# MEMORANDUM State of Alaska

Department of Transportation and Public Facilities

Design and Engineering Services – Central Region

Preliminary Design and Environmental

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| **TO:** | Sean Baski, P.E.  **Project Manager**  Highway Design | **DATE:** | August 2, 2012 |
|  |  | **PROJECT NAME:** | Alaska Peninsula Highway Bridges |
|  |  | **PROJECT NO.:** | 53795 |
| **FROM:** | Paul Janke, Ph.D, P.E.  Regional Hydrologist | **SUBJECT:** | Leader Creek Survey Request |

The following survey information is needed to provide recommendations for a culvert at Leader Creek near MP 3 of the Alaska Peninsula Highway.

1. Bridge surface above the stream.
2. Six point stream cross sections located about every 50’ measured along the stream from 400’ upstream of the upstream bridge face to the upstream bridge face. The six points are as follows. Right and left are as looking downstream.
   1. A point about 20’ right of the right top of bank.
   2. Right top of bank.
   3. Right bottom of bank.
   4. Left bottom of bank.
   5. Left top of bank.
   6. A point about 20’ left of the left top of bank.
3. One six point stream cross section under the bridge near the highest streambed elevation. The six points are as defined above.
4. Six point stream cross sections located about every 50’ measured along the stream from the downstream bridge face to 400’ downstream of the downstream bridge face. The six points are as defined above.
5. The 18’ marker downstream of the bridge about 600’ near the stream right bank adjacent the boat ramp.

Notes:

1. A horizontal and vertical location is needed for each point.
2. Streambed elevations should be an average for the area and consequently the stream distances between such points will vary.

cc: Ruth Carter, P.E., Coastal Engineer, Ports & Harbors