Photo No. 1 - View to the Northeast Looking Upstream Along Top of Dyke on East Side of the Serpentine River.

Photo No. 2 - View to the West. Showing Pump Station Inlet.

Photo No. 3 - View to the East. Showing Pump Station Outlet.

To Mitigate the Flooding at the Intersection of 176 Street and Fraser Highway, a Drainage Pump Station was Constructed in July, 2000. To Obtain Ministry of Environment (MOE) and Department of Fisheries and Oceans (DFO) Approvals, a "Fish Friendly" Facility was Required.

This Involved the Following:

- A Drainage Pump Station Consisting of Two Large Archimedes Screw Pumps Which Allows Fish Migration From the Upstream Ditch to the Serpentine River.

- A Concrete Fish Ladder to Allow Fish Migration from the Serpentine River to the Upstream Ditch During High Water Levels in the River.

- A Sideways Opening Flap Gate at the Flood Box Outlet into the Serpentine River to Allow Fish Migration During Low Water Levels in the River.

Input from MOE and DFO as well as Recommendations from ECL Environmental Consultants Ltd. was Used to Design and Construct this Unique Facility.

Photo No. 7 - Fish Ladder Rising Pools, Water Supply Flowing and Cascading Down in the Pools.

Photo No. 6 - Fish Ladder Chute Down to Forebay, with Aluminum Cover.

Photo No. 5 - Access Platform Over Flood Box Outlet.

Photo Nos. 4 - Installing Screw Pump Unit No. 1.

Screw Pump Dimensions:

Length =	9.5m
Diameter =	2.4m
Weight =	16 000 kg
Capacity =	2000 L/sec

FRY'S CORNER DRAINAGE PUMP STATION

Client

SURREY CITY OF PARKS

Project Consultant:

APLIN & MARTIN CONSULTANTS LTD

Subconsultants

envirowest ENVIRONMENTAL CONSULTANTS

amec