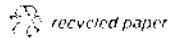




Consulting Engineers • Planners  
Environmental Scientists

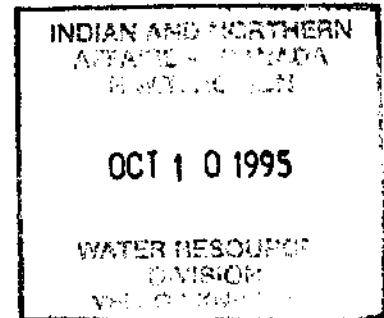


Our File: 95-2832

October 3, 1995

Water Resources Division  
Renewable Resources & Environment  
Northern Affairs Program  
Box 1500  
7th Floor Bellanca Bldg.  
Yellowknife, N.W.T.  
X1A 2R3

Attention: Brian Collins



*Grise Fiord  
Nunavut District  
WB*

**Sewage Lagoon  
Grise Fiord, NWT**

Dear Mr. Collins;

At your request, we have reviewed the tender drawings for the above project. The review was limited to the information shown on the drawings with respect to construction details. Sewage effluent/treatment data was not provided and, as such, we have not commented on the treatment process. Further, regional hydraulics were not reviewed and, therefore, drainage channel capacity is not discussed in this letter. Our comments are as follows:

- Drawing 100 - Site Plan

The ditch downstream of the overflow spillway is shown to be a Type B ditch. It is assumed that the lagoon will be discharged to this ditch. The frozen core dyke design precludes discharging by exfiltration.

Erosion protection along the discharge ditch should be considered. This is shown be a Type A ditch on the plans. We suggest that the Type A ditch would be more appropriate for the discharge channel.

- Drawing 101 - Detail 1 and Detail 2

The berm walls are shown to be constructed of a partial excavation and a partial fill section. In areas on the interior slopes that are an excavation section, there is no treatment of the face shown.

...continued

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Water Resources Division

-2-

October 3, 1995

The drawings indicate that this material is a frozen, silty material for approximately half of the lagoon area. This material will thaw at the face of the slope. Consideration should be given to removing 1.0 m of this material and placing compacted, granular material over all interior faces. The granular material will aid in preventing erosion and, therefore, increase the stability of the berm walls.

Attached are copies of the construction drawings that indicate the areas of concern.

We trust this meets your requirements.

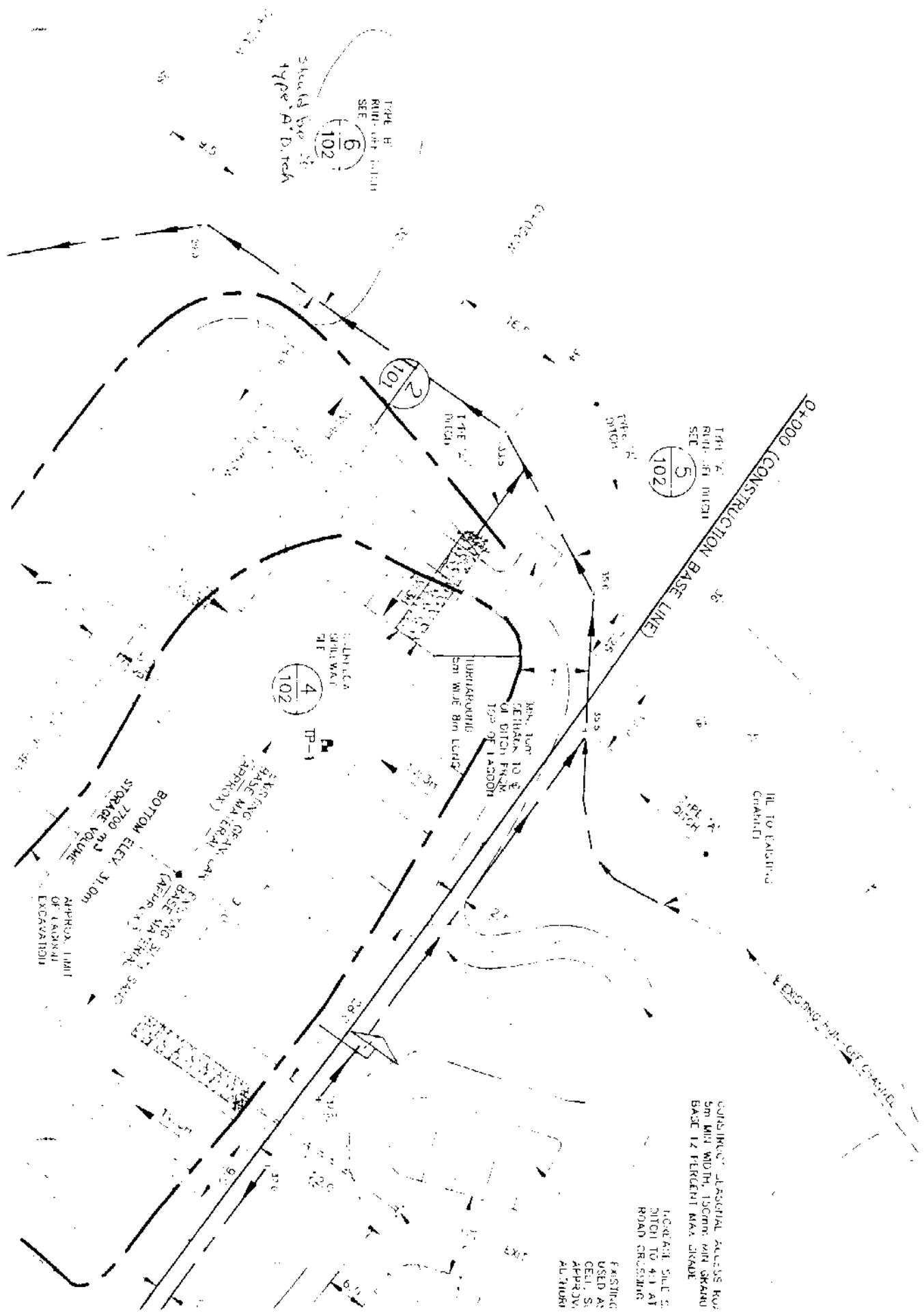
Yours truly,

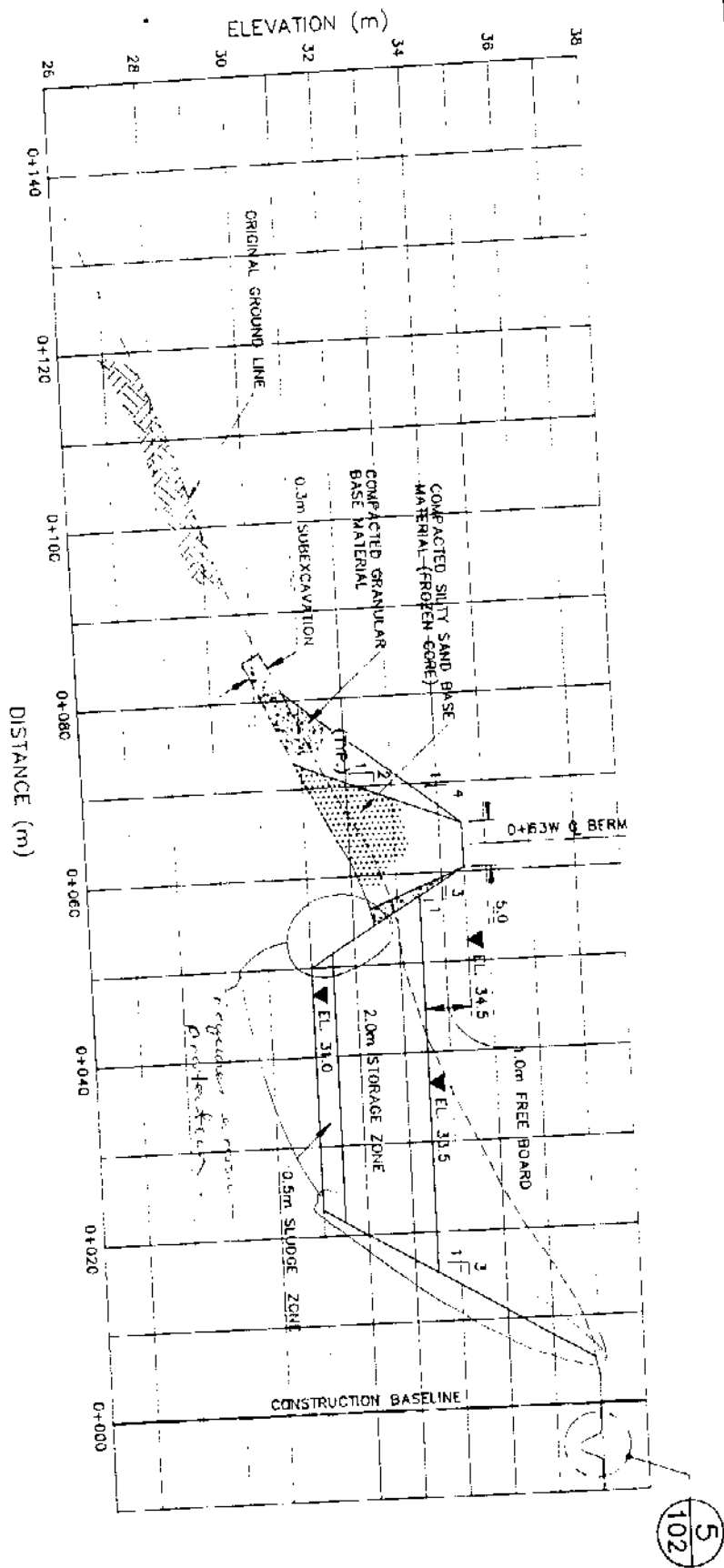
M.M. DILLON LIMITED



Gary Strong, P.Eng.  
Project Manager

GS:vw  
Encls.





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