

2002-11

Engineering

In the past, Andy was responsible for field supervision, planning, scheduling, budgeting from conception to implementation. This included coordinating site surveys using professional equipment and software. All field work was conducted according to the Forest Practices Code of British Columbia, including Forest Road Regulations. Andy prepared written reports and made presentations to managers and clients on regular basis. Projects included:

- Bridge Surveys:
 - Hodder Creek Crossing @ 4.8 km for MoF Skeena
 - Hodder Creek Crossing @ 3.5 km for MoF Skeena
 - 3.1 km on Prinz FSR for BCTS, Burns Lake
 - 3 km on 10316-01 FSR for BCTS, Burns Lake
 - 270 km on the 200 FSR for BCTS, Burns Lake
 - 3 km on the Division FSR for BCTS, Burns Lake
 - 257 km on the 200 FSR for BCTS, Burns Lake
 - 261 km on the 200 FSR for BCTS, Burns Lake
 - 3 km on the 10288-01 FSR for BCTS, Burns Lake
 - Iltzul Creek Crossing @ 17.8 km for BCTS, Terrace
 - Maxan FSR for BCTS, Smithers
 - Survey of 11 sites in the Mess Creek Valley for Copper Fox Metals Inc.
- Road Surveys / Realignment:
 - 90 km access road for Andrew Zinc Project, Yukon
 - Blue Pearl Mine Road in Smithers
 - Thompson FSR @ 15-17km for BCTS, Burns Lake
 - ATV Trail at Pope Pit for MoT
- Survey / Layout Boundary of the Filter Camp for NovaGold Resources Inc.
- Bridge Inspections:
 - Grizzly Main FSR, Kluskus FSR, Bobtail FSR, Southerland FSR, Broman FSR, East Swanson FSR, Red FSR, Blue FSR for Canadian Forest Products Ltd. in Vanderhoof
 - Dala North M/L, Dala South M/L, Dala Branch 1200 FSR, Pike FSR, Sleeman FSR and Ayton Creek FSR for BCTS, Terrace
 - 100 Rd, 200 RD, 600 Rd for Lakeland Mills, Prince George
- Deactivation Prescription / Environmental Site Assessment:
 - Iltzul West FSR for BCTS, Terrace
- Erosion Control Implementations:
 - Iltzul West FSR for BCTS, Terrace
- Flood Protection Plan:
 - Lower Post for Daylu Dena Council
- Structural Assessments / Inspections / Loading:
 - Roof Inspection/Assessment of the Shop, Lower Post, Yukon
 - Roof Inspection/Assessment/ Loading check, Restaurant, Prince George, BC

Andy drafted and designed plans using ACAD, Autodesk Civil 3D, RoadEng computer software. All designs were made in general accordance with MoF Design standards using CAN / CSA – S6 – 00 design specifications and conformed to the Forest Practices Code of British Columbia, including Forest Road Regulations. He prepared written reports and made presentations to managers and clients. Projects included:

- Bridge Design / Draftings:
 - Shediash and Utsun Crossings for BCTS, Terrace
 - Several Creek Crossings for NovaGold Resources Inc.
 - 0+248 km on the 1000 Branch Road for Cypress Forest Consultants Ltd.

- 0+095 km on the 1500 Branch Road for Cypress Forest Consultants Ltd.
 - 8+800 km on the White River FSR for BCTS, Terrace
 - 10+100 km on the White River FSR for BCTS, Terrace
 - Maxan FSR for BCTS, Smithers
 - Upper White Crossing @ 6.5 km for Cypress Forest Consultants Ltd.
 - Hodder Creek Crossing @ 4.8 km for MoF Skeena
 - Hodder Creek Crossing @ 3.5 km for MoF Skeena
 - 3.1 km on Prinz FSR for BCTS, Burns Lake
 - 3 km on 10316-01 FSR for BCTS, Burns Lake
 - 270 km on the 200 FSR for BCTS, Burns Lake
 - 3 km on the Division FSR for BCTS, Burns Lake
 - 257 km on the 200 FSR for BCTS, Burns Lake
 - 261 km on the 200 FSR for BCTS, Burns Lake
 - 3 km on the 10288-01 FSR for BCTS, Burns Lake
 - South Beach Creek Crossing for Ascot Resources Ltd.
 - Iltzul Creek Crossing @ 17.8 km for BCTS, Terrace
 - McRae Creek Crossing @ 2.3 km on the Galore Creek Project Access Road for the NovaGold Resources Inc.
 - 36.5 km on the Suskwa FSR for BCTS, Terrace
 - 7 km on the Captain M/L
 - 6 km on Branch 1000 Road
 - 4.5 km on Branch 1000 Road
 - Structural Detail Design Drafting of Bridge Structures:
 - Old Skeena Bridge in Terrace for MoT, Terrace
 - Structures: (30', 40', 50', 60', 70', 80', 90', 100', 110', 120', 130' long) for NovaGold Resources Inc.
 - Detail Drafting of the Gabion Baskets Installation:
 - Galore Creek Project Access Road for the NovaGold Resources Inc.
 - Pedestrian Bridge Drafting / Preliminary Designs
 - Cronin Footbridge Design, BC Parks
 - Preliminary Design for the Rotary Bulkley River Pedestrian Bridge Crossing near Smithers
 - Road Design / Draftings:
 - 34 km access road for Andrew Zinc Project, Yukon
 - Blue Pearl Mine Road in Smithers
 - Bypass Road at Morice FSR for Canadian Forest Products Ltd. in Houston
- Thompson FSR @ 15-17km for BCTS, Burns Lake
- Corrections for Subdivision Road Design near Houston
 - Ski Hill Geotechnical Option Drafting:
 - Ski Smithers in Smithers

Andy assisted in field surveys, assessments and implementations, deepening his understanding of the end product of engineering work in relation to the equipment and role of computer software. Projects included:

- Bridge Surveys:
 - Hodder Creek Crossing @ 4.8 km for MoF Skeena
 - Hodder Creek Crossing @ 3.5 km for MoF Skeena
 - 3.1 km on Prinz FSR for BCTS, Burns Lake
 - 3 km on 10316-01 FSR for BCTS, Burns Lake
 - 270 km on the 200 FSR for BCTS, Burns Lake
 - 3 km on the Division FSR for BCTS, Burns Lake
 - 257 km on the 200 FSR for BCTS, Burns Lake
 - 261 km on the 200 FSR for BCTS, Burns Lake
 - 3 km on the 10288-01 FSR for BCTS, Burns Lake



OGOPOGO

- Iltzul Creek Crossing @ 17.8 km for BCTS, Terrace
- Maxan FSR for BCTS, Smithers Survey of 11 sites in the Mess Creek Valley for Copper Fox Metals Inc.
- Road Survey / Realignment:
 - Blue Pearl Mine Road in Smithers
 - Morgan Road in Smithers
 - Rogers Wireless Antenna Tower Installation in Hazelton Access Road in Hazelton
 - Bypass Road at Morice FSR for Canadian Forest Products Ltd. in Houston
 - 2nd Avenue Meadows Project for Smithers Community Services in Smithers
 - Thompson FSR @ 15-17km for BCTS, Burns Lake
 - Survey of the Hwy 16 between Lake Kathlyn and Smithers for MOT in Terrace
 - Survey portion of the Hwy 16 crossing with Babine Forest Products Ltd. Access Road for MOT in Prince George
 - Realignment of the NovaGold Access Road
- Flood Protection Plan:
 - Lower Post for Daylu Dena Council
- Bridge Inspections:
 - Meziadin River for MoF, Terrace
- Erosion Control Implementations:
 - 160 km of Golden Bear Road near Telegraph Creek for MoEMPR
- Slide Assessments:
 - 16km on the Babine River near Hazelton, for MoT, Terrace
 - China Cut near Hazelton, for MoT, Terrace
 - Iltzul West FSR for BCTS, Terrace
- Deactivation Prescription / Environmental Site Assessment:
 - Tsugwinselda FSR for BCTS Terrace
 - Iltzul West FSR for BCTS, Terrace
- Road Inspection / Environmental Assessment:
 - 160 km of Golden Bear Road near Telegraph Creek for MoEMPR
- Swamp Survey / Assessment:
 - Red Chris Mine near Iskut
- Survey / Layout of ATV Trail:
 - ATV Trail at Pope Pit for MoT