

TECHNICAL REPORT

(PRELIMINARY PROJECT REPORT)

Name of work: -

Upgradation of Udhampur- Ghordi road from Km 13th to 40th from single lane to Double lane (Length: 28.0 km).

Authority: -

- i. Hon'ble Minister of State, PMO's Office, New Delhi Letter No. 1196543/VIP/M.O.S /16 Dated: 08/09/2016.
- ii. Hon'ble MLA Chenani Ghordi Constituency's letter No. 266/DNB/MLA Dated: 14/12/2016.
- iii. Chief Engineer PW(R&B) Deptt. Jammu's letter No. CEJ/DB/S/14713 Dated: 02/12/2016.

TECHNICAL DATA

1. Length: 28.0 km
2. Specifications (Proposed):
 - i. Roadway width: 10.0 mtr.
 - ii. Carriageway width: 7.0 mtr.
3. Pavement thickness:
 - a. Widened portion: 200 mm thick GSB+150 mm thick WBM G-II+75 mm thick WMM+ 50 mm thick BM+25 mm thick Open graded premix carpet
 - b. Existing portion: 150 mm thick WBM G-II (Profile correction and realigned stretches)+75 mm thick WMM+ 50 mm thick BM+25 mm thick Open graded premix carpet.

Description: -

At present there exists a PWD road from Udhampur to Ghordi, having a length of 40 kms which is at present having single lane specifications. The km 1st to km 12th already stands tendered by PMGSY Deptt. for upgradation. As such this project has been proposed from km 13th to km 40th of Udhampur Ghordi road.

The said existing road is very narrow at various locations and requires overall improvement by way of widening & upgradation. The existing riding surface requires overall improvement and upgradation as the

present road surface is marked with ditches, pot holes, depressions, sunken portions, which makes the smooth plying of vehicular traffic very difficult. Due to existence of narrow formation widths and improper geometrics at curvatures, the mishaps/ accidents have been happening on this road frequently, which causes huge loss of precious human lives. The total cost involved for widening including its upgradation/ improvement of entire road stretch from Udhampur- Ghordi road from Km 13th to 40th, having length of 28.00 kms works out to the order of Rs. 92.00 crores (9200.00 lacs).

History and Necessity: -

The said road from Udhampur to Ghordi takes off from km 68th of NH-1A at village Jakhani (about 2 kms from Udhampur Town) passes through No. of villages such as Jakhani, Omala, Basla, Kaldi, Balater, Ambalehar, Barmeen, Langa. Barota, Ghordi Khas, Ghordi Nagrota etc. The km 1st to km 12th from Jakhani have been tendered by the PMGSY Deptt. for upgradation. This project has thus been framed from km 13th to 40th from single lane to double lane. This road passes through above mentioned villages covering population of more than 50000 souls and also serves as circular road/ alternate road to Tehsil HQ Ramnagar. This road connects two assembly segments namely Chenani- Ghordi & Ramnagar and acts as a life line for the vast area. As the area is backward & lacks all modern amenities and will boost/ enhance the living standard of the public of the area by constructing good road. The local inhabitants use this road as a road connectivity to move themselves in vehicles (both light as well as heavy vehicles) and also to transport their essential commodities to the desired destinations/ locations. The day to day means of the livelihood of the local population of these villages is mainly based on the agriculture products, which caters, their economic and financial needs. The agricultural produces like grain, vegetables, pulses & fruits usually are required to be carried over to main markets located in the District Head Quarters at Udhampur and as well to the winter capital of State at Jammu. It's worthwhile to point out here that by getting their produce speedily transported produces it fetches them favourable financial returns/ prices. Large chunk of population also comprises of students, who use this stretch of road to reach their respective schools/ colleges to pursue their higher studies at college/ university level. Other basic amenities on account of health care etc. are also dependent on the good plying condition of this road to reach the advanced Health care institutions like hospitals, PHC's etc. to avail immediate and advanced medical care facilities. The upgradation of the road in question shall also boost the

Proposals and Specifications: -

The project for widening/ upgradation/ improvement of Udampur to Ghordi road (i.e. km 13th to km 40th), shall have following proposals & specifications: -

1. The existing road formation width (5.50 mtr av.) shall be widened to 10.0 mtr. Width by way of execution of earth work in cutting on hill side of the road. However, to improve the geometrics of the road as well as to avoid clubbing of forest land, the proposed formation width at many locations of the road shall be achieved by earth work in filling with const. of retaining walls.
2. The vulnerable hill slopes with having an apprehension of occurrence of landslides shall be protected by way of const. of semi pucca B/ walls along with drain.
3. The washed off/ eroded stretches of the road shall be protected by way of const. of edge walls and retaining walls.
4. There is sufficient provision of cross drainage works in this project. It is proposed to construct new 157 No. Of minor X- drainage works and extension of 7 No. Existing bridges approx. Length 220 Rmt. upto double lane. Extension of existing 3.0 mtr span RCC culvert has also been proposed upto double lane width.
5. In order to provide effective drainage on the road side and to ensure that storm water/ rain water doesn't flow over the road surface, the component of drain has been kept in the project.
6. The pavement in the carriageway width of 7.0 mtr. Width shall be constructed as per the adoption of following brief specifications.
 - a. **Widened Portion:** - A layer of 200 mm thick GSB shall be laid in the widened width of 4.0 mtr. Which shall be subsequently followed by the layer of 150 mm thick WBM G-II, 75 mm thick WMM and 50 mm thick BM & 25 mm thick open graded premix carpet.
 - b. **Existing Portion:** - The existing portion of carriageway of the road shall be strengthened by way of providing of 150 mm thick layer of WBM G-II for profile correction/ realigned stretches, followed by layers of 75 mm thick WMM, 50 mm thick bituminous macadam & lastly with the top most layer of 25 mm thick open graded premix carpet.


This entire pavement construction process shall comply the specifications conforming to the MORHT/ IRC standards specifications and C.B.R values.
7. As the road is having topography of hilly terrain, consisting of valleys & deep gorges, there is a requirement of adopting road safety measures, which is a paramount feature in the project and an effort of minimizing the occurrence of mishaps/ road accidents which tragically is a source of loosing precious human lives. As such an amount of Rs. 90.00 lacs has been projected for undertaking road safety measures, The road safety

measures have a special emphasis in this instant project and it is proposed to install & fix crash barriers/ caution boards/ road marking/ cats eye/ fluorescent lights etc. at various vulnerable and accident prone locations. Further, Mileage Stones shall be also embedded at each kilometre distance of the road stretch.

8. This project is also having adequate provisions for following important aspects of road const. as per CRF guidelines: -
- a. An amount of Rs. 261.67 lacs i.e. 3% cost of the projected cost of the work as "contingencies" component.
 - b. An amount of Rs. 87.22 lacs for meeting the cost of design & operation of a quality assurance system and monitoring of works by state quality monitor & training of state's official in quality awareness by the executing agencies (1% of projected cost).
 - c. An amount of Rs. 87.22 lacs for meeting the cost of quality control for monitoring of works & towards training, research & dev. By Central Govt. (i.e. 1% of projected cost)
 - d. An amount of Rs. 43.61 lacs for work charge contingencies (Half percent of projected cost).

Time and cost: -


The cost for the above work comes out to Rs.92.00 crores. The work is proposed to be completed in 02 working years subject to the availability of funds, key constructional materials and as well as prevailing of favourable weather conditions.



(Er. Mohammad Abdullah)
Executive Engineer
PWD(R&B) Division
Udhampur

CERTIFICATE

Name of work: Upgradation of Udhampur- Ghordi road from Km 13th to 40th from single lane to Double lane (Length: 28.0 km).

- i. Land is available free from all encumbrances.
- ii. Rates have been properly checked/ scrutinized as per the latest SOR.
- iii. No work has been done on the said road during the past three years.
- iv. The project has not been funded under any other scheme.
- v. Roads safety measures are in place as per norms.


(Anil Kumar Gupta)
Asstt. Executive Engineer
PWD(R&B) Sub- Division
Barmeen


(Er. Mohammad Abdullah)
Executive Engineer
- PWD(R&B) Division
Udhampur


ABSTRACT OF COST
(PRELIMINARY PROJECT REPORT)

Name of work: - Upgradation of Udampur- Ghordi road from Km 13th to 40th from single lane to Double lane (Length: 28.0 km).

| S. no. | Particulars of item | Unit | Rate | Qty. | Amount (in lacs) |
|--------|--|------|-----------|---|------------------|
| 1 | Earth work (All kind of soil 40%, ordinary rock 30% & hard rock 30%) | Cum | 267.32 | 172337.50 | 406.69 |
| 2 | Minor Drainage X- ings work: | | | | |
| | a. 1.0 mtr ^{span} RCC culvert. | No. | 9.03 | 100.00 | 903.00 |
| | b. Extension of existing 3 mtr span culverts | No. | 7.85 | 7.00 | 54.95 |
| | c. 3.0 mtr. span R.C.C culvert | No. | 14.55 | 15.00 | 218.25 |
| | d. 6.0 mtr. span R.C.C culvert | No. | 30.82 | 25.00 | 770.50 |
| | e. Pucca drain | Rmt. | 1306.00 | 15000.00 | 195.90 |
| | f. Extension of existing of 7.0 No. Bridges | Rmt. | 400000.00 | 220.00 | 880.00 |
| 3. | Protection works: | | | | |
| | a. R/wall 3.0 mtr. av. ht. | Rmt. | 18933.00 | 7200.00 | 1363.17 |
| | b. B/wall | Rmt. | 10502.00 | 11900.00 | 1249.74 |
| 4. | Pavement: | | | | |
| | a. G.S.B course (on intended portion) (84x1000x4x0.20)+10% | Cum | 640.10 | 24640.00 | 157.72 |
| | b. ²⁵⁰⁰ WBM G-II (on extended portion) (28x1000x0.15)+10% = 11480 cum Add 30% for profile correction & for realigned portions on old surface (28x1000x3x0.075)@40%= 2520 cum Total =21000 cum | Cum | 1613.85 | 21000.00 | 338.91 |
| | c. Wet Mix for 7.0 mtr. width (28x1000x7.0x0.075)+10% | Cum | 1875.20 | 16170.00 | 303.21 |
| | d. Providing/ laying 50 mm thick BM. (28x1000x7.0x0.05)+10% | Cum | 9240.80 | 10780.00 | 996.15 |
| | e. 30 mm thick SDBC including tack coat and seal coat.(28x1000x7.0x0.03)+10% | Cum | 10641.90 | 6468.00 | 688.32 |
| 5. | Add for berms with RBM 28x1000x0.90x0.30x2 | Cum | 700.00 | 15120.00 | 105.84 |
| 6. | Provision for providing and fixing sign boards and mile stone (Road safety) crash barriers, road marking, cats eye etc. | L.S | - | - | 90.00 |
| | | | | Total | 8722.36 |
| | | | | Add 3% for contingencies | 261.67 |
| | | | | Add 1% for devising & operation | 87.22 |
| | | | | Add 1% for quality assurance | 87.22 |
| | | | | Add 0.5% for work charges establishment | 43.61 |
| | | | | Grand Total | 9202.08 |

Say Rs. 92.00 crores

Sa/-
(Anil Kumar Gupta)
Asstt. Executive Engineer
PWD(R&B) Sub-Division
Barmeen


(Er. Mohannad Abduliah)
Executive Engineer
PWD(R&B) Division
Udhampur