**METHODOLOGY OF WORK**

**Name of Work: <name\_of\_work>**

Completion Period: <completion\_duration>. The aforesaid work will be commenced within the stipulated

time if the is awarded to me

The structure of a road consists of the sub grade and the pavement. The structural element of the pavement is the sub base and the base. Concreting or a bituminous surfacing may the surface of the base. Hence the basic construction of a road is three main activities-

1. Preparation of sub grade
2. Contraction of bases and sub bases.
3. Construction of GSB and WBM GR- ii & iii
4. Laying of Carpeting.
5. Contraction of RCC culvert, bridge & drainages
6. Preparation of sub base – this is the most important for the longevity of the road. Unless the sub base is hard and firm the resulting road will always be bad. Special attention will be given to compaction and the drainage. To make the road successful, side drains to be developed and no stagnant water is to be allowed to remain on drains. Alternatively the sub phase shouldn’t get totally dry also. The material to be used in the sub base is natural soil. The soil is required to be compacted properly , which will be done in 15cm thick layers. It will be sufficient to have soil with 70% sand and 30% slit and clay. The rolling is to commence from at the edge to the center and the speed of the roller is to be minimum possible for the soil compaction. The soil to be tested for its suitability to use and composition.
7. Construction of bases and sub bases - granular sub base the work consisits of laying and compacting granular materials.the thickness of loose layers shall be so regulated that the maximum thickness of the layers after consolidation does not exceed to 100mm. Sufficent water is to be sprinkeled before the compaction to give the best results. The rolling is to be done minimum of eight times to give sufficent consolidation . The final level should be checked with a template so as to give the gradient and as required finally. A layer of 8-10 cm of fine graded granular material laid over the foundation will prevent working up of the clay into the base course. After final compaction of the wbm course the binding materials mainly stone dust or fine sand etc . To be spread and the road should be allowed to dry overnight and process repeated.
8. The road to be sprinkled with water and rolled top gives the maximum effect. The spreading of the binding materials, sprinkling with water, sweeping with broom should continue till a wave of slurry ahead the roller is formed.
9. Laying of carpeting (seal coat , tack coat & prime cost)

Would be done after completion of laying the water bound macadam layer.

1. Apart from the above road work, the cross drainage work would be done with all activities simultaneously. The cross drainage are to be laid as per the level and drawings supplied by the department on the required position.
2. After completing the all the activities at last the road furniture would be provided.

Proposed steps to carry the works -

1. In the first month itself the clearing operation will be completed. The earthwork of the road will be started immediately from one side.
2. The culverts will be dug and Hume pipes placed in the required levels and places.
3. As the earthwork excavation in the bridge is completed, the foundation work (pilling of 1000mm dia) will start in the 2nd month confirming the procurement of required machineries along with the quality materials like cement, steel, chips as desired and direction by department.
4. The earthwork will be requiring one excavator and few toppers. The same will be done with speed and more machinery will be activated as required. More than 20% of earthwork will be done in the 4th month and the activity will be completed by the end of 12th month.
5. The culvert portion (Hume pipe) will be completed in the 8th month.
6. The filled up earth will be rolled optimally and two to three no of rollers will be deployed for the same.
7. After the sub base is complicated before the end of 8th working month the next activity namely the GSB will be started and the sequence will be maintained.
8. The WBM II and iii will be done after the completion up to the fifth as the requirements of the machineries will become more to continue three activities at the same time.
9. After 30% completion of WBM lying of OGPC would be started.
10. In the meantime, the additional road works such as milepost, tree etc will be completed.
11. By the end of the 12th (working month) month all the works direct and related will be completed.
12. While in the works all necessary tests will be conducted for maintaining the best possible quality.

Signature of Bidder