

**BNSF Railway
Bridge No. 9.1
Railroad Bridge Over Fargo Diversion Channel
Prosper, North Dakota
ENGINEER'S 90% PLAN ESTIMATE OF PROBABLE CONSTRUCTION COSTS**

Item Description	Unit	Quantity	Estimated Unit Cost	Estimated Total Cost
MOBILIZATION	LS	1	\$ 880,000.00	\$ 877,000.00
				\$ 877,000.00
Mainline Track				
CLEARING	ACRE	7.63	\$ 1,500.00	\$ 11,445
STRIPPING	CY	12,310	\$ 5.00	\$ 61,550
TRACK REMOVAL	TF	4,394	\$ 12.00	\$ 52,728
BALLAST REMOVAL	CY	3,703	\$ 10.00	\$ 37,030
SUBBALLAST REMOVAL	CY	4,218	\$ 10.00	\$ 42,180
REMOVAL OF CULVERTS-ALL TYPES & SIZES	LF	376	\$ 25.00	\$ 9,400
TOPSOIL PLACEMENT	CY	6,155	\$ 5.00	\$ 30,775
SEEDING CLASS II	ACRE	7.63	\$ 200.00	\$ 1,526
ECB TYPE 2	SY	10,667	\$ 5.00	\$ 53,335
FIBER ROLLS 12IN	LF	5,539	\$ 5.00	\$ 27,695
COMMON EXCAVATION	CY	5,213	\$ 5.00	\$ 26,065
EMBANKMENT	CY	12,661	\$ 5.00	\$ 63,305
SURCHARGE	CY	10,798	\$ 5.00	\$ 53,990
BALLAST	CY	3,703	\$ 30.00	\$ 111,090
SUBBALLAST	CY	4,218	\$ 30.00	\$ 126,531
NEW TRACK (141 LB. RAIL, TIES)	TF	4,394	\$ 240.00	\$ 1,054,560
				\$ 1,763,000
Shoofly Track				
CLEARING	ACRE	8.85	\$ 1,500.00	\$ 13,275
STRIPPING	CY	14,278	\$ 5.00	\$ 71,390
TRACK REMOVAL	TF	4,421	\$ 12.00	\$ 53,052
BALLAST REMOVAL	CY	3,726	\$ 10.00	\$ 37,260
SUBBALLAST REMOVAL	CY	4,244	\$ 10.00	\$ 42,440
TURNOUT REMOVAL	EA	1	\$ 30,000.00	\$ 30,000
REMOVAL OF CULVERTS-ALL TYPES & SIZES	LF	44	\$ 25.00	\$ 1,100
OBLITERATE EMBANKMENT	LF	4,421	\$ 55.00	\$ 243,155
TOPSOIL PLACEMENT	CY	4,848	\$ 5.00	\$ 24,240
SEEDING CLASS II	ACRE	6.01	\$ 200.00	\$ 1,202
ECB TYPE 2	SY	9,829	\$ 5.00	\$ 49,145
FIBER ROLLS 12IN	LF	8,753	\$ 5.00	\$ 43,765
COMMON EXCAVATION	CY	283	\$ 5.00	\$ 1,415
EMBANKMENT	CY	29,774	\$ 5.00	\$ 148,870
BALLAST	CY	3,726	\$ 30.00	\$ 111,780
SUBBALLAST	CY	4,224	\$ 30.00	\$ 126,720
NEW TRACK (141 LB. RAIL, TIES)	TF	4,421	\$ 240.00	\$ 1,060,922
NO. 24 TURNOUT	EA	1	\$ 200,000.00	\$ 200,000
				\$ 2,260,000
Bridge				
STRUCTURAL STEEL, ASTM A709, GRADE 50WT2	POUND	356,260	\$ 5.85	\$ 2,084,121
STRUCTURAL STEEL,MISCELLANEOUS	POUND	9,050	\$ 5.85	\$ 52,943
PRESTRESSED CONCRETE BEAM, 54" DEEPx54'-5" LONG	EACH	32	\$ 12,750.00	\$ 408,000
DIAPHRAGMS FOR 54" BEAMS	LIN. FT.	368	\$ 95.00	\$ 34,960
SUBSTRUCTURE FOOTING CONCRETE (CLASS 40)	CU. YD.	650	\$ 490.00	\$ 318,500
SUBSTRUCTURE STEM CONCRETE (CLASS 40)	CU. YD.	599	\$ 610.00	\$ 365,390
SUPERSTRUCTURE CONCRETE (CLASS 50)	CU. YD.	498	\$ 530.00	\$ 263,940
REINFORCEMENT BARS	POUND	213,940	\$ 1.25	\$ 267,425
HP14x89, 14", 80' TEST PILE	LIN. FT.	240	\$ 80.00	\$ 19,200
HP14x89, 14", 75' TEST PILE	LIN. FT.	225	\$ 80.00	\$ 18,000
HP14x89, 14", 70' TEST PILE	LIN. FT.	280	\$ 80.00	\$ 22,400
HP14x89 PILING DELIVERED	LIN. FT.	6,315	\$ 65.00	\$ 410,475
HP14x89 PILING DRIVEN	LIN. FT.	6,511	\$ 1.75	\$ 11,394
PREBALLASTING	SQ. YD.	802	\$ 45.00	\$ 36,090
STRUCTURE EXCAVATION	LUMP SUM	1	\$ 220,000.00	\$ 220,000
STRUCTURAL TUBE RAILING WITH FENCE	LIN. FT.	110	\$ 150.00	\$ 16,500
BEARING ASSEMBLY	EACH	74	\$ 1,275.00	\$ 94,350
ARCHITECTURAL CONCRETE TEXTURE (CUT STONE)	SQ. FT.	360	\$ 17.00	\$ 6,120
SPRAY-ON WATERPROOFING	SQ. YD.	985	\$ 95.50	\$ 94,068
JOINT WATERPOOFING	LIN. FT.	162	\$ 20.00	\$ 3,240
DAMPPROOFING	SQ. YD.	144	\$ 31.50	\$ 4,536
				\$ 4,752,000
			Total	\$ 9,652,000
			Contingency (20%)	\$ 1,930,000
			Total	\$ 11,600,000