

Alternative Analysis and Comparison Table

Alternative	Description	Proposed Span Length	Bridge Roadway Width	Maintenance of Traffic	Profile Raise (Max.)	Design Load Rating	ROW Impacts	Reconstruction Length Based On Roadway Grades & Profile Adjustments	SHPO Considerations	Utility Impacts	Structure Type Options	Cost	Pros	Cons
1	Rehab Existing Superstructure on Existing Alignment	92'-6"	Maintain Existing (12'-0")	Offsite Detour	4" +/- (Minimal)	HL-93	None	West Appr. = 100' East Appr. = 100'	<ul style="list-style-type: none"> Retains NRHP eligible truss with significant modifications to structural integrity 	None	<ul style="list-style-type: none"> Existing truss to remain Existing substructures to remain Exodermic concrete deck 	\$ 1,970,000.00	<ul style="list-style-type: none"> Retains NRHP eligible truss Maintains hydraulic capacity Maintains single lane bridge status Meets HL-93 and current design standards 	<ul style="list-style-type: none"> Non-standard 12'-0" clear width Non-standard bridge/transition rail 25-yr Design Life Requires significant maintenance Cost prohibitive Requires substantial modifications to structural integrity of NRHP eligible truss
2	Truss Superstructure Replacement on Existing Alignment	92'-6"	Maintain Existing (12'-0")	Offsite Detour	4" +/- (Minimal)	HL-93	None	West Appr. = 100' East Appr. = 100'	<ul style="list-style-type: none"> Removes NRHP eligible truss, and replace with new similar truss 	None	<ul style="list-style-type: none"> New similar truss Existing substructures to remain Exodermic concrete deck 	\$ 1,890,000.00	<ul style="list-style-type: none"> 75-yr design life Maintains hydraulic capacity Meets HL-93 and current design standards Maintains single lane bridge status 	<ul style="list-style-type: none"> Non-standard 12'-0" clear width Non-standard bridge/transition rail Requires significant maintenance Cost prohibitive Removes NRHP eligible truss
3	Full Structure Replacement on Existing Alignment	112'-0"	15'-11"	Offsite Detour	1'-0" to 2'-0"	HL-93	TE's/Grading Release	West Appr. = 175' East Appr. = 230'	<ul style="list-style-type: none"> Removes NRHP eligible truss, and replace with new similar truss New/increased ground disturbance 	Utility relocation required for new structure	<ul style="list-style-type: none"> New similar truss New substructures Reinforced concrete deck 	\$ 2,440,000.00	<ul style="list-style-type: none"> 75-yr design life Maintains hydraulic capacity Meets HL-93 and current design standards Maintains single lane bridge status and increases width to accommodate agricultural equipment 	<ul style="list-style-type: none"> Utility Conflicts Requires significant maintenance Cost prohibitive Removes NRHP eligible truss
4	Full Structure Replacement Off Alignment and Retain/Rehabilitate Existing Truss	92'-6"	15'-11"	Offsite Detour	Existing Truss Rehab (0'-0") New structure (1'-6" to 2'-0")	HL-93	TE's, PE's, and FEE Takings	West Appr. = 200' East Appr. = 230'	<ul style="list-style-type: none"> Retains NRHP eligible truss with significant modifications to structural integrity New/increased ground disturbance 	Utility relocation required for new structure	<ul style="list-style-type: none"> Existing truss to remain Existing substructures to remain New steel multi-girder superstructure New substructures Reinforced concrete deck 	\$ 2,470,000.00	<ul style="list-style-type: none"> Retains NRHP eligible truss 75-yr design life Maintains hydraulic capacity Meets HL-93 and current standards Maintains single lane bridge status and increases width to accommodate agricultural equipment 	<ul style="list-style-type: none"> Requires significant maintenance Cost prohibitive Requires substantial modifications to structural integrity of NRHP eligible truss
5	Superstructure Replacement on Existing Alignment	92'-6"	15'-11"	Offsite Detour	1'-6" to 2'-0"	HL-93	TE's/Grading Releases	West Appr. = 150' East Appr. = 230'	<ul style="list-style-type: none"> Removes NRHP eligible truss, replaces with new superstructure 	None	<ul style="list-style-type: none"> New steel multi-girder superstructure Existing substructures to remain Reinforced concrete deck 	\$ 1,270,000.00	<ul style="list-style-type: none"> Requires minimal maintenance 75-yr design life Maintains hydraulic capacity Cost effective Meets HL-93 and current standards Maintains single lane bridge status and increases width to accommodate agricultural equipment 	<ul style="list-style-type: none"> Removes NRHP eligible truss