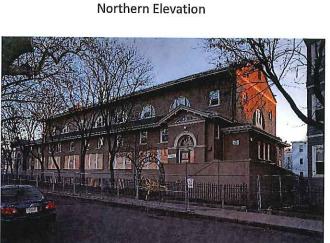


50 YORK STREET - PHOTOGRAPHS OF EXISTING CONDITION

Aerial View

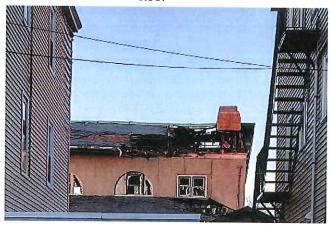




Southern Elevation Facing West



Roof



Southern Elevation Facing East



Southern Elevation Facing North



Impact of December 3, 2016 Fire on 50 York

50 York, one of four buildings on of our St. Patrick's Place site, was built in 1909. The mission-style church was owned by the Diocese of Boston until 1989, when it was decommissioned and sold to Just-A-Start to develop as affordable housing. When the project was completed in 1991, it had 16 units of family housing, with a parking garage underneath the building. The structure was heavily damaged in the recent East Cambridge fire that broke out on Saturday, December 3rd 2016. The fire started at 35 Berkshire Street, the adjacent building to the south along Berkshire Street, and the most extensive damage to the building occurred on the south-facing units, roof, and structural elements.

Although the full extent of the structural damage throughout the building cannot be ascertained without a painstaking process of demolition and shoring, it is evident that structural supports of the main roof and south-facing shed roof have been compromised by the fire and large sections of both roofs have collapsed leaving the building open to the weather. The support posts that carry the upper (clearstory) portion of the south wall and the main roof have also been substantially burned. These posts and the trusses, and beams they carry, were exposed to the full force of the fire in the cavity between the south shed roof and the ceiling of the second floor and in the main attic (see diagrams 1 and 2). In places where access is possible to view these structural elements, the trusses, beams and posts are observed to have been significantly burned. We do not believe it is possible to put a temporary roof over the building and a new roof could only be installed over the building after a very deliberative demolition and shoring process had exposed the structural elements, and those needing replacement have been replaced. In the meantime, the building is open to the weather and exposed to continued deterioration. Winter conditions including snow loads and freeze / thaw cycles may have an impact on the stability of the structure, and are very much a concern.

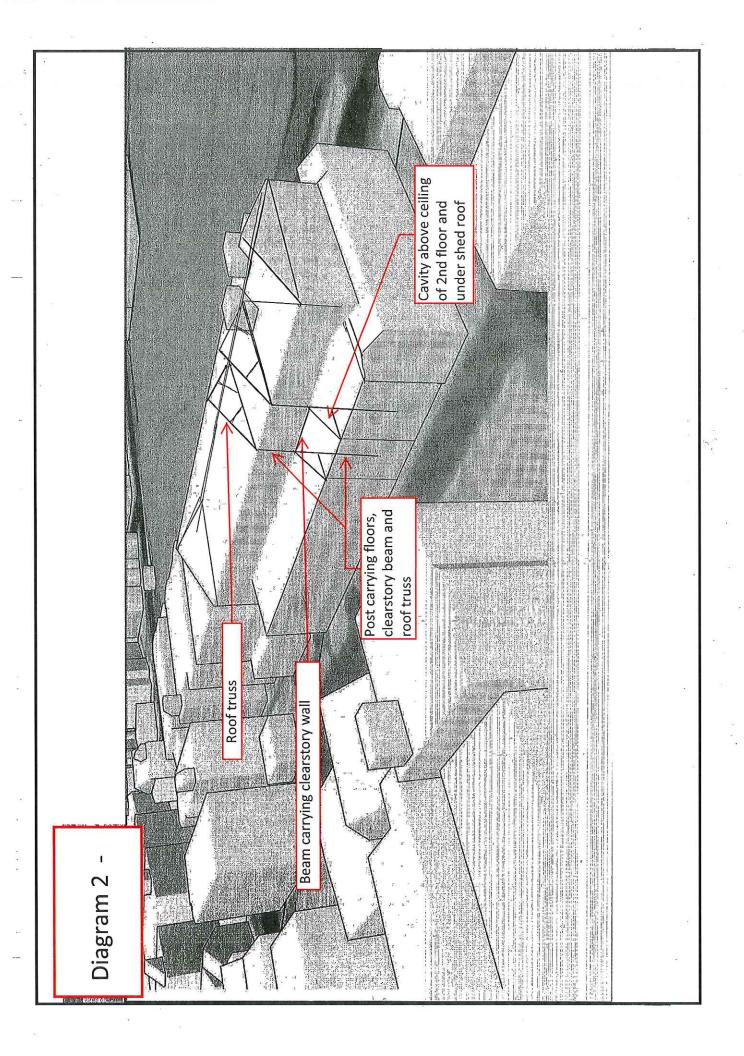
In addition to the impact of the fire, the entire building was heavily saturated with water, which ultimately filled the building, and its basement garage, up to outside grade. Due to the impact of the water and the need to expose the structural elements as described above, in order for the building to be saved, it would need

to be gutted to the exterior studs throughout the structure even in areas that were not impacted directly by the fire. All finishes, sheetrock, insulation, electrical and plumbing fixtures would need to be removed. In addition, there is concern that the water may have caused degradation to the soil underneath the building, destabilizing the foundation. Attached is a Structural Report which describes the structural engineer's observations of the impact of the fire on the building.

We do not say that the building cannot be saved because we do not know that. From the evidence that we have gathered however there is a good possibility that most of the building, including much of the structure would need to be rebuilt. The process of getting to the point where we know what can be saved would be a very long and expensive process with no certain outcome.

Given the facts that we know and have shared with the Commission, we have determined that the best path forward is to demolish the building and build a new building. It is also in the best interest of the community, from the perspective of public safety, finding closure and expediting the rebuilding process, that the demolition process commence soon.

Just A Start as an affordable housing agency is acutely aware of the impact the loss of these units has had not only the residents who lost their home where many lived since 1991, but also the ripple effect it has had on the shortage of affordable housing in Cambridge and in the region. Approval of the demolition permit by the Cambridge Historical Commission at this time will allow us to rebuild 16 needed affordable housing units, that were lost by the fire as soon as possible, and within the constraints of funding available for affordable housing.





CONSULTING ENGINEERS

100 Crescent Road, Suite 1A Needham, MA 02494-1457 p 781 444-5156 f 781 444-5157 www.dmberg.com **PRINCIPALS**

Thomas G. Heger, PE, LEED AP
Ali R. Borolerdi, PE, LEED AP
David M. Berg, PE
Peter M. Shedlock

ASSOCIATES William H. Barry, PE

January 23, 2017

Mr. Robert MacArthur Real Estate Project Manager Just-A-Start Corporation 1035 Cambridge Street #12 Cambridge, MA 02141

RE: 50 YORK STREET

CAMBRIDGE, MASSACHUSETTS

SUBJECT: FIRE DAMAGE INVESTIGATION

Dear Robert:

At your request, we prepared this report of the existing condition of the building at 50 York Street, Cambridge, Massachusetts.

1.0 OBJECTIVE

The objective of this report was to investigate the existing condition of the structure after the devastating fire in December 2016.

2.0 SCOPE

Our review included the following work:

- Visit the site to observe and document the existing conditions;
- Evaluate and summarize structural field observations; and
- Develop conclusions regarding the structural condition of the existing structure and provide recommendations on the future use of the building.



50 YORK STREET CAMBRIDGE, MASSACHUSETTS FIRE DAMAGE INVESTIGATION January 23, 2017 Page 2

3.0 GENERAL DESCRIPTION OF THE STRUCTURE

The building was originally a church and converted to housing in 1992. A new Second Floor and a new Third Floor were added. New footings, columns, and beams were added to support the new floors. Although the load on the existing columns and footings was increased, it doesn't appear that the existing footings were reinforced to meet the new loading demands during the 1992 renovation.

The basement is partially underground. First Floor framing consists of wood decking and wood joists supported on steel girders and columns. The new Second and Third Floor framings consist of plywood decking on steel joists at 2 feet on center. The joists are in turn supported on steel beams and columns.

4.0 SITE VISIT AND CONDITION SURVEY

We visited the site on January 20, 2017. We noticed the following:

- By observing the building from outside, we noticed fire damage to the First Floor and Second Floor units at the southeast corner of the building, to the existing Second Floor roof over the southern units, and the south side of the main roof of the building. Please see Photo 1.
- We entered the basement and we didn't notice any fire damage in the basement or in the ceiling under the overhead first floor framing plan. There was water damage to the architectural elements. The ceiling was covering the First Floor Framing and we could not observe the First Floor decking or wood joists to evaluate water or any other type of damage. Please see Photo 2.
- We then visited the First Floor. Two units at the southeast corner were blocked off due to the partial collapse of the floor above and we observed them from the corridor. We entered the other units. The first floor appeared to be okay with some water damage and debris from the above. We went to the second floor of each unit and we noticed that the existing roof over the southern units was extensively burnt and damaged. Please see Photos 3 and 4. In addition, it appeared that the interior beam supporting the existing shed roof and the clerestory wall above was also compromised due to the fire. The units on the north side of the corridor didn't have fire damage but had extensive water damage due to the roof damage. Please see Photo 5.
- We went up to the second floor so we could access the third floor units through the second floor corridor. We noticed that in every third floor unit on the south side, the existing roof over the unit was mostly burnt and the unit was exposed to the elements. Please see Photos 6 and 7. We also noticed that the existing 10x10 wood columns supporting the roof trusses were partially damaged in some units. Please see Photo 8. The top and bottom chords of the wood trusses in these units were charred and it was not possible to determine the remaining depth of the charred members. The units on the north side had partial fire damage close to the ridge of the truss and a lot of water damage due to the roof openings. Please see Photos 9 and 10.



50 YORK STREET CAMBRIDGE, MASSACHUSETTS FIRE DAMAGE INVESTIGATION January 23, 2017 Page 3

Although the fire happened on the southeast side and the roof is mostly damaged on the south side only, the existing roof is unstable due to the fact that trusses span the whole width of the roof and damage to one side of the truss will make the whole roof unstable. Furthermore, some of the wood columns supporting the south end of the wood trusses have been compromised in the fire. The east side gable wall is also unstable due to the collapsed floors and roof at the southern end.

5.0 CONCLUSIONS

Our investigation leads us to the following conclusions about the structural condition of the building:

- The building main roof is unstable. The trusses and the supporting columns are partially burnt on the south side. If it is the owner's intention to renovate the existing building, either the whole roof needs to be shored all the way down to the basement which will be very expensive, or the roof needs to be demolished.
- The Third and Second Floor framings are mostly damaged by fire or water and need to be replaced or extensively renovated. It is possible to keep the steel framing added in 1992 renovation and replace the wood framing, but this would require extensive shoring all the way down to the basement which would be expensive. It will most probably be less expensive to remove these floors and rebuild them.
- First Floor steel beams and columns appeared to be in good shape. The plywood and wood joists need to be investigated and most probably partially replaced due to exposure to water.
- We could not verify the foundation condition. There was no obvious settlement due to the water filling the basement, but the foundation could settle in the future when the cold and wet season would end. A Geotechnical investigation of the foundation might be required to rule that out.
- At this point, it might be wise to investigate the existing footings that were loaded beyond their intended original design load due to the 1992 renovation.

6.0 RECOMMENDATIONS

Shoring the existing building to replace the damaged roof and floor members, and columns would be very expensive and in our professional opinion, cost inhibitive. If the owner intends to keep the building, we recommend demolishing the building above the first floor and replacing it with new construction. This is of course dependent on the results of the above-mentioned Geotechnical investigation and analysis of the original foundation for the extra loads due to the previous renovation. The first floor framing might need some renovation as well.



50 YORK STREET CAMBRIDGE, MASSACHUSETTS FIRE DAMAGE INVESTIGATION January 23, 2017 Page 4

The building at its current situation is unstable and dangerous for any work or traffic until it is demolished or shored.

Our investigation was based on our visual observation and review of the existing drawings.

If you have any questions or comments, please do not hesitate to contact our office.

Sincerely,

DM BERG CONSULTANTS, P.C.

Ali R. Borojerdi, P.E., LEED AP Vice President

p:\proj17\001-099\17013\clerical\17013-50 york st fire damage report.doc



DM BERG CONSULTANTS, P.C. SERVING THE INDUSTRY SINCE 1963



Photo 1



Photo 2



DM BERG CONSULTANTS, P.C. SERVING THE INDUSTRY SINGE 1963



Photo 3



Photo 4



DM BERG CONSULTANTS, P.C. SERVING THE INDUSTRY SINGE 1963

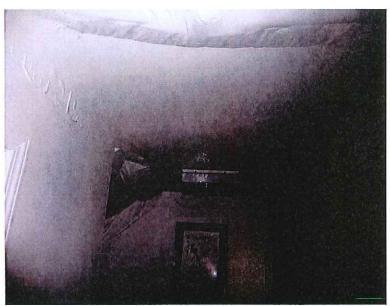


Photo 5



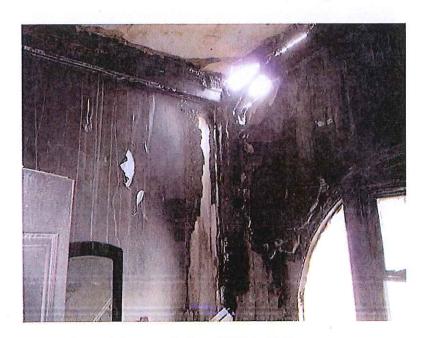
Design * Analysis * Forensics * Construction Administration * Structural Tests and Inspections Peer Reviews * Feasibility Studies * Historical Preservation * Building Envelope * Specialty



DM BERG CONSULTANTS, P.C. SERVING THE INDUSTRY SINGE 1963



Photo 7



Design • Analysis • Forensics • Construction Administration • Structural Tests and Inspections Peer Reviews • Feasibility Studies • Historical Preservation • Building Envelope • Specialty



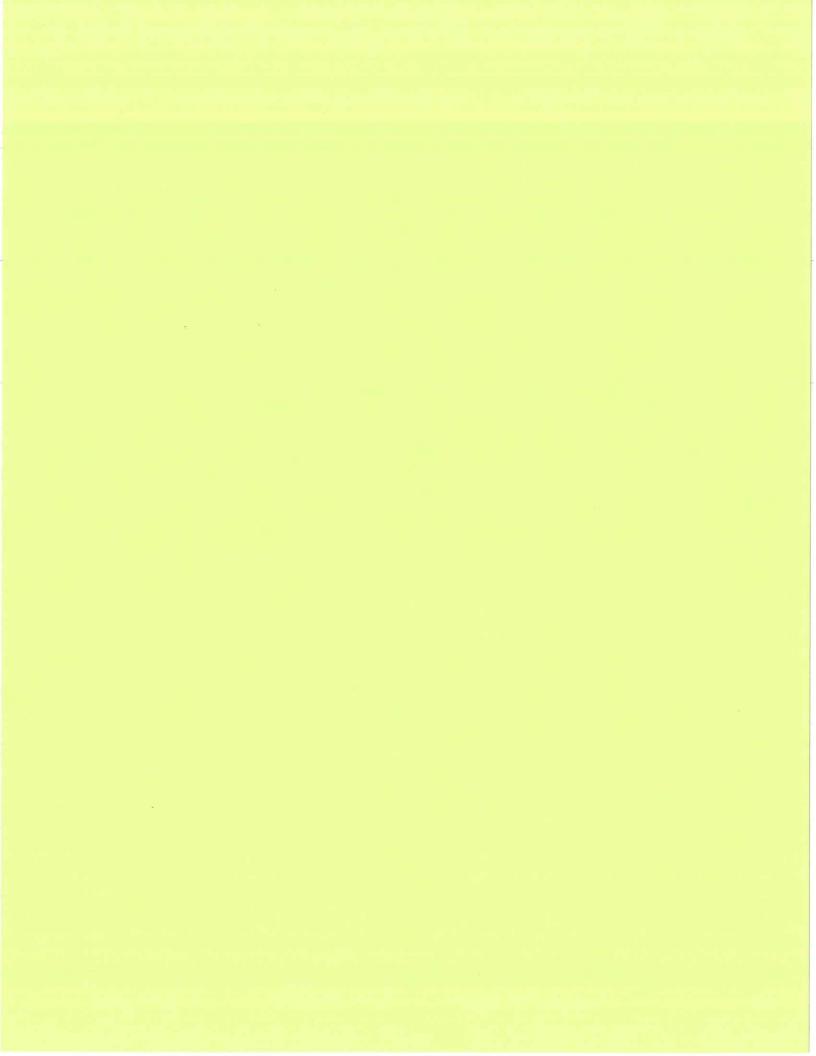
DM BERG CONSULTANTS, P.C. SERVING THE INDUSTRY SINCE 1963



Photo 9



Photo 10



Replacement Structure

Just A Start has hired John Winslow from Winslow Architects, Inc. to design a new building with 16 residential units. Attached are rendered elevations of a design for the building. This plan is still very preliminary but is scaled based on an initial evaluation of the required program square footage. The new building will be fully sprinkled, will have an elevator, and built to a high standard of energy efficiency. The new building will continue to retain large family units and be designed to fit well into the neighborhood context.

Zoning Analysis

50 York is one of 4 buildings on a 32, 536 square foot site, running along the block of York Street between Berkshire and Hamlin Streets. The entire parcel is governed by a Comprehensive Permit granted by the Board of Zoning Appeals in 1991. That Comprehensive Permit, for the creation of 32 Affordable Housing units, established the dimensional and parking standards applicable to the site.

As granted under the Comprehensive Permit decision, the allowed dimensions for the 50 York building are:

Height: 47 ft. ±

Front yard setback: 13 ft. ± from Berkshire Street

15 ft. ± from York Street

Side yard setback: 23 ft. ± opposite York Street

none give opposite Berkshire as parcel goes through to next street

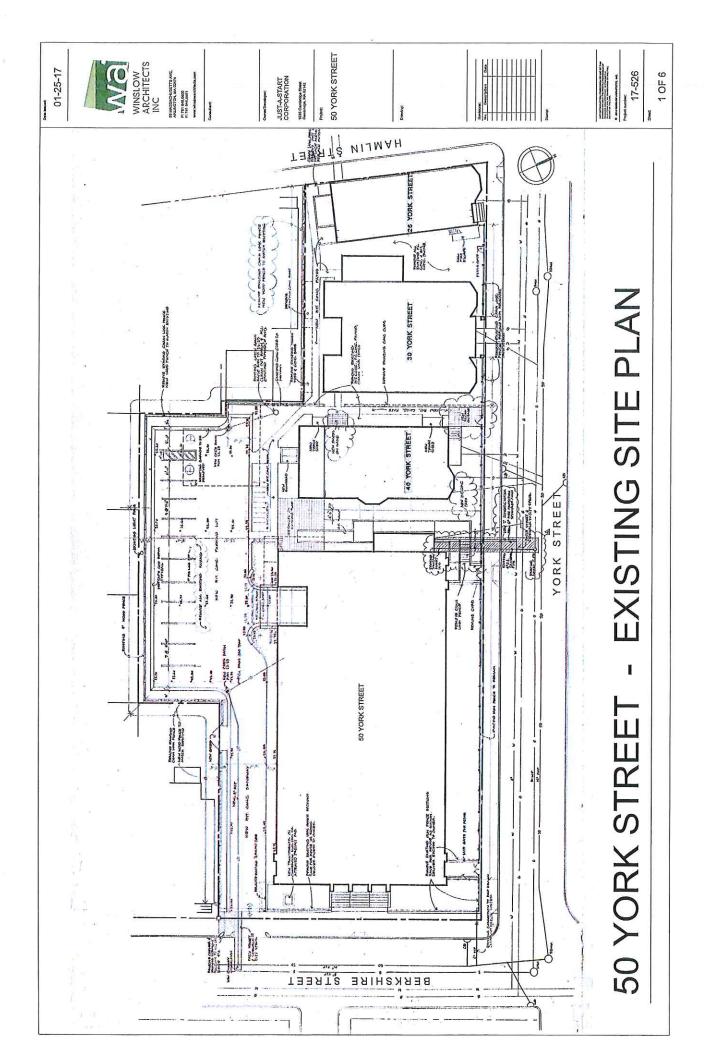
As granted under the Comprehensive Permit, the allowed relief for the

entire site is: FAR:

Number of Dwelling units: 32 for parcel, 16 of them in 50 York

Lot area per dwelling unit: 1,017 sq. ft. Allowable/required parking spaces: 28

The proposed plans which will be presented for rebuilding of 16 affordable housing units at 50 York Street will be in compliance with all of these zoning requirements. It is anticipated that the new building will be lower in height and provide greater setbacks than granted in the Comprehensive Permit decision.



Project 50 YORK STREET WINSLOW ARCHITECTS INC entransport prompt prompt and the state of t 2 OF 6 JUST-A-START CORPORATION

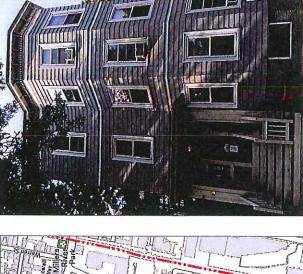


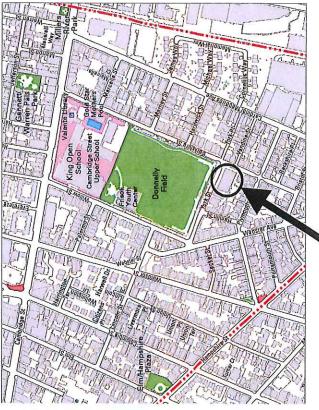


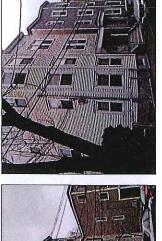


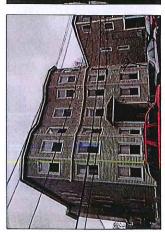


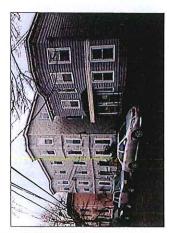














NEIGHBORHOOD CONTEXT **50 YORK STREET**

1936 Cambridge Bruet Cambridge, MA 02142











26 - 40 YORK STREET

26 YORK STREET

40 YORK STREET



30 YORK STREET



ST PATRICKS PLACE **50 YORK STREET**

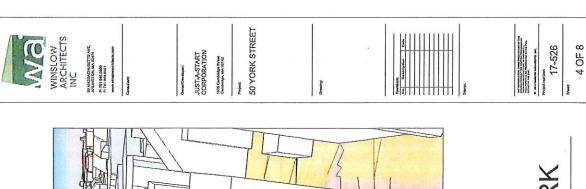
01-25-17

JUST-A-START CORPORATION

Project 50 YORK STREET

metatoricital metatoricital control of the control

3 OF 8



01-25-17

50 YORK STREET - ZONING ENVELOPE UNDER COMPREHENSIVE PERMIT FOR RESIDENTIAL USE AT 50 YORK

MINISLOW
ARCHITECTS
INC

STATE ASSOCIATION

WINNING COWN
ARCHITECTS
INC

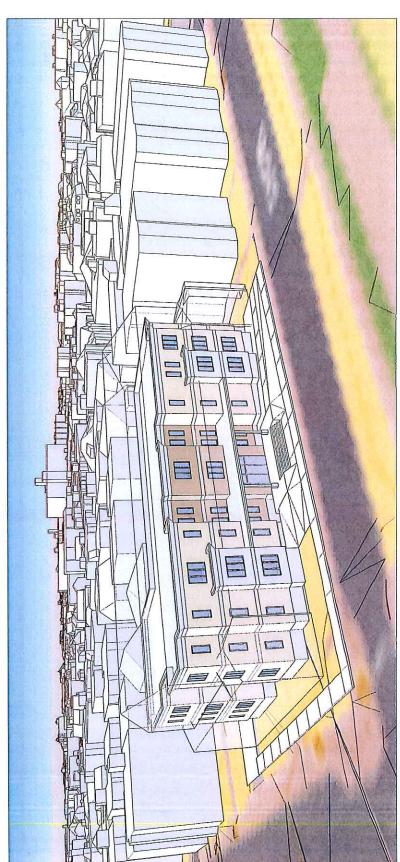
STATE ASSOCIATION

WANGER CONTROLLED

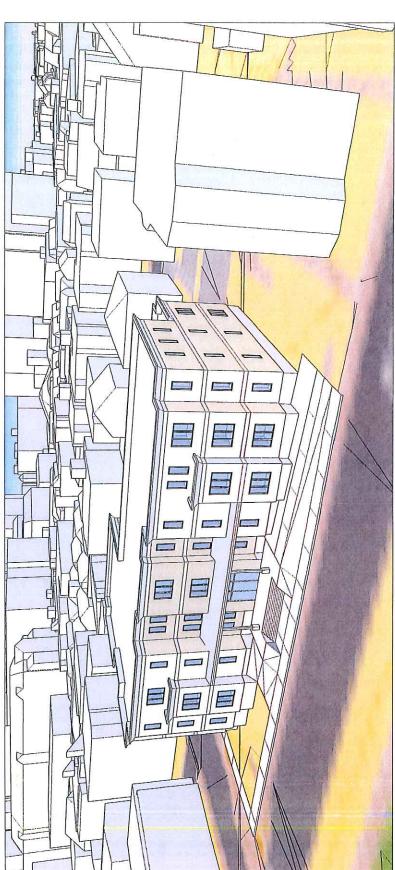
STATE ASSOCIATION

WANGER CONTROLLED

C

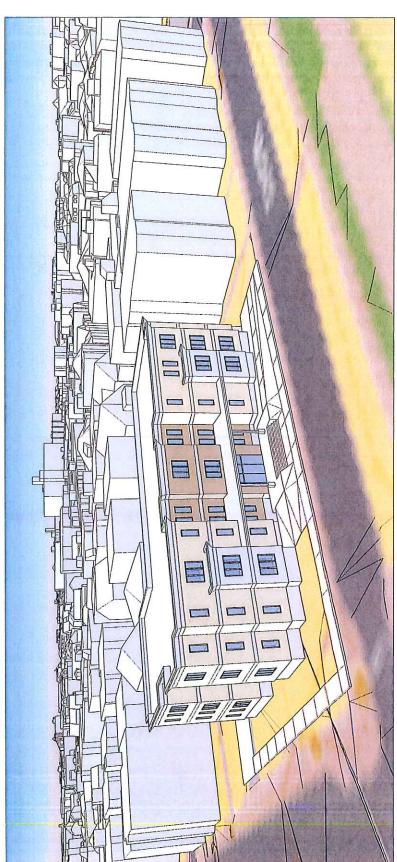


50 YORK STREET - ZONING ENVELOPE UNDER COMPREHENSIVE PERMIT FOR RESIDENTIAL USE AT 50 YORK

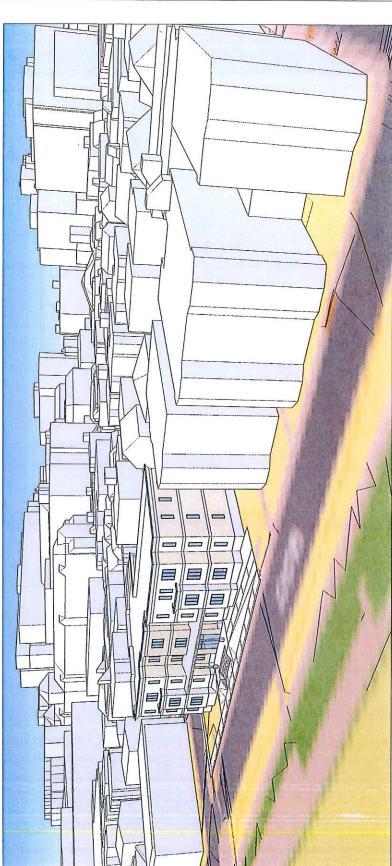


PERSPECTIVE 1 50 YORK STREET

COMPLETE SOLVEN ARCHITECTS
WINNSLOW ARCHITECTS



PERSPECTIVE 2 **50 YORK STREET**



PERSPECTIVE 3 **50 YORK STREET**