

























































SH-74 Bridge over I-35 Replacement/Interchange, McClain County, Oklahoma

Alternatives Comparison Matrix

A comparison matrix for all alternatives has been developed, based upon the geometric design, intersection capacity, environmental impacts, utility relocations, right-of-way acquisitions, and total cost opinions.

Each parameter has been assigned a color to allow visual comparison of the alternatives, with green being the best score, purple being the lowest score, and yellow being somewhere in between.

ALTERNATIVES COMPARISON MATRIX					
OPTION	ALTERNATIVE 1 0° Skew	ALTERNATIVE 2 20° Skew	ALTERNATIVE 3 45° Skew	ALTERNATIVE 4 40° Skew	ALTERNATIVE 5 53° Skew
GEOMETRIC DESIGN					
A	New I-35 SB ramps configuration and intersection with SH-74; new SH-74/W. Frontage Road intersection; new SH-74/Airport Road T-intersection 	New SH-74/Airport Road T-intersection; signalized SH-74/I-35 SB ramps/W. Frontage Road intersection; existing roundabout remains 	Major improvements to W. Frontage Road; Signalized Intersection @ SH-74/I-35 SB ramps/W. Frontage Road intersection and at existing roundabout 	Minor improvements to W. Frontage Rd.; major change to Airport Rd.; Signalized intersection @ SH-74/I-35 SB ramps/W. Frontage Rd. intersection and at existing roundabout 	Minor improvements to W. Frontage Road; Signalized Intersection @ existing roundabout 
B	N/A	Roundabouts at both SH-74/I-35 ramps locations 	Roundabouts at both SH-74/I-35 ramps locations 	Roundabouts at both SH-74/I-35 ramps locations 	Roundabouts at both SH-74/I-35 ramps locations 
INTERSECTION CAPACITY					
A					
B	N/A				
ENVIRONMENTAL IMPACT					
A	1.10 acres UST, 290' stream 	0.28 acres UST, 241' stream 	1.73 acres UST, 0' stream 	0.28 acres UST, 57' stream 	0.28 acres UST, 27' stream 
B	N/A	0.24 acres UST, 240' stream 	1.73 acres UST, 0' stream 	0.28 acres, UST, 56' stream 	0.28 acres UST, 26' stream 
UTILITY RELOCATION					
A	6 utilities, 13 owners \$1,060,000 	6 utilities, 12 owners \$837,100 	6 utilities, 13 owners \$1,584,000 	6 utilities, 13 owners \$1,597,900 	6 utilities, 13 owners \$1,320,700 
B	N/A	6 utilities, 12 owners \$773,700 	6 utilities, 11 owners \$1,043,900 	6 utilities, 13 owners \$1,423,600 	6 utilities, 11 owners \$839,900 
RIGHT-OF-WAY ACQUISITION					
A	12 properties, 5.63 acres 	8 properties, 5.61 acres 	14 properties, 9.96 acres, 2.53 acres from airport 	12 properties, 10.33 acres, 4.35 acres from airport 	12 properties, 8.51 acres, 2.53 acres from airport 
B	N/A	9 properties, 5.53 acres 	12 properties, 7.06 acres 	10 properties, 7.55 acres, 2.00 acres from airport 	9 properties, 5.57 acres 
TOTAL COST OPINION					
A	\$24,306,260 	\$23,728,660 	\$20,056,840 	\$18,919,320 	\$19,043,500 
B	N/A	\$23,504,440 	\$16,752,080 	\$16,936,200 	\$15,651,100 

It is noted that the colors used in matrix are for aid in visual comparison only, i.e., green, yellow, and purple indicate which alternative is better, neutral, and worse, respectively, for each parameter of comparison. The color scheme has relevance only to the comparison of these alternatives and is not meant to imply any parameter is "ideal", as compared to other projects or situations.