPACTION, EW1-003A SHALL BE ADOPTED.						
EW1-003A	APPROVED SOIL SPREAD & ROLLED USING MACHINERY INCLUDING MOTOR GRADER & ROLLER HIRE CHARGES, FUEL & WATERING (LOOSE VOLUME)* [SSCM 601.1 TO 4] :						
	* SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.						
	DATA FOR 210 CU.M						
	MOTOR GRADER (120-140 HP)	2.50	HOURS	B0-114	14,304.87		
	WATERING	210.00	CU.M	B0-784	5,775.00		
	ROLLER CHARGES (VIBRATING 10 TONS)	1.00	DAY	B0-110	35,810.63		
					55,890.50		
					55,890.50		
				EW1-003A	266.15		
				SAY	266.15	0.00	266.15
EW1-004	APPROVED SOIL SPREAD & ROLLED IN STRIPS WHERE AVERAGE WIDTH IS LESS THAN 1.2 METRES FOR ROAD WIDENING, INCLUDING ROLLER HIRE CHARGES, FUEL & WATERING (LOOSE VOLUME)* [SSCM 601.1 TO 4] :						
	* SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME. ASSUMING 50 CU.M COPACTION PER DAY						
	DATA FOR 2.83 CU.M						
	SPREADING-AS IN EW1-002	2.83	CU.M	EW1-002	980.88		
	WATERING	2.83	CU.M	B0-784	77.83		
	ROLLER CHARGES(8-10 TONS)	0.06	DAY	B0-111	1,174.79		
					2,233.49		
	COST PER 2.83 CU.M				2,233.49		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-004	789.22		
				SAY	789.20	309.05	480.15

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
EW1-005 DELETED							
EW1-006	APPROVED SOIL SPREAD AND COMPACTED IN PLACES BEHIND ABUTMENTS AND STRUCTURES, SHOULDERS ABOVE SUB BASE LEVEL AND IN SERVICE LINE TRENCHES, USING 1/2 TO 1 TON VIBRATING ROLLER INCLUDING WATERING (LOOSE VOLUME):						
	* SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.						
	DATA FOR 7 CU.M (LOOSE)						
	LABOUR - U/SK FOR TRANS. & SPREADING	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
	BASKET	0.75	NO.	B0-631	225.00		
	VIB. ROLLER (1/2 - 1 TON) 2 HOURS	0.25	DAY	B0-109	2,275.05		
	WATERING	7.00	ITEM	B0-784	192.50		
					5,562.55		
	COST PER 7 CU.M				5,562.55		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-006	794.65		
				SAY	794.65	400.00	394.65
EW1-007	APPROVED SOIL SPREAD AND COMPACTED IN 150 TO 225 MM THICK LAYERS USING MACHINE RAMMER AT NARROW PLACES (LOOSE VOLUME) :						
	DATA FOR 7 CU.M (LOOSE VOLUME)						
	LABOUR - U/SK FOR TRANS. & SPREADING	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
	BASKET	0.75	NO.	B0-631	225.00		
	RAMMER - 60 KG	0.50	DAY	B0-108	2,023.50		
	WATERING	6.00	ITEM	B0-784	165.00		
					5,283.50		
	COST PER 7 CU.M				5,283.50		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-007	754.79		
				SAY	754.80	400.00	354.80
EW1-008	SPREADING, LEVELLING AND COMPACTING MANUALLY USING STANDARD CAST IRON STAMPER OR EQUIVALENT AND FILLING IN 150-225 MM THICK LAYERS (LOOSE VOLUME) :						
	DATA FOR 5.66 CU.M						
	LABOUR (U/SK) - SPREADING & COMPACT.	2.25	DAYS	B0-004	6,300.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				157.50		
					6,457.50		
	COST PER 5.66 CU.M				6,457.50		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-008	1,140.90		
				SAY	1,140.90	1,113.07	27.83

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
EW1-009	TRIMMING, LEVELLING AND COMPACTION OF ORIGINAL GROUND/SUBGRADE TO 100% STD. DENSITY. [SSCM 304.3(C)] :						
	DATA FOR 1000 SQ.M						
	LABOUR SK'B'	1.00	DAY	B0-002	3,500.00		
	LABOUR U/SK	2.00	DAY	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				227.50		
	MOTOR GRADER (120-140 HP) SCARIFYING AND SPREADING) - MINIMUM	0.50	DAY	B0-114	22,887.79		
	WATER BOWSER (6000 LTRS)	0.50	DAY	B0-128	11,529.06		
	VIBRATING ROLLER (SMOOTH 10 TON) [2X6 HOURS]	1.50	DAYS	B0-110	53,715.95		
					97,460.29		
	COST PER 1000 SQ.M				97,460.29		
	RATE PER 1 SQ.M			EW1-009	97.46		
				SAY	97.45	9.10	88.35
EW1-010	TRIMMING, LEVELLING AND COMPACTION OF ORIGINAL GROUND/SUBGRADE TO 95% STD. DENSITY. [SSCM 304.3(C)] :						
	DATA FOR 1100 SQ.M						
	LABOUR SK'B'	1.00	DAY	B0-002	3,500.00		
	LABOUR U/SK	2.00	DAY	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				227.50		
	MOTOR GRADER (120-140 HP) SCARIFYING AND SPREADING) - MINIMUM	0.50	DAY	B0-114	22,887.79		
	WATER BOWSER (6000 LTRS)	0.50	DAY	B0-128	11,529.06		
	VIBRATING ROLLER (SMOOTH 10 TON) [2X6 HOURS]	1.50	DAYS	B0-110	53,715.95		
					97,460.29		
	COST PER 1100 SQ.M				97,460.29		
	RATE PER 1 SQ.M			EW1-010	88.60		
				SAY	88.60	8.27	80.33
EW1-011	APPROVED SOIL EXCAVATION FOR EMBANKMENT FILLING INCLUDING LOADING AND PILING (LOOSE VOLUME) [SSCM 601.1 TO 601.4]						
	DATA FOR 2.83 CU.M						
	EXCAVATING-AS IN E1-006	2.83	CU.M	E1-006	4,963.96		
	LABOUR (U/SK)	0.33	DAY	B0-004	924.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				23.10		
	BASKETS (1/6)	0.17	NO.	B0-631	50.00		
					5,961.06		
	COST PER 2.83 CU.M				5,961.06		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-011	2,106.38		
				SAY	2,106.40	2,008.48	97.92
EW1-012	DELETED						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
EW1-013	APPROVED SOIL (TYPE I & II MATERIALS) EXCAVATION USING MACHINERY FOR SUB BASES & SHOULDER CONSTRUCTION INCLUDING LOADING AND PILING. (LOOSE VOLUME) [SSCM 601.1 TO 604.4] :						
	DATA FOR 2.83 CU.M						
	EXCAVATING APPROVED MATERIAL	2.83	CU.M	B0-201	4,500.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	700.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				17.50		

					5,217.50		

	COST PER 2.83 CU.M				5,217.50		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-013	1,843.64		
					=====		
				SAY	1,843.65	247.35	1,596.30
EW1-014	APPROVED SOIL(TYPE I & II) EXCAVATION USING MACHINERY FOR EMBANKMENT FILLING INCLUDING LOADING AND PILING (LOOSE VOLUME) [SSCM 601.1 TO 604.4]						
	DATA FOR 2.83 CU.M						
	EXCAVATING APPROVED MATERIAL	2.83	CU.M	B0-202	3,000.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	700.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				17.50		

					3,717.50		

	COST PER 2.83 CU.M				3,717.50		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-014	1,313.60		
					=====		
				SAY	1,313.60	247.35	1,066.25
EW1-015	GRADING AND SPREADING BY MOTOR GRADER						
	DATA FOR OUT PUT IN 6 HOURS SPREADING & COMPACTION						
	ASSUMED OUTPUT PER HOUR	35.00	CU.M(LOOSE)				
	TOTAL OUTPUT IN 6 HOURS	210.00	CU.M(LOOSE)				
	ACTUAL GRADING TIME EXCLUDING FOR WATERING AND COMPACTION DURING 6 HOUR DURATION	3.00	HOURS				
	COST ON MOTOR GRADER	3.00	HOURS	B0-114	17,165.84		

	TOTAL COST PER 210 CU.M				17,165.84		
	RATE PER CU.M (LOOSE)			EW1-015	81.74		
					=====		
				SAY	81.75	0.00	81.75

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION V							
RUBBLE PITCHING / PAVING							
(RUBBLE TO BE PAID SEPARATELY)							
P1-001	PITCHED PAVING 225 MM THICK:						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				150.00		
					6,150.00		
	COST PER 9.29 SQ.M				6,150.00		
	RATE PER 1 SQ.M			P1-001	662.00		
				SAY	662.00	645.86	16.14
P1-002	PITCHED PAVING 150 MM THICK:						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	1.50	DAYS	B0-003	4,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				112.50		
					4,612.50		
	COST PER 9.29 SQ.M				4,612.50		
	RATE PER 1 SQ.M			P1-002	496.50		
				SAY	496.50	484.39	12.11
P1-003	FLAT PAVING 225 MM THICK:						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	1.33	DAY	B0-003	3,990.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				99.75		
					4,089.75		
	COST PER 9.29 SQ.M				4,089.75		
	RATE PER 1 SQ.M			P1-003	440.23		
				SAY	440.25	429.49	10.76
P1-004	FLAT PAVING 150 MM THICK:						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				75.00		
					3,075.00		
	COST PER 9.29 SQ.M				3,075.00		
	RATE PER 1 SQ.M			P1-004	331.00		
				SAY	331.00	322.93	8.07

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION VI							
=====							
AGGREGATE SPREADING & COMPACTION							

COST OF WATERING TO BE DEDUCTED FROM RATE IF NOT CARRIED OUT UNDER THE RELEVANT ITEMS.							
<p>NOTE: COST OF AGGREGATE SUPPLY AND TRANSPORT, NOT INCLUDED IN THE RATES FOR ITEMS: M1-001, M1-004,M1-007,M1-008 AND M1-009</p>							
M1-001	SPREADING, WATERING & ROLLING 100 MM AGGREGATE INCLUDING HIRE CHARGES OF ROLLER. (LOOSE VOLUME) [SSCM 304.3(d),(e)]:						
	DATA FOR 22.65 CU.M						
	LABOUR (S/SK)	5.00	DAY	B0-003	15,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	4.00	NOS.	B0-631	1,200.00		
	ALLOW FOR WATERING	22.65	CU.M	B0-785	872.03		
	ROLLER CHARGES ETC.(8-10 TONS)	0.84	DAY	B0-111	16,447.03		

					33,894.06		

	COST PER 22.65 CU.M				33,894.06		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-001	1,496.43		
					=====		
				SAY	1,496.45	662.25	834.20
M1-002	BREAKING ROAD SURFACE TO 50 MM DEPTH BY HAND, SCREEN & REPLACE OLD AGGREGATE. :						
	DATA FOR 306.58 SQ.M						
	PICKING:						
	LABOUR (SK/A)	0.25	DAY	B0-001	950.00		
	LABOUR (U/SK)	11.00	DAYS	B0-004	30,800.00		
	REMOVING PICKED AGGREGATE/SCREENING:						
	LABOUR (U/SK)	6.00	DAYS	B0-004	16,800.00		
	SPREADING OLD AGGREGATE:						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				1,363.75		
	ALLOW FOR FUEL ETC. BASKETS	1.00	ITEM	B0-720	110.00		
		3.00	NOS.	B0-631	900.00		

					56,923.75		

	COST PER 306.58 SQ.M				56,923.75		
	RATE PER 1 SQ.M			M1-002	185.67		
					=====		
				SAY	185.65	177.93	7.72

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-003	SCARIFYING ROAD SURFACE TO 50 MM DEPTH BY MACHINERY, SCREEN, & REPLACE OLD AGGREGATE. :						
	DATA FOR 306.58 SQ.M						
	SCARIFYING:						
	LABOUR (S/SK)	0.25	DAY	B0-003	750.00		
	REMOVING SCARIFIED AGGREGATE & SCREENING:						
	LABOUR (U/SK)	6.00	DAYS	B0-004	16,800.00		
	SPREADING OLD AGGREGATE:						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				588.75		
	ALLOW FOR SHARPENING TYRES	1.00	ITEM	B0-752	110.00		
	BASKETS	3.00	NOS.	B0-631	900.00		
	ROLLER CHARGES ETC.(8-10 TONS)	0.84	DAY	B0-111	16,447.03		
					41,595.78		

	COST PER 306.58 SQ.M				41,595.78		
	RATE PER 1 SQ.M			M1-003	135.68		
					=====		
				SAY	135.70	76.82	58.88
M1-004	SPREADING & COMPACTING 50-19 MM NEW AGGREGATE BY ROLLER INCLUDING WATERING HIRE, ETC.(LOOSE VOLUME)[SSCM 403.3(c)]:						
	DATA FOR 19.82 CU.M						
	LABOUR (U/SK)-SCREENING	2.75	DAYS	B0-004	7,700.00		
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	1,500.00		
	LABOUR (S/SK)	5.25	DAYS	B0-003	15,750.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				623.75		
	ROLLER CHARGES ETC.(8-10 TONS)	0.84	DAY	B0-111	16,447.03		
	HIGHER OF TRACTOR & TRAILER	0.22	DAY	B0-117	2,350.68		
	HIRE OF WATER TANK AND PUMP (50 MM)	0.22	DAY	B0-104	819.71		
	BASKETS	3.50	NOS	B0-631	1,050.00		
					46,241.17		

	COST PER 19.82 CU.M				46,241.17		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-004	2,333.06		
					=====		
				SAY	2,333.05	1,258.83	1,074.22
M1-005	BREAKING 50 MM ADDITIONAL DEPTH BY HAND SCREENING & REPLACING OLD AGGREGATE. :						
	DATA FOR 306.58 SQ.M						
	LABOUR (SK/A)	0.25	DAY	B0-001	950.00		
	LABOUR (U/SK) - PICKING	6.00	DAYS	B0-004	16,800.00		
	LABOUR (U/SK) - PICK,SCREEN	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK) - SPREADING	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				803.75		
	ALLOW FOR FUEL ETC.	1.00	ITEM	B0-720	110.00		
	BASKETS	3.00	NOS.	B0-631	900.00		
					33,963.75		

	COST PER 306.58 SQ.M				33,963.75		
	RATE PER 1 SQ.M			M1-005	110.78		
					=====		
				SAY	110.80	104.87	5.93

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-006	SCARIFYING 50 MM ADDITIONAL DEPTH WITH MACHINERY, SCREENING & REPLACING OLD AGGREGATE. :						
	DATA FOR 306.58 SQ.M						
	LABOUR (S/SK)-SCARIFYING	0.25	DAY	B0-003	750.00		
	LABOUR (U/SK)-SCREEN	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK)-SPREADING	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				378.75		
	ALLOW FOR SHARPENING TYNES BASKETS	1.00	ITEM	B0-752	110.00		
	ROLLER CHARGES ETC.(8-10 TONS)	3.00	NOS	B0-631	900.00		
		0.84	DAY	B0-111	16,447.03		
					32,985.78		
	COST PER 306.58 SQ.M				32,985.78		
	RATE PER 1 SQ.M			M1-006	107.59		
				SAY	107.60	49.42	58.18
M1-007	SPREADING WATERING & COMPACTING 50-19 MM AGGREGATE IN EDGE CORRECTION USING ROLLER INCLUDING HIRE, ETC.(LOOSE VOLUME)[SSCM 1103.3]:						
	DATA FOR 19.82 CU.M						
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	1,500.00		
	LABOUR (S/SK)-SPREADING	5.25	DAYS	B0-003	15,750.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				431.25		
	ROLLER CHARGES ETC.(8-10 TONS)	1.75	DAY	B0-111	34,264.65		
	HIGHER OF TRACTOR & TRAILER	0.22	DAY	B0-117	2,350.68		
	HIRE OF WATER TANK AND PUMP (50 MM) BASKETS	0.22	DAY	B0-104	819.71		
		3.50	NOS.	B0-631	1,050.00		
					56,166.29		
	COST PER 19.82 CU.M				56,166.29		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-007	2,833.82		
				SAY	2,833.80	870.33	1,963.47
M1-008	SPREADING WATERING & COMPACTING 50-19 MM AGGREGATE IN EDGE CORRECTION USING ROLLER INCLUDING HIRE, ETC.(LOOSE VOLUME)[SSCM 1103.3]:						
	DATA FOR 19.82 CU.M						
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	1,500.00		
	LABOUR (S/SK)-SPREADING	5.25	DAYS	B0-003	15,750.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				431.25		
	ROLLER CHARGES ETC.(8-10 TONS)	1.24	DAY	B0-111	24,278.95		
	HIGHER OF TRACTOR & TRAILER	0.22	DAY	B0-117	2,350.68		
	HIRE OF WATER TANK AND PUMP (50 MM) BASKETS	0.22	DAY	B0-104	819.71		
		3.50	NOS.	B0-631	1,050.00		
					46,180.59		
	COST PER 19.82 CU.M				46,180.59		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-008	2,330.00		
				SAY	2,330.00	870.33	1,459.67
M1 008A	225X150MM RUBBLE FILLING AND CHOCKING WITH AGGREGATE BASE COURSE FOR SOFT GROUND TREATMENT (INCLUDING LOADING, UNLOADING AND TRANSPORT OF MATERIALS)						
	DATA FOR 185.59 CU.M						
	225X150MM RUBBLE	185.59	CU.M	B0-301	491,846.29		
	AGGREGATE BASE COURSE	13.88	CU.M	B0-313	49,045.94		
	LABOUR (U/SK)	11.25	DAYS	B0-004	31,500.00		
	BACKHOE LOADER	2.47	DAY	B0-115	85,208.04		
	VIBRATING ROLLER 8 TON	0.16	DAY	B0-110	5,595.41		
	ALLOW 2.5% ON LABOUR FOR TOOLS				787.50		
					663,983.18		
	COST PER 185.59 CU.M				663,983.18		
	RATE PER 1 CU.M			M1-008A	3,577.69		
				SAY	3,577.70	169.73	3,407.97

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-009	SPREADING & COMPACTING 50-19 MM AGGREGATE BY 8-10 TON ROLLER AFTER APPLYING TACK COAT IN OVERLAY . (LOOSE VOLUME)(TACK COAT PAID SEPARATELY) :						
	DATA FOR 19.82 CU.M						
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	1,500.00		
	LABOUR (S/SK)-SPREADING	5.25	DAYS	B0-003	15,750.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				431.25		
	ROLLER CHARGES ETC.(8-10 TONS)	1.05	DAYS	B0-111	20,558.79		
	HIGHER OF TRACTOR & TRAILER BASKETS	0.22	DAY	B0-117	2,350.68		
		3.50	NOS.	B0-631	1,050.00		
					41,640.72		
	COST PER 19.82 CU.M				41,640.72		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-009	2,100.94		
				SAY	2,100.95	870.33	1,230.62
M1-010	WATER BOUND MACADAM - SPREADING WATERING AND COMPACTING 50-25 MM AGGREGATE AND FILLING THE VOIDS TO REFUSAL WITH CRUSHER FINES BY WATERING AND ROLLING TO FORM A WATER BOUND MACADAM BASE EXCLUDING TRANSPORT FOR AGGREGATES AND FINES. (LOOSE VOLUME) [(SSCM 404.1)]:						
	DATA FOR 8.50 CU.M						
	LABOUR (S/SK)-SPREADING	3.00	DAYS	B0-003	9,000.00		
	LABOUR (S/SK)-FILLING VOIDS	0.50	DAY	B0-003	1,500.00		
	LABOUR (S/SK)-CLEANING	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				337.50		
	AGGREGATE 50-25 MM	8.50	CU.M	B0-310	27,726.37		
	CRUSHER FINES	2.83	CU.M	B0-312	10,000.00		
	ROLLER CHARGES ETC.(8-10 TONS)	0.50	DAY	B0-111	9,789.90		
	HIGHER OF TRACTOR & TRAILER	0.50	DAY	B0-117	5,342.45		
	HIRE OF WATER TANK AND PUMP (50 MM)	0.50	DAY	B0-104	1,862.98		
					68,559.20		
	COST PER 8.50 CU.M				68,559.20		
	RATE PER 1 CU.M (LOOSE VOLUME) *			M1-010	8,065.79		
				SAY	8,065.80	1,588.24	6,477.56
* Note	IF AGGREGATE AND CRUSHER FINES ARE NOT PILED AND MEASURED BEFORE SPREADING, COST OF PILING AS PER A1-018 SHALL BE DEDUCTED FROM THE RATE.						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-011	DRY BOUND MACADAM - SPREADING WATERING AND COMPACTING 50-25 MM AGGREGATE AND FILLING THE VOIDS TO REFUSAL WITH CRUSHER FINES BY ROLLING WITH VIBRATING ROLLER TO FORM A DRY BOUND MACADAM BASE EXCLUDING TRANSPORT FOR AGGREGATES AND FINES (LOOSE VOLUME)[SSCM 404.1]:						
	DATA FOR 8.50 CU.M						
	LABOUR (S/SK)-SPREADING	3.00	DAYS	B0-003	9,000.00		
	LABOUR (S/SK)-FILLING VOIDS	0.50	DAY	B0-003	1,500.00		
	LABOUR (S/SK)-CLEANING	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				337.50		
	AGGREGATE 50-25 MM (LESS PILING)	8.50	CU.M	B0-310	27,726.37		
	CRUSHER FINES	2.83	CU.M	B0-312	10,000.00		
	ROLLER CHARGES ETC.(8-10 TONS)	0.50	DAY	B0-111	9,789.90		
	HIGHER OF TRACTOR & TRAILER	0.25	DAY	B0-117	2,671.23		
	HIRE OF WATER TANK AND PUMP (50 MM)	0.25	DAY	B0-104	931.49		
					64,956.48		
	COST PER 8.50 CU.M				64,956.48		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-011	7,641.94		
				SAY	7,641.95	1,588.24	6,053.71
	* NOTE IF AGGREGATE AND CRUSHER FINES ARE NOT PILED AND MEASURED BEFORE SPREADING, COST OF PILING AS PER A1-018 SHALL BE DEDUCTED FROM THE RATE.						
M1-012 DELETED							
M1-012A	DENSE GRADED AGGREGATE BASE [AGGREGATE BASE COURSE] - SPREADING, WATERING AND COMPACTING GRADED 37.5 MM AGGREGATE TO FORM A DENSE AGGREGATE BASE USING MACHINERY INCLUDING MOTOR GRADER & ROLLER HIRE CHARGES. TRANSPORT OF AGGREGATES TO BE PAID SEPARATELY (LOOSE VOLUME)[SSCM 405.1 TO 4]:						
	DATA FOR	170.00	CU.M				
	LABOUR S/SK - BLINDING & RAKING	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				150.00		
	GRADED AGGREGATE 37.5	170.00	CU.M	B0-313	600,706.71		
	MOTOR GRADER (120-140 HP)	6.00	HOURS	B0-114	34,331.68		
	ROLLER CHARGES (VIBRATING 10 TONS)	1.00	DAY	B0-110	35,810.63		
	HIRE OF WATER BOWSER (6000 LTRS)	0.25	DAY	B0-128	5,764.53		
					682,763.55		
	COST PER 170 CU.M				682,763.55		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-012A	4,016.26		
				SAY	4,016.25	35.29	3,980.96
	IF THE AGGREGATE WAS NOT PILED AND MEASURED PRIOR TO SPREADING, PILING COST OF AGGREGATE AS PER A1-018 SHALL BE DEDUCTED.						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-013	DENSE GRADED AGGREGATE BASE [AGGREGATE BASE COURSE] SPREADING WATERING AND COMPACTING GRADED 37.5 MM AGGREGATE TO FORM A DENSE AGGREGATE BASE IN STRIPS, AVERAGE WIDTH NOT EXCEEDING 1.2 METERS, FOR ROAD WIDENING. EXCLUDING TRANSPORT OF AGGREGATES * (LOOSE VOLUME)[SSCM 405.1]:						
	DATE FOR 19.82 CU.M						
	LABOUR (S/SK)-SPREADING	5.50	DAYS	B0-003	16,500.00		
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	1,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				450.00		
	GRADED AGGREGATE 37.5 MM	19.82	CU.M	B0-313	70,042.05		
	ROLLER CHARGES ETC.(8-10 TONS)	1.24	DAY	B0-111	24,254.48		
	HIGHER OF TRACTOR & TRAILER	0.22	DAY	B0-117	2,350.68		
	HIRE OF WATER TANK AND PUMP (50 MM)	0.22	DAY	B0-104	819.71		
					115,916.92		
	COST PER 19.82 CU.M				115,916.92		
	RATE PER 1 CU.M (LOOSE VOLUME)*			M1-013	5,848.48		
				SAY	5,848.50	908.17	4,940.33
	* NOTE FOR THE RATE ON COMPACTED VOLUME, INCREASE LOOSE VOLUME RATE BY 42%. IF THE AGGREGATE WAS NOT PILED AND MEASURED PRIOR TO SPREADING, PILING COST OF AGGREGATE AS PER A1-018 SHALL BE DEDUCTED.						
	NOTE* THE ITEM M1-013 ON MANUAL LABOUR SHOULD BE ADOPTED ON APPROVAL BY PD / CE FOR SMALL WORKS ONLY. WHEN MACHINERY IS USED FOR SPREADING AND COMPACTION, M1-012A / M1-013A SHALL BE ADOPTED DEPENDING ON SITE SITUATION.						
M1-013A	GRADED 37.5 AGGREGATE BASE COURSE MATERIAL SPREAD & ROLLED IN STRIPS, AVERAGE WIDTH NOT EXCEEDING 1.2 METERS USING MACHINERY INCLUDING MOTOR GRADER & ROLLER HIRE CHARGES, FUEL & WATERING (LOOSE VOLUME)* [SSCM 405.1 TO 4] : TRANSPORT OF AGGREGATES TO BE PAID SEPARATELY						
	DATA FOR 100 CU.M						
	LABOUR S/SK - BLINDING & RAKING	2.00	DAY	B0-003	6,000.00		
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				150.00		
	GRADED AGGREGATE 37.5	100.00	CU.M	B0-313	353,356.89		
	MOTOR GRADER (65 HP)	1.00	DAY	B0-113	29,859.06		
	ROLLER CHARGES (1/2 TO 1 TON)	3.00	DAY	B0-109	27,300.63		
	HIRE OF WATER BOWSER (6000 LTRS)	0.13	DAY	B0-128	2,882.26		
					422,348.84		
	COST PER 100 CU.M				422,348.84		
	RATE PER 1 CU.M (LOOSE VOLUME)*			M1-013A	4,223.49		
				SAY	4,223.50	88.00	4,135.50
	* NOTE FOR THE RATE ON COMPACTED VOLUME, INCREASE LOOSE VOLUME RATE BY 42%. IF THE AGGREGATE WAS NOT PILED AND MEASURED PRIOR TO SPREADING, PILING COST OF AGGREGATE AS PER A1-018 SHALL BE DEDUCTED.						

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION VII							
ROAD SURFACE TREATMENT							
(SAND TRANSPORT UP TO 16 KM INCLUDED IN THE RATES. TRANSPORT OF BITUMEN EMULSION / BITUMEN TO BE PAID SEPARATELY.)							
S1-001	BITUMEN(80/100) SURFACING FIRST COAT USING 2 LTR/SQ.M INCLUDING BLINDING WITH SAND AT THE RATE OF 125 SQ.M/CU.M [SSCM 503.1] :						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)/CLEARING SURFACE	9.00	DAYS	B0-003	27,000.00		
	LABOUR (U/SK)/TRANSPORT SAND	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				710.00		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	744.00	LTR	B0-351	140,533.33		
	SAND	2.98	CU.M	B0-331	25,560.29		
	FIREWOOD	0.38	CU.M	B0-395	1,066.66		
	BASKETS	0.33	NO	B0-631	100.00		
					196,470.28		
	COST PER 372 SQ.M				196,470.28		
	RATE PER 1 SQ.M			S1-001	528.15		
				SAY	528.15	76.34	451.81
S1-002	BITUMEN(80/100) SURFACING FIRST COAT, USING 2 LTR/SQ.M, INCLUDING BLINDING WITH GRAVEL WHERE SAND IS NOT AVAILABLE WITHIN 16 KM. :						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)	9.00	DAYS	B0-003	27,000.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				710.00		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	744.00	LTR	B0-351	140,533.33		
	GRAVEL	4.70	CU.M	E1-008	12,297.30		
	FIREWOOD	0.38	CU.M	B0-395	1,066.66		
	BASKETS	0.33	NO	B0-631	100.00		
					183,207.29		
	COST PER 372 SQ.M				183,207.29		
	RATE PER 1 SQ.M			S1-002	492.49		
				SAY	492.50	76.34	416.16

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-003	DOUBLE BITUMINOUS SURFACE TREATMENT WITH HOT BITUMEN (MANUAL) INCLUDING INTERNAL TRANSPORT (BINDER AND AGGREGATE PAID SEPARATELY) [SSCM 505.b1 - 505.b5 & TABLE 505-b1]:						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK)/CLEARING SURFACE ETC.	3.50	DAYS	B0-004	9,800.00		
	LABOUR (S/SK)-APPLY. 1ST COAT BITU.	2.00	DAYS	B0-003	6,000.00		
	LABOUR (S/SK)-SPR.MAT/CONT.VEHICLES	1.75	DAYS	B0-003	5,250.00		
	LABOUR (U/SK)-BRUSHING	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				561.25		
	FIREWOOD	0.25	CU.M	B0-395	711.10		
	BASKETS	0.67	NO	B0-631	201.00		
	HIRE OF TAR BOILER	1.00	DAY	B0-101	100.00		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	4.00	HOURS	B0-112	29,463.88		
	LABOUR (S/SK)-APPLY. 2ND COAT	2.00	DAYS	B0-003	6,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	LABOUR (S/SK)	0.75	DAY	B0-003	2,250.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				276.25		
	HIRE OF TAR BOILER	1.00	DAY	B0-101	100.00		
	FIREWOOD	0.19	CU.M	B0-395	533.33		
	BASKETS	0.67	NO	B0-631	200.00		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	4.00	HOURS	B0-112	29,463.88		
	TRACTOR & TRAIL.(1 & 2 COATS)	1.00	DAY	B0-117	10,684.90		
					105,795.59		
	COST PER 279 SQ.M				105,795.59		
	PER 1 SQ.M			S1-003	379.20		
				SAY	379.20	120.07	259.13
S1-004	SINGLE BITUMINOUS SURFACE TREATMENT WITH HOT BITUMEN (MANUAL) INCLUDING INTERNAL TRANSPORT (BINDER AND AGGREGATE PAID SEPARATELY) [SSCM 505.b1 - 505.b5 & TABLE 505-b1]:						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK)/CLEARING SURFACE & SWEEP ROAD ETC.	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK)/APPLY. BITUMEN	2.00	DAYS	B0-003	6,000.00		
	LABOUR (S/SK)/SPREADING	1.00	DAY	B0-003	3,000.00		
	LABOUR (S/SK) - BRUSH. & CONT.VEHI	0.50	DAY	B0-003	1,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				472.50		
	FIREWOOD	0.38	CU.M	B0-395	1,066.66		
	BASKETS	0.67	NO	B0-631	200.00		
	HIRE OF TAR BOILER	1.00	DAY	B0-101	100.00		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	4.00	HOURS	B0-112	29,463.88		
	TRACTOR & TRAILER	0.50	DAY	B0-117	5,342.45		
					55,545.49		
	COST PER 279 SQ.M				55,545.49		
	PER 1 SQ.M			S1-004	199.09		
				SAY	199.10	67.74	131.36

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-005	DOUBLE BITUMINOUS SURFACE TREATMENT WITH EMULSION(CRS-2)(MANUAL) INCLUDING INTERNAL TRANSPORT (BINDER AND AGGREGATE PAID SEPARATELY):						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK)/CLEARING ETC.	3.50	DAYS	B0-004	9,800.00		
	LABOUR (S/SK)-APPLY. 1ST COAT EMUL.	2.00	DAYS	B0-003	6,000.00		
	LABOUR (S/SK)-SPR.MAT/CONT.VEHICLES	1.75	DAYS	B0-003	5,250.00		
	LABOUR (U/SK)/BRUSH	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL BASKETS	0.67	NO	B0-631	200.00		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	4.00	HOURS	B0-112	29,463.88		
	2ND COAT:						
	LABOUR (S/SK)/EMULSION	2.00	DAYS	B0-003	6,000.00		
	LABOUR (U/SK)/SCREENING	1.00	DAY	B0-004	2,800.00		
	LABOUR (S/SK)/SPREADING	0.75	DAY	B0-003	2,250.00		
	ALLOW 2.5% ON LABOUR FOR TOOL BASKETS	0.67	NO	B0-631	200.00		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	4.00	HOURS	B0-112	29,463.88		
	TRACTOR & TRAILER (1ST & 2ND COAT)	1.00	DAY	B0-117	10,684.90		
					104,350.16		
	COST PER 279 SQ.M				104,350.16		
	PER 1 SQ.M			S1-005	374.01		
				SAY	374.00	120.07	253.93
S1-006	SINGLE BITUMINOUS SURFACE TREATMENT WITH EMULSION(CRS-2)(MANUAL) INCLUDING INTERNAL TRANSPORT (BINDER AND AGGREGATE PAID SEPARATELY):						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK)/CLEANING SURFACE ETC.	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK)/APPLY EMULSION	2.00	DAYS	B0-003	6,000.00		
	LABOUR (S/SK)/SPREADING	1.00	DAY	B0-003	3,000.00		
	LABOUR (S/SK) - BRUSH. & CONT.VEHI	0.50	DAY	B0-003	1,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOL BASKETS	0.67	NO	B0-631	200.00		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	4.00	HOURS	B0-112	29,463.88		
	TRACTOR & TRAILER	0.50	DAY	B0-117	5,342.45		
					54,378.83		
	COST PER 279 SQ.M				54,378.83		
	PER 1 SQ.M			S1-006	194.91		
				SAY	194.90	67.74	127.16

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-007	BITUMEN(80/100) SURFACING SUBSEQUENT COAT USING 0.75 LTR/SQ.M INCLUDING BLINDING WITH SAND @ 125 SQ.M/CU.M [SSCM 503.1 (b)] :						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)/BITUMEN & BLINDING	5.50	DAYS	B0-003	16,500.00		
	LABOUR (U/SK)/INT.TRANSPORT/SAND	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				447.50		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	279.00	LTR	B0-351	52,700.00		
	SAND	2.98	CU.M	B0-331	25,560.29		
	FIREWOOD	0.25	CU.M	B0-395	703.99		
	BASKETS	0.33	NO	B0-631	100.00		
					97,511.79		
	COST PER 372 SQ.M				97,511.79		
	PER 1 SQ.M			S1-007	262.13		
				SAY	262.15	48.12	214.03
S1-008	BITUMEN(80/100) SURFACING 2ND/SUBSEQUENT COAT USING 1.0 LTR/SQ.M INCLUDING BLINDING AT THE RATE OF 125 SQ.M/CU.M (NEW WORK)[SSCM 503.1(b)] :						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)	5.50	DAYS	B0-003	16,500.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				447.50		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	372.00	LTR	B0-351	70,266.67		
	SAND	2.98	CU.M	B0-331	25,560.29		
	FIREWOOD	0.25	CU.YD	B0-395	703.99		
	BASKETS	0.33	NO	B0-631	100.00		
					115,078.45		
	COST PER 372 SQ.M				115,078.45		
	PER 1 SQ.M			S1-008	309.35		
				SAY	309.35	48.12	261.23
S1-009	BITUMEN(80/100) SURFACING SUBSEQUENT COAT USING 0.75 LTR/SQ.M INCLUDING BLINDING WITH GRAVEL FREE OF CLAY WHERE SAND IS NOT AVAILABLE WITHIN 16 KM [SSCM 503.2(b)]:						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)	5.50	DAYS	B0-003	16,500.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				447.50		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	279.00	LTR	B0-351	52,700.00		
	GRAVEL	4.72	CU.M	E1-008	12,346.68		
	FIREWOOD	0.25	CU.M	B0-395	703.99		
	BASKETS	0.33	NO	B0-631	100.00		
					84,298.18		
	COST PER 372 SQ.M				84,298.18		
	PER 1 SQ.M			S1-009	226.61		
				SAY	226.60	48.12	178.48

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-010	BITUMEN(80/100) SURFACING 2ND/SUBSEQUENT COAT USING 1 LTR/SQ.M INCLUDING BLINDING WITH GRAVEL FREE OF CLAY WHERE SAND IS NOT AVAILABLE WITHIN 16 KM (NEW WORK) [SSCM 503.3(c)] :						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)	5.50	DAYS	B0-003	16,500.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				447.50		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	372.00	LTR	B0-351	70,266.67		
	GRAVEL	4.72	CU.M	E1-008	12,346.68		
	FIREWOOD	0.25	CU.M	B0-395	703.99		
	BASKETS	0.33	NO	B0-631	100.00		
					101,864.84		
	COST PER 372 SQ.M				101,864.84		
	PER 1 SQ.M			S1-010	273.83		
				SAY	273.85	48.12	225.73
S1-011	BITUMEN EMULSION(CRS-1) SURFACE TREATMENT 1ST COAT WITH 3.5 LTR/SQ.M INCLUDING BLINDING WITH SAND, @ 125 SQ.M/CU.M (MANUAL):						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)-BITUMEN & BLINDING	5.00	DAYS	B0-003	15,000.00		
	LABOUR (U/SK)-INT. TRANSPORT/SAND	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				410.00		
	EMULSION (CRS-1)	1,302.00	LTR	B0-353	193,998.00		
	SAND	2.98	CU.M	B0-331	25,560.29		
	BASKETS	0.33	NO	B0-631	100.00		
					236,468.29		
	COST PER 372 SQ.M				236,468.29		
	PER 1 SQ.M			S1-011	635.67		
				SAY	635.65	44.09	591.56
S1-012	BITUMEN EMULSION(CRS-1) SURFACE TREATMENT 1ST COAT WITH 3.5 LTR/SQ.M (USING TROLLEY, EMULSION), INCLUDING BLINDING WITH SAND, @ 125 SQ.M/CU.M :						
	DATA FOR 650 SQ.M						
	LABOUR (S/SK)-BITUMEN & BLINDING	3.50	DAYS	B0-003	10,500.00		
	LABOUR (U/SK)-INT. TRANSPORT/SAND	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				297.50		
	EMULSION (CRS-1)	2,275.00	LTR	B0-353	338,975.00		
	SAND	5.20	CU.M	B0-331	44,661.80		
	BASKETS	0.58	NO	B0-631	175.00		
	HIRE OF TROLLEY, EMULSION	1.00	DAY	B0-137	835.84		
					396,845.14		
	COST PER 650 SQ.M				396,845.14		
	PER 1 SQ.M			S1-012	610.53		
				SAY	610.55	18.31	592.24

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-013	BITUMEN EMULSION(CRS-1) SURFACE TREATMENT SUBSEQUENT COAT USING 0.75 LTR/SQ.M, INCLUDING BLINDING WITH SAND @ 125 SQ.M/CU.M (MANUAL)						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)-BITUMEN & BLINDING	2.00	DAYS	B0-003	6,000.00		
	LABOUR (U/SK)-INT. TRANSPORT/SAND	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				185.00		
	EMULSION (CRS-1)	279.00	LTR	B0-353	41,571.00		
	SAND	2.98	CU.M	B0-331	25,560.29		
	BASKETS	0.33	NO	B0-631	100.00		
					74,816.29		
	COST PER 372 SQ.M				74,816.29		
	PER 1 SQ.M			S1--013	201.12		
				SAY	201.10	19.89	181.21
S1-014	BITUMEN EMULSION(CRS-1) SURFACE TREATMENT SUBSEQUENT COAT WITH 0.75 LTR/SQ.M (USING TROLLEY, EMULSION), INCLUDING BLINDING WITH SAND @ 125 SQ.M/CU.M						
	DATA FOR 1,115 SQ.M						
	LABOUR (S/SK)-BITUMEN & BLINDING	2.00	DAYS	B0-003	6,000.00		
	LABOUR (U/SK)-INT. TRANSPORT/SAND	1.50	DAY	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				255.00		
	EMULSION (CRS-1)	836.25	LTR	B0-353	124,601.25		
	SAND	8.92	CU.M	B0-331	76,612.17		
	BASKETS	1.00	NO	B0-631	300.00		
	HIRE OF TROLLEY, EMULSION	1.72	DAYS	B0-137	1,437.64		
					213,406.07		
	COST PER 1,115 SQ.M				213,406.07		
	PER 1 SQ.M			S1-014	191.40		
				SAY	191.40	9.15	182.25

HSR - 2024
Engineering Division
Ministry of Transport and Highways

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-015	TACK COAT USING BITUMEN EMULSION(CSS-1) @ THE RATE OF 0.5 LTR/SQ.M INCLUSIVE OF BRUSHING, CLEANING ROAD SURFACE AND COST OF BITUMEN EMULSION (MANUAL) [SSCM 502.3]:						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOL EMULSION (CSS-1)	186.00	LTR	B0-352	150.00 27,714.00		
					33,864.00		
	COST PER 372 SQ.M				33,864.00		
	PER 1 SQ.M			S1-015.1	91.03		
(2)	DATA FOR 232 SQ.M - FOR BRUSHING						
	LABOUR (U/SK)	0.75	DAY	B0-004	2,100.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				52.50		
					2,152.50		
	COST PER 232 SQ.M				2,152.50		
	PER 1 SQ.M			S1-015.2	9.28		
	RATE PER 1 SQ.M (1 + 2)			S1-015	100.31		
				SAY	100.30	25.18	75.12
S1-016	TACK COAT USING BITUMEN EMULSION(CSS-1) @ THE RATE OF 0.5 LTR/SQ.M INCLUSIVE OF BRUSHING, CLEANING ROAD SURFACE AND COST OF BITUMEN EMULSION (MANUAL) [SSCM 502.3]:						
	AS PER S1-015, COST PER 186 LITRES				37,315.32		
	RATE PER 1 LITRE			S1-016	200.62		
				SAY	200.60	50.36	150.24
S1-017	TACK COAT USING BITUMEN EMULSION(CSS-1) @ THE RATE OF 0.75 LTR/SQ.M INCLUSIVE OF BRUSHING, CLEANING ROAD SURFACE AND COST OF BITUMEN EMULSION (MANUAL) [SSCM 502.1-503.3]:						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOL EMULSION (CSS-1)	279.00	LTR	B0-352	150.00 41,571.00		
					47,721.00		
	COST PER 372 SQ.M				47,721.00		
	PER 1 SQ.M			S1-017.1	128.28		
(2)	FOR BRUSHING AND CLEANING	1.00	SQ.M	S1-015.2	9.28		
	RATE PER 1 SQ.M (1 + 2)			S1-017	137.56		
				SAY	137.55	25.18	112.37

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-017A	TACK COAT USING BITUMEN EMULSION(CRS-1) @ THE RATE OF 0.5 LTR/SQ.M INCLUSIVE OF BRUSHING, CLEANING ROAD SURFACE AND COST OF BITUMEN EMULSION (MANUAL) [SSCM 502.1]:						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOL EMULSION (CRS-1)	186.00	LTR	B0-353	150.00 27,714.00		
					33,864.00		
	COST PER 372 SQ.M				33,864.00		
	PER 1 SQ.M			S1-017A.1	91.03		
(2)	DATA FOR 232 SQ.M - FOR BRUSHING	1.00	SQ.M	S1-015.2	9.28		
	RATE PER 1 SQ.M (1 + 2)			S1-017A	100.31		
				SAY	100.30	25.18	75.12
S1-017B	TACK COAT USING BITUMEN EMULSION(CRS-1) @ THE RATE OF 0.75 LTR/SQ.M INCLUSIVE OF BRUSHING, CLEANING ROAD SURFACE AND COST OF BITUMEN EMULSION (MANUAL) [SSCM 502.1-503.1]:						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOL EMULSION (CRS-1)	279.00	LTR	B0-353	150.00 41,571.00		
					47,721.00		
	COST PER 372 SQ.M				47,721.00		
	PER 1 SQ.M			S1-017B.1	128.28		
(2)	FOR BRUSHING AND CLEANING	1.00	SQ.M	S1-015.2	9.28		
	RATE PER 1 SQ.M (1 + 2)			S1-017B	137.56		
				SAY	137.55	25.18	112.37
S1-018	TACK COAT WITH CUT BACK BITUMEN(MC 30) USING 0.5 LTR/SQ.M. INCLUDING BRUSHING AND CLEANING ROAD SURFACE (MANUAL):						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	5.00	DAYS	B0-003	15,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				375.00		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	130.20	LTR	B0-351	24,593.33		
	KEROSENE OIL	55.80	LTR	B0-601	14,005.80		
	FIREWOOD	0.25	CU.M	B0-395	703.99		
	BASKETS	0.33	NO	B0-631	100.00		
					54,878.13		
	COST PER 372 SQ.M				54,878.13		
	PER 1 SQ.M			S1-018.1	147.52		
(2)	FOR BRUSHING AND CLEANING	1.00	SQ.M	S1-015.2	9.28		
	RATE PER 1 SQ.M (1 + 2)			S1-018	156.80		
				SAY	156.80	49.37	107.43
S1-019	DELETED						

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-020	TACK COAT WITH CUT BACK BITUMEN(80/100) USING 0.75 LTR/SQ.M INCLUDING BRUSHING AND CLEANING ROAD SURFACE (MANUAL)[SSCM 502.4] :						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	5.00	DAYS	B0-003	15,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				375.00		
	TAR BOILER	1.00	DAYS	B0-101	100.00		
	BITUMEN	195.30	LTR	B0-351	36,890.00		
	KEROSENE OIL	83.70	LTR	B0-601	21,008.70		
	FIREWOOD	0.33	CU.M	B0-395	920.73		
	BASKETS	0.33	NO	B0-631	100.00		
					74,394.43		
	COST PER 372 SQ.M				74,394.43		
	PER 1 SQ.M			S1-020.1	199.99		
(2)	FOR BRUSHING AND CLEANING	1.00	SQ.M	S1-315.2	9.28		
	RATE PER 1 SQ.M (1 + 2)			S1-020	209.27		
				SAY	209.25	49.37	159.88
S1-021	ROLLING OVER BLINDING MATERIAL SPREAD OVER SUBSEQUENT BITUMEN SURFACING USING DIESEL ROLLER (8-10 TONS) [SSCM 502.4]:						
	DATA FOR ROLLING 1115 SQ.M						
	HIRE OF ROLLER(8-10 TONS)	1.00	DAY	B0-111	19,579.80		
	COST PER 1115 SQ.M				19,579.80		
	RATE PER 1 SQ.M			S1-021	17.56		
				SAY	17.55	0.00	17.55
S1-022	PRIME COAT WITH BITUMEN EMULSION(CSS-1) USING 1 LTR/SQ.M INCLUDING BLINDING WITH SAND AT THE RATE OF 250 SQ.M/CU.M AND BRUSHING CLEANING AND MOISTENING ROAD SURFACE :						
(1)	DATA FOR 372 SQ.M - PRIME COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				185.00		
	EMULSION (CSS-1)	372.00	LTR	B0-352	55,428.00		
	SAND	1.49	CU.M	B0-331	12,780.15		
	BASKETS	0.33	NO	B0-631	100.00		
					75,893.15		
	COST PER 372 SQ.M				75,893.15		
	PER 1 SQ.M			S1-022.1	204.01		
(2)	DATA FOR 232 SQ.M - BRUSHING, CLEANING AND MOISTENING ROAD SURFACE (MANUAL)						
	LABOUR (U/SK)	0.75	DAY	B0-004	2,100.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				52.50		
	ALLOW FOR WATER	1.00	ITEM	B0-786	110.00		
					2,262.50		
	COST PER 232 SQ.M				2,262.50		
	PER 1 SQ.M			S1-022.2	9.75		
	RATE PER 1 SQ.M (1 + 2)			S1-022	213.77		
				SAY	213.75	28.94	184.81

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-023	PRIME COAT WITH BITUMEN EMULSION(CSS-1) USING 1 LTR/SQ.M WITHOUT BLINDING, BUT INCLUSIVE OF BRUSHING, CLEANING AND MOISTENING ROAD SURFACE :						
(1)	DATA FOR 372 SQ.M - PRIME COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				150.00		
	EMULSION (CSS-1)	372.00	LTR	B0-352	55,428.00		
					61,578.00		
	COST PER 372 SQ.M				61,578.00		
	PER 1 SQ.M			S1-023.1	165.53		
(2)	FOR BRUSHING, CLEANING AND MOISTENING	1.00	SQ.M	S1-022.2	9.75		
	RATE PER 1 SQ.M (1 + 2)	1.00	SQR	S1-023	175.28		
				SAY	175.30	25.18	150.12
S1-024	PRIME COAT WITH CUT BACK BITUMEN(MC 30) USING 1 LTR/SQ.M INCLUDING BLINDING WITH SAND AT THE RATE OF 250 SQ.M/CU.M AND BRUSHING, CLEANING AND MOISTENING ROAD SURFACE:						
(1)	DATA FOR 372 SQ.M - PRIME COAT						
	LABOUR (S/SK)	5.00	DAYS	B0-003	15,000.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				410.00		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	260.40	LTR	B0-351	49,186.67		
	KEROSENE OIL	111.60	LTR	B0-601	28,011.60		
	FIREWOOD	0.66	CU.M	B0-395	1,841.47		
	BASKETS	0.33	NO	B0-631	100.00		
	SAND	1.49	CU.M	B0-331	12,780.15		
					108,829.88		
	COST PER 372 SQ.M				108,829.88		
	PER 1 SQ.M			S1-024.1	292.55		
(2)	FOR BRUSHING, CLEANING AND MOISTENING	1.00	SQ.M	S1-022.2	9.75		
	RATE PER 1 SQ.M (1 + 2)			S1-024	302.31		
				SAY	302.30	53.14	249.16

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-025	PRIME COAT WITH CUT BACK BITUMEN(MC 30) USING 1 LT/SQ.M WITHOUT BLINDING BUT INCLUSIVE OF BRUSHING, CLEANING, AND MOISTENING ROAD SURFACE.:						
(1)	DATA FOR 372 SQ.M - PRIME COAT						
	LABOUR (S/SK)	5.00	DAYS	B0-003	15,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				375.00		
	TAR BOILER	1.00	DAYS	B0-101	100.00		
	BITUMEN	260.40	LTR	B0-351	49,186.67		
	KEROSENE OIL	111.60	LTR	B0-601	28,011.60		
	FIREWOOD	0.50	CU.M	B0-395	1,407.98		
					94,081.25		
	COST PER 372 SQ.M				94,081.25		
	PER 1 SQ.M			S1-025.1	252.91		
(2)	FOR BRUSHING, CLEANING AND MOISTENING	1.00	SQ.M	S1-022.2	9.75		
	RATE PER 1 SQ.M (1 + 2)			S1-025	262.66		
				SAY	262.65	49.37	213.28
S1-026	SWEEPING OVER TARRED SURFACE TO ARREST BLEEDING :						
	DATA FOR 372 SQ.M						
	LABOUR (LJ/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
	BASKETS	0.17	NO	B0-631	50.00		
					2,920.00		
	COST PER 372 SQ.M				2,920.00		
	PER 1 SQ.M			S1-026	7.85		
				SAY	7.85	7.53	0.32

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-027	APPLICATION OF BITUMEN EMULSION FOR SURFACE TREATMENT USING CRS - 1 (USING PLANT) "RATE PER LITRE"						
	DATA FOR 4546 LITRES						
	CRS 1 AT SITE	4,546.00	LTR	B0-353	677,354.00		
	MECHANICAL BROOM WITH TRACTOR	0.63	DAY	B0-122	7,810.11		
	EMULSION DISTRIBUTOR - 4000 LITRES	1.00	DAY	B0-123	29,046.35		
	LABOUR (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (SK/B)	2.00	DAY	B0-002	7,000.00		
	LABOUR (U/SK)	6.00	DAY	B0-004	16,800.00		
					741,810.46		
	COST PER 4546 LTRES				741,810.46		
	RATE PER 1 LITRE			S1-027	163.18		
				SAY	163.20	6.07	157.13
S1-028	BLINDING THE BITUMEN SURFACING WITH SAND AT THE RATE OF 125 SQ.M PER 1 CU.M USING MATERIAL FROM STOCK PILE:						
	DATA FOR 3000 SQ.M						
	SAND	24.00	CU.M	B0-331	206,131.40		
	TRACTOR	1.00	DAY	B0-117	10,684.90		
	LABOUR (U/SK) - LOADING & SPREADING	7.00	DAY	B0-004	19,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				490.00		
					236,906.30		
	FOR 3000 SQ.M				236,906.30		
	RATE PER 1 SQ.M			S1-028	78.97		
				SAY	78.95	6.53	72.42
S1-029	SINGLE BITUMINOUS SURFACE TREATMENT WITH BITUMEN EMULSION(CRS-2) USING PLANT. (BINDER AND AGGREGATE PAID SEPARATELY) (RATE TO INCLUDE TRANSPORT COST OF AGGREGATE UP TO 16 KMS) [SSCM 505.3(d)]:						
	DATA FOR 2787 SQ.M.						
	PLANT (WET LEASE)						
	MECHANICAL BROOM WITH TRACTOR	0.75	DAY	B0-122	9,372.13		
	EMULSION SPRAYER SELF PROPELLED (4000 LTRS)	1.00	DAY	B0-123	29,046.35		
	CHIPS SPREADER(SELF PROPELLED)	1.00	DAY	B0-121	45,022.79		
	ROLLER,SMOOTH WHEEL (7 TON) - 8 HOURS	8.00	HRS	B0-135	30,164.56		
	PNEUMATIC ROAD ROLLER	1.00	DAY	B0-112	58,927.76		
	BACKHOE LOADER	1.00	DAY	B0-115	34,514.65		
	TIPPER (7 TON/4.5 CU.M.) 1 NO. (ASSUMING 16 KM AVE. TRANSPORT FOR 9 TRIPS)	648.00	CU.M/KM	B0-118	32,017.68		
	LABOUR (SK/A)	2.00	DAY	B0-001	7,600.00		
	LABOUR (S/SK)	12.00	DAY	B0-003	36,000.00		
					282,665.92		
	COST FOR 2787 SQ.M				282,665.92		
	RATE PER 1 SQ.M			S1-029	101.42		
				SAY	101.40	15.64	85.76

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-030	DOUBLE BITUMINOUS SURFACE TREATMENT WITH BITUMEN EMULSION(CRS-1) USING PLANT. (BINDER AND AGGREGATE PAID SEPARATELY) (RATE TO INCLUDE TRANSPORT COST OF AGGREGATE UP TO 16 KMS) [SSCM 505.3(e)]:						
	DATA FOR 1394 SQ.M						
	PLANT (WET LEASE)						
	MECHANICAL BROOM WITH TRACTOR	0.75	DAY	B0-122	9,372.13		
	EMULSION SPRAYER SELF PROP. (4000 LTRS)	1.00	DAY	B0-123	29,046.35		
	CHIP SPREADER (SELF PROPELLED)	1.00	DAY	B0-121	45,022.79		
	WHEEL LOADER (1.7 CU.M)	0.75	DAY	B0-116A	27,706.09		
	ROLLER,SMOOTH WHEEL (7 TON) - 8 HOURS.	8.00	HRS	B0-135	30,164.56		
	PNEUMATIC ROAD ROLLER	1.00	DAY	B0-112	58,927.76		
	TIPPERS (7 TON/4.5 CU.M.) 2 NOS. (ASSUMING 16 KM AVE. TRANS., 6 TRIPS EACH TIPPER)	864.00	CU.M/KM	B0-118	42,690.24		
	LABOUR (SK/A)	2.00	DAY	B0-001	7,600.00		
	LABOUR (S/SK)	12.00	DAY	B0-003	36,000.00		
					286,529.92		
	COST FOR 1394 SQ.M				286,529.92		
	RATE PER 1 SQ.M			S1-030	205.55		
				SAY	205.55	31.28	174.27
S1-030A	DELETED						

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-030B	DOUBLE BITUMINOUS SURFACE TREATMENT WITH HOT BITUMEN(80/100) USING 19 MM AND 9.5 MM SINGLE SIZE SELECTED AGGREGATES ON EXISTING BITUMINOUS SURFACES USING PLANT. RATE TO INCLUDE ALL LABOUR, MATERIAL, PLANT AND TRANSPORT COST OF AGGREGATE UP TO 16 KM. (TRANSPORT OF BINDER AND ADDITIONAL TRANSPORT OF AGGREGATE TO BE PAID SEPARATELY)[SSCM 505b.5(e)]:						
	DATA FOR	1,394	SQ.M				
	PLANT (WET LEASE)						
	MECHANICAL BROOM WITH TRACTOR	0.75	DAY	B0-122	9,372.13		
	BITUMEN DISTRIBUTER 4500 LTR (RDA HIRRE CHARGES)	6.00	HRS	B0-123A	47,339.72		
	CHIP SPREADER (SELF PROPELLED)	1.00	DAY	B0-121	45,022.79		
	WHEEL LOADER (1.7 CU.M)	0.75	DAY	B0-116A	27,706.09		
	ROLLER,SMOOTH WHEEL (7 TON) - 8 HOURS.	8.00	HRS	B0-135	30,164.56		
	PNEUMATIC ROAD ROLLER	1.00	DAY	B0-112	58,927.76		
	TIPPERS (7 TON/4.5 CU.M.) 2 NOS.	864.00	CU.M/KM	B0-118	42,690.24		
	(ASSUMING 16 KM AVE. TRANS., 6 TRIPS EACH TIPPER)						
	ALLOW FOR HEATING BITUMEN, TANKER 10,000 LITRE, IDLE HIRE (WET)	1.00	HRS	B0-141	6,005.12		
	MATERIALS						
	BINDER 80/100 BITUMEN FOR 1ST SEAL @ THE RATE OF 0.75 LITRE/SQ.M	1,045.50	LTR	B0-355	187,667.25		
	19 MM AGGREGATE FOR 1ST SEAL @ THE RATE OF 1.5 CU.M/100 SQ.M	20.91	CU.M	B0-314	77,581.27		
	BINDER 80/100 BITUMEN FOR 2ND SEAL @THE RATE OF 1.2 LITRE/SQ.M	1,672.80	LTR	B0-355	300,267.60		
	12.5 MM AGGREGATE FOR 2ND SEAL @ THE RATE OF 0.85 CU.M/100 SQ.M	11.85	CU.M	B0-315	38,153.73		
	LABOUR						
	LABOUR (SK/A)	2.00	DAY	B0-001	7,600.00		
	LABOUR (S/SK)	12.00	DAY	B0-003	36,000.00		
	COST FOR 1394 SQ.M				914,498.26		
	RATE PER 1 SQ.M			S1-030	656.02		
					=====		
				SAY	656.00	31.28	624.72
	* (SEE APPROVED RDA MACHINERY HIRE CHARGES LIST)						
	QUANTITIES OF AGGREGATES AND BINDER (PEN GRADE BITUMEN) FOR DBST [SSCM 505.5]						
		AGGREGATE	BINDER				
		CU.M/100 M ²	LTR/SQ.M				
	1ST SEAL 20 MM AGGREGATE - BINDER PENGRADE BITUMEN	1.3 - 1.7	0.65-0.85				
	2ND SEAL 10 MM AGGREGATE - BINDER PENETRATION GRADE BITUMEN	0.7-1.0	1.0-1.3				
	1ST SEAL 14 MM AGGREGATE - BINDER PENGRADE BITUMEN	1.0 - 1.3	0.5-0.7				
	2ND SEAL 6.3 MM AGGREGATE - BINDER PENETRATION GRADE BITUMEN	0.55-0.75	0.75-1.05				

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-031	SUPPLY, LAY AND COMPACT ASPHALT CONCRETE (19 MM, 60/70 BINDER 4.7%**) - DENSE (PLANT MADE) IN WEARING SURFACE OF SMALL WORKS SUCH AS BRIDGE DECKING, REINSTATEMENT OF TRENCHES ETC. (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY.) [SSCM - 506]:						
	** (FOR BINDER CONTENTS SEE GENERAL NOTES - SECTION 29.8)						
	DATA FOR 10 METRIC TONS						
	LABOUR (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	5,600.00		
	LABOUR (S/SK)	4.00	DAY	B0-003	12,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				535.00		
	ASPHALT PREMIX CONCRETE(WEARING)	10.00	M.T.	B0-361A	168,490.00		
	ROAD ROLLER (7 HOURS)	0.88	DAY	B0-111	17,132.33		
					207,557.33		
	COST FOR 10 M.T.				207,557.33		
	RATE PER 1 M.T.			S1-031	20,755.73		
				SAY	20,755.75	2,140.00	18,615.75
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						
S1-032	LAY AND COMPACT ASPHALT CONCRETE (37.5MM, 60/70 BINDER, 3.5% **) - BOUND BASE MATERIAL (PLANT MADE) IN SMALL WORKS SUCH AS BRIDGE DECKING, REINSTATEMENT OF TRENCHES ETC. (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY.) [SSCM - 506]:						
	** (FOR BINDER CONTENTS SEE GENERAL NOTES - SECTION 29.8)						
	DATA FOR 10 METRIC TONS						
	LABOUR (SK A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	5,600.00		
	LABOUR (S/SK)	4.00	DAY	B0-003	12,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				535.00		
	ASPHALT BOUND PREMIX BASE MATERIAL	10.00	M.T.	B0-362	152,050.00		
	ROAD ROLLER (7 HOURS)	0.88	DAY	B0-111	17,132.33		
					191,117.33		
	COST FOR 10 M.T.				191,117.33		
	RATE PER 1 M.T.			S1-032	19,111.73		
				SAY	19,111.75	2,140.00	16,971.75
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-033	SUPPLY, LAY AND COMPACT CUTBACK ASPHALT CONCRETE COLD MIX WITH MC30 (19 MM AGGREGATE, 15% CUT BACK 60/70 BINDER 5.5%**) DENSE (PLANT MADE) IN SMALL WORKS SUCH AS BRIDGE DECKING, REINSTATEMENT OF TRENCHES ETC. (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY.) [SSCM - 507]:						
	** (FOR BINDER CONTENTS SEE GENERAL NOTES - SECTION 29.8)						
	DATA FOR 10 METRIC TONS						
	LABOUR (SK A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	5,600.00		
	LABOUR (S/SK)	4.00	DAY	B0-003	12,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				535.00		
	ASPHALT CONC.(COLD MIX WITH 60/70 CUT BACK) MATERIAL	10.00	M.T.	B0-365	197,240.00		
	ROAD ROLLER (7 HOURS)	0.88	DAY	B0-111	17,132.33		
					236,307.33		
	COST FOR 10 M.T.				236,307.33		
	RATE PER 1 M.T.			S1-033	23,630.73		
				SAY	23,630.75	2,140.00	21,490.75
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						
S1-033A	LAY AND COMPACT IMULSIFIED ASPHALT CONCRETE COLD MIX WITH BITUMEN EMULSION CSS-1(6.67%** BY WGT OF AGG.) AND 19 MM AGGREGATE, DENSE (PLANT MADE) IN SMALL WORKS SUCH AS BRIDGE DECKING, REINSTATEMENT OF TRENCHES ETC. [SUPPLY AND TRANSPORT OF PREMIX(COLD MIX) TO BE PAID SEPARATELY.] [SSCM - 507]:						
	** (FOR BINDER CONTENTS SEE GENERAL NOTES - SECTION 29.8.)						
	DATA FOR 10 METRIC TONS						
	LABOUR (SK A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	5,600.00		
	LABOUR (S/SK)	4.00	DAY	B0-003	12,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				535.00		
	ASPHALT CONCRETE(COLD MIX) MATERIAL	10.00	M.T.	B0-366	142,760.00		
	ROAD ROLLER (7 HOURS)	0.88	DAY	B0-111	17,132.33		
					181,827.33		
	COST FOR 10 M.T.				181,827.33		
	RATE PER 1 M.T.			S1-033A	18,182.73		
				SAY	18,182.75	2,140.00	16,042.75
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-034	LAY AND COMPACT ASPHALT CONCRETE USING PAVER (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY) :						
	DATA FOR 200 M.T. PER 12 HOURS						
	CHARGE HAND (SK'A') [13 HOURS]	-	DAY	B0-001	0.00		
	CHECKER (SK'A') - DO -	3.70	DAY	B0-001	14,060.00		
	LABOUR (SK'B' - 2 NOS.) -DO-	2.40	DAY	B0-002	8,400.00		
	LABOUR (S/Sk - 8 NOS.) -DO-	7.40	DAY	B0-003	22,200.00		
	LABOUR (U/Sk - 10 NOS.) -DO-	22.50	DAY	B0-004	63,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				2,691.50		
	FARM TRACTOR WITH BROOM - 6 HOURS	1.10	DAY	B0-122	13,745.79		
	MECHANICAL PAVER (6 M) - 11 HOURS	5.30	HRS	B0-129	58,959.06		
	VIBRATING ROLLER-7 TON (SMOOTH-TANDEM)						
	1 NOS. X 8 HOURS.	5.50	HRS	B0-135	20,738.14		
	PNEUMATIC ROLLER - 2NOSX12 HOURS	11.80	HRS	B0-112	86,918.45		
	WATER BOWSER(6000 LT) - 4 HOURS	1.20	DAY	B0-128	27,669.73		
	COMPRESSOR	7.80	HRS	B0-144	86,665.10		
					405,047.75		
	COST FOR 200 M.T.				405,047.75		
	RATE PER 1 M.T.			S1-034	2,025.24		
				SAY	2,025.25	538.30	1,486.95
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						
S1-034A	LAY AND COMPACT ASPHALT CONCRETE MANUALLY (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY) :						
	DATA FOR 15 M.T. PER 4 HOURS						
	SUPERVISOR (SK'A') [6 HOURS]	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/Sk - 5 NOS.) -DO-	2.50	DAY	B0-003	7,500.00		
	LABOUR (U/Sk - 7 NOS.) -DO-	3.50	DAY	B0-004	9,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				503.75		
	VIBRATING ROLLER 6-7 TON (SMOOTH-TANDEM)						
	1 NOS. X 8 HOURS.	2.00	HRS	B0-135	7,541.14		
					28,194.89		
	COST FOR 15 M.T.				28,194.89		
	RATE PER 1 M.T.			S1-034	1,879.66		
				SAY	1,879.65	1,343.33	536.32
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						
S1-035	SURFACING (SAND SEALING - MANUAL) USING BITUMEN EMULSION(CRS-1) AT THE RATE OF 1 LTR./SQ.M INCLUDING PREPARING SURFACE, BLINDING WITH SAND AT THE RATE OF 4 CU.M/500 SQ.M AND PRESSING WITH IMPROVISED HAND ROLLERS : (PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	DATA FOR 372 SQ.M						
(A)	EMULSION @ 1L/SQ.M. AND COVER WITH SAND :						
	LABOUR (S/SK)	2.00	DAY	B0-003	6,000.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				185.00		
	EMULSION (CRS-1)	372.00	LTR	B0-353	55,428.00		
	SAND	2.98	CU.M	B0-331	25,560.29		
	BASKETS	0.33	NO.	B0-631	100.00		
(B)	INTERNAL TRANSPORT OF MATERIAL: TRACTOR & TRAILOR	0.25	DAY	B0-117	2,671.23		
					91,344.52		
	FOR 372 SQ.M				91,344.52		
	RATE PER 1 SQ.M			S1-035	245.55		
				SAY	245.55	19.89	225.66

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-035A	PATCHING MINOR POT HOLES USING SAND, BITUMEN EMULSION MIX 1:8 WHERE NECESSARY, PRIOR TO SAND SEALING.						
	DATA FOR 372 SQ.M						
	PREPARATION & PATCHING MINOR POT HOLES :						
	LABOUR (S/SK)	2.00	DAY	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				150.00		
	SAND	0.23	CU.M	B0-331	1,945.67		
	EMULSION (CRS-1)	9.09	LTR	B0-353	1,354.74		
	INTERNAL TRANSPORT OF MATERIAL:						
	TRACTOR & TRAILOR	0.25	DAY	B0-117	2,671.23		
					12,121.64		
	COST PER 372 SQ.M				12,121.64		
	COST PER 1 SQ.M			S1-035A	32.59		
				SAY	32.60	16.13	16.47
S1-036 *	SAND SEALING WITH BITUMEN EMULSION CRS-1 AT THE RATE OF 1 LTR/SQ.M USING PLANT, INCLUDING BRUSHING, CLEANING, BLINDING, WITH SAND @ OF 125 SQ.M/CU.M, AND ROLLING WITH PNEUMATIC ROLLER AND INTERNAL TRANSPORT [SSCM 504] :						
	(PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	APPLICATION OF EMULSION, BLINDING & ROLLING DATA FOR 2000 SQ.M (USING PLANT)						
	APPLYING EMULSION CRS-1 AS PER ITEM S1-027	2,000.00	LITRE	S1-027	326,400.00		
	SAND FOR BLINDING	16.00	CU.M	B0-331	137,420.94		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	22,511.40		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	14,731.94		
	TRACTOR AND TRAILOR	0.50	DAY	B0-117	5,342.45		
	LABOUR (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	14,000.00		
	ADD 2.5% ON LABOUR FOR TOOLS				445.00		
					524,651.72		
	COST PER 2000 SQ.M				524,651.72		
	COST PER 1 SQ.M			S1-036	262.33		
				SAY	262.35	14.97	247.38
S1-036A*	CHIP SEALING WITH BITUMEN EMULSION CRS-1 AT THE RATE OF 1.25 LTR/SQ.M USING PLANT, INCLUDING BRUSHING, CLEANING, BLINDING (PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	APPLICATION OF EMULSION, BLINDING & ROLLING DATA FOR 2000 SQ.M (USING PLANT)						
	APPLYING EMULSION CRS-1 AS PER ITEM S1-027	2,500.00	LITRE	S1-027	408,000.00		
	CHIPS (9.5 MM) FOR BLINDING	16.00	CU.M	B0-316	51,519.94		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	22,511.40		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	14,731.94		
	TRACTOR AND TRAILOR	0.50	DAY	B0-117	5,342.45		
	LABOUR (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	14,000.00		
	ADD 2.5% ON LABOUR FOR TOOLS				445.00		
					520,350.72		
	COST PER 2000 SQ.M				520,350.72		
	COST PER 1 SQ.M			S1-036	260.18		
				SAY	260.20	8.90	251.30

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PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-036B*	FOG SEALING WITH BITUMEN EMULSION CSS-1 AT THE RATE OF 1.5 LTR/SQ.M USING PLANT, INCLUDING BRUSHING, CLEANING, BLINDING (PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	APPLICATION OF EMULSION, BLINDING & ROLLING DATA FOR 2000 SQ.M (USING PLANT)						
	APPLYING EMULSION CSS-1 AS PER ITEM S1-027	3,000.00	LITRE	S1-027A	489,600.00		
	SAND FOR BLINDING	16.00	CU.M	B0-331	137,420.94		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	22,511.40		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	14,731.94		
	TRACTOR AND TRAILOR	0.50	DAY	B0-117	5,342.45		
	LABOUR (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	14,000.00		
	ADD 2.5% ON LABOUR FOR TOOLS				445.00		
					687,851.72		
	COST PER 2000 SQ.M				687,851.72		
	COST PER 1 SQ.M			S1-036	343.93		
				SAY	343.95	8.90	335.05
S1-036C*	CRACK SEALING WITH BITUMEN EMULSION CSS-1 AT THE RATE OF 1.25 LTR/SQ.M USING PLANT, INCLUDING BRUSHING, CLEANING, BLINDING (PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	APPLICATION OF EMULSION, BLINDING & ROLLING DATA FOR 2000 SQ.M (USING PLANT)						
	APPLYING EMULSION CSS-1 AS PER ITEM S1-027	2,500.00	LITRE	S1-027A	408,000.00		
	SAND FOR BLINDING	16.00	CU.M	B0-331	137,420.94		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	22,511.40		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	14,731.94		
	TRACTOR AND TRAILOR	0.50	DAY	B0-117	5,342.45		
	LABOUR (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	14,000.00		
	ADD 2.5% ON LABOUR FOR TOOLS				445.00		
					606,251.72		
	COST PER 2000 SQ.M				606,251.72		
	COST PER 1 SQ.M			S1-036	303.13		
				SAY	303.15	8.90	294.25
* NOTE : THE ABOVE RATE IS APPLICABLE ONLY IF CHIP SPREADER AND PNEUMATIC ROLLER ARE USED FOR THE CONSTRUCTION. OTHERWISE APPROVED SSR SHOULD BE ADOPTED.							
S1-037	RECONSTRUCT BASE WITH PENETRATION MACADAM USING NOMINAL SIZE 50 MM AGGRGATE AND 19 MM KEY AGGREGATE FROM STOCK PILES, TO A COMPACTED THICKNESS OF 75 MM, ON EXISTING PAVEMENTS. [SSCM 406] (COST OF BINDER, AND AGGREGATE INCLUDING TRANSPORT TO BE PAID SEPARATELY):						
	DATA FOR 100 SQ.M						
	A. SWEEPING OVER TARRD SURFACE	100.00	SQ.M	S1-026	785.00		
	B. CONSTRUCTION OF PEN. MACADUM BASE USING 50 MM AGGREGATE	9.00	CU.M	M1-004	20,997.45		
	C. SPREADING KEY AGGREGATE 19 MM AFTER APPLICATION OF BINDER ON COMPACTED 50 MM COURSE AGGREGATE AND ROLLING (AS PER TABLE 406.1)	1.80	CU.M	M1-004	4,199.49		
					25,981.94		
	COST PER 100 SQ.M				25,981.94		
	RATE PER 1 SQ.M			S1-037	259.82		
				SAY	259.80	143.48	116.32

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-038	RECONSTRUCT BASE WITH PENETRATION MACADAM USING NOMINAL SIZE 37.5 MM AGGRGATE AND 12.5 MM KEY AGGREGATE FROM STOCK PILES, TO A COMPACTED THICKNESS OF 55 MM, ON EXISTING PAVEMENTS. [SSCM 406] (COST OF BINDER, AND AGGREGATE INCLUDING TRANSPORT TO BE PAID SEPARATELY):						
	DATA FOR 100 SQ.M						
A.	SWEEPING OVER TARRD SURFACE	100.00	SQ.M	S1-026	785.00		
B.	CONSTRUCTION OF PEN. MACADUM BASE USING 37.5 MM AGGREGATE	6.00	CU.M	M1-004	13,998.30		
C.	SPREADING KEY AGGREGATE 12.5 MM AFTER APPLICATION OF BINDER ON COMPACTED 37.5 MM COURSE AGGREGATE AND ROLLING (AS PER TABLE 406.1)	1.50	CU.M	M1-004	3,499.58		
					18,282.88		
	COST PER 100 SQ.M				18,282.88		
	RATE PER 1 SQ.M			S1-038	182.83		
				SAY	182.85	101.94	80.91
S1-039	CORRECTION OF CORRUGATIONS, DEPRESSIONS AND CAMBERING ROAD SURFACES USING ASPHALT CONCRETE COMPACTED BY VIBRATING ROLLER INCLUDING INTERNAL TRANSPORT. (APPLICATION OF TACK COAT AND SUPPLY OF ASPHALT CONCRETE TO BE PAID SEPARATELY) :						
	DATA FOR	12.00	M.TONS				
	LABOUR SK'A'	1.00	DAY	B0-001	3,800.00		
	LABOUR U/SK (LOADING AND MANUAL TRANS)	6.00	DAY	B0-004	16,800.00		
	LABOUR S/SK (SPREADING & LEVELLING)	2.00	DAY	B0-003	6,000.00		
	ADD 2.5 % OF LABOUR FOR TOOLS				665.00		
	VIBRATING ROLLER (1/2 - 1 TON)	1.00	DAY	B0-109	9,100.21		
	TRACTOR & TRAILER (INTERNAL TRANSPORT)	0.50	DAY	B0-117	5,342.45		
					41,707.66		
	TOTAL COST FOR 12 M.T				41,707.66		
	RATE PER 1 M.T.			S1-039	3,475.64		
				SAY	3,475.65	2,216.67	1,258.98
S1-040 *	SAND SEALING WITH BITUMEN EMULSION CRS-2 AT THE RATE OF 1 LTR/SQ.M USING PLANT, AND BLINDING WITH SAND AT THE RATE OF 125 SQ.M/CU.M. ON D.B.S.T./S.B.S.T (TRIPLE SEAL) INCLUDING INTERNAL TRANSPORT [SSCM 504] : (BINDER TRANSPORT TO SITE TO PAY SEPARATELY)						
A	APPLICATION OF BINDER:						
	DATA FOR	4,546.00	LITRES				
	CRS 2 AT SITE	4,546.00	LTR	B0-354	700,084.00		
	EMULSION DISTRIBUTOR - 4000 LITRES	1.00	DAY	B0-123	29,046.35		
	LABOUR (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (SK/B)	1.00	DAY	B0-002	3,500.00		
	LABOUR (U/SK)	3.00	DAY	B0-004	8,400.00		
					744,830.35		
	COST FOR 4546 LITRES				744,830.35		
	COST PER 1 LITRE			S1-040.A	163.84		
B	SAND SEALING :						
	DATA FOR	2,000.00	SQ.M				
	APPLYING CRS-2 @ 1.0 LTR/SQ.M AS IN (A) ABOVE	2,000.00	LTR	S1-040.A	327,680.00		
	SAND FOR BLINDING	16.00	CU.M	B0-331	137,420.94		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	22,511.40		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	14,731.94		
	TRACTOR AND TRAILOR	0.50	DAYS	B0-117	5,342.45		
	LABOUR (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	14,000.00		
	ADD 2.5% ON LABOUR FOR TOOLS				445.00		
					525,931.72		
	TOTAL COST FOR 2000 SQ.M				525,931.72		
	RATE PER 1 SQ.M			S1-040	262.97		
				SAY	262.95	12.35	250.60
* NOTE : THIS ITEM SHOULD BE USED ONLY FOR SAND SEALING ON ROAD SURFACE AFTER DBST / SBST WORK AND USE OF PNEUMATIC ROLLER IS ESSENTIAL. IF EMULSION AND/OR THE RATE OF APPLICATION OR THE METHOD OF SAND SPREADING TO BE CHANGED, S.S.R. SHALL BE PREPARED AND APPROVED.							

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION VIII							
ROAD SURFACE MAINTENANCE							
INTERNAL TRANSPORT OF HOT BITUMEN UP TO 16 KM AND SAND TRANSPORT UP TO 16 KM INCLUDED IN THE RATES.							
MN1-001	PATCHING WITH HOT BITUMEN(60/70) USING 14 LITRES PER 1/2 KM (SSCM 1102.1 - 1102.3):						
	DATA FOR 6.4 KILO METRES						
	LABOUR (S/SK) - BIT. APPLI. & BLIND.	7.75	DAYS	B0-003	23,250.00		
	LABOUR (U/SK) - INTER. TRANS./SAND ALLOW 2.5% ON LABOUR FOR TOOLS	0.50	DAY	B0-004	1,400.00		
	BITUMEN	179.20	LTR	B0-351	33,848.89		
	SAND	1.42	CU.M	B0-331	12,160.46		
	FIREWOOD	0.25	CU.M	B0-395	697.53		
	BASKETS	0.17	NO	B0-631	51.00		
	TRACTOR	0.25	DAY	B0-117	2,671.23		
					74,695.35		
	COST PER 6.4 KILO METRES				74,695.35		
	RATE PER 1/2 KM			MN1-001	5,835.57		
				SAY	5,835.55	1,925.78	3,909.77
MN1-002	PATCHING WITH HOT BITUMEN(60/70) USING 21 LTRS. PER 1/2 KM.:						
	3/2 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	1.50	KM	MN1-001	8,753.36		
				MN1-002	8,753.36		
				SAY	8,753.35	2,888.67	5,864.68
MN1-003	PATCHING WITH HOT BITUMEN(60/70) USING 28 LTRS. PER 1/2 KM.:						
	2 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	2.00	KM	MN1-001	11,671.15		
				MN1-003	11,671.15		
				SAY	11,671.15	3,851.56	7,819.59
MN1-004	PATCHING WITH HOT BITUMEN(60/70) USING 35 LTRS. PER 1/2 KM.:						
	2.5 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	2.50	KM	MN1-001	14,588.94		
				MN1-004	14,588.94		
				SAY	14,588.95	4,814.45	9,774.50
MN1-005	PATCHING WITH HOT BITUMEN(60/70) USING 42 LTRS. PER 1/2 KM.:						
	3 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	3.00	KM	MN1-001	17,506.72		
				MN1-005	17,506.72		
				SAY	17,506.70	5,777.34	11,729.36

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MN1-006	PATCHING WITH HOT BITUMEN(60/70) USING 49 LTRS. PER 1/2 KM.:						
	7/2 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	3.50	KM	MN1-001 MN1-006	20,424.51 20,424.51		
				SAY	20,424.50	6,740.23	13,684.27
MN1-007	PATCHING WITH HOT BITUMEN(60/70) USING 56 LTRS. PER 1/2 KM.:						
	4 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	4.00	KM	MN1-001 MN1-007	23,342.30 23,342.30		
				SAY	23,342.30	7,703.13	15,639.18
MN1-008	EXTENSIVE PATCHING FOR EVERY ADDITIONAL 7 LTRS. HOT BITUMEN(60/70):						
	1/2 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	0.50	KM	MN1-001 MN1-008	2,917.79 2,917.79		
				SAY	2,917.80	962.89	1,954.91
MN1-009	PATCHING WITH BITUMEN EMULSION (CRS-1) USING 14 LTRS PER 1/2 KILO METRE:						
	DATA FOR 6.4 KILO METRES						
	LABOUR (S/SK) - EMUL. APPL. & BLIND.	3.00	DAYS	B0-003	9,000.00		
	LABOUR (U/SK) - INTER. TRANS./SAND	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				260.00		
	EMULSION, CRS - 1	180.00	LTR	B0-353	26,820.00		
	SAND	1.42	CUM	B0-331	12,160.46		
	BASKETS	0.17	NO.	B0-631	51.00		
	FARM TRACTOR AND TRAILOR	0.25	DAY	B0-117	2,671.23		
					52,362.69		
	COST PER 6.4 KILO METRES				52,362.69		
	RATE PER 1/2 KILO METRE			MN1-009	4,090.84		
				SAY	4,090.85	812.50	3,278.35
MN1-010	PATCHING WITH BITUMEN EMULSION CRS-1 USING 21 LTRS. PER 1/2 KM.:						
	1 1/2 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	1.50	KM	MN1-009 MN1-010	6,136.25 6,136.25		
				SAY	6,136.25	1,218.75	4,917.50
MN1-011	PATCHING WITH BITUMEN EMULSION CRS-1 USING 28 LTRS. PER 1/2 KM.:						
	2 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	2.00	KM	MN1-009 MN1-011	8,181.67 8,181.67		
				SAY	8,181.65	1,625.00	6,556.65
MN1-012	PATCHING WITH BITUMEN EMULSION CRS-1 USING 35 LTRS. PER 1/2 KM.:						
	2.5 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	2.50	KM	MN1-009 MN1-012	10,227.09 10,227.09		
				SAY	10,227.10	2,031.25	8,195.85

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MN1-013	PATCHING WITH BITUMEN EMULSION CRS-1 USING 42 LTRS. PER 1/2 KM.:						
	3 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	3.00	KM	MN1-009 MN1-013	12,272.51 12,272.51		
				SAY	12,272.50	2,437.50	9,835.00
MN1-014	PATCHING WITH BITUMEN EMULSION CRS-1 USING 49 LTRS. PER 1/2 KM.:						
	3.5 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	3.50	KM	MN1-009 MN1-014	14,317.92 14,317.92		
				SAY	14,317.90	2,843.75	11,474.15
MN1-015	PATCHING WITH BITUMEN EMULSION, CRS-1 USING 56 LTRS. PER 1/2 KM.:						
	4 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	4.00	KM	MN1-009 MN1-015	16,363.34 16,363.34		
				SAY	16,363.35	3,250.00	13,113.35
MN1-016	EXTENSIVE PATCHING FOR EVERY ADDITIONAL 7 LTRS. BITUMEN EMULSION, CRS-1						
	50% OF ITEM CODE MN1-009 RATE PER 1/2 KM.	0.50	KM	MN1-009 MN1-016	2,045.42 2,045.42		
				SAY	2,045.40	406.25	1,639.15
MN1-017	50 MM - 19 MM AGGREGATE ROLLER PATCHING:						
	<u>DATA FOR 8.5 CU.M</u>						
	LABOUR (U/SK) - TRIMMING EDGES/CLEAN.	6.00	DAYS	B0-004	16,800.00		
	LABOUR (S/SK) - FILL	6.00	DAYS	B0-003	18,000.00		
	ALLOW 2.5% ON LABOUR				870.00		
	ROLLER (8-10 TON)	1.00	DAYS	B0-111	19,579.80		
	BASKETS	1.50	NO.	B0-631	450.00		
	FARM TRACTOR AND TRAILOR	0.33	DAY	B0-117	3,526.02		
					59,225.82		

	COST PER 8.5 CU.M				59,225.82		
	RATE PER CU.M			MN1-017	6,967.74		
				SAY	6,967.75	4,094.12	2,873.63
MN1-018	50 MM - 19 MM AGGREGATE STAMPED PATCHING:						
	<u>DATA FOR 0.71 CU.M</u>						
	LABOUR (U/SK) - TR. EDGES/CLEAN.	0.50	DAYS	B0-004	1,400.00		
	LABOUR (S/SK) - FILL	0.50	DAYS	B0-003	1,500.00		
	LABOUR (S/SK) - STAMPING	1.00	DAYS	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR				147.50		
	BASKETS	0.13	NO.	B0-631	39.00		
					6,086.50		

	COST PER 0.71 CU.M				6,086.50		
	RATE PER CU.M			MN1-018	8,572.54		
				SAY	8,572.55	8,309.86	262.69

* * *

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION IX							
ROAD SIDE AND DRAINAGE SYSTEM (SSCM 701.3)							
(* RATE TO INCLUDE SPREADING THE RESULTING MATERIALS SUITABLY IN THE VICINITY UNLESS OTHERWISE DIRECTED)							
DR1-001	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	1.00	DAY	B0-003	0.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	0.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				0.00		
	BASKETS	0.33	NO.	B0-631	99.00		
	ALLOW FOR COIR STRING	1.00	ITEM	B0-716	82.50		
					181.50		
	COST PER 2.83 CU.M				181.50		
	RATE PER 1 CU.M			DR1-001	64.13		
				SAY	64.15	0.00	64.15
DR1-002	CUTTING NEW SIDE DRAINS IN MED. SOIL : *						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	1.50	DAYS	B0-003	0.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	0.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				0.00		
	BASKETS	0.33	NO.	B0-631	99.00		
	ALLOW FOR COIR STRING	1.00	ITEM	B0-716	82.50		
					181.50		
	COST PER 2.83 CU.M				181.50		
	RATE PER 1 CU.M			DR1-002	64.13		
				SAY	64.15	0.00	64.15
DR1-003	CUTTING NEW SIDE DRAINS IN HARD SOIL : *						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	700.00		
	ALLOW 2.5% ON LABOUR				167.50		
	BASKETS	0.33	NO.	B0-631	99.00		
	ALLOW FOR COIR STRING	1.00	ITEM	B0-716	82.50		
					7,049.00		
	COST PER 2.83 CU.M				7,049.00		
	RATE PER 1 CU.M			DR1-003	2,490.81		
				SAY	2,490.80	2,367.49	123.31

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
DR1-004	CUTTING NEW SIDE DRAINS IN SOFT ROCK : *						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	2.25	DAYS	B0-003	6,750.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	700.00		
	ALLOW 2.5% ON LABOUR BASKETS	0.33	NO.	B0-631	99.00		
	ALLOW FOR COIR STRING	1.00	TEM	B0-716	82.50		
					7,817.75		
	COST PER 2.83 CU.M				7,817.75		
	RATE PER 1 CU.M			DR1-004	2,762.46		
				SAY	2,762.45	2,632.51	129.94
DR1-005	CUTTING NEW SIDE DRAINS IN UNCLASSIFIED SOIL : *						
	DATA FOR 1 CU.M						
	RATE @ DR1-001				64.13		
	RATE @ DR1-002				64.13		
	RATE @ DR1-003				2,490.81		
	AVERAGE BASIC COST PER 1 CU.M				873.03		
	RATE PER 1 CU.M			DR1-005	873.03		
				SAY	873.05	789.16	83.89
DR1-005A	CUTTING SIDE DRAINS OF STD. DIMENSIONS IN UNCLASSIFIED SOIL USING MACHINE (BACK HOE J.C.B.) INCLUDING SHAPING, TRIMMING AND LEVELLING BOTTOM MANUALLY.						
	DATA FOR 10 METER LENGTH (5.06 CU.M)						
	TOP WIDTH OF DRAIN	900.00	MM				
	BOTTOM WIDTH OF DRAIN	450.00	MM				
	AVERAGE DEPTH OF DRAIN	750.00	MM				
	J.C.B. BUCKET WIDTH	600.00	MM				
	TOTAL EXCAVATION IN 10 M LENGTH ((.9 + .4) / 2 X .75 X 10]	5.06	CU.M				
	EXCAVATION BY JCB BUCKET (.6 X .6 X 10)	3.60	CU.M				
	VOLUME LEFT FOM MANUAL WORK	1.46	CU.M				
	AVERAGE OUTPUT OF J.C.B. PER HOUR	9.00	CU.M				
	HIRE CHAGE PER HOUR	0.13	DAY	B0-115	4,314.33		
	COST OF EXCAVATION BY JCB FOR 3.6 CU.M	0.40	HOOR		1,725.73		
	COST OF MANUAL EXCAVATION FOR SHAPING TRIMMING & LEVELLING	1.46	CU.M	DR1-005	1,274.62		
	TOTAL COST FOR 5.06 CU.M				3,000.36		
	RATE PER 1 CU.M			DR1-005A	592.96		
				SAY	592.95	227.70	365.25

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
DR1-006	CUTTING NEW SIDE DRAINS IN ROCK : *						
	DATA FOR 2.83 CU.M						
	LABOUR SKILLED (B)	2.00	DAYS	B0-002	7,000.00		
	LABOUR (U/SK)	2.25	DAYS	B0-004	6,300.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				332.50		
	ALLOW FOR FUEL, FORGE, ETC.	1.00	ITEM	B0-723	220.00		
	POWDER	0.45	KG	B0-501	931.83		
	FUSE	3.96	M	B0-502	3,292.36		
	STEEL	0.57	KG	B0-503	396.64		
					18,473.33		

	COST PER 2.83 CU.M				18,473.33		
	RATE PER 1 CU.M			DR1-006	6,527.68		
					=====		
				SAY	6,527.70	4,699.65	1,828.05
DR1-007	TURFING (EXCLUDING ROYALTY, TRANSPORT AND WATERING & MAINTENANCE) [SSCM 802.3a]:						
	DATA FOR 19 SQ.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				140.00		
	ALLOW FOR PEGS	1.00	ITEM	B0-746	550.00		
	BASKETS	0.17	NO.	B0-631	51.00		
					6,341.00		

	COST PER 19 SQ.M				6,341.00		
	RATE PER 1 SQ.M			DR1-007	333.74		
					=====		
				SAY	333.75	294.74	39.01
DR1-008	WATERING AND MAINTAINING TURF FOR THREE MONTHS INCLUDING TRANSPORT OF WATER						
	DATA FOR 4000 SQ.M PER DAY						
	LABOUR U/SK	7.00	DAYS	B0-004	19,600.00		
	ALLOW 2.5% OF LABOUR FOR TOOLS				490.00		
	TRACTOR AND TRAILOR	1.00	DAY	B0-117	10,684.90		
	TANK AND 50 MM. PUMP	1.00	DAY	B0-104	0.00		
					30,774.90		

	COST PER 4000 SQ.M PER TIME				30,774.90		
	ASSUMING 16 DAYS WATERING PER MONTH, COST PER 4000 SQ.M FOR THREE MONTHS (3816.67X16X3)				1,477,195.20		

					1,477,195.20		
	RATE PER 1 SQ.M FOR WAT. & MAINT. FOR 3 MONTHS			DR1-008	369.30		
					=====		
				SAY	369.30	235.20	134.10

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
DR1-009	LEVELLING & TRIMMING EARTH : *						
	DATA FOR 74 SQ.M						
	LABOUR (U/SK)	1.00	DAY	B0-004	0.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				0.00		
	BASKETS	0.33	NO.	B0-631	99.00		
					99.00		
	COST PER 74 SQ.M				99.00		
	RATE PER 1 SQ.M			DR1-009	1.34		
				SAY	1.35	0.00	1.35
DR1-010	CLEARING SILT ETC. FROM KERBS & CHANNELS (SSCM 12053): *						
	DATA FOR 120 METRES						
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
	BASKETS	0.17	NO.	B0-631	51.00		
					2,921.00		
	COST PER 120 METRES				2,921.00		
	RATE PER 1 METRE			DR1-010	24.34		
				SAY	24.35	23.33	1.02
DR1-011	CUTTING SCUPPER DRAINS ON ANY SOIL OTHER THAN ROCK TO AN AVERAGE WIDTH OF 0.75 M WITH PROPER GRADIENT AND AVE. DEPTH OF 100 MM (SSCM 1304.3): *						
	DATA FOR 36 METRES						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				150.00		
	BASKETS	0.33	NO.	B0-631	100.00		
					6,250.00		
	COST PER 36 METRES				6,250.00		
	RATE PER 1 METRE			DR1-011	173.61		
				SAY	173.60	166.67	6.93
DR1-012	CLEANING AND DESILTING OF CULVERTS (SSCM 1303.3): *						
	DATA FOR 6 CULVERTS						
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
	BASKETS	0.33	NO.	B0-631	100.00		
					2,970.00		
	COST FOR 6 CULVERTS				2,970.00		
	RATE PER 1 NO CULVERT			DR1-012	495.00		
				SAY	495.00	466.67	28.33

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
DR1-013	CLEANING CHOKED CULVERTS (WITH HEAD ROOM > 1 M **): *						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				140.00		
	BASKETS	0.33	NO.	B0-631	100.00		
					5,840.00		
	COST FOR 2.83 CU.M				5,840.00		
	RATE PER 1 CU.M			DR1-013	2,063.60		
				SAY	2,063.60	1,978.80	84.80
	** IF THE CULVERT HEAD ROOM IS LESS THAN 1 METRE, WORK SHALL BE CARRIED OUT ON DAY WORKS BASIS.						
DR1-014	CLEANING DESILTING EXISTING SIDE DRAINS AND LEAD UP DRAINS TO PROPER SHAPE AND GRADIENT AND TRANSPORT OF EXCAVATED MATERIALS FROM ROAD SIDE UP TO 100 M : *						
	DATA FOR 1.6 KILO METRES						
(1)	CLEANING VEGETATION ETC. FROM EDGES OF DRAINS .6 M AVERAGE WIDTH:						
	LABOUR (U/SK)	2.50	DAYS	B0-004	7,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				175.00		
					7,175.00		
	COST PER 1600 M				7,175.00		
(2)	REMOVING SILT ASSUME DEPTH 75 MM GET SILTED ONCE IN SIX MONTHS (1600 x .45 x .075)	54.00	CU.M	E1-003	84,053.70		
					84,053.70		
	COST PER 1600 M				84,053.70		
(3)	15% OF SILT HEAD CARRY (54 x 15/100)	8.10	CU.M	T1-001	6,392.93		
					6,392.93		
	COST PER 1600 M				6,392.93		
	TOTAL COST PER 1600 M (1)+(2)+(3)				97,621.63		
	RATE PER 1 M			DR1-014	61.01		
				SAY	61.00	58.36	2.64

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
DR1-015	CLEARING INLETS AND OUTLETS OF CULVERTS: *						
	FOR 10 CULVERTS						
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				105.00		
	BASKETS	0.50	NO.	B0-631	150.00		
					4,455.00		
	RATE PER 10 CULVERTS				4,455.00		
	RATE PER CULVERT	1.00	NO.	DR1-015	445.50		
				SAY	445.50	420.00	25.50

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HSR - 2024
Engineering Division
Ministry of Transport and Highways

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION X =====							
BRIDGES, CULVERTS & RETAINING WALLS ETC. -----							
ST1-001	DEMOLISHING LEAN CONCRETE STRUCTURE INCLUDING STACKING OR LOADING. [SSCM 202.2]:						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - DEMOLISHING	1.00	DAY	B0-003	3,000.00		
	LABOUR (U/SK) - DEMOLISHING	3.00	DAYS	B0-004	8,400.00		
	LABOUR (U/SK) - COLLECTING	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				425.00		
					17,425.00		
	COST PER 2.83 CU.M				17,425.00		
	RATE PER 1 CU.M			ST1-001	6,157.24		
				SAY	6,157.25	6,007.07	150.18
ST1-002	DEMOLISHING REINFORCED CONCRETE STRUCTURE INCLUDING STACKING OR LOADING.:						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)-DEMOLISHING	1.00	DAY	B0-003	3,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	LABOUR (U/SK)-COLLECTING & STACK.	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				495.00		
					20,295.00		
	COST PER 2.83 CU.M				20,295.00		
	RATE PER 1 CU.M			ST1-002	7,171.38		
				SAY	7,171.40	6,996.47	174.93
ST1-003	DEMOLISHING RANDOM RUBBLE MASONRY IN CEMENT MORTAR INCLUDING STACKING OR LOADING.:						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)-DEMOLISHING	2.00	DAYS	B0-003	6,000.00		
	LABOUR (U/SK)-COLLECTING & STACK.	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				220.00		
					9,020.00		
	COST PER 2.83 CU.M				9,020.00		
	RATE PER 1 CU.M			ST1-003	3,187.28		
				SAY	3,187.30	3,109.54	77.76
ST1-003A	DEMOLISHING BRICK MASONRY IN CEMENT MORTAR INCLUDING STACKING OR LOADING.:						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)-DEMOLISHING	1.00	DAY	B0-003	3,000.00		
	LABOUR (U/SK)-COLLECTING & STACK.	2.00	DAY	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				215.00		
					8,815.00		
	COST PER 2.83 CU.M				8,815.00		
	RATE PER 1 CU.M			ST1-003A	3,114.84		
				SAY	3,114.85	3,038.87	75.98

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-004	RANDOM RUBBLE MASONRY, 150-225 MM RUBBLE IN APPROVED CEMENT& SAND MORTAR 1:6 (EXCLUDING TRANSPORT OF RUBBLE & PILING) [SSCM 1006.3]:						
	DATA FOR 2.83 CU.M						
	RUBBLE 150 MM - 225 MM (LESS PILING)	3.11	CU.M	B0-302	8,242.08		
	MASONS (SK/B)	3.00	DAYS	B0-002	10,500.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				712.50		
	CEMENT	5.00	50 KG	B0-401	9,220.00		
	SAND	1.13	CU.M	B0-332	9,722.53		
	BASKETS (1/6)	0.17	NO.	B0-631	50.00		
	WATER	27.00	LTR	B0-788	742.50		
					57,189.61		
	COST PER 2.83 CU.M				57,189.61		
	RATE PER 1 CU.M			ST1-004	20,208.34		
				SAY	20,208.35	10,070.67	10,137.68
ST1-005	RANDOM RUBBLE MASONRY, 150-225 MM RUBBLE IN APPROVED CEMENT & SAND MORTAR 1:5 (EXCLUDING TRANSPORT OF RUBBLE & PILING) [SSCM 1006.3]:						
	DATA FOR 2.83 CU.M						
	RUBBLE 150 MM - 225 MM (LESS PILING)	3.11	CU.M	B0-302	8,242.08		
	MASONS (SK/B)	3.00	DAYS	B0-002	10,500.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				712.50		
	CEMENT	6.00	50 KG	B0-401	11,064.00		
	SAND	1.13	CU.M	B0-332	9,722.53		
	BASKETS (1/6)	0.17	NO.	B0-631	50.00		
	WATER	32.50	LTR	B0-788	893.75		
					59,184.86		
	COST PER 2.83 CU.M				59,184.86		
	RATE PER 1 CU.M			ST1-005	20,913.38		
				SAY	20,913.40	10,070.67	10,842.73
ST1-006	RANDOM RUBBLE MASONRY IN APPROVED CEMENT & SAND MORTAR 1:6 WITH AVAILABLE RUBBLE 150-225 MM :						
	DATA FOR 2.83 CU.M						
	AS PER ITEM ST1-004	2.83	CU.M	ST1--004	57,189.61		
	DEDUCT FOR RUBBLE (LESS PILING)	3.11	CU.M	B0-302	8,242.08		
					48,947.53		
	COST PER 2.83 CU.M				48,947.53		
	RATE PER 1 CU.M			ST1-006	17,295.95		
				SAY	17,295.95	10,070.67	7,225.28

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-007	RANDOM RUBBLE MASONRY IN APPROVED CEMENT & SAND MORTAR 1:5 WITH AVAILABLE RUBBLE 150-225 MM :						
	DATA FOR 2.83 CU.M						
	AS PER ITEM ST1--005	2.83	CU.M	ST1-005	59,184.86		
	DEDUCT FOR RUBBLE (LESS PILING)	3.11	CU.M	B0-302	8,242.08		
					50,942.78		
	COST PER 2.83 CU.M				50,942.78		
	RATE PER 1 CU.M			ST1-007	18,000.98		
				SAY	18,001.00	10,070.67	7,930.33
ST1-008	DRY MASONRY WITH AVAILABLE HEAVY RUBBLE OR BOULDERS (SSCM 1006.3 (B):						
	DATA FOR 2.83 CU.M						
	MASONS (SK/A)	2.50	DAYS	B0-001	9,500.00		
	LABOUR (S/SK)	5.00	DAYS	B0-003	15,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				612.50		
					25,112.50		
	COST PER 2.83 CU.M				25,112.50		
	RATE PER 1 CU.M			ST1-008	8,873.67		
				SAY	8,873.65	8,657.24	216.41
ST1-009	DRY RANDOM MASONRY WITH RUBBLE 150-225 MM (EXCLUDING TRANSPORT OF RUBBLE & PILING):						
	DATA FOR 2.83 CU.M						
	MASONRY RUBBLE (LESS PILING)	2.83	CU.M	B0-302	7,500.03		
	MASONS (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	4.00	DAYS	B0-003	12,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				490.00		
					27,590.03		
	COST PER 2.83 CU.M				27,590.03		
	RATE PER 1 CU.M			ST1-009	9,749.13		
				SAY	9,749.15	6,925.80	2,823.35
ST1-010	DRY RANDOM MASONRY WITH AVAILABLE RUBBLE 150-225 MM:						
	DATA FOR 2.83 CU.M						
	MASONS (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	4.00	DAYS	B0-003	12,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				490.00		
					20,090.00		
	COST PER 2.83 CU.M				20,090.00		
	RATE PER 1 CU.M			ST1-010	7,098.94		
				SAY	7,098.95	6,925.80	173.15

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-011	PACKING AVAILABLE RUBBLE AND AGGREGATE FILTER LAYERS BEHIND MASONRY WALLS: DATA FOR 2.83 CU.M ----- LABOUR (U/SK) 1.75 DAYS B0-004 4,900.00 ALLOW 2.5% ON LABOUR FOR TOOLS 122.50 BASKETS (1/3) 0.33 NO. B0-631 100.00 ----- 5,122.50 COST PER 2.83 CU.M 5,122.50 RATE PER 1 CU.M ST1-011 1,810.07 =====						
				SAY	1,810.05	1,731.45	78.60
ST1-012	CLAY PUDDLED & LAID BEHIND MASONRY WALLS (EXCL. TRANSPORT OF CLAY) (SSCM 705.3): DATA FOR 2.83 CU.M ----- CLAY AS PER ITEM E1-008 2.83 CU.M E1-008 7,403.56 LABOUR (U/SK) 1.00 DAY B0-004 2,800.00 ALLOW 2.5% ON LABOUR FOR TOOLS 70.00 BASKETS (1/3) 0.33 NO. B0-631 100.00 ----- 10,373.56 COST PER 2.83 CU.M 10,373.56 RATE PER 1 CU.M ST1-012 3,665.57 =====						
				SAY	3,665.55	3,512.37	153.18
ST1-013	GROUTING COURSED STONE MASONRY JOINTS WITH WITH APPROVED CEMENT & SAND MORTAR 1:3 (SSCM 804.2(C): DATA FOR 19 SQ.M ----- MASONS (SK/A) 1.00 DAY B0-001 3,800.00 LABOUR (S/SK) 2.00 DAYS B0-003 6,000.00 ALLOW 2.5% ON LABOUR FOR TOOLS 245.00 CEMENT 1.50 50 KG B0-401 2,766.00 SAND 0.14 CU.M B0-332 1,216.05 BASKETS (1/40) 0.03 NO. B0-631 7.50 WATER 27.00 LTR B0-788 742.50 ----- 14,777.05 COST PER 19 SQ.M 14,777.05 RATE PER 1 SQ.M ST1-013 777.74 =====						
				SAY	777.75	515.79	261.96

HSR - 2024
Engineering Division
Ministry of Transport and Highways

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-014	GROUTING RUBBLE PAVING WITH CONCRETE CLASS C, 1:2:4(19 MM) (EXCL. TRANSPORT OF AGGR. FOR CONCRETE & PILING):						
	DATA FOR 2.83 CU.M						
	CONCRETE AS PER ITEM ST1-046	0.28	CU.M	ST1-046	7,747.03		
	MASONS (SK/A)	0.25	DAY	B0-001	950.00		
	LABOUR (S/SK)	0.50	DAY	B0-003	1,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				61.25		
					10,258.28		
	COST PER 2.83 CU.M				10,258.28		
	RATE PER 1 CU.M			ST1-014	3,624.83		
				SAY	3,624.85	1,701.41	1,923.44
ST1-015	GROUTING RUBBLE PAVING WITH APPROVED CEMENT & SAND MORTAR (1:3):						
	DATA FOR 19 SQ.M						
	MASONS (SK/A)	1.50	DAY	B0-001	5,700.00		
	LABOUR (S/SK)	3.00	DAYS	B0-003	9,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				367.50		
	CEMENT	3.00	50 KG	B0-401	5,532.00		
	SAND	0.28	CU.M	B0-332	2,430.63		
	BASKETS (2/40)	0.05	NO.	B0-631	15.00		
	WATER	54.00	LTR	B0-788	1,485.00		
					24,530.13		
	COST PER 19 SQ.M				24,530.13		
	RATE PER 1 SQ.M			ST1-015	1,291.06		
				SAY	1,291.05	773.68	517.37
ST1-016	FORMING WEEP HOLES IN MASONRY CONSTRUCTION (LABOUR ONLY) [SSCM 706.3] :						
	DATA FOR 6 NOS.						
	MASONS (SK/A)	1.00	DAY	B0-001	3,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.00		
					3,895.00		
	COST PER 6 NOS.				3,895.00		
	RATE PER 1 NO.			ST1-016	649.17		
				SAY	649.15	633.33	15.82

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-017	FORMING WEEP HOLES USING P.V.C. PIPES OF INT. DIA. NOT LESS THAN 100 MM. COMPLETE WITH DRIPLEGE AND SURROUND FINISH SMOOTH:						
	DATA FOR 6 M						
	LABOUR Sk'B' (3.5 HOURS)	0.44	DAY	B0-002	1,531.25		
	LABOUR U/Sk (1.5 HOURS)	0.19	DAY	B0-004	525.00		
	ALLOW 2.5% OF LABOUR FOR TOOLS				51.41		
	ALLOW 10% OF LABOUR FOR CEMENT, SAND ETC.				205.63		
	P.V.C. PIPE DIA. 110 MM	6.00	M	B0-636	6,349.20		
	ALLOW 5% FOR WASTE				317.46		
					8,979.94		
	COST FOR 6 METRES				8,979.94		
	RATE PER 1 METRE			ST1-017	1,496.66		
				SAY	1,496.65	342.71	1,153.94
ST1-018	SHORING WITH 37.5 MM THICK CLASS II TIMBER PLANKS UP TO 3 M DEPTH.:						
	DATA FOR 9 SQ.M (INCLUDING 10% WASTE & FOR 6 USES)						
	37.5 MM THICK PLANKS (CLASS II TIMBER)	61.88	CU.DECI M	B0-392	7,097.06		
	CARPENTER (SK/A)	0.50	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				152.50		
					13,349.56		
	COST PER 9 SQ.M				13,349.56		
	RATE PER 1 SQ.M			ST1-018	1,483.28		
				SAY	1,483.30	677.78	805.52
ST1-019	SUPPLYING & FIXING CLASS II TIMBER STRUTS ETC. FOR SHORING UP TO 3 M DEPTH.:						
	DATA FOR 45 CU.DECI M (INCLUDING 10% WASTE & FOR 6 USES)						
	TIMBER CLASS II	8.25	CU.DECI M	B0-392	946.28		
	CARPENTER (SK/A)	0.50	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				117.50		
					5,763.78		
	COST PER 45 CU.DECI M				5,763.78		
	RATE PER 1 CU.DECI M			ST1-019	128.08		
				SAY	128.10	104.44	23.66

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-020	SUPPLYING AND FIXING CLASS II TIMBER IN SHORING UP TO 3 M DEPTH (RATE PER AREA BASIS). :						
	CONSIDER EXCAVATION OF TRENCH 3 X 1.5 X 3 M DATA FOR 18 SQ.M SURFACE AREA BOTH SIDES, (INCLUDING 10% WASTE AND 12 USES ON STRUTS)						
	50X100 MM TIMBER REQUIREMENT :						
	HORIZONTALS - 3 M X 3 NO X 2 SIDES =	18.00	M				
	VERTICLES - 3 M X 3.5 NO X 2 SIDES =	21.00	M				
	CROSS STRUTS - 1.4 M X 7 NO =	9.80	M				
	TOTAL LENGTH =	48.80	M				
	VOL. OF TIMBER (.050X.100X48.8X1000) =	244.00	CU.DECI M				
	COST OF 18 SQ.M AS PER ITEM ST1-018,	18.00	SQ.M	ST1-018	26,699.13		
	COST OF STRUTS ETC. FOR 18 SQ.M AREA,	44.73	CU.DECI M	ST1-019	5,729.62		
	TOTAL COST FOR 18 SQ.M				32,428.74		
	RATE PER 1 SQ.M			ST1--020	1,801.60		
				SAY	1,801.60	937.34	864.26
ST1-021	LIFTING SOIL FOR EVERY 1.5 M BEYOND THE INITIAL 1.5 M :						
	DATA FOR 2.83 CU.M PER LIFTING 1 STAGE						
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
					2,870.00		
	COST PER 2.83 CU.M PER LIFT				2,870.00		
	RATE PER 1 CU.M PER LIFT			ST1-021	1,014.13		
				SAY	1,014.15	989.40	24.75
ST1-022	LIFTING WEDGE STONES EVERY 1.5 M BEYOND THE INITIAL 1.5 M :						
	DATA FOR 2.83 CU.M PER LIFTING 1 STAGE						
	LABOUR (U/SK)	3.00	DAYS	B0-004	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				210.00		
					8,610.00		
	COST PER 2.83 CU.M PER LIFT				8,610.00		
	RATE PER 1 CU.M PER LIFT			ST1-022	3,042.40		
				SAY	3,042.40	2,968.20	74.20
ST1-023	LIFTING RUBBLE OR CONCRETE EVERY 1.5 M BEYOND THE INITIAL 1.5 M :						
	DATA FOR 2.83 CU.M PER LIFTING 1 STAGE						
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				105.00		
					4,305.00		
	COST PER 2.83 CU.M PER LIFT				4,305.00		
	RATE PER 1 CU.M PER LIFT			ST1-023	1,521.20		
				SAY	1,521.20	1,484.10	37.10

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-024	LOWERING WEDGED STONES EVERY 1.5 M BEYOND THE INITIAL 1.5 M :						
	DATA FOR 2.83 CU.M PER LOWERING 1 STAGE						
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				140.00		
					5,740.00		
	COST PER 2.83 CU.M				5,740.00		
	RATE PER 1 CU.M PER LOWER			ST1-024	2,028.27		
				SAY	2,028.25	1,978.80	49.45
ST1-025	LOWERING RUBBLE OR CONCRETE FOR EVERY 1.5 M BEYOND THE INITIAL 1.5 M:						
	DATA FOR 2.83 CU.M PER LOWERING 1 STAGE						
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
					2,870.00		
	COST PER 2.83 CU.M				2,870.00		
	RATE PER 1 CU.M PER LOWER			ST1-025	1,014.13		
				SAY	1,014.15	989.40	24.75
ST1-026	RENDERING 12.5 MM THICK IN CEMENT SAND MORTAR 1:2 MIX (ROUGH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	4,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				183.75		
	CEMENT	1.40	50 KG	B0-401	2,572.38		
	SAND	0.12	CU.M	B0-332	1,038.39		
	BASKETS (1/50)	0.02	NO.	B0-631	6.00		
	WATER	35.34	LTR	B0-788	971.85		
					12,122.37		
	COST PER 9.3 SQ.M				12,122.37		
	RATE PER 1 SQ.M			ST1-026	1,303.48		
				SAY	1,303.50	790.32	513.18

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-027	RENDERING 12.5 MM THICK IN CEMENT SAND MORTAR 1:2 MIX (SMOOTH FINISH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	4,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				207.50		
	CEMENT	1.77	50 KG	B0-401	3,258.35		
	SAND	0.12	CU.M	B0-332	1,038.39		
	BASKETS (1/50)	0.02	NO.	B0-631	6.00		
	WATER	47.43	LTR	B0-788	1,304.33		
					14,114.56		
	COST PER 9.3 SQ.M				14,114.56		
	RATE PER 1 SQ.M			ST1-027	1,517.69		
				SAY	1,517.70	892.47	625.23
ST1-028	RENDERING 19 MM THICK IN CEMENT SAND MORTAR 1:2 MIX (ROUGH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				245.00		
	CEMENT	2.14	50 KG	B0-401	3,944.32		
	SAND	0.19	CU.M	B0-332	1,597.52		
	BASKETS (1/40)	0.03	NO.	B0-631	7.50		
	WATER	53.94	LTR	B0-788	1,483.35		
					17,077.68		
	COST PER 9.3 SQ.M				17,077.68		
	RATE PER 1 SQ.M			ST1-028	1,836.31		
				SAY	1,836.30	1,053.76	782.54
ST1-029	RENDERING 19 MM THICK IN CEMENT SAND MORTAR 1:2 MIX (SMOOTH FINISH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.25	DAY	B0-001	4,750.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				268.75		
	CEMENT	2.51	50 KG	B0-401	4,630.28		
	SAND	0.19	CU.M	B0-332	1,597.52		
	BASKETS (1/40)	0.03	NO.	B0-631	7.50		
	WATER	66.03	LTR	B0-788	1,815.83		
					19,069.88		
	COST PER 9.3 SQ.M				19,069.88		
	RATE PER 1 SQ.M			ST1-029	2,050.52		
				SAY	2,050.50	1,155.91	894.59

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-030	RENDERING 12.5 MM THICK IN CEMENT SAND MORTAR 1:3 MIX (ROUGH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	4,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				183.75		
	CEMENT	1.12	50 KG	B0-401	2,057.90		
	SAND	0.15	CU.M	B0-332	1,278.01		
	BASKETS (1/50)	0.02	NO.	B0-631	6.00		
	WATER	26.97	LTR	B0-788	741.68		
					11,617.34		
	COST PER 9.3 SQ.M				11,617.34		
	RATE PER 1 SQ.M			ST1-030	1,249.18		
				SAY	1,249.20	790.32	458.88
ST1-031	RENDERING 12.5 MM THICK IN CEMENT SAND MORTAR 1:3 MIX (SMOOTH FINISH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	4,500.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				207.50		
	CEMENT	1.58	50 KG	B0-401	2,915.36		
	SAND	0.15	CU.M	B0-332	1,278.01		
	BASKETS (1/50)	0.02	NO.	B0-631	6.00		
	WATER	39.06	LTR	B0-788	1,074.15		
					13,781.03		
	COST PER 9.3 SQ.M				13,781.03		
	RATE PER 1 SQ.M			ST1-031	1,481.83		
				SAY	1,481.85	892.47	589.38
ST1-032	RENDERING 19 MM THICK IN CEMENT SAND MORTAR 1:3 MIX (ROUGH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				245.00		
	CEMENT	1.77	50 KG	B0-401	3,258.35		
	SAND	0.22	CU.M	B0-332	1,917.02		
	BASKETS (1/40)	0.03	NO.	B0-631	7.50		
	WATER	39.99	LTR	B0-788	1,099.73		
					16,327.60		
	COST PER 9.3 SQ.M				16,327.60		
	RATE PER 1 SQ.M			ST1-032	1,757.55		
				SAY	1,757.55	1,053.76	703.79

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-033	RENDERING 19 MM THICK IN CEMENT SAND MORTAR 1:3 MIX (SMOOTH FINISH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.25	DAY	B0-001	4,750.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				268.75		
	CEMENT	2.14	50 KG	B0-401	3,944.32		
	SAND	0.22	CU.M	B0-332	1,917.02		
	BASKETS (1/40)	0.03	NO.	B0-631	7.50		
	WATER	53.01	LTR	B0-788	1,457.78		
					18,345.36		
	COST PER 9.3 SQ.M				18,345.36		
	RATE PER 1 SQ.M			ST1-033	1,972.62		
				SAY	1,972.60	1,155.91	816.69
ST1-034	MIXING & LAYING MANUALLY, CEMENT CONCRETE 1:4:8(50 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING) (SSCM 1001.4):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				521.25		
	CEMENT	9.00	50 KG	B0-401	16,596.00		
	AGGREGATE 50 MM (LESS PILING)	2.83	CU.M	B0-311	9,231.25		
	SAND	1.70	CU.M	B0-332	14,600.97		
	ALLOW FOR WATER	2.83	ITEM	B0-782	155.65		
	BASKET (2/3)	0.67	NO.	B0-631	200.00		
					62,155.12		
	COST PER 2.83 CU.M				62,155.12		
	RATE PER 1 CU.M			ST1-034	21,962.94		
				SAY	21,962.95	7,367.49	14,595.46
ST1-035	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:4:8(50 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING) (SSCM 1001.8-1001.9):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	27.00	50 KG	B0-401	49,788.00		
	AGGREGATE 50 MM (LESS PILING)	8.50	CU.M	B0-311	27,726.37		
	SAND	5.10	CU.M	B0-332	43,802.92		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NOS.	B0-631	600.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	8,583.62		
					180,988.41		
	COST PER 8.5 CU.M				180,988.41		
	RATE PER 1 CU.M			ST1-035	21,292.75		
				SAY	21,292.75	5,741.18	15,551.57

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-036	MIXING & LAYING MANUALLY CEMENT CONCRETE 1:4:8(50 MM) WITH 20% PLUMS(VOLUME BATCHING), USING CRUSHER RUN AGGREGATE.(EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				591.25		
	CEMENT	7.20	50 KG	B0-401	13,276.80		
	AGGREGATE 50 MM (LESS PILING)	2.26	CU.M	B0-311	7,371.95		
	RUBBLE 150-225 MM (LESS PILING)	0.57	CU.M	B0-302	1,500.01		
	SAND	1.36	CU.M	B0-332	11,680.78		
	ALLOW FOR WATER	2.83	ITEM	B0-782	155.65		
	BASKET (2/3)	0.67	NO.	B0-631	200.00		
					58,426.44		
	COST PER 2.83 CU.M				58,426.44		
	RATE PER 1 CU.M			ST1-036	20,645.38		
				SAY	20,645.40	8,356.89	12,288.51
ST1-037	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:4:8(50 MM) WITH 20% PLUMS(VOLUME BATCHING) USING CRUSHER RUN AGGREGATE.(EXCLUDING TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	21.60	50 KG	B0-401	39,830.40		
	AGGREGATE 50 MM (LESS PILING)	6.80	CU.M	B0-311	22,181.10		
	RUBBLE 150-225 MM (LESS PILING)	1.70	CU.M	B0-302	4,505.32		
	SAND	4.10	CU.M	B0-332	35,214.11		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NO.	B0-631	600.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	8,583.62		
					161,402.05		
	COST PER 8.5 CU.M				161,402.05		
	RATE PER 1 CU.M			ST1-037	18,988.48		
				SAY	18,988.50	5,741.18	13,247.32
	* NOTE: WHEN HAND BROKEN AGGREGATE(50 MM OR 37.5 MM) ARE USED, INPLACE OF CRUSHER RUN AGGREGATE, ON APPROVAL BY PD/CE S.S.RR. TO BE PREPARED BASED ON THE SAME NORMS.						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-038	MIXING & LAYING MANUALLY, CEMENT CONCRETE 1:3:6(37.5 MM) WITH 20% PLUMS(VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				591.25		
	CEMENT	9.00	50 KG	B0-401	16,596.00		
	AGGREGATE 37.5 MM (LESS PILING)	2.26	CU.M	B0-310	7,385.00		
	RUBBLE 150-225 MM (LESS PILING)	0.57	CU.M	B0-302	1,500.01		
	SAND	1.36	CU.M	B0-332	11,667.04		
	ALLOW FOR WATER	2.83	ITEM	B0-782	155.65		
	BASKET (2/3)	0.67	NO.	B0-631	200.00		
					61,744.94		
	COST PER 2.83 CU.M				61,744.94		
	RATE PER 1 CU.M			ST1-038	21,818.00		
				SAY	21,818.00	8,356.89	13,461.11
ST1-039	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:3:6(37.5 MM) WITH 20% PLUMS(VOLUME BATCHING) USING CRUSHER RUN AGGREGATE.(EXCL.TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAY	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	27.00	50 KG	B0-401	49,788.00		
	AGGREGATE 37.5 MM (LESS PILING)	6.79	CU.M	B0-310	22,155.00		
	RUBBLE 150-225 MM (LESS PILING)	1.70	CU.M	B0-302	4,500.02		
	SAND	4.08	CU.M	B0-332	35,001.11		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NO.	B0-631	600.00		
	HIRE OF CONC. MIXER (LTRS.)	1.00	DAY	B0-102	8,583.62		
					171,115.25		
	COST PER 8.5 CU.M				171,115.25		
	RATE PER 1 CU.M			ST1-039	20,131.21		
				SAY	20,131.20	5,741.18	14,390.02

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-040	MIXING & LAYING MANUALLY, CEMENT CONCRETE 1:3:6(37.5 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING) (SSCM 1001.4):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				591.25		
	CEMENT	12.40	50 KG	B0-401	22,865.60		
	AGGREGATE 37.5 MM (LESS PILING)	2.83	CU.M	B0-310	9,231.25		
	SAND	1.70	CU.M	B0-332	14,600.97		
	ALLOW FOR WATER	2.83	ITEM	B0-782	155.65		
	BASKET (2/3)	0.67	NOS.	B0-631	200.00		
					71,294.72		

	COST PER 2.83 CU.M				71,294.72		
	RATE PER 1 CU.M			ST1-040	25,192.48		
				SAY	25,192.50	8,356.89	16,835.61
ST1-041	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:3:6(37.5 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	37.23	50 KG	B0-401	68,652.12		
	AGGREGATE 37.5 MM (LESS PILING)	8.50	CU.M	B0-310	27,726.37		
	SAND	5.10	CU.M	B0-332	43,802.92		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NOS.	B0-631	600.00		
	HIRE OF CONC. MIXER (400 LTRS)	1.00	DAY	B0-102	8,583.62		
					199,852.53		

	COST PER 8.5 CU.M				199,852.53		
	RATE PER 1 CU.M			ST1-041	23,512.06		
				SAY	23,512.05	5,741.18	17,770.87
ST1-042	MIXING & LAYING MANUALLY, CEMENT CONCRETE 1:3:6(19 MM) (VOLUME BATCHING) USING CRUSHED AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING)						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAYS	B0-001	2,850.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				591.25		
	CEMENT	12.40	50 KG	B0-401	22,865.60		
	AGGREGATE 19 MM (LESS PILING)	2.58	CU.M	B0-308A	8,871.60		
	SAND	1.70	CU.M	B0-332	14,600.97		
	ALLOW FOR WATER	2.83	ITEM	B0-782	155.65		
	BASKET	2.00	NOS.	B0-631	600.00		
					71,335.07		

	COST PER 2.83 CU.M				71,335.07		
	RATE PER 1 CU.M			ST1-042	25,206.74		
				SAY	25,206.75	8,356.89	16,849.86

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-043	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:3:6(19 MM) (VOLUME BATCHING) USING CRUSHED AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	37.23	50 KG	B0-401	68,652.12		
	AGGREGATE 19 MM (LESS PILING)	7.74	CU.M	B0-308A	26,614.80		
	SAND	5.10	CU.M	B0-332	43,802.92		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NOS.	B0-631	600.00		
	HIRE OF CONC. MIXER (400 LTRS)	1.00	DAY	B0-102	8,583.62		
					198,740.96		
	COST PER 8.5 CU.M				198,740.96		
	RATE PER 1 CU.M			ST1-043	23,381.29		
				SAY	23,381.30	5,741.18	17,640.12
ST1-044	MIXING & LAYING MANUALLY CEMENT CONCRETE 1:2:4(37.5 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				591.25		
	CEMENT	16.00	50 KG	B0-401	29,504.00		
	AGGREGATE 37.5 MM (LESS PILING)	2.83	CU.M	B0-310	9,231.25		
	SAND	1.70	CU.M	B0-332	14,600.97		
	ALLOW FOR WATER	2.83	ITEM	B0-782	155.65		
	BASKET (2/3)	0.67	NO.	B0-631	200.00		
					77,933.12		
	COST PER 2.83 CU.M				77,933.12		
	RATE PER 1 CU.M			ST1-044	27,538.21		
					27,538.20	8,356.89	19,181.31

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-045	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:2:4(37.5 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	48.00	50 KG	B0-401	88,512.00		
	AGGREGATE 37.5 MM (LESS PILING)	8.50	CU.M	B0-310	27,726.37		
	SAND	5.10	CU.M	B0-332	43,802.92		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NOS.	B0-631	600.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	8,583.62		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,223.09		
					221,935.50		
	COST PER 8.5 CU.M				221,935.50		
	RATE PER 1 CU.M			ST1-045	26,110.06		
				SAY	26,110.05	5,741.18	20,368.87
ST1-046	MIXING & LAYING MANUALLY CEMENT CONCRETE 1:2:4(19 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				591.25		
	CEMENT	16.00	50 KG	B0-401	29,504.00		
	AGGREGATE 19 MM (LESS PILING)	2.55	CU.M	B0-308A	8,768.44		
	SAND	1.70	CU.M	B0-332	14,600.97		
	ALLOW FOR WATER	2.83	ITEM	B0-782	155.65		
	BASKET (2/3)	0.67	NO.	B0-631	200.00		
					77,470.32		
	COST PER 2.83 CU.M				77,470.32		
	RATE PER 1 CU.M			ST1-046	27,374.67		
				SAY	27,374.65	8,356.89	19,017.76

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-047	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:2:4(19 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	48.00	50 KG	B0-401	88,512.00		
	AGGREGATE 19 MM (LESS PILING)	7.64	CU.M	B0-308A	26,274.38		
	SAND	5.09	CU.M	B0-332	43,751.39		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NOS.	B0-631	600.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	8,583.62		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,223.09		
					220,431.98		
	COST PER 8.5 CU.M				220,431.98		
	RATE PER 1 CU.M			ST1-047	25,933.17		
				SAY	25,933.15	5,741.18	20,191.97
ST1-048	MIXING & LAYING USING CONCRETE MIXER(W/BATCHING), CEMENT CONCRETE FOR GRADE 25(19 MM) USING CRUSHER RUN AGGREGATES IN FOUNDATIONS AND FLOORS. (EXCLUDING TRANSPORT OF AGGREGATE & PILING): *						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	54.00	50 KG	B0-401	99,576.00		
	AGGREGATE 19 MM (LESS PILING)	7.64	CU.M	B0-308A	26,274.38		
	SAND	5.09	CU.M	B0-332	43,751.39		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NOS.	B0-631	600.00		
	HIRE OF CONC. MIXER W/B(400LTRS.)	1.00	DAY	B0-136	13,132.37		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,223.09		
					236,044.73		
	COST PER 8.5 CU.M				236,044.73		
	RATE PER 1 CU.M			ST1-048	27,769.97		
				SAY	27,769.95	5,741.18	22,028.77
	* SEE GENERAL NOTES: SECTION 33.7						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-048A	MIXING & LAYING USING CONCRETE MIXER(W/BATCHING), CEMENT CONCRETE FOR GRADE 25(70% 37.5+30%19) USING CRUSHER RUN AGGREGATES. (EXCLUDING TRANSPORT OF AGGREGATE & PILING): *						
	DATA FOR	8.50	CU.M				
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	49.81	50 KG	B0-401	91,849.64		
	AGGREGATE 37.5 MM (LESS PILING)	4.59	CU.M	B0-310	14,972.24		
	AGGREGATE 19 MM (LESS PILING)	2.04	CU.M	B0-308A	7,014.75		
	SAND	5.09	CU.M	B0-332	43,751.39		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NOS.	B0-631	600.00		
	HIRE OF CONC. MIXER W/B(400LTRS.)	1.00	DAY	B0-136	13,132.37		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,223.09		
					224,030.98		
	COST PER 8.5 CU.M				224,030.98		
	RATE PER 1 CU.M			ST1-048A	26,356.59		
				SAY	26,356.60	5,741.18	20,615.42
	* SEE GENERAL NOTES: SECTION 33.7						
ST1-049	MIXING & LAYING USING CONCRETE MIXER(W/BATCHING) CEMENT CONCRETE GRADE 30(19 MM), WITH CRUSHER RUN AGGREGATE. (EXCLUDING TRANSPORT OF AGGREGATE & PILING): *						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	69.00	50 KG	B0-401	127,236.00		
	AGGREGATE 19 MM (LESS PILING)	7.70	CU.M	B0-308A	26,469.00		
	SAND	5.09	CU.M	B0-332	43,751.39		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NO.	B0-631	600.00		
	HIRE OF CONC. MIXER W/B(400LTRS.)	1.00	DAY	B0-136	13,132.37		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,223.09		
					263,899.35		
	COST PER 8.5 CU.M				263,899.35		
	RATE PER 1 CU.M			ST1-049	31,046.98		
				SAY	31,047.00	5,741.18	25,305.82
	* SEE GENERAL NOTES: SECTION 33.7						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-050	MIXING & LAYING USING CONCRETE MIXER(W/BATCHING), CEMENT CONCRETE GRADE 40(19 MM), WITH CRUSHER RUN AGGREGATE. (EXCLUDING TRANSPORT OF AGGREGATE AND PILING)*						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	CEMENT	83.90	50 KG	B0-401	154,702.38		
	AGGREGATE 19 MM (LESS PILING)	7.74	CU.M	B0-308A	26,597.60		
	SAND	5.10	CU.M	B0-332	43,802.92		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NO.	B0-631	600.00		
	HIRE OF CONC. MIXER W/B(400LTRS.)	1.00	DAY	B0-136	13,132.37		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,223.09		
					291,545.87		
	COST PER 8.5 CU.M				291,545.87		
	RATE PER 1 CU.M			ST1-050	34,299.51		
				SAY	34,299.50	5,741.18	28,558.32
	* SEE GENERAL NOTES: SECTION 33.7						
ST1-051	MIXING & LAYING CEMENT CONCRETE BY HAND :						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				591.25		
	ALLOW FOR WATER	2.83	ITEM	B0-782	155.65		
	BASKET (2/3)	0.67	NOS.	B0-631	200.00		
					24,596.90		
	COST PER 2.83 CU.M				24,596.90		
	RATE PER 1 CU.M			ST1-051	8,691.48		
				SAY	8,691.50	8,356.89	334.61
ST1-052	MIXING & LAYING CEMENT CONCRETE BY POWER DRIVEN CONCRETE MIXER V/BATCHING:						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	30,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,220.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	467.50		
	BASKET	2.00	NOS.	B0-631	600.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	8,583.62		
					59,671.12		
	COST PER 8.5 CU.M				59,671.12		
	RATE PER 1 CU.M			ST1-052	7,020.13		
				SAY	7,020.15	5,741.18	1,278.97

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-053	CURING OF CONCRETE DECKS, SLABS, BEAMS, WALLS ETC. [SSCM 1011.11]:						
	DATA FOR 37.16 SQ.M, FOR 14 DAYS						
	SAW DUST	1.42	CU.M	B0-648	180.48		
	SAW DUST SPREAD AS PER EW1-002	1.42	CU.M	EW1-002	490.44		
	LABOUR (U/SK) (WATERING)	2.50	DAYS	B0-004	7,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				175.00		
	TRACTOR & TRAILOR	1.66	DAYS	B0-117	17,736.93		
	BASKETS	0.17	NO.	B0-631	51.00		
	ALLOW FOR ROPE	1.00	ITEM	B0-715	550.00		
					26,183.86		
	COST PER 37.16 SQ.M PER 14 days				26,183.86		
	RATE PER 1 SQ.M PER DAY			ST1-053	50.33		
				SAY	50.35	14.30	36.05
ST1-054	FABRICATE & LAY M.S. BARS AS REINFORCEMENT(INCL. TRANSPORT):						
	DATA FOR 50 KG - (INCLUDING FOR WASTE :	15.00	%)				
	MILD STEEL	57.50	KG	B0-411	16,564.31		
	BARBENDER (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				170.00		
	ALLOW 10% ON LABOUR FOR SPACER BLOCKS				680.00		
	BINDING WIRE	0.45	KG	B0-431	172.59		
					24,386.90		
	COST PER 50 KG				24,386.90		
	RATE PER 1 KG			ST1-054	487.74		
				SAY	487.75	136.00	351.75
ST1-055	FABRICATE & LAY TOR STEEL AS REINFORCEMENT(INCL. TRANSPORT):						
	DATA FOR 50 KG - (INCLUDING FOR WASTE :	15.00	%)				
	TOR STEEL	57.50	KG	B0-411A	17,077.50		
	BARBENDER (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				170.00		
	ALLOW 10% ON LABOUR FOR SPACER BLOCKS				680.00		
	BINDING WIRE	0.45	KG	B0-431	170.87		
					24,898.37		
	COST PER 50 KG				24,898.37		
	RATE PER 1 KG			ST1-055	497.97		
				SAY	497.95	136.00	361.95

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-056	CUTTING & LAYING REINFORCEMENT FABRIC (EXCLUDING COST OF REINFORCEMENT FABRIC) :						
	DATA FOR 18.5 SQ.M						
	BLACKSMITH (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				170.00		
	BINDING WIRE	0.11	KG	B0-431	43.15		
					7,013.15		
	COST PER 18.5 SQ.M				7,013.15		
	RATE PER 1 SQ.M			ST1-056	379.09		
				SAY	379.10	367.57	11.53
ST1-057	SUPPLYING & FIXING 25 MM THICK PLANKS OF CLASS II TIMBER AS SHUTTERING, INCLUDING REMOVING [SSCM 1008.3 (b)]:						
	DATA FOR 9.30 SQ.M(INCLUDING 10% WASTE & FOR 3 USES)						
	TIMBER PLANK (CLASS II)	85.25	CU.DECI.M	B0-392	9,778.18		
	CARPENTER (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				165.00		
	MOULD OIL	1.14	LTR	B0-602	181.26		
	NAILS	0.45	KG	B0-432	172.71		
					16,897.15		
	COST PER 9.30 SQ.M				16,897.15		
	RATE PER 1 SQ.M			ST1-057	1,816.90		
				SAY	1,816.90	709.68	1,107.22
ST1-057A	SUPPLYING & FIXING 25 MM THICK PLANKS OF CLASS II TIMBER AS SHUTTERING FOR CONCRETE ROADS AND CURB FOR INTERLOCKING BLOCK PAVING ROADS INCLUDING REMOVING [SSCM 1008.3 (b)]:						
	DATA FOR 9.30 SQ.M(INCLUDING 10% WASTE & FOR 5 USES)						
	TIMBER PLANK (CLASS II)	51.15	CU.DECI.M	B0-392	5,866.91		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
	MOULD OIL	1.14	LTR	B0-602	181.26		
	NAILS	0.25	KG	B0-432	95.95		
					9,014.12		
	COST PER 9.30 SQ.M				9,014.12		
	RATE PER 1 SQ.M			ST1-057	969.26		
				SAY	969.25	301.08	668.17

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-058	SUPPLYING & FIXING CLASS II TIMBER BEARERS, JOISTS, ETC. INCLUDING DISMANTLING IN SHUTTERING . [SSCM 1008.3(a)]:						
	DATA FOR 283 CU.DECI M (INCLUDING 10% WASTE & FOR 5 USES)						

	CARPENTER (SK/A)	3.00	DAYS	B0-001	11,400.00		
	LABOUR (U/SK)	3.00	DAYS	B0-004	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				495.00		
	TIMBER (CLASS II) BEARERS & JOISTS	62.26	CU.DECI.M	B0-392	7,141.22		

					27,436.22		

	COST PER 283 CU.DECI M				27,436.22		

	RATE PER 1 CU.DECI M			ST1-058	96.95		
					=====		
				SAY	96.95	69.96	26.99
ST1-059	100 - 150 MM DIA. ROUND JUNGLE TIMBER SUPPLIED & FIXED AS PROPS.:						
	DATA FOR 12.2 M (INCL. 10% WASTE & FOR 5 USES)						

	ROUND JUNGLE TIMBER	2.68	M	B0-393	343.55		
	CARPENTER (SK/A)	0.25	DAY	B0-001	950.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	700.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				41.25		

					2,034.80		

	COST PER 12.2 METRES				2,034.80		

	RATE PER 1 METRE			ST1-059	166.79		
					=====		
				SAY	166.80	135.25	31.55
ST1-060	150 - 200 MM DIA. ROUND JUNGLE TIMBER SUPPLIED & FIXED AS PROPS.:						
	DATA FOR 12.2 M(INCL. 10% WASTE FOR 5 USES)						

	ROUND JUNGLE TIMBER	2.68	M	B0-394	335.50		
	CARPENTER (SK/A)	0.25	DAY	B0-001	950.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	700.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				41.25		

					2,026.75		

	COST PER 12.2 METRES				2,026.75		

	RATE PER 1 METRE			ST1-060	166.13		
					=====		
				SAY	166.15	135.25	30.90

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-061	FORMWORK SMOOTH FINISH WITH CLASS II TIMBER FOR BRIDGE BEAMS, BRIDGE DECK UNDER SIDES AND SIDES INCLUDING DISMANTLING. [SSCM 1008.3(B)]: CONSIDER A BEAM SECTION 300X450 MM AND 6100 MM LONG. DATA FOR 7.32 SQ.M (INCLUDING 10% WASTE & FOR 3 USES)						
	CARPENTER (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (SK/B)	1.50	DAY	B0-002	5,250.00		
	LABOUR (U/SK)	2.50	DAY	B0-003	7,500.00		
	SMALL TOOLS 2.5% OF LABOUR				413.75		
	CLASS II TIMBER PLANK 25 MM THICK	67.10	CU.DECI M	B0-392	7,696.37		
	CLASS II TIMBER BEARERS & JOISTS	52.36	CU.DECI M	B0-392	6,005.12		
	ROUND JUNGLE TIMBER	7.11	M	B0-393	910.34		
	WIRE NAIL (50 & 75 MM)	3.18	LBS	B0-432	1,218.64		
	MOULD OIL	3.64	LTR	B0-602	578.26		
					33,372.48		
	COST PER 7.32 SQ.M				33,372.48		
	RATE PER 1 SQ.M			ST1-061	4,559.08		
				SAY	4,559.10	2,260.93	2,298.17
ST1-062	FORMWORK SMOOTH FINISH WITH CLASS II TIMBER, FOR BRIDGE COLUMN SHAFTS INCLUDING DISMANTLING. [SSCM 1008.3(b)]: CONSIDER A COLUMN SECTION 225X225 MM AND 1200 MM HIGH DATA FOR 1.08 SQ.M (INCLUDING 10% WASTE & FOR 3 USES)						
	CARPENTER (SK/A) (1 HOUR)	0.13	DAY	B0-001	475.00		
	LABOUR (SK/B) (2 HOURS)	0.25	DAY	B0-002	875.00		
	LABOUR (U/SK) (3 HOURS)	0.38	DAY	B0-003	1,125.00		
	SMALL TOOLS 2.5% OF LABOUR				61.88		
	CLASS II TIMBER PLANK 25 MM THICK	9.90	CU.DECI M	B0-392	1,135.53		
	CLASS II TIMBER JOISTS	3.08	CU.DECI M	B0-392	353.28		
	WIRE NAIL	0.45	KG	B0-432	172.71		
	MOULD OIL	1.44	LTR	B0-602	228.96		
	9 MM DIA, M.S.BOLTS 450 MM LONG	0.45	KG	B0-432	174.09		
					4,601.44		
	COST PER 1.08 SQ.M				4,601.44		
	RATE PER 1 SQ.M			ST1-062	4,260.60		
				SAY	4,260.60	2,291.67	1,968.93
ST1-063	FORMWORK SMOOTH FINISH, USING PLYWOOD (SHUTTER 15 MM) AND CLASS II TIMBER BEARERS,JOISTS AND JUNGLE TIMBER PROPS FOR BRIDGE ABUTMENTS, WINGWALLS ETC.: CONSIDER 2 NO PANNELS OF 1 M X 1 M DATA FOR 2 SQ.M (INCLUDING 10% WASTE & FOR 5 USES)						
	CARPRNTER (SK/A) - 2 HOURS	0.25	DAY	B0-001	950.00		
	LABOUR (SK/B) - 4 HOURS	0.50	DAY	B0-002	1,750.00		
	LABOUR (U/SK) - 6 HOURS	0.75	DAY	B0-004	2,100.00		
	ALLOW 2.5% OF LABOUR FOR TOOLS				120.00		
	PLYWOOD 15 MM THICK	0.44	SQ.M	B0-396	845.86		
	CLASS II TIMBER BEARERS & JOISTS ETC (.050 X .100 X 8M) + (.050 X.050 X 4M)	11.00	CU.DECI M	B0-392	1,261.70		
	WIRE NAILS	0.12	KG	B0-432	46.06		
	MOULD OIL	0.24	LTR	B0-602	38.16		
	FIXING BOLTS (10 USES)	0.10	KG	B0-432	38.38		
	JUNGLE TIMBER PROPS, 100 - 150 MM DIA :2 X (3+2+1)M	12.00	M	ST1-059	2,001.44		
					9,151.60		
	COST PER 2 SQ.M				9,151.60		
	RATE PER 1 SQ.M			ST1-063	4,575.80		
				SAY	4,575.80	3,211.48	1,364.32

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-064	SUPPLYING & FIXING 25 MM THICK PLANKS AND STRUTS OF CLASS II TIMBER AS FORMWORK ROUGH FINISH, IN FOUNDATION ETC. INCLUDING REMOVING. [SSCM 1008.3(b)]:						
	DATA FOR 5.57 SQ.M (INCLUDING 10% WASTE & FOR 5 USES)						
	CARPENTER (SK/A)	1.00	DAY	B0-001	3,800.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				165.00		
	TIMBER(CLASS II) 25 MM PLANKS & STRUTS	39.62	CU.DECI M	B0-392	4,544.41		
	NAILS	0.23	KG	B0-432	87.05		
	MOULD OIL	0.90	LTR	B0-602	143.10		
					11,539.56		
	COST PER 5.57 SQ.M				11,539.56		
	RATE PER 1 SQ.M			ST1--064	2,071.73		
				SAY	2,071.75	1,184.92	886.83
ST1-065	FORMWORK SMOOTH FINISH FOR GENERAL PURPOSES, USING 25 MM THICK PLANKS & STRUTS OF CLASS II TIMBER AND ROUND JUNGLE TIMBER PROPS 100-150 MM DIA., INCLUDING DISMANTLING :						
	DATA FOR 5.57 SQ.M (INCL. 10% WASTE & FOR 4 USES)						
	TIMBER CLASS II, 25 MM PLANKS & STRUTS	49.53	CU.DECI M	B0-392	5,680.52		
	ROUND JUNGLE TIMBER PROPS 100-150 MM DIA.	12.20	M	ST1-059	2,034.80		
	NAILS	0.27	KG	B0-432	104.46		
	MOULD OIL	0.90	LTR	B0-602	143.10		
	CARPENTER (SK/A) - (PLANNING & FIXING)	1.25	DAY	B0-001	4,750.00		
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	ADD 2.5% OF LABOUR FOR TOOLS				193.75		
					15,906.62		
	COST PER 5.57 SQ.M				15,906.62		
	RATE PER 1 SQ.M			ST1-065	2,855.77		
				SAY	2,855.75	1,687.61	1,168.14

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PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-066	LAYING & JOINTING 153 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	0.67	DAY	B0-001	2,533.33		
	LABOUR (S/SK)	0.67	DAY	B0-003	2,000.00		
	LABOUR (U/SK)	1.33	DAY	B0-004	3,733.33		
	ALLOW 2.5% ON LABOUR FOR TOOLS				206.67		
	CONCRETE PIPES (2438 MM LONG)	3.00	NOS.	B0-441	23,400.00		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-441B	2,400.00		
	ALLOW FOR CEMENT,SAND AND WATER	2.00	JOINTS	B0-711	220.00		
					34,493.33		
	COST PER 7.32 M LENGTH				34,493.33		
	RATE PER 1 M			ST1-066	4,712.20		
				SAY	4,712.20	1,129.33	3,582.87
ST1-067	LAYING & JOINTING 229 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	0.50	DAY	B0-003	1,500.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				213.75		
	CONCRETE PIPES(2438 MM LONG)	3.00	NOS.	B0-442	28,500.00		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-442B	2,800.00		
	ALLOW FOR CEMENT,SAND AND WATER	2.00	JOINTS	B0-712	440.00		
					40,503.75		
	COST PER 7.32 M LENGTH				40,503.75		
	RATE PER 1 M			ST1-067	5,533.30		
				SAY	5,533.30	1,168.03	4,365.27
ST1-068	LAYING & JOINTING 305 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	0.75	DAY	B0-003	2,250.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				232.50		
	CONCRETE PIPES (2438 MM LONG)	3.00	NOS.	B0-443	27,000.00		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-443B	3,800.00		
	ALLOW FOR CEMENT,SAND AND WATER	2.00	JOINTS	B0-712	440.00		
					40,772.50		
	COST PER 7.32 M LENGTH				40,772.50		
	RATE PER 1 M			ST1-068	5,570.01		
				SAY	5,570.00	1,270.49	4,299.51

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PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-069	LAYING & JOINTING 450 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	0.75	DAY	B0-003	2,250.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				232.50		
	CONCRETE PIPES (2438 MM LONG)	3.00	NOS.	B0-444	51,750.00		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-444B	4,500.00		
	ALLOW FOR GROUTING COLLARS	2.00	JOINTS	B0-712	440.00		
					66,222.50		
	COST PER 7.32 M LENGTH				66,222.50		
	RATE PER 1 M			ST1-069	9,046.79		
				SAY	9,046.80	1,270.49	7,776.31
ST1-070	LAYING & JOINTING 610 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	1.50	DAYS	B0-001	5,700.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	4,500.00		
	LABOUR (U/SK)	3.00	DAYS	B0-004	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				465.00		
	CONCRETE PIPES (2438 MM LONG)	3.00	NOS.	B0-445	84,600.00		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-445B	5,800.00		
	ALLOW FOR GROUTING COLLARS	2.00	JOINTS	B0-712	440.00		
					109,905.00		
	COST PER 7.32 M LENGTH				109,905.00		
	RATE PER 1 M			ST1-070	15,014.34		
				SAY	15,014.35	2,540.98	12,473.37
ST1-071	LAYING & JOINTING 914 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	1.75	DAYS	B0-001	6,650.00		
	LABOUR (S/SK)	1.75	DAYS	B0-003	5,250.00		
	LABOUR (U/SK)	6.50	DAYS	B0-004	18,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				752.50		
	CONCRETE PIPES (1220 MM LONG)	6.00	NOS.	B0-446	126,300.00		
	CONCRETE PIPE COLLARS	5.00	NOS.	B0-446B	19,000.00		
	ALLOW FOR GROUTING COLLARS	5.00	JOINTS	B0-713	2,200.00		
					178,352.50		
	COST PER 7.32 M LENGTH				178,352.50		
	RATE PER 1 M			ST1-071	24,365.10		
				SAY	24,365.10	4,112.02	20,253.08

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-072	LAYING & JOINTING 1219 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	2.50	DAYS	B0-001	9,500.00		
	LABOUR (S/SK)	2.50	DAYS	B0-003	7,500.00		
	LABOUR (U/SK)	9.00	DAYS	B0-004	25,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,055.00		
	CONC. PIPES (1219 MM LONG)	6.00	NOS.	B0-447	199,800.00		
	CONC. PIPE COLLARS	5.00	NOS.	B0-447B	22,500.00		
	ALLOW FOR GROUTING COLLARS	5.00	JOINTS	B0-714	3,850.00		
					269,405.00		
	COST PER 7.32 M LENGTH				269,405.00		
	RATE PER 1 M			ST1-072	36,803.96		
				SAY	36,803.95	5,765.03	31,038.92
ST1-073	LAYING & JOINTING 153 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	0.67	DAY	B0-001	2,533.33		
	LABOUR (S/SK)	0.67	DAY	B0-003	2,000.00		
	LABOUR (U/SK)	1.33	DAY	B0-004	3,733.33		
	ALLOW 2.5% ON LABOUR FOR TOOLS				206.67		
	ALLOW FOR CEMENT, SAND AND WATER	2.00	JOINTS	B0-711	220.00		
					8,693.33		
	COST PER 7.32 M LENGTH				8,693.33		
	RATE PER 1 M			ST1-073	1,187.61		
				SAY	1,187.60	1,129.33	58.27
ST1-074	LAYING & JOINTING 229 MM DIA. AVAILABLE CONCRETE PIPES WITH COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	0.50	DAY	B0-003	1,500.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				213.75		
	ALLOW FOR CEMENT, SAND AND WATER	2.00	JOINTS	B0-712	440.00		
					9,203.75		
	COST PER 7.32 M LENGTH				9,203.75		
	RATE PER 1 M			ST1-074	1,257.34		
				SAY	1,257.35	1,168.03	89.32

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-075	LAYING & JOINTING 305 - 450 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	0.75	DAY	B0-001	2,850.00		
	LABOURS (S/SK)	0.75	DAY	B0-003	2,250.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ADD 2.5% ON TOOLS				232.50		
	ALLOW FOR CEMENTING COLLARS	2.00	JOINTS	B0-712	440.00		
					9,972.50		
	COST PER 7.32 M LENGTH				9,972.50		
	RATE PER 1 M			ST1-075	1,362.36		
				SAY	1,362.35	1,270.49	91.86
ST1-076	LAYING & JOINTING 610 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	1.50	DAYS	B0-001	5,700.00		
	LABOURS (S/SK)	1.50	DAYS	B0-003	4,500.00		
	LABOUR (U/SK)	3.00	DAYS	B0-004	8,400.00		
	ADD 2.5% ON TOOLS				465.00		
	ALLOW FOR CEMENTING COLLARS	2.00	JOINTS	B0-712	440.00		
					19,505.00		
	COST PER 7.32 M LENGTH				19,505.00		
	RATE PER 1 M			ST1-076	2,664.62		
				SAY	2,664.60	2,540.98	123.62
ST1-077	LAYING & JOINTING 914 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	1.75	DAYS	B0-001	6,650.00		
	LABOURS (S/SK)	1.75	DAYS	B0-003	5,250.00		
	LABOUR (U/SK)	6.50	DAYS	B0-004	18,200.00		
	ADD 2.5% ON TOOLS				752.50		
	ALLOW FOR CEMENTING COLLARS	5.00	JOINTS	B0-713	2,200.00		
					33,052.50		
	COST PER 7.32 M LENGTH				33,052.50		
	RATE PER 1 M			ST1-077	4,515.37		
				SAY	4,515.35	4,112.02	403.33

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PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-078	LAYING & JOINTING 1219 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	2.50	DAYS	B0-001	9,500.00		
	LABOUR (S/SK)	2.50	DAYS	B0-003	7,500.00		
	LABOUR (U/SK)	9.00	DAYS	B0-004	25,200.00		
	ADD 2.5% ON TOOLS				1,055.00		
	ALLOW FOR CEMENTING COLLARS	5.00	JOINTS	B0-714	3,850.00		
					47,105.00		
	COST PER 7.32 M LENGTH				47,105.00		
	RATE PER 1 M			ST1-078	6,435.11		
				SAY	6,435.10	5,765.03	670.07
ST1-079	FIXING NEW BRIDGE PLANKS RUNNERS AND STACKING OLD PLANKS (AVAILABLE)[SSCM 1402.2(a)]:						
	DATA FOR 12 NOS.(SIZE 3.66M X .15M X .1M)						
	CARPENTER (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				470.00		
					19,270.00		
	COST FOR 12 NOS.				19,270.00		
	RATE PER 1 NO.			ST1-079	1,605.83		
				SAY	1,605.85	1,566.67	39.18
ST1-080	REMOVING & RE-SETTING OLD BRIDGE PLANKS.:						
	DATA FOR 12 NOS.(SIZE 3.66M X .15M X .1M)						
	CARPENTER (SK/A)	1.25	DAYS	B0-001	4,750.00		
	LABOUR (U/SK)	2.50	DAYS	B0-004	7,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				293.75		
					12,043.75		
	COST FOR 12 NOS.				12,043.75		
	RATE PER 1 NO.			ST1-080	1,003.65		
				SAY	1,003.65	979.17	24.48
ST1-081	SUPPLYING & FIXING NEW BRIDGE PLANKS OF CLASS I TIMBER.:						
	DATA FOR 658.8 CU.DECI M						
	CARPENTER (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				470.00		
	PLANKS (12 X 3.66M X .15M X .1M)	658.80	CU.DECI M	B0-391	166,478.76		
					185,748.76		
	COST FOR 658.8 CU.DECI M				185,748.76		
	RATE PER 1 CU.DECI M			ST1-081	281.95		
				SAY	281.95	28.54	253.41

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-082	SUPPLYING & FIXING 31 MM THICK DECK PLANKS OF CLASS I TIMBER.:						
	DATA FOR 4.5 SQ.M						
	CARPENTER (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				330.00		
	TIMBER CLASS I	139.50	CU.DECI M	B0-391	35,251.65		
					48,781.65		
	COST FOR 4.5 SQ.M				48,781.65		
	RATE PER 1 SQ.M			ST1-082	10,840.37		
				SAY	10,840.35	2,933.33	7,907.02
ST1-083	FIXING NEW CHEQUERED OR M.S. PLATES ON TIMBER - DECKED BRIDGE.[SSCM 1402.2(d)]:						
	DATA FOR 12.2 M						
	CARPENTER (SK/A)	3.00	DAYS	B0-001	11,400.00		
	LABOUR (U/SK)	6.00	DAYS	B0-004	16,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				705.00		
					28,905.00		
	COST FOR 12.2 METRES				28,905.00		
	RATE PER 1 METRE			ST1-083	2,369.26		
				SAY	2,369.25	2,311.48	57.77
ST1-084	REMOVING & REFIXING CHEQUERED M.S. PLATES ON TIMBER - DECKED BRIDGE.:						
	DATA FOR 12.2 M						
	CARPENTER (SK/A)	4.00	DAYS	B0-001	15,200.00		
	LABOUR (U/SK)	8.00	DAYS	B0-004	22,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				940.00		
					38,540.00		
	COST FOR 12.2 METRES				38,540.00		
	RATE PER 1 METRE			ST1-084	3,159.02		
				SAY	3,159.00	3,081.97	77.03
ST1-085	TIGHTENING BOLTS & NUTS OF CHEQUERED OR M.S. PLATES.:						
	DATA FOR 12.2 M						
	CARPENTER (SK/A)	1.00	DAY	B0-003	3,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				145.00		
					5,945.00		
	COST FOR 12.2 METRES				5,945.00		
	RATE PER 1 METRE			ST1-085	487.30		
				SAY	487.30	475.41	11.89

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-086	REMOVING & REFIXING 'U' CLIPS.[SSCM 1402.2(b)]:						
	DATA FOR 10 NOS.						
	CARPENTER (SK/A)	0.50	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				82.50		
					3,382.50		
	COST FOR 10 NOS.				3,382.50		
	RATE PER 1 NO.			ST1-086	338.25		
				SAY	338.25	330.00	8.25
ST1-087	CLEANING, WIRE BRUSHING & PAINTING STEELWORK, ONE COAT ENAMEL PAINT.:						
	DATA FOR 9.29 SQ.M						
	PAINTER (S/SK)	0.25	DAY	B0-003	750.00		
	LABOUR (U/SK)	0.75	DAY	B0-004	2,100.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				71.25		
	PAINT	0.75	LTR	B0-541	1,096.80		
					4,018.05		
	COST FOR 9.29 SQ.M				4,018.05		
	RATE PER 1 SQ.M			ST1-087	432.51		
				SAY	432.50	306.78	125.72
ST1-088	CLEANING, WIRE BRUSHING & APPLYING TAR ON STEELWORK, ONE COAT :						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	0.25	DAY	B0-003	750.00		
	LABOUR (U/SK)	0.75	DAY	B0-004	2,100.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				71.25		
	COAL TAR	1.13	LTR	B0-531	173.25		
					3,094.50		
	COST FOR 9.29 SQ.M				3,094.50		
	RATE PER 1 SQ.M			ST1-088	333.10		
				SAY	333.10	306.78	26.32

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-089	CLEANING, WITH COTTON WASTE AND PAINTING STEEL WORK WITH ENAMEL PAINT, ONE COAT :						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.20	DAY	B0-002	700.00		
	LABOUR (U/SK)	0.20	DAY	B0-004	560.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				31.50		
	COTTON WASTE	0.06	KG	B0-633	7.56		
	PAINT	0.75	LTR	B0-541	1,096.80		
					2,395.86		
	COST FOR 9.29 SQ.M				2,395.86		
	RATE PER 1 SQ.M			ST1-089	257.90		
				SAY	257.90	135.63	122.27
ST1-090	CHIPPING TO BARE METAL ETC. & PAINTING WITH ANTICORROSIVE PAINT, ONE COAT :						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.38	DAY	B0-002	1,312.50		
	LABOUR (S/SK)	3.00	DAYS	B0-003	9,000.00		
	LABOUR (U/SK)	0.75	DAY	B0-004	2,100.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				310.31		
	PAINT ANTICORROSIVE	0.75	LTR	B0-542	1,024.91		
					13,747.73		
	COST FOR 9.29 SQ.M				13,747.73		
	RATE PER 1 SQ.M			ST1-090	1,479.84		
				SAY	1,479.85	1,336.11	143.74
ST1-091	PAINTING WITH ONE COAT OF ENAMEL PAINT AFTER CLEANING, DERUSTING & APPLICATION OF ONE COAT ANTICORROSIVE PAINT.[SSCM 1401.3(c)]:						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.63	DAY	B0-002	2,187.50		
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	LABOUR (U/SK)	0.75	DAY	B0-004	2,100.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				182.19		
	PAINT ANTICORROSIVE	0.75	LTR	B0-542	1,024.91		
	PAINT ENAMAL	0.75	LTR	B0-541	1,096.80		
					9,591.40		
	COST FOR 9.29 SQ.M				9,591.40		
	RATE PER 1 SQ.M			ST1-091	1,032.44		
				SAY	1,032.45	784.45	248.00

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-092	PAINTING WITH TWO COATS OF ENAMEL PAINT, AFTER CLEANING, DERUSTING & APPLICATION OF ONE COAT ANTICORROSIVE PAINT :						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B) (5/8 + 1/5)	0.83	DAY	B0-002	2,887.50		
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				217.19		
	COTTON WASTE	0.09	KG	B0-633	12.09		
	PAINT ANTICORROSIVE	0.75	LTR	B0-542	1,024.91		
	PAINT ENAMAL (.75 + .55)	1.30	LTR	B0-541	1,901.12		
					11,842.81		

	COST FOR 9.29 SQ.M				11,842.81		
	RATE PER 1 SQ.M			ST1-092	1,274.79		
				SAY	1,274.80	935.15	339.65
					=====		
ST1-093	OILING STEEL CABLES ON SUSPENSION BRIDGES [SSCM 1405.3] :						
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				150.00		
	LUBRICANT	6.75	LTR	B0-611	10,263.86		
					16,413.86		

	COST FOR 9.29 SQ.M				16,413.86		
	RATE PER 1 SQ.M			ST1-093	1,766.83		
				SAY	1,766.85	645.86	1,120.99
					=====		
ST1-094	CLEANING BOOMS OF STEEL BRIDGES INCLUDING SCAFFOLDING WHERE NECESSARY [SSCM 1401.3] :						
	DATA FOR 15.25 METRES						
	LABOUR (S/SK)	0.50	DAY	B0-003	1,500.00		
	ADD 2.5% ON TOOLS				37.50		
	ALLOW FOR SCAFFOLDING	1.00	ITEM	B0-717	440.00		
					1,977.50		

	COST FOR 15.25 METRES				1,977.50		
	RATE PER 1 METRE			ST1-094	129.67		
				SAY	129.65	98.36	31.29
					=====		

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PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-095	DEMOLISHING UNREINFORCED CEMENT CONCRETE INCLUDING CLEANING OF DEBRIS IN FOUNDATION AND SUPERSTRUCTURE IN DRY CONDITION EXCLUDING UNDER WATER STRUCTURES [SSCM 202.2] :						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/B) - SLEDGING	1.00	DAY	B0-002	3,500.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	LABOUR (U/SK)-COLLECT.& TRANSP.T.	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% FOR TOOLS				367.50		
	BASKETS	1.00	NO.	B0-631	300.00		
					15,367.50		
	COST FOR 2.83 CU.M				15,367.50		
	RATE PER 1 CU.M			ST1-095	5,430.21		
				SAY	5,430.20	5,194.35	235.85
ST1-096	DEMOLISHING REINFORCED CONCRETE AND DEBRIS CLEARED :						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/B) - SLEDGING	2.00	DAYS	B0-002	7,000.00		
	LABOUR (U/SK)	3.00	DAYS	B0-004	8,400.00		
	LABOUR (U/SK)-COLLECT.& TRANSP.T.	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% FOR TOOLS				525.00		
	BASKETS	1.00	NO.	B0-631	300.00		
					21,825.00		
	COST FOR 2.83 CU.M				21,825.00		
	RATE PER 1 CU.M			ST1-096	7,712.01		
				SAY	7,712.00	7,420.49	291.51
ST1-097	DEMOLISHING REINFORCED CONCRETE IN VERY HEAVY STRUCTURES BUILD UP OF GRADE 30 ABOVE CONCRETE IN WORK SUCH AS BRIDGE BEAMS & DECK SLABS, INCLUDING COLLECTING & REMOVING :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)-COLLECT	2.00	DAYS	B0-004	5,600.00		
	ADD 2.5% OF LABOUR FOR TOOLS				140.00		
	AIR COMPRESSOR (250 C.F.M.)	8.00	HRS	B0-156	55,783.12		
	HAND HELD CONCRETE BREAKERS	2.00	DAYS	B0-157	1,358.10		
	BREAKER OPERATERS (SK/B)	3.00	DAYS	B0-002	10,500.00		
	BASKETS	1.00	NO.	B0-631	300.00		
					73,681.22		
	COST FOR 2.83 CU.M				73,681.22		
	RATE PER 1 CU.M			ST1-097	26,035.77		
				SAY	26,035.75	5,689.05	20,346.70
	* (SEE APPROVED HIRE CHARGES LIST FOR MACHINERY)						

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-098	SUPPLYING & FIXING M.S. DOWELS, SPLICED AND DOVE TAILED WITH WEDGE AT ONE END, 16 MM DIA. AND 1 M LONG, BORING HOLES TO 0.3 M DEPTH IN FIXING :						
	DATA FOR 35 DOWELS						
	LABOUR (SK/B) - CUTTING	2.50	DAYS	B0-002	8,750.00		
	LABOUR (SK/B) - BORING	5.00	DAYS	B0-002	17,500.00		
	LABOUR (SK/B) - FIXING	1.00	DAY	B0-002	3,500.00		
	ADD 2.5% OF LABOUR FOR TOOLS				743.75		
	SUPPLY OF 16 MM DIA. M.S. BARS- (1 M LONG, 1.619 KG/M)	56.67	KG	B0-411	16,323.77		
					46,817.52		
	COST FOR 35 DOWELS				46,817.52		
	RATE PER 1 DOWEL			ST1-098	1,337.64		
				SAY	1,337.65	850.00	487.65
ST1-099	SUPPLYING & FIXING M.S. DOWELS, SPLICED AND DOVE TAILED WITH WEDGE AT ONE END, 20 MM DIA. AND 1 M LONG, BORING HOLES TO 0.3 M DEPTH IN FIXING :						
	DATA FOR 35 DOWELS						
	LABOUR (SK/B) - CUTTING	2.50	DAYS	B0-002	8,750.00		
	LABOUR (SK/B) - BORING	6.00	DAYS	B0-002	21,000.00		
	LABOUR (SK/B) - FIXING	1.00	DAY	B0-002	3,500.00		
	ADD 2.5% OF LABOUR FOR TOOLS				831.25		
	SUPPLY OF 20 MM DIA. M.S. BARS- (1 M LONG, 2.528 KG/M)	88.48	KG	B0-411	25,488.88		
					59,570.13		
	COST FOR 35 DOWELS				59,570.13		
	RATE PER 1 DOWEL			ST1-099	1,702.00		
				SAY	1,702.00	950.00	752.00
ST1-099A	SUPPLYING & FIXING OF 400MM LONG , 20MM DIA. STAINLESS STEEL BARS AS DOWELS IN CAPPING BEAM AT FIXED END						
	FOR 20 NOS						
	SUPPLYING OF 20MM DIA. STAINLESS STEEL BARS	8.00	LM	B0-433	15,701.20		
	LABOUR (SK/B)-CUTTING	0.38	DAYS	B0-002	1,312.50		
	LABOUR (S/SK)-FIXING	0.38	DAYS	B0-003	1,125.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				60.94		
					18,199.64		
	COST FOR 20 DOWELS				18,199.64		
	RATE PER 1 DOWEL			ST1-099A	909.98		
				SAY	910.00	121.88	788.13

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-100	SUPPLYING & FIXING M.S. DOWELS, SPLICED AND DOVE TAILED WITH WEDGE AT ONE END, 25 MM DIA. AND 1 M LONG, BORING HOLES TO 0.3 M DEPTH IN FIXING :						
	DATA FOR 35 DOWELS						
	LABOUR (SK/B) - CUTTING	3.50	DAYS	B0-002	12,250.00		
	LABOUR (SK/B) - BORING	7.00	DAYS	B0-002	24,500.00		
	LABOUR (SK/B) - FIXING	1.00	DAY	B0-002	3,500.00		
	ADD 2.5% OF LAB. FOR TOOLS				1,006.25		
	SUPPLY OF 25 MM DIA. M.S. BARS- (1 M LONG 3.950 KG/M)	138.25	KG	B0-411	39,826.37		
					81,082.62		
	COST FOR 35 DOWELS				81,082.62		
	RATE PER 1 DOWEL			ST1-100	2,316.65		
				SAY	2,316.65	1,150.00	1,166.65
ST1-101	LAY STANDARD TYPE ROAD KERBS(125 MM WIDE X 900 MM LONG), SET ON 19 MM THICK 1:3 CEMENT MORTAR LAYER ON 150 MM X 275 MM WIDE 1:2:4(19) CONCRETE FOUNDATION WITH AVE. 157 MM X 150 MM WIDE BACKING WITH SAME CONCRETE INCLUDING EXCAVATION AND SHUTTERING. (COST OF KERB STONES INCLUDING TRANSPORT AND AGGREGATE* TRANSPORT, TO PAY SEPARATELY) :						
	DATA PER 23 METRES						
	EXCAVATION (.15X.275X23) AS PER E1-005	0.95	CU.M	E1-005	1,957.84		
	CONCRETE FOUNDATION & BACKING AS PER ST1-046						
	[(.15X.275)+((.144+.169)/2)X.15]X23	1.49	CU.M	ST1-046	40,751.96		
	SHUTTERING (.144+.150X2)X23 AS PER ST1-064	10.21	SQ.M	ST1-064	21,156.71		
	LABOUR SK'B' LAYING OF KERBS	1.00	DAY	B0-002	3,500.00		
	LABOUR U/SK	7.00	DAYS	B0-004	19,600.00		
	19 MM MORTAR LAYER (.125X23) AS PER ST1-032	2.88	SQ.M	ST1-032	5,052.96		
					92,019.46		
	COST PER 23 LINEAR METRES				92,019.46		
	RATE PER 1 METRE			ST1-101	4,000.85		
				SAY	4,000.85	2,033.77	1,967.08
	* QUANTITY OF AGGREGATE REQUIRED FOR CONCRETING IN 1 METRE LENGTH IS EQUAL TO : 0.06 CU.M						

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-102	LAY STANDARD PRECAST BRIDGE KERBS [TYPE DRAWING NO. T/B/106-REV 1 OF RDA] (COST OF PRECAST KERBS INCLUDING TRANSPORT TO BE PAID SEPARATELY) :						
	DATA FOR 27 LM.(30 KERBS)						
A.	FIXING:						
	MASON - SK'A'	1.50	DAYS	B0-001	5,700.00		
	LABOUR - U/SK (4 NOS. X 1.5 DAYS)	6.00	DAYS	B0-004	16,800.00		
	ALLOW 2.5% OF LABOUR FOR TOOLS				562.50		
B.	CEMENT FOR JOINTING	0.50	BAG	B0-401	922.00		
					23,984.50		
	COST FOR 27 LINEAR METRES				23,984.50		
	RATE PER 1 LM			ST1-102	888.31		
				SAY	888.30	833.33	54.97
ST1-103	CONSTRUCTING 150X50 MM THICK INSITU LOWER KERB IN GRADE 20(14 MM) CONCRETE FOR BRIDGES: (AGGREGATE TRANSPORT TO BE PAID SEPARATELY)						
	DATA FOR 45 LM.						
A.	FORMWORK AS PER ST1-064	2.27	SQ.M	ST1-064	4,692.51		
B.	CONCRETE GRADE 20(14 MM)						
	CONCRETE GRADE 20(19 MM)	0.34	CU.M	ST1-047	8,752.44		
	DEDUCT COST OF 19 MM AGGREGATE (LESS PILING)	0.30	CU.M	B0-308A	(1,044.48)		
	ADD COST OF 12.5 MM AGGREGATE -DO-	0.30	CU.M	B0-309	1,044.48		
	ADD 20% OF 12.5 MM AGGR. FOR 14 MM SIZE				208.90		
C.	EXTRA LABOUR ALLOWED FOR LEVELLING AND SHAPING CURVED SURFACES:						
	MASON - SK'A'	1.00	DAY	B0-001	3,800.00		
	LABOUR - U/SK	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% OF LABOUR FOR TOOLS				165.00		
					20,418.85		
	COST FOR 45 LINEAR METRES				20,418.85		
	RATE PER 1 LM.			ST1--103	453.75		
				SAY	453.75	249.37	204.38
ST1-104	LAYING 450 X 450 X 50 MM PRECAST CONCRETE SLABS ON FOOT WALKS INCLUDING AVE. 40 MM THICK 1:3 CEMENT MORTAR BEDDING.(COST OF PRECAST SLABS AND TRANSPORT, TO PAY SEPARATELY.) :						
	DATA FOR 10 SQ.M						
(A)	MIXING CEMENT SAND MORTAR USING A MIXER FOR MIXING 6 CU.M						
	SAND FOR MORTAR BEDDING	7.64	CU.M	B0-332	65,618.50		
	CEMENT FOR MORTAR BEDDING	58.77	BAGS	B0-401	108,371.88		
	WATER FOR MIXING	6.00	CU.M	B0-781	330.00		
	CONC. MIXER (400 L) @ 50% EFFICIENCY	1.00	DAY	B0-102	8,583.62		
	LABOUR SK'B'	1.00	DAY	B0-002	3,500.00		
	LABOUR U/SK	6.00	DAYS	B0-004	16,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				507.50		
	COST FOR MIXING 6 CU.M				203,711.50		
	COST PER 0.4 CU.M (10 SQ.M X.04 M)			ST1-104A	13,580.77		
(B)	ALLOW CEMENT FOR GROUTNG JOINTS	0.25	BAGS	B0-401	461.00		
				ST1-104B	461.00		
(C)	LABOUR FOR LEVELLING BASE, PLACING AND GROUTING						
	LABOUR SK'A'	1.00	DAY	B0-001	3,800.00		
	LABOUR U/SK	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				375.00		
	COST FOR 10 SQ.M			ST1-104C	15,375.00		
	TOTAL COST (A+B+C)				29,416.77		
	COST PER 10 SQ.METRES				29,416.77		
	RATE PER 1 SQ.METRE			ST1-104	2,941.68		
				SAY	2,941.70	1,635.33	1,306.37

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-105	LAYING 450 X 450 X 50 MM PRECAST CONCRETE SLABS ON FOOT WALKS INCLUDING AVE. 40 MM THICK 1:3 CEMENT MORTAR BEDDING.(COST OF PRECAST SLABS AND TRANSPORT, TO PAY SEPARATELY.) :						
	DATA FOR 10 SQ.M						
(A)	SAND FOR SAND BEDDING 40 MM THICK	0.40	CU.M	B0-332 ST1-105A	3,435.52 3,435.52		
(B)	ALLOW CEMENT FOR GROUTNG JOINTS	0.25	BAGS	B0-401 ST1-105B	461.00 461.00		
(C)	LABOUR FOR LEVELLING BASE, PLACING AND GROUTING						
	LABOUR SK'A'	1.00	DAY	B0-001	3,800.00		
	LABOUR U/SK	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				375.00		
	COST FOR 10 SQ.M			ST1-105C	15,375.00		
	TOTAL COST (A+B+C)				19,271.52		
	COST PER 10 SQ.METRES				19,271.52		
	RATE PER 1 SQ.METRE			ST1-105	1,927.15		
				SAY	1,927.15	1,500.00	427.15
ST1-106	FIXING PRE CAST HAND RAILING AND UPRIGHTS USING GRADE 25(19) CONCRETE INCLUDING FORM WORK FOR POCKETS. (COST OF THE PRE CAST ITEMS INCLUDING TRANSPORT AND AGGREGATE* TRANSPORT, TO PAY SEPARATELY.)(TYPE DRAWING NO. T/B/102/B]						
	DATA FOR 13.8 METRES (6 BAYS)						
	NUMBER OF UPRIGHTS	16.00	NOS.				
	FORM WORK (.340+.230)X2X.2X16) AS PER ST1-064	3.65	SQ.M	ST1-064	7,557.74		
	G25 CONCRETE FOR FIXING UP RIGHTS	0.25	CU.M	ST1-048	6,949.15		
	LABOUR SK'A' (MASON)	2.00	DAYS	B0-001	7,600.00		
	LABOUR U/SK	4.00	DAYS	B0-004	11,200.00		
					33,306.90		
	COST PER 13.8 LINEAR METRES				33,306.90		
	RATE PER 1 METRE			ST1-106	2,413.54		
				SAY	2,413.55	1,779.66	633.89
	* QUANTITY OF AGGREGATE REQUIRED FOR CONCRETING IN 1 METRE LENGTH IS EQUAL TO : 0.017 CU.M						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-107	CONSTRUCTION OF R.C.C. GRADE 25(19 MM) END PILLASTER, TYPE I.(AGGR. TRANSPORT AND IRON PILING TO BE PAID SEPARATELY) [TYPE DRAWING NO. T/B/106-REV 1] :						
	DATA FOR 1 END PILLASTER:						
A.	EXCAVATION FOR FOUNDATION: 2.0X.5X.525 M	0.53	CU.M	E1-012	1,349.59		
B.	CONCRETE SCREED: CONCRETE 1:3:6(37.5 MM) 2X.5X.075 M	0.08	CU.M	ST1-040	1,889.44		
	FOUNDATION: GRADE 25(19 MM) CONCRETE (2X.5X.3)+(2X.35X.35) M	0.55	CU.M	ST1-048	15,134.62		
	PILLASTER: CONCRETE GRADE 25(19 MM) 1.4X.35X.15 M +	0.07					
	1.35X.3X.95 M +	0.38					
	1.4X.35X.1 M +	0.05					

		0.51	CU.M	ST1-048	14,086.31		
C.	FORMWORK SHUTTERING FOR FOUNDATION: 2X2X.375	1.50					
	2X.5X.375	0.38					
	2X2X.35	1.40					
	2X.35X.35	0.25					

		3.52	SQ.M	ST1-064	7,292.56		
	SMOOTH SHUTTERING FOR PILLASTER(65%): 2X1.4X.3X65%	0.55					
	2X.35X.3X65%	0.14					
	2X1.35X.95X65%	1.67					
	2X.3X.95X65%	0.37					
	2X.025X1.4X65%	0.05					
	2X.025X.3X65%	0.01					

		2.78	SQ.M	ST1-065	7,926.13		
D.	TOR STEEL REINFORCEMENT FABRICATION: 12 MM DIA. - 24.6 M X .910 KG/M	22.39					
	10 MM DIA. - 52.97 M X .641 KG/M	33.95					

		56.34	KG	ST1-055	28,054.39		
E.	LABOUR & MATERIALS FOR MAKING OF COPING AND PLINTH: MASON - SK'A' FOR MATERIALS -	0.25	DAY	B0-001	950.00		
	ADD 1% OF CONCRETE FOR PILLASTER				140.86		

					76,823.90		

	TOTAL COST				76,823.90		
	RATE PER 1 END PILLASTER			ST1-107	76,823.90		
				SAY	=====		
					76,823.90	25,433.60	51,390.30
*	AGGREGATE QUANTITIES REQUIRED:	37.5 MM	- 0.08 CU.M				
		19 MM	- 0.95 CU.M				

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-108	CONSTRUCTION OF R.C.C. GRADE 25(19 MM) END PILLASTER, TYPE II.(AGGR. TRANSPORT AND IRON PILING TO BE PAID SEPARATELY) [TYPE DRAWING NO. T/B/106-REV 1] :						
	DATA FOR 1 END PILLASTER:						
A.	EXCAVATION FOR FOUNDATION: 2.0X.6X.775 M	0.93	CU.M	E1-012	2,390.70		
B.	CONCRETE SCREED: CONCRETE 1:3:6(37.5 MM) 2X.6X.075 M	0.09	CU.M	ST1-040	2,267.33		
	FOUNDATION: GRADE 25(19 MM) CONCRETE (2X.6X.3)+(2X.35X.6) M	0.78	CU.M	ST1-048	21,660.56		
	PILLASTER: CONCRETE GRADE 25(19 MM) 1.4X.35X.15 M + 1.35X.3X.95 M + 1.4X.35X.1 M +	0.07 0.38 0.05					
		0.51	CU.M	ST1-048	14,086.31		
C.	FORMWORK SHUTTERING FOR FOUNDATION: 2X2X.375 2X.6X.375 2X2X.6 2X.35X.6	1.50 0.45 2.40 0.42					
		4.77	SQ.M	ST1-064	9,882.25		
	SMOOTH SHUTTERING FOR PILLASTER(65%): 2X1.4X.3X65% 2X.35X.3X65% 2X1.35X.95X65% 2X.3X.95X65% 2X.025X1.4X65% 2X.025X.3X65%	0.55 0.14 1.67 0.37 0.05 0.01					
		2.78	SQ.M	ST1-065	7,926.13		
D.	TOR STEEL REINFORCEMENT FABRICATION: 12 MM DIA. - 13.10 M X .910 KG/M 10 MM DIA. - 62.57 M X .641 KG/M	11.92 40.11					
		52.03	KG	ST1-055	25,907.53		
E.	LABOUR & MATERIALS FOR MAKING OF COPING AND PLINTH: MASON - SK'A' FOR MATERIALS -	0.25	DAY	B0-001	950.00		
	ADD 1% OF CONCRETE FOR PILLASTER				140.86		
					85,211.67		
	TOTAL COST				85,211.67		
	RATE PER 1 END PILLASTER			ST1-108	85,211.67		
				SAY	85,211.65		
*	AGGREGATE QUANTITIES REQUIRED:	37.5 MM 19 MM	- 0.09 CU.M - 1.16 CU.M			28,804.69	56,406.96

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE -----	DESCRIPTION OF ITEM -----	QUANTITY -----	UNIT ----	PRICE CODE -----	AMOUNT (Rs.) -----	LABOUR INPUT -----	OTHER INPUTS -----
ST1-109	CONSTRUCTION OF R.C.C. GRADE 25(19 MM) END PILLASTER, TYPE III.(AGGR. TRANSPORT AND BUILTUP RUBBLE FOUNDATION TO BE PAID SEPARATELY) [TYPE DRAWING NO. T/B/106-REV 1] :						
	DATA FOR 1 END PILLASTER: -----						
A.	CONCRETE FOUNDATION OVER BUILTUP RUBBLE MASONRY: GRADE 25(19 MM) CONCRETE 1.45X.6X.3 M	0.26	CU.M	ST1-048	7,247.96		
	PILLASTER: CONCRETE GRADE 25(19 MM)	0.07					
	1.4X.35X.15 M +	0.38					
	1.35X.3X.95 M +	0.05					
	1.4X.35X.1 M +	-----					
		0.51	CU.M	ST1-048	14,086.31		
B.	FORMWORK SHUTTERING FOR FOUNDATION: 2X1.45X.3 2X.6X.3	0.87					
		0.36					

		1.23	SQ.M	ST1-064	2,548.25		
	SMOOTH SHUTTERING FOR PILLASTER(65%):						
	2X1.4X.3X65%	0.55					
	2X.35X.3X65%	0.14					
	2X1.35X.95X65%	1.67					
	2X.3X.95X65%	0.37					
	2X.025X1.4X65%	0.05					
	2X.025X.3X65%	0.01					

		2.78	SQ.M	ST1-065	7,926.13		
C.	TOR STEEL REINFORCEMENT FABRICATION: 12 MM DIA. - 10.75 M X .910 KG/M 10 MM DIA. - 36.49 M X .641 KG/M	9.78					
		23.39					

		33.17	KG	ST1-055	16,518.29		
D.	LABOUR & MATERIALS FOR MAKING OF COPING AND PLINTH: MASON - SK'A' FOR MATERIALS -	0.25	DAY	B0-001	950.00		
	ADD 1% OF CONCRETE FOR PILLASTER				140.86		

					49,417.80		

	TOTAL COST				49,417.80		
	RATE PER 1 END PILLASTER			ST1-109	49,417.80		
				SAY	=====		
					49,417.80	16,013.55	33,404.25
*	AGGREGATE QUANTITIES REQUIRED:	19 MM -	0.70 CU.M				

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE -----	DESCRIPTION OF ITEM -----	QUANTITY -----	UNIT ----	PRICE CODE -----	AMOUNT (Rs.) -----	LABOUR INPUT -----	OTHER INPUTS -----
ST1-110	CONSTRUCTION OF R.C.C. GRADE 25(19 MM) END PILLASTER, TYPE IV.(AGGR. TRANSPORT TO BE PAID SEPARATELY) [TYPE DRAWING NO. T/B/106-REV 1] :						
	DATA FOR 1 END PILLASTER: -----						
A.	CONCRETE FOUNDATION OVER WINGWALL STRUCTURE: GRADE 25(19 MM) CONCRETE 1.45X.6X.3 M	0.26	CU.M	ST1-048	7,247.96		
	PILLASTER: CONCRETE GRADE 25(19 MM)	0.07					
	1.4X.35X.15 M +	0.38					
	1.35X.3X.95 M +	0.05					
	1.4X.35X.1 M +	-----					
		0.51	CU.M	ST1-048	14,086.31		
B.	FORMWORK SHUTTERING FOR FOUNDATION: 2X1.45X.3 2X.6X.3	0.87					
		0.36					

		1.23	SQ.M	ST1-064	2,548.25		
	SMOOTH SHUTTERING FOR PILLASTER(65%): 2X1.4X.3X65% 2X.35X.3X65% 2X1.35X.95X65% 2X.3X.95X65% 2X.025X1.4X65% 2X.025X.3X65%	0.55 0.14 1.67 0.37 0.05 0.01					

		2.78	SQ.M	ST1-065	7,926.13		
C.	TOR STEEL REINFORCEMENT FABRICATION: 12 MM DIA. - 10.75 M X .910 KG/M 10 MM DIA. - 36.49 M X .641 KG/M 16 MM DIA. - 4.8 M X 1.619 KG/M	9.78 23.39 7.77					

		40.94	KG	ST1-055	20,387.96		
D.	LABOUR & MATERIALS FOR MAKING OF COPING AND PLINTH: MASON - SK'A' FOR MATERIALS -	0.25	DAY	B0-001	950.00		
	ADD 1% OF CONCRETE FOR PILLASTER				140.86		

					53,287.47		

	TOTAL COST				53,287.47		

	RATE PER 1 END PILLASTER			ST1-110	53,287.47		
					=====		
				SAY	53,287.45	17,070.43	36,217.02
*	AGGREGATE QUANTITIES REQUIRED:	19 MM -	0.70 CU.M				

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-111	LAYING OF GRADE 20 CONCRETE PRECAST PIN KERBS IN GRADE 20(19) CONCRETE FOUNDATION AS EDGING : (AGGREGATE TRANSPORT TO BE PAID SEPARATELY)						
	DATA FOR 30 NOS. EQUIVALENT TO	18.00	METERS				
A.	CONCRETE FOR PIN KERB .075X.15X.6X30 NOS	0.20	CU.M	ST1-047	5,251.46		
B.	FORMWORK AS PER ST1-057 & 15 USES ADD 1% OF FORMWORK COST FOR CASTING BED	0.54	SQ.M	ST1-057	981.13 9.81		
C.	EXCAV. FOR FOUND. E1-012 (1X.2X.6X30)	0.36	CU.M	E1-012	925.43		
D.	CONCRETE FOR FOUNDATION AS PER ST1-047 LESS ((.1X.22X.6)-(.075X.075X.6))X30	0.29	CU.M	ST1-047	7,643.80		
E.	FORMWORK AS PER ST1-064 & 50 USES	0.22	SQ.M	ST1-064	447.50		
F.	PLACING PIN KERBS AND INTERNAL TRANSPORT LABOUR SK'B' LABOUR US/K ADD 2.5% OF LABOUR FOR TOOLS	2.00 1.00	DAY DAY	B0-003 B0-004	6,000.00 2,800.00 220.00		
					24,279.13		
	TOTAL COST FOR 18 M				24,279.13		
	RATE PER 1 METER LENGTH			ST1-111	1,348.84		
				SAY	1,348.85	732.68	616.17
*	AGGRGATE REQUIRED PER 1 M FOR PIN KERB - 0.01 CU.M & FOR FOUNDATION - 0.02 CU.M						

HSR - 2024
Engineering Division
Ministry of Transport and Highways

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-112	SUPPLYING AND FIXING 25 MM THICK TONGUE & GROOVED PLANKS WITH 50X50 MM STRUTS OF CLASS I TIMBER IN PANELS AS SMOOTH SHUTTERING FOR CONCRETE DRAINS :						
	DATA FOR LENGTH OF DRAIN 5.49 M & AREA NUMBER OF USES ASSUMED	13.38	SQ.M				
		12.00	TIMES				
A.	CLASS I TIMBER INCLUDING 10% FOR WASTAGES						
	25MM PLANKS 4X3X1.83X.61X.025	334.89					
	50X50 MM SECTIONS 4X2X3X1.83X.050X.050	109.80					
	50X50 MM SECTIONS 4X4X3X.61X.050X.050	73.20					
	50X50 MM PLANKS 4X.61X.15X.025 (4 ENDS)	9.15					
	50X25 MM SECTIONS 4X3X.75X.050X.025	11.25					
	50X25 MM SECTIONS 4X3X.45X.050X.025	6.75					
		545.04					
	ADD 10 % FOR WASTAGES	54.50					
	TOTAL TIMBER	599.54	CU.DECI M	B0-391	151,504.77		
	FABRICATION & FOR NECESSARY REPAIRS						
	LABOUR SK'A'	3.00	DAY	B0-001	11,400.00		
	LABOUR S/SK	6.00	DAY	B0-003	18,000.00		
	ADD 2.5 % OF LABOUR FOR TOOLS				735.00		
	WIRE NAILS	2.00	KG	B0-432	767.60		
					182,407.37		
	COST OF SHUTTERING FOR 13.38 SQ.M FOR 12 USES				182,407.37		
	COST FOR 13.38 SQ.M PER 1 USE			ST1-112A	15,200.61		
B.	ASSEMBLING AND DIS-ASSEMBLING OF SHUTTERING						
	LABOUR SK'A'	1.50	DAY	B0-001	5,700.00		
	LABOUR S/SK	3.00	DAY	B0-003	9,000.00		
	ADD 2.5 OF LABOUR FOR TOOLS				367.50		
	MOULD OIL	1.67	LTR	B0-602	264.74		
	WIRE NAILS	0.80	KG	B0-432	307.04		
					15,639.28		
	COST OF ASSEMBLING & REMOVING OF 13.38 SQ.M			ST1-112B	15,639.28		
	TOTAL COST FOR 13.38 SQ.M PER USE				30,839.89		
	COST PER 1 SQ.M PER USE			ST1-112	2,304.08		
				SAY	2,304.10	1,235.59	1,068.51
ST1-113	SUPPLY AND PACKING 50 - 200 MM DRY STONE LINING BEHIND ABUTMENTS AND WING WALLS : (AGGREGATE TRANSPORT TO PAY SEPARATELY)						
	DATA FOR 1 CU.M						
	AGGREGATE RUBBLE (LESS PILING)	0.50	CU. M	B0-302	1,325.09		
	AGGREGATE 100 MM (LESS PILING)	0.20	CU. M	B0-303	581.71		
	AGGREGATE 75 MM (LESS PILING)	0.20	CU. M	B0-304	581.71		
	AGGREGATE 50 MM (LESS PILING)	0.10	CU. M	B0-305	326.19		
	COST OF PACKING (AS PER ST1-011)	1.00	CU. M	ST1-011	1,810.07		
					4,624.78		
	ADD 10% ON COST OF AGG. 100MM & BELOW ANDFOR FILLING VOIDS				239.47		
					4,864.25		
	COST PER 1 CU. M			ST1-113	4,864.25		
				SAY	4,864.25	1,731.45	3,132.80

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-114	LAYING GEOTEXTILE ON PREPARED SURFACE (SUPPLY AND TRANSPORT TO PAY SEPARATELY)						
	DATA FOR 87.75 SQ.M						
	LABOUR U/SK	2.00	DAYS	B0-004	5,600.00		
	LABOUR SK 'B'	1.00	DAYS	B0-002	3,500.00		
	ADD 2.5% OF LABOUR FOR TOOLS				227.50		
	TOTAL FOR 87.75 SQ.M				9,327.50		
	RATE PER 1 SQ.M			ST1-114	106.30		
				SAY	106.30	103.70	2.60
ST1-115	CONSTRUCTION OF GABION WALL USING 4X1X1M MESH ON PREPARED GROUND. (SUPPLY AND TRANSPORT OF GABION MESH TO BE PAID SEPARATELY) :						
	DATA FOR 16 CU.M (4/4.0X1.0X1.0 M) OF GABION						
A	FABRICATING GABION BOX						
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	LABOUR S/SK	0.50	DAY	B0-003	1,500.00		
	LABOUR SK 'B'	0.50	DAY	B0-002	1,750.00		
	ADD 2.5% OF LABOUR FOR TOOLS				151.25		
					6,201.25		
B	PLACING AND FIXING GABION BOXES						
	LABOUR U/SK	5.33	DAY	B0-004	14,924.00		
	LABOUR S/SK	0.89	DAY	B0-003	2,670.00		
	LABOUR SK 'B'	1.33	DAY	B0-002	4,655.00		
	ADD 2.5% OF LABOUR FOR TOOLS				556.23		
					22,805.23		
C	PACKING RUBBLE INCLUDING SUPPLY						
	LABOUR U/SK	15.55	DAY	B0-004	43,540.00		
	LABOUR S/SK	2.80	DAY	B0-003	8,400.00		
	LABOUR SK 'B'	5.91	DAY	B0-002	20,685.00		
	ADD 2.5% OF LABOUR FOR TOOLS				1,815.63		
	RUBBLE	20.00	CU.M	B0-301	53,003.53		
					127,444.16		
	TOTAL COST FOR 16 CU.M			(A+B+C)	156,450.63		
	RATE PER CU.M			ST1-115	9,778.16		
				SAY	9,778.15	6,307.75	3,470.40

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-116	CONSTRUCTION OF GABION WALL USING 4X1X0.5 M MESH ON PREPARED GROUND. (SUPPLY AND TRANSPORT OF GABION MESH TO BE PAID SEPARATELY) :						
	<u>DATA FOR 12 CU.M (6/4.0X1.0X0.5 M) OF GABION</u>						
A	FABRICATING GABION BOX						
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	LABOUR S/SK	0.50	DAY	B0-003	1,500.00		
	LABOUR SK 'B'	0.50	DAY	B0-002	1,750.00		
	ADD 2.5% OF LABOUR FOR TOOLS				151.25		

					6,201.25		
B	PLACING AND FIXING GABION BOXES						
	LABOUR U/SK	6.67	DAY	B0-004	18,676.00		
	LABOUR S/SK	0.83	DAY	B0-003	2,490.00		
	LABOUR SK 'B'	0.83	DAY	B0-002	2,905.00		
	ADD 2.5% OF LABOUR FOR TOOLS				601.78		

					24,672.78		
C	PACKING RUBBLE INCLUDING SUPPLY						
	LABOUR U/SK	11.66	DAY	B0-004	32,648.00		
	LABOUR S/SK	2.10	DAY	B0-003	6,300.00		
	LABOUR SK 'B'	4.43	DAY	B0-002	15,505.00		
	ADD 2.5% OF LABOUR FOR TOOLS				1,361.33		
D	RUBBLE	15.00	CU.M	B0-301	39,752.65		

					95,566.98		
	TOTAL COST FOR 12 CU.M			(A+B+C)	126,441.00		
	RATE PER CU.M			ST1-116	10,536.75		
					=====		
				SAY	10,536.75	7,047.83	3,488.92
ST1-117	CONSTRUCTION OF KERB INLET AS PER DRAWING TYPE - K1/T1 WITH COVER SLABS. AGGREGATE TRANSPORT TO PAY SEPARATELY						
	<u>DATA FOR 1.2 M LENGTH</u>						
	1. CONCRETE						
	INLET CHANNEL BASE (.8X1.2X.1)	0.10					
	INLET CHANNEL WALLS (2X.2X.1X1.2)	0.05					
	BASE PARALLEL TO KERB EDGE (3.1X.1X.2)	0.06					
	COVER SLABS 2 NOS (2X.6X.8X.115)	0.11					
	TOTAL CONCRETE 1:2:4(19)	<u>0.32</u>	CU.M	ST1-047	8,205.25		
	2. FORM WORK						
	WALL (2X.3X1.2)+(2X.2X1.2)	1.20					
	SLAB (2X2X.8X.115)+(2X2.6X.115)	<u>0.64</u>					
	TOTAL FORM WORK	<u>1.84</u>	SQ.M	ST1-064	3,820.31		
	3. REINFORCEMENT TOR STEEL						
	AS PER THE BAR SCHEDULE IN TYPE DRAWING	8.04	KG	ST1-055	4,003.52		
	4. ALLOW CASTING BED COST 3% OF FORM WORK COST						
							114.61
	5. PLACING 2 NO. SLABS INCLUDING LEVELLING						
	4 U/SK IN 1 HOUR	0.50	DAY	B0-004	1,400.00		
	TRACTOR & TRAILER FOR TRANSPORT	0.05	DAY	B0-117	534.25		

	TOTAL COST FOR 1.2 M KERB INLET PIT				18,077.93		
	RATE PER 1 KERB INLET PIT WITH 1.2 M LENGTH			ST1-117	18,077.93		
					=====		
				SAY	18,077.95	6,494.94	11,583.01
	NOTE: EARTH EXCAVATION TO CONSIDER BY ENGINEER AS PER SITE CONDITION AND ADD SEPARATELY IF REQUIRED						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ITEMS RESERVED FOR BRIDGE WORKS ONLY							
THE RATES IN THE FOLLOWING ITEMS FROM ST1-118 TO ST1-120 SHOULD BE ADDED TO THE CONCRETE RATE SELECTED FROM ITEMS ST1-038 TO ST1-050, DEPENDING ON THE STRUCTURAL LOCATION							
ST1-118	ADDITIONAL LABOUR FOR POURING, COMPACTING AND LEVELLING CONCRETE IN SCREED UNDER FOUNDATION SLAB						
	DATA FOR 1 CU.M						
	LABOUR SK'A' MASON	0.13	DAY	B0-001	475.00		
	LABOUR S/SK	0.33	DAY	B0-003	1,000.00		
					1,475.00		
	TOTAL COST PER 1 CU.M.			ST1-118	1,475.00		
				SAY	1,475.00	1,475.00	0.00
ST1-119	ADDITIONAL LABOUR FOR POURING AND COMPACTING CONCRETE IN ABUTMENTS, WINGWALLS, CAPPING BEAMS OF PIERS AND FOOT WALKS OF BRIDGES						
	DATA FOR	8.50	CU.M				
	LABOUR SK'A' CARPENTER	1.00	DAY	B0-001	3,800.00		
					3,800.00		
	TOTAL COST PER 8.5 CU.M.				3,800.00		
	TOTAL COST PER 1 CU.M.			ST1-119	447.06		
				SAY	447.05	447.05	0.00
ST1-120	ADDITIONAL LABOUR FOR POURING, COMPACTING AND LEVELLING INFILLER CONCRETE BETWEEN BRIDGE BEAMS INCLUDING SCREED OF BRIDGE DECKS.						
	DATA FOR 1 CU.M						
	LABOUR SK'A' CARPENTER	0.33	DAY	B0-001	1,254.00		
	LABOUR U/SK	0.33	DAY	B0-004	924.00		
					2,178.00		
	TOTAL COST PER 1 CU.M.			ST1-120	2,178.00		
				SAY	2,178.00	2,178.00	0.00
ST1-121	LAYING READY MIXED GRADE CONCRETE INCLUDING VIBRATION.* (SUPPLY OF CONCRETE TO BE PAID SEPARATELY)						
	DATA FOR	8.50	CU.M				
	LABOUR SK'A'	2.00	DAY	B0-001	7,600.00		
	LABOUR S/SK	3.00	DAY	B0-003	9,000.00		
	LABOUR U/SK	2.00	DAY	B0-004	5,600.00		
	ADD 2.5% OF LABOUR FOR TOOLS				555.00		
	HIRE OF PORKER VIBRATER	1.00	DAY	B0-106	2,223.09		
					24,978.09		
	TOTAL COST PER 8.5 CU.M.				24,978.09		
	TOTAL COST PER 1 CU.M.			ST1-121	2,938.60		
				SAY	2,938.60	2,611.76	326.84

* Additional labour to be considered depending on the location of concreting.

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-122	SUPPLYING AND LAYING APPROVED HARD RUBBER BEARING PADS 75MM X 12 MM OVER CAPPING BEAMS AND UNDER THE APPROACH SLABS						
	DATA FOR	19.60	METRES				
	LABOUR SK'A' CARPENTER	0.50	DAY	B0-001	1,900.00		
	LABOUR U/SK	0.50	DAY	B0-004	1,400.00		
	ADD 2.5% OF LABOUR FOR TOOLS				82.50		
	HARD RUBBER BEARING PADS 75 MMX 12 MM	19.60	METRES	B0-638	52,816.61		
	TOTAL COST PER 8.5 CU.M.				56,199.11		
	TOTAL COST PER 1 M.			ST1-122	2,867.30		
				SAY	2,867.30	168.37	2,698.93
ST1-123	BITUMENOUS SEALING MATERIAL SUPPLIED AND LAID UNDER BEAM ENDS TO PREVENT GROUT LEAK ON TO CAPPING BEAM TRANSPORT OF EMULSION INCLUDED:						
	DATA FOR	10.00	METRES				
	VOLUME OF SAND EMULSION MIX 1:8 (0.1 X 0.05 X 15)	0.05	CU.M				
	LABOUR FOR MIXING AND LAYING 2 S/SK FOR 2 HOURS	0.50	DAY	B0-003	1,500.00		
	ADD 2.5% OF LABOUR FOR TOOLS				37.50		
	EMULSION CSS-1	3.00	LITRES	B0-352	447.00		
	RIVER SAND	0.06	CU.M	B0-332	472.38		
	ALLOW 5% EMULSION FOR TRANSPORT	1.00	ITEM		22.35		
	TOTAL COST PER 10 M.				2,479.23		
	TOTAL COST PER 1 M.			ST1-123	247.92		
				SAY	247.90	150.00	97.90
ST1-124	150 MM DIA. POLYTHENE DISPLACERS SUPPLIED AND FILLED WITH SAW DUST OR SIMILAR LIGHT MATERIAL IN DECK. TRANSPORT OF SAW DUST TO PAY SEPARATELY:						
	DATA FOR	50.00	METRES				
	POLYTHENE TUBE LENGTH/KG	28.00	METRES				
	ASSUME 50% COMPACTION						
	VOLUME OF SAW DUST	1.33	CU.M				
	LABOUR U/SK FILLING	0.50	DAY	B0-004	1,400.00		
	LABOUR U/SK LOADING FOR TRANSPORT	0.13	DAY	B0-004	350.00		
	ADD 2.5% OF LABOUR FOR TOOLS				43.75		
	COST OF SAW DUST	1.33	CU.M	B0-648	169.64		
	POLYTHENE TUBE	1.96	KG	B0-639B	1,351.03		
	BASKET	0.33	NO	B0-631	100.00		
	BINDING WIRE	0.75	KG	B0-431	284.78		
	TOTAL COST PER 50 M.				3,699.19		
	TOTAL COST PER 1 M.			ST1-124	73.98		
				SAY	74.00	35.00	39.00

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-125	230 MM DIA. POLYTHENE DISPLACERS SUPPLIED AND FILLED WITH SAW DUST OR SIMILAR LIGHT MATERIAL IN DECK. TRANSPORT OF SAW DUST TO PAY SEPARATELY:						
	<u>DATA FOR</u>	50.00	METRES				
	POLYTHENE TUBE LENGTH/KG	20.00	METRES				
	ASSUME 50% COMPACTION						
	<u>VOLUME OF SAW DUST</u>	3.12	CU.M				
	LABOUR U/SK FILLING	1.00	DAY	B0-004	2,800.00		
	LABOUR U/SK LOADING FOR TRANSPORT	0.25	DAY	B0-004	700.00		
	ADD 2.5% OF LABOUR FOR TOOLS				87.50		
	COST OF SAW DUST	3.12	CU.M	B0-648	397.96		
	POLYTHENE TUBE	2.75	KG	B0-639A	1,895.58		
	BASKET	0.33	NO	B0-631	100.00		
	BINDING WIRE	0.75	KG	B0-431	284.78		
	TOTAL COST PER 50 M.				6,265.81		
	TOTAL COST PER 1 M.			ST1-125	125.32		
				SAY	125.30	70.00	55.30
ST1-126	325 MM DIA. POLYTHENE DISPLACERS SUPPLIED AND FILLED WITH SAW DUST OR SIMILAR LIGHT MATERIAL IN DECK. TRANSPORT OF SAW DUST TO PAY SEPARATELY:						
	<u>DATA FOR</u>	50.00	METRES				
	POLYTHENE TUBE LENGTH/KG	14.00	METRES				
	ASSUME 50% COMPACTION						
	<u>VOLUME OF SAW DUST</u>	6.22	CU.M				
	LABOUR U/SK FILLING	1.50	DAY	B0-004	4,200.00		
	LABOUR U/SK LOADING FOR TRANSPORT	0.50	DAY	B0-004	1,400.00		
	ADD 2.5% OF LABOUR FOR TOOLS				140.00		
	COST OF SAW DUST	6.22	CU.M	B0-648	793.36		
	POLYTHENE TUBE	3.93	KG	B0-639	2,708.95		
	BASKET	0.50	NO	B0-631	150.00		
	BINDING WIRE	0.75	KG	B0-431	284.78		
	TOTAL COST PER 50 M.				9,677.09		
	TOTAL COST PER 1 M.			ST1-126	193.54		
				SAY	193.55	112.00	81.55
ST1-127	PCC BEAMS 16.15M LONG LAUNCHED INTO POSITION						
	<u>DATA FOR</u>	16.00	NOS				
	LABOUR SK'A'	4.00	DAY	B0-001	15,200.00		
	LABOUR U/SK	32.00	DAY	B0-004	89,600.00		
	ALLOW 2.5% FOR TOOLS				2,620.00		
	MOBILE CRANE 25 TON	24.00	HOUR	B0-146	271,045.20		
	TOTAL COST 16 BEAMS				378,465.20		
	RATE PER 1 NO.			ST1-127	23,654.08		
				SAY	23,654.10	6,550.00	17,104.10
ST1-128	PCC BEAMS 13.41M AND 12.19M LONG LAUNCHED INTO POSITION						
	<u>DATA FOR</u>	8.00	NOS				
	LABOUR SK'A'	1.00	DAY	B0-001	3,800.00		
	LABOUR S/SK	4.00	DAY	B0-004	11,200.00		
	ADD 2.5% OF LABOUR FOR TOOLS				375.00		
	MOBILE CRANE	8.00	HOUR	B0-146A	119,335.68		
	TOTAL COST 8 BEAMS				134,710.68		
	RATE PER 1 NO.			ST1-128	16,838.84		
				SAY	16,838.85	1,875.00	14,963.85

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-129	PCC BEAMS 10.67M, 9.75M AND 8.23M LONG LAUNCHED INTO POSITION						
	DATA FOR	16.00	NOS				
	LABOUR SK'A'	2.00	DAY	B0-001	7,600.00		
	LABOUR U/SK	16.00	DAY	B0-004	44,800.00		
	ALLOW 2.5% FOR TOOLS				1,310.00		
	MOBILE CRANE 25 TON	13.00	HOUR	B0-146	146,816.15		
	TOTAL COST 16 BEAMS				200,526.15		
	RATE PER 1 NO.			ST1-129	12,532.88		
				SAY	12,532.90	3,275.00	9,257.90
ST1-130	PCC BEAMS 7.01M, 6.09M, 5.18M, 4.26M AND 3.35M LONG LAUNCHED INTO POSITION						
	DATA FOR	16.00	NOS				
	LABOUR SK'A'	1.50	DAY	B0-001	5,700.00		
	LABOUR U/SK	12.00	DAY	B0-004	33,600.00		
	ALLOW 2.5% FOR TOOLS				982.50		
	MOBILE CRANE 25 TON	10.00	HOUR	B0-146	112,935.50		
	TOTAL COST 16 BEAMS				153,218.00		
	RATE PER 1 NO.			ST1-130	9,576.13		
				SAY	9,576.15	2,456.25	7,119.90
ST1-131	M.S. ANGLE IRON AND HARD RUBBER EXPANSION JOINTS AS PER DRAWING NO. T/B/107 REV.1						
	DATA FOR	9.80	M				
	A FABRICATING M.S. ANGLE						
	LABOUR SK'A'	0.50	DAY	B0-001	1,900.00		
	LABOUR U/SK	0.50	DAY	B0-004	1,400.00		
	B PREPARING M.S. STUDS						
	LABOUR SK'A'	1.00	DAY	B0-001	3,800.00		
	LABOUR U/SK	2.00	DAY	B0-004	5,600.00		
	C PRPARING DOVETAILED M.S. RODS						
	LABOUR SK'A'	1.00	DAY	B0-001	3,800.00		
	LABOUR U/SK	2.00	DAY	B0-004	5,600.00		
	D PRPARING M.S. LUGS						
	LABOUR SK'A'	1.50	DAY	B0-001	5,700.00		
	LABOUR U/SK	3.00	DAY	B0-004	8,400.00		
	E FOR PAINTING						
	LABOUR S/SK	1.00	DAY	B0-003	3,000.00		
	F FOR FIXING ANGLE IRON, ALLUMINIUM SHEET & RUBBER						
	LABOUR SK'A'	2.00	DAY	B0-001	7,600.00		
	LABOUR U/SK	4.00	DAY	B0-004	11,200.00		
	G FOR FILLING BITUMINOUS MATERIAL						
	LABOUR S/SK	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% FOR TOOLS				1,525.00		
	WELDING PLANT WITH GENERATOR	1.00	DAY	B0-105	15,812.80		
	ALLOW FOR WELDING ACCESSORIES				200.00		
	M.S.ANGLE 50X50X6 MM CONSIDERING 10% WASTAGE	10.78	METRE	B0-641	13,826.97		
	M.S. STUDS	2.17	KG	B0-411	625.12		
	M.S. RODS	2.17	KG	B0-411	625.12		
	M.S. PLATE 12MM THICK FOR M.S. LUGS	0.06	SQ.M	B0-642	1,998.09		
	75X12 MM RUBBER PAD	9.80	METRE	B0-638	26,408.31		
	ALLUMINIUM SHEET 24 SWG	1.72	SQ.M	B0-640	4,049.83		
	ADHESIVE (WATER RESISTANT)	0.50	KG	B0-643	654.38		
	ALLOW FOR BITUMINOUS FILLER	0.02	CU.M	MS1-019A	804.09		
	PAINT ANTICORROSIVE	1.00	LITRE	B0-542	1,366.55		
	TOTAL COST PER 9.8 M.				128,896.25		
	TOTAL COST PER 1 M.			ST1-131	13,152.68		
				SAY	13,152.70	6,240.49	6,912.21

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-132	TRANSPORT OF 355 X355X9144 MM R.C.C. PILES TO THE SITE EXCLUDING UNLOADING AND STACKING						
	DATA FOR	8.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	164.10		
	PRIME MOVER FOR 30 TON TRILER(TWO WAY)	2.00	KM	B0-131B	912.32		
	TOTAL COST PER 8 NOS. FOR 1.0 KM TRANSPORT				1,076.42		
	TOTAL COST PER 1 NO. PER 1 KM			ST1-132	134.55		
					=====		
				SAY	134.55	0.00	134.55
ST1-133	STACKING OF 355 X355X9144 MM R.C.C. PILES						
	DATA FOR	8.00	NOS				
	LABOUR U/SK	4.00	DAY	B0-004	11,200.00		
	ALLOW 2.5% FOR TOOLS				280.00		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	45,174.20		
	TOTAL COST PER 8 NOS.				56,654.20		
	TOTAL COST OF STACKING PER 1 NO.			ST1-133	7,081.78		
					=====		
				SAY	7,081.80	1,400.00	5,681.80
ST1-134	TRANSPORT OF 305 X200X6100 MM R.C.SHEET PILES TO THE SITE EXCLUDING UNLOADING AND STACKING						
	DATA FOR	9.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LORRY 10 TON (TWO WAY)	2.00	KM	B0-148	419.88		
	TOTAL COST PER 54.9 LM. FOR 2 KM TRANSPORT				419.88		
	TOTAL COST PER 1 NO. PER 1 KM			ST1-134	46.65		
					=====		
				SAY	46.65	0.00	46.65
ST1-135	STACKING OF 305 X200X6100 MM R.C.SHEET PILES						
	DATA FOR	9.00	NOS				
	LABOUR U/SK	3.00	DAY	B0-004	8,400.00		
	ALLOW 2.5% FOR TOOLS				210.00		
	MOBILE CRANE 25 TON	2.00	HOUR	B0-146	22,587.10		
	TOTAL COST PER 73.2 LM.				31,197.10		
	TOTAL COST OF STACKING PER 1 NO.			ST1-135	3,466.34		
					=====		
				SAY	3,466.35	933.33	2,533.02

HSR - 2024
Engineering Division
Ministry of Transport and Highways

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE -----	DESCRIPTION OF ITEM -----	QUANTITY -----	UNIT ----	PRICE CODE -----	AMOUNT (Rs.) -----	LABOUR INPUT -----	OTHER INPUTS -----
ST1-136	DRIVING 305 X200X6100 MM R.C.SHEET PILES USING HAND MONKEY						
	DATA FOR	106.00	LM				
	INTERNAL TRANSPORTING PILES						
	LABOUR U/SK	40.00	DAY	B0-004	112,000.00		
	HANDLING PILES						
	LABOUR SK'A'	20.00	DAY	B0-001	76,000.00		
	LABOUR U/SK	100.00	DAY	B0-004	280,000.00		
	DRIVING PILES USING HAND MONKEY						
	LABOUR U/SK	320.00	DAY	B0-004	896,000.00		
	ALLOW 2.5% FOR TOOLS				34,100.00		
	TOTAL COST PER 106 LM.				1,398,100.00		
	TOTAL COST PER 1 M.			ST1-136	13,189.62		
				SAY	13,189.60	12,867.92	321.68
ST1-137	SATURATED SAND FILLING						
	DATA FOR	8.50	M ³				
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% FOR TOOLS				70.00		
	RIVER SAND FOR CONCRETE AND MASONRY WORK	8.93	CU.M	B0-332	76,698.06		
	TOTAL COST				79,568.06		
	RATE PER 1 M ³			ST1-137	9,360.95		
				SAY	9,360.95	329.41	9,031.54
ST1-138	STACKING OF P.S.C.BEAM 16.15M (53' 0") LONG						
	DATA FOR	4.00	NOS				
	UNLOADING AND STACKING						
	LABOUR U/SK	4.00	DAY	B0-004	11,200.00		
	ALLOW 2.5% FOR TOOLS				280.00		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	45,174.20		
	TOTAL COST				56,654.20		
	RATE PER 1 NO.			ST1-138	14,163.55		
				SAY	14,163.55	2,800.00	11,363.55
ST1-139	TRANSPORT OF P.S.C.BEAM 16.15M (53' 0") LONG TO THE SITE						
	DATA FOR	4.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	164.10		
	PRIME MOVER FOR 30 TON TRILER (TWO WAY)	2.00	KM	B0-131B	912.32		
	TOTAL COST PER 73.2 LM.FOR 1.0 KM TRANSPORT				1,076.42		
	TOTAL COST PER 1 No. PER 1 KM			ST1-139	269.11		
				SAY	269.10	0.00	269.10

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-140	STACKING OF P.S.C.BEAM 13.41M (44' 0") OR 12.19M (40' 0") LONG						
	DATA FOR	6.00	NOS				
	UNLOADING AND STACKING						
	LABOUR U/SK	6.00	DAY	B0-004	16,800.00		
	ALLOW 2.5% FOR TOOLS				420.00		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	45,174.20		
	TOTAL COST				62,394.20		
	RATE PER 1 NO.			ST1-140	10,399.03		
				SAY	10,399.05	2,800.00	7,599.05
ST1-141	TRANSPORT OF P.S.C.BEAM 13.41M (44' 0") OR 12.19M (40' 0") LONG TO THE SITE						
	DATA FOR	6.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	164.10		
	PRIME MOVER FOR 30 TON TRILER (TWO WAY)	2.00	KM	B0-131B	912.32		
	TOTAL COST PER 73.2 LM.FOR 1.0 KM TRANSPORT				1,076.42		
	TOTAL COST PER 1 No. PER 1 KM			ST1-141	179.40		
				SAY	179.40	0.00	179.40
ST1-142	STACKING OF P.S.C.BEAM 10.63M (35' 0") , 9.75M (32' 0") OR 8.23M (27' 0") LONG						
	DATA FOR	8.00	NOS				
	UNLOADING AND STACKING						
	LABOUR U/SK	6.00	DAY	B0-004	16,800.00		
	ALLOW 2.5% FOR TOOLS				420.00		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	45,174.20		
	TOTAL COST				62,394.20		
	RATE PER 1 NO.			ST1-142	7,799.28		
				SAY	7,799.30	2,100.00	5,699.30
ST1-143	TRANSPORT OF P.S.C.BEAM 10.63M (35' 0") , 9.75M (32' 0") OR 8.23M (27' 0") LONG TO THE SITE						
	DATA FOR	8.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	164.10		
	PRIME MOVER FOR 30 TON TRILER (TWO WAY)	2.00	KM	B0-131B	912.32		
	TOTAL COST PER 73.2 LM.FOR 1.0 KM TRANSPORT				1,076.42		
	TOTAL COST PER 1 No. PER 1 KM			ST1-143	134.55		
				SAY	134.55	0.00	134.55

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-144	STACKING OF P.S.C.BEAM 7.01M (23' 0") LONG						
	<u>DATA FOR</u>	12.00	NOS				
	UNLOADING AND STACKING						
	LABOUR U/SK	6.00	DAY	B0-004	16,800.00		
	ALLOW 2.5% FOR TOOLS				420.00		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	45,174.20		
	TOTAL COST				62,394.20		
	RATE PER 1 NO.			ST1-144	5,199.52		
				SAY	5,199.50	1,400.00	3,799.50
ST1-145	TRANSPORT OF P.S.C.BEAM 7.01M (23' 0") LONG TO THE SITE						
	<u>DATA FOR</u>	12.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	164.10		
	PRIME MOVER FOR 30 TON TRILER (TWO WAY)	2.00	KM	B0-131B	912.32		
	TOTAL COST PER 73.2 LM.FOR 1.0 KM TRANSPORT				1,076.42		
	TOTAL COST PER 1 No. PER 1 KM			ST1-145	89.70		
				SAY	89.70	0.00	89.70
ST1-146	50mm THICK COVER SLABS FOR SERVICE DUCTS IN GRADE 25(20) CONCRETE INCLUSIVE OF LIGHT REINFORCEMENT						
	<u>DATA FOR</u>	20.25	M ²				
	FOR UNLOADING AND STACKING						
	LABOUR U/SK	0.50	DAY	B0-004	1,400.00		
	FOR LAYING						
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% FOR TOOLS				105.00		
	PAVING SLABS 450 X450X50 MM G.20 CONCRETE	100.00	NO	B0-449	97,500.00		
	TOTAL COST				101,805.00		
	RATE PER M ²			ST1-146	5,027.41		
				SAY	5,027.40	207.41	4,819.99
ST1-147	110mm Ø TYPE 400 P.V.C. SERVICE DUCT SUPPLYING AND FIXING IN DECK						
	<u>DATA FOR</u>	20.00	L.M				
	LABOUR SK'A'	1.00	DAY	B0-001	3,800.00		
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% FOR TOOLS				165.00		
	P.V.C PIPE 110mm TYPE 400 WITH TRANSPORT	20.00	M	B0-636B	32,136.00		
	TOTAL COST				38,901.00		
	RATE PER 1 L.M.			ST1-147	1,945.05		
				SAY	1,945.05	330.00	1,615.05

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-148	110mm Ø TYPE 250 P.V.C. RAIN WATER OUTLETS SUPPLIED AND FIXED THROUGH DECK						
	DATA FOR	10.00	L.M				
	FOR HANDLING AND CUTTING						
	LABOUR U/SK	0.50	DAY	B0-004	1,400.00		
	FOR SHAPING AND FIXING						
	LABOUR SK'A'	0.50	DAY	B0-001	1,900.00		
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% FOR TOOLS				152.50		
	P.V.C PIPE 110mm TYPE 250 WITH TRANSPORT	10.50	M	B0-636	11,111.10		
	TOTAL COST				17,363.60		
	RATE PER 1 L.M.			ST1-148	1,736.36		
				SAY	1,736.35	610.00	1,126.35
ST1-149	50mm Ø TYPE 400 P.V.C. DRAIN PIPES SUPPLIED AND FIXED THROUGH DECK						
	DATA FOR	15.00	L.M				
	FOR HANDLING AND CUTTING						
	LABOUR U/SK	0.50	DAY	B0-004	1,400.00		
	FOR SHAPING AND FIXING						
	LABOUR SK'A'	0.50	DAY	B0-001	1,900.00		
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% FOR TOOLS				152.50		
	P.V.C PIPE 50mm TYPE 400 WITH TRANSPORT	16.00	M	B0-637	5,256.80		
	TOTAL COST				11,509.30		
	RATE PER 1 L.M.			ST1-149	767.29		
				SAY	767.30	406.67	360.63
ST1-150	25mm Ø TYPE 1000 P.V.C. DRAIN PIPES SUPPLIED AND FIXED THROUGH DECK						
	DATA FOR	20.00	L.M				
	FOR HANDLING AND CUTTING						
	LABOUR U/SK	0.50	DAY	B0-004	1,400.00		
	FOR SHAPING AND FIXING						
	LABOUR SK'A'	0.50	DAY	B0-001	1,900.00		
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% FOR TOOLS				152.50		
	P.V.C PIPE 25mm TYPE 1000 WITH TRANSPORT	21.50	M	B0-637A	6,073.75		
	TOTAL COST				12,326.25		
	RATE PER 1 L.M.			ST1-150	616.31		
				SAY	616.30	305.00	311.30
ST1-151	SUPPLYING & LAYING 110 MM DIAMETER PVC PIPE (GAUGE 600) UNDER THE ELECTRICAL LINE INSTALATION ON CENTER MEDIAN						
	DATA FOR 30 M LENGTH						
	PVC PIPE110 MM	30.00	LM	B0-636C	56,593.50		
	SAND	2.41	CU.M	B0-331	20,699.03		
	ALLOW FOR SOLVENT CEMENT				300.00		
	LABOUR (SK/B)	0.50	DAYS	B0-002	1,750.00		
	LABOUR (U/SK) (02 NO X 4 HRS)	1.00	DAY	B0-004	2,800.00		
	BACK-HOE LOADER	0.13	DAYS	B0-115	4,314.33		
	TIPPER (1 CUBE)	0.50	DAYS	B0-118	24.71		
	ASPHALT CUTTER	4.00	HOURS	B0-162	15,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				4,550.00		
	COST FOR 30 M LENGTH				106,031.56		
	DATA FOR 1 M LENGTH			ST1-151	3,534.39		
				SAY	3,534.40	151.67	3,382.73

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS		
	SECTION XI =====								
	KILOMETER POSTS AND GUARD STONES -----								
RF1-001	WHITE WASHING, TWO COATS TO GUIDE/GUARD STONES: DATA FOR 100 NOS. ----- LABOUR (S/SK) LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS LIME BOILED GLUE	1.75 1.75 31.25 0.11	DAYS DAYS KG KG	B0-003 B0-004 B0-537 B0-534	5,250.00 4,900.00 253.75 1,089.06 69.19 ----- 11,562.00 ----- 11,562.00 RATE PER 1 NO. RF1-001 SAY	115.62 =====	115.60	101.50	14.10
RF1-002	WHITEWASHING TWO COATS K.M. STONES INC. NUMBERING & TAR SKIRTING: DATA FOR 20 NOS. ----- LABOUR (S/SK) WHITEWASHING LABOUR (U/SK) PAINTER (S/SK) NUMBERING LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS LIME BOILED GLUE PAINT COAL TAR	1.75 1.75 2.25 2.25 12.50 0.09 0.09 1.14	DAYS DAYS DAYS DAYS KG KG LTR LTR	B0-003 B0-004 B0-003 B0-004 B0-537 B0-534 B0-541 B0-531	5,250.00 4,900.00 6,750.00 6,300.00 580.00 435.63 53.00 132.96 175.02 ----- 24,576.62 ----- 24,576.62 RATE PER 1 NO. RF1-002 SAY	1,228.83 =====	1,228.85	1,160.00	68.85
RF1-003	PAINTING WHITE BACK GROUND ON PARAPETS ETC. & STENCILLING NOS.: DATA FOR 50 NOS. ----- PAINTER (S/SK) LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS PAINT	3.50 3.50 1.50	DAYS DAYS LTR	B0-003 B0-004 B0-541	10,500.00 9,800.00 507.50 2,193.60 ----- 23,001.10 ----- 23,001.10 RATE PER 1 NO. RF1-003 SAY	460.02 =====	460.00	406.00	54.00

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RF1-004	FIXING GUARD STONES IN ANY SOIL: DATA FOR 16 NOS. LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	2.00	DAYS	B0-004	5,600.00 140.00 5,740.00		
	COST FOR 16 NOS.				5,740.00		
	RATE PER 1 NO.			RF1-004	358.75		
				SAY	358.75	350.00	8.75
RF1-005	CASTING STD. K.M. STONES WITH R.C.C [1:2:4(19 MM) & CEMENT 282.5 KG/CU.M], INCLUDING CURING, FOR "A" AND "B" CLASS ROADS : DATA FOR 10 NOS. CONCRETE AS PER ST1-046 STEEL FAB. AS PER ST1-054 LABOUR (S/SK) ADDL.LAB. FOR PLACING MASON (SK'A) ASSEMBLING MOULD ETC. LABOUR (U/SK) ASSEMBLING MOULD ETC. LABOUR (U/SK) CURING ALLOW 2.5% ON LABOUR FOR TOOLS GUNNY BAGS MOULD OIL	1.27 41.66 1.00 2.50 2.50 9.00 10.00 1.50	CU.M KG DAY DAYS DAYS DAYS NO. LTR	ST1-046 ST1-054 B0-003 B0-001 B0-004 B0-004 B0-632 B0-602	34,882.56 20,318.99 3,000.00 9,500.00 7,000.00 25,200.00 1,117.50 1,015.00 238.53 102,272.59		
	COST FOR 10 NOS.				102,272.59		
	RATE PER 1 NO.			RF1-005	10,227.26		
				SAY	10,227.25	6,101.45	4,125.80
RF1-006	CASTING STD. K.M. STONES WITH R.C.C [1:2:4(19 MM) & CEMENT 282.5 KG/CU.M], INCLUDING CURING, FOR "C" AND "D" CLASS ROADS : DATA FOR 10 NOS. CONCRETE AS PER R1-636M STEEL FAB. AS PER R1-643M LABOUR (S/SK) ADDL.LAB. FOR PLACING MASON (SK'A) ASSEMBLING MOULD ETC. LABOUR (U/SK) ASSEMBLING MOULD ETC. LABOUR (U/SK) CURING ALLOW 2.5% ON LABOUR FOR TOOLS GUNNY BAGS MOULD OIL	0.62 37.59 0.50 1.50 1.50 7.00 10.00 1.50	CU.M KG DAY DAYS DAYS DAYS NO. LTR	ST1-046 ST1-054 B0-003 B0-001 B0-004 B0-004 B0-632 B0-602	17,053.70 18,336.65 1,500.00 5,700.00 4,200.00 19,600.00 775.00 1,015.00 238.53 68,418.88		
	COST FOR 10 NOS.				68,418.88		
	RATE PER 1 NO.			RF1-006	6,841.89		
				SAY	6,841.90	4,131.90	2,710.00

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE ----	DESCRIPTION OF ITEM -----	QUANTITY -----	UNIT ---	PRICE CODE -----	AMOUNT (Rs.) -----	LABOUR INPUT -----	OTHER INPUTS -----
RF1-007	FIXING STANDARD TYPE K.M. STONES IN ANY SOIL: DATA FOR 8 NOS. ----- EXCAVATION AS PER E1-014 LABOUR (S/SK) LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	1.42 1.00 5.00	CU.M DAY DAYS	E1-014 B0-003 B0-004	3,876.68 3,000.00 14,000.00 425.00 ----- 21,301.68 ----- 21,301.68		
	COST FOR 8 NOS. RATE PER 1 NO.			RF1-007 SAY	2,662.71 =====		
					2,662.70	2,591.67	71.03
RF1--008	FIXING NEW OR REFIXING TYPE GUARD STONES IN CEMENT CONCRETE [1:3:6(37.5 MM) AND CEMENT 219 KG/CU.M] WITH MIN. COVER 75MM X 300MM DEPTH: LABOUR (U/SK) (1 HOUR) ALLOW 2.55 ON LABOUR FOR TOOLS CONCRETE AS PER ST1-040	0.13 0.04	DAY CU.M	B0-004 ST1-040	350.00 8.75 1,020.30 ----- 1,379.05 ----- 1,379.05		
	RATE PER NO.			RF1-008 SAY	1,379.05 =====		
					1,379.05	688.45	690.60
RF1-009	CASTING STANDARD TYPE GUARD STONES IN CONCRETE [1:2:4(19 MM) & CEMENT 282.5 KG/CU.M] : DATA FOR 30 NOS. ----- CONCRETE AS PER ST1-046 CARPENTER (SK/A) LABOUR (U/SK) MASON (SK/A) LABOUR (U/SK) LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS TIMBER 25 MM PLANKS (CLASS 2) GUNNY BAGS MOULD OIL	1.70 2.00 2.00 1.50 1.50 9.00 51.82 15.00 1.50	CU.M DAYS DAYS DAYS DAYS DAYS CU.DECI M NO. LTR	ST1-046 B0-001 B0-004 B0-001 B0-004 B0-004 B0-392 B0-632 B0-602	46,510.08 7,600.00 5,600.00 5,700.00 4,200.00 25,200.00 1,207.50 5,943.77 1,522.50 238.53 ----- 103,722.38 ----- 103,722.38		
	COST FOR 30 NOS. RATE PER 1 NO.			RF1-009 SAY	3,457.41 =====		
					3,457.40	2,083.28	1,374.12

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RF1-009A	CASTING STANDARD TYPE GUARD STONES IN CONCRETE G25(19) AS PER DRAWING NO. T/B/100-REV 1, FOR BRIDGES & CULVERTS :						
	DATA FOR 30 NOS.						
	1. TIMBER FORMWORK FOR MOULD - NUMBER OF USES	20.00					
	CARPENTER (SK'A')	2.00	DAYS	B0-001	7,600.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				330.00		
	PLY WOOD (WBP) 15 MM THICK	29.68	SQ.M	B0-396	57,056.83		
	50MM X 50 MM SAWN TIMBER	867.51	CU.DECI M	B0-392	99,503.40		
	WIRE NAILS	1.50	KG	B0-432	575.70		
	75 MM. X 8 MM DIA. NUTS AND BOLTS	720.00	NOS.	B0-647	24,372.00		
	COST FOR 30 MOULDS FOR 20 USES				195,037.93		
	COST FOR 30 MOULDS FOR 01 USE				9,751.90		
	2. ROUND BARS FOR MAKING 20 MM DIA HOLES AS PER DRWG. FOR		200 USES				
	LABOUR (U/SK) FOR CUTTING	3.00	DAYS	B0-004	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				210.00		
	M.S. ROUNDS 20 MM DIA.	58.90	KG	B0-411	16,967.62		
	COST FOR 30 MOULDS FOR 20 USES				25,577.62		
	COST FOR 30 MOULDS FOR 01 USE				127.89		
	3. CLEANING MOULD, FIXING CONCRETING AND CURING FOR 7 DAYS						
	MASON SK'A'	1.50	DAYS	B0-001	5,700.00		
	LABOUR U/SK	10.50	DAYS	B0-004	29,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				877.50		
	CONCRETE GRADE 25(20)	1.72	CU.M	ST1-048	47,708.77		
	M.S. ROUNDS FOR REINFORCEMENT	101.42	KG	ST1-054	49,467.61		
	MOULD OIL	1.50	LTR	B0-602	238.50		
	GUNNEY BAGS (JUTE)	15.00	NO.	B0-632	1,522.50		
	ALLOW FOR WATER	210.00	LTR	B0-788	5,775.00		
	ALLOW FOR CASTING BED(10% OF BASE AREA)	0.09	SQ.M.	ST1-057	163.52		
	COST FOR 30 NO. GUARD STONES				140,853.40		
	TOTAL COST PER 30 GUARD STONES (1+2+3)				150,733.18		
	COST PER GUARD STONE FOR BRIDGES & CULVERTS			RF1-009A	5,024.44		
				SAY	5,024.45	1,994.55	3,029.90
RF1-010	ROUTE NUMBERING WITH REFLECTIVE PAINT ON 2 SIDES:(REFLECTIVE PAINT TO BE PAID SEPARATELY)						
	DATA FOR 5 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.25	DAYS	B0-001	4,750.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				118.75		
	ALLOW FOR OTHER PAINT	1.00	ITEM	B0-741	220.00		
	COST FOR 5 NOS.				5,088.75		
	COST FOR 5 NOS.				5,088.75		
	RATE PER 1 NO.			RF1-010	1,017.75		
				SAY	1,017.75	950.00	67.75

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RF1-011	CASTING STANDARD BOUNDARY MARKERS IN REINFORCED CONCRETE [1:2:4(19 MM)] WITH ADMIXTURES, INCLUDING 14 DAYS CURING AND LOADING TO VEHICLES AT YARD (AGGREGATE TRANSPORT TO PAY SEPARATELY) :						
	DATA FOR 14 NO.						
(A)	STEEL FORM WORK (FOR 1000 USES) COST FOR 14 NOS. ADD FOR REPAIRS 25%	2,600.00 36.40 9.10					
	TOTAL COST ON FORM WORK				45.50		
(B)	MATERIALS: CEMENT SAND AGGREGATE 19MM LESS PILING WATER MILD STEEL 6 MM & 10MM RE/BARS BINDING WIRE MOULD OIL ADMIX.(POZZOLITH: 0.3 LTR/BAG CEMENT)	3.25 0.35 0.55 0.55 41.50 0.40 3.00 0.98	BAGS CU.M CU.M ITEM KG KG LTRS LTRS	B0-401 B0-332 B0-308A B0-781 B0-411 B0-431 B0-602 B0-645	5,993.00 3,006.08 1,891.23 30.42 11,955.11 151.88 477.00 483.55		
	TOTAL COST ON MATERIALS				23,988.27		
(C)	PLANT: CONCRETE MIXER (400 LITRES) PORKER VIBRATOR	0.13 0.50	DAY DAY	B0-102 B0-106	1,072.95 1,111.55		
	TOTAL COST ON PLANT				2,184.50		
(D)	LABOUR: CONCRETE MIXING : S/SK 8 NOS. GANG CONCRETING : MASON SK 'A' HELPER U/SK STEEL WORK : BAR BENDER SK'A' HELPER U/SK HANDLING OF MARKERS AT YARD FOR STACKING, & LOADING ETC. : U/SK 4 NOS. GANG ADD 2.5% OF LABOUR FOR TOOLS	0.13 1.00 1.00 1.00 1.00 0.50	DAY DAY DAY DAY DAY DAY	B0-003 B0-001 B0-004 B0-001 B0-004 B0-004	3,000.00 3,800.00 2,800.00 3,800.00 2,800.00 5,600.00		
	TOTAL COST ON LABOUR				22,345.00		
(E)	CURING: CURING AREA FOR 14 NOS. MARKERS COST OF CURING TANK & WATER ASSUME COST OF CURING FOR 14 DAYS	12.19 5.00 8.53	SQ.M % OF CURING AREA SQ.M-D)	ST1-053	429.49		
	TOTAL BASIC COST FOR 14 MARKERS (A+B+C+D+E)				48,992.75		
	COST FOR 14 NO. BOUNDARY MARKERS				48,992.75		
	COST FOR 1 NO. MARKER			RF1-011	3,499.48		
				SAY	3,499.50	1,565.85	1,933.65
*NOTE:	19 MM AGGREGATE PER BOUNDARY MARKER :	0.04	CU.M				

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION XII							
=====							
NOTICE BOARDS & SIGN BOARDS							
=====							
[SSCM 810.2 AND 1501.3]							
(ALL PAINTS SHOULD CONFORM TO THE REQUIREMENTS OF S.L.S. AS GIVEN IN SSCM 1707)							
RS1-001	NOTICE & TRAFFIC SIGN BOARDS ETC. FIXED IN CONCRETE [1:3:6(37.5 MM) AND CEMENT 219 KG/CU.M], (EXCLUDING TRANSPORT OF AGGREGATE):						
	DATA FOR 5 NOS.						
	EXCAVATION AS PER E1-014	0.28	CU.M	E1-014	775.80		
	CONCRETE AS PER ST1-040	0.28	CU.M	ST1-040	7,133.76		
	MASON (SK/A)	0.50	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				117.50		
					12,727.06		

	RATE PER 5 NOS.				12,727.06		
	RATE PER 1 NO.			RS1-001	2,545.41		
					=====		
				SAY	2,545.40	1,562.71	982.69
RS1-002	CLEANING & WHITEWASHING 2 COAT TOWN NAME BOARDS (INC. TAR SKIRT)						
	DATA FOR 20 NOS.						
	PAINTER (S/SK)	1.75	DAYS	B0-003	5,250.00		
	LABOUR (U/SK)	1.75	DAYS	B0-004	4,900.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				253.75		
	LIME BOILED	62.50	KG	B0-537	2,178.13		
	GLUE	0.23	KG	B0-534	139.48		
	COAL TAR	0.27	LTR	B0-531	42.01		
					12,763.36		

	RATE PER 20 NOS.				12,763.36		
	RATE PER 1 NO.			RS1-002	638.17		
					=====		
				SAY	638.15	507.50	130.65
RS1-003	CLEANING, PAINTING ONE COAT & RELETTERING ETC. TRFFIC SIGN BOARDS INC. PAINT POST IN B/W						
	DATA FOR 5 NOS.						
	SIGNBOARD PAINTER (SK/A)	2.50	DAYS	B0-001	9,500.00		
	LABOUR (U/SK)	2.50	DAYS	B0-004	7,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				412.50		
	ENAMEL PAINT	0.77	LTR	B0-541	1,130.20		
					18,042.70		

	RATE PER 5 NOS.				18,042.70		
	RATE PER 1 NO.			RS1-003	3,608.54		
					=====		
				SAY	3,608.55	3,300.00	308.55

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RS1-004	CLEANING AND PAINTING 1 COAT ON NOTICE BOARD						
	DATA FOR 9.29 SQ.M						
	Painter (S/SK)	1.25	DAYS	B0-003	3,750.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				93.75		
	ENAMEL PAINT	0.77	LTR	B0-541	1,130.20		
					4,973.95		
	RATE PER 9.29 SQ.M				4,973.95		
	RATE PER 1 NO.			RS1-004	535.41		
				SAY	535.40	403.66	131.74
RS1-005	LETTERING & NUMBERING BELOW 50 MM						
	DATA FOR 48 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.00	DAY	B0-001	3,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.00		
	PAINT	1.00	ITEM	B0-741	220.00		
					4,115.00		
	RATE PER 48 NOS				4,115.00		
	RATE PER 1 NO.			RS1-005	85.73		
				SAY	85.75	79.17	6.58
RS1-006	LETTERING & NUMBERING 50 MM - 75 MM						
	DATA FOR 40 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.00	DAY	B0-001	3,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.00		
	PAINT	1.00	ITEM	B0-741	220.00		
					4,115.00		
	RATE PER 40 NOS				4,115.00		
	RATE PER 1 NO.			RS1-006	102.88		
				SAY	102.90	95.00	7.90
RS1-007	LETTERING & NUMBERING 75 MM - 150 MM						
	DATA FOR 32 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.00	DAY	B0-001	3,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.00		
	PAINT	1.00	ITEM	B0-741	220.00		
					4,115.00		
	RATE PER 32 NOS				4,115.00		
	RATE PER 1 NO.			RS1-007	128.59		
				SAY	128.60	118.75	9.85

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RS1-008	LETTERING & NUMBERING 150 MM - 225 MM						
	DATA FOR 24 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.00	DAY	B0-001	3,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.00		
	PAINT	1.00	ITEM	B0-741	220.00		
					4,115.00		
	RATE PER 24 NOS				4,115.00		
	RATE PER 1 NO.			RS1-008	171.46		
				SAY	171.45	158.33	13.12
RS1-009	PAINTING 2 COATS CONTINUOUS CENTRE LINE, 100 MM WIDE WITH ENAMEL PAINT :						
	DATA FOR 90 L.METRES (9.0 SQ.M)						
	PAINTER (SK/A)	2.25	DAYS	B0-001	8,550.00		
	LABOUR (U/SK)	2.25	DAYS	B0-004	6,300.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				371.25		
	PAINT(ENAMEL)	1.50	LTR	B0-541	2,193.91		
	ALLOW FOR BARRICADING	0.90	ITEM	B0-705	2,475.00		
					19,890.16		
	RATE PER 90 M				19,890.16		
	RATE PER 1 METRE			RS1-009	221.00		
				SAY	221.00	165.00	56.00
RS1-010	PAINTING 1 COAT CONTINUES CENTRE LINE, 100 MM WIDE WITH ROAD MARKING PAINT(WHITE) :						
	DATA FOR 90 L.METRES (9.0 SQ.M)						
	PAINTER (SK/A)	2.38	DAYS	B0-001	9,025.00		
	LABOUR (U/SK)	2.38	DAYS	B0-004	6,650.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				391.88		
	ROAD MARKING PAINT @ RATE OF 6.5 SQ. M PER LITRE	1.38	LTR	B0-548	2,621.82		
	ALLOW FOR BARRICADING	0.90	ITEM	B0-705	2,475.00		
					21,163.70		
	RATE PER 90 M				21,163.70		
	RATE PER 1 METRE			RS1-010	235.15		
				SAY	235.15	174.17	60.98

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RS1-011	PAINING 2 COATS BROKEN CENTRE LINE, 100 MM WIDE WITH ENAMEL PAINT :						
	DATA FOR 90 L.METRES (4.5 SQ.M)						
	Painter (SK/A)	2.25	DAYS	B0-001	8,550.00		
	LABOUR (U/SK)	2.25	DAYS	B0-004	6,300.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				371.25		
	PAINT/(ENAMEL)	0.77	LTR	B0-541	1,130.20		
	ALLOW FOR BARRICADING	0.90	ITEM	B0-705	2,475.00		
					18,826.45		
	RATE PER 90 M				18,826.45		
	RATE PER 1 METRE			RS1-011	209.18		
				SAY	209.20	165.00	44.20
RS1-012	PAINING 1 COAT BROKEN CENTRE LINE, WITHOUT REFLECTIVE STUDS), 100 MM WIDE, AT 3 METRE INTERVALS WITH ROAD MARKING PAINT(WHITE) :						
	DATA FOR 90 L.METRES (4.5 SQ.M)						
	Painter (SK/A)	2.38	DAYS	B0-001	9,025.00		
	LABOUR (U/SK)	2.38	DAYS	B0-004	6,650.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				391.88		
	ROAD MARKING PAINT @ RATE OF 6.5 SQ.M PER LITRE	0.69	LTR	B0-548	1,310.91		
	ALLOW FOR BARRICADING	0.90	ITEM	B0-705	2,475.00		
					19,852.79		
	RATE PER 90 M				19,852.79		
	RATE PER 1 METRE			RS1-012	220.59		
				SAY	220.60	174.17	46.43
RS1-013	BARRICADING WITH EMPTY (HOT TAR) BARRELS INCLUDING WHITE WASHING, TRANSPORTING AND COST OF BARRELS :						
	DATA FOR 16 NOS.BARRELS (FOR 35 USES)						
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				105.00		
	ALLOW FOR WHITE WASHING BARRELS	16.00	NOS.	B0-791	4,000.00		
	ALLOW COST OF BARRELS (35 USES)	0.46	NOS.	B0-635	41.39		
	TRANSPORT OF BARRELS - AS PER T1-010	16.00	NOS	T1-010	1,076.80		
					9,423.19		
	RATE PER 16 NOS.				9,423.19		
	RATE PER 1 NO.			RS1-013	588.95		
				SAY	588.95	269.68	319.28

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RS1-014	REVTMENT TO BANKS ETC. WITH EMPTY BARRELS IN HORIZONTAL TIERS WITH VERTICAL BATTER(1:8), INCLUDING TRANSPORT OF BARRELS :						
	DATA FOR 16 NOS.						
	MASON (SK/A)	0.50	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				327.50		
	EMPTY TAR BARRELS (140 LTRS.)	16.00	NOS.	B0-635	1,448.80		
	TRANSPORT OF BARRELS AS PER T1-010	16.00	NOS.	T1-010	1,076.80		
					15,953.10		
	RATE PER 16 NOS.				15,953.10		
	RATE PER 1 NO.			RS1-014	997.07		
				SAY	997.05	825.93	171.13
RS1-015	ROAD MARKING CONTINUOUS CENTRE LINE 100 MM WIDTH, USING THERMOPLASTIC PAINT(WHITE), INCLUSIVE BARRICADING. (PAINT MATERIAL AND REFLECTIVE GLASS BEADS TO PAY SEPARATELY)						
	DATA FOR 1.0 KILOMETRES						
	LABOUR SK'A'	3.00	NO.	B0-001	11,400.00		
	LABOUR U/SK	4.00	NO.	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				565.00		
	ROAD MARKER (GAS HEATED)	8.00	HOURS	B0-139	13,027.68		
	ALLOWE FOR BARRICADING	0.90	DAY	B0-705	2,475.00		
	COST PER 1 KM				38,667.68		
	TOTAL COST PER 100 SQ.M(1 KM)				38,667.68		
	RATE PER 1 SQ.M			RS1-015	386.68		
				SAY	386.70	226.00	160.70
	NOTE * 1 KG OF THERMOPLASTIC PAINT COVERS 0.14 SQ.M AREA AT 3.0 MM THICKNESS 25 KG OF GLASS BEADS IS SUFFICIENT FOR 100 SQ.M OF CENTER LINE.						
RS1-016	ROAD MARKING, STANDARD PEDESTRIAN CROSSING, USING THERMOPLASTIC PAINT (YELLOW) (PAINT MATERIAL AND REFLECTIVE GLASS BEADS TO PAY SEPARATELY)						
	DATA FOR AVERAGE 15 METRE WIDE ROAD (34.0 SQ.M)						
	LABOUR SK'A'	0.67	NO.	B0-001	2,546.00		
	LABOUR U/SK	1.00	NO.	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				133.65		
	ROAD MARKER (GAS HEATED)	2.64	HOURS	B0-139	4,299.13		
	ALLOWE FOR BARRICADING	0.90	DAY	B0-705	2,475.00		
	COST PER 15 M				12,253.78		
	TOTAL COST PER 34.0SQ.M (15.M CARRIAGEWAY WIDTH)				12,253.78		
	RATE PER 1 SQ.M			RS1-016	360.41		
				SAY	360.40	356.40	4.00
	NOTE * 1 KG OF THERMOPLASTIC PAINT COVERS 0.14 SQ.M AREA AT 3.0 MM THICKNESS 25 KG OF GLASS BEADS IS SUFFICIENT FOR 100 SQ.M AREA.						

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
	SECTION XIII =====						
	MISCELLANEOUS =====						
MS1-001	PREPARING, STOCK PILING PREMIX USING PEN. GRADE 80/100 BITUMEN (EXCL. TRANSPORT OF AGGREGATE) (SITE MADE):						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - HEATING	1.00	DAY	B0-003	3,000.00		
	LABOUR (S/SK) - MIXING	6.00	DAYS	B0-003	18,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				525.00		
	BITUMEN(80/100)	191.00	LTR	B0-351	36,077.78		
	AGGREGATE 12.5 MM	1.81	CU.M	B0-309	6,715.55		
	SAND	1.22	CU.M	B0-331	10,451.72		
	KEROSINE	45.00	LTR	B0-601	11,295.00		
	TAR BOILER	0.50	DAY	B0-101	50.00		
	FIREWOOD	0.38	CU.M	B0-395	1,060.24		
	BASKET (2/3)	0.67	NO.	B0-631	200.00		
					87,375.28		
					87,375.28		
	COST PER 2.83 CU.M				87,375.28		
	RATE PER 1 CU.M			MS1-001	30,874.66		
				SAY	30,874.65	7,420.49	23,454.16
MS1-002	PATCHING SHALLOW POT HOLES, DEPTH LESS THAN 20 MM USING HOT BITUMEN (80/100)1.2 LTR/SQ.M AND 12.5 MM CHIPS SINGLE SIZE AT THE RATE OF 13.75 CU.DECI M/SQ.M INCLUDING HAND TAMPING (RATE INCLUDES COST OF BITUMEN AND MATERIALS) (EXCL. TRANSPORT OF AGGREGATE & BITUMEN):						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING SURFACE	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK) - APPLYING BITUMEN	2.00	DAYS	B0-003	6,000.00		
	LABOUR (S/SK) - SPREADING	1.00	DAY	B0-003	3,000.00		
	LABOUR (S/SK) - STAMPING	6.00	DAYS	B0-003	18,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				885.00		
	BITUMEN	334.80	LTR	B0-351	63,240.00		
	TAR BOILER	0.50	DAY	B0-101	50.00		
	AGGREGATE 12.5 MM	3.84	CU.M	B0-309	14,247.35		
	FIREWOOD	0.38	CU.M	B0-395	1,066.66		
	HIRE OF TRACTOR & TRAILOR	1.00	DAY	B0-117	10,684.90		
	BASKETS	1.00	NO.	B0-631	300.00		
					125,873.91		
					125,873.91		
	COST PER 279 SQ.M				125,873.91		
	RATE PER 1 SQ.M			MS1-002	451.16		
				SAY	451.15	126.88	324.27

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-003	PATCHING SHALLOW POT HOLES, DEPTH LESS THAN 20 MM MC 30 BITUMEN 1.2 LTR/SQ.M AND 12.5 MM CHIPS SINGLE SIZE AT THE RATE OF 13.75 CU.DECI M/SQ.M INCLUDING HAND TAMPING (RATE INCLUDES COST OF BITUMEN AND MATERIALS) (EXCL. TRANSPORT OF AGGREGATE AND BITUMEN):						
(A)	PREPARATION OF 10%-20% CUT BACK BITUMEN						
	DATA FOR 109 LTR						
	LABOUR U/SK	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				35.00		
	BITUMEN	87.20	LTR	B0-351	16,471.11		
	KEROSINE	21.80	LTR	B0-601	5,471.80		
	TAR BOILER	0.25	DAY	B0-101	25.00		
	FIREWOOD (1/8)	0.10	CU.M	B0-395	266.66		
					23,669.57		
	COST PER 109 LITRES				23,669.57		
	RATE PER 1 LTR			MS1-003A	217.15		
(B)	DATA FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING SURFACE	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK) - APPLYING BITUMEN	2.00	DAYS	B0-003	6,000.00		
	LABOUR (S/SK) - SPREADING	1.00	DAY	B0-003	3,000.00		
	LABOUR (S/SK) - FOR STAMPING	6.00	DAYS	B0-003	18,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				885.00		
	CUTBACK BITUMEN AS PER MS1-003A	334.80	LTR	MS1-003A	72,702.51		
	AGGREGATE 12.5 MM	3.84	CU.M	B0-309	14,247.35		
	HIRE OF TRACTOR & TRAILOR	1.00	DAY	B0-117	10,684.90		
	BASKETS	1.00	NO.	B0-631	300.00		
					134,219.76		
	COST PER 279 SQ.M				134,219.76		
	RATE PER 1 SQ.M			MS1-003	481.07		
				SAY	481.05	142.29	338.76

HSR - 2024
Engineering Division
Ministry of Transport and Highways

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
(C)	PREPARATION OF PREMIX WITH 10-20% CUT BACK BITUMEN(80/100). (EXCL. TRANSPORT OF AGGREGATE)						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK) HEATING AGGREGATE AND BITUMEN	1.00	DAY	B0-003	3,000.00		
	LABOUR (S/SK) - MIXING & PREPARING	6.00	DAYS	B0-003	18,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				525.00		
	10-20% CUT BACK BITUMEN	236.31	LTR	MS1-003A	51,314.12		
	AGGREGATE 12.5 MM	1.81	CU.M	B0-309	6,715.55		
	SAND	1.22	CU.M	B0-331	10,451.72		
	FIREWOOD	0.38	CU.M	B0-395	1,066.66		
	BASKET (2/3)	0.67	NO.	B0-631	200.00		
					91,273.04		
	COST PER 2.83 CU.M				91,273.04		
	RATE PER 1 CU.M			MS1-005C	32,251.96		
(D)	COST OF PREMIX FOR 1 SQ.M (AT THE RATE OF 67 CU.DECI M/SQ.M)						
	PREMIX AS PER MS1-005C	0.07	CU.M	MS1-005C	2,160.88		
				MS1-005D	2,160.88		
	TOTAL COST PER 1 SQ.M R1-905M(A)+(B)+(D)				3,236.95		
	RATE PER 1 SQ.M			MS1-005	3,236.95		
				SAY	3,236.95	1,509.83	1,727.12
MS1-006	PATCHING POTHoles USING PLANT MADE BITUMEN BOUND BASE (WITH 60/70 BINDER) INCLUDING SEALING THE PATCHING WITH EMULSION(CRS-1) PAINTING @ 7.3 LTR/M.TON, COVER WITH SAND (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY):						
	DATA PER 3 M.TONS						
	PREMIX (BASE COURSE)(EX PLANT)	3.00	M.TON	B0-362	45,615.00		
	EMULSION (CRS-1)	21.90	LTR	B0-353	3,263.10		
	SAND	0.37	CU.M	B0-331	3,159.82		
	LABOUR (S/SK)	3.00	DAY	B0-003	9,000.00		
	LABOUR (U/SK)	3.00	DAY	B0-004	8,400.00		
	TOOLS 2.5% OF LABOUR				435.00		
					69,872.92		
	RATE PER 3 M.TONS				69,872.92		
	RATE PER 1 M.TON			MS1-006	23,290.97		
				SAY	23,290.95	5,800.00	17,490.95

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-007	PATCHING POT HOLES OF MEDIUM DEPTH OF 20-75 MM USING GRADED AGGREGATE 19 -12.5 MM USING HOT BITUMEN(80/100) @ 2 LTR/SQ.M COVERED WITH BLOTTON MATERIAL AT THE RATE OF 1 CU.M/125 SQ.M, INCLUDING PREPARATION OF SURFACE TACK COAT WITH (CSS-1) AT .75 LTR/SQ.M, TRIMMING SIDES, LAYING AGGREGATE, TAMPING ETC. COMPLETE (RATE INCLUSIVE OF AGGREGATE & TACK COAT BUT EXCL. TRANSPORT OF AGGREGATE & BITUMEN):						
	DATA FOR 1 SQ.M						
(A)	PREP. OF POT HOLES AS PER MS1-005A	1.00	SQ.M	MS1-005A	324.38		
(B)	PATCHING POT HOLES INCLUDING TACK COAT TACK COAT AS PER MS1-005B	1.00	SQ.M	MS1-005B	751.69		
(C)	GRADED AGGREGATE 19 MM	0.07	CU.M	B0-308A	248.80		
(D)	BITUMEN 2 LTR/SQ.M COVERED WITH SAND AS PER S1-001	1.00	SQ.M	S1-001	528.15		
	TOTAL COST PER 1 SQ.M				1,853.01		
	RATE PER 1 SQ.M			MS1-007	1,853.01		
				SAY	1,853.00	1,017.14	835.86
MS1-008	PATCHING DEEP POT HOLES DEEPER THAN 75 MM WITH C/B PREMIX MATERIAL (SITE MADE) TO A DEPTH OF 37.5 MM (OVER THE ALREADY PREPARED SURFACE WITH AGGREGATE AND GRAVEL PAID SEPARATELY) USING 10-20% CUT BACK BITUMEN AT THE RATE OF 83.5 LTR/CU.M OF 19 MM AND DOWN GRADED AGGREGATE INCL. PREPARATION OF SURFACE, TACK COAT WITH EMULSION (CSS-1) .75 LTR/SQ.M., TRIMMING SIDES, LAYING PREMIX, TAMPING ETC. COMPLETE (RATE INCLUSIVE OF PREMIX MADE AT SITE AND TACK COAT) (EXCL. TRANSPORT OF AGGREGATE & BITUMEN):						
(A)	PATCHING POT HOLES INCLUDING TACK COAT AS PER MS1-005B	1.00	SQ.M	MS1-005B	751.69		
(B)	PREMIX (WITH 10-20% CUT BACK) AS PER MS1-005C	0.03	CU.M	MS1-005C	1,064.31		
	COST PER 1 SQ.M (A + B)				1,816.00		
	RATE PER 1 SQ.M			MS1-008	1,816.00		
				SAY	1,816.00	904.60	911.40

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-009	PATCHING POT HOLES MORE THAN 75 MM DEEP WITH WATER BOUND GRAVEL MATERIAL USING 50 MM OR 12.5 MM SINGLE SIZE AGGREGATE ALONG WITH USEABLE OLD AGGREGATE OBTAINED FROM PICKING AND PREPARATION OF SURFACE INCLUDING. LAYING, WATERING, SPREADING GRAVEL OF APPROVED QUALITY AND TAMPING AS DIRECTED. (AGGREGATE AND GRAVEL WOULD BE PAID SEPARATELY): DATE FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING SURFACE	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK) - SPREADING AGGREGATE	1.00	DAY	B0-003	3,000.00		
	LABOUR (S/SK) - FOR STAMPING	5.00	DAYS	B0-003	15,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				660.00		
	ALLOW FOR WATERING	2.83	CU.M	B0-785	108.96		
					27,168.96		
	COST PER 279 SQ.M				27,168.96		
	RATE PER 1 SQ.M			MS1-009	97.38		
				SAY	97.40	94.62	2.78
MS1-010	PATCHING RUTS AND DEPRESSIONS UPTO 75 MM DEPTH USING SITE MADE COLD MIX(CUT BACK) MATERIAL WITH THE SURFACE AND EDGE PREPARED AS PER SPECIFICATIONS AND APPLICATION OF TACK COAT WITH EMULSION (CSS-1) AT .75 LTR/SQ.M., (EXCL. TRANSPORT OF AGGREGATE):						
(A)	PREPARATION OF SURFACE FOR 279 SQ.M : LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	4.00	DAYS	B0-004	11,200.00		
					280.00		
					11,480.00		
	COST PER 279 SQ.M				11,480.00		
	RATE PER 1 SQ.M			MS1-010A	41.15		
(B)	TACK COAT AS PER MS1-005B	1.00	SQ.M	MS1-005B	751.69		
				MS1-010B	751.69		
(C)	COLD MIX AT THE RATE OF 67 CU.DECI M/SQ.M AS PER MS1-005C	0.07	CU.M	MS1-005C	2,160.88		
				MS1-010C	2,160.88		
	TOTAL COST PER 1 SQ.M - MS1-010(A)+(B)+(C)				2,953.71		
	RATE PER 1 SQ.M			MS1-010	2,953.71		
				SAY	2,953.70	1,233.50	1,720.20

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-011	PATCHING RUTS AND DEPRESSIONS UPTO 75 MM DEPTH USING PLANT MADE COLD MIX(60/70 CUT BACK) MATERIAL WITH THE SURFACE AND EDGE PREPARED AS PER SPECIFICATIONS AND APPLICATION OF TACK COAT WITH EMULSION (CSS-1) @ .75 LTR/SQ.M (COLD MIX SUPPLY AND TRANSPORT TO BE PAID SEPARATELY):						
(A)	PREPARATION OF SURFACE FOR 1 SQ.M AS PER MS1-010A	1.00	SQ.M	MS1-010A MS1-011A	41.15 41.15		
(B)	TACK COAT AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-011B	751.69 751.69		
(C)	PLANT MADE COLD MIX FOR 1 SQ.M	0.10	M.TON	B0-365 MS1-011C	1,952.68 1,952.68		
	SUB TOTAL						
	TOTAL COST PER 1 SQ.M - MS1-011(A)+(B)+(C)				2,745.51		
	RATE PER 1 SQ.M			MS1-011	2,745.51		
				SAY	2,745.50	664.47	2,081.03
MS1-012	PATCHING RUTS AND DEPRESSIONS DEEPER THAN 75 MM THE SURFACE AND EDGES PREPARED AS PER SPECIFICATION TACK COAT WITH EMULSION(CSS-1) @ .75 LTR/SQ.M, TRIMMING SIDES, 50 MM DOWN GAUGE AGGREGATED LAID AND COMPACTED AND THE TOP 40 MM LAID AND COMPACTED WITH SITE MADE COLD MIX(CUT BACK) MATERIAL (SUPPLY OF 50 MM DOWN GAUGE AND TRANSPORT OF ALL AGGREGATE WILL BE PAID SEPARATELY)						
(A)	PREPARATION OF SURFACE PER 1 SQ.M: AS PER MS1-010A	1.00	SQ.M	MS1-010A MS1-012A	41.15 41.15		
(B)	APPLICATION OF TACK COAT (AT .75 LTR/SQ.M) AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-012B	751.69 751.69		
(C)	LAYING & COMPACTING 50 MM DOWN GAUGE AGGREGATE: DATA FOR 2.83 CU.M ----- LABOUR (S/SK) - FILLING AGGREGATE LABOUR (S/SK) - FOR STAMPING ALLOW 2.5% ON LABOUR FOR TOOLS BASKET	2.00 4.00 0.50	DAYS DAYS NO	B0-003 B0-003 B0-631	6,000.00 12,000.00 150.00		
					18,600.00		
	COST PER 2.83 CU.M				18,600.00		
	RATE PER 1 CU.M			MS1-012C1	6,572.44		
	COST FOR .076 CU.M			MS1-012C	499.51		
(D)	PREMIX (WITH 10-20% CUT BACK) AS PER MS1-005C	0.03	CU.M	MS1-005C MS1-012D	1,064.31 1,064.31		
	TOTAL COST PER 1 SQ.M - MS1-012(A)+(B)+(C)+(D)				2,356.65		
	RATE PER SQ.M			MS1-012	2,356.65		
				SAY	2,356.65	1,428.13	928.52

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-013	PATCHING RUTS AND DEPRESSIONS UPTO 75 MM DEPTH THE SURFACE AND EDGES PREPARED AS PER SPECIFICATION AND APPLICATION OF TACK COAT WITH EMULSION(CSS-1) AT .75 LTR/SQ.M 50 MM DOWN GAUGE AGGREGATED LAID AND COMPACTED USING HOT BITUMEN(80/100) @ 2 LTR/SQ.M, COVERED WITH BLOTTON MATERIAL (SAND) AT THE RATE OF 1 CU.M/125 SQ.M (AGGREGATE WILL BE PAID SEPARATELY): DATA FOR 1 SQ.M						
(A)	PREPARATION OF SURFACE AS PER MS1-010A	1.00	SQ.M	MS1-010A MS1-013A	41.15 41.15		
(B)	APPLICATION OF TACK COAT (AT .75 LTR/SQ.M) AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-013B	751.69 751.69		
(C)	LAYING & COMPACTING 50 MM DOWN GAUGE AGGREGATE AS PER MS1-012C1	0.07	CU.M	MS1-012C1 MS1-013C	440.35 440.35		
(D)	BITUMEN 2 LTR/SQ.M COVERED WITH SAND AS PER S1-001	1.00	SQ.M	S1-001 MS1-013D	528.15 528.15		
	TOTAL COST PER 1 SQ.M - MS1-013(A)+(B)+(C)+(D)				1,761.33		
	RATE PER SQ.M			MS1-013	1,761.33		
				SAY	1,761.35	1,166.96	594.39
MS1-014	PATCHING RUTS AND DEPRESSIONS DEEPER THAN 75 MM DEPTH THE SURFACE AND EDGES PREPARED AS PER SPECIFICATION AND APPLICATION OF TACK COAT WITH EMULSION(CSS-1) AT .75 LTR/SQ.M 50 MM DOWN GAUGE AGGREGATED LAID AND COMPACTED USING HOT BITUMEN(80/100) @ 2 LTR/SQ.M, COVERED WITH BLOTTON MATERIAL (SAND) AT THE RATE OF 1 CU.M/125 SQ.M (AGGREGATE WILL BE PAID SEPARATELY): DATA FOR 1 SQ.M						
(A)	PREPARATION OF SURFACE AS PER MS1-010A	1.00	SQ.M	MS1-010A MS1-014A	41.15 41.15		
(B)	APPLICATION OF TACK COAT (AT .75 LTR/SQ.M) AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-014B	751.69 751.69		
(C)	LAYING & COMPACTING 50 MM DOWN GAUGE AGGREGATE AS PER MS1-012C1	0.10	CU.M	MS1-012C1 MS1-014C	657.24 657.24		
(D)	BITUMEN 2 LTR/SQ.M COVERED WITH SAND AS PER S1-001	1.00	SQ.M	S1-001 MS1-014D	528.15 528.15		
	TOTAL COST PER 1 SQ.M - MS1-014(A)+(B)+(C)+(D)				1,978.22		
	RATE PER 1 SQ.M			MS1-014	1,978.22		
				SAY	1,978.20	1,376.86	601.34

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-015	CORRECTING & STRENGTHENING THE EDGES OF ROAD WITH SITE MADE COLD MIX 40MM THICK PREPARED USING CUT BACK BITUMEN 10-20% AT THE RATE OF 83.5 LTR/CU.M OF 19 MM AND DOWN GAUGE AGGREGATE OVER A TACK COAT USING WITH EMULSION .75 LTR/SQ.M LAID OVER 50 MM AND DOWN GAUGE AGGREGATE LAID, ON POSITION WATERED AND COMPACTED INCLUDING EARTH WORK EXCAVATION TO A WIDTH OF 225 MM AND DEPTH OF 125 MM. (COST OF AGGREGATE AND TRANSPORT TO BE PAID SEPARATELY) :						
	DATA FOR 1 SQ.M						
(A)	EARTH WORK EXCAVATION TO A DEPTH OF .125 M AND WIDTH .225 M AS PER E1-003	0.13	CU.M	E1-003 MS1-015A	194.57 194.57		
(B)	LAYING 50 MM DOWN GAUGE AGGREGATE & COMPACTION : DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - LAYING	2.00	DAYS	B0-003	6,000.00		
	LABOUR (S/SK) - COMPACTING	4.00	DAYS	B0-003	12,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				450.00		
	WATERING	1.00	ITEM	B0-785	38.50		
	BASKET	0.50	NO.	B0-631	150.00		
					18,638.50		
	COST PER 2.83 CU.M				18,638.50		
	RATE PER 1 CU.M			MS1-015B1	6,586.04		
	COST FOR 0.125 CU.M	0.13	CU.M	MS1-015B	823.26		
(C)	TACK COAT WITH EMULSION AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-015C	751.69 751.69		
(D)	COLD MIX 40 MM THICK AS PER MS1-005C	0.03	CU.M	MS1-005C MS1-015D	1,064.31 1,064.31		
	TOTAL COST PER 1 SQ.M - MS1-015(A)+(B)+(C)+(D)				2,833.82		
	RATE PER 1 SQ.M			MS1-015	2,833.82		
				SAY	2,833.80	1,885.16	948.64

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-016	CORRECTING & STRENGTHENING THE EDGES OF ROAD WITH SITE MADE COLD MIX 40 MM THICK PREPARED USING CUTBACK BITUMEN 10-20% AT THE RATE OF 83.5 LTR/CU.M OF 19 AND DOWN GAUGE AGGREGATE OVER A TACK COAT WITH EMULSION .75 LTR/SQ.M LAID OVER 50 MM AND DOWN GAUGE AGGREGATE LAID, ON POSITION WATERED AND COMPACTED WITH A BOTTOM LAYER OF 100 MM AGGREGATE CLOSELY PACT, INCLUDING EARTH WORK EXCAVATION TO A WIDTH OF 225 MM AND DEPTH OF 225 MM (AGGREGATE 100 MM, 50 MM DOWN GAUGE AND TRANSPORT WILL BE PAID SEPARATELY):						
	DATA FOR 1 SQ.M						
(A)	EARTH WORK EXCAVATION TO A DEPTH OF .225 M AND WIDTH .225 M AS PER E1-003	0.23	CU.M	E1-003 MS1-016A	350.22 350.22		
(B)	LAYING 100 MM AGGREGATE : DATA FOR 2.83 CU.M						
	LAYING OF 100 MM AGGREGATE	2.50	DAYS	B0-003	7,500.00		
	LABOUR (S/SK) - FOR PACKING				187.50		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKET	0.50	NO.	B0-631	150.00		
					7,837.50		
	COST PER 2.83 CU.M				7,837.50		
	RATE PER 1 CU.M			MS1-016B1	2,769.43		
	COST FOR 0.1 CU.M	0.10	CU.M	MS1-016B	276.94		
(C)	50 MM DOWN GAUGE AGGREGATE LAID WATERED & COMPACT. AS PER MS1-015B1	0.13	CU.M	MS1-015B1 MS1-016C	823.26 823.26		
(D)	TACK COAT WITH EMULSION AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-016D	751.69 751.69		
(E)	COLD MIX 40 MM THICK AS PER MS1-005C	0.03	CU.M	MS1-005C MS1-016E	1,064.31 1,064.31		
	TOTAL COST PER 1 SQ.M - MS1-015(A)+(B)+(C)+(D)+(E)				3,266.42		
	RATE PER 1 SQ.M			MS1-016	3,266.42		
				SAY	3,266.40	2,298.59	967.81

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-017	PATCH SEALING WITH EMULSION PAINTING THE SURFACE BY SPRAY OF CRS-1 AT THE RATE OF .75 LTR/SQ.M SQUEEGING THE EMULSION AND SPREADING THE BLOTTON MATERIAL (SAND) AT THE RATE OF 1 CU.M/125 SQ.M :						
	DATA FOR 279 SQ.M						
	LABOUR (S/SK)	4.00	DAYS	B0-003	12,000.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 20% ON LABOUR FOR LOSS OF WORKING HOURS				2,680.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				335.00		
	EMULSION (CRS-1)	209.25	LTR	B0-353	31,178.25		
	SAND	2.23	CU.M	B0-331	19,170.22		
	BASKET (1/3)	0.33	NO.	B0-631	100.00		
					66,863.47		
	COST PER 279 SQ.M				66,863.47		
	RATE PER 1 SQ.M			MS1-017	239.65		
				SAY	239.65	48.03	191.62
MS1-018	PATCH SEALING WITH HOT BITUMEN PAINTING THE SURFACE BY USING .75 LTR/SQ.M SQUEEGING THE BITUMEN AND SPREADING THE BLOTTON MATERIAL (SAND) AT THE RATE OF 1 CU.M/125 SQ.M (TRANSPORT OF BITUMEN PAID SEPARATELY):						
	DATA FOR 279 SQ.M						
	LABOUR (S/SK)	4.00	DAYS	B0-003	12,000.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	1,400.00		
	ALLOW 20% ON LABOUR FOR LOSS OF WORKING HOURS				2,680.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				335.00		
	BITUMEN	209.25	LTR	B0-351	39,525.00		
	TAR BOILER	0.50	DAY	B0-101	50.00		
	SAND	2.23	CU.M	B0-331	19,170.22		
	FIREWOOD	0.25	CU.M	B0-395	703.99		
	BASKET (1/3)	0.33	NO.	B0-631	100.00		
					75,964.21		
	COST PER 279 SQ.M				75,964.21		
	RATE PER 1 SQ.M			MS1-018	272.27		
				SAY	272.25	48.03	224.22

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-019	PATCH SEALING OF PITTED SURFACE USING HOT SAND BITUMEN(80/100) MIX 104 LTR/CU.M OF SAND SPREAD AND HAND TAMPED INCLUDING BRUSHING AND CLEANING THE SURFACE BEFORE APPLICATION (EXCLUDING TRANSPORT OF BITUMEN):						
(A)	PREPARING SAND BITUMEN MIX : DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - HEATING	1.00	DAY	B0-003	3,000.00		
	LABOUR (U/SK) - MIXING	6.00	DAYS	B0-004	16,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				495.00		
	BITUMEN	294.32	LTR	B0-351	55,593.78		
	TAR BOILER	0.50	DAY	B0-101	50.00		
	SAND	2.83	CU.M	B0-331	24,306.33		
	FIREWOOD	0.38	CU.M	B0-395	1,066.66		
	BASKET (2/3)	0.67	NO.	B0-631	200.00		
					101,511.76		
	COST PER 2.83 CU.M				101,511.76		
	RATE PER 1 CU.M			MS1-019A	35,869.88		
(B)	CLEANING, BRUSHING, SPREADING & TAMPING : DATA FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING & BRUSHING	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK) - SPREAD. & TAMPING	5.00	DAYS	B0-003	15,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				585.00		
					23,985.00		
	COST PER 279 SQ.M				23,985.00		
	RATE PER 1 SQ.M			MS1-019B	85.97		
(C)	SAND BITUMEN MIX @ RATE OF .015 CU.M PER SQ.M, AS PER MS1-019A	0.02	CU.M	MS1-019A	538.05		
				MS1-019C	538.05		
	TOTAL COST PER 1 SQ.M MS1-019(B)+(C)				624.02		
	RATE PER 1 SQ.M			MS1-019	624.02		
				SAY	624.00	188.82	435.18

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-020	PATCH SEALING OF PITTED SURFACES WITH A EMULSION SAND SLURRY USING CRS 1 OR 2 AT THE RATE OF 136.5 LTR/CU.M OF SAND MIX PROPERLY LAID, LEVELLED & SQUEEGED INCLUDING BRUSHING AND CLEANING THE SURFACE BEFORE APPLICATION:						
(A)	PREPARING EMULSION-SAND SLURRY: DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - FOR MIXING	4.00	DAYS	B0-003	12,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				300.00		
	EMULSION (CRS-1)	386.30	LTR	B0-353	57,557.96		
	HIRE OF MIXER	0.50	DAY	B0-102	4,291.81		
	SAND	2.83	CU.M	B0-331	24,306.33		
	BASKET (2/3)	0.67	NO.	B0-631	200.00		
					98,656.09		
	COST PER 2.83 CU.M				98,656.09		
	RATE PER 1 CU.M			MS1-020A	34,860.81		
(B)	CLEANING, BRUSHING, LAYING ETC.: DATA FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING & BRUSHING	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK) FOR LAYING AND LEVELING ETC.	4.00	DAYS	B0-003	12,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				510.00		
					20,910.00		
	COST PER 279 SQ.M				20,910.00		
	RATE PER 1 SQ.M			MS1-020B	74.95		
(C)	SAND EMULSION MIX (10-20 MM THICK) AT THE RATE OF .015 CU.M/SQ.M, AS PER MS1-020A	0.02	CU.M	MS1-020A	522.91		
				MS1-020C	522.91		
					597.86		
	TOTAL COST PER 1 SQ.M MS1-020: (B)+(C)				597.86		
	RATE PER 1 SQ.M			MS1-020	597.86		
				SAY	597.85	136.72	461.14
MS1-021	GENERAL UPKEEP OF ROAD SIDES INCLUDING MAINTAINING THE RIGHT OF WAY IN A NEAT CONDITION BY TRIMMING, WEEDING & CLEARING OF THE ROAD SIDES, DRAINS, DRAINAGE STRUCTURES, SCUPPER DRAINS AND CLEANING MINOR SLIPS:						
	DATA FOR 74 SQ.M						
	LABOUR (U/SK) TRIMMING	1.00	DAY	B0-004	2,800.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	700.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				87.50		
	BASKET (1/10)	0.10	NO.	B0-631	30.00		
					3,617.50		
	COST FOR 74 SQ.M				3,617.50		
	RATE PER 1 SQ.M			MS1-021	48.89		
				SAY	48.90	47.30	1.60

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-022	CLEARING ORDINARY JUNGLE INCLUDING REMOVING HIGH GROWING PLANTS AND TREES OF GIRTH LESS THAN 300 MM OTHER THAN THOSE DESIGNATED TO REMAIN, BY UPROOTING OR BY CUTTING AND THEN UPROOTING THE STUMPS OR BY CUTTING ONLY AS DIRECTED.(SSCM 1203.2):						
	DATA FOR 4905 SQ.M						
	LABOUR (S/SK)	3.00	DAYS	B0-003	9,000.00		
	LABOUR (U/SK)	7.00	DAYS	B0-004	19,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				715.00		

					29,315.00		

	COST FOR 4905 SQ.M				29,315.00		
	RATE PER 1 SQ.M			MS1-022	5.98		
				=====			
				SAY	6.00	5.83	0.17
MS1-023	CLEARING MEDIUM JUNGLE INCLUDING REMAINING ALL HIGH GROWING PLANTS AND TREES OF GIRTH LESS THAN 300 MM OTHER THAN THOSE DESIGNATED TO REMAIN, BY UPROOTING OR BY CUTTING AND THEN UPROOTING THE STUMPS OR BY CUTTING ONLY AS DIRECTED:						
	DATA FOR 4905 SQ.M						
	LABOUR (S/SK)	3.00	DAYS	B0-003	9,000.00		
	LABOUR (U/SK)	11.00	DAYS	B0-004	30,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				995.00		

					40,795.00		

	COST FOR 4905 SQ.M				40,795.00		
	RATE PER 1 SQ.M			MS1-023	8.32		
				=====			
				SAY	8.30	8.11	0.19
MS1-024	CLEARING HEAVY JUNGLE INCLUDING REMOVING ALL HIGH GROWING PLANTS AND TREES OF GIRTH LESS THAN 300 MM OTHER THAN THOSE DESIGNATED TO REMAIN, BY UPROOTING OR BY CUTTING AND THEN UPROOTING THE STUMPS OR BY CUTTING ONLY AS DIRECTED:						
	DATA FOR 4905 SQ.M						
	LABOUR (S/SK)	3.00	DAYS	B0-003	9,000.00		
	LABOUR (U/SK)	15.00	DAYS	B0-004	42,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,275.00		

					52,275.00		

	COST FOR 4905 SQ.M				52,275.00		
	RATE PER 1 SQ.M			MS1-024	10.66		
				=====			
				SAY	10.65	10.40	0.25

HSR - 2024
Engineering Division
Ministry of Transport and Highways

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-025	REPAIRS TO DAMAGE OF SHOULDERS VERGES AND EMBANKMENTS SLOPES INCLUDING MAKING GOOD DEPRESSIONS, RUTS, HOLES AND ERROSION PATH WITH APPROVED GRAVELLY SOIL AND COMPACTING THE SAME WITH ROLLER (8-10TON)AS DIRECTED (GRAVELLY SOIL TO BE PAID SEPARATELY IF BROUGHT FROM OUTSIDE)[SSCM 1201.3]:						
	DATA FOR 5.66 CU.M						
	LABOUR U/SK	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
	ROLLER (8-10 TONS)	0.10	DAY	B0-111	1,957.98		
	BASKET (1/3)	0.33	NO.	B0-631	100.00		
					4,927.98		
	COST FOR 5.66 CU.M				4,927.98		
	RATE PER 1 CU.M			MS1-025	870.67		
				SAY	870.65	494.70	375.95
MS1-026	REGRADING AND REGRAVELLING OF SHOULDERS WITH GRAVEL OF APPROVED QUALITY, DULY COMPACTED WITH ROLLER(8-10TONS) AS DIRECTED FOR REPAIRING HIGH SIDES CAUSED BY HEAVINGS DEPOSITS AND CONSTRUCTION DEBRIS, TO REQUIRED LEVELS BY USING A GRADER(120-140 HP) (GRAVEL TO BE PAID FOR SEPARATELY)[SSCM 1201.3(b)]:						
	DATA FOR .5 KM						
	ASSUMING 225 MM THICK ON EITHER SIDE 1.5 M WIDE						
	QUANTITY OF EARTH WORK INVOLVED:						
	= 500 X .225 X 3 = 337.5 CU.M						
	MOTOR GRADER (120-140 HP)	0.75	DAY	B0-114	34,331.68		
	ROLLER (8-10 TONS)	5.00	DAYS	B0-111	97,899.00		
	WATER	112.50	ITEM	B0-784	3,093.75		
					135,324.43		
	COST FOR 337.5 CU.M				135,324.43		
	RATE PER 1 CU.M			MS1-026	400.96		
				SAY	400.95	0.00	400.95
MS1-027	REGRADING AND REGRAVELLING OF SHOULDERS WITH GRAVEL OF APPROVED QUALITY, DULY COMPACTED WITH ROLLER(8-10TONS) AS DIRECTED FOR REPAIRING HIGH SIDES CAUSED BY HEAVINGS DEPOSITS AND CONSTRUCTION DEBRIS, TO REQUIRED LEVELS MANUALLY (GRAVEL(LOOSE VOLUME) TO BE PAID SEPARATELY) [SSCM 1201.3(b)]:						
	DATA FOR 19.8 CU.M						
	LABOUR (U/SK)	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				280.00		
	ROLLER	0.33	DAY	B0-111	6,461.33		
	BASKET	2.25	NOS	B0-631	675.00		
	WATER	19.80	ITEM	B0-784	544.50		
					19,160.83		
	COST FOR 19.8 CU.M				19,160.83		
	RATE PER 1 CU.M			MS1-027	967.72		
				SAY	967.70	565.66	402.04

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-028	REPLACING THE DAMAGE CRACKED CONCRETE SLABS IN THE FOOT WALKS WITH PRECAST/CAST INSITU CEMENT CONCRETE 1:2:4(19MM) USING 19 MM & DOWN GAUGE STONE AGGREGATE TO A MINIMUM THICKNESS OF 50 MM INCLUDING FIXING/LAYING IN POSITION WITH CEMENT MORTAR 1:3 JOINTS OVER A COMPACTED BED ETC. (EXCLUDING TRANSPORT OF AGGREGATE)[SSCM 1204.3]:						
	DATA FOR 9.29 SQ.M						
(A)	1:2:4(19 MM) MIX CONCRETE	0.45	CU.M	ST1-046	12,318.59		
(B)	SHUTTERING	0.62	SQ.M	ST1-064	1,284.49		
(C)	FIXING & LAYING: LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	LABOUR (U/SK) - FOR COMPACTION	4.00	DAYS	B0-004	11,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				355.00		
					14,555.00		
	COST FOR 9.29 SQ.M				14,555.00		
(D)	GROUT. JOINTS WITH CEMENT MOTAR 1:3	9.29	SQ.M	ST1-013	7,225.30		
	TOTAL COST PER 9.29 SQ.M MS1-028(A)+(B)+(C)+(D)				35,383.38		
	RATE PER 1 SQ.M			MS1-028	3,808.76		
				SAY	3,808.75	2,528.20	1,280.55
MS1-029	CUTTING AND REMOVING FALLEN TREES UPTO 600 MM GIRTH INCLUDING CUTTING INTO REQUIRED NUMBER OF PIECES INCLUDING DISPOSAL AS DIRECTED. MINIMUM PIECE SHALL NOT BE LESS THAN 2.5 M IN LENGTH [SSCM 1203.2]:						
	FOR 4 NOS. CUT						
	LABOUR (U/SK) - CUTTING	0.75	DAY	B0-004	2,100.00		
	LABOUR (U/SK) - CLEANING	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				122.50		
					5,022.50		
	COST FOR 4 NOS				5,022.50		
	RATE PER 1 NO			MS1-029	1,255.63		
				SAY	1,255.65	1,225.00	30.65

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-030	CUTTING AND REMOVING FALLEN TREES 600-900 MM GIRTH INCLUDING CUTTING INTO REQUIRED NUMBER OF PIECES INCLUDING DISPOSAL AS DIRECTED. MINIMUM PIECE SHALL NOT BE LESS THAN 2 M [SSCM 1203.2]:						
	FOR 4 NOS. CUT						
	LABOUR (U/SK) - CUTTING	1.00	DAY	B0-004	2,800.00		
	LABOUR (U/SK) - CLEANING	1.50	DAY	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				175.00		
					7,175.00		
	COST FOR 4 NOS				7,175.00		
	RATE PER 1 NO			MS1-030	1,793.75		
				SAY	1,793.75	1,750.00	43.75
MS1-031	WEEDING MASONRY CULVERTS SMALL BRIDGES AND RETAINING WALLS [SSCM 1303.3]:						
	DATA FOR 10 CULVERTS						
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				75.00		
	ALLOW FOR BARRICADING	1.00	ITEM	B0-704	1,100.00		
					4,175.00		
	COST PER 10 CULVERTS				4,175.00		
	RATE PER CULVERT			MS1-031	417.50		
				SAY	417.50	300.00	117.50
MS1-032	MASONRY RANDOM RUBBLE WITH BOULDERS INCLUDING COLLECT[SSCM 1006.3(b)]:						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	7,600.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	6,000.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				480.00		
	BASKET	1.00	NO	B0-631	300.00		
					19,980.00		
	COST PER 8.5 CU.M				19,980.00		
	RATE PER 1 CU.M			MS1--032	2,350.59		
				SAY	2,350.60	2,258.82	91.78

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-033	FIXING CATS EYES IN TAR MACADAM INCLUDING BREAKING ROAD SURFACE, BARRICADE ETC. [SSCM 810.3(C)]:						
	DATA FOR 10 NOS.						
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	LABOUR (SK/B)	0.50	DAY	B0-002	1,750.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				148.75		
	ADD 10% ON LABOUR FOR BARRICADING				595.00		
					6,693.75		
	COST PER 10 NOS.				6,693.75		
	RATE PER 1 NO.			MS1-033	669.38		
				SAY	669.40	595.00	74.40
MS1-034	REDUCING HIGH SIDES IN ORDINARY SOIL [SSCM 301.3/1201.3 (c)]:						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
	BASKETS	0.50	NO	B0-631	150.00		
					3,020.00		
	COST PER 2.83 CU.M				3,020.00		
	RATE PER 1 CU.M			MS1-034	1,067.14		
				SAY	1,067.15	989.40	77.75
MS1-035	REDUCING HIGH SIDES IN MEDIUM SOIL:						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				105.00		
	BASKETS	0.50	NO	B0-631	150.00		
					4,455.00		
	COST PER 2.83 CU.M				4,455.00		
	RATE PER 1 CU.M			MS1-035	1,574.20		
				SAY	1,574.20	1,484.10	90.10
MS1-036	REDUCING HIGH SIDES IN HARD SOIL:						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				140.00		
	BASKETS	0.50	NO.	B0-631	150.00		
					5,890.00		
	COST PER 2.83 CU.M				5,890.00		
	RATE PER 1 CU.M			MS1-036	2,081.27		
				SAY	2,081.25	1,978.80	102.45

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-037	REDUCING HIGH SIDES IN SOFT ROCK:						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.50	DAYS	B0-004	7,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				175.00		
	BASKETS	0.50	NO.	B0-631	150.00		
					7,325.00		
	COST PER 2.83 CU.M				7,325.00		
	RATE PER 1 CU.M			MS1-037	2,588.34		
				SAY	2,588.35	2,473.50	114.85
MS1-038	REDUCING HIGH SIDES IN ROCK REQUIRING BLASTING:						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/B)	1.00	DAY	B0-002	3,500.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	5,600.00		
	ALLOW 40% LOSS ON LABOUR CONTROL				3,640.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				227.50		
	BASKETS (1/3)	0.33	NO.	B0-631	100.00		
	JUMPER STEEL	0.45	KG	B0-503	314.80		
	BLASTING POWDER	0.34	KG	B0-501	698.46		
	FUSE	3.05	M	B0-502	2,534.25		
					16,615.00		
	COST PER 2.83 CU.M				16,615.00		
	RATE PER 1 CU.M			MS1-038	5,871.03		
				SAY	5,871.05	3,215.55	2,655.50
MS1-039	WHITE WASHING 1 COAT TO PARAPETS OF BRIDGES AND CULVERTS.[SSCM 1403.3(e)]:						
	DATA FOR 93 SQ.M						
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				145.00		
	BOILED LIME	18.75	KG	B0-537	653.44		
	COMMON SALT	0.45	KG	B0-634	33.75		
	BASKETS (1/15)	0.07	NO.	B0-631	20.00		
	ALLOW FOR LADDERS	1.00	ITEM	B0-732	550.00		
					7,202.19		
	COST PER 93 SQ.M				7,202.19		
	RATE PER 1 SQ.M			MS1-039	77.44		
				SAY	77.45	62.37	15.08

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-040	WHITE WASHING 2 COATS TO PARAPETS OF BRIDGES AND CULVERTS:						
	DATA FOR 93 SQ.M						
	LABOUR (S/SK)	1.75	DAYS	B0-003	5,250.00		
	LABOUR (U/SK)	1.75	DAYS	B0-004	4,900.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				253.75		
	BOILED LIME	31.25	KG	B0-537	1,089.06		
	COMMON SALT	0.80	KG	B0-634	60.00		
	BASKETS (1/8)	0.13	NO.	B0-631	37.50		
	ALLOW FOR LADDERS	1.00	ITEM	B0-732	550.00		

					12,140.31		

	COST PER 93 SQ.M				12,140.31		
	RATE PER 1 SQ.M			MS1-040	130.54		
					=====		
				SAY	130.55	109.14	21.41
MS1-041	WHITE WASHING 1 COAT TO PARAPETS OF BRIDGES AND CULVERTS AFTER CLEANING ATTENDING TO MINOR REPAIRS:						
	DATA FOR 93 SQ.M						
	LABOUR (SK/B)	1.00	DAY	B0-002	3,500.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				157.50		
	BOILED LIME	18.75	KG	B0-537	653.44		
	COMMON SALT	0.45	KG	B0-634	33.75		
	BASKETS (1/15)	0.07	NO.	B0-631	20.00		
	ALLOW FOR LADDERS	1.00	ITEM	B0-732	550.00		
	ALLOW FOR MINOR REPAIRS	10.00	ITEM	B0-718	5,500.00		

					13,214.69		

	COST PER 93 SQ.M				13,214.69		
	RATE PER 1 SQ.M			MS1-041	142.09		
					=====		
				SAY	142.10	67.74	74.36
MS1-042	WHITE WASHING 2 COATS TO PARAPETS OF BRIDGES AND CULVERTS AFTER CLEANING ATTENDING TO MINOR REPAIRS:						
	DATA FOR 93 SQ.M						
	LABOUR (SK/B)	1.75	DAYS	B0-002	6,125.00		
	LABOUR (U/SK)	1.75	DAYS	B0-004	4,900.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				275.63		
	BOILED LIME	31.25	KG	B0-537	1,089.06		
	COMMON SALT	0.80	KG	B0-634	60.00		
	BASKETS (1/8)	0.13	NO.	B0-631	37.50		
	ALLOW FOR LADDERS	1.00	ITEM	B0-732	550.00		
	ALLOW FOR MINOR REPAIRS	10.00	ITEM	B0-718	5,500.00		

					18,537.19		

	COST PER 93 SQ.M				18,537.19		
	RATE PER 1 SQ.M			MS1-042	199.32		
					=====		
				SAY	199.30	118.55	80.75

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-043	PAINING WITH EMULSION 1 COAT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS AFTER CLEANING AND ATTENDING TO MINOR REPAIRS.[SSCM 1501.3(a)-(v)]:						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.44	DAY	B0-002	1,540.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.50		
	EMULSION PAINT	0.75	LTR	B0-544	651.75		
	ALLOW FOR MINOR REPAIRS	1.00	ITEM	B0-718	550.00		
	ALLOW FOR SAND PAPER ETC.	1.00	ITEM	B0-751	330.00		

					3,110.25		

	COST PER 9.29 SQ.M				3,110.25		

	RATE PER 1 SQ.M			MS1-043	334.80		
					=====		
				SAY	334.80	165.77	169.03
MS1-044	PAINING WITH ENAMEL 1 COAT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS AFTER CLEANING AND ATTENDING TO MINOR REPAIRS.[SSCM 1501.3(a)-(v)]:						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.44	DAY	B0-002	1,540.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.50		
	ENAMEL PAINT	0.77	LTR	B0-541	1,126.05		
	ALLOW FOR MINOR REPAIRS	1.00	ITEM	B0-718	550.00		
	ALLOW FOR SAND PAPER ETC.	1.00	ITEM	B0-751	330.00		

					3,584.55		

	COST PER 9.29 SQ.M				3,584.55		

	RATE PER 1 SQ.M			MS1-044	385.85		
					=====		
				SAY	385.85	165.77	220.08
MS1-045	PAINING WITH ENAMEL 2 COATS TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS AFTER CLEANING AND ATTENDING TO MINOR REPAIRS.[SSCM 1501.3(a)-(v)]:						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.82	DAY	B0-002	2,870.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				71.75		
	ENAMEL PAINT(.77+.55)	1.32	LTR	B0-541	1,930.37		
	ALLOW FOR MINOR REPAIRS	1.00	ITEM	B0-718	550.00		
	ALLOW FOR SAND PAPER ETC.	1.00	ITEM	B0-751	330.00		

					5,752.12		

	COST PER 9.29 SQ.M				5,752.12		

	RATE PER 1 SQ.M			MS1-045	619.17		
					=====		
				SAY	619.15	308.93	310.22

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-046	PAINING WITH EMULSION 2 COATS TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS AFTER CLEANING AND ATTENDING TO MINOR REPAIRS:						
	DATA FOR 9.29 SQ.M						
	Painter (SK/B)	0.82	DAY	B0-002	2,870.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				71.75		
	EMULSION PAINT	1.40	LTR	B0-544	1,216.60		
	ALLOW FOR MINOR REPAIRS	1.00	ITEM	B0-718	550.00		
	ALLOW FOR SAND PAPER ETC.	1.00	ITEM	B0-751	330.00		
					5,038.35		
	COST PER 9.29 SQ.M				5,038.35		
	RATE PER 1 SQ.M			MS1-046	542.34		
					=====		
				SAY	542.35	308.93	233.42
MS1-047	PAINING 1 COAT EMULSION PAINT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS INCLUDING PREPARING SURFACE OF OLD WORK.[SSCM 1501.3(b)(v)]:						
	DATA FOR 9.29 SQ.M						
	Painter (SK/B)	0.44	DAY	B0-002	1,540.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.50		
	EMULSION PAINT	0.75	LTR	B0-544	651.75		
	ALLOW FOR SAND PAPER ETC.	1.00	ITEM	B0-751	330.00		
					2,560.25		
	COST PER 9.29 SQ.M				2,560.25		
	RATE PER 1 SQ.M			MS1-047	275.59		
					=====		
				SAY	275.60	165.77	109.83
MS1-048	PAINING SUB COAT EMULSION PAINT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS INCLUDING PREPARING SURFACE SSCM 1501.3(b):						
	DATA FOR 9.29 SQ.M						
	Painter (SK/B)	0.38	DAY	B0-002	1,330.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				33.25		
	EMULSION PAINT	0.65	LTR	B0-544	564.85		
	ALLOW FOR SAND PAPER/COTTON ETC.	1.00	ITEM	B0-751	330.00		
					2,258.10		
	COST PER 9.29 SQ.M				2,258.10		
	RATE PER 1 SQ.M			MS1-048	243.07		
					=====		
				SAY	243.05	143.16	99.89

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-049	PAINING 1 COAT EMULSION PAINT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS INCLUDING PREPARING SURFACE OF NEW WORK.[S.S.C.M. 1501.3 (b)(v)]:						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.38	DAY	B0-002	1,330.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				33.25		
	EMULSION PAINT	0.75	LTR	B0-544	651.75		
	ALLOW FOR SAND PAPER/COTTON	1.00	ITEM	B0-751	330.00		
					2,345.00		

	COST PER 9.29 SQ.M				2,345.00		
	RATE PER 1 SQ.M			MS1-049	252.42		
				SAY	=====		
					252.40	143.16	109.24
MS1-050	CLEANING & PAINTING 100 MM WIDE STRIPE FOR SKIRTING TO GUARD STONES.[SSCM 1501.3(b)(v)]:						
	DATA FOR 91.5 LINEAR METRES						
	LABOUR (S/SK)	2.25	DAYS	B0-003	6,750.00		
	LABOUR (U/SK)	2.25	DAYS	B0-004	6,300.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				326.25		
	COAL TAR	0.75	LTR	B0-531	115.50		
					13,491.75		

	COST PER 91.5 M				13,491.75		
	RATE PER 1 M			MS1-050	147.45		
				SAY	=====		
					147.45	142.62	4.83
MS1-051	PAINING 2 COATS STANDARD PEDESTRIAN CROSSING FOR CARRIAGEWAY. [SSCM 810.2(c)]:						
	DATA FOR 3.66 M WIDE CARRIAGEWAY (AVE. SQ.M)	9.74					
	PAINTER (SK/A)	1.38	DAY	B0-001	5,225.00		
	LABOUR (U/SK)	1.38	DAY	B0-004	3,850.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				226.88		
	ALLOW FOR BARRICADING	1.00	ITEM	B0-704	1,100.00		
	ENAMEL PAINT @ RATE OF 6.0 SQ.M/LTR	1.62	LTR	B0-541	2,374.10		
					12,775.98		

	COST PER 3.66 M				12,775.98		
	RATE PER 1 M			MS1-051	3,490.70		
				SAY	=====		
					3,490.70	2,479.51	1,011.19

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-052	PAINTING 1 COAT STANDARD PEDESTRIAN CROSSING FOR CARRIAGEWAY USING ROAD MARKING PAINTS. [SSCM 810.2(c)]:						
	DATA FOR 3.66 M WIDE CARRIAGEWAY (AVE. SQ.M)	9.74					
	PAINTER (SK/A)	1.50	DAY	B0-001	5,700.00		
	LABOUR (U/SK)	1.50	DAY	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				247.50		
	ALLOW FOR BARRICADING	1.00	ITEM	B0-704	1,100.00		
	ROAD MARKING PAINT(YELLOW) - @ RATE OF 6.5 SQ.M/LITRE	1.50	LTR	B0-547	2,837.56		
					14,085.06		

	COST PER 3.66 M				14,085.06		
	RATE PER 1 M			MS1-052	3,848.38		
				SAY	3,848.40	2,704.92	1,143.48
					=====		
MS1-053	ERECTING, BARRICADING IN JUNGLE TIMBER 75 - 100 MM DIA. VERTICAL POSTS AT .9 M CENTRES AND 1.2 M ABOVE GROUND INCLUDING WHITE WASHING.[SSCM 1709]:						
	DATA FOR 3.66 LINEAR METRES						
	LABOUR U/SK	0.50	DAY	B0-004	1,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				35.00		
	TIMBER POST,HORIZ, ETC.	0.92	ITEM	B0-762	2,013.00		
	ALLOW FOR WHITE WASHING TIMBER	0.92	ITEM	B0-792	85.78		
					3,533.78		

	COST PER 3.66 M				3,533.78		
	RATE PER 1 M			MS1-053	965.51		
				SAY	965.50	382.51	582.99
					=====		
MS1-054	TEMPORARY SCAFFOLDING FOR PAINTING OR TARRING BRIDGES AND FOR WEEDING ON BRIDGES OR RETAINING WALL INCLUDING DISMANTLING AFTER WORK.[SSCM 1008.3(a)]:						
	DATA FOR 93 SQ.M						
	LABOUR (S/SK)	6.00	DAYS	B0-003	18,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				450.00		
	ALLOW FOR COIR STRING (SCAFF.)	1.00	ITEM	B0-717	440.00		
	ALLOW FOR COIR ROPE	1.00	ITEM	B0-715	550.00		
	ALLOW FOR TIMBER PLANKS/BAMBOO	1.00	ITEM	B0-761	1,430.00		
					20,870.00		

	COST PER 93 SQ.M				20,870.00		
	RATE PER 1 SQ.MM			MS1-054	224.41		
				SAY	224.40	193.55	30.85
					=====		

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-055	ROUGHNING EXISTING SMOOTH TARRED METALLED CARRIAGEWAY BY HAND FOR BONDING, COLLECTING DISPOSAL OF ALL LOOSE MATERIALS.[SSCM 403.3(b)];						
	DATE FOR 93 SQ.M						
	LABOUR S/SK	1.00	DAY	B0-003	3,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				75.00		
					3,075.00		
	COST PER 93 SQ.M				3,075.00		
	RATE PER 1 SQ.M			MS1-055	33.06		
				SAY	33.05	32.26	0.79
MS1-056	SUPPLY OF DIESEL FOR MACHINERIES: (EX-FILLING STATION)						
	DIESEL	1.00	LTR.	B0-612	363.00		
	RATE PER 1 LTR			MS1-056	363.00		
				SAY	363.00	0.00	363.00
MS1-057	PATCHING ROAD WITH PREMIX (LOOSE VOLUME) AFTER PREP. SURFACE WITH EMULSION(CSS-1) AT .75 LTR/SQ.M AS TACK COAT, INCLUDING INTERNAL TRANSPORT AND HAND STAMPING. (SUPPLY OF PREMIX(LOOSE VOL.) PAID SEPARATELY) [SSCM 1102.3(b)(i)];						
	DATA FOR 2.83 CU.M(LOOSE VOLUME)						
	LABOUR (U/SK) - (PREP.SUR.)	0.50	DAY	B0-004	1,400.00		
	LABOUR (U/SK) - (MANUAL TRANS.)	3.00	DAYS	B0-004	8,400.00		
	LABOUR (S/SK) - (APPLYING EMULS.)	0.50	DAY	B0-003	1,500.00		
	LABOUR (S/SK) - (STAMPING PREMIX)	3.00	DAYS	B0-003	9,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				320.58		
	EMULSION(CSS-1) FOR TACK COAT	22.50	LTR	B0-352	3,352.50		
	TRACTOR & TRAILER	0.50	DAY	B0-117	5,342.45		
					29,315.53		
	COST PER 2.83 CU.M				29,315.53		
	RATE PER 1 CU.M			MS1-057	10,358.84		
				SAY	10,358.85	7,173.14	3,185.71

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-058	PATCHING ROAD WITH PREMIX AFTER PREPARING SURFACE WITH EMULSION(CSS-1) AT .75 LTR/SQ.M AS TACK COAT, INCLUDING INTERNAL TRANSPORT AND TAMPING WITH MACHINE.(SUPPLY OF PREMIX PAID SEPARATELY) [SSCM 1102.3(b)(i)]:						
	DATA FOR 7.0 M.TONS						
	(ASSUMED 1 CU.M OF PREMIX(LOOSE) = 1.48 M.TONS)						
	LABOUR (SK/A) - (CHARGE HAND)	1.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	3.00	DAYS	B0-003	9,000.00		
	LABOUR (U/SK)	11.00	DAYS	B0-004	30,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,090.00		
	EMULSION (CSS-1)	51.64	LTR	B0-352	7,694.91		
	MACHINE TAMPER	1.00	DAY	B0-108	4,046.99		
	LABOUR (SK/B) (TAMPER OPERATOR)	1.00	DAY	B0-002	3,500.00		
	TRACTOR & TRAILER	1.00	DAY	B0-117	10,684.90		
					70,616.80		
	COST PER 7 M.T				70,616.80		
	RATE PER 1 M.T			MS1-058	10,088.11		
				SAY	10,088.10	6,728.57	3,359.53
MS1-059	PAINTING TWO COATS ENAMEL PAINT ON KERBS, AFTER CLEANING AND PREPARING SURFACE.						
	DATA FOR 9.29 SQ.M						
	PAINTER - SK'B'	0.82	DAY	B0-002	2,870.00		
	LABOUR - U/SK FOR CLEANING	0.35	DAY	B0-004	980.00		
	ALLOW 2.5% OF LABOUR FOR TOOLS				96.25		
	ENAMEL PAINT (.77+.55)	1.32	LTR	B0-541	1,930.37		
					5,876.62		
	COST FOR 9.29 SQ.M				5,876.62		
	RATE PER 1 SQ.M			MS1-059	632.57		
				SAY	632.55	414.42	218.13
MS1-060	PREPARING AND STOCK PILING PREMIX AT SITE USING 12.5 MM AGGREGATE AND EMULSION CSS-1 (EXCLUDING TRANSPORT OF AGGREGATE):						
	DATA FOR 2.83 CU.M						
	LABOUR - S/SK	1.00	DAY	B0-003	3,000.00		
	LABOUR - U/SK	4.00	DAY	B0-004	11,200.00		
	ALLOW 2.5% OF LABOUR FOR TOOLS				355.00		
	EMULSION CSS-1	250.00	LTR	B0-352	37,250.00		
	WATER	137.00	LTR	B0-788	3,767.50		
	AGGREGATE 12.5 MM	1.81	CU.M	B0-309	6,715.55		
	SAND	1.22	CU.M	B0-331	10,478.35		
	BASKET	0.67	NO.	B0-631	201.00		
					72,967.39		
	COST FOR 2.83 CU.M				72,967.39		
	RATE PER 1 CU.M			MS1-060	25,783.53		
				SAY	25,783.55	5,017.67	20,765.88

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-061	BREAKING MANUALLY ASPHALT LAYER 2" - 3" THICK ON THE CARRIAGEWAY FOR KERB LAYING						
	DATA FOR LENGTH OF	12.00	METERS				
	LABOUR - U/SK FOR BREAKING ASPHALT	3.00	DAY	B0-003	9,000.00		
	LABOUR - SK'A' BLACK SMITH FOR SHARPENNING	0.13	DAY	B0-001	475.00		
	ALLOW 2.5% OF LABOUR FOR TOOLS				236.88		
					9,711.88		
	COST FOR 12 M LENGTH				9,711.88		
	RATE PER 1 METER			MS1-061	809.32		
				SAY	809.30	789.58	19.72
MS1-062	CUTTING AND REMOVING TREES 300-600MM GIRTH INCLUDING DISPOSAL AS DIRECTED						
	DATA FOR 1 NOS						
	LABOUR - SK'B'	0.06	DAY	B0-002	218.75		
	LABOUR - U/SK	0.19	DAY	B0-004	525.00		
	BACK-HOE LOADER	0.06	DAY	B0-115	2,157.17		
	TIPPER (1 CUBE)	0.06	DAY	B0-118	3.09		
	CHAINSAW (WITHOUT OPERATOR)	1.00	DAY	B0-160	3,500.00		
	GAZOLINE	1.00	LTR	B0-613	371.00		
	ALLOW FOR 2T OIL (50 RS. FOR 1 LTR OF GAZOLINE)				50.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				18.59		
					6,843.60		
	RATE PER 1 NOS			MS1-062	6,843.60		
				SAY	6,843.60	743.75	6,099.85
MS1-063	CUTTING AND REMOVING TREES 600-1200MM GIRTH INCLUDING DISPOSAL AS DIRECTED						
	DATA FOR 1 NOS						
	LABOUR - SK'B'	0.13	DAY	B0-002	437.50		
	LABOUR - U/SK	0.25	DAY	B0-004	700.00		
	BACK-HOE LOADER	0.09	DAY	B0-115	3,235.75		
	TIPPER (1 CUBE)	0.09	DAY	B0-118	4.63		
	CHAINSAW (WITHOUT OPERATOR)	1.00	DAY	B0-160	3,500.00		
	GAZOLINE	1.00	LTR	B0-613	371.00		
	ALLOW FOR 2T OIL (50 RS. FOR 1 LTR OF GAZOLINE)				50.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				28.44		
					8,327.32		
	RATE PER 1 NOS			MS1-063	8,327.32		
				SAY	8,327.30	1,137.50	7,189.80
MS1-064	CUTTING AND REMOVING TREES 1200-2000MM GIRTH INCLUDING DISPOSAL AS DIRECTED						
	DATA FOR 1 NOS						
	LABOUR - SK'B'	0.19	DAY	B0-002	656.25		
	LABOUR - U/SK	0.38	DAY	B0-004	1,050.00		
	BACK-HOE LOADER	0.13	DAY	B0-115	4,314.33		
	TIPPER (1 CUBE)	0.13	DAY	B0-118	6.18		
	CHAINSAW (WITHOUT OPERATOR)	1.00	DAY	B0-160	3,500.00		
	GAZOLINE	1.00	LTR	B0-613	371.00		
	ALLOW FOR 2T OIL (50 RS. FOR 1 LTR OF GAZOLINE)				50.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				42.66		
					9,990.41		
	RATE PER 1 NOS			MS1-064	9,990.41		
				SAY	9,990.40	1,706.25	8,284.15
MS1-065	CUTTING AND REMOVING TREES OVER 2000MM GIRTH INCLUDING DISPOSAL AS DIRECTED						
	DATA FOR 1 NOS						
	LABOUR - SK'B'	0.75	DAY	B0-002	2,625.00		
	LABOUR - U/SK	0.75	DAY	B0-004	2,100.00		
	BACK-HOE LOADER	0.38	DAY	B0-115	12,942.99		
	LORRY 17 TON SELF LOADING, WITH 10T CRANE - BOOM TRUCK (WET)	1.00	HOUR	B0-151A	5,140.64		
	CHAINSAW (WITHOUT OPERATOR)	1.00	DAY	B0-160	3,500.00		
	GAZOLINE	1.00	LTR	B0-613	371.00		
	ALLOW FOR 2T OIL (50 RS. FOR 1 LTR OF GAZOLINE)				50.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				118.13		
					26,847.76		
	RATE PER 1 NOS			MS1-065	26,847.76		
				SAY	26,847.75	4,725.00	22,122.75

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-066	CUTTING AND REMOVING OF OVERHANGING BRANCHES 300-600MM GIRTH INCLUDING DISPOSAL AS DIRECTED						
	DATA FOR 1 NOS						
	LABOUR - SK'B'	0.25	DAY	B0-002	875.00		
	LABOUR - U/SK	0.25	DAY	B0-004	700.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				39.38		
					1,614.38		
	RATE PER 1 NOS			MS1-066	1,614.38		
				SAY	1,614.40	1,575.00	39.40
MS1-067	CUTTING AND REMOVING OF OVERHANGING BRANCHES 600-1200MM GIRTH INCLUDING DISPOSAL AS DIRECTED						
	DATA FOR 1 NOS						
	LABOUR - SK'B'	0.38	DAY	B0-002	1,312.50		
	LABOUR - U/SK	1.50	DAYS	B0-004	4,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				137.81		
					5,650.31		
	RATE PER 1 NOS			MS1-067	5,650.31		
				SAY	5,650.30	5,512.50	137.80
MS1-068	CUTTING AND REMOVING OF OVERHANGING BRANCHES OVER 1200MM GIRTH INCLUDING DISPOSAL AS DIRECTED						
	DATA FOR 1 NOS						
	LABOUR - SK'B'	0.50	DAY	B0-002	1,750.00		
	LABOUR - U/SK	2.00	DAYS	B0-004	5,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				183.75		
					7,533.75		
	RATE PER 1 NOS			MS1-068	7,533.75		
				SAY	7,533.75	7,350.00	183.75
MS1-069	REMOVING OF STUMPS 300-600MM GIRTH INCLUDING DISPOSAL AS DIRECTED						
	DATA FOR 1 NOS						
	LABOUR - U/SK	0.06	DAYS	B0-004	175.00		
	BACK-HOE LOADER	0.13	DAY	B0-115	4,314.33		
	ALLOW 2.5% ON LABOUR FOR TOOLS				4.38		
					4,493.71		
	RATE PER 1 NOS			MS1-069	4,493.71		
				SAY	4,493.70	175.00	4,318.70
MS1-070	REMOVING OF STUMPS 600-1200MM GIRTH INCLUDING DISPOSAL AS DIRECTED						
	DATA FOR 1 NOS						
	LABOUR - U/SK	0.06	DAYS	B0-004	175.00		
	BACK-HOE LOADER	0.19	DAY	B0-115	6,471.50		
	ALLOW 2.5% ON LABOUR FOR TOOLS				4.38		
					6,650.87		
	RATE PER 1 NOS			MS1-070	6,650.87		
				SAY	6,650.85	175.00	6,475.85
MS1-071	REMOVING STRINGS OF BARBED WIRE FENCE						
	PER 30 LM WTH 10 STRINGS						
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.00		
					2,870.00		
	RATE PER 30 LM				2,870.00		
	RATE PER 1 LM OF 1 STRING			MS1-071	9.57		
				SAY	9.55	9.33	0.22

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION XIV							
SURVEYING, LEVELLING AND DAYWORKS							
SV1-001	SUPPLY OF UNSKILLED LABOUR:						
	LABOUR (U/SK)	1.00	DAY	B0-004	2,800.00		
	RATE PER 1 DAY			SV1-001	2,800.00		
				SAY	2,800.00	2,800.00	0.00
SV1-002	SUPPLY OF SEMISKILLED LABOUR:						
	LABOUR (S/SK)	1.00	DAY	B0-003	3,000.00		
	RATE PER 1 DAY			SV1-002	3,000.00		
				SAY	3,000.00	3,000.00	0.00
SV1-003	SUPPLY OF SKILLED 'A' GRADE LABOUR:						
	LABOUR (SK/A)	1.00	DAY	B0-001	3,800.00		
	RATE PER 1 DAY			SV1-003	3,800.00		
				SAY	3,800.00	3,800.00	0.00
SV1-004	SUPPLY OF SKILLED 'B' GRADE LABOUR:						
	LABOUR (SK/A)	1.00	DAY	B0-002	3,500.00		
	RATE PER 1 DAY			SV1-004	3,500.00		
				SAY	3,500.00	3,500.00	0.00
SV1-005	CLEARING JUNGLE (LIGHT) TO A WIDTH OF 1.22 METRES FOR SURVEY WORK:						
	DATA FOR 1.61 KILO METRES						
	LABOUR (U/SK)	6.00	DAYS	B0-004	16,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				420.00		
					17,220.00		
	TOTAL COST PER 1.61 KM				17,220.00		
	RATE PER 1 KILO METRE			SV1-005	10,695.65		
				SAY	10,695.65	10,434.78	260.87
SV1-006	CLEARING JUNGLE (MEDIUM) TO A WIDTH OF 1.22 METRES FOR SURVEY WORK:						
	DATA FOR 1.61 KILO METRES						
	LABOUR (U/SK)	8.00	DAYS	B0-004	22,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				560.00		
					22,960.00		
	TOTAL COST PER 1.61 KM				22,960.00		
	RATE PER 1 KILO METRE			SV1-006	14,260.87		
				SAY	14,260.85	13,913.04	347.81

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2024
PUTTALAM DISTRICT

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SV1-007	CLEARING JUNGLE (HEAVY) TO A WIDTH OF 1.22 METRES FOR SURVEY WORK: DATA FOR 1.61 KILO METRES ----- LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	12.00	DAYS	B0-004	33,600.00 840.00 ----- 34,440.00		
	TOTAL COST PER 1.61 KM				34,440.00		
	RATE PER 1 KILO METRE			SV1-007	21,391.30 =====		
				SAY	21,391.30	20,869.57	521.73
SV1-008	SUPPLY OF LABOUR FOR CHAINING AND CUTTING PEGS AND PEGGING: DATA FOR 1.61 KILO METRES ----- LABOUR (S/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	1.50	DAYS	B0-003	4,500.00 112.50 ----- 4,612.50		
	TOTAL COST PER 1.61 KM				4,612.50		
	RATE PER 1 KILO METRE			SV1-008	2,864.91 =====		
				SAY	2,864.90	2,795.03	69.87
SV1-009	LEVELLING CHAINING AND PEGGING AND ESTABLISHING BENCH MARKS ON CONCRETE ROCK OR PEGS AND CHECKING BACK LEVELS: DATA FOR 1.61 KILO METRES ----- LABOUR (S/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	3.00	DAYS	B0-003	9,000.00 225.00 ----- 9,225.00		
	TOTAL COST PER 1.61 KM				9,225.00		
	RATE PER 1 KILO METRE			SV1-009	5,729.81 =====		
				SAY	5,729.80	5,590.06	139.74
SV1-010	SURVEYING INCLUDING FIXING PICKETS & TAKING ANGLES: DATA FOR 1.61 KILO METRES ----- LABOUR (S/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	3.00	DAYS	B0-003	9,000.00 225.00 ----- 9,225.00		
	TOTAL COST PER 1.61 KM				9,225.00		
	RATE PER 1 KILO METRE			SV1-010	5,729.81 =====		
				SAY	5,729.80	5,590.06	139.74
SV1-011	CHANGING TRAVERSE LINES AND TAKING OFF-SETS: DATA FOR 1.61 KILO METRES ----- LABOUR (S/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	4.00	DAYS	B0-003	12,000.00 300.00 ----- 12,300.00		
	TOTAL COST PER 1.61 KM				12,300.00		
	RATE PER 1 KILO METRE			SV1-011	7,639.75 =====		
				SAY	7,639.75	7,453.42	186.33

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**EX-PLANT BASIC PRICES OF ASPHALT CONCRETE MATERIALS PRODUCED AT MIXING PLANTS
LOCATED IN THE DISTRICTS : HSR-2024**

- NOTE:** 1. TRANSPORT COST OF ALL RAW MATERIALS AND ROYALTY INCLUDED IN THE GIVEN PRICES.
2. PRICES FROM THE ASPHALT CONCRETE MIXING PLANT CLOSEST TO THE WORK SITE, WHICH IS ABLE TO SUPPLY THE REQUIRED TYPE (HOT/COLD) SHALL BE CONSIDERED.
3. ADD PREMIX TRANSPORT FROM MIXING PLANT TO THE WORK SITE, SEPARATELY
4. BINDER % OF B0-361A, B0-362, B0-362A AND B0-365 ARE BY TOTAL MIX WEIGHT AND BINDER % OF B0-366 IS BY TOTAL WEIGHT OF AGGREGATE

			PRICE : EX-PLANT COST RS. PER M.Ton											
DISTRICT			COLOMBO		GAMPAHA		KALUTARA		GALLE		MATARA		HAMBANTOTA	
LOCATION														
CODE	AGG. SIZE	UNIT	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE
B0-361	19 mm	PER M.T.	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL
B0-361A	19 mm	PER M.T.	4.70	16,818.00	4.70	17,131.00	4.70	17,087.00	4.70	17,930.00	4.70	17,632.00	4.70	17,190.00
B0-361B	19 mm	PER M.T.	-	8,153.00	-	8,430.00	-	8,359.00	-	8,597.00	-	8,271.00	-	7,741.00
B0-362	37.5 mm	PER M.T.	3.40	14,458.00	3.40	14,744.00	3.40	14,693.00	3.40	15,496.00	3.40	15,133.00	3.40	14,694.00
B0-362A	19 mm	PER M.T.	4.10	15,706.00	4.10	16,028.00	4.10	15,993.00	4.10	16,792.00	4.10	16,465.00	4.10	16,068.00
B0-362B	19 mm	PER M.T.	-	8,136.00	-	8,429.00	-	8,373.00	-	8,995.00	-	8,609.00	-	8,104.00
B0-365 *	19 mm	PER M.T.	5.50	18,934.00	5.50	19,250.00	5.50	19,220.00	5.50	20,013.00	5.50	19,704.00	5.50	19,351.00
B0-365A**	19 mm	PER M.T.	5.50	19,055.00	5.50	19,349.00	5.50	19,297.00	5.50	20,126.00	5.50	19,865.00	5.50	19,335.00
B0-366***	19 mm	PER M.T.	6.67	13,907.00	6.67	13,732.00	6.67	13,475.00	6.67	14,582.00	6.67	14,247.00	6.67	13,737.00
B0-366A	19 mm	PER M.T.	5.90	13,661.00	5.90	13,906.00	5.90	13,797.00	5.90	14,421.00	5.90	14,120.00	5.90	13,519.00

* Binder for B0-365 is 15% cut-back with Bitumen 60/70 penetration grade; 19mm Aggregate

** Binder for B0-365A is 16% cut-back with Bitumen 60/70 penetration grade; 12.5 Aggregate

*** Binder for B0-366 is Emulsion CSS-1

ANNEX I

**EX-PLANT BASIC PRICES OF ASPHALT CONCRETE MATERIALS PRODUCED AT MIXING PLANTS
LOCATED IN THE DISTRICTS : HSR-2024**

- NOTE:** 1. TRANSPORT COST OF ALL RAW MATERIALS AND ROYALTY INCLUDED IN THE GIVEN PRICES.
 2. PRICES FROM THE ASPHALT CONCRETE MIXING PLANT CLOSEST TO THE WORK SITE, WHICH IS ABLE TO SUPPLY THE REQUIRED TYPE (HOT/COLD) SHALL BE CONSIDERED.
 3. ADD PREMIX TRANSPORT FROM MIXING PLANT TO THE WORK SITE, SEPARATELY
 4. BINDER % OF B0-361A, B0-362, B0-362A AND B0-365 ARE BY TOTAL MIX WEIGHT AND BINDER % OF B0-366 IS BY TOTAL WEIGHT OF AGGREGATE

PRICE : EX-PLANT COST RS. PER M.Ton																
DISTRICT			KANDY		MATHALE		NUWARAEIYA		KURUNEGALA		PUTLAM		MONARAGALA		BADULLA	
LOCATION																
CODE	AGG. SIZE	UNIT	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE
B0-361	19 mm	PER M.T.	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL
B0-361A	19 mm	PER M.T.	4.70	17,359.00	4.70	17,425.00	4.70	17,673.00	4.70	15,172.00	4.70	16,849.00	4.70	17,219.00	4.70	17,061.00
B0-361B	19 mm	PER M.T.	-	8,503.00	-	8,499.00	-	8,704.00	-	6,330.00	-	7,951.00	-	8,050.00	-	7,959.00
B0-362	37.5 mm	PER M.T.	3.40	15,005.00	3.40	15,033.00	3.40	15,254.00	3.40	14,961.00	3.40	15,116.00	3.40	14,779.00	3.40	14,588.00
B0-362A	19 mm	PER M.T.	4.10	16,303.00	4.10	16,385.00	4.10	16,574.00	4.10	16,264.00	4.10	16,350.00	4.10	16,127.00	4.10	16,006.00
B0-362B	19 mm	PER M.T.	-	8,580.00	-	8,602.00	-	8,747.00	-	8,559.00	-	8,578.00	-	8,163.00	-	8,094.00
B0-365 *	19 mm	PER M.T.	5.50	19,543.00	5.50	19,634.00	5.50	19,814.00	5.50	19,499.00	5.50	19,586.00	5.50	19,413.00	5.50	19,292.00
B0-365A**	19 mm	PER M.T.	5.50	19,485.00	5.50	19,531.00	5.50	19,899.00	5.50	19,541.00	5.50	19,694.00	5.50	19,386.00	5.50	19,222.00
B0-366***	19 mm	PER M.T.	6.67	13,846.00	6.67	14,170.00	6.67	14,306.00	6.67	14,155.00	6.67	14,204.00	6.67	13,742.00	6.67	13,643.00
B0-366A	19 mm	PER M.T.	5.90	13,864.00	5.90	13,862.00	5.90	14,147.00	5.90	13,934.00	5.90	13,982.00	5.90	13,504.00	5.90	13,422.00

* Binder for B0-365 is 15% cut-back with Bitumen 60/70 penetration grade; 19mm Aggregate

** Binder for B0-365A is 16% cut-back with Bitumen 60/70 penetration grade; 12.5 Aggregate

*** Binder for B0-366 is Emulsion CSS-1

ANNEX I

**EX-PLANT BASIC PRICES OF ASPHALT CONCRETE MATERIALS PRODUCED AT MIXING PLANTS
LOCATED IN THE DISTRICTS : HSR-2024**

- NOTE:**
1. TRANSPORT COST OF ALL RAW MATERIALS AND ROYALTY INCLUDED IN THE GIVEN PRICES.
 2. PRICES FROM THE ASPHALT CONCRETE MIXING PLANT CLOSEST TO THE WORK SITE, WHICH IS ABLE TO SUPPLY THE REQUIRED TYPE (HOT/COLD) SHALL BE CONSIDERED.
 3. ADD PREMIX TRANSPORT FROM MIXING PLANT TO THE WORK SITE, SEPARATELY
 4. BINDER % OF B0-361A, B0-362, B0-362A AND B0-365 ARE BY TOTAL MIX WEIGHT AND BINDER % OF B0-366 IS BY TOTAL WEIGHT OF AGGREGATE

		PRICE : EX-PLANT COST RS. PER M.Ton														
DISTRICT			ANURADHAPURA		POLONNARUWA		RATHNAPURA		KEGALLE		TRINCOMALLEE		BATTICALOA		AMPARA	
LOCATION																
CODE	AGG. SIZE	UNIT	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE
B0-361	19 mm	PER M.T.	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL
B0-361A	19 mm	PER M.T.	4.70	17,599.00	4.70	17,618.00	4.70	17,597.00	4.70	17,280.00	4.70	17,385.00	4.70	18,890.00	4.70	17,663.00
B0-361B	19 mm	PER M.T.	-	8,582.00	-	8,560.00	-	8,773.00	-	8,477.00	-	8,157.00	-	9,580.00	-	8,407.00
B0-362	37.5 mm	PER M.T.	3.40	15,089.00	3.40	15,157.00	3.40	15,253.00	3.40	14,891.00	3.40	14,888.00	3.40	16,424.00	3.40	15,169.00
B0-362A	19 mm	PER M.T.	4.10	16,511.00	4.10	16,528.00	4.10	16,511.00	4.10	16,217.00	4.10	16,330.00	4.10	17,804.00	4.10	16,564.00
B0-362B	19 mm	PER M.T.	-	8,631.00	-	8,637.00	-	8,815.00	-	8,517.00	-	8,311.00	-	9,702.00	-	8,501.00
B0-365 *	19 mm	PER M.T.	5.50	19,819.00	5.50	19,783.00	5.50	19,732.00	5.50	19,454.00	5.50	19,619.00	5.50	21,045.00	5.50	19,846.00
B0-365A**	19 mm	PER M.T.	5.50	19,750.00	5.50	19,779.00	5.50	19,819.00	5.50	19,519.00	5.50	19,558.00	5.50	21,038.00	5.50	19,796.00
B0-366***	19 mm	PER M.T.	6.67	14,192.00	6.67	14,236.00	6.67	14,370.00	6.67	14,092.00	6.67	13,830.00	6.67	15,100.00	6.67	14,052.00
B0-366A	19 mm	PER M.T.	5.90	14,018.00	5.90	13,988.00	5.90	14,186.00	5.90	13,963.00	5.90	13,664.00	5.90	14,918.00	5.90	13,772.00

* Binder for B0-365 is 15% cut-back with Bitumen 60/70 penetration grade; 19mm Aggregate

** Binder for B0-365A is 16% cut-back with Bitumen 60/70 penetration grade; 12.5 Aggregate

*** Binder for B0-366 is Emulsion CSS-1

ANNEX I

**EX-PLANT BASIC PRICES OF ASPHALT CONCRETE MATERIALS PRODUCED AT MIXING PLANTS
LOCATED IN THE DISTRICTS : HSR-2024**

- NOTE:**
1. TRANSPORT COST OF ALL RAW MATERIALS AND ROYALTY INCLUDED IN THE GIVEN PRICES.
 2. PRICES FROM THE ASPHALT CONCRETE MIXING PLANT CLOSEST TO THE WORK SITE, WHICH IS ABLE TO SUPPLY THE REQUIRED TYPE (HOT/COLD) SHALL BE CONSIDERED.
 3. ADD PREMIX TRANSPORT FROM MIXING PLANT TO THE WORK SITE, SEPARATELY
 4. BINDER % OF B0-361A, B0-362, B0-362A AND B0-365 ARE BY TOTAL MIX WEIGHT AND BINDER % OF B0-366 IS BY TOTAL WEIGHT OF AGGREGATE

		PRICE : EX-PLANT COST RS. PER M.Ton											
DISTRICT			MANNAR		KILINOCCHI		MULLAITIVU		VAVUNIYA		JAFFNA		
LOCATION													
CODE	AGG. SIZE	UNIT	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	
B0-361	19 mm	PER M.T.	-		-		-		-	NIL	-		
B0-361A	19 mm	PER M.T.	4.70	17,106.00	4.70	16,998.00	4.70	17,790.00	4.70	17,186.00	4.70	17,523.00	
B0-361B	19 mm	PER M.T.	-	7,763.00	-	7,663.00	-	8,490.00	-	8,044.00	-	8,123.00	
B0-362	37.5 mm	PER M.T.	3.40	14,601.00	3.40	14,519.00	3.40	15,218.00	3.40	14,760.00	3.40	14,946.00	
B0-362A	19 mm	PER M.T.	4.10	16,063.00	4.10	15,968.00	4.10	16,710.00	4.10	16,120.00	4.10	16,448.00	
B0-362B	19 mm	PER M.T.	-	7,954.00	-	7,868.00	-	8,619.00	-	8,164.00	-	8,276.00	
B0-365 *	19 mm	PER M.T.	5.50	19,379.00	5.50	19,288.00	5.50	19,992.00	5.50	19,406.00	5.50	19,756.00	
B0-365A**	19 mm	PER M.T.	5.50	19,256.00	5.50	19,120.00	5.50	19,942.00	5.50	19,307.00	5.50	19,648.00	
B0-366***	19 mm	PER M.T.	6.67	13,486.00	6.67	13,388.00	6.67	14,126.00	6.67	13,736.00	6.67	13,752.00	
B0-366A	19 mm	PER M.T.	5.90	13,309.00	5.90	13,166.00	5.90	13,917.00	5.90	13,436.00	5.90	13,458.00	

* Binder for B0-365 is 15% cut-back with Bitumen 60/70 penetration grade; 19mm Aggregate

** Binder for B0-365A is 16% cut-back with Bitumen 60/70 penetration grade; 12.5 Aggregate

*** Binder for B0-366 is Emulsion CSS-1

ANNEX I

**SPECIFICATIONS RELATED TO THE HSR ITEMS
HSR-2024**

1. EARTHWORKS:

a) Embankment Construction- SSCM section 304:

Type I material $MDD \geq 1600 \text{ kg/m}^3$

Type II material $MDD \geq 1500 \text{ kg/m}^3$

HSR items : EW1-011, EW1-014

b) Soil for road shoulders and gravel surfacing- SSCM section 409 & 601:

Table 1708-1

Sieve size mm	Percentage passing
37.5	100
20	77 - 100
5	41 - 100
2.36	30 - 80
0.6	18 - 50
0.075	05 - 25

Table 1708-2 - Consistency limits for road shoulder materials and gravel surfacings.

Climatic Zone	LL	PI
Wet zone	<55	4 - 25
Dry Zone	< 55	6 - 25

c) Sub Base :

CBR $\geq 20\%$

LL ≤ 40

PI ≤ 15

HSR items : EW1-001, EW1-013

2. Aggregates :

a) Single size aggregate bases - 50, 37.5, 19, & 12.5 mm - SSCM section 403 :

Table 1701-4

Sieve Size mm	Percentage passing			
	Nominal size in mm			
	50	37.5	19	12.5
63	100	-	-	-
50	85 - 100	100	-	-
37.5	0 - 30	85 - 100	-	-
28	0 - 7	0 - 30	100	-
20	0 - 2	0 - 7	85 - 100	100
14	-	0 - 2	0 - 35	85 - 100
10	-	-	0 - 7	0 - 35
5	-	-	-	0 - 5
2.36	-	-	0 - 2	0 - 2

AIV $\leq 30\%$

FI $\leq 35\%$

HSR items : M1-004, M1-007, M1-008, M1-009, A1-005 TO A1-012

SPECIFICATIONS RELATED TO THE HSR ITEMS

HSR-2024

b) Water bound macadam and Dry bound macadam - SSCM section 404 :
(50 or 63 mm and crusher fines)

Table 1701-6

Sieve Size	Percentage passing		
	Nominal max size of agg in mm		Crusher fines
	63	50	
mm			
75	100	-	-
63	90 - 100	100.0	-
50	30 - 70	90 - 100	-
37.5	0 - 15	30 - 70	-
28	-	0 - 15	-
20	0 - 5	-	-
14	-	0 - 5	-
10	-	-	100.0
5	-	-	85 - 100
0.150	-	-	10 - 30

AIV <= 30%

FI <= 35%

HSR items : M1-010, M1-011

c) Penetration macadam base - SSCM section 406 :

Table 1701-7

Sieve Size	Percentage passing			
	Nominal size in mm			
	50	37.5	20	14
mm				
63	100	-	-	-
50	-	100	-	-
37.5	50-73	-	-	-
28	-	46-72	100	-
20	7-26	-	52-68	100
14	-	7-27	-	63-88
10	-	-	7-25	-
5	-	-	-	6-35
2.36	0-3	0-3	0-3	0-3
1.18	-	-	-	-

AIV <= 30%

FI <= 35%

HSR items : S1-037, S1-038

d) Dense Graded Aggregate Bases : SSCM section 405

(ABC construction)

Table 1701-5

Sieve Size	Percentage passing		
	Nominal size in mm		
	37.5	28	20
mm			
50	100	-	-
37.5	95-100	100	-
28	-	-	100
20	60-80	70-85	90-100
10	40-60	50-65	60-75
5	25-40	35-55	40-60
2.36	15-30	25-40	30-45
0.425	7-19	12-24	13-27
0.75	5-12	5-12	5-12

AIV <= 30%

FI <= 35%

CBR >=80%

HSR items : M1-012, M1-013

SPECIFICATIONS RELATED TO THE HSR ITEMS

HSR-2024

e) Aggregate grading, binder content and thickness requirements - SSCM section 407 :

Table 407-1

Mix Classification no.	1	2	3	4
Nominal maximum size of aggregate in mm	37.5	37.5	19	19
Course	Dense graded	Open graded	Dense graded	Open graded
Thickness mm - Max	100	100	50	40
- Min	60	60	30	30
Sieve size mm	Total % by weight passing			
50	100	100	-	-
37.5	95 -100	95 -100	-	-
28	80-95	53-75	100	100
20	-	-	80-98	96-100
14.0	62-77	10-27	-	50-75
10.0	-	-	49-67	22-42
5.00	-	-	29-44	-
2.36	30 - 45	0 - 10	18-30	5 - 20
1.180	-	-	13-24	0-2
300	-	-	5-14	-
Percent binder content by total weight of mix	3.0 - 4.0	2.5 - 3.5	3.5-4.5	3.0 - 4.0

AIV <= 30%

FI <= 35%

HSR items : B0-362, S1-032

3 Surfacing :

a) Asphalt concrete - SSCM section 506 :

Table 506-1

Mix Classification No. Course	Binder Course	Wearing Course Type - 1	Wearing Course Type - 2
Thickness mm - Max	75	75	75
Min	35	35	35
Sieve size mm	Total % by weight passing including filler if used		
28	100	100	-
20	90-100	85-100	100
14.00	-	-	82-92
10.0	56-82	66-94	61-81
5.00	36-58	46-74	41-66
2.36	21-38	35-58	27-48
1.18	15-32	26-48	20-40
0.600	10-26	18 - 38	15-35
0.300	6-20	11-28	10-25
0.150	3-13	07-20	7-17
0.075	1-7	3-12	5-9
Percent binder content by total weight of mix	3.5 - 4.5	4.0-6.5	4.0-6.0

AIV <= 30%

FI <= 35%

LAAV <= 40%

HSR items : B0-361, S1-031, B0-362A

SPECIFICATIONS RELATED TO THE HSR ITEMS

HSR-2024

b) Seal Coat treatments (Surface dressing) - SSCM section 505 :

Table 1701-8

Sieve Size mm	Percentage passing Nominal size in mm			
	19	12.5	9.5	6.3
25	100	-	-	-
19	85 - 100	100	-	-
12.5	0 - 25	85 - 100	100	-
9.5	0 - 7	0 - 25	85 - 100	100
6.3	-	-	0 - 25	85 - 100
4.75	-	0 - 7	0 - 10	-
2.36	0 - 2	0 - 2	0 - 2	0 - 10
0.075	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5

AIV <= 30%

FI <= 35%

LAAV <= 40%

HSR items : S1-003, S1-004, S1-005, S1-006, S1-029, S1-030

c) Cold mix surfacings - SSCM section 507 :

Table 507.1

Grading type Nominal max size of aggregate	Dense graded		Open graded	
	19 mm	12.5 mm	19 mm	12.5 mm
Sieve size mm	Total percentage passing by weight			
25	100	-	100	-
19	90 - 100	100	90 - 100	100
12.5	-	90 - 100	60 - 80	85 - 100
9.5	56 - 80	-	-	-
4.75	35 - 65	44 - 74	18 - 35	35 - 50
2.36	23 - 49	28 - 56	-	15 - 30
0.300	05 - 20	05 - 22	-	-
0.075	0 - 05	0 - 08	0 - 03	0 - 03
Percent binder as % of wgt of Aggregate				
(a) Cutback Bitumen	4.5 - 5.5	5.0 - 6.0	4.5 - 5.0	4.5 - 5.0
(b) Emulsion	5.0 - 6.0	5.5 - 6.5	4.5 - 5.5	5.0 - 6.0

AIV <= 30%

FI <= 35%

LAAV < 40%

HSR items : B0-365, B0-366, S1-033, S1-033A

4. Binder for Surface applications

a) Prime coat - CSS-1 emulsion - SSCM section 1702.3 : shall conform to ASTM D2397-98

Cutback bitumen(20-45%) or MC-30, MC-70 or MC-250 or MC-800 : SSCM section 1702.2

HSR items : B0-352, S1-022, S1- 023, S1-024, S1-025

b) Sand seal - CRS-1 emulsion - SSCM section 1702.3 : HSR items : B0-353, S1-011, S1-012, S1-013,
Tack coat - shall conform to ASTM D2397-98 S1-014, S1-027, S1-035, S1-036

Cutback bitumen (8 - 12%) - SSCM section 1702.2

Bitumen 80 - 100 penetration grade bitumen - SSCM section 1702.1

c) Surface dressing - CRS-2 emulsion - SSCM section 1702.3

Residue on distillation minimum 65% shall conform to ASTM D2397-98

Viscosity min. 100 Saybolt furol seconds

HSR items : B0-354, S1-029, S1-030

Formula for Earth Excavation using Machinery for HSR-2024											
Dozer HP and Blade Dimensions received from DGM(mech)/RC&DC											
A. Excavation :		Unit									
i	Dozer type :		D4 - H		D4 - E		D7 - G		D8 - 10		
	Horse power	HP	95		80		200		300		
	Hire charge for Dozer	Rs.	per Hour (wet)	7,741.10	7,741.10	7,741.10	7,741.10	10,438.52	10,438.52	12,120.00	12,120.00
ii	Cutting Blade Details :										
	Length of Load(Blade length)	L	m	2.636	2.636	3.12	3.12	4.27	4.27	4.965	4.965
	Blade height	H	m	1.085	1.085	1	1	0.97	0.97	1.174	1.174
iii	Assumptions :										
	Slope of cut *	S	ratio	2 : 1							
	Width of Load	W=2XH	m	2.17	2.17	2	2	1.94	1.94	2.348	2.348
	Haul distance	D	m	30	60	30	60	30	60	30	60
	Average Forward speed		km/h	2.25	2.25	2.25	2.25	2.70	2.70	2.70	2.70
	Average time for forward push	=A	minutes	0.8	1.6	0.8	1.6	0.67	1.33	0.67	1.33
	Average Reverse speed		km/h	2.85	2.85	3.50	3.50	3.50	3.50	2.50	2.50
	Average time for return	=B	minutes	0.63	1.26	0.51	1.03	0.51	1.03	0.72	1.44
	Ave. time loading and changing Gears	=C	minutes per cycle	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
	Efficiency of Operator	E	%	75	75	75	75	75	75	75	75
	Break for rest in each hour	R	minutes	10	10	10	10	10	10	10	10
	Average cycle time for Pushing, Returning, Changing gears etc.	T=(A+B+C)	minutes	1.78	3.21	1.66	2.98	1.53	2.71	1.74	3.12
	Bulking factor	B	%	15	15	15	15	15	15	15	15
iv	Moldboard capacity :										
	Volume(Bank) of Cut (LxHxW)/S		cu.m(bank)	3.10	3.10	3.12	3.12	4.02	4.02	6.84	6.84
v	Net loose volume per cycle	V	cu.m(loose)	3.57	3.57	3.59	3.59	4.62	4.62	7.87	7.87
	Probable cycle output per hour										
	Cycle output per Hour C=[(60-R)/T]xE/100		cycles/Hr	21.07	11.68	22.59	12.58	24.51	13.84	21.55	12.02
vi	Net loose volume per hour	v=CxV	cu.m(bulked)	75.22	41.7	81.1	45.16	113.24	63.94	169.6	94.6
	Net loose volume per day (5 hours)			376.1	208.5	405.5	225.8	566.2	319.7	848	473
	Considering the time for Servicing, Fuelling & Cleaning as		hours/day	1	1	1	1	1	1	1	1
	Working time	t	hours/day	6	6	6	6	6	6	6	6
	Output per 6 Hours	=txv	cu.m per day	451.32	250.2	486.6	270.96	679.44	383.64	1017.6	567.6
vii	Average cost per Cu.m Loose		Rs.	102.91	185.64	95.45	171.41	92.18	163.26	71.46	128.12
	Average for each dozer			144.28		133.43		127.72		99.79	
B. Loading :											
i	Hire Charge for wheel loader 2.7 cu.m		hour(wet)	8,377.54		B0-124					
	One way haul distance up to :	d	m	10							
	The Maximum time for loading cycle	t	minutes	1.2							
	Capacity of loader bucket	v	cu.m	2.7							
	Assume working time per hour	T	minutes	50							
	Assume loading bucket efficiency	E		0.8							
	Assume machine operator efficiency	e		0.75							
ii	No of loads per hour	n		41.66667		[(T/t)]					
iii	Loading capacity per hour	V	cu.m	67.5		[v x n x e x E]					
	Assume 5 hours working for loader due to Queing and delays in transport vehicles		hours	5							
iv	Out put per day (Loose)		cu.m	337.5							
v	Cost of loading per Cu.m (Loose)		Rs.	124.11		per cu.m					
	Sub Total cost of excavation & loading			268.39		257.54		251.83		223.90	
C. For excavation of Base, Sub Base & Shoulder materials :											
	Allow for borrow pit establishment and site maintenance %			25							
D. For excavation of Embankment fill materials :											
	Allow for borrow pit establishment and site maintenance %			10							
	Total cost of excavation and supply of Soil for										
	Sub Bases, Bases and Shoulders	Cu.m(loose)		335.48		321.93		314.79		279.88	
	Embankment fill material	Cu.m(loose)		295.23		283.30		277.01		246.29	
	Sub Bases, Bases and Shoulders, Average	total cost		313.02	per cu.m	Excluding overheads					
	Embankment fill material, Average	total cost		275.46	per cu.m	Excluding overheads					
	Say, For Bases, Sub Bases and Shoulders	Rate Rs.		313.00	per cu.m	885.85	per cube	B0-201			
	Say, For Embankment filling	Rate Rs.		275.50	per cu.m	779.54	per cube	B0-202			
		with 28%		400.64	per cu.m	1133.81	per cube				
				352.64	per cu.m	997.97	per cube				

Cu.m Transport Cost on KM Distance involving Small Quantities

Cost of Transport from 0.5 km up to 1 km per cu.m	(T1-003)	457.90
Rate for each subsequent km from 1 km up to 8th km	(T1-003A)	71.25
Rate for each subsequent km beyond 8th km	(T1-003B)	47.85

Distance/km	Cost/Cu.m/Trip Rs.	Distance/km	Cost/Cu.m/Trip Rs.
0.5 up to 1	457.90	43	2,631.40
2	529.15	44	2,679.25
3	600.40	45	2,727.10
4	671.65	46	2,774.95
5	742.90	47	2,822.80
6	814.15	48	2,870.65
7	885.40	49	2,918.50
8	956.65	50	2,966.35
9	1,004.50	51	3,014.20
10	1,052.35	52	3,062.05
11	1,100.20	54	3,157.75
12	1,148.05	56	3,253.45
13	1,195.90	58	3,349.15
14	1,243.75	60	3,444.85
15	1,291.60	62	3,540.55
16	1,339.45	64	3,636.25
17	1,387.30	66	3,731.95
18	1,435.15	68	3,827.65
19	1,483.00	70	3,923.35
20	1,530.85	72	4,019.05
21	1,578.70	74	4,114.75
22	1,626.55	76	4,210.45
23	1,674.40	78	4,306.15
24	1,722.25	80	4,401.85
25	1,770.10	82	4,497.55
26	1,817.95	84	4,593.25
27	1,865.80	86	4,688.95
28	1,913.65	88	4,784.65
29	1,961.50	90	4,880.35
30	2,009.35	92	4,976.05
31	2,057.20	94	5,071.75
32	2,105.05	96	5,167.45
33	2,152.90	98	5,263.15
34	2,200.75	100	5,358.85
35	2,248.60	102	5,454.55
36	2,296.45	104	5,550.25
37	2,344.30	106	5,645.95
38	2,392.15	108	5,741.65
39	2,440.00	110	5,837.35
40	2,487.85	112	5,933.05
41	2,535.70	114	6,028.75
42	2,583.55	116	6,124.45

Transport and Paving of Interlocking Blocks - 2024

DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT(Rs.)
1. Transport of Interlocking Concrete Paving				
Block per km transport (short distance - within the province)				
Data for: transport distance of	25.00	km for	2,750.00	Blocks
Dimension of a Block (220x110x80 mm)				
Volume of 2750 blocks	5.32	Cu.m		
Average weight of a interlocking block	4.65	kg		
Load per trip	12,778	kg		
Hire charge (Wet) for a 12 ton Lorry per km (RDA Hire Charges)		Rs./Km	228.97	
Hire charge (Dry) for a 12 ton Lorry per hr. (RDA Hire Charges)		Rs./km	122.49	
Average Speed of Lorry 20 km/Hr (Assumption)	20.00	km/hr		
Distance Transport 2 way	50	km		
Cost of transport by lorry	50	km	228.97	11,448.73
Cost of Lorry during Loading and Unloading @ total 2 Hrs (Idle Time)	2.00	Hrs	2,449.89	4,899.79
Labour for loading & Unloading(4 U/Sk for 1.0 hrs)	0.50	Day	2,800.00	1,400.00
Total cost for transport 2750 blocks for 25 km Distance				17,748.52
Transport cost per block per 1 km				0.26
			Say	0.26 per Block/ km
2. Paving of Interlocking Concrete Blocks.				
inclusive 50 mm sand bedding and compaction. Supply and transport of Blocks and bedding material to be paid separately.				
(Depending on the design, Construction of side kerbs and ABC layer and sub grade preparation to be paid separately.)				
a) Cutting end Blocks				
Cost of angle grinder			20,000.00	
	2500	Hours		
Cost of cutting blade			1,200.00	
Assumed workable life period	96	Hours		
Hire Charge of Electric Generator per Hour		Hour	1,947.81	
Charge for Angle grinder per hour			8.00	
Cost of cutting Blade per Hour			12.50	
Data for paving per day	93	Sq.m		
Angle grinder	2	hours	8.00	16.00
Cutting Blade	2	hours	12.50	25.00
Electricity Generator (HSR - 2024)	2	hours	1,947.81	3,895.63
Labour Sk'A' (HSR - 2024)	1	Day	4,000.00	4,000.00
Total Cost for cutting concrete blocks Blocks for 93 sq.m				7,936.63
Sub Total Cost per 1 Sq.m				85.34 per Sq.m
b) Paving of concrete blocks and preparation of sand bedding				
Data for	93	Sq.m		
Paving width confined between kerbs	3	m		
Paving output area per day	93	Sq.m		
Sand (including 16 km transport)	4.65	Cu.m		
Add 10% for bulking and filling etc.	0.47	Cu.m		
Labour for spreading sand and paving				
Skilled "A"	1	Day	4,000.00	4,000.00
Skilled"B"	1	Day	3,500.00	3,500.00
Un Skilled	4	Day	2,800.00	11,200.00
Plate vibrator	1	Day	5,610.78	5,610.78
For Other Tools(Assume 2.5% of Labour)				467.50
Total Cost for paving blocks for 93 sq.m				24,778.28
Sub Total Cost per 1 Sq.m sand bedding and paving of blocks				266.43 per Sq.m
Total cost of paving of interlocking blocks excluding the cost of side kerbs				
			Say	351.77
				351.75 per Sq.m