
LAKE LOOP MANAGEMENT PLAN

Prepared For:

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Prepared By:

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A. Project Overview

a. Project and Purpose:

Installation of closed circuit piping into lake for geothermal heating and cooling.

b. Location:

526 North Beach Road

c. Size:

Length from shore=150 feet

Maximum boundary width= 6 feet

Heading= 54 degrees

d. Main Features:

All piping to be made of high density polyethylene

Main lines to be sleeved

Coiled pipe to be protected with galvanized metal mesh

e. Construction Schedule:

Prefab

- All piping and loop components to be constructed on shore before any water or ground disturbance commences
- Loop piping will be hydrostatically tested on shore prior to installation
- Equipment inspections and readiness

Day 1

- Excavate trench
- Float loops above approximate final location (controlled by workers in boats)
- Slowly fill loops with water to sink in a controlled manner (use divers to guide loops if visibility is impaired)
- Flush and purge loop of all air
- Perform hydrostatic pressure test for one hour
- Backfill trench
- Maintain hydrostatic pressure test over night

Day 2

- Confirm hydrostatic test pressure has held over night
- Inspect trenched area and exposed underwater loop pipe and coils

B. Additional Information**I. Environmental****a. Land Impacts**

This project will have little impact on the land. An excavated trench into the water will be made approximately 30' long, 3' wide, and 4' deep. The lines will be back filled with same material removed. Any equipment working near or in water will have been recently maintained and inspected. Equipment will be pressure washed 24 hours prior to work commencing to ensure there are no fluid leaks or possibility of contamination. If equipment requires refueling, it will be done at a site determined to be a safe distance from the water.

Upon completion, ground and lake bed will be restored to the likeness of original condition. No loop components will be visible.

All loop piping and fittings will be made of high density polyethylene, with a minimum of 50 year manufacturer warranty, and joined by fusion welding.

b. Atmospheric Impacts

During construction only, there will be diesel and gas powered engines required for operation of equipment. Equipment noise will be minimal and negligible in comparison to adjacent house construction.

c. Aquatic Impacts

This project will have little impact on water or land covered by water. An excavated trench into the water will be made approximately 30' long, 3' wide, and 4' deep. The lines will be back filled with same material removed. Any equipment working near or in water will have been recently maintained and inspected. Equipment will be pressure washed 24 hours prior to work commencing to ensure there are no fluid leaks or possibility of contamination. If equipment requires refueling, it will be done at a site determined to be a safe distance from the water.

Upon completion, ground and lake bed will be restored to the likeness of original condition. No loop components will be visible.

All loop piping and fittings will be made of high density polyethylene, with a minimum of 50 year manufacturer warranty, and joined by fusion welding.

d. Fish and Wildlife Habitat

With the proper precautions noted earlier, and the use of silt screens, no foreseeable impact on fish or wildlife, endangered or not, will occur from this project.

II. Socio- Community**a. Land Use**

This project will not have any known adverse affects on Land Use. A "No Anchors" buoy will be located above the lake loop to warn boaters. The particular area of the lake does not accommodate non-local boats very well due to high winds.

b. Socio-Community Conditions

This project will not have any known adverse affects or influence on existing community services or infrastructure.

c. Public Health

This project will not have any known adverse affects on public health.

d. First Nations

No contact has been made with First Nations.