

## Attachement 2.4

### Performa for comparison between identified alignments

| Sl. No | Variables  | Alignment No-1   |                            |          |                | Alignment No-2   |                            |          |                |
|--------|--|--|----------------------------|----------|----------------|--|----------------------------|----------|----------------|
| 1      | Topography   | Mountainous  |                            |          |                | Mountainous  |                            |          |                |
| 2      | Length of Road   | 0.70 Km.   |                            |          |                | 1.00 Km.   |                            |          |                |
| 3      | Bridging requirement No. and Length  | Nil  |                            |          |                | Nil  |                            |          |                |
| 4      | Geometric  |  |                            |          |                |  |                            |          |                |
|        | (a) Gradients  | 1:20   |                            |          |                | 1:18   |                            |          |                |
|        | (b) Curves, H.P Bends  | 1 No.  |                            |          |                | 1 No.  |                            |          |                |
| 5      | Existing Means of communication, mule path, jeep, Tracks etc.  | Mule Path  |                            |          |                | Mule Path  |                            |          |                |
| 6      | Right of way, bringing out, construction on account of built up areas, monuments and other structures.           | Right of way is available for carrying out the construction work. There are no built up area, monuments or other important structures along this alignment.  |                            |          |                | Right of way is available for carrying out the construction work. There are no built up area, monuments or other important structures along this alignment.  |                            |          |                |
| 7      | (a) Terrain & Soil Condition.  | Hilly and soil is a mix of Earth & Boulders, Soft Rock and Hard Rock.  |                            |          |                | Hilly and soil is a mix of Earth & Boulders, Soft Rock and Hard Rock.  |                            |          |                |
|        | (b) Cliffs and gorges.   | None   |                            |          |                | None   |                            |          |                |
|        | (c) Drainage characteristics of the area including susceptibility to flooding.                                   | The natural drainage characteristics of the area is good and there is no susceptibility to flooding.   |                            |          |                | The natural drainage characteristics of the area is good and there is no susceptibility to flooding.   |                            |          |                |
|        | (d) General elevation of the road indicating maximum and minimum height negotiated by main ascends and descends. | The general elevation of road is 1840 m. the elevation of the starting point of the road is 1795 m. & the elevation of the end point of the road is 1885 m. Thus the road achieve the hight of 90 m. |                            |          |                | The general elevation of road is 1840 m. the elevation of the starting point of the road is 1795 m. & the elevation of the end point of the road is 1885 m. Thus the road achieve the hight of 90 m. |                            |          |                |
|        | (e) Variations extants and types.  | Variable of the Habitation   | Weight age of the variable | Variable | Value Obtained | Variable of the Habitation   | Weight age of the variable | Variable | Value Obtained |
|        |  | Population   | 8                          | 631      | 8              | Population   | 8                          | 631      | 8              |
|        |  | SC/ST Population   | 8                          | 127      | 4              | SC/ST Population   | 8                          | 127      | 4              |
|        |  | Primary School   | 4                          | Yes      | 0              | Primary School   | 4                          | Yes      | 0              |
|        |  | Middle School  | 6                          | No       | 0              | Middle School  | 6                          | No       | 0              |
|        |  | High School  | 8                          | No       | 0              | High School  | 8                          | No       | 0              |
|        |  | Intermediate School  | 8                          | Yes      | 8              | Intermediate School  | 8                          | Yes      | 8              |
|        |  | Vocational School  | 8                          | No       | 0              | Vocational School  | 8                          | No       | 0              |
|        |  | Dispensary   | 4                          | No       | 0              | Dispensary   | 4                          | No       | 0              |
|        |  | Maternity & Child Welfare Centers  | 6                          | No       | 0              | Maternity & Child Welfare Centers  | 6                          | No       | 0              |
|        |  | Primary Health Centre & Veterinary   | 8                          | No       | 0              | Primary Health Centre & Veterinary   | 8                          | No       | 0              |

| Sl. No | Variables   | Alignment No-1  |                               |     |           | Alignment No-2  |     |     |    |
|--------|---|---|-------------------------------|-----|-----------|---|-----|-----|----|
|        |   | Police Station  | 6                             | No  | 0         | Police Station  | 6   | No  | 0  |
|        |   | Post Office   | 4                             | No  | 0         | Post Office   | 4   | No  | 0  |
|        |   | Electrified   | 6                             | Yes | 6         | Electrified   | 6   | Yes | 6  |
|        |   | Panchayat Head Office   | 6                             | No  | 0         | Panchayat Head Office   | 6   | No  | 0  |
|        |   | No. of days Market Held   | 6                             | No  | 0         | No. of days Market Held   | 6   | No  | 0  |
|        |   | Hilly Area  | 4                             | Yes | 4         | Hilly Area  | 4   | Yes | 4  |
|        |   | <b>Total</b>  | 100                           |     | 30        | <b>Total</b>  | 100 |     | 30 |
| 8      | Climate Condition:  |   |                               |     |           |   |     |     |    |
|        | (a) Temperature Monthly max. & min. reading.  | Month   | Temperature (in °C)           |     | Month     | Temperature (in °C)   |     |     |    |
|        |   |   | Max                           | Min |           | Max   | Min |     |    |
|        |   | January   | 20                            | 7   | January   | 20  | 7   |     |    |
|        |   | February  | 23                            | 9   | February  | 23  | 9   |     |    |
|        |   | March   | 27                            | 13  | March     | 27  | 13  |     |    |
|        |   | April   | 33                            | 18  | April     | 33  | 18  |     |    |
|        |   | May   | 36                            | 21  | May       | 36  | 21  |     |    |
|        |   | June  | 34                            | 23  | June      | 34  | 23  |     |    |
|        |   | July  | 31                            | 24  | July      | 31  | 24  |     |    |
|        |   | August  | 30                            | 23  | August    | 30  | 23  |     |    |
|        |   | September   | 30                            | 21  | September | 30  | 21  |     |    |
|        |   | October   | 29                            | 17  | October   | 29  | 17  |     |    |
|        |   | November  | 26                            | 12  | November  | 26  | 12  |     |    |
|        |   | December  | 22                            | 8   | December  | 22  | 8   |     |    |
|        | (b) Rainfall data average annual peak intensities monthly distribution (to the extent available). | Month   | Average Rainfall Data (in mm) |     | Month     | Average Rainfall Data (in mm)   |     |     |    |
|        |   | January   | 74                            |     | January   | 74  |     |     |    |
|        |   | February  | 63                            |     | February  | 63  |     |     |    |
|        |   | March   | 63                            |     | March     | 63  |     |     |    |
|        |   | April   | 25                            |     | April     | 25  |     |     |    |
|        |   | May   | 48                            |     | May       | 48  |     |     |    |
|        |   | June  | 168                           |     | June      | 168   |     |     |    |
|        |   | July  | 389                           |     | July      | 389   |     |     |    |
|        |   | August  | 309                           |     | August    | 309   |     |     |    |
|        |   | September   | 174                           |     | September | 174   |     |     |    |
|        |   | October   | 83                            |     | October   | 83  |     |     |    |
|        |   | November  | 9                             |     | November  | 9   |     |     |    |
|        |   | December  | 30                            |     | December  | 30  |     |     |    |
|        | (c) Snowfall data average annual peak intensities monthly distribution (to the extent available)  | During the Month of December, January and February there are little chances of Snowfall in on the proposed alignment of the road. |                               |     |           | During the Month of December, January and February there are little chances of Snowfall in on the proposed alignment of the road. |     |     |    |



| Sl. No | Variables  | Alignment No-1  |           |         |      | Alignment No-2  |           |         |       |
|--------|--|---|-----------|---------|------|---|-----------|---------|-------|
|        | (d) Wind direction and velocities.   | Owing to the nature of terrain local affect are pronounced and when the general prevailing winds not too strong to mask these effect there is a tendency for diurnal reversal of winds the flow being anabatic during the day and katabatic at night the latter being of considerable force |           |         |      | Owing to the nature of terrain local affect are pronounced and when the general prevailing winds not too strong to mask these effect there is a tendency for diurnal reversal of winds the flow being anabatic during the day and katabatic at night the latter being of considerable force |           |         |       |
|        | (e) Fog Condition.   | Generally there are no fog conditions in the area However during the month of December and January slight foggy conditions prevail during night, with clear sky in the day  |           |         |      | Generally there are no fog conditions in the area However during the month of December and January slight foggy conditions prevail during night, with clear sky in the day  |           |         |       |
|        | (f) Exposure to sun.   | The site is exposed to sun throughout the year  |           |         |      | The site is exposed to sun throughout the year  |           |         |       |
|        | (g) Unusual weather condition like cloud burst etc.  | There is no record of unusual weather condition like cloud burst in the area where the site is located  |           |         |      | There is no record of unusual weather condition like cloud burst in the area where the site is located  |           |         |       |
| 9      | Facilities resources.  |   |           |         |      |   |           |         |       |
|        | (a) Landing ground.  | None  |           |         |      | None  |           |         |       |
|        | (b) Dropping Zone.   | None  |           |         |      | None  |           |         |       |
|        | (c) Food stuffs.   | Patato, Rajma, Walnut   |           |         |      | Patato, Rajma, Walnut   |           |         |       |
|        | (d) Labour local availability and need for import.   | Local labour is available for construction of work  |           |         |      | Local labour is available for construction of work  |           |         |       |
|        | (e) Construction material (Timber, Bamboo, Sand, Stone, Shingle etc. extent of their availability and lead involved. | Stone required for the construction work shall be made available locally as it shall be obtained from hill side cutting. However sand and stone chips (grit) required for the construction work shall be procured from the approved quarry.   |           |         |      | Stone required for the construction work shall be made available locally as it shall be obtained from hill side cutting. However sand and stone chips (grit) required for the construction work shall be procured from the approved quarry.   |           |         |       |
| 10     | Value of land, agricultural land, Irrigated land, built up land, forest land etc.                                    | Private Land  | 0.000 Ha. | @ 20.00 | 0.00 | Private Land  | 0.000 Ha. | @ 20.00 | 0.00  |
|        |  | Civil Land  | 0.708 Ha. | @ 9.35  | 6.62 | Civil Land  | 1.100 Ha. | @ 9.35  | 10.29 |
|        |  | Reserve Land  | 0.000 Ha. | @ 9.35  | 0.00 | Reserve Land  | 0.000 Ha. | @ 9.35  | 0.00  |
|        |  | Van Panchayat   | 0.000 Ha. | @ 9.35  | 0.00 | Van Panchayat   | 0.000 Ha. | @ 9.35  | 0.00  |
|        |  | Total value of Land (in Lakh)   |           |         | 6.62 | Total value of Land (in Lakh)   |           |         | 10.29 |
| 11     | Approximate Const. Cost.   | 0.700 Km.   | @ 46.60   | 32.62   | Lakh | 1.000 Km.   | @ 46.60   | 46.60   | Lakh  |
| 12     | Access point indicating possibility of induction of equipment.   | Access point available for induction of equipment.  |           |         |      | Access point available for induction of equipment.  |           |         |       |
| 13     | Period required for construction.  | 6 Months  |           |         |      | 8 Months  |           |         |       |
| 14     | Strategic Consideration.   | Deployment of skilled manpower and efficient equipment/machinery shall be made for completion of the project.   |           |         |      | Deployment of skilled manpower and efficient equipment/machinery shall be made for completion of the project.   |           |         |       |
| 15     | Important villages, towns and markets centers to be connected.   | The road shall provide connectivity to village G.I.C. Talwari with a population of 631 numbers.   |           |         |      | The road shall provide connectivity to village G.I.C. Talwari with a population of 631 numbers.   |           |         |       |
| 16     | Recreational potential.  | Nil   |           |         |      | Nil   |           |         |       |

| Sl. No | Variables   | Alignment No-1  | Alignment No-2  |
|--------|---|---|---|
| 17     | Economic Factors:   |   |   |
|        | (a) Population served by the alignment.   | 631   | 631   |
|        | (b) Agricultures and economic potential of the area.                                  | Transportation of the cultivated crops by mechanical means (ie. through road) shall enhance the economical condition of the people residing in this area. Potential of the development of animal husbandry is available in large scale. | Transportation of the cultivated crops by mechanical means (ie. through road) shall enhance the economical condition of the people residing in this area. Potential of the development of animal husbandry is available in large scale. |
| 18     | other major development projects being taken up electric projects etc.                | None  | None  |
| 19     | (i) Misc. Such as camping sites   | None  | None  |
|        | (ii) Law and other problem  | None  | None  |
|        | (iii) Royalty   | Royalty is paid to the Revenue Department as per rate fixed by District Magistrate.   | Royalty is paid to the Revenue Department as per rate fixed by District   |
|        | (iv) Availability of contractors for collection and carriage of construction material | Available   | Available   |
|        | (v) working period available for construction of work.                                | 8 Months  | 8 Months  |
| 20     | Total No. of trees to be removed  | 75  | 110   |
| 21     | Average Density of forest cover   | 0.2   | 0.2   |
| 22     | Total No. of Merits   | 14  | 11  |
| 23     | Total No. of Demerits   | 7   | 10  |

#### RECOMMENDATIONS:

Alignment no. (1) Recommended for approval being more economical, useful & technically feasible.

  
A. Assistant. Engineer/J.E.

  
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