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1949 Holiday Lane  
Crystal Water Beach  
Point Roberts, WA.  
98281, U.S.A.

August 18, 2004

To : Carl Gregg  
Chairman, Road Improvement Committee ✓

c.c. Board of Directors  
Crystal Water Beach Association

Mr. R. Niebrugge, fax : 360-733-6735  
Mr. Mike Delf  
Mr. Don Rathborne

Re : Wilder Construction - "RAP" Assessment

As per your arrangement Carl, I met with Rick Niebrugge, an Estimator with Wilder Construction's Whatcom County Branch, in Bellingham on August 12th. Wilder's are a substantial company with whom I would have no hesitancy in recommending contracting. Prior to our meeting I engaged Keith, a Superintendent [?] and Steve, their Plant Despatcher in an informal further education re road applications.

The purpose was to evaluate RAP, a recycled road base, which is an alternative to graded pit run both product and cost wise. Rick stressed that this was not dust free. It compares with crushed limerock, but the latter when well watered and rolled is more compact and less dusty. The emphasis is on the amount of water. RAP was the sub base to the Tyee / APA paving project done by Wilders several years back. Kieth told me they laid 2 inches plus of RAP and the standard 2 degree crown slope. Apparently they nearly drained the Point's water storage tanks; they couldn't get enough water down on the RAP.

Wilder's have to pay a permit cost of USD 300 per truck load of RAP delivered to the Point. Rick was basing his estimate on 1500 lineal feet X 12 foot width, which by recollection was about USD 16,000 +/- 10%. Consequently Rick opined that our Association would be better to source ex B.C. We could be paying \$2 per ST trucking for local source material versus perhaps \$20/t to truck to the Point. As to their labour availability, Wilder could have graders [key factor] available in late September or mid October if we wished to proceed. Rick does 400 estimates per year on average, so making a trip to the Point has to be based upon some certainty of proceeding thru to the contracting phase.

To asphalt top coat the RAP, which would then provide us with a maintenance free surface for decades would cost an additional USD 13,500. In total, the finished job, as a stand-alone, is therefore about USD 30,000.

I then proceeded to Sterk Lane which is approximately one mile from the plant to view an application done about 18 months prior. Sterk is a relatively flat, high and dry re drainage, typical country lane which services six home acreages. I traveled inbound about one kilometer at 15~20 kph; the car raised minimal dust. Stopping at a 90 degree curve to examine the side sluff of looser surface material, I noted that the product seemed to be 1 inch or less and had the typical low volume road tendency to rut out in the curve and build up loose material towards the shoulders. Three pictures of the road surface were taken. On the return trip I travelled at 35 kph - the dust was copious - just like a very dry upcountry Caribou road. My conclusion was that RAP was not CWB's preferred solution.

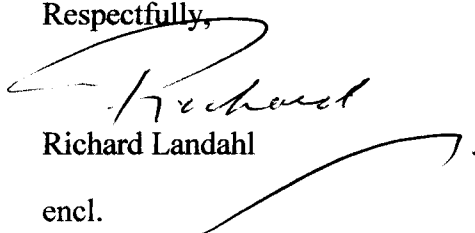
The following morning I phoned Rick to inform him that RAP was not the application desired. The product that I had in mind is known as Plainings. This is the existing asphalt surface which is ground up and removed prior to subterranean work as commonly seen on 56th Street. Apparently not much in the way of Plainings is generated in Washington. When reapplied, Plainings are not as smooth as asphalt, the material isn't consistent, but it does consolidate with time. It is not dusty.

However Plainings have product application difficulties. It cannot be stockpiled, or it sets up. It won't set in the sun. It should be hauled directly. If CWB sourced Canadian Plainings, Wilder's could do the prep and application on a T&M basis, which is reasonable under the circumstances. However the coordination, advise on number of loads is expected to be "difficult".

Finally I asked Rick for his recommendation on surfacing CWB's short, country style lanes. His bottom line " keep your M&R current, and when the next local paving project occurs, contract with that firm for an asphalt surface. Do it right, and do it for the long term - you'll have thirty years. Mobilisation could save you 20%."

I thanked Rick for his time & recommendations. Further, I have requested that Wilders' inform us when they will next be paving on the Point in the hope that we can then coordinate our needs.

Respectfully,

  
Richard Landahl

encl.



**Rick Niebrugge**  
Estimator

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