



DATE: December 17, 2014
TO: Transportation Commission
FROM: Joshua Laipply, Chief Engineer
Scott Richrath, Chief Financial Officer
SUBJECT: RAMP Program Project Controls Workshop

Purpose

Staff established and presented to the Commission a RAMP program contingency budget that began at 3.5% of each individual RAMP program - Public-Public, Public-Private, and Operations. Adhering to Policy Directive 703.0 policy of seeking Commission approval for RAMP projects exceeding 7.5% of budget, staff has nearly expended the Public-Public program contingency budget of \$13.0 million with only 6 out of 38 projects awarded.

In June of 2014 resolution 3168 was passed by the Commission to prevent this from occurring. CDOT staff, guided by the Chief Engineer and Chief Financial Officer as stipulated in the resolution, has not consistently followed nor applied this resolution. There are currently 16 projects remaining in the 38 RAMP public-public partnerships that contain significant risk for increased budget need. The original budget amount for the 16 projects is \$355.0 million. Utilizing the latest construction inflation numbers and recent history of awarded projects, we estimate a potential of an additional \$80.0 million of project liability. New procedures and processes must be put into place to reduce the RAMP public-public partnership program liability and comply with Commission resolutions and accepted policy directives.

The RAMP Program Project Controls Workshop provides programming and funding options with a staff recommendation to deliver the RAMP public-public partnership program and minimize additional funding, through scope reductions and increased local agency support.

Action

The RAMP project control items presented here are for Transportation Commission information and comment. Possible actions may include allocation of additional RAMP contingency funds, endorsement of new proposed project controls, and clear procedures and policies moving forward.

Information on RAMP Partnership and Operations projects with existing cost overruns that require near term Transportation Commission action and/or direction are also included for consideration.



Details

Existing RAMP P&O Governing Documents and CDOT Management Practices:

Intergovernmental Agreements (IGAs) have been executed for the RAMP partnership and operations program that are consistent with Department practice for all programs and are also consistent with Transportation Commission direction for the RAMP program. The IGA establishes that the scope and shared costs are to be revisited between the parties if the total costs are estimated to have increased at Final Office Review. The Final Office Review is the review of construction plans and specifications prior to the advancing the project to advertisement. After the Final Office Review, CDOT is responsible for cost increases (during bid/award). For locally administered and constructed projects, the IGA establishes that the local partner is responsible for cost increases and limits the Department’s cost participation. This is consistent with Resolution TC-3168 passed in the June 2014 Transportation Commission meeting and recently passed resolution TC-3209.

Resolution TC-3168 was misunderstood regarding our level of authority to move projects forward when PD 703.0 was adopted. Staff level authority was discussed in the May and June program management workshops (7.5% per project and 3.5% for the program) and written into Policy Directive 703.0 (less than both 7.5% and \$1.0 million, or less than \$100 thousand). While there have been inconsistencies in what has been presented, the intent of the Transportation Commission is clear in the RAMP resolution. The resolution says “the financial commitment of the partners extends to additional cost.”

Throughout the management of the program it has been considered as a total program. Project selection was completed as groups and the program gets reported monthly in the Transportation Commission packet on the z-fold ‘red/yellow/green’ sheets. This helps to report projects that are in different stages of development in one summary sheet. It presents a summary of Transportation Commission and staff budget actions to date.

RAMP P&O Program Contingency - Existing Status and Future Considerations: As indicated above, CDOT has been managing the RAMP P&O program using a 7.5% individual project allowance and a program allowance for each of the three segments of the RAMP Partnership and Operations program. Current status of the program allowance is contained in the table below:

RAMP Partnership and Operations Program Segment	Original Total Project Cost (Approved) (includes both RAMP and all other project funds)	Current Approved Total Project Cost	Forecast Total Project Cost	Comments
Public-Private / HPTE Partnerships	\$1,495,000,000	* The scope of C-470, the I-25 Northern Segment and the I-25 Southern Segment remain under development.	TBD	Three significant projects are requiring additional staff development and other funding sources (toll, concessionaire, HPTE, etc.).



RAMP Partnership and Operations Program Segment	Original Total Project Cost (Approved) (includes both RAMP and all other project funds)	Current Approved Total Project Cost	Forecast Total Project Cost	Comments
Public-Public Partnerships	\$587,498,039	\$598,156,457 **Currently @ 1.81% increase which is than the 3.5% allowance presented in June workshop	\$658,000,000 to \$680,000,000	Four (4) projects have awarded construction contracts and are at minimal risk for further increases. Sixteen (16) projects are devolution or locally constructed. Eighteen (18) CDOT projects originally estimated at \$370.0 million have yet to go to construction and have risk of increased costs.
Operations	\$105,389,791	\$147,899,193 ***Currently less than the segment limit of \$151,535,607 presented in the October workshop and budget supplement	\$146,000,000 to \$151,000,000	Four (4) projects have awarded construction contracts and are at minimal risk for further increases. Five (5) projects are locally constructed. Thirty-three (33) CDOT projects originally estimated at \$64.0 million have yet to go to construction/award and have risk of increased costs.

In light of recent trend of projects bidding much higher than originally estimated, concerns were expressed by the Transportation Commission. CDOT has attempted to quantify potential future liability of un-awarded, approved RAMP P&O projects. Based on a Colorado Construction Index growth of approximately 20% since inception of the RAMP P&O program, we believe the maximum additional program liability is approximately \$80.0 million, if the projects were to move forward as originally scoped and approved.

Funding the GAP

In October, the TC informally concurred to set the FY2015 year-end Transportation Commission Contingency Reserve Fund (TCCRF) target balance at \$40.0 million. In November, the Department presented the TC with a list of projects and programs to be considered to consume a portion of the contingency balance. The decision was deferred until the RAMP Public-Public project cost estimates were re-evaluated considering recent pricing trends as previously discussed in this memo.

As of December, the estimated remaining TCCRF balance is \$90,028,109. As outlined above, the conservative estimate for RAMP Public-Public project cost overruns is \$80.0 million. The Transportation Commission has funded a \$40 million HPTE Reserve Fund. This reserve will likely



be used to partially fund the C-470 and I-25 North RAMP Public Private Partnership projects. Therefore, Department Staff is asking the TC to consider reserving \$40.0 million of additional TC funds, in coordination with greater adherence to recently adopted resolutions and more aggressive scope and fund source management, to offset the anticipated cost overruns. If the Commission concurs with our staff recommended controls the program liability will be reassessed and a new program liability will be developed. If this option is approved by the TC, the Projected Contingency Balance as of June, 2015 would be \$46,028,109.

Transportation Commission Contingency Reserve Fund (TCCRF) Reconciliation		
To Be Funded (Estimate):	FY2015	Notes
November, 2014 Balance	\$ 103,405,527	
Federal Reimbursement of US24 & Other	4,000,000	Low end projection
TCCRF Supplement Requests	(12,500,000)	Remaining 6 months
State Match for ER/PR	(5,000,000)	Low end projection
Pending December Supplement Items	122,582	Project Savings
Estimated Remaining Balance - December, 2015	\$ 90,028,109	
Items For TC Consideration:		
RAMP Program Cost Overruns	\$(46,000,000)	
Workforce for the Future	(2,000,000)	See Narrative in Budget Supplement
Region 1 WB Floyd Hill to Empire	(2,000,000)	See Narrative in Budget Supplement
Projected Contingency Balance - June, 2015	\$ 46,028,109	

Transportation Commission Resolution 3209 and Project Controls Processes: In support of Resolution 3209 CDOT has drafted recommended project controls to manage RAMP P&O project overruns going forward. A summary is included below and a graphical representation is attached.

- All RAMP P&O projects in excess of \$15.0 million will require an independent cost estimate at FOR.
- All RAMP P&O projects less than \$15.0 million but with CDOT estimates greater than 7.5% or \$1.0 million above the approved budget will require an independent cost estimate.
- Independent cost estimates performed more than 45 days before advertisement will be adjusted based upon an economic analysis/forecast.
- All projects will be evaluated for scalability and scalable portions of projects may be included as alternate bid schedules. The Region must provide the Chief Engineer an explanation of all options that were explored to adjust the scope or why the scope is not scalable.
- CDOT will explore options for additional local contributions for all projects with estimates greater than the approved budget. If not feasible, the Regions will document why additional local participation is not a possibility.
- All projects needing CDOT funds in excess of 1% of the original budget will require TC action BEFORE advertisement. Possible TC actions include approving the additional funding, project swaps to cover shortfall, deferring advertisement or killing the project.



Projects Needing Transportation Commission Direction/Action: Transportation Commission direction and/or action is required on the following projects. Additional project specific information is included in the attached memorandums.

1. I-25/Cimarron in Region 2
2. SH 9 in Region 3

Next Steps: Discuss potential guidance to address combined RAMP and approved baseline funded projects taking into consideration the intent of previously approved TC thresholds for RAMP projects. Include a recommended guidance statement within the January, 2015 TC packet. The US 285 Antonito project included in this month's Budget Supplement is representative of this type of project funding scenario.

Recommendations:

1. Approve recommendation as part of the monthly budget supplement process to reserve \$40.0 million of the TCCRF to fund RAMP Public-Public project cost overruns.
2. Provide feedback/comments and/or endorse modified RAMP P&O project controls.
3. Provide direction on RAMP P&O projects requiring near term decisions.

Attachments

RAMP Risks and Project Controls Decision Tree
I-25/Cimarron Region 2 Project Memo
SH 9 Region 3 Project Memo



Base Options

Action

Risks

Opportunities

Option 1

Complete Projects as Scoped
(Hold scope, increase funding)

Inadequate funds exist. Utilizing funding from Asset Management will sacrifice our core program goals.

Maintains relationships with TPRs and delivers RAMP projects.

Option 2

Hold individual project scope but select projects currently in the program for deletion.
(Hold funding, decrease scope)

CDOT would appear to "pick favorites". It also undermines confidence that we can deliver projects when given funding.

Maintains scopes on non-cancelled projects.

*Option 3

Add \$80M; \$40M from cont/redist and \$40M from unallocated RAMP and reduce individual project scopes wherever possible.
(Strike a balance between scope reduction and additional funding)

Locals can't/won't contribute additional \$. Project teams can't/won't reduce scope.

Should maintain TPR credibility but not reduce scope below a meaningful limit.

***Option 3 is the Staff Recommendation**

RAMP P&O FOR Procedures

ASSUMPTION: TC ADJUSTS RAMP P&O PROGRAM SIZE BY DAF RECOMMENDED AMOUNT AND 3.5% PROGRAM THRESHOLD APPLIES TO INCREASED AMOUNT.

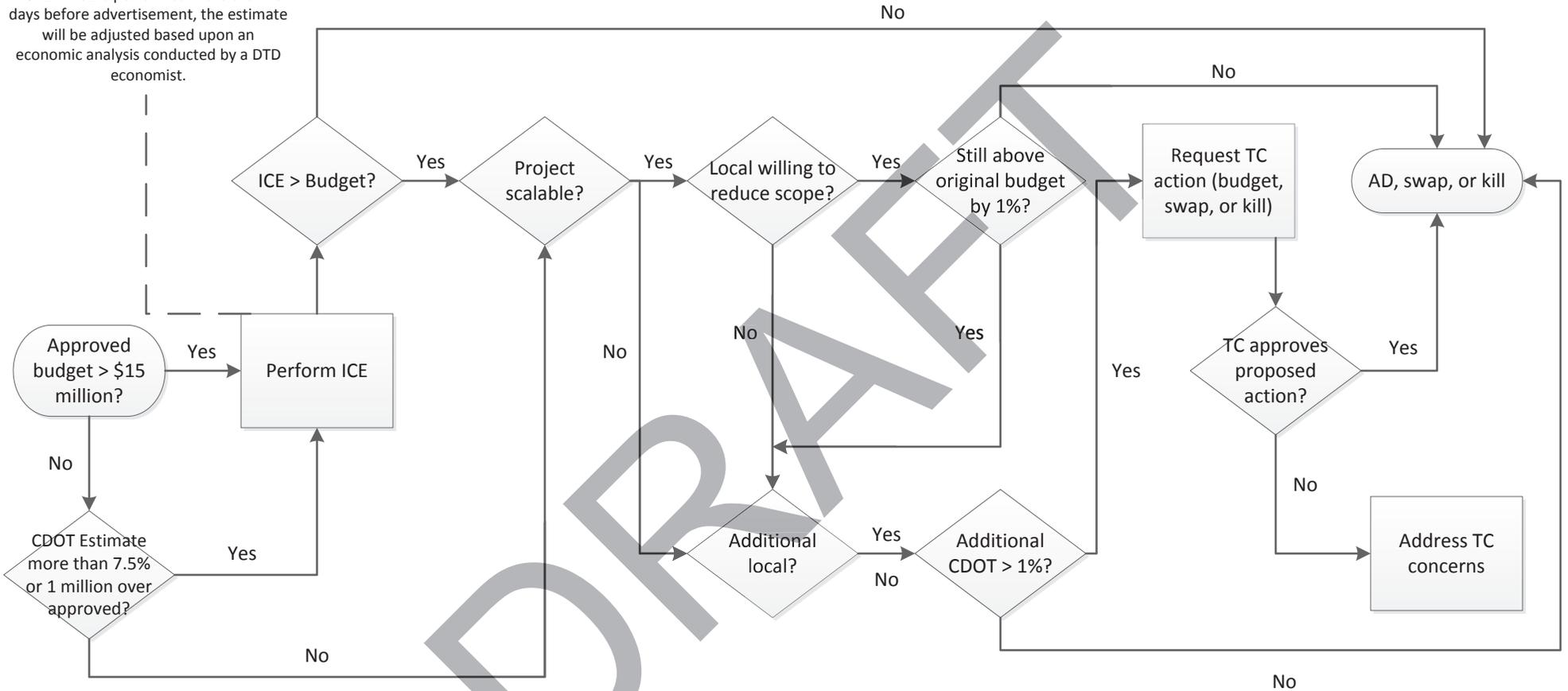
- All RAMP P&O projects in excess of \$15 million will require an independent cost estimate at FOR.
- All RAMP P&O projects less than \$15 million but with CDOT estimates greater than 7.5% or \$1 million above the approved budget will require an independent cost estimate.
- Independent cost estimates performed more than 45 days before advertisement will be adjusted based upon an economic analysis/forecast.
- All projects will be evaluated for scalability and scalable portions of projects may be included as alternate bid schedules. The Region must provide the Chief Engineer an explanation of all options that were explored to adjust the scope or why the scope is not scalable.
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- All projects needing CDOT funds in excess of 1% of the original budget will require TC action BEFORE advertisement. Possible TC actions include approving the additional funding, project swaps to cover shortfall, deferring advertisement or killing the project.

Assumptions:

- Transportation Commission adds additional \$80 million of cost-overrun contingency.

At FOR for RAMP Public-Public Partnership Projects

NOTE: If ICE is performed more than 45 days before advertisement, the estimate will be adjusted based upon an economic analysis conducted by a DTD economist.





COLORADO
Transportation Commission

4201 East Arkansas Avenue, Room270
Denver, CO 80222-3406

DATE: December 18, 2014

TO: Transportation Commission

FROM: Karen Rowe, Region 2 Transportation Director

SUBJECT: I-25 / Cimarron Street RAMP Partnership Project

Purpose

The RAMP 2-21 I-25 Cimarron RAMP Partnership project will need additional \$13.5M of CDOT funding and \$2.05 of local cash match for a total project cost of \$111M. The project needs \$15.5M of additional funds in order to move to final selection of a design build contractor team.

Action

Request approval of \$13.5M CDOT funds and \$2.05M Local cash to be added into the RAMP partnership I-25 Cimarron project.

Request to approve CDOT funding in the ratio of \$8.5 M of RPP and \$5 M RAMP contingency funds

Background

The project team reduced the scope since the last commission meeting. The additional \$15.5 Million of funds that are required (not reduced by City contributions) are summarized as follows:

- \$12.0 Million to Guaranteed Maximum Price (Construction Costs 19% increase)
- \$1.1 Million additional ROW costs
- \$2.4 Million Force account/Utility items/CE/Indirects

Total project budget needed \$15.5 Million

Total CDOT funds needed = \$13.5 Million = \$15.5 Million -\$2.05M (City cash match)

Details

The Independent Cost Estimator (ICE) will have reviewed the cost estimate by the TC meeting on Dec. 18th but it was in process when the memo was written. Pikes Peak Area Council of Governments (PPACG) has already passed approval for the addition of \$20M of their share of the RPP funds. There were RPP funds originally funded in the project.

The following is the timeline for scope reduction on the project:

1. Before releasing the Final Request for Proposal (RFP) on July 24th 2014, these items were removed or revised on the project (Total \$5.9 Million):
 - a. Eliminated the existing I-25 Bridges over the Midland Trail (\$5M savings).



- b. Eliminated the Sidewalk/Trail on the Cimarron St. Bridge over Fountain Creek by tying into the existing Pikes Peak Greenway Trail (\$500k savings).
 - c. Eliminated the Additional Requested Elements for full depth pavement and reconstruction of the highway (\$400k)
2. After issuing the final Request for Proposal, we further reduced the scope of the project by these items total (\$2.9 Million):
 - a. Removed improvements to the I-25 Bridge over Colorado Ave (\$350k savings).
 - b. Eliminated separate right turn lane at the southbound ramp (\$700k savings).
 - c. Reduced wall lengths and embankment costs (\$600k savings).
 - d. Removed the retaining wall along the south side of Cimarron Street. (\$750k savings)
 - e. Minimized the structural aesthetics along the trail and bridge abutments (\$500k savings).
3. Recognizing that further reductions in the project budget and scope are necessary to minimize the impacts to other important projects, since the last Commission meeting the project staff have identified these additional cost savings measures (total \$ 3.4 M):
 - a. Eliminated the landscaping and irrigation features of the project (\$3 Million)
 - b. Eliminated utilities improvements necessary for Additional Requested Elements (\$400K).

There are 3 design-build contractor teams currently preparing the proposals for submittal. In order for them to proceed with the design build proposal they need to know the new GMP about a month before the proposals are due. If the commission approves that the funds can be added to the project at this meeting, then bids can open for the project in late February.

Region 2 has advertised all of their RAMP partnership projects except for one (under \$2M). The US 50 West project had bids open Dec. 4th with bids coming in below the engineer's estimate.

Key Benefits

Approving the funds at this TC meeting, the project procurement schedule will allow construction to begin in the Spring allowing for a full construction season. Construction costs risk being increased if there is too much delay into the bid opening process.

Pikes Peak Area Council of Governments (PPACG) is in support of the project and are willing to put forward their RPP funds as needed to see this project move forward.





COLORADO Transportation Commission

4201 East Arkansas Avenue, Room270
Denver, CO 80222-3406

DATE: December 18, 2014
TO: Transportation Commission
FROM: David Eller, Region 3 Transportation Director
SUBJECT: SH 9 Colorado River South Wildlife and Safety RAMP Partnership Project

Purpose

The State Highway 9 Colorado River South RAMP Partnership (RAMP #3-40) project will need an additional \$6.63M of CDOT funding for a total project cost of \$51.7M.

Action

Request approval of \$6.63M CDOT funds to be added into the SH 9 Colorado River South RAMP Partnership project.

Background

The original RAMP application dated July 1, 2013 requested \$1,523,000 for design and \$44,477,000 for construction and utility relocation. The local contribution to the project was 20% or \$9,200,000. This contribution included cash donations from Cities, Counties and local citizens and land donations from private land owners.

RAMP Application Participation Breakdown:

Total Budget:	\$46,615,000	
Design and Right-of-way:		\$1,523,000
Utility and Construction:		\$45,092,000

Funding Sources:

CDOT RAMP Contribution:	\$36,222,000
CDOT NonRAMP Contribution:	\$1,193,000
Local Partner Contribution	\$9,200,000

Bid Results:

Design and Right-of-way:	\$1,523,000	
Utility and Construction:	\$51,719,747	(14.7% over budget)

Details

The project provides major safety improvements on SH 9 from milepost 125 to 136 in Summit and Grand Counties, including standard geometric improvements, 8 foot paved shoulders, and full scale wildlife mitigation. The south end of the project is located in Summit County for approximately one mile of the project. Since Summit County and the Town of Silverthorne contributed to the project it is not desired to eliminate this portion of the project. On the north end of the project is the Town of Kremmling along with Grand County, which are also both contributing partners. The project stops at the Colorado River where it was determined to be the logical project termini for the wildlife mitigation. The selection of the project termini and locations for the Overpass/Underpass structures was evaluated by a team of experts, including consultation with Colorado Parks and Wildlife (CPW), over the past three years and eliminating crossings could jeopardize the projects success. It should also be noted that a large portion of



the right-of-way needed for the project was donated throughout the project limits and scaling the project could have legal/political ramifications and would be in direct conflict with the IGA. Throughout the development of the project Region 3 design staff minimized cost and reduced scope where possible without jeopardizing the intent of the original RAMP application. This has been reviewed with the PMO office and Chief Engineer.

Additional local in-kind match not previously credited in the initial application has been provided by Blue Valley Ranch allowing all bidders to utilize the private aggregate pit for project benefit. It is estimated by review of the aggregate items below that the savings to the project in comparison of the Engineers Estimate and the apparent low bidder for the use of the private Blue Valley Ranch pit is around \$3.2 million.

<u>Item</u>	<u>Quantity</u>	<u>Eng. Est.</u>	<u>Low Bid</u>	<u>Difference</u>
203 Embankment	298,905 cy	\$2,989,050	\$2,391,240	\$597,810
304 Aggregate Base	168,605 cy	\$4,215,125	\$4,328,543	-\$113,418
403 Hot Mix Asphalt	95,135 tons	\$6,183,775	\$3,424,860	\$2,758,915
Total Savings				\$3,243,307

Kirkland Construction, the apparent low bidder, has also provided a letter stating as a result of the privately owned local pit there were additional savings to the project that resulted in over \$4.2 million (Attachment).

Benefits to Award:

- Allows project to begin in the spring of 2015 and complete in summer of 2017, which meets the TC RAMP guidelines.
- Costs of construction is a known factor, and bid analysis indicates current market pricing.
- Low Bid result was within 3.7% of Engineers Estimate.
- All five Bid results were within 10.3% of one another.

Detriment to Award:

- Project exceeds the budget by 14.7%.

Benefits to Re-bid:

- Allows project to stay within budget.

Detriment to Re-bid:

- Could lose private partnership funding by reducing the scope of work.
- Design funds have been exhausted. Redesign would require use of RAMP funds.
- Construction costs could escalate with limited availability of contractors and spring advertisement date.
- Construction schedule would be delayed and jeopardize completion within TC guidelines (Dec. 2017).
- Low bid contractor may protest non-award.
- CDOT Staff availability to complete the redesign could jeopardize other project delivery schedules.

In summary, Region 3 believes that it is in the best interest of all parties involved to add additional funds and award the project at this time. The Region sees minimal risk of construction overrun and feels that the project can likely be completed below budget resulting in savings that can be returned to the Department and RAMP program.

Attachments

Letter from Kirkland Construction.





Main Office: 2101 Main Street POB 580, Rye, Colorado 81069 PH: 719-489-3385 FX: 719-489-2268

Shop: 4595 Graneros Road, Colorado City, CO 81019 PH: 719-676-3011 FX: 719-676-3010

Arizona: 8255 E Raintree, Ste. 100 Scottsdale, Arizona 85260 PH: 480-634-8168 FX: 480-621-8511

EQUAL OPPORTUNITY EMPLOYER AND CONTRACTOR

December 2, 2014

Colorado Department of Transportation
4201 E. Arkansas Avenue
Denver, Colorado 80222

Emailed

RE: STA 009A-034
SH 9 CO River South Wildlife and Safety - Project Code: 19910

Subj: Value of utilizing Blue Valley Material Source

Attn: Jason Smith

Gentlemen;

The use of materials from Blue Valley Ranch's source located near the center of the project has an estimated economic advantage of approximately \$4,200,000. This value reflects a savings passed along to the State in Kirkland Construction's bid as compared to other sources that were available at the time of the bid letting. These cost savings include the cost of processing and transporting Aggregate Base, Hot Mix Asphalt, and Backfill Materials.

In addition to the economic value to the State, utilizing this source will eliminate approximately 38,600 semi-truck loads of asphalt and aggregate from the public roadways outside of the project limits. This reduction in truck travel over the local roadways is immeasurable in terms of safety and roadway life cycle.

Thank you,

Baxter W. Kirkland