

11/18/2013

TURTLE
MOUNTAIN
BAND OF
CHIPPEWA

JACK RABBIT ROAD RECONSTRUCTION
PROJECT



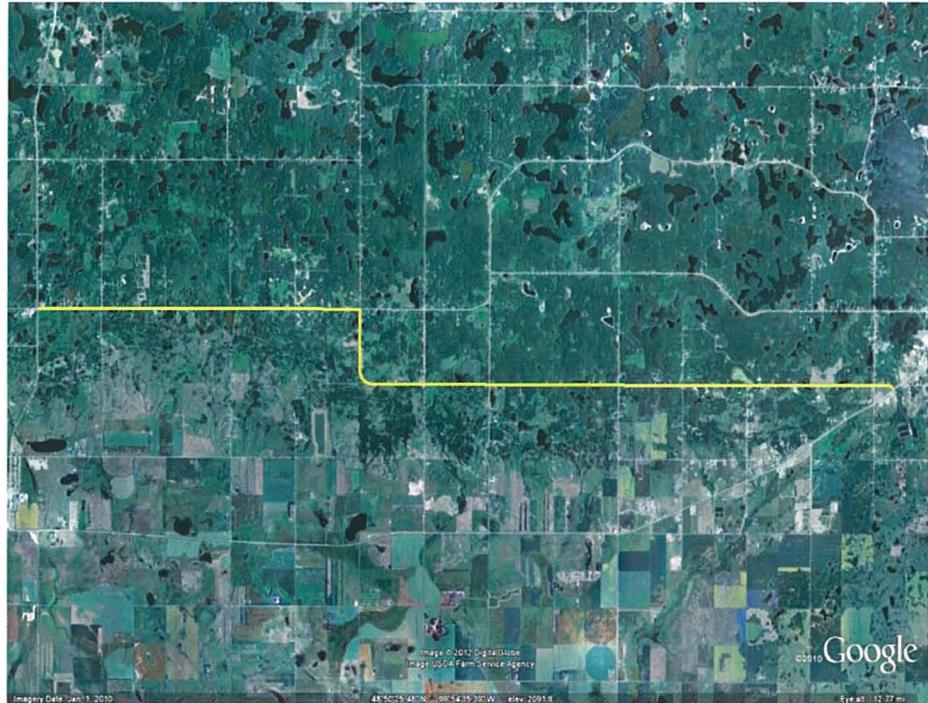
North Dakota Economic Impact Committee Funding Request

Jack Rabbit Road Reconstruction Project

Project

Description

The Jackrabbit Road Reconstruction project is an initiative to reconstruct 14.25 miles of roadway on the Turtle Mountain Band of Chippewa Indians reservation. The reconstruction project will correct substandard road conditions including; roadway surface cracking and deterioration, narrow road shoulders, poor line of sight, improve ditch grades, and will widen the narrow road top.



Introduction to the Turtle Mountain Band of Chippewa Indians

The Turtle Mountain Band of Chippewa Indians proudly referred to as Anishinabe meaning “The Original People.” The tribe is primarily members of the Pembina Band of Chippewa (also called Ojibwa) who are members of the Algonquin language group. The tribe resides in the Turtle Mountains, near the geographic center of North America.

The Reservation encompasses 2 consolidated townships in Rolette County. It is the most densely populated Reservation of all the federally recognized Tribes. When the housing clusters of the Reservation are included within the population of Belcourt it becomes the largest city in Rolette County and the 17th largest city in North Dakota.

The contemporary history of the Turtle Mountain Band began on December 21, 1882 when the Turtle Mountain Reservation was established under a Presidential [Executive Order](#). Located southeast of the International Peace Gardens, the northern boundary of the reservation runs perpendicular to the Canadian Border, along the 49th parallel. The land base of the Reservation is entirely within Rolette County, measuring 12 miles (from west to east) by 6 miles (from north to south). The Reservation consists of four (4) districts.

The BIA Population Estimates for 2005 indicated the total service population to be 32,109 with 24,278 being between the ages of 16-64 and 28,823 enrolled in the TMBCI. According to the 2000 US Census Rolette County Population Count was 13,674. There were 9,983 American Indians living in the county or 73% of Rolette County's population is American Indian, ranking Rolette County 14th in the country for percentage of the county population identified as AI. The Census suggested there were 952 children between 5 – 9 years of age, 1,008 from 10 to 14 years, and 923 between the ages of 15 to 19 and approximately 37% of the population was under the age of 16.

Funding and Sources

Because the Turtle Mountain Band of Chippewa is unable to fully fund the project ourselves with our current resources, we are seeking financial aid from the State of North Dakota. The tribe's annual allocation of the tribal shares distributed under the Tribal Transportation Program (TTP) in the MAP-21 legislation isn't nearly enough to bring our road system up to adequate conditions.

Over the past year we have undertaken many projects that are currently utilizing our TTP funds. We have begun the long awaited reconstruction of BIA Route 7, also known as College Road. This is an estimated 8.5 million



dollar project. We were fortunate to have received a 4 million dollar TIGER Grant for the BIA 7 project as well as a BIA Loan Guarantee. We have addressed some concerns that the Federal Highway Administration had along BIA Route 21 and that will cost the tribe approximately 1.3 million dollars. We were also awarded ERFO (Emergency Relief for Federally Owned roads) funding and supplanted those funds with some of our TTP funds and addressed many problem areas throughout our road system. The tribe has made many efforts to improve the conditions of our road system, but is still far from being able to provide the safe transportation facilities the community needs.

The Turtle Mountain Band of Chippewa is hoping that the State of North Dakota will recognize the need and urgency to have this route reconstructed. Unfortunately, because much of our funding is tied up in current projects we are unable to offset this project cost with much contribution from TTP funding and are heavily relying on an award from the State of North Dakota.

Because of the overwhelming cost of the project, the tribe has broken it up into 4 phases. If awarded, the TIGER Grant funds will be used to initiate and construct Phase I (please see attached engineers estimates).

State of Good Repair

Jackrabbit road contains portions of three Bureau of Indian Affairs (BIA) roads including BIA 10, 15, and 8. The original construction of the project was completed in 1976. The life expectancy of the road was estimated to be approximately 20 to 25 years. The road is currently 36 years old and is a major safety concern for the tribe. Design safety standards have evolved and improved over the years and it is of great importance that the tribe be able to improve the standards on one of its most dangerous roads. The original design did not address the long term needs of the road. The reservation has since had significant population growth and the volume of traffic utilizing the road has increased significantly.



The reconstruction project will begin at the intersection of BIA 10 and HWY 5 and end at the intersection of BIA 8 and US HWY 281. Jackrabbit Road is one of the tribe’s arterial routes and connects the Belcourt and Dunseith tribal communities. The reconstruction project would improve the safety for commuters immensely and would strengthen the local economy by improving accessibility for our local workforce as well as to our local schools.

Economic Impact

The US census of 2000 indicated that poverty has prevailed on reservations. Native Americans have the highest poverty and unemployment rates in the United States. Incomes of Native Americans tend to be low and unemployment rates astonishingly high. Poverty has prevailed on reservations throughout the country. The Turtle Mountain Band of Chippewa reservation is no exception. According to



the US Department of the Interior Labor Force Estimate Report the Turtle Mountain Band of Chippewa Indians has a current unemployment rate of 69.25%. With its status as a sovereign nation, the economic activity of the Turtle Mountain Band of Chippewa consists of all those functions normally assumed by government entities. The Tribe provides services that include highways, streets, public utilities, health,



education and law enforcement. They also provide housing, food assistance and other social services typically provided by government entities. Tribal members employed to provide these services are approximately 690. There are approximately an additional 1,900 residents that are employed in Rolette County because of the efforts of the Tribal government to enhance and improve the economics of the area.

The local school system is the greatest opportunity tribal members have to receive training and prepare themselves for

contribution to society. It is of the utmost importance that the facilities that service our education system are to standard and aid in the path to education rather than provide obstacle for students to overcome. The reconstruction of this road will contribute to both the medium and long-term ambitions of the Turtle Mountain Band of Chippewa Indians by creating near-term jobs, and greatly enhancing transportation to and from places of education and employment.

The reconstruction of Jackrabbit road will bring a needed economic boost to the Turtle Mountain reservation. According to the US Department of the Interior Labor Force Estimate Report the Turtle Mountain Band of Chippewa Indians has a current unemployment rate of 69.25%. According to the Bureau of Labor Statistics, North Dakota has the nation's lowest unemployment rate at 3.1%. Also, according to the Bureau of Labor Statistics, Rolette County (containing the Turtle Mountain Band of Chippewa reservation) has the highest unemployment rate of all its counties at 14.7%

The project will provide many short term jobs through project construction. Some of those new dollars will then be spent locally and will hopefully cycle through the community, stimulating the local economy, before leaving to outside businesses.

Another benefit of the construction is that workers will gain new skills and experience throughout the project making them a more valuable asset to the community. The Federal Highway Administration Estimates 30 jobs are created and or retained for every million dollars in highway infrastructure investment. Based on this data, the estimated construction cost of \$20,687,957.00 will create/retain 621 jobs.

Innovation

The Turtle Mountain Band of Chippewa has employed consultants to address each of the long-term outcomes outlined by the Department of Transportation. The project will result in a class transportation corridor that will be maintained in a state of good repair.

The Tribal Council and Transportation Department has been exploring the possibility of purchasing an asphalt plant with TTP funds to offset the cost of paving projects. The tribe has designated lands to be used for a Tribal Gravel Pit. From this pit the tribe will be able to extract the necessary materials for the production of asphalt.

Below is a table of paving projects the Tribe needs to be carried out in the near future order to provide adequate facilities for our people. The table also contains an estimated price for the production and placement of asphalt pavement (pricing also includes the purchase and processing of the gravel materials needed for asphalt production).

Project	Contracted Paving		
	Estimated Bituminous Material Needed (Tons)	Estimated Cost of Bituminous Material Per Cubic Yard	Estimated Cost of Bituminous Pavement for Project
BIA 21 - Fiddler's Road	2479	\$85.50	\$211,954.50
Fiddler's Hall Parking Lot	414	\$85.50	\$35,397.00
New Wellness Center Parking Lot	750	\$85.50	\$64,125.00
Jack Rabbit Road	64672	\$85.50	\$5,529,456.00
Highway Bike Path	743	\$85.50	\$63,526.50
Wilderness Bike Path	213	\$85.50	\$18,211.50
Eagle's View Roads	5783	\$85.50	\$494,446.50
Co. Rt. 54 - Kent Addition Road	3098	\$85.50	\$264,879.00
BIA 4 Overlay	9940	\$85.50	\$849,870.00
BIA 9 Overlay	3266	\$85.50	\$279,243.00
BIA 13 Overlay	2840	\$85.50	\$242,820.00
Belcourt Fitness Center	930	\$85.50	\$79,515.00
Dunseith Fitness Center	620	\$85.50	\$53,010.00
Ojibwa School Roads	2634	\$85.50	\$225,207.00
Apartment Bldg Near Ojibwa	155	\$85.50	\$13,252.50
Apartment Bldg Near St John	1860	\$85.50	\$159,030.00
TOTAL			\$8,583,943.50

If the Tribe were able to Force Account the paving portions of our road projects, we would be able to impact our community in many positive ways, including;

Job Creation – At least 10 part time positions will be needed to run the plant and paving crew including a plant operator, and assistant, a loader operator, a paver operator, 2 people running screeds, 2 roller operators, a person to dump the trucks accordingly, and possibly 2 laborers following the paver to perform tasks as needed.

Learned Construction Skills – The Tribe will bring in a consultant to help with the initial operations of the plant. This consultant will train individuals until we are self sufficient.

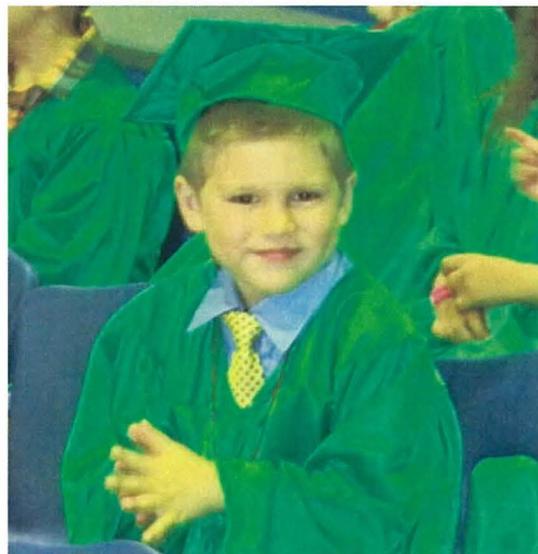
Project Savings – By producing and placing the asphalt paving ourselves we can eliminate some costs by not having to pay for aggregate material, as well as the usual markups associated with construction activity.

Extended Road Life – the tribe would be able to extend the road life of many of our paved roads by performing overlays. This would reduce the likelihood of rapid road deterioration and the need for total reconstruction.

The Tribe has been actively seeking a plant for purchase and is currently in discussions with The Turtle Mountain State Bank about securing a Rural Development loan to purchase the equipment. Securing funding for this project would all but ensure that the purchase of our own paving equipment and establishing a paving crew would be a reality.

Livability

The reconstruction of Jack Rabbit Road will improve the quality of life, working and learning environments and the overall commuting experience for tribal members and the surrounding communities. Commuters will have an improved route to travel that offers modern design and increased safety. The people of the Turtle Mountain are the tribe’s greatest asset. By reconstructing a road that is littered with cracked and heaving surfaces we help pave the way to a better future through increased education. More educated people will result in a higher population of contributing members of society, lowering unemployment rates and creating less dependence on welfare.



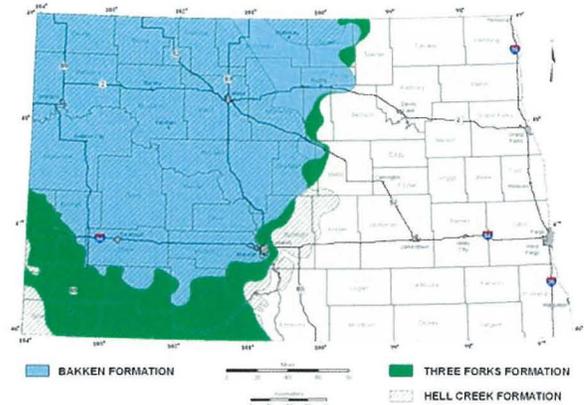
Because the road is adjacent to an abundance of home sites and local housing sites, it is heavily traveled by local school busses. Currently students from

the Turtle Mountain Community College, the Turtle Mountain School System, the Ojibwa Indian School, the Dunseith Day School, The Dunseith Public School, the St. John Public School, the local Head Start Programs, and the Tiny Turtles Preschool are transported to and from school daily on this route. 18 busses from these various schools travel the Turtle Mountain's most dangerous route daily.

Because, the Turtle Mountain Indian Reservation also resides within the Bakken Oil Formation, the Tribe anticipates oil production in the area within the upcoming years.

According to a Planning Asset Management Engineer from the North Dakota Department of Transportation, from 2010 to 2012 there has been a 22% increase in traffic statewide with a 53% increase in traffic in the oil bearing regions of Western North Dakota.

This would mean a substantial increase to traffic on all of our reservation roads. The affects of the added traffic volume can only be anticipated to be adverse as Jack Rabbit Road is already the tribes most dangerous.



Sustainability

During the design process of the reconstruction project, the Turtle Mountain Band of Chippewa Indians has worked and will continue to work with engineering consultants, the Federal Highway Administration, the Army Corps of Engineers, North Dakota Fish and Wild Life, and our local Tribal Historic Preservation Officer to ensure all NEPA considerations were followed. The reconstruction project will reduce long-term maintenance which will reduce future construction as well as maintenance and minimize future impact to the environment and our community members.

Safety

Ensuring the safety and well being of current tribal members as well as generations to come is the top priority for the Turtle Mountain Band of Chippewa. The reconstruction project will correct damaged pavement, narrow road top, steep ditch embankments, and poor line of sight.



Traffic injuries and fatalities are too high on the Turtle Mountain Indian Reservation.

Jackrabbit road is heavily traveled by emergency response vehicles including the BIA/Tribal Police department and Indian Health Service ambulances. The tribal police department responds to an average of 960 calls per year to sites along Jackrabbit road. (This does not count the use of the route to get to response sites along other routes)



In 2000, the overall motor vehicle injury death rate (age adjusted) was 27.5 per 100,000 for American Indian/Alaska Native (AI/AN) versus 15.5 for US All Races. In 2006, the overall motor vehicle injury death rate (age adjusted) was 57.38 per 100,000 for AI in North Dakota (ND) versus 17.9 for ND All Races. Source: CDC & www.statehealthfacts.org. In 2007, according to the National Center for Injury Prevention and Control, the overall motor vehicle deaths and rates per 100,000 for Native Americans in ND were 79.60 versus 17.6 for all Races.

Fatalities - Rolette County

Calendar Year	Fatalities
2007	8
2008	4
2009	5

Source: North Dakota Department of Transportation

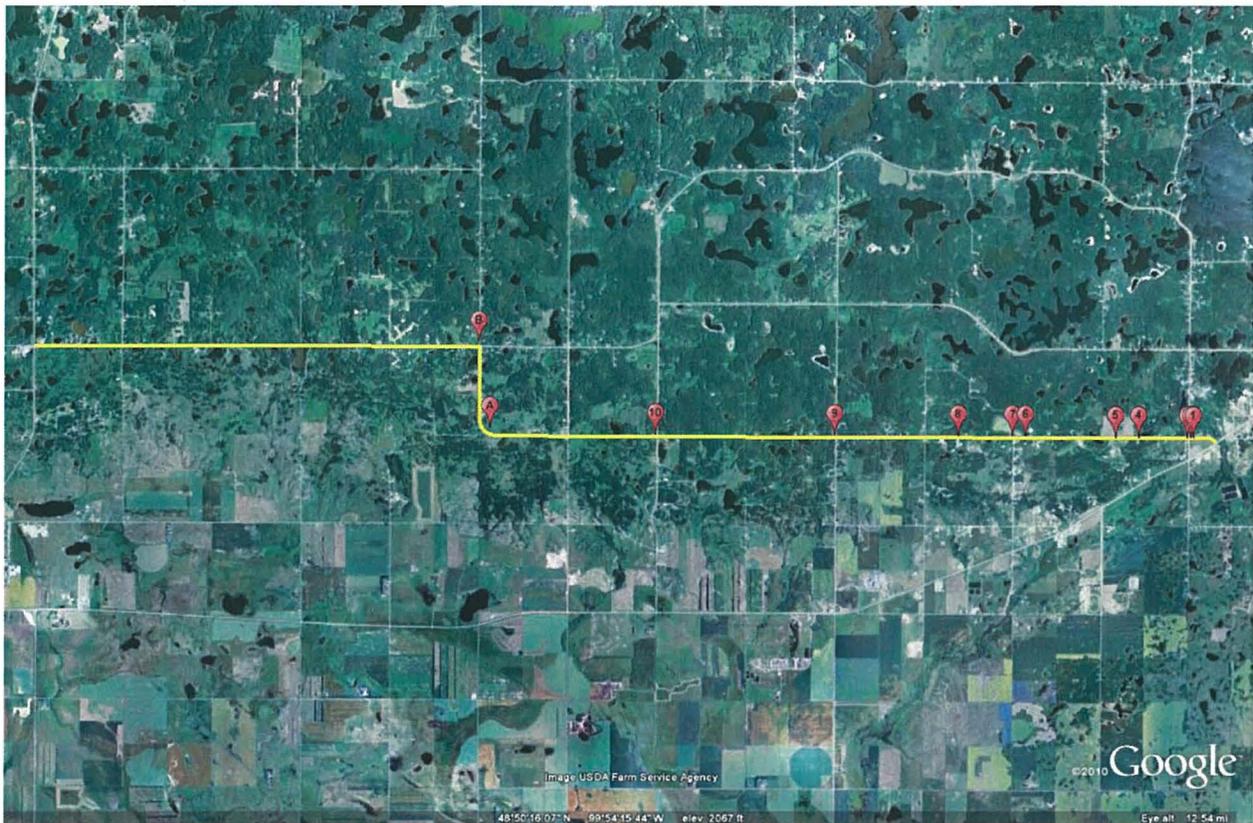
Crash Data - BIA/Tribal Law Enforcement

Fiscal Year	Crashes
2006	235
2007	247
2008	379
2009	289

Source: BIA Law Enforcement Turtle Mountain

According to the Aberdeen Area Severe Injury Surveillance System for the Turtle Mountain Service Unit for the calendar year 2005 and 2006, motor vehicle crashes (MVC's) were ranked the 2nd highest, only after falls, for all new cases of severe injury. (For this purpose a severe injury is defined as an injury resulting in one of the following: amputation; loss of consciousness; major fracture; hospitalization for at least one day in an I.H.S. hospital or contract facility, or fatality.

Jack Rabbit road is notoriously known throughout the reservation as the tribe's most dangerous road. There have been far too many fatalities and injuries sustained because of the route's condition.



Additional Fatality Sites

Not included in 2005-2012 Data

Project Readiness

The current design is approximately 40% complete. Because the design is being kept within the existing 150 feet of Rights of Way, no additional Rights of Way are anticipated to be needed. Again, because the design is being kept within the existing Rights of Way the tribe will be pursuing a categorical exclusion for all environmental and archeological permits. If the project is awarded, the tribe will be ready to begin construction in 2014.

Partnership

The Turtle Mountain Band of Chippewa has been working with the State of North Dakota since September of 2012 to secure funding for the reconstruction project. The tribe has met with Governor Jack Dalrymple, Former Head of the North Dakota Department of Transportation, Francis Ziegler, as well

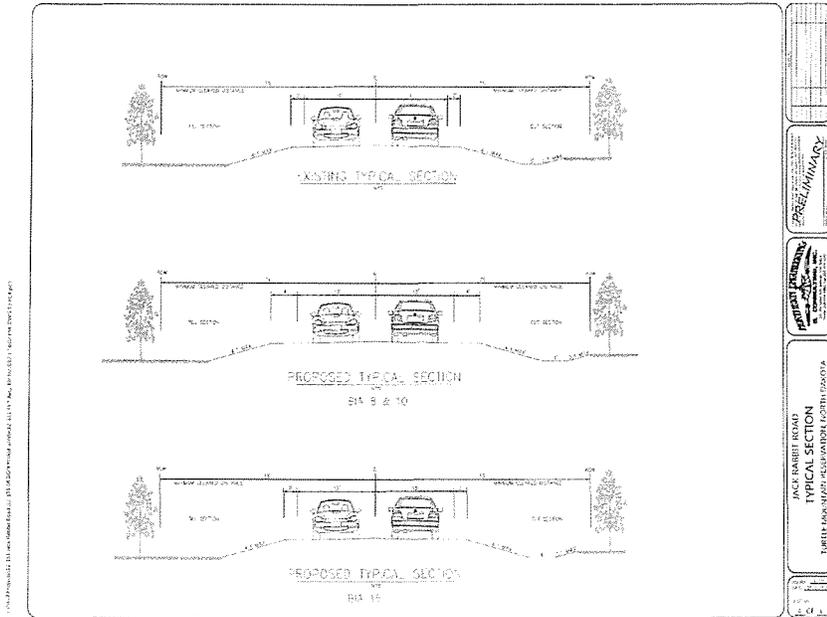
as current Head of the North Dakota Department of Transportation, Grant Levi, all of whom recognize the disastrous condition of the road as well as the urgency in which it needs to be reconstructed.

Because the route is highly utilized by area schools, the tribe has formed partnerships with the local school districts and will seek funding through the State of North Dakota through the \$135.5 million in undesignated funding for competitive grants to address the region's critical needs in schools and other political subdivisions.

As with all projects, the tribe will also work closely with the local Indian Health Service, Public Utilities Commission, and any other entities that may have utilities that will be affected by the reconstruction project.

Cost Benefit Analysis

The tribe is hoping that the Federal Highway Administration and State of North Dakota will look at this project as an investment based on the following Cost Benefit Analysis.



The Benefit-Cost Analysis for this project has been structured around safety. The increased safety that this project will provide is the most important aspect to the Turtle Mountain Band of Chippewa. Crash Data was supplied by the local Bureau of Indian Affairs Law Enforcement Agency and the North Dakota Department of Transportation. Data was supplied for a 6 year time period and showed that BIA Law Enforcement responded to 104 crashes in that time period. 6 of those crashes included fatalities, 28 of those crashes had some type of injury, 28 of the crashes had unknown injuries, and 42 of the crashes were property damage only.

Referring to the Federal Highway Administration's *Desktop Reference for Crash Reduction Factors* shows that stabilizing the shoulders provides a crash reduction factor (CRF) of 15 percent. Widening shoulders from 0 to 8 feet provides a crash reduction factor of 43 percent. Currently there are no paved shoulders on the road. Where earth shoulders do exist, they are no more than two feet wide. Flattening vertical curves can provide as much as a 51% CRF. Installing a left turn lane can provide a CRF range from 19 to 62 percent.

As it is difficult to analyze the nature of the crashes by the general data the BIA Law enforcement agency has provided we will examine two cases using a CRF of 15 percent for one study and 51 percent for the other which will reduce the number of accidents that occur during an average year.

The Accidents summary had a yearly value of fatalities, injuries, and property damage of \$6,125,165. That amount was reduced to \$ 5,206,390 using a 15 % CRF and to 3,001,331 using a 51% CRF, reducing the Average Yearly Value by \$918,775 and \$3,123,834 respectively.

Utilizing a proposed life expectancy of the reconstructed route to be 25 years we will see a total Value of Statistical Life to be \$16,324,343 at a 15% CRF and a 3% discount on the future benefits of the reconstruct. For a 51% CRF over 25 years we will return a total Value of Statistical Life to be \$55,502,751 with a 3% discount on future benefits for the reconstruct.

Please see the following tables;

According to *Treatment of the Economic Value of a Statistical Life in Departmental Analyses*, which is utilized by the National Highway Safety Administration (NHTSA) the Value of Statistical Life (VSL) can be represented by levels of severity and are assigned monetary unit values. Because accident data are typically reported as a single number (e.g. crashes in a year, without levels of severity) values are to be converted using the Abbreviated Injury Scale (AIS) containing probabilities and values listed below.

AIS Level	Severity	Fraction of VSL for Crashes with Injuries – Severity Unknown	Fraction of VSL for Crashes – Injury Unknown	Unit Value \$
0	No Injury	0.21538	0.43676	\$ 0
1	Minor Injury	0.062728	0.41739	\$ 18,600
2	Moderate Injury	0.10400	0.08872	\$ 291,400
3	Serious Injury	0.03858	.04817	\$ 651,000
4	Severe Injury	0.00442	0.00617	\$ 1,649,200
5	Critical Injury	0.01034	0.00279	\$ 3,676,600
6	Fatal	0	0	\$ 6,200,000
Value of Property Damage only Crashes				
\$ 3,285				

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5	Critical Injury	0.01034	0.00279	\$ 3,676,600
6	Fatal	0	0	\$ 6,200,000

Value of Property Damage only Crashes	
\$ 3,285	

Crash Data for Jackrabbit Road

Crashes on Jackrabbit Road						
Year(s)	Number of Years	Crashes (Unknown Injuries)	Crashes (Fatalities)	Crashes (Injuries – Severity Unknown)	Crashes (Property Damage Only)	Sources
2005 - 2012	7	28	6	28	42	NDDOT and BIA Police Dept. *

* Statistics Provided by the Bureau of Indian Affairs only includes crashes that occurred from 12/2006 – 10/2009

Benefit Cost Analysis

Crash Summary (2005-2012)

		Fatal Crashes # of Fatalities		Non-Fatal Crashes # of injured – Severity Unknown		Non-Fatal Crashes Injury Unknown		Property Damage Only Crashes
		6	\$ Value [Pr(AISx)*Va lue(AISx)]	28	\$ Value [Pr(AISx)*Va lue(AISx)]	28	\$ Value [Pr(AISx)*Va lue(AISx)]	42
Abbreviated Injury Scale Value	0	-	-	6.030	-	12.229	-	-
	1	-	-	17.564	\$ 326,687	11.687	\$ 217,376	-
	2	-	-	2.912	\$ 848,557	2.484	\$ 723,884	-
	3	-	-	1.080	\$ 703,236	1.349	\$ 878,043	-
	4	-	-	0.124	\$ 204,104	0.173	\$ 284,916	-
	5	-	-	0.290	\$ 1,064,362	0.078	\$ 287,193	-
Fatality		6	\$37,200,000	-	-	-	-	\$ 137,970
TOTALS		6	\$37,200,000	28	\$ 3,146,946	28	\$ 2,391,412	\$ 137,970

Total Value of Crash Fatalities, Injuries, and Property Damage (2005-2012)

\$ 42,752,148

Average Annual Crash Summary (2005-2012)

		Fatal Crashes # of Fatalities		Non-Fatal Crashes # of injured – Severity Unknown		Non-Fatal Crashes Injury Unknown		Property Damage Only Crashes
		0.86	\$ Value [Pr(AISx)*Val ue(AISx)]	4	\$ Value [Pr(AISx)*Val ue(AISx)]	4	\$ Value [Pr(AISx)*Val ue(AISx)]	6
Abbreviated Injury Scale Value	0	-	-	0.862	-	1.747	-	-
	1	-	-	2.509	\$ 46,670	1.670	\$ 31,054	-
	2	-	-	0.416	\$ 121,222	0.355	\$ 103,412	-
	3	-	-	0.154	\$ 100,462	0.193	\$ 125,434	-
	4	-	-	0.018	\$ 29,158	0.025	\$ 40,702	-
	5	-	-	0.041	\$ 152,052	0.011	\$ 41,028	-
Fatality		0.86	\$ 5,332,000	-	-	-	-	\$ 19,710
TOTALS		0.86	\$ 5,332,000	4	\$ 449,564	4	\$ 341,630	\$ 19,710

Total Average Value of Crash Fatalities, Injuries, and Property Damage (2005-2012)

\$ 6,125,165

Crash Data for Jackrabbit Road with Crash Reduction Factors

Average Yearly Crashes on Jackrabbit Road from 2005-2012					
Crash Reduction Factor	Crashes (Unknown Injuries)	Crashes (Fatalities)	Crashes (Injuries – Severity Unknown)	Crashes (Property Damage Only)	Sources
0%	4	.86	4	6	NDDOT and BIA Police Dept. *
15%	3.4	.72	3.4	5.1	
51%	1.96	.44	1.96	2.94	

* Statistics Provided by the Bureau of Indian Affairs only includes crashes that occurred from 12/2006 – 10/2009

Benefit Cost Analysis

Average Reduction Values		
Crash Reduction Factor	Annual Value of Reduction of Fatalities, Injuries, and PDO Crashes	Annual Value of Fatalities, Injuries, and PDO Crashes
0%	\$ 0	\$6,125,165
15%	\$ 918,775	\$ 5,206,390
51%	\$ 3,123,834	\$ 3,001,331

Value of Reconstruction over 25 year life expectancy of road using a 15% CRF

Year	Annual Value of Fatalities, Injuries, and PDO Crashes	Value of 15% CRF	Value of Reconstruction with 3% Discount on Future Benefits
1	\$ 612,165.00	\$ 918,775.00	\$ 918,775.00
2	\$ 612,165.00	\$ 918,775.00	\$ 891,211.75
3	\$ 612,165.00	\$ 918,775.00	\$ 864,475.40
4	\$ 612,165.00	\$ 918,775.00	\$ 838,541.14
5	\$ 612,165.00	\$ 918,775.00	\$ 813,384.90
6	\$ 612,165.00	\$ 918,775.00	\$ 788,983.35
7	\$ 612,165.00	\$ 918,775.00	\$ 765,313.85
8	\$ 612,165.00	\$ 918,775.00	\$ 742,354.44
9	\$ 612,165.00	\$ 918,775.00	\$ 720,083.81
10	\$ 612,165.00	\$ 918,775.00	\$ 698,481.29
11	\$ 612,165.00	\$ 918,775.00	\$ 677,526.85
12	\$ 612,165.00	\$ 918,775.00	\$ 657,201.05
13	\$ 612,165.00	\$ 918,775.00	\$ 637,485.02
14	\$ 612,165.00	\$ 918,775.00	\$ 618,360.46
15	\$ 612,165.00	\$ 918,775.00	\$ 599,809.65
16	\$ 612,165.00	\$ 918,775.00	\$ 581,815.36
17	\$ 612,165.00	\$ 918,775.00	\$ 564,360.90
18	\$ 612,165.00	\$ 918,775.00	\$ 547,430.07
19	\$ 612,165.00	\$ 918,775.00	\$ 531,007.17
20	\$ 612,165.00	\$ 918,775.00	\$ 515,076.96
21	\$ 612,165.00	\$ 918,775.00	\$ 499,624.65
22	\$ 612,165.00	\$ 918,775.00	\$ 484,635.91
23	\$ 612,165.00	\$ 918,775.00	\$ 470,096.83
24	\$ 612,165.00	\$ 918,775.00	\$ 455,993.93
25	\$ 612,165.00	\$ 918,775.00	\$ 442,314.11
		TOTAL VALUE	\$ 16,324,343.84

Value of Reconstruction over 25 year life expectancy of road using a 51% CRF

Year	Annual Value of Fatalities, Injuries, and PDO Crashes	Value of 51% CRF	Value of Reconstruction with 3% Discount on Future Benefits
1	\$ 612,165.00	\$ 3,123,834.00	\$ 3,123,834.00
2	\$ 612,165.00	\$ 3,123,834.00	\$ 3,030,118.98
3	\$ 612,165.00	\$ 3,123,834.00	\$ 2,939,215.41
4	\$ 612,165.00	\$ 3,123,834.00	\$ 2,851,038.95
5	\$ 612,165.00	\$ 3,123,834.00	\$ 2,765,507.78
6	\$ 612,165.00	\$ 3,123,834.00	\$ 2,682,542.55
7	\$ 612,165.00	\$ 3,123,834.00	\$ 2,602,066.27
8	\$ 612,165.00	\$ 3,123,834.00	\$ 2,524,004.28
9	\$ 612,165.00	\$ 3,123,834.00	\$ 2,448,284.15
10	\$ 612,165.00	\$ 3,123,834.00	\$ 2,374,835.63
11	\$ 612,165.00	\$ 3,123,834.00	\$ 2,303,590.56
12	\$ 612,165.00	\$ 3,123,834.00	\$ 2,234,482.84
13	\$ 612,165.00	\$ 3,123,834.00	\$ 2,167,448.36
14	\$ 612,165.00	\$ 3,123,834.00	\$ 2,102,424.91
15	\$ 612,165.00	\$ 3,123,834.00	\$ 2,039,352.16
16	\$ 612,165.00	\$ 3,123,834.00	\$ 1,978,171.60
17	\$ 612,165.00	\$ 3,123,834.00	\$ 1,918,826.45
18	\$ 612,165.00	\$ 3,123,834.00	\$ 1,861,261.65
19	\$ 612,165.00	\$ 3,123,834.00	\$ 1,805,423.80
20	\$ 612,165.00	\$ 3,123,834.00	\$ 1,751,261.09
21	\$ 612,165.00	\$ 3,123,834.00	\$ 1,698,723.26
22	\$ 612,165.00	\$ 3,123,834.00	\$ 1,647,761.56
23	\$ 612,165.00	\$ 3,123,834.00	\$ 1,598,328.71
24	\$ 612,165.00	\$ 3,123,834.00	\$ 1,550,378.85
25	\$ 612,165.00	\$ 3,123,834.00	\$ 1,503,867.49
		TOTAL VALUE	\$ 55,502,751.29

**Summary of Benefit Cost Analysis
for Total Reconstruction of Jackrabbit Road
With 25 Year Road Life Expectancy**

Estimated Cost	Value of 15% CRF Over 25 Years	Value of 51% CRF Over 25 Years
\$ 20,687,957	\$ 16,324,344	\$ 55,502,757

Planning Approvals

The reconstruction design will stay entirely within the existing 150 feet of Rights of Way. The Turtle Mountain Band of Chippewa will be seeking a Categorical Exclusion for the project based on the existing Rights of Way. The tribe will also work closely with the Tribal Historical Preservation Officer and other governing entities to ensure there are no adverse archeological or environmental impacts during the construction of the project

TMBC Jack Rabbit Road - Total Reconstruct

BID NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	Unit Cost	Amount
151.000	Mobilization	Lump sum	1	\$ 250,000.00	\$ 250,000.00
154.000	Contractor testing	Lump sum	1	\$ 75,000.00	\$ 75,000.00
157.001	Temporary turf Establishment	Acre	25	\$ 500.00	\$ 12,500.00
157.002	Silt Fence	Linear Foot	5280	\$ 5.00	\$ 26,400.00
157.011	Excelsior logs, 12" diameter	Linear Foot	500	\$ 8.00	\$ 4,000.00
157.012	Excelsior logs, 20" diameter	Linear Foot	750	\$ 9.50	\$ 7,125.00
157.020	Mucking of erosion control devices	Cubic yard	250	\$ 10.00	\$ 2,500.00
201.001	Clearing and grubbing	Lump sum	1	\$ 100,000.00	\$ 100,000.00
203.000	Removal of existing signs	Each	50	\$ 70.00	\$ 3,500.00
203.001	Removal of existing culverts	Each	50	\$ 750.00	\$ 37,500.00
203.015	Remove and reset of existing signs	Each	50	\$ 200.00	\$ 10,000.00
203.031	Removal and stockpile of existing fence	Linear foot	1000	\$ 6.00	\$ 6,000.00
203.041	Removal of existing concrete surfacing	Square yard	183729	\$ 7.00	\$ 1,286,103.00
204.000	Roadway excavation	Cubic yard	755044	\$ 3.75	\$ 2,831,415.00
204.002	Subexcavation	Cubic yard	50000	\$ 4.50	\$ 225,000.00
207.140	Earthwork geotextile, type IV-D	Square yard	267242	\$ 6.00	\$ 1,603,452.00
251.001	Placed riprap, class 2	Cubic yard	1000	\$ 50.00	\$ 50,000.00
301.002	Aggregate base, grading D	Ton	154333	\$ 14.00	\$ 2,160,662.00
408.176	Hot Bituminous Pavement, CL 27	Ton	64672	\$ 75.00	\$ 4,850,400.00
412.012	Tack coat, grade CSS-1h	Gallon	14698	\$ 3.30	\$ 48,503.40
602.000	Furnish 18 inch dia. CMP culvert, 16 gage	Linear foot	5000	\$ 17.00	\$ 85,000.00
602.001	Install 18 inch dia. CMP culvert	Linear foot	5000	\$ 18.00	\$ 90,000.00
602.002	Furnish 24 inch dia. CMP culvert, 14 gage	Linear foot	2500	\$ 25.00	\$ 62,500.00
602.003	Install 24 inch dia. CMP culvert	Linear foot	2500	\$ 30.00	\$ 75,000.00
602.065	Furnish 24 inch dia. RCP culvert, class III	Linear foot	1500	\$ 30.00	\$ 45,000.00
602.070	Install 24 inch dia. RCP culvert	Linear foot	1500	\$ 60.00	\$ 90,000.00
602.092	Furnish 36 inch dia. RCP culvert, class II	Linear foot	500	\$ 50.00	\$ 25,000.00
602.098	Install 36 inch dia. RCP culvert	Linear foot	500	\$ 75.00	\$ 37,500.00
602.556	Furnish safety end for 18 inch dia. CMP culvert w/o bars	Each	25	\$ 100.00	\$ 2,500.00
602.559	Install end section for 18 inch dia. CMP culvert	Each	25	\$ 50.00	\$ 1,250.00
602.560	Furnish safety end for 24 inch dia. CMP culvert w/o bars	Each	10	\$ 120.00	\$ 1,200.00
602.561	Furnish flared end for 24 inch dia. CMP culvert	Each	10	\$ 110.00	\$ 1,100.00
602.563	Install end section for 24 inch dia. CMP culvert	Each	20	\$ 90.00	\$ 1,800.00
602.619	Furnish flared end for 24 inch dia. RCP culvert	Each	10	\$ 405.00	\$ 4,050.00
602.620	Furnish sloped end for 24 inch dia. RCP culvert	Each	10	\$ 350.00	\$ 3,500.00

602.621	Install end section for 24 inch dia. RCP culvert	Each	20	\$ 250.00	\$ 5,000.00
602.631	Furnish flared end for 36 inch dia. RCP culvert	Each	10	\$ 670.00	\$ 6,700.00
602.633	Install end section for 36 inch dia. RCP culvert	Each	10	\$ 230.00	\$ 2,300.00
608.015	Paved waterway type 4, 36 inch width	Square yard	1000	\$ 90.00	\$ 90,000.00
619.000	Fence, barb wire	Linear foot	10560	\$ 6.75	\$ 71,280.00
619.041	Brace panel, 3 post	Each	100	\$ 400.00	\$ 40,000.00
619.043	Brace panel, 5 post	Each	100	\$ 500.00	\$ 50,000.00
619.044	Brace panel, 6 post	Each	100	\$ 750.00	\$ 75,000.00
619.045	Brace panel, 7 post	Each	100	\$ 1,250.00	\$ 125,000.00
619.046	Brace panel, 8 post	Each	100	\$ 1,500.00	\$ 150,000.00
624.009	Placing conserved topsoil	Cubic yard	92792	\$ 5.00	\$ 463,960.00
625.000	Seeding, dry method	Acre	175	\$ 2,500.00	\$ 437,500.00
625.002	Mulching, dry method	Acre	175	\$ 1,000.00	\$ 175,000.00
625.004	Fertilizer, dry method	Ton	3	\$ 1,200.00	\$ 3,960.00
629.007	Rolled erosion control product, type 2.D	Square yard	1220	\$ 3.00	\$ 3,658.50
633.006	Sign installation, 18 inch x 18 inch	Each	50	\$ 250.00	\$ 12,500.00
633.013	Sign installation, 24 inch x 24 inch	Each	50	\$ 260.00	\$ 13,000.00
633.014	Sign installation, 24 inch x 30 inch	Each	50	\$ 280.00	\$ 14,000.00
633.017	Sign installation, 30 inch x 30 inch	Each	50	\$ 300.00	\$ 15,000.00
634.127	Pavement markings, type B, white, 4 inch width	Gallon	250	\$ 57.00	\$ 14,250.00
634.132	Pavement markings, type B, yellow, 4 inch width	Gallon	250	\$ 57.00	\$ 14,250.00
634.244	Pavement markings, type B, white, objects	Each	15	\$ 33.00	\$ 495.00
635.000	Temporary traffic control	Lump sum	1	\$ 100,000.00	\$ 100,000.00
635.012	Barricade, type I	Each	10	\$ 105.00	\$ 1,050.00
635.013	Barricade, type II	Each	10	\$ 210.00	\$ 2,100.00
635.014	Barricade, type III	Each	10	\$ 220.00	\$ 2,200.00
635.017	Construction sign	Square foot	1138	\$ 22.00	\$ 25,036.00
635.018	Drum	Each	12	\$ 32.00	\$ 384.00
635.019	Flagger	Hour	5000	\$ 35.00	\$ 175,000.00
635.020	Pilot car	Hour	2500	\$ 50.00	\$ 125,000.00
635.031	Warning light, type A	Each	10	\$ 50.00	\$ 500.00
	3% TERO	Lump sum	1	\$ 489,887.00	\$ 489,887.00
Sub-Total					\$ 16,819,470.90
10% Contingency					\$ 1,681,947.09
6 % Preliminary Eng.					\$ 1,009,168.25
7% Const. Eng.					\$ 1,177,362.96
Total					\$ 20,687,949.21

TMBC Jack Rabbit Road - PHASE I

STA 0+00 - 205+24.19

BID NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	Unit Cost	Amount
151.000	Mobilization	Lump sum	1	\$ 62,500.00	\$ 62,500.00
154.000	Contractor testing	Lump sum	1	\$ 18,750.00	\$ 18,750.00
157.001	Temporary turf Establishment	Acre	6	\$ 500.00	\$ 3,211.24
157.002	Silt Fence	Linear Foot	1356	\$ 5.00	\$ 6,782.14
157.011	Excelsior logs, 12" diameter	Linear Foot	128	\$ 8.00	\$ 1,027.60
157.012	Excelsior logs, 20" diameter	Linear Foot	193	\$ 9.50	\$ 1,830.41
157.020	Mucking of erosion control devices	Cubic yard	64	\$ 10.00	\$ 642.25
201.001	Clearing and grubbing	Lump sum	1	\$ 25,000.00	\$ 25,000.00
203.000	Removal of existing signs	Each	13	\$ 70.00	\$ 910.00
203.001	Removal of existing culverts	Each	13	\$ 750.00	\$ 9,633.72
203.015	Remove and reset of existing signs	Each	13	\$ 200.00	\$ 2,568.99
203.031	Removal and stockpile of existing fence	Linear foot	257	\$ 6.00	\$ 1,541.40
203.041	Removal of existing concrete surfacing	Square yard	38605	\$ 7.00	\$ 270,235.00
204.000	Roadway excavation	Cubic yard	193970	\$ 3.75	\$ 727,388.22
204.002	Subexcavation	Cubic yard	12845	\$ 4.50	\$ 57,802.32
207.140	Earthwork geotextile, type IV-D	Square yard	68654	\$ 6.00	\$ 411,925.52
251.001	Placed riprap, class 2	Cubic yard	257	\$ 50.00	\$ 12,844.96
301.002	Aggregate base, grading D	Ton	39648	\$ 14.00	\$ 555,072.32
408.176	Hot Bituminous Pavement, CL 27	Ton	16614	\$ 75.00	\$ 1,246,063.83
412.012	Tack coat, grade CSS-1h	Gallon	3776	\$ 3.30	\$ 12,460.48
602.000	Furnish 18 inch dia. CMP culvert, 16 gage	Linear foot	1500	\$ 17.00	\$ 25,500.00
602.001	Install 18 inch dia. CMP culvert	Linear foot	1500	\$ 18.00	\$ 27,000.00
602.002	Furnish 24 inch dia. CMP culvert, 14 gage	Linear foot	642	\$ 25.00	\$ 16,056.20
602.003	Install 24 inch dia. CMP culvert	Linear foot	642	\$ 30.00	\$ 19,267.44
602.065	Furnish 24 inch dia. RCP culvert, class III	Linear foot	385	\$ 30.00	\$ 11,560.46
602.070	Install 24 inch dia. RCP culvert	Linear foot	385	\$ 60.00	\$ 23,120.93
602.092	Furnish 36 inch dia. RCP culvert, class II	Linear foot	128	\$ 50.00	\$ 6,422.48
602.098	Install 36 inch dia. RCP culvert	Linear foot	128	\$ 75.00	\$ 9,633.72
602.556	Furnish safety end for 18 inch dia. CMP culvert w/o bars	Each	6	\$ 100.00	\$ 642.25
602.559	Install end section for 18 inch dia. CMP culvert	Each	6	\$ 50.00	\$ 321.12
602.560	Furnish safety end for 24 inch dia. CMP culvert w/o bars	Each	3	\$ 120.00	\$ 308.28
602.561	Furnish flared end for 24 inch dia. CMP culvert	Each	3	\$ 110.00	\$ 282.59
602.563	Install end section for 24 inch dia. CMP culvert	Each	5	\$ 90.00	\$ 462.42

602.619	Furnish flared end for 24 inch dia. RCP culvert	Each	3	\$ 405.00	\$ 1,040.44
602.620	Furnish sloped end for 24 inch dia. RCP culvert	Each	3	\$ 350.00	\$ 899.15
602.621	Install end section for 24 inch dia. RCP culvert	Each	5	\$ 250.00	\$ 1,284.50
602.631	Furnish flared end for 36 inch dia. RCP culvert	Each	3	\$ 670.00	\$ 1,721.22
602.633	Install end section for 36 inch dia. RCP culvert	Each	3	\$ 230.00	\$ 590.87
608.015	Paved waterway type 4, 36 inch width	Square yard	257	\$ 90.00	\$ 23,120.93
619.000	Fence, barb wire	Linear foot	2713	\$ 6.75	\$ 18,311.77
619.041	Brace panel, 3 post	Each	26	\$ 400.00	\$ 10,275.97
619.043	Brace panel, 5 post	Each	26	\$ 500.00	\$ 12,844.96
619.044	Brace panel, 6 post	Each	26	\$ 750.00	\$ 19,267.44
619.045	Brace panel, 7 post	Each	26	\$ 1,250.00	\$ 32,112.40
619.046	Brace panel, 8 post	Each	26	\$ 1,500.00	\$ 38,534.88
624.009	Placing conserved topsoil	Cubic yard	23838	\$ 5.00	\$ 119,190.95
625.000	Seeding, dry method	Acre	45	\$ 2,500.00	\$ 112,393.40
625.002	Mulching, dry method	Acre	45	\$ 1,000.00	\$ 44,957.36
625.004	Fertilizer, dry method	Ton	1	\$ 1,200.00	\$ 1,017.32
629.007	Rolled erosion control product, type 2.D	Square yard	313	\$ 3.00	\$ 939.87
633.006	Sign installation, 18 inch x 18 inch	Each	13	\$ 250.00	\$ 3,211.24
633.013	Sign installation, 24 inch x 24 inch	Each	13	\$ 260.00	\$ 3,339.69
633.014	Sign installation, 24 inch x 30 inch	Each	13	\$ 280.00	\$ 3,596.59
633.017	Sign installation, 30 inch x 30 inch	Each	13	\$ 300.00	\$ 3,853.49
634.127	Pavement markings, type B, white, 4 inch width	Gallon	64	\$ 57.00	\$ 3,660.81
634.132	Pavement markings, type B, yellow, 4 inch width	Gallon	64	\$ 57.00	\$ 3,660.81
634.244	Pavement markings, type B, white, objects	Each	4	\$ 33.00	\$ 127.17
635.000	Temporary traffic control	Lump sum	1	\$ 25,000.00	\$ 25,000.00
635.012	Barricade, type I	Each	3	\$ 105.00	\$ 269.74
635.013	Barricade, type II	Each	3	\$ 210.00	\$ 539.49
635.014	Barricade, type III	Each	3	\$ 220.00	\$ 565.18
635.017	Construction sign	Square foot	292	\$ 22.00	\$ 6,433.25
635.018	Drum	Each	3	\$ 32.00	\$ 96.00
635.019	Flagger	Hour	1284	\$ 35.00	\$ 44,957.36
635.020	Pilot car	Hour	642	\$ 50.00	\$ 32,112.40
635.031	Warning light, type A	Each	3	\$ 50.00	\$ 128.45
	3% TERO	Lump sum	1	\$ 124,164.70	\$ 124,164.70
				Sub-Total	\$ 4,262,988.04
				10% Contingency	\$ 426,298.80
				6 % Preliminary Eng.	\$ 255,779.28
				7% Const. Eng.	\$ 298,409.16
				Total	\$ 5,243,475.29

TMBC Jack Rabbit Road - PHASE II

STA 205+24.19 - 465+67.10

BID NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	Unit Cost	Amount
151.000	Mobilization	Lump sum	1	\$ 62,500.00	\$ 62,500.00
154.000	Contractor testing	Lump sum	1	\$ 18,750.00	\$ 18,750.00
157.001	Temporary turf Establishment	Acre	8	\$ 500.00	\$ 4,074.70
157.002	Silt Fence	Linear Foot	1721	\$ 5.00	\$ 8,605.77
157.011	Excelsior logs, 12" diameter	Linear Foot	163	\$ 8.00	\$ 1,303.91
157.012	Excelsior logs, 20" diameter	Linear Foot	244	\$ 9.50	\$ 2,322.58
157.020	Mucking of erosion control devices	Cubic yard	81	\$ 10.00	\$ 814.94
201.001	Clearing and grubbing	Lump sum	1	\$ 25,000.00	\$ 25,000.00
203.000	Removal of existing signs	Each	16	\$ 70.00	\$ 1,140.00
203.001	Removal of existing culverts	Each	16	\$ 750.00	\$ 12,224.11
203.015	Remove and reset of existing signs	Each	16	\$ 200.00	\$ 3,259.76
203.031	Removal and stockpile of existing fence	Linear foot	326	\$ 6.00	\$ 1,955.86
203.041	Removal of existing concrete surfacing	Square yard	63660	\$ 7.00	\$ 445,622.96
204.000	Roadway excavation	Cubic yard	246126	\$ 3.75	\$ 922,974.24
204.002	Subexcavation	Cubic yard	16299	\$ 4.50	\$ 73,344.67
207.140	Earthwork geotextile, type IV-D	Square yard	87115	\$ 6.00	\$ 522,687.38
251.001	Placed riprap, class 2	Cubic yard	326	\$ 50.00	\$ 16,298.82
301.002	Aggregate base, grading D	Ton	50309	\$ 14.00	\$ 704,324.64
408.176	Hot Bituminous Pavement, CL 27	Ton	21082	\$ 75.00	\$ 1,581,115.53
412.012	Tack coat, grade CSS-1h	Gallon	4791	\$ 3.30	\$ 15,810.96
602.000	Furnish 18 inch dia. CMP culvert, 16 gage	Linear foot	1620	\$ 17.00	\$ 27,540.00
602.001	Install 18 inch dia. CMP culvert	Linear foot	1620	\$ 18.00	\$ 29,160.00
602.002	Furnish 24 inch dia. CMP culvert, 14 gage	Linear foot	815	\$ 25.00	\$ 20,373.52
602.003	Install 24 inch dia. CMP culvert	Linear foot	815	\$ 30.00	\$ 24,448.22
602.065	Furnish 24 inch dia. RCP culvert, class III	Linear foot	489	\$ 30.00	\$ 14,668.93
602.070	Install 24 inch dia. RCP culvert	Linear foot	489	\$ 60.00	\$ 29,337.87
602.092	Furnish 36 inch dia. RCP culvert, class II	Linear foot	163	\$ 50.00	\$ 8,149.41
602.098	Install 36 inch dia. RCP culvert	Linear foot	163	\$ 75.00	\$ 12,224.11
602.556	Furnish safety end for 18 inch dia. CMP culvert w/o bars	Each	8	\$ 100.00	\$ 814.94
602.559	Install end section for 18 inch dia. CMP culvert	Each	8	\$ 50.00	\$ 407.47
602.560	Furnish safety end for 24 inch dia. CMP culvert w/o bars	Each	3	\$ 120.00	\$ 391.17
602.561	Furnish flared end for 24 inch dia. CMP culvert	Each	3	\$ 110.00	\$ 358.57
602.563	Install end section for 24 inch dia. CMP culvert	Each	7	\$ 90.00	\$ 586.76

602.619	Furnish flared end for 24 inch dia. RCP culvert	Each	3	\$ 405.00	\$ 1,320.20
602.620	Furnish sloped end for 24 inch dia. RCP culvert	Each	3	\$ 350.00	\$ 1,140.92
602.621	Install end section for 24 inch dia. RCP culvert	Each	7	\$ 250.00	\$ 1,629.88
602.631	Furnish flared end for 36 inch dia. RCP culvert	Each	3	\$ 670.00	\$ 2,184.04
602.633	Install end section for 36 inch dia. RCP culvert	Each	3	\$ 230.00	\$ 749.75
608.015	Paved waterway type 4, 36 inch width	Square yard	326	\$ 90.00	\$ 29,337.87
619.000	Fence, barb wire	Linear foot	3442	\$ 6.75	\$ 23,235.59
619.041	Brace panel, 3 post	Each	33	\$ 400.00	\$ 13,039.05
619.043	Brace panel, 5 post	Each	33	\$ 500.00	\$ 16,298.82
619.044	Brace panel, 6 post	Each	33	\$ 750.00	\$ 24,448.22
619.045	Brace panel, 7 post	Each	33	\$ 1,250.00	\$ 40,747.04
619.046	Brace panel, 8 post	Each	33	\$ 1,500.00	\$ 48,896.45
624.009	Placing conserved topsoil	Cubic yard	30248	\$ 5.00	\$ 151,239.97
625.000	Seeding, dry method	Acre	57	\$ 2,500.00	\$ 142,614.64
625.002	Mulching, dry method	Acre	57	\$ 1,000.00	\$ 57,045.86
625.004	Fertilizer, dry method	Ton	1	\$ 1,200.00	\$ 1,290.87
629.007	Rolled erosion control product, type 2.D	Square yard	398	\$ 3.00	\$ 1,192.58
633.006	Sign installation, 18 inch x 18 inch	Each	16	\$ 250.00	\$ 4,074.70
633.013	Sign installation, 24 inch x 24 inch	Each	16	\$ 260.00	\$ 4,237.69
633.014	Sign installation, 24 inch x 30 inch	Each	16	\$ 280.00	\$ 4,563.67
633.017	Sign installation, 30 inch x 30 inch	Each	16	\$ 300.00	\$ 4,889.64
634.127	Pavement markings, type B, white, 4 inch width	Gallon	81	\$ 57.00	\$ 4,645.16
634.132	Pavement markings, type B, yellow, 4 inch width	Gallon	81	\$ 57.00	\$ 4,645.16
634.244	Pavement markings, type B, white, objects	Each	5	\$ 33.00	\$ 161.36
635.000	Temporary traffic control	Lump sum	1	\$ 25,000.00	\$ 25,000.00
635.012	Barricade, type I	Each	3	\$ 105.00	\$ 342.28
635.013	Barricade, type II	Each	3	\$ 210.00	\$ 684.55
635.014	Barricade, type III	Each	3	\$ 220.00	\$ 717.15
635.017	Construction sign	Square foot	371	\$ 22.00	\$ 8,163.08
635.018	Drum	Each	3	\$ 32.00	\$ 96.00
635.019	Flagger	Hour	1630	\$ 35.00	\$ 57,045.86
635.020	Pilot car	Hour	815	\$ 50.00	\$ 40,747.04
635.031	Warning light, type A	Each	3	\$ 50.00	\$ 162.99
	3% TERO	Lump sum	1	\$ 157,400.40	\$ 157,400.40
Sub-Total					\$ 5,466,580.29
10% Contingency					\$ 546,658.03
6 % Preliminary Eng.					\$ 327,994.82
7% Const. Eng.					\$ 382,660.62
Total					\$ 6,723,893.75

TMBC Jack Rabbit Road - PHASE III

STA 465+67.10 - 624+02.13

BID NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	Unit Cost	Amount
151.000	Mobilization	Lump sum	1	\$ 62,500.00	\$ 62,500.00
154.000	Contractor testing	Lump sum	1	\$ 18,750.00	\$ 18,750.00
157.001	Temporary turf Establishment	Acre	5	\$ 500.00	\$ 2,477.56
157.002	Silt Fence	Linear Foot	1047	\$ 5.00	\$ 5,232.61
157.011	Excelsior logs, 12" diameter	Linear Foot	99	\$ 8.00	\$ 792.82
157.012	Excelsior logs, 20" diameter	Linear Foot	149	\$ 9.50	\$ 1,412.21
157.020	Mucking of erosion control devices	Cubic yard	50	\$ 10.00	\$ 495.51
201.001	Clearing and grubbing	Lump sum	1	\$ 25,000.00	\$ 25,000.00
203.000	Removal of existing signs	Each	10	\$ 70.00	\$ 700.00
203.001	Removal of existing culverts	Each	10	\$ 750.00	\$ 7,432.69
203.015	Remove and reset of existing signs	Each	10	\$ 200.00	\$ 1,982.05
203.031	Removal and stockpile of existing fence	Linear foot	198	\$ 6.00	\$ 1,189.23
203.041	Removal of existing concrete surfacing	Square yard	38708	\$ 7.00	\$ 270,954.44
204.000	Roadway excavation	Cubic yard	149654	\$ 3.75	\$ 561,200.83
204.002	Subexcavation	Cubic yard	9910	\$ 4.50	\$ 44,596.14
207.140	Earthwork geotextile, type IV-D	Square yard	52969	\$ 6.00	\$ 317,812.33
251.001	Placed riprap, class 2	Cubic yard	198	\$ 50.00	\$ 9,910.25
301.002	Aggregate base, grading D	Ton	30590	\$ 14.00	\$ 428,254.18
408.176	Hot Bituminous Pavement, CL 27	Ton	12818	\$ 75.00	\$ 961,373.90
412.012	Tack coat, grade CSS-1h	Gallon	2913	\$ 3.30	\$ 9,613.62
602.000	Furnish 18 inch dia. CMP culvert, 16 gage	Linear foot	810	\$ 17.00	\$ 13,770.00
602.001	Install 18 inch dia. CMP culvert	Linear foot	810	\$ 18.00	\$ 14,580.00
602.002	Furnish 24 inch dia. CMP culvert, 14 gage	Linear foot	496	\$ 25.00	\$ 12,387.82
602.003	Install 24 inch dia. CMP culvert	Linear foot	496	\$ 30.00	\$ 14,865.38
602.065	Furnish 24 inch dia. RCP culvert, class III	Linear foot	297	\$ 30.00	\$ 8,919.23
602.070	Install 24 inch dia. RCP culvert	Linear foot	297	\$ 60.00	\$ 17,838.46
602.092	Furnish 36 inch dia. RCP culvert, class II	Linear foot	99	\$ 50.00	\$ 4,955.13
602.098	Install 36 inch dia. RCP culvert	Linear foot	99	\$ 75.00	\$ 7,432.69
602.556	Furnish safety end for 18 inch dia. CMP culvert w/o bars	Each	5	\$ 100.00	\$ 495.51
602.559	Install end section for 18 inch dia. CMP culvert	Each	5	\$ 50.00	\$ 247.76
602.560	Furnish safety end for 24 inch dia. CMP culvert w/o bars	Each	2	\$ 120.00	\$ 237.85
602.561	Furnish flared end for 24 inch dia. CMP culvert	Each	2	\$ 110.00	\$ 218.03
602.563	Install end section for 24 inch dia. CMP culvert	Each	4	\$ 90.00	\$ 356.77

602.619	Furnish flared end for 24 inch dia. RCP culvert	Each	2	\$ 405.00	\$ 802.73
602.620	Furnish sloped end for 24 inch dia. RCP culvert	Each	2	\$ 350.00	\$ 693.72
602.621	Install end section for 24 inch dia. RCP culvert	Each	4	\$ 250.00	\$ 991.03
602.631	Furnish flared end for 36 inch dia. RCP culvert	Each	2	\$ 670.00	\$ 1,327.97
602.633	Install end section for 36 inch dia. RCP culvert	Each	2	\$ 230.00	\$ 455.87
608.015	Paved waterway type 4, 36 inch width	Square yard	198	\$ 90.00	\$ 17,838.46
619.000	Fence, barb wire	Linear foot	2093	\$ 6.75	\$ 14,128.06
619.041	Brace panel, 3 post	Each	20	\$ 400.00	\$ 7,928.20
619.043	Brace panel, 5 post	Each	20	\$ 500.00	\$ 9,910.25
619.044	Brace panel, 6 post	Each	20	\$ 750.00	\$ 14,865.38
619.045	Brace panel, 7 post	Each	20	\$ 1,250.00	\$ 24,775.63
619.046	Brace panel, 8 post	Each	20	\$ 1,500.00	\$ 29,730.76
624.009	Placing conserved topsoil	Cubic yard	18392	\$ 5.00	\$ 91,959.23
625.000	Seeding, dry method	Acre	35	\$ 2,500.00	\$ 86,714.72
625.002	Mulching, dry method	Acre	35	\$ 1,000.00	\$ 34,685.89
625.004	Fertilizer, dry method	Ton	1	\$ 1,200.00	\$ 784.89
629.007	Rolled erosion control product, type 2.D	Square yard	242	\$ 3.00	\$ 725.13
633.006	Sign installation, 18 inch x 18 inch	Each	10	\$ 250.00	\$ 2,477.56
633.013	Sign installation, 24 inch x 24 inch	Each	10	\$ 260.00	\$ 2,576.67
633.014	Sign installation, 24 inch x 30 inch	Each	10	\$ 280.00	\$ 2,774.87
633.017	Sign installation, 30 inch x 30 inch	Each	10	\$ 300.00	\$ 2,973.08
634.127	Pavement markings, type B, white, 4 inch width	Gallon	50	\$ 57.00	\$ 2,824.42
634.132	Pavement markings, type B, yellow, 4 inch width	Gallon	50	\$ 57.00	\$ 2,824.42
634.244	Pavement markings, type B, white, objects	Each	3	\$ 33.00	\$ 98.11
635.000	Temporary traffic control	Lump sum	1	\$ 25,000.00	\$ 25,000.00
635.012	Barricade, type I	Each	2	\$ 105.00	\$ 208.12
635.013	Barricade, type II	Each	2	\$ 210.00	\$ 416.23
635.014	Barricade, type III	Each	2	\$ 220.00	\$ 436.05
635.017	Construction sign	Square foot	226	\$ 22.00	\$ 4,963.44
635.018	Drum	Each	3	\$ 32.00	\$ 96.00
635.019	Flagger	Hour	991	\$ 35.00	\$ 34,685.89
635.020	Pilot car	Hour	496	\$ 50.00	\$ 24,775.63
635.031	Warning light, type A	Each	2	\$ 50.00	\$ 99.10
	3% TERO	Lump sum	1	\$ 98,205.98	\$ 98,205.98

Sub-Total	\$ 3,371,738.50
10% Contingency	\$ 337,173.85
6% Preliminary Eng.	\$ 202,304.31
7% Const. Eng.	\$ 236,021.70
Total	\$ 4,147,238.36

TMBC Jack Rabbit Road - PHASE IV

STA 624+02.13 - 798+92

BID NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	Unit Cost	Amount
151.000	Mobilization	Lump sum	1	\$ 62,500.00	\$ 62,500.00
154.000	Contractor testing	Lump sum	1	\$ 18,750.00	\$ 18,750.00
157.001	Temporary turf Establishment	Acre	5	\$ 500.00	\$ 2,736.49
157.002	Silt Fence	Linear Foot	1156	\$ 5.00	\$ 5,779.47
157.011	Excelsior logs, 12" diameter	Linear Foot	109	\$ 8.00	\$ 875.68
157.012	Excelsior logs, 20" diameter	Linear Foot	164	\$ 9.50	\$ 1,559.80
157.020	Mucking of erosion control devices	Cubic yard	55	\$ 10.00	\$ 547.30
201.001	Clearing and grubbing	Lump sum	1	\$ 25,000.00	\$ 25,000.00
203.000	Removal of existing signs	Each	11	\$ 70.00	\$ 770.00
203.001	Removal of existing culverts	Each	11	\$ 750.00	\$ 8,209.47
203.015	Remove and reset of existing signs	Each	11	\$ 200.00	\$ 2,189.19
203.031	Removal and stockpile of existing fence	Linear foot	219	\$ 6.00	\$ 1,313.52
203.041	Removal of existing concrete surfacing	Square yard	42753	\$ 7.00	\$ 299,271.62
204.000	Roadway excavation	Cubic yard	165294	\$ 3.75	\$ 619,851.36
204.002	Subexcavation	Cubic yard	10946	\$ 4.50	\$ 49,256.84
207.140	Earthwork geotextile, type IV-D	Square yard	58504	\$ 6.00	\$ 351,026.58
251.001	Placed riprap, class 2	Cubic yard	219	\$ 50.00	\$ 10,945.96
301.002	Aggregate base, grading D	Ton	33786	\$ 14.00	\$ 473,010.59
408.176	Hot Bituminous Pavement, CL 27	Ton	14158	\$ 75.00	\$ 1,061,846.13
412.012	Tack coat, grade CSS-1h	Gallon	3218	\$ 3.30	\$ 10,618.33
602.000	Furnish 18 inch dia. CMP culvert, 16 gage	Linear foot	1110	\$ 17.00	\$ 18,870.00
602.001	Install 18 inch dia. CMP culvert	Linear foot	1110	\$ 18.00	\$ 19,980.00
602.002	Furnish 24 inch dia. CMP culvert, 14 gage	Linear foot	547	\$ 25.00	\$ 13,682.46
602.003	Install 24 inch dia. CMP culvert	Linear foot	547	\$ 30.00	\$ 16,418.95
602.065	Furnish 24 inch dia. RCP culvert, class III	Linear foot	328	\$ 30.00	\$ 9,851.37
602.070	Install 24 inch dia. RCP culvert	Linear foot	328	\$ 60.00	\$ 19,702.74
602.092	Furnish 36 inch dia. RCP culvert, class II	Linear foot	109	\$ 50.00	\$ 5,472.98
602.098	Install 36 inch dia. RCP culvert	Linear foot	109	\$ 75.00	\$ 8,209.47
602.556	Furnish safety end for 18 inch dia. CMP culvert w/o bars	Each	5	\$ 100.00	\$ 547.30
602.559	Install end section for 18 inch dia. CMP culvert	Each	5	\$ 50.00	\$ 273.65

602.560	Furnish safety end for 24 inch dia. CMP culvert w/o bars	Each	2	\$ 120.00	\$ 262.70	
602.561	Furnish flared end for 24 inch dia. CMP culvert	Each	2	\$ 110.00	\$ 240.81	
602.563	Install end section for 24 inch dia. CMP culvert	Each	4	\$ 90.00	\$ 394.05	
602.619	Furnish flared end for 24 inch dia. RCP culvert	Each	2	\$ 405.00	\$ 886.62	
602.620	Furnish sloped end for 24 inch dia. RCP culvert	Each	2	\$ 350.00	\$ 766.22	
602.621	Install end section for 24 inch dia. RCP culvert	Each	4	\$ 250.00	\$ 1,094.60	
602.631	Furnish flared end for 36 inch dia. RCP culvert	Each	2	\$ 670.00	\$ 1,466.76	
602.633	Install end section for 36 inch dia. RCP culvert	Each	2	\$ 230.00	\$ 503.51	
608.015	Paved waterway type 4, 36 inch width	Square yard	219	\$ 90.00	\$ 19,702.74	
619.000	Fence, barb wire	Linear foot	2312	\$ 6.75	\$ 15,604.57	
619.041	Brace panel, 3 post	Each	22	\$ 400.00	\$ 8,756.77	
619.043	Brace panel, 5 post	Each	22	\$ 500.00	\$ 10,945.96	
619.044	Brace panel, 6 post	Each	22	\$ 750.00	\$ 16,418.95	
619.045	Brace panel, 7 post	Each	22	\$ 1,250.00	\$ 27,364.91	
619.046	Brace panel, 8 post	Each	22	\$ 1,500.00	\$ 32,837.89	
624.009	Placing conserved topsoil	Cubic yard	20314	\$ 5.00	\$ 101,569.79	
625.000	Seeding, dry method	Acre	38	\$ 2,500.00	\$ 95,780.00	
625.002	Mulching, dry method	Acre	38	\$ 1,000.00	\$ 38,310.88	
625.004	Fertilizer, dry method	Ton	1	\$ 1,200.00	\$ 866.92	
629.007	Rolled erosion control product, type 2.D	Square yard	267	\$ 3.00	\$ 800.92	
633.006	Sign installation, 18 inch x 18 inch	Each	11	\$ 250.00	\$ 2,736.49	
633.013	Sign installation, 24 inch x 24 inch	Each	11	\$ 260.00	\$ 2,845.95	
633.014	Sign installation, 24 inch x 30 inch	Each	11	\$ 280.00	\$ 3,064.87	
633.017	Sign installation, 30 inch x 30 inch	Each	11	\$ 300.00	\$ 3,283.79	
634.127	Pavement markings, type B, white, 4 inch width	Gallon	55	\$ 57.00	\$ 3,119.60	
634.132	Pavement markings, type B, yellow, 4 inch width	Gallon	55	\$ 57.00	\$ 3,119.60	
634.244	Pavement markings, type B, white, objects	Each	3	\$ 33.00	\$ 108.37	
635.000	Temporary traffic control	Lump sum	1	\$ 25,000.00	\$ 25,000.00	
635.012	Barricade, type I	Each	2	\$ 105.00	\$ 229.87	
635.013	Barricade, type II	Each	2	\$ 210.00	\$ 459.73	
635.014	Barricade, type III	Each	2	\$ 220.00	\$ 481.62	
635.017	Construction sign	Square foot	249	\$ 22.00	\$ 5,482.16	
635.018	Drum	Each	3	\$ 32.00	\$ 96.00	
635.019	Flagger	Hour	1095	\$ 35.00	\$ 38,310.88	
635.020	Pilot car	Hour	547	\$ 50.00	\$ 27,364.91	
635.031	Warning light, type A	Each	2	\$ 50.00	\$ 109.46	
	3% TERO	Lump sum	1	\$ 108,283.68	\$ 108,283.68	
					Sub-Total	\$ 3,717,739.80
					10% Contingency	\$ 371,773.98

6 % Preliminary Eng.	\$ 223,064.39
7% Const. Eng.	\$ 260,241.79
Total	\$ 4,572,819.96