S. No.	De	escription	Remarks (Option-1)	Remarks (Option-2)	Remarks (Option-3)
1	Road Features	Total Length including spur	53.500 Kms.	54.324 Km	56.200 Kms.
2		Length of Existing Road	0.000 Km	0.000 Km	0.000 Km
3		Length of Green Field	53.500 Kms.	54.324 Km	56.200 Kms.
4		Geometric Features	<ul><li>a) Will provide adequate design Speed.</li><li>b) Congestion free Traffic Movement inside</li></ul>	<ul><li>a) Will provide adequate design Speed.</li><li>b) Congestion free Traffic Movement inside City</li></ul>	<ul><li>a) Will provide adequate design Speed.</li><li>b) Congestion free Traffic Movement inside City</li></ul>
5		Nature de Campa etimiter	City. Amas To Bela Nawada	Amas To Bela Nawada	Amas To Bela Nawada
		Network Connectivity			
,		Expected Traffic (PCU)	12000 PCU (Preliminary Traffic estimates)	15000 PCU (Preliminary Traffic estimates)	12000 PCU (Preliminary Traffic estimates)
		Land to be Acquired	336.87 Ha (approx.)	341.66 Ha (approx.)	353.07 Ha (approx.)
5		Cost of Land Acquisition	286.70 Cr (approx.)	289.56 Cr. (approx.)	299.23 Cr (approx.)
	Social and Environmental	Built-Up section	Built up section is encountered 3 Kms.	No Built-Up section	Buildings will be affected
)		Area sensitive of flora or fauna /Wildlife Sanctuary	None	None	None
1		Loss in Agricultural Land	Yes	Yes	Yes
2		Forest Land (Ha)	4.5	4.343	4.6
3	Existing / Proposed Structure(s)	Trumpet/Fly-Over	03Nos.	02 Nos.	03 Nos.
+		Elevated Structure	Nil	Nil	Nil
		Major Bridge	04 Nos.	03 Nos.	04 Nos.
5		Minor Bridge	45 Nos.	44 Nos.	47 Nos.
7		VOP	Nil	Nil	Nil
;		VUP	11 Nos.	04 Nos.	08 No.
)		LVUP	08 Nos.	03 Nos.	09 No.
)		SVUP	03 Nos.	02 Nos.	04 No.
1		ROB	01 Nos.	01 Nos.	01 Nos.
	Merit and Demerits		• Traffic can move without any hindrance.	• Traffic can move fast throughout as this is an almost straight alignment.	• Amount of Land required for Acquisition is more than other two options, and consequently total LA cost is higher than the LA cost of other two options.
22		Merits	• Traffic can move fast throughout as this is an almost straight alignment.	• Length of highway is shorter than existing highway.	• Total civil cost is more than option -2.
			• Length of highway is more than existing.		<ul> <li>Length of highway is more than existing highway.</li> </ul>
			• R & R cost is very high.		• R& R cost is very high.
		Demerits	<ul> <li>Land Acquisition required throughout the project stretch.</li> <li>Project cost is high then other option.</li> </ul>	<ul> <li>Land Acquisition required throughout the project stretch.</li> <li>Project cost is lower than other option.</li> </ul>	• Residential &commercial buildings would be demolished.
ŀ	Construction Cost	Cost of Road Work	392.45 Cr. (Approx.)	398.87 Cr (Approx.)	411.08 Cr (Approx.) N
		Cost of Structure(s)	553.061 Cr (Approx.)	533.13 Cr (Approx.)	637.781 Cr. (Approx.)
		Total Civil Cost	945.511 Cr.	932 Cr.	1048.861 Cr.
7	Total Project Cost	Total Project Cost	1058.98 Cr (Approx.)	1053.19 Cr. (Approx.)	1174.724 Cr (Approx.)
3		Project Cost/km	19.79 Cr/Km.	19.40 Cr/Km.	20.87 Cr/Km.

## Details of Alternate Alignment Study for the Project Highway – NH-119D – Pkg-II Shivrampur (Km – 55+000) to Ramnagar (Km - 109+324)]

• Option 1 and 3 leads to more impact on structure and families as number affected families are high as compared to option 2.

o If alignment option 1 or 3 is followed then it will leads to more impacts on Environment & Social components, hence Option 2 is followed.

oject Director

AI, PIU,-Gaya



Map showing 3 alternatives sites on Survey of India Toposheet

## Alignment option of NH-119D – Pkg-II



pub Project Director NHAI, PIU,-Gaya

Sof