# **Appendix F:**

**Preliminary Cost Estimates** 

Project	MP	Quantity	Unit	Total				
Segment 1: US 89 to Pinkerton Road								
Reconstruct								
Typical 1 (24 feet)	0 - 3.8	3.8	mi	\$2,300,000				
Typical 2 (28 feet)	0 - 3.8	3.8	mi	\$3,500,000				
Typical 3 (30 feet)	0 - 3.8	3.8		\$3,900,000				
Segment 2: Pinkerton Road to Porcupine Road								
Reconstruct								
Typical 1 (24 feet) 1	3.8 - 8.4	4.6	mi	\$3,300,000				
Typical 2 (28 feet) 1	3.8 - 8.4	4.6	mi	\$5,100,000				
Typical 3 (30 feet) 1	3.8 - 8.4	4.6	mi	\$5,700,000				
Segment 3: Porcupine Road to Hill Road								
Reconstruct								
Typical 1 (24 feet)	8.4 - 14.2	5.8	mi	\$3,500,000				
Typical 2 (28 feet)	8.4 - 14.2	5.8	mi	\$5,400,000				
Typical 3 (30 feet)	8.4 - 14.2	5.8		\$5,900,000				
Segment 4: Hill Road to Smith Creek Road								
Preservation and Maintenance								
Chip Seal	14.2 - 15.7	1.5		\$70,000				
Resurfacing	14.2 - 15.7	1.5		\$640,000				
Segment 5: Smith Creek Road to End Project								
Preservation and Maintenand								
Resurfacing	15.7 - 19.5	3.8	mi	\$790,000				
Combined Reconstruction								
Reconstruct	T	T		ı				
Typical 1 (24 feet) 1	0.0 - 14.2	14.2		\$9,100,000				
Typical 2 (28 feet) 1	0.0 - 14.2	14.2	mi	\$14,000,000				
Typical 3 (30 feet) <sup>1</sup>	0.0 - 14.2	14.2	mi	\$15,500,000				

Includes a 20% inflation to account for installment of guardrail, bank stabilization, and other geotechnical considerations on Segment 2.

Unit Costs:						
Reconstruction:						
Typical 1 (24 feet)	\$588,315	/mi				
Typical 2 (28 feet)	\$916,143	/mi				
Typical 3 (30 feet)	\$1,016,243	/mi				
Resurfacing:						
Pavement	\$421,200	/mi				
Gravel	\$205,296	/mi				
Geotech/Stabilization:	20%					

#### 24 -Foot Typical Section Cost

Incidentals @ 50%:

Road Length: 5280 ft Average Width: 24.5 ft

Rounded Unit Price Cost

Full Depth Recycling: 14373.33 sqyd/mile 14400 \$3.00 \$43,200.00 2" Agg. Base: 1695.076 ton/mile 1700 \$25.00 \$42,500.00 3" Pavement: 2352.142 ton/mile \$90.00 2400 \$216,000.00

\$150,850.00

Construction cost per mile: \$452,550.00

Construction Engineering @ 15% \$67,882.50

Preliminary Engineering @ 15% \$67,882.50

> Total cost per mile: \$588,315.00

### 28 -Foot Typical Section Cost

Incidentals @ 75%:

Road Length: 5280 ft Average Width: 24.5 ft

Rounded Unit Price Cost Full Depth Recycling: 14373.33 sqyd/mile 14400 \$3.00 \$43,200.00 3" Pavement: 2731.52 ton/mile 2800 \$90.00 \$252,000.00 2" Agg. Base: 1926.222 ton/mile \$25.00 2000 \$50,000.00 6" Agg. Base: 1386.88 ton/mile 1400 \$25.00 \$35,000.00 Unclassified borrow: 1486.222 cuyd/mile 1500 \$15.00 \$22,500.00

\$302,025.00

Total cost per mile: \$704,725.00

Construction Engineering @ 15% \$105,708.75 Preliminary Engineering @ 15%

\$105,708.75

Total cost per mile: \$916,142.50

## 30 -Foot Typical Section Cost

Road Length: 5280 ft Average Width: 24.5 ft

		Rounded	Unit Price	Cost
Full Depth Recycling:	14373.33 sqyd/mile	14400	\$3.00	\$43,200.00
3" Pavement:	2921.209 ton/mile	3000	\$90.00	\$270,000.00
2" Agg. Base:	2080.32 ton/mile	2100	\$25.00	\$52,500.00
6" Agg. Base:	1772.124 ton/mile	1800	\$25.00	\$45,000.00
Unclassified borrow:	2346.667 cuyd/mile	2400	\$15.00	\$36,000.00
Incidentals @ 75%:				\$335,025.00

\$335,025.00

Total cost per mile: \$781,725.00

Construction Engineering @ 15% \$117,258.75 Preliminary Engineering @ 15% \$117,258.75

Total cost per mile: \$1,016,242.50

### **Pavement Maintenance Cost**

Road Length: 5280 ft Average Width: 24.5 ft

Rounded Unit Price Cost

Chip Seal, Type 1C 14373.33 sqyd/mi 14400 \$1.75 \$25,200.00 **Emulsified Asphalt** 14.37333 ton/mi 14.4 \$650.00 \$9,360.00

Mobilization and Traffic Control @ 25%: \$8,640.00

Total cost per mile (chip seal): \$43,200.00

3" Pavement: 2352.142 ton/mile 2400 \$90.00 \$216,000.00

Incidentals @ 50%: \$108,000.00

Total cost per mile: \$324,000.00

Construction Engineering @ 15% \$48,600.00

Preliminary Engineering @ 15% \$48,600.00

> Total cost per mile (resurfacing): \$421,200.00

## **Gravel Maintenance Cost**

Road Length: 5280 ft Average Width: 24.5 ft

Rounded Unit Price Cost

6" Agg Surfacing: 4931.129 ton/mile 5000 \$20.00 \$100,000.00 Roadway Reconditioning 5280 ft/mile 5280 \$1.00 \$5,280.00

Incidentals @ 50%: \$52,640.00

Total cost per mile: \$157,920.00

Construction Engineering @ 15% \$23,688.00

Preliminary Engineering @ 15% \$23,688.00

Total cost per mile (resurfacing): \$205,296.00