ALIGNMENT EVALUATION MATRIX
THORNCREEK ROAD TO MOSCOW
DHP-NH-4110 (156); Key No. 9294

MATRIX - JANUARY 2006	WESTERN CORRIDOR				CENTRAL CORRIDOR			EASTERN CORRIDOR			EXISTING
	W-1	W-2	W-3	W-4	C-1	C-2	C-3	E-1	E-2	E-3	NO-ACTION
Evaluation Criteria											
Length	8.2 Miles	7.3 Miles	7.8 Miles	7.5 Miles	7.3 Miles	7.4 Miles	6.8 Miles	6.6 Miles	6.7 Miles	6.6 Miles	6.8 Miles
Meets Purpose and Need	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Public Involvement	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Meets Design Standards	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Safety - Estimated Accidents per Year based on estimated total turning movements.	13.07 A/Y	11.64 A/Y	12.43 A/Y	12.63 A/Y	14.59 A/Y	12.29 A/Y	12.97 A/Y	10.52 A/Y	10.68 A/Y	10.52 A/Y	24.87 A/Y
Right-of-Way Acres ± (New / Existing / Total)	308 / 12 / 320	270 / 15 / 285	283 / 7 / 290	204 / 51 / 255	135 / 90 / 225	196 / 54 / 250	139 / 56 / 195	227 / 33 / 260	195 / 30 / 225	205 / 30 / 235	
Estimated Total Construction Cost (Million)	58	49	55	41	33	41	33	43	37	40	
Archeological (Estimated acres within probable occurrence areas)	114	90	83	121	100	125	75	53	42	44	
Number of Historic Sites (Preliminary - No SHPO Determination)	Historic Structure 1 Site	Historic Property 1 Site	No Effect	No Effect	Historic Structures 2 Sites	No Effect	No Effect	Historic Structure 1 Site	No Effect	No Effect	
WETLANDS & WATERS OF THE US											
Wetlands Acres	5.1	5.2	3.7	6.5	4.6	5.8	1.7	4.4	4.1	4.3	
Tributaries - Number of Crossings & (Linear Feet)	7 - (2,735 LF)	5 - (3,270 LF)	6 - (2,875 LF)	10 - (11,721 LF)	12 - (9,250 LF)	10 - (10,665 LF)	11 - (8,920 LF)	10 - (6,450 LF)	7 - (6,320 LF)	8 - (5,910LF)	
Number of Regulatory Floodway and Floodplain Hits	8	6	7	5	4	5	4	3	3	3	
Threatened and Endangered Species	No Effect	No Effect	No Effect	No Effect	No Effect	No Effect	No Effect	No Effect	No Effect	No Effect	
Hazardous Materials (# of potential sites)	3 sites	5 sites	3 sites	5 sites	12 sites	5 sites	11 sites	4 sites	5 sites	5 sites	
SOCIO-ECONOMIC											
1 Mile South of Moscow	Significant increase in property values / Moderate potential to induced development / Challenge for contiguous growth and future connectivity	Significant increase in property values / Moderate potential to induced development	Significant increase in property values / Moderate potential to induced development	Significant increase in property values / Moderate potential to induced development / Challenge for contiguous growth and future connectivity	Increase in property values / Moderate to low potential to induced development	Increase in property values / Moderate to low potential to induced development	Increase in property values / Moderate to low potential to induced development	Increase in property values / Moderate potential to induced development	Increase in property values / Moderate potential to induced development	Increase in property values / Moderate potential to induced development	
Rest of Corridor	No change to minor increase in property values / Moderate to no potential to induced development	No change to minor increase in property values / Moderate to no potential to induced development	No change to minor increase in property values / Moderate to no potential to induced development	No change to minor increase in property values / Moderate to no potential to induced development	No change to minor increase in property values / Moderate to no potential to induced development	No change to minor increase in property values / Moderate to no potential to induced development	No change to minor increase in property values / Moderate to no potential to induced development	No change to minor increase in property values / Moderate to no potential to induced development	No change to minor increase in property values / Moderate to no potential to induced development	No change to minor increase in property values / Moderate to no potential to induced development	
Environmental Justice	No Effect	No Effect	No Effect	No Effect	No Effect	No Effect	No Effect	No Disproportionately High Impact	No Disproportionately High Impact	No Disproportionately High Impact	
Number of Displacements/Relocations	0	0	0	3 Residences	11 Residences 6 Businesses	3 Residences	3 Residences	4 Residences 1 Businesses	5 Residences	2 Residences	
Noise (receptors within 300' of CL and does not count displacements)	4 Homes 7 Businesses	6 Homes 7 Businesses	4 Homes 8 Businesses	10 Homes 7 Businesses	32 Homes 19 Businesses	10 Homes 8 Businesses	15 Homes 19 Businesses	10 Homes 8 Businesses	9 Homes 4 Businesses	12 Homes 7 Businesses	
Visual Analysis (Mod high and high considered for matrix) Moderate High – These conditions occur where viewers are sensitive to change to the landscape, are moderately visible (seen by 1-10 viewers), and may dominate the viewshed. High – These conditions occur where viewers are sensitive to changes to the landscape, changes may be highly visible (10+ viewers), and may dominate the viewshed.	LOW = 18% MOD = 37% MOD HIGH = 33% HIGH = 12% MH + H = 45%	LOW = 10% MOD = 29% MOD HIGH = 34% HIGH = 27% MH + H = 61%	LOW = 17% MOD = 29% MOD HIGH = 30% HIGH = 24% MH + H = 54%	LOW = 11% MOD = 58% MOD HIGH = 23% HIGH = 8% MH + H = 31%	LOW = 7% MOD = 69% MOD HIGH = 19% HIGH = 5% MH + H = 24%	LOW = 9% MOD = 47% MOD HIGH = 22% HIGH = 22% MH + H = 44%	LOW = 9% MOD = 68% MOD HIGH = 15% HIGH = 8% MH + H = 23%	LOW = 4% MOD = 44% MOD HIGH = 26% HIGH = 26% MH + H = 52%	LOW = 3% MOD = 47% MOD HIGH = 25% HIGH = 25% MH + H = 50%	LOW = 3% MOD = 47% MOD HIGH = 27% HIGH = 23% MH + H = 50%	
Prime Farmland Impact Rating (IR)	IR: 204	IR: 197	IR: 202	IR: 187	IR: 173	IR: 188	IR: 188	IR: 190	IR: 194	IR: 196	
Conservation Data Center Species (Long Eared Myotis & Pygmy Nuthatch)	No Effect	No Effect	No Effect	No Effect	No Effect	No Effect	No Effect	May Effect; / 0 Acres of Habitat Impact	May Effect; / 2.9 Acres of Habitat Impact	May Effect; / 2.5 Acres of Habitat Impact	
Conservation Data Center Plant Survey (# of Site Impacts)	2 Sites	0 Sites	2 Sites	0 Sites	0 Sites	0 Sites	0 Sites	2 Sites	0 Sites	2 Sites	
Ungulate Report: Population Effect and Identified Habitat Areas (Deer, Elk & Moose)	No Population Effect / Alignment Crosses 29.2 Acres of known use.	No Population Effect / No identified habitat areas	No Population Effect / Alignment Crosses 29.2 Acres of known use.	No Population Effect / No identified habitat areas	No Population Effect / No identified habitat areas	No Population Effect / No identified habitat areas	No Population Effect / No identified habitat areas	No Population Effect / Alignment Crosses 0 acres of suitable habitat area	No Population Effect / Alignment Crosses 3.3 acres of suitable habitat area	No Population Effect / Alignment Crosses 4.7 acres of suitable habitat area	
CLIMATE											
Precipitation (January - March) % of Plant Sciences Farm (PSF) 30 Year Average	74%	74%	74%	74%	74%	74%	80%	80%	80%	80%	
Fog (January - May) Total hours w/ visibility less than 1,000 feet	49 Hours	49 Hours	49 Hours	49 Hours	49 Hours	49 Hours	69.0 Hours	69.0 Hours	69.0 Hours	69.0 Hours	
Road Ice Conditions (January - May) Total hours w/ air temperature at or below 32°F & 100% Humidity	158 Hours	158 Hours	158 Hours	158 Hours	158 Hours	158 Hours	128 Hours	128 Hours	128 Hours	128 Hours	
✔ in this row represents the alignment ITD is recommending to carry forward within their respective corridor .				✔			✔		✔		Must Carry Forward 40 CFR 1502.14(d)

The appropriate Federal and State agencies will continue to participate in the evaluation process. During the evaluation process, the following guidelines were used by ITD for decision making: A) The alignment demonstrating the least amount of impact in each corridor will be recommended to the FHWA to advance into the draft EIS process. B) The alignments recommended by ITD to carry forward were based solely on evaluation criteria identified in the alignment evaluation matrix. C) Review was done at the corridor level with the goal of advancing one alignment per corridor. D) When evaluation criteria was equal across alignments the criteria was evaluated as beneficial to each alignment. E) All evaluation criteria were considered equal because outside agencies and the public place a different value on the criteria.