



Former Holy Name School and Convent Evaluation for Use as New Catholic Charities Office Building 8-29-19

JRA architects

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Catholic Charities Building Program Requirements

Headquarters Building

29,321 SF Flexible open office space

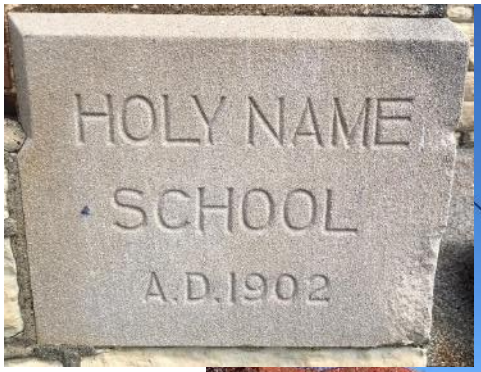
- Two assembly rooms for education and community activities
- Part time child care center with outdoor playground
- Cost efficient design equivalent to today's standard office building cost
- Onsite Shared Parking for 95 -100
- Fully accessible entrance and building
- Secure campus with simple wayfinding for the people served by this organization
- Energy efficient building utilizing solar panels

Evaluation Criteria

- Existing Structure review and capacity
- Existing Building Conditions
- Building Code / Life Safety issues
- Accessibility
- Layout
    - Ability to rehabilitate / add onto existing structure within NPS guidelines
- Rehabilitation Costs
- Long term Energy Costs

Former Holy Name School Building 3

- Built around 1902 25,524 SF First Floor Elev = 464.94



Former Holy Name School Building 3

- Added on in 1932 *

Rectory of the Holy Name
2914 THIRD STREET
Louisville, Ky.

September 23rd, 1932.

Most Reverend Bishop John A. Floersh
1118 South Third Street
City

Most Reverend Dear Bishop:

Inclosed please find a financial statement for the remodeling of our school, school equipment, furnishings, and other improvements particularly the installation of two automatic stokers for the heating plant.

The original contract price for alteration		$25000.00
Extras		
New work ordered		2953.34
Desks and school furnishings		1117.50
Automatic stokers		1060.06
Labor not included in contract		2378.00
Cafeteria and Equipment		602.05
		957.25
Total Expenditures		$34068.20
Total amount of principal & Interest paid by Bishop	$14715.74	
Plus new notes	14600.00	
	29315.74	
Less improvement in April, used	1500.00	
	$27815.74	
Approximate payments from current revenue	1963.50	
Balance needed to pay outstanding debts	4288.96	
		$34068.20

This indicates that we have been able to accumulate about $2000.00 over current expenses during the past months. I have not returned the note of $2500.00 which Holy Name Church holds against St. Augustine's Church, Reed, Ky. My reason for not returning this note is that it will be necessary for me to borrow $4200.00 to pay the outstanding bills of the school remodeling. If this note were discounted I would need but $1700.00 additional. This would be more in accord with your Lordship's practice, that a Church be not permitted to borrow while a lender. Of course I will be perfectly willing to renew the note with Father Hoolveld if it meets with your approval. In addition to the $4200.00 which we will need, I would like to ask your permission to make some very necessary repairs in the Church basement where the furnaces are located. Since the steps and runways are of wooden construction, and so near the



* Not 1928 as discussed in the Louisville Metro Historic Landmarks and Preservation Districts Commission Draft Designation Report dated June 27, 2019

Existing Structure Review

- ICON report – water infiltration



Existing Structure Review

- Mortar deterioration





Existing Structure Review

- Building damage due to water infiltration





Existing Structure Review

- Differential settlement at building addition



Existing Structure Review and capacity

- Summary Structural issues
  - Mortar deterioration in structural foundation walls
  - Water infiltration damage to structure
  - Existing floor system not adequate to support Office floor loads
  - Existing bearing wall system inadequate to resist current seismic and wind loads

35 Public Square
Elizabethtown, KY 42701
Phone: (270) 737-4226

ICON Engineering & Inspection Services PLLC

330 W. Vine Street
Suite #300
Lexington, KY 40507
Fax: (270) 737-0441

PROFESSIONAL OPINIONS AND RECOMMENDATIONS

Based on the observations and findings noted above, we offer the following professional opinions and recommendations:

The floor systems of the existing building were found to be highly inadequate to carry the required floor live loads and partition allowance required by the current building codes. In addition, there is significant damage to the wood structure due to prolonged exposure to infiltrated water. It is our opinion that upgrading the floor system to meet the loading requirements would require complete replacement of the internal structural system and foundations.

Due to the extensive level of structural upgrade required, it is our opinion that this will invoke requirements, in the building code, for upgrade of the entire structural system which would include resistance to current code level seismic and wind loads. These loads cannot be resisted by the existing perimeter brick wall/pier system. The existing walls being constructed in the 1900 to 1902 timeframe (1902 on the cornerstone) were constructed using lime past mortar which is very susceptible to degradation when exposed to weather. This degradation impacts all layers of the multi-wythe wall systems where internal damage cannot be assessed. Evidence of exterior wall saturation is observed through the building by failing of the interior plaster wall finish. Additionally, evidence of mortar degradation is observed throughout the exterior veneer.

These professional opinions and recommendations are based solely on information gathered from our on-site review/observations and limited analysis. We reserve the right to supplement or amend these findings and/or opinions should new information become available.

Please let us know if you have any questions or need further clarification regarding the above.

Sincerely,

Michael S. Childers, PE
President/Structural Engineer
Providing Structural Engineering Services for Over 32 Years

STATE OF KENTUCKY
MICHAEL S. CHILDERS
17137
LICENSED PROFESSIONAL ENGINEER

Existing Building Interior Conditions

- Water Damage and mold build up





Existing Building Interior Conditions

- Mold identified is Aspergillus Penicillinium and Cladosporium



Existing Building Conditions

- Replace roof, fascia, and soffit need replacement





Existing Building Conditions

- Windows need replacement

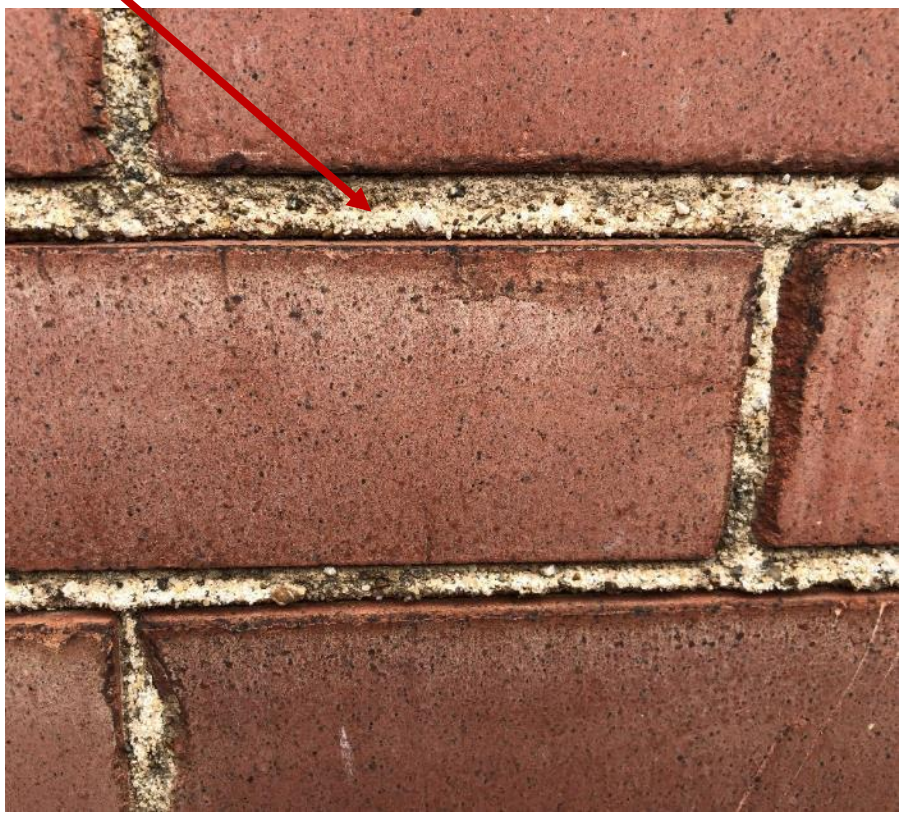




Existing Building Conditions

- Repoint and seal brick to prevent further water infiltration



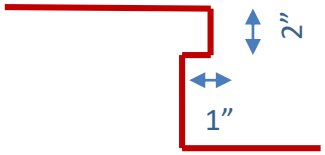


Building Code / Exit Stairs

- Exit stairs treads and rails non- compliant
  - •Guardrail and Handrails at 32" high need to be replaced
  - •Riser non- ADA compliant and tripping hazard



Stair nosing does not meet ADA requirements



90 degrees

Building Code / Useable space

- Non usable lower level – ceiling height does not meet code



Building Code / Accessibility

- Building is not accessible, fire exits not accessible, no elevator





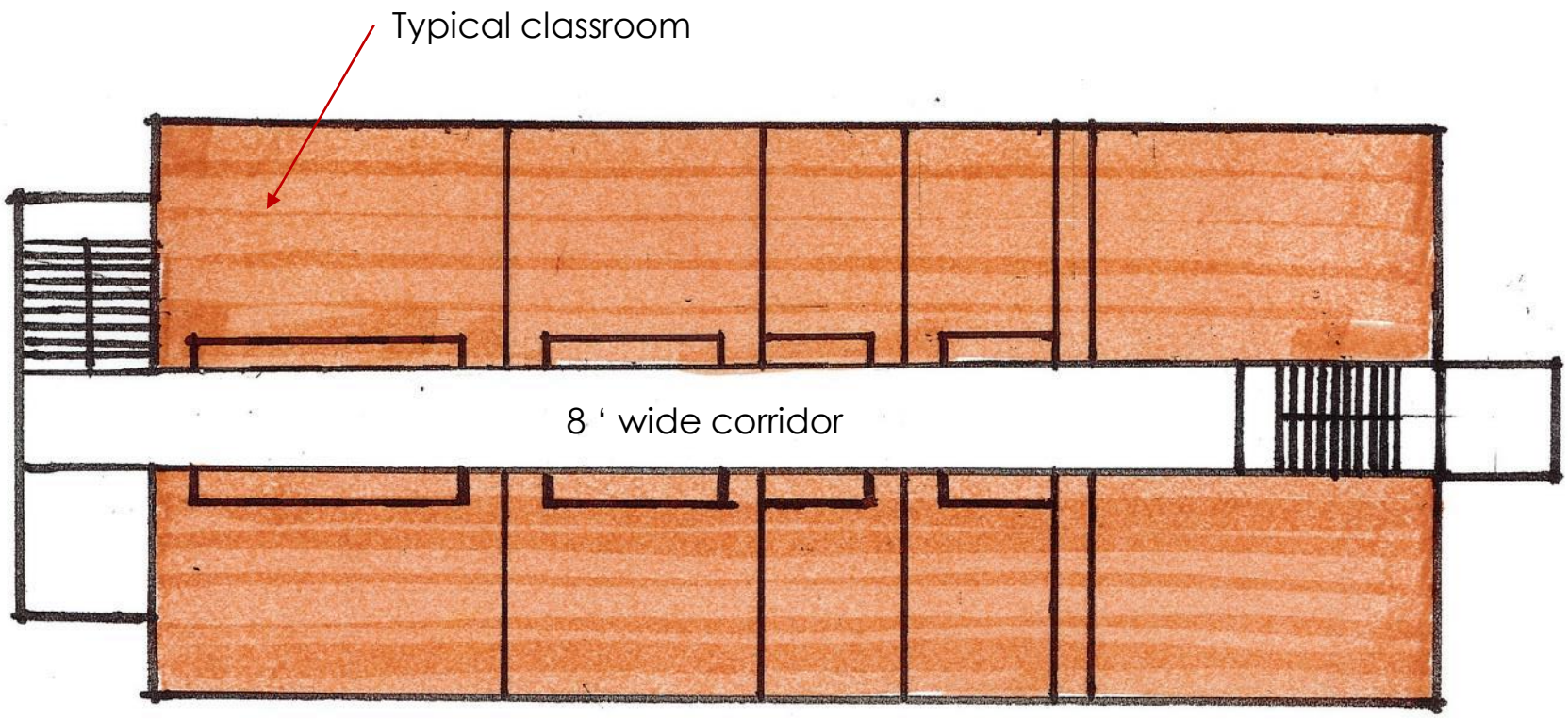
Building Code / Accessibility

- No Elevator
- Restrooms non- ADA compliant



Layout

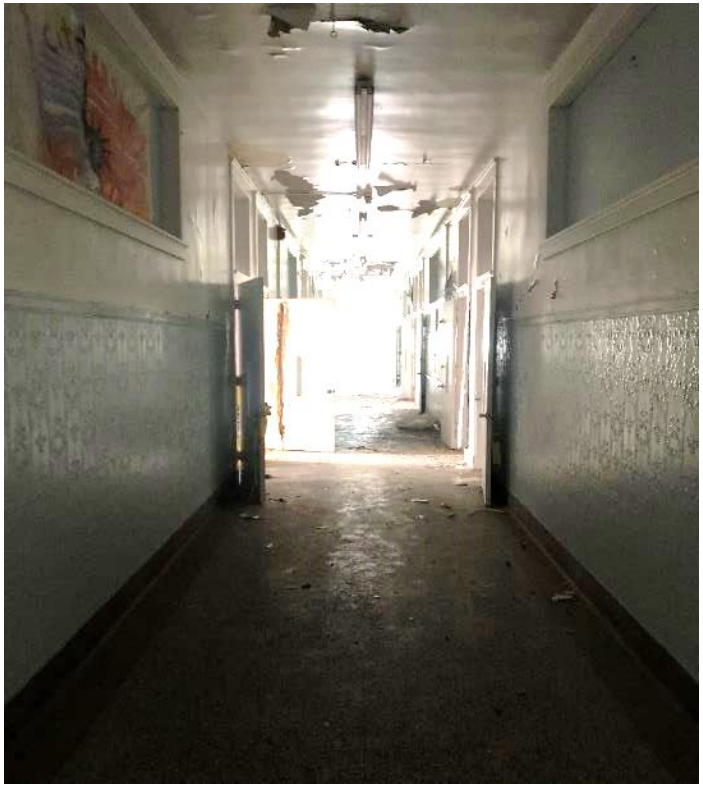
- Existing building has 8 foot wide central corridor



Layout

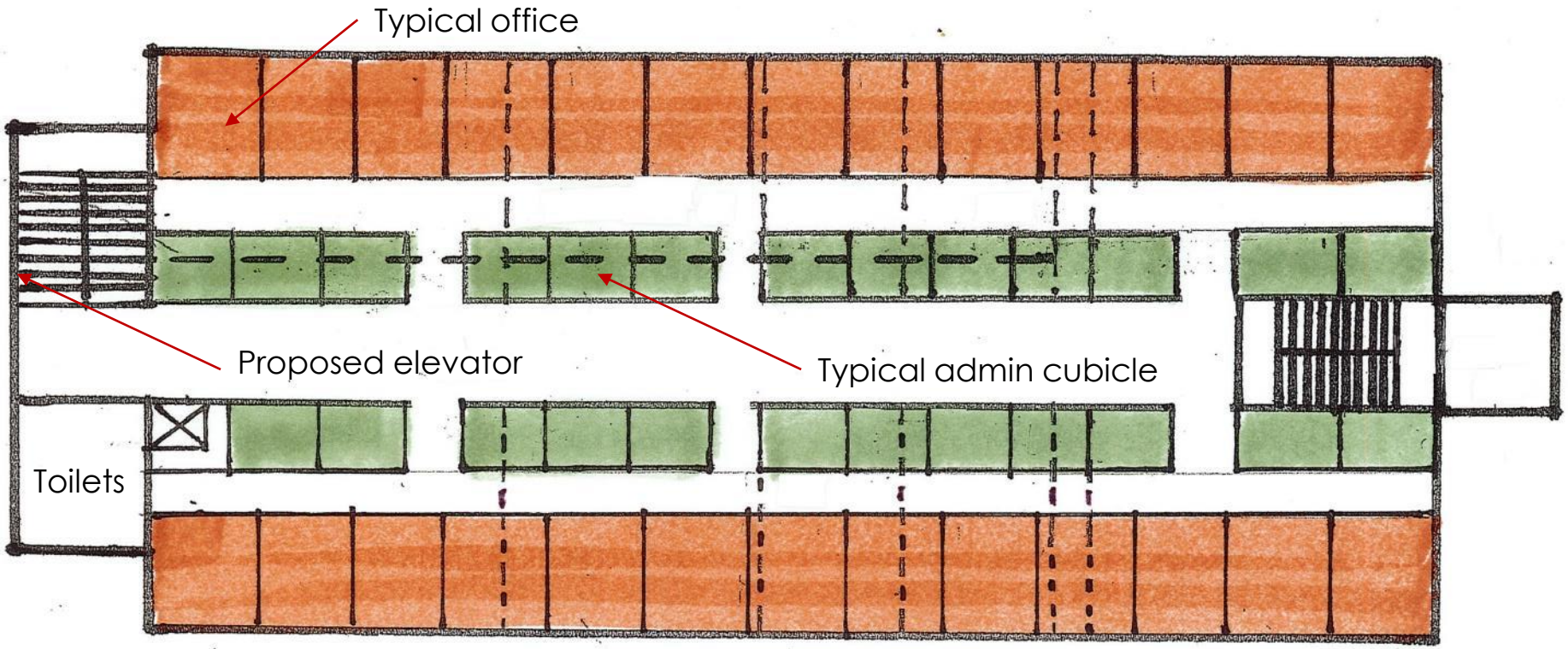
- Convert former classrooms to private offices and open admin area confined by corridor wall





Possible Office Layout

- Inefficient office plan – excessive corridors & wide stairs – Center corridor is 1760 sf unusable space.
- Basement is not usable, reducing usable space from 25,524 sf to 17,016 sf. Will need a 12,305 sf addition



NPS Brief #14 New Exterior Additions to Historic Building Preservation Concerns

A 12,305 sf addition to the 17,016 sf building is required.

"a new addition should always be subordinate to the historic building; it should not compete in size, scale, or design with the historic building."

"incorporate a simple, recessed small scale hyphen to physically separate the old and new volumes or set the addition back from wall plane(s) of the historic building."

"avoid designs that unify the two volumes into a single architectural whole."

"use building materials in the same color range or value as those of the historic building"

"base the size, rhythm, and alignment of the new additions window and door openings on those of the historic building."

"respect the architectural expression of the historic building type. For example, an addition to an institutional building should maintain the architectural character associated with this building type rather than using details and elements typical of residential or other building types.

Addition Possibilities

- Original Building has already had an addition to the rear
- Original exterior design integrity has been compromised by the absence of integrity
- Addition has no recess at juncture, changed the window type and proportion, changed roof configuration, and dominates the side facades





Rehabilitation of Current Structure

- Remove non- historical glass block – replace with twin double hung windows





Additional Compliance Designated Costs for Rehabilitation – Former School

- Stair tread and handrail replacement: $65,000
- Additional elevator stops : $ 120,000
- Masonry (tuckpoint existing vs build new): $ 33,000
- Inefficient center corridor: $ 281,600
- Windows : $ 309,903
- Roof : $ 39,328
- Mold and Lead Paint remediation : $ 237,500
- Total additional costs : $ 1,313,798

All estimated costs are from subcontractors visiting the building

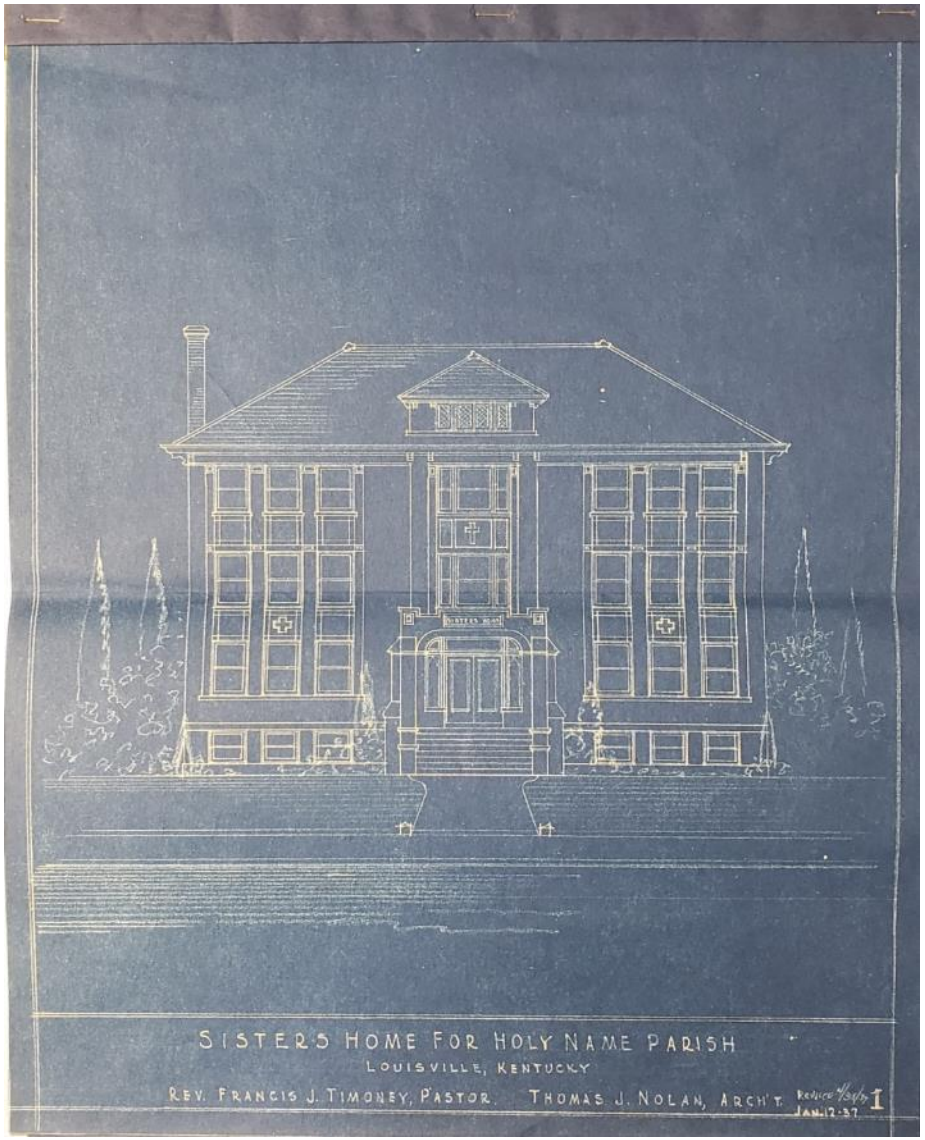
Long Term Energy Costs

- Annual operational energy cost with insulated roof and windows (cannot change all masonry wall – has a low R-value) = $1.81/ sf
- NPS Brief #3 – cautions against adding wall insulation (spray foam or rigid) on an all masonry wall (changes the drying rate, increases spalling)
- Annual operational energy cost with new office building insulated to meet today's energy code = $1.40/ sf
- Additional cost to use this portion of building over a 20 year period assuming no increase in energy costs = $199,260.
- Catholic Charities desires to use solar panels at their new location to save on energy costs, this could be problematic with rehabilitation

Former Holy Name Convent – Building 4

- Built around 1937 10,200 SF First Floor Elev 465.87





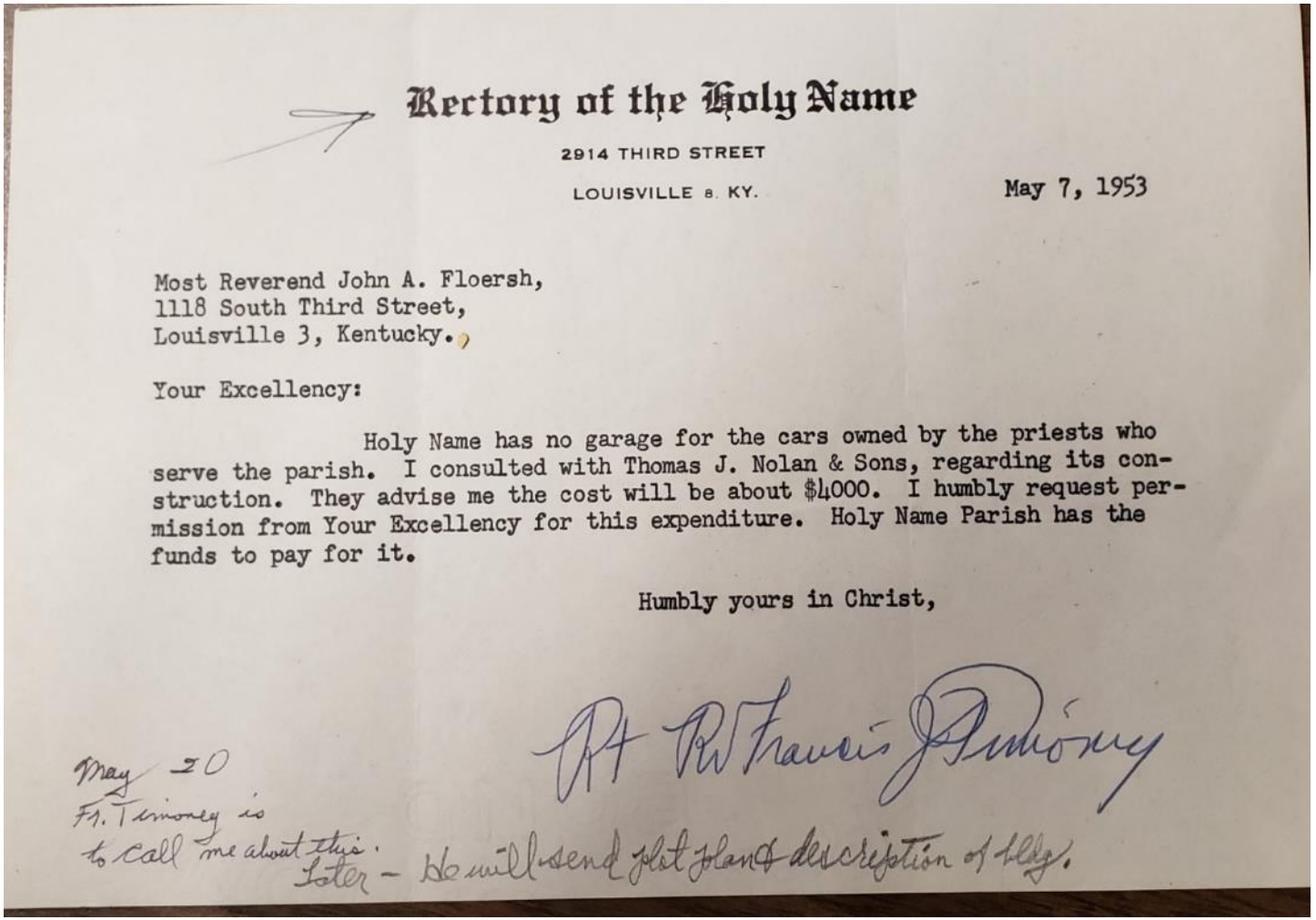
Former Holy Name Convent – Building 4





Existing Building Exterior Conditions

- Former convent built 1937
- Garage addition built 1953



Rectory of the Holy Name

2914 THIRD STREET

LOUISVILLE 8, KY.

May 7, 1953

Most Reverend John A. Floersh,
1118 South Third Street,
Louisville 3, Kentucky.

Your Excellency:

Holy Name has no garage for the cars owned by the priests who serve the parish. I consulted with Thomas J. Nolan & Sons, regarding its construction. They advise me the cost will be about $4000. I humbly request permission from Your Excellency for this expenditure. Holy Name Parish has the funds to pay for it.

Humbly yours in Christ,

Rt Rev Francis J Tinsley

May 20
Fr. Tinsley is to call me about this. Later - He will send plat plan & description of bldg.

Evaluation Criteria

- Existing Structure review and capacity
- Existing Building Conditions
- Building Code / Life Safety issues
- Accessibility
- Layout
    - Ability to rehabilitate / add onto existing structure within NPS guidelines
- Rehabilitation Costs
- Long term Energy Costs

Existing Structure Review

- ICON report - cracks indicating wall movement



Existing Structure Review

- Foundation movement



Existing Structure Review

- masonry movement - Rust Jacking



Existing Structure Review

- Ceiling movement



Existing Structure Review

- Ceiling / wall movement



Existing Structure Review and Capacity

- Summary Structural issues
  - Significant Horizontal & Vertical Cracks
  - Rust Jacking evident at exterior lintels
  - Existing floor system not adequate to support Office floor loads
  - Existing bearing wall system inadequate to resist current seismic and wind loads



35 Public Square
Elizabethtown, KY 42701
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PROFESSIONAL OPINIONS AND RECOMMENDATIONS

Based on the observations and findings noted above, we offer the following professional opinions and recommendations:

The extent of the interior cracking and outward movement of the bearing wall observed in the basement, indicates substantial movements in the foundation system. The fact that some cracks had repeated repairs indicated the presents of bearing soils that are sensitive to seasonal moisture content resulting both permanent and cyclical settlements. With the exterior veneer wythe of the wall being non-interlaced with the inner bearing portion of the wall, not all interior cracking observed has translated to the exterior although the cracks are present in the foundation system.

Given the age of this building and knowing it was originally used as a convent, we know that the floor system for this building would have been designed for residential floor loadings in the 1930s. Although this building is currently used for office space, we have no documentation to show that the building was ever verified to meet office loadings. The code floor loading requirements for offices are substantially more than residential floor loading requirements and in addition to code required partition loads. It is therefore our opinion that the floor system is not adequate to support the code required floor loadings for office spaces and would likely require reinforcements of the floor joists.

Rust jacking was prevalent throughout the exterior of the building. Rust jacking results from water infiltration of the exterior brick veneer and water collects/ponds at the lintels rusting the lintels over time. The jacking comes from the expansion of the oxidized steel and literally lifts the brick.

The existing bearing wall system is furthermore inadequate to resist current code level wind/seismic loads with the existing perimeter brick wall/pier system.

Although there is no immediate need for concern of potential failure, it is our professional opinion that this building is in need of substantial structural repairs. We are however concerned that this building may have been converted to an business/office use without proper due diligence.

These professional opinions and recommendations are based solely on information gathered from our on-site review/observations and limited analysis. We reserve the right to supplement or amend these findings and/or opinions should new information become available.

Please let us know if you have any questions or need further clarification regarding the above.

Sincerely,

Michael S. Childers, PE
President/Structural Engineer
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STATE OF KENTUCKY
MICHAEL S. CHILDERS
17137
LICENSED
PROFESSIONAL ENGINEER

August 2, 2019

Page 2 of 5

Existing Building Interior Conditions

- Narrow Corridors, former cells are small rooms





Existing Building Exterior Conditions

- Appraisal by William Haysley in 1970 stated building has useful life 50 years

WILLIAM G. HAYSLEY

APPRAISAL REPORT

Name HOLY NAME SISTERS' HOME
Address 2911 South 4th Street
Location
Occupant Same



Site Data
Land Size 78 x 190 Survey Recommended Yes
Street Asphalt Side-walk Concrete Walks Concrete
Alley Yes Drive-way Asphalt Water City
Electricity City Gas City Sewer City
Surrounding Property Residential and Commercial

Improvements: Main Building and Additions
Size 11,291 square feet (1 & 2 Floors) 3819 square feet (Basement)
Construction Solid Brick Type 3 1/2 story
Age: Actual 33 yrs. Foundation Concrete
Effective 33 yrs. Roof Tile
Porch Front and Rear Utility Room - Basement
Heating Gas Fired Boiler Air-cond No
Water heater Gas Auto Paint Fair
Garage 2 car Equipment
Basement Full
Use: Residential Units 1
Other

No. rooms	Units	L. R.	D R.	Kit.	B. R.	Family	Clos.	Other	Baths	Walls	Floors	Rentals
Basement		Laundry room -			Boiler Room				1 toil			Storage
1st Floor		1	1	1		Chapel			1 toil 1 lav.		Terrazzo	2 Conference
2nd Floor					9	Sewing Room			2 toil Plas. 3 lav. 2 tubs		Terr.	Community room
3rd Floor					13				3 toil Plas. 3 lav. 2 tubs		Terrazzo	
Total												

REMARKS Building needs exterior repair and paint - Interior needs modernizing and decorating.

ESTIMATED VALUE

Land	$ 14,820.00
Improvements	$ 46,650.82
TOTAL	61,470.82
	Say $ 61,500.00

I certify that to the best of my knowledge and belief, the facts and data used herein are true and correct, and that I personally inspected the property. I have no interest, present or prospective, therein.

Date April 16, 1970 Appraiser William G. Haysley

HOLY NAME SISTERS HOME

2911 South Fourth Street

3 Floors	11,291 square feet @ $ 21.39 =		$241,514.00
Basement	3,819 " " @ $ 16.55 =		$ 63,204.45
Rear Porch	216 " " @ $ 8.00 =		$ 1,728.00
Front Porch	122 " " @ $ 6.00 =		$ 732.00
Attic Storage	1,827 " " @ $ 1.00 =		$ 1,827.00
Garage - Estimated			$ 1,000.00
Walks - Stoops - Miscellaneous			$ 1,000.00
	Total		$311,005.45

50 yr. Life

33 yrs. Depreciation @ 2%	= 66%	
Economic and Functional Obsolescences	19%	
	85%	$264,354.63
		$ 46,650.82
Land 78' x 190' = 14,820 square feet @ $1.00		$ 14,820.00
		$ 61,470.82

Existing Building Exterior Conditions

- Roof and windows have reached their usefull life span and need replacement.
- Masonry needs repointing / replacement at rust jacking





Building Code / Exit Stairs Evaluation

- Fire exit stairs are non-compliant
  - •Stair Width 42" needs to be 44"
  - •Stair Landing is only 39" and needs to be 44"
  - •Door swing into the stair landing too far preventing proper evacuation



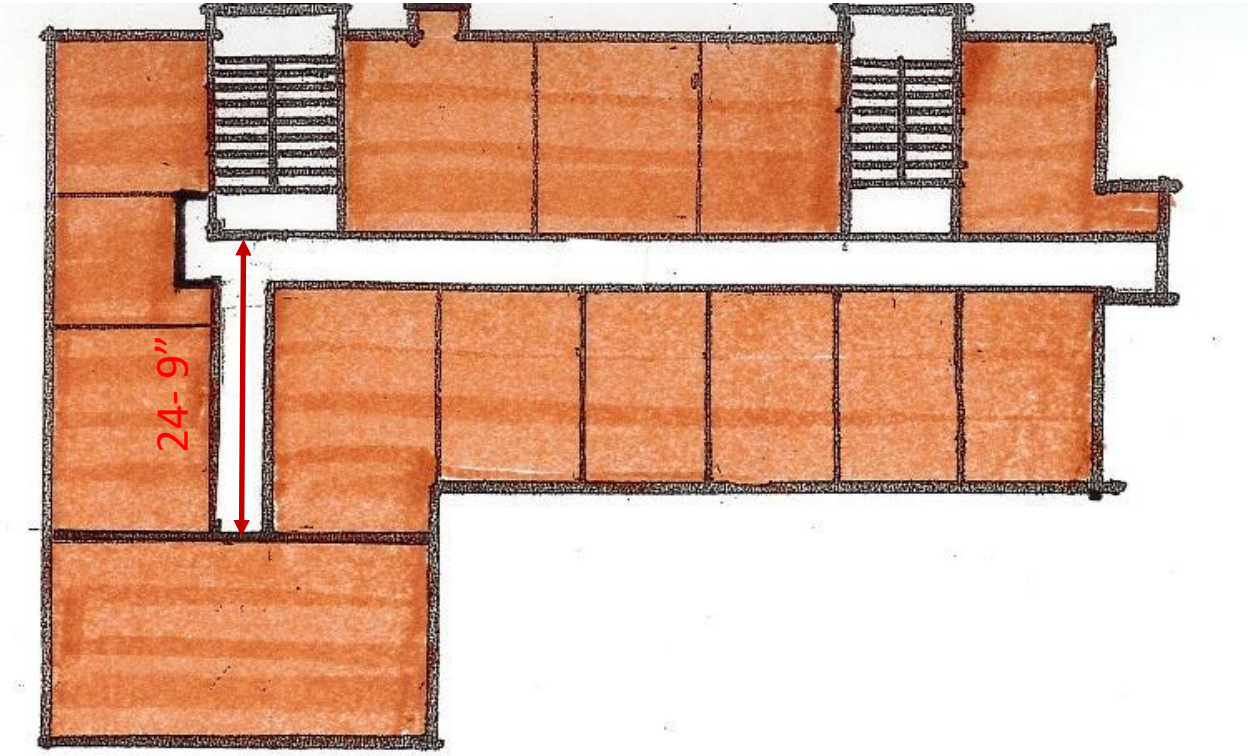
Building Code / Exit Stairs

- Fire stairs non- compliant
  - •Stairs exit to the exterior has non- code compliant landing and are not accessible
  - •Cannot build a ramp into the public alley
  - • No landing at the exit, no clearance for automobiles , major safety concern



Building Code / Corridor length

- Dead end corridor greater than 20’ and does not meet KBC



dead end corridor length is 24’-9”

Building Code / Usable Space

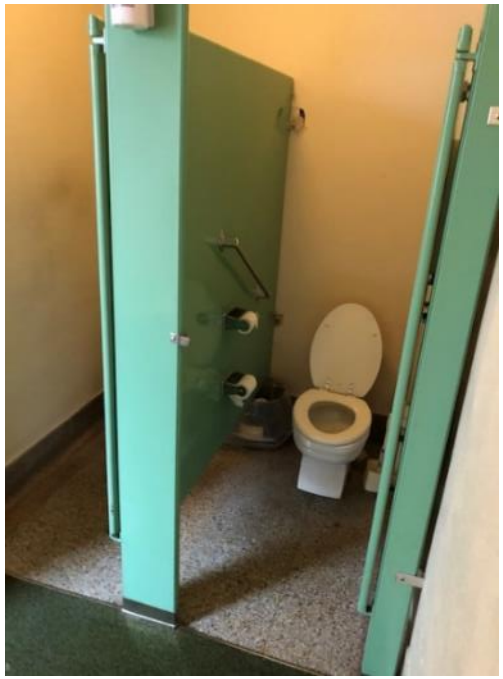
- Ceiling Height will be inadequate when HVAC is modified to today's energy standards and fire suppression is added.





Building Code / Accessibility

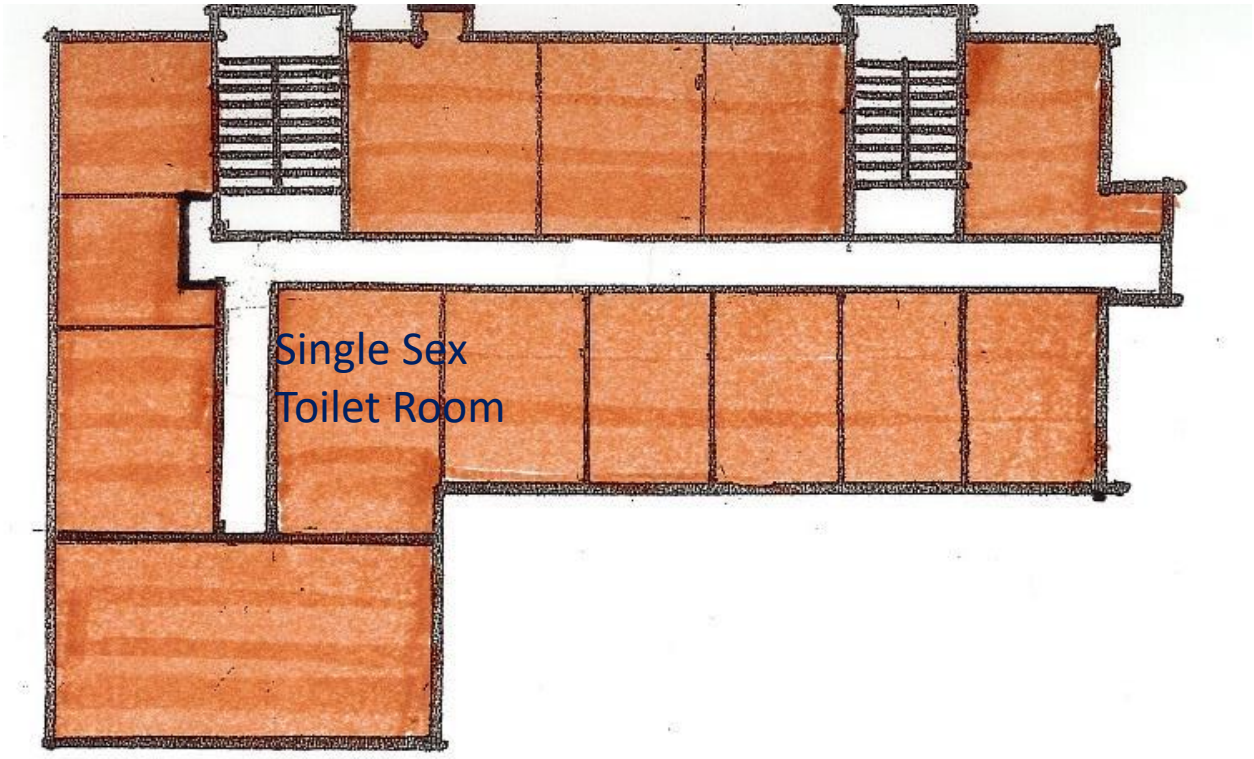
- Building is not accessible
  - Main level raised approximately 6.87’ from sidewalk
  - Elevator too small at 40” x 58” (ADA minimum is 51” x 68”for side mounted door)
  - Restrooms are non- compliant





Layout

- Central hallway / cell configuration is not conducive for Manager / Admin flexible modern office layout
- Very small footprint of 3644 sf x 3 stories = 10,932 sf – will need a 18,389 sf addition





NPS Brief #14 New Exterior Additions to Historic Building Preservation Concerns

A 18,389 sf addition to the 10,932 sf building is required – almost doubling the original footprint size

"a new addition should always be subordinate to the historic building; it should not compete in size, scale, or design with the historic building."

"incorporate a simple, recessed small scale hyphen to physically separate the old and new volumes or set the addition back from wall plane(s) of the historic building."

"avoid designs that unify the two volumes into a single architectural whole."

"use building materials in the same color range or value as those of the historic building"

"base the size, rhythm, and alignment of the new additions window and door openings on those of the historic building."

"respect the architectural expression of the historic building type. For example, an addition to an institutional building should maintain the architectural character associated with this building type rather than using details and elements typical of residential or other building types.

Additional Compliance Designated Costs for Rehabilitation – Former Convent

- New Fire Exit Stair: $ 49,500
- Additional elevator stops : $ 120,000
- Masonry (tuckpoint existing vs new): $ 55,000
- Window : $ 213,109
- Roof : $ 59,356
- Asbestos removal: $ 22,000
- Total additional costs : $ 622,758

All estimated costs are from subcontractors visiting the building

Long Term Energy Costs

- Annual operational energy cost with insulated roof and windows (cannot change all masonry wall – has a low R-value) = $1.81/ sf
- Annual operational energy cost with new office building insulated to meet today's energy code = $1.40/ sf
- Additional cost to use this building over a 20 year period assuming no increase in energy costs = $83,640

Summary

- Both buildings do not have structural capability for new office space
- A significant addition exceeding the recommendations of NPS would need to be done to either building
- Correction of Building Code / ADA deficiencies of the former Convent building are significant and costly
- Interior floor plates of both buildings are not conducive for a modern flexible office template
- Costs to renovate both buildings are excessive and significantly exceed costs of a standard office building.
- Long term energy costs of both buildings are unsustainable
- Loose the ability to provide a new building utilizing Green initiatives championed by the City

Therefore, the rehabilitation /addition to these buildings for the new Catholic Charities Office building is not recommended