



PUBLIC WORKS, PORTS & INLAND WATER TRANSPORT DEPARTMENT  
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office of the  
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**JUSTIFICATION LETTER**

It is planned by MORTH to replace all the existing level crossing on NH with ROB. Existing level crossing falls on NH-50, which starts from Udgir and goes to Humnabad via Naubad. MORTH has planned to widen all the existing NH to two lane with Paved Shoulders and improve the geometrics as per IRC stipulations. With this objective, following minimum requirement is needed at the project section:

- Replacement of existing level crossing with 4-lane ROB. Basic requirement of Railways is to restrict skew angle within 20 Degrees and to provide additional Limited Height Subway.
- As the section is in built-up section, existing section to be widened to 4-lane.

Keeping the basic objective in consideration, alignment improvement options were studied. Following options were studied for the improvement at existing section:

**Option 1:** Improvement along the existing Highway.

**Option 2:** Improving the alignment near the existing level crossing to reduce skew.

**Option 3:** Providing Bypass to existing alignment

**Option 1: Improvement along existing Alignment**

1. Skew angle at existing level crossing is 50 degrees. Railways have not accepted the alignment with this skew angle.
2. As the alignment is near the built-up sections, it is necessary to provide 4-lane section. It was not possible within the available ROW. Acquiring land in the built-up zone has met with resistance from the local people. It is not possible to provide design speed of 100 KMPH in habitation areas.

Considering the above issues, Option 1 was not preferred.

**Option 2: Improving the alignment at Level Crossing**

1. Although the skew angle was reduced by improving alignment, it has increased the land acquisition in the built-up sections. This option required to acquire private property and faced huge resistance from the local people.
2. This alignment option No.2 runs in habitation area and it has two continuous s-curves in city area, here also it is not possible to provide design speed of 100 KMPH.

Considering the above issues, Option 2 was not preferred. To improve the alignment of the complete Project, it was recommended to provide Bypass to Naubad city.

**Option 3: Bypass**

It is observed that forest starts immediately after completion of Naubad built-up section. Start point of Alignment was proposed considering the geometric requirements. This alignment is ideal to have design speed of 100 KMPH. Further this alignment option No.3 reduces the total length of project by 1.5 Km.

Considering the above points, it was decided to recommend Bypass to Naubad in alignment option No.3 which is being adopted for implementation.

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