

SUBJECT: Discussion with Brigadier General Love, Commander, Fort Macleod,  
Highway System, Canada, on Proposed PDL Pipeline

MEMO FOR FILES

NPABD-1

20 September 1951

On 15 September 1951 Brigadier General Love visited the Military Office and discussed the route of the proposed PDL pipeline through Canada with Colonel Hambolt, and the undersigned. The Brigadier was quite interested in the route and offered several general items of engineering advice based on his knowledge of the area traversed. He requested a set of preliminary location plans through the Canadian portion which I am sending him by letter. He very generously stated that his staff would study the route and would advise us of any objection factors which might conflict with the route presently contemplated.

Brigadier Love mentioned the possibility of conflicts of pipeline location with existing gravel or borrow pits used by the Canadian Army in connection with road maintenance. He stated that in the majority of cases the location of the existing borrow pits is somewhat critical inasmuch as they are, in general, located at the sources of the best material locally available and that in some cases it might cause considerable inconvenience if the pipeline were improperly located with respect to the existing borrow pits. He stated that information on the borrow pit reservations has been sent to Fluor Corp. of the Fluor Corporation so that interferences could be readily identified in the course of the design. I stated that we would request the Fluor Corporation to prepare a resume of possible conflicts of pipeline location and existing gravel pits and that, if the problems appeared to be real, we would send a representative to Brigadier Love's office to discuss the interferences and arrive at a solution satisfactory to the interests of both governments. Brigadier Love heartily concurred in this suggestion and stated that he thought any such matters should be worked out through personal contact between our respective offices. The individual we should contact in this regard is Lt. Col. Beeman, Senior Highway Engineer, Whitehorse. Brigadier Love suggested that in some cases where location of the pipeline through gravel pits might be necessary, the line should be deeply buried and clearly identified so that careless equipment operators would not easily damage the line.

Brigadier Love requested that we make certain that the line is buried deeply enough at road crossings so that the grading in the roadside ditches will not be a source of possible damage to the line.

Brigadier Love pointed out that the Donjek River scours the gravel bottom very deeply in flood periods and that this summer they had a flood which actually undermined piles which had a recorded penetration of 10 feet. This was physically measured, and it is known that the gravel had actually washed out from under the piles at a 45-ft. depth below the former ground line. This was an extreme case caused by a channel change.

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an obstruction which greatly constricted the channel area and accentuated the scouring action. He stated that the bridge was being relocated at the Donjek River and that, while they had some channel work in mind, the work tentatively contemplated was not of such a nature that it would concentrate the channel over the proposed pipeline route in such a way as to increase the scour but rather that the river would tend to be dispersed in that immediate area.

5. Brigadier Love brought up the possibility of the contractor's use of existing army road camps which are not now in use. He suggested that if this office felt there would be a savings to the government, a letter should be sent through our higher headquarters outlining our needs and requesting the use of such camps as might be made available and information as to which ones might be available. A copy of this letter should be addressed to Brigadier General Love, Commander, Northwest Highway System, Whitehorse.

6. Brigadier Love stated that he had no objection to our using existing or proposed highway bridges for pipeline river crossings; however, he assumed that we would normally stay away from bridges from our own design standpoint.

7. The General suggested the possibility of traversing the length of Iluane Lake under water for substantially the entire distance in order to avoid the bad slide area and the flash flood area which exist all along the lake shore. He stated that the flash floods were a recurring problem in this area and might cause us or damage to the pipeline.

8. The subject of clearance for drilling and general subsurface exploration work at the pumping station site was brought up and Brigadier Love reiterated his former statement granting the District Engineer Corp. personnel the necessary authority and clearance to conduct any necessary subsurface explorations. He stated that he considered the existing survey authorization and clearance sufficient to include any attendant subsurface exploration and studies.

9. At the conclusion of the conference Brigadier Love expressed his appreciation of the information which we had furnished. The District representatives in turn expressed appreciation for the study and advice which have been furnished and which had been promised by Brigadier Love.

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