



December 27, 2012

Dear Senator Ellis,

Thank you for your December 17, 2012 letter requesting the most recent Knik Arm Crossing cost estimate. The most recent construction cost estimate for Phase I is \$706 million. This estimate was developed in 2010.

The 2007 Shannon & Wilson Geotechnical Memorandum you reference in your letter was based on the assumption that driven pipe piles would be used for the bridge foundation. We have since committed to using noise reducing drilled shaft technology for the bridge foundations in response to beluga conservation recommendations requested by the National Marine Fisheries Service, lessening the need for a pile installation demonstration project, estimated at \$10 million.

The three recommendations you forwarded from the 2007 Shannon and Wilson Geotechnical Memorandum have been or will be addressed as follows:

- Preliminary Site Characterization – We collected deep boring geotechnical information that exceeds the planned pile lengths and zone of influence of the planned drilled shafts. These borings were drilled directly on the selected project centerline at 500' intervals.
- Pile Installation Demonstration Project – The data gathered on 500' intervals verified that drilled shaft foundations are feasible.
- Final Site Characterization – Design guidance recommends that each pier location have a sufficient number of borings to determine the subsurface characterization of the soils. This investigation and the final design will be done by the Developer.

The 2010 cost estimate considers the additional geotechnical data, drilled shaft bridge foundations, and several other features added during project development and permitting activities. Major items include:

- Constructing all six lanes of the tunnel under Government Hill in the initial phase of construction, to mitigate and minimize impacts to the community;
- Constructing all fill in the intertidal zone in the initial phase of construction, to minimize impacts to fish and fish habitat;
- Constructing roadway embankment for 4-lanes up to the top of subgrade along the Port of Anchorage and JBER, to minimize disruption to their activities.

We evaluated the cost of increasing the structure length from 8,200 feet to 9,200 feet last spring at the request of AMATS, during the development of the Metropolitan Transportation Plan. The cost of the lengthened structure is offset by the removal of embankment and riprap material in the deepest areas of the Knik Arm Crossing alignment, resulting in a net increase of approximately \$15 million dollars, or roughly 2% of the overall Phase I construction cost. There is sufficient contingency included in the 2010 cost estimate to cover this change.

Many cost estimate reviews have been performed for the project, the latest being conducted by the Federal Highway Administration (FHWA) in 2009 as required for Major Projects. FHWA will perform another Major Projects cost estimate review during 2013 to update their 2009 work. This review will capture all of the changes incorporated to date and will be published once complete. Of course, the actual cost will be known when proposals are received from the three teams shortlisted to compete for the project, expected in the fall of 2013. It is interesting to note that other agencies engaging P3 procurements around the country have been pleasantly surprised by cost proposals well below the engineers' estimates. Most recently, the East End Crossing Project over the Ohio River between Indiana and Kentucky came in 23% under estimate, and the Tappan Zee Bridge in New York came in more than 25% under estimate. We are hopeful that Alaska will have a similar experience with the Knik Arm Crossing Project.

Let us know if you have additional questions, we can also offer you a briefing on the most current information regarding the Knik Arm Crossing project.

Sincerely,



Andrew J. Niemiec
Executive Director

CC: Senator Lisa Murkowski
Senator Mark Begich
Congressman Don Young (w/Ellis letter)
Senator Charlie Huggins (w/Ellis letter)
Representative Mark Neuman (w/Ellis letter)
Representative Les Gara
Mayor Dan Sullivan
Assemblyman Pat Flynn
Michael L. Foster, Chairman, KABATA
Bob French, President Government Hill Community Council