

## Osage County - JP20288(04) Alternatives Matrix

New typical includes two-12' driving lanes with 8' shoulders.

	Alternative B	Alternative C	Alternative D
Category	West mile offset south, East mile offset north, 65 mph	West mile offset south, East mile offset south, 65 mph	West mile offset south, East mile offset south, 55 mph
Number of Alignment Crossings of Existing C/L	0	3	5
Vertical Alignment - Number of Vertical Curves	15	15	10
Horizontal Alignment - Number of Horizontal Curves	7	8	6
Earthwork	Excavation: 306,700 cy	Excavation: 209,400 cy	Excavation: 132,900 cy *
	Fill: 129,600 cy	Fill: 151,800 cy	Fill: 134,600 cy
	Net: 177,100 cy of excavation	Net: 57,600 cy of excavation	Net: 1,700 cy of fill *
Construction Traffic Control	Phase Construction. No road closure	Phase Construction. No road closure	Phase Construction. No road closure
Construction Sequencing	2-12' driving lanes with phased shoulder construction	2-12' driving lanes with phased shoulder construction	2-12' driving lanes with phased shoulder construction
Temporary Median Barrier	Not Required	Not Required	Not Required
Roadway and Bridge Shoring	Not Required	Not Required	Not Required
Temporary Sheet Pile Shoring	N/A	N/A	N/A
Phased Bridge Construction	No	No	No
Historic Properties	None	None	None
High Potential NRHP Sites (CR)	None	None	None
Archeological Sites	None	None	None
Cemeteries	None	None	None
UST & AST Sites	None	None	None
O&G Well Pads	4	1	2
Abandoned Oil Sludge Pit	Yes	Yes	Yes
Blue Line Streams (Linear Feet)	623	778	763
NWI Wetlands (Acres)	0.40	0.10	0.10
Floodplain (Acres)	5.60	6.10	5.90
Channel Change (Linear Feet)	0	224	214
T&E Species	Same	Same	Same
Critical Habitat	None	None	None
Bald Eagles & Swallows	Same	Same	Same
Tribal Property	None	None	None
Public Parks / Recreation Areas / Refuges	None	None	None
Residential Relocations	3	3	3
Commercial Relocations	None	None	None
ROW Impacts	28 Parcels - 20 Owners 31.9 acres	26 Parcels - 20 Owners 30.3 acres	30 Parcels - 20 Owners 31.0 acres
ROW Costs	\$1,617,000	\$1,586,000	\$1,273,000.00
Utility Costs	\$755,100	\$620,000	\$570,200
Construction Costs	\$8,745,100	\$7,723,500	\$6,975,600
Mitigation Cost	TBD	TBD	TBD
Total Project Costs	\$11,117,200	\$9,929,500	\$8,818,800

\* Modify grades and/or backslopes during final design to create an earthwork balance.