LEAVITT ASSOCIATES, INC. Architects & Engineers

Historic church sanctuary restored better than new.



The First Presbyterian Church in Norfolk, Virginia contacted us because of a problem with their new organ. Water leaking from the roof had damaged part of a new mechanism while the craftsmen were installing it; and the installers stopped work until the leakage could be fixed. This problem created some urgency, because the organ builders had a limited window of availability in their schedule.



When we first arrived, we saw the organ pipes covered with plastic to prevent water damage. Leavitt Associates responded immediately. We inspected and water tested the building thoroughly and found that a series of problems had developed over the years. Masonry parapets had deteriorated and were allowing water to flow behind the interior plaster finishes. Masonry piers at the roof line had deteriorated to the point where bricks could be removed by hand. The stone tracery surrounding the stained glass windows had lost nearly all of its mortar;

and the joints had been filled with sealant. In the low roofs surrounding the Sanctuary, wood joists extending into the exterior masonry walls had rotted, allowing the roof to "collapse" by several inches. Many of these problems originated with the fact that the original roof perimeter flashings had not extended through the masonry, but stopped at the face of the mortar joints, allowing slow leakage over the years.

Slow leakage through parapets had permitted termites to eat the wood lath behind the plaster





Before the installation of new roof flashings, water was flooding through the stained glass windows and tracery.

Leavitt Associates developed a restoration program that the Church put into effect promptly, with Hoy Construction as the General Contractor. The organ installation was completed, and a new Carillon installed in the Bell Tower.

Leavitt Associates designed structural reinforcement and supports for the new Carillon in the church tower



All the copings were re-built with copper flashings to prevent continued leakage and deterioration of the masonry



The piers had deteriorated to a powder where they penetrated the roof. We re-supported the piers in place with specially designed low-stress grouted anchors.

The church building is now in a position to remain durably protected against the elements, for many decades to come.

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