



Plymouth Community Center - Heated Sidewalks

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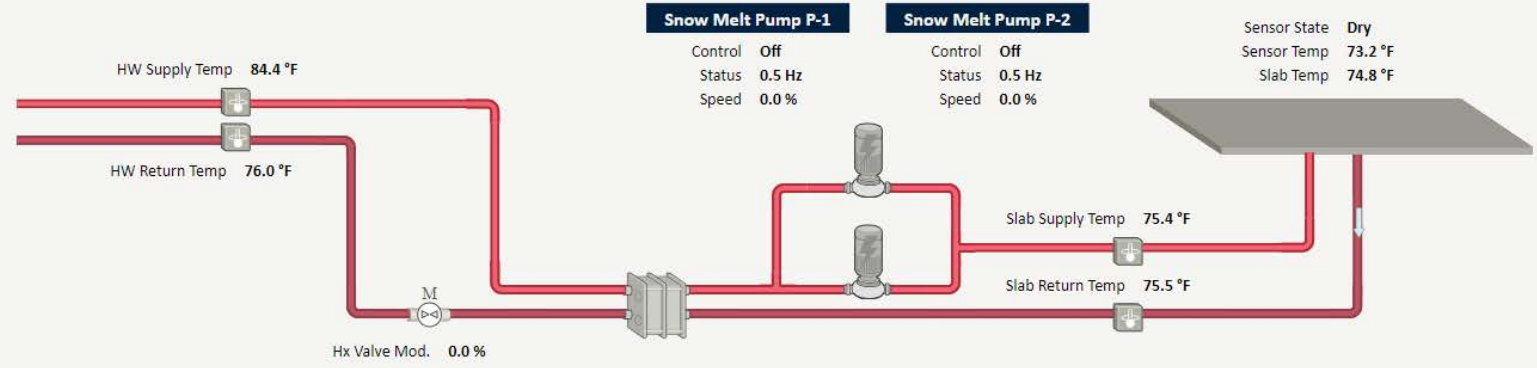


Overview

- August 2020 council approved the renovation and expansion of the Plymouth Community Center
 - 111,410 total sq. ft. building
- As part of the scope, snowmelt system was included.
 - 11,664 sq. ft of heated sidewalks
 - 2280 sq. ft of is excluded from the system
- Estimated to save 500 - 1000 lbs. of salt annually by utilizing the snowmelt system.
 - Nov 2023 – March 2024 (650 lbs.)
 - *This number can vary based off annual snow fall totals.*







Equipment Information

Name: **Snow Melt System**
 Panel: **FMP-2 - Mech Rm-186**

Plant Control

H-O-A: **Auto**

Oa Temp Enable Setpoint: **45.0 °F**

Minimum On Time: **1440.0 min**

Minimum Off Time: **5.0 min**

System Mode: **Off**

Snow Mode Current Runtime: **0.00 hr**

Snow Mode Off Delay: **6.0 hr**

Snow Mode Runtime Remain: **0.00 hr**

Temperature Setpoints

Melt Slab Return Temp Stpt: **90.0 °F**

Idle Slab Return Temp Stpt: **55.0 °F**

High Return Temp Alarm Stpt: **95.0 °F**

Low Return Temp Alarm Stpt: **35.0 °F**

Snow Override

Snow Override: **Auto**

Time Limit Override: **24.0 hr**

Runtime: **24.0 hr**

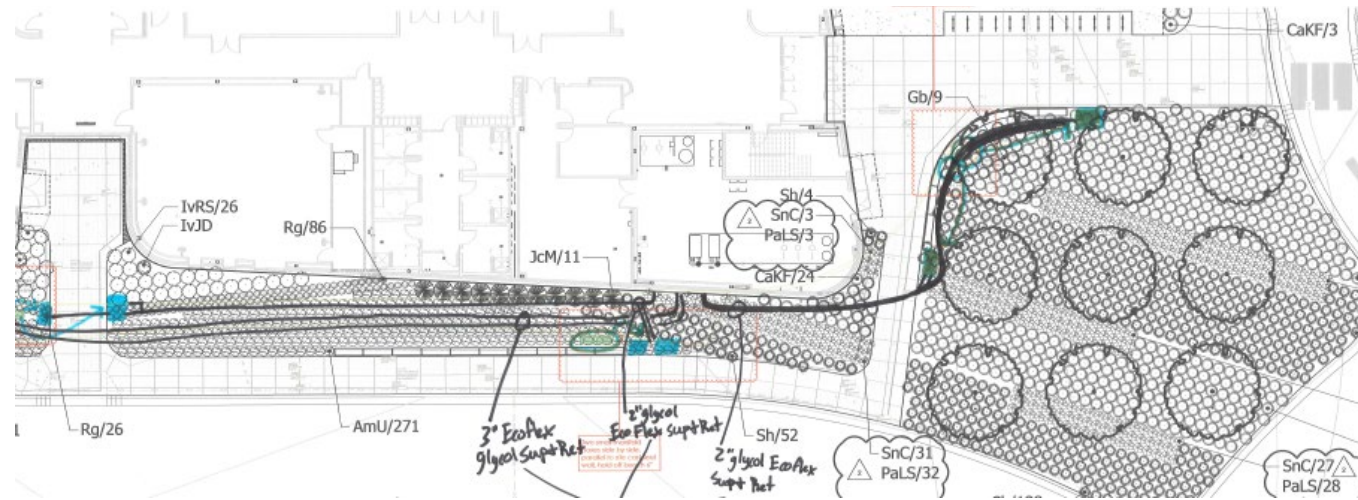
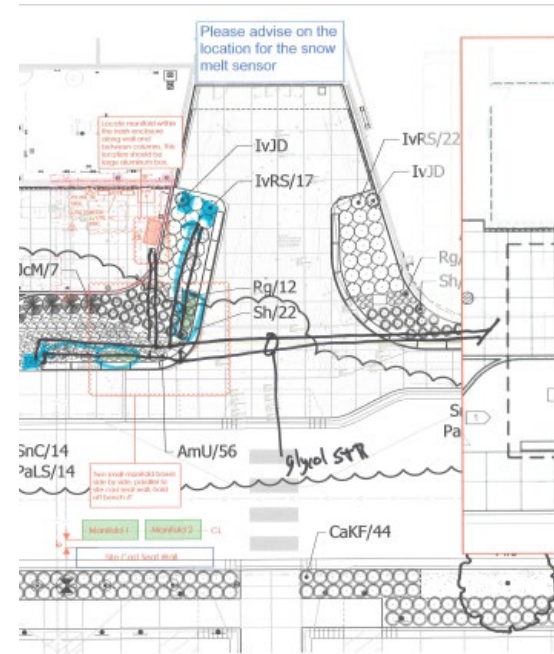
Override

Benefits/Cons

- Benefits:
 - Managing snow efficiently
 - Allowing us to have snow cleared prior to the opening of the building
 - Allowing us to keep pathways cleared throughout the ongoing snow event
 - Saves staff time
 - Reduces salt usage
 - Estimated 500 lbs.
 - Full automation allowing staff to control operation.
- Cons:
 - Large amount of energy consumption
 - Painful commissioning process, a lot of air in the lines
 - Start up process can be slow in large event
 - Not as effective in blowing snow condition
 - Lack to have enough snowmelt sensors







Other locations:

- City Hall
 - Requires manual operation On/Off
 - Once on it operates 24/7 with little energy roll backs
- Ice Center
 - Recently abandoned due to performance
 - Required manual on/off operation
 - Failed to start up soon enough causing the concrete to heave

