

2000-20/Hatzic

**HATZIC PRAIRIE RIPARIAN
PLANTING AND SEDIMENT
CONTROL PROJECT**

**SECOND PHASE – SEDIMENT REMOVAL
ALONG SAND REACH FROM
DALE ROAD TO HATZIC LAKE**

ADDENDUM

**FARMS ROAD GRAVEL TRAP
MODIFICATION TO ORIGINAL DESIGN**

Prepared for:
**Fraser Valley Regional District
8430 Cessna Way
Chilliwack, BC
V2P 7K4**

Prepared by:
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30 Gostick Place
North Vancouver, BC
V7M 3G2**

December 7, 2001

3-3436

1.0 INTRODUCTION

The original report which was submitted on November 20, 2001, provides a post-construction layout and fisheries mitigation drawing (shown as Figure 1.2 in the report) but there was no detailed explanation for modifying the original design layout. The original design is shown on the attached Figure 1.4 and shows the excavation profile with four pits separated by short gravel berms. The post-construction layout, however, shows that only three pits were excavated with two berms between the pits (original Figure 1.2).

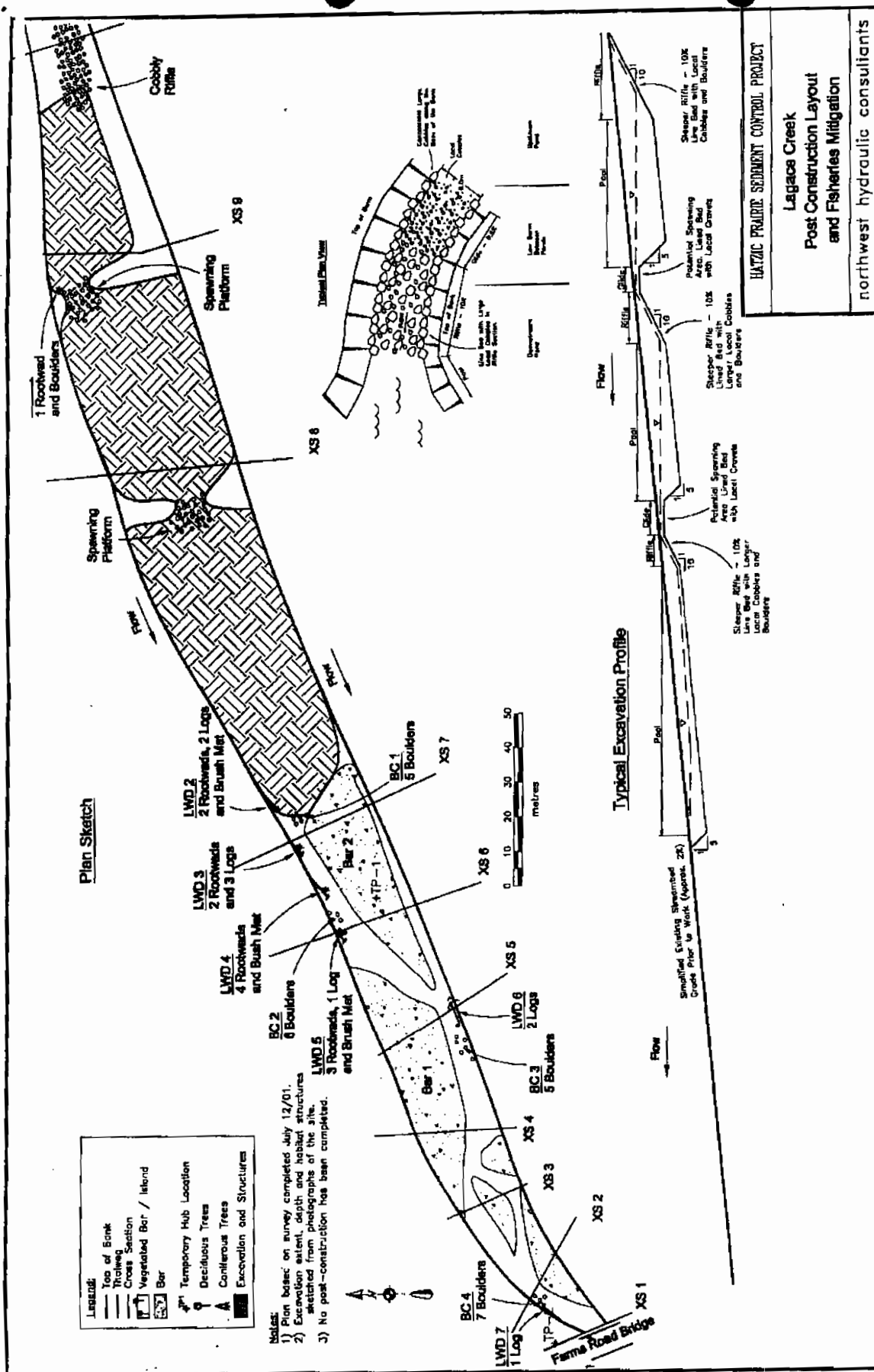
2.0 REASONS FOR MODIFYING THE ORIGINAL DESIGN OF THE GRAVEL TRAP

The permit for gravel excavation within Lagace Creek was approved on September 21, 2001, and the fish window was extended from September 15 to 30, 2001, in order to allow this excavation to proceed. This resulted in five days being available for excavation if weekends are not included.

The preparation of the site was started on Monday, September 24, 2001, and the flow was diverted to the south side of the creek. Salvaging of fish proceeded during this early stage. However, during preliminary excavation, the contractor found that there was only about 1.0 to 2.0 m of gravel above a silt/peat layer. This gravel thickness was found to be rather thin at the lower end, from the Farms Road Bridge to an old ramp along the north side, and was about 2.0 m thick at the upstream end of the proposed trap. With only five working days, it appeared that the entire trap could not be excavated with the equipment that the contractor had available. After reviewing this information, it was ascertained that excavation of the upper portion of the trap would result in a larger trap than if the lower part was excavated. Also, leaving the lower portion intact would allow for the placement of more permanent woody debris and rocks. A third reason for excavating the upper portion was that this reach has larger bed material which could be used to construct riffles thereby reducing the requirement to obtain rock from nearby quarries as originally planned.

Therefore, the original design was modified from four separate pits to three shorter pits located along the upper reach of the gravel trap. This modified design was mutually discussed with the fish habitat monitor and the DFO office on site during the early stages of the excavation. The excavation was completed on Friday, September 28, 2001, and woody debris and rock placement was completed during the early part of the following week (October 1 to 3, 2001).

WJG



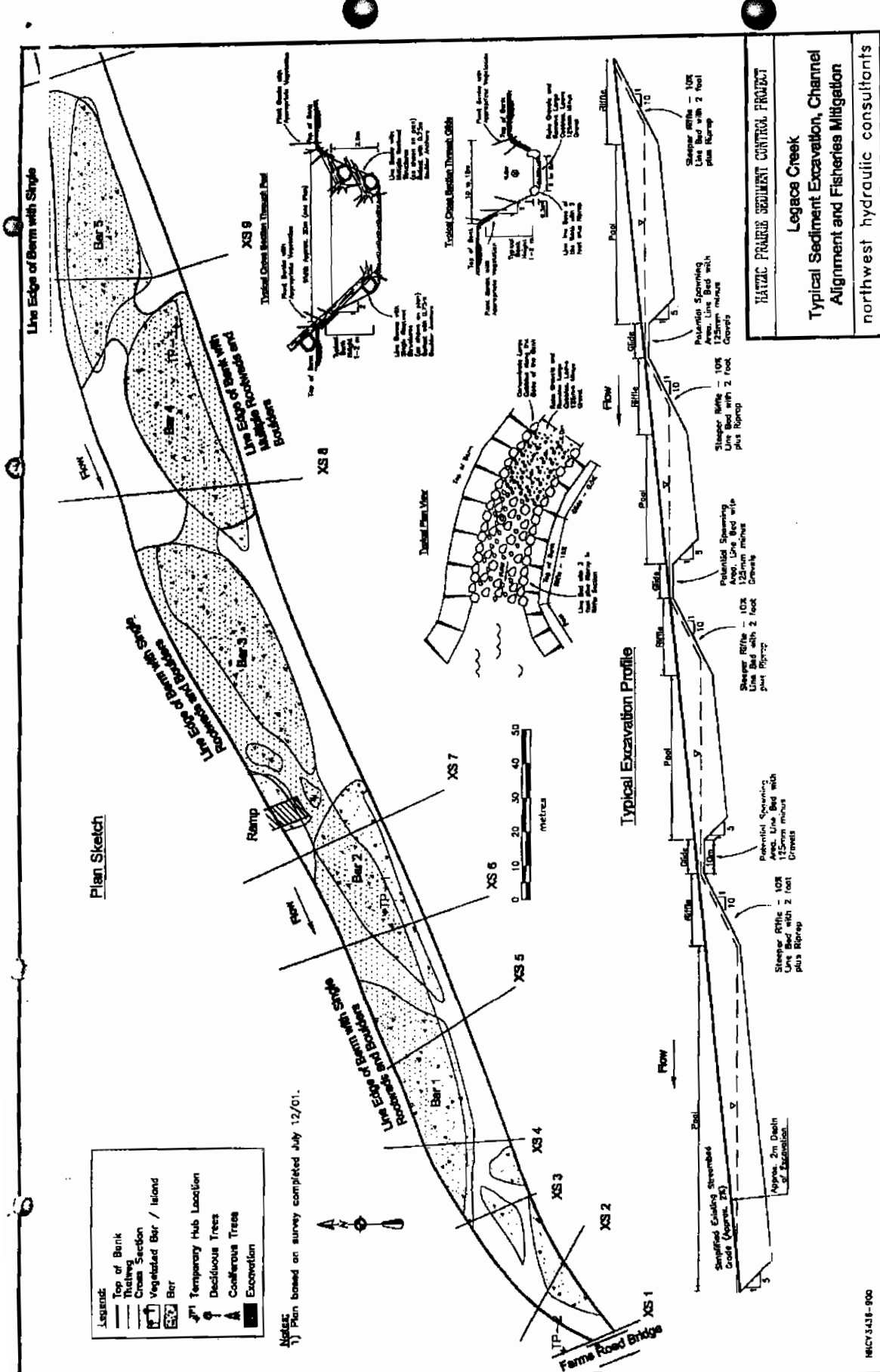


FIGURE 1.4

NYC 3438-900

FAXED

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Leaders in
water resource
technology

3-3436

December 12, 2001

Graham Daneluz
Fraser Valley Regional District
8430 Cessna Drive
Chilliwack, BC
V2P 7K4

Dear Graham,

Re: Future Sediment Basin at Dale Road

FVRD - INCOMING MAIL			
☐ Executive	☐ Community Services	☐ Finance	☐
☐ Administration	☐ Building	☐ Recreation	☐
☒ Planning	DEC 17 2001		Date Scanned
Date Rec'd			
File No.			
Project No.			

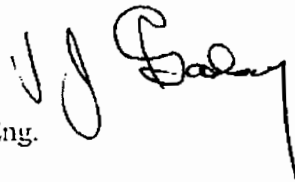
Thank you for the information and comments related to placing excavated sand from the Dale Road reach onto farm land. The comments related to the suitability of primarily sand fill as agricultural land are appropriate at this time and discussions with the locals during the next watershed meeting would certainly be appropriate.

In our recent report we had mentioned that the sand could be used by locals, but we had not yet carried out any studies on where this material would be placed. Some of the locals have mentioned to me that they would like to raise the level of low-lying land, but it was uncertain whether this would be future farmland or future tree plantations. Others also requested fill material for roads.

I am enclosing a graph showing sediment sizes along Lagacc Creek and curve #2 is at the Dale Road Bridge. About 79 percent of the material is sand with 21 percent being coarser granules and pebbles. There was no silt or clay in this sample.

Also, from discussion with local aggregate industry operators, it seems that there could be a commercial market for this sand material, but the end use was not discussed. Discussions will be necessary with local landowners in order to finalize locations of sand removal as well as compensation sites for fish.

Sincerely,



Vic J. Galay, P. Eng.
Principal

cc: Jim Scott - Scott Resources Services, 8426 Jennings St., Mission, BC
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