Alternative alignments with comparative statement & Justification for choosing the preferred Alignment:

The Proposed Pune Ring Road Western (PRR-W) project is to be constructed in accordance with specific alignment (Alternative Alignment – I) decided after detailed study, therefore, the project is site specific. The total land required for the construction of project is 753.5739 Ha in Pune district. Out of which 48.55 Ha forest land is involved in the alignment. In view of this no alternative non-forest land can be used for the construction purpose. The following alternatives have been examined in detail.

Sr. No.	Description	Alternative Alignment - I	Alternative Alignment – II (Preferred alignment)	Alternative Alignment - III
1	Total Length (km)	68.8	66.27	64.70
2	RoW (m)	110	110	110
3	Total land required (Ha.)	753.5739	729	712
4	Agriculture land (%)	58.40	58.10	53.10
5	Barren land (%)	36.60	34.60	35.90
6	Forest land (%)	6.467 (48.55 Ha.)	7.40 (53.95 Ha.)	11 (78.32 Ha.)
7	Major Bridge (Nos.)	3	4	4
8	Minor Bridges (Nos.)	16	5	6-
9	Tunnels (Nos.)	8	10	12

<u>Justification for choosing the preferred Alignment (Alternative Alignment – I):</u>

1. Safety Aspects:

Safety of Commuters was the first priority for selection of alternatives as PRR-W is passing through Western Ghats which has steep slopes and sharp turns. Minimum number of horizontal curves will ensure free flow of traffic and will achieve reduction in number of accidents, conforming with IRC specifications.

2. Technical Aspects:

The curves in the preferred alignment is minimum compared to other two alignments. In the preferred alignment, the minimum curves are considered which will be feasible for the natural gradient.

3. Environmental Aspects:

As per alternative alignment assessment, the forest land required for 1st, 2nd & 3rd alternatives are 48.55 Ha, 53.95 ha and 78.32 ha respectively. Minimum forest area falls under the preferred alignment, which is 1st alternative with forest land requirement of 48.55 Ha. As the forest land requirement of preferred alignment is minimum, there will be minimum deforestation and minimum hindrance with the flora and fauna of the area. Also, the requirement of PRR-W project is for the movement of high intensity road traffic and accommodate the future predicted traffic.

Considering the above reasons Alternative Alignment– I has been finalized by MSRDC as the preferred alignment.