

Calvary Episcopal Church  
Renovation Project 2023-24  
**Frequently Asked Questions**

**Q: Why are we doing a renovation?**

**A:** The primary reason is that the slab foundation in the Sanctuary is shifting dramatically. The slab nearest the altar has a 7" slope, and in other places it is buckling. While older masonry cracks have been repaired in the past, many new cracks in the church pillars are starting to appear. It is essential for the integrity of the church structure that this serious issue be addressed as soon as possible.

**Q: When was this discovered?**

**A:** As Fr. Ralph served at the altar over the past 7-8 months, he sensed the drop – the unevenness. The depression continued to grow over time, along with other changes in the slab, and it was decided to invite our architect and professional engineers to begin an investigation. An interior elevation survey was conducted (by Civil Engineers) throughout the entire sanctuary and side chapels, and Calvary was provided with a floor plan with elevations that confirmed the 7" drop.

**Q: Who has been included in the consultation about the causes?**

**A:** Calvary first retained the services of the architectural firm Merriman, Holt, and Powell. They had oversight of the Parish Hall renovation and are intimately involved with church building and renovations. With their experience and contacts, we called in structural, civil, and geotechnical engineers, and an arborist. Because of the age of the building, we were required to do asbestos testing.

**Q: Was there a cost for this work?**

**A:** Yes, \$90,000. The funds came from three sources: \$30,000 each from The Myers Endowment through the school, the Calvary Episcopal Foundation, and from a parishioner gift above pledge.

**Q: What were the results of the analysis?**

**A:** Our foundation issue has multiple contributing causes. First, when the church was originally built, the slab was designed without grade beams placed to support the slab under the front two-thirds of the sanctuary. The soil borings revealed very loose, sandy soil in the samples taken directly under the slab, which leads us to believe there wasn't proper preparation before the slab was poured. In short, the slab was not built to modern day standards. Drainage and tree roots have compounded the problem.

**Q: In the past there has been water runoff around the church during heavy rains. Has this contributed to the current foundation problem?**

**A:** No. While water sometimes collects at the back of the school building and runs in the street, that is not the cause of our slab problem. We are told the City of Richmond will be addressing the larger issue of water drainage on Austin Street.

**Q: What are the first steps in addressing the problem?**

**A:** There are four steps that will be done in conjunction with each other.

- Asbestos removal. We cannot work in the church space until the asbestos is removed.
- The slab: The Structural engineer presented us with two options for the slab: lifting and leveling the slab with polymer injection method through a grid of injection sites throughout the Sanctuary using URATEK; or tearing the slab out entirely, and repouring, which would be much more costly option, and require us to vacate the Sanctuary for a much longer period of time. Our Architects have had great success using URATEK in other projects, and the committee feels this is the right choice for Calvary. In the weeks that follow, they will monitor the foundation to see if more injections are needed, making sure we are not over-stressing the foundation. The carpeting and the pews will need to be removed for work on the slab to begin.
- Drainage: The drain spouts carrying water runoff from the church roof drain into the ground at the foundation. The drainage needs to be redirected away from the church. There will be some immediate work on the drainage, for a short-term solution. The longer-term solution will be done in conjunction with the engineers and permitting office of the City of Richmond. (Amber, I don't want to imply that the City is part of the project or assisting us with the funding)
- Tree roots: The tree roots seek sources of water and have tapped into the water at the foundation level. There is a method to trimming back some of the roots of the two large trees nearest the church. More roots will be trimmed over time. This is another effort that will be done in stages to hopefully preserve the life of the trees while getting the roots away from the slab.

Additional steps related to the foundation include new flooring throughout the sanctuary and chapels, and removing, refinishing, and reinstalling the pews. Because of drainage work, some of the lawn and landscaping will be disturbed and will need to be replaced.

**Q: Does this affect the stained-glass windows?**

**A:** No. Foster Stained Glass, the company who did our restoration three years ago, came to Calvary recently and feels the windows are solidly protected and should not shift or break during the renovation. They identified repair work that needs to be done on the stained glass window and frame in the balcony. The frame has deteriorated since the original work was completed.

**Q: What about the acoustics in the Sanctuary?**

**A:** We have been working with an acoustical engineer to ensure that sound quality, both spoken and sung, is not diminished. This engineer will be engaged with the renovation throughout its entirety. We also want to make sure that hearing aid devices work effectively.

**Q. Who in the church has been involved with this process?**

**A:** Fr. Ralph asked Betsy Zanghi to chair a Renovation Committee. Other members include James Milford, Susan Grotte, Amber Zentis, Reb Scarborough and Roy Haley.

**Q: Why have we added more projects beyond repairing the slab?**

**A:** There are several reasons:

- American Disabilities Act (ADA) requirements and Safety issues: Over time Calvary has addressed ADA requirements, such as the restrooms nearest the Sanctuary and the Parish Hall. Calvary learned of some ADA needs during the renovation of the Parish Hall and Solarium and remedied them. Now, there needs to be adjustments in the Quiet Room/Bride's Room. Doors into the narthex and sanctuary do not conform and need to be replaced. The handicapped parking on Travis Street is incorrect. Calvary will not meet permitting requirements if these issues are left unaddressed. From a safety perspective, the balcony needs reinforcing.
- Energy Conservation:
  - When the church was constructed, no roof insulation was included. This renovation will add insulation between the ceiling and the roof.
  - The roof shingles are reaching the end of their life, so it makes sense to replace them.
  - The HVAC in the Sanctuary is uneven. Air blows directly down onto the pews on one side of the sanctuary but doesn't reach the rest of the Sanctuary. This unevenness will be solved, providing efficiency and comfort, while not taxing the HVAC system as much.
- Being a Welcoming Church/Enhanced Worship:
  - Chancel modifications. This includes increasing the space surrounding the altar by moving the altar rails further away for better traffic flow and for handicapped accessibility. The back altar will be shortened slightly. Both altars will have a marble slab on top.
  - Exposing the organ pipes
  - Painting the ceiling, which hasn't been freshened in years, and painting faux beams
  - Repairing the stains in the green room and adding new ceiling and floor, plus window replacement
  - Moving the large HVAC unit on the roof at the front entrance of the church to ground level and enclosing behind a new brick wall, so that it isn't the first thing a visitor sees as they approach the front of the church.

**Q: Will there be other opportunities for church members to ask questions?**

**A:** Yes. Times have been set aside after Saturday and Sunday services.

**Q: When will the work begin and how long will it take?**

**A:** Assuming money is in place to bring contractors on site, we plan to start work in March 2023. Phase I will only take a few months to complete. Work has already begun on the engineering drawings that are needed to file for permits and have final pricing and delivery to being Phase II. Phase II should start in January 2024 and take approximately eight months.

**Q: Will we still be able to worship in the Sanctuary?**

**A:** Not always. There will be periods of time when we cannot. The clergy, with advice from the architects, will make that determination based on what is most appropriate to meet construction needs. Calvary is fortunate to have both the Parish Hall and Family Life Center for worship. The school will use the Family Life Center when they can't be in the Sanctuary.

**Q. What will happen to the memorial plaques on the pews – will they stay?**

**A:** When the pews are removed, they are numbered and mapped out on the floor plan – likewise the plaques on each pew are labeled according to the pew number. The plaques are removed in the refinishing process, buffed to remove tarnish, clear coated with, and reinstalled on the newly finished corresponding pew.

**Q: What is the estimated cost of the project?**

**A:** Early estimates total \$2.4 million for the entire scope of work. Final estimates will be available after the engineering drawings are completed and there is a competitive bidding process.

**Q: How will Calvary fund this project?**

**A:** Calvary is launching a capital campaign, *Celebrating our Legacy...Growing our Future*, and hopes to raise \$1M through church member gifts. The church is also pursuing grants from other sources, and is in conversation with the Diocesan finance team about ways they might help – perhaps through a low interest loan. A local charitable foundation has already pledged matching funds up to \$700,000!

**Q: What if our fund-raising efforts fall short?**

**A:** Only 9% of the financing is for items considered non-essential. The Building Committee, with the architects, will make suggestions to the Vestry on streamlining the project.