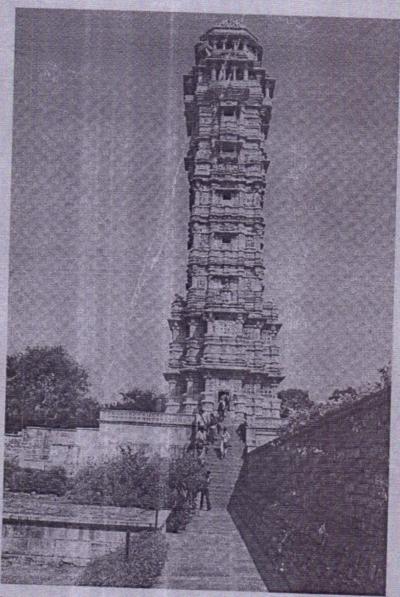
PROJECT REPORT FOR WIDENING, STRENGTHEN AND RE-CARPETING OF ROAD FROM DELHI GATE TO NH-79 VIA MANPURA / GOPALNAGAR CHITTORGARH, RAJASTHAN.



### PROJECT PROPONENT:

URBAN IMPROVEMENT TRUST, CHITTORGARH

### CONSULTANTS:

VISTAAR INFRATECH INDIA PRIVATE LIMITED H. No. 31, SHANKAR VATIKA, SECTOR: 18(H) PRN (SOUTH), MANSAROVAR, JAIPUR - 302020 RAJASTHAN.PH. 0141-2785792

> ी अभियन्ता पर विकास न्यास वितौडगढ (राज.)

अगिराचि अभियम्ता

### 2.0 PREFACE

Urban Improvement Trust Chittorgarh have a proposal for Development of various Infrastructure in Chittorgarh City (Rajasthan). The proposed proposal included development of three roads and river front development. Therefore it is essential to prepare project report for above said projects.

Project report is a primary requirement for development works for smoothly execution as well as for proper financial planning / budgeting / tendering etc. Hence Urban Improvement Chittorgarh has appointed Vistaar Infratech India Private Limited as their consultant for preparation of project report for above mentioned projects.

The report presented herein deals with Technical Studies, Conducting Survey, Data Collection, Planning, Designing, Preparation of drawings, Preparation of Bill of Quantities, Preparation of Bidding Documents, Preparation of Project Report etc.

### 3.0 INTRODUCTION

The present Project Report is for Widening, Strengthen and Re-Carpeting of Road from Delhi Gate To NH-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

### 4.0 LOCATION OF PROJECT

The Chittorgarh Town is very Famous, Historical and Archeological town of Rajasthan State. It is District Head Quarter of Rajasthan State. It is well connected by Road and Rail with other parts of Rajasthan State as well as with other parts of India. Chittorgarh is 567 Km from Delhi by Road and 549Km by Train. It is 306 Km from Jaipur by Road and 314 Km by Train. National Highway No. 79 and 76 passing through Chittorgarh.

The Proposed Road starts at Delhi gate (24°-53'-33.19" Northing & 74°-38'-20.5" Easting) and Join to NH-79 (24°-54'-22.82" Northing and 74°-41'-14.29"). The length of Proposed Road is 6.20Km. The location of Project shown herein figure No. 01 & 02.

Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

अधिशाषी अभियन्ता नगर विकास न्यास षित्तीडगढ (राज.)

Figure Showing location of Project



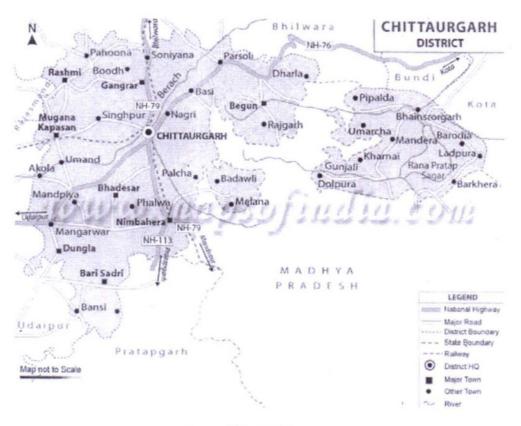


Figure: 01

Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

अधिशाषी अभियन्ता नगर विकास न्यास चितौडगढ (राजः)

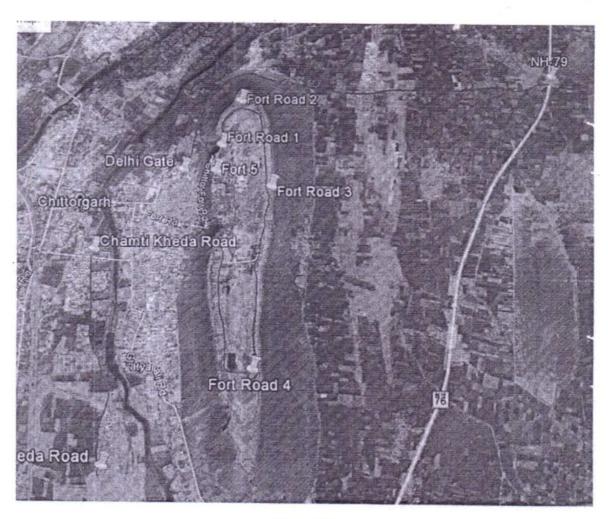


Figure: 02

Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

अधिशाषी अभियन्ता नगर विकास न्यास चितौडगढ (राजः)

### 5.0 Topography of Proposed Road

The Proposed starts at Delhi Gate (Km 0/0 at Delhi Gate). Geographic Coordinates of Delhi Gate is 24°-53'-33.19" Northing and 74°-38'-20.5" Easting. The Proposed Road ends at NH-79. Geographical Coordinates at junction of Proposed Road and NH-79 is 24°-54'-22.82" Northing and 74°-41'-14.29" Easting. Km 0 / 0 to Km 01 / 100 and Km 03 / 400 to Km 03 / 900 is urban portion (Habitation). Remaining length of proposed road is almost open.

Alignment of proposed road is almost along foothill of Chittorgarh Fort Hill. Longitudinal gradient in entire alignment of proposed road is smooth. The longitudinal gradient of proposed road is with in limits of ruling gradient and minimum gradient (1in300 to 1in500).

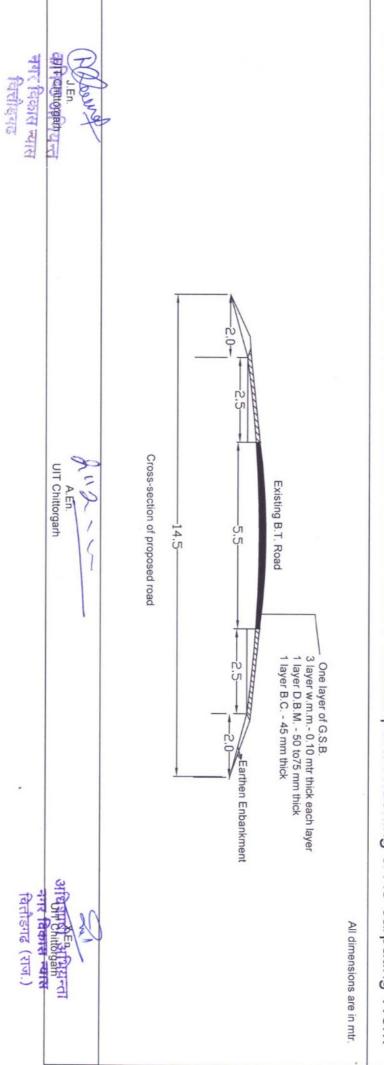
Existing carriageway of proposed road is 5.50m wide, and Total width of proposed road (Including Shoulders) is 14.50m. Typical X-Section of Proposed Road as under -

अधिशाषी अधियन्ता नगर विकास न्यास वितौडगढ़ (राज.)

Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan,

# URBAN IMPROVMENT TRUST, CHITTORGARH

Name of Work :- Cross Section of Road From Dehli Gate to N.H.79 Via Manpura Widening & Re-carpating Work



There are some structures and utilities falling with in (Located within / Exists within) limits of carriageway (within 10.5m width) of proposed road, which are as under -

Electric Poles: 25 No.

Structures:

S. No.	Ch	ainage	Left Side /	Structure /
3. NO.	From	То	Right Side	Compound wall / Boundary wall
1	Km 0/096m	Km 0/110m	LHS	Structure
2	Km 0/169	Km 0/201	LHS	Structure
3	Km 0/210	Kmi 0/269	RHS	BW
4	Km 0/510	Km 0/590	RHS	BW
5	Km 0/681	Km 0/703	RHS	Structure
6	Km 0/685	Km 0/715	LHS	BW
7	Km 0/770	Km 0/782	RHS	Sţructure
8	Km 0/789	Km 0/695	LHS	Structure
9	Km 1/070	Km 1/080	RHS	Structure
10	Km 5/075	Km 5/085	LHS	Structure

Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

अधिशाषी अभियन्ता नगर विकास न्यास चित्तौडगढ (राज.) Vistaar Infratech (I) Pvt. Ltd.

8

### 6.0 Sub-Soil Conditions of Proposed Road

Soil properties is almost same on entire stretch of proposed road. Soil properties are as under -

- 1. Soil Group GC
- 2 CBR Value 19
- 3. Value of C 0
- 4. Value of Ø 35
- 5. Compressive strength 16 T/M2

Above parameter shows that soil conditions are good for a road pavement as well as for foundation of structures.

### 7.0 Traffic Characteristics of Proposed Road

There is low to medium traffic on proposed road. But heavy traffic in between 5pm to 6pm in Km 0/0 to Km 1/500 (Urban / City portion). Traffic volume at peak hours just double with respect to present road capacity with in Km 0/0 to Km 1/500. Particularly Delhi gate is very congested. Generally light motor vehicles, cars, two wheeler moves on this stretch during peak hours. But multi axle vehicles also moves (travel) on entire road in the night. More traffic may divert on this road after widening and strengthening.

### 8.0 Bridge Inventory

There are 15 small bridges / Culvert / Cross Drainage Work at the proposed road. The detail of bridges as under -

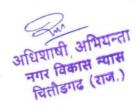
Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

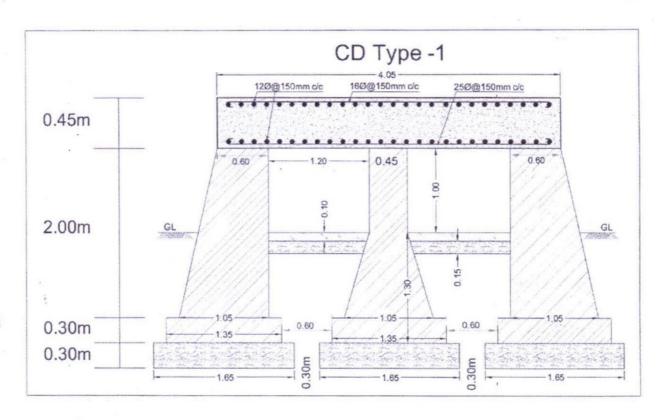
भिधशाषी अभियन्त नगर विकास न्यास चितौडगढ (राज.)

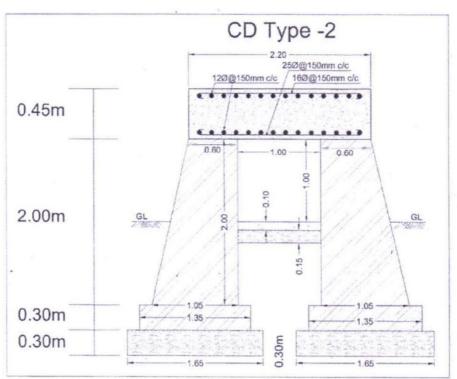
S. No.	Chainage	Detail
1	Km 0/306	CD with RCC solid slab. 2 span of 1.20m
2	Km 1/171	
3	Km 1/292	CD with RCC solid slab. 2 span of 1.20m
4	Km 1/505	RCC Hume Pipe Culvert. 2 Pipe 600mm dia
5	Km 1/731	RCC Hume Pipe Culvert. 2 Pipe 600mm dia
6	Km 2/265	CD with RCC solid slab. 1 span of 1.00m
7	Km 2/309	CD with RCC solid slab. 1 span of 1.00m
8	Km 2/540	RCC Hume Pipe Culvert. 2 Pipe 600mm dia
9	Km 2/660	RCC Hume Pipe Culvert. 2 Pipe 600mm dia
10	Km 3/281	RCC Hume Pipe Culvert. 2 Pipe 600mm dia
11	Km 3/369	CD with RCC solid slab. 1 span of 1.00m
12	Km 3/892	CD with RCC solid slab. 1 span of 1.50m
13	Km 4/805	RCC Hume Pipe Culvert. 2 Pipe 600mm dia
14	Km 5/108	CD with RCC solid slab. 3 span of 1.20m
15	Km 6/025	CD with RCC solid slab. 1 span of 1.50m

Drawings of CD works / Culverts are as under :

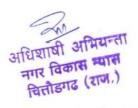
Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

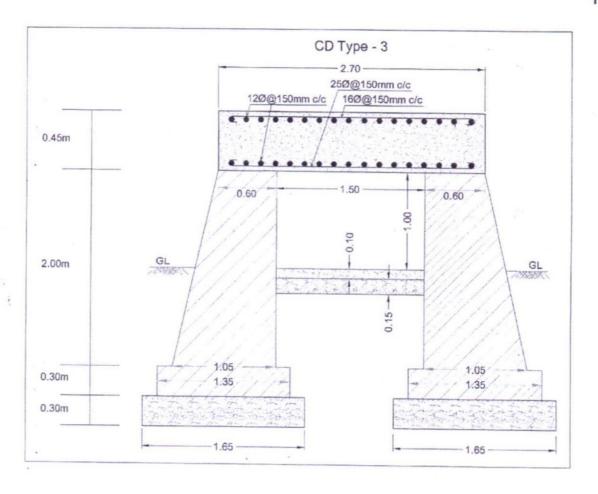






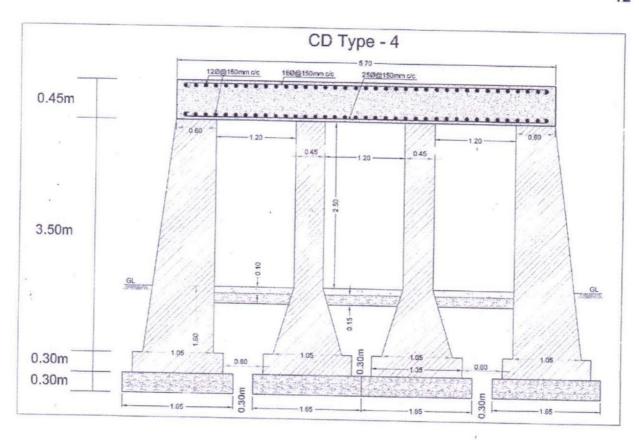
Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

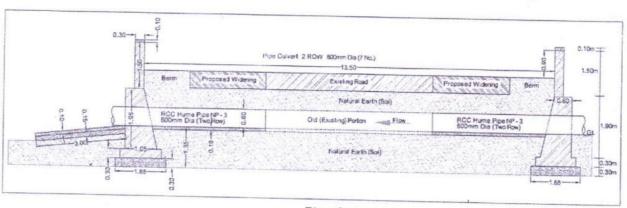




Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

अधिशाषी अभियन्ता नगर विकास न्यास चितीडगढ (राज.)

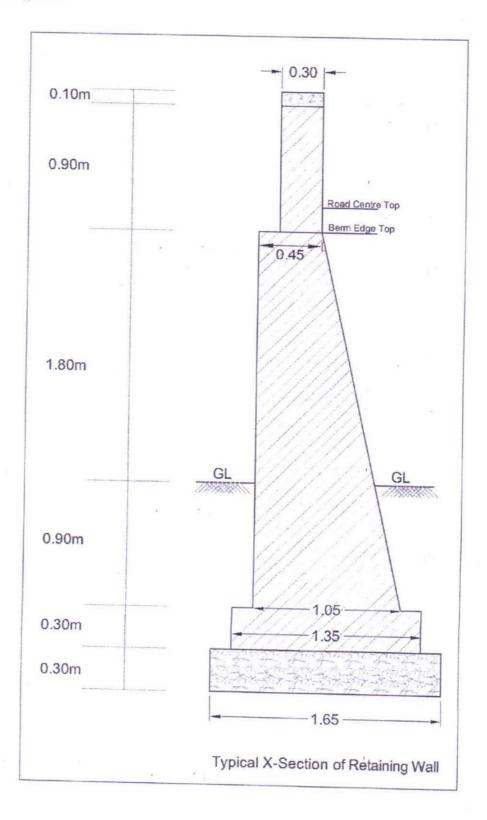




· Pipe Culvert

Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh ,

अधिशाषी अभियन्ता नगर विकास न्यास चित्तौडगढ (राज.)



Project Report For Widening, Strengthen And Re-Carpeting Of Road From Delhi Gate To Nh-79 Via Manpura / Gopal Nagar Chittorgarh , Rajasthan.

अधिशाषी अभियन्ता नगर विकास न्यास चितौडगढ (राज.)

### OFFICE OF THE URBAN INPROVMENT TRUST CHITTORGARH (RAJ.)

### **Technical Report**

S.No.	Items	Description
1	Name of work	Windening and Recarpanting of Road from Delhi Gate to NH- 79 Manpura Road.
2	Authority	Govt. of Rajasthan Under Shari Jan Sahbhagita Yojana.
3	A/F Sanction	Rs. 748.00 Lacs from Distt. Collector Wide Latter No. सामान्य / एसजेएसवाई / आदेश / 2016 / 1542 दिनांक 21 अक्टूबर, 2016 राज्य सरकार की 50 प्रतिशत हिस्सा राशि 374.00 लाख की स्वीकृति स्थानीय निकाय विभाग, जयपुर के पत्र क्रमांक एफ.8 () लेखा / SJSY/PD/DLB/2013-14/15322 Date 27-12-2016 न्यास की 20 प्रतिशत हिस्सा राशि 149.60 लाख की स्वीकृति राजस्थान सरकार नगरीय विकास विभाग, जयपुर के पत्र क्रमांक प. 8 (4) नविवि/1/2015 दिनांक 03.01.2017
4	Technical Sanction	748.00 Lacs from Trust
5	Working Agency	UIT, Chittorgarh As per Distt. Collector Latter No. सामान्य/एसजेएसवाई/आदेश/2016/1542 दिनांक 21 अक्टूबर, 2016
6	Necessity of work	This is one of the main Entrence of the Chittorgarh City so it have High Traffic Problem. To solve the Problem of Traffic and Safety it is Necessiry to Widen the road from Delhi Gate to Highway. Road Widening is Permanent Cure of Traffic Management.  One of other Advantage of Widening the Lanes Road is to Reduce Side Swap Traffic and Reduce Turn off Road Crashes.
7	Speciffication	(A)  1 Length of Road 6.2 KM  2 Existing Road Pavement Width -5.50 Mtr  3 Road to be Widended on each side – 2.5 Mtr  (B)  1 GSB 1 Layer – 0.20 Mtr. Thick  2 W.M.M. 3 Layer – 0.10 Mtr. Thick each  3 D.B.M. – 1 Layer – 50 to 75 MM Thick  4 B.C. – 1 Layer – 30 to 45 MM Thick
8	B.S.R.	Based on PWD- 2016 BSR for Road Works Circle Chittorgarh.

अधिशाषी अभियन्ता नगर विकास न्यास चित्तौडगढ (राज.)

9	Project Cost	748 Lacs
10	Project Completin Period	12 Month
11	Other Details	1 L-Section of Road 2 Cross-Sections of Road 3 Survey Map of Road Aliment 4 Earth work Calculation Sheet

Junior Engineer UIT, Chittorgarh

UIT, Chittorgarh

**Executive Engineer** UIT, Chittorgarh

Estimate for Windening and Recarpanting of Road from Delhi Gate to NH-79 Manpura Road Technically Sanctioned for Rs. 748.00 Lacs

------ Date ------ Ch.Head-----Submitted for Competent approval for T. S. of R. 748, a loss

> **Executive Engineer** UIT, Chittorgarh

Suprintending Engineer/Additional Chief Engineer/ Chief Engineer

May be placed before troust for competent approval.

Estimate Technically Sanctioned in Truss+ meeting dated 22.2.17

अधिशाषी अभियन्ता नगर विकास न्यास चित्तौडगढ (राज.)

विसीडगढ (राजः)

नगरीद विकास विमान मुख्यालय, कोटा

## OFFICE OF THE URBAN IMPROVEMENT TRUST CHITTORGARH

### **GENERAL ABSTRACT**

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to NH - 79 manpur Road.

748.00 LACS	SAY		
74778962.85	GRAND TOTAL		
797566.5	ADD 15% AVVNL SUPERVISION CHARGES ON ELECTRIC WORK		
3185801.75	ADD 4.5%		
70795594.60	TOTAL		
521/310.00	ELECTRIC LINE SHIFFITING WORK	Part -H	00
5565687.88	RETAINING WALL(200 MWY)	Part -G	7
50.571086	RCC CD WORK TYPE -4, 1 NO.	Part -F	6
595587.64	RCC CD WORK TYPE -3, 2 NO.	Part -E	5
825050.41	RCC CD WORK TYPE -2, 3 NO.	Part -D	4
869726.04	RCC CD WORK TYPE -1, 2 NO.	Part -C	3
699142.64	HUME PIPE CULVERTS- 7NO.	Part -B	2
56441901.94	ROAD WORK (6186M)	Part -A	1
ESTIMATED COST IN LACS	DESCRIPTION		S.No.

UIT, CHITTORGARH JUNIOR ENGINEER

ASSISTANT ENGINEER UIT, CHITTORGARH

EXECUTIVE ENGINEER UIT, CHITTORGARH

अधिशाषी अभियन्ता नगर विकास न्यास चितौडगढ (राज.)

OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway Part : A , Road Work

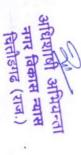
6	ن. د	4	ω	N	1	S.No.
R-6/1	R-4/8	R-3/8	R.3 / 1.3	R-2/4.2.1	R-2/3.1.1	Code No.
Cleaning the existing WBM /WMM surface including removing of binding Material and other foreign matter with wire brushes ,small picks, sweeping with brooms /soft brushes, finally dusting with old gunny bags anc;l compressed air to receive bituminous treatment. (MoRTH specification clause 501 to 503, 112).	Providing, laying and spreading and compacting specified graded crushed stone in subbase course including premixing the Material at OMC in mechanical mixer (Pugmill), carriage of mixed Material, laying in uniform layers with Motor Grader, F.E.Loader, on a prepared surface and compacting with Vibratory Compactor to achieve the desired density including all Material, labour, machinery, lighting barricading and maintenance of Driversion complete. (MoRTH specification clause 401). with all lead & lift	Construction of embankment with approved Material obtained from borrow-pits with all lift sandleads, transporting to site, spreading, grading to required slope and compacting by vibratory roller 8-10 to n neto meet requirement of Table 300 2 including cost of compensation for earth taken from private land with lead upto 1 km as per MoRTH Specification: Clause No. 305.	Earth work in excavation for roadway in soil,including stacking/disposal of surplus Material exclusive of compensation of earth (MoRTHspecification: clause 301 to 305). By Hydraulic Excavator CK-90 of 0.9 cum bucket capacity andtipper with disposal upto 1000 mtrs.	Dismantaling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled Material, disposal of unserviceable Material and stacking the serviceable Material with all lift and lead of 1000 metres. [MoRTH Specification: Clause 202]. BY MECHANICAL MEANS. Cement concrete grade M-15 & M-20.	R-2/3.1.1 Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, removal of stumps, disposal of unserviceable Material and stacking of serviceable Material upto 1000m from road boundary. (MoRTH Specification: Clause 201). BY MANUAL MEANS. In area of Light Jungle	Particular
30930.00	6186.00	3709.00	22135.00	61.56	3.09	Quantity
Sqm	Cum	Cum	Cum	Cum	Hect	Unit
6.00	911.00	98.00	33.00	317.00	24474.00	Rate
185580.00	5635446.00	363482.00	730455.00	19514.52	75698.08	Amount

अधिशार्षी अभिवन्ता नगर विकास न्यास चितौडगढ (राज.)

	R-6/2	Cleaning of the existing black topped surfaces with brooms, soft brushes and finally dusting with old gunny bags and compressed air to receive bituminou streatment (MoRTH specification clause to 503, 112)	34023,00	Sqm	3.20	108873,60
œ	R-5/2	Providing, laying, spreading and compacting crushed graded stone aggregate as per Table 400- 10 & 400. 11 to Wet Mix Macadam specifications in including premixing the Material with water to OMC in mechanical mixer (Pugmill) as per design mix, carriage of mixed Material by tipper to site laying in uniform layers, with motor grader / F.E. loader / Paver Finisher, in sub-base / base course on a well prepared under-base and compacting with Vibratory Roller to achieve the desired density including lighting, guarding, barricading and maintenanc of Drivers n etc. (MoRTH specification: Clause 406), with all lead & lift	9279.00	Cum	1050.00	9742950.00
9	R-6/4	Providing and applying primer coat over prepared surface Of granular base with bitumen emulsion as per IS: 8887 & manufacturer "specifications @ 6 kg /10 sqm with a self propelled or to wed bitumen pressure sprayer equipped for spraying the Material uniformly at specified rates and temperatures (including cleaning of road surface) as per MoRTH specification: CI. 502, 112	30930.00	Sqm	24.00	742320.00
10	R-6/5	Providing and applying tack coat on the prepared surface, with bitumen emulsion as per IS: 8887 & manufacturer specifications @ 0.2 kg/ sqm with as self propelled or to wed bitumen pressures prayer equipped for spraying the Material uniformly at specified rates and temperatures (including cleaning of road surface ) as per MoRTH specification CI. 502, 112.Add extra for 0.1 kg extra in emulsion per sqm (One coat on 10.5m width + one more coat on 5.0m width / widening portion).	95883.00	Sqm	9.00	862947.00
4	R-6 / 10.1	R-6 / 10.1 Providingr and laying Dense Bituminous Macadam on prepared surface with specified graded crushed aggregates (as per table 500-9,500-10 and design mix) for base /binder course including loading of Material with F. E. loader , heating of binder (including cost of antistripping compound ,wherever required ) aggregates and filler in hot mix plant (40-60 TPH) , transporting the mixed Material by tippers and laying with sensor paver finisher as per clause 504.3.5 required level and grade , rolling by self propelled power roller sand vibratory rollers or pneumatic tyre droller , 150-250 KN.TP=0.7 Mpa ,to achieve the desired density (approved by the department)but excluding primer /tack coat. (MoRTH specification : clause 505, 112). with all lead & lift (a)50-75 mm Compacted thickness with 4.5% bitumen content VG 30 grade with lead of mixed	2319.75	Cum	5841.00	13549659.75



	372.00	Each	150.00	Boundary pillar: Reinforced cement concrete M15 grade boundary pillars of standard design as per IRC:25-1967, fixed in position including finishing and lettering but excluding painting.	R-9 / 16	17
	3429.00	Sqm	45.00	Direction and Place Identification Signs upto 0.9 sqm Size Board. Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of high intensity grade sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing	R-9/5	6
	2097.00	Each	50.00	Retro-Reflectorised Traffic Signs Providing and fixing of retro- reflectorised cautionary, mandatory and informatory sign as per IRC :67 made of high intensity grade sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 60 cm, 60 cm below ground level as per approved drawing. 90 cm equilateral triangle.	R-9/4.1	on on
	418.00	Each	24.00		=	
	1454.00	Each	5.00	Ordinary Kilometer Stone (Precast)	=	
	2431.00	Each	1.00	5th Kilometre Stone (precast)	-	
				Reinforced cement concrete M15 grade kilometre stone/local stone of standard design as per IRC:8 fixing in position including painting and printing, etc as per drawing and MoRD Specification Clause 1703	R-9 / 14	14
	547.00	Sqm	5567.40	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface.Providing and laying of hot applied on plastic compound 2.5 mm thick including reflector is in glass beads @ 250 gms per sqm area ,thickness qt 2.5 mm is exclusive of surface applied glass beads as per IRC: 35. The finished surface of be leve I, uniform and free from streaks and holes.	R-9 / 13	3
20989237.19	7181.00	Cum	2922.89	R-6 / 15.1 Providing and laying Bituminous Concrete as per Design Mix on prepared surface specified graded stone aggregates as per Table 500-17, for wearing course including loading of aggregates with F. E. loader and hot mixing of binder (including cost of antistripping compound, wherever required) and 3% cement filler with a ggregates in Hot Mix Plant 40-60 TPH, transporting the mixed Material with tipper to paver and laying with sensor paver finisher (as per clause 504-3.5) to the required level, grades and rolling with vibratory compactor and pneumatic tyred roller 150-250 kN,TP =0.7 Mpa, to achieve the desired density (approved by the department as per job mix.) excluding cost of primer. Lack coat. (MoRTH specification: clause 507), 15.1, 30-45 mm compacted with 6% binder with lead of mix Material. 1 km 15.1.1 (a) With strai. The run bitumen Crade VG30.	R-6/15.1	12



56441901.94				
55683.00	185.61	Each	300.00	MORTH Circular No RW/NH/33023/10-97 – DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 100 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/ 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 700 Kgf. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer. The contractor shall submit 2 years pre qualified warranty certificate from the manufacturer for satisfactory field performance during the time of bid submission.
				panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance
				18 R-9 / 57 Raised Pavment Marker ( Cats Eyes) : Supplying and Fixing of Molded Shank Raised Pavement Markers made of polycarbonate and ABS moulded body and reflective

अधिशासी अभियन्ता नगर विकास न्यास चित्तीङ्ग्ड (राज्ञ.)

सहायक अभियन्ता नगर विकास न्यास, चित्तीइगढ

किनिष्ठ अभियन्ता नगर विकास न्यास वित्तीड्गढ

अधिशाषी अधियन्ता अधिशाषी अधियन्ता नगर विकास न्यास चित्तीङगढ (राज.)

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH Part- B (RCC Hume Pipe Culvert - 7 No.)

699142.64	Total				
182952.00	3267.00	RM	56.00	R-8 / 20.3 Providing and laying reinforced cement concrete pipe NP3 for culverts including jointing and fixing colar with cement mortar 1;2 (MORTH SPECIFICATION) CLAUSE 1000/2900 600 mm dia	6 R-8
17640.00	140.00	Sqm	126.00	R-8 / 18 Providing cement plaster 20mm thick in cement mortar 1:3 at all levels (MORTH specification; clause 1000/1300).	5 R
359626.40	2980.00	Cum	120.68	R-8 / 12 Providing & laying Random Rubble Masonry (coursed) in cement sand mortar 1:3 in foundation up to a depth of 1.50m and also 1.50m above ground/bed level. [MoRTH Specification: Clause 1000/1400].	4 R
22194.90	3523.00	Cum	6.30	R-8 / 2 Providing and laying Plain Cement Concrete M-15 mix with stone aggregate 20mm nominal size mechanically mixed and vibrated in foundation upto a depth of 1.50 below ground level and or 1.50mtr. above ground/bed level.	ω P
109118.10	2855.00	Cum	38.22	(b) Froviding & laying mechanically mixed and vibrated Cement Concrete in foundation upto a depth of 1.5mtr, below ground level and 1.5mtr above ground/bed level. [MoRTH Specification: Clause 1000/1700].) Cement concrete 1:3:6 mix with stone aggregate 40 mm crusher broken.	2 R-8
7611.24	68.00	Cum	111.93	B-1/1.1.4 Earthwork in excavation for foundation of structure complete with all lift, dewatering shoring and shuttering etc. including refilling of trenches in 250 mm layer, ramming, watering and disposal of surplus soil within a lead of 1000 meters, as per drawing and technical Earth in excavation for foundation of specification. [MoRTH Specification: Clause 304]. In ordinary soil. BY MECHANICAL MEANS, Depth upto 3m.	1 B-1
Amount	Rate	Unit	Quantity of 7 Culverts	Code No. Particular	S.No. Cod

अधियाषी अभिय-ता नगर विकास न्यास चित्तौडगढ (राजू.)

अधियाषी अधियन्ता अधियाषी अधियन्ता नगर विकास न्यास नितीडगढ (राज.)

> सहायक अभियन्ता नगर विकास न्यास, चित्तीइगढ़

कान्ध्व आभयन्ता नगर विकास न्यास रिक्तीड्यह

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

Part: C, RCC Culvert Type - 1 (2 No. 1 & 3)

C works including centering are sold with all prefilling of trenches in 250 blus soil within a lead of Earth in excavation for 126.72 Cum 68.00 8616.96 Side X 3 Wall X 4.00 Long Side X 4.33 Long Side X 4.	869726.04	Total					
Quantity     Unit     Rate     Ar       1     126.72     Cum     68.00       2     29.52     Cum     2855.00     8       4.33     Cum     2855.00     8       142.14     Cum     2980.00     42       86.16     sqm     140.00     13       29.16     Cum     4878.00     143	183692.81	53.586	6	3428.00	2 Providing and fabricating Steel reinforcement for RCC works including cutting, bending, placing in position and binding complete including cost of binding wire.  (MoRTH specification: Clause 1000/1600). HYSD bars	K-8/6.2	,
Quantity     Unit     Rate     Ar       1     126.72     Cum     68.00       29.52     Cum     2855.00     8       4.33     Cum     3523.00     1       142.14     Cum     2980.00     42       86.16     sqm     140.00     13	142242.48	4878.00	Cum	29.16	mechanically mixed and vibrated for reinforced concrete work in uperstructure at any level excluding steel reinforcement, but including and shuttering laid in position (MoRTH specification: clause 1000/1700).		
Quantity     Unit     Rate     Ar       1     1     1     68.00       1     29.52     Cum     2855.00     8       2     4.33     Cum     3523.00     1       142.14     Cum     2980.00     42	12062.40	140.00	sqm	86.16		7-6/18	ם מ
Quantity     Unit     Rate     Ar       126.72     Cum     68.00       29.52     Cum     2855.00     8       4.33     Cum     3523.00     1	423577.20	2980.00	Cum	142.14		R-8/12	4 1
Quantity Unit Rate Ar 126.72 Cum 68.00 29.52 Cum 2855.00 8	15254.59	3523.00	Cum	4.33		7-6/2	
Quantity Unit Rate Ar 126.72 Cum 68.00	84279.60	2855.00	Cum	29.52	Providing & laying mechanically mixed and vibrated Cement Confoundation upto a depth of 1.5mtr, below ground level and 1.5mt ground/bed level. [MoRTH Specification: Clause 1000/1700].) concrete 1:3:6 mix with stone aggregate 40 mm crusher broken	(b)	۸ د
Unit Rate	8616.96	68.00	Cum		A in excavation for foundation of structure complete with atering shoring and shuttering etc. including refilling of trenches in 2 ramming, watering and disposal of surplus soil within a lead ters, as per drawing and technical Earth in excavation of specification. [MoRTH Specification: Clause 304]. In ordinate of the specification of specification. [MoRTH Specification: Clause 304]. In ordinate of the specification. [MoRTH Specification: Clause 304]. In ordinate of the specification. [MoRTH Specification: Clause 304]. In ordinate of the specification. [MoRTH Specification: Clause 304]. In ordinate of the specification of the specification. [MoRTH Specification: Clause 304]. In ordinate of the specification of the specification of the specification of the specification.	9	-
	Amount	Rate	Unit	Quantity	Particular	Code No.	S.No.

अधियाषी अभियन्ता नगर विकास न्यास चित्तीडगढ (राजू.)

मिराणायां न्यास सहायतः अधियानाः नगरं विकास न्यासः सहायतः अधियानाः । विताहातः (सङ्क्षेत्रे विकास ज्यासः, वितीह्नाद्

कानष्ठ आभयन्ता

नगर विकास न्यास चित्तौड्गढ

8.7

say

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

Part : D , RCC Culvert Type - 2 (3 No. 6 , 7 & 11)

	-					
153202.37	53.59	Κg	2859.00	Providing and fabricating Steel reinforcement for RCC works including cutting, bending, placing in position and binding complete including cost of binding wire.  (MoRTH specification: Clause 1000/1600). HYSD bars	R-8 / 6.2	7
115901.28	4878.00	Cum	23.76	1	R-8/26	on
11306.40	140.00	Sqm	80.76		R-8/18	Ch
449056.20	2980.00	Cum	150.69	2 Providing & laying Random Rubble Masonry (coursed) in cement sand mortar 1:3 in foundation up to a depth of 1.50m and also 1.50m above ground/bed level. [MoRTH Specification: Clause 1000/1400].	R-8/12	4
9864.40	3523.00	Cum	2.80		R-8/2	ω
78112.80	2855.00	Cum	27.36	N	(b)	N
8616.98	68.00	Cum	126.72		8-1/1.15	_
Amount	Rate	Unit	Qty of 3 CD	lo. Particular	Code No.	S.No.
		-				

अधियाषी अभियन्ता अधियाषी अभियन्ता नगर विकास न्यास अधियाषी अभियन्ता वितीङ्गढ (राजू.) नगर विकास न्यास

> सहायेके अभिएना नगर विकास न्यास, चितौड्गढ़

कान्छ आभवता नगर विकास त्यास चित्तीहमळ

Total

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH Part: F, RCC Culvert Type - 4 (1 No. 14)

580178.05	Total					
130481.91	53.586	. Kg	2435.00	Providing and fabricating Steel reinforcement for RCC works including cutting, bending, placing in position and binding complete including cost of binding wire. (MoRTH specification: Clause 1000/1600). HYSD bars	R-8 / 6.2	7
66731.04	4878.00	Cum	13.68	Reinforced cement concrete M-30 mix with stone aggregate 20mm nominal size mechanically mixed and vibrated for reinforced concrete work in slab in uperstructure at any level excluding steel reinforcement, but including centering and shuttering laid in position (MoRTH specification: clause 1000/1700).	R-8 / 26	0
6862.80	140.00	Sqm	49.02	Plastering with cement mortar (1:4), 20 mm thick on Stone work.	R-8 / 18	5
301456.80	2980.00	Cum	101.16	Providing & laying Random Rubble Masonry (coursed) in cement sand mortar 1:3 in foundation up to a depth of 1.50m and also 1.50m above ground/bed level. [MoRTH Specification: Clause 1000/1400].	R-8 / 12	4
11344.06	3523.00	Cum	3.22	Plain / reinforced cement concrete in substructure complete as per drawings and MoRD specification Clauses 802, 804, 805, 806, 807, 1202 and 1204. For height upto 5 m. P.C.C. grade M 20 . Nominal mix (1:2:4).	R-8/2	ω
57556.80	2855.00	Cum	20.16	Providing concrete for plain / reinforced concrete in open foundations complete as per drawings and MoRD specifications Clause 802, 803, 1202 & 1203. P.C.C grade M 10. Nominal mix 1:3:6.	R-8 / 1.2.2(b)	2
5744.64	68.00	Cum	84.48	B-1 / 1.1.4 Earthwork in excavation for structures as per drawing and MoRD specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material. Ordinary soil. Upto 3 m depth. (2 Side X 4 Wall X 4.00 Long X 1.65 Wide X 1.60 Ht)	B-1/1.1.4	_
Amount	Rate	Unit	Quantity	Particular	Code No.	S.No.

अधिशाषी अभियन्ता अभियन्ता नगर विकास नगस अभियान अभियन विकास नगस विकास नगस विकास नगस विकास नगस विकास नगर विकास नगर विकास विकास नगर विकास विक

सहायक अभियना नहायक अभियना नह विास न्यास, चित्तीइनाइ

किनेष्ठ अभियन्ता नगर विकास न्यास चित्तौड्गढ

### NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway Part: G, Retaining Wall OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

अधियाषी अभिक्षानात विकास त्यातः।
नगर विकास न्यास विताडगढ (राजः)
चिताडगढ (राजः), विताडगढ

नगर विकास न्यास, चित्तीड्गढ़ सहायक अभियन्ता

> कनिष्ठ अभियन्ता नगर विकास न्यास **चित्ती**ड्गढ

## OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

NAME OF WORK: Windening and Recarpanting of Road from Delhi Gate to NH-79 Manpura Road.

	A LANG	Part H - Electric Shiffting Works				
S. NO.	S. NO. Code No.	Particular	Qunt.	Unit	Rate	Amount
_	E210101	Supply and erection of P.C.C./R.C.C. pole as per REC manual no 15/1979 conforming to IS: 2905/1966 including excavation of pit and back filling with stone aggregate/boulders and soil in 0.45m consolidating each deposited layer of 0.45m by ramming and watering etc complete in all respect.	40	Each	2660.40	106416.00
2	E210103	Supply and erection of P.C.C./R.C.C. pole as per REC manual no 15/1979 conforming to IS: 2905/1966 including excavation of pit and back filling with stone aggregate/boulders and soil in 0.45m consolidating each deposited layer of 0.45m by ramming and watering etc complete in all respect.  9.0 Mtr long (400 Kg ) as per Discom specification	110	Each	4328.40	476124.00
ω	E210201	Supply and erection of GI stay set as per Discom specification complete with long stay rod with anchor plate including stay clamps turn buckle and G.I stay wire tightened through strain insulator, in cement concrete 1:3:6 including excavation of pit-re-filling etc as reqd.Stay set of dia 20mm,2.4m long stay rod and anchor plate 380x380x6.4mm	10	Each	1319.0	13190.00
4	E210301	E210301 Supply and fixing of following LT Supporting accessories with nut bolt & Clamps made out as per standard Discom's specifications.  LT cross arm 600 mm long with clamp	150	Each	280.00	42000.00
Ŋ	E210302	Supply and fixing of following LT Supporting accessories with nut bolt & Clamps made out as per standard Discom's specifications.  LT cross arm 1200 mm long with clamp	150	Each	480.00	72000.00
O	E210401	E210401 Supply and fixing of LT porcelain pin insulator as per IS 1445-1997 suitable for working voltage 1100 volts including all accessories like hot dip GI forged spindle of 260mm long and nuts etc as read as per Discom specification.  105mm x 65mm	400	Each	55.00	22000.00
7	E210501	E210501 Supply and fixing of porcelain shackle insulator as per IS:1443 1979 suitable for working on 1100 volts including hot dipped GI accessories and heavy duty hardwares etc as required as per Discom specification.  75mm x 90mm	160	Each	65,00	10400.00

अधियाषी अभियन्ता नगर विकास न्यास नगर विकास न्यास चितीडगढ (राज.)

Discom specifications.	7 E212200 Supply and fixing double pole complete in all respect as requi of MS channel of 4 nos 100 x 5		6 E211700 Supplying and fixing of straight x 50 x 6mm for guarding on ex 50 x 6mm bend into shape at b	5 E211401 Supply and fixing 11kV Disc ins on existing bracket including a specification of Discom).  B & S type hardware 45 KN	4 E211403 Supply and fixing 11kV Disc ins on existing bracket including specification of Discom).  B & S disc insulator 45 KN	3 E211300 Supply and fixing 11kV pin instruction on existing bracket including a specification of Discom).	2 E210811 Supply and fixing of top hamper on the 11 kV (.7m long) (65 x 65 x6mm angle)	1 E210701 Supply and fixing of "V" type cross ar including all necessary nut and bolt etc 11kV cross arms (75 x 40 x 6.8 kg/mtr)			binding and twisting etc. complete in all respective for the complete of the c
	Supply and fixing double pole structure for $11/0.4$ Kv substation as per Discom specification complete in all respect as required including nuts and bolts etc (excluding the cost of poles) made of MS channel of 4 nos $100 \times 50 \times 6$ mm and 4 nos $75 \times 40 \times 6$ mm and MS flat $50 \times 6$ mm as per		E211700 Supplying and fixing of straight type 1.5 mtr long cross arms made out from MS angle of size 50 x 50 x 6mm for guarding on existing poles complete including 2 nos 150mm long MS flat of size 50 x 6mm bend into shape at both the ends duly welded clamps, nut and bolt etc as required.	E211401 Supply and fixing 11kV Disc insulator (IS 731/ 1971) with minimum creepage distance of 300mm on existing bracket including all accessories like hot dipped GI spindle and nuts etc (as per specification of Discom).  B & S type hardware 45 KN	Supply and fixing 11kV Disc insulator (IS 731/ 1971) with minimum creepage distance of 300mm on existing bracket including all accessories like hot dipped GI spindle and nuts etc (as per specification of Discom).  B & S disc insulator 45 KN	Supply and fixing 11kV pin insulator(IS 731/ 1971) with minimum creepage distance of 300mm on existing bracket including all accessories like hot dipped GI spindle and nuts etc (as per specification of Discom).	Supply and fixing of top hamper on the existing pole complete including nut bolts etc as required.  11 kV (.7m long) (65 x 65 x6mm angle)	Supply and fixing of 'V' type cross arms made of MS channel on the existing poles complete including all necessary nut and bolt etc with clamps as per Discom specification.  11kV cross arms (75 x 40 x 6.8 kg/mtr)	Part B		II-1996) on existing cross arms through insulator with all necessary T&P required including binding and twisting etc. complete in all respect as required as per Discom specification.  50 Sqmm of (6+1) 3.35 mm (Insulated Rabbit)
16		24		48	96	48	24	24			15000
Each		Each		Each	Each	Each	Each	Each		Tota	Rmtr
9570.00		540.00		560.00	406.00	135.00	315.00	850.00		Total PART A	62.00
153120.00	2	12960.00		26880.00	38976.00	6480,00	7560.00	20400.00		1672130.00	930000.00



21.000.00	2000		0000			-
27000 00	9 00	3	3000	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required.  8 SWG G.I. ( Hot Dipped ) Wire	E150705	4
513520.00	917.00	mtr.	560	E110113 P/Laying P.V.C. / XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor of IS:1554 P-1 / IS:7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.  3.5 core	E110113	ದೆ
680000.00	42500.00	Each	16	Supply and fixing of piller box made of 2 mm thick powder coated CRCA sheet of 415 volts 3 phase 4 wire triple pole and neutral type, complete in all respect as required. Including knife switch of 400 amp. rating, HRC fuses with copper one piece U contacts base, brass studs and nuts, copper busbar for main and interconnection, MS angle frame of 50 x 50 x 6 mm grouted with C.C. of M-10 grade to achieve the height of 1.5 feet above the road level suitable for four outgoing.	E211800	12
38160.00	2385.00	Each	16	E212100 Supply and fixing of distribution type Lightening arrestor 9 kV, 10 kA (IS:3070) with mounting breaking to be installed on existing DP structure. (Type tested by ERDA/CPRI.)	E212100	1
96800.00	6050.00	Each	16	Supply and fixing 100 Amp, 11kV Horn gap fuse set IS 9385 on existing DP structure with 6 nos 24kV/22kV post insulator (IS:5350 part III), hot dipped hard ware, fuse wire of required size etc. complete in all respect as per specification given by Discom. (Type tested by ERDA/CPRI)	E211900	10
210400.00	13150.00	Each	16		E212000	9
158400.00	1650.00	Set	96		E150100	00

अधिशाषी अभियन्ता नगर विकास न्यास चितौडगढ (राज.)

5217310.00	Grant Total	0				
5217310.00	TOTAL PART A+B	TOTAL				
3545180.00	TOTAL PART B	101				
26144.00	1634.00	Each	16	required. 2 x 1.3 m long		
				E210902 Supply and fixing of Cross arms made out from 100 x 50 x 5 mm MS channel complete in all respect as required including nuts and bolts and clamp as per Discom specification etc as	18 E210	
237380.00	Each 237380.00	Each	_	160 KVA		
				Epoxy based paint, including carrying of pre-commission Testing & Charging of Transformer. ( See table - 08 for CTL Losses.)		
				radiator, fins, HT bushing & LT cableboxes, Off -LTC (+/- 5% in steps of 2.5%) winding temperature rise of 50/55 C. ISI marked drain valve. Dial type Temperature gauge first fill of oil		
				Connected, Vector Group Dyn 11, standard accessories like conservator, silica gel breather,		,
				E280204 S I T C of BEE 3 star rated Aluminium wound Transformer conforming to IS: 2026 & Losses as per Discom's CTL ( CTL Test certificate to be attached ) of rating 11/0.433KV Delta-Star	17 E280	
935000.00	Each 187000.00	Each	Çī	100 KVA		
				Epoxy based paint, including carrying of pre-commission Testing & Charging of Transformer. ( See table - 08 for CTL Losses)		
				radiator, fins, HT bushing & LT cableboxes, Off -LTC (+/- 5% in steps of 2.5%) winding		
				Connected, Vector Group Dyn 11, standard accessories like conservator, silica gel breather,		
				per Discom's CTL ( CTL Test certificate to be attached ) of rating 11/0.433KV Delta-Star		
356000.00	89.00	mtr.	4000	E280202 STT C of REE 3 star rated Aliminium wound Transformer conforming to IS: 2026 & Losses as	16 E28/	T
				100 sqmm of (6/4.72 mm+1/1.57 mm) (Dog)		
				binding and twisting etc. complete in all respect as required as per Discom specification.		
				E210605 Supplying and drawing overhead steel core Aluminium conductor (ACSR) ISI marked(IS 398 part	15 E210	

अधिशाषी अभियन्ता नगर विकास न्यास विताडगढ (राज्ने अभियन्ता नगर विकास न्यास नगर विकास न्यास विताडगढ (राज.)

सरायम अभियना नगर विलास न्यास, चित्तीहंगह

> कानिष्ठ अभियन्ता नगर विकास न्यास चितीइगढ

### OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway Part: A, Road Work

ø	Ch Ch	4	ω	N	_	S.No.
R-6/1	R-4/8	R-3/8	R.3/1.3	R-2/4.2.1	R-2/3.1.1	Code No.
Cleaning the existing WBM /WMM surface including removing of binding Material and other foreign matter with wire brushes, small picks, sweeping with brooms /soft brushes, finally dusting with old gunny bags anc; compressed air to receive bituminous treatment (MoRTH specification clause 501 to 503, 112).	Providing, laying and spreading and compacting specified graded crushed stone in sub-base course including premixing the Material at OMC in mechanical mixer (Pugmill), carriage of mixed Material, laying in uniform layers with Motor Grader, F.E.Loader, on a prepared surface and compacting with Vibratory Compactor to achieve the desired density including all Material, labour, machinery, lighting barricading and maintenance of Driversion complete. (MoRTH specification clause 401), with all lead & lift	Construction of embankment with approved Material obtained from borrow-pits with all lift sandleads, transporting to site, spreading, grading to required slope and compacting by vibratory roller 8-10 to n neto meet requirement of Table 300 2 including cost of compensation for earth taken from private land with lead upto 1 km as per MoRTH Specification: Clause No. 305.	Earth work in excavation for roadway in soil,including stacking/disposal of surplus Material exclusive of compensation of earth (MoRTHspecification: clause 301 to 305).By Hydraulic Excavator CK-90 of 0.9 cum bucket capacity and tipper with disposal upto 1000 mtrs.	Dismantaling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled Material, disposal of unserviceable Material and stacking the serviceable Material with all lift and lead of 1000 metres. [MoRTH Specification: Clause 202]. BY MECHANICAL MEANS. Cement concrete grade M-15 & M-20.	Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, removal of stumps, disposal of unserviceable Material and stacking of serviceable Material upto 1000m from road boundary. (MoRTH Specification: Clause 201). BY MANUAL MEANS. In area of Light Jungle	Particular
2.00	2.00	As	As	38.00	2.00	No
6186.00	6186.00	pe Calculation by Computer	pe Calculation by Computer	6.00	6186.00	٦
2.50	2.50	on by Cor	on by Cor	0.45	2.50	T/W.
1	0.20	nputer	nputer	0.60	1	н/В
30930.00	6188.00	3709.00	22135.00	61.56	3.09	Quantity
Sqm	Cum	Cum	Cum	Cum	Hect	Unit

अधियार्थि अधियन्ता भार विकास नाम वित्तीराढ (शका)

10	9		7
7.6. 6.	R-6/4	R-5/2	R-6/2
Providing and applying tack coat on the prepared surface, with bitumen emulsion as per IS:8887 & manufacturer specifications @ 0.2 kg/ sqm with as self propelled or to wed bitumen pressures prayer equipped for spraying the Material uniformly at specified rates and temperatures (including cleaning of road surface )as per MoRTH specification CI. 502, 112.Add extra for 0.1 kg extra in emulsion per sqm (One coat on 10.5m width + one more coat on 5.0m width / widening portion).	Providing and applying primer coat over prepared surface Of granular base with bitumen emulsion as per IS: 8887 & manufacturer "specifications @ 6 kg /10 sqm with a self propelled or to wed bitumen pressure sprayer equipped for spraying the Material uniformly at specified rates and temperatures (including cleaning of road surface) as per MoRTH specification: CI. 502, 112	Providing, laying, spreading and compacting crushed graded stone aggregate as per Table 400- 10 & 400. 11 to Wet Mix Macadam specifications in including premixing the Material with water to OMC in mechanical mixer (Pugmill) as per design mix, carriage of mixed Material by tipper to site laying in uniform layers, with motor grader / F.E. loader / Paver Finisher, in sub-base / base course on a well prepared underbase and compacting with Vibratory Roller to achieve the desired density including lighting, guarding, barricading and maintenanc of Drivers n etc. (MoRTH specification Clause 406), with all lead & lift	Cleaning of the existing black topped surfaces with brooms, soft brushes and finally dusting with old gunny bags and compressed air to receive bituminou streatment (MoRTH specification:clause to 503, 112)
1.00	2.00	2.00	1,00
6186,00	6186.00	6186.00	6186.00
15.50	2.50	2.50	5.50
1		0.30	į
95883.00	30930.00	9279.00	34023.00
Sqm	Sqm	Cum	Sqm
	Providing and applying tack coat on the prepared surface with bitumen emulsion as per IS:8887 & manufacturer specifications @ 0.2 kg/ sqm with as self propelled or to wed bitumen pressures prayer equipped for spraying the Material uniformly at specified rates and temperatures (including cleaning of road surface )as per MoRTH specification CI. 502, 112.Add extra for 0.1 kg extra in emulsion per sqm (One coat on 10.5m width + one more coat on 5.0m width / widening portion).	R-6/4 Providing and applying primer coat over prepared surface Of granular base with bitumen emulsion as per IS: 8887 & manufacturer "specifications @ 6 kg /10 sqm with a self propelled or to wed bitumen pressure sprayer equipped for spraying the Material uniformly at specification: CI. 502, 112  R-6/5 Providing and applying tack coat on the prepared surface with bitumen emulsion as per IS: 8887 & manufacturer specifications @ 0.2 kg/ sqm with as self propelled or to wed bitumen pressures prayer equipped for spraying the Material uniformly at specification CI. 502, 112. Add extra for 0.1 kg extra in emulsion per sqm (One coat on 10.5m width + one more coat on 5.0m width / widening portion).  *****  30930.00  *****  30930.00  *****  30930.00  ****  30930.00  ****  4186.00  418	R-5/2 Providing, laying, spreading and compacting crushed graded stone aggregate as per table 400- 10 & 400. 11 to Wet Mix Macadam specifications in including premixing the Material with water to OMC in mechanical mixer (Pugmill) as per design mix.  E.E. loader / Paver Finisher in sub-base / base course on a well prepared underbase and compacting with Vibratory Roller to achieve the desired density including lighting, guarding, barricading and maintenance of Drivers netc. (MoRTH specification Clause 406), with all lead & lift  R-6/4 Providing and applying primer coat over prepared surface Of granular base with bitumen emulsion as per IS: 8887 & manufacturer "specifications @ 6 kg /10 sqm with a self propelled or to wed bitumen pressure sprayer equipped for spraying the Material uniformly at specifications @ 0.2 kg/s sqm with as self propelled or to wed bitumen pressures prayer equipped for spraying the Material uniformly at specifications @ 0.2 kg/s sqm with as self propelled or to wed bitumen pressures prayer equipped for spraying the Material uniformly at specification Cl. 502, 112. Add extra for 0.1 kg extra in emulsion per sqm (One coat on 1.00 6186.00 15.50 95883.00 10.5m width + one more coat on 5.0m width / widening portion).

अधियाषी अभियन्ता नगर विकास न्यास चित्तीडगढ (राज.)

			14	13	12
=	=	-	R-9/14	R-9/13	R-6/15.1
200 m stone (precast)	Ordinary Kilometer Stone (Precast)	5th Kilometre Stone (precast)	Reinforced cement concrete M15 grade kilometre stone/local stone of standard design as per IRC:8 fixing in position including painting and printing, etc as per drawing and MoRD Specification Clause 1703	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface. Providing and laying of hot applied on plastic compound 2.5 mm thick including reflector is in glass beads @ 250 gms per sqm area thickness qt 2.5 mm is exclusive of surface applied glass beads as per IRC: 35. The finished surface of be leve I, uniform and free from streaks and holes.	R-6 / 15.1 Providing and laying Bituminous Concrete as per Design Mix on prepared surface specified graded stone aggregates as per Table 500-17, for wearing course including loading of aggregates with F.E. loader and hot mixing of binder (including cost of antistripping compound, wherever required) and 3% cement filler with a ggregates in Hot Mix Plant 40-80 TPH, transporting the mixed Material with tipper to paver and laying with sensor paver finisher (as per clause 504-3.5) to the required level, grades and rolling with vibratory compactor and pneumatic tyred roller 150-250 kN,TP =0.7 Mpa to achieve the desired density (approved by the department as per job mix.) excluding cost of primer 1 tack coat. (MoRTH specification: clause 507), 15.1, 30-45 mm compacted with 6% binder with lead of mix Material. 1 km 15.1.1 (a) With strail ht run bitumen Qrade VG30
24.00	5.00	1.00		6.00	1.00
*****	*****	*****		6186.00	6186.00
*****	*****	*****		0.15	10.50
*****	*****	****	*	1	0.045
24.00	5.00	1.00		5567.40	2922.89
Each	Each	Each		Sqm	Cum
	200 m stone (precast) 24.00 ***** 24.00	Ordinary Kilometer Stone (Precast)         5.00         ****** 5.00           200 m stone (precast)         24.00         ***** 24.00	5th Kilometre Stone (precast)       1.00       ******       ******       1.00         Ordinary Kilometer Stone (Precast)       5.00       ******       ******       5.00         200 m stone (precast)       24.00       ******       ******       24.00	R-9/14 Reinforced cement concrete M15 grade kilometre stone/local stone of standard design as per IRC:8 fixing in position including painting and printing, etc as per drawing and MoRD Specification Clause 1703  I 5th Kilometre Stone (precast)  I Ordinary Kilometer Stone (Precast)  5.00  24.00  24.00  24.00  24.00	R-9 / 13 Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface.Providing and laying of hot applied on plastic compound 2.5 mm thick including reflector is in glass beads @ 250 gms per sqm area thickness qt 2.5 mm is exclusive of surface applied glass beads as per IRC: 35. The finished surface of be leve I, uniform and free from streaks and holes.  R-9 / 14 Reinforced cement concrete M15 grade kilometre stone/local stone of standard design as per IRC:8 fixing in position including painting and printing, etc as per drawing and MoRD Specification Clause 1703  1 Sth Kilometre Stone (precast)  1 Ordinary Kilometer Stone (Precast)  24.00 ***********************************



Г			_
	ਕੋ	17	3
	7-9/57	R-9/16	7 6
	Raised Pavement Marker (Cats Eyes): Supplying and Fixing of Molded Shank Raised Pavement Markers made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 – DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 100 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/ 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 700 Kgf. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer. The contractor shall submit 2 years pre qualified warranty certificate from the manufacturer for satisfactory field performance during the time of bid submission.		Direction and Place Identification Signs upto 0.9 sqm Size Board. Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of high intensity grade sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing
	300.00	150.00	45.00
	. !	***	1
	** *** *** *** *** *** *** *** *** ***	****	•
	# # # # # # # # # # # # # # # # # # #	***	1
	300.00	150.00	45.00
	Each	Each	Sqm.



अधियाषी अधियन्ता नगर विकास नगस विताडगढ (राज.)

> किन्छ अधियन्ता नगर विकास न्यास चित्तीइगढ

नगर विकास न्यास, चित्तोड्नाढ़

नगर विकास न्यास चित्तौडगढ (राज.)

अधिशाषी अभियन्ता

कनिष्ठ अभियन्त नगर विकास न्यास

चित्तीड्गढ

Ó

Parapet

R-8 / 18 Providing cement plaster 20mm thick in cement mortar 1:3 at all levels (MORTH specification : clause 1000/1300). Walls

Parapet Wall

2.00 2.00

2.50

: \*\*\*\*\*

2.40 1.20

18.00 12.00

126.00

2.50

4.00

2.00

:

\*\*\*\*

8.00

56.00

2.00

2.50

0.30

1.50

2.25 12.96

Total

17.24

120.68

6.00

1.33

1.95

2.00

Providing and laying reinforced cement concrete pipe NP3 for culverts including jointing ends and fixing collars with cement mortar 1:2 (MORTH specifications) clauise 1000/2900 600 mm dia

R-8 / 12 Providing & laying Random Rubble Masonry (coursed) in cement sand mortar 1:3 in foundation up to a depth of 1.50m and also 1.50m above ground/bed level. [MoRTH Specification: Clause 1000/1400].1st Course

ground level and or 1.50mtr. above ground/bed level.

D/S Floor

2.00

2.50

2.50

0.10 0.10

2.00

2.50

1.35

0.30

2.03 0.15 0.75

Total

0.90

6.30

S.No. R-8 / Providing & laying mechanically mixed and vibrated Cement Concrete in 1.2.2 (b) foundation upto a depth of 1.5mtr, below ground level and 1.5mtr above ground/bed level. [MoRTH Specification: Clause 1000/1700].) Cement concrete 1:3:6 mix with R-8 / 2 Providing and laying Plain Cement Concrete M-15 mix with stone aggregate 20mm nominal size mechanically mixed and vibrated in foundation upto a depth of 1.50 below Code No. B-1/ D/S Floor dewatering shoring and shuttering etc. including refilling of trenches in 250 mm layer, ramming, watering and disposal of surplus soil within a lead of 1000 meters, as per [MoRTH Specification: Clause 304]. In ordinary soil. BY MECHANICAL MEANS, Depth Earthwork in excavation for foundation of structure complete with all lift Wall Foundation drawing and technical Earth in excavation for foundation of specification Under D/S Floor Under Pipe Foundation stone aggregate 40 mm crusher broken. Under Pipe upto 3m. Particular 2.00 1.00 2.00 1.00 2.00 2.00 No 3.00 3.00 2.50 2.50 1.65 \_ 2.50 3.70 2.50 2.50 3.70 1.65 5 0.15 0.10 0.30 0.40 0.10 1.35 Total I Quantity Quantity 15.99 Culvert Culverts 1.13 1.85 2.48 11.14 3.00 1.85 of 1 38.22 111.93

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH Part- B (RCC Hume Pipe Culvert - 7 No.)

of 7

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH Part: C, RCC Culvert Type - 1 (2 No. 1 & 3)

Cum	4.33	2.16	Total						
1		0.24	0.10	0.30	4.05	2.00	Coping		
		1.92	0.10	1.20	4.00	4.00	Floor		
1	ź				i		Providing and laying Plain Cement Concrete M-15 mix with stone aggregate 20mm nominal size mechanically mixed and vibrated in foundation upto a depth of 1.50 below ground level and or 1.50mtr. above ground/bed level.	R-8/2	ω
	29.52	14.76	Total						
		2.88	0.15	1.20	4.00	4.00	Under Floor		
		11.88	0.30	1.65	4.00	6.00	Foundation		
					•		R-8 / 1.2.2 Providing & laying mechanically mixed and vibrated Cement Concrete in foundation upto a depth of 1.5mtr, below ground level and 1.5mtr above ground/bed level. [MoRTH Specification : Clause 1000/1700]. ) Cement concrete 1:3:6 mix with stone aggregate 40 mm crusher broken	R-8 / 1.2.2 (b)	N
	126.72	63.36	1.60	1.65	4.00	6.00	B-1/1.1.4 Earthwork in excavation for foundation of structure complete with all lift, dewatering shoring and shuttering etc. including refilling of trenches in 250 mm layer, ramming, watering and disposal of surplus soil within a lead of 1000 meters, as per drawing and technical Earth in excavation for foundation of specification. [MoRTH Specification: Clause 304]. In ordinary soil. BY MECHANICAL MEANS, Depth upto 3m (2 Side X 3 Wall X 4.00 Long X 1.65 Wide X 1.60 Ht)	B-1/1.1.	_
	Quantity of 2 CD	Quantity of 1 CD	Ι	٧	Г	No	Particular Particular	Code No.	S.No.
1									

अधिशाली अधियन्ता अधिशाली अधियन्ता नात विकास नात वितोज्याह (राज.)

	,						and the			out to the last
7	d	D		c	ח					4
R-8 / 6.2	1	00100		200	00/40					R-8/12
Providing and fabricating Steel reinforcement for RCC works including cutting, bending, placing in position and binding complete including cost of binding wire. 1714.00 (MoRTH specification : Clause 1000/1600). HYSD bars	aggregate 20mm nominal size mechanically mixed and vibrated for reinforced concrete work in slab in uperstructure at any level excluding steel reinforcement, but including centering and shuttering laid in position (MoRTH specification : clause 1000/1700).		Parapet Wall	1:3 at all levels (MORTH specification : clause 1000/1300). Wall	Distriction of the state of the	Parapet	3rd Course (Mid Wall)	2nd Course (Mid Wall)	2nd Course (End Wall)	R-8 / 12 Providing & laying Random Rubble Masonry (coursed) in cement sand mortar 1:3 in foundation up to a depth of 1.50m and also 1.50m above ground/bed level. [MoRTH Specification : Clause 1000/1400]. 1st Course
1714.00	2.00		4.00	6.00		2.00	2.00	2.00	4.00	6.00
İ	4.05		4.05	4.75		4.05	4.00	4.00	4.00	4.00
****	4.00		****	* * * *		0.30	0.45	1.25	1.33	1.35
***	0.45	Total	0.90	1.00	Total	0.90	1.00	1.30	2.00	0.30
1714.00	14.58	43.08	14.58	28.50	71.07	2.19	3.60	13.00	42.56	9.72
3428.00	29.16	86.16			142.14				•	
Κ <sub>Q</sub>	Cum				Cum					

सहायक अभियना

अधिशाषी अभियन्ता नगर विकास न्यास चित्तौडगढ (राज.)

> कारिक अभियन्तः स्वार विकास न्यास विचीद्वाड

OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway

Part: D, RCC Culvert Type - 2 (3 No. 6, 7 & 11)

		4	-			ω				и	_	S.No.
		R-8/12				R-8/2				R-8 / 1.2.2 Providing (b) Concrete and 1.5m 1000/1700 aggregate	B-1/1.1.4	Code No.
सहायक अभियना। नगर विकास नगर नगर दिकास न्यास, रितोइगढ़ (त्रांजः)	2nd Course	Providing & laying Random Rubble Masonry (coursed) in cement sand mortar 1:3 in foundation up to a depth of 1.50m and also 1.50m above ground/bed level. [MoRTH Specification: Clause 1000/1400].1st Course		Coping	Floor	Providing and laying Plain Cement Concrete M-15 mix with stone aggregate 20mm nominal size mechanically mixed and vibrated in foundation upto a depth of 1.50 below ground level and or 1.50mtr. above ground/bed level.		Under Floor	Foundation	Providing & laying mechanically mixed and vibrated Cement Concrete in foundation upto a depth of 1.5mtr, below ground level and 1.5mtr above ground/bed level. [MoRTH Specification: Clause 1000/1700]. ) Cement concrete 1:3:6 mix with stone aggregate 40 mm crusher broken	B-1 / 1.1.4 Earthwork in excavation for foundation of structure complete with all lift, dewatering shoring and shuttering etc. including refilling of trenches in 250 mm layer, ramming, watering and disposal of surplus soil within a lead of 1000 meters, as per drawing and technical Earth in excavation for foundation of specification. [MoRTH Specification: Clause 304]. In ordinary soil. BY MECHANICAL MEANS, Depth upto 3m (2 Side X 2 Wall X 4.00 Long X 1.65 Wide X 1.60 Ht)	Particular
当歌	4.00	4.00		2.00	2.00			2.00	4.00		4.00	No
कान्स्य अमियन्ता नगर विकास न्यास चिनौडगढ	4.00	4.00		2.20	4.00			4.00	4.00		4.00	٦
यी पी	1.33	1.35		0.30	1.00			1.00	1.65		1.65	W/T
	2.00	0.30	Total	0.10	0.10	111	Total	0.15	0.30		1.60	H/D
	42.56	5.48 8		0.13	0.80		9.12	1.20	7.92		42.24	Quantity of 1 CD
			2.80				27.36				126.72	Qty of 3 CD

नगर विकास न्यास चित्तौङ्गढ

OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway Part: E, RCC Culvert Type - 3 (2 No. 12 & 15)

								N		S.No.
_					+	_				_
	_		î	K-8/2				R-8 / 1.2.2(b)	1/1.1.4	Code No.
5	Coping	Floor	MoRD specification Clauses 802, 804, 805, 806, 807, 1202 and 1204. For height upto 5 m. P.C.C. grade M 20. Nominal mix (1:2:4).	Plain / reinforced cement concrete in substructure complete as ner drawings and		Under Floor	Foundation	Providing concrete for plain / reinforced concrete in open foundations complete as per drawings and MoRD specifications Clause 802, 803, 1202 & 1203. P.C.C grade M 10. Nominal mix 1:3:6.	B-1 / 1.1.4 Earthwork in excavation for structures as per drawing and MoRD specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material. Ordinary soil. Upto 3 m depth. (2 Side X 2 Wall X 4.00 Long X 1.65 Wide X 1.60 Ht)	Particular
	2.00	2.00	a .			2.00	4.00		4.00	No
	2.70	4.00				4.00	4.00		4.00	_
	0.30	1.50				1.50	1.65		1.65	W/T
Total	0.10	0.10			Total	0.15	0.30		1.60	H/D
1.36	0.16	1.20	ı		9.72	1.80	7.92		42.24	מואַסו
2.72					19.44				84.48	CD CD
Cum					Cum				Cum	Unit

अधियायी अभियन्ता नगर विकास न्यास चिताडगढ (राजः)

		_			_			
7	d	,		ch				
R-8/6.2	7.0			R-8/18				R-8/12
Providing and fabricating Steel reinforcement for RCC works including cutting, bending, placing in position and binding complete including cost of binding wire. (MoRTH specification : Clause 1000/1600). HYSD bars	stone aggregate 20mm nominal size mechanically mixed and vibrated for reinforced concrete work in slab in uperstructure at any level excluding steel reinforcement, but including centering and shuttering laid in position (MoRTH specification : clause 1000/1700).		Parapet Wall	Plastering with cement mortar (1:4), 20 mm thick on Stone work.		Parapet	2nd Course	R-8 / 12 Providing & laying Random Rubble Masonry (coursed) in cement sand mortar 1:3 in foundation up to a depth of 1.50m and also 1.50m above ground/bed level. [MoRTH Specification: Clause 1000/1400] 1st Course
1153.00	2.00		4.00	2.00		2.00	4.00	4.00
****	2.70		2.70	4.75		2.70	4.00	4.00
# # # # # # # # # # # # # # # # # # #	4.00		****	****		0.30	1.33	1.35
***	0.45	Total	0.90	1.00	Total	0.90	2.00	0.30
1153.00	9.72	19.22	9.72	9.50	50.50	1.46	42.56	6.48
2306.00	19.44	38.44			101.00			
8	Cum	Sqm			Cum			



कीनच्छ आम् नगर विकास न्यार वित्तीडगढ

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

Part: F, RCC Culvert Type - 4 (1 No. 14)

_			A D-8/42			7.6/2	+			2 R-8/ 1.2.2(b)		S.No. Code No.
Parapet	2nd Course	cement sand mortar 1:3 in foundation up to a depth of 1.50m and also 1.50m above ground/bed level. [MoRTH Specification : Clause 1000/1400]. 1st Course	Droviding	Coping	Floor	per drawings and MoRD specification Clauses 802, 804, 805, 806, 807, 1202 and 1204. For height upto 5 m. P.C.C. grade M 20 . Nominal mix (1:2:4).		Under Floor	Foundation	(b) Providing concrete for plain / reinforced concrete in open foundations complete as per drawings and MoRD specifications Clause 802, 803, 1202 & 1203. P.C.C grade M 10. Nominal mix 1:3:6.	4	No. Particular
2.00	8.00	8.00		2.00	6.00			6.00	8.00		8.00	No
5.70	4.00	4.00		5.70	4.00			4.00	4.00		4.00	_
0.30	1.33	1.35		0.30	1.20			1.20	1.65		1.65	×
0.90	2.00	0.30	Total	0.10	0.10		Total	0.15	0.30		1.60	I
3.08	85.12	12.96	3.22	0.34	2.88		20.16	4.32	15.84		84.48	Quantity
			Cum				Cum				Cum	Unit

अधिशाषी अभियन्ता नगर विकास न्यास वितौडगढ (शन) सहायक अधियना सहायक अधियना त्रिक्त स्थास, चित्तीड्वाइ 6

R-8 / 26

Parapet Wall

Reinforced cement concrete M-30 mix with stone aggregate 20mm' nominal size mechanically mixed and vibrated for

reinforced concrete work in slab in uperstructure at any level

2.00

5.70

4.00

0.30

13.68

Cum

R-8 / 6.2 Providing and fabricating Steel reinforcement for RCC works

1000/1700).

excluding steel reinforcement, but including centering and shuttering laid in position (MoRTH specification : clause

including cutting, bending, placing in position and binding complete including cost of binding wire. (MoRTH

2435.00

\*\*\*\*

\*\*\*\*

\*\*\*\*

2435.00

Kg

specification : Clause 1000/1600). HYSD bars

5

R-8 / 18 Plastering with cement mortar (1:4), 20 mm thick on Stone

4.00

4.75

\*\*\*\*

1.00

Total

101.16

Cum

5.70

\*\*\*\*

0.90

28.50

Total

49.02

Sqm

कान्छ अभियत्ता नगर विकास न्यास चित्तीहमढ

अधियाषी अपियन्ता अपियाषी अपियन्ता नात विकास नात वितीराह (राषः)

## OFFICE OF THE URBAN IMPROVEMENT TRUST, CHITTORGARH

NAME OF WORK:- Widening, Stengthing and Recarpeting of road from Delhi Gate to manpura to gopalnagar upto Highway - Part : G , Retaining Wall

00			6				4	ω	N	_	0 %
B-13/ 16			R-8 / 18				R-8 / 12	R-8/2	R-8 /	B-1/ 1.1.4	No.
Providing A.C. pipe Weep holes 150mm dia in Masonry/plain Concrete/Reinforced Concrete abutment, wing wall/return wall complete as per drawing and technical specification. [MoRTH Specification: Clause 2205].		Parapet Wall	n cement mortar (1:4), 20 mm thick on Stone work.		Parapet	irse	R-8 / 12 Providing & laying Random Rubble Masonry (coursed) in cement sand mortar 1:3 in foundation up to a depth of 1.50m and also 1.50m above ground/bed level. [MoRTH Specification: Clause 1000/1400]. 1st Course	Plain / reinforced cement concrete in substructure complete as per drawings and MoRD specification Clauses 802, 804, 805, 806, 807, 1202 and 1204. For height upto 5 m. P.C.C. grade M 20. Nominal mix (1:2:4).	<ul> <li>R-8 / Providing concrete for plain / reinforced concrete in open foundations complete as</li> <li>1.2.2(b) per drawings and MoRD specifications Clause 802, 803, 1202 &amp; 1203. P.C.C grade</li> <li>M 10. Nominal mix 1:3:6.</li> </ul>	Earthwork in excavation for structures as per drawing and MoRD specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material. Ordinary soil. Upto 3 m depth.	Particular
1000.00		2.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	No
. 1	,	525.00	525.00		525.00	525.00	525.00	525.00	-525.00	525.00	٦
1		****	****		0.30	0.75	1.35	0.30	1.65	1.65	W
1	Total	0.90	2.70	Total	0.90	2.70	0.30	0.10	0.30	1.50	I
1000.00	2362.50	945.00	1417.50	1417.50	141.75	1063.13	212.63	15.75	259.88	1299.38	Quantity
Mtr	Sqm			Cum				Cum	Cum	Cum	Unit

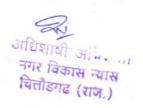
नगर दिकास न्यास, चित्तीइगढ़

अधिशाषी अमियान्तात नगर विकास न्यास चितौडगढ (राज.)

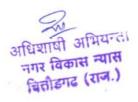
नगर विकास न्यास चित्तौड्गढ कानेष्ठ अभियन्त

## Earth work Cutting Filling Detail (Calculated by Computer)

Station	Cut Area (Sqm.)	Cut Volume (Cum.)	Fill Area (Sqm.)	Fill Volume (Cum.)	Cum. Cut Vol. (Cum.)	Cum. Fill Vo
0+025.000	381.77	0.00	0.00	0.00	0.00	0.00
0+050.000	6.54	120.00	0.00	0.00	120.00	0.00
0+075.000	3.78	128.91	0.13	1.62	248.91	1.62
0+100.000	3.95	96.90	0.01	1.75	345.81	3.36
0+125.000	3.85	98.30	0.10	1.38	444.11	4.75
0+150.000	4.48	104.10	0.00	1.26	548.21	6.01
0+175.000	5.01	117.29	0.00	0.00	665.50	6.01
0+200.000	3.62	107.54	0.00	0.00	, 773.04	6.01
0+225.000	4.89	106.16	0.00	0.00	879.20	6.01
0+250.000	7.93	159.90	0.00	0.00	1039.10	6.01
0+275.000	5.62	170.55	0.00	0.00	1209.65	6.01
0+300.000	5.23	135.50	0.00	0.00	1345.15	6.01
0+325.000	4.20	117.95	0.00	0.00	1463.10	6.01
0+350.000	4.93	114.13	0.00	0.00	1577.23	6.01
0+375.000	6.32	140.70	0.00	0.00	1717.93	6.01
0+400.000	4.80	139.29	0.00	0.00	1857.22	6.01
0+425.000	4.02	110.18	0.04	0.51	1967.40	6.52
0+450.000	3.83	98.22	0.00	0.52	2065.62	7.04
0+475.000	3.61	93.03	0.06	0.78	2158.65	7.81
0+500.000	3.92	94.17	0.00	0.76	2252.82	8.57
0+525.000	3.49	92.48	0.30	3.74	2345.30	12.32
0+550.000	4.39	98.58	0.00	3.73	2443.88	16.05
0+575.000	3.62	99.96	0.00	0.00	2543.84	16.05
0+600.000	2.90	81.67	0.81	10.12	2625.51	26.17
0+625.000	3.25	76.93	0.39	15.06	2702.44	41.24



0+650.000	3.46	84.10	0.23	7.75	2786.54	49.00
0+675.000	4.40	98.69	0.00	2.85	,	48.99
0+700.000	4.66				2885.23	51.84
		113.42	0.00	0.02	2998.65	51.86
0+725.000	3.17	97.93	1.06	13.30	3096.58	65.16
0+750.000	4.43	95.10	0.00	13.31	3191.68	78.47
0+775.000	4.15	107.13	0.00	0.00	3298.81	78.47
0+800.000	6.08	127.86	0.00	0.00	3426.67	78.47
0+825.000	4.28	129.55	0.11	1.35	3556.22	79.82
0+850.000	3.66	99.26	0.09	2.51	3655.48	82.32
0+875.000	5.43	113.64	0.00	1.17	3769.12	83.49
0+900.000	5.63	138.26	0.00	0.00	3907.38	83.49
0+925.000	4.46	126.18	0.00	0.00	4033.56	83.49
0+950.000	3.97	105.29	0.00	0.00	4138.85	83.49
0+975.000	3.94	98.85	0.00	0.00	4237.70	83.49
1+000.000	3.61	94.31	0.05	0.68	4332.01	84.17
1+025.000	9.70	166.00	0.00	0.68	4498.01	84.85
1+050.000	5.00	183.36	0.08	0.95	4681.37	85.80
1+075.000	3.69	108.30	0.12	2.46	4789.67	88.26
1+100.000	4.25	99.23	0.05	2.08	4888.90	90.34
1+125.000	4.15	105.31	0.05	1.21	4994.21	91.55
1+150.000	2.79	86.82	0.76	10.06	5081.03	101.61
1+175.000	3.99	84.94	0.58	16.66	5165.97	118.27
1+200.000	4.01	100.02	0.04	7.67	5265.99	125.95
1+225.000	2.19	77.35	2.76	34.99	5343.34	160.93
1+250.000	2.57	58.81	0.32	38.80	5402.15	199.73
1+275.000	1.97	56.68	0.28	7,56	5458.83	207.29
1+300.000	1.26	40.31	0.82	13.78	5499.14	221.07



				A STATE OF THE STA		
1+325.000	7.05	103.71	0.00	10.25	5602.85	231.32
1+350.000	8.48	194.12	0.00	0.00	5796.97	231.32
1+375.000	8.21	208.66	0.00	0.00	6005.63	231.32
1+400.000	13.51	271.51	0.00	0.00	6277.14	231.32
1+425.000	6.47	249.73	0.00	0.00	6526.87	231.32
1+450.000	4.78	140.50	0.15	1.91	6667.37	233.24
1+475.000	3.50	103.55	0.27	5.23	6770.92	238.46
1+500.000	2.30	72.57	1.51	22.26	6843.49	260.73
1+525.000	2.05	54.44	1.42	36.67	6897.93	297.40
1+550.000	3.59	70.46	0.15	19.57	6968.39	316.96
1+575.000	2.85	80.43	0.98	14.11	7048.82	331.07
1+600.000	10.34	164.82	0.00	12.27	7213.64	343.34
1+625.000	5.05	191.28	0.00	0.00	7404.92	343.34
1+650.000	4.37	117.32	0.00	0.00	7522.24	343.34
1+675.000	5.74	125.93	0.00	0.00	7648.17	343.34
1+700.000	4.04	121.77	0.00	0.09	7769.94	343.44
1+725.000	4.01	100.49	0.00	0.09	7870.43	343.53
1+750.000	3.84	98.13	0.00	0.00	7968.56	343.53
1+775.000	3.99	97.54	0.13	1.69	8066.10	345.22
1+800.000	4.22	102.58	0.00	1.68	8168.68	346.90
1+825.000	4.67	110.19	0.00	0.00	8278.87	346.90
1+850.000	1.79	80.71	2.61	32.63	8359.58	379.53
1+875.000	0.35	26.75	5.03	95.55	8386.33	475.08
1+900.000	4.42	59.37	0.00	63.18	8445.70	538.26
1+925.000	6.05	130.28	0.00	0.00	8575.98	538.26
1+950.000	0.22	78.12	1.48	18.62	8654.10	556.88
1+975.000	4.11	54.12	0.34	22.83	8708.22	579.71

अधिशाषी अभियन्ता नगर विकास न्यास चित्तौडगढ (राज.)

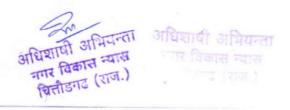
				I		1
2+000.000	3.29	92.00	0.33	8.42	8800.22	588.13
2+025.000	3.52	84.15	0.02	4.37	8884.37	592.50
2+050.000	3.06	81.46	0.25	3.46	8965.83	595.96
2+075.000	2.91	74.59	0.25	6.29	9040.42	602.25
2+100.000	3.63	81.70	0.00	3.21	9122.12	605.46
2+125.000	3.87	93.57	0.12	1.60	9215.69	607.06
2+150.000	6.46	129.19	0.00	1.52	9344.88	608.58
2+175.000	4.73	139.85	0.15	1.83	9484.73	610.41
2+200.000	3.67	104.94	0.47	7.75	9589.67	618.16
2+225.000	2.72	79.85	0.10	7.19	9669.52	625.35
2+250.000	2.53	65.59	1.08	14.72	9735.11	640.06
2+275.000	1.48	50.11	5.65	83.98	9785.22	724.04
2+300.000	1.45	36.54	2.17	97.78	9821.76	821.82
2+325.000	5.72	89.59	0.00	27.02	9911.35	848.84
2+350.000	4.69	130.15	0.00	0.00	10041.50	848.84
2+375.000	2.92	95.52	0.67	8.36	10137.02	857.20
2+400.000	2.38	66.64	0.93	19.97	10203.66	877.17
2+425.000	2.95	66.91	0.55	18.51	10270.57	895.67
2+450.000	3.44	79.95	0.23	9.79	10350.52	905.47
2+475.000	2.65	76.18	1.12	16.85	10426.70	922.32
2+500.000	2.36	62.70	0.93	25.56	10489.40	947.88
2+525.000	3.14	68.77	0.05	12.19	10558.17	960.07
2+550.000	0.67	47.65	3.80	48.12	10605.82	1008.19
2+575.000	2.61	40.93	0.66	55.71	10646.75	1063.90
2+600.000	2.16	59.66	1.55	27.64	10706.41	1091.54
2+625.000	2.52	58.19	1.16	33.96	10764.60	1125.50
2+650.000	2.75	65.87	0.64	22.55	10830.47	1148.05

्रण्लेशाधी अभियन्ता ः १ विकास न्यास चित्तौडगढ (राज.)

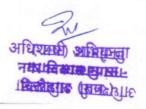
2+675.000	2.90	70.60	0.59	15.43	10901.07	1163.48
2+700.000	2.54	67.95	1.16	21.87	10969.02	1185.34
2+725.000	3.31	73.03	0.02	14.70	11042.05	1200.04
2+750.000	3.28	82.39	0.14	1.91	11124.44	1201.95
2+775.000	2.26	69.30	0.67	10.08	11193.74	1212.04
2+800.000	3.27	69.13	0.16	10.41	11262.87	1222.45
2+825.000	3.23	81.26	0.25	5.16	11344.13	1227.61
2+850.000	3.14	79.67	0.39	7.97	11423.80	1235.58
2+875.000	4.03	89.61	0.00	4.85	11513.41	1240.42
2+900.000	3.34	92.03	0.17	2.15	11605.44	1242.57
2+925.000	3.66	87.48	0.05	2.76	11692.92	1245.33
2+950.000	2.79	80.60	0.62	8.37	11773.52	1253.70
2+975.000	2.93	71.67	0.89	18.83	11845.19	1272.53
3+000.000	1.21	51.76	2.75	45.50	11896.95	1318.03
3+025.000	3.40	57.65	0.00	34.45	11954.60	1352.48
3+050.000	3.31	83.88	0.00	0.14	12038.48	1352.62
3+075.000	3.37	83.44	0.08	1.09	12121.92	1353.72
3+100.000	3.92	91.05	0.00	1.02	12212.97	1354.73
3+125.000	3.43	91.80	0.00	0.00	12304.77	1354.73
3+150.000	1.47	61.26	2.30	28.77	12366.03	1383.50
3+175.000	2.05	44.06	1.60	48.80	12410.09	1432.30
3+200.000	3.53	69.71	0.00	20.03	12479.80	1452.33
3+225.000	1.23	59.41	2.64	32.98	12539.21	1485.31
3+250.000	2.06	41.09	0.85	43.59	12580.30	1528.90
3+275.000	7.81	123.39	0.00	10.62	12703.69	1539.52
3+300.000	2.13	124.28	1.40	17.53	12827.97	1557.06
3+325.000	0.83	36.99	3.10	56.25	12864.96	1613.31



3+350.000	0.91	21.76	3.00	76.23	12886.72	1689.54
3+375.000	5.76	83.31	0.00	37.51	12970.03	1727.05
3+400.000	2.51	103.37	0.09	1.14	13073.40	1728.19
3+425.000	2.37	60.99	1.27	17.02	13134.39	1745.21
3+450.000	3.68	75.51	0.05	16.48	13209.90	1761.69
3+475.000	4.32	99.73	0.03	0.98	, 13309.63	1762.67
3+500.000	4.37	108.58	0.00	0.38	13418.21	1763.06
3+525.000	3.16	94.20	0.78	9.71	13512.41	1772.76
3+550.000	3.40	82.04	0.07	10.60	13594.45	1783.37
3+575.000	4.77	102.16	0.00	0.89	13696.61	1784.26
3+600.000	6.86	145.53	0.00	0.00	13842.14	1784.26
3+625.000	4.96	147.83	0.00	0.00	13989.97	1784.26
3+650.000	3.95	111.36	0.00	0.00	14101.33	1784.26
3+675.000	4.62	107.15	0.00	0.00	14208.48	1784.26
3+700.000	4.81	117.98	0.00	0.00	14326.46	1784.26
3+725.000	5.38	127.42	0.00	0.00	14453.88	1784.26
3+750.000	5.32	133.69	0.00	0.00	14587.57	1784.26
3+775.000	3.84	114.48	0.31	3.84	14702.05	1788.10
3+800.000	3.85	96.19	0.03	4.26	14798.24	1792.36
3+825.000	4.34	102.45	0.00	0.42	14900.69	1792.78
3+850.000	2.57	86.36	1.12	13.97	14987.05	1806.75
3+875.000	2.72	66.05	0.64	21.98	15053.10	1828.73
3+900.000	3.78	81.24	0.00	8.01	15134.34	1836.74
3+925.000	1.61	67.43	2.05	25.67	15201.77	1862.42
3+950.000	2.62	52.86	0.28	29.15	15254.63	1891.57
3+975.000	4.14	84.39	0.00	3.49	15339.02	1895.05
4+000.000	4.07	102.63	0.00	0.00	15441.65	1895.05



4+025.000	3.58	95.55	0.00	0.04	15537.20	1895.09
4+050.000	3.28	85.67	0.10	1.22	15622.87	1896.32
4+075.000	2.60	73.43	0.65	9.28	15696.30	1905.59
4+100.000	2.78	67.27	0.42	13.35	15763.57	1918.94
4+125.000	2.64	67.73	0.14	6.98	15831.30	1925.92
4+150.000	2.93	69.56	0.15	3.58	15900.86	1929.51
4+175.000	2.14	63.28	0.82	12.06	15964.14	1941.57
4+200.000	3.12	65.70	0.30	13.93	16029.84	1955.50
4+225.000	3.38	81.23	0.11	5.07	16111.07	1960.56
4+250.000	3.71	88.63	0.04	1.86	16199.70	1962.42
4+275.000	7.69	142.58	0.00	0.52	16342.28	1962.94
4+300.000	2.24	124.17	1.49	18.66	16466.45	1981.60
4+325.000	2.42	58.23	0.75	28.02	16524.68	2009.62
4+350.000	2.88	66.22	0.44	14.91	16590.90	2024.53
4+375.000	3.46	79.23	0.00	5.56	16670.13	2030.09
4+400.000	3.32	84,73	0.00	0.00	16754.86	2030.09
4+425.000	3.06	79.64	0.02	0.30	, 16834.50	2030.39
4+450.000	4.31	92.09	0.00	0.30	16926.59	2030.68
4+475.000	2.91	90.24	0.18	2.20	17016.83	2032.89
4+500.000	1.31	52.76	2.50	33.45	17069.59	2066.34
4+525.000	3.49	60.02	0.20	33.75	17129.61	2100.09
4+550.000	3.28	84.66	0.05	3.16	17214.27	2103.26
4+575.000	3.06	79.22	0.05	1.36	17293.49	2104.61
4+600.000	3.23	78.60	0.12	2.22	17372.09	2106.84
4+625.000	3.18	80.01	0.18	3.84	17452.10	2110.68
4+650.000	3.47	83.05	0.01	2.42	17535.15	2113.10
4+675.000	3.32	84.89	0.06	0.90	17620.04	2114.00



4+700.000	2.79	76.45	0.52	7.33	17696.49	2121.32
4+725.000	3.13	74.09	0.24	9.52	17770.58	2130.84
4+750.000	3.11	78.03	0.31	6.84	17848.61	2137.68
4+775.000	2.73	72.92	0.96	15.88	17921.53	2153.56
4+800.000	3.76	81.13	0.00	12.01	18002.66	2165.57
4+825.000	2.78	81.82	0.73	9.08	18084.48	2174.65
4+850.000	4.65	92.80	0.00	9.07	18177.28	2183.73
4+875.000	4.66	116.37	0.00	0.00	18293.65	2183.73
4+900.000	4.05	108.85	0.00	0.00	18402.50	2183.73
4+925.000	5.75	122.44	0.11	1.40	18524.94	2185.13
4+950.000	10.20	199.43	0.00	1.40	18724.37	2186.53
4+975.000	4.20	180.00	0.00	0.00	18904.37	2186.53
5+000.000	3.24	93.01	0.14	1.69	18997.38	2188.22
5+025.000	3.43	83.36	0.01	1.87	19080.74	2190.09
5+050.000	3.23	83.18	0.00	0.20	19163.92	2190.29
5+075.000	2.87	76.21	0.31	3.87	19240.13	2194.17
5+100.000	2.39	65.59	0.57	10.97	19305.72	2205.14
5+125.000	2.37	59.74	0.12	8.60	19365.46	2213.74
5+150.000	2.45	60.26	0.00	1.53	19425.72	2215.27
5+175.000	0.00	30.57	6.26	78.21	19456.29	2293.48
5+200.000	0.66	8.21	3.93	127.28	19464.50	2420.76
5+225.000	0.00	8.21	9.26	164.78	19472.71	2585.54
5+250.000	0.56	7.04	5.30	182.00	19479.75	2767.54
5+275.000	0.03	7.30	3.55	110.95	19487.05	2878.49
5+300.000	0.24	3.35	3.94	93.62	19490.40	2972.11
5+325.000	2.38	32.61	0.67	57.55	19523.01	3029.66
5+350.000	0.10	31.03	5.03	71.21	19554.04	3100.87

भार्त्याषी अभियन्ता नगर विकास न्यास चित्तीडगढ (राज.)

5+375.000	2.54	33.01	0.00	62.79	19587.05	3163.66
5+400.000	3.16	71.30	0.25	3.10	19658.35	3166.76
5+425.000	3.18	79.27	0.93	14.72	19737.62	3181.49
5+450.000	5.77	111.17	0.00	11.58	19848.79	3193.07
5+475.000	3.10	109.66	0.04	0.45	19958.45	3193.51
5+500.000	4.07	89.63	0.03	0.80	20048.08	3194.32
5+525.000	2.74	85.11	1.00	12.83	20133.19	3207.15
5+550.000	2.84	69.73	0.06	13.22	20202.92	3220.37
5+575.000	0.99	47.95	2.92	37.25	20250.87	3257.63
5+600.000	1.72	33.94	1.02	49.20	20284.81	3306.83
5+625.000	2.29	50.84	0.16	14.40	20335.65	3321.23
5+650.000	2.67	62.07	0.03	2.34	20397.72	3323.57
5+675.000	2.76	67.84	0.54	7.09	20465.56	3330.66
5+700.000	3.40	76.93	0.00	6.71	20542.49	3337.38
5+725.000	2.93	79.16	0.56	6.99	20621.65	3344.37
5+750.000	0.26	39.91	6.72	91.29	20661.56	3435.66
5+775.000	2.92	39.77	0.23	86.89	20701.33	3522.55
5+800.000	1.95	60.24	1.43	20.83	20761.57	3543.38
5+825.000	2.80	59.24	0.68	26.34	20820.81	3569.72
5+850.000	1.82	57.67	1.81	31.04	20878.48	3600.76
5+875.000	3.36	64.70	0.00	22.66	20943.18	3623.42
5+900.000	3.14	81.32	0.00	0.09	21024.50	3623.51
5+925.000	3.35	81.10	0.27	3.45	21105.60	3626.96
5+950.000	3.11	80.71	0.14	5.18	21186.31	3632.14
5+975.000	3.03	76.69	0.65	9.82	21263.00	3641.97
6+000.000	3.02	75.61	0.38	12.86	21338.61	3654.83
6+025.000	8.90	149.00	0.00	4.78	21487.61	3659.61



6+050.000	3.25	151.89	0.00	0.04	21639.50	3659.65
6+075.000	2.70	74.42	0.85	10.70	21713.92	3670.35
6+100.000	2.56	66.09	0.41	15.77	21780.01	3686.12
6+125.000	3.48	75.93	0.06	5.89	21855.94	3692.01
6+150.000	2.91	79.96	0.68	9.29	21935.90	3701.30
6+175.000	4.40	91.38	0.00	8.50	22027.28	3709.80
6+200.000	4.24	108.05	0.00	0.00	22135.33	3709.80

अधिशाषी अभियन्ता नगर विकास न्यास चित्तौडगढ (राज.)