

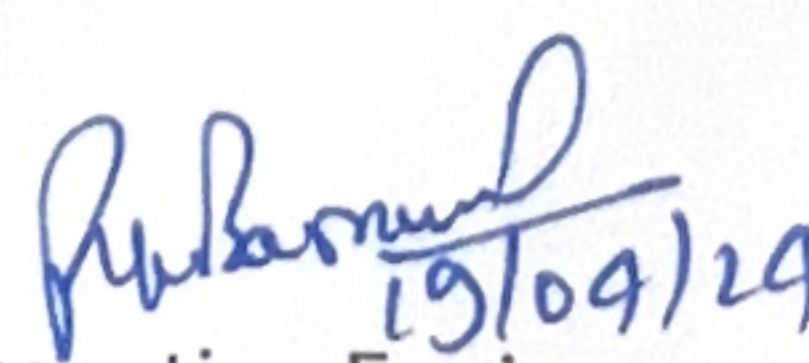
ALTERNATE ALIGNMENT ANALYSIS SHEET

	Alignment 1		Alignment 2		Alignment 3	
Type of Terrain	Plain		Plain		Plain	
Length	10.350 Km		10.800 Km		14.200 Km	
R & R	Nil		Nil		Nil	
Bridges	Span	Type	Span	Type	Span	Type
	Alignment		Alignment		Alignment	
	4x18m = 72m	Major	4x18m = 72m	Major	4x4.3m	Box Cell
	4x18m = 72m	Major	4x18m = 72m	Major		Minor (1 no.)
	3x18m = 54m	Minor	3x18m = 54m	Minor		
Cost of Bridge	11.5 Cr.		11.5 Cr.		0.9 Cr.	
Box Culvert	Size	Nos.	Size	Nos.	Size	Nos.
	1x2x2	8	1x2x2	9	1x2x2	10
	1x3x3	10	1x3x3	10	1x3x3	17
VUP					3 no. 12m width at NH-100 (New NH-522) Chatra, Sesang road and Chtra Chauparan road	
Land type	Protected Forest	Private Land	Protected Forest	Private Land	Protected Forest	Private Land
	24.36	6.69	16.62	15.78	26.04	16.56
Total area	31.05 Hect (land width 30m)		32.4 Hect (land width 30m)		42.6 Hect (land width 30m)	

Note : Proposed Alignment 1 & 2 passes through valleys portion. In these Bypasses construction may not possible due to valley area. Land has been acquired for some another projects where Alignment 1 & 2 passes. NH-22 starts from Dobhi (Gaya) and end at Chandwa at NH-75 passes through Chatra main town. Proposed Alignment-3 starts from Ch. 42.112 of NH-22 crosses NH-522, Chouparan-Chatra road and Hazaribagh-Katkamsandi road and end at Ch. 54.701 of NH-22.

All traffic coming from NH-522, Chouparan-Chatra road and Hazaribagh-Katkamsandi road and going towards Ranchi or Daltonganj and towards Gaya used this bypass. After construction of this bypass public get relief from traffic congestion in Chatra town. If we follow Alignment 1 & 2, traffic going to Ranchi or Daltonganj and Gaya couldn't get relief from congestion of traffic because finally they will use Chatra town of NH-22.

Therefore, Alignment-3 is best suitable for bypass considering all the above aspects.


 19/04/24
 Executive Engineer
 NH Division, Hazaribagh
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 Hazaribagh

COMPARATIVE STATEMENT OF ALTERNATE ALIGNMENT

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Sl. No.	Details	Alignment 1		Alignment 2		Alignment 3	
1	Length	10.350 Km		10.800 Km		14.200 Km	
2	R & R	Nil		Nil		Nil	
3	Bridges	4x18m = 72m Major 4x18m = 72m Major 3x18m = 54m Minor		4x18m = 72m Major 4x18m = 72m Major 3x18m = 54m Minor		5x3.4m Minor	
4	VUP	Nil		Nil		Nil	
5	Box Culvert	Size	Nos.	Size	Nos.	Size	Nos.
		1x2x2	8	1x2x2	9	1x2x2	10
		1x3x3	10	1x3x3	10	1x3x3	17
6	Name of villages passing through	Near Golhutu village, Amuna, Kathautia, Chaudharia village		Near Golhutu village, Amuna, Kathautia, Chaudharia village		Near Golhutu village, Girwan, Arudana, Mohanadih, Dewaria, Banasam, Chaudharia village	
7	Merits	<p>Proposed Alignment 1 & 2 passes through valleys portion. In these Bypasses construction may not possible due to valley area. Land has been acquired for some another projects where Alignment 1 & 2 passes. NH-22 starts from Dobhi (Gaya) and end at Chandwa at NH-75 passes through Chatra main town. Proposed Alignment-3 starts from Ch. 42.112 of NH-22 crosses NH-522, Chouparan-Chatra road and Hazaribagh-Katkamsandi road and end at Ch. 54.701 of NH-22.</p> <p>All traffic coming from NH-522, Chouparan-Chatra road and Hazaribagh-Katkamsandi road and going towards Ranchi or Daltonganj and towards Gaya used this bypass. After construction of this bypass public get relief from traffic congestion in Chatra town. If we follow Alignment 1 & 2, traffic going to Ranchi or Daltonganj and Gaya couldn't get relief from congestion of traffic because finally they will use Chatra town of NH-22.</p> <p>Therefore, Alignment-3 is best suitable for bypass considering all the above aspects.</p>					

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