

MADONNA DESIGNS

St. Peter's Prep Grammar School Report 2/1/16

Superstorm Sandy in 2012 hit St. Peter's Prep hard. The streets, sidewalks and parking lots surrounding the property were severely flooded. The full cellars of every building were filled with several feet of water. The entire boiler plant was put out of commission since it was in the old St. Peter's Grammar School.

An extensive clean-up began in November 2012 and took several months to complete. Over the course of the next year, many of the cellar spaces were refurbished. However, the storm structurally undermined and exacerbated the structural weaknesses of three of the school's properties: St. Peter's Grammar School, 191 Grand Street and Mulry Hall. Below is a description of the damage and the recommended action for the grammar school.

St. Peter's Grammar School

St. Peter's Grammar School was built in 1861 with an addition in 1898. It operated as an archdiocesan Catholic grammar school until its closure in 2002. It was purchased by St. Peter's Prep in September 2004, so that the school could control all the property on this one city block which is the main part of its campus. It was initially rented out as a charter school. As the needs of the charter school grew, it could not be accommodated by this outdated structure and the charter school sought a more appropriate facility. Other charter schools that contemplated a rental also came to the same conclusion. It was then used by Emmanuel Baptist Church for weekend services. However, after 2006, its deteriorated condition negated any potential occupancy by outside users. The school used only the main floor of the auditorium for after school wrestling practice from 2007 to 2011. However, in 2011, due to safety concerns, even this nominal use was discontinued.

Superstorm Sandy seriously undermined the foundation system of the school. There are a series of interior columns that are supported on piles. However, the storm by filling up the entire cellar with water as well as this entire area of the city, washed away the supporting soil between these columns and piles. The weight of the water then deformed the cellar floor slab. This is identical to the prior flooding in the 1950s that resulted in the demolition of the church.

One only has to examine the history of this site to understand why we are in this predicament today. In the 1830s this land, which was predominately marshland, was donated as part of a four-site gift for churches. In 1831, the first church collapsed while being built since its pile foundation could not support the structure due to the tenuous marshy soil conditions. It restarted several years later and was finally completed in 1837.

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With the growing need of the community, a second church was eventually built in 1867 and then replaced in 1892. In November of 1950, a similar storm to Sandy flooded the entire area. The cellar of the church collapsed in exactly the same manner as the school today. In 1950s, they came to the same conclusion. The structure had to be torn down. The current church, which is only a one-story structure, was erected in its place in 1961 and now serves as the school's cafeteria. Clearly, the underlying marshland for over 150 years has been a site liability to the erection of pile supported masonry structures. The marshland is a shifting base that is heavily influenced by flooding conditions. Once shifted, it undermines the entire structure.

The current unstable structure has resulted in several façade deficiencies. Large cracks can be found in the exterior of the masonry facade. The façade itself is racking resulting in a large window collapse into the interior of the second floor space along York Street. That collapse forced the school to erect a sidewalk bridge to protect the public. The rear façade developed cracks and loose masonry at the entire parapet. The school fully repaired this area but again all of these façade problems are a manifestation of the structural problems caused by the flood. They are not normal façade repair items that are required over time. They are not routine maintenance.

With Superstorm Sandy, we now have the third time that an antiquated structure has failed on this site. Any attempt to repair the slab and the soil beneath will only potentially undermine the existing structure and is a fool's errand. The next storm will continue to shift the marshland and wipe out any remediation. That is why in the 1950s they demolished the building when it suffered this type of damage. Therefore the recommended course of action is to demolish the school.

Any repair could undermine the existing pile supported columns and result in a progressive collapse of the entire structure. In addition the building is riddled throughout with asbestos. An unplanned collapse could result in an environmental contamination of the entire surrounding neighborhood. Finally any repair would be temporary until the next storm or the marshland shifts the soil again and undermines the cellar floor all over again.

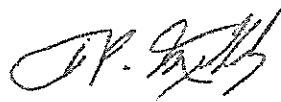
The attached diagrams delineate the structural deficiencies. In the main cellar beneath the auditorium, the soil has eroded around all the columns creating an undulating slab. The columns while still supported by the timber piles now have little lateral support. The staircase along York Street at the main school entry has also sunk. The floor of the auditorium severely slopes to the stair whose foundation is now undermined. There is no way to practically re-support this stair and stabilize the foundation beneath it.

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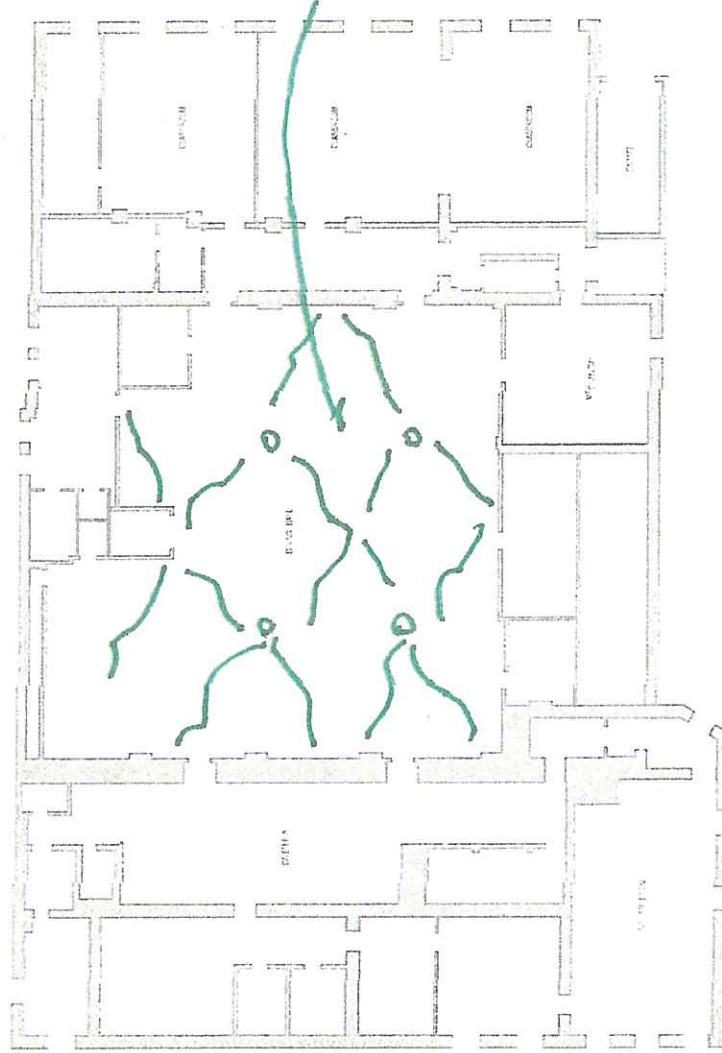
The west wall of the original school is bulging to the west with visible structural cracks displacing the staircase in the school extension. The stairs now are severely pitched. This original foundation wall which now sits on shifting soil is pushing on the corner structure.

The corner school extension has its own foundation and structural floor problems. All of the floors are considerably pitching west to the corner of the building. The floors are no longer level. These structural deformations are directly the result of the poor foundation and they strain the west façade on Van Vorst Street.

Respectfully submitted,

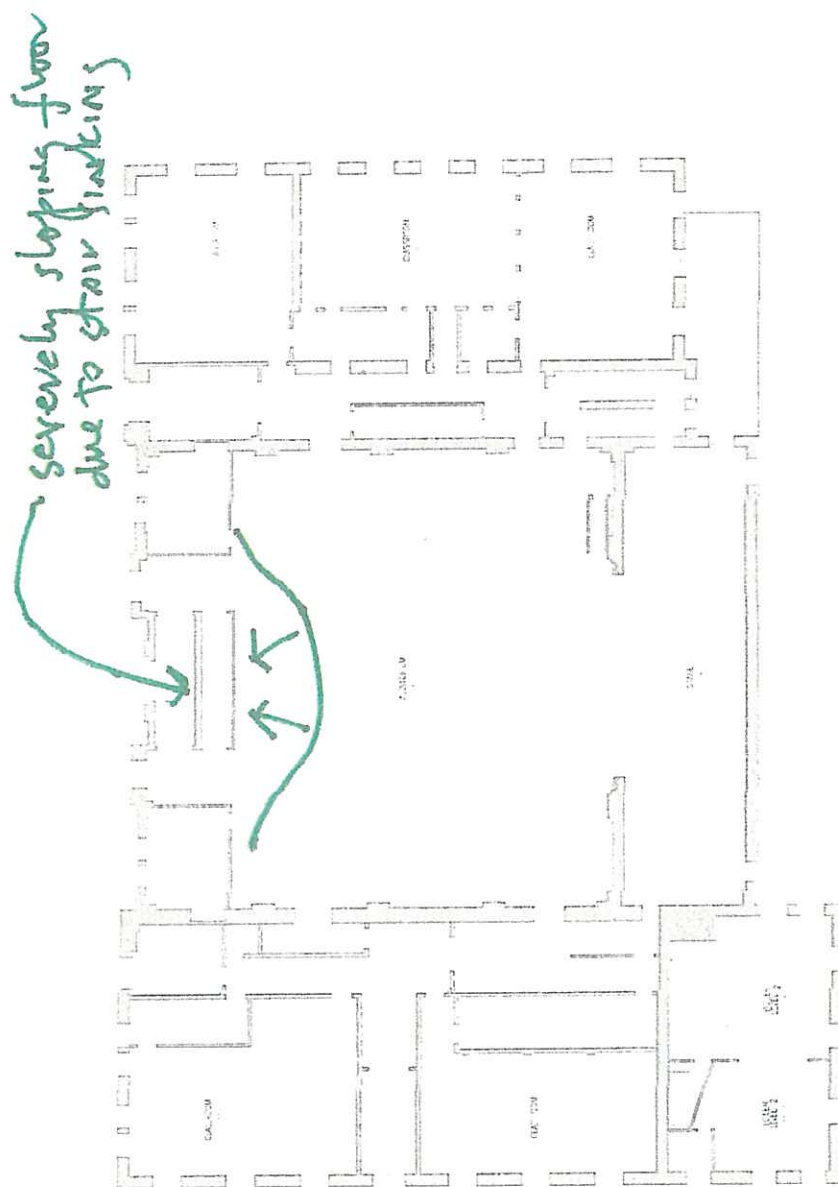


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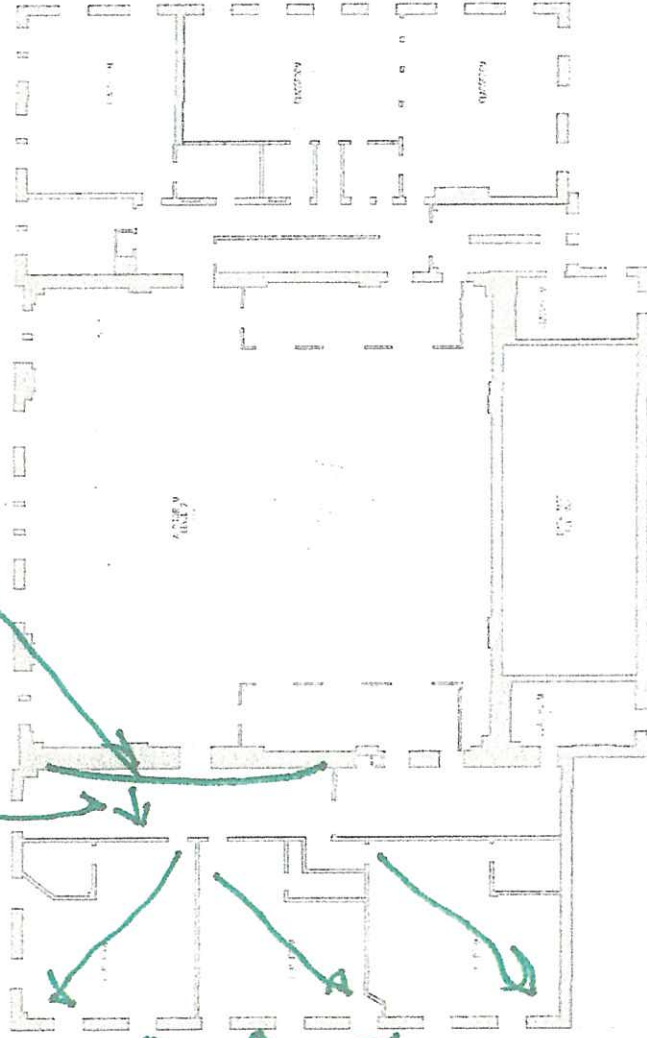
BUCKLING
CEILING
FLOOR
SLAB

Basement Level
Saint Peter's Parochial School



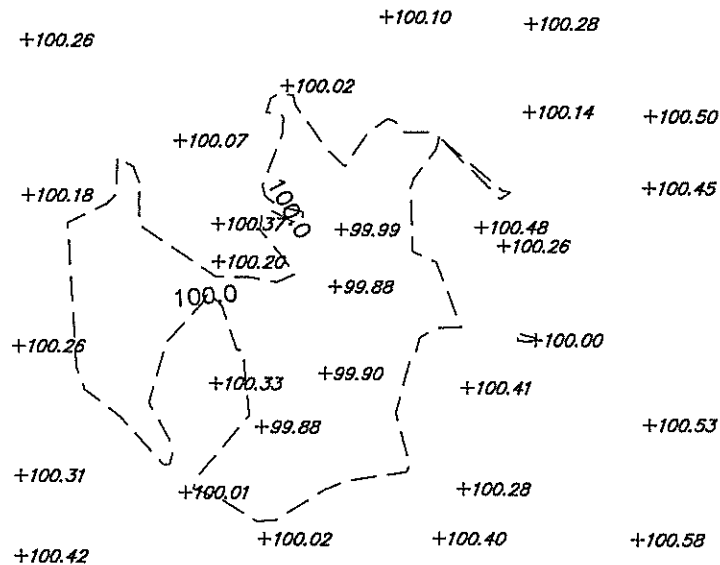
Ground Floor
Saint Peter's Parochial School

STAIR CASE SLOPER
BUCKLING W/ LARGE STRUCTURAL CRACKS



SEVERELY
SLOPED
FLOOR

Second Floor
Saint Peter's Parochial School



BASEMENT
SCALE 1" = 20'

- 1 ELEVATIONS SHOWN HEREON REFERENCE AN ASSUMED DATUM.
- 2 DIMENSIONS SHOWN HEREON ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES. ALL CONTRACTORS ARE TO VERIFY BUILDING DIMENSIONS PRIOR TO CONSTRUCTION.
- 3 ARCHITECTURAL BASEMAP REFERENCES A PLAN ENTITLED "SAINT PETER'S PREPARATORY SCHOOL - SAINT PETER'S PAROCHIAL SCHOOL- JERSEY CITY, NJ" PREPARED BY BEYER BLINDER BELLE ARCHITECTS & PLANNERS, LLP, DATED JUNE 1, 2007.



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EXISTING CONDITIONS PLAN-BASEMENT
SAINT PETER'S PREPARATORY SCHOOL-GRAMMAR SCHOOL

SITUATED IN
 CITY OF JERSEY CITY
 HUDSON COUNTY, NEW JERSEY

SCALE: 1" = 20'

DATE: JUNE 9, 2016

REVISION	DATE

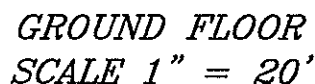
VALLEE SURVEYING, INC.



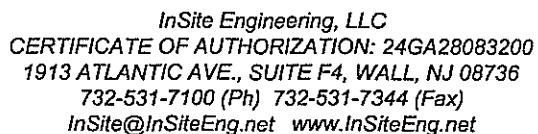
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DRWN. CHKD. RV. BK. FILE JOB
 PG. SURVEY 18-288



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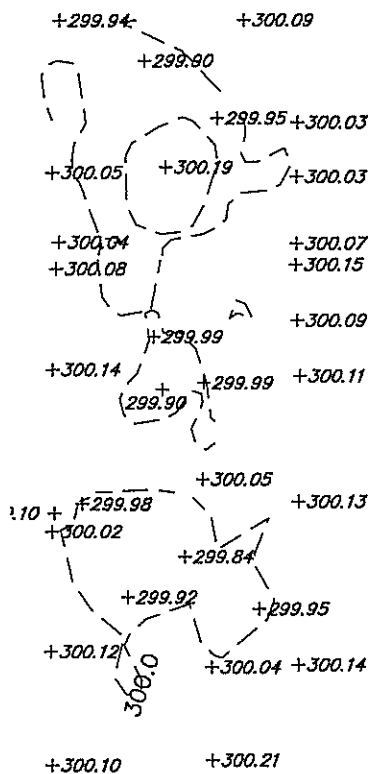


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SECOND FLOOR
SCALE 1" = 20'

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EXISTING CONDITIONS PLAN—SECOND FLOOR
SAINT PETER'S PREPARATORY SCHOOL—GRAMMAR SCHOOL

SITUATED IN
 CITY OF JERSEY CITY
 HUDSON COUNTY, NEW JERSEY

SCALE: 1" = 20'

DATE: JUNE 9, 2016

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