

## **RELIGIOUS PROJECTS**

New Construction / Restoration and Repairs

Our office has performed a variety of religious projects that include new construction in addition to restoration and repairs of existing facilities. Because many religious structures were built in excess of 50 years ago, maintenance becomes a critical issue for long-term durability of the structure. Contact our office should you need an assessment of your religious facility.



Left - Old St. Joseph Church – Round Lake, IL - Structural repairs and investigation of over 100 year old church. The investigation included repair recommendations on foundation system, framing and stability of steeple. Building has been decommissioned as a church and proposed as an alternate usage for a community center.

**Below** - Jesus washes the feet of his disciples. Made of over 2000 vertical stainless steel "sliding fins" cut by a laser "jig", this mural as originally engineered for Catholic Charities in downtown Chicago on Randolph St. before being relocated to Holy Family Villa in Palos Park, a Catholic Charities Retirement Community. It is called a Shadow Mural as the sunlight on the mural "fins" creates different depictions of Jesus. The sister mural is in Paris, France.







**Above Left** – Drone photo of a new Greek Orthodox Cathedral we designed shows framing with dome to be installed. Dome was lifted into place later with four tower cranes.

**Above Right**: Interior space mosaics and stained glass windows will encompass the entire inside space of the cathedral

**Below** – Final completion of Greek Orthodox Cathedral.





Far Left – St. Francis Xavier Catholic Church- Wilmette, IL. – Structual investigation of Gothic church constructed in 1939 to ascertain the cause of cracking of buttresses supporting the roof.

**Left** – Close-up of buttresses composed of limestone facing and brick interior with no reinforcement present. Tension forces present.





Above – First Baptist Congregation Church, Chicago, IL -Installation of new steeple as seen in photos above required a steel reinforced cage to be inserted in the church tower as masonry stresses did not allow direct attachment

**Left** – Steel reinforced vertical truss installed into the vertical height of the masonry portion of the bell tower.





Left and Above Right – Chabad of Wilmette, Wilmette, IL Structural engineering design of new temple.



**Above** – **All Saints Cathedral** – **Polish National Church** – **Chicago, IL.** Photos above show completed church addition and work under construction. Structural design included steel framing, masonry bearing walls and precast concrete.





Above, Far Left and Left – St. Joseph Catholic Church School -Wilmette, IL – Structural investigation and repair program to the main school wood roof trusses as well as masonry repairs and lintel repairs to the limestone and face-brick.



**Above** - **St. John Berchmans Catholic Church – Chicago, IL** – Five year structural repair program to the parish campus included restoration of church, administrative building and schools (5-building campus). Repairs included replacement of steel framing due to deterioration, bell tower framing repairs, roof truss system repairs and replacement with steel trusses in the main church and masonry repairs on all buildings.





**Above - St. Joan of Arc – Skokie, IL –** Structural replacement of main church canopy entrance. New steel framing installed and existing limestone reinstalled. Damaged limestone matched and replaced with new limestone.

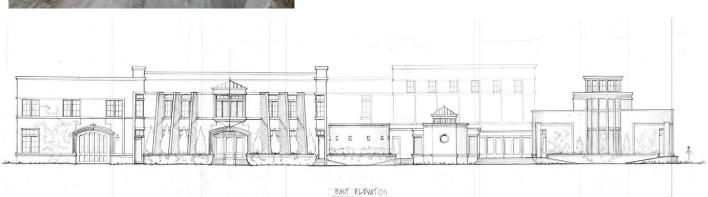
**Left – St. Joan of Arc School – Skokie, IL** – Bulging east wall in danger of collapse reinforced and strengthened without wall removal. Existing window deteriorated steel lintels and deteriorated limestone and mortar repaired or replaced at time of wall stabilization.



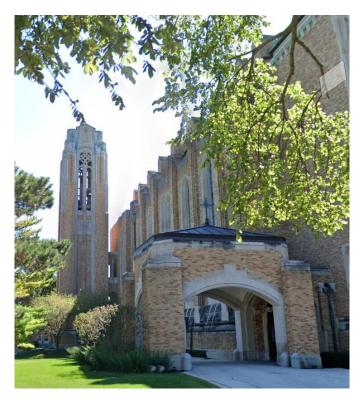




**Above and Left – Lithuanian World Center – Lemont, IL** "Loosely" patterned after the Air Force Academy Chapel in Colorado, a structural investigation was undertaken for repair of the precast concrete panels. Long term deterioration was causing the panels to dislodge with the potential of falling due to deterioration.



**Above** – *Design Underway*: Lubavitch Girls High School Renovation – Chicago, IL – Expansion of current Synagogue and new two story addition with new gymnasium constructed over the existing structure.



**St. Joseph Catholic Church – Wilmette, IL.** Built in 1939, our office was part of the team to develop repair solutions for the 100 foot bell tower of the church.

The tower is a full masonry structure designed to resist gravity and wind forces under the weight of the masonry only. No structural steel frame is present in the tower.



**Sacred Heart Convent – Wilmette – Masonry bearing wall facility with concrete floor construction.** Structural condition assessment performed of the 1915 facility including maintenance recommendations and repairs.