



AIR CONDITIONING

CURRENT STATE

FUTURE PLAN

FOCUS

SILVER HILL

GOLDEN HILL

PENTUCKET LAKE

BRADFORD

APPROACH

**MULTIYEAR
PLANNED AT ONCE
IN ORDER OF PRIORITY**

SILVER HILL: YEAR BUILT 1992, 73,875 SQ. FT.

GOLDEN HILL: YEAR BUILT 1992, 73,875 SQ. FT.

PENN LAKE: YEAR BUILT 1998, 73,875 SQ. FT.

BRADFORD: YEAR BUILT 1997, 73,875 SQ. FT.

CONDITIONED SECTIONS OF THE BUILDINGS

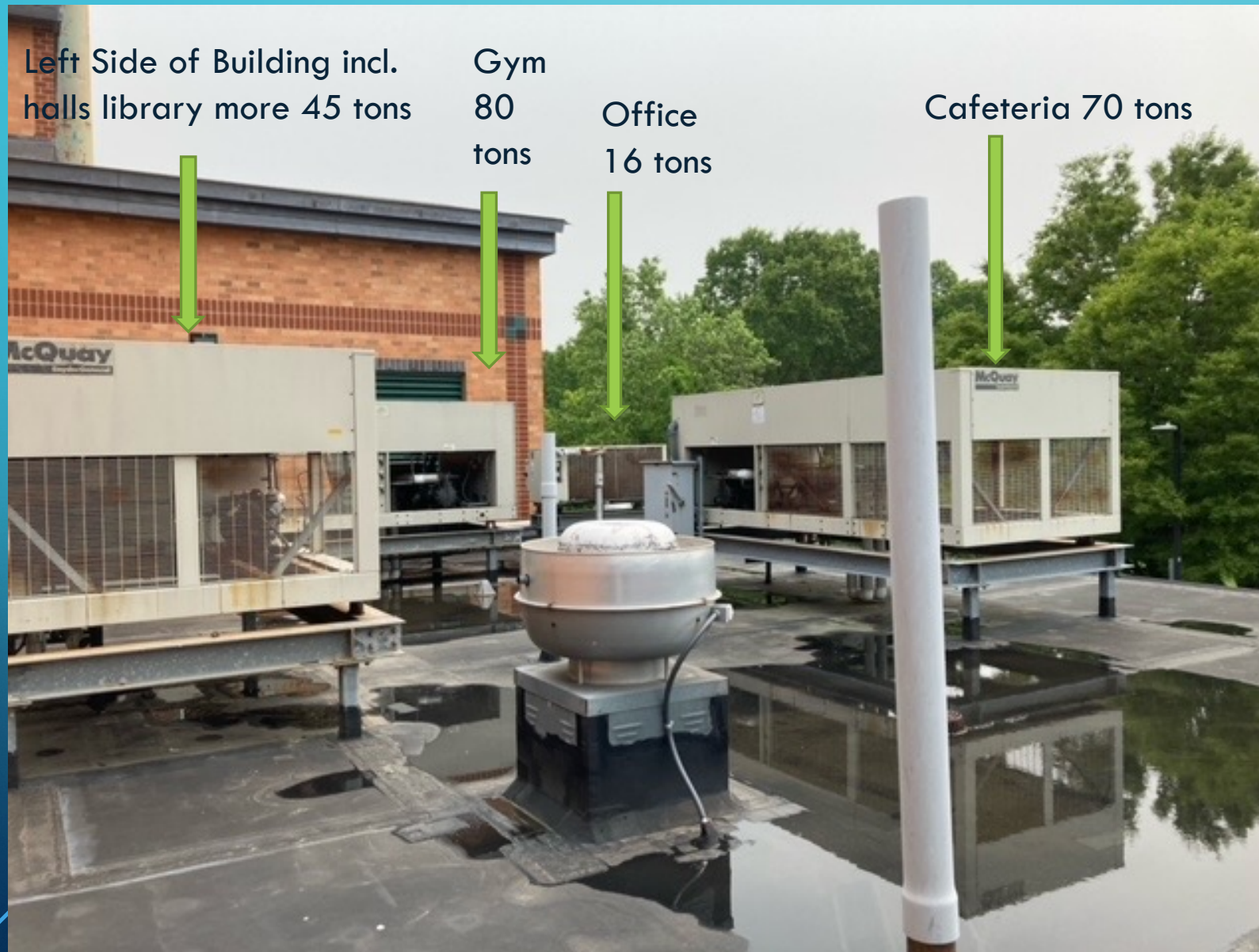
- Hallways
- Gym
- Cafeteria
- Central office
- Nurses office
- Library
- Interior offices without windows

EXISTING SYSTEMS ARE COMPONENT-LEVEL IDENTICAL

The Current State

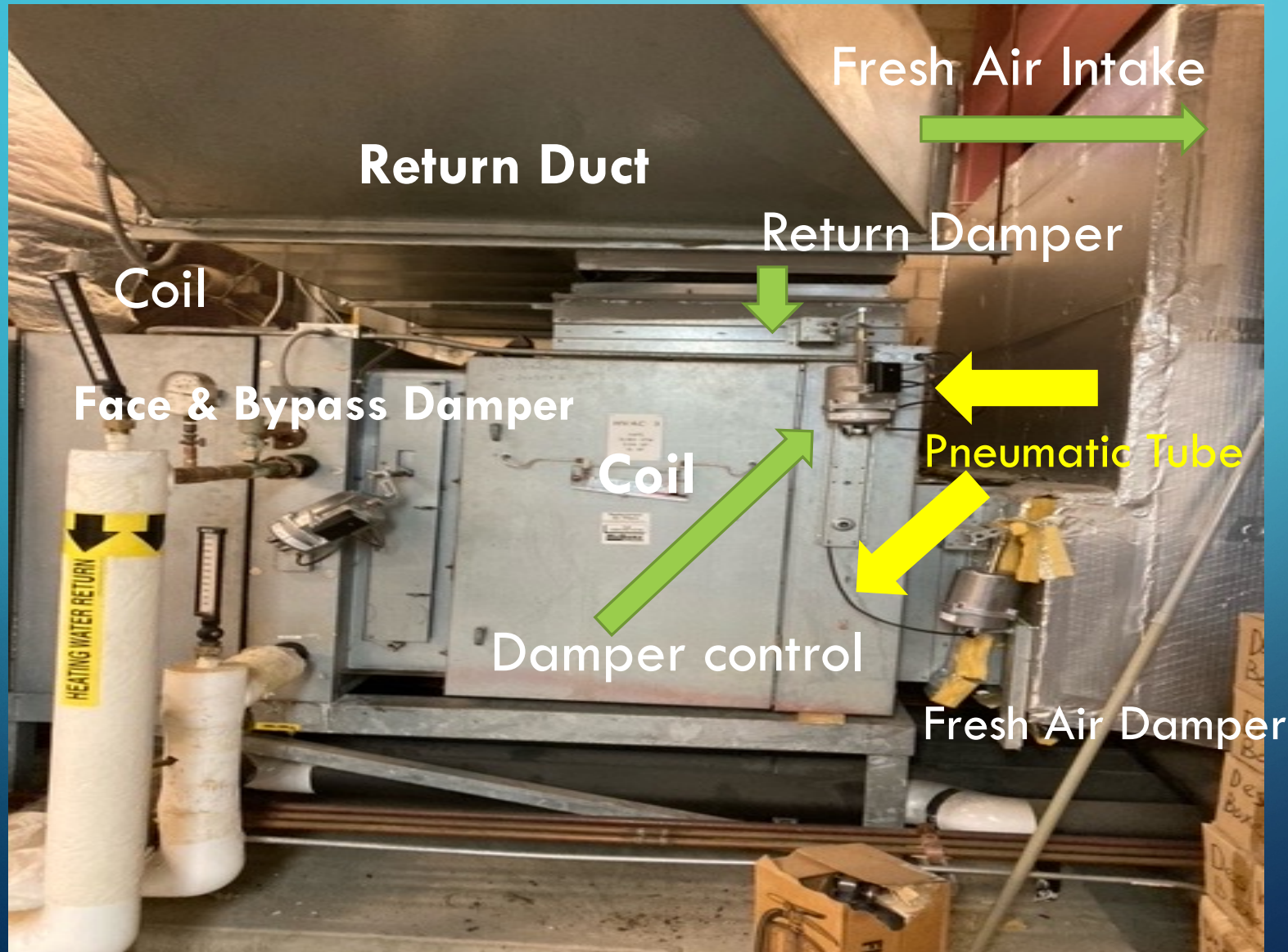
- Equipment exceeded useful life (25-31)
- Major component failures
- Obsolete controls, pneumatic vs DDC
 - State of the art
 - Control, Usage, Trend Analysis,
 - Optimum Efficiency and Cost Control
- Phased out Freon (R22 vs 410A)

OUTSIDE VIEW, TYPICAL OF ALL SCHOOLS



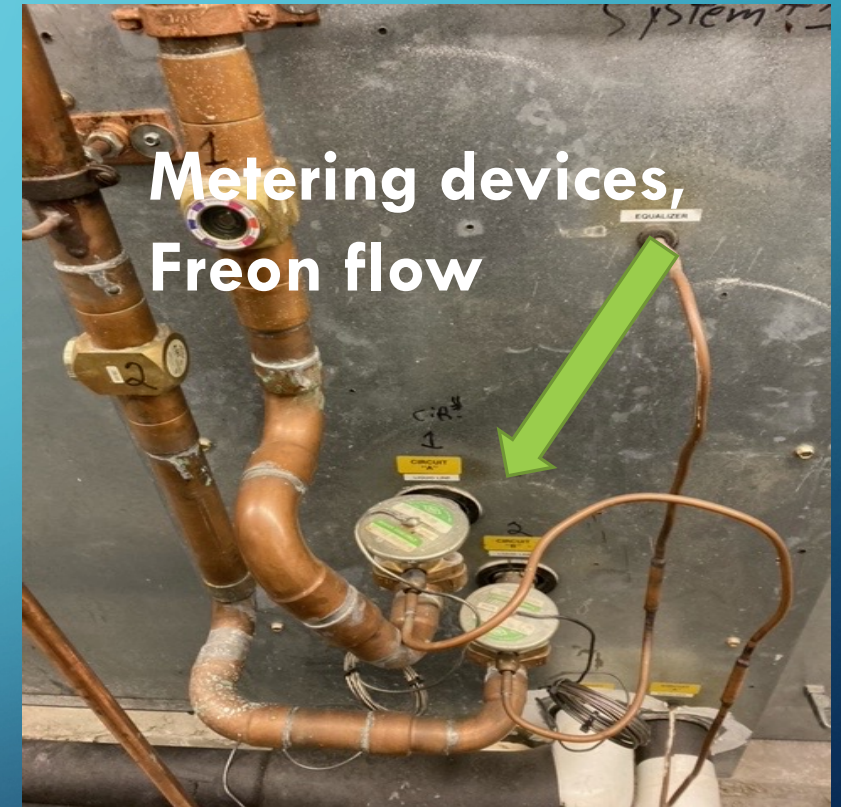
- Equivalent 211
- Roof exceeded useful life
- Standing water
- Mountings will most likely change

PNEUMATIC CONTROLS

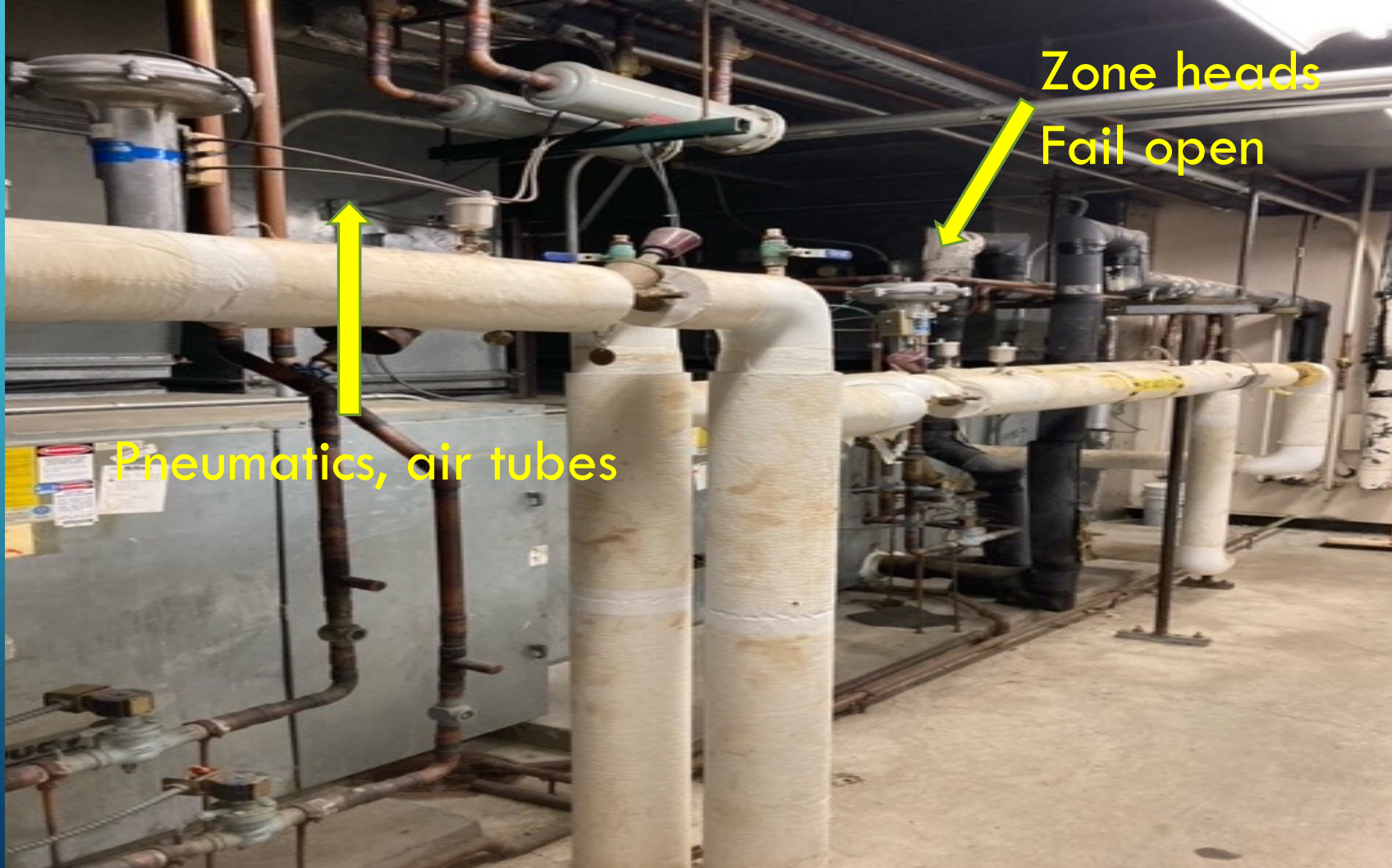


Pneumatic Tubes
DDC Controls
Damper Controls
Dampers fail
open
Fresh Air
unrestricted air
flow, coil freezes

MISCELLANEOUS DEVICES/CONTROLS



WHAT'S LEFT



WHERE FROM HERE AND OPTIONS

- Retain Mechanical Engineer
- Retain Architect
- Review Options
 - Chilled Water
 - Less equipment to maintain
 - Less electrical draw/operating cost
- Downside
 - Chiller fails, no cooling anywhere
- Replacing units with newer like kind

UNKNOWNNS/TIMING/COST

- Leaks
 - Role in failures
 - Soft solder vs brazing
- Cost
 - Unknown min. \$800 to \$900,000K per bldg.
- Timing
 - Starting now
 - 90 days design, 30 review/mod, 60 bid package prep, 60 days bidding, demo/construction 60 days (300 days)
 - Completion September 2024 (PL, SH, GH)
 - September 2025 (BR)
 - Nothing ready September 2023