## MONITORING REPORT

FOR

## West Park Presbyterian Church

New York, NY 10024
DATE ISSUED: March $31^{\text {st }} 2023$
This report discusses the optical and vibration monitoring in proximity of the project site for the duration: July $12^{\text {th }}, 2022$ - ongoing


PREPARED FOR:
Roger Leaf, Chair
West Park Administrative Commissi ©iOFESS10

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## I. Introduction

Krypton Engineering has been retained to provide tilt monitoring services for the abovereferenced project. The monitored assembly is comprised of a stone-clad church building. The north and south facades in the vicinity of the large, circular stained-glass windows are to be monitored. An exterior façade mapping has been previously prepared by this office for each of these façades, indicating an initial tilting and bulging of these facades.

Each façade received two vertical tilt beams, installed from the interior adjacent to, on each side of, the circular window openings. Four (4) total beams and one (1) data logger were installed. Installation of beams was performed July 12, 2022 and baseline data collection was performed through the first two days of data collection.

## II. Tilt Beam Installation and Data Collection

Following completion of equipment installation, performed as referenced above, approximately 2 days of baseline data was collected. Baseline data collection was completed and used so set initial readings to zero along a vertical axis. Monitoring data for tilt readings was then compared to this baseline data.

Tilt beam data will be reported as the angle of tilt of the beams, in radians. The vertical tilt beam tilt will be reported as the angle of the deviation from vertical (z) axis toward each horizontal axis. The beams are installed on vertical surfaces. The horizontal axes are as follows: alpha is into/out of the plane of the vertical surface/wall to be monitored; beta is along the plane of the surface/wall to be monitored. A positive alpha reflects an orientation of the top of the beam to a direction into the plane of the surface (wall) that it is mounted on) A positive beta angle reflects an orientation of the top of the beam to the right relative to the plane (normal surface) the beam is mounted on. To note, this is opposite a positive curve orientation based on the "right-hand-rule".

Tit Beams are located as follows:

Tilt Beam 55807 Location - Installed along the interior of the south wall (along West $86^{\text {th }}$ St.) facing the interior of the building. The beam is to the west (right) of the circular stained-glass window

Tilt Beam 55808 Location - Installed along the interior of the south wall (along West $86^{\text {th }}$ St.) facing the interior of the building. The beam is to the east (left) of the circular stained-glass window

Tilt Beam 55809 Location - Installed along the interior of the north (rear) wall facing the interior of the building. The beam is to the east (left) of the circular stained-glass window

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Tilt Beam 55810 Location - Installed along the interior of the north (rear) wall facing the interior of the building. The beam is to the west (right) of the circular stained-glass window

## III. Data analysis

Tilt beam data analysis will be provided monthly or at another predetermined tolerance as required by the project team.

Four tilt beams have been installed across the above-discussed interiors of the building facades. Tilt beam data is automatically recorded three times per day for both vertical axes of each tilt beam. Tilt beams will report their orientation in alpha and beta angles, discussed above. The angle of orientation, and the change of that angle over time, is of particular interest to the engineering team. A typical threshold angular deflection in either vertical axis is $\mathbf{0 . 0 0 2 1}$ radians or $\mathbf{0 . 1 2}$ degrees. This constitutes an " $\mathrm{L} / 480$ " deflection along the length of the 1meter beam, or approximately $1 / 16^{\prime \prime}$ of displacement across the beam length.

The actual component that is monitored by this beam may be moving uniformly or may be separating, bending, bulging or otherwise moving in parts. The beam angle that is reported is indicating relative orientation of the two ends of the beam at their attachment points. Endpoint deflection may be calculated as follows:

Length of beam * tangent of the reported alpha or beta angle (in radians) The beam length of 1 meter, or approximately 39 inches, may be substituted:
$1 m * \tan (\alpha$ or $\beta)=\Delta$
For instance, a recorded angle of 0.0256 radians, or 1.4688 degrees will indicate a relative displacement of approximately 1 inch between the top and bottom connection points of the 39-inch tilt beam.

Again, this may or may not translate to a total displacement of a taller or longer wall depending upon whether that component is moving uniformly.

Tilt beams installed on the surface of or with building components that are subjected to thermal variations, particularly those directly exposed to sunlight, typically report changes due to thermal expansion and contraction. These changes can be observed daily and seasonally. Depending upon the underlying material's thermal expansion properties, the data may appear to be significant. The resulting data often appears in a cyclical pattern and is typically identifiable as such. Consult with the structural engineering team to better incorporate material properties into analysis of reported data.

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## IV. Summary of Results

Tilt beam data is to be downloaded from data collection unit on-site at scheduled frequency and reported following collection. The data is reviewed for exceedances to angular rotation threshold.

Monthly data will be provided in the report appendix.
Based on data and analysis through the date of this report, threshold value of Beam 55807 has exceeded above-referenced threshold of 0.0021 radians in $\Delta \beta$. Review of any bracing implementation and structural conditions should be performed.

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Interior of North Wall


Interior of South Wall

## Appendix II -Tilt Beam Logs

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March 31 ${ }^{\text {st, }} 2023$
Appendix II.A Tilt Beam \#1 EB55807

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March 31 ${ }^{\text {st, }} 2023$
Appendix II.A Tilt Beam \#3 EB55809

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Appendix II.A Tilt Beam \#4 EB55810

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## C. Parish House Code Issues for Commercial Use

The attached drawings by FXCollaborative show the design of the Parish House, as renovated for commercial use, with Code-required access, elevators, and egress.



03/06/2023 | Conversion to accessible / Layouts
WPPC
Job Number 21019.LOO


## D. Window Assessment

The attached report by Liberty Stained Glass Conservation, dated November 2022, analyzes the condition of the Building's windows and proposes a scope of work for window replacement and restoration. It notes that "nearly every window exhibits untreated breaks" and that "[†]he windows require, at a minimum, removal for crack repair, re-leading, and re-waterproofing." It finds that "[ $\dagger]$ he tower windows are in the worst condition and are of concern. The tower windows should be removed immediately, and the window openings closed with a weatherproof board-up until the leaded glass can be restored and returned to the building. For the remainder of the windows, Liberty recommends a conservation and restoration plan, which involves removing the stained and leaded glass panels for treatment or replacement, and restoring the wood frames.

The estimated cost of this proposed scope of work is $\$ 1,896,376$, which has been added to the façade restoration figure in the revised LBG cost estimate.

# West Park Presbyterian Church 

Stained Glass Condition Survey<br>November 2022

zed in 1872, as the he present name arose Cheever, who gave to e sale of the lease are, which had for racter of its people eever. This noble



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## WEST




Parish House Register 1


Parish House Register 2


Parish House Register 3



## Significance of the Windows

The historical and architectural importance of the West Park Presbyterian Church has been identified in the Landmarks Preservation Commission LP-2338. The leaded and stained glass windows were referenced in that report, but not addressed in detail.

The sanctuary windows date to around the time Henry Kilburn designed a larger main church in 1889. Opalescent glass was becoming popular at this time as a result of the work of John La Farge and Louis C. Tiffany. The West Park Presbyterian windows are ornamental windows, made of various textures of opalescent glass, cathedral glass and jewels. The majority of the windows can be categorized as "leaded glass" as there is no painted decoration. The Parish House windows are a different design from the sanctuary and are likely by different makers.

The sanctuary contains a War Memorial Window depicting Christ Blessing the Children, executed by Tiffany Studios in 1929. The window is dedicated to the sons of the church who sacrificed their lives in WWI (New York Times [27 May 1929, p. 25]).

## Purpose \& Summary

Liberty Stained Glass Conservation LLC was retained to; provide an accurate assessment of the existing conditions of the stained and leaded glass at West Park Presbyterian Church, propose a treatment strategy and coordinate cost estimations of the proposed work. The windows were reviewed twice in person. LSGC requested probes to better understand the exterior window condition, which is not visible due to the exterior Lexan coverings. The probe included the removal of Lexan at fixed windows.

The sanctuary and parish house have 80 windows. 63 windows were surveyed up close. Windows surveyed from a distance greater than 10 ' or could not be reviewed due to the lack of safe access are indicated in the existing conditions table with asterisks. Asterisks also indicate where information was estimated, such as window sizes and breakage counts.

The War Memorial Window was viewed from the back only. It is heavily plated and is supported by a steel subframe. The back side of the window did not show bowing or breakage. The window acts as a backlit organ screen. There were no obvious signs of damage, and it does not act as a weather barrier. An up-close inspection of the window is needed to verify its condition.

## Stained Glass \& Decoration

There was no evidence of glass corrosion, glass sickness or crizzling. The stained and leaded glass has been previously restored, and many inappropriate replacement pieces exist throughout the sanctuary and parish house.

Regardless of previous restoration campaigns, nearly every window exhibits untreated breaks. 11 windows have broken pieces of glass that are visibly in danger of falling out of the matrix. Many of the sanctuary windows are coated in cold paint (an un-fired substance applied to leaded or stained glass to darken it). The application of cold paint appears to have been used to better blend
poor replacement pieces with the surrounding glass and to serve as a consolidant for fragile grisaille (glass paint). There is minimal glass paint in the sanctuary, and it appears to be fragile.

## Lead Matrix

The lead matrices are reaching the end of their serviceable life. Nearly $40 \%$ of the surveyed lead matrices exhibit lead carbonate on the interior. Both probes showed lead carbonate on the exterior. It can be assumed that all matrices exhibit lead carbonate on the exterior. This is common in settings with unvented exterior coverings. Lead carbonate is a by-product of advanced oxidation and is identifiable as a white powdery substance on the lead came. It can become friable and should be considered dangerous.

The matrices have cracked cames and solder joints. The matrices have become pliable and $75 \%$ flex more than 1 " with mild pressure applied. The weatherproofing putty under the lead flanges is leaching and has been lost in areas. In situations where these conditions occur sporadically, repair is possible. At West Park Presbyterian Church, these conditions are typical and indicate a structurally weakened lead matrix that is no longer weathertight.

Finding: The longevity of the windows is in jeopardy, given their current condition. The windows require, at a minimum, removal for crack repair, re-leading, and re-waterproofing.

## Frames Setting \& Support

The interior wood frames appear in good condition despite chipping paint. The windows were designed to be well supported with support bars every $6 "-12$." Window load and heat build-up in the unvented interspace between the leaded glass and Lexan have put pressure on the windows, and some tie wires (connecting the support bars to the stained glass) have broken. This is not unusual.

The operable sashes (steel ventilators and double-hung wood) contain leaded glass panels set from the exterior. Traditionally, a mechanical fastener (sash clips, glazing pins) fixes the panel into the operable sash. At West Park, in cases where the stained glass has fallen out of the steel central pivot ventilators, there is no visible indication of sash clips or any other type of mechanical fasteners. They may or may not be under the putty bevels. The bevels have dried and cracked. If there are no mechanical fasteners, the motion and shock absorption from the continual use of the ventilators are of concern, as the panels can fall out of the ventilators.

The exterior wood frames show various stages of degradation. Chipped paint has left wood exposed to the elements for extended periods of time. Overall, the wood is salvageable. In a few instances, the exterior wood rot is significant, and the wood requires replacement.

Finding: The frames are salvageable through restoration (including the replacement of specific members). Findings are a result of visual inspection only. The strength of the attachment of the wood frame to stonework and the strength of the individual wood members is unconfirmed.

## Protective Glazing

The windows were covered with Lexan at some point in the past. UV exposure causes Lexan to cloud over time, which is the current condition. Unvented protective glazing allows for heat and moisture build-up, which negatively impacts the longevity of the materials, as evidenced by several articles and studies.

A probe reveals that the Lexan had holes for mechanical fasteners under the caulk joint, but no nails or other mechanical fasteners were found. In the instance of the probe, the Lexan was attached to the stone with caulk only. Some pieces of Lexan across the building show face-nailed screw heads. $60 \%$ of caulk holding in Lexan has visibly failed (caulk has cracked, is falling off in strips, or has separated from either the Lexan or the frame). Eight Lexan panels have fallen off completely.

Finding: The method of attachment of the Lexan has failed. The current condition of the caulk cannot be counted upon to remain intact. A caulk-only attachment is no longer considered best practice.

## Recommended Treatment

IMMEDIATE PRIORITY: The tower windows are in the worst condition and are of concern. The tower windows should be removed immediately, and the window openings closed with a weatherproof board-up until the leaded glass can be restored and returned to the building. There are large portions of missing glass, and the remaining glass is not secure. Missing areas have been covered with either plastic or chicken wire, which allows water infiltration. The tower has missing window stools, and the wood frames are shored with lumber angled against the interior wood tower. The tower is covered in guano, and there are the remains of dead birds. PPE, including respirators, should be utilized inside the tower.

Treatment for the balance of the stained and leaded glass windows at West Park Presbyterian has been carefully considered. Due to the current condition of the windows, the only way to ensure the windows survive for future generations is by conducting the conservation and restoration scope as listed below as soon as possible. Please note that much historic glass and materials are already lost, so intermediate remediation will not ensure the long-term survival of the windows. The recommended treatment includes removing the stained and leaded glass panels for treatment and restoring the wood frames.

The previously poor replacement pieces can be replaced with more sympathetic materials. This option should be considered in specific sanctuary windows to return the balance to the scheme. This option has been priced. Adding laminated glass protective glazing into the restored wood frames is an additional alternative, priced with the option for internal ventilation. Internal ventilation is the best tool we currently have at our disposal to safeguard the longevity of stained glass. Mounting the laminated glass into the restored wood frames would reveal the woodwork
as intended and set the protective glazing in the same approximate plane as the historic windows. ${ }^{1}$

The recommended scope of work for the windows is as follows:

1. Label and photograph the window prior to the commencement of work.
2. Remove sashes/stained glass from frames for studio treatment.
3. Provide temporary weatherproofed blocking in window openings.
4. Pack and transport stained glass to studio.
5. Conduct in-studio documentation.
6. Dismantle windows.
7. Clean, treating all paint as fragile paint.
8. Repair broken glass and replace missing pieces.
9. Assume $100 \%$ releading for all windows. Re-lead and re-waterproof.
10. Restore wood window frames, prime and paint/finish.
11. Reinstall stained glass.

## ADD ALTERNATES:

1. Replacement of previous poor replacement pieces with appropriate glass.
2. Install new $1 / 4 "$ laminated glass protective glazing into the existing wood window frame.
3. Modify frames to allow for internal ventilation. Assume discreet drilling of interior frame/molding to allow for internal ventilation (4 per light).
4. Custom steel ventilators to accommodate stained glass and protective glazing while allowing operability.

## Budgets

Liberty Stained Glass Conservation coordinated with Patrick Baldoni of Femenella \& Associates and Zach Greene of the Gil Studio to provide the following budget. The budget only pertains to the above scope and does not include scaffolding, permits, abatement, engineering, or general conditions. This budget is meant to serve as information for finance purposes only.

[^0]| North Façade | Budget |  |  |  |
| :--- | ---: | :---: | :---: | :---: |
| Stained Glass Conservation | $\$ 204,760$ |  |  |  |
| Wood Restoration | $\$ 195,021$ |  |  |  |
| Base Scope Subtotal | $\mathbf{\$ 3 9 9 , 7 8 1}$ |  |  |  |
|  |  |  |  |  |
| ADD ALT Protective Glazing | $\$ 59,339$ |  |  |  |
| ADD ALT Replacement Pieces | $\$ 13,873$ |  |  |  |
| ADD ALT Subtotal | $\mathbf{\$ 7 3 , 2 1 2}$ |  |  |  |
| Total |  |  |  | $\mathbf{\$ 4 7 2 , 9 9 3}$ |


| East Façade | Budget |  |  |  |
| :--- | ---: | :---: | :---: | :---: |
| Stained Glass Conservation | $\$ 18,514$ |  |  |  |
| Wood Restoration | $\$ 29,256$ |  |  |  |
| Base Scope Subtotal | $\mathbf{\$ 4 7 , 7 7 0}$ |  |  |  |
|  | $\$ 9,750$ |  |  |  |
| ADD ALT Protective Glazing | $\$ 0$ |  |  |  |
| ADD ALT Replacement Pieces | $\mathbf{\$ 9 , 7 5 0}$ |  |  |  |
| ADD ALT Subtotal |  |  |  |  |
| Total |  |  |  | $\mathbf{\$ 5 7 , 5 2 0}$ |


| ADD ALT Item | Budget |  |  |  |
| :--- | ---: | :---: | :---: | :---: |
|  <br> internal ventilation | $\$ 209,469$ |  |  |  |
|  | $\$ 60,450$ |  |  |  |
| Replacement Pieces |  |  |  |  |
|  | $\$ 64,625$ |  |  |  |
| Custom ventilators (est. 35) <br> (Estimated cost per vent, \$1,875) | 0 |  |  |  |
| Total |  |  |  | $\mathbf{\$ 3 3 4 , 5 4 4}$ |

## BUILDING DESCRIPTION

| Building Name: | West Park Presbyterian Church |
| :--- | :--- |
| Address: | 165 W. 86th Street, New York, NY |
| Building Type: | Romanesque Revival |
| Building Date: | $1884 / 1890$ |
| Architect: | Leopold Eidlitz/Henry Franklin Kilburn |

## SURVEY DATA

Examiner:

Examination Date:

Window Locations:

Weather:

Point of view:

Brianne Van Vorst

Thursday September 22, 2022

Sanctuary, organ loft, parish house

Overcast, rainy, 70

The majority of windows were viewed from the ground-level interior and exterior. The sidewalk bridge was accessed to review the second-story of the church and parish house.

## WEST PARK PRESBYTERIAN CHURCH STAINED GLASS CONDITION SURVEY

IDENTIFICATION

| Studio/Artist | The only known studio/artist is Tiffany Studios (window E 1). E1 |
| ---: | :--- |
| is not included in this survey. |  |

SUBJECT MATTER \& INSCRIPTIONS
S11: 'THE GIFT OF THE LIGHTBEARERS SOCIETY / THE ENTRANCE OF THEY WORD GIVETH LIGHT'

N8: 'PRESENTED BY THE SEEKERS FOR PEARLS / IN THE Inscription YEAR OF OUR LORD MDCCCXC'
Significance The windows are indicative of late 19th century style.

DIMENSIONS (hxw)

| Window Type | Various: see elevations. Most windows are roman arches, with <br> some rectangular and round openings. |
| ---: | :--- |
| Height | Various, see existing conditions table. |
| Width | Various, see existing conditions table. |

FRAME, SETTING \& VENTS

| Interior surround material | Plaster |
| ---: | :--- |
| Surrounding material condition | Cracks and collapsed areas of plaster observed, peeling paint. |
| Frame type | All of the windows are set in wood frames, some with central <br> pivoting steel ventilators (refer to window schedule). |
| Interior frame condition | Generally satisfactory. |
| Interior or Exterior set | Interior |
| Setting material | None visible, presumably putty. |
| Evidence of past intervention | Lexan was added to the exterior frames at some point in the past. |
| Notes | A masonry professional/engineer should evaluate the visible and <br> underlying stonework. |

## SUPPORT BARS

$$
\begin{array}{r|l}
\hline \text { Number of T-bars } & 0 \\
\hline \text { T-bar material } & \text { N/A } \\
\hline \text { T-bar size/profile } & \text { N/A } \\
\hline \text { T-bar condition } & \text { N/A } \\
\hline
\end{array}
$$

| T-bar putty bevel location, condition | N/A |
| ---: | :--- |
| Number of saddle bars | Various, on average every 6-12" |
| Saddle bar material | Steel |
| Saddle bar size/profile | Various sizes and profiles ranging from 1/4"-1", flat and round |
| Saddle bar condition | Almost all exhibit rust on the interior. |
| Method of bar attachment/condition | The round bars are connected with tie wires, some are broken or <br> unattached (untwisted). The flat bars were soldered to the panels. <br> The solder connections are typically attached. |
| Evidence of past intervention | The different profiles and setting methods of the bars suggests <br> that bars were added over time. |
| Additional notes | The windows were designed with many support bars and <br> additional bars were added over time. |


| GLASS |  |
| ---: | :--- |
| Glass types | Opalescent, cathedral, window glass, |
| Glass additions | Cast and chipped jewels, spun roundels. |
| Plating | None visible at the time of survey. |
| Percentage of pieces broken | Various, see existing conditions table. |
| Description of damage | Typical untreated breaks. |
| Number of pieces missing | Various, see existing conditions table. |
| Description of dirt | Various, see existing conditions table. |
| Presence of biological growth | None. |
| Presence of surface phenomena | None visible on the interior. There is minor surface phenomena <br> on the exterior of the north-facing parish house windows. |
| Evidence of past intervention | There are lead repairs, both true repairs and strap leads that cover <br> the break but do not stabilize it. |
| Additional notes | Many pieces of glass have been replaced in the past, and were <br> cold painted to match the surrounding, historic glass. There are <br> missing pieces of glass. |

## SURFACE DECORATION

| Paint types | Grisaille, cold paint |
| :--- | :--- |

Location of paint Interior, Face 1
Other decoration None
Paint condition Cracking, flaking
Evidence of past intervention Adding the cold paint can be considered an intervention.
Additional notes There is minimal use of glass paint, only in the inscriptions as noted above.

| MATRIX |  |
| :---: | :---: |
|  | Came metal Lead $^{\text {d }}$ |


| Came condition | The came is brittle and there are instances of cracked came and <br> solder joints. The exterior of the windows were difficult to <br> observe through the clouded Lexan covering. |
| ---: | :--- |
| Lead Carbonate | Nearly $40 \%$ of interior matrices showed lead carbonate. The <br> exterior areas which were visible also showed lead carbonate. |
| Bowing | Yes, bowing is generally mild-moderate throughout the scheme. <br> Note that the matrix is pliable. |
| Evidence of past intervention | Lead repairs. |
| Additional notes | Lead carbonate can become friable and should be handled <br> properly. |

## MATRIX WATERPROOFING MATERIAL

Waterproofing material description Gray Waterproofing material condition Brittle, leaching out, lost in areas. Evidence of past intervention None

Notes Without the Lexan coverings, the windows would leak.

## EXTERIOR

| Exterior stone condition | There are areas of missing stone, spalling, delamination and <br> erosion. |
| :--- | :--- |
| Exterior of the stained glass condition | The majority of window exteriors were not visible due to the <br> clouded Lexan covering. A few of the ventilator panels were <br> visible, due to lost Lexan. Those panels show leaching <br> waterproof putty and degradation of the lead cames. |
|  | Unsatisfactory. The steel ventilators are rusted. The wood frames <br> and trim are exposed due to lost paint. The visible wood is <br> splintered and shows areas of water damage. The setting putty <br> around the panels in the ventilators is cracked and partially lost. |
| Exterior frame condition |  |
| Evidence of past intervention | No obvious signs of repairs. |
| Notes | None |


| PROTECTIVE GLAZING/COVERING (CLEAR WINDOW GLAZING) |  |
| ---: | :--- |
| Protective covering type | Lexan |
| Protective covering condition | The Lexan has clouded over time due to exposure to UV light, <br> rendering it semi-opaque. |
| Protective covering setting method | Some of the Lexan appears to have used a zinc frame, which was <br> then caulked to the wood frame. |
| Evidence of past intervention | The Lexan was added over time. |
| Notes | The Lexan was added in a way to allow for continued operability <br> of the ventilators. There is one instance of steel mesh instead of <br> Lexan. |

West Park Presbyterian Church Existing Conditions Key
Shorthand NR Not reviewed * Windows viewed from distance $>10^{\prime}$ Estimated sizes
West Park Presbyterian Church Sanctuary Existing Conditions


Wstimated sizes

> Estimated breakage E
> Estimated breakage

| $15 \%^{*}$ | 0 | Wood | Fixed | None |
| :---: | :---: | :---: | :---: | :---: |
| $15 \%$ | 25 | Wood | Fixed | None |
| $15 \%^{*}$ | 0 | Wood | Fixed | None |
| $15 \%^{*}$ | 0 | Wood | Fixed | None |
| $10 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $10 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $10 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $10 \%$ | 0 | Wood | Fixed | Plastic |
| $10 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $10 \%$ | 0 | Wood | Fixed | Plastic |
| $10 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $10 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $10 \%$ | 0 | Wood | Fixed/vent | None |
| N/A | N/A | N/A | N/A | N/A |
| $10 \%$ | 1 | Wood | Fixed/vent | Plastic |
| $20 \%$ | 1 | Wood | Fixed/vent | Plastic |
| $20 \%$ | 15 | Wood | Fixed/vent | Plastic |
| $15 \% *$ | 0 | Wood | Fixed | Wire Guards |
| $150^{*}$ | NR | Wood | $2 x$ hung | None |
| $15 \% 0^{*}$ | NR | Wood | Fixed | Plastic |
| $15 \% 0^{*}$ | NR | Wood | $2 x$ hung | None |
| $20 \%$ | 25 | Wood | Dead | None |
| $12 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $25 \%$ | 50 | Wood | Fixed/vent | Plastic |
| $10 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $10 \%$ | 0 | Wood | Fixed | Plastic |
| $10 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $10 \%$ | 0 | Wood | Fixed | Plastic |
| $10 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $15 \%$ | 1 | Wood | Fixed/vent | Plastic |
| $15 \%$ | 0 | Wood | Fixed/vent | Plastic |
| $20 \%$ | 50 | Wood | Fixed | None |
| NR | NR | Steel | Fixed | N/A |
| $20 \%$ | 50 | Wood | Fixed | None |
|  |  |  |  |  |


| No． | Type | Size（wxh）＊ |
| :---: | :---: | :---: |
| PHN 1＊ | PHN Register 1 | 18＂x55＂＊ |
| PHN 2＊ | PHN Register 1 | 18＂x55＂＊ |
| PHN 3＊ | PHN Register 1 | 18＂x55＂＊ |
| PHN 4＊ | PHN Register 1 | 18＂x55＂＊ |
| PHN 5＊ | PHN Register 1 | 18＂x55＂＊ |
| PHN 6＊ | PHN Register 2 | 18＂x72＂＊ |
| PHN 7＊ | PHN Register 2 | 18＂x72＂＊ |
| PHN 8＊ | PHN Register 2 | 18 |
| PHN 9＊ | PHN Register 2 | 18＂x72＂＊ |
| PHN 10＊ | PHN Register 2 | 18＂x72＂＊ |
| PHN 11＊ | PHN Register 2 | 18＂x72＂＊ |
| PHN 12 | PHN Register 3 | 18＂x55＂＊ |
| PHN 13 | PHN Register 3 | 18＂x55＂＊ |
| PHN 14 | PHN Register 3 | 18＂x55＂＊ |
| PHN 15 | PHN Register 3 | 18＂x55＂＊ |
| PHN 16 | PHN Register 3 | 18＂x55＂＊ |
| PHN 17 | PHN Register 3 | 18＂x55 |
| PHS 1 | PHS Door | 48＂x36＂＊ |
| PHS 2＊ | PHS Façade | 12＂x42＂＊ |
| PHS 3＊ | PHS Façade | 12＂x42＂＊ |
| PHS 4＊ | PHS Façade | 12＂x42＂＊ |
| PHS 5＊ | PHS Façade | 12＂x42＂＊ |
| PHS 6＊ | PHS Façade | 12＂x42＂＊ |
| PHS 7＊ | PHS Façade | 12＂x42＂＊ |
| PHS 8 | PHS Façade | 7＂x76＂＊ |
| PHS 9 | PHS Façade | 42＂x120＂＊ |
| PHS 10 | PHS Façade | 48＂x138＂＊ |
| PHS 11 | PHS Façade | 42＂x120＂＊ |
| PHS 12＊ | PHS Façade | 42＂x36＂＊ |
| PHS 13＊ | PHS Façade | 42＂x32＂＊ |

No．

$$
\begin{gathered}
\hline \text { Protection } \\
\hline \text { None } \\
\hline \text { None } \\
\hline \text { None } \\
\hline \text { None } \\
\hline \text { None } \\
\hline \text { Plastic } \\
\hline \text { None } \\
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\hline \text { None } \\
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\hline \text { None } \\
\hline \text { Plastic } \\
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\hline \text { Plastic } \\
\hline \text { N/A } \\
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\hline \text { Plastic } \\
\hline \text { Plastic } \\
\hline \text { NR } \\
\hline \text { None } \\
\hline
\end{gathered}
$$

Size (wxh)*

$$
\begin{aligned}
& \begin{array}{|c}
\text { Matrix } \\
\hline \text { Lead } \\
\hline \text { Lead } \\
\text { Lead } \\
\text { Lead } \\
\hline \text { Lead } \\
\hline \text { Lead } \\
\hline \text { Lead } \\
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\hline \text { N/A } \\
\hline \text { N/A } \\
\hline \text { Lead } \\
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\hline \text { Lead } \\
\hline \text { Lead } \\
\hline \text { Lead } \\
\hline \text { NR } \\
\hline \text { N/A } \\
\hline
\end{array}
\end{aligned}
$$

## Organ Screen Window: Tiffany Studios



The War Memorial Window, depicting Christ Blessing the Children, was executed by Tiffany Studios in 1929. The window is dedicated to the sons of the church who sacrificed their lives in WWI (New York Times [27 May 1929, p. 25]).

The window was viewed from the back only. It is heavily plated and has a steel subframe to support it. The exterior side of the window did not show bowing or breakage. An up-close inspection of the window is needed.

## Materials



The windows at West Park Presbyterian Church and Parish House use various colors of opalescent (left), cathedral (center) and antique glasses (right). The clouded exterior Lexan coverings create a semi-opaque appearance, even in the transparent glasses. All of the windows were made with lead matrices.


Detail from windows S9, PHS 9, and PHS 10. The window scheme uses chipped jewels in the sanctuary (left), cast jewels (center), and spun roundels (right) in the Parish House. Jewels and roundels were often seen in 19th-century windows and were a notable inclusion. They were more expensive than glass.

## Condition, Glass

There are many untreated breaks, broken pieces that have been totally are partially lost and evidence of previous repairs.


Detail from window S 12 where a piece of glass and the surrounding matrix have been lost. The pieces are unstable.


Detail of a poor repair in window S 13. The replacement glass is not a good match to the surrounding material.


Detail illustrating several lost and unstable glass pieces in window S 13.


Detail of typical strap lead in window W 15. Strap leads are not true repairs, they merely cover the break. www.libertysgc.com

## Condition, Tower

The tower windows are in particularly bad condition. Portions of the windows have been lost. The openings have been secured with plastic or chicken wire, but that does not stabilize the panels above.


An opening with missing leaded glass that has been secured with plastic and chicken wire. This is not weather tight, and water is infiltrating the tower.


Detail of frame slippage. The top of the frame is no longer holding in the window.


This remaining panel in danger of falling out. There is nothing supporting it from the bottom.


The frame appears to be shored by $2 \times 2$ lumber. The stone stool has been lost on the interior. The window
frame is in danger of falling out of the setting.

## Condition, Glass Paint/Decoration



Detail from window S 11. The grisaille (glass paint) shows scratch marks and speckled losses. Cold paint (unfired paint) was applied to the inscription pieces, likely to camouflage the failures of the glass paint. The glass paint should be assumed fragile and handled with care until further testing is conducted.


Nearly all of the sanctuary windows have been treated with cold paint. It was likely used as a darkening agent to mask bright light and to darken the extensive replacement pieces to blend in with the historic glass. Cold paint, like all material, degrades over time. The cold paint is patchy and has been affected by age and condensation.

## Condition, Lead



Details of windows S 13 (left) and W 11 (right) showing lead carbonate, a white powdery substance, on the interior lead matrix. Lead carbonate is a by-product of advanced oxidation. It can become friable and should be considered dangerous. The lead has become brittle and is breaking in areas. This condition occurs in $40 \%$ of the interiors of the windows.


Details of window W 10. Note the lead carbonate, brittle lead came and bowing of the matrix.

732-462-2863

## Condition, Interior Setting



Detail of lost, cracked and damaged plaster in window N 1 .


Detail of PHN (Register 1) showing watermarks on the interior of the sash and chipping paint.


Detail of window S 9 showing chipping interior paint which is typical across the building.

## Condition, Exterior Setting



Details illustrating typical exterior wood and steel conditions. The paint has chipped away exposing bare wood and steel. The steel ventilators have rusted.


Stone spalling and delamination on the exterior of the West facade. The window sills have eroded.

## Condition, Exterior Setting



Many panels have been removed to accommodate air condition units across the building. Note the pieces of stone which have fallen on the sidewalk bridge.


Pieces of the wood sashes and Lexan framing are in danger of falling on the northern side of the parish house. The caulk adhering the Lexan has failed and the Lexan is unstable.

## APPENDIX 1

CONTRACTOR BUDGET SHEETS
West Park Presbyterian Church Contractor Budget Sheets

| No. | Size | Scope SG | SG \$ | Scope Frame | Frame \$ | Scope PG | PG \$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W-1 | $\begin{gathered} 151 / 4 " \times 371 / 2^{\prime \prime} \\ \text { each } \end{gathered}$ | In situ cleaning, repair | \$1,047 | None | N/A | N/A | N/A |
| W-2 | $\begin{gathered} 271 / 4^{\prime \prime} \times 371 / 2^{\prime \prime} \\ 30 " \mathrm{x} 20^{\prime \prime} \text { (transom) } \end{gathered}$ | Remove for conservation | \$5,803 | None | N/A | N/A | N/A |
| W-3 | 30"x20" (transom) | Remove for conservation | \$3,211 | None | N/A | N/A | N/A |
| W-4 | $\begin{gathered} 27 \text { 1/4" x } 371 / 2^{\prime \prime} \\ 30^{\prime \prime \times 20^{\prime *}} \text { (transom) } \end{gathered}$ | Remove for conservation | \$5,803 | None | N/A | N/A | N/A |
| W-5 | N/A | N/A | \$0 | N/A | N/A | N/A | N/A |
| W-6 | $45 / 8^{\prime \prime} \times 42^{\prime \prime}$ | In situ cleaning | \$562 | Strip, Restore, Repaint | \$1,560 | 1/4" laminated glass | \$704 |
| W-7 | $45 / 8^{\prime \prime} \times 42^{\prime \prime}$ | In situ cleaning | \$562 | Strip, Restore, Repaint | \$1,560 | 1/4" laminated glass | \$704 |
| W-8 | $\begin{gathered} 16^{\prime \prime} \times 36^{\prime \prime} \\ 59^{\prime \prime} \times 30 \text { (fan) } \\ \hline \end{gathered}$ | Remove for conservation | \$7,781 | Strip, Restore, Repaint | \$2,976 | 1/4" laminated glass, fan light only | \$1,530 |
| W-9 | $\begin{gathered} 25^{\prime \prime} \times 36^{\prime \prime} \\ 76^{\prime \prime} \times 40^{\prime \prime} \text { (fan) } \end{gathered}$ | Remove for conservation | \$13,510 | Strip, Restore, Repaint | \$5,264 | 1/4" laminated glass, fan light only | \$3,336 |
| W-10 | $\begin{gathered} 16 " \mathrm{x} 36^{\prime \prime} \\ 59 \text { " } \times 30^{\prime *} \text { (fan) } \\ \hline \end{gathered}$ | Remove for conservation | \$7,781 | Strip, Restore, Repaint | \$2,977 | 1/4" laminated glass, fan light only | \$1,530 |
| W-11 | $45 / 8^{\prime \prime} \times 42^{\prime \prime}$ | Remove for conservation | \$946 | Strip, Restore, Repaint | \$2,268 | 1/4" laminated glass | \$704 |
| W-12 | $45 / 8^{\prime \prime} \times 42^{\prime \prime}$ | Remove for conservation | \$946 | Strip, Restore, Repaint | \$2,268 | 1/4" laminated glass | \$704 |
| W-13* | 12"x24" (per light) | Remove for conservation | \$946 | Strip, Restore, Repaint | \$2,268 | 1/4" laminated glass | \$704 |
| W-14 | 60"x238" overall | Remove for conservation | \$57,502 | Strip, Restore, Repaint | \$39,438 | 1/4" laminated glass | \$11,672 |
| W-15 | 83"x263" overall | Remove for conservation | \$83,918 | Strip, Restore, Repaint | \$48,294 | 1/4" laminated glass | \$17,850 |
| W-16 | 60"x238" overall | Remove for conservation | \$57,502 | Strip, Restore, Repaint | \$39,438 | 1/4" laminated glass | \$11,672 |


| W-17* | 12"x24" (per panel) | Remove for conservation | \$946 | Strip, Restore, Repaint | \$2,268 | 1/4" laminated glass | \$704 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W-18 | 10" x 360" per light | Remove for conservation | \$18,514 | Restore and paint | \$29,256 | 1/4" laminated glass | \$9,750 |
| W-19* | 18"x36" per panel | Remove for conservation | \$1,046 | Strip, Restore, Repaint | \$2,568 | 1/4" laminated glass | \$1,004 |
| W-20* | $\begin{gathered} 24 " \times 60 " * \text { per } \\ \text { light } \end{gathered}$ | Remove for conservation | \$1,925 | Strip, Restore, Repaint | \$2,294 | 1/4" laminated glass | \$704 |
| S 1 | 24" x 36" | Remove for conservation | \$6,117 | Strip, Restore, Repaint | \$4,200 | 1/4" laminated glass | \$900 |
| S 2 | $24^{\prime \prime} \times 36{ }^{\prime \prime}$ | Remove for conservation | \$6,117 | Strip, Restore, Repaint | \$4,200 | 1/4" laminated glass | \$900 |
| S 3 | 12"x24" | Remove for conservation | \$2,057 | Strip, Restore, Repaint | \$1,898 | 1/4" laminated glass | \$704 |
| S 4 | 12"x24" | Remove for conservation | \$2,057 | Strip, Restore, Repaint | \$1,898 | 1/4" laminated glass | \$704 |
| S 5 | 12"x24" | Remove for conservation | \$2,057 | Strip, Restore, Repaint | \$1,898 | 1/4" laminated glass | \$704 |
| S 6 | 12"x24" | Remove for conservation | \$2,057 | Strip, Restore, Repaint | \$1,898 | 1/4" laminated glass | \$704 |
| S 7 | 12"x24" | Remove for conservation | \$2,057 | Strip, Restore, Repaint | \$1,898 | 1/4" laminated glass | \$704 |
| S 8 | 24" x 40" | Remove for conservation | \$6,630 | Strip, Restore, Repaint | \$4,574 | 1/4" laminated glass | \$1,037 |
| S 9 | 24" x 40" | Remove for conservation | \$6,630 | Strip, Restore, Repaint | \$4,574 | 1/4" laminated glass | \$1,037 |
| S 10 | No visible glazing | $N / A$ | $N / A$ | $N / A$ | $N / A$ | $N / A$ | $N / A$ |
| S 11 | 22"x96" per light | Remove for conservation | \$8,171 | Strip, Restore, Repaint | \$6,594 | 1/4" laminated glass | \$2,383 |
| S 12 | 168" diameter | Remove for conservation | \$73,050 | Strip, Restore, Repaint | \$45,890 | 1/4" laminated glass | \$25,334 |
| S 13 | 22"x96" | Remove for conservation | \$8,171 | Strip, Restore, Repaint | \$6,594 | 1/4" laminated glass | \$2,383 |


| S 14* | 12"x24" per light | Remove for conservation | \$7,956 | Strip, Restore, Repaint | \$12,578 | 1/4" laminated glass | \$2,255 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S 15* | NR | Remove for conservation | \$946 | Strip, Restore, Repaint | \$2,268 | 1/4" laminated glass | \$704 |
| S 16* | NR | Remove for conservation | \$947 | Strip, Restore, Repaint | \$2,269 | 1/4" laminated glass | \$705 |
| S 17* | NR | Remove for conservation | \$948 | Strip, Restore, Repaint | \$2,270 | 1/4" laminated glass | \$706 |
| S 18 | $10^{\prime \prime} \times 360$ " per light | Remove for conservation | \$18,514 | Restore and paint | \$29,256 | 1/4" laminated glass | \$9,750 |
| N 1 | 24" x 36" | Remove for conservation | \$6,221 | Strip, Restore, Repaint | \$2,984 | 1/4" laminated glass | \$1,537 |
| N 2 | 24 " x 36" | Remove for conservation | \$6,776 | Strip, Restore, Repaint | \$2,984 | 1/4" laminated glass | \$1,590 |
| N 3 | 12"x24" | Remove for conservation | \$1,925 | Strip, Restore, Repaint | \$2,294 | 1/4" laminated glass | \$704 |
| N 4 | 12"x24" | Remove for conservation | \$1,925 | Strip, Restore, Repaint | \$2,294 | 1/4" laminated glass | \$704 |
| N 5 | 12"x24" | Remove for conservation | \$1,925 | Strip, Restore, Repaint | \$2,294 | 1/4" laminated glass | \$704 |
| N 6 | 12"x24" | Remove for conservation | \$1,925 | Strip, Restore, Repaint | \$2,294 | 1/4" laminated glass | \$704 |
| N 7 | 12"x24" | Remove for conservation | \$1,925 | Strip, Restore, Repaint | \$2,294 | 1/4" laminated glass | \$704 |
| N 8 | 23"x96" per light | Remove for conservation | \$7,693 | Strip, Restore, Repaint | \$4,620 | 1/4" laminated glass | \$2,016 |
| N 9 | 168" diameter | Remove for conservation | \$73,050 | Strip, Restore, Repaint | \$45,890 | 1/4" laminated glass | \$25,334 |
| N 10 | 10" x 360' per light | Remove for conservation | \$18,514 | Restore and paint | \$29,256 | 1/4" laminated glass | \$9,750 |
| E 1* | NR | NR | NR | NR | N/R | NR | N/R |
| E 2 | $10^{\prime \prime} \times 360$ " per light | Remove for conservation | \$18,514 | Restore and paint | \$29,256 | 1/4" laminated glass | \$9,750 |


| PHS 1 | $48^{\prime \prime x} 6^{\prime \prime}$ | Remove for <br> conservation | $\$ 5,174$ | Touch up paint as needed | 1/4" laminated glass, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| fan light only |  |  |  |  |  | \$785


| PHN 5* | 18"x55" | Remove for conservation | \$6,406 | Strip, Restore, Repaint | \$8,220 | None | \$1,122 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHN 6* | 18"x72" | Remove for conservation | \$7,428 | Strip, Restore, Repaint | \$9,452 | None | \$1,663 |
| PHN 7* | 18"x72" | Remove for conservation | \$7,428 | Strip, Restore, Repaint | \$9,452 | None | \$1,663 |
| PHN 8* | 18"x72" | Remove for conservation | \$7,428 | Strip, Restore, Repaint | \$9,452 | None | \$1,663 |
| PHN 9* | 18"x72" | Remove for conservation | \$7,428 | Strip, Restore, Repaint | \$9,452 | None | \$1,663 |
| PHN 10* | 18"x72" | Remove for conservation | \$7,428 | Strip, Restore, Repaint | \$9,452 | None | \$1,663 |
| PHN 11* | 18"x72" | Remove for conservation | \$7,428 | Strip, Restore, Repaint | \$9,452 | None | \$1,663 |
| PHN 12 | 18"x55" | In situ cleaning | \$1,047 | None | N/A | None | N/A |
| PHN 13 | 18"x55" | In situ cleaning | \$1,047 | None | N/A | None | N/A |
| PHN 14 | 18"x55" | In situ cleaning | \$1,047 | None | N/A | None | N/A |
| PHN 15 | 18"x55" | In situ cleaning | \$1,047 | None | N/A | None | N/A |
| PHN 16 | 18"x55" | In situ cleaning | \$1,047 | None | N/A | None | N/A |
| PHN 17 | 18"x55" | In situ cleaning | \$1,047 | None | N/A | None | N/A |

## APPENDIX 2

## REPLACEMENT GLASS COST BREAKDOWN

Replacement Piece Cost Breakdown

| West |
| :--- |
| Size (wxh) |
| Replacement | Estimated Cost

## E. Façade - Probe Report

The attached report by Façade MD provides the results of probes taken in October and November 2022. The probe analysis found that the tie bars anchoring the façade stones to the backing brick wall are deteriorated, and are providing little, if any, structural support. Façade MD recommends replacing these metal anchors throughout the façade.

April 12, 2023

Probes were performed on October 31, November $14^{\text {th }}$ and $17^{\text {th }}$ of 2022 in accordance with LPC Permit \# PMW-23-03714 dated 10/21/22.

Probe locations were chosen to learn more about the existing construction and condition of the wall at various details.

Non-destructive sounding was performed at and prior to the performance of each of the four masonry probe locations by Façade MD on October 13th. The sounding was documented in video and audio and resulted in varying degrees of soundness across each of the probe areas. This information was compared with the visual results of the probes.

Non-destructive testing was performed by Atkinson-Noland \& Associates on October 31st at each of the four probe locations prior to the physical probing. The non-destructive testing included infrared (thermal), metal detecting, surface penetrating radar and visual verification of anchor locations with a borescope. The infrared and metal testing were unable to detect the presence of anchors.

Surface penetrating radar detected anomalies within the horizontal mortar joints. These anomalies were then further investigated by drilling holes into the mortar joint at each anomaly location, so that a borescope could be inserted for visual verification of anchors at those locations. The borescope identified metal anchors at many of these anomaly locations, but the condition of the anchors was unclear until the anchors were exposed when the stones were removed.

Mortar was drilled and/or cut around stones to remove the stones at each probe location.
The results of the probes are as follows:
Though the surface penetrating radar was able to identify likely locations of several anchors, the condition of the anchors and the connection of the anchors with the veneer stone and back-up masonry was not clear until the stones were removed and the anchors exposed for visual examination. The original construction appears to have included anchors securing the veneer stone to the masonry back-up periodically, and inserted into kerf cuts at the top of selected veneer stones.

General observations from non-destructive testing and physical probes:
Facing stones are between 4 " and 5 " in depth.
Though wall anchors were originally installed to bond the facing stone with the brick backup wall, they were often not engaged with the facing stone or have deteriorated to the point of not adding any bonding value to the wall.

Of the anchors that were present, none were serving as intended. All anchors observed were either corroded, or not engaged in the stone kerf. The extent of corrosion at many anchors obviously provides far lower than the intended lateral restraint capacity. This is also an indication that water is penetrating the mortar joints and traveling vertically down the back of the stones. It is likely that moisture traveling between the back of the stones and the face of the backup freezes and expands, breaking the bond of mortar between the back of the stones and the brick back-up wall. This is likely the cause of many of the unsatisfactory sounding readings.

There is also little surface and/or planar roughness between the back side of the veneer stones and the back-up wall, allowing minimal frictional or mechanical bond between the masonry layers of the wall. We believe that new anchors need to be installed at approximately 2 ' on center to secure the veneer layer of stone to the backup wall, at all stone-faced facades.

The exact configuration of the anchors would be determined through design and submission to the LPC. For purposes of this exercise, we believe a reasonable assumption is that new anchors need to be installed at 2' on center. Though the current code requires that each and every veneer stone be anchored directly to the backup, which would necessitate either the removal and resetting of all stones or installation of anchors through each stone in-situ. For purposes of this exercise, we believe an acceptable improvement could be achieved by installing anchors into the stone joints and adhered into the backup wall, minimizing the aesthetic effect to the exterior landmark. Approximately 3,700 anchors will need to be installed.

In addition to this, the probes yielded the following information at particular locations:
Probe 1 demonstrated that this area of façade appears to have been built concurrently with the backup brick wall and not simply refaced, when the church was constructed.

Probe 2 demonstrated that the facing stone was constructed with the brick back-up wall. The brick backup wall is approximately 16 inches thick. This is the location of a prior probe.

Probe 3 demonstrated that the back-up wall varies from $16^{\prime \prime}$ to $21^{\prime \prime}$ deep. This probe was performed at the side of the wood window surround, which was only attached to the masonry with finishing nails. We believe the window surrounds should be supplementally fastened to the masonry backup wall at all windows.

Lateral loads, most usually from positive and negative wind loads applied to the stained-glass windows, are transferred to the masonry wall at the perimeter. Window perimeters are of wood that is attached to the masonry backup wall only with light gauge nails, which support the windows through shear. It appears that additional anchorage needs to be added to the perimeter of the windows, to transfer the lateral load to the masonry more effectively. If protective glazing is to be installed on the exterior side of the windows, it would be best not to depend on the window, but the masonry surrounding the window, to support the lateral and horizontal loads placed on the windows. These improvements should be included in the Stained Glass Window scope of repairs.

Probe 4 demonstrated that though the anchor located in the deep window return appeared to be adequate condition, it was not set into the stone kerf properly. Also, the mortar at the back side of the stone was not adhered to the stone.

Very truly yours,

Richard W. Lefever, PE, LEED AP President

Nen

New York, NY 10001



1-Probe 1


3 - Probe 1


2 - Probe 1


4 - Probe 1


5 - Probe 1


6 - Probe 1


Facade Probes


7 - Probe 2


9 - Probe 2


11 - Probe 2


8 - Probe 2


10 - Probe 2


12 - Probe 2


17 - Probe 3


19 - Probe 3


21 - Probe 4


18 - Probe 3


20 - Probe 3


22 - Probe 4

Ardritedetife and Êngmgernig, rPC

## F. Revised Restoration Costs

The attached revised analysis of restoration costs, prepared by LBG, incorporates the additional costs from the new reports included with this submission: the Severud estimate for stabilizing the north and south walls and the Liberty Stained Glass Conservation estimate for restoring the windows. LBG's estimate also includes a revised estimate for façade restoration, based on the 2011 analysis prepared by Sciame Construction. Sciame's scope of work and materials quantities have been updated based on current materials costs.

The LBG estimate presents four different scenarios: the Church remaining in the Building; a conversion of the Building to commercial use; a conversion to commercial use with infill of additional floors; and a conversion to residential use.

# HLBG 

Leeding Builders Group, LCC
33 East 33rd Street, 7th Floor
New York, NY 10016

## West Park Presbyterian Church 165 West 86th Street, New York, NY



## Preliminary Budget With Options

Revised April 10, 2023

# Preliminary Budget - Assumptions <br> West Park Presbyterian Church - 165 West 86th Street 

## Estimate was based on the following documents:

FMD Memo to DOB dated November 12, 2021 Amended December 2, 2021
FMD Façade Review Quantities dated December 12, 2021
FMD Memo to DOB re Violation 21-01507Dated November 16, 2021

CCI Accessibility Survey Existing Conditions dated November 11, 2021
CCI Fire Protection and Life Safety Existing Conditions Survey dated November 8, 2021 Revised November 11, 2021

Severud Associates Structural Observation Report Dated November 9, 2021
Severud Associates Structural Observation Report Dated November 16, 2021
Severud Emergency Structural Repair Sketch Dated November 23, 2021

WPPC Existing Church Infill Scenario Upper West Side dated February 17, 2022
FX Collaborative "WPPC Existing Church Facility Area" Dated February 16, 2022

## Assumptions, Qualifications and Exclusions:

FFE work specific to the church, including fire rated stage equipment is excluded All permits are by owner.

Restoration of existing millwork is excluded. It is assumed that any repair work will use new substitutions.
SSM is excluded
Construction hoist is excluded.

No costs are included to meet existing light and air requirements except in allowance for residential use An allowance is included for new insulation to meet energy code and new exterior glazing OVER the existing glass windows.
Note that while we are carrying costs for repairing the façade, there has been no discussion on bringing the building up to code for seismic considerations. Should there be a need to stabilize the masonry bell tower / steeple, there would be considerable costs for structural reinforcement and bracing that are not currently included.

Note the above do not take into account modifications to the existing foundation, slabs or supporting elements that may be required due to the new increase in loading due to change in occupancy.

Preliminary Hard Cost - Summary West Park Presbyterian Church - 165 West 86th Street

| TRADE DESCRIPTION | CCIP | SDI | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Remain Church - <br> Façade <br> Restoration - No <br> Code <br> Improvements | Commercial / Community <br> Facility 'White Box' - Façade Restoration, Code Improvements | Commercial / Community Facility 'White Box' with Infill- Façade Restoration, Code Improvements | Residential Use |
| 024000 - Demo | Y | Y | \$0 | \$1,450,000 | \$1,450,000 | \$3,861,360 |
| 024010 - Abatement | Y | Y | \$0 | \$390,000 | \$390,000 | \$790,000 |
| 033000 - Cast In Place Concrete | Y | $Y$ | \$0 | \$252,000 | \$397,920 | \$2,513,190 |
| 042000 - Masonry | Y | Y | \$0 | \$781,469 | \$781,469 | \$660,903 |
| 043010 - Façade Restoration Scope w/ New Scope | $Y$ | $Y$ | \$13,865,544 | \$13,865,544 | \$13,865,544 | \$13,865,544 |
| 043020 - Window Restoration | $Y$ | Y | \$1,896,376 | \$0 | \$0 | \$0 |
| 043030 - New Egress | Y | Y | \$0 | \$127,500 | \$127,500 | \$127,500 |
| 051000 - Structural Steel | Y | Y | \$0 | \$1,230,000 | \$1,412,400 | \$525,000 |
| 052000 - Misc Metal | $Y$ | Y | \$0 | \$343,163 | \$343,163 | \$217,663 |
| 052010 - Wall Stabilization Per Severud Analysis dated July 22, 2022 | $Y$ | Y | \$1,170,947 | \$1,170,947 | \$1,170,947 | \$1,170,947 |
| 060500 - Structural Repair (Wood Framing / Trusses) | $Y$ | Y | \$0 | \$175,000 | \$175,000 | \$175,000 |
| 061000 - Drywall / Miscellaneous Carpentry / Millwork \& Trim | Y | Y | \$0 | \$3,010,305 | \$3,101,505 | \$100,000 |
| 064000 - Architectural Millwork | Y | Y | \$0 | \$350,000 | \$350,000 | \$0 |
| 072000 - Fireproofing | Y | Y | \$0 | \$100,000 | \$100,000 | \$0 |
| 074000 - Roofing / Waterproofing | Y | Y | \$0 | \$0 | \$0 | \$1,500,000 |
| 081000 - Doors, Frames \& Hardware (furnish only) | Y | Y | \$0 | \$330,000 | \$330,000 | \$8,000 |
| 085000 - New Windows, Louvers, Replacement Windows | Y | Y | \$0 | \$350,000 | \$350,000 | \$445,000 |
| 088000 - Interior Glazing \& Shower Doors | Y | Y | \$0 | \$0 | \$0 | \$0 |
| 093000 - Ceramic and Stone | Y | Y | \$0 | \$48,000 | \$48,000 | \$0 |
| 096000 - Wood Flooring \& Carpet | Y | Y | \$0 | \$75,000 | \$75,000 | \$0 |
| 099000 - Painting | $Y$ | Y | \$0 | \$0 | \$0 | \$0 |
| 101400 - Signage | $Y$ | Y | \$0 | \$25,000 | \$25,000 | \$25,000 |
| 108000 - Specialties | Y | Y | \$0 | \$25,000 | \$25,000 | \$25,000 |
| 500000 Interior Fit out Allowances | Y | Y | \$0 | \$2,468,700 | \$2,833,500 | \$6,029,650 |
| 142000 - Elevators | Y | Y | \$0 | \$200,000 | \$200,000 | \$500,000 |
| 148500 - Scaffolding and Protection | Y | Y | \$0 | \$661,750 | \$661,750 | \$0 |
| 210000 - Fire Protection System | Y | Y | \$0 | \$572,504 | \$651,136 | \$720,170 |
| 220000 - Plumbing | $Y$ | Y | \$0 | \$435,000 | \$489,720 | \$320,000 |
| 230000 - HVAC Piping \& Ductwork | Y | Y | \$0 | \$1,290,000 | \$1,370,256 | \$1,290,000 |
| 260000 - Electrical \& Low Voltage | Y | Y | \$0 | \$859,537 | \$1,023,697 | \$952,913 |
| 265000 -Lighting Fixtures | Y | Y | \$0 | \$74,064 | \$85,008 | \$207,102 |
| 310000 - Excavation / Foundation | $Y$ | Y | \$0 | \$377,000 | \$377,000 | \$1,068,000 |
| 323000 - Site work | $Y$ | Y | \$0 | \$135,000 | \$135,000 | \$135,000 |
| 324000 -Landscaping | Y | Y | \$0 | \$0 | \$0 | \$0 |
| 013504 - Site Security (Allowance) | Y | Y | \$0 | \$330,000 | \$330,000 | \$330,000 |
| 013528 - Site Safety (Excluded) | Y | Y | \$0 | \$0 | \$0 | \$0 |
| FFE - EXCLUDED |  |  | \$0 | \$0 | \$0 | \$0 |
|  |  |  |  |  |  |  |
|  | Trade Subtotals |  | \$16,932,867 | \$31,502,483 | \$32,675,515 | \$37,562,942 |
| General Conditions Costs 13\% |  |  | \$2,201,273 | \$4,095,323 | \$4,247,817 | \$4,883,182 |
| Subtotal |  |  | \$19,134,140 | \$35,597,806 | \$36,923,332 | \$42,446,124 |
| Design Contingency $10 \%$ |  |  | \$1,693,287 | \$3,150,248 | \$3,267,551 | \$3,756,294 |
| Construction Contingency 10\% |  |  | \$1,693,287 | \$3,150,248 | \$3,267,551 | \$3,756,294 |
| Subtotal |  |  | \$22,520,713 | \$41,898,302 | \$43,458,435 | \$49,958,713 |
|  | CCIP | 9.00\% | \$2,026,864 | \$3,770,847 | \$3,911,259 | \$4,496,284 |
| Subtotal |  |  | \$24,547,577 | \$45,669,149 | \$47,369,694 | \$54,454,997 |
| Insurance (Professional/Auto/Offsite/ Pollution) 2.50\% |  |  | \$563,018 | \$1,047,458 | \$1,086,461 | \$1,248,968 |
| Subtotal |  |  | \$25,110,595 | \$46,716,607 | \$48,456,155 | \$55,703,965 |
| Construction Services Fee 4.00\% |  |  | \$900,829 | \$1,675,932 | \$1,738,337 | \$1,998,349 |
| Subtotal |  |  | \$26,011,423 | \$48,392,539 | \$50,194,492 | \$57,702,313 |
| SDI 1.75\% |  |  | \$394,112 | \$733,220 | \$760,523 | \$874,277 |
| Total |  |  | \$26,405,536 | \$49,125,759 | \$50,955,015 | \$58,576,591 |



| Preliminary Budget Detail WPPC 165 86th St 4／10／23 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Quantity | Cost |  | Total | Applies to： |
| 024000 －Demo |  |  |  |  |  |
| 1 Decommission and demo／remove existing elevator | 1.00 Isum | \＄75，000．00 | ／Isum | \＄75，000 | WIR |
| 2 Demo slabs to enlarge elevator shaft（slabs and walls） | 4.00 ea | \＄15，000．00 | ／ea | \＄60，000 | WI |
| 3 |  |  |  |  |  |
| Selective demo for MEP access and installation of all new work．．． | 1.00 allow | \＄250，000．00 | ／allow | \＄250，000 | WI |
| 4 Demo and remove existing boilers | 1.00 Isum | \＄25，000．00 | ／Isum | \＄25，000 | WI |
| 5 Demo（E）Stairs Enlarge Slab openings for new egress stairs（4 $\begin{array}{lllll}\text { levels，} 2 \text { shafts）} & 8.00 \text { ea } & \$ 20,000.00 / \text { ea } & \$ 160,000 & \text { WI }\end{array}$ |  |  |  |  |  |
| 6 Demo and dispose of existing boilers | 2.00 ea | \＄15，000．00 | ／ea | \＄30，000 | WI |
| 7 Misc probe allowance for MEP，structure，etc <br> 8 Demo INTERIOR FINISHES to expose brick and structural truss deficiencies．（Severud 11／16／21 P3 \＃3，4） | 1.00 allow | \＄75，000．00 | ／allow | \＄75，000 | WI |
|  | 1.00 allow | \＄750，000．00 | ／allow | \＄750，000 | WI |
| 9 Partial Demo Existing Stairs for ADA Entrances（per CCI 11／11／21 pg 3） | 1.00 allow | \＄25，000．00 | ／allow | \＄25，000 | WIR |
| 10 |  |  |  |  |  |
| 11 |  |  |  |  |  |
| 12 Demolish all interior slabs from Cellar to Attic | 34517.00 sf | \＄80．00 | ／sf | \＄2，761，360 | R |
| 13 Stabilize Façade to allow for Demo and new slabs | 1.00 allow | \＄1，000，000．00 | ／allow | \＄1，000，000 | R |
| 14 | allow |  | ／allow | \＄0 |  |
|  |  | 024000 －Demo |  | \＄5，211，360 |  |
| 024010 －Abatement |  |  |  |  |  |
| 1 Abatement Allowance（Interior only） | 1.00 Isum | \＄350，000．00 | ／Isum | \＄350，000 | WI |
| 2 Abate existing abandoned boilers | 2.00 ea | \＄20，000．00 | ／ea | \＄40，000 | WIR |
| 3 Abatement for Residential from3／23／22 Estimate | 1.00 allow | \＄750，000．00 | ／allow | \＄750，000 | R |
|  | 0240 10－Abatement |  |  | \＄1，140，000 |  |
| 033000 －Cast In Place Concrete |  |  |  |  |  |
| 1 Concrete infill at slabs at enlarged elevator opening | 4.00 ea | \＄10，000．00 | ／ea | \＄40，000 | WIR |
| 2 Patch Concrete at new egress stair opening | 8.00 Isum | \＄10，000．00 | ／Isum | \＄80，000 | WI |
| 3 Misc MEP opening patching allowance | 1.00 Isum | \＄50，000．00 | ／Isum | \＄50，000 | WI |
| 4 MEP Pads | 1.00 allow | \＄10，000．00 | ／allow | \＄10，000 | WIR |
| 5 New Landings，misc infill（per CCI Report 11／11／21 pg 15） | 1.00 allow | \＄25，000．00 | ／allow | \＄25，000 | WI |
| 6 Pour Ramps for ADA Entrances（per CCI 11／11／21 pg 3） | 1.00 allow | \＄25，000．00 | ／allow | \＄25，000 | WIR |
| 7 （ 7 |  |  |  |  |  |
| Concrete Ramps for ADA GF Access（per CCI 11／11／21 pg 4） | 1.00 allow | \＄17，000．00 | ／allow | \＄17，000 | WIR |
| 8 Concrete Ramps for ADA Sanctuary Access（per CCl 11／11／21 pg |  |  |  |  |  |
| 9 New Slab per＂Preliminary Area Chart＂FX 3／8／22 | 34517.00 gsf | \＄70．00 | gsf | \＄2，416，190 | R |
| 10 Infill Slab on Metal Deck per2／17／22 Infill FX | 3648.00 sf | \＄40．00 | sf | \＄145，920 | 1 |
|  | 033000 －Cast In Place Concrete |  |  | \＄180，000 |  |










## 024000 －Demo

## 024010 －Abatement

1 Abatement Allowance（Interior only）
2 Abate existing abandoned boilers
033000 －Cast In Place Concrete





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| Preliminary Budget Detail WPPC 165 86th St 4/10/23 |  |  |  |  |  |
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| 052010 - Wall Stabilization Per Severud Analysis dated July 22, 2022 |  |  |  |  |  |
|  |  |  |  |  |  |
| 1 Reference LBG Estimate Dated 9/6/22 | 1.00 Isum | \$1,170,947 | / Isum | \$1,170,947.00 | CWIR |
| 2 | 1.00 Isum |  | / Isum | \$0.00 | cWI |
| 052010 - Wall Stabilization Per Severud Analysis dated July 22, 2022 |  |  |  | \$1,170,947 |  |
| 060500 - Structural Repair (Wood Framing / Trusses) |  |  |  |  |  |
| 1 |  |  |  |  |  |
| Allowances for joists and trusses (per Severud 11/16/21 pg 3 \#5) | 1.00 allow | \$150,000.00 | / Isum | \$150,000 | WIR |
| 2 Repair of storage Room Floor (per Severud 11/16/21 \#6) | 1.00 Isum | \$25,000.00 | / Isum | \$25,000 | WIR |
| 3 边 | 1.00 Isum |  | / Isum | \$0 | WI |
| 4 | 1.00 Isum |  | / Isum | \$0 | WI |
| 060500 - Structural Repair (Wood Framing / Trusses) |  |  |  | \$175,000 |  |
| 061000 - Drywall / Miscellaneous Carpentry / Millwork \& Trim |  |  |  |  |  |
| 1 New elevator shaft walls | 1500 sf | \$18.00 | / sf | \$27,000.00 | WI |
| 2 Patching for MEP trades / probes etc | 1 allow | \$100,000.00 | / allow | \$100,000.00 | WI |
| 3 |  |  |  |  |  |
| New Shaft wall for stairs (per CCI report 11/11/21 page 7) | 6720 Isum | \$18.00 | / Isum | \$120,960.00 | WI |
| 4 New doors (Install) (per CCI report 11/11/21 page 7) | 20 Isum | \$500.00 | / Isum | \$10,000.00 | WI |
| 5 New bathroom walls | 0 sf | \$11.00 | / sf | \$0.00 | WI |
| 6 |  |  |  |  |  |
| New cellar framing for new EMR closet, new services and egress | 2650 sf | \$12.00 | / sf | \$31,800.00 | WI |
| 7 Patching of Damage to Existing Plaster | 1 Isum | \$350,000.00 | / Isum | \$350,000.00 | WI |
| 8 Temp Protection Allowance | 1 Isum | \$75,000.00 | / Isum | \$75,000.00 | WI |
| 9 New Rated Ceilings at Chapel building | 12000 sf | \$9.00 | / sf | \$108,000.00 | WI |
| 10 Removal and reinstallation of pews in Sanctuary | 1 Isum | \$50,000.00 | / Isum | \$50,000.00 | WI |
| 11 New egress from stairs - route TBD Allowance only (per CCI report 11/11/21 page 7) <br> 1 allow $\$ 150,000.00$ / allow $\$ 150,000.00$ WI |  |  |  |  |  |
| 12 New Spray / blown-in insulation to meet Energy Code | 56000 sf | \$15.00 | / sf | \$840,000.00 | WI |
| 13 Restoration of black iron, framing, ceiling and interior finishes for structural repairs (Severud 11/16/21 various) | 1 allow | \$750,000.00 | / allow | \$750,000.00 | WI |
| 14 OSHA Protection | 1 allow | \$100,000.00 | / allow | \$100,000.00 | WIR |
| 15 |  |  |  |  |  |



## Description 16 From 7/7/22 FX Accessible Layout 18 Furnish and Install new egress door 19 Perimeter Furring w/ Insulation

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Preliminary Budget Detail
WPPC 16586 th St
$4 / 10 / 23$
$\quad \begin{aligned} & \text { Quantity } \\ & 074000 \text { - Roofing / Waterproofing }\end{aligned}$

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| Preliminary Budget Detail WPPC 165 86th St 4／10／23 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Quantity | Cost |  | Total | Applies to： |
| 081000 －Doors，Frames \＆Hardware（furnish only） |  |  |  |  |  |
| 1 New Stair Doors | 8.00 ea | \＄1，800．00 | ／ea | \＄14，400 | WI |
| 2 New EMR Door | 1.00 ea | \＄1，800．00 | ／ea | \＄1，800 | wi |
| 3 New Bathroom Doors | 6.00 ea | \＄1，800．00 | ／ea | \＄10，800 | wi |
| 4 Misc Repairs for existing doors | 1.00 allow | \＄50，000．00 | ／allow | \＄50，000 | wi |
| 5 Modify／Repair Existing Wood Doors for ADA Entrances（per CCI | 1.00 allow | \＄120，000．00 | ／allow | \＄120，000 | wi |
| 6 Modify openings for ADA Entry Doors（per CCI 11／11／21 pg 6 ） | 1.00 allow | \＄50，000．00 | ／allow | \＄50，000 | WI |
| 7 New Doors all locations for ADA Entry Doors（per CCI 11／11／21 | 1.00 allow | \＄75，000．00 | ／allow | \＄75，000 | wi |
| 8 Modify Thresholds for ADA Entry Doors（per CCl 11／11／21 pg 6） | 1.00 allow | \＄8，000．00 | ／allow | \＄8，000 | WIR |
| 081000 －Doors，Frames \＆Hardware（furnish only） |  |  |  | \＄330，000 |  |
| 085000 －New Windows，Louvers，Replacement Windows |  |  |  |  |  |
| 1 Existing Window Restoration－Inc With Façade Restoration | 0.00 allow | \＄0．00 | ／allow | \＄0 | wi |
| 2 Additional lite for energy code（Assumed） | 1.00 allow | \＄350，000．00 | ／allow | \＄350，000 | wi |
| 3 New Windows per drawing | 600.00 sf | \＄250．00 | ／sf | \＄150，000 | R |
| 4 Legal Window Modifications（Allowance） | 1200.00 sf | \＄100．00 | 1 sf | \＄120，000 | R |
| 5 Assumed rear yard windows | 500.00 sf | \＄150．00 | ／sf | \＄75，000 | R |
| 6 Louver allowance | 1.00 allow | \＄100，000．00 | ／allow | \＄100，000 | R |
| 085000 －New Windows，Louvers，Replacement Windows |  |  |  | \＄795，000 |  |
| 088000 －Interior Glazing \＆Shower Doors |  |  |  |  |  |
| 1 Excluded | 1.00 lsum |  | ／Isum | \＄0 | wi |
|  | $88000-$ Interior Glazing \＆Shower Doors |  |  | \＄0 |  |
| 093000 －Ceramic and Stone |  |  |  |  |  |
| 1 New Bathroom Tile Floors and Walls | 6 ea | \＄8，000 | ／ea | \＄48，000 | wi |
|  | 093000 －Ceramic and Stone |  |  | \＄48，000 |  |
| 096000 －Wood Flooring \＆Carpet |  |  |  |  |  |
| 1 Remove and replace carpet IN FITOUT ALLOWANCE | 0.00 sf | \＄9．00 | ／sf | \＄0 | wi |
| 2 VCT in Chapel offices | 0.00 sf | \＄5．00 | ／sf | \＄0 | wi |
| 3 Wood Floor Repair／Restoration Allowance IN FITOUT allowance | 0.00 allow | \＄125，000．00 | ／allow | \＄0 | wi |
| 4 |  |  |  |  |  |
| Flooring allowance for ADA GF Access（per CCl 11／11／21 pg 4） | 1.00 allow | \＄50，000．00 | ／allow | \＄50，000 | wi |
| 5 Flooring allowance for ADA Sanctuary Access（per CCI 11／11／21 pg 5） |  |  |  |  |  |
|  | 1.00 allow | \＄25，000．00 | ／allow | \＄25，000 | wi |
|  | 096000 －Wood Flooring \＆Carpet |  |  | \＄75，000 |  |


|  | Commercial / Community | Commercial / Community |
| :---: | :---: | :---: |
| Remain Church - Façade | Facility 'White Box' - | Facility 'White Box' with |
| Restoration - No Code | Façade Restoration, Code |  |
| Improvements | Infill- Façade Restoration, |  |
| Improvements | Code Improvements |  |

(1)
$\begin{array}{lr}\text { Preliminary Budget Detail } & \\ \text { WPPC } 165 \text { 86th St } & \\ 4 / 10 / 23 & \\ & \\ \text { Quantity } & \text { Cost }\end{array}$

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| Preliminary Budget Detail WPPC 165 86th St 4/10/23 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Quantity | Cost |  | Total | Applies to: |
| 099000 - Painting |  |  |  |  |  |
| 1 Paint Interior IN FITOUT Allowance | 0.00 Isum | \$250,000.00 | / Isum | \$0 | WIR |
| 099000 - Painting |  |  |  | \$0 |  |
| 101400 -Signage |  |  |  |  |  |
| 1 Allowance for Code Signage | 1.00 allow | \$25,000.00 | / allow | \$25,000 | WIR |
| 101400 - Signage |  |  |  | \$25,000 |  |
| $108000-$ Specialties |  |  |  |  |  |
| 1 Fire Extinguisher Cabinets | 1.00 allow | \$25,000.00 | / allow | \$25,000 | WIR |
|  | 108000 -Specialties |  |  | \$25,000 |  |
| 500000 Interior fit out Allowances |  |  |  |  |  |
| $\begin{array}{llll} 1 \\ 2 \end{array} \text { Residential Fit Out Allowance covers finishes not above } \quad 16377.00 \text { Isum } \quad \$ 250.00 \text { / Isum } \quad \$ 4,094,250$ |  |  |  |  |  |
| 3 <br> Residential Lobby Fit Out Allowance covers finishes not above | 1138.00 Isum | \$300.00 | / Isum | \$341,400 | R |
| Residential Amenity Fit Out Allowance covers finishes not above | 7970.00 Isum | \$200.00 | / lsum | \$1,594,000 | R |
| Office White Box Fit out Allowance (All Areas - Less Partitions) 4 Office White Box Infill Fit Out Allowances- Second Floor (additive to above from $2 / 17 / 22$ FX Infill) | 24687.00 sf | \$100.00 | / sf | \$2,468,700 | wi |
|  | 2157.00 sf | \$100.00 | / sf | \$215,700 | , |
| 5 Office White Box Infill Fit Out Allowances - Third Floor (additive to above) | 1491.00 sf | \$100.00 | / sf | \$149,100 | , |
|  | 500000 Interior fit out Allowances |  |  | \$8,863,150 |  |
| 119500 - Winter Heat, Summer Concrete, and Climate Control |  |  |  |  |  |
| 1 Excluded $119500-$ Winter Heat | 1.00 allow |  | / allow | \$0 | wi |
|  | ummer Concrete, a | limate Control |  | \$0 |  |
| 142000 - Elevators |  |  |  |  |  |
| 1 New 4 stop elevator (stretcher car) | 4.00 stops | \$50,000.00 | / stops | \$200,000 | WIR |
| 2 New Additional Car for Residential | 4.00 stops | \$75,000.00 | / stops | \$300,000 | R |
| 3 | 1.00 Isum |  | / Isum | \$0 |  |
| 142000 - Elevators |  |  |  | \$500,000 |  |


|  | Commercial / Community | Commercial / Community |
| :---: | :---: | :---: |
| Remain Church - Façade | Facility 'White Box' - | Facility 'White Box' with |
| Restoration - No Code | Façade Restoration, Code |  |
| Improvements | Infill- Façade Restoration, |  |
| Improvements | Code Improvements |  |

(1)
$\begin{array}{lr}\text { Preliminary Budget Detail } & \\ \text { WPPC } 165 \text { 86th St } & \\ 4 / 10 / 23 & \\ & \\ \text { Quantity } & \text { Cost }\end{array}$


HLBG

| Preliminary Budget Detail WPPC 165 86th St 4/10/23 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Quantity | Cost |  | Total | Applies to: |
| 148500 - Scaffolding and Protection |  |  |  |  |  |
| 1 ( |  |  |  |  |  |
| Install common scaffold for entire Nave / Sanctuary (40' high) | 3360.00 sf | \$50.00 | / sf | \$168,000 | wi |
| 2 |  |  |  |  |  |
| Install common scaffold for entire Nave / Sanctuary (25' high) | 2850.00 sf | \$35.00 | / sf | \$99,750 | wi |
| 3 Stair Towers inc above | 0.00 ea | \$0.00 | / еа | \$0 | wi |
| 4 |  |  |  |  |  |
| Shoring for truss repairs to cellar (per Severud 11/16/21 Pg3 \#4) | 1.00 allow | \$350,000.00 | / allow | \$350,000 | wi |
| 5 |  |  |  |  |  |
| Sidewalk Bridge - INCLUDED WITH FAÇADE RESTORATION | 0.00 If | \$500.00 | If | \$0 | wi |
| 5 Jersey Barriers / Logistics | 200.00 If | \$155.00 | If | \$31,000 | wi |
| 6 Site Fence | 200.00 If | \$65.00 | If | \$13,000 | wi |
| 148500 - Scaffolding and Protection $\$ 661,750$ |  |  |  |  |  |
| 210000 - Fire Protection System |  |  |  |  |  |
| 1 New Fire Pumps | 1.00 Isum | \$125,000.00 | / Isum | \$125,000 | WIR |
| 2 CC111/11/21 Report page 6, 18) | 2.00 ea | \$75,000.00 | / ea | \$150,000 | WIR |
| (1) $2.00 \mathrm{ea} \mathrm{\$} \mathrm{\$ 5,00.00} \mathrm{/} \mathrm{ea}$ |  |  |  |  |  |
| Install of pipe and heads (per CCI11/11/21 Report page 6, 18) | 24688.00 sf | \$8.00 | / sf | \$197,504 | w |
|  |  |  |  |  |  |
| Install of pipe and heads (per CCI11/11/21 Report page 6, 18) | 34517.00 sf | \$8.00 | / sf | \$276,136 | IR |
| 5 Additional heads required for residential | 34517.00 sf | \$2.00 | / sf | \$69,034 | R |
| 6 New standpipe in new egress stairs (per CC111/11/21 Report |  |  |  |  |  |
| page 6, 18) | 2.00 Isum | \$50,000.00 | / Isum | \$100,000 | WIR |
|  |  |  |  |  | $\stackrel{\text { wi }}{1}$ |
|  | 210000 - Fire Protection System |  |  | \$917,674 |  |
| 220000 - Plumbing |  |  |  |  |  |
| 1 New sump pump for elevator | 1.00 Isum | \$15,000.00 | / Isum | \$15,000 | WIR |
| 2 New water service for Fire Protection | 1.00 Isum | \$35,000.00 | / Isum | \$35,000 | WIR |
| 3 New boiler Office | 1.00 Isum | \$25,000.00 | / Isum | \$25,000 | wi |
| New Boiler Residential | 1.00 Isum | \$25,001.00 | / Isum | \$35,000 | R |
| 4 New domestic HW heater | 1.00 Isum | \$15,000.00 | / Isum | \$15,000 | WIR |
| 5 New heat piping | 1.00 Isum | \$200,000.00 | / Isum | \$200,000 | WIR |
| 6 New domestic lines to new bathrooms | 1.00 Isum | \$35,000.00 | / Isum | \$35,000 | wi |
| 7 New bathrooms (assume 6 total) (rough and fixtures, <br> $\begin{array}{llllll}\text { accessories } & 6.00 \text { Isum } & \$ 15,000.00 / \text { Isum }\end{array}$ |  |  |  |  |  |
| 8 Disconnect and reconnect existing systems | 1.00 Isum | \$20,000.00 | / Isum | \$20,000 | WIR |
| 9 MEP Increase for infill area allowance | 3648.00 sf | \$15.00 | sf | \$54,720 | 1 |


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| Preliminary Budget Detail WPPC 165 86th St 4／10／23 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Quantity | Cost |  | Total | Applies to： |
| 230000 －HVAC Piping \＆Ductwork |  |  |  |  |  |
| 1 Ventilation for elevator shaft | 1.00 Isum | \＄25，000．00 | ／Isum | \＄25，000 | WIR |
| 2 AC for EMR closet | 1.00 Isum | \＄15，000．00 | ／Isum | \＄15，000 | WIR |
| 3 Assumed new VRF cooling system（air cooled） | 1.00 Isum | \＄400，000．00 | ／Isum | \＄400，000 | WIR |
| 4 Install new interior ductless units and condensate lines | 1.00 Isum | \＄200，000．00 | ／Isum | \＄200，000 | WIR |
| 5 New make up air system | 1.00 Isum | \＄250，000．00 | ／Isum | \＄250，000 | WIR |
| 6 |  |  |  |  |  |
| New smoke purge system（per CCI Report 11／11／21 page 6） | 1.00 Isum | \＄350，000．00 | ／Isum | \＄350，000 | WIR |
| 7 New TX riser | 1.00 Isum | \＄50，000．00 | $1 \begin{aligned} & \text { Isum } \\ & \text { sf }\end{aligned}$ | \＄50，000 | WIR |
| 8 MEP Increase for infill area allowance | 3648.00 sf | \＄22．00 |  | \＄80，256 | 1 |
|  | 230000 －HVAC Piping \＆Ductwork |  |  | \＄1，370，256 |  |
| 260000 －Electrical \＆Low Voltage |  |  |  |  |  |
| 1 Elevator power（from switchgear to disconnect Fire Alarm（per CCI Report 11／11／21 page 6） | 1.00 Isum | \＄45，000．00 | ／Isum | \＄45，000 | WIR |
|  |  |  |  |  | WI |
| 2 Install conduit and wire for new FA | 24688.00 Isum | \＄6．00 | ／Isum | \＄148，128 | WI |
| Install conduit and wire for new FA | 34517.00 Isum | \＄6．00 | ／Isum | \＄207，102 | R |
| 3 New devices | 1.00 Isum | \＄150，000．00 | ／Isum | \＄150，000 | WIR |
| 4 New FA command center | 1.00 Isum | \＄65，000．00 | ／Isum | \＄65，000 | WIR |
| 5 Power to new AC VRF units | 1.00 Isum | \＄45，000．00 | ／Isum | \＄45，000 | WIR |
| 6 Upgrade switchgear／service size | 1.00 allow | \＄250，000．00 | ／allow | \＄250，000 | WIR |
| 7 Upgrade Stage Lighting | 0.00 allow | \＄50，000．00 | ／allow | \＄0 | WI |
| 8 Upgrade Stage Audio | 0.00 allow | \＄25，000．00 | ／allow | \＄0 | WI |
| 9 Temp Lighting／Power | 24688.00 sf | \＄1．50 | ／sf | \＄37，032 | WI |
| Temp Lighting／Power | 34517.00 sf | \＄1．50 | ／sf | \＄51，776 | R |
| 10 Disconnect／existing equipment and reconnect | 1.00 allow | \＄20，000．00 | ／allow | \＄20，000 | WIR |
| 11 Emergency Lighting（per CCI Report 11／11／21 page 7，16） | 24688.00 Isum | \＄2．00 | ／Isum | \＄49，376 | WI |
| Emergency Lighting（per CCI Report 11／11／21 page 7，16） | 34517.00 Isum | \＄2．00 | ／Isum | \＄69，034 | R |
| 12 New Exit Signage（per CCI Report 11／11／21 page 7，16） | 1.00 allow | \＄20，000．00 | ／allow | \＄20，000 | WIR |
| 13 |  |  |  |  |  |
| New Step lighting install only（per CCI Report 11／11／21 page 12） | 1.00 allow | \＄15，000．00 | ／allow | \＄15，000 | WIR |
| 14 New CO monitors（per CCI Report 11／11／21 page 19 | 1.00 allow | \＄15，001．00 | ／allow | \＄15，001 | WIR |
| 15 MEP Increase for infill area allowance | 3648.00 sf | \＄45．00 | sf | \＄164，160 | 1 |
|  | 260000 －Electrical \＆Low Voltage |  |  | \＄1，351，609 |  |
| 265000 －Lighting Fixtures |  |  |  |  |  |
| 1 Allowance（excludes decorative fixtures） | 24688.00 sf | \＄3．00 | ／sf | \＄74，064 | WI |
| 2 Allowance for Infill | 3648.00 sf | \＄3．00 | ／sf | \＄10，944 | 1 |
| 3 Allowance（excludes decorative fixtures） | 34517.00 sf | \＄6．00 | ／sf | \＄207，102 | R |


| Preliminary Budget Detail WPPC 165 86th St 4／10／23 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Quantity | Cost |  | Total | Applies to： |
| 230000 －HVAC Piping \＆Ductwork |  |  |  |  |  |
| 1 Ventilation for elevator shaft | 1.00 Isum | \＄25，000．00 | ／Isum | \＄25，000 | WIR |
| 2 AC for EMR closet | 1.00 Isum | \＄15，000．00 | ／Isum | \＄15，000 | WIR |
| 3 Assumed new VRF cooling system（air cooled） | 1.00 Isum | \＄400，000．00 | ／Isum | \＄400，000 | WIR |
| 4 Install new interior ductless units and condensate lines | 1.00 Isum | \＄200，000．00 | ／Isum | \＄200，000 | WIR |
| 5 New make up air system | 1.00 Isum | \＄250，000．00 | ／Isum | \＄250，000 | WIR |
| 6 |  |  |  |  |  |
| New smoke purge system（per CCI Report 11／11／21 page 6） | 1.00 Isum | \＄350，000．00 | ／Isum | \＄350，000 | WIR |
| 7 New TX riser | 1.00 Isum | \＄50，000．00 | $1 \begin{aligned} & \text { Isum } \\ & \text { sf }\end{aligned}$ | \＄50，000 | WIR |
| 8 MEP Increase for infill area allowance | 3648.00 sf | \＄22．00 |  | \＄80，256 | 1 |
|  | 230000 －HVAC Piping \＆Ductwork |  |  | \＄1，370，256 |  |
| 260000 －Electrical \＆Low Voltage |  |  |  |  |  |
| 1 Elevator power（from switchgear to disconnect Fire Alarm（per CCI Report 11／11／21 page 6） | 1.00 Isum | \＄45，000．00 | ／Isum | \＄45，000 | WIR |
|  |  |  |  |  | WI |
| 2 Install conduit and wire for new FA | 24688.00 Isum | \＄6．00 | ／Isum | \＄148，128 | WI |
| Install conduit and wire for new FA | 34517.00 Isum | \＄6．00 | ／Isum | \＄207，102 | R |
| 3 New devices | 1.00 Isum | \＄150，000．00 | ／Isum | \＄150，000 | WIR |
| 4 New FA command center | 1.00 Isum | \＄65，000．00 | ／Isum | \＄65，000 | WIR |
| 5 Power to new AC VRF units | 1.00 Isum | \＄45，000．00 | ／Isum | \＄45，000 | WIR |
| 6 Upgrade switchgear／service size | 1.00 allow | \＄250，000．00 | ／allow | \＄250，000 | WIR |
| 7 Upgrade Stage Lighting | 0.00 allow | \＄50，000．00 | ／allow | \＄0 | WI |
| 8 Upgrade Stage Audio | 0.00 allow | \＄25，000．00 | ／allow | \＄0 | WI |
| 9 Temp Lighting／Power | 24688.00 sf | \＄1．50 | ／sf | \＄37，032 | WI |
| Temp Lighting／Power | 34517.00 sf | \＄1．50 | ／sf | \＄51，776 | R |
| 10 Disconnect／existing equipment and reconnect | 1.00 allow | \＄20，000．00 | ／allow | \＄20，000 | WIR |
| 11 Emergency Lighting（per CCI Report 11／11／21 page 7，16） | 24688.00 Isum | \＄2．00 | ／Isum | \＄49，376 | WI |
| Emergency Lighting（per CCI Report 11／11／21 page 7，16） | 34517.00 Isum | \＄2．00 | ／Isum | \＄69，034 | R |
| 12 New Exit Signage（per CCI Report 11／11／21 page 7，16） | 1.00 allow | \＄20，000．00 | ／allow | \＄20，000 | WIR |
| 13 |  |  |  |  |  |
| New Step lighting install only（per CCI Report 11／11／21 page 12） | 1.00 allow | \＄15，000．00 | ／allow | \＄15，000 | WIR |
| 14 New CO monitors（per CCI Report 11／11／21 page 19 | 1.00 allow | \＄15，001．00 | ／allow | \＄15，001 | WIR |
| 15 MEP Increase for infill area allowance | 3648.00 sf | \＄45．00 | sf | \＄164，160 | 1 |
|  | 260000 －Electrical \＆Low Voltage |  |  | \＄1，351，609 |  |
| 265000 －Lighting Fixtures |  |  |  |  |  |
| 1 Allowance（excludes decorative fixtures） | 24688.00 sf | \＄3．00 | ／sf | \＄74，064 | WI |
| 2 Allowance for Infill | 3648.00 sf | \＄3．00 | ／sf | \＄10，944 | 1 |
| 3 Allowance（excludes decorative fixtures） | 34517.00 sf | \＄6．00 | ／sf | \＄207，102 | R |


| Preliminary Budget Detail WPPC 165 86th St 4／10／23 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Quantity | Cost |  | Total | Applies to： |
| 230000 －HVAC Piping \＆Ductwork |  |  |  |  |  |
| 1 Ventilation for elevator shaft | 1.00 Isum | \＄25，000．00 | ／Isum | \＄25，000 | WIR |
| 2 AC for EMR closet | 1.00 Isum | \＄15，000．00 | ／Isum | \＄15，000 | WIR |
| 3 Assumed new VRF cooling system（air cooled） | 1.00 Isum | \＄400，000．00 | ／Isum | \＄400，000 | WIR |
| 4 Install new interior ductless units and condensate lines | 1.00 Isum | \＄200，000．00 | ／Isum | \＄200，000 | WIR |
| 5 New make up air system | 1.00 Isum | \＄250，000．00 | ／Isum | \＄250，000 | WIR |
| 6 |  |  |  |  |  |
| New smoke purge system（per CCI Report 11／11／21 page 6） | 1.00 Isum | \＄350，000．00 | ／Isum | \＄350，000 | WIR |
| 7 New TX riser | 1.00 Isum | \＄50，000．00 | $1 \begin{aligned} & \text { Isum } \\ & \text { sf }\end{aligned}$ | \＄50，000 | WIR |
| 8 MEP Increase for infill area allowance | 3648.00 sf | \＄22．00 |  | \＄80，256 | 1 |
|  | 230000 －HVAC Piping \＆Ductwork |  |  | \＄1，370，256 |  |
| 260000 －Electrical \＆Low Voltage |  |  |  |  |  |
| 1 Elevator power（from switchgear to disconnect Fire Alarm（per CCI Report 11／11／21 page 6） | 1.00 Isum | \＄45，000．00 | ／Isum | \＄45，000 | WIR |
|  |  |  |  |  | WI |
| 2 Install conduit and wire for new FA | 24688.00 Isum | \＄6．00 | ／Isum | \＄148，128 | WI |
| Install conduit and wire for new FA | 34517.00 Isum | \＄6．00 | ／Isum | \＄207，102 | R |
| 3 New devices | 1.00 Isum | \＄150，000．00 | ／Isum | \＄150，000 | WIR |
| 4 New FA command center | 1.00 Isum | \＄65，000．00 | ／Isum | \＄65，000 | WIR |
| 5 Power to new AC VRF units | 1.00 Isum | \＄45，000．00 | ／Isum | \＄45，000 | WIR |
| 6 Upgrade switchgear／service size | 1.00 allow | \＄250，000．00 | ／allow | \＄250，000 | WIR |
| 7 Upgrade Stage Lighting | 0.00 allow | \＄50，000．00 | ／allow | \＄0 | WI |
| 8 Upgrade Stage Audio | 0.00 allow | \＄25，000．00 | ／allow | \＄0 | WI |
| 9 Temp Lighting／Power | 24688.00 sf | \＄1．50 | ／sf | \＄37，032 | WI |
| Temp Lighting／Power | 34517.00 sf | \＄1．50 | ／sf | \＄51，776 | R |
| 10 Disconnect／existing equipment and reconnect | 1.00 allow | \＄20，000．00 | ／allow | \＄20，000 | WIR |
| 11 Emergency Lighting（per CCI Report 11／11／21 page 7，16） | 24688.00 Isum | \＄2．00 | ／Isum | \＄49，376 | WI |
| Emergency Lighting（per CCI Report 11／11／21 page 7，16） | 34517.00 Isum | \＄2．00 | ／Isum | \＄69，034 | R |
| 12 New Exit Signage（per CCI Report 11／11／21 page 7，16） | 1.00 allow | \＄20，000．00 | ／allow | \＄20，000 | WIR |
| 13 |  |  |  |  |  |
| New Step lighting install only（per CCI Report 11／11／21 page 12） | 1.00 allow | \＄15，000．00 | ／allow | \＄15，000 | WIR |
| 14 New CO monitors（per CCI Report 11／11／21 page 19 | 1.00 allow | \＄15，001．00 | ／allow | \＄15，001 | WIR |
| 15 MEP Increase for infill area allowance | 3648.00 sf | \＄45．00 | sf | \＄164，160 | 1 |
|  | 260000 －Electrical \＆Low Voltage |  |  | \＄1，351，609 |  |
| 265000 －Lighting Fixtures |  |  |  |  |  |
| 1 Allowance（excludes decorative fixtures） | 24688.00 sf | \＄3．00 | ／sf | \＄74，064 | WI |
| 2 Allowance for Infill | 3648.00 sf | \＄3．00 | ／sf | \＄10，944 | 1 |
| 3 Allowance（excludes decorative fixtures） | 34517.00 sf | \＄6．00 | ／sf | \＄207，102 | R |


260000 －Electrical \＆Low Voltage



Preliminary Budget Detail
WPPC 165 86th St

|  | $\propto$ |  | $\begin{aligned} & 8 \\ & 0 \\ & 0 \\ & 0 \\ & \hline 0 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \stackrel{8}{0} \\ & \stackrel{N}{\tilde{N}} \end{aligned}$ | ， | ＇ |  | － | ＇ | ＇ |
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013528 －Site Safety（Excluded）
1 Site Safety－not required

## G. Revised Reasonable Return Analysis

The attached report by Appraisers \& Planners shows the reasonable return analysis for three of the scenarios analyzed by LBG: a commercial conversion; a commercial conversion with infill; and a residential conversion. Appraisers and Planners has revised its financial analysis with these updated costs, and also with updated market rent figures.

# ECONOMIC ANALYSIS REPORT <br> of <br> West-Park Presbyterian Church <br> 165 West $8{ }^{\text {th }}$ Street <br> Block 1217, Lot 1 <br> New York, New York 

## SUBMITTED TO

Hon. Sarah Carroll, MFA
Chair - Landmarks Preservation Commission
1 Centre Street
New York, New York 10007

Hon. Sarah Carroll, MFA
Chair - Landmarks Preservation Commission
1 Centre Street
New York, New York 10007

Re: Economic Analysis Report West-Park Presbyterian Church 165 West 86 ${ }^{\text {th }}$ Street<br>New York, New York<br>Block 1217, Lot 1

## Dear Chairperson Carroll:

In accordance with your request, we have prepared an Economic Analysis Report ("Report") of the above-captioned property, henceforth referred to as the "subject property." The Report has been prepared to assist ownership of the subject property, West-Park Presbyterian Church, ("Applicant"), in connection with its hardship application to the City of New York Landmarks Preservation Commission ("LPC") in accordance with the Landmarks Law of the City of New York to seek demolition of the existing improvements.

The subject property is located along the northeasterly corner of West $86^{\text {th }}$ Street and Amsterdam Avenue in Manhattan's Upper West Side, City, County and State of New York. The property occupies an irregular parcel measuring approximately 10,157 square feet. The property is mapped within a zoning district designated as R10A, a General Residence District. The majority of the site is also mapped within a C1-5 commercial overlay and a (EC-2) Special Enhanced Commercial District-2.

The property is currently improved with a one- and part-three-story over partial cellar church building. We have been requested to provide this Economic Analysis Report to aid ownership in its application to LPC.

## Overview of the Economic Analyses

The core component of the Economic Analyses required for the Hardship Application is to determine whether the improvements, following renovation and lease-up can produce a Reasonable Return, which is defined as $6 \%$ over the assessed value of the property. The specific requirements of the determination of Reasonable Return are set forth in depth in the body of this report.

In order to investigate whether a Reasonable Return can be achieved for the subject following steps were taken:

- Estimate a market rent for the subject property, as renovated and restored
- Estimate stabilized operating expenses for the subject property, as renovated and restored, exclusive of repairs and maintenance costs. These annual costs are equal to the depreciated improvement costs computed as $2 \%$ of the renovation costs, per LPC Statute.
- Real Estate Taxes are not included as a stabilized operating expense and are built into the loaded capitalization rate ${ }^{1}$
- Determine stabilized Net Operating Income for the property, as renovated and restored
- Capitalize stabilized Net Operating Income into value using a loaded capitalization rate.
- Determine if the Calculated Return achieves a $6 \%$ annual return above the Actual Assessment of $\$ 3,463,650$, or $\$ 207,819$.


## Scenarios Studied - Base Scenario, Infill Scenario and Multi-Family Scenario

The Report contains an analysis of three (3) development scenarios in an effort to compare the feasibility of each scenario given current market conditions, development costs and required rates of return for this type of investment. The development scenarios are as follows:
a) Community Facility and Commercial Use Scenario ("Base Scenario") in which the deficiencies of the existing structure are cured and renovated for community facility use with a Net Usable Area of 18,353 square feet in a gross building area of 24,688 square feet.
b) Infill Community Facility and Commercial Use Scenario ("Infill Scenario") in which interior square footage is maximized through a $3,647 \pm$ square foot infill of the auditorium, in order to create total gross building area of nearly $28,335 \pm$ square feet and a net usable area of $22,014 \pm$ square feet.
c) Residential Multi-Family Conversion Scenario ("Multi-Family Scenario") in which the interior square footage is maximized through infill construction and converted for residential use. Both structural and interior work is required to create a total of 20 apartments ranging from studios to three-bedroom units with a total residential rentable area of 20,613 square feet.

Conclusion: Under all three (3) scenarios a positive return is unable to be achieved.

[^1]
## Summary of Conclusions:

The Base Scenario, Infill Scenario and Multi-family scenarios all produce negative net operating income illustrating that a Reasonable Return, as defined, is unable to be achieved at the subject property given the estimated income achievable at the site and the depreciated annual costs to cure the structural deficiencies of the property. A summary of the conclusions is presented below:

| Reasonable Return Threshold Analysis |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Scenario | Base * | Infill* | Multi-Family |
| Actual Assessment | $\$ 3,463,650$ | $\$ 3,463,650$ | $\$ 3,463,650$ |
| $6 \%$ Return on Actual Assessment | $\$ 207,819$ | $\$ 207,819$ | $\$ 207,819$ |
| Calculated Return via Income Approach | $(\$ 224,468)$ | $(\$ 102,519)$ | $(\$ 525,707)$ |
| Return Exceed 6\% Threshold? | NO | NO | NO |

* Excludes real estate taxes as an expense

Summary of Depreciated Cost Calculations

| Depreciated Development Cost Calculation |  |  |  |
| :--- | ---: | ---: | ---: |
| Scenario | Base | Infill | Multi-Family |
| Assessed Value of Subj Building Exclusive of Land | $\$ 1,416,150$ | $\$ 1,416,150$ | $\$ 1,416,150$ |
| Projected Renovation Cost (full cost) | $\$ 49,153,829$ | $\$ 50,955,015$ | $\$ 58,576,591$ |
| Total | $\$ 50,569,979$ | $\$ 52,371,165$ | $\$ 59,992,741$ |
| Annual Depreciation @ | $\$ 1,011,400$ | $\$ 1,047,423$ | $\$ 1,199,855$ |

## Hypothetical Condition

The valuation analyses contained within this report are further subject to a Hypothetical Condition, which is defined in the Dictionary of Real Estate Appraisal $6^{\text {th }}$ Edition as follows: A hypothetical condition is "A condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purpose of analysis." We have hypothetically assumed for purposes of analysis that under all scenarios that the property is renovated and cured of functional and structural deficiencies as of the analysis date. Within this hypothetical condition is the assumption that the work is completed in a timely manner, to market standards and within the budgets furnished to us in preparation of this report.

## Revised Analysis - Data Considered

This Report is a revised analysis based on an updated, and more detailed, scope of work to restore and renovate the subject improvements under the three scenarios. The findings and conclusions of the analysis in this Report are consistent with the findings and conclusions of the Economic Analysis Report presented in the Original Submission of April 2022. In the Original Submission the calculation of Annual Depreciation included equalized value of the assessment, exclusive of the land value; this has been corrected in this Report to include the assessed value of the improvements, not the equalized value of the assessment. Furthermore, as the Test Year of the analysis is to be consistent with the application date, we have utilized the market data presented in the Original Submission, and solely included updated costs corresponding with the revised scope of repair and restoration. The costs have been trended to a 2022 development year.

In response to a request from the LPC we previously prepared an analysis that considers the impact of potential Historic Tax Credits on the project's feasibility. We have included in the Addenda to this report the findings of that analysis incorporating the updated restoration and renovation costs.

## Shift in Market Conditions

Between the Original Submission date of April 2022 and the current date, there has been a fundamental shift in the demand for space, the marketplace for residential and commercial development and the lending environment for these projects. Beginning early 2022 and continuing to this writing, inflationary pressures have dramatically increased beyond what had been anticipated with inflation reaching $9.1 \%$ in June 2022. In early 2022, when inflation was at a level deemed to be controllable and "transitory" general consensus was that 2022 would experience between three and four quarter-point rate increases. The troubling inflation data necessitated the Fed to undertake a meaningful response in its policy, but also signaled the possibility for several quarters of rate hikes and quantitative tightening. Overall, The Federal Reserve ("The Fed") raised the federal funds rate seven times in 2022 and has thus far implemented two (2) quarter-point rate hikes in February 2023 and March 2023, bringing the target Federal Funds rate to between $4.75 \%$ and $5.0 \%$. For reference, Federal Funds rate as of the date of the Original Submission was between $0.25 \%$ and $0.50 \%$.

The rapid increase in interest rates has dramatically impacted the cost of capital, and caused a sharp decrease in lending activity, a spike in capitalization rates and a broad value decrease across the local commercial real estate market. Nonetheless, the Report relies on the market conditions as of the Test Year, but we note that economic conditions have deteriorated substantially in the last year; this is evidenced in comparable rent levels, capitalization rates for stabilized assets and the costs to finance development projects.

Please do not hesitate to call upon us if you have additional questions or concerns.

Respectfully submitted,


Sharon Y. Locatell, MAI, CRE, MRICS
State of New York Certified General Appraiser I.D. \#46000007350


State of New York Certified General Appraiser I.D. \# 46000050707


Photograph of Subject Property - December 2021

Economic Analysis Report<br>West-Park Presbyterian Church<br>165 West 86th Street<br>New York, New York<br>Block 1217, Lot 1

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## COMPONENTS OF THE ECONOMIC ANALYSES

## A. Summary of the Reasonable Return Computations and Guiding Statutes

In computing the reasonable return analysis, we are guided by Section 25-302 and 25-309 of the Administrative Code of the City of New York, which governs the process by which an applicant may seek a certificate of appropriateness authorizing demolition, alternations or reconstruction of a landmark on ground of insufficient return. The statute calls for an analysis of the investment potential of the subject property in which a reasonable return can be achieved. The relevant components of the statute are presented as follows:

Section 25-302 (v.) "Reasonable return."
(1) A net annual return of six per centum of the valuation of an improvement parcel
(2) Such valuation shall be the current assessed valuation established by the city, which is in effect at the time of the filing of the request for a certificate of appropriateness; provided that:
(a) The commission may make a determination that the valuation of the improvement parcel is an amount different from such assessed valuation where there has been a reduction in the assessed valuation for the year next preceding the effective date of the current assessed valuation in effect at the time of the filing of such request; and
(b) The commission may make a determination that the value of the improvement parcel is an amount different from the assessed valuation where there has been a bona fide sale of such parcel within the period between March fifteenth, nineteen hundred fifty-eight, and the time of the filing of such request, as the result of a transaction at arm's length, on normal financing terms, at a readily ascertainable price, and unaffected by special circumstances such as, but not limited to, a forced sale, exchange of property, package deal, wash sale or sale to a cooperative. In determining whether a sale was on normal financing terms, the commission shall give due consideration to the following factors:
(1) The ratio of the cash payment received by the seller to (a) the sales price of the improvement parcel and (b) the annual gross income from such parcel;
(2) The total amount of the outstanding mortgages which are liens against the improvement parcel (including purchase money mortgages) as compared with the assessed valuation of such parcel;
(3) The ratio of the sales price to the annual gross income of the improvement parcel, with consideration given, where the improvement is subject to residential rent control, to the total amount of rent adjustments previously granted, exclusive of rent adjustments because of changes in dwelling space, services, furniture, furnishings, or equipment, major capital improvements, or substantial rehabilitation;
(4) The presence of deferred amortization in purchase money mortgages, or the assignment of such mortgages at a discount;
(5) Any other facts and circumstances surrounding such sale which, in the judgment of the commission, may have a bearing upon the question of financing.
(3) For the purposes of this subdivision v:
(a) Net annual return shall be the amount by which the earned income yielded by the improvement parcel during a test year exceeds the operating expenses of such parcel during such year, excluding mortgage interest and amortization, and excluding allowances for obsolescence and reserves, but including an allowance for depreciation of two per centum of the assessed value of the improvement, exclusive of the land, or the amount shown for depreciation of the improvement in the latest required federal income tax return, whichever is lower; provided, however, that no allowance for depreciation of the improvement shall be included where the improvement has been fully depreciated for federal income tax purposes or on the books of the owner; and
(b) Test year shall be (1) the most recent full calendar year, or (2) the owner's most recent fiscal year, or (3) any twelve consecutive months ending not more than ninety days prior to the filing (a) of the request for a certificate, or (b) of an application for a renewal of tax benefits pursuant to the provisions of section 25-309 of this chapter, as the case may be." ${ }^{2}$

We have incorporated the relevant statue in determining the reasonable return of the subject property. We have made an estimate of the potential rent for the subject property, as renovated and cured of its internal, structural and exterior deficiencies, deducted the depreciated costs to cure the current conditions as an annual expense, and have capitalized the net operating income into value using a loaded capitalization rate, which includes the base capitalization rate plus an equalized or effective tax rate. The net return was equalized to a return on assessment to compare to the $6 \%$ return on assessed value. The current assessment is employed in this analysis as there has not been a bona fide sale of the property between 1958 and the time of the request, and there has not been a reduction in the assessed valuation for the year next preceding the effective date of the current assessed valuation at the filing of such request. This analysis was performed for the Base Scenario, Infill Scenario and Multi-Family Scenario.

In developing this analysis we are guided, in part, by the LPC's Denial of Notice to Proceed in the Stahl York matter. In this Denial Notice, LPC sets forth analyses that would have been deemed acceptable in establishing the Reasonable Return threshold. We have relied on LPC guidance with respect to treatment of several inputs in our analysis, namely depreciation, acceptance of certain soft costs, treatment of real estate taxes after renovation and inclusion of an effective tax rate analysis.

[^2]
## B. Description of Subject Property

The subject property is identified on the City of New York Assessor's Map as Block 1217, Lot 1. The subject property is situated along the northwesterly corner of West $86^{\text {th }}$ Street and Amsterdam Avenue in the Upper West Side neighborhood of the Borough of Manhattan, City, County and State of New York. The subject site is a nearly-rectangular parcel measuring approximately 10,157 square feet. It is situated within the confines of a zoning district designated as R10A, a General Residence District, and is mapped with a C1-5 commercial overlay and EC-2 (EC-2) Special Enhanced Commercial District-2. The subject zoning district permits an assortment of residential uses up to 12.0 Floor Area Ratio (FAR), community facility uses up to 10.0 FAR and commercial uses up to a 2.0 FAR.

The existing improvements are spread over four (4) floors, inclusive of a prominent tower located in the southwesterly most portion of the site. Floor plans provided by the Client are presented below:

## Applicable Floor Plans - Base and Infill Scenarios

Cellar Level


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## Ground Floor



Second Floor Plan


AND

Second Floor Infill Plan


Third Floor Plan


AND PLA

Third Floor Infill Plan


Fourth Floor Plan

Economic Analysis Report - 165 West $86^{\text {th }}$ Street

## Floor Plans - Multi-Family Scenario



Cellar


Ground Floor


Second and Third Floors


Attic Floor

AND PLANNERS INC

## Rentable and Gross Building Areas

Based on measured areas provided by the architecture firm of FXCollaborative Architects LLP, existing gross building area is approximately 24,688 square feet, inclusive of basement areas for the Base scenario with a rentable area of 18,353 square feet. For the Infill Scenario, Gross Building Area is estimated at 28,335 square feet with a rentable area of 22,014 square feet.

For the Multi-Family scenario, total Gross Building Area is estimated at 34,517 square feet across all floors and the net rentable residential area is 20,613 square feet. A summary of the residential rentable areas is presented below:

| Unit $\#$ | Floor | Bedrooms | Square <br> Footage | Location/ <br> Orientation |
| :---: | :--- | :---: | :---: | :---: |
| 1 | Ground | 3 | 1,214 Overlooking Amsterdam Ave. |  |
| 2 | Ground | Studio | 607 Overlooking Amsterdam Ave. |  |
| 3 | Ground | $2+$ Den | 1,166 Corner |  |
| 4 | Ground | 1 | 822 Facing West 86th Street |  |
| 5 | Second Floor | 3 | 1,215 Overlooking Amsterdam Ave. |  |
| 6 | Second Floor | Studio | 604 Overlooking Amsterdam Ave. |  |
| 7 | Second Floor | $2+$ Den | 1,164 Corner |  |
| 8 | Second Floor | 1 | 828 Facing West 86th Street |  |
| 9 | Second Floor | $2+$ Den | 1,119 Facing West 86th Street |  |
| 10 | Second Floor | 2 | 1,084 Facing inner court |  |
| 11 | Second Floor | Studio | 616 Facing inner court |  |
| 12 | Third Floor | 3 | 1,215 Overlooking Amsterdam Ave. |  |
| 13 | Third Floor | Studio | 604 Overlooking Amsterdam Ave. |  |
| 14 | Third Floor | $2+$ Den | 1,164 Corner |  |
| 15 | Third Floor | 1 | 828 Facing West 86th Street |  |
| 16 | Third Floor | $2+$ Den | 1,119 Facing West 86th Street |  |
| 17 | Third Floor | 2 | 1,084 Facing inner court |  |
| 18 | Third Floor | Studio | 616 Facing inner court |  |
| 19 | Attic | 3 | 1,617 Overlooking Amsterdam Ave. |  |
| 20 | Attic | 3 | 1,927 Facing inner court and West 86th |  |
| Total Rentable |  |  |  |  |

## Base Scenario Construction Assumptions

The Base Scenario assumes a full restoration of the deteriorating façade, a curing of the structural damage, inclusive of exterior walls and roofing, and a renovation of the interior that allows for a repurposing of the property. The full scope of the construction work cures the deficiencies identified by the consultants reports prepared by FacadeMD, Code Consultants, Inc. ("CCI") Severud Associates Consulting Engineers P.C. ("Severud"), Krypton Engineering ("Krypton"), Liberty Stained Glass Conservation ("Liberty") and Nova Construction ("Nova") were incorporated into an analysis of the subject structure. These reports and costs have been synthesized into a construction cost estimate provided by Leeding Builders Group ("LBG").

## Total Construction Costs: \$49,153,829

## Infill Scenario Construction Assumptions

The Infill Scenario contemplates all the corrective work identified in the LBG construction cost budget, and includes an infill of approximately 3,648 square feet through a creation of additional floors within the footprint of the auditorium on the second and third floors of the building.

Total Construction Costs: \$50,955,015

## Multi-Family Scenario Construction Assumptions

The Multi-Family Scenario contemplates the aforementioned corrective work identified in the LBG construction cost budget and also includes infill to create 20 apartments, lobby and amenity space.

Total Construction Costs: $\mathbf{\$ 5 8 , 5 7 6 , 5 9 1}$

## Discussion of Alternative Uses

Given the lack of windows and general transparency into the structure at the street level, certain alternative uses would not be appropriate for the subject property. Although retail uses are permitted, the subject property does not lay out efficiently. There are few large retail tenants in the market and properties the size of the subject property would require several smaller spaces. The minimal points of entry limits a multi-tenant retail option.

Residential uses are also permitted at the subject property, but the existing configuration of the building would not be appropriate for residential uses unless a substantial portion of the building's rear was removed in order to create sufficient legal light and air. This removal would disrupt the individual landmark, and would also put at risk the structural integrity of the façade and structure. However, even considering all these constraints, this report incorporates a multi-family scenario incorporating the addition of legal windows and rear courts in order to test the economic feasibility of this effort.

The most likely use of the property, upon renovation, is occupancy by a single tenant that can make use of the existing spaces and layout, such as a church or educational use. Comparable data utilized concerns a mix of church uses, museum uses, nightclub uses and an educational use within a larger religious building.

Our interior physical inspection of the property revealed that the interior spaces appeared to be in poor to poor condition; an observation that confirmed by the professional reports contained within this application. Engineering and code reports provided by FacadeMD, CCI, Severud, Krypton, Liberty and Nova were incorporated into an analysis of the subject structure. These reports are included as an addenda to this submission and were the basis for estimating the costs to repair and restore the subject improvements.

## Costs to Cure - Leeding Builders Group (LBG)

LBG incorporated the above-referenced consultants' reports and prepared a report and cost estimate to address the issues and cure the deficiencies identified in the reports provided by the aforementioned consultants. Total hard costs to cure the deficiencies are estimated to be $\$ 31,520,483$. Inclusive of General Conditions, Contingencies and Insurance, total costs are estimated to be $\$ 49,153,829$ as summarized on the following page. We note that these costs exclude soft costs typical in a commercial renovation and 11 soft cost items previously accepted by LPC in the Stahl York matter and the KISKA matter.

LBG's costs for the Infill Scenario are estimated to be $\$ 32,675,515$, and include additional costs for construction of infill areas to maximize the usable areas of the structure. Inclusive of General Conditions, Contingencies and Insurance, total costs are $\$ 50,955,015$ as summarized on the following page. As with the base scenario, we note that these costs previously-accepted soft costs and financing costs.

For the Multi-Family Scenario, total hard costs to cure deficiencies are estimated to be $\$ 37,562,942$. Inclusive of General Conditions, Contingencies and Insurance, total costs are estimated to be $\$ 58,576,591$, as summarized on the following pages. As with the base and infill scenarios we note that these costs exclude soft costs and financing costs.

## LBG Development Cost Estimates

4/10/2023<br>教

Preliminary Hard Cost - Summary
West Park Presbyterian Church - 165 West 86 th Street

| trade description | CCIP | SDI | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Remain Church - <br> Facade <br> Restoration - No <br> Code <br> Improvements | Commercial/ Community <br> Facility White <br> Box' - Facade <br> Restoration, Code <br> Improvements | Commercial/ Community <br> Facilly 'White Box' with Infil. Facade <br> Restoration, Code Improvements | Residental Use |
| 024000 - Demo | $Y$ | $Y$ | \$0 | \$1,450,000 | \$1,450,000 | \$3,861,360 |
| 024010 - Abatement | $Y$ | $Y$ | \$0 | \$390,000 | \$390,000 | \$790,000 |
| 033000 - Cast in Place Concrete | $Y$ | $Y$ | \$0 | \$252,000 | \$397,920 | \$2,513,190 |
| 042000 - Masonry | $Y$ | $Y$ | \$0 | \$781,469 | \$781,469 | \$660,903 |
| 043010 - Façade Restoration Scope w/ New Scope | $\gamma$ | $\gamma$ | \$13,865,544 | \$13,865,544 | \$13,865,544 | \$13,865,544 |
| 043020 - Window Restoraton | $r$ | $r$ | \$1,896,376 | \$0 | \$0 | \$0 |
| 043030 . New Egress | $\gamma$ | $Y$ | \$0 | \$127,500 | \$127,500 | \$127,500 |
| O5 1000 - Structural 5teel | $r$ | $r$ | \$0 | \$1,230,000 | \$1,412,400 | \$525,000 |
| 052000 - Misc Metal | $r$ | $Y$ | \$0 | \$343,163 | \$343,163 | \$ $\$ 217,663$ |
| 052010 - Wall Stabilizaton Per Severud Analysis dated huly 22, 2022 | $\gamma$ | $r$ | \$1,170,947 | \$1,170,947 | \$1,170,947 | \$1,170,947 |
| 060500 - Structural Repair (Wood Framing / Trusses] | $Y$ | $Y$ | \$0 | \$175,000 | \$175,000 | \$175,000 |
| 061000 - Drywall / Miscellaneous Carpentry/ Milwork \& Trim | $Y$ | $Y$ | \$0 | \$3,010,305 | \$3,101,505 | \$100,000 |
| 064000 - Architectural Millwork | $Y$ | $Y$ | \$0 | \$350,000 | \$350,000 | \$0 |
| 072000 - Fireproofing | $\gamma$ | $Y$ | \$0 | \$100,000 | \$100,000 | \$0 |
| 074000 - Footing / Waterprooing | $Y$ | $Y$ | \$0 | \$0 | 50 | \$1,500,000 |
| 081000 - Doors, Frames \& Hfardware (furnish only) | $\gamma$ | $\gamma$ | \$0 | \$330,000 | \$330,000 | \$8,000 |
| 085000 - New Windows, Louvers, Replacement Windows | $r$ | $Y$ | \$0 | \$350,000 | \$350,000 | \$445,000 |
| 085000 - Interior Glaxing \& Shower Doars | $Y$ | $Y$ | \$0 | \$0 | \$0 | \$0 |
| 093000 - Ceramic and stone | $\gamma$ | $\gamma$ | \$0 | \$48,000 | \$43,000 | \$0 |
| 096000 - Wood Flooring \& Carpet | $Y$ | $\gamma$ | \$0 | \$75,000 | \$75,000 | \$0 |
| 09.9000 - Painting | $Y$ | $Y$ | \$0 | \$0 | \$0 | \$0 |
| 101400 - Signage | $r$ | $Y$ | \$0 | \$25,000 | \$25,000 | \$25,000 |
| 108000 - Spedalities | $\gamma$ | $Y$ | \$0 | \$25,000 | \$25,000 | \$25,000 |
| 500000 interior fit out Allowances | $Y$ | $Y$ | \$0 | \$2,468,700 | \$2,833,500 | \$6,029,650 |
| 142000 - Eleyztors | $Y$ | $Y$ | \$0 | \$200,000 | \$200,000 | \$500,000 |
| 148500 - Scaffolding and Protection | $Y$ | $r$ | \$0 | \$661,750 | \$661,750 | \$0 |
| 210000 - Fire Protection Spstem | $\gamma$ | $\gamma$ | 50 | \$572,504 | \$651,136 | \$720,170 |
| 220000 - Plumbing | $\gamma$ | $Y$ | \$0 | \$435,000 | \$489,720 | \$320,000 |
| 230000 - HVAC Piping \& Ductwork | $Y$ | $Y$ | \$0 | \$1,290,000 | \$1,370,256 | \$1,290,000 |
| 260000 - Electrical \& Low Voltage | $Y$ | $Y$ | \$0 | \$859,537 | \$1,023,697 | \$952,913 |
| 265000 - Lighting Fixtures | $Y$ | $Y$ | \$0 | \$74,054 | \$85,008 | \$207,102 |
| 310000 - Excavaton/ Foundation | $Y$ | $Y$ | \$0 | \$377,000 | \$377,000 | \$1,063,000 |
| 323000 - Ste work | $\gamma$ | $Y$ | \$0 | \$135,000 | \$135,000 | \$135,000 |
| 324000 - Landscaping | $Y$ | $Y$ | \$0 | \$0 | \$0 | \$0 |
| 013504 - Ste Security (Alowance) | $r$ | $Y$ | \$0 | \$330,000 | \$330,000 | \$330,000 |
| 013528 - Site Sajety (Excluded) | $Y$ | $Y$ | \$0 | \$0 | \$0 | \$0 |
| FFE-EXCIUDED |  |  | 50 | \$0 | 50 | \$0 |
|  |  |  |  |  |  |  |
|  | Trade Subtotals |  | \$16,932,857 | \$31,502,483 | \$32,675,515 | \$37,562,942 |
| General Conditions Costs |  |  | \$2,201,273 | \$4,095,323 | \$4,247,817 | \$4,883,182 |
|  |  | Subtotal | \$19,134,140 | \$35,597,806 | \$35,923,332 | \$42,446,124 |
| Design Cortingency 10\% |  |  | \$1,693,287 | \$3,150,248 | \$3,267,551 | \$3,756,294 |
| Constructon Contingency $10 \%$ |  |  | \$1,693,287 | \$3,150,248 | \$3,267,551 | \$3,756,294 |
| Subtotal |  |  | \$22,520,713 | \$41,898,302 | \$43,453,435 | \$49,958,713 |
|  |  | 9.00\% | \$2,026.854 | \$3,770,347 | \$3,911,259 | \$4,496,284 |
| Subtotal |  |  | \$24,547,577 | \$45,669,149 | \$47,369,694 | \$54,454,997 |
| Insurance (Profersiona/ / 4 (o/Offiste/ Polution) $2.50 \%$ |  |  | \$563,018 | \$1,047,458 | \$1,085,461 | \$1,248,968 |
| Subtotal |  |  | \$25,1 10,595 | \$46,716,607 | \$48,456,155 | \$55,703,955 |
| Construction Services Fee 4.00\% |  |  | \$900,829 | \$1,675,932 | \$ $\$ 1,738,337$ | \$1,998,349 |
| Subtotal |  |  | \$26,011,423 | \$48,392,539 | \$50,194,492 | \$57,702,313 |
| 501 |  | 1.73\% | \$394,112 | \$733,220 | \$760,523 | \$ $\$ 774,277$ |
|  |  | Total | \$26,405,536 | \$49,125,759 | \$50,955,015 | \$58,576,591 |

## Summary:

Options B, C and D are considered in the Reasonable Return analysis. Option A is not relevant to the Reasonable Return analysis as this option solely estimates costs to repair the façade, restore
the windows and stabilize the building. None of the required code compliance for a commercial use, alternate community facility or multifamily uses are addressed in Option A.

Additional structural costs and demising walls to create the Infill scenario in Option C are reflected in that budget scenario, representing much of the cost difference between the Infill and the Base scenarios. The residential scenario, which assumes a first-class rental apartment building, has a hard cost budget approximately $\$ 4.9$ million greater than the infill scenario. Much of the delta of those costs concerns interior fit out of the apartments and the costs punch nearly 60 new windows of the building façade in order to create units with legal light and air.

The table below summarizes the three (3) cost scenarios employed in the Reasonable Return analysis and illustrates the annual depreciated cost permitted for the calculation of Reasonable Return, which is the total development costs multiplied by $2 \%$. Note that in the calculation of the Reasonable Return, the annual depreciated cost is added to the annual depreciated cost of the improvements, which is the assessed value of the building multiplied by $2 \%$.

| Calculation of Construction Components | Base Scenario | Infill Scenario | Multi-Family Scenario |
| :---: | :---: | :---: | :---: |
| Subtotal - Full Scope | \$31,520,483 | \$32,675,515 | \$37,562,942 |
| Full Scope | \$31,520,483 | \$32,675,515 | \$37,562,942 |
| General Conditions Cost @ | \$4,097,663 | \$4,247,817 | \$4,883,182 |
| Subtotal | \$35,618,146 | \$36,923,332 | \$42,446,124 |
| Design Contingency | \$3,152,048 | \$3,267,552 | \$3,756,294 |
| Construction Contingency | \$3,152,048 | \$3,267,552 | \$3,756,294 |
| Subtotal - Full Scope | \$41,922,242 | \$43,458,435 | \$49,958,713 |
| CCIP | \$3,773,002 | \$3,911,259 | \$4,496,284 |
| Subtotal | \$45,695,244 | \$47,369,694 | \$54,454,997 |
| Insurance (professional/auto/offsite/pollution) | \$1,048,056 | \$1,086,461 | \$1,248,968 |
| Subtotal | \$46,743,300 | \$48,456,155 | \$55,703,965 |
| Construction Services Fee | \$1,676,890 | \$1,738,337 | \$1,998,349 |
| Subtotal | \$48,420,190 | \$50,194,492 | \$57,702,313 |
| SDI Program | \$733,639 | \$760,523 | \$874,277 |
| Total Development Costs | \$49,153,829 | \$50,955,015 | \$58,576,591 |
| Interior Program Fitout @ | Included | Included | Included |
| Total Fitout | Allow | Allow | Allow |
| Total Renovation Costs | \$49,153,829 | \$50,955,015 | \$58,576,591 |


| Depreciated Development Cost Calculation |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Base | Infill | Multi-Family |  |
| Scenario | $\$ 1,416,150$ | $\$ 1,416,150$ | $\$ 1,416,150$ |  |
| Assessed Value of Subj Building Exclusive of Land | $\$ 49,153,829$ | $\$ 50,955,015$ | $\$ 58,576,591$ |  |
| Projected Renovation Cost (full cost) | $\$ 50,569,979$ | $\$ 52,371,165$ | $\$ 59,992,741$ |  |
| Total | $\$ 1,011,400$ | $\$ 1,047,423$ | $\$ 1,199,855$ |  |

## Soft Costs

In the Stahl York hardship application, LPC accepted certain costs to be relevant for the Reasonable Return analysis, and referenced a prior hardship application involving KISKA's 351353 Central Park West application ("KISKA"). In this application, LPC treated the following soft costs as relevant to the analysis and acceptable to be included within the depreciable development budget. In the KISKA matter, the costs equated to $19.8 \%$ and $20.7 \%$ of the hard cost budgets for the two scenarios presented. In Stahl York, accepted soft costs equated to $21.8 \%$ of the total hard cost budget.

Of the 11 soft cost items listed below and accepted in the LPC's KISKA decision, none are included within the LBG budget.

- Architects' and Engineers' Fees
- Consultants
- Soil Investigation
- Inspection and Testing
- Owner's Construction Representative
- Insurance
- Legal Fees
- Title and Related Costs
- Filing Fees and Permits
- Accounting
- Mortgage Recording Tax


## C. Subject Location and Surrounding Upper West Side Area

The subject property is located along the northeasterly corner of West $86^{\text {th }}$ Street and Amsterdam Avenue within the Upper West Side neighborhood of Manhattan, New York. A map illustrating the subject's location is presented below:


## General Area

The neighborhood of Upper West Side is one of Manhattan's most desirable residential communities characterized by relatively quiet streets and the two parks, Central Park and Riverside Park, which form its easterly and westerly borders respectively. The neighborhood is well served by a variety of public transport options and many of its residents are employed by and commute to more commercial areas in Midtown and Lower Manhattan. Central Park West, West End Avenue, and Riverside Drive are considered the best residential addresses for individual apartments, and the side streets between Central Park West and Columbus Avenue are considered as the best addresses for single-family homes within this area. Upper West Side is dominated by a high concentration of elegant and expensive apartments and private homes.

## Population and Households

Trends for the population and households in the 10024 Zip Code and for the borough of Manhattan are summarized as follows:

| Population Statistics |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Census | Projected |  | Projected |  |
| Area | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 2 1}$ | \% Change | $\mathbf{2 0 2 6}$ | \% Change |
| Manhattan | Population | Population | From 2010 | Population | From 2021 |
| 10024 zip code | $58,58,873$ | $1,633,977$ | $3.0 \%$ | $1,654,548$ | $1.3 \%$ |
|  |  | 59,001 | $0.3 \%$ | 58,965 | $-0.1 \%$ |
| Source: ESRI |  |  |  |  |  |


| Household Statistics |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Area | $\mathbf{2 0 1 0}$ <br> Census | Projected <br> 2021 <br> Households | \% Change <br> From 2010 | Projected <br> 2026 <br> Households | \% Change <br> From 2021 |
| Manhattan | 763,846 | 794,969 | $4.1 \%$ | 807,556 | $1.6 \%$ |
| 10024 zip code | 30,545 | 30,455 | $-0.3 \%$ | 30,422 | $-0.1 \%$ |
| Source: ESRI |  |  |  |  |  |

Statistics indicate that during a period between 2010 and 2021, local area experienced a population increase of only $0.3 \%$, while the borough's population increased by $3.0 \%$. During the same timeframe, the number of households located in the local area decreased by $0.3 \%$, compared to the $4.1 \%$ increase reported for the borough. Projections for the next five years estimate a $1.3 \%$ increase for Manhattan population while the local area's population is expected to continue to remain flat to slightly decreasing, predicted to decline by $0.1 \%$. Projections for household formation indicate a similar trend for both the local area and the borough with anticipated decrease of $0.1 \%$ and an increase of $1.6 \%$, respectively.

## Income

Another important measure of an area's economic health is its income characteristics. A household consists of all the people occupying a single housing unit. While individual members of a household purchase goods and services, these purchases actually reflect household needs and decisions and levels of disposable income. Thus, the household (and subsequently, income) is one of the critical units to be considered when reviewing market data and forming conclusions about the demographic impact on any real property. The following charts details the median household income and per capita income for both the larger Manhattan market and the subject's local market:


Between 2021 and 2026 Median Household income for Manhattan and the Local Area is projected to increase by $15.2 \%$ and $21.3 \%$, respectively. Per capita income is projected to increase by $14.4 \%$ in Manhattan and by $13.9 \%$ in the local area. The income levels in the subject area have been and are projected to remain significantly above the income levels within Manhattan.

## Nearby and Adjacent Land Uses

The subject neighborhood is predominantly improved with two types of older multiple dwellings. The north-south avenues are lined with large, elevator apartment buildings, many built in the 1920s, a few built during the first decade of this century and a number that were constructed during the last thirty to forty years. The side streets contain four and five-story brownstones, which were originally built to house one or two families. A large number of these were subsequently converted into small rental apartment buildings.

## Recreation and Cultural Facilities

The main recreational areas for Upper West Side residents are Central Park, which borders the neighborhood to the east, and Riverside Park which borders the neighborhood to the west. The parks provide a variety of facilities, including modern and traditional playgrounds, baseball diamonds, swimming pools, tennis courts, ice skating rinks, bicycle and bridle paths and opportunities for boating. The Upper West Side is known for its institutions such as the Lincoln Center, the American Museum of Natural History, New York Historical Society and the Children's Museum. Houses of worship for most major religions and denominations along with such major religious and social institutions as the Ethical Culture Society and the West Side Branch of the YMCA play a significant role in the community.

The area is well served by public, parochial and private schools at all levels. The High School of Music and Art, The Julliard School, Fordham University and Columbia are all located on the Upper West Side.

## Public Transportation

Public transportation in the area is excellent and heavily used. The Eighth Avenue B and C subway lines run beneath Central Park West with local stops at $86^{\text {th }}$ and $96^{\text {th }}$ Streets. The 1,2 and 3 subway lines run along Broadway with an express stop at West $96^{\text {th }}$ Street. There is north and south bus service on Broadway, Amsterdam Avenue, Columbus Avenue, Riverside Drive, and Central Park West. Crosstown buses operate on $66^{\text {th }}, 72^{\text {nd }}, 79^{\text {th }}, 86^{\text {th }}$ and $96^{\text {th }}$ Streets. The subject's location has good vehicular excess via Broadway and is convenient to the West Side Highway (9A) which is locally accessed at West $79^{\text {th }}$ and West $96^{\text {th }}$ Streets.

## Housing Stock and Residential Development

In the vicinity of the subject property, the neighborhood is improved with mostly older, pre-war apartment buildings. Side streets feature a mix of pre-war apartment buildings, single-family and rental townhouse structures, and a few newer, post-war high-rise apartment buildings. New development in the subject neighborhood is ongoing. Primarily comprised of residential development, various new developments have recently been completed with numerous others currently under construction or planned.

Presented on the following page is a listing of various new developments that have recently been completed, under construction and planned.

| Building Name | Address | \# of Units | Delivered | Description | Sponsor/Developer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 200 Amsterdam | 200 Amsterdam Avenue <br> @ East 70th Street | 112 | 2021 | Luxury high-rise project measuring 52 stories and 668 feet | SJP Properties, Mitsui Fudosan America |
| The Marlow | 150 West 82nd Street | 27 | 2021 | 10 -story project; conversion of pre-war rental building. | GreenOak |
| Charlotte | 470 Columbus Avenue | 7 | 2021 | 8 -story and penthouse boutique development | Roe Corporation |
| The Belnord | 225 West 86th Street | 213 | Ongoing | Conversion and redevelopment of 12story prewar full-block building | Westbrook |
| 555 WEA | 555 West End Avenue @ | 13 | 2020 | Conversion and expansion of pre-war building. | Cary Tamarki |
| West End \& Eighty Seven | 269 West 87th Street | 39 | 2019 | New development on a ground lease; project sellout has struggled and sponsors took a $\$ 38$ minventory loan in Dec 2020. | Simon Baron |
| The Westly | 251 West 91st Street @ Broadway | 52 | 2022 | New 20-story development on the corner of Broadway. Project utilizes a large cantilever over the abutting property. Recently rebranded from the Era. | Adam America |
| 212W93 | 212 West 93rd Street | 20 | 2021 | New 14 -story condominium between Broadway and Amsterdam Aves. | Landsea |
| 2505 Broadway | 2505 Broadway at West 93rd Street | 44 | 2022 | New 19-story luxury condominium development with grade retail space. | Adam America |
| Dahlia | 212 West 95th Street | 38 | 2020 | New, 24-story condominium along West 95th Street between Broadway and Amsterdam | United <br> Management and Certes |
| 378 WEA | 378 West End Avenue at West 78th Street | 18 | 2020 | Luxury new condominium development and repurpose of existing building with large units | Alchemy |
| 250 West 81st Street | West 81st Street at Broad | 21 | 2019 | Luxury new condominium development with large units | Alchemy |

## Education

The Upper West Side is home to many public and private schools. Fordham University and Columbia University dominate the list of notable institutions of secondary education. The educational facilities of Lincoln Center include the Juilliard School of Music, the School of American Ballet, and the Fiorello LaGuardia School of Music and Arts. Distinguished private schools include Trinity School and Columbia Grammar and Prep School. Additionally, the area has many public and parochial schools with very good reputations.

## Conclusion

The area of Upper West Side is and is expected to remain, one of New York City's most desirable residential neighborhoods. The subject property benefits from being within short walking distance to Riverside Park and Central Park, both offering a variety of recreational opportunities. The subject has good access to public transportation and is afforded excellent vehicular access. Various retail and cultural facilities are within relatively easy reach. Demographics of the neighborhood reflect stable population and household numbers, as well as relatively high-income levels of its residents. The subject property is located along Amsterdam Avenue and West $86^{\text {th }}$ Street, which is a desirable residential location.

However, presently there is no way to predict with any degree of certainty to what extent the subject property and/or any other property in the City will be adversely affected in the near, or long term future by the current COVID-19 pandemic. Prior to the COVID-19 pandemic, the underlying fundamentals of the residential market in New York City were stable. Given the Property's location it should remain a viable location for a variety of uses in the long term, but may struggle in the short term as vacancy and concessions rise for most commercial, community facility and retail space types.

## D. Zoning and Code Analysis

The subject property is mapped within a zoning district identified as R10A, a General Residence District, and is mapped with a C1-5 commercial overlay and EC-2 (EC-2) Special Enhanced Commercial District-2. According to the City of New York Planning Commission, these Quality Housing contextual districts...
"...typically produce the substantial apartment buildings set on the avenues and wide streets of Manhattan, such as West End Avenue and Broadway on the Upper West Side. Commercial districts which are R10A residential district equivalent, such as C4-6A districts on Broadway and C2-8A districts on some blocks of East $96^{\text {th }}$ Street, are lined with large apartment houses with street level stores. Towers are not permitted in R10A districts.

Typical new buildings are apartment buildings between 21 and 23 stories with high lot coverage and street walls set at or near the street line. The floor area ratio (FAR) is 10.0. Residential and mixed buildings can receive a residential floor area bonus for the creation or preservation of affordable housing, on-site or off-site, pursuant to the Inclusionary Housing Program. The maximum base height before setback, which is 155 feet within 100 feet of a wide street with a qualifying ground floor and 125 feet on a narrow street, is designed to match the height of many older apartment buildings. Above the base height, the required minimum setback is 10 feet on a wide street and 15 feet on a narrow street. The maximum height of a building is 210 feet within 100 feet of a wide street and 185 feet beyond 100 feet of a wide street. If providing a qualifying ground floor, the maximum height on a wide street is 215 feet.

Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program or that provide certain senior facilities.

Off-street parking is generally required for 40 percent of a building's dwelling units, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone and the Manhattan Core, or for lots less than 15,000 square feet. Off-street parking requirements can be waived if 15 or fewer parking spaces are required or if the zoning lot is 10,000 square feet or less."

## Use Groups

Use Groups permitted in R10A consist of Residential Use Groups 1 and 2, and Community Facility Use Groups 3 and 4. The property is mapped within a C1-5 Local Retail overlay. In addition to Use Groups 1 through 4, Use Groups 5 and 6 are permitted in C1-5. Use Group 5 addresses applicability

## C1-5 Commercial Overlay

The site also has a C1-5, Local Retail District overlay. According to the City of New York Zoning resolution, these districts are designed...
"to provide for local shopping and include a wide range of retail stores and personal service establishments which cater to frequently recurring needs. Since these establishments are required in convenient locations near all residential areas, and since they are relatively unobjectionable to nearby residences, these districts are widely mapped. The district regulations are designed to promote
convenient shopping and the stability of retail development by encouraging continuous retail frontage and by prohibiting local service and manufacturing establishments which tend to break such continuity."

C1 districts accommodate the retail and personal service shops needed in residential neighborhoods. These districts are often mapped as an overlay along major avenues in otherwise residentially zoned neighborhoods. They are widely mapped throughout the city. Typical uses include grocery stores, small dry cleaning establishments, restaurants and barber shops. All cater to the daily needs of the immediate neighborhood. Regulations limit commercial use to one or two floors.

Continuous, clustered retail development is desired in these districts. Local service and repair establishments are not permitted to break the retail commercial continuity. Permitted Use Groups within a C1-5 district include all residential use groups, community facilities and specified retail and commercial uses. Parking is not required within a C1-5 district which is typically mapped in a densely populated area. When mapped in a R10 district, C1-5 districts have commercial density of 2.0 for commercial uses.

## EC-2 Enhanced Commercial

The subject property is also mapped in the Special Enhanced Commercial District 2 (EC-2) district, which includes Broadway bounded by 72nd Street and 110th Street on the west side, and 74th Street and 110th Street on the east side. EC-2 was created to maintain, over time, the general multi-store character of Broadway, while promoting a varied and active retail environment. The special district provisions apply ground floor frontage limitations for most new and expanding retail and commercial establishments and residential lobbies, and retail transparency requirements for new buildings. Overall store sizes are not restricted, and stores can be laid out with any configuration, including the basement, second story, wrapping behind, or along corner frontages. Existing commercial spaces with frontages exceeding what is permitted along Broadway in EC-3 are not affected.

The following bulk regulations apply to the subject:
The following bulk regulations apply:

| Maximum Floor Area Ratio (FAR): | 10.0 (12 FAR available with inclusionary <br> housing bonus) |
| :--- | :--- |
| Maximum Lot Coverage: | $100 \%$ |
| Corner Lot: | $70 \%$ |
| Interior/Through Lot: | 125 feet -150 feet |
| Base Height (Min/Max) | 60 feet -125 feet |
| Wide Street: |  |
| Narrow Street: | 210 feet (235 feet with IH or AIRS) |
| Maximum Building Height: | 185 feet |
| Wide Street: |  |
| Narrow Street: | None required in Core Manhattan |
| Minimum Required Parking: |  |

Above the maximum base height, buildings must be set back 15 feet when facing a narrow street and 10 feet when facing a wide street; the subject fronts along two (2) wide streets.

The subject site covers a total plot area of 10,157 square feet. The maximum building area permitted, if the site was vacant and available for development to its Highest and Best Use, is as follows:

## Plot Size (SF) FAR Maximum Building Area (SF)

$$
10,157 \quad \times \quad 10.0=101,570
$$

## Conclusion:

The subject site contains approximately 10,157 square feet, indicating a basic maximum Zoning Floor Area (ZFA) of 101,570 square feet. If developed with Inclusionary Housing bonuses, the total ZFA achievable on the site is 121,884 square feet. Based on the present zoning ordinance, the subject property is legally conforming as to use, but may have non-complying elements with respect to setbacks and rear yards. It is assumed for the multifamily scenario that any non-compliance will be cured.

The CCI analysis of the current improvements indicated the existing improvements lacked compliance for both life safety and ingress/egress. A formal zoning analysis was not provided in connection with this report which address the level of zoning non-conformance or non-compliance with respect to bulk and use. We note that the improvements were constructed long before the enactment of the current zoning code and the improvements are considered to be legal, noncomplying.

## E. Real Estate Assessed Valuation and Tax Data

The subject property is identified on the New York City tax rolls as Block 1217, Lot 1. According to the New York City tax records, the property is identified as Class IV property. The Property Division of the City of New York Department of Finance (DOF) assigns both an actual and transitional assessment to real property. Real estate taxes are typically calculated based on the lower of the two assessments. Assessments are theoretically based on $45 \%$ of the assessor's fair market value conclusion.

The historical tax rates for Class IV property indicate an average annual change in the tax rate of $0.369 \%$ over the past ten years. The current Class IV tax rate is $10.755 \%$, or $\$ 10.755$ per $\$ 100$ of assessed value.

The subject's most recent tentative values are as follows:

## Assessed Value

Land Assessment (Tentative, Taxable) Building Assessment (Tentative, Taxable) Total Assessment (Tentative, Taxable)

2022/23
\$2,047,500
$\$ 1,416,150$
$\$ 3,463,650$

## Comparable Assessments

The subject's taxable tentative 2022/23 assessment is $\$ 3,463,650$ or $\$ 216.44$ per square, based on the building area the City of New York has for the subject property. We have compared the subject assessment with assessments of similar church properties to determine if the subject's assessment is within market levels. We have researched assessed values of comparable church properties in Manhattan's Upper West Side and Upper East Side. The table below contains the array of comparable assessments.

| Address | Religious Facility | Block / Lot | Department of Finance Listed Sq. Ft. | $\begin{array}{\|c} \text { 2022/23 } \\ \text { Land } \\ \text { Assessment } \\ \hline \end{array}$ | Tentative Assess Building Assessment | sments <br> Total <br> Assessment | PSF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUBJECT | West-Park Presbyterian | 1217/1 | 16,003 | \$2,047,500 | \$1,416,150 | \$3,463,650 | \$216.44 |
| 15 West 86th Street | The Society for the Advancement of Judaism | 1200 / 23 | 11,955 | \$1,030,500 | \$1,974,795 | \$1,986,750 | \$166.19 |
| 1 West 96th Street | First Church of Christ, Scientist | 1832 / 29 | 33,011 | \$1,197,000 | \$1,515,150 | \$2,712,150 | \$82.16 |
| 351 East 74th Street | Jan Hus | 1449 / 20 | 16,975 | \$1,471,500 | \$2,180,250 | \$3,651,750 | \$215.13 |
| 748 Amsterdam Ave | Holy Name of Jesus RC | 1868 / 29 | 14,160 | \$1,260,000 | \$1,024,200 | \$2,284,200 | \$161.31 |
| 409 East 79th Street | St. Monica's | 1559 / 5 | 70,081 | \$5,805,000 | \$5,043,600 | \$10,848,600 | \$154.80 |


| Statistic | \$/PSF |
| :--- | ---: |
| Minimum | $\$ 82.16$ |
| Maximum | $\$ 215.13$ |
| Average | $\$ 155.92$ |
| Subject | $\$ 216.44$ |

The subject's assessment per square foot - according to the DOF - is above the assessments of the comparable church buildings. This further illustrates that it is appropriate to use the subject current assessment to calculate the Reasonable Return analysis.

## Exempt Status:

The subject property has long enjoyed a full exemption from real estate taxes. Given its operation as a church, the property continues to be assessed by the City of New York Department of Finance, but has no obligations to pay any real estate taxes.

## Use of Assessments in Reasonable Return Calculations:

Although the property is exempt from real estate taxes, the property's assessments are used in two ways in this Economic Analysis Report.

## Depreciation Calculation

First, the building assessment is a component of the total improvement cost used to calculated annual depreciation. We are guided by Administrative Code Section 25-302, which states in the calculation of Reasonable Return that an expense may include, "... an allowance for depreciation of two per centum of the assessed value of the improvement, exclusive of the land..." The Building Assessment of $\$ 1,416,150$ is added to the total renovation costs for each scenario to compute the basis for the depreciation calculation. ${ }^{3}$

## Reasonable Return Calculation

Second, in computing the Reasonable Return, the calculation is based on, ".... net annual return of six per centum of the valuation of an improvement parcel... Such valuation shall be the current assessed valuation established by the city, which is in effect at the time of the filing of the request for a certificate of appropriateness..." The Reasonable Return analysis translates, via capitalization, the estimated NOI from market value to assessed value to calculate this Reasonable Return and determines whether the $6 \%$ threshold is achieved under either scenario. It is noted that since neither of the three (3) scenarios produces positive net income, when factoring in the depreciated cost component as an annual expense.

## Effective Tax Rate Computation

The actual taxes are not utilized in the Reasonable Return analysis, and the effective tax rate is added to the base capitalization to establish the loaded capitalization rate.

For the Base and Infill scenarios, Class IV rates are utilized. The effective tax rate is computed as follows: Assessment Ratio x Tax Rate = Effective Tax Rate. In the case of the subject, the assessment ratio for Class IV properties is $45 \%$, the Tax Rate is $10.755 \%$ and the effective tax rate ( .45 x .10755 ) is $4.83975 \%$, which we have rounded to $4.84 \%$.

For the Multi-Family scenario, Class II rates are utilized. The effective tax rate is computed as follows: Assessment Ratio x Tax Rate = Effective Tax Rate. In the case of the subject, the assessment ratio for Class IV properties is $45 \%$, the Tax Rate is $12.235 \%$ and the effective tax rate ( .45 x .12235 ) is $5.5058 \%$, which we have rounded to $5.506 \%$.

[^3]
## F. Development Costs Assumptions - All Three (3) Scenarios

Below is a summary of the LBG cost estimates. Inclusive in these costs for the Base and Infill scenarios are tenant improvement allowances to create a "white box." It is our opinion that this will be required to achieve market rents for the property.

## CONSTRUCTION COSTS AND SCENARIO COMPARISON - UPDATED APRIL 2023

| Calculation of Construction Components | Base <br> Scenario | Infill Scenario | Multi-Family Scenario |
| :---: | :---: | :---: | :---: |
| Subtotal - Full Scope | \$31,520,483 | \$32,675,515 | \$37,562,942 |
| Full Scope | \$31,520,483 | \$32,675,515 | \$37,562,942 |
| General Conditions Cost @ | \$4,097,663 | \$4,247,817 | \$4,883,182 |
| Subtotal | \$35,618,146 | \$36,923,332 | \$42,446,124 |
| Design Contingency | \$3,152,048 | \$3,267,552 | \$3,756,294 |
| Construction Contingency | \$3,152,048 | \$3,267,552 | \$3,756,294 |
| Subtotal - Full Scope | \$41,922,242 | \$43,458,435 | \$49,958,713 |
| CCIP | \$3,773,002 | \$3,911,259 | \$4,496,284 |
| Subtotal | \$45,695,244 | \$47,369,694 | \$54,454,997 |
| Insurance (professional/auto/offs ite/pollution) | \$1,048,056 ${ }^{\text {T }}$ | \$1,086,461 | \$1,248,968 |
| Subtotal | \$46,743,300 | \$48,456,155 | \$55,703,965 |
| Construction Services Fee | \$1,676,890 | \$1,738,337 | \$1,998,349 |
| Subtotal | \$48,420,190 | \$50,194,492 | \$57,702,313 |
| SDI Program | \$733,639 | \$760,523 | \$874,277 |
| Total Development Costs | \$49,153,829 | \$50,955,015 | \$58,576,591 |
| Interior Program Fitout @ | Included | Included | Included |
| Total Fitout | Allow | Allow | Allow |
| Total Renovation Costs | \$49,153,829 | \$50,955,015 | \$58,576,591 |

## G. Income and Expense Estimates:

## Base and Infill Scenarios

## Stabilized Income Estimates

As discussed in greater detail below, we estimated market rent for all rentable spaces in the subject property under both development scenarios in order to estimate stabilized income upon completion. Based on comparable commercial and community facility data uncovered in the subject market and competing markets, we developed the following estimated market rents, vacancy and collection loss factors, and stabilized effective gross incomes. The market rental analysis for all three scenarios is presented in the Addenda to this report.

## Conclusion of Market Rent and Vacancy - Both Scenarios

| Potential Space Use | Base Scenario | Infill Scenario |
| :--- | ---: | ---: |
| Rentable Building Sq. Ft. | 18,353 | 22,014 |
| Rent PSF | $\$ 50.00$ | $\$ 50.00$ |
|  | $\$ 917,650$ | $\$ 1,100,700$ |
| PGI | $5.0 \%$ | $5.0 \%$ |
| Less: Vacancy and Collection Loss @ \% | $(\$ 45,883)$ | $(\$ 55,035)$ |
| Less: Vacancy and Collection Loss @ $\$$ | $\mathbf{\$ 8 7 1 , 7 6 8}$ | $\mathbf{\$ 1 , 0 4 5 , 6 6 5}$ |

We note that the current tenant occupies the subject property at an annualized rent of approximately $\$ 2.00$ per square foot.

## Stabilized Operating Expense Estimates

Insurance: This expense estimate is for general liability and fire insurance premiums for the subject property under each development scenario. Current insurance premia are $\$ 41,000$ for Property/Casualty and $\$ 12,780$ for General Liability, however these insurance premia reflect the unstable condition of the subject property. Typically, smaller commercial structures have expenses in the range of $\$ 0.50$ to $\$ 1.25$ per square foot. We estimate an expense towards the midpoint of this range at $\$ 1.00$ per gross square foot.

Professional Fees: This expense estimate covers annual, recurring professional fees for legal and accounting purposes. We estimate this expense at $\$ 5,000$ per annum under both scenarios. It is assumed that the property will be a single-tenant asset with relatively simple professional requirements.

Structural Repairs: It is assumed that for the Base and Infill scenarios that the property will be net leased and the tenant will be wholly responsible for interior maintenance and repairs. We have assumed that the landlord will be responsible for any structural repairs. We estimate a small expense in this category of $\$ 0.50$ per square foot given that the valuation assumptions presumes that the property has been renovated and cured of interior and exterior deficiencies.

Management and Leasing: Management fees for a small, single-tenant property are generally in the range of $1.0 \%$ to $3.0 \%$ per annum. We have estimated this expense at $2.0 \%$ per annum. We have also provided for a recurring leasing commissions cost. Standard practice in NYC is that on a 10-year deal
with no broker overrides, total commissions are roughly equal to $32 \%$ of first year rent. With full broker overrides, this increases to $48 \%$ of first year rent. We assume the midpoint of this range at $40 \%$ of the first year income, and amortized over a 10-year period. This amount is equal to $4 \%$ of annual rent. Together, the management and leasing commissions are estimated to be $6 \%$ of effective gross income.

Depreciation Calculation: Per the guidance of the LPC Statute, the depreciation calculation is $2 \%$ of the improvement cost and building assessment. The computation of the inputs is presented below.

| Depreciated Development Cost Calculation |  |  |  |
| :--- | ---: | ---: | ---: |
| Scenario |  |  |  |
| Base | Infill |  |  |
| Assessed Value of Subj Building Exclusive of Land (full marl | $\$ 1,416,150$ | $\$ 1,416,150$ |  |
| Projected Renovation Cost (full cost) |  | $\$ 49,153,829$ | $\$ 50,955,015$ |
| Total | $\$ 50,569,979$ | $\$ 52,371,165$ |  |
| Annual Depreciation @ | $2.0 \%$ | $\$ 1,011,400$ | $\$ 1,047,423$ |

Set forth below is our estimate of the total subject property expenses under both the Base and Infill scenarios utilized in our economic analyses.

Subject Property Expenses - Exclusive of Depreciated Costs and Real Estate Taxes

| Potential Space Use |  | Base Scenario | Infill Scenario |
| :--- | ---: | ---: | ---: |
| Expenses |  |  |  |
| Insurance PSF @ | $\$ 1.00$ | $\$ 18,353$ | $\$ 22,014$ |
| Professional Fees p/annum @ | $\$ 5,000$ | $\$ 5,000$ | $\$ 5,000$ |
| Utilities |  | Tenant | Tenant |
| Payroll | None | $\$ 0$ | $\$ 0$ |
| Repairs and Maintenance | Tenant | $\$ 0$ | $\$ 0$ |
| Structural Repairs PSF @ | $\$ 0.50$ | $\$ 9,177$ | $\$ 11,007$ |
| Management and Leasing \% EGI @ | $6.00 \%$ | $\$ 52,306$ | $\$ 62,740$ |
| Expenses BEFORE Amortized Dev Costs and RE | Taxes | $\mathbf{\$ 8 4 , 8 3 6}$ | $\mathbf{\$ 1 0 0 , 7 6 1}$ |

Set forth below is our estimate of the total subject NOI less depreciated development costs for the Base and Infill scenarios utilized in our economic analyses.

## Net Operating Calculation - Before Real Estate Taxes

| Potential Space Use | Base Scenario | Infill Scenario |
| :---: | :---: | :---: |
| Rentable Building Sq. Ft. | 18,353 | 22,014 |
| Rent PSF | \$50.00 | \$50.00 |
| PGI | \$917,650 | \$1,100,700 |
| Less: Vacancy and Collection Loss @ \% | 5.0\% | 5.0\% |
| Less: Vacancy and Collection Loss @ \$ | $(\$ 45,883)$ | $(\$ 55,035)$ |
| Effective Gross Income | \$871,768 | \$1,045,665 |
| Expenses |  |  |
| Insurance PSF @ | \$18,353 | \$22,014 |
| Professional Fees p/annum@ | \$5,000 | \$5,000 |
| Utilities | Tenant | Tenant |
| Payroll | \$0 | \$0 |
| Repairs and Maintenance | \$0 | \$0 |
| Structural Repairs PSF @ | \$9,177 | \$11,007 |
| Management and Leasing \% EGI @ | \$52,306 | \$62,740 |
| Expenses BEFORE Depreciated Dev Costs and RE Taxes | \$84,836 | \$100,761 |
| NOI BEFORE Depreciated Dev Costs and RE Taxes | \$786,932 | \$944,904 |
| Less: Depreciated Development Costs | (\$1,011,400) | (\$1,047,423) |
| Net Operating Income (w/out Real Estate Taxes) | (\$224,468) | (\$102,519) |

## Conclusion:

The above analysis demonstrates a negative Net Operating Income of $(\$ 224,468)$ and $(\$ 102,519)$ for the Base and Infill scenarios, respectively. This negative figure is achieved before incorporation of real estate taxes as an expense. With negative net income it is impossible to test for a reasonable return, as the return is negative. Therefore, due to the lack of positive net operating income, the reasonable return analysis is unable to be completed for these scenarios.

## Multi-Family Scenario

## Stabilized Income Estimates

As discussed in greater detail below, we estimated market rent for apartments that can be developed in the subject property in order to estimate stabilized income upon completion. Based on comparable apartment rental data uncovered in the subject's Upper West Side market, we developed the following estimated market rents, vacancy and collection loss factors and stabilized effective gross income. The residential market analysis is presented in the Addenda to this report.

Conclusion of Market Rent and Vacancy - Multi-Family Scenario
Summary of Projected Rent Statistics
Statistical Summary of Rent Projections

| Unit <br> Type | Statistical <br> \# of <br> Units | Sin <br> Rent | Max <br> Rent |  | Avg Rent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Studio | 5 | $\$ 3,300$ | $\$ 3,900$ | $\$ 3,580$ | $\$ 70.54$ |
| $\mathbf{1}$ | 3 | $\$ 4,250$ | $\$ 4,700$ | $\$ 4,517$ | $\$ 65.61$ |
| $\mathbf{2}$ | 2 | $\$ 6,200$ | $\$ 6,400$ | $\$ 6,300$ | $\$ 69.74$ |
| $\mathbf{2 + D e n ~}$ | 5 | $\$ 6,500$ | $\$ 7,400$ | $\$ 7,060$ | $\$ 73.97$ |
| $\mathbf{3}$ | 5 | $\$ 7,500$ | $\$ 12,000$ | $\$ 9,280$ | $\$ 77.75$ |
| Totals | $\mathbf{2 0}$ |  |  | $\mathbf{\$ 6 , 2 8 8}$ | $\mathbf{\$ 7 3 . 2 1}$ |

Summary of Potential Gross Income

| Potential Space Use | Multi-Family |  |
| :--- | ---: | ---: |
| Rentable Residential Sq. Ft. | 20,613 |  |
| Total \# Residential Units | p/ Mo. | 20 |
| Potential Gross Income - Apartments | $\$ 6,288$ | $\$ 1,509,000$ |
| Potential Gross Income - Amenity and misc income | $\$ 200$ | $\$ 48,000$ |
| Total Potential Gross Income | $\mathbf{\$ 1 , 5 5 7 , 0 0 0}$ |  |
| Less: Vacancy and Collection Loss @ \% | $4.0 \%$ |  |
| Less: Vacancy and Collection Loss @ \$ | $\mathbf{( \$ 6 0 , 3 6 0 )}$ |  |
| Effective Gross Income | $\mathbf{\$ 1 , 4 9 6 , 6 4 0}$ |  |
| Per Unit / Mo. | $\$ 6,236$ |  |
| Per RSF - Annual | $\$ 72.61$ |  |

## Stabilized Operating Expense Estimates

Insurance: This expense estimate is for general liability and fire insurance premiums for the subject property. Current insurance premia are $\$ 41,000$ for Property/Casualty and $\$ 12,780$ for General Liability, however these insurance premia reflect the unstable condition of the subject property. Typically, smaller apartment properties exhibit insurance expenses in the range of $\$ 500$ to $\$ 1,000$ per unit. We estimate an expense towards the higher end of this range at $\$ 1,000$ per unit which equates to a figure of $\$ 0.58$ per gross square foot. We note that at an average unit size of 1,031 rentable square feet, these units are large in comparison to many rental units in this market.

Utilities: This expense is comprised of electric, water and sewer, fuel for heating and cooking gas. We estimate a cost of $\$ 1,750$ per unit, which is in line not only with comparable costs for new/converted projects, but is in line with 2020 Rent Guidelines Board (RGB) expense estimates for

Core Manhattan properties published in March 2022. For post 1946 buildings - used because this hypothetical conversion will occur in 2022 - utilities costs total $\$ 1,836$ per unit. Both Core Manhattan and Manhattan exhibit similar statistics in this category.

Payroll: This expense covers the salaries, benefits and payroll taxes of building employees. We have conservatively estimated that in order to generate the subject rents that staffing required would consist of an off-site superintendent and a part-time superintendent's assistant/porter. Total payroll for these two part-time employees is estimated to be $\$ 5,000$ per apartment or $\$ 100,000$ per annum. We note that neither concierge nor doorman service is assumed for this project and that tenant entry will be through coded entry and virtual doorman service.

Turnover Costs: In order to maintain the estimated market rents, annual repairs, maintenance and turnover costs are necessary. As the property is anticipated to be a new conversion, effectively a new development property, this expense is estimated at $\$ 1,000$ per unit as intensive repairs are not anticipated in the first several years of operation.

Service Contracts: We have separately estimated service contracts for the building comprising of elevator maintenance and virtual doorman service. The property is anticipated to have two (2) passenger elevators. Based on comparable data for similar size buildings in this market, we estimate an annual elevator service contract to be $\$ 7,500$ per annum. As it relates to virtual doorman service, we have assumed that the property will be able to achieve the projected market rents with a virtual doorman service in place of a full-time doorman and/or security service. Based on comparable expenses we estimate this cost at $\$ 400$ per month or $\$ 4,800$ per annum. Combined, these contracts total $\$ 12,300$ per annum and we have rounded this figure to $\$ 12,500$ per annum.

Professional Fees: This expense estimate covers annual, recurring professional fees for legal and accounting purposes. We estimate this expense at $\$ 7,500$ per annum or $\$ 375$ per unit, which is within the range typically observed for small apartment properties.

Miscellaneous and Amenity Operating Expenses: The property is anticipated to have 2,417 square feet of ground level amenity space that is accessory to the residential use. The amenity space will likely be programmed with a small fitness facility and tenant lounge, both of which will require regular cleaning, maintenance and general upkeep. We have estimated a cost of $\$ 10,000$ to cover this, and other miscellaneous expenses.

Management and Leasing: Management fees for a small, luxury rental property are generally in the range of $2.0 \%$ to $6.0 \%$ per annum. We have estimated this expense at $5.0 \%$ per annum, which provides for recurring leasing commissions cost. Standard practice in NYC is that on a one-year lease, broker commissions are roughly equal to one months' rent. Assuming a turnover of $25 \%$ of the units annually, this annual cost approximates to $2 \%$ of potential gross income.

Set forth below is our projected stabilized statement for the subject property assuming renovation as a multi-family building.

## Subject Property Expenses and Net Operating Income Calculation Exclusive of Depreciated Costs and Real Estate Taxes

|  | $\mathbf{\$ 1 , 4 9 4 , 7 2 0}$ |
| :---: | ---: |
| Per Unit $/$ Mo. | $\$ 6,228$ |
| Per RSF - Annual | $\$ 72.51$ |


| Expenses | p/unit | Annual |
| :--- | ---: | ---: |
| Insurance Per Unit @ | $\$ 1,000$ | $\$ 20,000$ |
| Utilities Per Unit @ | $\$ 1,500$ | $\$ 30,000$ |
| Payroll p/annum @ | $\$ 5,000$ | $\$ 100,000$ |
| Turnover and Cleaning Per Unit @ | $\$ 1,000$ | $\$ 20,000$ |
| Service Contracts (elevator, virtual doorman) |  | $\$ 12,500$ |
| Professional Fees p/annum @ | $\$ 7,500$ |  |
| Misc. and amenity operating expenses |  | $\$ 10,000$ |
| Management and Leasing \% EGI @ |  | $\$ 74,736$ |
| Expenses Before Amortized Dev Costs and RE Taxes |  | $\mathbf{\$ 2 7 4 , 7 3 6}$ |
| Expenses Per Unit/Month - Before Dev. Costs and RET | $\$ 13,737$ |  |
| OpEx Ratio - Before Dev. Costs and RET | $18.38 \%$ |  |
|  |  |  |
| NOI BEFORE Amortized Dev Costs and RE Taxes | $\mathbf{\$ 1 , 2 1 9 , 9 8 4}$ |  |
| Less: Amortized Development Costs | $\mathbf{( \$ 1 , 1 9 9 , 8 5 5 )}$ |  |
| Net Operating Income | $\mathbf{\$ 2 0 , 1 2 9}$ |  |

Unlike in the Base Scenario and the Infill Scenario, the Multi-family scenario produces a small positive net operating income of $\$ 20,129$, if real estate taxes are not included as an expense. In the Base and Infill scenarios, because the net operating incomes were negative, the test of reasonable return was unable to be performed, and estimating real estate taxes for these scenarios was not necessary. However, because positive net operating income was derived via the multi-family scenario, in order to test whether there is a reasonable return, we must estimate the post-renovation taxes and include this in the analysis.

Per the calculations presented by LPC in the Stahl decision, the calculation of reasonable return is based upon the post-renovation assessed value. In determining the post-renovation assessed value we have been guided by the Stahl decision in developing an effective tax rate to estimate the postrenovation assessed value and corresponding taxes. This calculation is processed by dividing the net operating income, exclusive of real estate taxes, by the loaded capitalization rate. The loaded capitalization is comprised of the effective tax rate and a basic capitalization rate. The net operating income, exclusive of real estate taxes, is divided by the loaded capitalization to produce the equalized market value of the property as if equitably assessed.

## Effective Tax Rate Calculation:

The effective tax rate calculation is the result of multiplying the tax rate in effect for the subject property by $45 \%$. As previously set forth, the tax rate in effect for the subject property as of the analysis date is $12.235 \%$. Multiplied by $45 \%$ results in an effective tax rate of $5.506 \%$.

## Selection of Basic Capitalization Rate:

We note that the capitalization rate used in the Stahl decision relies on the City Assessor's capitalization rates, not market-derived rates from sales or investor surveys. The loaded capitalization rate used in Stahl decision for this analysis was $13.574 \%$, which was comprised of an effective tax rate of $5.91 \%$ and capitalization rate of $7.7 \%$.

The capitalization rate selected to capitalize the income into value is $6.80 \%{ }^{4}$. The capitalization rate is substantially above market levels but is in line with the capitalization rate the City's assessors used to determine capitalization rates when assessing real property in the City of New York. According to the 2023 Assessment Roll Guidelines for the January 15, 2022 assessment roll published by the Finance Department of the City of New York indicates the following:

| Apartment Buildings with More Than 10 Units Including Rental Buildings, Cooperatives and Condominiums Residential Unregulated |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Manhattan |  |  |  | Vacancy Rate | Bcat/Subcat |
| Pre-1973 Rental Elevator Buildings |  |  |  | 14.19\% | RU32 |
| Pre-1973 Cooperative Elevator Buildings |  |  |  | 14.19\% | CU32 |
| Pre-1973 Condominium Elevator Buildings |  |  |  | 14.19\% | EU32 |
| Pre-1973 Condo-Coops/Condo-Rental Elevator Buildings |  |  |  | 14.19\% | DU32 |
|  | Low | Median | High | - | Effective Tax Rate |
| Income | \$31.46 | \$41.52 | \$50.33 |  |  |
| Expense | \$15.76 | \$19.01 | \$21.66 |  |  |
| Expense Ratio | 50\% | 46\% | 43\% |  |  |
| Cap Rate | 6.80\% | 6.77\% | 6.84\% |  |  |
| Approximate Market Value Range | \$128 | \$183 | \$232 |  | 5.506\% |

The resulting total loaded capitalization rate utilized in our analysis is $12.306 \%$, comprised of the effective tax rate of $5.506 \%$ and the estimated base capitalization rate of $6.8 \%$.

## Estimated Assessed Value - Post-Renovation

We have capitalized into value the estimated net operating income, without real estate taxes, using the loaded capitalization rate of $12.306 \%$ in order to estimate the post-renovation assessed value and resulting real estate taxes. Based on the calculations presented in the table below, the postrenovation market value is $\$ 9,913,935$. In order to derive the post-renovation assessed value, this figure is multiplied by $45 \%$. The resulting assessed value is $\$ 4,461,271$ and resulting real estate taxes, using the $12.235 \%$ Class II tax rate are $\$ 545,836$. The post-renovation real estate taxes are utilized in the reasonable return calculation.

[^4]
## PROJECTED ASSESSED VALUE AND RE TAXES SUMMARY

| Scenario | Multi-Family |
| :--- | ---: |
| Net Operating Income | $\mathbf{\$ 1 , 2 1 9 , 9 8 4}$ |
| Effective Tax Rate | $5.506 \%$ |
| Basic Capitalization Rate | $6.800 \%$ |
| Loaded Capitalization Rate | $\mathbf{1 2 . 3 0 6 \%}$ |
| Capitalized Market Value (loaded Cap rate) | $\$ 9,913,935$ |
| Assessed Value - Post-Renovation (45\% of above) | $\$ 4,461,271$ |
| Projected Real Estate Taxes (12.235\% of AV) | $\mathbf{\$ 5 4 5 , 8 3 6}$ |

## H. Reasonable Return Analysis

Using the post-renovation real estate taxes of $\$ 545,836$, the total expenses are revised to $\$ 820,572$ and the resulting net operating income is $\$ 674,148$. After deducting the amortized annual development costs of $\$ 1,199,855$ the resulting net operating income is $(\$ 525,707)$, indicating that this scenario does not meet the reasonable return threshold of $\$ 207,819$.

| Effective Gross Income |  | $\mathbf{\$ 1 , 4 9 4 , 7 2 0}$ |
| :--- | ---: | ---: |
| Per Unit / Mo. | $\$ 6,228$ |  |
| Per RSF - Annual |  | $\$ 72.51$ |
|  |  |  |
| Expenses | p/unit | Annual |
| Real Estate Taxes - Calculated on Post-Renovation AV |  | $\$ 545,836$ |
| Insurance Per Unit @ | $\$ 1,000$ | $\$ 20,000$ |
| Utilities Per Unit @ | $\$ 1,500$ | $\$ 30,000$ |
| Payroll p/annum@ | $\$ 5,000$ | $\$ 100,000$ |
| Turnover and Cleaning Per Unit @ | $\$ 1,000$ | $\$ 20,000$ |
| Service Contracts (elevator, virtual doorman) |  | $\$ 12,500$ |
| Professional Fees p/annum@ |  | $\$ 7,500$ |
| Misc. and amenity operating expenses | $\$ 10,000$ |  |
| Management and Leasing \% EGI @ | $5.00 \%$ | $\$ 74,736$ |
| Expenses Before Amortized Dev Costs and RE Taxes |  | $\$ 820,572$ |
| Expenses Per Unit |  | $\$ 41,029$ |


| NOI BEFORE Amortized Dev Costs | $\mathbf{\$ 6 7 4 , 1 4 8}$ |
| :--- | ---: |
| Less: Amortized Development Costs | $(\$ 1,199,855)$ |
|  | $\mathbf{( \$ 5 2 5 , 7 0 7 )}$ |

## Conclusion - Reasonable Return Analysis

Due to the extraordinary costs to renovate, restore and convert the property to a multi-family use, a reasonable return of $\$ 207,819$, or $6 \%$ of the assessed value of $\$ 3,463,350$ is unable to be achieved.

Reas onable Return Threshold Analysis - Multi-Family Scenario
Actual Assessment
\$3,463,650
6\% Return on Actual Assessment
\$207,819
Calculated Return via Income Approach with RETaxes
$(\$ 525,707)$
Return Exceed 6\% Threshold?

## Schedule of Addenda Exhibits

1. Comparable Church / Community Facility Adjustment Grid and Discussion
2. Comparable Residential Rental Data and Discussion
3. Photographs of Subject Property
4. Construction Cost Data
5. Updated Historic Tax Credit Analysis

## Base Scenario and Infill Scenario Rental Overview

## Summary of Comparable Rents

The comparable rents concern a collection of community facility rents and alternative uses that would be appropriate for the subject property's improvements such as a museum or club venue. The data includes both consummated lease deals, lease extensions as well as asking rents for comparable spaces. In general, the spaces range in location, size, configuration and finishes, but the array of data brackets the subject property in most characteristics under the assumption it has been renovated and that structural deficiencies have been cured such that it can be occupied as income producing property. The adjustments were applied to the subject property, under the assumption it is renovated and cured of structural deficiencies and will be delivered in a marketable condition. The following pages contains photographs of the comparable rentals followed by an adjustment grid and explanation of adjustments applied to each comparable rental.


AND PLANNERS INC

ADDENDA - Economic Analysis Report - 165 West $86^{\text {th }}$ Street

| Adjustment Grid - Comparable Leases and Listings |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SUBJECT | Lease 1 | Lease 2 | Lease 3 | Lease 4 | Lease 5 | Lease 6 | Lease 7 | Listing 1 | Listing 2 |
| Address | 165 West 86th Street | 1157 Lexington Avenue | 50 Monroe Place | 417 West 57th Street | 215 East 94th Street | 12 West 12th Street | 135 West 41st | 558 Broad way | 4 West 76th Street | 15 West 86th Street |
| Location | New York, NY | New York, NY | Brookly, NY | New York, NY | New York, NY | New York, NY | New York, NY | New York, NY | New York, NY | New York, NY |
| Cross Streets | Corner of West 86th Street and Ams terdam Avenue | Corner of East 80th \& Lexington Avenue | Corner with Pierrepont Street | Btw. 9th Avenue and 10th Avenue | Btw. 2nd \& 3rd Avenues | Btw 5th Avenue and 6th Avenue | Btw 6th A venue and 7 th A venue | Btw. Prince and Spring | Avenue | Btw Central Park West and Columbus Avenue |
| Sign Date | - | 4Q 2021 | 4Q 2021 | 1Q 2021 | Q22019 | 3Q 2020 | 4Q 2019 | 2Q 2019 | LISTING | LISTING |
| Bidg Description | Church \& School | Church and School | Landmark Church | Landmark Church | 4-Story Building | Portion of Church and office | Portion of office, former church | Portion of office | Portion of Church Complex | $\begin{aligned} & \text { Entire Building } \\ & \text { Option } \end{aligned}$ |
| Use | -- | School | School | Church | School | School | Club venue | Museum | Asking | Asking |
| Individual Landmark or Historic District | Yes | No | Yes | Yes | No | Yes | No | Yes | Yes | Yes |
| Trans action Type | New Lease | Extension | Extension | New Lease | New Lease | New Lease | New Lease | New Lease | New Lease | New Lease |
| Tenant | - | All Souls School | Imagine Early Learning Centers, LLC | The City to Come Lutheran Church | Saint David's School | NYC DOE | Club Nebula | Museum of fee Cream | Asking | Asking |
| Suite / Foors | - | C, B, 1, 2, 3,4 | Portion of church with classrooms, a gymand a patio | Entire building - Full height basement. Church space with offices, attics, sitting rooms. | Entire Building | Portion of building spread over three floors, and 1,300 sq ft. of exterior space | Portion of grade, mezzan ine and lower level. Capacity for 700 | 7,753 sq. ft. on grade 8,001 sq. ft. lower level 7,527 sq. ff. second floor | 4,000 at grade, 3,330 on the second floor, 1,000 on the third floor, and approximately 12,000 square feet in the lower level gymnasium | Entire Building Option Available - Cellar to 4 th Floor- total of 17,814 square feet |
| SFLeased | 18,353 | 14,872 | 11,069 | 8,100 | 16,188 | 7,100 | 9,600 | 23,281 | 20,300 | 17,814 |
| Term (mos) | 120 | 252 | 120 | 47 | 36 | 120 | 204 | 120 | Asking | Asking |
| First Year Rent | - | \$620,000 | \$360,000 | \$360,000 | S890,340 | \$339,600 | \$1,100,000 | \$1,360,000 | \$913,500 | \$775,000 |
| First Year Rent PSF | - | \$41.69 | \$32.52 | \$44.44 | \$55.00 | \$47.83 | \$114.58 | \$58.42 | \$45.00 | \$43.51 |
| Tls PsF | - | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$10.00 | \$0.00 | \$0.00 | \$0.00 |
| Free Rent (mos) | - | 10* | 0 | 0 | 0 | 0 | 12 | , | 0 | , |
| Expense Structure |  | TT pays $100 \%$ of utility and cleaning; LL to provide HVAC units in good working order and will maintain building systems, roof, façade and sidewalks. | $\begin{aligned} & \text { Modified Gross } \\ & \text { Lease } \end{aligned}$ | Net Lease | Net Lease | Net Lease | Modified gross lease. Landlord installed HVAC and base building upgrades | Modified Gross Lease | Net Lease Structure | Net Lease Structure |
| * 15 months offree rent amorized monthly over the 20-year term; is roughly equivalent to 10 months of up-front free rent |  |  |  |  |  |  |  |  |  |  |
|  |  |  | \$32.52 | \$44.44 | $\$ 55.00$$\$ 0.00$8000 | \$47.83S0.00 | \$114.58 | \$58.42 | $\$ 45.00$S0.00 | $\$ 43.51$$\$ 0.00$ |
| First Year Rent PSF TI Adjustment |  | $50.00$ | \$0.00 | \$0.00 |  |  | - 50.94 | \$0.00 |  |  |
| Free RentNet Effective Rent |  | -52.90 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | - 810.71 | \$0.00 | \$0.00 | \$0.00 |
|  |  | $\$ 38.79$$0.0 \%$ | \$32.52 | \$44.44 | \$55.00 | \$47.83 | $\$ 102.93$ Covid $/$ Market $-20.0 \%$ | \$58.42 | \$45.00 |  |
| Market Conditions / Listing Discount Subtotal Adjus ted Rent |  |  | 0.0\% | 0.0\% | $\begin{gathered} \text { Covid / Market } \\ -20.0 \% \end{gathered}$ | 0.0\% | $\begin{gathered} \text { Covid / Market } \\ -20.0 \% \end{gathered}$ | $\begin{gathered} \text { Covid / Market } \\ -20.0 \% \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Listing } \\ & -10.0 \% \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Listing } \\ -10.0 \% \\ \hline \end{gathered}$ |
|  |  | \$39 | \$33 | \$44 | \$44 | \$48 |  | \$47 | \$41 | \$39 |
| Location |  | 0.0\% | $\begin{aligned} & 5.0 \% \\ & 0.0 \% \end{aligned}$ | $\begin{aligned} & 15.0 \% \\ & 0.0 \% \end{aligned}$ | $\begin{aligned} & 10.0 \% \\ & 0.0 \% \end{aligned}$ | $\begin{aligned} & -10.0 \% \\ & -5.0 \% \\ & \hline \end{aligned}$ |  | $\begin{gathered} -10.0 \% \\ 0.0 \% \end{gathered}$ | 0.0\% 0 | 0.0\% |
| Building Quality |  |  |  |  |  |  | - $-5.50 \%$ |  |  |  |
| Floors Leased |  | 0.0\% | 5.0\% | $0.0 \%$ $.7 .5 \%$ | 0.0\% | 0.0\% | -5.0\% | $\begin{aligned} & 0.0 \% \\ & 0.0 \% \end{aligned}$ | $\begin{aligned} & 10.0 \% \\ & 0.0 \% \end{aligned}$ | $\begin{aligned} & \text { 0.0\% } \\ & 0.0 \% \end{aligned}$ |
| Size (area leased)Total Adjustments |  | 0.0\% | -5.0\% | -7.5\% | 0.0\% | -7.5\% | -7.5\% |  |  |  |
|  |  | 0.0\% | 5.0\% | $\begin{gathered} 7.5 \% \\ \$ 48 \end{gathered}$ | $\begin{gathered} \hline 10.0 \% \\ \$ 48 \end{gathered}$ | $-22.5 \%$$\mathbf{5 3 7}$ | $\begin{gathered} -32.5 \% \\ \$ 56 \end{gathered}$ | $\begin{gathered} \hline-10.0 \% \\ 542 \end{gathered}$ | $10.0 \%$\$45 | $0.0 \%$$\$ 39$ |
| Adjusted Rent PSF |  | \$39 | \$34 |  |  |  |  |  |  |  |

Adjustment Grid - Comparable Leases and Listings

## Explanation of Adjustments - Comparable Rents

Market Conditions and Listing Adjustments: The comparable rentals ranged in date from Q2 2019 to Q4 2021, and include two spaces that are presently offered for lease. Only Lease \#4 was entered into agreement prior to Covid-19 pandemic, whereas Leases \#1, \#2 and \#3 reflect current market conditions. A downward adjustment of $-20 \%$ was applied to Lease \#4 to reflect for inferior market conditions as of the effective date of appraisal as compared with this lease date.

Both of the active listings presented were also adjusted downward to reflect for the fact that there is typically a spread between listing rents and taking rents, especially for this type of product where there is a limited pool of prospective tenants/occupants.

Lease \#1 - $\mathbf{1 1 5 7}$ Lexington Avenue: This is a lease extension of a 14,872 square foot portion of a larger religious building. The tenant shares limited common areas with the landlord. The space is utilized as a school, and also has use of a chapel on site. The lease extension was signed in 4Q 2021 and called for a first year rent of $\$ 620,000$ per annum beginning in 2022. The tenant was granted 15 months of free rent amortized over the 20 year term, which equates to 10 months free rent at the outset. No adjustments were applied to this lease other than a downward size adjustment to account for the size of the leased space in relation to the size of the subject space.

Lease \#2 - 50 Monroe Place: This is the lease extension of a 11,069 square foot portion of a larger church building. This lease is the only data point located outside of Manhattan, but the leased space is located in an attractive and desirable corner of Brooklyn Heights. The tenant shares limited common areas with the landlord. The space is utilized as a school. The lease extension was signed in 4Q 2021 and called for a first year rent of $\$ 360,000$ per annum beginning in 2022. An upward adjustment was applied for location, and for floors leased as this space is largely lower level space. A downward size adjustment was also applied to account for the size of the leased space in relation to the size of the subject space.

Lease \#3-417 West 57 ${ }^{\text {th }}$ Street: This is a new, short term, lease of an entire church building measuring approximately 8,100 square feet. The space will be utilized as a church. The lease was signed in 1Q 2021 and calls for a first year rent of \$360,000 per annum. An upward adjustment was applied for location due to the lease's inferior location as compared with the subject's. A downward size adjustment was also applied to account for the size of the leased space in relation to the size of the subject space.

Lease \#4 - 215 East 94 ${ }^{\text {th }}$ Street: This is a new, short term, lease of an entire church building measuring approximately 16,188 square feet. The space will be utilized as an athletic facility for a Catholic School. The lease was signed in 1Q 2021 and calls for a first year rent of $\$ 55$ per square foot or $\$ 890,340$ per annum. An upward adjustment was applied for location due to the lease's inferior location as compared with the subject's. A downward size adjustment was also applied to account for the size of the leased space in relation to the size of the subject space.

Lease \#5-12 West 12 ${ }^{\text {th }}$ Street: This is a lease of a school through the City of New York. The space occupies a portion of a religious facility and educational annex owned by the Presbyterian Church. The lease comprises 7,100 square feet spread over three (3) floors and includes 1,300 square feet of exterior space. Annual starting rent is $\$ 339,600$ or $\$ 47.83$ per square foot. The Greenwich Village location of this comparable lease is superior to the subject's location and a downward adjustment was
applied for this element of comparison. The building quality is superior to the subject when renovated as it offers superior light and air, and overlooks a small lawn along Fifth Avenue. A downward size adjustment was also applied to account for the size of the leased space in relation to the size of the subject space.

Lease \#6 - 135 West 41 ${ }^{\text {st }}$ Street: This lease represents one (1) of the two (2) non-school or religious facility leases amongst the array, as this space is being used as a night club. Some church buildings have been repurposed for night clubs, and this comparable rental reflects an alternative use for the subject. The lease was signed, pre-Covid in December 2019 for an annual rent of $\$ 1,100,000$ per annum. The space is spread over three levels and totals a reported 9,600 square feet, and has capacity for 700 patrons. For a nightclub location, this is far superior to the subject's location given its Times Square location, and a downward adjustment was applied for this element of comparison. A downward adjustment was also applied for building quality as the access and configuration of the space is better for this type of use than the subject property. Approximately half of the space of this rental is located on the first floor, which commands a notable premium over other floors, and a downward adjustment was applied for this element of comparison. A downward size adjustment was also applied to account for the size of the leased space in relation to the size of the subject space.

Lease \#7-558 Broadway: This lease represents the other non-school or religious facility lease amongst the array, as this space is being used as a museum with a retail component. Some church buildings have been repurposed for museums - such as the Children's Museum of Manhattan on West $96^{\text {th }}$ Street - and this comparable rental reflects an alternative use for the subject. The lease was signed, pre-Covid in 2Q 2019 for an annual rent of $\$ 1,360,000$ per annum. The space is spread over three levels and totals a reported 23,281 square feet. For a museum with a retail component, this is far superior to the subject's location, and a downward adjustment was applied for this element of comparison. Approximately half of the space of this rental is located on the first floor, which commands a notable premium over other floors, and a downward adjustment was applied for this element of comparison.

Listing \#1-4 West 76 ${ }^{\text {th }}$ Street: This listing represents the asking rent for the portion of a ChurchSchool complex. The offering calls for 4,000 square feet at grade, 3,330 square feet on the second floor, 1,000 square feet on the 3 rd floor, and approximately 12,000 square feet in the lower level gymnasium for a total of 20,300 square feet. The asking rent of $\$ 45$ per square foot translates into an annual rent of $\$ 913,500$. Aside from the adjustment for listing discount as discussed above, we made an upward adjustment to reflect for the floors offered in the listing, as nearly $60 \%$ of the space is below grade.

According to a petition dated August 10, 2022, filed with the NYS Attorney General's office, this space was leased for 10 years with a starting rent of $\$ 701,501$ per annum with escalations of $\mathbf{2 . 2 5 \%}$ per annum. This represents a taking rent of $\$ \mathbf{3 4} .50$ per square foot, $\mathbf{2 3 \%}$ below the asking rent and $31 \%$ below the estimated market rent conclusion for the subject property.

Listing \#2 - $\mathbf{1 5}$ West $\mathbf{8 6}^{\text {th }}$ Street: This listing represents the asking rent for a Synagogue. The wholebuilding option totals 17,814 square feet across the cellar through fourth floors. The asking rent of $\$ 775,000$ in total and translates into an annual rent of $\$ 43.51$ per square foot. Aside from the adjustment for listing discount as discussed above, no other adjustments were made to this lease.

## Conclusion:

The adjusted comparable rentals range from $\$ 34.15$ to $\$ 55.58$ per square foot with a mean adjusted price of $\$ 43.06$ per square foot and median adjusted price of $\$ 42.06$ per square foot. In arriving at a conclusion of market rent, we place most weight on the comparable spaces that are most similar to the subject property. Therefore, we conclude above the averages at $\$ 50$ per square foot, which we note is notably above the mean and median adjusted net effective rents. This rent is applied to both the Base Scenario and Infill Scenario analysis.

Adjusted Net Effective Rents PSF

| Minimum | $\$ 34.15$ |
| :--- | :--- |
| Maximum | $\$ 55.58$ |
| Average | $\$ 43.06$ |
| Median | $\$ 42.06$ |
| NER Conclusion PSF | $\mathbf{\$ 5 0 . 0 0}$ |

## MANHATTAN RENTAL APARTMENT MARKET

During 2020 and the first quarter of 2021, the Manhattan apartment rental market has been drastically impacted by the Covid-19 pandemic. Hundreds of thousands of residents left New York City which was reflected by the historically high vacancy rates and inventory, increased landlord concessions and decreasing rents. According to the November 2020 issue of the Elliman rental report, net effective median rent decreased year over year by $21.7 \%$, the largest such decline in more than nine years. Notably, since the lockdown began in April of 2020, monthly effective rent in Manhattan decreased by $\$ 797$, listing inventory nearly tripled and the vacancy rate reached $6.14 \%$, compared to pre-Covid levels of $2 \%$ to $3 \%$ during the years prior to the onset of the pandemic.

However, beginning in the spring of 2021 and continuing through and up to the date of value of this appraisal, rental apartment market conditions have improved significantly. During this time, the marked increase in demand has been mirrored by increases in average and median market rents, decreased prevalence of landlord concessions and decreasing vacancy. The following chart highlights year over year changes in rental rates and other market indicators for Manhattan apartments, sorted by apartment size:

| Manhattan Rentals Matrix By Size |  | FEB-22 | \% (ma) | JAN-22 | \% (na) | FEB-21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Studio | Average Rental Price | \$2,855 | 1.6\% | \$2,811 | 19.5\% | \$2,389 |
|  | Rental Price Per Sq Ft | \$75.93 | 9.7\% | \$69.21 | 35.9\% | \$55.87 |
|  | Median Rental Price | \$2,600 | 00\% | \$2,600 | 18.2\% | \$2,200 |
|  | Number of New Leases | 619 | -8.7\% | 678 | -59.6\% | 1,531 |
| 1-Bedroom | Average Rental Price | \$3,882 | 4.7\% | \$3,707 | 23.0\% | \$3,156 |
|  | Rental Price Per Sq Ft | \$74.03 | 5.7\% | \$70,07 | 33.0\% | \$55.68 |
|  | Median Rental Price | \$3,750 | 7.1\% | \$3,500 | 27.1\% | \$2,950 |
|  | Number of New Leases | 1,203 | -6.3\% | 1,312 | -58.0\% | 2,861 |
| 2-Bedroom | Average Rental Price | \$6,013 | 10.0\% | \$5,467 | 26.8\% | \$4,742 |
|  | Rental Price Per Sq Ft | \$77.84 | 8.2\% | \$71.96 | 28.4\% | \$60.63 |
|  | Median Rental Price | \$5,104 | 3.1\% | \$4,950 | 20.0\% | \$4,255 |
|  | Number of New Leases | 652 | -20.5\% | 820 | -56.3\% | 1,493 |
| 3-Bedroom | Average Rental Price | \$10,160 | 11.4\% | \$9,121 | 34.6\% | \$7,550 |
|  | Rental Price Per Sq Ft | \$91.57 | 6.4\% | \$86.07 | 30.6\% | \$70.13 |
|  | Median Rental Price | \$6,060 | -0.7\% | \$6,100 | 15.5\% | \$5,248 |
|  | Number of New Leases | 339 | -2.9\% | 349 | -49.9\% | 676 |

Source: The Elliman Report, February 2022
According to the data reported by the Elliman Report, the net effective average rent per square foot reached an all-time high, exceeding the pre-pandemic level. Market surveys have generally been confirmed by our experience where we find that currently signed leases typically do not include landlord concessions and the effective rents have made up most of the decline attributed to the Covid19 pandemic. The following chart illustrates the recent historical trend for Median Rental Price and Number of New Leases:


Source: The Elliman Report, February 2022
The chart highlights that median rent in Manhattan peaked at approximately $\$ 3,650$ at some point in April of 2020, then spent the following seven months in a steep decline, finally bottoming out at $\$ 2,957$ in November of 2020. The median rent remained relatively flat until April 2021 at which point it began an upward climb and topped out at $\$ 3,630$ in February 2022. The leasing activity was robust in the third quarter of 2021 and has declined slowly since that point, partially due to seasonality.

Since the run on rental apartments began in April 2021, supply has been decreasing. Overall, the inventory declined by $81.1 \%$ from where it was during the same time last year. The number of new leases has also decreased according to Elliman, down 57.1\% year over year.

| Manhattan Rentals Matrix By Property Type | FEB-22 | $\% \Delta($ mo $)$ | JAN-22 | $\% \Delta($ rR $)$ | FEB-21 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Doorman Median Rental Price | $\$ 4,500$ | $2.3 \%$ | $\$ 4,398$ | $28.8 \%$ | $\$ 3,495$ |
| Non-Doorman Median Rental Price | $\$ 2,875$ | $2.9 \%$ | $\$ 2,795$ | $16.2 \%$ | $\$ 2,475$ |
| Loft Median Rental Price | $\$ 10,248$ | $22.0 \%$ | $\$ 8,399$ | $70.9 \%$ | $\$ 5,998$ |
| New Development Median Rental Price | $\$ 5,900$ | $4.7 \%$ | $\$ 5,634$ | $28.7 \%$ | $\$ 4,583$ |
| Existing Median Rental Price | $\$ 3,600$ | $2.9 \%$ | $\$ 3,500$ | $23.1 \%$ | $\$ 2,925$ |

Currently there is widening gap between rents for doorman versus non-doorman buildings, representing a flight to quality seen across most real estate asset classes coming out of the Covid-19 pandemic. According to the Elliman Report, the median rent for Manhattan doorman buildings rose $28.8 \%$ year over year. In contrast, rent for non-doorman buildings increased year over year by $16.2 \%$. Although we contemplate a project that will have a virtual doorman, the new development aspect of the project will more closely mirror the trends and rent levels of a doorman property. Notably, median rent for new developments increased from \$4,583 in February 2021 to $\$ 5,900$ in February 2022, an increase of $28.7 \%$. We note that the estimated average rent of the subject project is $\$ 388$ per month or $6.5 \%$ greater than the Elliman Report statistics for new development, likely all of which are doorman buildings.

## Submarket Analysis - Upper West Side

The subject's Upper West Side rental market is one of the strongest markets in New York City. According to Costar Group, the submarket is comprised of 56,808 units in 2,010 buildings. Very few recent and projected deliveries of rental product has suppressed supply. As CoStar notes:
"Due to increased density and the cost of procuring land, building from the ground-up remains a difficult task in Manhattan. Still, the Upper West Side has added more inventory than many submarkets over the past decade. The inventory has grown by more than 3,000 units since the start of 2010, a greater unit total compared to other Northern Manhattan neighborhoods like the Upper East Side and Harlem. While more than 600 units delivered in 19Q4 alone, a minimal number of units are underway as of 21Q3 as condos, not rentals, continue to be more popular here."

The restricted supply coupled with a return to historical demand for quality rental housing in the neighborhood led to a quick recovery in rents in the latter half of 2021 through the analysis date. Data tracked by CoStar Group's shows four consecutive quarters of year-over-year rent growth in the subject's submarket following rent declines in five (5) quarters from Q1 2020 to Q1 2021, as depicted in the chart below that plots submarket rent growth against rent growth throughout New York City.


## Submarket Rent by Unit Type

The table below shows the trajectory of average rents in the Upper West Side. Current average monthly rent in the submarket for studios is $\$ 2,579$, for one-bedrooms is $\$ 3,707$, for two-bedrooms is $\$ 5,621$ and for three-bedrooms is $\$ 8,079$, as depicted in the chart below.


## Subject Apartments

According to an architectural concept prepared by FXCollaborative, the subject property can hypothetically be programmed with 20 units across three (3) floors and a rentable attic space. The units range from studios to three-bedrooms and have a variety of layouts and exposures. A summary of the units is presented below:

| Unit \# | Floor | Bedrooms | Square <br> Footage |
| :---: | :--- | :---: | :---: |
| 1 | Ground | 3 | 1,214 Overlooking Amsterdam Ave. |
| 2 | Ground | Studio | 607 Overlooking Amsterdam Ave. |
| 3 | Ground | $2+$ Den | 1,166 Corner |
| 4 | Ground | 1 | 822 Facing West 86th Street |
| 5 | Second Floor | 3 | 1,215 Overlooking Amsterdam Ave. |
| 6 | Second Floor | Studio | 604 Overlooking Amsterdam Ave. |
| 7 | Second Floor | $2+$ Den | 1,164 Corner |
| 8 | Second Floor | 1 | 828 Facing West 86th Street |
| 9 | Second Floor | $2+$ Den | 1,119 Facing West 86th Street |
| 10 | Second Floor | 2 | 1,084 Facing inner court |
| 11 | Second Floor | Studio | 616 Facing inner court |
| 12 | Third Floor | 3 | 1,215 Overlooking Amsterdam Ave. |
| 13 | Third Floor | Studio | 604 Overlooking Amsterdam Ave. |
| 14 | Third Floor | $2+$ Den | 1,164 Corner |
| 15 | Third Floor | 1 | 828 Facing West 86th Street |
| 16 | Third Floor | $2+$ Den | 1,119 Facing West 86th Street |
| 17 | Third Floor | 2 | 1,084 Facing inner court |
| 18 | Third Floor | Studio | 616 Facing inner court |
| 19 | Attic | 3 | 1,617 Overlooking Amsterdam Ave. |
| 20 | Attic | 3 | 1,927 Facing inner court and West 86th |
|  | Total Rentable |  | $\mathbf{2 0 , 6 1 3}$ |

## Comparable Rentals

In order to estimate market rents for the subject units we relied on broader submarket data as well as comparable leases in nearby buildings. Our search generally concerned renovated pre-war buildings, as those are deemed to be the most similar and competitive to what is contemplated for the subject property. In many cases larger buildings offered superior amenities, views and larger apartments. A summary of the comparable rentals uncovered for this analysis is presented below:

| Unit Type | Address | Apt \# | Monhthly <br> Rent |
| :---: | :---: | :---: | :---: |
| studio | 115 West 71st | 1B | $\$ 3,700$ |
| studio | 38 West 69th | B | $\$ 3,600$ |
| studio | 166 West 72nd | 3D | $\$ 4,500$ |
| studio | 189 West 89th street | 6L | $\$ 3,821$ |
| studio | 57 West 75th Street | 11 G | $\$ 4,000$ |


| Unit Type | Address | Apt \# | Monhthly <br> Rent |
| :---: | :---: | :---: | :---: |
| 1BR | 10 West 74th Street | 7B | $\$ 4,995$ |
| 1BR | 100 West 86th Street | 5A | $\$ 4,500$ |
| 1BR | 144 West 86th Street | 4D | $\$ 4,650$ |
| 1BR | 11 West 81st St | 7B | $\$ 4,950$ |
| 1BR | 14 West 68th | 4 | $\$ 5,500$ |
| 1BR | 21 West 86th | 9B | $\$ 5,015$ |
| 1BR | 21 West 86th | 4B | $\$ 5,350$ |


| Unit Type | Address | Apt \# | Monhthly <br> Rent |
| :---: | :---: | :---: | :---: |
| 2BR | 10 West 74th | 6 F | $\$ 5,750$ |
| 2BR | 170 West 74th | 1005 | $\$ 7,000$ |
| 2BR | 319 West 77th Street | $\# 1$ | $\$ 7,200$ |
| 2BR | 46 West 89th Street | $\# 4$ | $\$ 7,500$ |
| 2BR | 100 West 86th Street | 5B | $\$ 5,295$ |
| 2BR | 41 West 72nd Street | 17D | $\$ 6,500$ |
| 2BR | 25 West 68th Street | 4A | $\$ 7,250$ |
| 2BR | 2350 Broadway | 320A | $\$ 6,800$ |
| 2BR | 21 West 86th Street | 7E | $\$ 7,200$ |
| 2BR | 21 West 86th Street | 6 F | $\$ 7,650$ |


| Studio | Statistics |
| :--- | ---: |
| Min | $\mathbf{\$ 3 , 6 0 0}$ |
| Max | $\mathbf{\$ 4 , 5 0 0}$ |
| Avg. | $\mathbf{\$ 3 , 9 2 4}$ |


| 1BR Statistics |  |
| :--- | :--- |
| Min | $\mathbf{\$ 4 , 5 0 0}$ |
| Max | $\mathbf{\$ 5 , 5 0 0}$ |
| Avg. | $\mathbf{\$ 4 , 9 9 4}$ |


| Unit Type | Address | Monhthly |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Apt \# | Rent |  |  |
| 3BR | 21 West 86th | 7G | \$9,000 |  |  |
| 3BR | 21 West 86th | 3F | \$9,000 |  |  |
| 3BR | 21 West 86th | 4 C | \$9,100 |  |  |
| 3BR | 21 West 86th | 2 A | \$8,300 |  |  |
| 3BR | 233 West 83rd | 1A | \$8,000 |  |  |
| 3BR | 101 West 85th | 4-5 | \$8,350 |  |  |
| 3BR | 650 West End Ave | 5A | \$8,950 |  |  |
| 3BR | 251 West 89th Street | 9 E | \$10,500 |  | tistics |
| 3BR | 255 West 88th Street | 4A | \$8,531 | Min | \$8,000 |
| 3BR | 140 West 86th | 11B | \$10,000 | Max | \$10,500 |
| 3BR | 10 West 74th | 7EF | \$9,188 | Avg. | \$8,993 |

## Conclusion of Market Rents:

We have utilized the comparable rentals, market reports cited in this report, and information gleaned from the broader market to develop the following opinion of market rent for each unit in the hypothetical conversion of the subject property.

| Unit \# | Floor | Bedrooms | Square Location/ <br> Footage Orientation | Estimated Monthly Rent | $\begin{gathered} \text { Annual } \\ \text { Rent PSF } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Ground | 3 | 1,214 Overlooking Amsterdam Ave. | \$7,500 | \$74.14 |
| 2 | Ground | Studio | 607 Overlooking Amsterdam Ave. | \$3,500 | \$69.19 |
| 3 | Ground | 2+Den | 1,166 Corner | \$6,500 | \$66.90 |
| 4 | Ground | 1 | 822 Facing West 86th Street | \$4,250 | \$62.04 |
| 5 | Second Floor | 3 | 1,215 Overlooking Amsterdam Ave. | \$8,100 | \$80.00 |
| 6 | Second Floor | Studio | 604 Overlooking Amsterdam Ave. | \$3,800 | \$75.50 |
| 7 | Second Floor | 2+Den | 1,164 Corner | \$7,000 | \$72.16 |
| 8 | Second Floor | 1 | 828 Facing West 86th Street | \$4,600 | \$66.67 |
| 9 | Second Floor | $2+$ Den | 1,119 Facing West 86th Street | \$7,200 | \$77.21 |
| 10 | Second Floor | 2 | 1,084 Facing inner court | \$6,200 | \$68.63 |
| 11 | Second Floor | Studio | 616 Facing inner court | \$3,300 | \$64.29 |
| 12 | Third Floor | 3 | 1,215 Overlooking Amsterdam Ave. | \$8,300 | \$81.98 |
| 13 | Third Floor | Studio | 604 Overlooking Amsterdam Ave. | \$3,900 | \$77.48 |
| 14 | Third Floor | $2+$ Den | 1,164 Corner | \$7,200 | \$74.23 |
| 15 | Third Floor | 1 | 828 Facing West 86th Street | \$4,700 | \$68.12 |
| 16 | Third Floor | $2+$ Den | 1,119 Facing West 86th Street | \$7,400 | \$79.36 |
| 17 | Third Floor | 2 | 1,084 Facing inner court | \$6,400 | \$70.85 |
| 18 | Third Floor | Studio | 616 Facing inner court | \$3,400 | \$66.23 |
| 19 | Attic | 3 | 1,617 Overlooking Amsterdam Ave. | \$10,500 | \$77.92 |
| 20 | Attic | 3 | 1,927 Facing inner court and West 86th | \$12,000 | \$74.73 |
|  | Total Rentable |  | 20,613 | \$125,750 | \$73.21 |

Comments: The layouts for units 1-4 and 5-8 are essentially identical, but second floor apartments are notably more desirable than first floor apartments, especially for a property at the intersection of two (2) busy wide streets. As many of the comparable rents are located above the first floor of their respective developments, we estimated rent for the second floor and applied a $7.5 \%$ discount to the first floor units. The third-floor units were estimated to be $3 \%$ superior than second floor units. We have also taken into consideration orientation of the units, configuration and potential views for each unit. We note that the conclusion of rents is, on average, $\$ 3.60$ per square foot / $5 \%$ greater than average asking rents of $\$ 69.60$ in the Upper West Side, per CoStar. A summary of the estimated rent statistics is presented below:

Statistical Summary of Rent Projections

| Unit <br> Type | \# of <br> Units | Min <br> Rent | Max <br> Rent | Avg Rent | Avg Rent <br> PSF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Studio | 5 | $\$ 3,300$ | $\$ 3,900$ | $\$ 3,580$ | $\$ 70.54$ |
| $\mathbf{1}$ | 3 | $\$ 4,250$ | $\$ 4,700$ | $\$ 4,517$ | $\$ 65.61$ |
| $\mathbf{2}$ | 2 | $\$ 6,200$ | $\$ 6,400$ | $\$ 6,300$ | $\$ 69.74$ |
| $\mathbf{2 + D e n ~}$ | 5 | $\$ 6,500$ | $\$ 7,400$ | $\$ 7,060$ | $\$ 73.97$ |
| $\mathbf{3}$ | 5 | $\$ 7,500$ | $\$ 12,000$ | $\$ 9,280$ | $\$ 77.75$ |
| Totals | $\mathbf{2 0}$ |  |  | $\mathbf{\$ 6 , 2 8 8}$ | $\$ 73.21$ |



Subject Property from across West $86^{\text {th }}$ Street


## LBG Hard Cost and General Conditions Summary

West Park Presbyterian Church - 165 West 86 th Street


## Impact of Historic Tax Credits on Analysis

## Use of Historic Tax Credits

The use of Federal Historic Tax Credits ("FHTC") and State Historic Tax Credits ("SHTC"), collectively the ("HTC") was not factored into the analysis presented with the initial hardship application. The subject property is not within a qualifying census tract to be eligible for SHTC. While the West Park Presbyterian Church ("WPPC") could be eligible for the FHTC program in the future, WPPC is not currently listed on the National Register of Historic Places. Under the assumption that WPPC could be listed in the future, the cost of any qualified rehabilitation expenditures could be partially offset by $20 \%$ FHTC, which would be available over a five-year period. However, the $20 \%$ FHTC does not result in a reasonable return as defined in the landmarks law.

Using the three scenarios presented in the hardship application, the estimated hypothetical credit would range from $\$ 7,864,613$ under the Base Scenario to $\$ 9,958,020$ for the Multifamily Scenario ${ }^{5}$. We note that it is highly speculative to assume that the multifamily scenario would be eligible for the FHTC due to the considerable exterior alterations required in connection with the creation of over 60 new windows punched through the façade and roof. The National Park Service ("NPS") has strict requirements concerning the preservation of the appearance of properties seeking FHTC and it is likely that the multifamily program would not meet NPS requirements.

## Economic Components of FHTC

It should be noted first that a not-for-profit entity is only able to take advantage of the $20 \%$ FHTC if it creates a for-profit entity to syndicate or sell the tax credits to an investor in exchange for cash equity that can be used for the rehabilitation expenses. Typically, the use of FHTC to fund rehabilitation projects comes in the form of syndicated tax credit equity in which tax credit investors invest for future tax credits in a "lump sum" in order to fill in the capital stack of a project. Our discussions with knowledgeable parties practicing in this area indicate that the current syndication rates for FHTC range from $80 \%$ to $85 \%$ of the total eligible tax credit. We have assumed for purposes of this analysis that all estimated renovation and restoration costs, as detailed in Exhibit A, would be eligible for FHTC, but this would likely not be the case in practice. Based on the estimated construction costs, the syndicated credit range is presented below:

80\% Syndication Rate Scenario

| Scenario | Base | Infill | Multifamily |  |
| :--- | ---: | ---: | ---: | ---: |
| Total Development Costs | $\$ 49,153,829$ | $\$ 50,955,015$ | $\$ 58,576,591$ |  |
| FHTC Credits @ | $20 \%$ | $\$ 9,830,766$ | $\$ 10,191,003$ | $\$ 11,715,318$ |
| Tax Credit Equity - Syndication Rate @ | $\mathbf{8 0 . 0 \%}$ | $\$ 7,864,613$ | $\$ 8,152,802$ | $\$ 9,372,255$ |

85\% Syndication Rate Scenario

| Scenario |  | Base | Infill | Multifamily |
| :--- | ---: | ---: | ---: | ---: |
| Total Development Costs | $\$ 49,153,829$ | $\$ 50,955,015$ | $\$ 58,576,591$ |  |
| FHTC Credits @ | $20.0 \%$ | $\$ 9,830,766$ | $\$ 10,191,003$ | $\$ 11,715,318$ |
| Tax Credit Equity - Syndication Rate @ | $\mathbf{8 5 . 0} \%$ | $\$ 8,356,151$ | $\$ 8,662,353$ | $\$ 9,958,020$ |

[^5]Cash Flow - Outflow to FHTC Investor: Following the initial FHTC investment from the tax credit investor, there are two components that the developer is required to pay back to the tax credit investor: an allocation of cash flow from the project's net operating income, and an investor buyout at the conclusion of the tax credit period.

The allocation of cash flow to the tax credit investor is generally between $2 \%$ and $3 \%$ of the tax credit equity. For this analysis, we estimate a distribution from cash flows equal to $2 \%$ of tax credit equity. Annual amounts under the $80 \%$ syndication rate scenario range from $\$ 157,292$ to $\$ 187,445$ per annum over the five-year period. Under the $85 \%$ syndication rate scenario, annual cash flow ranges from $\$ 167,123$ to $\$ 199,160$ per annum. Both scenarios are summarized below:

| Scenario | Base | Infill | Multifamily |
| :--- | ---: | ---: | ---: |
| Total Development Costs | $\$ 49,153,829$ | $\$ 50,955,015$ | $\$ 58,576,591$ |
| FHTC Credits @ | $20 \%$ | $\$ 9,830,766$ | $\$ 10,191,003$ |
| Tax Credit Equity - Syndication Rate @ | $\mathbf{8 0 . 0 \%}$ | $\$ 7,864,613$ | $\$ 8,152,802$ |
| Net Operating Income* | $\$ 9,372,255$ |  |  |
| Annual Cash Flow to Tax Credit Investor (paid from NOI) | $\$ 542,166$ | $\$ 651,003$ | $\$ 674,148$ |
| Total Cash Flows to Tax Credit Investor (5 years) | $\$ 157,292$ | $\$ 163,056$ | $\$ 187,445$ |
|  | $\$ 786,461$ | $\$ 815,280$ | $\$ 937,225$ |


|  | $\mathbf{8 5 \%}$ Syndication Rate Scenario |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Scenario |  | Base | Infill | Multifamily |
| Total Development Costs | $\$ 49,153,829$ | $\$ 50,955,015$ | $\$ 58,576,591$ |  |
| FHTC Credits @ | $20.0 \%$ | $\$ 9,830,766$ | $\$ 10,191,003$ | $\$ 11,715,318$ |
| Tax Credit Equity - Syndication Rate @ | $\mathbf{8 5 . 0 \%}$ | $\$ 8,356,151$ | $\$ 8,662,353$ | $\$ 9,958,020$ |
| Net Operating Income* | $\$ 542,166$ | $\$ 651,003$ | $\$ 674,148$ |  |
| Annual Cash Flow to Investor | $\$ 167,123$ | $\$ 173,247$ | $\$ 199,160$ |  |
| Total Cash Flow (5 years) | $\$ 835,615$ | $\$ 866,235$ | $\$ 995,802$ |  |

*The Net Operating Income calculation for this demonstration excludes 2\% depreciated development costs. Net operating income for this demonstration is computed based on equalized taxes. This is presented in Exhibit B.

Investor Buyout - Outflow to FHTC Investor: Lastly, the FHTC investor requires a "buyout" of the investment at the end of the five-year tax credit period, typically $5 \%-10 \%$ of the total syndicated credit amount; we have estimated closer to the lowest end of the range at $5 \%$. The buyout ranges are as follows:

| Scenario | Base | Infill | Multifamily |  |
| :--- | ---: | ---: | ---: | ---: |
| Total Development Costs | $\$ 49,153,829$ | $\$ 50,955,015$ | $\$ 58,576,591$ |  |
| FHTC Credits @ | $20 \%$ | $\$ 9,830,766$ | $\$ 10,191,003$ | $\$ 11,715,318$ |
| Tax Credit Equity - Syndication Rate @ | $\mathbf{8 0 . 0 \%}$ | $\$ 7,864,613$ | $\$ 8,152,802$ | $\$ 9,372,255$ |
| Year 5 Credit Investor Buyout @ | $5.0 \%$ | $\$ 393,231$ | $\$ 407,640$ | $\$ 468,613$ |

85\% Syndication Rate Scenario

| Scenario | Base | Infill | Multifamily |
| :--- | ---: | ---: | ---: |
| Total Development Costs | $\$ 49,153,829$ | $\$ 50,955,015$ | $\$ 58,576,591$ |
| FHTC Credits @ | $20.0 \%$ | $\$ 9,830,766$ | $\$ 10,191,003$ |
| Tax Credit Equity - Syndication Rate @ | $\mathbf{8 5 . 0 \%}$ | $\$ 8,715,318$ |  |
| Year 5 Credit Investor Buyout @ | $5.0 \%$ | $\$ 417,808$ | $\$ 8,662,353$ |

## Net Impact on Reasonable Return Analysis

The FHTC offset the total development costs by approximately $13.60 \%$ assuming an $80 \%$ syndication rate, and $14.45 \%$ assuming $85 \%$ syndication rate. Factoring in the improvement assessment, this reduces the annualized depreciated repair costs to a low of $\$ 869,345$ for the Base Scenario up to $\$ 1,040,526$ for the Multifamily Scenario. A comparison of the full costs and annual depreciated repair costs is presented with the reduced costs and reduced annual depreciated repair costs:


As previously determined, under both the Base and the Infill scenarios, there is considerable negative net operating income under the Reasonable Return analysis, and therefore by reducing the net development costs by $13.60 \%$ and $14.45 \%$, respectively, does not result in a positive return, and only a minimal positive return under the Multifamily Scenario. The positive return in the Multifamily Scenario is far below the 6\% Reasonable Return threshold. A full presentation of the three scenarios and syndication rates are set forth in Exhibit C.

With respect to the Multifamily Scenario, the FHTC offset would create positive net operating income for the Reasonable Return calculation, but the net operating income is far below the $6 \%$ threshold. We have demonstrated all scenarios in Exhibit D.

## HTC Analysis Exhibit A:

## Development Costs for the Three Hardship Scenarios

| Calculation of Construction Components | Base <br> Scenario | Infill <br> Scenario | Multi-Family Scenario |
| :---: | :---: | :---: | :---: |
| Subtotal - Full Scope | \$31,520,483 | \$32,675,515 | \$37,562,942 |
| Full Scope | \$31,520,483 | \$32,675,515 | \$37,562,942 |
| General Conditions Cost @ | \$4,097,663 | \$4,247,817 | \$4,883,182 |
| Subtotal | \$35,618,146 | \$36,923,332 | \$42,446,124 |
| Design Contingency | \$3,152,048 | \$3,267,552 | \$3,756,294 |
| Construction Contingency | \$3,152,048 | \$3,267,552 | \$3,756,294 |
| Subtotal - Full Scope | \$41,922,242 | \$43,458,435 | \$49,958,713 |
| CCIP | \$3,773,002 | \$3,911,259 | \$4,496,284 |
| Subtotal | \$45,695,244 | \$47,369,694 | \$54,454,997 |
| Insurance (professional/auto/offsite/pollution) | \$1,048,056 ${ }^{\text {² }}$ | \$1,086,461 | \$1,248,968 |
| Subtotal | \$46,743,300 | \$48,456,155 | \$55,703,965 |
| Construction Services Fee | \$1,676,890 | \$1,738,337 | \$1,998,349 |
| Subtotal | \$48,420,190 | \$50,194,492 | \$57,702,313 |
| SDI Program | \$733,639 | \$760,523 | \$874,277 |
| Total Development Costs | \$49,153,829 | \$50,955,015 | \$58,576,591 |
| Interior Program Fitout @ | Included | Included | Included |
| Total Fitout | Allow | Allow | Allow |
| Total Renovation Costs | \$49,153,829 | \$50,955,015 | \$58,576,591 |


| Depreciated Development Cost Calculation |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: |
| Scenario | Base | Infill | Multi-Family |  |  |  |
| Assessed Value of Subj Building Exclusive of Land | $\$ 1,416,150$ | $\$ 1,416,150$ | $\$ 1,416,150$ |  |  |  |
| Projected Renovation Cost (full cost) | $\$ 49,153,829$ | $\$ 50,955,015$ | $\$ 58,576,591$ |  |  |  |
| Total | $\$ 50,569,979$ | $\$ 52,371,165$ | $\$ 59,992,741$ |  |  |  |
| Annual Depreciation @ | $\$ 1,011,400$ | $\$ 1,047,423$ | $\$ 1,199,855$ |  |  |  |

Note: The development costs may not fully incorporate the incremental costs necessary to comply with the architectural standards for the federal tax credit such as additional professionals for Park Service applications and negotiation, legal and accounting tax advisory, costs of credit syndication, possible changes/upgrades to materials to changes to process to treat relevant elements of the building more delicately. Furthermore, the analysis does not consider that State Historic Preservation Office may require additional conformance to historic standards, which could result in less efficient use of a building with more common area.

## HTC Analysis Exhibit B:

## Calculation of Net Operating Income, Exclusive of Depreciated Repair Costs

| Development Scenario | Base | Infill | Multi-Family |
| :---: | :---: | :---: | :---: |
| Effective Gross Income | \$871,768 | \$1,045,665 | \$1,494,720 |
| Expenses (Exclusive of Real Estate Taxes)* | $(\$ 84,836)$ | $(\$ 100,761)$ | (\$274,736) |
| Depreciated Repair Costs - OMITTED FOR PRESENTATION | \$0 | \$0 | \$0 |
| Net Operating Income - Subtotal a | \$786,932 | \$944,904 | \$1,219,984 |
| Less: Imputed Real Estate Tax Burden | (\$244,766) | (\$293,901) | $(\$ 545,836)$ |
| Net Operating Income | \$542,166 | \$651,003 | \$674,148 |
| *Real Estate Tax Calculation - Equalized Taxes Based on Projected NOI |  |  |  |
| NOI Without Taxes | \$786,932 | \$944,904 | \$1,219,984 |
| Loaded Capitalization Rate Applicable b | 15.56\% | 15.56\% | 12.31\% |
| Imputed Equalized Assessment (a b) | \$5,057,404 | \$6,072,649 | \$9,913,935 |
| Imputed Assessment (45\% of Equalized) | \$2,275,832 | \$2,732,692 | \$4,461,271 |
| Applicable Tax Rate | 10.755\% | 10.755\% | 12.235\% |
| Imputed Real Estate Taxes | \$244,766 | \$293,901 | \$545,836 |


| 85\％Syndication Rate－Base Scenario |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inflow <br> Syndicated Credit Equity | $\begin{aligned} & \text { Year } 0 \\ & \$ 8,356,151 \end{aligned}$ | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Outflow |  |  |  |  |  |  |
| Cash Flow to Credit Investor Credit Investor Buyout |  | －\＄167，123 | －\＄167，123 | －\＄167，123 | －\＄167，123 | $\begin{aligned} & -\$ 167,123 \\ & -\$ 417,808 \\ & \hline \end{aligned}$ |
| Total Outflows | \＄0 | －\＄167，123 | －\＄167，123 | －\＄167，123 | －\＄167，123 | －\＄584，931 |
| Net Annual Proceeds | \＄8，356，151 | －\＄167，123 | －\＄167，123 | －\＄167，123 | －\＄167，123 | －\＄584，931 |
| Total | \＄7，102，728 |  |  |  |  |  |
| As \％of Development Costs | 14．45\％ |  |  |  |  |  |


| 85\％Syndication Rate－Infill Scenario |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inflow | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Syndicated Credit Equity | \＄8，662，353 |  |  |  |  |  |
| Outflow |  |  |  |  |  |  |
| Cash Flow to Credit Investor |  | －\＄173，247 | －\＄173，247 | －\＄173，247 | －\＄173，247 | －\＄173，247 |
| Credit Investor Buyout |  |  |  |  |  | －\＄433，118 |
| Total Outflows | \＄0 | －\＄173，247 | －\＄173，247 | －\＄173，247 | －\＄173，247 | －\＄606，365 |
| Net Annual Proceeds | \＄8，662，353 | －\＄173，247 | －\＄173，247 | －\＄173，247 | －\＄173，247 | －\＄606，365 |
| Total | \＄7，363，000 |  |  |  |  |  |
| As \％of Development Costs | 14．45\％ |  |  |  |  |  |


|  | $\begin{aligned} & n \\ & \stackrel{\rightharpoonup}{0} \\ & \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \stackrel{\rightharpoonup}{\hbar} \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ |  | $\frac{8}{\frac{0}{2}}$ |
| 曷 | $\begin{aligned} & \text { س } \\ & \stackrel{\rightharpoonup}{0} \\ & \hline \end{aligned}$ | $\begin{array}{c\|c} \frac{8}{-} & \frac{8}{2} \\ \frac{2}{2} & \frac{2}{2} \end{array}$ | $\frac{8}{\frac{8}{2}}$ |
| 等 | $\begin{aligned} & N \\ & \stackrel{\pi}{\nabla} \\ & \end{aligned}$ | $\begin{aligned} & \frac{8}{2} \\ & \frac{2}{2} \end{aligned}$ $\begin{aligned} & \frac{8}{2} \\ & \frac{2}{9} \end{aligned}$ | $\frac{0}{2}$ |
| $\left\|\begin{array}{c} 3 \\ \sum_{1} \\ \vdots \\ \cline { 1 - 2 } \end{array}\right\|$ | च亏ँ | $$ | $\frac{8}{\frac{8}{2}}$ |
|  |  | \％ |  |
| $\|i n\|$ | Inflow Syndicated Credit Equity |  |  |

ADDENDA－Economic Analysis Report－ 165 West $86^{\text {th }}$ Street

| 80\％Syndication Rate－Base Scenario |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inflow | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Syndicated Credit Equity | \＄7，864，613 |  |  |  |  |  |
| Outflow |  |  |  |  |  |  |
| Cash Flow to Credit Investor |  | －\＄157，292 | －\＄157，292 | －\＄157，292 | －\＄157，292 | －\＄157，292 |
| Credit Investor Buyout |  |  |  |  |  | －\＄393，231 |
| Total Outflows | \＄0 | －\＄157，292 | －\＄157，292 | －\＄157，292 | －\＄157，292 | －\＄550，523 |
| Net Annual Proceeds | \＄7，864，613 | －\＄157，292 | －\＄157，292 | －\＄157，292 | －\＄157，292 | －\＄550，523 |
| Total | \＄6，684，921 |  |  |  |  |  |
| As \％of Development Costs | 13．60\％ |  |  |  |  |  |


| 80\％S yndication Rate－Infill Scenario |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inflow | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Syndicated Credit Equity | \＄8，152，802 |  |  |  |  |  |
| Outflow |  |  |  |  |  |  |
| Cash Flow to Credit Investor |  | －\＄163，056 | －\＄163，056 | －\＄163，056 | －\＄163，056 | －\＄163，056 |
| Credit Investor Buyout |  |  |  |  |  | －\＄407，640 |
| Total Outflows | \＄0 | －\＄163，056 | －\＄163，056 | －\＄163，056 | －\＄163，056 | －\＄570，696 |
| Net Annual Proceeds | \＄8，152，802 | －\＄163，056 | －\＄163，056 | －\＄163，056 | －\＄163，056 | －\＄570，696 |
| Total | \＄6，929，882 |  |  |  |  |  |
| As \％of Development Costs | 13．60\％ |  |  |  |  |  |


| 80\％Syndication Rate－Multifamily Scenario |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inflow | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Syndicated Credit Equity | \＄9，372，255 |  |  |  |  |  |
| Outflow |  |  |  |  |  |  |
| Cash Flow to Credit Investor |  | －\＄187，445 | －\＄187，445 | －\＄187，445 | －\＄187，445 | －\＄187，445 |
| Credit Investor Buyout |  |  |  |  |  | －\＄468，613 |
| Total Outflows | \＄0 | －\＄187，445 | －\＄187，445 | －\＄187，445 | －\＄187，445 | －\＄656，058 |
| Net Annual Proceeds | \＄9，372，255 | －\＄187，445 | －\＄187，445 | －\＄187，445 | －\＄187，445 | －\＄656，058 |
| Total | \＄7，966，416 |  |  |  |  |  |
| As \％of Development Costs | 13．60\％ |  |  |  |  |  |

## HTC Analysis Exhibit D:

## Reasonable Return Calculations with HTC Offsets

| Development Scenario | Base | Infill | Multi-Family |
| :--- | :---: | :---: | ---: |
| Effective Gross Income | $\$ 871,768$ | $\$ 1,045,665$ | $\$ 1,494,720$ |
| Expenses (Exclusive of Real Estate Taxes)* | $(\$ 84,836)$ | $(\$ 100,761)$ | $(\$ 274,736)$ |
| Depreciated Repair Costs - OMITTED FOR PRESENTATION | $\mathbf{\$ 0}$ | $\mathbf{\$ 0}$ | $\mathbf{\$ 0}$ |
|  |  | $\$ 786,932$ | $\$ 944,904$ |
| Net Operating Income - Subtotal | a | $\mathbf{2}, 219,984$ |  |
| Less: Imputed Real Estate Tax Burden |  | $\mathbf{\$ 2 4 4 , 7 6 6 )}$ | $\mathbf{( \$ 2 9 3 , 9 0 1 )}$ |
| Net Operating Income | $\mathbf{\$ 5 4 2 , 1 6 6}$ | $\mathbf{\$ 6 5 1 , 0 0 3}$ | $\mathbf{\$ 6 7 4 , 1 4 8}$ |


| $*$ Real Estate Tax Calculation - Equalized Taxes Based on Projected NOI |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: |
| NOI Without Taxes |  | $\$ 786,932$ | $\$ 944,904$ | $\$ 1,219,984$ |
| Loaded Capitalization Rate Applicable | b | $15.56 \%$ | $15.56 \%$ | $12.31 \%$ |
| Imputed Equalized Assessment | $(\mathrm{a} / \mathrm{b})$ | $\$ 5,057,404$ | $\$ 6,072,649$ | $\$ 9,913,935$ |
| Imputed Assessment | $(45 \%$ of Equalized $)$ | $\$ 2,275,832$ | $\$ 2,732,692$ | $\$ 4,461,271$ |
| Applicable Tax Rate |  | $10.755 \%$ | $10.755 \%$ | $12.235 \%$ |
| Imputed Real Estate Taxes |  | $\$ 244,766$ | $\$ 293,901$ | $\$ 545,836$ |


| Reasonable Return Test | $13.60 \%$ Reduction | Base | Infill | Multi-Family |
| :--- | ---: | ---: | ---: | ---: |
| Effective Gross Income | $\$ 871,768$ | $\$ 1,045,665$ | $\$ 1,494,720$ |  |
| Expenses (exclusive of Real Estate Taxes) |  | $(\$ 84,836)$ | $(\$ 100,761)$ | $(\$ 274,736)$ |
| Real Estate Taxes |  | $(\$ 244,766)$ | $(\$ 293,901)$ | $(\$ 545,836)$ |
| Net Operating Income - Subtotal | $\$ 542,166$ | $\$ 651,003$ | $\$ 674,148$ |  |
| Less: Depreciated Development Costs |  | $(\$ 877,701)$ | $(\$ 908,826)$ | $(\$ 1,040,526)$ |
|  |  | $(\$ 335,535)$ | $(\$ 257,823)$ | $(\$ 366,379)$ |
|  |  |  |  |  |
| Pet Operating Income |  | no | no | no |
|  |  | no | no | no |


| Reasonable Return Test | 14.45\% Reduction | Base | Infill | Multi-Family |
| :---: | :---: | :---: | :---: | :---: |
| Effective Gross Income |  | \$871,768 | \$1,045,665 | \$1,494,720 |
| Expenses (exclusive of Real Estate Taxes) |  | $(\$ 84,836)$ | $(\$ 100,761)^{\text {F }}$ | (\$274,832) |
| Real Estate Taxes |  | (\$244,766) | (\$293,901) | $(\$ 545,836)$ |
| Net Operating Income - Subtotal |  | \$542,166 | \$651,003 | \$674,052 |
| Less: Depreciated Development Costs |  | $(\$ 869,345)$ | $(\$ 900,163)$ | (\$1,030,568) |
| Net Operating Income |  | $(\$ 327,179)$ | $(\$ 249,160)$ | $(\$ 356,517)$ |
| Positive Return |  | no | no | no |
| Threshold Return Minimum (6\% of AV) | \$207,819 | no | no | no |

## UNDERLYING ASSUMPTIONS AND CONTINGENT CONDITIONS

For the purpose of this report, except as otherwise stated, it is assumed:

1. That the legal description is correct.
2. That the title to the property is legally sufficient.
3. That there are no encumbrances or defects of title.
4. That the property is free and clear of all liens.
5. That the property will be efficiently managed and properly maintained.
6. That there are no structural conditions which are not apparent.
7. That there are no sub-surface soil conditions which would cause extraordinary development costs.

The appraisal is made subject to the following contingent conditions:

1. That no liability is assumed because of inaccuracies or errors in information furnished by others.
2. That no liability is assumed as a result of matters of legal character affecting the property, such as title defects, encroachments, liens, overlapping boundaries, party wall agreements, and easements.
3. Unless otherwise stated in this report, the existence of hazardous material, which may or may not be present on the property, was not observed by the appraiser, and the appraiser has no knowledge of the existence of such materials on or in the property. The appraiser, however, is not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation, or other potentially hazardous materials may affect the value of the property. Except as the otherwise stated in the appraisal report, the value indication is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.
4. This report is to be used in whole and not in part. The appraisal is invalid if used in part.
5. That no survey, structural or sub-surface soil investigation was made of the property by the authors of this report.
6. The authors herein by reason of this report are not required to give testimony in court with reference to the subject property unless otherwise previously arranged.
7. Possession of this report, or copy thereof, does not carry with it the right of publication, nor may it be used for any purpose by anyone but the applicant without the previous written consent of the appraiser.
8. This report was made for the purpose stated and should not be used for any unrelated purpose.
9. Each finding, prediction, assumption or conclusion contained in the report is the appraiser's personal opinion and is not an assurance that an event will or will not occur. Except as otherwise stated in the report, we assume that there are no conditions relating to the real estate, sub-soil or structures located on the real estate which would affect appraiser's analyses, opinions or conclusions with respect to the real estate that are not apparent.
10. Neither all nor any part of the contents of the appraisal report (especially the conclusions as to value, the identity of the appraiser, references to the Appraisal Institute or references to the MAI or SRA designations) shall be disseminated to the public through advertising media, public relations media, news media, sales media or other public means of communication without the prior written consent and approval of the appraiser.
11. Appraisers and Planners, Inc. has not made a specific compliance survey and analysis of the property to determine whether or not it is in conformity with the various detailed requirements of the Americans with Disabilities Act (ADA, effective January 16, 1992). It is possible that a compliance survey of the property and a detailed analysis of the ADA requirements may reveal that the property is not in compliance with one or more requirements. If so, this fact might have a negative effect upon the value of the property. Appraisers and Planners, Inc. is not an ADA expert and has no direct evidence relating to this issue. This report does not reflect possible non-compliance with the ADA or its potential negative effect on the concluded value herein.

We certify that, to the best of our knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- We have no present or prospective interest in the property that is the subject of this report and no interest with respect to the parties involved.
- We have not provided appraisal and consulting services regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment, other than the Economic Analysis Report provided in April 2022.
- We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The reported analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- Adam L. Wald, MAI and Sharon Y. Locatell, MAI made an inspection of the property that is the subject of this report.
- No one provided real property appraisal assistance to the persons signing this report.
- As of the date of this report, Sharon Y. Locatell, MAI and Adam L. Wald, MAI have completed the continuing education program of the Appraisal Institute.



## SHARON LOCATELL, MAI, CRE, MRICS - PRESIDENT APPRAISERS \& PLANNERS, INC.

Sharon Locatell is President of Appraisers \& Planners, Inc. headquartered in New York City. She is the former Executive Director of Brown Harris Stevens Appraisal \& Consulting, LLC, where she headed the division for 18 years. Appraisers \& Planners is a general appraisal and consulting business. Ms. Locatell has over 30 years' experience in real estate valuation and consulting with a diversified background in terms of property type, and services offered. She is actively involved in market value appraisals, consulting assignments, arbitration proceedings, purchase price allocation studies, estate work, litigation support and expert witness testimony, and investment advisory consultation.

Ms. Locatell has acted as real estate appraiser and/or consultant to Rudin Management Company, Cord Meyer Development LLC , Jack Resnick \& Sons, Inc., The LeFrak Organization Inc., The Shubert Organization, the Nederlander's, Richemont, McDonald's, Nixon Peabody LLP, AXA Equitable Life Insurance Co., Paul Weiss Rifkin LLP, Fried Frank Harris Shriver \& Jacobsen LLP, Meister Seelig and Fein LLP, Madison International Realty, Muss Development LLC, Hudson River Park Trust, Morrison Cohen LLP, New York Racing Association, Inc., Titan Capital, Emerald Creek Capital, Roman Catholic Archdiocese of New York, Yeshiva University, Union Theological Seminary in the City of New York, Lord \& Taylor, Wien \& Malkin LLP, Consolidated Edison, Friedman LLP, Rockefeller Center, GAP Inc., as well as other institutions, corporations, law firms and individuals.

She has experience in both consultation and valuation of all types of properties including commercial, residential, retail, industrial, vacant land, as well as lease analysis, highest and best use studies, and feasibility studies. Ms. Locatell has testified as an expert witness in Federal District Court on numerous occasions, and in various local and state courts. She is also active as an arbitrator.

## EDUCATION

| Gettysburg College <br> Gettysburg, Pennsylvania | Bachelor of Arts (BA) <br> $(1984-1988)$ |
| :--- | :--- |
| University of Florida | Master's Degree (MA) <br> Real Estate and Urban Analysis <br> $(1988-1990)$ |
| Graduate School of Business | Administration |

## PROFESSIONAL AFFILIATIONS

Member of Appraisal Institute - MAI
Past President and Board Member of the New York Metropolitan Chapter
Counselor of Real Estate - CRE
Member - Royal Institution of Chartered Surveyors - MRICS
American Arbitration Association (AAA) - Panel of Arbitrators
Member - Real Estate Board of New York
New York State Certified General Real Estate Appraiser \#46000007350
New Jersey State Certified General Real Estate Appraiser \#42RG00196800
Connecticut State Certified General Real Estate Appraiser \#RCG0001066

## ADAM L. WALD, MAI - EXECUTIVE VICE PRESIDENT APPRAISERS \& PLANNERS, INC.

## PROFESSIONAL EXPERIENCE

2021 - Present: Executive Vice President - Appraisers \& Planners, Inc.
2015-2021: Vice President - Appraisers \& Planners, Inc.
2014-2015: Senior Staff Appraiser - Appraisers \& Planners, Inc.
2012-2013: Associate Staff Appraiser - Appraisers \& Planners, Inc.
2005-2012: Staff Appraiser - Sterling Appraisals, Inc.

## EDUCATION

Bachelor of Arts - Brandeis University
Major in Economics
Minor in International Business
New York University School of Continuing Professional Studies:
Completed AQB education for New York State General Certification. Courses included Introduction to Real Estate Appraisal; Valuation Principles and Procedures; Introduction to Income Property Valuation; Principles of Income Property Appraising; Applied Income Property Valuation; Fair Housing, Fair Lending and Environmental Issues; and 15-Hour USPAP - Nation Uniform Standards of Professional Appraisal Practice

Appraisal Institute - Designation Education:
Business Practices and Ethics; Advanced Market Analysis and Highest and Best Use; Advanced Income Capitalization; Quantitative Analysis; General Appraiser Report Writing and Case Studies; and Advanced Concepts and Case Studies

## PROFESSIONAL AFFILIATIONS

Designated Member, Appraisal Institute

## CURRENT LICENSE

State of New York Certified General Appraiser - \#46000050707

## COMMUNITY ACTIVITIES

Board of Directors, Metropolitan New York Chapter (2018-2020 Term)

- Chair, Education Committee

Current Member of Manhattan Community Board 8 (2017-2019, 2019-2021 and 2021-2023 Terms)

- Zoning and Development Committee Member


## APPRAISAL EXPERIENCE

Adam has worked exclusively in commercial real estate appraisal and consulting services and has amassed nearly 17 years' experience in real estate valuation and consulting. Property types appraised include multifamily, retail, industrial, manufacturing, office and institutional with a focus on development land, development rights and ground-leased assets. Appraisal assignments include multi-tenant, single tenant, owner-occupied properties, leased fee and leasehold assignments. Appraisals have been prepared for an assortment of uses including estate and gift tax, tax certiorari, purchase and sale negotiations, litigation and condemnation.


[^0]:    ${ }^{1}$ LPC Permit Guidebook Chapter 2 Windows, 2.8

[^1]:    ${ }^{1}$ Per the income method as detailed LPC's Denial of Notice to Proceed for the Stahl York matter

[^2]:    ${ }^{2}$ Rules of the City of New York - Retrieved February 1, 2022 at: https://codelibrary.amlegal.com/codes/newyorkcity/latest/NYCadmin/0-0-0-45963

[^3]:    ${ }^{3}$ Note that the assessed value of the building is not converted to assessor's market value, which would require dividing the assessed value by $45 \%$. In the last paragraph of Section VIII in LPC's Stahl York decision, the building value that is to be added to the total renovation costs is presented in the text as, "Based on the discussion above, the Commission finds that, in addition to 2 percent of the value of the Subject Buildings exclusive of land,..." This does not indicate assessed value. Nevertheless, we have taken a conservative approach and elected to not convert the assessed value of the building into market value.

[^4]:    ${ }^{4}$ We note that using a market-derived capitalization rate would result in substantially greater real estate taxes.

[^5]:    ${ }^{5}$ 20\% x Applicable Development Scenario - Presented in Exhibit A

