



Appendix D – Cost Estimate

Upper Midwest Transportation Hub

Iowa Department of Transportation

Cost Estimate for TIGER Grant Application**Upper Midwest Transportation Hub****Which includes improvements at MANLY YARD, MANLY TERMINAL LLC, and MANLY LOGISTIC PARK IMPROVEMENTS**

Date: May 20, 2013

Phase I-A- Improvements to Manly Terminal - Intermodal				MT-IANR	Tiger Grant
Description: Intermodal Improvements	Units	Quantity	Unit Cost	Contribution	Contribution
Mobilization	Lump Sum	1.00	\$ 25,000.00		\$ 25,000.00
Security Fence (north end only)	Lineal Feet	516	\$ 25.00		\$ 12,910.50
Gate House and Control Point	Lump Sum	1	\$ 75,000.00		\$ 75,000.00
Lighting Improvments	Lump Sum	1.00	\$ 10,000.00		\$ 10,000.00
Pavement, Reinforced Concrete Slab	Square Feet	61,109.00	\$ 30.00		\$ 1,833,270.00
Granular Subbase Stone - 1-Inch Clean, 1-Foot Thickness	Tons	37,124.00	\$ 15.00		\$ 556,860.00
Storm Water Drainage (piping)	Lineal Feet	4,800	\$ 50.00		\$ 240,000.00
Storm Sewer Intakes	Each	11	\$ 1,500.00		\$ 16,500.00
115# RE - Bolted Rail- New Intermodal Track	Track Feet	2,630.00	\$ 41.06		\$ 107,987.80
Steel Cross Ties with Clips	Each	1,754.00	\$ 90.00		\$ 157,860.00
Joint Bars, 112 RE, 6-1/2"x5"x6-1/2"	Pairs	136.00	\$ 90.00		\$ 12,240.00
Track Bolts	Each	816.00	\$ 1.50		\$ 1,224.00
Track Washers	Each	816.00	\$ 0.50		\$ 408.00
AREMA No. 10 Switch Tie Package 100% with 115# RE Rail	Each	2.00	\$ 35,000.00		\$ 70,000.00
Intermodal Track Construction	Track Feet	2,630.00	\$ 22.00	\$ 57,860.00	
Ballast - AREMA NO. 4	Tons	3,050.00	\$ 14.00		\$ 42,700.00
Switch Construction	Each	2.00	\$ 8,300.00	\$ 16,600.00	
Surfacing Track	Track Feet	5,260.00	\$ 1.25	\$ 6,575.00	
Surface Switches	Each	2.00	\$ 1,000.00	\$ 2,000.00	
Erosion Control and SWPPP Compliance	Lump Sum	1.00	\$ 5,000.00	\$ 5,000.00	
Lift Equipment-Yard Shuttle Tractors		3	\$ 600,000.00	\$ 1,800,000.00	
Security System and Cameras	Lump Sum	1.00	\$ 50,000.00		\$ 50,000.00
Lighting Improvments	Lump Sum	1.00	\$ 20,000.00		\$ 20,000.00
Construction Staking	Lump Sum	1.00	\$ 10,000.00		\$ 10,000.00
			Sub Total	\$ 1,888,035.00	\$ 3,241,960.30
			Manly Terminal Total Phase I		
			\$ 5,129,995.30		

Phase I-B- Improvements to Manly Yard to Support Intermodal				IANR	Tiger Grant
Description: Tracks 10 - 12	Units	Quantity	Unit Cost	Contribution	Contribution

Track 10, 11 & 12, Change out Bolted Rail to 115 RE	Track Feet	13,500	\$	41.06		\$	554,310.00
Joint Bars, 115 RE, 6-1/2"x5"x6-1/2"	Pairs	693	\$	90.00		\$	62,370.00
Track Bolts	Each	4,158	\$	1.50		\$	6,237.00
Track Washers	Each	4,158	\$	0.50		\$	2,079.00
Steel Cross Ties with Clips	Each	6750	\$	90.00		\$	607,500.00
Salvage Rail from Yard Tracks 10 - 11 -12 & OTM	Tons	474	\$	(385.00)		\$	(182,443.80)
Wood Cross Tie Disposal	Each	8,100	\$	1.00		\$	8,100.00
Track Construction	Track Feet	13,500	\$	22.00	\$	297,000.00	
Ballast - AREMA NO. 4 (New Intermodal Track and 3 Yard Tracks)	Tons	8,717.50	\$	14.00		\$	122,045.00
Yard Track Rail Change out	Track Feet	6,750.00	\$	23.00		\$	155,250.00
Surfacing Track	Track Feet	13,500.00	\$	1.25	\$	16,875.00	
Observation Tower - Manly Yard - 40-ft Ht.	Each	1.00	\$	546,000.00		\$	546,000.00
				Sub Total	\$	313,875.00	\$ 1,881,447.20
						Manly Yard Total	\$ 2,195,322.20
				Phase I A&B Participation	\$	2,201,910.00	\$ 5,123,407.50
						Phase I A&B Total	\$ 7,325,317.50

Phase II- Improvements to Manly Logistic Park				MLP-IANR	Tiger Grant
Description: Outer Loop Track & 4 Intermodal Tracks	Units	Quantity	Unit Cost	Contribution	Contribution
Mobilization	Lump Sum	1.00	\$ 15,000.00		\$ 15,000.00
Clear and Grubbing	Lump Sum	1.00	\$ 2,500.00		\$ 2,500.00
Top Soil, Strip, Salvage and Spread (1-ft deep)	Cubic Yards	40,012.52	\$ 1.00		\$ 40,012.52
Class 10 Excavation and Borrow	Cubic Yards	20,006.26	\$ 1.50		\$ 30,009.39
Granular Macadam Subgrade Stone (1.50-ft deep)	Tons	46,184.45	\$ 14.00		\$ 646,582.35
Base Choke Stone (6-inch deep)	Tons	16,475.16	\$ 13.00		\$ 214,177.03
Pavement Reinforced Concrete Slab	Square Yard	26,622.83	\$ 30.00		\$ 798,685.00
Pavement (All other Areas) 9" PCC	Square Yard	3,386.53	\$ 25.00		\$ 84,663.19
Fencing (10'ft high w/3-strand barb wire)	Lineal Feet	6,241.00	\$ 25.00		\$ 156,025.00
Seeding, Mulch and Fertilizer	Acres	15.00	\$ 4,500.00		\$ 67,500.00
Drainage and Storm Sewer	Lineal Feet	1,000.00	\$ 50.00		\$ 50,000.00
Rail 115# RE (39-FT Rail lengths)	Track Feet	15,715.00	\$ 41.06		\$ 645,257.90
Steel Cross Ties (24" Centers) with Spring Clips	Each	10,477.00	\$ 90.00		\$ 942,930.00
Joint Bars 115 RE	Pair	807.00	\$ 90.00		\$ 72,630.00
Track Bolts and Nuts	Each	4,842.00	\$ 1.50		\$ 7,263.00
Track Washers	Each	4,842.00	\$ 0.50		\$ 2,421.00
Steel Tie Switch AREMA No 10 Complete Set w/115# RE Rail	Each	5.00	\$ 32,000.00		\$ 160,000.00
Concrete Crossing Panels	Lineal Feet	324.00	\$ 190.00		\$ 61,560.00

Ballast Stone 2-1/2"	Tons	18,550.00	\$	14.00		\$	259,700.00
Halfman Conveyance of Remaining Land for Project	Acres	104.00	\$	28,000.00	\$	2,912,000.00	
Train for Ballast Placement	Trains	24.00	\$	2,500.00	\$	60,000.00	
Track Construction	Track Feet	15,715.00	\$	21.00	\$	330,015.00	
Turnout Construction	Each	5.00	\$	8,500.00	\$	42,500.00	
Road Crossing Place Concrete Panels	Lineal Feet	324.00	\$	200.00	\$	64,800.00	
Lift Equipment-Yard Shuttle Tractors		5	\$	600,000.00	\$	3,000,000.00	
Crossing Signalization	Each	1.00	\$	250,000.00			\$ 250,000.00
Surface Track	Each	31,430.00	\$	1.25	\$	39,287.50	
Surface Turnouts	Each	5.00	\$	1,000.00	\$	5,000.00	
				Sub Total	\$	6,453,602.50	\$ 4,506,916.39
				Phase III Totals \$ 10,960,518.89			

Phase III- Improvements to Manly Logistic Park - Intermodal				MLP-IANR	Tiger Grant
Description: Container Storage Yard - Outside Intermodal Facility	Units	Quantity	Unit Cost	Contribution	Contribution
Top Soil, Strip, Salvage an Spread (1-ft deep)	Cubic Yards	64,372.00	\$ 1.25	\$	80,465.00
Service Roads around Loop Tracks - 6" Class "A" Road Stone	Tons	13,373.00	\$ 15.00	\$	200,595.00
Site Class 10 Excavation and Borrow	Cubic Yards	32,186.00	\$ 2.50	\$	80,465.00
Granular Macadam Subgrade Stone (1.50-ft deep)	Tons	211,049.00	\$ 15.00	\$	3,165,735.00
Base Choke Stone (6-inch deep)	Tons	55,039.00	\$ 15.00	\$	825,585.00
Fencing (10'ft high w/3-strand barb wire)	Lineal Feet	4,400.00	\$ 28.00	\$	123,200.00
Lighting	Lump Sum	1.00	\$ 9,000.00	\$	9,000.00
Drainage and Storm Sewer Structures	Lineal Feet	4,000.00	\$ 50.00	\$	200,000.00
Seeding, Mulch and Fertilizer	Acres	1.00	\$ 4,500.00	\$	4,500.00
Gate/ Office Building	Lump Sum	1.00	\$ 100,000.00	\$	100,000.00
Yard Lights	Lump Sum	1.00	\$ 84,000.00	\$	84,000.00
Sanitary Septic System	Lump Sum	1.00	\$ 8,500.00	\$	8,500.00
Potable Water Well	Lump Sum	1.00	\$ 50,000.00	\$	50,000.00
Communication Lines	Lump Sum	1.00	\$ 2,000.00	\$	2,000.00
Gas	Lump Sum	1.00	\$ 3,500.00	\$	3,500.00
Parking Lot Grading	Cubic Yards	461.00	\$ 6.25	\$	2,881.25
Parking Lot Pavement	Square Yard	2,765.00	\$ 25.00	\$	69,125.00
Security System and Cameras	Lump Sum	1.00	\$ 150,000.00	\$	150,000.00
Fencing (10'ft high w/3-strand barb wire)	Lineal Feet	775.00	\$ 25.00	\$	19,375.00
Gas	Lump Sum	1.00	\$ 3,500.00	\$	3,500.00
			Sub Total	\$ -	\$ 5,182,426.25
			Phase III Total		\$ 5,182,426.25

Phase IV- Improvements to Manly Logistic Park - Intermodal				MLP	Tiger Grant
Description: Complete Final Pavement of Areas	Units	Quantity	Unit Cost	Contribution	Contribution
Mobilization	Lump Sum	1.00	\$ 5,000.00	\$	10,000.00
Pavement Reinforced Concrete Slab	Square Yard	17,885.75	\$ 30.00	\$	536,572.50
Granular Macadam Subgrade Stone (1.50-ft deep)	Tons	20,524.00	\$ 14.00	\$	287,336.00
Concrete Crossing Panels	Lineal Feet	468.00	\$ 390.00	\$	182,520.00
Class "A" Road Stone Sub-base	Tons	9,882.00	\$ 13.00	\$	128,466.00
Sub Total				\$ -	\$ 1,144,894.50
Phase IV Total					\$ 1,144,894.50
IANR -MT-MLP Match					Tiger Grant
\$ 8,655,512.50					\$ 15,957,644.64
Total Phase I -IV					\$ 24,613,157.14
Pct of Project					35.2% 64.8%