

**MT. CAIN ALPINE PARK SOCIETY
\$237,000 INFRASTRUCTURE & CAPITAL
IMPROVEMENT PROJECT**

Final Report



Attention: Mt. Cain Alpine Park Society

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**COMPLETION REPORT
SEPTEMBER 1, 2012**

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COMPLETION REPORT
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1. OBJECTIVES:

There were three objectives to this project: 1. completion of a new maintenance building, 2. improvement to the electrical system, and, 3. acquisition of a diesel generator.

Maintenance Building: Maintenance is critical to the operation of Mt. Cain. Snow grooming, road grading, and moving snow by caterpillar are essential functions of any ski hill. The operation and maintenance of this machinery is critical to the ongoing success of the resort. In 2006, there was only one open bay where maintenance work on machinery was performed under cover. Otherwise, the work was performed outside in the elements. The machinery sat outside and was adversely depreciated by the weather. With additional funding, coupled with donated time and materials, an improved maintenance building was proposed, vastly improving the longevity of the existing machinery, permitting repair work to occur out of the weather, as well as keeping the equipment safe from possible vandalism. A consultant's report (the Matthews Report⁰) recommended that siting of the maintenance building should be relocated.

The maintenance and storage buildings are located near the centre of the Mt. Cain ski area...However, **it should be relocated away** from the base of the area as per the proposed plan. (Matthews Report, August 3, 2000, p.27) (bolding supplied)

It was proposed the building would be completed in two phases. **Phase One** was completed in 2006, which involved the acquisition of timber frame materials for external frame of building, and site preparation work. This was performed under funding granted by the Coast Sustainability Trust.

Phase Two would permit the completion of the project, including roofing, wall framing and siding, plumbing and concrete flooring.

Electrical Upgrade: Mt. Cain has been relying on an original electrical system put in place nearly 30 years ago. The electrical system has received periodic maintenance but with the expansion of the resort, would benefit from a complete overhaul and upgrade of its electrical system. If funding is approved, this would allow the new maintenance building to have electrical wiring installed professionally, as well as the adjacent buildings rewired. Obviously the electrical system is a critical safety feature for the resort, and obtaining funds for this project would significantly increase the safety of the current buildings.

Electrical Generation Plant: Mt. Cain generates its own electricity, and has done so from the its inception over 30 years ago. In 2007 generator was over 20 years old and had

become progressively more inefficient. Mt. Cain was seeking funding for a replacement generator, which would result in increased efficiency, lower fuel consumption, reduced noise and overall, improve the ability of the resort to function.

2. PROJECT INITIATION:

Upon receiving approval of funding of \$59,325 from Coast Sustainability Trust, and approval of funding of \$118,650 from Island Coastal Trust, the project was initiated. Stuart Abernethy was Mt. Cain's Project Manager. Together with Lance Karsten and Casey Brown, Mr. Abernethy worked as a liaison between Mt. Cain Alpine Park Society and the various suppliers, volunteers and subtrades to coordinate and manage the budgets, personnel, and developments. Work commenced June 1, 2007 based on the following budget, which was developed from the Mt. Cain Infrastructure proposal:

Maintenance Building (Phase Two)

1 – Concrete work =	\$ 16,000.00
2 – Framing =	\$ 65,000.00
3 – Roofing =	\$ 24,000.00
4 – Exterior siding =	\$ 15,000.00
5 – Overhead Doors=	\$ 18,000.00
Total	\$138,000.00 (plus taxes)

Electrical Upgrade

1 – wiring existing system =	\$37,000.00
Total	\$37,000.00

Electrical Generator

1 – Generator =	\$35,000.00
Total	\$35,000.00

Summary of Total Costs

Project	Cost	PST	GST
Maintenance Building	\$138,000.00	\$ 9,660.00	\$ 8,280 .00
Electrical Upgrade	\$ 37,000.00	\$ 2,590.00	\$ 2,220.00
Generator Replacement	\$ 35,000.00	\$ 2,450.00	\$ 2,100.00
	\$210,000.00	\$14,700.00	\$12,600.00

Total Budget **\$237,300.00**

Source of Funds

Source	Amount
Labour & Contributions	\$ 10,000.00
Financial Contributions (Mt. Cain)	\$ 49,325.00
Grant Application Island Coastal Trust	\$118,650.00
<u>Grant Application Coast Sustainability</u>	<u>\$ 59,325.00</u>
Total Budget	\$237,300.00

3. Completion of New Maintenance Building



Old Maintenance Building.

The old maintenance building was in very poor condition and was unable to permit service of Mt. Cain's equipment.



Construction volunteers.

Construction began in 2007. Many volunteers with experience in the building and construction trades were pivotal in getting the job complete.



Construction equipment.

Volunteers provided both volunteer labour and use of equipment to complete the building.



Construction walls.

Erecting pre-constructed walls via crane truck.



Following construction of the building frame, installation of the roof trusses was the next step.



Roof trusses were pre-engineered and delivered via Lance Karsten's crane truck.



Only a large crane could place the roof trusses in place.



Roof trusses being put in place.

The new Maintenance building was completed in 2010, on schedule and on budget.



Completed Maintenance building



Interior of Maintenance Building

The interior of the building is ideal for working on multiple machines.



Concrete foundation

A large portion of the project consisted of cement walls and foundation work.



Exterior Siding

The building has been sheathed in very robust cedar siding and stained.

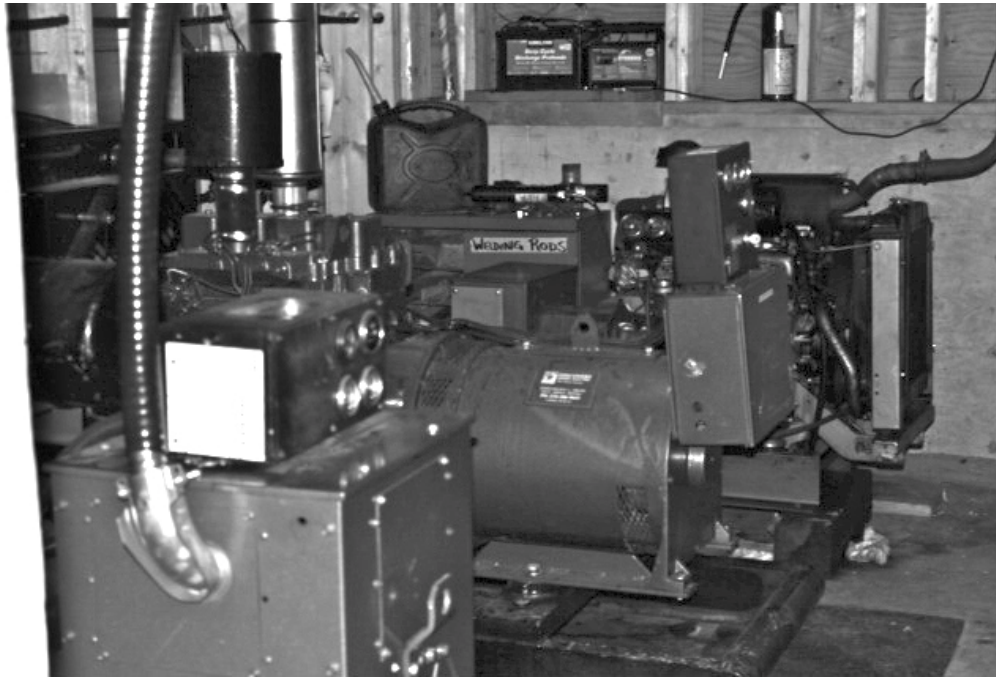
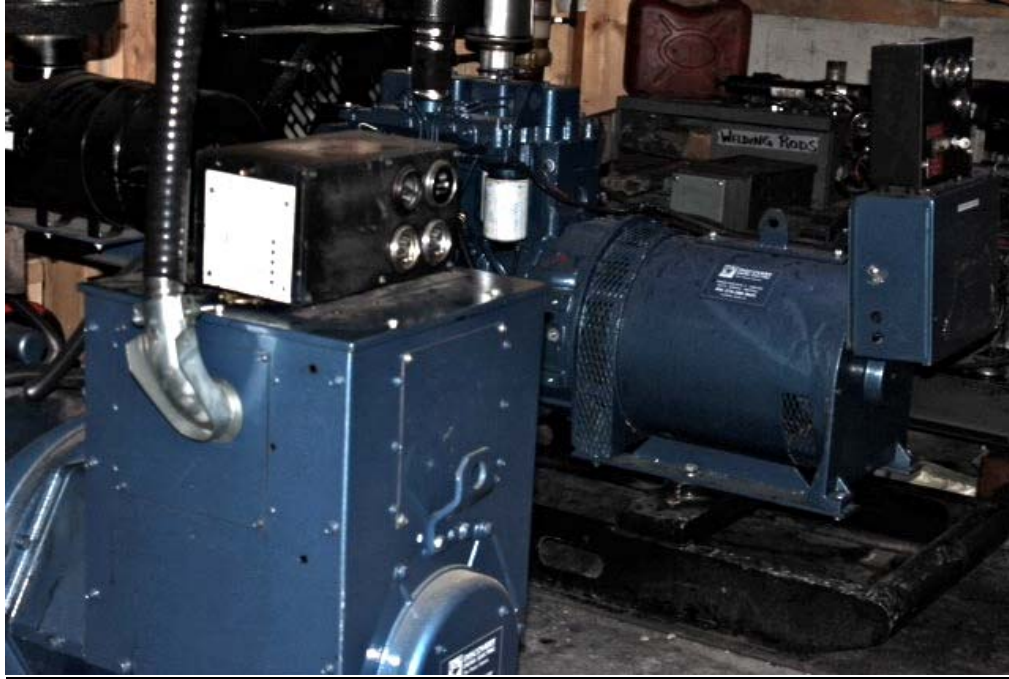
4. Completion of Electrical Upgrade



Rewiring of Mt. Cain's electrical system was completed following significant retrenching and rewiring.

5. Completion of Electrical Generator Purchase

Due to fortuitous circumstances and careful budgeting, Mt. Cain was able to secure two diesel generators. The first, a 35 kw Cummins diesel, was purchased on September 30, 2007. The second generator is a 55 kw Cummins diesel. Both are now fully installed and wired into the Mt. Cain Maintenance building.



Photos of installed 35 kw and 55 kw Cummins Diesel Generators.

6. Summary Of Work In Relation To Project Objectives

The project objectives:

1. Maintenance Building: **Completed**

The maintenance building has been completed and has provided a much needed enclosed space to store and work on equipment..

2. Electrical Upgrade: **Completed**

Extensive rewiring of the Mt. Cain electrical system was completed.

3. Electrical Generator: **Completed**

funds.

7. Employment from project:

There were a significant number of people involved in the project, who were involved in both volunteer and paid work. The total amount of 'man days' of work is 139, which are estimated to be as follows:

95 man days of volunteer labor

15 man days of paid labour

8 man days of volunteer machine operator time.

15 man days of volunteer project management

4 man days of hired machine operator time.

2 man days of hired project management

139 total man days of labour

8. Project Benefits

1. The project has contributed to the development in the North Island's coast communities. Mt. Cain's service area is composed of the following coastal communities:

Port McNeill,	Zeballos,
Sointula,	Alert Bay,
Port Hardy,	Port Alice,
Woss,	

All of these communities have been adversely impacted by recent economic conditions, and the upgrades at Mt. Cain now provide improved access to recreation, diversification of the economy, assisted in expanding of year round activities, and has provided new employment to the area.

2. This project has contributed directly to increased skier visits to Mt. Cain. It was estimated that Mt. Cain had the capacity to increase its skier visits from 200 per day to 300 per day in five years. Since 2008, Mt. Cain's skier visits have steadily increased, with 2011 being the highest year eve. Demand continues to exceed supply for access to the ski hill.

3. Increased employment has resulted from this expansion of Mt. Cain. 13 new jobs were created in the short term. The hiring of a General Manager is considered key to Mt. Cain's further development. With increased skier visits, Mt. Cain is now closer to finally reaching the critical mass required to support a GM, which in turn will permit the orderly planning and development of increased activities on the hill.

4. Mt. Cain is now able to consider expanding into the summer season. Mt. Cain already boasts full summer facilities, including a lodge, two mountain chalets, water, power, washrooms, trails and outstanding mountain scenery. Following the lead of most other winter resorts, Mt. Cain may soon be able to offer North Islanders mountain biking, hiking, rock climbing, festivals and accommodation, thereby increasing its workforce by additional jobs.