

New State Road Bridge Deck Replacement

BR-150-01.70 (SFN: 3937267)

Bridge Deck 28' x 36', roadway approach work 200 ft eachway

Bridge Deck - Material

Ref.	Item	Description	Quant.	Unit	Price	Costs
1	513	Structural Steel Members, Level 1 (interior)	5	Ea.	\$8,500.00	\$42,500.00
2	513	Structural Steel Members, Level 1 (fascia)	2	Ea.	\$9,000.00	\$18,000.00
3	513	Structural Steel Members, Diaphragms	24	Ea.	\$300.00	\$7,200.00
4	513	Structural Steel, Bridge Posts	12	Ea.	\$300.00	\$3,600.00
5	513	Galvanized Corrugated Steel Deck, 5Ga	1,000	SF	\$25.00	\$25,000.00
6	513	Expansion Angle Joints, as per plan	1	LS	\$3,000.00	\$3,000.00
7	513	Bearing Plates and Anchor Bolts	1	LS	\$1,700.00	\$1,700.00
8	517	Bridge Rail - Tubular Back-up	90	Ft	\$100.00	\$9,000.00

Sub total = **\$110,000.00**

Asphalt - Material & Installation

9	301	Asphalt Concrete Base, 6"	25	CY	\$200.00	\$5,000.00
10	407	Tack Coat @ 0.1 Gal/SY	40	GAL	\$5.00	\$200.00
11	407	Tack Coat @ 0.05 Gal/SY	20	GAL	\$5.00	\$100.00
12	441	Asphalt Concrete, Intermediate, Type 2, 1 3/4"	25	CY	\$200.00	\$5,000.00
13	441	Asphalt Concrete, Surface, Type 1, 1 1/4"	15	CY	\$250.00	\$3,750.00
14	441	Asphalt Concrete Level Course, Surface, Type 1	10	CY	\$295.00	\$2,950.00

Sub total = **\$17,000.00**

Guardrail - Material & Installation

15	606	Bridge Terminal Assembly, Type 4	4	Ea.	\$2,000.00	\$8,000.00
16	606	Guardrail, Type MGS	100	Ft	\$25.00	\$2,500.00
17	606	Guardrail, Type E	4	Ea.	\$2,575.00	\$10,300.00
18	626	Barrier Reflector, Type A-2	20	Ea.	\$10.00	\$200.00

Sub total = **\$21,000.00**

Project Total = **\$148,000.00**

I hereby certify that this estimate was prepared by me and that the useful life for the New State Road Bridge is 50 years.

Lee E. Tansey, P.E., P.S.
Huron County Engineer

Butler Road Reconstruction - Option #2

Pavement Width 20 Ft

SR 162 to SR 18 - (5.2 miles) 27,500 LF - 61,000 SY

SR 18 to SR 303 - (4.4 miles) 23,200 LF - 51,500 SY

SR 303 to SR 20 - (1.0 miles) 5,280 LF - 11,800 SY

Type 1, asphalt level w/ chip seal, County base repairs

2" Type 2 asphalt

chip & seal, County crews to perform repairs

SR 18 to SR 303 (2" Type 2 asphalt)

Ref.	Item	Description	Quant.	Unit	Price	Costs
1	254	Pavement Planning, 2"	51,500	SY	\$1.75	\$90,125.00
2	254	Patching of Planned Surfaces, as per plan	45	CY	\$400.00	\$18,000.00
3	407	Tack Coat @ 0.1 Gal/SY	5,150	GAL	\$1.70	\$8,755.00
5	441	Asphalt Concrete, Type 2, Modified Intermed., 2"	3,100	CY	\$135.00	\$418,500.00
8	614	Maintaining Traffic	1	LS	\$3,000.00	\$3,000.00
9	642	Center Line	4.4	Mile	\$500.00	\$2,200.00
10	642	Edge Line	8.8	Mile	\$750.00	\$6,600.00
11	642	Stop Bar 24"	2	Ea.	\$200.00	\$400.00
Subtotal =						\$547,580.00

SR 162 to SR 18 (Type 1, asphalt level w/ chip seal, County base repairs)

12	407	Tack Coat @ 0.1 Gal/SY	6,100	GAL	\$1.70	\$10,370.00
13	441	Asphalt Concrete Level Course, Type 1 - Variable	1,000	CY	\$180.00	\$180,000.00
14	409	CRS-2, Seal Bituminous @ 0.45 GAL/SY	27,500	GAL	\$2.10	\$57,750.00
15	409	#8 Lime Stone, Seal Aggregate @ 22 Lbs/SY	670	Ton	\$30.00	\$20,100.00
16	411	Limestone berm & Drives @ 1.0' each side	250	Ton	\$35.00	\$8,750.00
17	614	Maintaining Traffic	1	LS	\$3,000.00	\$3,000.00
18	642	Center Line	5.2	Mile	\$500.00	\$2,600.00
19	642	Edge Line	10.4	Mile	\$750.00	\$7,800.00
20	642	Stop Bar 24"	2	Ea.	\$200.00	\$400.00
21	Spec	Butt Joints	10	Ea.	\$200.00	\$2,000.00
Subtotal =						\$292,770.00

SR 303 to SR 20 (chip & seal, County crews to perform repairs)

24	409	CRS-2, Seal Bituminous @ 0.45 GAL/SY	5,310	GAL	\$2.10	\$11,151.00
25	409	#8 Lime Stone, Seal Aggregate @ 22 Lbs/SY	130	Ton	\$30.00	\$3,900.00
26	614	Maintaining Traffic	1	LS	\$500.00	\$500.00
27	642	Center Line	1	Mile	\$500.00	\$500.00
28	642	Edge Line	2	Mile	\$750.00	\$1,500.00
22	642	Stop Bar 24"	2	Ea.	\$200.00	\$400.00
Subtotal =						\$17,951.00

29	624	Mobilization	1	LS	\$5,000.00	\$5,000.00
30	103.5	Premium Contract Bond	1	LS	\$5,000.00	\$5,000.00
31	Spec.	Contingencies	1	LS	\$10,000.00	\$10,000.00
Subtotal =						\$20,000.00

Total Project = \$878,301.00

Butler Road Reconstruction - Option #3

Pavement Width 20 Ft

SR 162 to SR 18 - (5.2 miles) 27,500 LF - 61,000 SY

SR 18 to SR 303 - (4.4 miles) 23,200 LF - 51,500 SY

SR 303 to SR 20 - (1.0 miles) 5,280 LF - 11,800 SY

Type 1, asphalt level w/ chip seal, County base repairs

Cold Mix Overlay

chip & seal, County crews to perform repairs

SR 18 to SR 303 (Cold Mix Overlay)

Ref.	Item	Description	Quant.	Unit	Price	Costs
1	254	Pavement Planning, 2"	51,500	SY	\$1.75	\$90,125.00
2	407	Tack Coat @ 0.1 Gal/SY	5,150	GAL	\$1.70	\$8,755.00
3	405	CMS-2, Mix Bituminous @ 1.5 Gal/SY	77,250	GAL	\$2.60	\$200,850.00
4	405	Mix Aggregate, #67's @ 150 Lbs/SY	3,900	Ton	\$30.00	\$117,000.00
5	405	Choke Aggregate, #8's @ 10 Lbs/SY	260	Ton	\$40.00	\$10,400.00
6	409	CRS-2, Seal Bituminous @ 0.45 GAL/SY	23,200	GAL	\$2.10	\$48,720.00
7	409	#8 Lime Stone, Seal Aggregate @ 17 Lbs/SY	440	Ton	\$30.00	\$13,200.00
8	614	Maintaining Traffic	1	LS	\$3,000.00	\$3,000.00
9	642	Center Line	4.4	Mile	\$500.00	\$2,200.00
10	642	Edge Line	8.8	Mile	\$750.00	\$6,600.00
11	642	Stop Bar 24"	2	Ea.	\$200.00	\$400.00

Subtotal = \$501,250.00

SR 162 to SR 18 (Type 1, asphalt level w/ chip seal, County base repairs)

12	407	Tack Coat @ 0.1 Gal/SY	6,100	GAL	\$1.70	\$10,370.00
13	441	Asphalt Concrete Level Course, Type 1 - Variable	1,000	CY	\$180.00	\$180,000.00
14	409	CRS-2, Seal Bituminous @ 0.45 GAL/SY	27,500	GAL	\$2.10	\$57,750.00
15	409	#8 Lime Stone, Seal Aggregate @ 22 Lbs/SY	670	Ton	\$30.00	\$20,100.00
16	411	Limestone berm & Drives @ 1.0' each side	250	Ton	\$35.00	\$8,750.00
17	614	Maintaining Traffic	1	LS	\$3,000.00	\$3,000.00
18	642	Center Line	5.2	Mile	\$500.00	\$2,600.00
19	642	Edge Line	10.4	Mile	\$750.00	\$7,800.00
20	642	Stop Bar 24"	2	Ea.	\$200.00	\$400.00
21	Spec	Butt Joints	10	Ea.	\$200.00	\$2,000.00

Subtotal = \$292,770.00

SR 303 to SR 20 (chip & seal, County crews to perform repairs)

24	409	CRS-2, Seal Bituminous @ 0.45 GAL/SY	5,310	GAL	\$2.10	\$11,151.00
25	409	#8 Lime Stone, Seal Aggregate @ 22 Lbs/SY	130	Ton	\$30.00	\$3,900.00
26	614	Maintaining Traffic	1	LS	\$500.00	\$500.00
27	642	Center Line	1	Mile	\$500.00	\$500.00
28	642	Edge Line	2	Mile	\$750.00	\$1,500.00
22	642	Stop Bar 24"	2	Ea.	\$200.00	\$400.00

Subtotal = \$17,951.00

29	624	Mobilization	1	LS	\$5,000.00	\$5,000.00
30	103.5	Premium Contract Bond	1	LS	\$5,000.00	\$5,000.00
31	Spec.	Contingencies	1	LS	\$10,000.00	\$10,000.00

Subtotal = \$20,000.00

Total Project = \$831,971.00