



R.E. Dimond
& Associates, Inc.
Consulting Engineers

**St. Paul's Catholic Center
Facility Assessment
D&A# 12105
NOVEMBER 29, 2012**

EXECUTIVE SUMMARY:

HVAC:

The existing HVAC system components are either in need of replacement or will need replacing in the near future. The following are the recommendations being made in this report.

Heating Source:

Replace the existing steam heating boiler with a new high efficiency (90%+ efficient) natural gas heating water boiler. Cost \$ 104,000.

Cooling Source:

Remove existing Direct Expansion (DX) cooling equipment and install a small packaged air cooled chiller which would provide chilled water to the building for cooling purposes. Cost \$120,000.

Building HVAC Systems:

Install Central Station Air Conditioning (CSAC) units in similar locations to the existing units. Existing ductwork would be utilized and new Variable Air Volume (VAV) boxes with hydronic heating coils would be installed. Cost \$120,000.

Install a new DX cooling with gas heating rooftop unit to provide supplemental cooling and heating to the Sanctuary. Cost \$100,000.

Replace the existing DX cooling and gas heating rooftop which serves the Gathering Space. This new unit would also condition the office space adjacent to the Gathering Space. Cost \$42,000.

Replace the existing Rectory unit with two residential style units. Cost \$20,000.

Total Mechanical Cost: \$506,000

ELECTRICAL:

Various code violations exist in the building and should be addressed. In addition, it is recommended that the parallel fused service entrance switch be replaced. Cost \$25,000.

The existing fire alarm system is a zoned non addressable system and has a current inspection from Koorsen, however if any expansion is required a new system should be installed. Cost \$35,000.

The existing lighting system is outdated and can be replaced with a more efficient system. A revised lighting system can be combined with occupancy sensors to provide even more energy savings. Cost \$155,000 to \$190,000

Total Electrical Cost: \$215,000 to \$250,000

SOUND & ACOUSTICS:

Recommendations:

Removing carpet/refinish floors: Cost \$40,000 to \$70,000

Replace 7,000 square foot of ceiling: Cost \$29,000

Add suspension "cloud" system in central part of Sanctuary: Cost \$40,000 to \$90,000

Add engineered diffusion 2' x 2' tile at lower musician area: Cost \$16,000 to \$18,000

Renovate or replace sound system: Cost \$54,000 to \$93,000

New Parish Hall audio system: Cost \$6,700

Option to test, demo and relocate existing audio in lieu of new system: Cost \$4,500

New Parish Hall video system: Cost \$4,800

Add noise control to confessional room: Cost \$1,000

Add rear wall absorption for Sanctuary: Cost \$8,700 to \$14,500

Contingency: Cost \$20,000

Total Sound & Acoustics Cost: \$218,000 to \$347,000

TOTAL RECOMMENDED PROJECT COST: \$939,000 TO \$1,103,000