



ALAMEDA CORRIDOR TRANSPORTATION AUTHORITY

3760 KILROY AIRPORT WAY, SUITE 200, LONG BEACH, CA 90806 – (562) 247-7777 • FAX (562) 247-7090

November 29, 2021

To: Parties listed on Exhibit A

Subject: Notice of Mutual Agreement No. 2021-6 - Request for Approval under Amended and Restated Alameda Corridor Use and Operating Agreement

Matter: Alameda Corridor Proposed Calendar Year 2022 Operations & Maintenance Budget

Dear Sir or Madam:

Reference is made to that certain Amended and Restated Alameda Corridor Use and Operating Agreement dated as of December 15, 2016 (the “Agreement”), by and among the BNSF Railway Company (BNSF), Union Pacific Railroad Company (UP), the City of Los Angeles, acting by and through its Board of Harbor Commissioners (POLA), the City of Long Beach, acting by and through its Board of Harbor Commissioners (POLB), and the Alameda Corridor Transportation Authority (ACTA).

The Agreement governs the use and operation of the Alameda Corridor and, among other things, contains provisions which require certain decisions to be made from time to time by either Mutual Agreement (as defined in the Agreement) or unanimous consent/approval. In particular, Mutual Agreement requires the approval from at least three of the following parties: BNSF, UP, POLB, and POLA, and unanimous consent/approval requires the approval of each of the same four entities. Pursuant to the terms of the Agreement, ACTA as an entity does not approve or disapprove Mutual Agreement matters.

Attached as Exhibit B is Notice of Mutual Agreement (NMA) No. 2021-6, for which approval by the requisite parties is requested at this time. The matter to be approved is described in the attached NMA (the “Matter”). Following consideration of the Matter, please email to ACTA a signed copy of the attached NMA (or, if such Matter is not approved by your entity, a written statement indicating such disapproval), no later than December 31, 2021. Once all responses are received, ACTA will send a letter to the four entities with the results.

If there are any questions, please advise.

Sincerely,

A handwritten signature in black ink that reads "Michael C. Leue".

Michael C. Leue, P.E.
Chief Executive Officer

EXHIBIT A
LIST OF PARTIES

Port of Los Angeles
425 South Palos Verdes Street
San Pedro, California 90733
Attn: Executive Director
Email: gene_seroka@portla.org

Port of Long Beach
415 W. Ocean Blvd., 11th Floor
Long Beach, CA 90802
Attn: Executive Director
Email: mario.cordero@polb.com

BNSF Railway Company
2500 Lou Menk Drive
AOG -Garden Level
Fort Worth, Texas 76131
Attn: Assistant Vice President - Contracts
& Joint Facilities
Email: sarah.bailliff@bnsf.com

Union Pacific Railroad Company
1400 Douglas Street -Stop 1160
Omaha, Nebraska 68179
Attn: Executive Vice President of
Operations
Email: jointfacilitycontracts@up.com

Cc:

Email: olivia.power@bnsf.com
Email: Katherine.Sieversen@bnsf.com
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Email: carlo.luzzi@polb.com
Email: hmccloskey@portla.org
Email: David.Albers@longbeach.gov

EXHIBIT B
NOTICE OF MUTUAL AGREEMENT

Number: 2021-6

Subject: Approval Request for the Alameda Corridor Proposed Calendar Year 2022 Operations & Maintenance Budget

Recommendation:

1. Approve the proposed 2022 MOW Budget in the amount of \$14,979,475.33;
2. Approve the overall proposed 2022 Operations and Maintenance (O&M) Budget in the amount of \$20,594,069.52, which includes the MOW Budget, other estimated annual O&M expenses, and a \$500,000 contingency for unanticipated O&M items.
3. Authorize delegates appointed by each party to the UOA with delegated authority to provide written approval towards mutual agreement of the allocation and use of the contingency fund and/or of the transfer of amounts from one MOW Budget line item to another as needed to accomplish work. Written approval can be in the form of an email affirming party's approval.

Discussion:

Section 2.5(b) of the Amended and Restated Use and Operating Agreement, dated as of December 15, 2016, (the "Agreement") requires that the Ports and Railroads through Mutual Agreement approve an Annual Maintenance and Capital Improvement Plan and Budget prior to January 1 of each year. The Plan and Budget for 2022 are comprised of two documents.

1. The Maintenance of Way (MOW) Budget estimates the projected maintenance and capital costs to be incurred for the coming year.
2. The overall Operations and Maintenance (O&M) Budget, which incorporates the MOW Budget, Contingency Budget and Other O&M Budget (including but not limited to insurance, dispatching, security, utilities and support costs).

Attached for approval is the detail for both budgets for calendar year 2022. The following are provided to support your approval.

Attachment 1 presents the proposed 2022 MOW Budget.

Attachments 2 through 4 provide budget detail information for MOW Labor, Operations Maintenance and Capital Costs, respectively.

Attachment 5 provides the proposed 2022 O&M Budget.

The proposed 2022 MOW Budget was originally prepared in draft form by ACTA and their Maintenance Contractor and submitted for review by the Railroads and the Ports. Several meetings were held among the staffs of the Railroads, Ports and ACTA during September, October and November to review and modify as necessary the draft budget. Discussions resulted in staff/delegate concurrence on the attached MOW and O&M Budgets, now submitted for approval by mutual agreement of the parties to the UOA.

Major items reviewed included: proposed Contractor staffing levels and equipment levels; allocation of costs between the Rail and Non-Rail categories within Maintenance; and between Maintenance and Capital Expenses made in accordance with the approved definition of Capital Expenses. The O&M Budget includes a \$500,000 contingency to be allocated, as approved by delegates, during the year to enable necessary unforeseen work.

Summary Comparison - 2022 vs. 2021 MOW and O&M Budgets

MOW Budget

The proposed 2022 MOW Budget of \$14,979,475.33 is \$1.08M higher than the 2021 Amended MOW Budget, but this includes \$1.3M for conduit repairs caused by vandalism. The funding of the proposed 2022 MOW Budget is split approximately 50/50 between ACTA fee revenue and costs billed to the Railroads.

The proposed 2022 MOW Budget is divided into three categories: Labor Costs, Operations Maintenance, and Capital Costs. The Labor category is up 3.0% over the Approved 2021 MOW Budget, due to annual salary increases, largely dictated by prevailing wages required per contract.

The Operations Maintenance category is up 28.3% from the 2021 Approved MOW Budget, but this is entirely attributed to conduit repair caused by vandalism, without which the category would down 3% from 2021.

The Capital Costs category is down 3.4% compared the Approved 2021 MOW Budget. Capital work can vary dramatically from year to year due to replacement needs. The 2022 Capital Costs decrease is primarily due to completion of significant work during 2021.

MOW Budget Summary <i>(in millions of dollars)</i>			
MOW Budget	Proposed 2022	Approved 2021	% Change
A. Labor	\$4.013	\$3.896	3.0 %
B. Operations Maintenance	5.277	4.114	28.3 %
C. Capital Costs	5.689	5.889	- 3.4 %
Total MOW	\$14,979	\$13.899	7.8 %

O&M Budget

The proposed 2022 O&M Budget of \$20,594,069.52 is the sum of the proposed 2022 MOW Budget of \$14,979,475.33, a \$500,000 contingency, and \$5,114,594.19 in Other Costs. These Other Costs are about 2.0% below those in the 2021 O&M Budget. Most of these costs are paid by the Railroads either directly or from deposits made to ACTA known as M&O charges. The proposed 2022 O&M Budget is 5.0% above the 2021 O&M Budget, due to the proposed 2021 MOW Budget increase described previously.

O&M Budget Summary <i>(in millions of dollars)</i>			
O&M Budget	Proposed 2022	Approved 2021	% Change
I. MOW Contractor ⁽¹⁾	\$9.290	\$8.010	16.0%
II. Capital Costs ⁽²⁾	5.689	5.889	-3.4%
Contingency	0.500	0.300	67.0%
III. Operating & Other	5.115	5.221	- 2.0%
Total O&M	\$20.594	\$19.420	6.0%

⁽¹⁾ A+B from MOW Budget

⁽²⁾ C from MOW Budget

Items of Note:

1. The proposed 2022 MOW Budget is prepared before the close of the previously approved 2021 MOW Budget, and is based on estimates of how ongoing 2021 work will stand at year's end. Therefore, to the extent that certain 2021 work is not completed to the anticipated level, costs for that work could carry over into 2022 impacting the net 2022 expenditures. ACTA and RailWorks have updated the current status of 2021 MOW work to reflect the best understanding of conditions.
2. Decisions regarding the use of the contingency fund were previously approved by the former Alameda Corridor Operating Committee. Because the Operating Committee no longer exists, delegation is sought pursuant to the aforementioned Recommendation No. 3 for a designated individual or designated individuals within each party to be given authority to approve the allocation and use of contingency funds as needed for the MOW Budget to address unforeseen requirements.

Further delegation is sought for such designated individual(s) to have authority to approve the shift of amounts from one MOW Budget line item to another as needed, provided that the total MOW Budget (which is the MOW contract value) plus the \$500,000 contingency, is not exceeded.

Such delegated authority will provide additional budgetary flexibility and efficiency as to not hold up necessary operations work pending Board approval any time an

individual estimated line item may be exceeded. Approvals from the designees of at least three of the four parties (BNSF, UP, POLB, and POLA) are required in advance to authorize the allocation and use of contingency funds and/or the transfer of MOW Budget line items from one line item to another. Note that such delegation was similarly approved for the 2021 MOW and O&M Budgets.

3. Budget Flexibility

- Flexibility between line items shall remain within the same category: Labor, OE, or Capital unless otherwise authorized by at least 75% of the delegates.
- Any anticipated overrun in the approved budget for a particular category shall be communicated by RailWorks and shall be authorized by at least 75% of the delegates named in Recommendation 4 of this NMA 2021-5 in advance of any overrun or transfer of budget funds.

In summary, the budget is comprised of 3 sections: Labor, OM, and Capital. Flexibility between line items must remain within the same section. Finally, if there is an anticipated overrun in any of the three sections, there shall be a written communication by RailWorks to ACTA and a written approval by 75% of the delegates prior to incurring the cost. It is important to allow ACTA the flexibility to administer the RailWorks budget and the intent of these guidelines is to provide that flexibility, while protecting the Railroads and Ports from unexpected budget changes.

4. Reporting (Section 13.2 of the Alameda Corridor Maintenance Agreement)

- RailWorks shall generate a quarterly report for budget status and projection.
- RailWorks shall develop a rolling 5-year plan for maintenance programs and capital.
- RailWorks shall develop a detailed report to support the manpower requirements for the annual budget.

Please provide your acceptance and approval by affixing your signature, name and title below:

Port of Los Angeles

By: _____

Printed Name: _____

Title: _____

Date: _____

Port of Long Beach

By: _____

Printed Name: _____

Title: _____

Date: _____

BNSF Railway Company

By: _____

Printed Name: _____

Title: _____

Date: _____

Union Pacific Railroad Company

By: _____

Printed Name: _____

Title: _____

Date: _____

Attachments:

- 1 – Proposed 2022 MOW Budget
- 2 – Proposed 2022 MOW Labor Detail
- 3 – Proposed 2022 MOW Operations Maintenance Detail
- 4 – Proposed 2022 MOW Capital Costs Detail
- 5 – Proposed 2022 O&M Budget

Attachments 1 – Proposed 2022 MOW Budget

3. CAPITAL COSTS	2022		R.R. M&O - Rail		Res. Acct. Non-Rail		ACTA Operating Budget		2021
	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	
3.a Surfacing & Mobilization	\$ 503,065.67	0.0%	\$ -	-	\$ 503,065.67	0.0%	\$ -	-	\$ 478,338.14
3.c Reballast Program - Labor & Equipment	\$ 324,775.97	0.0%	\$ -	-	\$ 324,775.97	0.0%	\$ -	-	\$ 260,448.95
3.d Reballast Program - Ballast	\$ 58,300.00	0.0%	\$ -	-	\$ 58,300.00	0.0%	\$ -	-	\$ 58,300.00
3.f Capital Program Rail Grinding - (50% of Total Cost)	\$ 304,062.49	0.0%	\$ -	-	\$ 304,062.49	0.0%	\$ -	-	\$ 514,808.69
3.h-2 Replace 20 Frogs	\$ 728,557.20	0.0%	\$ -	-	\$ 728,557.20	0.0%	\$ -	-	\$ 771,001.76
3.h-3 Replace 40 Switch Points and Stock Rails	\$ 458,201.73	0.0%	\$ -	-	\$ 458,201.73	0.0%	\$ -	-	\$ 461,894.76
3.h-5 Insulated Joint Replacement	\$ 256,060.44	0.0%	\$ -	-	\$ 256,060.44	0.0%	\$ -	-	\$ 456,540.76
3.o Pump Station Upgrades (Subcontractor)	\$ 213,500.00	0.0%	\$ -	-	\$ 213,500.00	0.0%	\$ -	-	\$ 213,500.00
3.r Trench Emergency Ladder, Stair Study, & Repairs (Subcontractor)	\$ 129,000.00	0.0%	\$ -	-	\$ 129,000.00	0.0%	\$ -	-	\$ 129,000.00
3.w.1 Rehab Henry Ford Crossing - Near PHL Offices N of Bridge	\$ -	0.0%	\$ -	-	\$ -	0.0%	\$ -	-	\$ 439,984.37
3.y Signal Battery Replacement	\$ 110,000.00	0.0%	\$ -	-	\$ 110,000.00	0.0%	\$ -	-	\$ 110,000.00
3.aa-1 Replace Crucero Diamonds	\$ 631,773.17	0.0%	\$ -	-	\$ 631,773.17	0.0%	\$ -	-	\$ 566,095.43
3.gg-3 Curve Rail Replacement	\$ 657,204.85	0.0%	\$ -	-	\$ 657,204.85	0.0%	\$ -	-	\$ 776,461.84
3.ii Fixed Trench Ladders (Subcontractor)	\$ 420,000.00	0.0%	\$ -	-	\$ 420,000.00	0.0%	\$ -	-	\$ 420,000.00
3.mm Miscellaneous Trench Structure Repairs (Subcontractor)	\$ 63,000.00	0.0%	\$ -	-	\$ 63,000.00	0.0%	\$ -	-	\$ 63,000.00
3.nn Compton Bridges - Replace Deck Ties	\$ 572,913.23	0.0%	\$ -	-	\$ 572,913.23	0.0%	\$ -	-	\$ -
3.oo Replacement of M23A Switches Machines	\$ 30,800.00	0.0%	\$ -	-	\$ 30,800.00	0.0%	\$ -	-	\$ 30,800.00
3.pp Signal Module VHLC Replacements to XLC	\$ 141,699.60	0.0%	\$ -	-	\$ 141,699.60	0.0%	\$ -	-	\$ 138,600.00
3.qq Furnish and Replace Rail Lubricator Systems	\$ 86,411.66	0.0%	\$ -	-	\$ 86,411.66	0.0%	\$ -	-	\$ -
SUBTOTAL C:	\$ 5,689,326.00		\$ -		\$ 5,689,326.00		\$ -		\$ 5,888,774.70
Approved CY2021 Budget	\$ 5,888,774.71		\$ -		\$ 5,888,774.71		\$ -		\$ 5,888,774.71
Variance	\$ (199,448.71)		\$ -		\$ (199,448.71)		\$ -		\$ (0.00)
% Change	-3.4%				-3.4%				0.0%
GRAND TOTAL A, B, C:	\$ 14,979,475.33		\$ 7,812,548.32		\$ 7,009,538.97		\$ 157,388.05		\$ 13,899,013.95
Approved CY2021 Budget	\$ 13,899,013.95		\$ 6,072,178.65		\$ 7,687,394.54		\$ 139,440.77		\$ 13,899,013.95
Variance	\$ 1,080,461.38		\$ 1,740,369.67		\$ (677,855.57)		\$ 17,947.28		\$ (0.00)
% Change	7.8%		28.7%		-8.8%		12.9%		0.0%

Attachments 2 – Proposed 2022 MOW Labor Detail

1. Proposed 2022 Labor Costs

1. LABOR		Positions	Needed Portion	EST Hours	2022 Hourly RATE	OT RATE	OT * VALUE	DT RATE	DT ** VALUE	2022 VALUE	Share	R.R. M & O Rail Cost	Hours	Share	Reserve Account Non-Rail Cost	Hours	Share	ACTA Operating Budget Cost	Hours	2021 Amended Approved Budget
MANAGEMENT POSITIONS																				
1.a.i	Contract Manager	1	100.0%	2000	\$ 157.76	N/A	N/A	N/A	N/A	\$ 315,519.95	70.0%	\$ 220,863.97	1,400	20.0%	\$ 63,103.99	400	10.0%	\$ 31,552.00	200	\$ 310,438.89
1.a.ii	Track Supervisor	1	100.0%	2000	\$ 124.55	N/A	N/A	N/A	N/A	\$ 249,094.70	80.0%	\$ 199,275.76	1,600	20.0%	\$ 49,818.94	400	0.0%	\$ -	-	\$ 245,083.33
1.a.iii	Safety Supervisor	1	100.0%	2000	\$ 124.55	N/A	N/A	N/A	N/A	\$ 249,094.70	80.0%	\$ 199,275.76	1,600	20.0%	\$ 49,818.94	400	0.0%	\$ -	-	\$ 245,083.33
1.a.iv	Office Manager	1	100.0%	2000	\$ 58.12	N/A	N/A	N/A	N/A	\$ 116,244.19	50.0%	\$ 58,122.10	1,000	50.0%	\$ 58,122.10	1,000	0.0%	\$ -	-	\$ 114,372.22
1.a.vi	Office Assistant	1	100.0%	2000	\$ 58.12	N/A	N/A	N/A	N/A	\$ 116,244.19	50.0%	\$ 58,122.10	1,000	50.0%	\$ 58,122.10	1,000	0.0%	\$ -	-	\$ 114,372.22
STAFF POSITIONS																				
1.b	Track Inspector	1	100.0%	2000	\$ 94.36	\$ 126.90	\$ 9,771.25	\$ 159.44	\$ 3,826.59	\$ 202,312.96	100.0%	\$ 202,312.96	2,000	0.0%	\$ -	-	0.0%	\$ -	-	\$ 196,685.98
1.b.i	Track Foreman	1	100.0%	2000	\$ 94.36	\$ 126.90	\$ 9,771.25	\$ 159.44	\$ 3,826.59	\$ 202,312.96	100.0%	\$ 202,312.96	2,000	0.0%	\$ -	-	0.0%	\$ -	-	\$ 196,685.98
1.b.ii	Assistant Foreman	1	100.0%	2000	\$ 92.86	\$ 124.66	\$ 9,598.48	\$ 156.45	\$ 3,754.79	\$ 199,076.73	100.0%	\$ 199,076.73	2,000	0.0%	\$ -	-	0.0%	\$ -	-	\$ 193,437.65
1.b.iii	Track Laborers	4	100.0%	8000	\$ 86.88	\$ 115.68	\$ 35,629.63	\$ 144.48	\$ 13,870.35	\$ 744,527.29	97.5%	\$ 725,914.11	7,800	2.5%	\$ 18,613.18	200	0.0%	\$ -	-	\$ 902,221.69
1.b.iv	Equipment Operators	1.5	100.0%	3000	\$ 115.94	\$ 156.33	\$ 18,055.74	\$ 196.71	\$ 7,081.71	\$ 372,955.41	97.5%	\$ 363,631.52	2,925	2.5%	\$ 9,323.89	75	0.0%	\$ -	-	\$ 363,625.14
1.b.v	Welder	2	100.0%	4000	\$ 91.37	\$ 122.41	\$ 18,851.43	\$ 153.46	\$ 7,365.97	\$ 391,681.01	100.0%	\$ 391,681.01	4,000	0.0%	\$ -	-	0.0%	\$ -	-	\$ 380,378.65
1.b.vi	Welder Helper	1	100.0%	2000	\$ 86.88	\$ 115.68	\$ 8,907.41	\$ 144.48	\$ 3,467.59	\$ 186,131.82	100.0%	\$ 186,131.82	2,000	0.0%	\$ -	-	0.0%	\$ -	-	\$ 180,444.34
1.b.vii	Laborer (Non-Rail)	1	100.0%	2000	\$ 86.88	\$ 115.68	\$ 8,907.41	\$ 144.48	\$ 3,467.59	\$ 186,131.82	0.0%	\$ -	-	100.0%	\$ 186,131.82	2,000	0.0%	\$ -	-	\$ 180,444.34
1.b.viii	Foreman (Non-Rail)	1	100.0%	2000	\$ 94.36	\$ 126.90	\$ 9,771.25	\$ 159.44	\$ 3,826.59	\$ 202,312.96	0.0%	\$ -	-	100.0%	\$ 202,312.96	2,000	0.0%	\$ -	-	\$ -
1.b.ix	Track Superintendent	1	100.0%	2000	\$ 130.03	\$ 177.04	\$ 13,632.03	\$ 224.05	\$ 5,377.28	\$ 279,060.05	50.0%	\$ 139,530.03	1,000	50.0%	\$ 139,530.03	1,000	0.0%	\$ -	-	\$ 272,947.08
		19.5		39000						SUBTOTAL A:		\$ 3,146,250.83	30,325		\$ 834,897.94	8,475		\$ 31,552.00	200	\$ 3,896,220.85
										Approved CY2021 Budget		\$ 2,639,860.25	17,600		\$ 1,235,120.05	10,200		\$ 21,240.56	200	\$ 3,896,220.85
										Variance		\$ 506,391	26,350		\$ (400,222)	12,450		\$ 10,311.44		\$ -
										% Change		19.2%	3,975		-32.4%	(3,975)		48.5%		0.0%

* OT Value Based on Working 80 Hours of OT During Calendar Year = 3.85% of Base Hours
 **DT Value Based on Working 24 Hours of DT During Year = 1.2% of Base Hours
 Note: all rates are Fully Burden Labor Rate. Additional detail is available upon request.

Attachments 3 – Proposed 2022 MOW Operations Maintenance Detail

2. Proposed CY22 Operations Maintenance Budget Detail

Cost Code

2.b Pump Station Maintenance	U of M	QTY	Rate	Split	Total
Vehicle (Split 50/50 between 2.b & 2.e)	Monthly	12	\$ 2,236.00	50%	\$ 13,416.00
SUBTOTAL:					\$ 13,416.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ -
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ 13,416.00

2.b.i Pump Station Repairs and Supplies	U of M	QTY	Rate	Split	Total
Subcontractor - Repairs to Pumps	LS	1	\$ 17,000.00	100%	\$ 17,000.00
Environmental Supplies (Chemicals for water treatment)	LS	1	\$ 12,000.00	100%	\$ 12,000.00
SUBTOTAL:					\$ 29,000.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ 850.00
	Supplies		15%	Markup:	\$ 1,800.00
TOTAL:					\$ 31,650.00

2.c AEI & Other Communications Maintenance	U of M	QTY	Rate	Split	Total
Materials					
Material - Initial Inventory Purchase	LS	1	\$ 12,500.00	100%	\$ 12,500.00
<i>Subtotal - Materials</i>					\$ 12,500.00
Subcontractor					
AEI / Comm Technician - ST	Hour	2000	\$ 109.00	100%	\$ 218,000.00
AEI / Comm Technician - OT (Based on 1Q&2Q2021)	Hour	100	\$ 161.00	100%	\$ 16,100.00
AEI / Comm Technician - DT (Based on 1Q&2Q2021)	Hour	20	\$ 215.00	100%	\$ 4,300.00
Signal / Comm Supervisor	Hour	200	\$ 125.00	100%	\$ 25,000.00
Vehicle - Signal / Comm Supervisor	Monthly	12	\$ 178.60	100%	\$ 2,143.20
Vehicle - AEI / Comm Technician (Monthly Rate for FT Position)	Monthly	12	\$ 2,228.39	100%	\$ 26,740.68
Vehicle - AEI / Comm Technician (Hourly Rate for Call-Outs)	Hour	120	\$ 14.00	100%	\$ 1,680.00
Equipment - Hi-Rail Bucket Truck	Monthly	12	\$ 228.00	100%	\$ 2,736.00
<i>Subtotal - Subcontractor</i>					\$ 296,699.88
SUBTOTAL:					\$ 309,199.88
	Materials		10%	Markup:	\$ 1,250.00
	Subcontractor		5%	Markup:	\$ 14,834.99
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ 325,284.87

2.d Rail Flaw Detection	U of M	QTY	Rate	Split	Total
Subcontractor - Mobilization	EA	3	\$ 4,000.00	100%	\$ 12,000.00
Subcontractor - Daily Rate (3-day minimums)	EA	3	\$ 14,000.00	100%	\$ 42,000.00
SUBTOTAL:					\$ 54,000.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ 2,700.00
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ 56,700.00

2.e Graffiti Control	U of M	QTY	Rate	Split	Total
Vehicle (Split 50/50 between 2.b & 2.e)	Monthly	12	\$ 2,236.00	50%	\$ 13,416.00
Materials	LS	1	\$ 12,600.00	100%	\$ 12,600.00
SUBTOTAL:					\$ 26,016.00
	Materials		10%	Markup:	\$ 1,260.00
	Subcontractor		5%	Markup:	\$ -
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ 27,276.00

2.f Weed Abatement	U of M	QTY	Rate	Split	Total
Subcontractor					
Subcontractor	LS	1	\$ 33,600.00	100%	\$ 33,600.00
Disposal - Dumpsters @ 1 per month	EA	12	\$ 1,200.00	100%	\$ 14,400.00
<i>Subtotal - Subcontractor</i>					\$ 48,000.00
Supplies & Rental					
Specialty Equipment Rental	EA	12	\$ 1,200.00	100%	\$ 14,400.00
<i>Subtotal - Supplies & Rental</i>					\$ 14,400.00
SUBTOTAL:					\$ 62,400.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ 2,400.00
	Supplies		15%	Markup:	\$ 2,160.00
	TOTAL:				\$ 66,960.00

2.g Safety Training	U of M	QTY	Rate	Split	Total
Subcontractor - Training (Classes and Seminars)	LS	1	\$ 18,000.00	100%	\$ 18,000.00
Instructor Lodging and Meals	Days	5	\$ 2,500.00	100%	\$ 12,500.00
SUBTOTAL:					\$ 30,500.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ 1,525.00
	Supplies		15%	Markup:	\$ -
	TOTAL:				\$ 32,025.00

2.h Safety Management	U of M	QTY	Rate	Split	Total
Drug Testing - Employees	EA	30	\$ 775.00	100%	\$ 23,250.00
SUBTOTAL:					\$ 23,250.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ 1,162.50
	Supplies		15%	Markup:	\$ -
	TOTAL:				\$ 24,412.50

2.i Vehicles (Cost Accounts % split)	U of M	QTY	Rate	Split	Total
2.i.i Contract Manager (RR M&O 70%/RA 20%/OB 10%)	Monthly	12	\$ 1,763.00	100%	\$ 21,156.00
2.i.ii Track Supervisor - Hi-Rail (RR M&O 80%/RA 20%)	Monthly	12	\$ 2,236.00	100%	\$ 26,832.00
2.i.iii Welding Truck - Hi-Rail (RR M&O 100%)	Monthly	12	\$ 6,192.00	100%	\$ 74,304.00
2.i.iv Track Foreman - Hi-Rail (2 Each) (RR M&O 50%/RA 50%)	Monthly	24	\$ 2,900.00	100%	\$ 69,600.00
2.i.v Assistant Track Foreman - Hi-Rail (RR M&O 100%)	Monthly	12	\$ 2,236.00	100%	\$ 26,832.00
2.i.vi Track Inspector - Hi-Rail (2 Each) (RR M&O 100%)	Monthly	24	\$ 2,236.00	100%	\$ 53,664.00
2.i.vii Track Superintendent - Hi-Rail (RR M&O 50%/RA 50%)	Monthly	12	\$ 2,236.00	100%	\$ 26,832.00
2.k Safety Supervisor Vehicle (RR M&O 80%/RA 20%)	Monthly	12	\$ 1,032.00	100%	\$ 12,384.00
SUBTOTAL:					\$ 311,604.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ -
	Supplies		15%	Markup:	\$ -
	TOTAL:				\$ 311,604.00

2.l Full-Time Equipment	U of M	QTY	Rate	Split	Total
Hi-Rail Grapple / Boom Truck	Monthly	12	\$ 9,460.00	100%	\$ 113,520.00
Speedswing	Monthly	12	\$ 7,568.00	100%	\$ 90,816.00
Combination Backhoe	Monthly	12	\$ 4,816.00	100%	\$ 57,792.00
SUBTOTAL:					\$ 262,128.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ -
	Supplies		15%	Markup:	\$ -
	TOTAL:				\$ 262,128.00

2.m	Maintenance Program Rail Grinding	U of M	QTY	Rate	Split	Total
RailWorks Labor & Equipment						
	Foreman	HR	80	\$ 94.36	50%	\$ 3,774.30
	Laborer	HR	80	\$ 86.88	50%	\$ 3,475.14
	F350 HiRail Crew Truck	HR	80	\$ 13.00	50%	\$ 520.00
	<i>Subtotal - RWs Labor & Equipment</i>					\$ 7,769.44
Subcontractor						
	Mainline Grinding Subcontractor Mobilization	LS	2	\$ 20,000.00	50%	\$ 20,000.00
	Mainline Grinding Contractor Basic Charge	Daily	6	\$ 63,157.00	50%	\$ 189,471.00
	Mainline Grinding Production Charge	Miles	50	\$ 1,074.00	50%	\$ 26,850.00
	Mainline Grinding Pre-Grind Survey Mobilization	LS	1	\$ 11,000.00	50%	\$ 5,500.00
	Mainline Grinding Pre-Grind Survey Daily Rate	Daily	3	\$ 7,200.00	50%	\$ 10,800.00
	Signal Support	Daily	10	\$ 984.00	50%	\$ 4,920.00
	<i>Subtotal - Subcontractor</i>					\$ 257,541.00
Supplies & Rental						
	Fuel for Grinder	Gallon	6000	\$ 5.00	50%	\$ 15,000.00
	Water Truck Rental	Monthly	2	\$ 7,500.00	50%	\$ 7,500.00
	<i>Subtotal - Supplies & Rental</i>					\$ 22,500.00
Total is split 50/50 between R.R. M&O Cost and Capital						SUBTOTAL: \$ 287,810.44
	Materials	10%	Markup:	\$	-	
	Subcontractor	5%	Markup:	\$	12,877.05	
	Supplies	15%	Markup:	\$	3,375.00	
						TOTAL: \$ 304,062.49

2.n	Track Materials / Supplies / Rentals	U of M	QTY	Rate	Split	Total
Materials						
	Equipment Rental	Monthly	12	\$ 5,000.00	100%	\$ 60,000.00
	Miscellaneous Track Materials - Bolts, etc.	Monthly	12	\$ 5,000.00	100%	\$ 60,000.00
	Curve Grease - Grease and miscellaneous parts and pieces	Monthly	12	\$ 5,000.00	100%	\$ 60,000.00
	Supplies and Consumables - Welding, etc.	Monthly	12	\$ 5,000.00	100%	\$ 60,000.00
	<i>Subtotal - Materials</i>					\$ 240,000.00
Supplies & Rental						
	<i>Subtotal - Supplies & Rental</i>					
						SUBTOTAL: \$ 240,000.00
	Materials	10%	Markup:	\$	24,000.00	
	Subcontractor	5%	Markup:	\$	-	
	Supplies	15%	Markup:	\$	-	
						TOTAL: \$ 264,000.00

2.o	Signal Maintenance	U of M	QTY	Rate	Split	Total
Materials						
	Material Ongoing Purchases Total = LS (RWKS purchase)	LS	1	\$ 80,000.00	100%	\$ 80,000.00
	<i>Subtotal - Materials</i>					\$ 80,000.00
Subcontractor						
	Signal / Comm Supervisor	HR	1800	\$ 125.00	100%	\$ 225,000.00
	Signal / Comm Supervisor - OT (Based on 1Q&2Q2021)	HR	60	\$ 185.00	100%	\$ 11,100.00
	Signal / Comm Supervisor - DT (Based on 1Q&2Q2021)	HR	10	\$ 247.00	100%	\$ 2,470.00
	Signal Test Maintainer	HR	2000	\$ 111.00	100%	\$ 222,000.00
	Signal Test Maintainer - OT (Based on 1Q&2Q2021)	HR	103	\$ 164.00	100%	\$ 16,892.00
	Signal Test Maintainer - DT (Based on 1Q&2Q2021)	HR	24	\$ 219.00	100%	\$ 5,256.00
	Signal Maintainer	HR	6000	\$ 109.00	100%	\$ 654,000.00
	Signal Maintainer - OT (Based on 1Q&2Q2021)	HR	394	\$ 161.00	100%	\$ 63,434.00
	Signal Maintainer - DT (Based on 1Q&2Q2021)	HR	98	\$ 215.00	100%	\$ 21,070.00
	Vehicle - Signal / Comm Supervisor	Monthly	12	\$ 1,786.00	100%	\$ 21,432.00
	Vehicle - Signal Test Maintainer	Monthly	12	\$ 2,229.00	100%	\$ 26,748.00
	Vehicle - Signal Maintainers (3)	Monthly	12	\$ 6,687.00	100%	\$ 80,244.00
	Vehicle - Signal Test Maintainer &/or Signal Maintainer for Call-Outs	HR	1238	\$ 14.00	100%	\$ 17,332.00
	Vehicle - Sig/Comm Supv &/or Signal Engineer for Call-Outs	HR	140	\$ 11.00	100%	\$ 1,540.00
	Equipment - Bucket Truck	Monthly	12	\$ 2,280.00	100%	\$ 27,360.00
	<i>Subtotal - Subcontractor</i>					\$ 1,395,878.00
						SUBTOTAL: \$ 1,475,878.00
	Materials	10%	Markup:	\$	8,000.00	
	Subcontractor	5%	Markup:	\$	69,793.90	
	Supplies	15%	Markup:	\$	-	
						TOTAL: \$ 1,553,671.90

2.p Ladder / Fence / Traffic Support	U of M	QTY	Rate	Split	Total
Materials					
Ladder Replacement Parts	LS	1	\$ 11,550.00	100%	\$ 11,550.00
<i>Subtotal - Materials</i>					\$ 11,550.00
Subcontractor					
Traffic Support	LS	1	\$ 220,500.00	100%	\$ 220,500.00
Fence Repair / Replacement	LS	1	\$ 33,600.00	100%	\$ 33,600.00
<i>Subtotal - Subcontractor</i>					\$ 254,100.00
SUBTOTAL:					\$ 265,650.00
	Materials		10%	Markup:	\$ 1,155.00
	Subcontractor		5%	Markup:	\$ 12,705.00
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ 279,510.00

2.q Security - Trench Cameras	U of M	QTY	Rate	Split	Total
Motion Detector Replacement Parts	LS	1	\$ 2,500.00	100%	\$ 2,500.00
Wire Replacement Subcontractor	LS	1	\$ 3,500.00	100%	\$ 3,500.00
Camera Replacement Parts	LS	1	\$ 12,600.00	100%	\$ 12,600.00
SUBTOTAL:					\$ 18,600.00
	Materials		10%	Markup:	\$ 1,860.00
	Subcontractor		5%	Markup:	\$ -
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ 20,460.00

2.r Yard / Office Security / Maintenance / Support	U of M	QTY	Rate	Split	Total
Subcontractor					
Security Guard Services	Monthly	12	\$ 14,700.00	100%	\$ 176,400.00
Janitorial Services	Monthly	12	\$ 1,575.00	100%	\$ 18,900.00
HVAC and Building Maintenance (Electrical, Mechanical, Pest)	Monthly	12	\$ 1,050.00	100%	\$ 12,600.00
Quench / Dumpsters / Portable Sanitation / Pesticides	Monthly	12	\$ 1,200.00	100%	\$ 14,400.00
SUBTOTAL:					\$ 222,300.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ 11,115.00
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ 233,415.00

2.s Underwater Bridge Inspection	U of M	QTY	Rate	Split	Total
Not needed until 2023	LS	0	\$ -	100%	\$ -
SUBTOTAL:					\$ -
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ -
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ -

2.t Trench Ditch Cleaning	U of M	QTY	Rate	Split	Total
Subcontractor					
Hi-Rail Vac Truck if Required	Weeks	2	\$ 12,000.00	100%	\$ 24,000.00
Disposal of Materials	LS	1	\$ 20,000.00	100%	\$ 20,000.00
SUBTOTAL:					\$ 44,000.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ 2,200.00
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ 46,200.00

2.w Railroad Reporting & Record Keeping Software System	U of M	QTY	Rate	Split	Total
Subcontractor					
Tier Based Management Fee	LS	1	\$ 37,800.00	100%	\$ 37,800.00
Updates	LS	1	\$ 4,200.00	100%	\$ 4,200.00
SUBTOTAL:					\$ 42,000.00
	Materials		10%	Markup:	\$ -
	Subcontractor		5%	Markup:	\$ 2,100.00
	Supplies		15%	Markup:	\$ -
TOTAL:					\$ 44,100.00

2.x	Railroad Emergency Drill Exercise	U of M	QTY	Rate	Split	Total	
RailWorks Labor & Equipment							
	Track Foreman	HR	12	\$ 159.44	100%	\$ 1,913.28	
	Crew Truck	HR	24	\$ 13.00	100%	\$ 312.00	
	Track Laborer	HR	24	\$ 144.48	100%	\$ 3,467.52	
	<i>Subtotal - RWs Labor & Equipment</i>					\$	5,692.80
Subcontractor							
	Maintenance of Traffic Subcontractor	LS	1	\$ 2,000.00	100%	\$ 2,000.00	
	<i>Subtotal - Subcontractor</i>					\$	2,000.00
Supplies & Rental							
	Miscellaneous Supplies	LS	1	\$ 17,000.00	100%	\$ 17,000.00	
	<i>Subtotal - Supplies & Rentals</i>					\$	17,000.00

SUBTOTAL: \$ 24,692.80

Materials	10%	Markup:	\$ -
Subcontractor	5%	Markup:	\$ 100.00
Supplies	15%	Markup:	\$ 2,550.00
		TOTAL:	\$ 27,342.80

2.dd	Bridge Inspections	U of M	QTY	Rate	Split	Total
	Subcontractor	LS	1	\$ 34,000.00	100%	\$ 34,000.00

SUBTOTAL: \$ 34,000.00

Materials	10%	Markup:	\$ -
Subcontractor	5%	Markup:	\$ 1,700.00
Supplies	15%	Markup:	\$ -
		TOTAL:	\$ 35,700.00

2.ee	Conduit Installation MP 8.9 to Ladder 15 - 2022	U of M	QTY	Rate	Split	Total	
RailWorks Labor & Equipment							
	Labor & Equipment from Estimate File	LS	1	\$ 550,000.00	100%	\$ 550,000.00	
	<i>Subtotal - RailWorks Labor & Equipment</i>					\$	550,000.00
Materials							
	Materials - Lump Sum from Estimate File	LS	1	\$ 550,000.00	100%	\$ 550,000.00	
	<i>Subtotal - Materials</i>					\$	550,000.00
Subcontractor							
	Highball Signal Support	LS	1	\$ 78,000.00	100%	\$ 78,000.00	
	Previous GM Electric Tech Invoices not Billed to Date	LS	1	\$ 75,000.00	0%	\$ -	
	Fiber Splice Sub	LS	1	\$ 70,000.00	100%	\$ 70,000.00	
	<i>Subtotal - Subcontractor</i>					\$	148,000.00
Supplies & Rental							
	Supplies - Lump Sum from Estimate File	LS	1	\$ 31,000.00	20%	\$ 6,200.00	
	<i>Subtotal - Supplies & Rental</i>					\$	6,200.00

SUBTOTAL: \$ 1,254,200.00

Materials	10%	Markup:	\$ 55,000.00
Subcontractor	5%	Markup:	\$ 7,400.00
Supplies	15%	Markup:	\$ 930.00
		TOTAL:	\$ 1,317,530.00

Attachments 4 – Proposed 2022 MOW Capital Costs Detail

3. Proposed CY2022 Capital Program

Cost Code

3.a

Surfacing	U of M	QTY	Rate	Split	Total
RailWorks Labor & Equipment					
Operators	Hour	96	\$ 115.94	100%	\$ 11,130.17
Truck	Hour	96	\$ 14.00	100%	\$ 1,344.00
<i>Subtotal - RWs Labor & Equipment</i>					\$ 12,474.17
Subcontractor					
Subcontractor Tamping & Regulating - LazerWest	Day	70	\$ 5,005.00	100%	\$ 350,350.00
Signal Support	Day	70	\$ 984.00	100%	\$ 68,880.00
Subcontract Equipment Trucking	LS	12	\$ 4,000.00	100%	\$ 48,000.00
<i>Subtotal - Subcontractor</i>					\$ 467,230.00
Daily Rate with Subcontractor = \$5,966.13					

SUBTOTAL: \$ 479,704.17

Materials	10%	Markup: \$	-
Subcontractor	5%	Markup: \$	23,361.50
Supplies	15%	Markup: \$	-
		TOTAL: \$	503,065.67

3.c

Reballast Program (Labor & Equipment Combined)	U of M	QTY	Rate	Split	Total
RailWorks Labor & Equipment					
Foreman	Hour	256	\$ 94.36	100%	\$ 24,155.54
Laborers	Hour	1024	\$ 86.88	100%	\$ 88,963.50
Operators	Hour	768	\$ 115.94	100%	\$ 89,041.40
Flagger	Hour	256	\$ 94.36	100%	\$ 24,155.54
Hi-Rail Rotary Dump Truck	Hour	256	\$ 36.00	100%	\$ 9,216.00
Ballast Regulator	Hour	256	\$ 85.00	100%	\$ 21,760.00
Crew Truck	Hour	256	\$ 26.00	100%	\$ 6,656.00
Flagger Truck	Hour	256	\$ 13.00	100%	\$ 3,328.00
<i>Subtotal - RWs Labor & Equipment</i>					\$ 267,275.97
Supplies & Rental					
Front End Loader	Month	4	\$ 7,500.00	100%	\$ 30,000.00
Mobilizations (Loaders, Regulators, Hi-Rail Dump Truck)	LS	1	\$ 20,000.00	100%	\$ 20,000.00
<i>Subtotal - Supplies & Rental</i>					\$ 50,000.00

SUBTOTAL: \$ 317,275.97

Materials	10%	Markup: \$	-
Subcontractor	5%	Markup: \$	-
Supplies	15%	Markup: \$	7,500.00
		TOTAL: \$	324,775.97

3.d

Reballast Program - Ballast	U of M	QTY	Rate	Split	Total
Ballast	Ton	1000	\$ 53.00	100%	\$ 53,000.00
<i>Subtotal - Ballast</i>					\$ -

SUBTOTAL: \$ 53,000.00

Materials	10%	Markup: \$	5,300.00
Subcontractor	5%	Markup: \$	-
Supplies	15%	Markup: \$	-
		TOTAL: \$	58,300.00

3.f Capital Program Rail Grinding

	U of M	QTY	Rate	Split	Total
RailWorks Labor & Equipment					
Foreman	HR	80	\$ 94.36	50%	\$ 3,774.30
Laborer	HR	80	\$ 86.88	50%	\$ 3,475.14
F350 HiRail Crew Truck	HR	80	\$ 13.00	50%	\$ 520.00
<i>Subtotal - RWs Labor & Equipment</i>					\$ 7,769.44
Subcontractor					
Mainline Grinding Subcontractor Mobilization	LS	2	\$ 20,000.00	50%	\$ 20,000.00
Mainline Grinding Contractor Basic Charge	Daily	6	\$ 63,157.00	50%	\$ 189,471.00
Mainline Grinding Production Charge	Miles	50	\$ 1,074.00	50%	\$ 26,850.00
Mainline Grinding Pre-Grind Survey Mobilization	LS	1	\$ 11,000.00	50%	\$ 5,500.00
Mainline Grinding Pre-Grind Survey Daily Rate	Daily	3	\$ 7,200.00	50%	\$ 10,800.00
Signal Support	Daily	10	\$ 984.00	50%	\$ 4,920.00
<i>Subtotal - Subcontractor</i>					\$ 257,541.00
Supplies & Rental					
Fuel for Grinder	Gallon	6000	\$ 5.00	50%	\$ 15,000.00
Water Truck Rental	Monthly	2	\$ 7,500.00	50%	\$ 7,500.00
<i>Subtotal - Supplies & Rental</i>					\$ 22,500.00

Total is split 50/50 between R.R. M&O Cost (2.m) and Capital

SUBTOTAL: \$ 287,810.44

Materials	10%	Markup: \$	-
Subcontractor	5%	Markup: \$	12,877.05
Supplies	15%	Markup: \$	3,375.00
		TOTAL: \$	304,062.49

3.h-2 Replace 20 Frogs

	U of M	QTY	Rate	Split	Total
RailWorks Labor & Equipment					
Foreman	Hour	160	\$ 94.36	100%	\$ 15,097.21
Laborers	Hour	320	\$ 86.88	100%	\$ 27,801.09
Operators	Hour	160	\$ 115.94	100%	\$ 18,550.29
Welder	Hour	320	\$ 91.37	100%	\$ 29,237.09
Welder Helper	Hour	320	\$ 86.88	100%	\$ 27,801.09
Flagger	Hour	320	\$ 94.36	100%	\$ 30,194.42
Foreman Truck	Hour	160	\$ 26.00	100%	\$ 4,160.00
Welding Truck	Hour	320	\$ 36.00	100%	\$ 11,520.00
CWR Rail Heater / Vibrator	Hour	160	\$ 57.00	100%	\$ 9,120.00
Rail Saw	Hour	160	\$ 10.00	100%	\$ 1,600.00
Rail Drill	Hour	160	\$ 10.00	100%	\$ 1,600.00
Mobile Power Pack	Hour	160	\$ 10.00	100%	\$ 1,600.00
Flagger Truck	Hour	320	\$ 13.00	100%	\$ 4,160.00
Carryover for installations not completed in 2021	LS	1	\$ 55,000.00	100%	\$ 55,000.00
<i>Subtotal - RWs Labor & Equipment</i>					\$ 237,441.20
Materials					
#10 RBM Frogs	EA	2	\$ 16,000.00	100%	\$ 32,000.00
#14 RBM Frogs	EA	10	\$ 19,000.00	100%	\$ 190,000.00
#20 RBM Frogs	EA	8	\$ 23,000.00	100%	\$ 184,000.00
Thermite Weld Kits	EA	80	\$ 125.00	100%	\$ 10,000.00
<i>Subtotal - Materials</i>					\$ 416,000.00
Subcontractor					
Signal Support	Day	20	\$ 984.00	100%	\$ 19,680.00
Trucking Sub	Day	10	\$ 1,224.00	100%	\$ 12,240.00
<i>Subtotal - Subcontractor</i>					\$ 31,920.00

SUBTOTAL: \$ 685,361.20

Materials	10%	Markup: \$	41,600.00
Subcontractor	5%	Markup: \$	1,596.00
Supplies	15%	Markup: \$	-
		TOTAL: \$	728,557.20

3.h-3 Replace 40 Switch Points and Stock Rails

	U of M	QTY	Rate	Split	Total
RailWorks Labor & Equipment					
Foreman	Hour	160	\$ 94.36	100%	\$ 15,097.21
Laborers	Hour	480	\$ 86.88	100%	\$ 41,701.64
Operators	Hour	320	\$ 115.94	100%	\$ 37,100.58
Welder	Hour	160	\$ 91.37	100%	\$ 14,618.54
Welder Helper	Hour	160	\$ 86.88	100%	\$ 13,900.55
Flagger	Hour	160	\$ 94.36	100%	\$ 15,097.21
Foreman Truck	Hour	160	\$ 26.00	100%	\$ 4,160.00
Welding Truck	Hour	160	\$ 36.00	100%	\$ 5,760.00
CWR Rail Heater / Vibrator	Hour	160	\$ 57.00	100%	\$ 9,120.00
Rail Saw	Hour	160	\$ 10.00	100%	\$ 1,600.00
Rail Drill	Hour	160	\$ 10.00	100%	\$ 1,600.00
Mobile Power Pack	Hour	160	\$ 10.00	100%	\$ 1,600.00
Flagger Truck	Hour	160	\$ 13.00	100%	\$ 2,080.00
Carryover for installations not completed in 2021	LS	1	\$ 55,000.00	100%	\$ 55,000.00
<i>Subtotal - RWs Labor & Equipment</i>					\$ 218,435.73
Materials					
Switch Points	EA	20	\$ 6,000.00	100%	\$ 120,000.00
Stock Rails	EA	20	\$ 3,000.00	100%	\$ 60,000.00
Thermite Weld Kits	EA	60	\$ 125.00	100%	\$ 7,500.00
<i>Subtotal - Materials</i>					\$ 187,500.00
Subcontractor					
Signal Support	Day	20	\$ 984.00	100%	\$ 19,680.00
Trucking Sub	Day	10	\$ 1,224.00	100%	\$ 12,240.00
<i>Subtotal - Subcontractor</i>					\$ 31,920.00

SUBTOTAL: \$ 437,855.73

Materials	10%	Markup: \$	18,750.00
Subcontractor	5%	Markup: \$	1,596.00
Supplies	15%	Markup: \$	-
		TOTAL: \$	458,201.73

3.h-5 Insulated Joint Replacement

	U of M	QTY	Rate	Split	Total
RailWorks Labor & Equipment					
Foreman	Hour	200	\$ 94.36	100%	\$ 18,871.51
Laborers	Hour	200	\$ 86.88	100%	\$ 17,375.68
Operators	Hour	200	\$ 115.94	100%	\$ 23,187.86
Welder	Hour	200	\$ 91.37	100%	\$ 18,273.18
Welder Helper	Hour	200	\$ 86.88	100%	\$ 17,375.68
Flagger	Hour	200	\$ 94.36	100%	\$ 18,871.51
Foreman Truck	Hour	200	\$ 26.00	100%	\$ 5,200.00
Welding Truck	Hour	200	\$ 36.00	100%	\$ 7,200.00
CWR Rail Heater / Vibrator	Hour	200	\$ 57.00	100%	\$ 11,400.00
Rail Saw	Hour	200	\$ 10.00	100%	\$ 2,000.00
Rail Drill	Hour	200	\$ 10.00	100%	\$ 2,000.00
Mobile Power Pack	Hour	200	\$ 10.00	100%	\$ 2,000.00
Flagger Truck	Hour	200	\$ 13.00	100%	\$ 2,600.00
<i>Subtotal - RWs Labor & Equipment</i>					\$ 146,355.44
Materials					
Thermite Welds	EA	50	\$ 125.00	100%	\$ 6,250.00
Insulated Joint Plug Rails	EA	25	\$ 2,800.00	100%	\$ 70,000.00
<i>Subtotal - Materials</i>					\$ 76,250.00
Subcontractor					
Signal Support	Day	25	\$ 984.00	100%	\$ 24,600.00
<i>Subtotal - Subcontractor</i>					\$ 24,600.00

SUBTOTAL: \$ 247,205.44

Materials	10%	Markup: \$	7,625.00
Subcontractor	5%	Markup: \$	1,230.00
Supplies	15%	Markup: \$	-
		TOTAL: \$	256,060.44

3.o	Pump Station Upgrades	U of M	QTY	Rate	Split	Total
	Materials	LS	1	\$ 70,000.00	100%	\$ 70,000.00
	Subcontractor	LS	1	\$ 130,000.00	100%	\$ 130,000.00
						SUBTOTAL: \$ 200,000.00
						Materials 10% Markup: \$ 7,000.00
						Subcontractor 5% Markup: \$ 6,500.00
						Supplies 15% Markup: \$ -
						TOTAL: \$ 213,500.00

3.r	Trench Emergency Ladder, Stair Study, & Repairs	U of M	QTY	Rate	Split	Total
	Materials - Parts and other materials	LS	1	\$ 60,000.00	100%	\$ 60,000.00
	Subcontractor	LS	1	\$ 60,000.00	100%	\$ 60,000.00
						SUBTOTAL: \$ 120,000.00
						Materials 10% Markup: \$ 6,000.00
						Subcontractor 5% Markup: \$ 3,000.00
						Supplies 15% Markup: \$ -
						TOTAL: \$ 129,000.00

3.y	Signal Battery Replacement	U of M	QTY	Rate	Split	Total
	Materials - Signal Batteries	Ea	1	\$ 100,000.00	100%	\$ 100,000.00
						SUBTOTAL: \$ 100,000.00
						Materials 10% Markup: \$ 10,000.00
						Subcontractor 5% Markup: \$ -
						Supplies 15% Markup: \$ -
						TOTAL: \$ 110,000.00

3.aa-1	Replace Crucero Diamonds (carryover from 2021)	U of M	QTY	Rate	Split	Total
RailWorks Labor & Equipment						
	Foreman	Hour	100	\$ 94.36	100%	\$ 9,435.76
	Laborers (x4)	Hour	400	\$ 86.88	100%	\$ 34,751.37
	Operators (x2)	Hour	200	\$ 115.94	100%	\$ 23,187.86
	Welder	Hour	100	\$ 91.37	100%	\$ 9,136.59
	Welder Helper	Hour	100	\$ 86.88	100%	\$ 8,687.84
	Flagger	Hour	100	\$ 94.36	100%	\$ 9,435.76
	Foreman Truck	Hour	100	\$ 26.00	100%	\$ 2,600.00
	Welding Truck	Hour	100	\$ 36.00	100%	\$ 3,600.00
	CWR Rail Heater / Vibrator	Hour	40	\$ 57.00	100%	\$ 2,280.00
	Rail Saw	Hour	80	\$ 10.00	100%	\$ 800.00
	Rail Drill	Hour	80	\$ 10.00	100%	\$ 800.00
	Mobile Power Pack	Hour	80	\$ 10.00	100%	\$ 800.00
	Flagger Truck	Hour	100	\$ 13.00	100%	\$ 1,300.00
<i>Subtotal - RWs Labor & Equipment</i>						\$ 106,815.17
Materials						
	Thermite Welds	EA	15	\$ 125.00	100%	\$ 1,875.00
	Ballast	Ton	100	\$ 54.00	100%	\$ 5,400.00
	Diamonds	LS	1	\$ 400,000.00	100%	\$ 400,000.00
	Insulated Joint Plug Rails	EA	12	\$ 2,500.00	100%	\$ 30,000.00
<i>Subtotal - Materials</i>						\$ 437,275.00
Subcontractor						
	Signal Support	Day	5	\$ 984.00	100%	\$ 4,920.00
	Subcontract Tamping	Day	2	\$ 5,005.00	100%	\$ 10,010.00
	Subcontract Tamping Mobilization	LS	1	\$ 10,000.00	100%	\$ 10,000.00
<i>Subtotal - Subcontractor</i>						\$ 24,930.00
Supplies & Rental						
	Front End Loader Rental (2x)	Month	2	\$ 7,500.00	100%	\$ 15,000.00
	Front End Loader Mobilization	Ea	4	\$ 115.00	100%	\$ 460.00
<i>Subtotal - Supplies & Rental</i>						\$ 15,460.00
						SUBTOTAL: \$ 584,480.17
						Materials 10% Markup: \$ 43,727.50
						Subcontractor 5% Markup: \$ 1,246.50
						Supplies 15% Markup: \$ 2,319.00
						TOTAL: \$ 631,773.17

3.gg-3 Curve Rail Replacement (Furnish and Install 8,000 LF)

	U of M	QTY	Rate	Split	Total
RailWorks Labor & Equipment					
Foreman	Hour	184	\$ 94.36	100%	\$ 17,361.79
Laborers	Hour	920	\$ 86.88	100%	\$ 79,928.14
Operators	Hour	368	\$ 115.94	100%	\$ 42,665.67
Welder	Hour	184	\$ 91.37	100%	\$ 16,811.33
Welder Helper	Hour	184	\$ 86.88	100%	\$ 15,985.63
Flagger	Hour	184	\$ 94.36	100%	\$ 17,361.79
Foreman Truck	Hour	552	\$ 26.00	100%	\$ 14,352.00
Welding Truck	Hour	184	\$ 36.00	100%	\$ 6,624.00
CWR Rail Heater / Vibrator	Hour	184	\$ 57.00	100%	\$ 10,488.00
Rail Saw	Hour	184	\$ 10.00	100%	\$ 1,840.00
Rail Drill	Hour	184	\$ 10.00	100%	\$ 1,840.00
Mobile Power Pack	Hour	184	\$ 10.00	100%	\$ 1,840.00
Flagger Truck	Hour	184	\$ 13.00	100%	\$ 2,392.00
<i>Subtotal - RWs Labor & Equipment</i>					\$ 229,490.35
Materials					
Rail - 136RE, HH, 80' Lengths, Blank	Ton	190.4	\$ 1,600.00	100%	\$ 304,640.00
Weld Kits	Each	50	\$ 125.00	100%	\$ 6,250.00
<i>Subtotal - Materials</i>					\$ 310,890.00
Subcontractor					
					\$ -
Flash Welding Subcontractor	Each	90	\$ 375.00	100%	\$ 33,750.00
Flash Welding Subcontractor Mobilization	LS	1	\$ 8,500.00	100%	\$ 8,500.00
Signal Support	Day	15	\$ 984.00	100%	\$ 14,760.00
<i>Subtotal - Subcontractor</i>					\$ 57,010.00
Supplies & Rental					
Front End Loader Rental	Month	3	\$ 7,500.00	100%	\$ 22,500.00
<i>Subtotal - Supplies & Rental</i>					\$ 22,500.00

SUBTOTAL: \$ 619,890.35

Materials	10%	Markup: \$	31,089.00
Subcontractor	5%	Markup: \$	2,850.50
Supplies	15%	Markup: \$	3,375.00
		TOTAL: \$	657,204.85

3.II Fixed Trench Ladders

	U of M	QTY	Rate	Split	Total
Subcontractor Labor, Equipment & Materials	LS	4	\$ 100,000.00	100%	\$ 400,000.00

SUBTOTAL: \$ 400,000.00

Materials	10%	Markup: \$	-
Subcontractor	5%	Markup: \$	20,000.00
Supplies	15%	Markup: \$	-
		TOTAL: \$	420,000.00

3.mm Miscellaneous Trench Structure Repairs

	U of M	QTY	Rate	Split	Total
Subcontractor - Labor, Equipment & Materials	LS	1	\$ 60,000.00	100%	\$ 60,000.00

SUBTOTAL: \$ 60,000.00

Materials	10%	Markup: \$	-
Subcontractor	5%	Markup: \$	3,000.00
Supplies	15%	Markup: \$	-
		TOTAL: \$	63,000.00

3.nn	Replace Compton Bridge Deck Ties - Track 3	U of M	QTY	Rate	Split	Total	
RailWorks Labor & Equipment (44 Bays at 2 Bays per Shift)							
	Foreman & Flagger	Hour	400	\$ 94.36	100%	\$ 37,743.03	
	Laborers	Hour	1400	\$ 86.88	100%	\$ 121,629.78	
	Operators	Hour	400	\$ 115.94	100%	\$ 46,375.73	
	Assistant Foreman	Hour	400	\$ 92.86	100%	\$ 37,144.69	
	Foreman Truck x2	Hour	400	\$ 26.00	100%	\$ 10,400.00	
	Flagger Truck	Hour	200	\$ 13.00	100%	\$ 2,600.00	
	Grapple Truck	Hour	200	\$ 55.00	100%	\$ 11,000.00	
	Hi-Rail Excavator	Month	3	\$ 10,000.00	100%	\$ 30,000.00	
	Rail Cart	Hour	200	\$ 10.00	100%	\$ 2,000.00	
	Mobile Power Pack	Hour	200	\$ 10.00	100%	\$ 2,000.00	
	Hydraulic Tools x 2	Hour	400	\$ 20.00	100%	\$ 8,000.00	
	<i>Subtotal - RWs Labor & Equipment</i>					\$	308,893.23
Materials							
	Bridge Timbers - 10"x10"x10' SYP, Dapped, Pre-Drilled, then Treated	Each	300	\$ 210.00	100%	\$ 63,000.00	
	Sidewalk Support Timbers - 4'x10'x14' DF, Cut, Dapped, Treated	Each	150	\$ 125.00	100%	\$ 18,750.00	
	Timber Guard - 4-1/2 x 7-1/2 x 8' DF, Cut, Treated	Each	120	\$ 75.00	100%	\$ 9,000.00	
	Rolled Pandrol Tie Plates - 136RE, 4R/2SQ	Each	600	\$ 25.00	100%	\$ 15,000.00	
	E-Clips - RH Galvanized	Each	1200	\$ 6.00	100%	\$ 7,200.00	
	15/16" x 6-1/2" Evergrip Coach Screws	Each	2400	\$ 3.50	100%	\$ 8,400.00	
	Rail - 136RE (500TF plus waste)	Ton	26	\$ 1,500.00	100%	\$ 39,000.00	
	Weld Kits	Each	30	\$ 125.00	100%	\$ 3,750.00	
	Miscellaneous Hardware	LS	1	\$ 7,500.00	100%	\$ 7,500.00	
	Fall Protection Materials	LS	1	\$ 10,000.00	100%	\$ 10,000.00	
	<i>Subtotal - Materials</i>					\$	181,600.00
Subcontractor							
	Tie Disposal	EA	600	\$ 20.00	100%	\$ 12,000.00	
	Signal Support	Day	50	\$ 984.00	100%	\$ 49,200.00	
	<i>Subtotal - Subcontractor</i>					\$	61,200.00
SUBTOTAL:						\$ 551,693.23	
	Materials	10%	Markup:	\$	18,160.00		
	Subcontractor	5%	Markup:	\$	3,060.00		
	Supplies	15%	Markup:	\$	-		
TOTAL:						\$ 572,913.23	

3.oo	Replacement of M23A Switches Machines	U of M	QTY	Rate	Split	Total
	M23A Switch Machine Materials - Refurbishments	EA	2	\$ 14,000.00	100%	\$ 28,000.00
						\$ -
						SUBTOTAL: \$ 28,000.00
				Materials	10%	Markup: \$ 2,800.00
				Subcontractor	5%	Markup: \$ -
				Supplies	15%	Markup: \$ -
						TOTAL: \$ 30,800.00

3.pp	Signal Module VHLC Replacements to XLC - Repeat for 3 Locations	U of M	QTY	Rate	Split	Total
	Materials					
	Materials - New XLC Module	EA	3	\$ 33,000.00	100%	\$ 99,000.00
	Design Changes and Prints	EA	3	\$ 3,500.00	100%	\$ 10,500.00
	Software + Engineering	EA	3	\$ 5,500.00	100%	\$ 16,500.00
						<i>Subtotal - Materials</i> \$ 126,000.00
	Subcontractor					
	Signal Subcontractor	Days	3	\$ 984.00	100%	\$ 2,952.00
						<i>Subtotal - Subcontractor</i> \$ 2,952.00
						SUBTOTAL: \$ 128,952.00
				Materials	10%	Markup: \$ 12,600.00
				Subcontractor	5%	Markup: \$ 147.60
				Supplies	15%	Markup: \$ -
						TOTAL: \$ 141,699.60

3.qq	Furnish and Replace Rail Lubricator Systems	U of M	QTY	Rate	Split	Total
	Railworks Labor & Equipment					
	Foreman	Hour	32	\$ 94.36	100%	\$ 3,019.44
	Laborers	Hour	64	\$ 86.88	100%	\$ 5,560.22
	Foreman Truck	Hour	32	\$ 26.00	100%	\$ 832.00
						<i>Subtotal - RWs Labor & Equipment</i> \$ 9,411.66
	Furnish and Replace Rail Lubricator Systems					
	Rail Wheel Lubricator System	EA	2	\$ 35,000.00	100%	\$ 70,000.00
						<i>Subtotal - Materials</i> \$ 70,000.00
						SUBTOTAL: \$ 79,411.66
				Materials	10%	Markup: \$ 7,000.00
				Subcontractor	5%	Markup: \$ -
				Supplies	15%	Markup: \$ -
						TOTAL: \$ 86,411.66

Attachments 5 – Proposed 2022 O&M Budget

Alameda Corridor - Proposed CY2022 Operations & Maintenance (O&M) Budget

		Calendar Year 2022					Amended Calendar Year 2021												
		<u>Basis of Apportionment</u>		<u>R.R. M & O Rail</u>	<u>Reserve Account Non-</u>	<u>ACTA Operating</u>	<u>Total</u>	<u>R.R. M & O Rail Cost</u>	<u>Reserve Account Non-</u>	<u>ACTA Operating</u>	<u>Total</u>								
		<u>GR Ton MI</u>	<u>Train MI</u>	<u>Cost (A)</u>	<u>Rail Cost (B)</u>	<u>Budget Cost (C)</u>		<u>(A)</u>	<u>Rail Cost (B)</u>	<u>Budget Cost (C)</u>									
I. Labor & Operations Maintenance: (1. Labor, 2. Operations Maintenance)																			
1.a.i	Contract Manager	GTM	TM	220,863.97	63,103.99	31,552.00	315,519.95	217,307.22	77,609.72	15,521.94	310,438.89								
1.a.ii	Track Supervisor	GTM		199,275.76	49,818.94	-	249,094.70	183,812.50	61,270.83	-	245,083.33								
1.a.iii	Safety Supervisor	GTM		199,275.76	49,818.94	-	249,094.70	49,016.67	196,066.67	-	245,083.33								
1.a.iv	Office Manager		TM	58,122.10	58,122.10	-	116,244.19	80,060.56	28,593.06	5,718.61	114,372.22								
1.a.vi	Office Assistant		TM	58,122.10	58,122.10	-	116,244.19	22,874.44	91,497.78	-	114,372.22								
1.b	Track Inspector	GTM		202,312.96	-	-	202,312.96	147,514.49	49,171.50	-	196,685.98								
1.b.i	Track Foreman	GTM		202,312.96	-	-	202,312.96	147,514.49	49,171.50	-	196,685.98								
1.b.ii	Assistant Foreman	GTM		199,076.73	-	-	199,076.73	145,078.24	48,359.41	-	193,437.65								
1.b.iii	Track Laborers	GTM		725,914.11	18,613.18	-	744,527.29	676,666.27	225,555.42	-	902,221.69								
1.b.iv	Equipment Operators		TM	363,631.52	9,323.89	-	372,955.41	272,718.85	90,906.28	-	363,625.14								
1.b.v	Welder	GTM		391,681.01	-	-	391,681.01	380,378.65	-	-	380,378.65								
1.b.vi	Welder Helper	GTM		186,131.82	-	-	186,131.82	180,444.34	-	-	180,444.34								
1.b.vii	Laborer (Non-Rail)		TM	-	186,131.82	-	186,131.82	-	180,444.34	-	180,444.34								
1.b.viii	Foreman (Non-Rail)		TM	-	202,312.96	-	202,312.96	-	-	-	-								
1.b.ix	Track Superintendent	GTM		139,530.03	139,530.03	-	279,060.05	136,473.54	136,473.54	-	272,947.08								
2.b	Pump Station Maintenance		TM	-	13,416.00	-	13,416.00	-	10,939.20	-	10,939.20								
2.b.i	Pump Station Repairs and Supplies (Subcontractor)		TM	-	31,650.00	-	31,650.00	-	31,050.00	-	31,050.00								
2.c	AEI & Other Communications Maintenance		TM	202,587.42	-	122,697.45	325,284.87	191,344.10	-	115,887.92	307,232.01								
2.d	Rail Flaw Detection (Subcontractor)	GTM		56,700.00	-	-	56,700.00	52,762.50	-	-	52,762.50								
2.e	Graffiti Control		TM	-	27,276.00	-	27,276.00	-	24,139.20	-	24,139.20								
2.f	Weed Abatement (Subcontractor)		TM	53,568.00	13,392.00	-	66,960.00	49,104.00	12,276.00	-	61,380.00								
2.g	Safety Training (Subcontractor)		TM	27,221.25	4,803.75	-	32,025.00	26,775.00	4,725.00	-	31,500.00								
2.h	Safety Management		TM	20,750.63	3,661.88	-	24,412.50	21,037.50	3,712.50	-	24,750.00								
2.i	Vehicles	GTM	TM	249,198.00	60,290.40	2,115.60	311,604.00	196,442.38	76,236.38	1,030.80	273,709.56								
2.l	Full-Time Equipment	GTM	TM	262,128.00	-	-	262,128.00	204,336.00	51,084.00	-	255,420.00								
2.m	Maintenance Program Rail Grinding - (50% of Total Cost)	GTM		304,062.49	-	-	304,062.49	514,808.69	-	-	514,808.69								
2.n	Track Materials / Supplies / Rentals	GTM		264,000.00	-	-	264,000.00	386,760.00	-	-	386,760.00								
2.o	Signal Maintenance (Subcontractor)		TM	1,553,671.90	-	-	1,553,671.90	1,479,737.23	-	-	1,479,737.23								
2.p	Ladder / Fence / Traffic Support (Subcontractor)		TM	-	279,510.00	-	279,510.00	-	265,650.00	-	265,650.00								
2.q	Security - Trench Cameras	GTM	TM	14,322.00	5,115.00	1,023.00	20,460.00	17,941.00	6,407.50	1,281.50	25,630.00								
2.r	Security / Yard & Office Maintenance & Support (Subcontractor)		TM	233,415.00	-	-	233,415.00	207,900.00	-	-	207,900.00								
2.s	Underwater Bridge Inspection (Not until 2023)		TM	-	-	-	-	-	-	-	-								
2.t	Trench Ditch Cleaning		TM	-	46,200.00	-	46,200.00	-	50,400.00	-	50,400.00								
2.v	Replace Signal Wire on the Corridor (Subcontractor)		TM	-	-	-	-	24,150.00	-	-	24,150.00								
2.w	Railroad Reporting and Record Keeping Software System (Subcontractor)		TM	44,100.00	-	-	44,100.00	42,000.00	-	-	42,000.00								
2.x	Railroad Emergency Drill Exercise		TM	27,342.80	-	-	27,342.80	-	-	-	-								
2.aa	AEI Readers Upgrade - Completed in 2021	Special Apportionment		-	-	-	-	10,500.00	-	-	10,500.00								
2.dd	Bridge Inspections (Subcontractor)	GTM		35,700.00	-	-	35,700.00	6,720.00	26,880.00	-	33,600.00								
2.ee	Conduit Installation MP 8.9 to Ladder 15 - 2022	GTM		1,317,530.00	-	-	1,317,530.00	-	-	-	-								
Subtotal Labor & Operations Maintenance				\$	7,812,548.32	\$	1,320,212.97	\$	157,388.05	\$	9,290,149.34	\$	6,072,178.65	\$	1,798,619.83	\$	139,440.77	\$	8,010,239.25

		Calendar Year 2022					Amended Calendar Year 2021				
		Basis of Apportionment		R.R. M & O Rail	Reserve Account Non-	ACTA Operating	Total	R.R. M & O Rail Cost	Reserve Account Non-	ACTA Operating	Total
		GR Ton MI	Train MI	Cost (A)	Rail Cost (B)	Budget Cost (C)		(A)	Rail Cost (B)	Budget Cost (C)	
II. Capital Costs											
3.a	Surfacing & Mobilization	GTM		\$ -	\$ 503,065.67	\$ -	\$ 503,065.67	\$ -	\$ 478,338.14	\$ -	\$ 478,338.14
3.c	Reballast Program - Labor & Equipment			\$ -	\$ 324,775.97	\$ -	\$ 324,775.97	\$ -	\$ 260,448.95	\$ -	\$ 260,448.95
3.d	Reballast Program - Ballast			\$ -	\$ 58,300.00	\$ -	\$ 58,300.00	\$ -	\$ 58,300.00	\$ -	\$ 58,300.00
3.f	Capital Program Rail Grinding - (50% of Total Cost)	GTM		\$ -	\$ 304,062.49	\$ -	\$ 304,062.49	\$ -	\$ 514,808.69	\$ -	\$ 514,808.69
3.h-2	Replace 20 Frogs			\$ -	\$ 728,557.20	\$ -	\$ 728,557.20	\$ -	\$ 771,001.76	\$ -	\$ 771,001.76
3.h-3	Replace 40 Switch Point and Stock Rail			\$ -	\$ 458,201.73	\$ -	\$ 458,201.73	\$ -	\$ 461,894.76	\$ -	\$ 461,894.76
3.h-5	Insulated Joint Replacement			\$ -	\$ 256,060.44	\$ -	\$ 256,060.44	\$ -	\$ 456,540.76	\$ -	\$ 456,540.76
3.o	Pump Station Upgrades (Subcontractor)	GTM		\$ -	\$ 213,500.00	\$ -	\$ 213,500.00	\$ -	\$ 213,500.00	\$ -	\$ 213,500.00
3.r	Trench Emergency Ladder, Stair Study, & Repairs (Subcontractor)			\$ -	\$ 129,000.00	\$ -	\$ 129,000.00	\$ -	\$ 129,000.00	\$ -	\$ 129,000.00
3.w.1	Rehab Henry Ford Crossing - Near PHL Offices N of Bridge			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 439,984.37	\$ -	\$ 439,984.37
3.y	Signal Battery Replacement			\$ -	\$ 110,000.00	\$ -	\$ 110,000.00	\$ -	\$ 110,000.00	\$ -	\$ 110,000.00
3.aa-1	Replace Crucero Diamonds			\$ -	\$ 631,773.17	\$ -	\$ 631,773.17	\$ -	\$ 566,095.43	\$ -	\$ 566,095.43
3.gg-3	Curve Rail Replacement			\$ -	\$ 657,204.85	\$ -	\$ 657,204.85	\$ -	\$ 776,461.84	\$ -	\$ 776,461.84
3.ll	Fixed Trench Ladders (Subcontractor)			\$ -	\$ 420,000.00	\$ -	\$ 420,000.00	\$ -	\$ 420,000.00	\$ -	\$ 420,000.00
3.mm	Miscellaneous Trench Structure Repairs (Subcontractor)			\$ -	\$ 63,000.00	\$ -	\$ 63,000.00	\$ -	\$ 63,000.00	\$ -	\$ 63,000.00
3.nn	Compton Bridges - Replace Deck Ties			\$ -	\$ 572,913.23	\$ -	\$ 572,913.23	\$ -	\$ -	\$ -	\$ -
3.oo	Replacement of M23A Switches Machines			\$ -	\$ 30,800.00	\$ -	\$ 30,800.00	\$ -	\$ 30,800.00	\$ -	\$ 30,800.00
3.pp	Signal Module VHLC Replacements to XLC			\$ -	\$ 141,699.60	\$ -	\$ 141,699.60	\$ -	\$ 138,600.00	\$ -	\$ 138,600.00
3.qq	Furnish and Replace Rail Lubricator Systems			\$ -	\$ 86,411.66	\$ -	\$ 86,411.66	\$ -	\$ -	\$ -	\$ -
Subtotal Capital Costs				\$ -	\$ 5,689,326.00	\$ -	\$ 5,689,326.00	\$ -	\$ 5,888,774.71	\$ -	\$ 5,888,774.71
Subtotal of I & II				\$ 7,812,548.32	\$ 7,009,538.97	\$ 157,388.05	\$ 14,979,475.33	\$ 6,072,178.65	\$ 7,687,394.54	\$ 139,440.77	\$ 13,899,013.95
Multiple use contingency for 2022, not in MOW Budget but included in O&M Total							\$ 500,000.00				\$ 300,000.00
III. Operating & Other Costs											
	Insurance (annual amount) (8)		TM	\$ 1,600,000.00	\$ -	\$ -	\$ 1,600,000.00	\$ 1,600,000.00	\$ -	\$ -	\$ 1,600,000.00
	Dispatching (1)		(9)	\$ 662,385.79	\$ -	\$ -	\$ 662,385.79	\$ 662,385.79	\$ -	\$ -	\$ 662,385.79
	Security - Labor (2)		(9)	\$ 1,455,116.00	\$ -	\$ -	\$ 1,455,116.00	\$ 1,455,116.00	\$ -	\$ -	\$ 1,455,116.00
	Security - Equipment (3)		(9)	\$ 281,540.40	\$ -	\$ -	\$ 281,540.40	\$ 281,540.40	\$ -	\$ -	\$ 281,540.40
	Utilities (5)		TM	\$ 214,000.00	\$ -	\$ -	\$ 214,000.00	\$ 179,916.25	\$ -	\$ -	\$ 179,916.25
	Storm Water Discharge Permits, Water Testing & Support Services (4)		TM	\$ 75,000.00	\$ -	\$ -	\$ 75,000.00	\$ 75,000.00	\$ -	\$ -	\$ 75,000.00
	Provide 3rd Party Security Monitoring & Support Services		TM	\$ 3,500.00	\$ -	\$ -	\$ 3,500.00	\$ 3,500.00	\$ -	\$ -	\$ 3,500.00
	M&O or Capital Reserve Support Service (6)		TM	\$ 426,039.00	\$ 142,013.00	\$ -	\$ 568,052.00	\$ 388,629.00	\$ 129,543.00	\$ -	\$ 518,172.00
	Communications Network and Alarm/Phone Upgrades and Renewals		TM	\$ 30,000.00	\$ -	\$ -	\$ 30,000.00	\$ 30,000.00	\$ -	\$ -	\$ 30,000.00
	Rehab Henry Ford Crossing @ CP Dominguez (Engineering & Permits) (Also see 3.w.)		TM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000.00	\$ -	\$ 50,000.00
	PRE Signal Plan Updates for Various Control Points		TM	\$ 50,000.00	\$ -	\$ -	\$ 50,000.00	\$ 100,000.00	\$ -	\$ -	\$ 100,000.00
	Extraordinary Right-of-Way Cleanup		TM	\$ 150,000.00	\$ -	\$ -	\$ 150,000.00	\$ 125,000.00	\$ -	\$ -	\$ 125,000.00
	AEI Readers Upgrade (7)		Special Apportionment	\$ 15,575.00	\$ -	\$ 9,425.00	\$ 25,000.00	\$ 87,220.00	\$ -	\$ 52,780.00	\$ 140,000.00
Subtotal Operating & Other Costs				\$ 4,963,156.19	\$ 142,013.00	\$ 9,425.00	\$ 5,114,594.19	\$ 4,988,307.44	\$ 179,543.00	\$ 52,780.00	\$ 5,220,630.44
Total of I, II, & III				\$ 12,775,704.51	\$ 7,151,551.97	\$ 166,813.05	\$ 20,594,069.52	\$ 11,060,486.09	\$ 7,866,937.54	\$ 192,220.77	\$ 19,419,644.39

(1,2,3) These costs are for memorandum purposes only and are internal Railroads costs not paid by ACTA

(4) Includes annual fees

(5) Previous Actual Expenditures + 5% increase per year

(6) Split based on work estimates

(7) Split based upon allocation plan for installation & maintenance agreed to by ACTA and the Railroads

(8) Only an Estimate based on 2021

(9) Apportionment between Railroads based upon private agreement between the parties.

FBLR = Fully Burden Labor Rate

(A) Costs paid by Railroads prorated among carriers

(B) Costs paid by ACTA from the Reserve Account

(C) Costs paid by ACTA