# **Perkins Consulting**

Joseph L. Perkins, P.E. (Ret.) PO Box 20129 Juneau, AK 99802 907-364-3450 907-321-5300 engrperk@msn.com

## **MEMORANDUM**

Date:

January 17, 2012

To:

John Moosey, Matanuska Susitna Borough Manager

From:

Joe Perkins, Executive Project Manager, Port MacKenzie Rail Line Extension Project

Subject:

Port MacKenzie Rail Line Extension Project - Status Report

Reference:

Project Status Fact Sheet, dated January 27, 2011 from Joe Perkins to MSB Acting

Manager

Purpose: This Memorandum is to update the referenced fact sheet and provide current project status regarding State appropriations, information pertaining to planned project work, work accomplished to date, and the current project budget.

<u>SUMMARY</u> of project's state Fiscal Year appropriations (July 1-June 30), funding expended to date, and significant project activities for the past year:

- Project funding to date:
  - a. \$10 million FY 2008 state appropriation for EIS
  - b. \$17.5 million FY 2009 state appropriation for project
  - c. \$35 million FY 2011 state appropriation for project
  - d. \$30 million FY 2012 state appropriation for project

CURRENT TOTAL APPROPRIATIONS: \$92.5 million

2. Project Budget: (Mac Central/Houston South Route)

Environmental Impact Statement	\$ 10,000,000
ARRC Direct Labor Costs	3,541,148
Engineering	14,051,730
Environmental and Permitting	2,922,022
Construction	208,995,100
Construction Management	11,700,000
Environmental Mitigation	4,500,000
Right-of-Way	9,900,000
MSB Contracts	3,650,000
MSB Finance/Administration	3,250,000*

Total Estimated Project Cost

\$272,500,000

\*If MSB charges the project for the 5% Administrative and Audit fee on the \$180 million required to complete the project, an additional \$8 million should be added to the project budget (see discussion below).

3. Additional Funding Needed For Project Completion:

Total Estimated Project Cost Project Funding To Date

\$272,500,000 \_\_92,500,000

Additional Funding Required

\$180,000,000

- a. The Governor's FY 2013 Capital Budget includes \$110,000,000 in General Obligation (GO) Bonds for the project. MSB and ARRC have requested that the Legislature appropriate an additional \$60 million in General Funds and a \$10 million increase in the Governor's proposed G.O. Bond which would allow rail operations to commence during 2015/2016.
- 4. Significant Project Activities and Milestones January 27, 2011 (reference) to January 17, 2012:
  - a. The Alaska State Legislature and the Governor approved a FY 2012 appropriation of \$30 million for the project.
  - b. The Surface Transportation Board (STB) released its Final Environmental Impact Statement (EIS) on March 25, 2011 and approved the MacCentral/Houston South routing alternative for the rail extension.
  - c. The STB released its Record of Decision (ROD) on the Final EIS on November 21, 2011 with an effective date of December 23, 2011. The ROD authorizes the ARRC to construct and operate a new rail line connecting Port MacKenzie to the ARRC existing main line near Houston, Alaska.
  - d. Bids were opened on December 6, 2011 and a construction contract awarded to Bristol Construction for the embankment for the first 5 miles of the rail extension (Segment 1), completion of the Bi-Modal Loop and the construction of an access road for the University of Alaska property. Segment 1 was scheduled to be constructed first due to settlement expected from high fills and wet, unstable ground conditions. Early completion will allow correction of any settlement prior to placing ties and track.
  - e. Engineering was completed on Segment 1 (construction contract awarded) and Segment 6 (to be bid in March 2012). The remaining segments are approximately 50% designed, and scheduled to be 95% designed by the summer of 2012.
  - f. The construction work underway for the Bi-Modal Facility by both Bristol Construction and Quality Asphalt Products (\$9.9 million) was completed.
  - g. The major permit to be acquired is the Corps of Engineers (COE) Section 404 permit. Application was made to the COE, the COE public notice period was completed, public comments were received by the COE, project staff responded to comments and submitted those comments to the COE, the COE received the STB's EIS ROD, and the COE has begun final preparation of the permit. Issuance of permit is expected by the end of February 2012.

- The majority of other project permits have been received with the exception of the Coast Guard bridge permit for Segment 6 which is expected in the next two months.
- h. The MSB and the ARRC Memo of Understanding dated December 5, 2011 was updated (#5) and provided \$24 million of the FY 2012 Appropriation (\$30 million) to be used by the ARRC to fund environmental, engineering, and construction contracts and to reimburse other ARRC expenses. The MOU and Grant Agreement were approved by the State Granting Agency.
- i. Following final identification of the selected route by the STB (March 25, 2011), a specific project cost estimate for the MacCentral/Houston route was developed. The cost estimate for that route is \$272,500,000 and is broken down as listed in Paragraph #2 above.
- j. The final EIS and release of the ROD allowed Right-of-Way (ROW) activities to be initiated. To date approximately 20% of the project ROW has been procured by the MSB with other parcels at various stages of acquisition.

### **DISCUSSION**

## Budget

 Attachment 1 provides a detailed break-out of the project expenditures to date by appropriation, a break out for the \$180 million required to complete the project and a summary of costs for the total project.

Items that are noteworthy are as follows:

- a. Administrative Charges: ARRC. The ARRC to date has billed \$1,330,323 in direct project charges. This is calculated by adding the ARRC direct labor for the FY 2008 State Grant for the EIS (\$1,037,911.85) and the direct labor for the FY 2009 and FY 2011 State Grants (\$292,412.07). The charges reflect the ARRC management of all environmental, engineering, construction, and STB-related contracts and activities for the project.
- b. Administrative Charges: MSB. The MSB has charged the project \$3,309,200 for Administrative and Audit Charges. The majority of this amount (\$3,250,000) was charged in the aggregate against the project funding in accordance with MSB Resolution Serial No. 08-096, enacted by the MSB Assembly August 19, 2008, stating that "it is the policy of the MSB to charge the administration and audit fee of 5% against all grants accepted by the Borough that allow the fee to be taken." An additional \$875,000 in administration and audit fees were withheld from the FY 2009 Grant but are scheduled to be returned to the project by MSB Finance in accordance with the MSB/ARRC Memorandum of Understanding. An additional \$59,200 for Administration and Audit was charged from the FY 2008 State Grant for the EIS.
- c. Administrative and Audit Fee-MSB: The Project Budget presented does not include a 5% MSB Administration and Audit Fee on the \$180 million required to complete the project. However, \$2.5 million has been budgeted for MSB contracts and administration in the \$180 million budget which should be sufficient to reimburse MSB for its direct costs. If a 5% fee is imposed, the total project estimate should be increased by approximately \$8 million.

- d. Mitigation, STB: In the ROD, the STB requires the ARRC to comply with a list of 100 environmental measures. The ARRC, in conjunction with an STB third party (independent) oversight contractor (funded with project funds) is responsible for the monitoring and enforcement of each measure. Monitoring records and reports will be submitted quarterly to the STB by ARRC until one year after the ARRC has constructed the new rail line. In addition, the ARRC must comply with the Section 106 Programmatic Agreement that will require the project to pay for other third party observers. The estimated \$2 million cost for these activities has been included in the project budget for STB mitigation.
- e. Mitigation, Corps of Engineers: The US Army Corps of Engineers Section 404 permit for the project will require that the project mitigate all wetlands impacted by the project. They will most likely require purchase of units in a wetlands bank. We estimate that the cost to purchase these units will be approximately \$2.5 million. This cost is in the budget and has been funded by the 2012 State Grant.
- f. Construction: We have revised some of the original segment construction scheduling as a result of the finalization of the route for the rail line, geotechnical (soil) borings, and timing and availability of funding. A map showing the development of the rail line by segment is attached as Attachment 2. As previously stated, Segment 1 is currently under construction. Early completion of Segment 6, including rail, will benefit the project by providing train-accessible storage for ballast and other rail materials which must be produced or procured early in 2013 to meet a project completion schedule of 2015. The ballast, for example, will be produced in the ARRC quarry in Curry, but storage space in Curry is not sufficient to store the required ballast. Track and associated work next to the main ARRC line will not be bid but will be accomplished on a time and material basis by ARRC crews. Funding is available to complete the Segment 6 work (both contract and ARRC work). The contract work is scheduled for bidding in March 2012.
- g. MSB Materials: The project will be reimbursing MSB approximately \$1,050,000 for Borough-owned gravel and \$225,000 for waste disposal in MSB pits in accordance with the MSB Community Development Memo dated April 12, 2011 (Subject: Approve administrative fee for borough-owned materials that are provided for the Matanuska-Susitna Borough railroad project.) These costs are included in the construction estimate.
- h. ARRC Materials: The ARRC will provide the ballast (crushed rock) for the project from its Curry Quarry. The ARRC will not charge the project for the rock in place, but will be reimbursed for crushing and transporting costs. These costs are included in the construction estimate.
- Engineering Costs: Budgeted engineering costs for the completed project total \$15,220,610.
  These costs include preliminary design for the EIS, geotechnical work and survey work.
  Engineering costs as a percentage of the total project are 5.6% which are well within the industry standard.
- j. Construction management costs: Budgeted construction management costs for the completed project total \$11,700,000. Construction management costs as a percentage of the total project are 4.3% which are well within the industry standard.
- k. Detailed construction cost estimates for each segment have not been included in this report as they will be used in the final development of the engineer's estimate and therefore should not be released prior to bidding.

#### Schedule

The project schedule is totally dependent on financing. If a State General Fund appropriation of \$60 million is approved by the FY 2013 Legislature, two construction contracts for rail embankment (Segments 3 and 4) would be bid in August/September of 2012. In addition, ballast for the project would be manufactured by the ARRC in the Curry Pit.

Approval of a \$120 General Obligation Bond by the FY 2013 Legislature and the voters in November 2012 would allow for bidding the last two construction embankment contracts (Segments 2 and 5) in the spring of 2013 and the procurement of long lead-time, railroad-specific items, such as rails and ties. Segment 7 (subballast and to correct settlement) work would be bid in the spring of 2014 along with Segment 8 (track work). This would allow project completion in the fall of 2015.

### Right-of-Way (ROW)

The MSB is managing all ROW acquisition for the project. All properties acquired are being titled to the MSB. After the acquisition of the required ROW has been completed, a Port MacKenzie rail extension corridor will be provided by the MSB to the ARRC for operation and maintenance of the rail extension. The Bi-Modal rail loop in the MSB Port District will remain under the management and control of the MSB.

# Budget for \$60 million 2012 General Fund Request

ARRC Direct	\$	1,000,000
Engineering		250,000
Environmental		250,000
Construction (Segment 3,4,ball	ast)	52,000.000
Construction Management		4,500,000
Mitigation (STB)		1,000,000
MSB (PM, Consultants, MSB )	Direct)	1,000,000

### Future Project Status Reports

Beginning April 1, 2012 we will provide quarterly project status reports for your information.

# Port MacKenzie Rail Line Extension/BiModal Facility January 1, 2012 Budget Status:

FY 2008 State Grant (Environmental Impact Statement)

	Approved Revised	THE PARTY OF THE P	
Activity	Budget	Expended	Available
ARRC Direct	1,146,170.00	1,037,911.82	108,258.18
Engineering (TNH,Hanson)	1,168,880.00	1,168,880.18	(0.18
Environmental (HDR)	1,757,905.00	1,757,905.09	(0.09)
Outside Counsel (Mayer-Brown, Dorsey)	698,262.00	598,262.03	99,999.97
STB/EIS Contractor (ICF/HDR)	4,700,307.00	4,700,306.81	0.19
RSA (DNR/BLM)	173,476.00	142,698.80	30,777.20
MSB (PM, Consultants)	295,800.00	289,286.00	6,514.00
MSB Finance/Administration	59,200.00	59,200.00	0,0171.00
Total	9,940,800.00	9,695,250.73	245,549.27

# FY 2009 State Grant

Activity	Approved Revised Budget	Expended	Available
ARRC Direct	344,974.00	151,651.44	193,322.56
Engineering (Hanson)	4,347,904.00	4,325,544.62	22,359.38
Environmental (HDR, ICF)	422,022.00	367,170.78	54,851.22
Construction Billiodal (Completed)	10,085,100.00	9,943,315.02	141,784.98
Construction Management	1,700,000.00	900,000,00	800,000.00
MSB (Consultants: PM, Legal)	600,000.00	456,277.00	143,723.00
Total	17,500,000.00	16,143,958.86	1,356,041.14

# FY 2011 State Grant

	Approved Revised	The state of the s	
Activity	Budget	Expended	Available
ARRC Direct	396,174.00	140,760.63	255,413.37
Engineering (TNH,Hanson)	6,203,826.00	2,886,214.17	3,317,611.83
Environmental (HDR)	1,500,000.00	524,884.63	975,115.37
Right-of-Way Consultant	1,900,000.00	713,415.16	1,186,584.84
Segment 1 Construction (Awarded)	19,000,000.00	0.00	19,000,000.00
Right-of-Way	4,000,000.00	1,462,000.00	2,538,000.00
MSB (Consultants: PM, Legal, ROW)	250,000.00	0.00	250,000.00
MSB Finance/Administration (5%)	1,750,000.00	1,750,000.00	0.00
Total	35,000,000.00	7,477,274.59	27,522,725.41

# FY 2012 State Grant

Activity	Approved Budget	Expended	Available
ARRC Direct	300,000.00	0.00	300,000.00
Engineering (TNH,Hanson)	2,500,000.00	0.00	2,500,000.00
Mitigation	2,500,000.00	0.00	2,500,000.00
Construction Management	1,900,000.00	0.00	1,900,000.00
Segment 6 Construction (March 2012 Bid)	17,000,000.00	0.00	17,000,000.00
Right-of-Way	4,000,000.00	0.00	4,000,000,00
MSB (Consultants: PM, Legal, ROW)	300,000.00	0.00	300,000,00
MSB Finance/Administration (5%)	1,500,000.00	1,500,000.00	0.00
Total	30,000,000.00	0.00	28,500,000.00

Attachment 1, Page 1 of 2

Budget Summary - Funded to Date January 1, 2012

Activity	Budgeted	Expended	Available
EIS	10,000,000.00	9,695,250.73	304,749.27
ARRC Direct	1,041,148.00	292,412.07	748,735.93
Engineering (TNH,Hanson)	13,051,730.00	7,211,758.79	5,839,971.21
Environmental (HDR)	1,922,022.00	892,055.41	1,029,966.59
Construction	46,085,100.00	9,943,315.02	36,141,784.98
Construction Management	3,600,000.00	900,000.00	2,700,000.00
Mitigation (COE and other)	2,500,000.00	0.00	2,500,000.00
ROW	9,900,000.00	2,175,415.16	7,724,584.84
MSB (Consultants: PM, Legal, ROW)	1,150,000.00	456,277.00	693,723.00
MSB Finance/Administration (5%)	3,250,000.00	3,250,000.00	0.00
Total	92,500,000.00	34,816,484.18	57,683,515.82

Budget Summary - Funding Required For Completion (180 million)

Activity	Budgeted	Expended	Available
	0.00		
ARRC Direct	2,500,000.00	0.00	2,500,000.00
Engineering (TNH, Hanson)	1,000,000.00	0.00	1,000,000.00
Environmental (HDR)	1,000,000.00	0.00	1,000,000,00
Construction	162,900,000.00	0.00	162,900,000.00
Construction Management	8,100,000.00	0.00	8,100,000.00
MSB (Consultants: PM, Legal, ROW)	2,500,000.00	0.00	2,500,000.00
Mitigation (STB and others)	2,000,000,00	0.00	2,000,000.00
Total	180,000,000.00	0.00	180,000,000.00

Project Budget Summary--Total Project

Activity	Budgeted	Expended	Available
EIS	10,000,000.00	9,695,250.73	304,749.27
ARRC Direct	3,541,148.00	292,412.07	3,248,735.93
Engineering (TNH,Hanson)	14,051,730.00	7,211,758.79	6,839,971.21
Environmental (HDR)	2,922,022.00	892,055,41	2,029,966.59
Construction	208,985,100.00	9,943,315.02	199,041,784.98
Construction Management	11,700,000.00	900,000.00	10,800,000.00
Mitigation (COE and STB)	4,500,000.00	0.00	4,500,000.00
ROW	9,900,000.00	2,175,415.16	7,724,584,84
MSB (Consultants: PM, Legal, ROW)	3,650,000.00	456,277.00	3,193,723.00
MSB Finance/Administration (5%)	3,250,000.00	3,250,000.00	0.00
Total	272,500,000.00	34,816,484.18	237,683,515.82

Attachment 1, Page 2 of 2



#### FY2013 Request: Matanuska-Susitna Borough - Port MacKenzie Rail \$110,000,000 Reference No: 46242 Extension **Project Type:** Construction **AP/AL:** Appropriation Category: Development Recipient: Matanuska-Susitna Borough Location: Matanuska Susitna Borough **House District:** Matsu Areawide (HD 13-16)

# **Brief Summary and Statement of Need:**

Impact House District: Matsu Areawide (HD 13-

This project will provide funding for the continuation of the development and construction of the Matanuska-Susitna Borough Port MacKenzie Rail Extension. The rail extension will promote the diversification of Alaska's economy. The general obligation bond authorization is considered one-time in nature and is not expected to fully fund the project.

Funding:	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	Total
G/O Bonds	\$110,000,000						\$110,000,000
Total:	\$110,000,000	\$0	\$0	\$0	\$0	\$0	\$110,000,000
1	ch Required    ✓ O  um State Match % R	•	Phased Amendm		Phased - unde Mental Health	•	n-Going
Operating	& Maintenance	Costs:			Amou	<u>unt</u>	<u>Staff</u>

	Amount	Stair
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Contact: JoEllen Hanrahan

# **Additional Information / Prior Funding History:**

FY2012 - \$30,000,000 SLA 2011 Ch 5 Sec 1 Pg 37 Ln 28; FY2011 - \$35,000,000 SLA 2010, Ch 43, Pg 99, Ln 27; FY2009 - \$17,500,000 SLA 2008, Ch 29, Pg 129, Ln 19; FY2008 - \$10,000,000 SLA 2007, Ch 30, Pg 88, Ln 8

# **Project Description/Justification:**

This request is for continued development and construction of the Matanuska-Susitna Borough Port MacKenzie Rail Extension Project. The rail extension will provide for the transportation of bulk materials such as coal, minerals, and timber from Interior Alaska to tidewater, and will make Alaskan natural resources significantly more competitive in Pacific Rim markets. The rail extension is expected to quadruple coal exports, stimulate development of new mineral mines, development of limestone deposits and related cement industry, and new opportunities for timber exports. An expected 4,000 jobs will be created along the rail line and in Interior Alaska due to new mining ventures and development efforts. South Central Alaska is expected to gain 2,000 permanent jobs over the first 10 years following rail construction and up to 3,500 jobs over the longer term.

Background: The Port MacKenzie Rail Extension will bring tremendous economic and employment benefits to Alaska. The project will create jobs, lower transport costs and increase economic development. Extension of the rail line will connect the Alaska Railroad Mainline to Port MacKenzie, resulting in a shorter distance to tidewater from the interior that will save more than \$100 million over

# Matanuska-Susitna Borough - Port MacKenzie Rail Extension

FY2013 Request: \$110,000,000 Reference No: 46242

existing ports for the State's proposed natural gas pipeline. Less expensive bulk transport costs will also help stimulate the development of natural resources and mines.

The lower costs created by the proposed rail extension coupled with this limestone deposit will create a major new export related manufacturing opportunity for the production of cement. With the rail extension, Alaska will be able to produce up to 15% of the nation's annual need for cement. In addition, the shorter distance to tidewater will reduce the cost of transporting coal by approximately 6 dollars per ton, making coal from Alaska's interior competitive on the world market. Representatives of the Alaska coal industry indicate that once the rail line is completed, it can quadruple annual coal exports from one million tons to four million tons.

An independent study by the University of Alaska-Fairbanks estimates the revenue to the State from new mines averages \$300 million per year over the next 100 years. According to a study by the Institute of Social and Economic Research, the Port MacKenzie Rail Extension Project will create up to 3,400 new jobs over a three year period in construction (currently in progress), 35 jobs in annual operations and another 640 direct and indirect jobs.

In order to complete the rail extension from the main Alaska Railroad line in Houston, to the Port MacKenzie facility, the Matanuska-Susitna Borough estimates the total cost of the project to be approximately \$180 million including this project funding.

The current cost estimate for the project (32.1 miles) is \$272.5 million of which \$92.5 million has been funded leaving an unfunded shortfall of \$180 million to complete the project. Funding on hand will complete the rail embankment for the one mile bi-modal loop adjacent to Port MacKenzie, the first 5 miles of the rail embankment (Segment 1) starting at Port MacKenzie and proceeding toward Houston and approximately one plus miles (Segment 6) of rail embankment and rail at the intersection of the new rail extension and the current ARRC mainline. The construction contract for the completion of the port loop and the first 5 miles of rail embankment (Segment 1) has been awarded. A contract for the "Y" connection with the main line at Houston (Segment 6) will be advertised for construction bids in early March 2012. Work on both contracts will be initiated in the spring/summer of 2012. All required Engineering and Right of Way (ROW) acquisition are funded and are scheduled for completion in 2012.

The \$110 million contained in the General Obligation Bond could be available for construction in the spring of 2013. It would be utilized to construct the rail embankment for Segments 3, 4, and 5 (18.5 miles) and the manufacture of ballast rock and purchase of long lead time materials such as steel rails. This work would be completed by the fall of 2015. An additional \$70 million would be required to complete the project. This \$70 million would be utilized to construct the rail embankment on Segment 2 (8.5 miles) and install ties, ballast, rails and other railroad operational equipment to complete the rail extension.