I. - INTRODUCTION

This chapter includes:

- Estimates of capital cost to bring restore rail service to Perry and to upgrade various connecting tracks in eastern Washington County up to three different levels of improvement.
- A description of how costs were derived, overall methodology and assumptions.
- Also included are order of magnitude cost estimates for the transload facility in Perry. Both the minimum, Phase 1 layout and maximum Phase 3 layout illustrated in the previous chapter are included.

II. - TRACK COSTS

The three levels of upgrading include bringing track up to Class 1 and Class 2 conditions as defined by the Federal Railroad Administration (FRA) within the Code of Federal Regulations dealing with track safety standards. That is Title 49, Part 213, Subpart A to F, Class of Track 1-5.1 Also included is the cost to bring the track up to standards that would allow for operation at FRA Class 2 with 286,000 lb cars, versus 263,000 lb cars.

The classes of track represent varying overall track condition defined by geometric deviation horizontally and vertically (how straight and how smooth are the rails), deviation from gauge (the distance between the two rails), the number of "good" ties per unit (typically a 39 foot rail length), and a "good" tie within a minimum prescribed distance from a rail joint. The higher the FRA classification number, the better the overall condition of the track and the higher the operating speed allowed.

There is an additional classification known as "excepted" track. This is track in poor condition, below that of Class 1, but can be operated for freight service only at no more than 10 MPH, not more than 5 cars of hazardous material can be carried in a single train, no passenger trains with passengers on board and a number of other restrictions.

TABLE 7-1 MAXIMUM ALLOWABLE SPEEDS **EXCEPTED TRACK TO FRA CLASS 5**

FRA CLASS	FREIGHT	PASSENGER	
Excepted	10 MPH	Not Allowed	
Class 1	10 MPH	15 MPH	
Class 2	25 MPH	30 MPH	
Class 3	40 MPH	60 MPH	
Class 4	60 MPH	80 MPH	
Class 5	80 MPH	90 MPH	

¹ Actually, under Title 49, there are nine classes of track plus the category known as "Excepted" track. Classes 6-9 are high speed corridors (up to 150 MPH for Class 8 and up to 200 MPH for Class 9)

III - METHODOLOGY & ASSUMPTIONS

To develop mile by mile capital cost estimates to upgrade the various rail lines to two FRA track classifications and for 286K rail car loadings the following steps were undertaken and various assumptions made:

A. Field Inspections

- miles).
- 2. Hi-rail inspection of Maine DOT owned tracks from St. Croix Jct. to Ayers Jct.
- 3. A walking inspection of former Eastport Branch ROW from Ayers Jct. to Perry.

All inspections were conducted in June 16 to 19, 2009.

Track charts of the lines (except Eastport Branch) showing the limits of types of ballast, curves, size of tie plates and other data were consulted to assist in a mile by mile tabulation that included the grade crossings, bridges and culverts.

Typical unit costs for the various elements of the track work were then applied to the estimated quantities on a mile by mile basis.

B. Comments on Condition Related to Costs and Cost Summaries

In developing a program to upgrade track to a certain level there is a margin of subjective opinion as to what the minimum actions should be, the methods; and from that, costs to achieve a certain condition.

The fact that the Maine DOT segment from St. Croix Jct. to Ayers Jct has been out of service for over 20 years, had no maintenance at all during that period except important holding actions by MEDOT over the last several years, and was not up to high standards at the time service was suspended; point to the need for a substantial program to put the line in a good condition that can then be maintained.

We have taken a conservative approach to provide a level of repair at each FRA track classification to assure a track condition that could be maintained at that class for at least 5 years without ongoing heavy maintenance and repairs. Towards that end, we have estimated more tie replacements than the minimum to meet class, considerable ditching for drainage, excavation of fouled gravel ballast areas, sufficient new rock ballast, complete reconstruction of all grade crossings. This approach results in a higher cost per mile than other recent up-grade examples that could be cited, however, over time, this approach will be less expensive and assure that the track does not suddenly deteriorate to the next lower classification.

Based on visual inspection, the existing 85 lb rail and joint bar assemblies appear to be sufficient for FRA track classifications 1 and 2; provided a good tie condition is achieved to adequately support this light rail

1. A hi-rail² trip was conducted over the Pan Am Railway owned segment from Woodland to Calais (10

 2 Hi-rail is a term used to describe what is otherwise an over- the road vehicle (such as pick-up truck) equipped with flip-down railroad wheels at both ends. This allows the truck to operate along tracks using its regular tires for propulsion but steered and



kept on the tracks by the small rail wheels at each end.

section and 286,000 lb cars are not operated. If the track is required to support 286,000 lb cars at 25 MPH operation as Class 2, new rail, most likely 115 RE, would be recommended.

The net result of this approach and circumstances for 24 miles of railroad with existing track in place is an average cost per mile and per foot as noted below

	REH	TABLE 7-2 ABILITATION BY CLASS	COSTS	
	FRA	AVERAGE	AVERAGE	
	CLASS	COST/MILE	COST/FOOT	
	1	\$398,000	\$75	
	2	\$459,000	\$87	
2 w	7/286K	\$1,116,000	\$211	

The small difference between Class 1 and 2 is because of the base cost of rebuilding all the crossings, repairing all the bridges common to all levels of upgrading with the only major additional cost from Class 1 to 2 generally related to replacing some additional ties and providing some additional ballast.

The large increase in cost to FRA Class 2 with 286K loading is mostly related to the complete replacement of the rail and OTM (other track material). The Class 2 - 286K upgrade is essentially a complete removal of existing track, salvaging some of the ties and putting down an all new track structure.

For the FRA Class 1 and 2 conditions, applying a less conservative approach to providing a sustainable track condition could result in a cost reduction. This is not recommended since the cost will be greater over time, and without significant yearly maintenance, could result in the track slipping into a lower classification.

Due to the relatively small difference in cost between FRA Class 1 and 2, it would be prudent to not consider upgrading to just a Class 1 condition.

For the 8.12 miles between Ayers Junction and Route 1 in Perry, an all new track structure is required along with replacement of three bridges, one of which is 200 feet long. We have estimated the cost using both relay 100 lb rail and new 115 RE rail. Due to the relatively high cost of No. 1 relay rail in the current market, the cost differential between relay and new rail is not significant. It would be prudent therefore to consider using all new rail between Ayers Junction and the proposed transload facility in Perry.

TABLE 7-3 NEW RAILROAD CONSTRUCTION COSTS AYERS JUNCTION TO PERRY RELAY 100 LB RAIL VERSUS NEW 115 LB RAIL

RAIL SECTION	AVERAGE COST/MILE	AVERAGE COST/FOOT	
100 lb 115 lb	\$1,620,000 \$1,744,000	\$307 \$330	

Above numbers include replacement costs for two bridges totaling \$3,400,000 and grade crossing upgrades with warning systems totaling \$1.1 million. Not included in above costs is a third bridge at MP 262.90, the turntable bridge over the Little River. That bridge is not required for any of the Perry Sites except Site 1.

C. Tie Condition Issues

The most obvious need is the poor tie condition. In many sections the tie condition is so bad that in the case of bringing the tie condition up to just an FRA Class 1 condition, there would remain large spans of rail with insufficient vertical support. We have calculated more new ties than necessary to just bring the track to that class.

D. Rail and Joint Bars

The existing 85 lb rail appears to be in fair condition. The joint bars are a mixture of more modern design (headfree, toeless) and older style Weber joints. The majority are the head free design. With a good tie condition, this rail should be sufficient for service up to FRA Class 2 but not for FRA Class 2 with 286K loading. Complete rail replacement to a minimum of 100 lb rail to achieve operation of the heavier cars is required.

On the Pan Am segment there are several miles of 75 lb rail. Most of this is in very poor condition and must be replaced for all three conditions.

E. Grade Crossings

There are a number of grade crossings along the route, both public, paved crossings and several gravel crossings both public and private. Most of the crossings (except the crossings on the active Pan Am segment) have been paved over and have not been rebuilt prior to cessation of rail service on the Maine DOT segment.

For main road crossings we assumed a complete renewal, taking out the old track, constructing new track through the crossings with new ties, crushed rock ballast, underdrains for drainage, hot mix asphalt underlayment under the ballast or geotextile fabric, new 115 RE welded rail and rubber rail seal and bituminous road surface. Proper transitions from the 115 lb rail to 85 lb rail have also been included.



F. Automatic Highway Crossing Warning Systems

We have assumed that all public road crossings would have automatic highway crossing warning systems installed. At a minimum, flashers with audible warning, and at some major crossings such as Route 1, with the addition of crossing gates.

Passive warning system (cross bucks) would be installed at all private, farm type crossings.

G. Rail Anchors

There are few to no rail anchors on most of the 85 lb rail. Minimal use of rail anchors was apparently standard Maine Central practice. This would explain the large amount of slued and bunched ties noted at various locations. For Class 1 and 2 conditions, we have estimated cost for purchasing and installing sufficient rail anchors as is generally recommended and practiced today. The unit cost is the cost for the anchor plus installation.

H. Tie Plates

Many of the existing tie plates are small, flat or single shoulder plates. For FRA Class 1 and 2 upgrades we have included cost to replace plates where rail is to be replaced with a heavier rail section. Existing tie plates would be reused under the 85 lb rail to minimize mixing flat and canted tie plates in track.

I. Rail

Class 1 and 2 would generally reuse the existing 85 lb. rail with a few replacements in kind where visual and ultrasonic testing revealed flaws. For FRA Class 2 with 286K cars we have assumed all new 115 RE rail. The cost noted for the rail includes removal of the present track structure, rail purchase, OTM and installation cost for the new rail.

IV. – TRACK ESTIMATE TABLES

The tables on the following pages summarize the above items on a mile by mile basis, showing the estimated cost for each mile and a cumulative cost. Note that the mileposts on the Pan Am active segment start at milepost "0" in Calais and increase in the direction towards Woodland. Mileages on other segments are based on the Maine Central mileposts with Portland being "0".

V. TRANSLOAD FACILITY ESTIMATES

We have assumed that the location for the transload will be Site 4 as identified in Chapter 3. We have estimated both the small, Phase 1 layout as well as the much larger Phase 3 layout. These estimates are at the very rear of this chapter.

Earthwork quantities are very approximate, based on limited vertical data available at the site and an assumed profile for the incoming track and grading of the facility. We also assumed 25% of the excavation would be in rock. If that assumption is incorrect, the earthwork costs could change significantly. We have also made assumptions as to the level of fire protection that would be required, the extent of supporting facilities that would be required at the two phases, and amount of environmental remediation that maybe necessary.



EASTPORT RAIL STUDY COST ESTIMATE FOR FRA CLASS 1 TRACK CONDITION TODD STREET CALAIS TO ST. CROIX JCT.

							SWI	тсн	TUR	NOUT	SHOU	JLDER			RA	лL	TRAC	K BOLT	В	OLT							BI	RIDGE	SM	ALL	GRADE CI	ROSSINGS	GRADE	CROSSI	NGS WARNIN	G SYSTEM	TOTAL	CUMULATIVE
MILE	DITC	HING	CLEAR	ING	T	IES	TIM	BER	REPAIR/	REPLACE	PLO	WING	TIE PL	ATES	ANCI	HORS	ASSE	MBLIES	TIGH	TENING	R	IL	BAL	LAST	SURFA	CING	RE	PAIRS	CULV	ERTS	PRIV	ATE	Р	BLIC	ACTIVE	PASSIVE	COST	COST
	UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT				PER	
	COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST				MILE	
	\$5.00	LF	\$5.000.00	MILE	\$70.00	EA	\$12.00	FT	Varies	EA	\$3.50	TF	\$9.00	EA	\$4.00	EA	\$4.00	EA	\$9.00	Joint	\$30.00	TF	\$18.00	TON	\$3.00	TF	Varies	EA	\$3.000	EA	\$4.000	EA	\$375	LI	7			
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Qauntity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Co	st			
0.62 End of Track to 1	600	\$3.000	0.10	\$500	600	\$42.000	456	\$5,472			2.000	\$7.000		\$0	1.300	\$5,200	60	\$24	0 150	\$1.35) 100	\$3.000	410	\$7.38	3200	\$9.600			1	\$3.000					\$0		\$87.742	\$87.742
1 to 2	1600	\$8.000	0.25	\$1,250	1.400	\$98.000		\$0			5,280	\$18,480		\$0	3,600	\$14.400	120	\$48	0 320	\$2.88	1450	\$43,500	1.200	\$21,600	5280	\$15,840			2	\$6.000			64	s	24.000 \$250.000		\$504.430	\$592,172
2 to 3	1600	\$8,000	0.25	\$1,250	1,950	\$136.500	1.200	\$14.400	Baring	\$30.000	5,280	\$18,480		\$0	5,700	\$22,800	200	\$80	0 525	\$4.72	5 400	\$12,000	1,200	\$21,600	8700	\$26,100			2	\$6,000				, .	\$0		\$302,655	\$894.827
3 to 3 13 (266 87)	400	\$2,000	0.05	\$250	200	\$14.000	1,200	\$1,100	burng	\$20,000	690	\$2.415		\$0	1 080	\$4 320	16	\$6	4 42	\$37	30	\$1 170	160	\$2 880	685	\$2.055			-	\$3,000					\$0		\$32 532	\$927 359
St. Croix Bridge (260.02)	100	\$2,000	0.05	\$250 \$0	50	\$2.500		90 \$0	1	\$25.000	0,0	\$2,415		\$0 \$0	1,000	\$160	10	φυ ¢	<u>-</u>	\$376 \$1	100	\$2,000	50	\$000	120	\$2,055		\$1.000.00	<u> </u>	\$5,000					\$0		\$1 022,552	\$1.960.779
St. Croix Bridge (209.02)	100	\$300		ŞU.	30	\$3,300	, 		1	\$43,000	0	şu		şu	40	\$100		φ	0	ą	/ 100	\$3,000	30	\$900	5 120	\$300		\$1,000,00	,	3 0					30		\$1,055,420	\$1,900,779
ITEM	4,300	\$21,500	\$1	\$3,250	\$4,200	\$294,000	\$1,656	\$19,872	\$1	\$55,000	\$13,250	\$46,375	\$0	\$0	\$11,720	\$46,880	\$396	\$1,58	4 \$1,037	\$9,33.	\$2,089	\$62,670	\$3,020	\$54,360	\$17,985	\$53,955	\$1	\$1,000,00) 6	\$18,000	0	\$0	64	\$2	24,000 \$250,000	\$0	\$1,960,779	
TOTAL																																						

EASTPORT RAIL STUDY COST ESTIMATE FOR FRA CLASS 2 TRACK CONDITION TODD STREET CALAIS TO ST. CROIX JCT.

							SWI	ІТСН	TURN	NOUT	SHOU	LDER			R	AIL	TRAC	K BOLT	E	OLT							BR	IDGE	SM	ALL	GRADE C	ROSSING	GRADE	CROSSINGS	WARNI	NG SYSTEM	TOTAL	CUMULATIVE
MILE	DITCH	HING	CLEAI	RING		TIES	TIM	1BER	REPAIR/I	REPLACE	PLO	WING	TIE PI	ATES	ANC	HORS	ASSE	MBLIES	TIGH	TENING		RAIL	BA	LLAST	SUR	FACING	RE	PAIRS	CULV	VERTS	PRI	VATE	Р	UBLIC	ACTIVE	PASSIVE	COST	COST
	UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNI		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT				PER	
	COST		COST		COST	r	COST		COST		COST		COST		COST		COST		COST		COS	r	COST		COST		COST		COST		COST		COST				MILE	
	\$5.00	LF	\$5,000.00	MILE	\$70.0	0 EA	\$12.00	FT	Varies	EA	\$3.50	TF	\$9.00	EA	\$4.00	EA	\$4.00	EA	\$9.00	Joint	\$30.0) TF	\$18.00	TON	\$3.00	TF	Varies	EA	\$3,000	EA	\$4,000	EA	\$375	LF				
	Quantity	Cost	Quantity	Cost	Quanti	ity Cost	Quantity	v Cost	Qauntity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quant	ty Cost	Quantit	y Cost	Quantit	y Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost				
0.62 End of Track to 1	600	\$3,000	0.10	\$500) 8	\$59,50	0 450	6 \$5,472			2,000	\$7,000		\$0	1,300	\$5,20	60	\$24	0 150	\$1,	50 1	00 \$3,00	0 82	0 \$14,76	640	0 \$19,200			1	\$3,000				4	0		\$122,222	\$122,222
1 to 2	1,600	\$8,000	0.25	\$1,250	2,0	00 \$140,00	0	\$0			5,280	\$18,480		\$0	3,600	\$14,40	120	\$48	0 320	\$2,8	80 14	50 \$43,50	0 2,15	\$38,70	0 1056	0 \$31,680			2	\$6,000			6	\$24,00	0 \$250,00)	\$579,370	\$701,592
2 to 3	1,600	\$8,000	0.25	\$1,250	2,5	50 \$178,50	0 1,200	0 \$14,400	Baring	\$30,000	5,280	\$18,480		\$0	5,700	\$22,80	200	\$80	0 525	\$4,3	25 4	00 \$12,0	3,00	0 \$54,00	0 1056	0 \$31,680			2	\$6,000				4	0		\$382,635	\$1,084,227
3 to 3.13 (266.87)	400	\$2,000	0.05	\$250) 2	\$17,50	0	\$0			690	\$2,415		\$0	1,080	\$4,32	16	\$6	4 42	\$3	78	39 \$1,12	0 30	0 \$5,40	0 137	0 \$4,110			1	\$3,000					0		\$40,607	\$1,124,834
St. Croix Bridge (269.02)	100	\$500		\$0)	50 \$3,50	0	\$0	1	\$25,000	0	\$0		\$0	40	\$16		\$	0		\$0 1	00 \$3,0	00 7	5 \$1,35	50 24	0 \$720	1	\$1,000,00	00	\$0				5	0		\$1,034,230	\$2,159,064
ITEM	4,300	\$21,500	\$1	\$3,250	\$5,7	00 \$399,00	0 \$1,650	6 \$19,872	\$1	\$55,000	\$13,250	\$46,375	\$0	\$0	\$11,720	\$46,88	\$396	\$1,58	4 \$1,037	\$9,3	33 \$2,0	89 \$62,63	0 \$6,34	5 \$114,21	.0 \$29,13	0 \$87,390	\$1	\$1,000,00	00 6	\$18,000	0) \$) 6	\$24,00	0 \$250,00) \$0	\$2,159,064	
TOTAL																																						

NOTES:

1. Milepost 0.62 is approxmate milepost at end of track. This is between the connection to New Brunswick Southern Railway at Milltown Jct. and Todd Street in Calais.

2. St. Croix Jct. is up to but not including the turnout between the line to Woodland and the line to Ayers Jct.

3. The St. Croix Bridge connecting to the New Brunswick Southern Railway in St. Stephen, NB is included as the last line item above.

4. Quantities reflect upgrading Track 5 (near the old roundhouse at Milltown Jct.) between Milepost 0.62 and 1 and the 2 sidings at Campbells between Milepost 2 and 3.

Chapter 7 Cost Estimates

COST PER MILE

\$781,187 \$382,780

TRACK ONLY

COST PER MILE

TRACK ONLY

\$860,185

\$461,778



EASTPORT RAIL STUDY COST ESTIMATE FOR FRA CLASS I TRACK CONDITION ST. CROIX JCT. TO WOODLAND (BAILEYVILLE)

							SV	VITCH	TUR	NOUT	SHO	ULDER			R	AIL	TRAG	K BOLT	в	OLT							BR	IDGE	SM	ALL	GRADE C	ROSSINGS	GRADE	ROSSINGS	WARNIN	IG SYSTE
MILE	DITC	HING	CLEA	RING	т	ES	т	MBER	REPAIR/	REPLACE	PLO	WING	TIE P	LATES	ANC	HORS	ASSE	MBLIES	TIGH	TENING	R	AIL	BAL	LAST	SURF	ACING	RE	PAIRS	CULV	ERTS	PRI	VATE	PU	BLIC	ACTIVE	PASSIV
	UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT			
	COST		COST		COST		cost	г	COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST	1	COST	i -		
	\$5.00	LF	\$5,000.00	MILE	\$70.00	EA	\$12.00	0 FT	Varies	EA	\$3.50	TF	\$9.00	EA	\$4.00	EA	\$4.00	EA	\$9.00	Joint	\$50.00	TF	\$18.00	TON	\$3.00	TF	Varies	EA	\$3,000	EA	\$4,000	EA	\$375	LF	\$200,004	0 \$5,0
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quanti	ty Cost	Qauntity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost		
St. Croix to Rte. 1		\$0	0.5	5 \$2,500	295	\$20,650)	\$0			1,800	\$6,300	2,160	\$19,440	750	\$3,000	12	\$48		\$0	1,800	\$90,000	360	\$6,480	1,800	\$5,400			2	\$6,000	,			\$(,	
3.13 to 4	3200	\$16,000	0.5	5 \$2,500	920	\$64,400) 4	15 \$4,980	1	\$25,000	4,600	\$16,100) 1,450	\$13,050	3,200	\$12,800	60	\$240	265	\$2,385	700	\$35,000	1,540	\$27,720	4,600	\$13,800			7	\$21,000)			\$(,	
4 to 4.65 (Bridge)	2400	\$12,000	0.5	5 \$2,500	680	\$47,600)	\$0			3,870	\$13,545	5 1,360	\$12,240	2,400	\$9,600	40	\$160	200	\$1,800	515	\$25,750	1,160	\$20,880	3,900	\$11,700	1	\$500,000	2	\$6,000)		ļ	\$(,	
4.65 to 5	800	\$4,000	0.1	\$750	350	\$24,500)	\$0			1,850	\$6,475	5	\$0	2,180	\$8,720	50	\$200	112	\$1,008	2640	\$132,000	500	\$9,000	1,850	\$5,550			3	\$9,000)			\$()	
5 to 6	2200	\$11,000	0.4	\$2,000	1,000	\$70,000)	\$0			5,280	\$18,480	1,550	\$13,950	4,350	\$17,400		\$0	160	\$1,440	5280	\$264,000	1,425	\$25,650	5,280	\$15,840			4	\$12,000)			\$()	
6 to 7	2200	\$11,000	0.4	\$2,000	1,000	\$70,000)	\$0			5,280	\$18,480	3,100	\$27,900	4,350	\$17,400		\$0		\$0	5280	\$264,000	1,425	\$25,650	5,280	\$15,840			4	\$12,000)		ļ	\$()	
7 to 8	2200	\$11,000	0.4	\$2,000	1,000	\$70,000)	\$0			5280	\$18,480	3,100	\$27,900	4,350	\$17,400)	\$0		\$0	5280	\$264,000	1,425	\$25,650	5,280	\$15,840			6	\$18,000) 1	\$4,000	!	\$()	
8 to 9	2200	\$11,000	0.4	\$2,000	1,000	\$70,000)	\$0			5280	\$18,480	3,100	\$27,900	4,350	\$17,400		\$0		\$0	5280	\$264,000	1,425	\$25,650	5,280	\$15,840	1	\$100,000	5	\$15,000) 1	\$4,000	!	\$0	,	
9 to 9.77 (Bridge)	1600	\$8,000	0.3	\$1,250	770	\$53,900)	\$0			3600	\$12,600	2,380	\$21,420	3,350	\$13,400		\$0		\$0	4065	\$203,250	1,100	\$19,800	4,100	\$12,300	1	\$1,000,000	3	\$9,000	ı	\$0	,	\$(,	
9.77 to 10		\$0	•	\$0	180	\$12,600) 4	60 \$5,520	2	\$30,000		\$0)	\$0	360	\$1,440	25	\$100	56	\$504	l		250	\$4,500	1,100	\$3,300			1	\$3,000	,	<u> </u>	<u> </u>			
10 to 11 (Yard)		\$0		\$0	1,700	\$119,000	2	75 \$3,300	7	\$28,000	1800	\$6,300	200	\$1,800	4,400	\$17,600	100	\$400	590	\$5,310	350	\$17,500	600	\$10,800	2,400	\$7,200			2	\$6,000		\$0		ļ	\square	
11 to end of trk.		\$0		\$0	80	\$5,600	0 2	75 \$3,300				\$()	\$0	300	\$1,200	20	\$80	30	\$270		\$0		\$0)	\$0				\$0	,	\$0		Ļ		
SUB - TOTAL	16,800	\$84,000	. 3	\$15,000	8,680	\$607,600) 1,4	25 17,100	10	\$83,000	36,840	\$128,940	16,240	\$146,160	33,590	\$134,360	295	\$1,180	1,413	\$12,717	29,390	\$1,469,500	10,850	\$195,300	39,070	\$117,210	3	1,600,000	37	\$111,000	2	\$8,000	0	\$C	, (D
MAIN TRACK																															<u> </u>	 '	ļ!		<u> </u>	
East Wye to OSB		\$0			460	\$32,200	5	20 \$6,240			2,600	\$9,10	600	\$5,400	1,100	\$4,400	100	\$400	170	\$1,530		\$0	600	\$10,800	2,700	\$8,100)		1	\$3,000	,	\$0	240	\$90,000	<u> </u>	2 \$10,0
West Wye		\$0			165	\$11,550)					\$0	200	\$1,800	350	\$1,400	20	\$80	50	\$450		\$0	200	\$3,600	900	\$2,700				\$0	,	\$0		\$0	<u> </u>	<u> </u>
SUB-TOTAL	0	0) () (625	\$43,750	5	20 \$6,240	() \$(2,600	\$9,100	800	\$7,200	1,450	\$5,800	120	\$480	220	\$1,980	0	\$0	800	\$14,400	3,600	\$10,800	0 0	0	1	\$3,000	, 0	\$0	240	\$90,000	<u> </u>	2 10,0
TOTAL																																<u> </u>				

COST PER MILE (Excluding spur to LP Mill) TRACK ONLY

COST SUMMARY TRACK ONLY
Woodland from St. Croix River Bridge around Wye and Yard at Domtar Mill

East and West Wye and Track to Louisiana Pacific OSB Mill

St. Croix Jct. to Route 1 Grade Crossing (Owned by Pan Am Railway)

Canada to St. Croix Jct.

5.12 Miles in Canada

EASTPORT RAIL STUDY COST ESTIMATE FOR FRA CLASS 2 TRACK CONDITION ST. CROIX JCT. TO WOODLAND (BAILEYVILLE)

							SWI	гсн	TURM	OUT	SHOU	LDER			RA	IL	TRAC	K BOLT	BC	LT							BRI	DGE	SM	ALL	GRADE CF	ROSSINGS	GRADE CF	OSSINGS	WARNIN	3 SYST
MILE	DITC	HING	CLEAF	RING	т	ES	TIM	BER	REPAIR/I	REPLACE	PLO	VING	TIE PI	ATES	ANCI	IORS	ASSE	MBLIES	TIGHT	ENING	R	AIL	BAL	LAST	SURF	ACING	REF	AIRS	CULV	ERTS	PRI	ATE	PUB	LIC	ACTIVE	PASSI
	UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT			
	COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST		COST			
	\$5.00	LF	\$5,000.00	MILE	\$70.00	EA	\$12.00	FT	Varies	EA	\$3.50	TF	\$9.00	EA	\$4.00	EA	\$4.00	EA	\$12.00	Joint	\$50.00	TF	\$18.00	TON	\$3.00	TF	Varies	EA	\$3,000	EA	\$4,000	EA	\$375	LF	\$200,000	\$2
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Qauntity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost		
St. Croix to Rte. 1		\$0	0.5	\$2,500	430	\$30,100		\$0			1,800	\$6,300	2,160	\$19,440	750	\$3,000	12	\$48		\$0	1,800	\$90,000	720	\$12,960	3,600	\$10,800			2	\$6,000				\$0		-
3.13 to 4	3200	\$16,000	0.5	\$2,500	1,380	\$96,600	415	\$4,980	1	\$25,000	4,600	\$16,100	1,450	\$13,050	3,200	\$12,800	60	\$240	265	\$3,180	700	\$35,000	3,000	\$54,000	9,200	\$27,600			7	\$21,000				\$0		
4 to 4.65 (Bridge)	2400	\$12,000	0.5	\$2,500	1,020	\$71,400		\$0			3,870	\$13,545	2,040	\$18,360	2,400	\$9,600	40	\$160	200	\$2,400	515	\$25,750	2,300	\$41,400	7,800	\$23,400	1	\$500,000	2	\$6,000				\$0		
4.65 to 5	800	\$4,000	0.2	\$750	350	\$24,500		\$0			1,850	\$6,475		\$0	2,180	\$8,720	50	\$200	112	\$1,344	2640	\$132,000	1,000	\$18,000	3,700	\$11,100			3	\$9,000				\$0		
5 to 6	2200	\$11,000	0.4	\$2,000	1,000	\$70,000		\$0			5,280	\$18,480	1,550	\$13,950	4,350	\$17,400		\$0	160	\$1,920	5280	\$264,000	2,850	\$51,300	10,560	\$31,680			4	\$12,000				\$0		
6 to 7	2200	\$11,000	0.4	\$2,000	1,000	\$70,000		\$0			5,280	\$18,480	3,100	\$27,900	4,350	\$17,400		\$0		\$0	5280	\$264,000	2,850	\$51,300	10,560	\$31,680			4	\$12,000				\$0		
7 to 8	2200	\$11,000	0.4	\$2,000	1,000	\$70,000		\$0			5280	\$18,480	3,100	\$27,900	4,350	\$17,400		\$0		\$0	5280	\$264,000	2,850	\$51,300	10,560	\$31,680			6	\$18,000	1	\$4,000		\$0		
8 to 9	2200	\$11,000	0.4	\$2,000	1,000	\$70,000		\$0			5280	\$18,480	3,100	\$27,900	4,350	\$17,400		\$0		\$0	5280	\$264,000	2,850	\$51,300	10,560	\$31,680	1	\$100,000	5	\$15,000	1	\$4,000		\$0		
9 to 9.77 (Bridge)	1600	\$8,000	0.3	\$1,250	770	\$53,900		\$0			3600	\$12,600	2,380	\$21,420	3,350	\$13,400		\$0		\$0	4065	\$203,250	2,200	\$39,600	8,200	\$24,600	1	\$1,000,000	3	\$9,000				\$0		
9.77 to 10		\$0		\$0	180	\$12,600	460	\$5,520	2	\$30,000		\$0		\$0	360	\$1,440	25	\$100	56	\$672		\$0	250	\$4,500	1100	\$3,300			1	\$3,000						
10 to 11 (Yard)		\$0		\$0	1,700	\$119,000	275	\$3,300	7	\$28,000	1800	\$6,300	2,360	\$21,240	4,400	\$17,600	100	\$400	590	\$7,080	2150	\$107,500	1,000	\$18,000	2400	\$7,200			2	\$6,000						
11 to end of trk.		\$0		\$0	80	\$5,600	275	\$3,300				\$0		\$0	300	\$1,200	20	\$80	30	\$360		\$0)	\$0		\$0				\$0						
SUB - TOTAL	16,800	84,000	4	17,500	9,910	693,700	1,425	17,100	10	83,000	38,640	135,240	21,240	191,160	34,340	137,360	307	1,228	1,413	16,956	32,990	1,649,500	21,870	393,660	78,240	234,720	3	1,600,000	39	117,000	2	8,000	0	0	0	
MAIN TRACK																																				
East Wye to OSB		\$0			460	\$32,200	520	\$6,240			2,600	\$9,100	600	\$5,400	1,100	\$4,400	100	\$400	170	\$1,530		\$0	600	\$10,800	2700	\$8,100			1	\$3,000		\$0	240	\$90,000	2	\$16
West Wye		\$0			165	\$11,550						\$0	200	\$1,800	350	\$1,400	20	\$80	50	\$450		\$0	200	\$3,600	900	\$2,700				\$0		\$0		\$0		
SUB-TOTAL	0	0	0	0	625	43,750	520	6,240	0	0	2,600	9,100	m	7,200	1,450	5,800	120	480	220	1,980	0	0	800	14,400	3,600	10,800	0	0	1	3,000	0	0	240	90,000	2	16
TOTAL																																				-
																															-					-

NOTES:

1. Segment is from St. Croix Jct to Baileyville (Woodland) and around the sharpest leg of the wye to the Domtar pulp mill.

2. East wye is the leg of wye closest to St. Croix River (one end of which has been removed).

3. West wye is the segment from the Domtar pulp mill straight towards the LP OSB mill.

4. Odd mileages at 4.65 and 9.77 are centerlines of bridges over the St. Croix River and presumably the International Border. A separate accounting of work in New Brunswick is required.

Maine Department of Transportation

COST PER MILE (Excluding spur to LP Mill) TRACK ONLY

Woodland from St. Croix River Bridge around Wye and Yard at Domtar Mill

East and West Wye and Track to Louisiana Pacific OSB Mill

St. Croix Jct. to Route 1 Grade Crossing (Owned by Pan Am Railway)

Canada to St. Croix Jct. 5.12 Miles in Canada

COST SUMMARY

Chapter 7 Cost Estimates

м	TOTAL	CUMULATIVE
Е	COST	COST
	PER	
	MILE/SEGMENT	
000		
	\$159,818	
	\$254,975	\$414,793
	\$663,775	\$1,078,568
	\$201,203	\$1,279,771
	\$451,760	\$1,731,531
	\$464,270	\$2,195,801
	\$474,270	\$2,670,071
	\$571,270	\$3,241,341
	\$1,354,920	\$4,596,261
	\$60,964	\$4,657,225
	\$223,210	\$4,880,435
	\$10,450	\$4,890,885
0	\$4,890,885	
000	\$181,172	
	\$21,580	
000	\$202,752	\$5,093,637
	\$606,058	
	\$409.314	

\$294,624 \$202,752 \$159,818 \$918,750 \$3,517,693

м	TOTAL	CUMULATIVE
Е	COST	COST
	PER	
	MILE/SEGMENT	
000		
	\$181,148	
	\$328,050	\$509,198
	\$726,515	\$1,235,713
	\$216,089	\$1,451,802
	\$493,730	\$1,945,532
	\$505,760	\$2,451,292
	\$515,760	\$2,967,052
	\$612,760	\$3,579,812
	\$1,387,020	\$4,966,832
	\$61,132	\$5,027,964
	\$341,620	\$5,369,584
	\$10,540	\$5,380,124
0	5,380,124	
000	\$181,172	
	\$21,580	
000	\$202,752	\$5,582,876
	\$ 669,170	
	\$470,165	
		\$413,292
		\$202,752
		\$101 140

\$202,752 \$181,148 \$1,054,565 \$3,731,119



Eastport Freight Rail Restoration Study Preliminary Report and Cost Estimates

														COSTES	E. FIMATE I AYEI	ASTPORT FOR FRA RS JCT, TC	RAIL STU CLASS 1 7) ST. CRO	JDY FRACK COND IX JCT.	ITION													
					SWI	тсн	TUR	NOUT	SHOULDER			R	AIL .	TRAC	K BOLT	вс	OLT	85 LB RAIL					SN	IALL	GRADE C	ROSSINGS	GRADE C	ROSSINGS	WARNIN	G SYSTEM	TOTAL	CUMULATIVE
MILE	DIT	CHING	CLEARING	TIES	ТІМ	IBER	REPAIR/I	REPLACE	PLOWING	TIE PL	ATES	ANC	HORS	ASSEM	ABLIES	TIGHI	ENING	REPLACE	BAL	LAST	SURFACING	BRIDGE REPAIRS	CUL	VERTS	PRIV	VATE	PUF	BLIC	ACTIVE	PASSIVE	соят	COST
	UNIT		UNIT UNIT		UNIT		UNIT		UNIT	UNIT		UNIT		UNIT		UNIT		UNIT	UNIT		UNIT	UNIT	UNIT		UNIT		UNIT	ļļ			PER	
	COST		COST COST		COST		COST		COST	COST		COST		COST		COST		COST	COST		COST	COST	COST		COST		COST	ļļ			MILE	
	\$5.00	LF	\$10,000.00 MILE \$70.00	EA	\$12.00	FT	Varies	EA	\$3.50 TF	\$9.00	EA	\$4.00	EA	\$4.00	EA	\$12.00	Joint	\$25.00 TF	\$18.00	TON	\$3.00 TF		\$3,000.0	0 EA			\$375	TF	\$200,000	LF		
	Quantit	y Cost	Quantity Cost Quantity	y Cost	Quantity	Cost	Qauntity	Cost	Quantity Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity Cost	Quantity	Cost	Quantity Cost	Quantity Cost	Quantity	y Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost		
East Wye (1,165) 40	\$2,000	0.3 \$3,000 40	0 \$28,00	0 692	\$8,304	1	\$5,000	1165 \$4,078	8	\$0	830	\$3,320	25	\$100	70	\$840	66 \$1,65	0 293	\$5,265	1165 \$3,49	95		2 \$6,000				\$0			\$69,402	\$69,402
254.40 to 255	340	\$17,000	0.6 \$6,000 77	0 \$53,90	0	\$0)		3168 \$11,088	8	\$0	1,670	\$6,680	40	\$160	190	\$2,280	132 \$3,30	0 774	\$13,932	3168 \$9,50	4		3 \$9,000				\$0			\$129,544	\$198,946
255 to 256	570	\$28,500	1.0 \$10,000 1,19	0 \$83,30	0	\$0)		5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	10	1	2 \$36,000			32	\$12,000	1	\$200,000	\$442,529	\$641,475
256 to 257	580	\$29,000	1.0 \$10,000 1,19	0 \$83,30	0	\$0)		5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	0 1 \$150,00	0 1	\$50,000				\$0			\$395,028	\$1,036,503
257 to 258	580	\$29,000	1.0 \$10,000 1,19	0 \$83,30	0	\$0	1	\$5,000	5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	0		2 \$6,000			56	\$21,000	1	\$200,000	\$427,029	\$1,463,532
258 to 259	570	\$28,500	1.0 \$10,000 1,19	0 \$83,30	0				5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	1 \$250,00	0	3 \$9,000		\$0)	\$0			\$453,528	\$1,917,060
259 to 260	580	\$29,000	1.0 \$10,000 1,19	0 \$83,30	0				5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	0		3 \$9,000		\$0)	\$0			\$204,028	\$2,121,088
260 to 261	580	\$29,000	1.0 \$10,000 1,19	0 \$83,30	0				5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	0		4 \$12,000		\$()	\$0			\$207,028	\$2,328,116
261 to 262	580	\$29,000	1.0 \$10,000 1,19	0 \$83,30	0				5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	0		5 \$15,000		\$0) 115	\$43,125	1	\$225,000	\$478,154	\$2,806,270
262 to 263	580	\$29,000	1.0 \$10,000 1,19	0 \$83,30	0				5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	0		4 \$12,000				ļ			\$207,028	\$3,013,298
263 to 264	580	\$29,000	1.0 \$10,000 1,19	0 \$83,30	0				5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	0		6 \$18,000		\$0)	\$0			\$213,028	\$3,226,326
264 to 265	580	\$29,000	1.0 \$10,000 1,19	0 \$83,30	0				5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	0		5 \$15,000		\$0	64	\$24,000	2	\$400,000	\$634,030	\$3,860,356
265 to 266	580	\$29,000	1.0 \$10,000 1,19	0 \$83,30	0				5280 \$18,480	D	\$0	2,780	\$11,120	66	\$264	320	\$3,840	231 \$5,77	5 1,288	\$23,184	5280 \$15,84	0		4 \$12,000		\$0)	\$0			\$207,028	\$4,067,384
266 to 266.35	200	D \$10,000	0.4 \$3,500 45	0 \$31,50	0				1,848 \$6,468	8	\$0	975	\$3,900	24	\$96	112	\$1,344	99 \$2,47	5 450	\$8,100	1932 \$5,79	6		3 \$9,000		\$0	,	\$0			\$79,704	\$4,147,088
ITEM	69,40	0 \$347,000	12.3 \$122,500 14,71	0 \$1,029,70	0				64,261 \$224,914	4 0	\$0	\$34,055	\$136,220	815	\$3,260	\$3,892	\$46,704	2,838 \$70,95	0 15,685	\$282,321	64,345 \$193,03	5 2 \$400,00	0 6	56 \$218,000	0	\$0	267	\$100,125		\$1,025,005	\$4,147,088	
TOTAL																																
																												COST PER	MILE		\$340,763	
																												TRACK ON	LY		\$307,895	
															E	ASTPORT	RAIL STU	JDY														
														COSTES	TIMATE I AYEF	FOR FRA RS JCT. TC	CLASS 2 1) ST. CRO	IRACK COND IX JCT.	ITION													
																	, on one															
					SWI	тсн	TUR	NOUT	SHOULDER			R	MIL.	TRAC	KBOLT	во	DLT	85 LB RAIL					SN	IALL	GRADE C	ROSSINGS	GRADE C	ROSSINGS	WARNIN	G SYSTEM	TOTAL	CUMULATIVE
MILE	DIT	CHING	CLEARING	TIES	TIM	IBER	REPAIR/	REPLACE	PLOWING	TIE PI	ATES	ANC	HORS	ASSEN	ABLIES	TIGHT	ENING	REPLACE	BAI	LAST	SURFACING	BRIDGE REPAIRS	CUL	VERTS	PRIV	VATE	PUI	BLIC	ACTIVE	PASSIVE	COST	COST
	UNIT	1	UNIT UNIT		UNIT		UNIT		UNIT	UNIT		UNIT		UNIT		UNIT		UNIT	UNIT		UNIT	UNIT	UNIT		UNIT	[UNIT				PER	
	COST		COST COST		COST		COST		COST	COST		COST		COST		COST		COST	COST		COST	COST	COST		COST		COST				MILE	
	\$5.00	LF	\$10 000 00 MILE \$70 00	EA	\$12.00	FT	Varies	EA	\$3.50 TF	\$9.00	EA	\$5.00	EA	\$5.50	EA	\$12.00	Joint	\$25.00 TE	\$18.00	TON	\$3.00 TE	0051	\$3,000.0	0 EA	0001		\$375	TF	\$200.000	LF		
	Quantit	y Cost	Quantity Cost Quantit	v Cost	Quantity	Cost	Qauntity	Cost	Quantity Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity Cost	Quantity	Cost	Quantity Cost	Quantity Cost	Quantity	v Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost		
East Wye (1,165) 40	0 \$2.000	0.3 \$3.000 45	0 \$31.50	0 692	\$8,304	1	\$5,000	1165 \$4.078	8	\$0	830	\$4,150	25	\$138	70	\$840	66 \$1.65	0 585	\$10,530	2330 \$6.99	0		2 \$6.000				\$0			\$82.529	\$82,529
254.40 to 255	3.40	0 \$17.000	0.6 \$6,000 90	0 \$63.00	0	\$0	,		3168 \$11.088	8	\$0	1.670	\$8,350) 40	\$220	190	\$2.280	132 \$3.30	0 1.546	\$27,828	6336 \$19.00	18		3 \$9.000				\$0			\$163,774	\$246,303
255 to 256	5,70	0 \$28,500	1.0 \$10.000 1.50	0 \$105.00	0	\$0	,		5280 \$18,480	D	\$0	2,780	\$13,900) 66	\$363	320	\$3,840	231 \$5.77	5 2.576	\$46,368	10560 \$31.68	:0	1	2 \$36.000			32	\$12,000	1	\$200.000	\$506,132	\$752.435
256 to 257	5.80	0 \$29.000	1.0 \$10.000 1.50	0 \$105.00	0	\$0	,		5280 \$18,480	D	\$0	2,780	\$13,900) 66	\$363	320	\$3,840	231 \$5.77	5 2.576	\$46,368	10560 \$31.68	1 \$150.00	0 1	\$50.000				\$0			\$458.631	\$1.211.066
257 to 258	5.80	529.000	1.0 \$10.000 1.50	0 \$105.00	0	\$0	1	\$5,000	5280 \$18,480	D	\$0	2.780	\$13.900) 66	\$363	320	\$3,840	231 \$5.77	5 2.576	\$46,368	10560 \$31.68	:0		2 \$6.000			56	\$21,000	1	\$200.000	\$490.632	\$1,701,698
258 to 259	5.70	0 \$28,500	1.0 \$10.000 1.50	0 \$105.00	0				5280 \$18,480	D	\$0	2,780	\$13,900) 66	\$363	320	\$3,840	231 \$5.77	5 2.576	\$46,368	10560 \$31.68	1 \$250.00	0	3 \$9.000				\$0			\$517,131	\$2,218,829
259 to 260	5.80	0 \$29.000	1.0 \$10.000 1.50	0 \$105.00	0				5280 \$18,480	D	\$0	2,780	\$13,900) 66	\$363	320	\$3.840	231 \$5.77	5 2.576	\$46,368	10560 \$31.68	:0		3 \$9.000				\$0			\$267.631	\$2,486,460
260 to 261	5,80	\$29,000	1.0 \$10,000 1.50	0 \$105,00	0				5280 \$18,480	D	\$0	2,780	\$13,900) 66	\$363	320	\$3,840	231 \$5.77	5 2,576	\$46,368	10560 \$31.68	:0	1	4 \$12,000				\$0			\$270,631	\$2,757,091
261 to 262	5,80	\$29,000	1.0 \$10,000 1,50	0 \$105,00	0				5280 \$18,480	D	\$0	2,780	\$13,900) 66	\$363	320	\$3,840	231 \$5,77	5 2,576	\$46,368	10560 \$31,68	:0		5 \$15,000			115	\$43,125	1	\$225,000	\$541,757	\$3,298,848
262 to 263	5,80	\$29,000	1.0 \$10,000 1.50	0 \$105,00	0				5280 \$18,480	D	\$0	2,780	\$13,900) 66	\$363	320	\$3,840	231 \$5,77	5 2,576	\$46,368	10560 \$31.68	:0		4 \$12,000				\$0			\$270,631	\$3,569,479
263 to 264	5.80	0 \$29.000	1.0 \$10,000 1.50	0 \$105.00	0				5280 \$18.480	D	\$0	2.780	\$13.900) 66	\$363	320	\$3.840	231 \$5.77	5 2,576	\$46.368	10560 \$31.68	:0		6 \$18.000				\$0			\$276.631	\$3,846.110
264 to 265	5.80	\$29.000	1.0 \$10,000 1.50	0 \$105.00	0				5280 \$18.480	D	\$0	2.780	\$13.900) 66	\$363	320	\$3.840	231 \$5.77	5 2,576	\$46.368	10560 \$31.68	:0	1	5 \$15.000			64	\$24.000	2	\$400.000	\$697.633	\$4,543.743
265 to 266	5.80	0 \$29.000	1.0 \$10.000 1.50	0 \$105.00	0				5280 \$18,480	D	\$0	2,780	\$13,900) 66	\$363	320	\$3.840	231 \$5.77	5 2.576	\$46,368	10560 \$31.68	:0		4 \$12.000				\$0			\$270.631	\$4.814.374
266 to 266.35	2,00	0 \$10,000	0.4 \$3,500 60	0 \$42,00	0				1,848 \$6,468	8	\$0	975	\$4,875	5 24	\$132	112	\$1,344	99 \$2,47	5 900	\$16,200	3685 \$11,05	5		3 \$9,000				\$0			\$104,574	\$4,918,948
пем	69.40	0 \$347.000	12.3 \$122.500 18.45	0 \$1.291.50	0				64.261 \$224.914	4 0	\$0	34.055	\$170.275	5 815	\$4,483	\$3.892	\$46,704	2.838 \$70.95	0 31.367	\$564,606	128.511 \$385.53	3 2 \$400.00	0 6	56 \$218.000	0	\$0	267	\$100,125		\$1.025.005	\$4,918,948	
TOTAL																																
																												COST PER	MILE		\$404,186	
NOTES:																												TRACK ON	LY		\$371,319	
1. East Wye is at	Ayers Jct.	and is the P	S to PS dimension around the wye	from the line t	towards Eas	stport to th	he line towar	ds Calais (S	t. Croix Jct.)																							
2. Milepost 255.4) is the PS	of turnout	connecting the East Wve to the line	towards St. C	Croix Jct.																											
3. Milepost 266.3	5 is the end	1 of MEDO	T ownership on the east side (comp	ass north) of	the Route 1	grade cro	ossing.																									
																											+					
																											1					



					SUBG	RADE	SUB- BA	ALLAST	RELAY	7 100 LB			BRI	DGE	SM	ALL	GRADE CRO	DSSINGS	GRADE CI	ROSSINGS	WARNIN	G SYSTEM	TOTAL	CUMULATIVE	
MILE	DITC	HING	CLEAI	RING	GRA	DING	6'' I	Deep	TR	АСК	SURF	ACING	REPLAC	CEMENTS	CULV	ERTS	PRIV	ATE	PUB	LIC	ACTIVE	PASSIVE	COST	COST	
	UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT				PER		
	COST		COST		COST		COST		COST		COST		COST		COST		COST		COST				MILE		
	\$5.00	LF	\$10,000.00	MILE	\$2.50	SY	\$20.00	TON	\$160.00	TF	\$3.00	TF	Varies	EA	\$3,000	EA	\$3,000	EA	\$375	TF	\$200,000	\$5,000			
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Qauntity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost			
254.47 to 255	1850	\$9,250	0.5	\$5,300	6,996	\$17,490	1,959	\$39,178	2,798	\$447,744	2,798	\$8,395	1	\$500,000	0	\$0				\$0			\$1,027,357	\$1,027,357	
255 to 256	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	3,696	\$73,920	5,280	\$844,800	5,280	\$15,840			1	\$3,000			34	\$12,750	1	\$200,000	\$1,210,561	\$2,237,918	
256 to 257	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	3,696	\$73,920	5,280	\$844,800	5,280	\$15,840			5	\$15,000				\$0			\$1,009,810	\$3,247,728	
257 to 258	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	3,696	\$73,920	5,280	\$844,800	5,280	\$15,840	1	\$3,000,000	4	\$12,000			80	\$30,000	2	\$400,000	\$4,436,812	\$7,684,540	
258 to 259	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	3,696	\$73,920	5,280	\$844,800	5,280	\$15,840			4	\$12,000				\$0			\$1,006,810	\$8,691,350	
259 to 260	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	3,696	\$73,920	5,280	\$844,800	5,280	\$15,840			3	\$9,000		\$0		\$0			\$1,003,810	\$9,695,160	
260 to 261	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	3,696	\$73,920	5,280	\$844,800	5,280	\$15,840			3	\$9,000		\$0		\$0			\$1,003,810	\$10,698,970	SITE - 4
261 to 262	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	3,696	\$73,920	5,280	\$844,800	5,280	\$15,840			5	\$15,000		\$0	98	\$36,750	2	\$400,000	\$1,446,562	\$12,145,532	\$100,981
262 to 263	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	3,696	\$73,920	5,280	\$844,800	5,280	\$15,840	1	\$1,500,000	5	\$15,000		\$0					\$2,509,810	\$14,655,342	\$10,799,951
263 to 263.19	600	\$3,000	0.2	\$1,900	2,508	\$6,270	702	\$14,045	1,003	\$160,512	1,003	\$3,010			2	\$6,000	1	\$3,000		\$0	1	\$5,000	\$202,737	\$14,858,079	
ITEM	30,050	\$150,250	8.7	\$87,200	115,104	\$287,760	\$32,229	\$644,582	46,042	\$7,366,656	46,042	\$138,125	3	\$5,000,000	32	\$96,000	1	\$3,000	212	\$79,500		\$1,005,000	\$14,858,079		
TOTAL																				COST PER	MILE		\$1,703,908		

EASTPORT RAIL STUDY COST ESTIMATE FOR NEW TRACK CONSTRUCTION WITH 100 LB RELAY MATERIAL AYERS JCT. TO PERRY

IF ROUTE 1 IS CROSSED, ADD

\$24,750

66

1 \$250,000

EASTPORT RAIL STUDY COST ESTIMATE FOR NEW TRACK CONSTUCTION WITH NEW 115 RE RAIL AYERS JCT. TO PERRY

					SUBG	RADE	SUB- B	ALLAST	NEW	115 RE			BRI	DGE	SM	ALL	GRADE C	ROSSINGS	GRADE CH	ROSSINGS	WARNIN	G SYSTEM	TOTAL	CUMULATIVE
MILE	DITC	HING	CLEAF	RING	GRA	DING	8'' 1	Deep	TR	ACK	SURF	ACING	REPLAC	CEMENTS	CULV	ERTS	PRI	VATE	PUB	LIC	ACTIVE	PASSIVE	COST	COST
	UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT				PER	
	COST		COST		COST		COST		COST		COST		COST		COST		COST		COST				MILE	
	\$5.00	LF	\$10,000.00	MILE	\$2.50	SY	\$20.00	TON	\$180.00	TF	\$3.00	TF	Varies	EA	\$3,000	EA	\$3,000	EA	\$375	TF	\$200,000	\$5,000		
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Qauntity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost		
254.47 to 255	1850	\$9,250	0.5	\$5,300	6,996	\$17,490	2,630	\$52,610	2,798	\$503,712	2,798	\$8,395	1	\$500,000	0	\$0)			\$0			\$1,096,757	\$1,096,757
255 to 256	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	4,963	\$99,264	5,280	\$950,400	5,280	\$15,840			1	\$3,000)		34	\$12,750	1	\$200,000	\$1,341,505	\$2,438,262
256 to 257	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	4,963	\$99,264	5,280	\$950,400	5,280	\$15,840			5	\$15,000)			\$0			\$1,140,754	\$3,579,016
257 to 258	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	4,963	\$99,264	5,280	\$950,400	5,280	\$15,840	1	\$3,000,000	4	\$12,000)		80	\$30,000	2	\$400,000	\$4,567,756	\$8,146,772
258 to 259	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	4,963	\$99,264	5,280	\$950,400	5,280	\$15,840			4	\$12,000)			\$0			\$1,137,754	\$9,284,526
259 to 260	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	4,963	\$99,264	5,280	\$950,400	5,280	\$15,840			3	\$9,000)	\$0		\$0			\$1,134,754	\$10,419,280
260 to 261	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	4,963	\$99,264	5,280	\$950,400	5,280	\$15,840			3	\$9,000)	\$0		\$0			\$1,134,754	\$11,554,034
261 to 262	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	4,963	\$99,264	5,280	\$950,400	5,280	\$15,840			5	\$15,000)	\$0	98	\$36,750	2	\$400,000	\$1,577,506	\$13,131,540
262 to 263	3450	\$17,250	1.0	\$10,000	13,200	\$33,000	4,963	\$99,264	5,280	\$950,400	5,280	\$15,840	1	\$1,500,000	5	\$15,000)	\$0		\$0			\$2,640,754	\$15,772,294
263 to 263.19	600	\$3,000	0.2	\$1,900	2,508	\$6,270	943	\$18,860	1,003	\$180,576	1,003	\$3,010			2	\$6,000	1	\$3,000		\$0	1	\$5,000	\$227,617	\$15,999,911
ITEM	30,050	\$150,250	8.7	\$87,200	115,104	\$287,760	43,279	\$865,582	46,042	\$8,287,488	46,042	\$138,125	3	\$5,000,000	32	\$96,000	1	\$3,000	212	\$79,500		\$1,005,000	\$15,999,911	
TOTAL																				COST PER	MILE		\$1,834,852	
															IF ROUTI	E 1 IS CRO	DSSED. ADI)	66	\$24.750	1	\$250,000		\$274.750

NOTES:

1. Milepost 254.47 is the PS of the turnout to east wye at Ayers Jct. Wye accounted for in segment from Ayers Jct. to St Croix Jct.

2. Milepost 263.19 is the Route 1 grade crossing in Perry. Alternative 1 would need to cross Route 1. Alternative 2 would end at Milepost 262.5. Alternative 3 would end at Milepost 262.85.

Chapter 7 Cost Estimates

\$274,750



EASTPORT RAIL STUDY COST ESTIMATE FOR FRA CLASS 2 WITH 286K AYERS JCT. TO ST. CROIX JCT.

							NEW	115 RE	NEW	V 115 RE			SMA	ALL	GRADE CR	OSSINGS	GRADE O	CROSSINGS	WARNIN	IG SYSTEM	TOTAL	CUMU
MILE	DITC	HING	CLEAF	RING	т	TIES	TURN	OUTS	TRACE	K CONSTR.	BRIDGE	REPAIRS	CULV	ERTS	PRIV	ATE	PU	BLIC	ACTIVE	PASSIVE	COST	СС
	UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT				PER	
	COST		COST		COST		COST		COST		COST		COST		COST		COST				MILE	
	\$5.00	LF	\$10,000.00	MILE	\$70.00	EA	\$70,000	EA	\$150.00	TF			\$3,000.00	EA			\$375	TF	\$200,000	LF		
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Qauntity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost		
East Wye (1,165')	400	\$2,000	0.3	\$3,000	450	\$31,500	1	\$70,000	1,125	\$168,750			2	\$6,000				\$0			\$281,250	
254.40 to 255	3400	\$17,000	0.6	\$6,000	1,250	\$87,500			5,280	\$792,000			3	\$9,000				\$0			\$911,500	\$1
255 to 256	5700	\$28,500	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000			12	\$36,000			32	\$12,000	1	\$200,000	\$1,232,500	\$2
256 to 257	5800	\$29,000	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000	1	\$150,000	10	\$50,000				\$0			\$1,185,000	\$3
257 to 258	5800	\$29,000	1.0	\$10,000	2,200	\$154,000	2	\$10,000	5,280	\$792,000			2	\$6,000			56	\$21,000	1	\$200,000	\$1,222,000	\$4
258 to 259	5700	\$28,500	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000	1	\$250,000	3	\$9,000		\$0		\$0			\$1,243,500	\$6
259 to 260	5800	\$29,000	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000			3	\$9,000		\$0		\$0			\$994,000	\$7
260 to 261	5800	\$29,000	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000			4	\$12,000		\$0		\$0			\$997,000	\$8
261 to 262	5800	\$29,000	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000			5	\$15,000		\$0	115	\$43,125	1	\$225,000	\$1,268,125	\$9
262 to 263	5800	\$29,000	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000			4	\$12,000							\$997,000	\$10
263 to 264	5800	\$29,000	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000			6	\$18,000		\$0		\$0			\$1,003,000	\$11
264 to 265	5800	\$29,000	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000			5	\$15,000		\$0	64	\$24,000	2	\$400,000	\$1,424,000	\$12
265 to 266	5800	\$29,000	1.0	\$10,000	2,200	\$154,000			5,280	\$792,000			4	\$12,000		\$0		\$0			\$997,000	\$13
266 to 266.35	2000	\$10,000	0.4	\$3,500	750	\$52,500			1,850	\$277,500			3	\$9,000		\$0		\$0			\$352,500	\$14
ITEM	69,400	\$347,000	12.3	\$122,500	26,650	\$1,865,500			66,335	\$9,950,250	2	\$400,000	66	\$218,000	0	\$0	267	\$100,125		\$1,025,005	\$14,108,375	
TOTAL																						

COST PER MILE

\$1,160,228

EASTPORT RAIL STUDY COST ESTIMATE FOR FRA CLASS 2 WITH 286K TODD STREET CALAIS TO ST. CROIX JCT.

							NE	EW	NEW	/ 115 RE	BR	IDGE	SMA	LL	GRADE CR	OSSINGS	GRADE (CROSSINGS	WARNIN	IG SYSTEM	TOTAL	CUMU
MILE	DITC	HING	CLEAI	RING	Т	IES	115 RE T	URNOUT	TRACK	CONSTR.	RE	PAIRS	CULVI	ERTS	PRIV	ATE	PU	BLIC	ACTIVE	PASSIVE	COST	сс
	UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT				PER	
	COST		COST		COST		COST		COST		COST		COST		COST		COST				MILE	
	\$5.00	LF	\$5,000.00	MILE	\$70.00	EA	\$70,000	EA	\$150.00	TF	Varies	EA	\$3,000	EA	\$4,000	EA	\$375	LF				
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Qauntity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost				
0.62 End of Track to 1	600	\$3,000	0.10	\$1,000	850	\$59,500	2	\$140,000	2000	\$300,000			1	\$3,000				\$0			\$506,500	
1 to 2	1600	\$8,000	0.25	\$2,500	2,200	\$154,000			5280	\$792,000			2	\$6,000	,		64	\$24,000	\$250,000		\$986,500	\$1
2 to 3	1600	\$8,000	0.25	\$2,500	3,200	\$224,000	4	\$280,000	5280	\$792,000			2	\$6,000	,			\$0			\$1,312,500	\$2
3 to 3.13 (266.87)	400	\$2,000	0.05	\$500	275	\$19,250			685	\$102,750			1	\$3,000	,			\$0			\$127,500	\$2
St. Croix Bridge (269.02)	100	\$500		\$0	60	\$4,200	1	\$70,000	200	\$30,000	1	\$1,000,000		\$0				\$0			\$1,104,700	\$4
ITEM	4,300	\$21,500	\$1	\$6,500	\$6,585	\$460,950	\$7	\$490,000	\$13,445	\$2,016,750	\$1	\$1,000,000	6	\$18,000	0	\$0	64	\$24,000	\$250,000	\$0	\$4,037,700	
TOTAL																						

COST PER MILE \$1,589,646







EASTPORT RAIL STUDY COST ESTIMATE FOR FRA CLASS 2 WITH 286K ST. CROIX J CT. TO WOODLAND (BAILEYVILLE)

									NEW	/ 115 RE	BR	IDGE	SM	ALL	GRADE C	ROSSINGS	GRADE	CROSSINGS	WARNIN	G SYSTEM	TOTAL	CUMULATIVE
MILE	DITC	HING	CLEAI	RING	Т	IES	TURN	OUTS	TRACK	CONSTR.	RE	PAIRS	CULV	VERTS	PRI	VATE	PU	BLIC	ACTIVE	PASSIVE	COST	COST
	UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT				PER	
	COST		COST		COST	1	COST		COST		COST		COST		COST		COST				MILE/SEGMENT	
	\$5.00	LF	\$5,000.00	MILE	\$70.00	EA	Varies	EA	\$160.00	TF	Varies	EA	\$3,000	EA	\$4,000	EA	\$375	LF	\$200,000	\$5,000		
	Quantity	Cost	Quantity	Cost	Quantity	Cost	Qauntity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost				
St. Croix to Rte. 1		\$0	0.5	\$2,500	700	\$49,000			1,800	\$288,000			2	\$6,000				\$0			\$345,500	
3.13 to 4	3200	\$16,000	0.5	\$2,500	1,800	\$126,000	1	\$70,000	4590	\$734,400			7	\$21,000				\$0			\$969,900	\$1,315,400
4 to 4.65 (Bridge)	2400	\$12,000	0.5	\$2,500	1,340	\$93,800			3430	\$548,800	1	\$1,000,000	2	\$6,000				\$0			\$1,663,100	\$2,978,500
4.65 to 5	800	\$4,000	0.2	\$750	720	\$50,400			2640	\$422,400			3	\$9,000				\$0			\$486,550	\$3,465,050
5 to 6	2200	\$11,000	0.4	\$2,000	2,200	\$154,000			5280	\$844,800			4	\$12,000				\$0			\$1,023,800	\$4,488,850
6 to 7	2200	\$11,000	0.4	\$2,000	2,200	\$154,000			5280	\$844,800			4	\$12,000				\$0			\$1,023,800	\$5,512,650
7 to 8	2200	\$11,000	0.4	\$2,000	2,200	\$154,000			5280	\$844,800			6	\$18,000	1	\$4,000		\$0			\$1,033,800	\$6,546,450
8 to 9	2200	\$11,000	0.4	\$2,000	2,200	\$154,000			5280	\$844,800	1	\$100,000	5	\$15,000	1	\$4,000		\$0			\$1,130,800	\$7,677,250
9 to 9.77 (Bridge)	1600	\$8,000	0.3	\$1,250	1,590	\$111,300			4065	\$650,400	1	\$1,000,000	3	\$9,000		\$0		\$0			\$1,779,950	\$9,457,200
9.77 to 10		\$0		\$0	400	\$28,000	2	\$140,000	690	\$110,400			1	\$3,000							\$281,400	\$9,738,600
10 to 11 (Yard)		\$0		\$0	1,700	\$119,000	7	\$28,000	1800	\$288,000			2	\$6,000		\$0					\$441,000	\$10,179,600
11 to end of trk.		\$0		\$0	80	\$5,600				\$0				\$0		\$0					\$5,600	\$10,185,200
SUB - TOTAL	16,800	\$84,000	3	\$15,000	16,430	\$1,150,100	10	\$238,000	38,335	\$6,133,600	3	2,100,000	37	\$111,000	2	\$8,000	0	\$0	0	0	\$10,185,200	
MAIN TRACK																						
East Wye to OSB		\$0			460	\$32,200				\$0			1	\$3,000		\$0	240	\$90,000	2	\$10,000	\$284,172	
West Wye		\$0			165	\$11,550				\$0				\$0		\$0		\$0			\$21,580	
SUB-TOTAL	0	0	0	0	625	\$43,750	0	\$0	0	\$0	0	0	1	\$3,000	0	\$0	240	\$90,000	2	10,000	\$305,752	\$10,490,952
TOTAL																						

COST PER MILE (Excluding spur to LP Mill)

\$1,262,107

COST SUMMARY

Woodland from St. Croix River Bridge around Wye and Yard at Domtar Mill	\$728,000
East and West Wye and Track to Louisiana Pacific OSB Mill	\$305,752
St. Croix Jct. to Route 1 Grade Crossing (Owned by Pan Am Railway)	\$345,500
Canada to St. Croix Jct.	\$2,633,000
5.12 Miles in Canada	\$6,478,700

NOTES:

1. Segment is from St. Croix Jct to Baileyville (Woodland) and around the sharpest leg of the wye to the Domtar pulp mill.

2. East wye is the leg of wye closest to St. Croix River (one end of which has been removed).

3. West wye is the segment from the Domtar pulp mill straight towards the LP OSB mill.

4. Odd mileages at 4.65 and 9.77 are centerlines of bridges over the St. Croix River and the International Border. A separate accounting of work in New Brunswick is required.

5. Costs in Woodland reflect upgrade to Class 1 speeds only, keeping 85 lb rail and replacing only the 75 lb rail. Some costs in Woodland are dervived from other spread sheet.



EASTPORT RAIL STUDY TRACK CONSTRUCTION COST ESTIMATE SUMMARY

MILEPOSTS	SEGMENT	COST BY TRACK CLASS				
	CURRENTLY ACTIVE PAN AM TRACK WEST (SOUTH) OF ST. CROIX JCT.	CLASS I	CLASS II	286 K		
9.77 to 11.15	Woodland from St. Croix River Bridge around Wye and Yard at Domtar Mill	\$294,624	\$413,292	\$728,000		
In Woodland	East and West Wye and Track to Louisiana Pacific OSB Mill	\$202,752	\$202,752	\$305,752		
	St. Croix Jct. to Route 1 Grade Crossing (Owned by Pan Am Railway)	\$159,818	\$181,148	\$345,500		
3.13 to 5.35	Canada to St. Croix Jct.	\$918,750	\$1,054,565	\$2,633,000		
	SUB -TOTAL IN USA	\$1,575,944	\$1,851,757	\$4,012,252		
5.35 to 9.77	5.12 Miles in Canada	\$3,517,693	\$3,731,119	\$6,478,700		
	TOTAL SEGMENT	\$5,093,637	\$5,582,876	\$10,490,952		
	OUDDENTER VACTIVE DAMANTER OV EAST MODTH. OF ST. CDOIV ICT.					
0.62 to 3.13	St. Croix Jct. to end of Track Bevond Milltown Jct.	\$1.960,779	\$2.159,064	\$4.037,700		
	SUB - TOTAL PAN AM IN USA	\$3,536,723	\$4,010,821	\$8,049,952		
	TOTAL ALL PAN AM OWNED	\$7,054,416	\$7,741,940	\$14,528,652		
	AYERS JCT. TO ROUTE 1 IN BARING					
254.40 to 266.35	Former Calais Branch from Ayers Jct. to Route 1 Grade Crossing in Baring	\$4,147,088	\$4,918,948	\$14,108,375		
	AYERS JCT. TO PERRY	100 lb Relay	New 115	New 115		
254.47 to 263.19	From Switch at Wye at Ayers Jct. up to the Route 1 Grade Crossing in Perry	\$14,858,079	\$15,999,911	\$15,999,911		
	TOTAL CONSTRUCTION COST IN US	\$22,541,890	\$24,929,680	\$38,158,238		
	TOTAL CONSTRUCTION COST	\$26,059,583	\$28,660,799	\$44,636,938		

No Contingency, Engineering or Construction Management Costs Applied

Totals based on Constructing Track all the way to Route 1 in Perry. Less cost if only to Site 4, the preferred alternative location of the Transload Facility. The lesser cost to Site 4 is the cost used in project summary calculations for the four cost alternatives presented.



PERRY TRANSLOAD FACILITY PRELIMINARY COST ESTIMATE

PHASE 1 - MINIMUM FOOTPRINT

TEM	UNIT	UNIT COST	EST. QTY.	EST. COST	COMMENTS
EARTHWORK					
Clearing and Grubbing	Acre	\$3,000.00	25	\$75,000	
Earth Excavation	СҮ	\$6.50	125,500	\$815,750	
					Assume 25% of
Rock Excavation	СҮ	\$16.00	40,000	\$640,000	Excavation
Ordinary Borrow	СҮ	\$9.00	85,000	\$765,000	
Loam Borrow	СҮ	\$15.00	2,100	\$31,500	
Seeding	SY	\$2.50	6,400	\$16,000	
Erosion Control	LS	\$40,000.00	1	\$40,000	
			SUBTOTAL	\$2,383,250	
HIGHWAY ACCESS TO ROUTE 1					
Right of Way Acquisition	Acre	\$2,500	13	\$32,500	
					Earthwork
Access Road	LF	\$150	4,600	\$690,000	included above
Intersection Modifications at Route					
1	LS	\$75,000	1	\$75,000	
			SUBTOTAL	\$797,500	
PAVEMENT					
					8" Pavement
	011		12 000		Section -
Heavy Duty Bit Conc Pavement	SY	\$38.50	43,000	\$1,655,500	16"subbase
					6 Pavement
Medium Duty Bit Conc. Pavement	SV	\$32.50	28 600	\$929 500	subbase
Pavement Striping	IF	\$0.40	20,000	\$8,000	subbase
Misc Pavement Marking		\$8,000,00	1	\$8,000	
	LO	\$0,000.00		¢0,000	
OFNED AL OFFE MODIZ			SUBIOTAL	\$2,601,000	
GENERAL SITE WORK					High Mast
					Lighting with
Lighting	Acre	\$30 000 00	21	\$630,000	Buried Conduits
Drainage	Acre	\$25,000.00	15	\$375.000	2 and Conduits
Detention Pond Liner	SY	\$20,000	4 000	\$80,000	
Curbing	LF	\$22.00	1,000	\$00,000 \$0	
Security Fencing	IF	\$30.00	4 200	\$126,000	
Gates	IF	\$20.00	100	\$8,000	
Landscaping	IC	25000	100	\$25,000	
Lanuscaping	L3	25000	1	¢25,000	

			SUBTOTAL	\$1,244,000	
RAILROAD WORK					
115# Track Construction	TF	\$180.00	9,350	\$1,683,000	
No. 10 115# RBM	EA	\$75,000.00	5	\$375,000	
Switch Point Derail	EA	\$20,000.00	1	\$20,000	
Grade Crossings	TF	\$275.00	850	\$233,750	
Yard Air System	LS		1	\$0	
			SUBTOTAL	\$2,311,750	
FIRE SUPPRESSION SYSTEM					
150,000 gallon storage tank	LS	\$300,000.00	1	\$300,000	
Pumping system	LS	\$50,000.00	1	\$50,000	
Fire Hydrants with Gates	EA	\$8,000.00	4	\$32,000	
8" CI Pipes, fittings	LF	\$65.00	2500	\$162,500	
			SUBTOTAL	\$544,500	
BUILDINGS & UTILITIES					
Administration Building	SF	\$150.00	1,200	\$180,000	
Gate Building and Swing Room	SF	\$125.00		\$0	
Warehouse	SF	\$35.00	76,000	\$2,660,000	
Maintenance Shop	SF	\$65.00	1,200	\$78,000	
Loading Machine Maintenance Pad	SF	\$35.00	5,000	\$175,000	
Gate Complex	LS	\$35,000.00	1	\$35,000	
Water Service using on site wells	LS	\$75,000.00	1	\$75,000	
Septic System	LS	\$40,000.00	1	\$40,000	
Electric Service exclusive of lighting	LS	\$250,000.00	1	\$250,000	
			SUBTOTAL	\$3,493,000	
TOTAL ESTIMATED					
CONSTRUCTION COST				\$9,882,000	
New Reach Stacker				\$560,000	
ENGINEERING & CONTINGENCIES					
Contingencies - 10%	LS	\$988,200	1	\$988,200	
Engineering - Design and Permitting	LS	\$1,304,424	1	\$1,304,424	
Engineering - Construction Management	LS	\$652,2120	1	\$652,212	
Site Acquisition Cost	Acre	\$2,000	210	\$420,000	
			SUBTOTAL	\$3,681,060	
TOTAL ESTIMATED COST				\$13,806,836	
		Construction	Total Cost		
Paved Area = 12 Acres		Cost per Acre	per Acre		
Gross Area = 21 Acres		\$517,630	\$657,468		
		Includes Acces	s Road and Lea	nd Tracks	

Maine Department of Transportation



PERRY TRANSLOAD FACILITY PRELIMINARY COST ESTIMATE

PHASE 3 -LARGE FOOTPRINT

ITEM	UNIT	UNIT COST	EST. QTY.	EST. COST	COMMENTS
EARTHWORK					
Clearing and Grubbing	Acre	\$3,000.00	74	\$222,000	
Gravel Excavation	СҮ	\$6.50	800,000	\$5,200,000	
Rock Excavation	СҮ	\$16.00	265,000	\$4,240,000	Assume 25% of Excavation
Ordinary Borrow	СҮ	\$9.00	0	\$0	Excess Excavation, no Borrow Required
Loam Borrow	СҮ	\$15.00	4,500	\$67,500	
Seeding	SY	\$2.50	45,000	\$112,500	
Erosion Control	LS	\$75,000.00	1	\$75,000	
			SUBTOTAL	\$9,917,000	
HIGHWAY ACCESS TO ROUTE 1					
Right of Way Acquistion	Acre	\$2,500	13	\$32,500	
Access Road	LS	\$150	2,800	\$420,000	Earthwork included above
Intersection Modifications at Route 1	LS	\$75,000	1	\$75,000	
			SUBTOTAL	\$527,500	
PAVEMENT					
Heavy Duty Bit Conc Pavement	SY	\$38.50	110,000	\$4,235,000	8" Pavement Section - 16"subbase
Medium Duty Bit Conc Pavement	SY	\$32.50	74,000	\$2,405,000	6" Pavement Section - 12" subbase
Pavement Striping	LF	\$0.40	45,000	\$18,000	
Misc. Pavement Marking	LS	\$15,000.00	1	\$15,000	
			SUBTOTAL	\$6,673,000	
GENERAL SITE WORK					
Lighting	Acre	\$30,000.00	70	\$2,100,000	High Mast Lighting with Buried Conduits
Drainage	Acre	\$25,000.00	38	\$950,000	
Detention Pond Liner	SY	\$20.00	12,000	\$240,000	
Curbing	LF	\$22.00	2,000	\$44,000	
Security Fencing	LF	\$30.00	9,000	\$270,000	
Gates	LF	\$80.00	240	\$19,200	
Landscaping	LS	\$40,000	1	\$40,000	
			SUBTOTAL	\$3,663,200	
RAILROAD WORK					
115# Track Construction	TF	\$180.00	24,000	\$4,320,000	
No. 10 115# RBM	EA	\$70,000.00	11	\$770,000	
Switch Point Derail	EA	\$20,000.00	2	\$40,000	

					Within facility plus
Grade Crossings	TF	\$275.00	630	\$173,250	private x-ing
Yard Air System	LS	\$400,000.00	1	\$400,000	
			SUBTOTAL	\$5,703,250	
FIRE SUPPRESSION SYSTEM					
250,000 gallon storage tank	LS	\$300,000.00	1	\$300,000	
Pumping system	LS	\$50,000.00	1	\$50,000	
Fire Hydrants with Gates	EA	\$8,000.00	9	\$72,000	
8" CI Pipes, fittings	LF	\$60.00	4000	\$240,000	
			SUBTOTAL	\$662,000	
BUILDINGS & UTILITIES					
Administration Building	SF	\$150.00	2,400	\$360,000	
Warehouse s	SF	\$35.00	140,000	\$4,900,000	
Maintenance Shop	SF	\$65.00	3,000	\$195,000	
Loading Machine Maintenance Pad	SF	\$35.00	9,600	\$336,000	
Communications System	LS	\$50,000.00	1	\$50,000	
Gate Complex	LS	\$250,000.00	1	\$250,000	
Water Service using on site wells	LS	\$75,000.00	1	\$75,000	
Septic System	LS	\$75,000.00	1	\$75,000	
Electric Service exclusive of lighting	LS	\$400,000.00	1	\$400,000	
			SUBTOTAL	\$6,641,000	
TOTAL ESTIMATED					
CONSTRUCTION COST				\$33,786,950	
2 - New Reach Stackers				1,120,000	
ENGINEERING &					
CONTINGENCIES					
Contingencies - 10%	LS	\$3,378,695	1	\$3,378,695	
Engineering - Design and					
Permitting	LS	\$4,459,877	1	\$4,459,877	
Engineering - Construction		**		†• • • • • • • •	
Management	LS	\$2,228,938	1	\$2,228,938	
Site Acquisition Cost	Acre	\$2,000	210	\$420,000	
			SUBTOTAL	\$10,893,955	
TOTAL ESTIMATED COST				\$48,773,155	
		Construction	Total Cost		
Paved Area = 38 Acres		Cost per Acre	per Acre		
Gross Area = 72 Acres		\$516,189	\$677,405		
		Includes Acc	ess Road and I	Lead Tracks	

Maine Department of Transportation

