Mess, Camie

From: Mess, Camie
Sent: Friday, January 26, 2018 4:30 PM
To: jmullen@rothjackson.com
Subject: BAR Action- January 17, 2018 - 501 West Main Street

January 26, 2018

Preliminary Discussion
BAR 16-09-01
425, 501, and 503 West Main Street
Tax Parcel 320175000, 320176000, and 320177000
Quirk Charlottesville, LLC, Owner/ Jennifer D. Mullen, Esq., Applicant
New Construction: Final Details

Dear Applicant,

The above referenced project was discussed before a meeting of the City of Charlottesville Board of Architectural Review (BAR) on January 17, 2018. The following action was taken:

Miller moved: Having considered the standards set forth within the City Code, including City Design Guidelines for Site Design and Elements and City Design Guidelines for New Construction, I move to find that the proposed changes to the rooftop, exterior staircase, and the addition of the transformer screen to be 6 inches above the height of the transformer satisfies the BAR's criteria and are compatible with this property and other properties in the West Main Street ADC District, and that the BAR approves the application as submitted, with the modifications listed above. Schwarz seconded. Approved (6-0.)

This certificate of appropriateness shall expire in 18 months (July 17, 2019), unless within that time period you have either: been issued a building permit for construction of the improvements if one is required, or if no building permit is required, commenced the project. You may request an extension of the certificate of appropriateness before this approval expires for one additional year for reasonable cause.

If you have any questions, please contact me at 434-970-3130 or messc@charlottesville.org.

Sincerely yours,

Camie Mess
Assistant Preservation and Design Planner

Camie Mess
Assistant Preservation and Design Planner
City of Charlottesville Neighborhood Development Services
610 E. Market Street, P.O. Box 911, Charlottesville, Virginia 22902
Phone: (434) 970-3398
E-mail: messc@charlottesville.org

CITY OF CHARLOTTESVILLE
BOARD OF ARCHITECTURAL REVIEW
STAFF REPORT
January 17, 2017

Certificate of Appropriateness Application
BAR 16-09-01
425, 501, and 503 West Main Street
Tax Parcel 320175000, 320176000, and 320177000
Quirk Charlottesville, LLC, Owner/ Jennifer D. Mullen, Esq., Applicant
New Construction: Final Details

Background

425, 501 and 503 West Main Street are contributing structures in the Downtown Architectural Design Control (ADC) historic district.

There have been several recent approvals for mixed use projects on these properties that were not pursued:

March 17, 2015 - A previous applicant received conditional BAR approval for a mixed use building at 421, 425, 501 and 503 West Main Street. No site plan was submitted, and that approval has expired.

April 19, 2016 – A previous applicant received conditional BAR approval for a mixed use building at 425, 501, 503 West Main Street. No site plan was submitted, and there was no follow-up on the conditions.

August 30, 2016 Work Session – The BAR had a preliminary discussion with the current applicant for the upcoming Quirk boutique arts-based hotel project.

April 25, 2017 – The applicants met with the neighborhood to discuss the proposed development.

May 16, 2017- The BAR moved to find that the massing of the proposed building satisfies the BAR's criteria and is compatible with these properties and other properties in the Downtown ADC district, and that the BAR approves the massing only as submitted, it was approved 9-0.

The BAR moved to find that the demolition of the (Mel's Barber Shop) structure at the rear of 425 West Main Street satisfies the BAR's criteria and is compatible with these properties and other properties in the Downtown ADC district, and that the BAR approves the application as submitted. It was approved 9-0.

The BAR moved to find that the demolition of the rear additions of 503 West Main Street satisfy the BAR's criteria and is compatible with these properties and other properties in the Downtown ADC district, and that the BAR approves the application as submitted. It was approved 9-0.

The BAR moved to find that the demolition of the rear addition and the re-opening of the enclosed sleeping porches on the west side of 501 West Main Street satisfies the BAR's criteria and is compatible with these properties and other properties in the Downtown ADC district, and that the BAR approves the application as submitted. The BAR did not approve the demolition of the 1924 side brick addition, it was approved 7-2 with Graves and Clayborne opposed.

October 17, 2017- Miller moved: Having considered the standards set forth within the City Code, including City Design Guidelines for New Construction and Additions, I move to find that, contingent upon zoning compliance, the massing; materials; warm, dimmable lighting; and landscape plan of the proposed building satisfy the BAR's criteria and are compatible with these properties and other properties in the Downtown ADC district, and that the BAR approves the massing, materials, lighting, and landscape plan only as submitted with the following modifications: that there's consideration for the soil volume of the ginkgo adjacent to the parking garage on Commerce Street, consideration of an alternative to the privet [hedge on the front elevation of West Main Street], and coordination with the street scape project along West Main.

In addition, the applicant should provide the following details for review and approval in order to receive a final certificate of appropriateness:

1. Historic building details, including exterior stair details
2. Site furnishings
3. Glass specifications with a physical sample
4. Window and wall sections
5. Signage
6. Final information on mechanical units.

Sarafin seconded. Motion was approved (7-0).

Application

The applicant is requesting various updates to the conditional approval from October 17, 2017 that include:

- Demolition of the north porch on 501 W. Main St. (added between 1896 and 1902)
- Demolition of the west addition on 501 W. Main St. (added between 1902 and 1920)
- Changes to proposed massing
- Additional windows at the hotel lobby on the east elevation
- An updated landscape plan
- Updates to the exterior stair

Criteria, Standards and Guidelines

Review Criteria Generally

Sec. 34-284(b) of the City Code states that,
In considering a particular application the BAR shall approve the application unless it finds:
(1) That the proposal does not meet specific standards set forth within this division or applicable provisions of the Design Guidelines established by the board pursuant to Sec.34-288(6); and
(2) The proposal is incompatible with the historic, cultural or architectural character of the district in which the property is located or the protected property that is the subject of the application.

Standards for Review of Construction and Alterations include:

(1) Whether the material, texture, color, height, scale, mass and placement of the proposed addition, modification or construction are visually and architecturally compatible with the site and the applicable design control district;
(2) The harmony of the proposed change in terms of overall proportion and the size and placement of entrances, windows, awnings, exterior stairs and signs;
(3) The Secretary of the Interior Standards for Rehabilitation set forth within the Code of

Federal Regulations (36 C.F.R. §67.7(b)), as may be relevant;
(4) The effect of the proposed change on the historic district neighborhood;
(5) The impact of the proposed change on other protected features on the property, such as gardens, landscaping, fences, walls and walks;
(6) Whether the proposed method of construction, renovation or restoration could have an adverse impact on the structure or site, or adjacent buildings or structures;
(7) When reviewing any proposed sign as part of an application under consideration, the standards set forth within Article IX, sections 34-1020 et seq. (SIGNS) shall be applied; and
(8) Any applicable provisions of the City's Design Guidelines.

Pertinent Guidelines for New Construction and Additions include:

A. INTRODUCTION
e. Multi-lot
Often new commercial, office, or multiuse buildings will be constructed on sites much larger than the traditionally sized lots 25 to 40 feet wide. Many sites for such structures are located on West Main Street and in the 14th and 15th Street area of Venable Neighborhood. These assembled parcels can translate into new structures whose scale and mass may overwhelm neighboring existing structures. Therefore, while this building type may need to respond to the various building conditions of the site, it also should employ design techniques to reduce its visual presence. These could include varying facade wall planes, differing materials, stepped-back upper levels, and irregular massing.

B. SETBACK
5) In the West Main Street corridor, construct new buildings with a minimal (up to 15 feet according to the zoning ordinance) or no setback in order to reinforce the street wall. If the site adjoins historic buildings, consider a setback consistent with these buildings.
6) On corners of the West Main Street corridor, avoid deep setbacks or open corner plazas unless the design contributes to the pedestrian experience or improves the transition to an adjacent residential area.
7) New buildings, particularly in the West Main Street corridor, should relate to any neighborhoods adjoining them. Buffer areas should be considered to include any screening and landscaping requirements of the zoning ordinance.
8) At transitional sites between two distinctive areas of setback, for instance between new commercial and historic commercial, consider using setbacks in the new construction that reinforce and relate to setbacks of the historic buildings.

C. SPACING
Spacing between buildings depends on the size of the lot, the size of the building, and side-yard setback requirements. Consistent spacing between a row of buildings helps to establish an overall rhythm along a street.
1)Maintain existing consistency of spacing in the area. New residences should be spaced within 20 percent of the average spacing between houses on the block.
2)Commercial and office buildings in the areas that have a well-defined street wall should have minimal spacing between them.
3)In areas that do not have consistent spacing, consider limiting or creating a more uniform spacing in order to establish an overall rhythm.
4)Multi-lot buildings should be designed using techniques to incorporate and respect the existing spacing on a residential street.

D. MASSING & FOOTPRINT
While the typical footprint of commercial building from the turn of the twentieth century might be 20 feet wide by 60 feet long or 1200 square feet per floor, new buildings in the downtown can be expected

to be somewhat larger. Likewise, new buildings in the West Main Street corridor may be larger than this district's historic buildings. It is important that even large buildings contribute to the human scale and pedestrian orientation of the district.

1)New commercial infill buildings' footprints will be limited by the size of the existing lot in the downtown or along the West Main Street corridor. Their massing in most cases should be simple rectangles like neighboring buildings.
2)New infill construction in residential sub-areas should relate in footprint and massing to the majority of surrounding historic dwellings.
3)Neighborhood transitional buildings should have small building footprints similar to nearby dwellings.
a. If the footprint is larger, their massing should be reduced to relate to the smaller-scaled forms of residential structures.
b. Techniques to reduce massing could include stepping back upper levels, adding residential roof and porch forms, and using sympathetic materials.
4)Institutional and multi-lot buildings by their nature will have large footprints, particularly along the West Main Street corridor and in the 14th and 15th Street area of the Venable neighborhood.
a. The massing of such a large scale structure should not overpower the traditional scale of the majority of nearby buildings in the district in which it is located.
b. Techniques could include varying the surface planes of the buildings, stepping back the buildings as the structure increases in height, and breaking up the roof line with different elements to create smaller compositions.

E. HEIGHT & WIDTH
1.Respect the directional expression of the majority of surrounding buildings. In commercial areas, respect the expression of any adjacent historic buildings, which generally will have a more vertical expression.
2. Attempt to keep the height and width of new buildings within a maximum of 200 percent of the prevailing height and width in the surrounding sub-area.
3.In commercial areas at street front, the height should be within 130 percent of the prevailing average of both sides of the block. Along West Main Street, heights should relate to any adjacent contributing buildings. Additional stories should be stepped back so that the additional height is not readily visible from the street.
4.When the primary façade of a new building in a commercial area, such as downtown, West Main Street, or the Corner, is wider than the surrounding historic buildings or the traditional lot size, consider modulating it with bays or varying planes.
5.Reinforce the human scale of the historic districts by including elements such as porches, entrances, storefronts, and decorative features depending on the character of the particular sub-area.
6.In the West Main Street corridor, regardless of surrounding buildings, new construction should use elements at the street level, such as cornices, entrances, and display windows, to reinforce the human scale.

F. SCALE
1.Provide features on new construction that reinforce the scale and character of the surrounding area, whether human or monumental. Include elements such as storefronts, vertical and horizontal divisions, upper story windows, and decorative features.

G. ROOF
1. Roof Forms and Pitches
a. The roof design of new downtown or West Main Street commercial infill buildings generally should be flat or sloped behind a parapet wall.

b. Neighborhood transitional buildings should use roof forms that relate to the neighboring residential forms instead of the flat or sloping commercial form.
c. Institutional buildings that are freestanding may have a gable or hipped roof with variations.
d. Large-scale, multi-lot buildings should have a varied roof line to break up the mass of the design using gable and/or hipped forms.
e. Shallow pitched roofs and flat roofs may be appropriate in historic residential areas on a contemporary designed building.
f. Do not use mansard-type roofs on commercial buildings; they were not used historically in Charlottesville's downtown area, nor are they appropriate on West Main Street.
2. Roof Materials
Common roof materials in the historic districts include metal, slate, and composition shingles.
a. For new construction in the historic districts, use traditional roofing materials such as standing-seam metal or slate.
b. In some cases, shingles that mimic the appearance of slate may be acceptable.
c. Pre-painted standing-seam metal roof material is permitted, but commercial-looking ridge caps or ridge vents are not appropriate on residential structures.
d. Avoid using thick wood cedar shakes if using wood shingles; instead, use more historically appropriate wood shingles that are thinner and have a smoother finish.
e. If using composition asphalt shingles do not use light colors. Consider using neutral-colored or darker, plain or textured-type shingles.
f. The width of the pan and the seam height on a standing-seam metal roof should be consistent with the size of pan and seam height usually found on a building of a similar period.
3. Rooftop Screening
a. If roof-mounted mechanical equipment is used, it should be screened from public view on all sides.
b. The screening material and design should be consistent with the design, textures, materials, and colors of the building.
c. The screening should not appear as an afterthought or addition the building.

H. ORIENTATION
1. New commercial construction should orient its façade in the same direction as adjacent historic buildings, that is, to the street.
2. Front elevations oriented to side streets or to the interior of lots should be discouraged.

I. WINDOWS & DOORS
1. The rhythm, patterns, and ratio of solids (walls) and voids (windows and doors) of new buildings should relate to and be compatible with adjacent historic facades.
a. The majority of existing buildings in Charlottesville's historic districts have a higher proportion of wall area than void area except at the storefront level.
b. In the West Main Street corridor in particular, new buildings should reinforce this traditional proportion.
2. The size and proportion, or the ratio of width to height, of window and door openings on new buildings' primary facades should be similar and compatible with those on surrounding historic facades.
a. The proportions of the upper floor windows of most of Charlottesville's historic buildings are more vertical than horizontal.
b. Glass storefronts would generally have more horizontal proportions than upper floor openings.
3. Traditionally designed openings generally are recessed on masonry buildings and have a raised surround on frame buildings. New construction should follow these methods in the historic districts as opposed to designing openings that are flush with the rest of the wall.
4. Many entrances of Charlottesville's historic buildings have special features such as transoms, sidelights, and decorative elements framing the openings. Consideration should be given to incorporating such elements in new construction.

5. Darkly tinted mirrored glass is not an appropriate material for windows in new buildings within the historic districts.
6. If small-paned windows are used, they should have true divided lights or simulated divided lights with permanently affixed interior and exterior muntin bars and integral spacer bars between the panes of glass.
7. Avoid designing false windows in new construction.
8. Appropriate material for new windows depends upon the context of the building within a historic district, and the design of the proposed building. Sustainable materials such as wood, aluminum-clad wood, solid fiberglass, and metal windows are preferred for new construction. Vinyl windows are discouraged.
9. Glass shall be clear. Opaque spandrel glass or translucent glass may be approved by the BAR for specific applications.

J. PORCHES
1. Porches and other semi-public spaces are important in establishing layers or zones of intermediate spaces within the streetscape.

K. STREET-LEVEL DESIGN
1. Street level facades of all building types, whether commercial, office, or institutional, should not have blank walls; they should provide visual interest to the passing pedestrian.
2. When designing new storefronts or elements for storefronts, conform to the general configuration of traditional storefronts depending on the context of the sub-area. New structures do offer the opportunity for more contemporary storefront designs.
3. Keep the ground level facades(s) of new retail commercial buildings at least eighty percent transparent up to a level of ten feet.
4. Include doors in all storefronts to reinforce street level vitality.
5. Articulate the bays of institutional or office buildings to provide visual interest.
6. Institutional buildings, such as city halls, libraries, and post offices, generally do not have storefronts, but their street levels should provide visual interest and display space or first floor windows should be integrated into the design.
7. Office buildings should provide windows or other visual interest at street level.
8. Neighborhood transitional buildings in general should not have transparent first floors, and the design and size of their façade openings should relate more to neighboring residential structures.
9. Along West Main Street, secondary (rear) facades should also include features to relate appropriately to any adjacent residential areas.
10. Any parking structures facing on important streets or on pedestrian routes must have storefronts, display windows, or other forms of visual relief on the first floors of these elevations.
11. A parking garage vehicular entrance/exit opening should be diminished in scale, and located off to the side to the degree possible.

L. FOUNDATION and CORNICE
1. Distinguish the foundation from the rest of the structure through the use of different materials, patterns, or textures.
2. Respect the height, contrast of materials, and textures of foundations on surrounding historic buildings.
3. If used, cornices should be in proportion to the rest of the building.
4. Wood or metal cornices are preferred. The use of fypon may be appropriate where the location is not immediately adjacent to pedestrians.

Review Criteria for Demolition
1. *The standards established by the City Code, Section 34-278.*
2. *The public necessity of the proposed demolition*

3. *The public purpose or interest in land or buildings to be protected.*
4. *Whether or not a relocation of the structure would be a practical and preferable alternative to demolition.*
5. *Whether or not the proposed demolition would adversely or positively affect other historic buildings or the character of the historic district.*
6. *The reason for demolishing the structure and whether or not alternatives exist.*
7. *Whether or not there has been a professional economic and structural feasibility study for rehabilitating or reusing the structure and whether or not its findings support the proposed demolition.*

Pertinent Guidelines for Demolition:

1. *Demolish a historic structure only after all preferable alternatives have been exhausted.*
2. *Document the building thoroughly through photographs and, for especially significant buildings, measured drawings according to Historic American Buildings Survey (HABS) Standards. This information should be retained by the City of Charlottesville Department of Neighborhood Development Services and the Virginia Department of Historic Resources.*
3. *If the site is to remain vacant for any length of time, maintain the empty lot in a manner*

Discussion and Recommendations

The BAR should discuss if the partial demolitions on the north and west sides of 501 West Main Street are appropriate, and fit within the guidelines. If the BAR finds them appropriate, then staff agrees the other changes to the application fit within the guidelines, are consistent with the rest of the building's design, and are compatible with and complementary to neighboring buildings.

Since this is a preliminary discussion, no motion is required.

Board of Architectural Review (BAR)
Certificate of Appropriateness

Please Return To: City of Charlottesville
Department of Neighborhood Development Services
P.O. Box 911, City Hall
Charlottesville, Virginia 22902
Telephone (434) 970-3130 Email scala@charlottesville.org

Please submit ten (10) hard copies and one (1) digital copy of application form and all attachments.
Please include application fee as follows: New construction project $375; Demolition of a contributing structure $375; Appeal of BAR decision $125; Additions and other projects requiring BAR approval $125; Administrative approval $100. Make checks payable to the City of Charlottesville.
The BAR meets the third Tuesday of the month.
Deadline for submittals is Tuesday 3 weeks prior to next BAR meeting by 3:30 p.m.

Owner Name Quirk Charlottesville, LLC Applicant Name Jennifer D. Mullen, Esq.

Project Name/Description The Quirk Hotel Parcel Number 320175000, 320176000 320177000

Project Property Address 425, 501 and 503 West Main Street

Applicant Information

Address: 11 South 12th Street, Suite 500
Richmond, Virginia 23219
Email: jmullen@rothjackson.com
Phone: (W) 804-977-3374 (C) _____

Property Owner Information (if not applicant)

Address: 10120 West Broad Street
Glen Allen, VA 23060
Email: _____
Phone: (W) _____ (C) _____

Do you intend to apply for Federal or State Tax Credits for this project? _____

Signature of Applicant

I hereby attest that the information I have provided is, to the best of my knowledge, correct.

Signature 12/20/2017 Date

Print Name Date

Property Owner Permission (if not applicant)

I have read this application and hereby give my consent to its submission.

Signature Date

Print Name Date

Description of Proposed Work (attach separate narrative if necessary): various updates to the condition approval for application 16-09-01

List All Attachments (see reverse side for submittal requirements):

For Office Use Only

Received by: D. Eubank
Fee paid: 1250 Cash/Ck. # 1110
Date Received: 12/20/17
Revised 2016

Approved/Disapproved by: _____
Date: _____
Conditions of approval: _____

CITY OF CHARLOTTESVILLE
"A World Class City"

Department of Neighborhood Development Services

City Hall Post Office Box 911
Charlottesville, Virginia 22902
Telephone 434-970-3182
Fax 434-970-3359
www.charlottesville.org

January 3, 2018

Dear Sir or Madam:

This letter is to notify you that the following application has been submitted for review by the City of Charlottesville Board of Architectural Review on property that is either abutting or immediately across a street from your property, or that has frontage on the same city street block.

Certificate of Appropriateness Application
BAR 16-09-01
425, 501, and 503 West Main Street
Tax Parcel 320175000, 320176000, and 320177000
Quirk Charlottesville, LLC, Owner/ Jennifer D. Mullen, Esq., Applicant
New Construction: Final Details

The Board of Architectural Review (BAR) will consider these applications at a meeting to be held on **Wednesday, January 17, 2018, starting at 5:30 pm in City Council Chambers, City Hall**. Enter City Hall from the Main Street pedestrian mall entrance and go up one floor.

An agenda with approximate times and additional application information will be available on the BAR's home page accessible through http://www.charlottesville.org. If you need more information, please do not hesitate to contact me at 434-970-3130 or scala@charlottesville.org.

Sincerely yours,

Camie Mess
Assistant Preservation and Design Planner

Quirk Charlottesville (QRC)

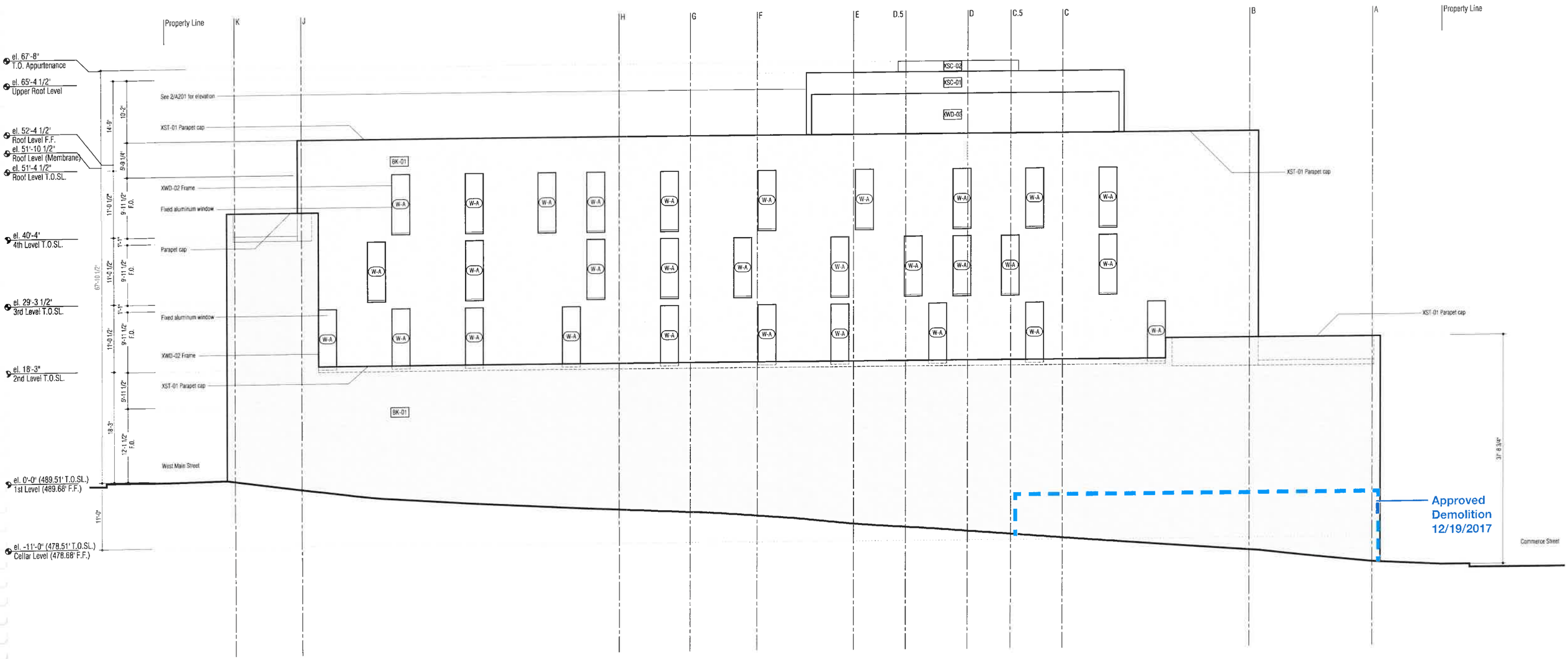
501 W. Main St.
Charlottesville, VA 22902

Board of Architectural Review
Design Updates from October 16, 2017 Meeting
16 January 2018

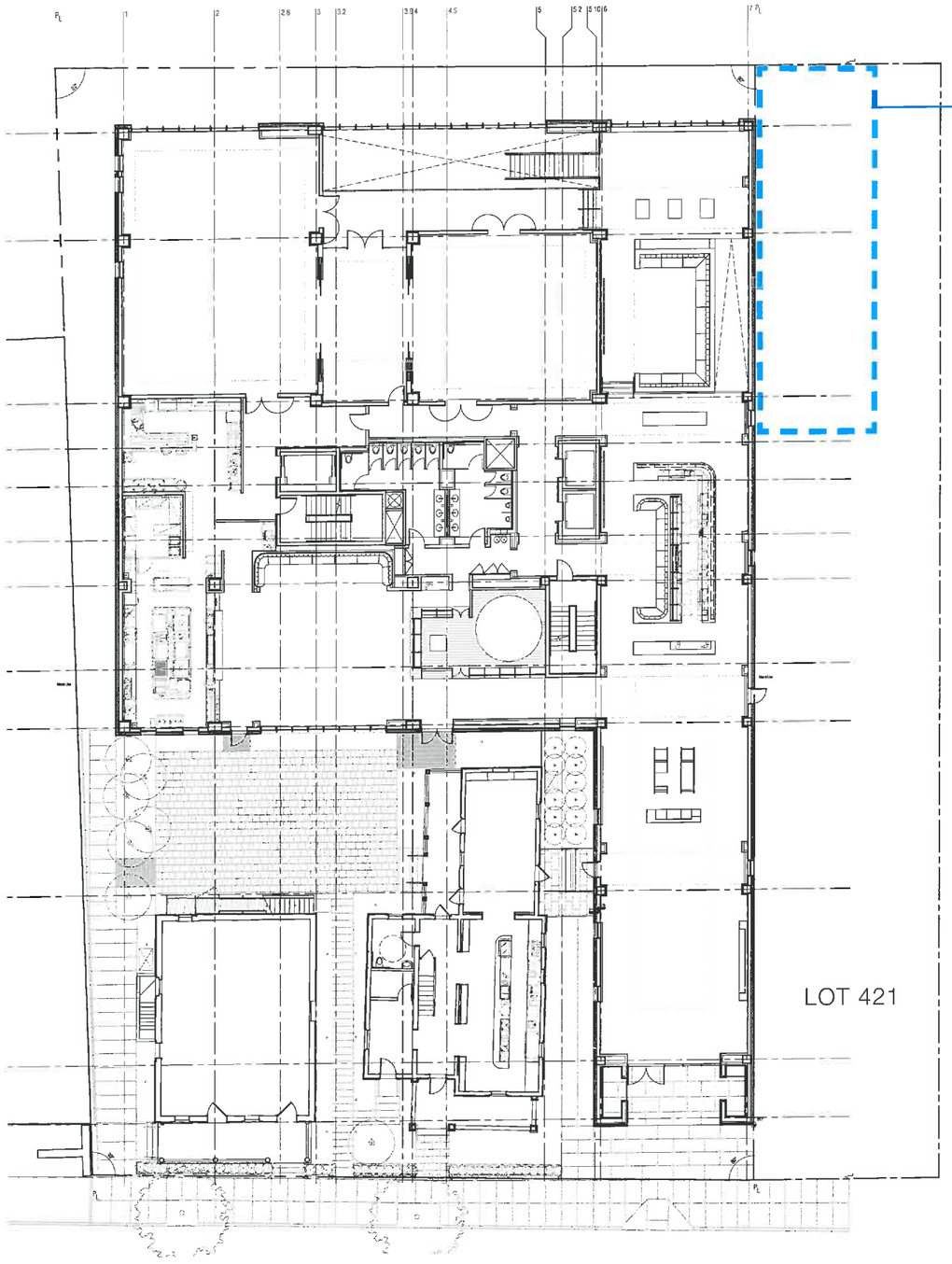
RICHMOND, VA
QUIRK
HOTEL

ARCHITECTUREFIRM

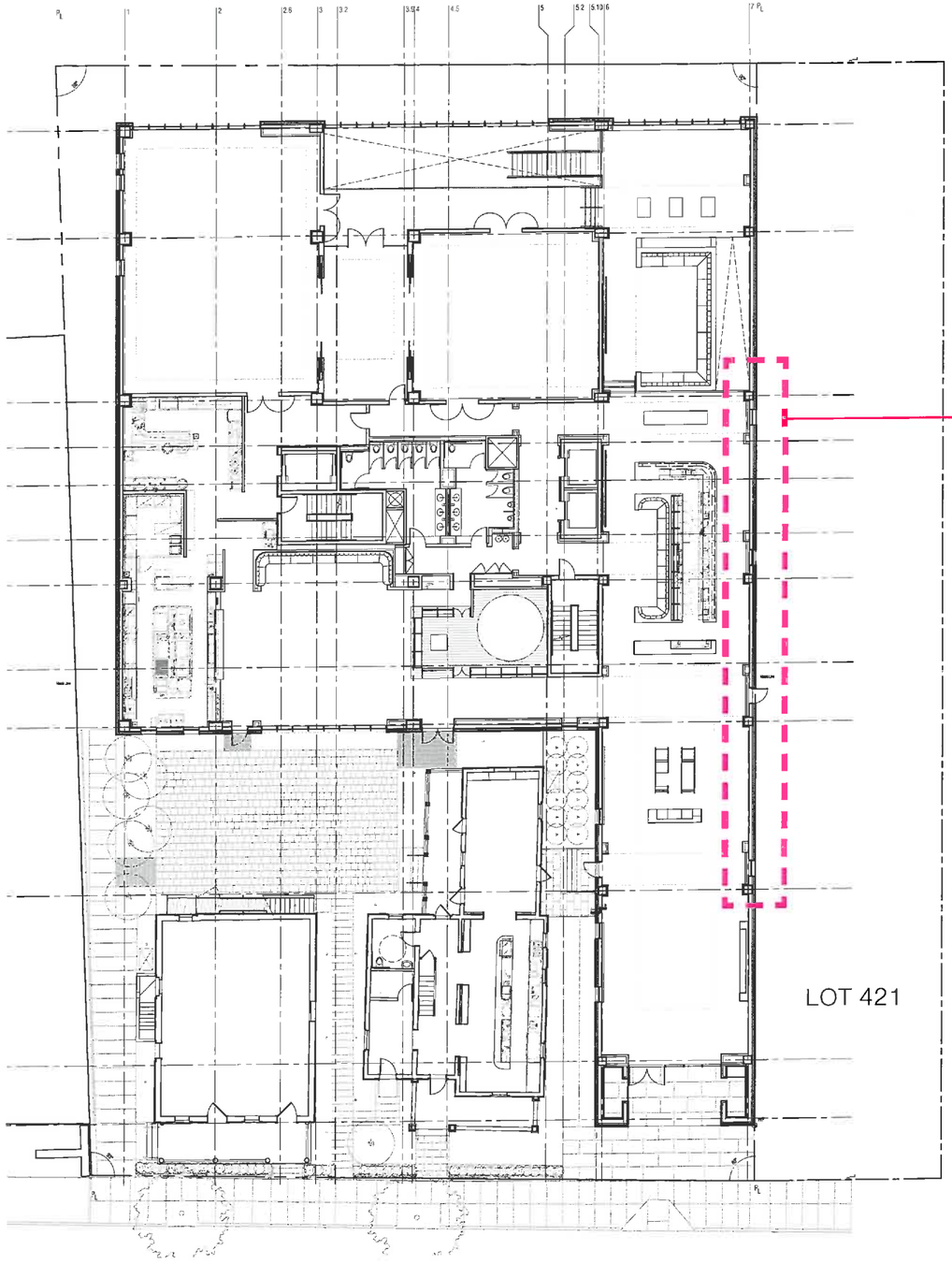
East Elevation Updates



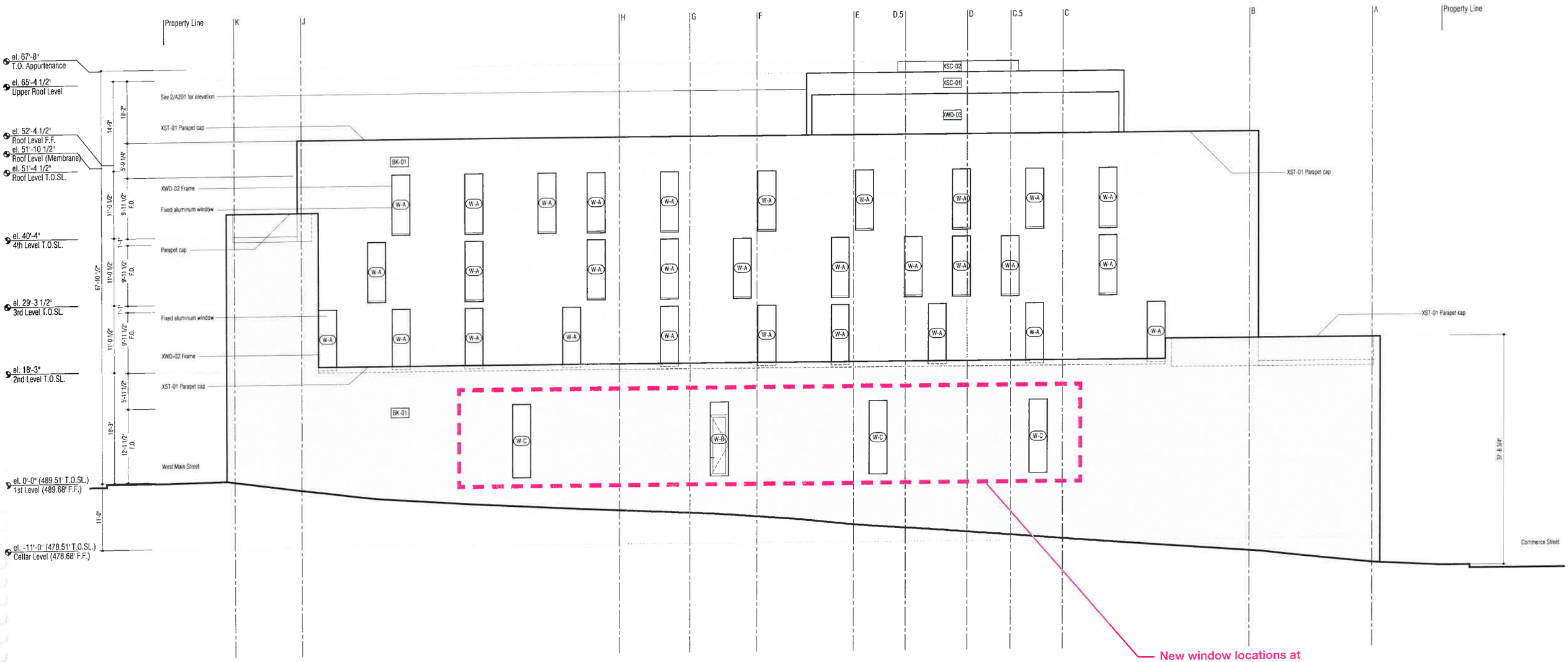
EAST ELEVATION : PREVIOUSLY APPROVED



PLAN : 1ST LEVEL SITE PLAN



PLAN : 1ST LEVEL SITE PLAN



EAST ELEVATION : PROPOSED ADDITIONAL WINDOWS

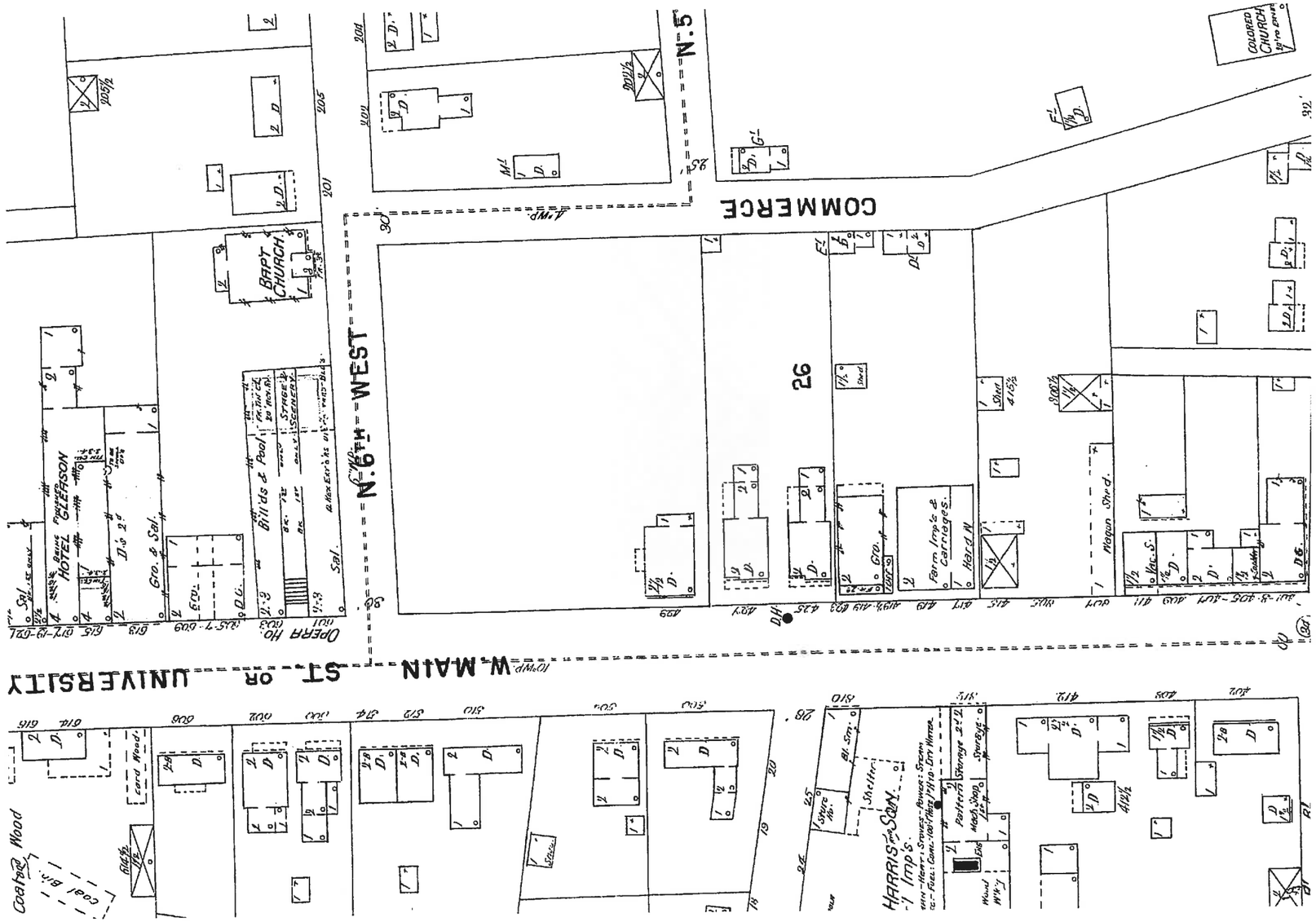
EXISTING BUILDING 501

Additional Research and Demolition Proposals

Analysis

LEGEND

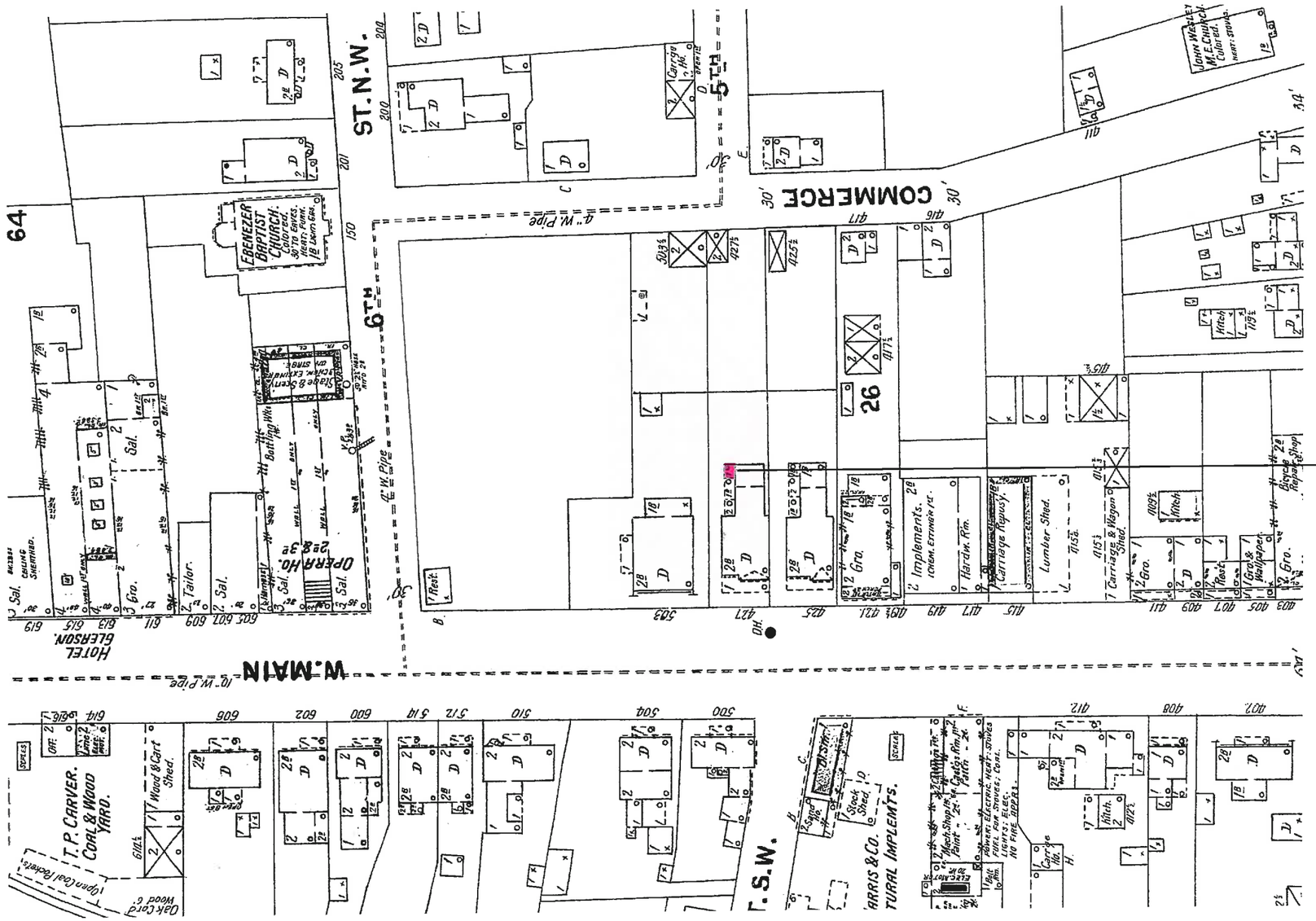
501 & 503 West Main St



SANBORN MAP : 1896 (PERIOD OF SIGNIFICANCE)

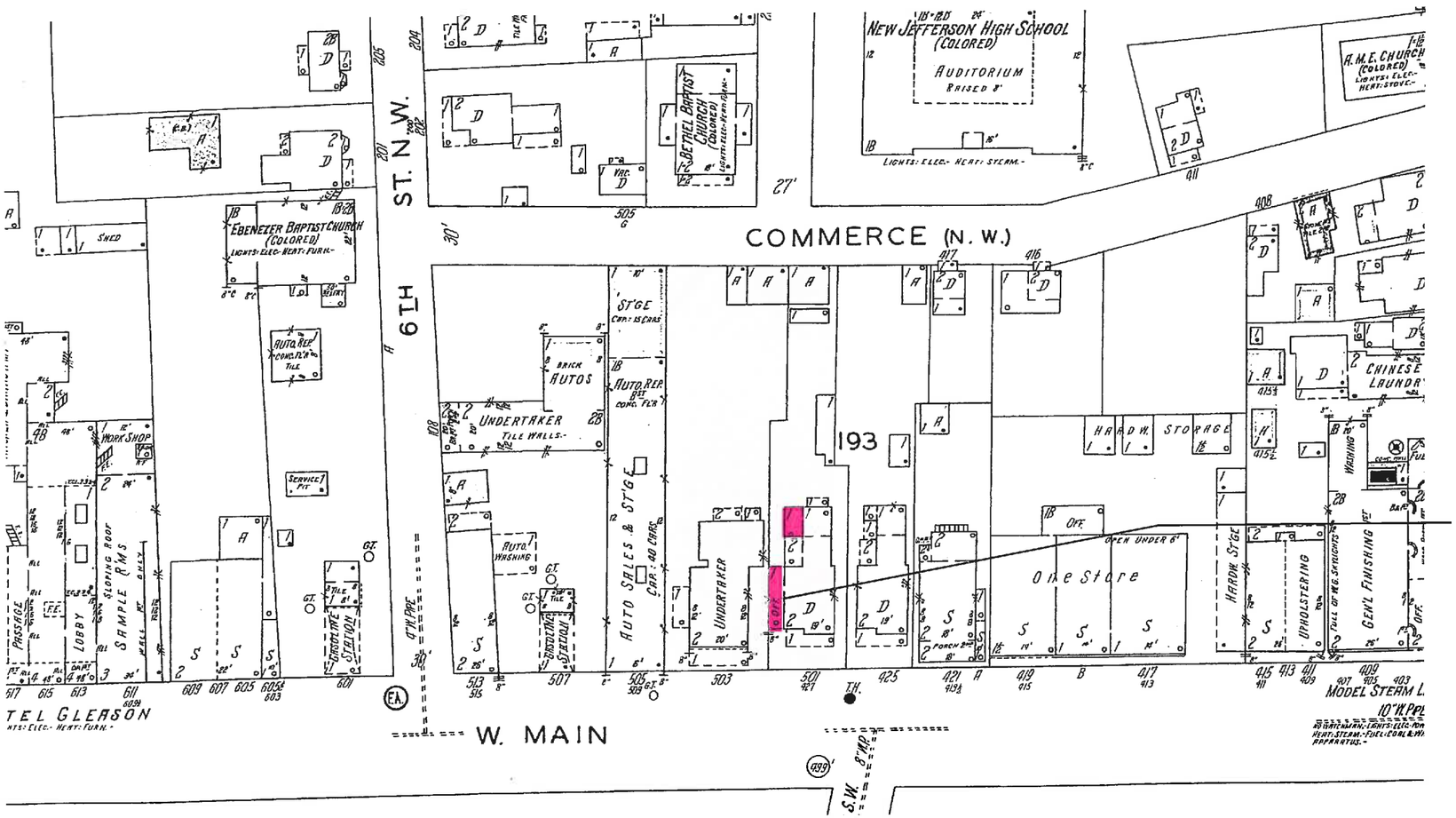
LEGEND

501 & 503 West Main St



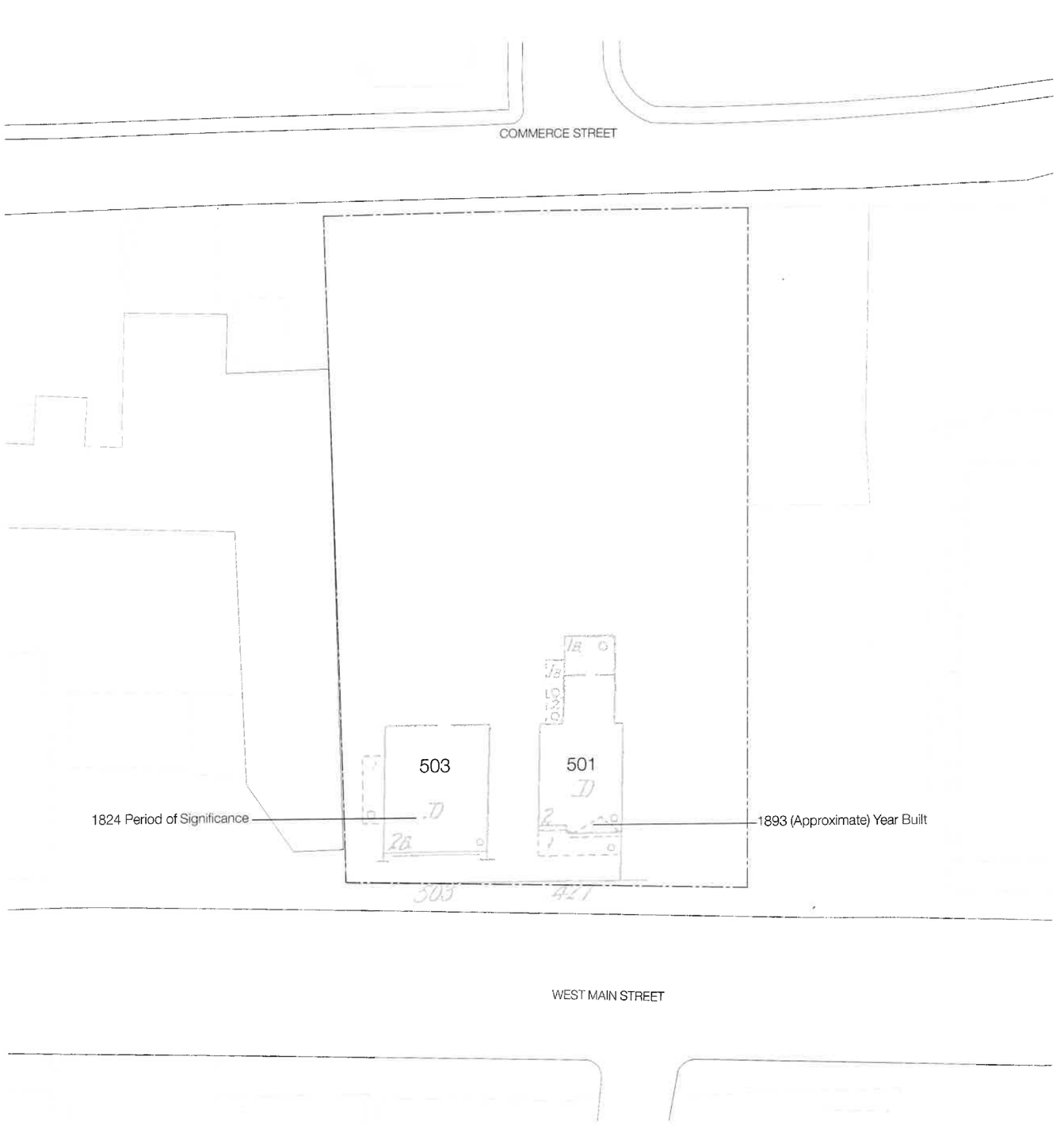
North porch addition was added between 1896 and 1902.

SANBORN MAP : 1902



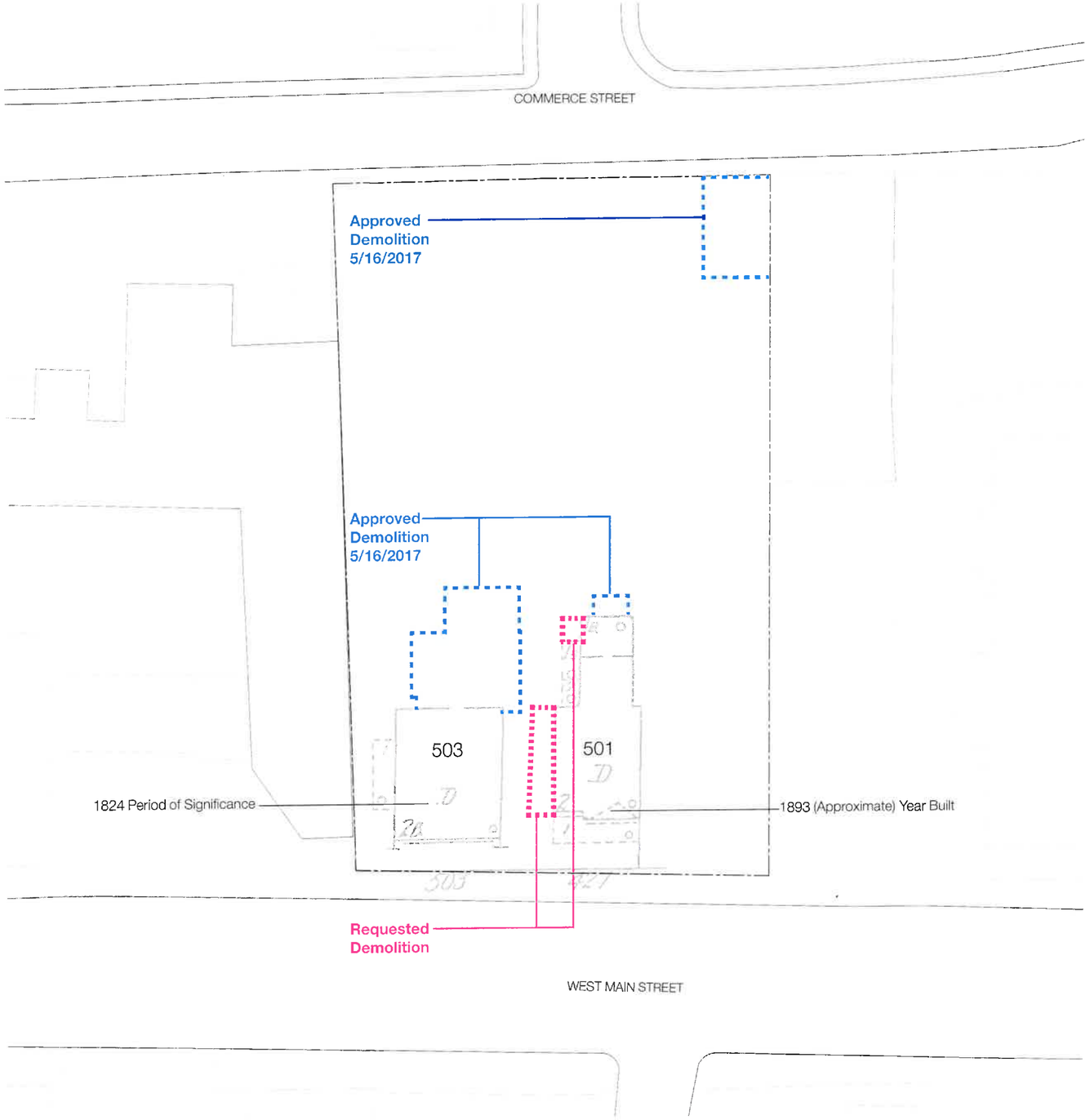
West addition was added between 1902 and 1920.

SANBORN MAP : 1920



Sanborn Map 1896

15' 30'



Historic Overlay (1902)

LEGEND

- - - Approved Demolition from 5/16/2017

▪▪▪▪▪ Requested Additions to be removed

HISTORICAL DATA

503 West Main Street - Paxton Place

National Historic Registry Information:
Title: Paxton Place
National Register Information System ID: 82001810
Multiple Listing: Charlottesville MRA
Applicable Criteria: ARCHITECTURE/ENGINEERING
Architectural Styles: FEDERAL
Areas Of Significance: ARCHITECTURE
Periods Of Significance: 1800-1824
Significant Years: 1824
Date Published: 10/21/1982
Asset ID: 02bc5e35-a825-4486-a428-63e75157ef54

Addition 1a: Built approximately 1913
Addition 1b: Built after 1950

501 West Main Street - Wheeler Dyer House

Addition 2: Built approximately 1924
Addition 3: Built approximately 1920

Sleeping Porch enclosed approx. 1920

0 15' 30'

ENGINEERING SOLUTIONS
& Construction Management PLC
Harrisonburg 540-442-8787
Charlottesville 434-202-8527
Richmond 804-433-3124
www.engsoln.com

05/11/2017

ESCM No. 0217-400

Mitch Crowder, RA LEED AP

ARCHITECTUREFIRM
309 North Adams Street
Richmond, Virginia 23220

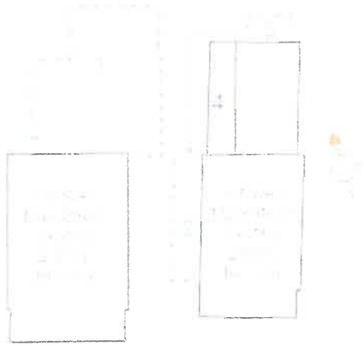
http://www.architecturefirm.co/

Re: 501 & 503 W. Main Street – Selective Partial Demolition

This correspondence is to provide you with a summary of our recent site visit to 501 & 503 W. Main Street in Charlottesville, VA 22901.

Project Description

The site comprised of lots identified as 503, 502, and 425 Main Street is proposed to be occupied by a new hotel and gallery structure. As part of the proposed development the existing structures that occupy 501 and 503 W. Main streets will be maintained and incorporated into the new hotel. Portions of the existing structures are proposed to be removed. It is the assumption that the portions of the structures to be removed are not part of the original construction. The purpose of our site visit and this report is to assess the structural viability of the proposed selective demolition. We have also provided our assessment of the general structural condition of each of the structure and the projected effects of the proposed new construction on the existing structures.



503 West Main Street

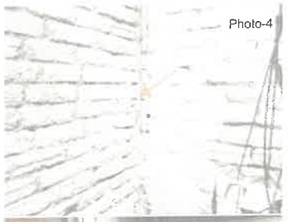
503 West Main Street was constructed circa 1824. It is a multi-wythe brick masonry bearing wall structure with a dimensional lumber floor system. There are two levels above grade and one below. There are two chimneys on the west face of the structure. The chimneys appear to have been recently reconstructed.

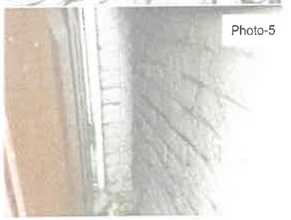
General Structural Condition

The general condition of the structure is good for its age. It remains occupied on all levels with both mercantile and residential uses. We noted the presence of tie rods placed at the roof line (photo-1) these where likely placed to rectify an actual or perceived defect. The root cause and maintenance of these tie rods will be investigated during the course of design. We also noted that a connector wall (photo 2) exists between the two chimneys on the west face. These along with small parapet at the corners of the original structure do not appear to be original and should be removed to restore the structural symmetry of the building.

Proposed Selective Demolition

There exists a large addition to the rear of the original structure. It is our opinion that the addition is a structurally separate building that can be removed without ill effect to the existing original building. This is evidenced by inspecting the masonry jointing between the two buildings (photo-4, 5), as well as our experience with the construction practices of the time. It can be seen from the photos that the masonry is not toothed together and that some separation has occurred over the years. The joints seems to have been effectively treated by periodically repointing.





Effects of the Proposed New Construction

Existing structures are generally effected by adjacent new construction due to vibration, dewatering, and changes in grading and earth loading. The geotechnical report does not indicate that extreme effort will be required to excavate the site soils, nor will dewatering be required. There already exists a basement so the existing bearing elevation is not far from the proposed new structure. The preceding coupled with the nearest excavation being approximately 30 feet away leads us to conclude that the overall impact to the 503 structure will be light. We recommend the removal of the addition and completion of differed maintenance, such as tuck-pointing with appropriate mortar. A weekly monitoring program should be established to gauge any movement of the structure related to the construction.

501 West Main Street

501 West Main Street was constructed circa 1893. It is a multi-wythe brick masonry bearing wall structure with a dimensional lumber floor system. There appears to be a crawl space and two levels above grade. There have been several additions to the structure over the years.

General Structural Condition

The general condition of the original structure is good for its age. It remains occupied on all levels as primarily residential. We noted signs of step cracking in the masonry field (photo-6) and above crawl space openings (photo-7) on the east façade. These are likely due to foundation settlement and differed maintenance. The condition of the additions are considerably worse. We noted mortar loss and displacement of the brick foundation wall along the west face toward the rear. This condition (photo-8) is due to foundation settlement coupled with unhandled water runoff either on-grade or from the roof.

Proposed Selective Demolition

There exists 3 distinct additions to the structure. **Structure-2** (photo-9) is a small office addition that was constructed by adding three masonry bearing walls. The short walls are sparsely toothed into the existing walls (photo-10). We noted that the joint between the two structures exhibits high movement and has been treated with a flexible sealant. This is indicative of a structurally separate element that could be removed without harm to the existing structure. Some local masonry patching should be expected both at the walls as well as at the roof rafter tie in.

Structure-3 is small covered stair platform. The platform is structured by two beams that span from masonry piers into masonry pocket cut into the existing wall (photo-12). The porch and stair could readily be removed with only minor patching at the beam pockets.

Structure-4 is identified on the sketch herein (photo-11) but is not proposed to be demolished at this time. This structure is either an enclosure of an existing covered porch and stair or an entirely separate structure. Unlike the rest of the structure it is a wood framed and clad addition. We noted the highest degree of deterioration at this portion of the structure. The deterioration is a result of poor initial construction, wood rot, differed maintenance and water washing through the mortar joints. There is also cracking at the masonry foundation wall at the joint of this structure. Given the poor condition of this addition we recommend that this portion be demolished, of not it will require rebuilding in-kind. If removed it would restore structural symmetry to the remainder of the building.

Effects of the Proposed New Construction

The 501 structure is closer to the proposed new construction than 503. Along the east side the structure the will be a new below grade mechanical crawl space for the hotel lobby. The proximity is not so close, and the difference in bearing elevation not so great that underpinning will be required. Instead the foundation wall of the new crawl space will account for the surcharge load of the existing building and will be constructed in a segmental fashion so as to lessen impact to the 501 structure. At the rear (north side) of the building it is proximate to a deep excavation for below grade parking. This will require underpinning of this face along with a portion of the adjacent faces to step the bearing elevation down to the new adjacent structure.

The aforementioned can be safely executed by implementing weekly monitoring program to gauge any movement within the structure related to the construction. During underpinning and adjacent foundation installation the frequency of the monitoring should be daily.

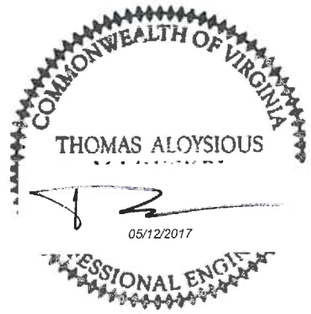
Closing

The general conclusion is that the proposed selective demolition can be carried out without structural ill effect to the existing original structures. The ongoing construction operations can be carried out with due caution regarding the existing structures. This includes completing differed maintenance items as well as establishing a monitoring program.

Our observations were visual in nature. We did not remove finishes, or conduct destructive or non-destructive investigations. This work presented is subject to Engineering Solutions & Construction Management, PLC standard Terms and Conditions. Should you have any questions, please do not hesitate to contact our office. We appreciated the opportunity to work with you on this project.

Sincerely
ENGINEERING SOLUTIONS AND CONSTRUCTION MANAGEMENT

Tom A. McLaughlin, P.E.
Director of Structural Engineering



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12/22/2017

ESCM No. 0217-400

Mitch Crowder, RA LEED AP

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http://www.architecturefirm.co/

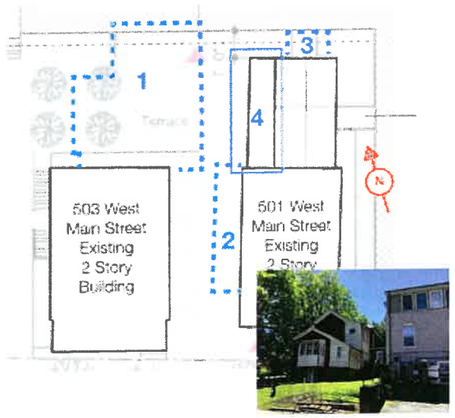
Re: 501 W. Main Street – Selective Partial Demolition at Porch Addition

This correspondence is to provide you with a summary of our recent site visit to 501 W.. Main Street in Charlottesville, VA 22901. We visited the site to review the condition of the porch addition to the W. Main street structure. This portion is the northern part of area 4 in the figure below.

Project Description

The site comprised of lots identified as 503, 502, and 425 Main Street is proposed to be occupied by a new hotel and gallery structure.

In regards to the porch addition, our previous report dated 05/15/17 noted that this portion of the existing structure was in poor condition and had recommended that it be demolished and rebuilt in its entirety. The purpose of this visit was to review new information garnered through several probes cut through the finishes and within the crawlspace of the building.



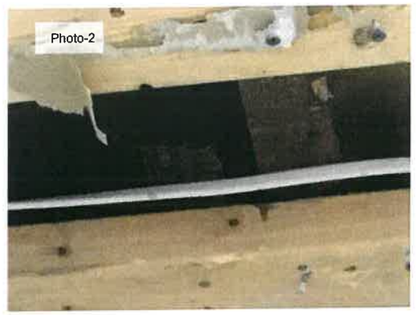
Area-4, Porch Addition

This structure appears to be an enclosure of an existing covered porch and stair or an entirely separate structure. Unlike the rest of the structure it is a wood framed and clad addition. We noted the highest degree of deterioration at this portion of the structure.

The deterioration is a result of poor initial construction, wood rot, differed maintenance and water washing through the mortar joints. There is also cracking at the masonry foundation wall at the joint of this structure.

At an interior (but likely originally an exterior) doorway we observed cracking and displacement of the masonry (see photo-1). This is a sign of an ongoing structural problem.

The framing of the roof over this portion in not an extension of the main roof rafters but a scabbed on 2x4 to the original framing (see photo-2). This alone does not significantly increase the load on the wall to account for the cracking observed.



The framing of the floor system for the main portion of the porch and the addition to the covered porch run in the long direction. Both portions frame in to a beam that spans between the exterior and an interior masonry wall. The interior masonry wall where this beam frames if the area where the masonry is cracked above. There are also numerous openings cut into this wall that have also affected its integrity.

In our opinion removal of the addition (highlighted) will lessen the demand on the wall. This along with necessary rebuilding of the openings will

Closing

The proposed selective demolition can be carried out without structural ill effect to the existing original structures. In the case of the porch addition the removal will have a beneficiary effect on the portion of the structure to remain.

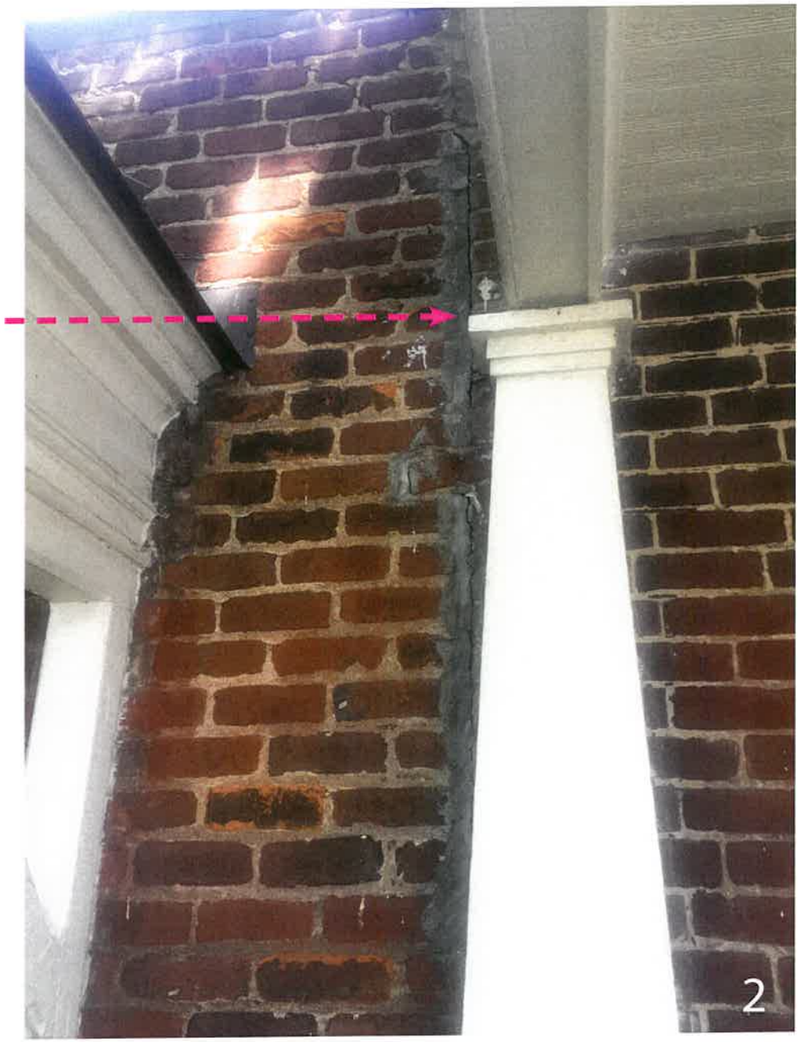
Our observations were visual in nature. We did not remove finishes, or conduct destructive or non-destructive investigations. This work presented is subject to Engineering Solutions & Construction Management, PLC standard Terms and Conditions. Should you have any questions, please do not hesitate to contact our office. We appreciated the opportunity to work with you on this project.

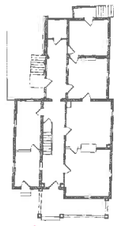
Sincerely
ENGINEERING SOLUTIONS AND CONSTRUCTION MANAGEMENT

Tom A. McLaughlin

Digitally signed by Tom A. McLaughlin
DN: C=US, E=tom@engsoln.com, O=ESCM, OU=Charlottesville, CN=Tom A. McLaughlin
Date: 2017.12.22 11:32:22-05'00'

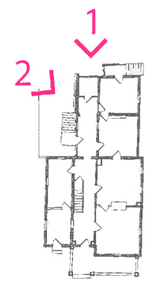
Tom A. McLaughlin, P.E.





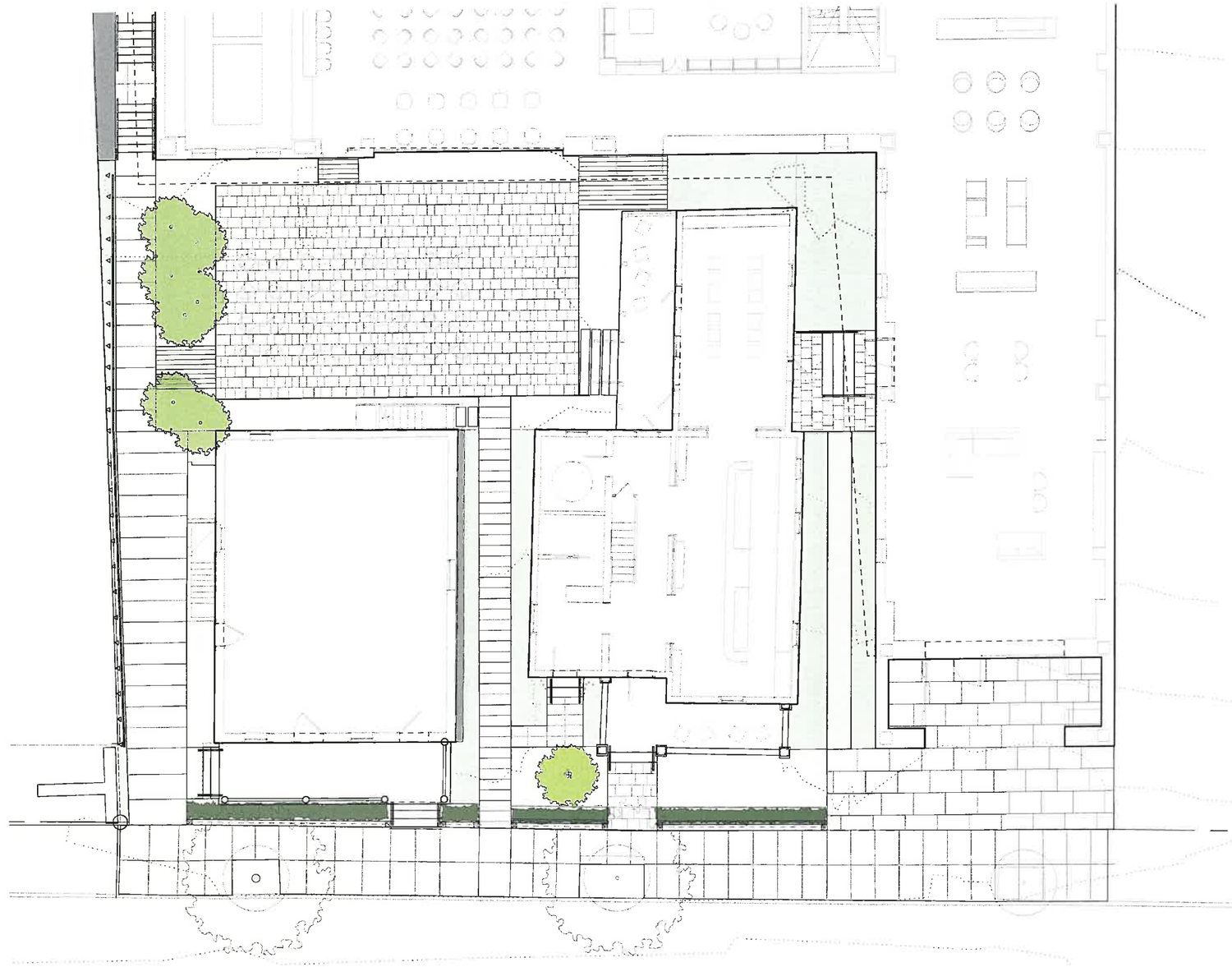
EXISTING CONDITIONS : 501 WEST ADDITION

EXISTING CONDITIONS : 501 WEST ADDITION

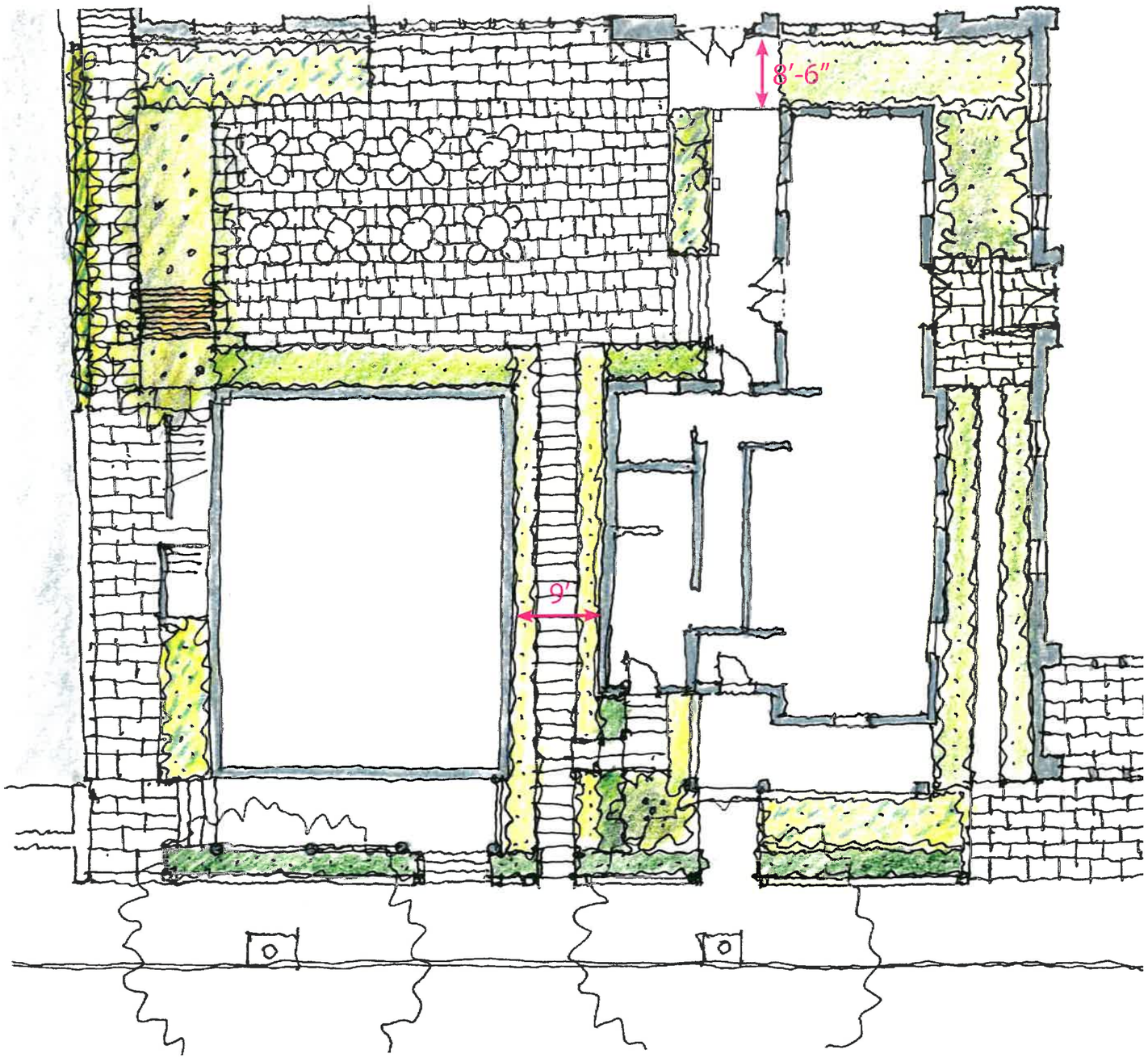


EXISTING CONDITIONS : NORTH PORCH ADDITION

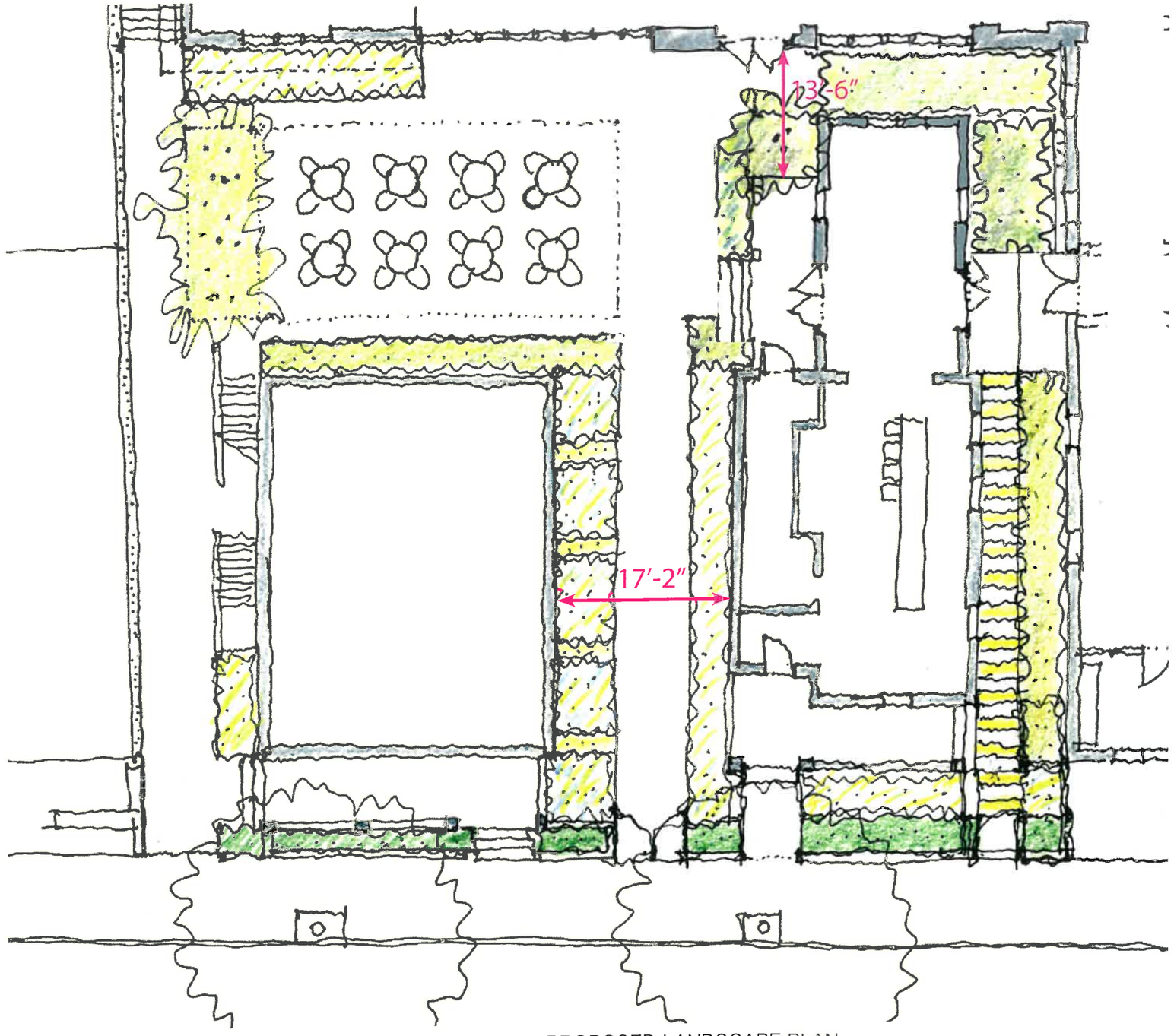
Proposed Massing Alterations



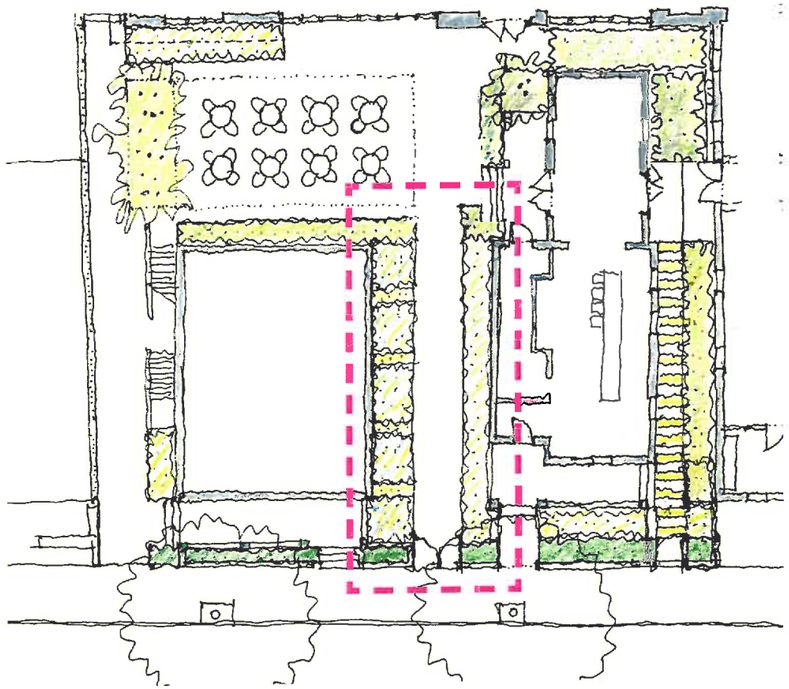
PREVIOUSLY APPROVED PLAN



PREVIOUSLY APPROVED LANDSCAPE PLAN



PROPOSED LANDSCAPE PLAN



Christmas Fern
Polystichum acrostichoides

Lenten Rose *(evergreen, Feb-May)*
Helleborus x hybridus 'Double Ellen White' & Helleborus niger

Snowdrop Windflower *(Apr-June)*
Anemone sylvestris

Windflower *(Aug-Oct)*
Anemone x hybrida 'Honorine Jobert'

PREVIOUSLY APPROVED MASSING

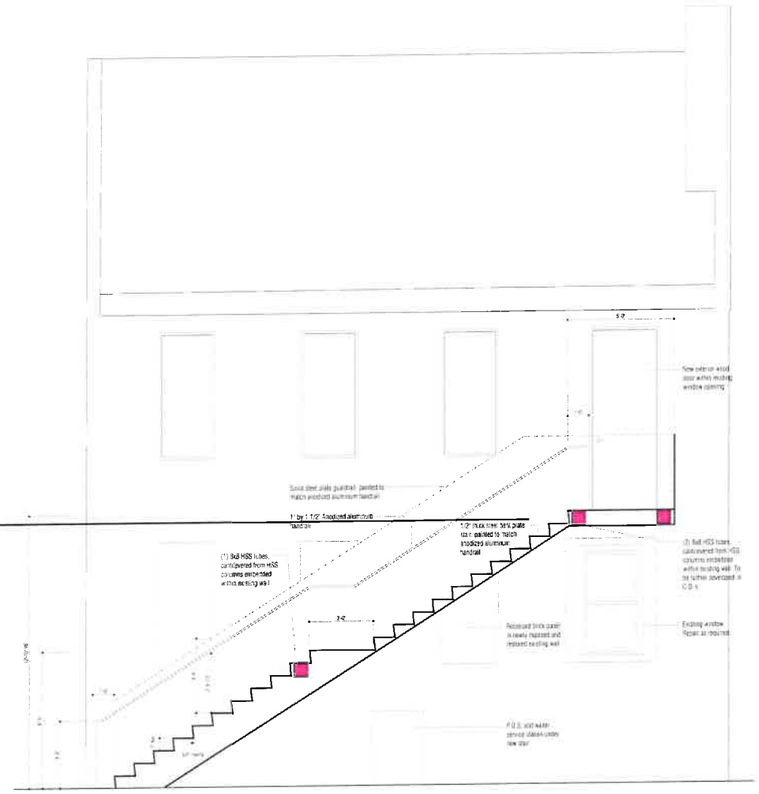
PROPOSED MASSING

PREVIOUSLY APPROVED MASSING

PROPOSED MASSING

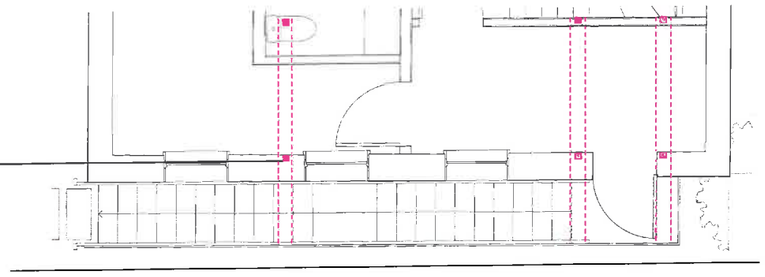
Building 503 Exterior Stair Updates

Beams cantilevered from
Existing Building



SECTION

Beams were to be
supported by new columns
within Existing Building



PLAN

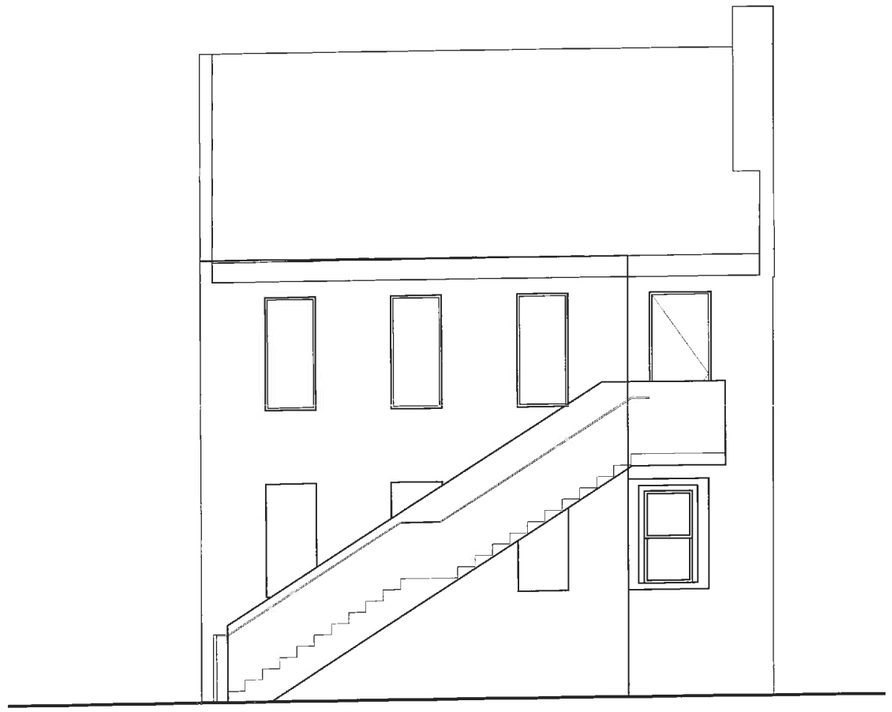
PREVIOUSLY APPROVED STAIR

el. 34'-4 1/2"
Roof 503 W. Main St (523.76' F.F. VIF)

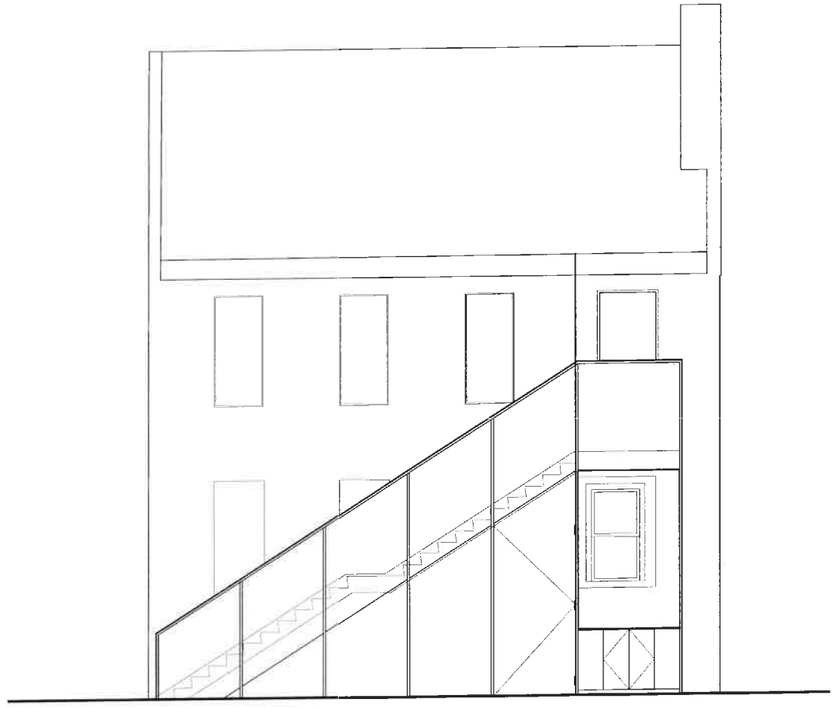
el. 23'-6"
3rd Level 503 W. Main St (513.05' F.F. VIF)

el. 12'-9 1/4"
2nd Level 503 W. Main St (502.32' F.F. VIF)

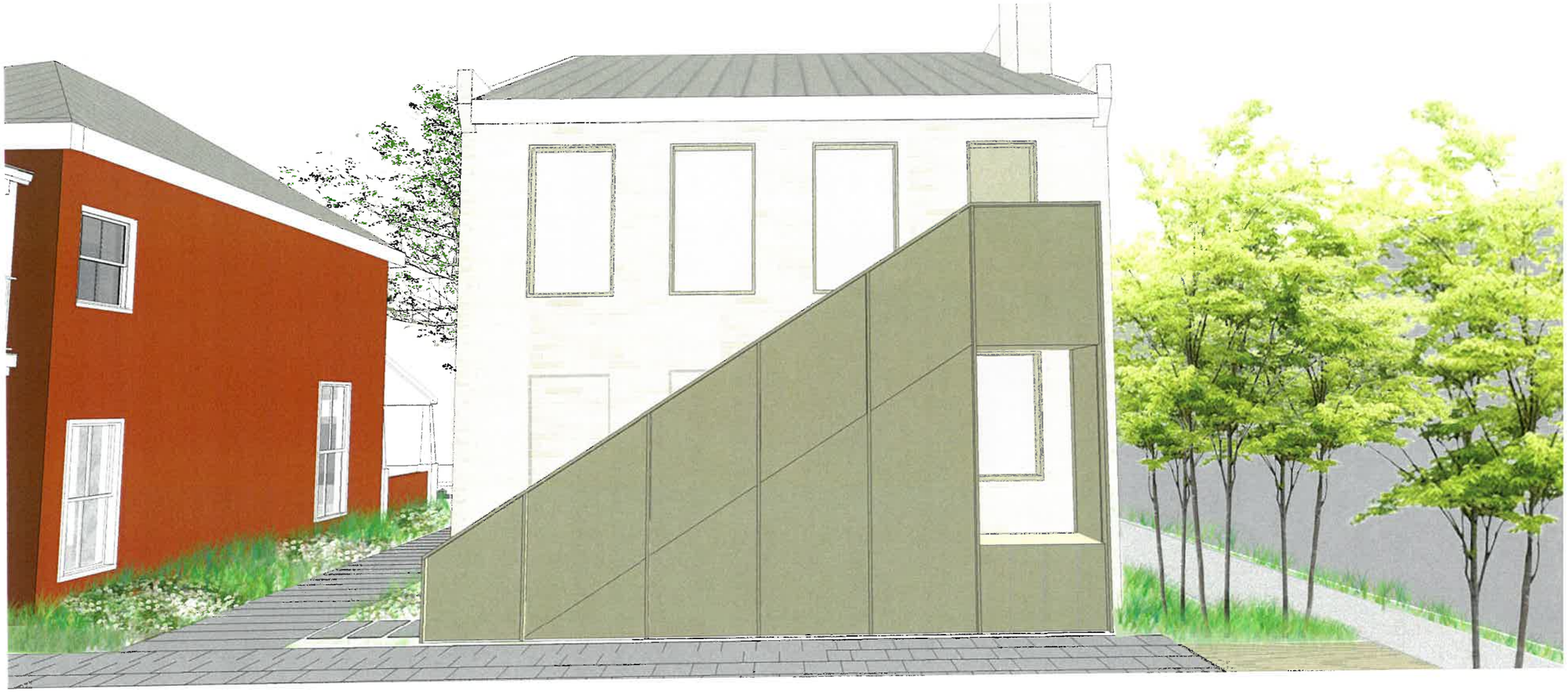
el. 2'-8"
1st Level 503 W. Main St. (492.22' F.F. VIF)



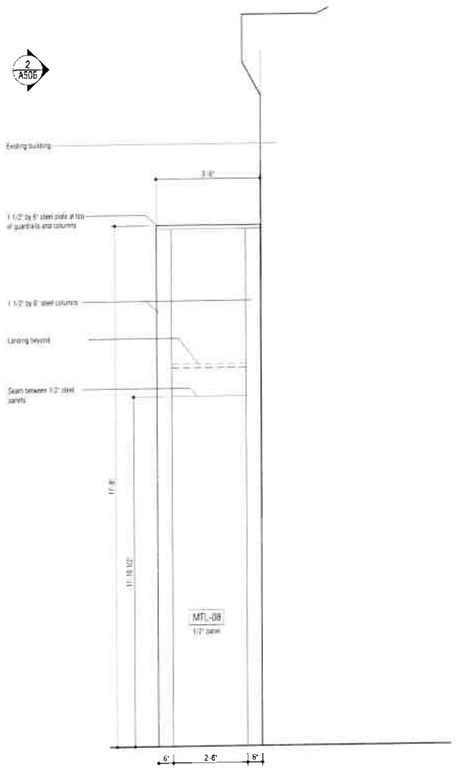
PREVIOUSLY APPROVED STAIR :
REQUIRED ADDITIONAL STEEL STRUCTURE
WITHIN EXISTING BUILDING



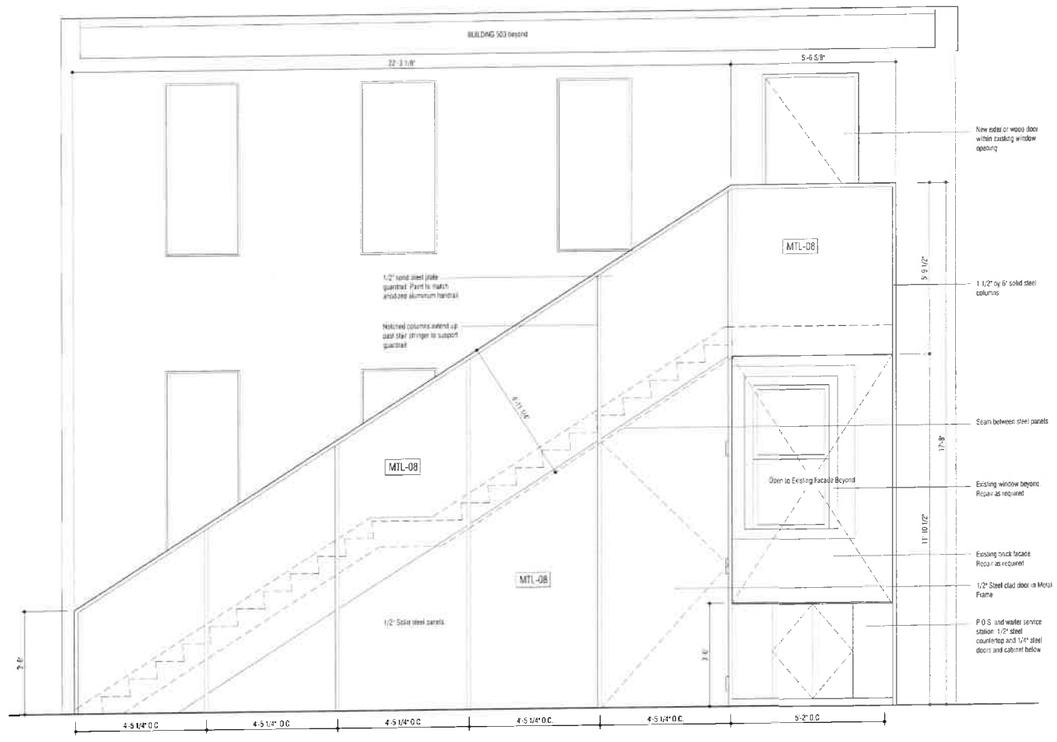
PROPOSED STAIR :
FREE-STANDING



5 West Elevation - Stair F
1/2" = 1'-0"

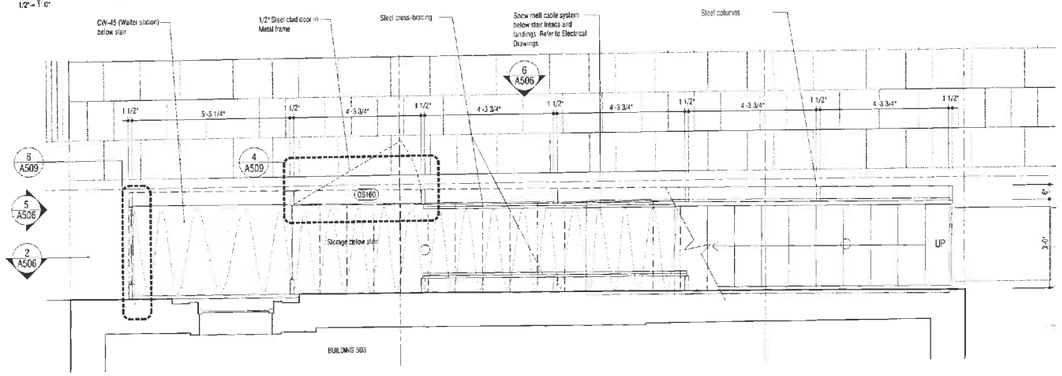


6 North Elevation - Stair F
1/2" = 1'-0"

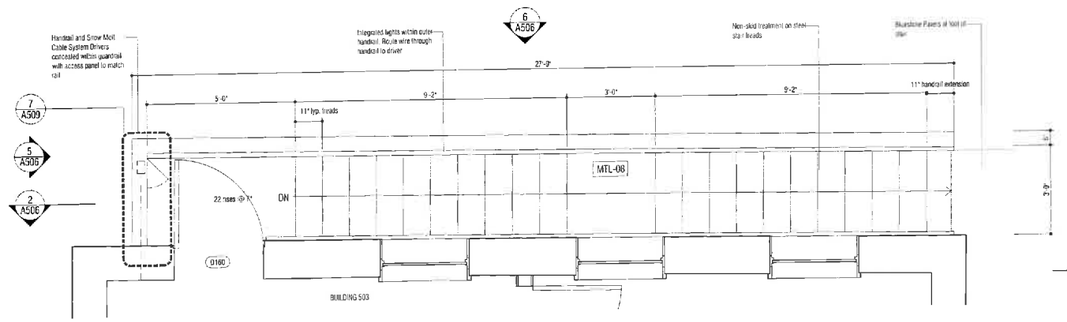


PROPOSED STAIR : ELEVATIONS

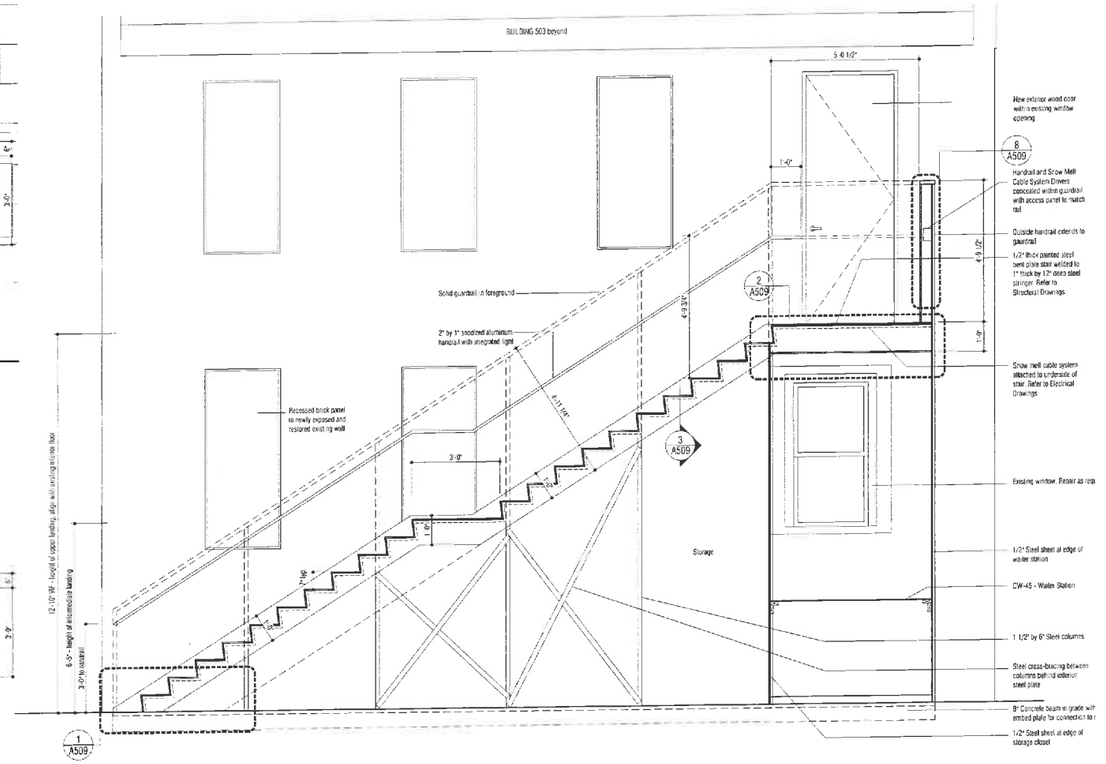
1 Enlarged Plan - Stair F - 1st Level
1/2" = 1'-0"



3 Enlarged Plan - Stair F - 2nd Level
1/2" = 1'-0"

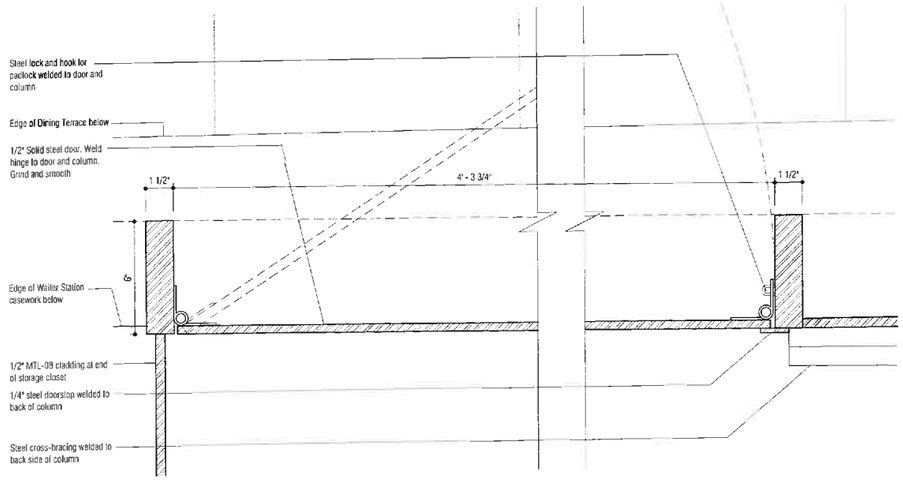


2 Section - Stair F
1/2" = 1'-0"

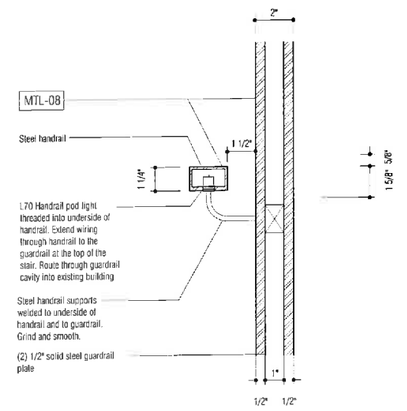


PROPOSED STAIR : PLANS & SECTION

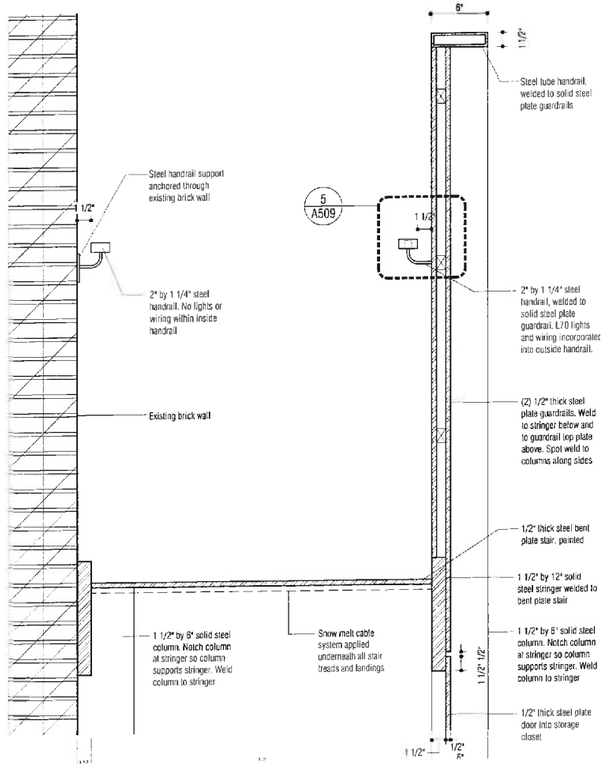
4 Plan Detail - Door to Storage Closet under stair
3" = 1'-0"



5 Section Detail - Handrail with Integrated Light
3" = 1'-0"

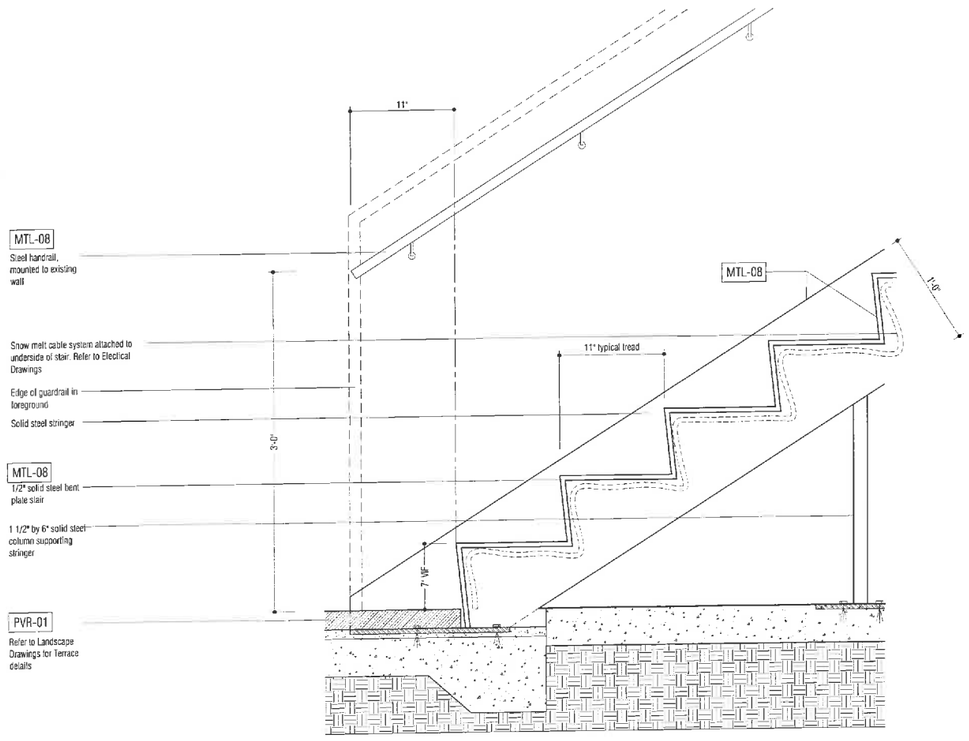


3 Section Detail - Stair to Existing Building Connection
1 1/2" = 1'-0"

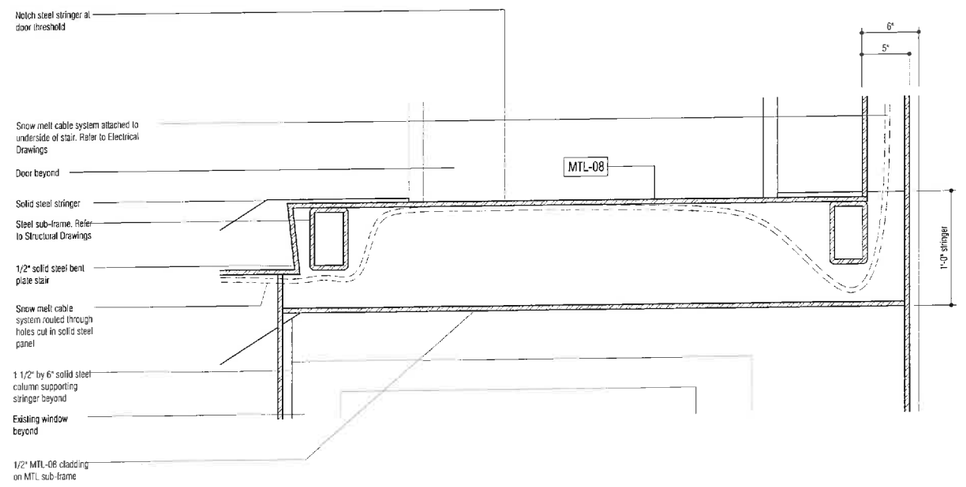


STAIR DETAILS

1 Section Detail - Stair F - Base
1 1/2" = 1'-0"



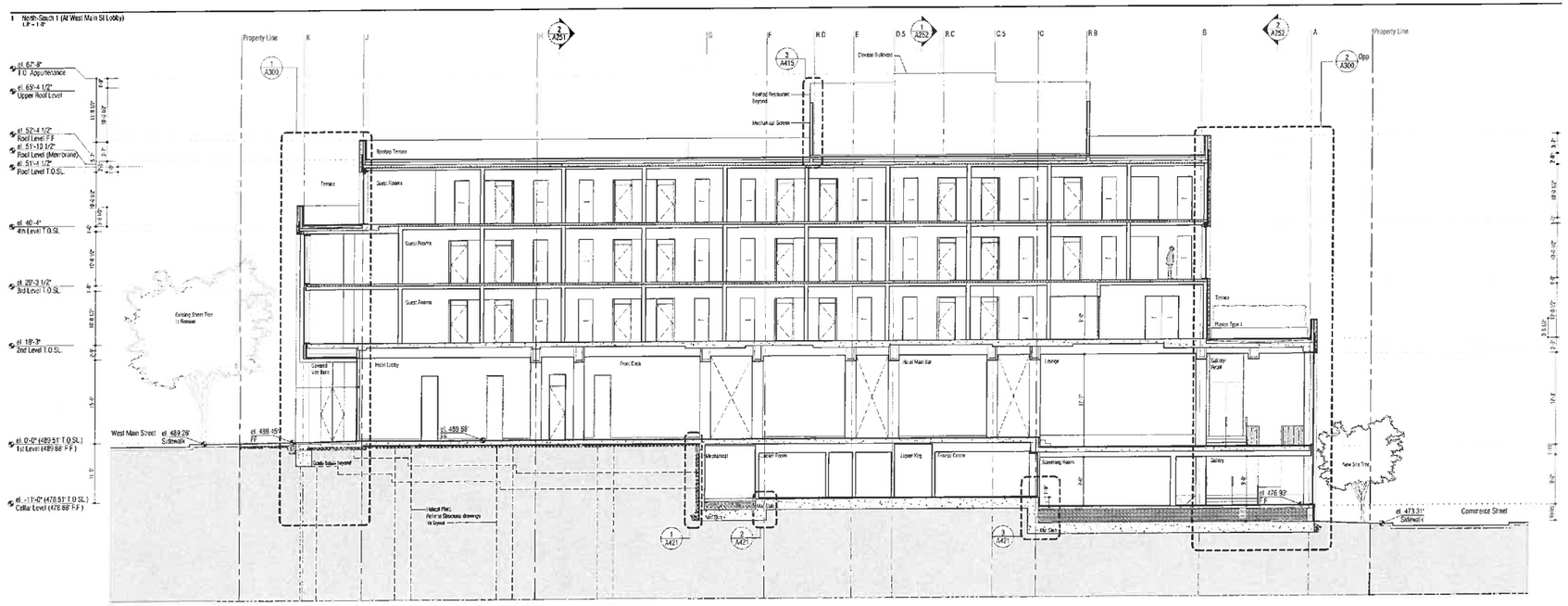
2 Section Detail - Stair F - Upper Landing
1 1/2" = 1'-0"



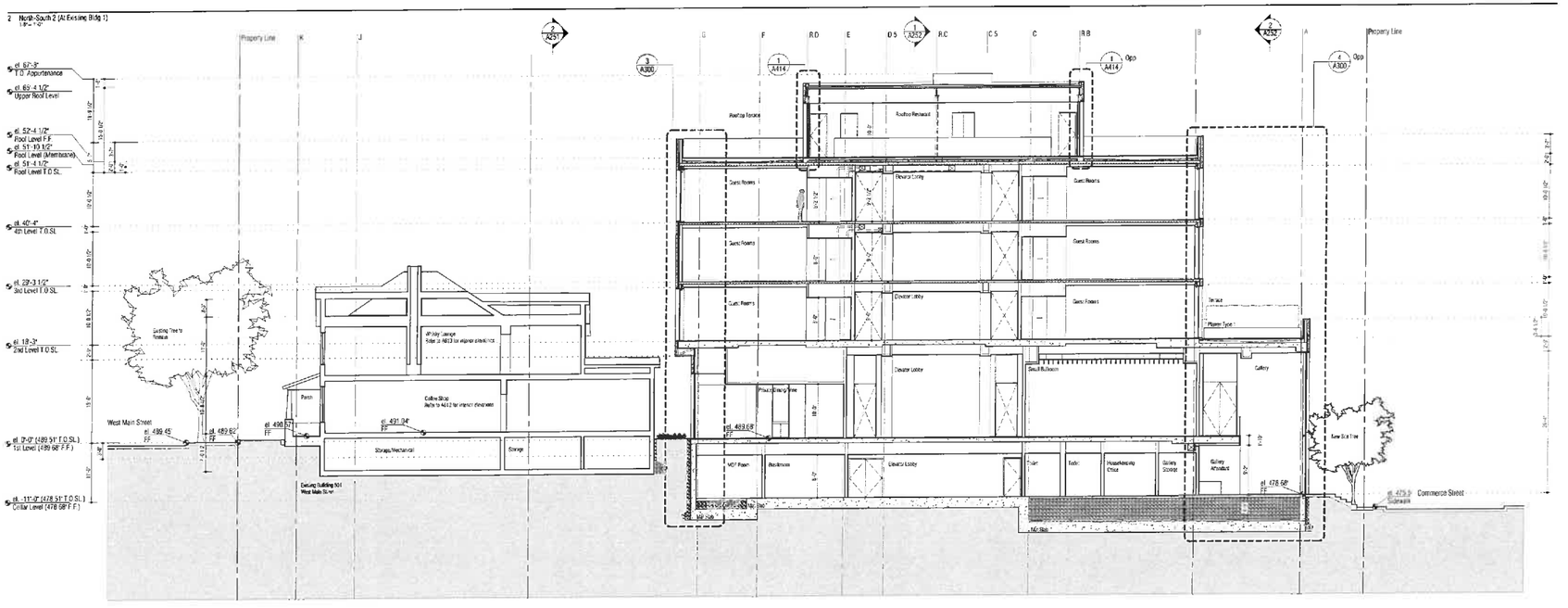
STAIR DETAILS

New Building Exterior Details

1 North-South 1 (At West Main St Lobby)
1/8" = 1'-0"



2 North-South 2 (At Existing Bldg 1)
1/8" = 1'-0"



No	Issue	Date
	100% Schematic Design	30 Jun 2017
	30% Design Development	04 Aug 2017
	100% Design Development	12 Oct 2017
	Guest Model Room Package	08 Nov 2017
	50% Construction Documents	22 Dec 2017

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Charlottesville, VA

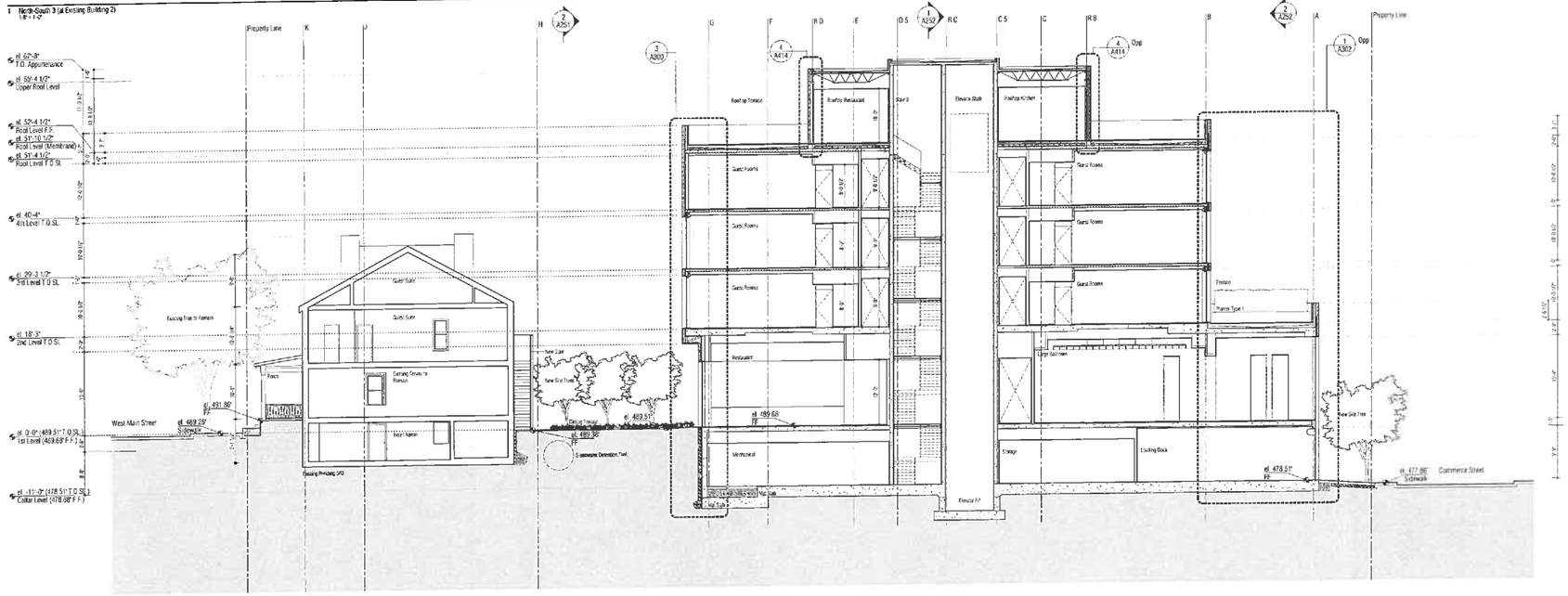
Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 1/8" = 1'-0"

Building Sections
North-South 1 (at West Main Street Lobby)
North-South 2 (at Existing Building 501)

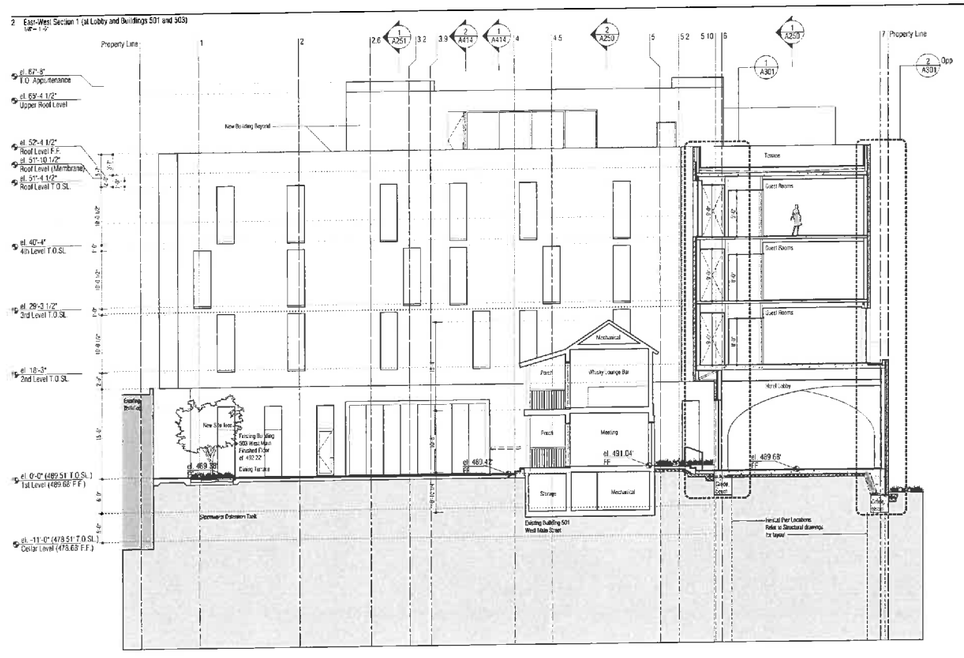
A250.00

50% CONSTRUCTION DOCUMENT SUBMISSION - BUILDING SECTIONS

1 North-South 3 (at Existing Building 2)



2 East-West Section 1 (at Lobby and Buildings 501 and 503)



No	Issue	Date
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Charlottesville, VA

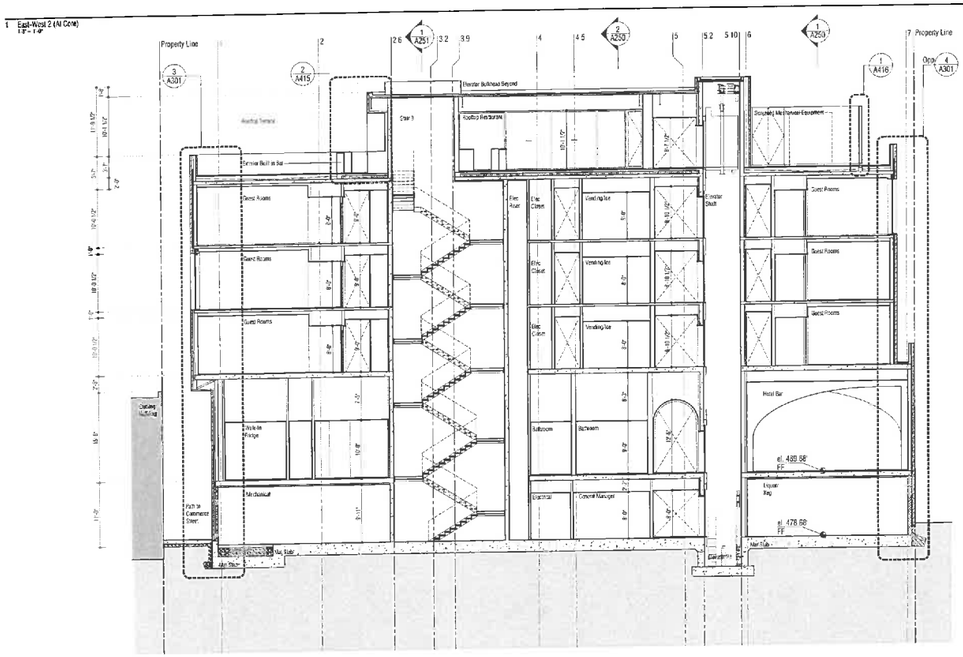
Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 1/8" = 1'-0"

Building Sections
North-South 3 (at Existing Building 501)
East-West 1 (at Lobby/Bldgs 501 and 503)

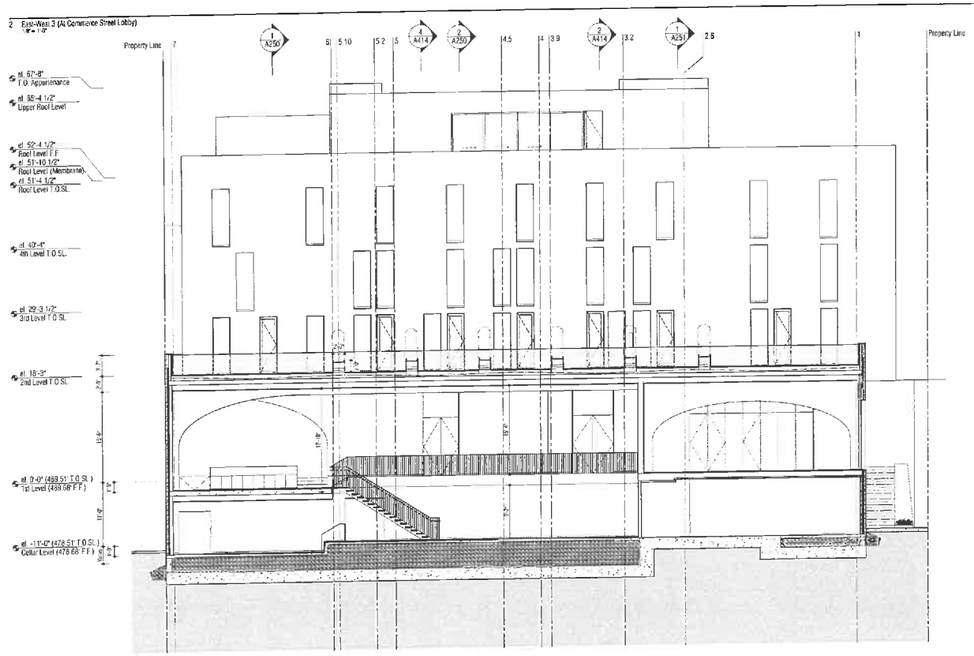
A251.00

50% CONSTRUCTION DOCUMENT SUBMISSION - BUILDING SECTIONS

1 East-West 2 (At Core)
1/8" = 1'-0"



2 East-West 3 (At Commerce Street Lobby)
1/8" = 1'-0"



No	Issue	Date
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	100% Design Development	12 Oct 2017
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804-367-4064

Quirk Charlottesville
Charlottesville, VA

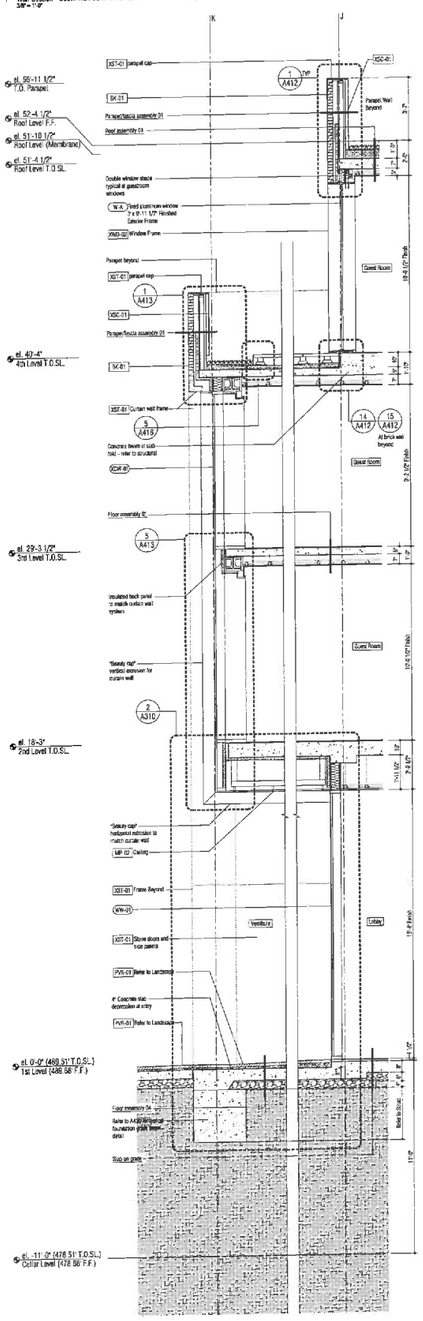
Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 1/8" = 1'-0"

Building Sections
East-West 2 (at Core)
East-West 3 (at Commerce Street Lobby)

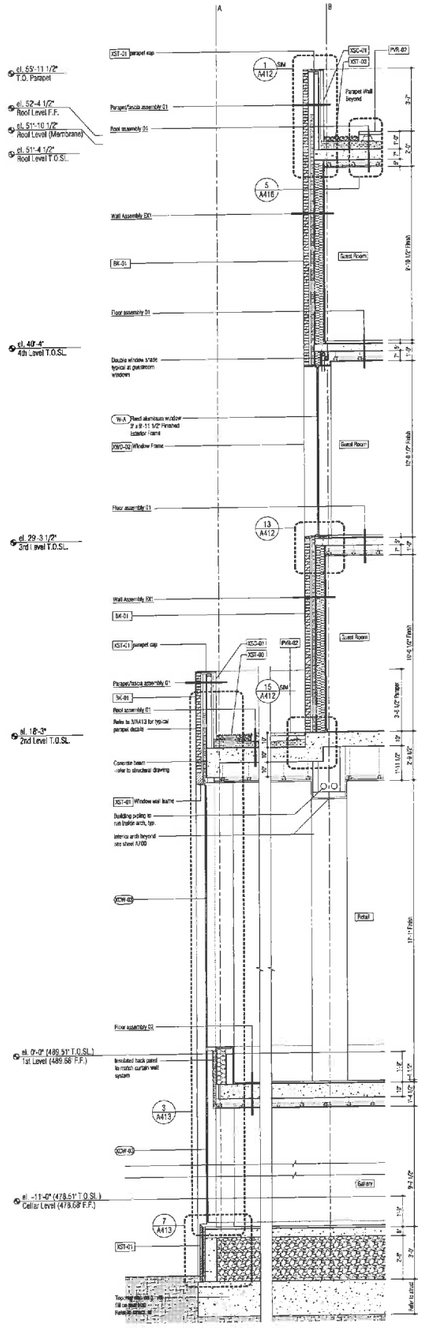
A252.00

50% CONSTRUCTION DOCUMENT SUBMISSION - BUILDING SECTIONS

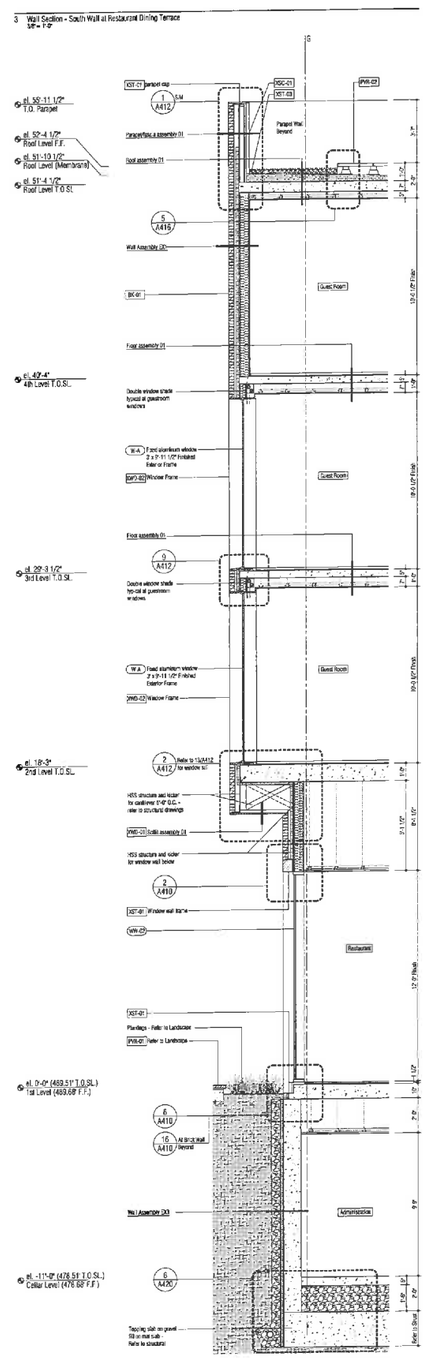
1 Wall Section - South Wall Curtain Wall at West Main Street Entry
3/8" = 1'-0"



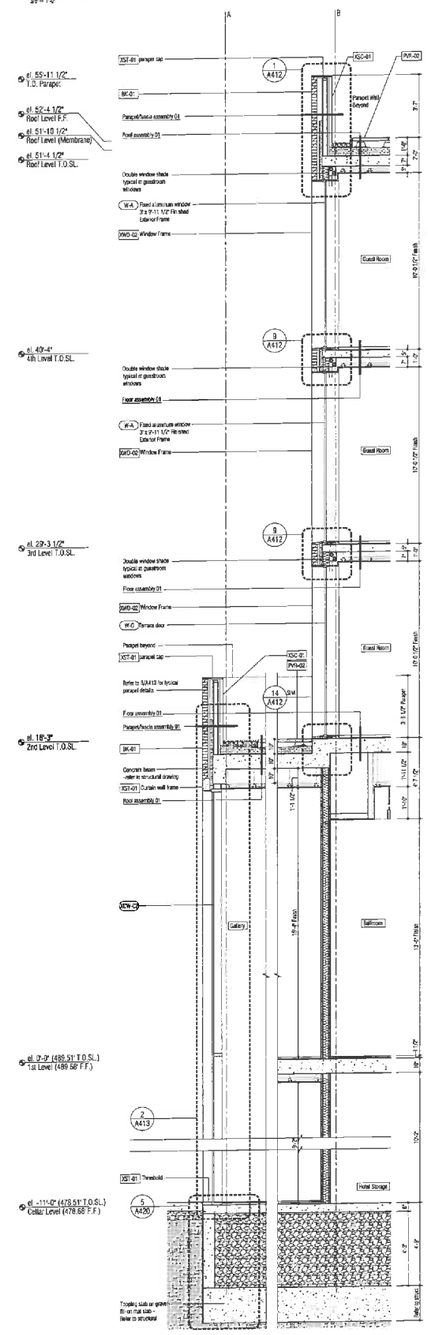
2 Wall Section - North Wall at Parking Garage Entry
3/8" = 1'-0"



3 Wall Section - South Wall at Restaurant Dining Terrace
3/8" = 1'-0"



4 Wall Section - North Wall at Gallery Entry at Commerce Street
3/8" = 1'-0"



No	Issue	Date
	100% Schematic Design	30 Jun 2017
	50% Design Development	04 Aug 2017
	100% Design Development	12 Oct 2017
	Guest Model Room Package	08 Nov 2017
	50% Construction Documents	22 Dec 2017

Material Keynotes

AIR-01	Air barrier Spec:
BK-01	Exterior brick Spec:
CMU-01	8" Reinforced CMU wall Spec:
CMU-02	4" Reinforced CMU veneer Spec:
CONC-01	Structural concrete Spec:
CONC-02	Concrete sidewalk wearing slab Spec:
DR-01	Drainage board Spec:
DR-01	Roof drain Spec:
DR-02	Trench drain Spec:
DR-03	Roof scupper Spec:
INS-01	Polyiso insulation above grade Spec:
INS-02	Rigid insulation below grade Spec:
INS-03	Extruded polyiso insulation overlap Spec:
INS-04	Batt insulation Spec:
INS-05	Spray foam insulation Spec:
LV-01	Exterior mechanical louver Spec:
MISC-01	Motorized garage door Type or Core TBD Spec:
MISC-02	Motorized roll down gate Spec:
MP-01	Alum. storefront to paint - dry seal Spec:
MP-02	Alum. storefront to paint - ceiling Spec:
MP-03	Exterior tube mullion Spec:
PVR-01	Bluestone paver - Refer to Landscape Spec:
PVR-02	Concrete pavers on pedestals Spec:
RR-01	Fluid-applied protected membrane roofing Spec:
RE-01	Exterior site handrails Spec:
WP-01	Vertical foundation wall waterproofing Spec:
WP-02	Horizontal slab waterproofing Spec:
WW-	Exterior window wall types Refer to A500 for types
WW-	Exterior window wall types Refer to A500 for types
XCW-	Exterior curtain wall types Refer to A500 for types
XG1-	Exterior glazing Refer to A500 for types
XGC-01	Exterior glazing - Pink Spec:
XGC-02	Exterior glazing - White Spec:
XGC-03	Exterior glazing - Grey Spec:
XST-01	Exterior cast stone Spec:
XST-02	Light weight stone panels Spec:
XST-03	Exterior stone roof detail Spec:
XWD-01	Exterior wood soffit Spec:
XWD-02	Exterior wood trim Spec:
XWD-03	Exterior wood pavers Spec:

General Notes:

- Specific item sections to be added in 100% CDs
- Refer to A500 for Exterior Materials Legend.
- Refer to A500 for Exterior Construction Assemblies
- Refer to A540 for Exterior Window Types.

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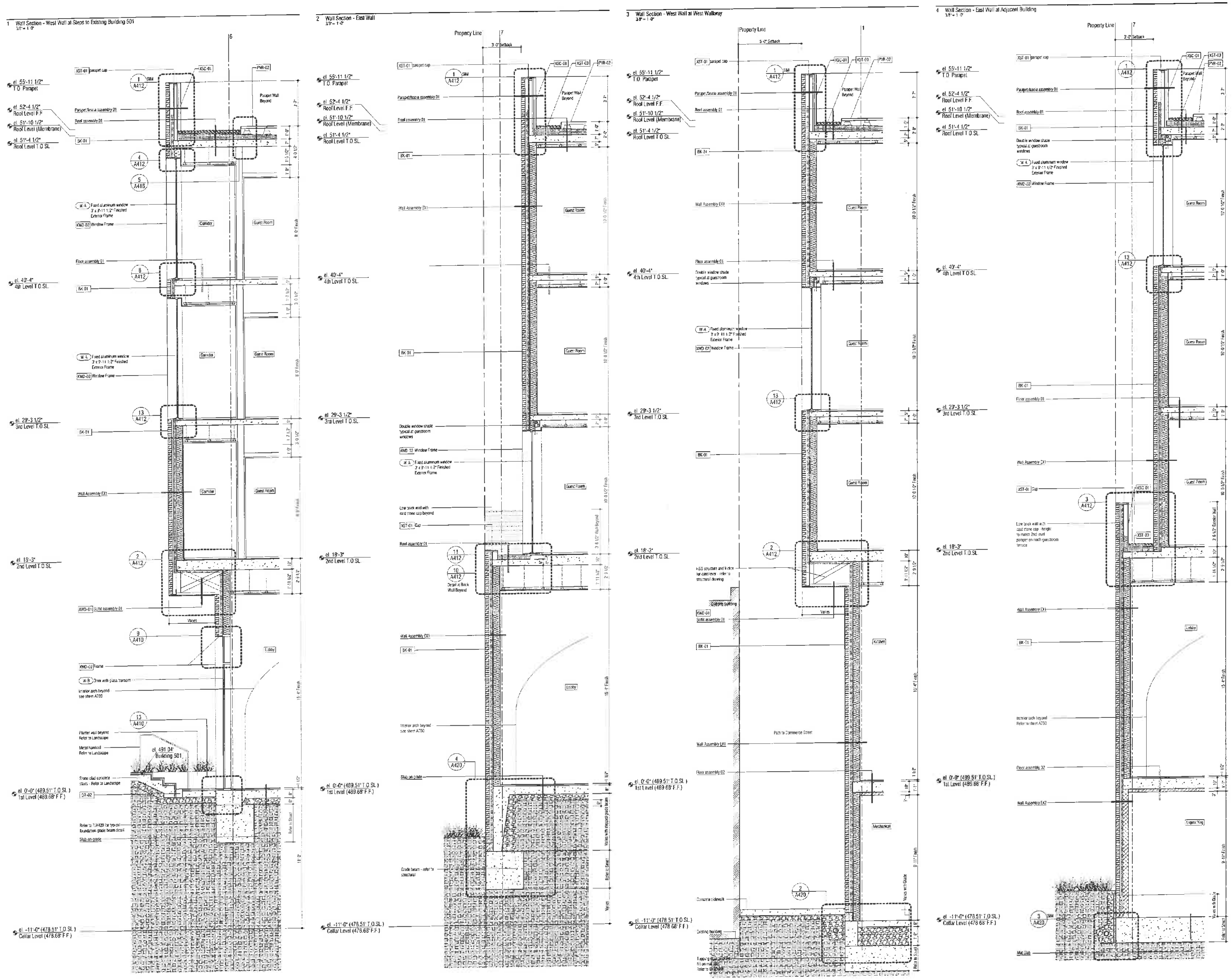
Issue: 50% Construction Documents
Date: 22 December 2017
Scale: Wall Sections

3/8" = 1'-0"

A300.00

50% CONSTRUCTION DOCUMENT SUBMISSION - WALL SECTIONS



No	Issue	Date
	100% Schematic Design	30 Jun 2017
	30% Design Development	04 Aug 2017
	100% Design Development	12 Oct 2017
	Guest Model Room Package	08 Nov 2017
	50% Construction Documents	22 Dec 2017

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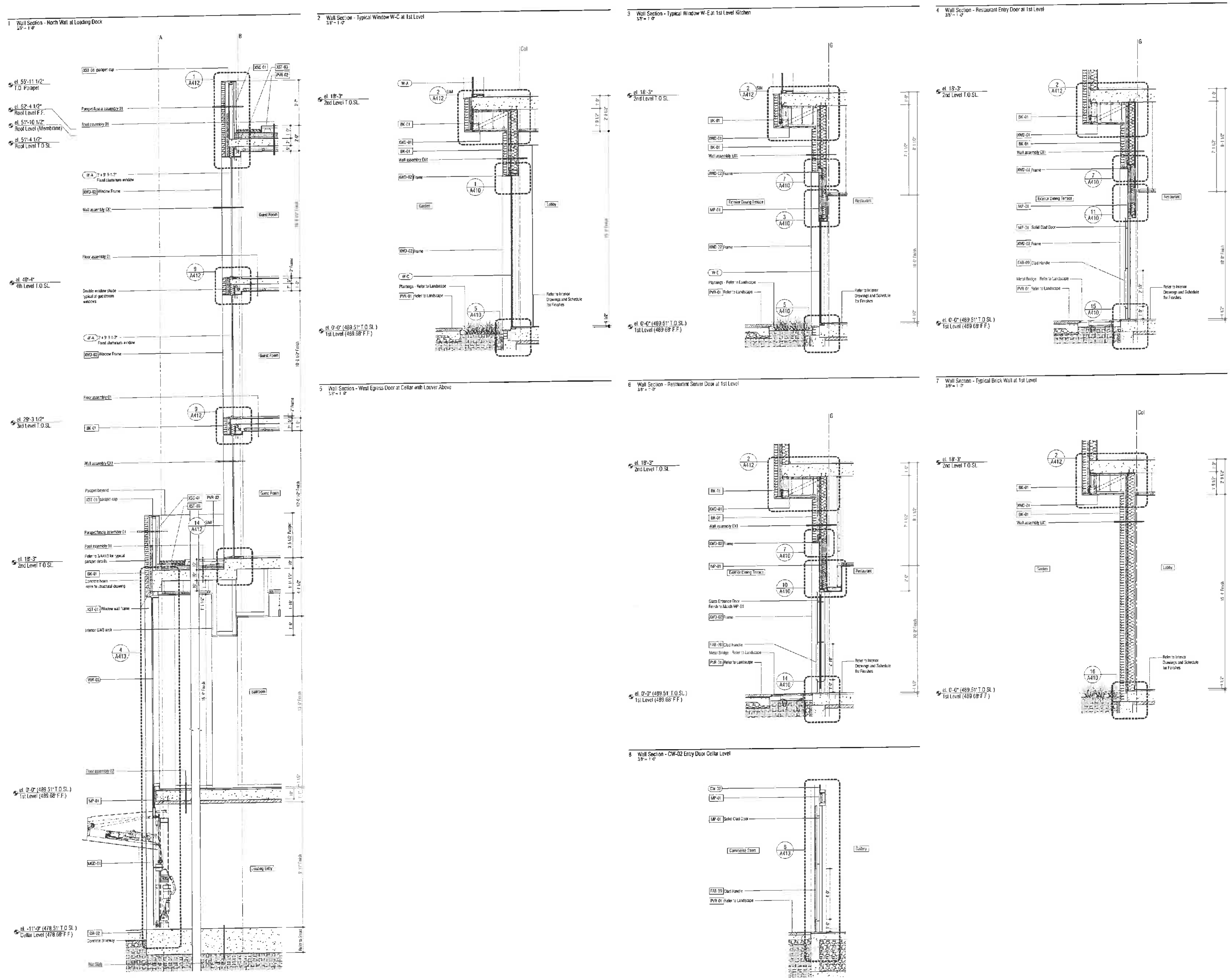
Charlottesville, VA

Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 3/8" = 1'-0"

Wall Sections

A301.00

50% CONSTRUCTION DOCUMENT SUBMISSION - WALL SECTIONS



No	Issue	Date
	100% Schematic Design	30 Jun 2017
	30% Design Development	04 Aug 2017
	100% Design Development	12 Oct 2017
	Guest Model Room Package	08 Nov 2017
	50% Construction Documents	22 Dec 2017

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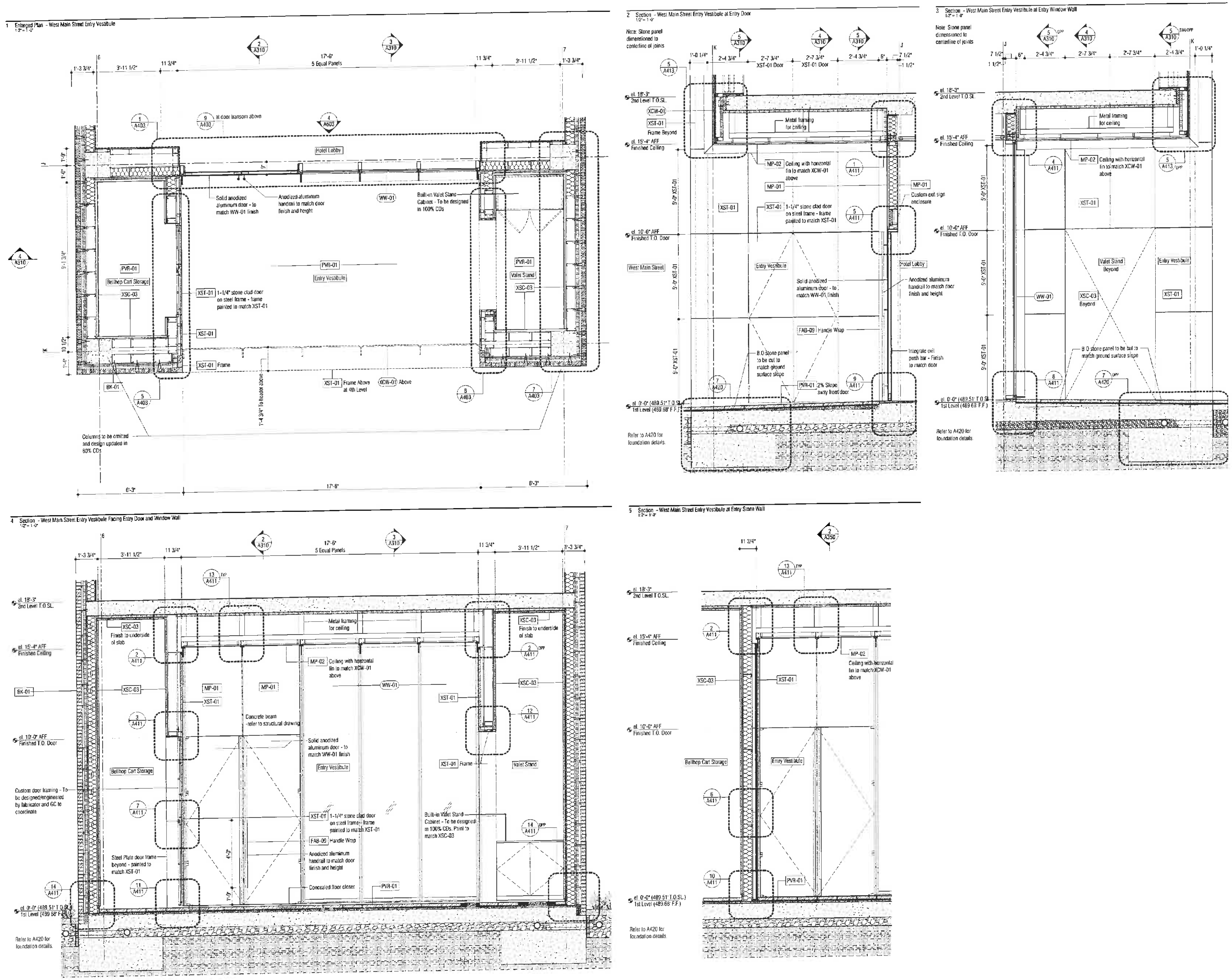
Charlottesville, VA

Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 3/8" = 1'-0"

Wall Sections

A302.00

50% CONSTRUCTION DOCUMENT SUBMISSION - WALL SECTIONS



No	Issue	Date
	100% Schematic Design	30 Jun 2017
	50% Design Development	04 Aug 2017
	100% Design Development	12 Oct 2017
	Guest Model Room Package	09 Nov 2017
	50% Construction Documents	22 Dec 2017

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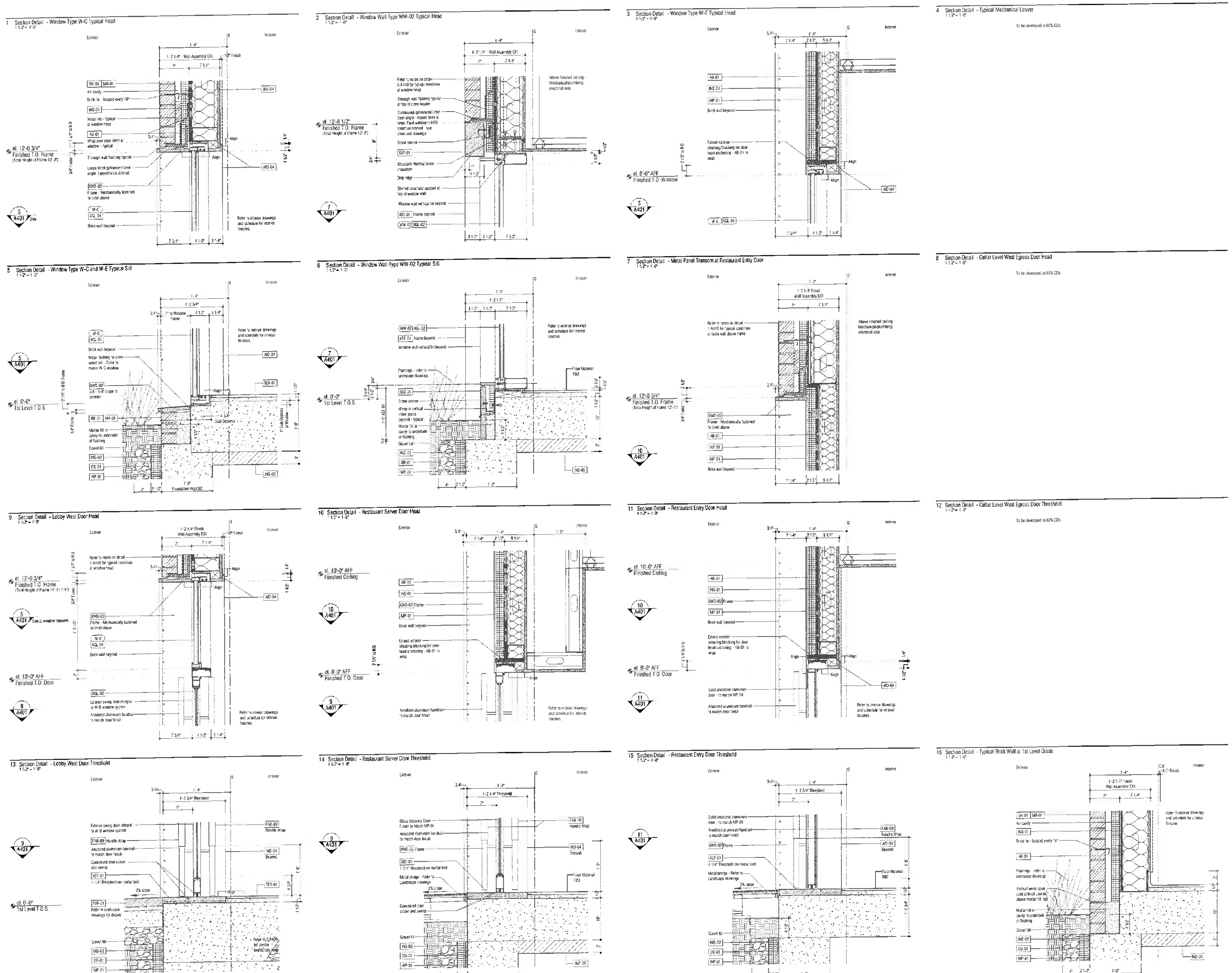
Quirk Charlottesville
Charlottesville, VA

Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 1/2" = 1'-0"

Entry Vestibule
West Main Street

A310.00

50% CONSTRUCTION DOCUMENT SUBMISSION - WEST MAIN STREET ENTRY VESTIBULE



No	Issue	Date
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	100% Design Development	12 Oct 2017
	Guest Model Room Package	08 Nov 2017
	50% Construction Documents	22 Dec 2017

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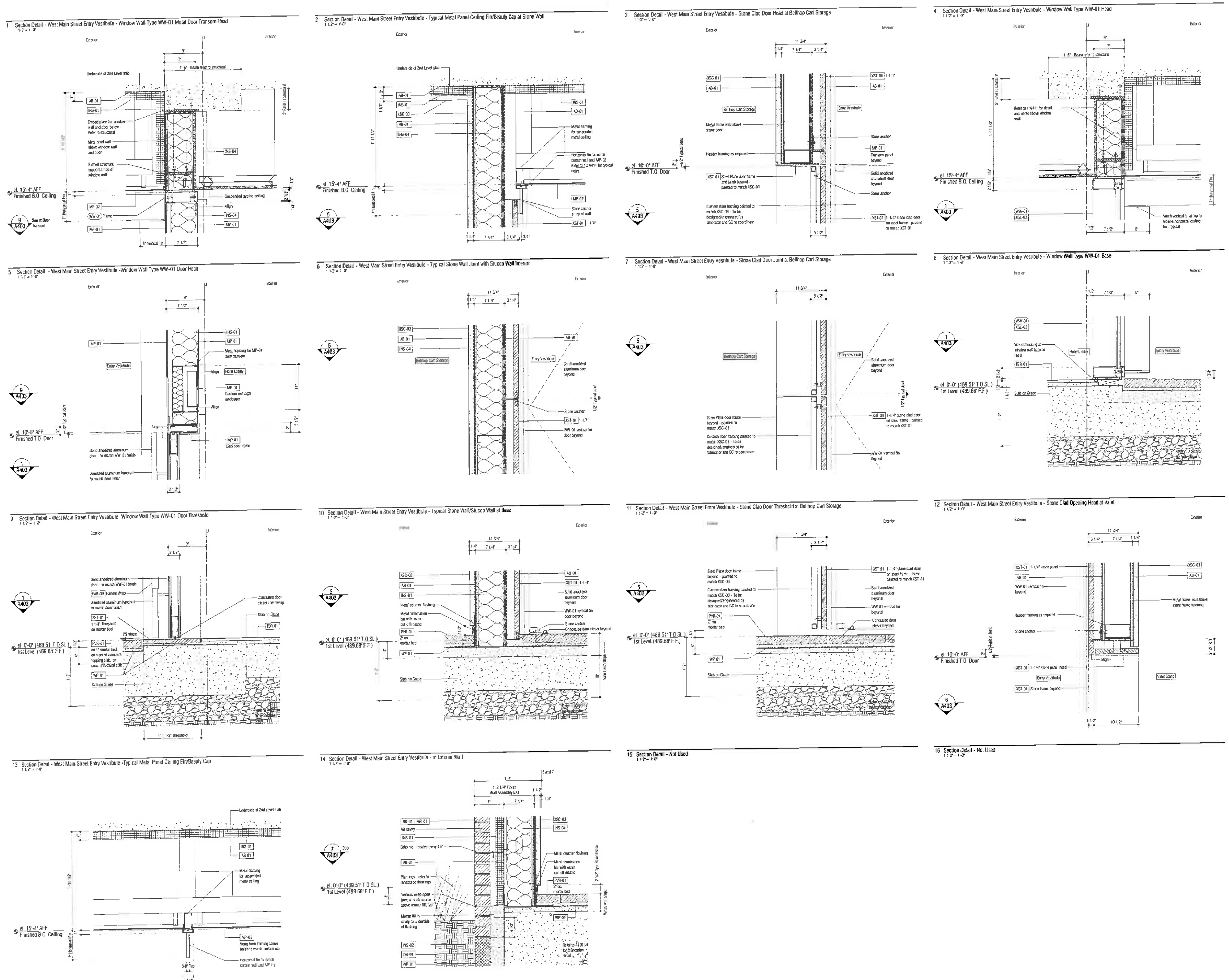
Quirk Charlottesville
Charlottesville, VA

Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 1 1/2" = 1'-0"

Exterior Section Details
1st Level

A410.00

50% CONSTRUCTION DOCUMENT SUBMISSION - SECTION DETAILS



No	Issue	Date
	100% Schematic Design	30 Jun 2017
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	100% Design Development	12 Oct 2017
	Guest Model Room Package	08 Nov 2017
	50% Construction Documents	22 Dec 2017

-Specification sections to be added at 100% CDs.
-Refer to A905 for Exterior Materials Legend
-Refer to A905 for Exterior Construction Assemblies.
-Refer to A945 for Exterior Window Types.

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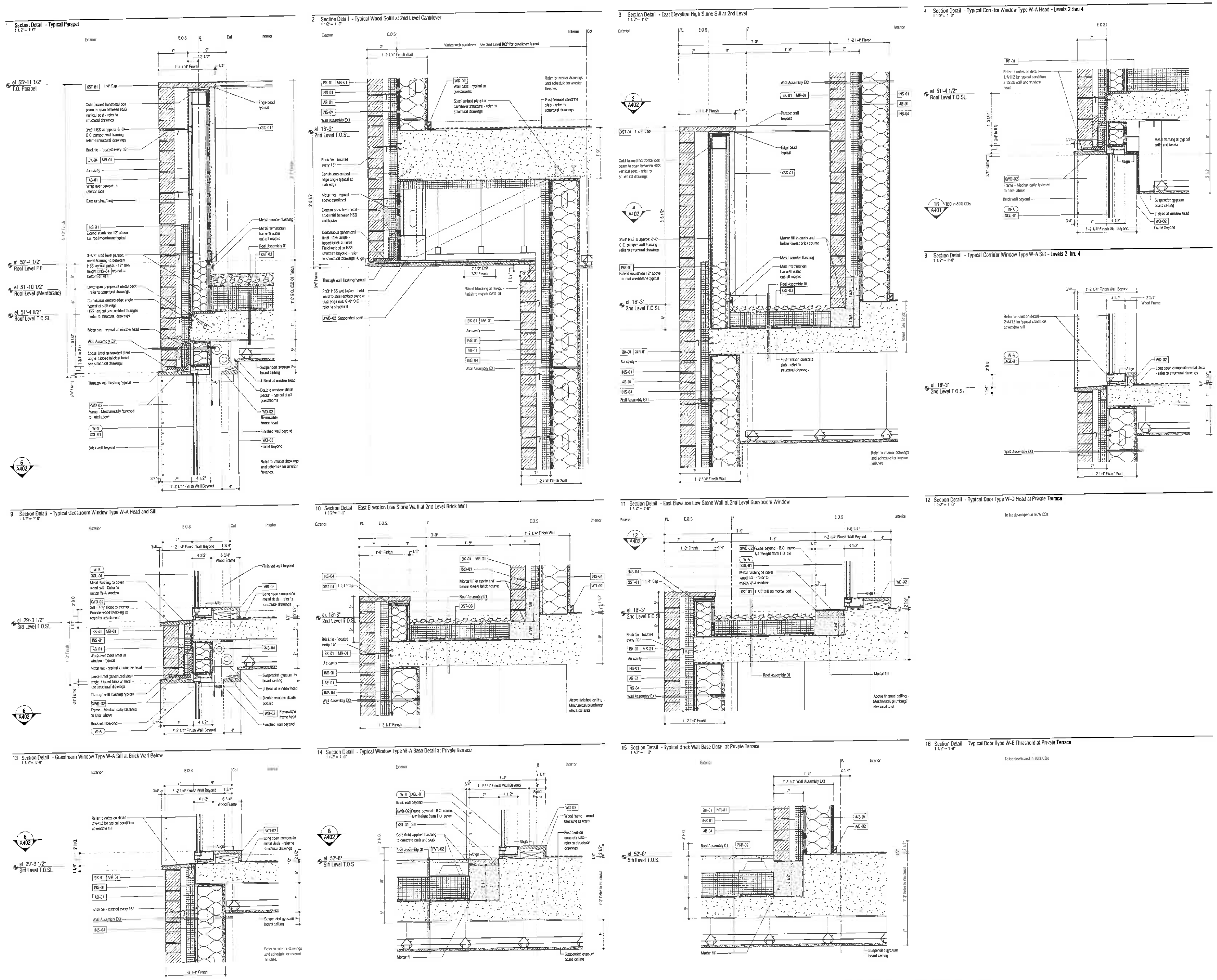
Charlottesville, VA

Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 1-1/2" = 1-0"

Exterior Section Details
West Main Street Entry Vestibule

A411.00

50% CONSTRUCTION DOCUMENT SUBMISSION - SECTION DETAILS



No	Issue	Date
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	100% Design Development	12 Oct 2017
	Guest Model Room Package	08 Nov 2017
	50% Construction Documents	22 Dec 2017

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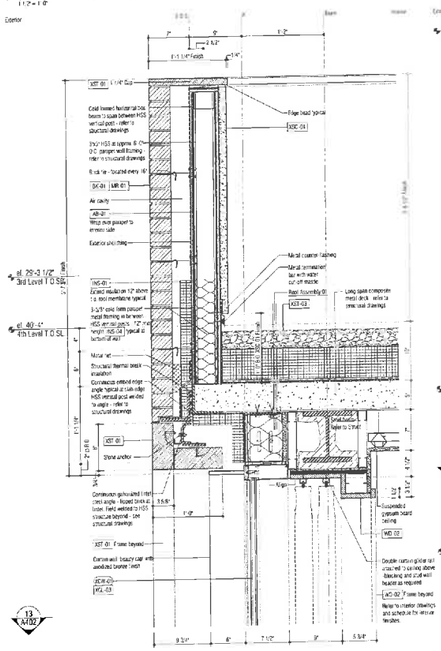
Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 1-1/2" = 1-0"

Exterior Section Details

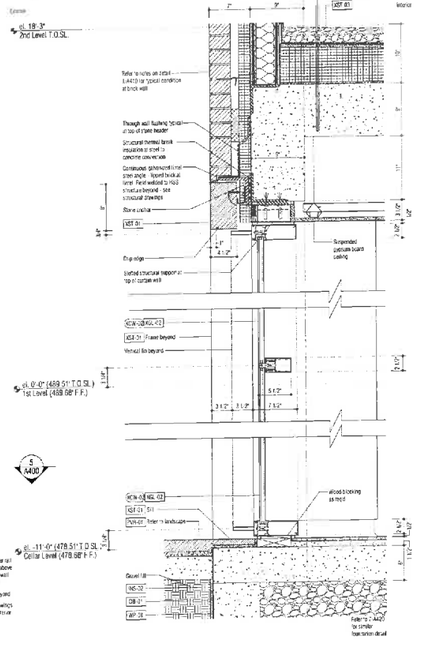
A412.00

50% CONSTRUCTION DOCUMENT SUBMISSION - SECTION DETAILS

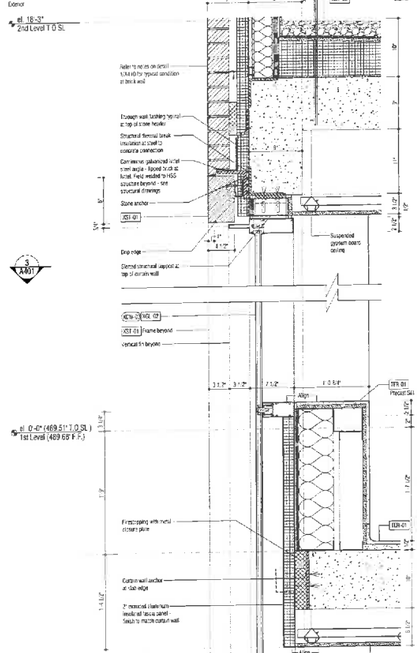
1 Section Detail - XCW-01 at 4th Level Parapet
1 1/2" = 1'-0"



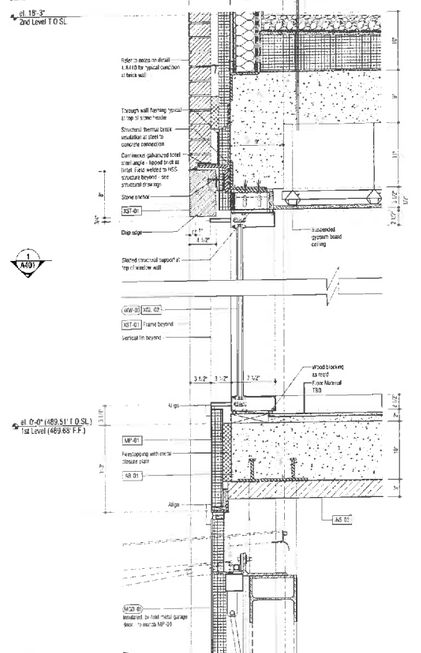
2 Section Detail - XCW-02 at Ceiling thru 2nd Levels
1 1/2" = 1'-0"



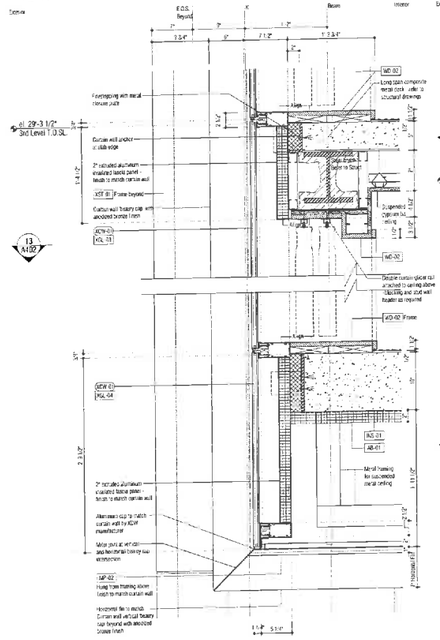
3 Section Detail - XCW-03 at Ceiling thru 2nd Levels
1 1/2" = 1'-0"



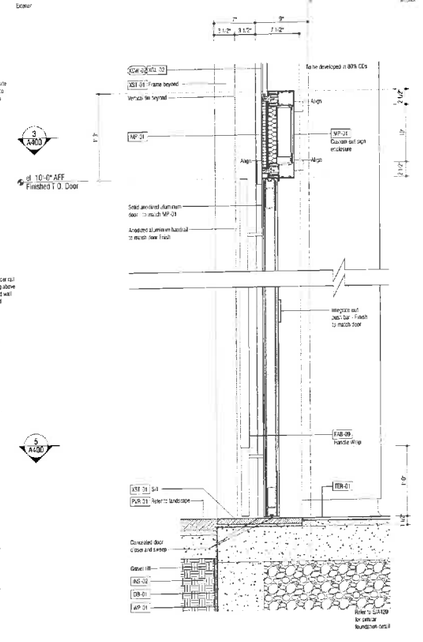
4 Section Detail - WW-03 2nd Level and Garage Door at Cellar Level
1 1/2" = 1'-0"



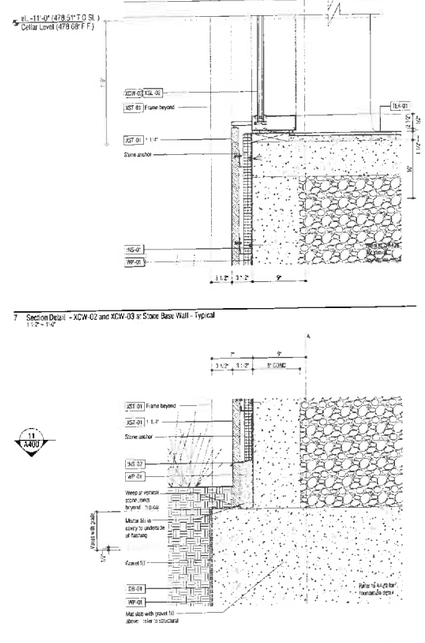
5 Section Detail - XCW-01 at 2nd and 3rd Levels
1 1/2" = 1'-0"



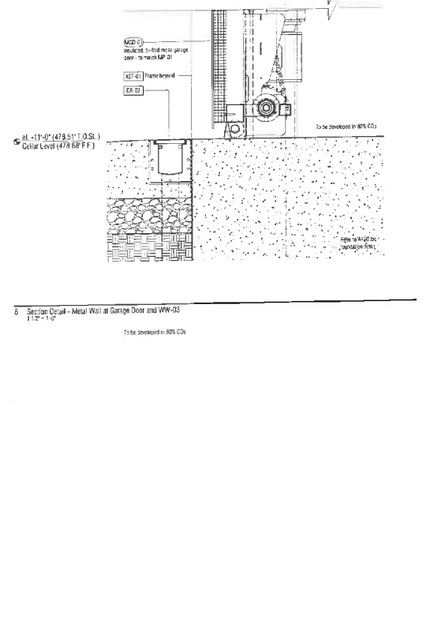
6 Section Detail - XCW-02 at Entry Door
1 1/2" = 1'-0"



7 Section Detail - XCW-02 and XCW-03 at Storefront Base Wall - Typical
1 1/2" = 1'-0"



8 Section Detail - Metal Wall at Garage Door and WW-03
1 1/2" = 1'-0"



No	Issue	Date
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	30% Design Development	04 Aug 2017
	100% Design Development	12 Oct 2017
	Guest Model Room Package	08 Nov 2017
	50% Construction Documents	22 Dec 2017

Material Keynotes

AB-01	Air barrier
BK-01	Common brick Spec:
CMU-01	8" Reinforced CMU wall Spec:
CMU-02	4" Reinforced CMU veneer Spec:
CONC-01	Structural concrete Spec:
CONC-02	Concrete pavers wearing slab Spec:
DB-01	Drainage board Spec:
DR-01	Roof drain Spec:
DR-02	Trench drain Spec:
DR-03	Roof scupper Spec:
INS-01	Physical insulation above grade Spec:
INS-02	Rigid insulation below grade Spec:
INS-03	Extruded polymer insulation rooftop Spec:
INS-04	Batt insulation Spec:
INS-05	Spray foam insulation Spec:
LL-01	Exterior mechanical louver Spec:
MISC-01	Motorized garage door Type of Door: RSD Spec:
MISC-02	Motorized roll down gate Spec:
MP-01	Resin composite panel - dry seal Spec:
MP-02	Resin composite panel ceiling Spec:
MR-01	Exterior brick mortar Spec:
PVR-01	Bluestone pavers - Refer to Landscape Spec:
PVR-02	Concrete pavers on pedestals Spec:
RF-01	Hard applied protected membrane roofing Spec:
SL-01	Exterior site bollards Spec:
WP-01	Vertical foundation wall waterproofing Spec:
WP-02	Horizontal slab waterproofing Spec:
WF-	Exterior window types Refer to A605 for types
WW-	Exterior window wall types Refer to A605 for types
XCW-	Exterior curtain wall types Refer to A605 for types
XCL-	Exterior cladding Refer to A605 for types
XSC-01	Exterior stucco - Pink Spec:
XSC-02	Exterior stucco - White Spec:
XSC-03	Exterior stucco - Gray Spec:
XST-01	Exterior cast stone Spec:
XST-02	Cast weather stone panels Spec:
XST-03	Exterior stone roof ballast Spec:
XWD-01	Exterior wood soffit Spec:
XWD-02	Exterior wood trim Spec:
XWD-03	Exterior wood planks Spec:

General Notes:
- Specification sections to be added in 100% CDs.
- Refer to A001 for Exterior Materials Legend.
- Refer to A605 for Exterior Construction Assemblies.
- Refer to A810 for Exterior Window Types.

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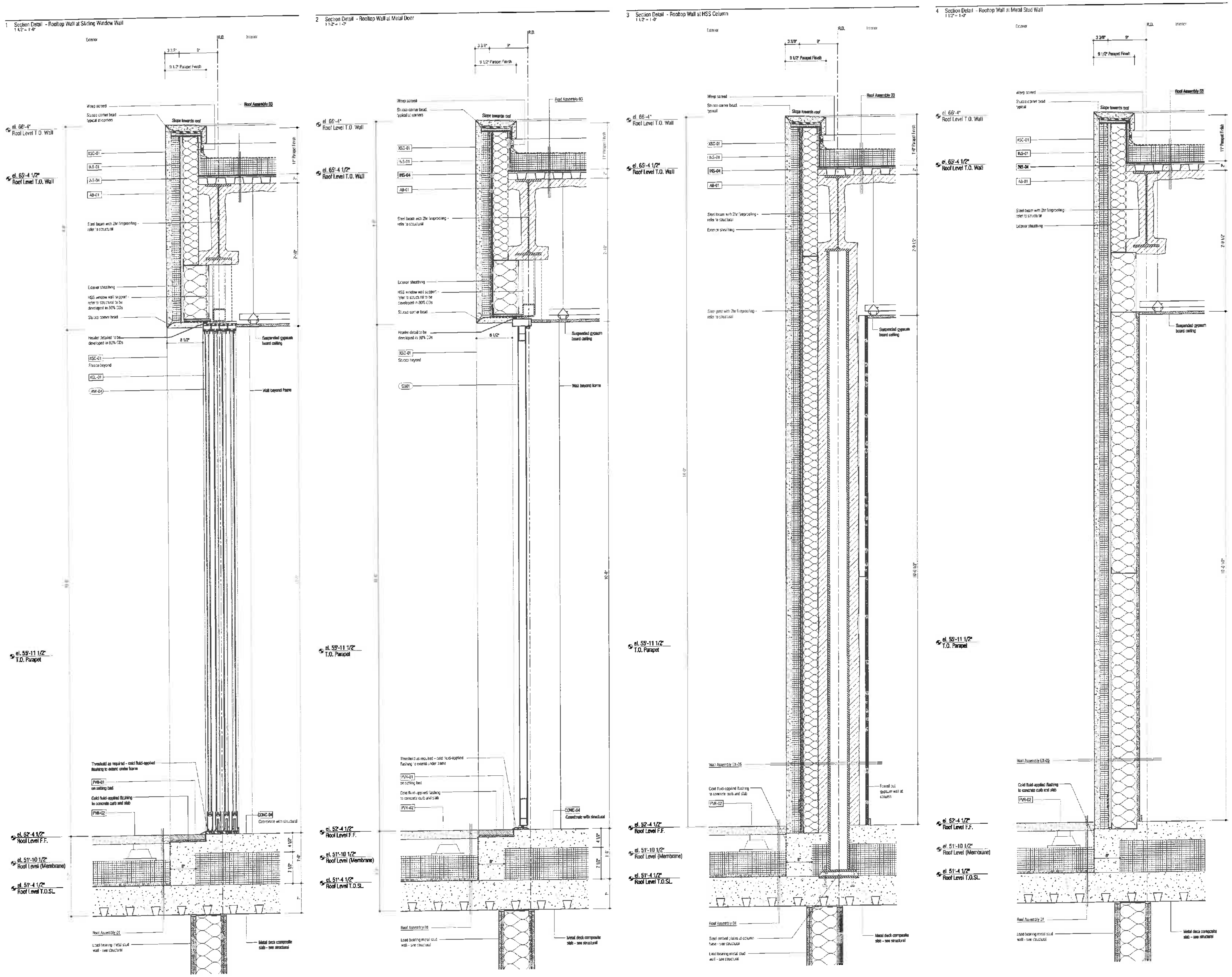
Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 1-1/2" = 1'-0"

Exterior Section Details

A413.00

50% CONSTRUCTION DOCUMENT SUBMISSION - SECTION DETAILS



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Issue: 50% Construction Documents
Date: 22 December 2017
Scale: 1-1/2" = 1'-0"

Exterior Section Details

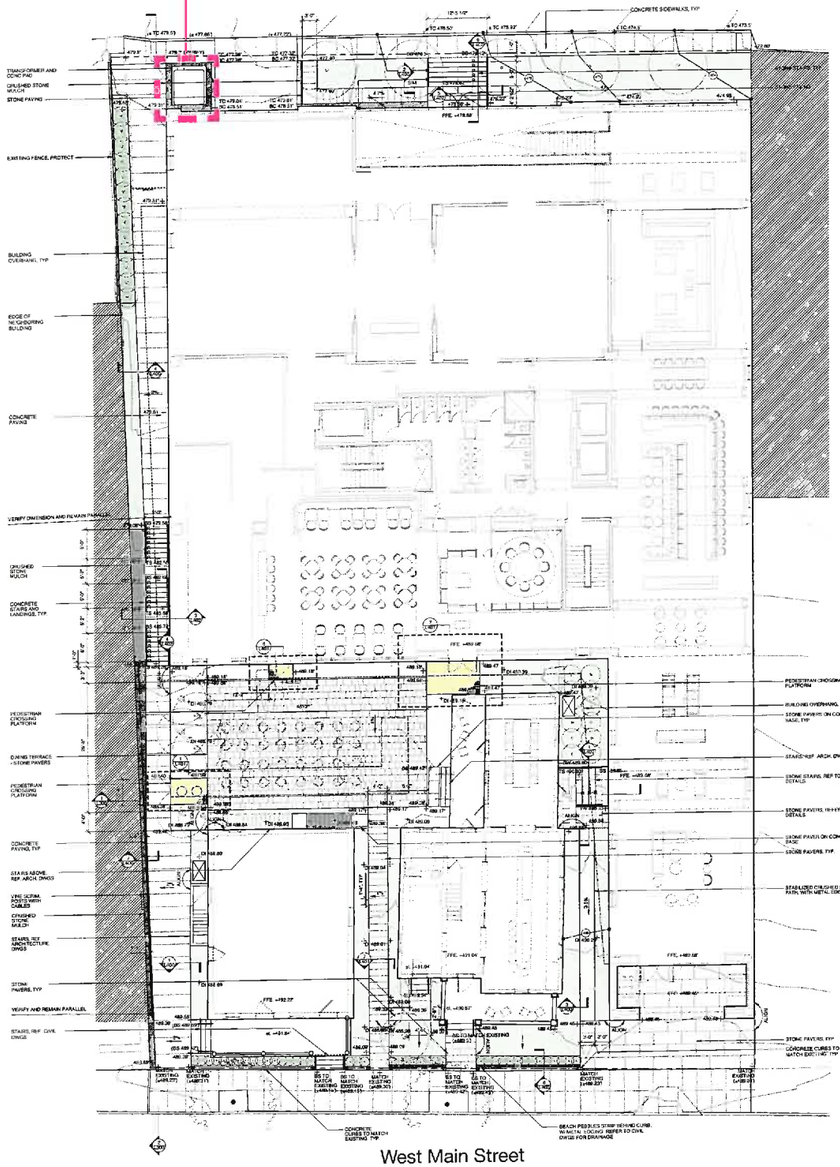
A414.00

50% CONSTRUCTION DOCUMENT SUBMISSION - SECTION DETAILS

Exterior Mechanical Units

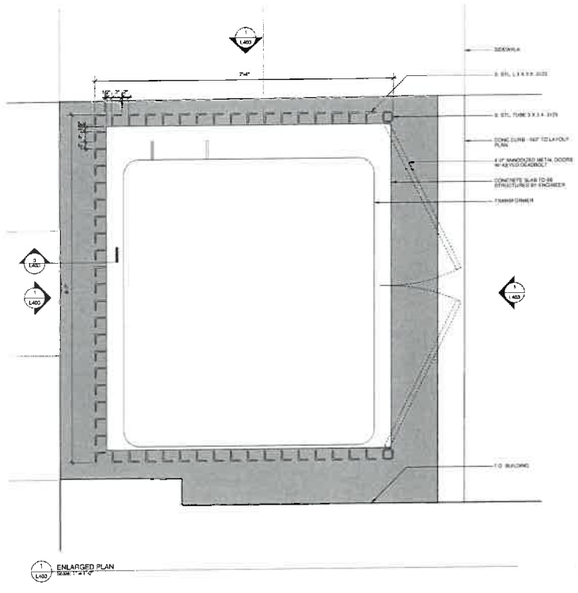
Transformer

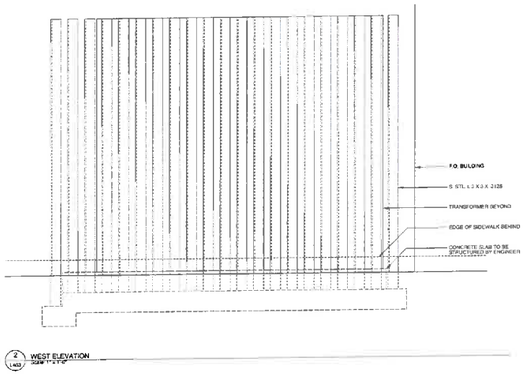
Commerce Street

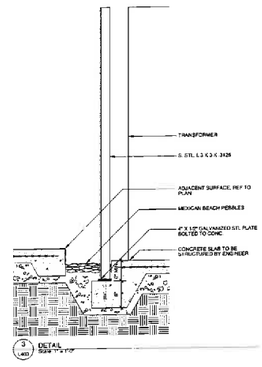


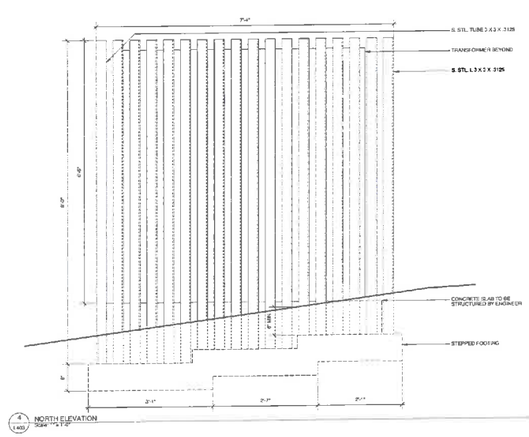
West Main Street

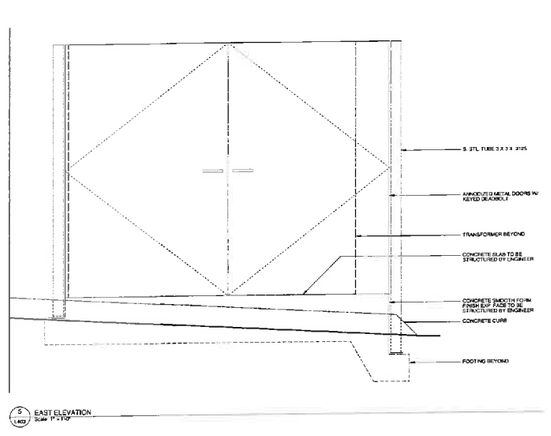
CURRENT SITE PLAN





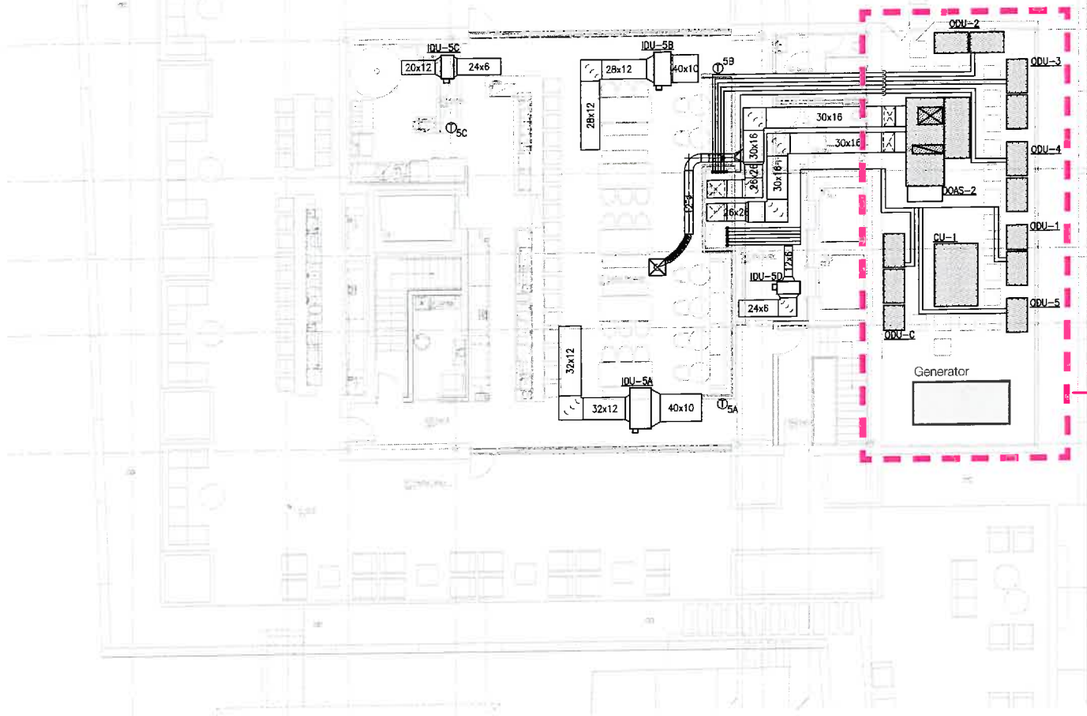






TRANSFORMER SCREEN

COMMERCE STREET DOMINION TRANSFORMER AND LOCATION



N

5TH FLOOR - VRF ROOF PLAN
SCALE: 1/8" = 1'-0"

ROOFTOP MECHANICAL EQUIPMENT

RN/RQ Series

PACKAGED ROOFTOP UNITS, AIR-SOURCE HEAT PUMPS, WATER-SOURCE / GEOTHERMAL HEAT PUMPS, & OUTDOOR AIR HANDLING UNTS

RQ Series

RN Series

Features:

- Air-cooled or water-cooled condenser, with unit capacities from 2-140 tons
- Available as a chilled water or non-compressorized DX air handling unit, from 800-49,100 cfm
- Air-source, water-source, and geothermal heat pump options
- R-410A scroll compressors - one, two, or four compressor systems
- Variable capacity and variable speed scroll compressors for load matching cooling and improved part load efficiency
- Electric, gas, steam, or hot water heating
- AMCA certified and labeled low leakage economizer dampers
- Direct drive backward curved plenum fans
- Power exhaust and power return options
- Factory installed AAONAIRE® total and sensible energy recovery wheels
- Double wall rigid polyurethane foam panel construction with a minimum R-value of 13
- Service access doors with full length stainless steel piano hinges and lockable handles
- Double sloped stainless steel drain pans

Application Flexibility
Minimzes Installation Time and Reduces Cost

- *Makeup Air Applications Up to 100% Outside Air*
- *Dehumidication and Filtration Capabilities*
- *Large Tonnage Rooftops with Small Footprints*
- *Factory Installed or Customer Specific Controls Options*

RN/RQ Series
Rooftop/Air Handlers

AAON RN and RQ Series rooftop units continue to lead the packaged rooftop equipment industry in performance and serviceability. Double wall rigid polyurethane foam insulated cabinet construction and direct drive backward curved plenum fans allow RN and RQ Series units to have quiet, energy efficient airflow with high static pressure capabilities. RN and RQ Series units also feature lockable hinged doors which provide service access to all sections of the unit.

Superior Features

- Cabinet construction consists of rigid polyurethane foam panels with G90 galvanized steel on both sides and a closed cell polyurethane foam interior core. The inner wall protects the insulation from moisture damage, prevents microbial growth, and is easy to clean.
- Two inch rigid polyurethane foam insulated panels have a thermal resistance R-value of 13 or greater, which exceeds the R-value of a cabinet with four inch thick fiberglass construction. They also make the cabinet more rigid and resistant to damage and provide increased sound dampening.
- Access doors with full length stainless steel piano hinges and quarter turn, lockable handles provide improved reliability over single point hinges and make the unit easily serviceable.
- Corrosion resistant polyurethane paint exceeds a 2,500 hour salt spray test.
- AMCA Certified low leakage gear driven economizer dampers are standard on RN and RQ Series rooftop units. AAON low leakage dampers meet the California Title 24 damper air leakage requirement. Optional Economizer Fault Detection and Diagnostics is also available with the low leakage dampers to meet the California Title 24 requirements.
- Compressors and unit controls are contained within a compartment isolated from the air stream for ease of service and increased sound dampening.
- Direct drive backward curved plenum fans provide improved energy efficiency and reduced maintenance versus belt driven fans.
- Double sloped stainless steel drain pans eliminate standing water which can support microbial growth and stainless steel construction prevents corrosion that could lead to water leaks and contaminants in the air stream.
- Run test report, wiring diagram, and Installation, Operation, and Maintenance manual with startup form provided in control access compartment of every unit.
- 5 year non-prorated compressor warranty, 15 year nonprorated aluminized steel gas heat exchanger warranty, and 25 year non-prorated

55-140 ton RN Series Packaged Rootop Unit

DOAS-1 CUT SHEET

Job Name/Location:

Date:

PO No.:

For: ☐ File ☐ Resubmit ☐ Approval ☐ Other

Architect:

GC:

Engr:

Mech:

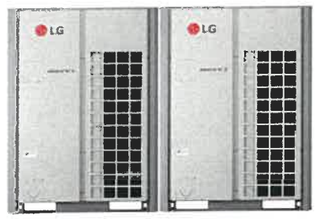
Rep:
(Company) (Project Manager)

Tag #:

ARUM312BTE5
Multi V™ 5 Dual Frame 208-230V
26.0 Ton Outdoor Unit for Heat Pump and Heat Recovery

(a) ARUM096BTE5
(b) ARUM216BTE5

LG Life's Good



Performance:

Cooling Mode:

Nominal Capacity (Btu/h)	312,000
Power Input[1] (kW)	20.70

Heating Mode:

Nominal Capacity (Btu/h)	351,000
Power Input[1] (kW)	24.49

Nominal Capacity is outside the scope of AHRI Standard 1230 and based on the following conditions:
Indoor: 80°F DB / 67°F WB — Indoor: 70°F DB
Outdoor 95°F DB — Outdoor 47°F DB / 43°F WB

Electrical:	(a) ARUM096BTE5	(b) ARUM216BTE5
Power Supply (V/Hz/Ø)	208-230/60/3	208-230/60/3
MOP (A)	40	80
MCA (A)	28.5	60.3
Rated Amps (A)	24.4	54.2
Compressor A (A)	16.4	24.3
Compressor B (A)	-	21.9
Fan (A)	8.0	8.0

Piping:	(a) ARUM096BTE5	(b) ARUM216BTE5
Refrigerant Charge (lbs)	23.2	37.5
Liquid Line[2] (in, OD)	3/8 Braze	5/8 Braze
Vapor Line High[2] (in, OD) Heat Recovery Only	3/4 Braze	1-1/8 Braze
Vapor Line Low[2] (in, OD)	7/8 Braze	1-1/8 Braze

Standard Features:

- Advanced Smart Load Control
- Intelligent Heating
- HiPOR (high pressure oil return)
- Smart Oil Control
- Night Quiet Operation
- Fault Detection and Diagnosis
- Active Refrigerant Control
- Variable Path Heat Exchanger
- Subcooling and Vapor Injection Control
- Liquid Cooled Inverter Controller

Required Accessories:

☐ ARCNB21 (frame connector Y-branch)

Optional Accessories:

☐ Air Guide - ZAGDKA52A (2 required)
☐ Hail Guard Kit - ZHGDKA52A (2 Required)
☐ Low Ambient Baffle Kit - ZLABKA52A (2), Control Kit - PRVC2 (1 per system)

****(-9.9°F achieved only when all IDU's are operating in cooling mode. Does not impact synchronous operating range.)**

Operating Range:

Cooling (°F DB)**	5-122
Heating (°F WB)	-13 - 61
Synchronous:	
Cooling Based (°F DB)	14 – 81
Heating Based (°F WB)	14 – 61

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Max Number of Indoor Units[3]	52
Sound Pressure[4] dB(A)	65.0
Net Unit Weight (a) + (b) (lbs)	507+666
Shipping Weight (a) + (b) (lbs)	534+694
Communication Cable[5] (No x AWG)	2 x 18
Heat Exchanger Coating	Black Coated Fin™

Compressor:

Type	HSS DC Scroll
Quantity	3
Oil/Type	PVE/FVC68D

Fan:

Type	Propeller
Quantity	4
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow Rate (CFM)	22,600

Notes:

1. For AHRI ratings, refer to the AHRI website http://www.ahridirectory.org.
2. For main pipe segment size, refer to the LATS Multi V tree diagram.
3. The combination ratio must be between 50-130%.
4. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745 for the combination of outdoor units.
5. Communication cable between ODU and IDU(s) must be 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
6. Nominal data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.
7. Power wiring cable size must comply with the applicable local and national code. Cables terminate at each frame.
8. The voltage tolerance is 187 - 253V.
9. The order of each of these units on the submittal (i.e., A+B) do not represent the installation order. Highest capacity unit is used as the Master, followed by the next smaller size as Slave 1 and so on.

Inverter

Intertek

AHRI CERTIFIED™ www.ahridirectory.org Variable Refrigerant Flow (VRF) Multi-Split AC and HP AHRI Standard 1230

Job Name/Location:

ARUM312BTE5
Multi V™ 5 Dual Frame 208-230V
26.0 Ton Outdoor Unit for Heat Pump and Heat Recovery

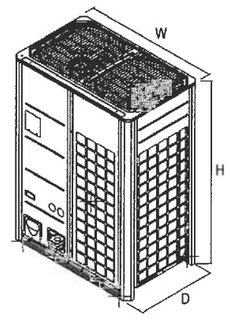
(a) ARUM096BTE5
(b) ARUM216BTE5

LG Life's Good

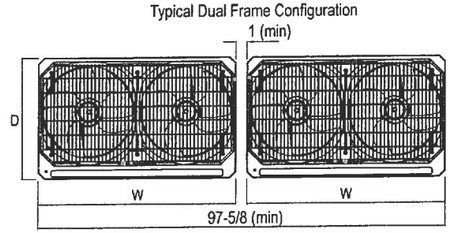
Tag #:

Date:

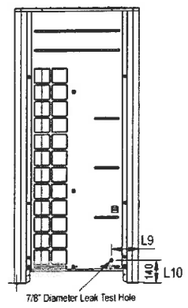
PO No.:



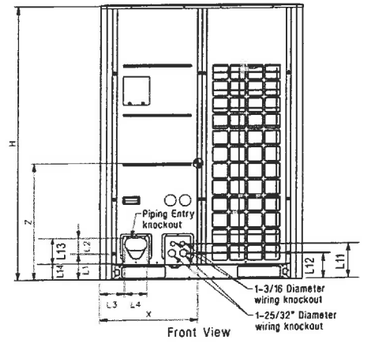
Typical Dual Frame Configuration



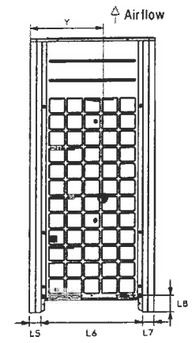
Note: Please refer to multi-frame placement information and piping rules in the Multi V 5 Engineering Manual and the Multi V 5 Installation Manual. Minimum spacing between frames is 1 inch.



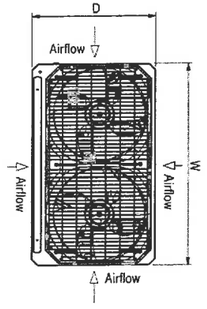
Left Side View



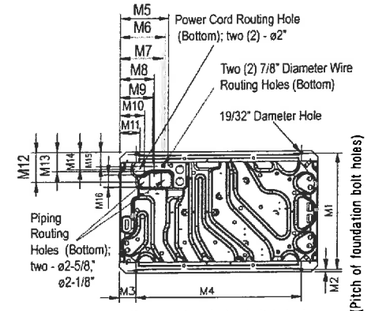
Front View



Right Side View



Top View



Bottom Mounting Holes

M1	28-25/32"
M2	5/8"
M3	3-15/16"
M4	40-15/16"
M5	11 – 15/16"
M6	11 – 1/16"
M7	10 – 1/2"
M8	8 – 7/16"
M9	8 – 1/8"
M10	6 – 1/16"
M11	4 – 15/16"
M12	7 – 1/2"
M13	4 – 13/16"
M14	4 – 5/16"
M15	3 – 5/8"
M16	3"

W	48-13/16"
H	66-17/32"
D	29-29/32"
L1	6-5/16"
L2	3-3/4"
L3	5-29/32"
L4	5-13/32"
L5	2-25/32"
L6	24-9/32"
L7	2-25/32"
L8	4-1/32"
L9	6 – 1/2"
L10	5 – 9/16"
L11	8 – 5/8"
L12	6 – 7/16"
L13	9 – 15/16"
L14	3 – 5/8"

Center of Gravity

X	23-7/32"
Y	15-5/8"
Z	25-9/16"

All dimensions have a tolerance of ± 0.25 in.
[Unit: inch]

= Center of Gravity

Job Name/Location:

Date:

PO No.:

Architect:

GC:

Engr:

Mech:

Rep:
(Company) (Project Manager)

For: ☐ File ☐ Resubmit ☐ Approval ☐ Other

Tag #:

ARUM216BTE5
Multi V™ 5 Single Frame 208-230V
18.0 Ton Outdoor Unit for Heat Pump and Heat Recovery

LG Life's Good

Performance:

Cooling Mode:

Nominal Capacity (Btu/h)	216,000
Power Input[1] (kW)	15.37

Heating Mode:

Nominal Capacity (Btu/h)	243,000
Power Input[1] (kW)	17.75

Nominal Capacity is outside the scope of AHRI Standard 1230 and based on the following conditions:
Indoor: 80°F DB / 67°F WB Indoor: 70°F DB
Outdoor 95°F DB Outdoor 47°F DB / 43°F WB

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/3
MOP (A)	80
MCA (A)	60.3
Rated Amps (A)	54.2
Compressor A (A)	24.3
Compressor B (A)	21.9
Fan (A)	8.0

Piping:

Refrigerant Charge (lbs)	37.5
Liquid Line (in, OD)	5/8 Braze
Low Pressure Vapor Line (in, OD)	1-1/8 Braze
High Pressure Vapor Line (in, OD) (HR only)	1-1/8 Braze

Standard Features:

- Advanced Smart Load Control
- Intelligent Heating
- HiPOR (high pressure oil return)
- Smart Oil Control
- Night Quiet Operation
- Fault Detection and Diagnosis
- Active Refrigerant Control
- Variable Path Heat Exchanger
- Subcooling and Vapor Injection Control
- Liquid Cooled Inverter Controller

Optional Accessories:

- ☐ Air Guide - ZAGDKA52A (1 required)
- ☐ Low Ambient Baffle Kit - ZLABKA52A (1), Control Kit - PRVC2 (1 per system)
- ☐ Hail Guard Kit - ZHGDKA52A (1 Required)

****Cooling operating range is extended to -9.9 to 122°F if the optional low ambient baffle kit and low ambient control kit are installed.**

Operating Range:

Cooling (°F DB)**	5-122
Heating (°F WB)	-13 - 61
Synchronous:	
Cooling Based Synchronous (°F DB)	14 – 81
Heating Based Synchronous (°F WB)	14 – 61

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Max Number of Indoor Units[2]	35
Sound Pressure[3] dB(A)	64.0
Net Unit Weight (lbs)	666
Shipping Weight (lbs)	694
Communication Cable[4] (No x AWG)	2 x 18
Heat Exchanger Coating	Black Coated Fin™

Compressor:

Type	HSS DC Scroll
Quantity	2
Oil/Type	PVE/FVC68D

Fan:

Type	Propeller
Quantity	2
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow Rate (CFM)	11,300

Notes:

1. For AHRI ratings, refer to the AHRI website http://www.ahridirectory.org.
2. The combination ratio must be between 50 – 130%.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
4. Communication cable between ODU and IDU(s) must be 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
5. Nominal data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.
6. Power wiring cable size must comply with the applicable local and national codes.
7. Acceptable operating voltage: 187V - 253V.

Inverter

Intertek

AHRI CERTIFIED™ www.ahridirectory.org
Variable Refrigerant Flow (VRF) Multi-Split AC and HP AHRI Standard 1230

Job Name/Location:

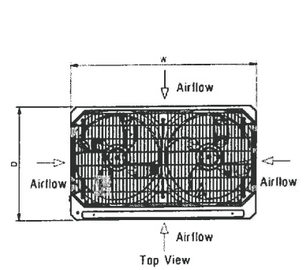
ARUM216BTE5
Multi V™ 5 Single Frame 208-230V
18.0 Ton Outdoor Unit for Heat Pump and Heat Recovery

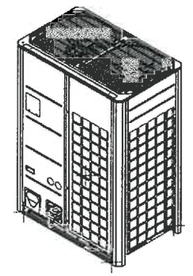
LG Life's Good

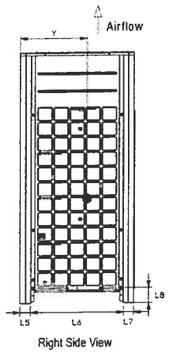
Tag #:

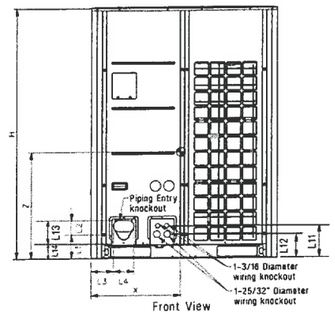
Date:

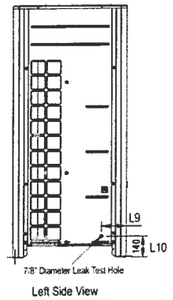
PO No.:

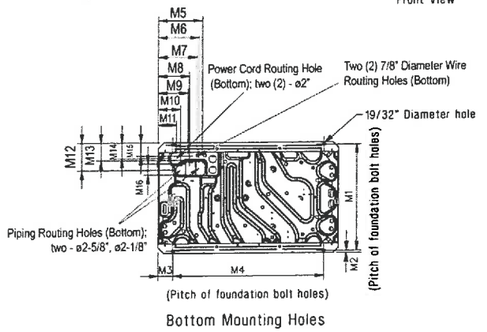












M1	28-25/32"
M2	5/8"
M3	3-15/16"
M4	40-15/16"
M5	11 – 15/16"
M6	11 – 1/16"
M7	10 – 1/2"
M8	8 – 7/16"
M9	8 – 1/8"
M10	6 – 1/16"
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M12	7 – 1/2"
M13	4 – 13/16"
M14	4 – 5/16"
M15	3 – 5/8"
M16	3"

W	48-13/16"
H	66-17/32"
D	29-29/32"
L1	6-5/16"
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L10	5 – 9/16"
L11	8 – 5/8"
L12	6 – 7/16"
L13	9 – 15/16"
L14	3 – 5/8"

Center of Gravity

X	23-7/32"
Y	15-5/8"
Z	25-9/16"

All dimensions have a tolerance of ± 0.25 in.
[Unit: inch]

= Center of Gravity

ODU-1 CUT SHEET

Job Name/Location:

Date:

PO No.:

Architect:

Engr:

Rep:
(Company)

Tag #:

For: ☐ File ☐ Resubmit ☐ Approval ☐ Other

GC:

Mech:

(Project Manager)

ARUM241BTE5
Multi V™ 5 Single Frame 208-230V
20.0 Ton Outdoor Unit for Heat Pump and Heat Recovery

LG Life's Good

Performance:

Cooling Mode:

Nominal Capacity (Btu/h)	240,000
Power Input[1] (kW)	16.80

Heating Mode:

Nominal Capacity (Btu/h)	243,000
Power Input[1] (kW)	17.75

Nominal Capacity is outside the scope of AHRI Standard 1230 and based on the following conditions:
Indoor: 80°F DB / 67°F WB — Indoor: 70°F DB
Outdoor: 95°F DB — Outdoor: 47°F DB / 43°F WB

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/3
MOP (A)	80
MCA (A)	63.2
Rated Amps (A)	56.8
Compressor A (A)	25.6
Compressor B (A)	23.2
Fan (A)	8.0

Piping:

Refrigerant Charge (lbs)	37.5
Liquid Line (in, OD)	5/8 Braze
Low Pressure Vapor Line (in, OD)	1-3/8 Braze
High Pressure Vapor Line (in, OD) (HR only)	1-1/8 Braze

Standard Features:

- Advanced Smart Load Control
- Intelligent Heating
- HiPOR (high pressure oil return)
- Smart Oil Control
- Night Quiet Operation
- Fault Detection and Diagnosis
- Active Refrigerant Control
- Variable Path Heat Exchanger
- Subcooling and Vapor Injection Control
- Liquid Cooled Inverter Controller

Optional Accessories:

- ☐ Air Guide - ZAGDKA52A (1 required)
- ☐ Low Ambient Baffle Kit - ZLABKA52A (1), Control Kit - PRVC2 (1 per system)
- ☐ Hail Guard Kit - ZHGDKA52A (1 Required)

****Cooling operating range is extended to -9.9 to 122°F if the optional low ambient baffle kit and low ambient control kit are installed.**

Operating Range:

Cooling (°F DB)**	5-122
Heating (°F WB)	-13 - 61
Synchronous:	
Cooling Based Synchronous (°F DB)	14 – 81
Heating Based Synchronous (°F WB)	14 – 61

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Max Number of Indoor Units[2]	39
Sound Pressure[3] dB(A)	65.0
Net Unit Weight (lbs)	666
Shipping Weight (lbs)	694
Communication Cable[4] (No x AWG)	2 x 18
Heat Exchanger Coating	Black Coated Fin™

Compressor:

Type	HSS DC Scroll
Quantity	2
Oil/Type	PVE/FVC68D

Fan:

Type	Propeller
Quantity	2
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow Rate (CFM)	11,300

Notes:

1. For AHRI ratings, refer to the AHRI website http://www.ahridirectory.org.
2. The combination ratio must be between 50 – 130%.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
4. Communication cable between ODU and IDU(s) must be 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
5. Nominal data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.
6. Power wiring cable size must comply with the applicable local and national codes.
7. Acceptable operating voltage: 187V ~ 253V.

Inverter — Intertek — AHRI CERTIFIED™ www.ahridirectory.org Variable Refrigerant Flow (VRF) Multi-Split AC and HP AHRI Standard 1230

Job Name/Location:

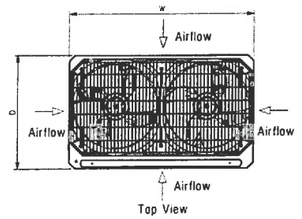
ARUM241BTE5
Multi V™ 5 Single Frame 208-230V
20.0 Ton Outdoor Unit for Heat Pump and Heat Recovery

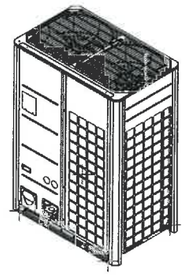
LG Life's Good

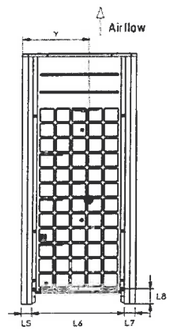
Tag #:

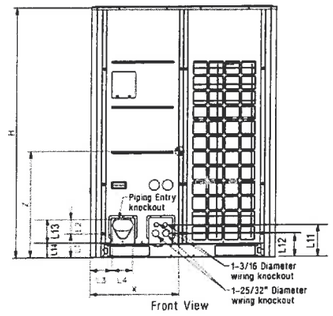
Date:

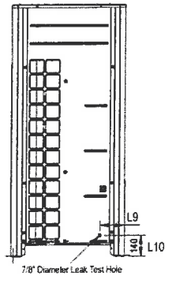
PO No.:

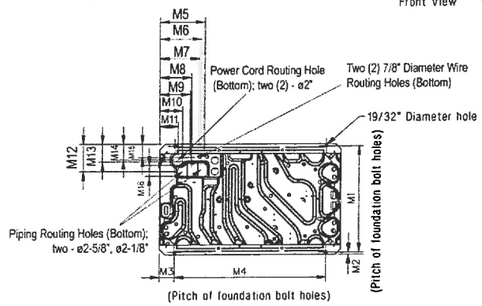












M1	28-25/32"
M2	5/8"
M3	3-15/16"
M4	40-15/16"
M5	11 – 15/16"
M6	11 – 1/16"
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M14	4 – 5/16"
M15	3 – 5/8"
M16	3"

W	48-13/16"
H	66-17/32"
D	29-29/32"
L1	6-5/16"
L2	3-3/4"
L3	5-29/32"
L4	5-13/32"
L5	2-25/32"
L6	24-9/32"
L7	2-25/32"
L8	4-1/32"
L9	6 – 1/2"
L10	5 – 9/16"
L11	8 – 5/8"
L12	6 – 7/16"
L13	9 – 15/16"
L14	3 – 5/8"

Center of Gravity

X	23-7/32"
Y	15-5/8"
Z	25-9/16"

All dimensions have a tolerance of ± 0.25 in.
[Unit: inch]

⊕ = Center of Gravity

Job Name/Location: **Tag #:**

Date:

PO No.:

For: ☐ File ☐ Resubmit ☐ Approval ☐ Other

Architect: GC:

Engr: Mech:

Rep:
(Company) (Project Manager)

ARUM144BTE5
Multi V™ 5 Single Frame 208-230V
12.0 Ton Outdoor Unit for Heat Pump and Heat Recovery

LG Life's Good

Performance:

Cooling Mode:

Nominal Capacity (Btu/h)	144,000
Power Input[1] (kW)	9.30

Heating Mode:

Nominal Capacity (Btu/h)	162,000
Power Input[1] (kW)	10.54

Nominal Capacity is outside the scope of AHRI Standard 1230 and based on the following conditions:
Indoor: 80°F DB / 67°F WB Indoor: 70°F DB
Outdoor: 95°F DB Outdoor: 47°F DB / 43°F WB

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/3
MOP (A)	70
MCA (A)	51.1
Rated Amps (A)	46.1
Compressor A (A)	19.8
Compressor B (A)	18.3
Fan (A)	8.0

Piping:

Refrigerant Charge (lbs)	26.5
Liquid Line (in, OD)	1/2 Braze
Low Pressure Vapor Line (in, OD)	1-1/8 Braze
High Pressure Vapor Line (in, OD) (HR only)	7/8 Braze

Standard Features:

- Advanced Smart Load Control
- Intelligent Heating
- HiPOR (high pressure oil return)
- Smart Oil Control
- Night Quiet Operation
- Fault Detection and Diagnosis
- Active Refrigerant Control
- Variable Path Heat Exchanger
- Subcooling and Vapor Injection Control
- Liquid Cooled Inverter Controller

Optional Accessories:

☐ Air Guide - ZAGDKA52A (1 required)

☐ Low Ambient Baffle Kit - ZLABKA52A (1), Control Kit - PRVC2 (1 per system)

☐ Hail Guard Kit - ZHGDKA52A (1 Required)

****Cooling operating range is extended to -9.9 to 122°F if the optional low ambient baffle kit and low ambient control kit are installed.**

Operating Range:

Cooling (°F DB)**	5-122
Heating (°F WB)	-13 - 61
Synchronous:	
Cooling Based Synchronous (°F DB)	14 – 81
Heating Based Synchronous (°F WB)	14 – 61

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Max Number of Indoor Units[2]	24
Sound Pressure[3] dB(A)	60.0
Net Unit Weight (lbs)	639
Shipping Weight (lbs)	666
Communication Cable[4] (No x AWG)	2 x 18
Heat Exchanger Coating	Black Coated Fin™

Compressor:

Type	HSS DC Scroll
Quantity	2
Oil/Type	PVE/FVC68D

Fan:

Type	Propeller
Quantity	2
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow Rate (CFM)	11,300

Notes:

1. For AHRI ratings, refer to the AHRI website http://www.ahridirectory.org.
2. The combination ratio must be between 50 – 130%.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
4. Communication cable between ODU and IDU(s) must be 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
5. Nominal data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.
6. Power wiring cable size must comply with the applicable local and national codes.
7. Acceptable operating voltage: 187V - 253V.

Inverter

Intertek

AHRI CERTIFIED™ www.ahridirectory.org Variable Refrigerant Flow (VRF) Multi-Split AC and HP AHRI Standard 1230

Job Name/Location:

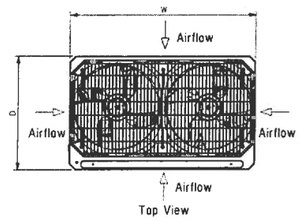
ARUM144BTE5
Multi V™ 5 Single Frame 208-230V
12.0 Ton Outdoor Unit for Heat Pump and Heat Recovery

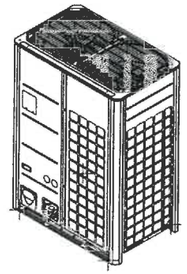
LG Life's Good

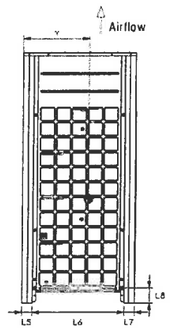
Tag #:

Date:

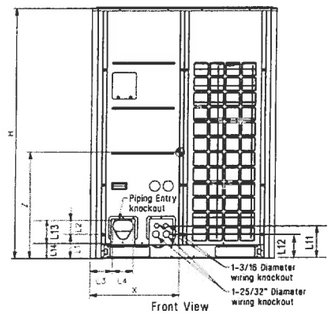
PO No.:



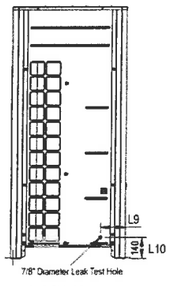




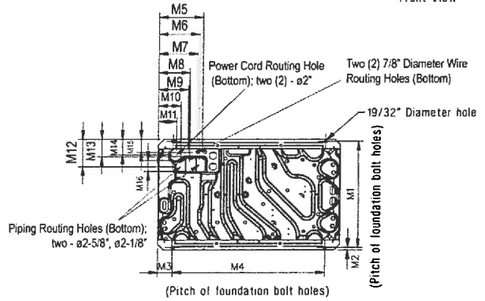
Right Side View



Front View



Left Side View



Bottom Mounting Holes

M1	28-25/32"
M2	5/8"
M3	3-15/16"
M4	40-15/16"
M5	11 – 15/16"
M6	11 – 1/16"
M7	10 – 1/2"
M8	8 – 7/16"
M9	8 – 1/8"
M10	6 – 1/16"
M11	4 – 15/16"
M12	7 – 1/2"
M13	4 – 13/16"
M14	4 – 5/16"
M15	3 – 5/8"
M16	3"

W	48-13/16"
H	66-17/32"
D	29-29/32"
L1	6-5/16"
L2	3-3/4"
L3	5-29/32"
L4	5-13/32"
L5	2-25/32"
L6	24-9/32"
L7	2-25/32"
L8	4-1/32"
L9	6 – 1/2"
L10	5 – 9/16"
L11	8 – 5/8"
L12	6 – 7/16"
L13	9 – 15/16"
L14	3 – 5/8"

Center of Gravity

X	23-7/32"
Y	15-5/8"
Z	25-9/16"

All dimensions have a tolerance of ± 0.25 in.
[Unit: inch]

= Center of Gravity

ODU-5 CUT SHEET

Model: 250REZXB

KOHLER. Power Systems

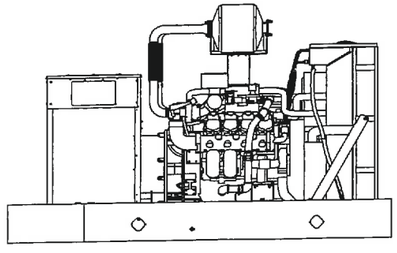
208-600 V **Gas**

ISO 9001 KOHLER POWER SYSTEMS NATIONALLY REGISTERED

EPA-Certified for Stationary and Mobile Emergency and Non-Emergency Applications

Ratings Range

		60 Hz
Standby:	**kW**	170-260
	kVA	213-325
Prime:	**kW**	225-235
	kVA	281-294



Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- A one-year limited warranty covers all generator set systems and components. Two- and five-year extended limited warranties are also available.
- Alternator features:
  - The unique Fast-Response® II excitation system delivers excellent voltage response and short-circuit capability using a permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.

Generator Set Ratings

				Rich-Burn Natural Gas 130°C Rise Standby Rating		105°C Rise Prime Rating		Rich-Burn LP Gas (Vapor) 130°C Rise Standby Rating	
Alternator	**Voltage**	**Ph**	**Hz**	**kW/kVA**	**Amps**	**kW/kVA**	**Amps**	**kW/kVA**	**Amps**
4UA10	120/208	3	60	260/325	902	230/288	798	170/213	590
	127/220	3	60	260/325	853	230/288	754	170/213	558
	120/240	3	60	260/325	782	230/288	692	170/213	511
	139/240	3	60	260/325	782	230/288	692	170/213	511
	220/380	3	60	250/313	475	225/281	427	170/213	323
	240/416	3	60	260/325	451	230/288	399	170/213	295
	277/480	3	60	260/325	391	230/288	346	170/213	256
	347/600	3	60	260/325	313	230/288	277	170/213	204
4UA13	120/208	3	60	260/325	902	235/294	815	170/213	590
	127/220	3	60	260/325	853	235/294	771	170/213	558
	120/240	3	60	260/325	782	235/294	707	170/213	511
	120/240	1	60	230/230	958	209/209	871	170/170	708
	139/240	3	60	260/325	782	235/294	707	170/213	511
	220/380	3	60	260/325	494	235/294	446	170/213	323
	240/416	3	60	260/325	451	235/294	408	170/213	295
	277/480	3	60	260/325	391	235/294	353	170/213	256
	347/600	3	60	260/325	313	235/294	283	170/213	204

RATINGS: All three-phase units are rated at 0.8 power factor. *Standby Ratings:* The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. *Prime Power Ratings:* At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. For limited running time and continuous ratings, consult the factory. Obtain technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. For dual fuel engines, use the LP gas ratings for both the primary and secondary fuels.

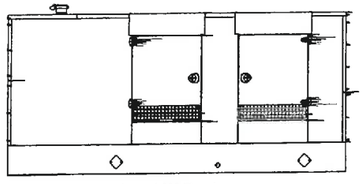
G4-189 (250REZXB) 7/15e

Industrial Generator Set Accessories

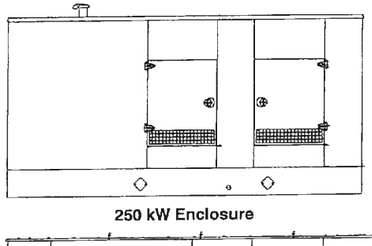
KOHLER. Power Systems

Weather and Sound Enclosures

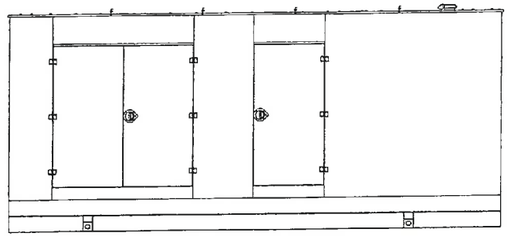
ISO 9001 KOHLER POWER SYSTEMS NATIONALLY REGISTERED



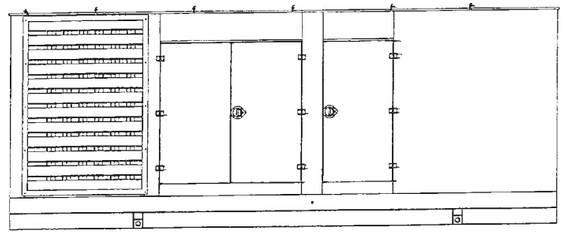
180/200 kW Enclosure



250 kW Enclosure



300/350 kW Enclosure



400 kW Enclosure

G6-109 3/16g

Applicable to the following:
180-400REZXB and 180-400RZXB

Weather Enclosure Features

- Internal-mounted critical silencer with rain cap and flexible exhaust connector.
- Skid-mounted, steel construction with hinged doors.
- Fade-, scratch-, and corrosion-resistant Kohler® Power Armor™ automotive-grade textured finish.
- Enclosure has four (180-250 kW) or six (300-400 kW) large access doors which allow for easy maintenance.
- Lockable, flush-mounted door latches.
- Vertical air inlet and outlet hoods with 90 degree angles to redirect air and reduce noise.
- High wind bracing, 241 kph (150 mph).
- Automatic door holders keep doors open during maintenance.

Sound Enclosure Features

- Includes all of the weather enclosure features with the addition of sound attenuation material.
- Skid-mounted, steel or aluminum construction with hinged doors. Aluminum enclosures are recommended for high humidity and/or high salt/coastal regions.
- Acoustic insulation that meets UL 94 HF1 flammability classification and repels moisture absorption.

Available Approvals and Listings

- ☐ UL 2200 Listing
- ☐ CSA Certified
- ☐ cUL Listing
- ☐ IBC Seismic Certification

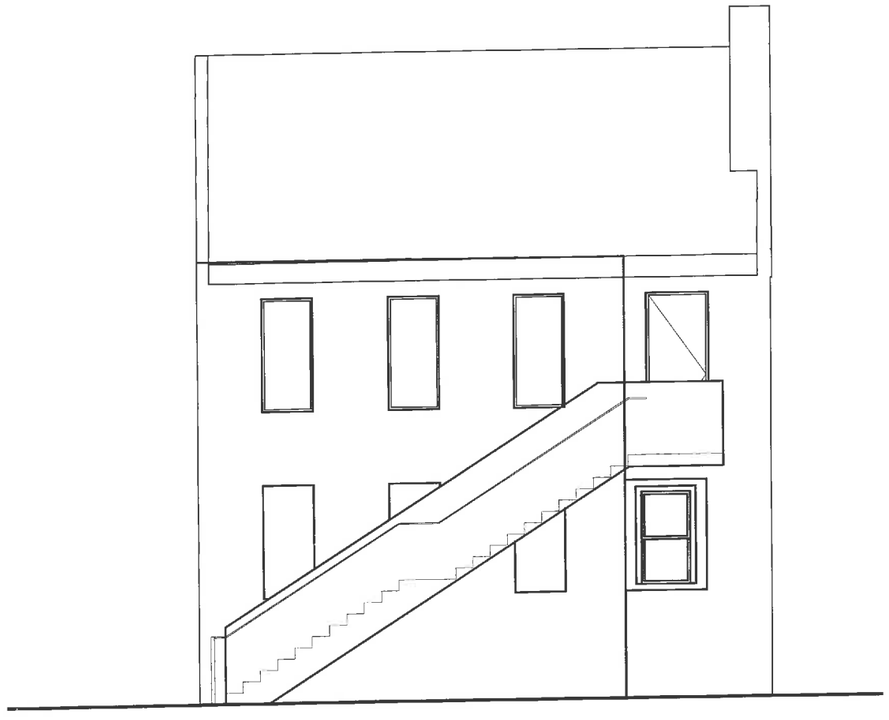
NOTE: Some models may have limited third-party approvals; see your local distributor for details.

el. 34'-4 1/2"
Roof 503 W. Main St (523.76' F.F. VIF)

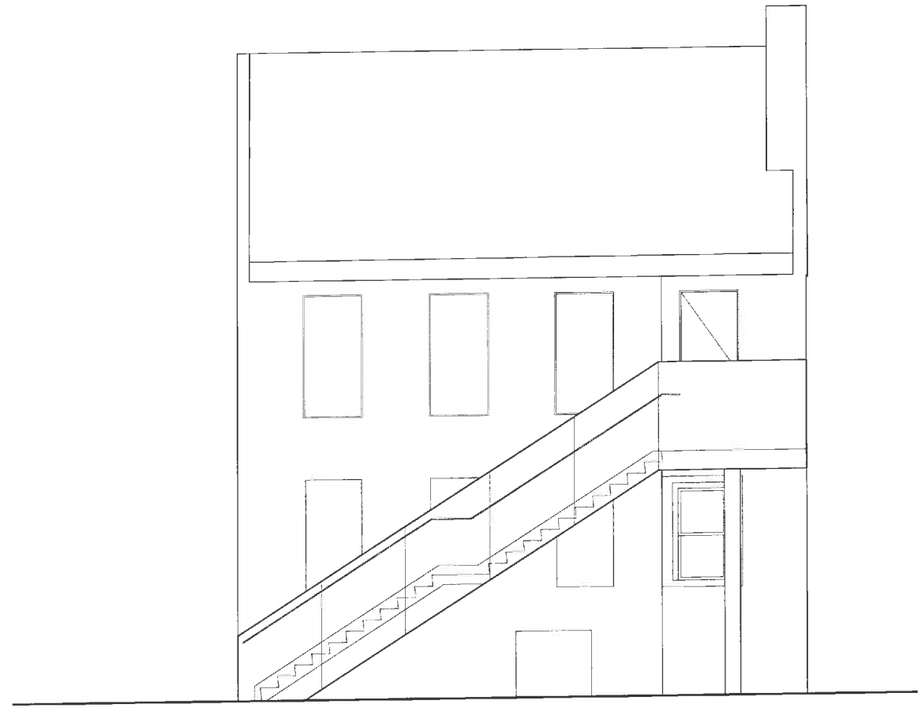
el. 23'-6"
3rd Level 503 W. Main St (513.05' F.F. VIF)

el. 12'-9 1/4"
2nd Level 503 W. Main St (502.32' F.F. VIF)

el. 2'-8"
1st Level 503 W. Main St. (492.22' F.F. VIF)



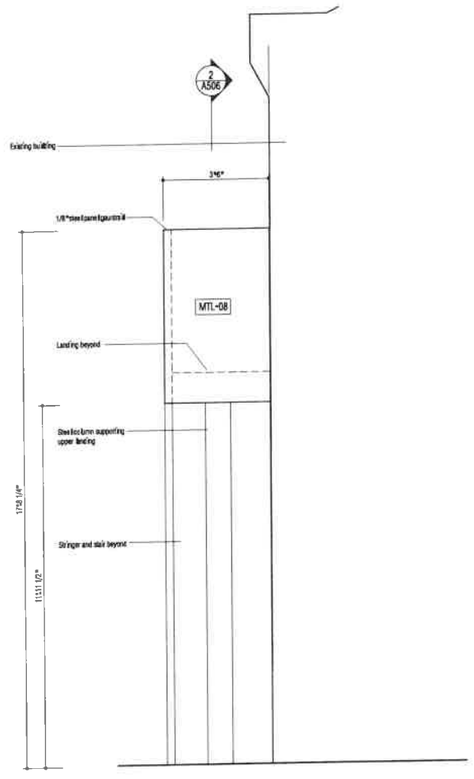
PREVIOUSLY APPROVED STAIR :
REQUIRED ADDITIONAL STEEL STRUCTURE
WITHIN EXISTING BUILDING



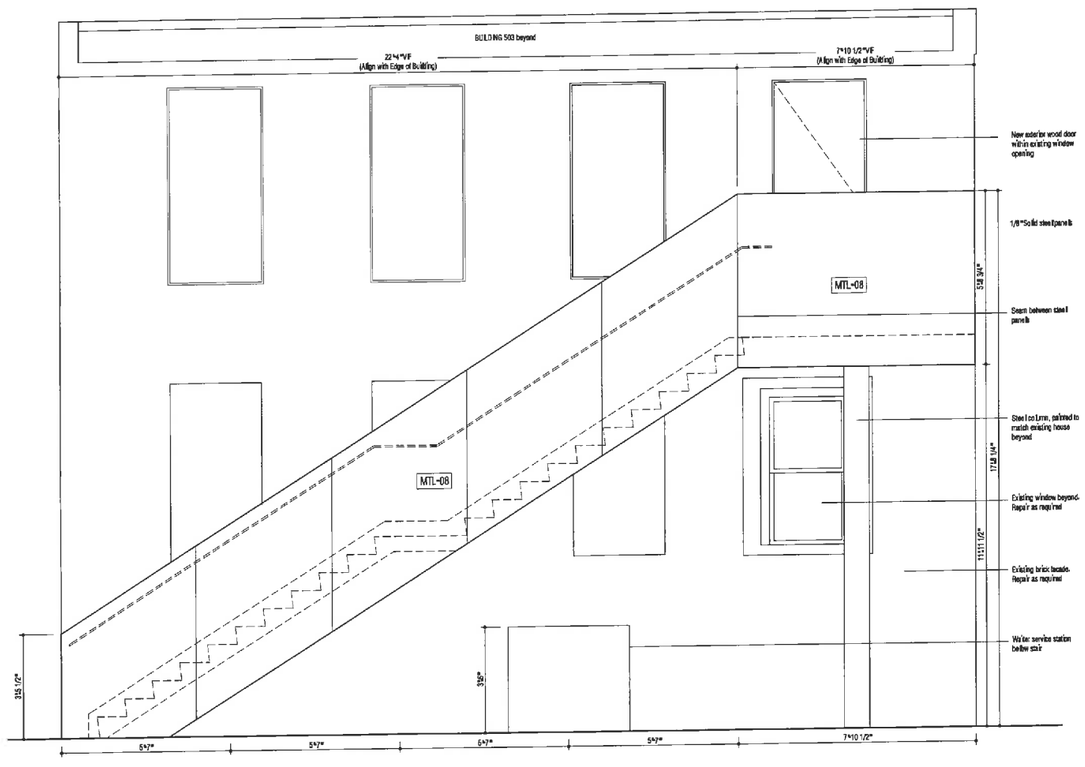
PROPOSED STAIR :
FREE-STANDING,
SUPPORTED BY A COLUMN

PROPOSED STAIR : PERSPECTIVE

5 West Elevation - Stair F
1/2"= 1'-0"

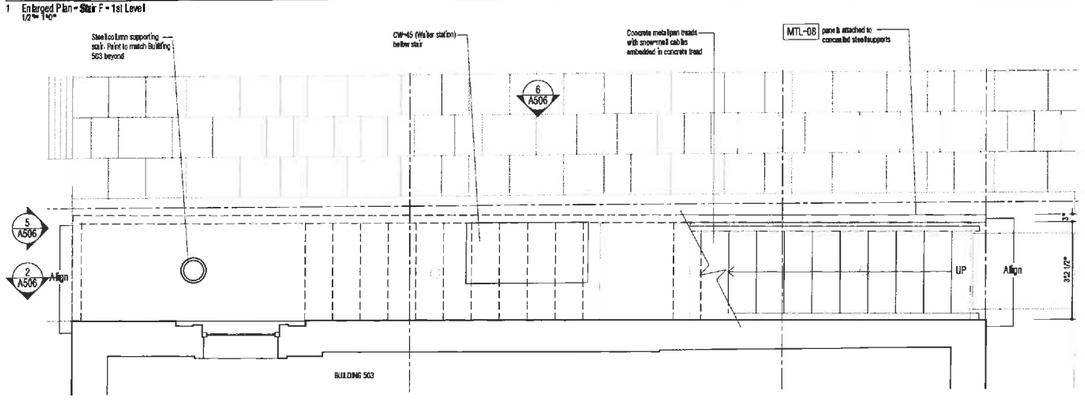


6 North Elevation - Stair F
1/2"= 1'-0"

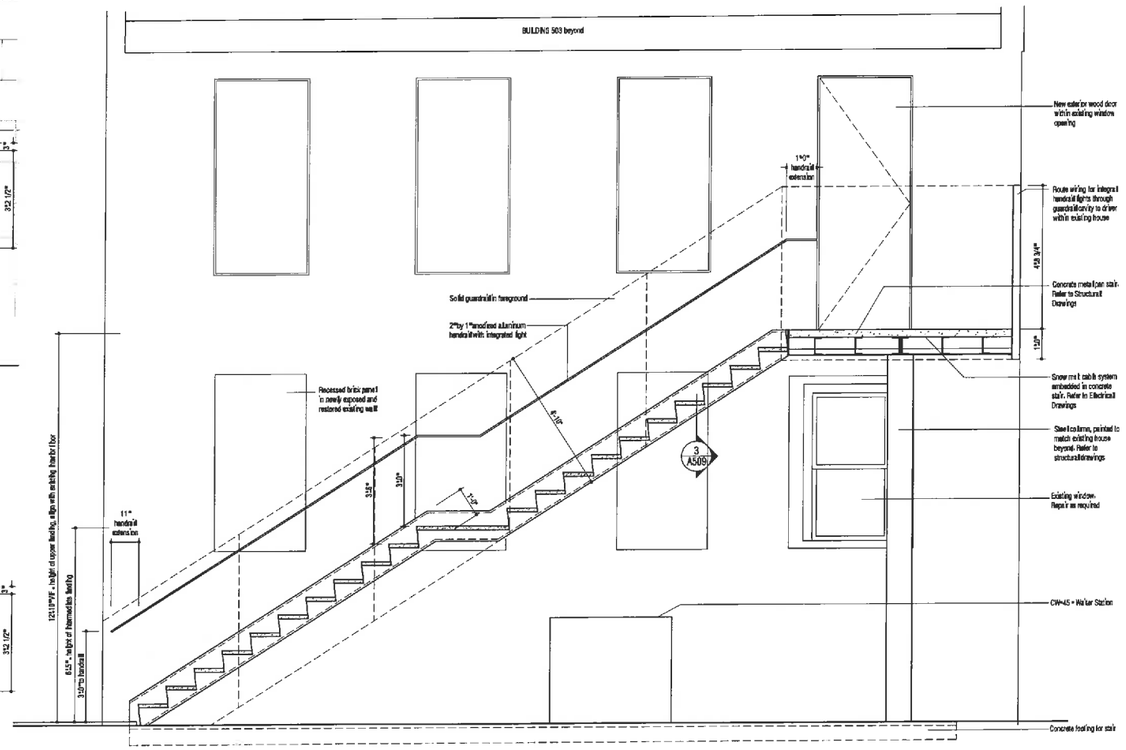


PROPOSED STAIR : ELEVATIONS

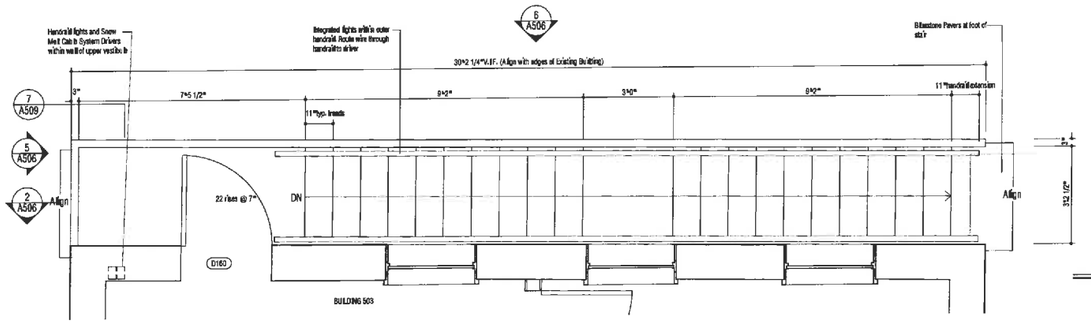
1 Enlarged Plan - Stair F - 1st Level
1/2" = 1'-0"



2 Section - Stair F
1/2" = 1'-0"



3 Enlarged Plan - Stair F - 2nd Level
1/2" = 1'-0"



PROPOSED STAIR : PLANS & SECTION

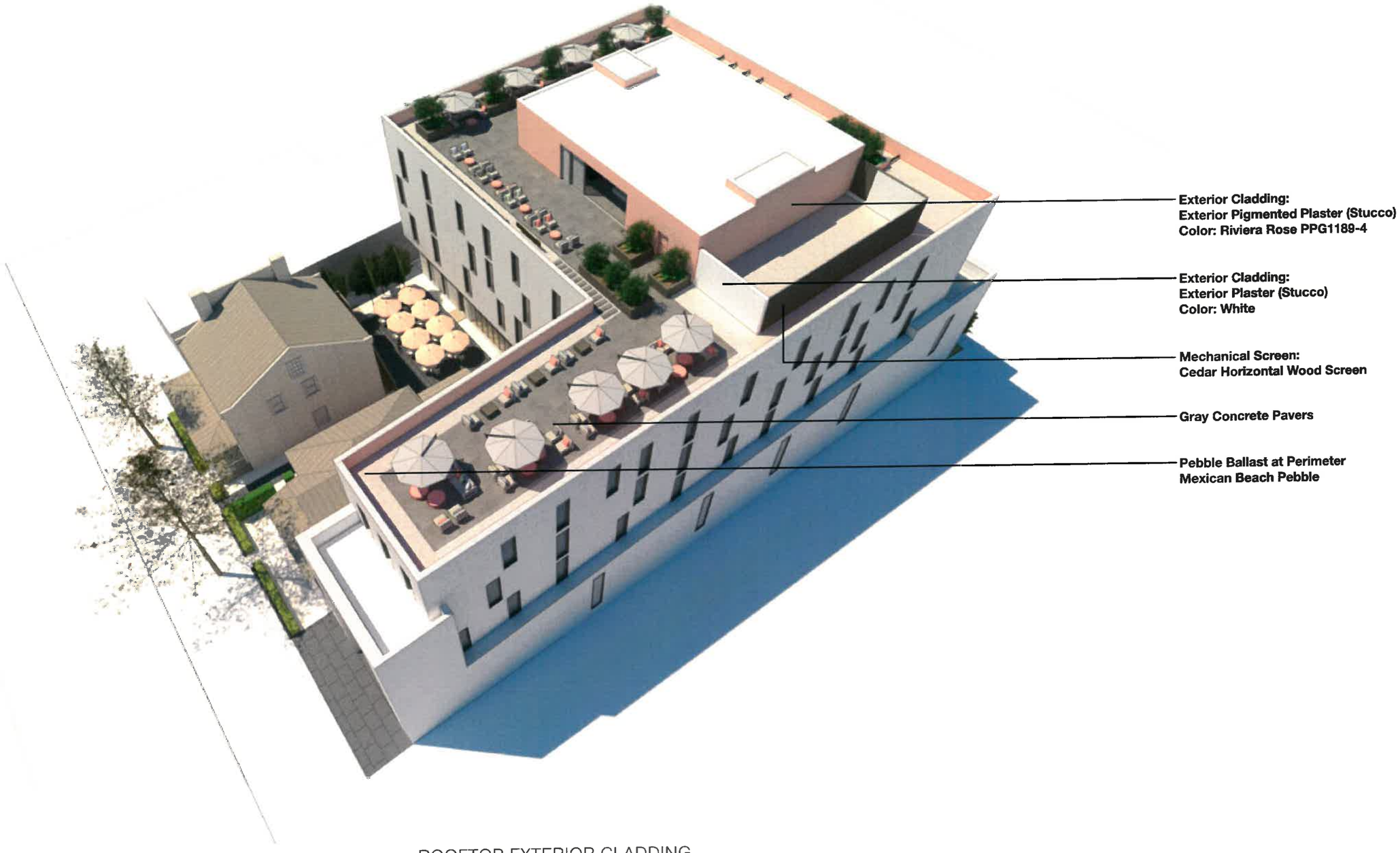
PAGE DELETED FROM PRESENTATION.
STAIR DETAILS ARE IN PROGRESS.

PAGE DELETED FROM PRESENTATION.
STAIR DETAILS ARE IN PROGRESS.

STAIR DETAILS

5th Floor Rooftop Exterior Material

RIVIERA ROSE PPG1189-4



ROOFTOP EXTERIOR CLADDING

RIVIERA ROSE PPG1189-4

ROOFTOP EXTERIOR CLADDING - VIEW FROM WEST MAIN STREET

ROOFTOP EXTERIOR CLADDING