Details of Alternate Alignment Study for the Project Highway – NH-119D – Pkg-IV [Kalyanpur (Km – 0+000) to Tal Dashraha (Km – 47+500)]

Salient Features of Alignment Options of NH-119D - Pkg – IV [Kalyanpur (Km – 0+000) to Tal Dashraha (Km – 47+500)]					
S. No.	**Description**		**Remarks (Option-1)**	**Remarks (Option-2)**	**Remarks (Option-3)**
1	**Road Features**	Total Length including spur	42+500 Kms	49+500 Kms	42+800 Kms
2		Length of Existing Road	0.000 Km	0.000 Km	0.000 Km
3		Length of Green Field	42+500 Kms	49+500 Kms	42+800 Kms
4		Geometric Features	a) Will provide adequate design Speed. b) Congestion free Traffic Movement inside City	a) Will provide adequate design Speed. b) Congestion free Traffic Movement inside City	a) Will provide adequate design Speed. b) Congestion free Traffic Movement inside City
5		Network Connectivity	Kalyanpur to Tal-Dasraha	Kalyanpur to Tal-Dasraha	Kalyanpur to Tal-Dasraha
6		Expected Traffic (PCU)	11000 PCU (Preliminary Traffic estimates)	15000 PCU (Preliminary Traffic estimates)	10000 PCU (Preliminary Traffic estimates)
7		Land to be Acquired	277.54 Ha (approx.)	304.54 Ha (approx.)	279.34 Ha (approx.)
8		Cost of Land Acquisition	319.64 Cr. (approx.)	344.13 Cr. (approx.)	325.53 Cr. (approx.)
9	**Social and Environmental**	Built-Up section	Less built-Up section	Building will be demolished	Buildings will be affected
10		Area sensitive of flora or fauna /Wildlife Sanctuary	None	None	None
11		Loss in Agricultural Land	Yes	Yes	Yes
12		Forest Land (Ha)	4.2	3.042	3.5
13	**Existing / Proposed Structure(s)**	Trumpet/Fly-Over	04Nos.	04 Nos.	04 Nos.
14		Elevated Structure	Nil	Nil	Nil
15		Major Bridge	02 Nos.	02Nos.	03 Nos. (Proposed)
16		Minor Bridge	05 Nos.	06 Nos.	07 Nos.
17		VOP	Nil	Nil	Nil
18		VUP	07 Nos.	05 Nos.	06 No. (Proposed)
19		LVUP	05 Nos.	05 Nos.	06 No. (Proposed)
20		SVUP	15 Nos.	15 Nos.	15 No. (Proposed)
21		ROB	1	1	1 (Proposed)
22	**Merit and Demerits**	Merits	Traffic can move fast throughout as this is analmost straight alignment Length of highway is shorter than existinghighway. Very less R & R cost.	Traffic can move fast throughout as this is an almoststraight alignment Length of highway is shorter than existing highway.	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. Total civil cost is more than option -2
23		Demerits	R&R cost is very high		R&R cost is very high

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24	**Construction Cost**	Cost of Road Work	386.43 Cr (Approx.)	408.54 Cr (Approx.)	388.15 Cr (Approx.)
25		Cost of Structure(s)	261.92 Cr (Approx.)	285.54 Cr (Approx.)	253.92 Cr. (Approx.)
26		Total Civil Cost	966.99 Cr. (Approx.)	1040.96.Cr.	967.6 Cr. (Approx.)
27	**Total Project Cost**	Total Project Cost	1083.288 Cr. (Approx.)	1165.54 Cr. (Approx.)	1083.712Cr. (Approx.)
28		Project Cost/km	25.489 Cr/Km	24.81Cr/Km	25.320 Cr/Km

Based on the above study the following observations are there:-

- Option 1 and 3 leads to more impact on structure and families as number affected families are high as compared to option 2.
- If alignment option 1 or 3 is followed then it will leads to more impacts on Environment & Social components, hence Option 2 is followed.

Manager Tech
NHAI, PIU- Chhapra