

**ISSUE:** Certificate of Appropriateness for new construction

**APPLICANT:** Galena Capital Partners

**LOCATION:** Old and Historic Alexandria District  
116 South Henry Street

**ZONE:** CD/Commercial Downtown Zone

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**STAFF RECOMMENDATION**

Staff recommends approval of the Certificate of Appropriateness for new construction with the following conditions:

- The applicant work with staff to differentiate the commercial entrances from the residential entrance on the proposed building at 116 South Henry.
- The applicant work with staff to determine the final location of all wall penetrations and that they be located so that they do not span from one material to another.
- The applicant work with staff to consider alternate cladding materials to the proposed EIFS

Staff notes the recommendations of Alexandria Archaeology:

**Open Space and Landscaping**

- R-1 Hire a professional consultant to work with staff and the landscape designers to incorporate and interpret elements of the historical character and archaeological findings into the design of the open space and to prepare interpretive elements, which shall be erected as part of the development project. The site plan shall indicate themes and locations of interpretive elements. Prior to release of the final site plan, the consultant shall provide text and graphics for the signage subject to approval by the Office of Historic Alexandria/Alexandria Archaeology and the Directors of P&Z and/or RP&CA.\* (Arch)(P&Z)(RP&CA)

**Archaeology Comments**

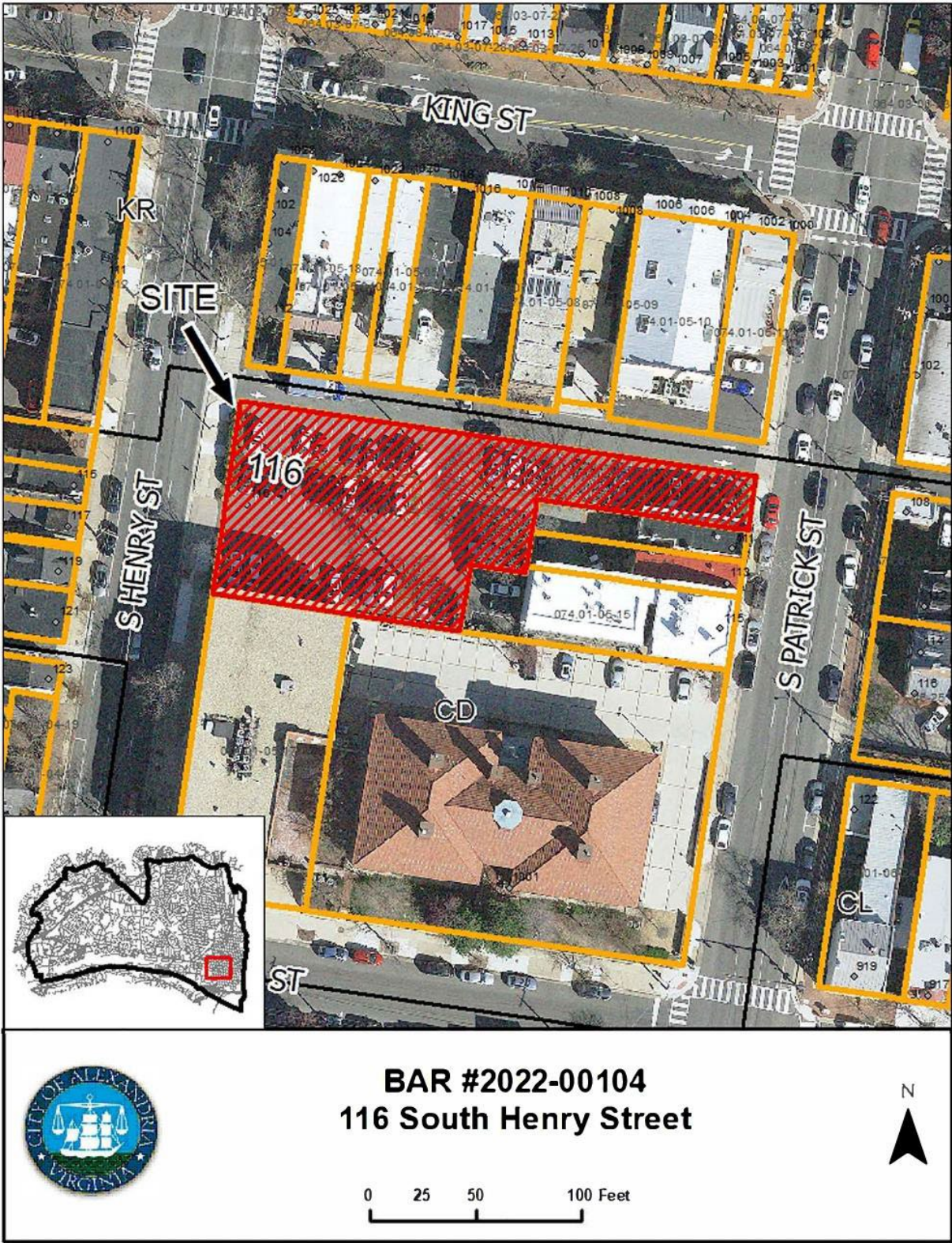
- R-1 Hire an archaeological consultant to complete a Documentary Study and an Archaeological Evaluation. If significant resources are discovered, the consultant shall complete a Resource Management Plan, as outlined in the City of Alexandria Archaeological Standards. Preservation measures presented in the Resource Management Plan, as approved by the City Archaeologist, will be implemented. (Archaeology)
- R-2 The Final Site Plan, Grading Plan, or any other permits involving ground disturbing activities (such as coring, grading, filling, vegetation removal, undergrounding utilities, pile driving, landscaping and other excavations as defined in Section 2-151 of the Zoning Ordinance) shall not be released until the City archaeologist confirms that all archaeological field work has been completed or that an approved Resource Management

Plan is in place to recover significant resources in concert with construction activities. \*  
(Archaeology)

- R-3 Call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds. The language noted above shall be included on all final site plan sheets involving any ground disturbing activities.  
(Archaeology)
- R-4 The applicant shall not allow any metal detection and/or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology. Failure to comply shall result in project delays. The language noted above shall be included on all final site plan sheets involving any ground disturbing activities. (Archaeology)
- R-5 Certificates of Occupancy shall not be issued for this property until interpretive elements have been constructed, interpretive markers have been erected, and the final archaeological report has been received and approved by the City Archaeologist.\*\*\*  
(Archaeology)

**GENERAL NOTES TO THE APPLICANT**

1. APPEAL OF DECISION: In accordance with the Zoning Ordinance, if the Board of Architectural Review denies or approves an application in whole or in part, the applicant or opponent may appeal the Board's decision to City Council on or before 14 days after the decision of the Board.
2. COMPLIANCE WITH BAR POLICIES: All materials must comply with the BAR's adopted policies unless otherwise specifically approved.
3. BUILDING PERMITS: Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Department of Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.
4. ISSUANCE OF CERTIFICATES OF APPROPRIATENESS AND PERMITS TO DEMOLISH: Applicants must obtain a copy of the Certificate of Appropriateness or Permit to Demolish PRIOR to applying for a building permit. Contact BAR Staff, Room 2100, City Hall, 703-746-3833, or [preservation@alexandriava.gov](mailto:preservation@alexandriava.gov) for further information.
5. EXPIRATION OF APPROVALS NOTE: In accordance with Sections 10-106(B), 10-206(B) and 10-307 of the Zoning Ordinance, any Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.
6. HISTORIC PROPERTY TAX CREDITS: Applicants performing extensive, certified rehabilitations of historic properties may separately be eligible for state and/or federal tax credits. Consult with the Virginia Department of Historic Resources (VDHR) prior to initiating any work to determine whether the proposed project may qualify for such credits.



## **UPDATE**

The Board first considered the proposed project at a BAR Concept Review on January 22, 2020, providing feedback regarding the height, mass, scale, and architectural character of the design (BAR2019-00557). On June 3, 2020 the Board reviewed refinements that the applicant had made in response to their comments at the previous Concept Review and unanimously endorsed the height, mass, scale, and architectural character of the project. The Board advised the applicant to move forward with a Certificate of Appropriateness.

DSUP 2019-00033, associated with the project, was approved by City Council on September 12, 2020, and the project returns to the BAR for a Certificate of Appropriateness. The following modifications/waivers were granted as part of the approved DSUP:

1. Increase the number of dwelling units per acre to not exceed 54.45
2. Exceed the maximum parking requirement
3. Reduction of the required loading dock space requirements
4. Modification to open space requirements
5. Modification to the setback requirements in the CD Zone
6. Modification to the crown coverage requirement

## **I. APPLICANT'S PROPOSAL**

The applicant proposes the construction of three separate buildings on this site: a two-unit townhouse condominium facing South Patrick Street, an automated parking structure on Downham Alley between South Patrick and South Henry streets, and a mixed-use four-story building on South Henry Street.

### **Certificate of Appropriateness**

Two-unit townhouse at 109 South Patrick, Figures 1 & 2: The primary elevation of the three-bay, four-story brick building will face South Patrick Street, with the fourth story recessed just over 16' from the third floor, providing a large roof terrace. The storefront window system for this roof terrace will have vertical and horizontal mullions. The north elevation reads as three separate masses, with different brick colors vertically defining each section. Brick cladding on both elevations will have horizontal accent course details in the same color. Also on both elevations, Nichiha fiber cement window spandrels provide detailing, while window headers and sills will be composed of TruExterior trim. The rear/west elevation will have entry doors on the first level, and one window on the south side of the second and third stories. Aluminum and glass window systems will comply with *Alexandria New and Replacement Window Performance Specifications in the Historic Districts*.





Figure 1: 109 South Patrick east elevation



Figure 2: 109 South Patrick north elevation

Parking structure on Downham Alley, Figure 3: The 50' tall, automated parking garage will face Downham Alley to the north. The west side of the building connects to 116 South Henry, and there is a gap between the east elevation and the building at 109 South Patrick. The lower levels of the garage will be clad in black brick and the levels above will be clad in EIFS/Dryvit synthetic stucco. The Dryvit will be scored to avoid any potential monolithic appearance. Entries on the first level will consist of two overhead rolling garage doors, an aluminum and glass storefront door system, and two pedestrian doors. Large backlit letters spelling "PARKING" will be at the west end of the north elevation, above the entrances. The west elevation will have exterior stairs running along the side, with doors at the northernmost end. The rooftop will be a green roof with mechanical equipment located to minimize visibility from the street.



Figure 3: Parking structure on Downham Alley

Mixed-use building at 116 South Henry, Figures 4 & 5: This four-story 50' tall building will face South Henry Street, with different brick colors visually dividing it into three vertical masses. The first level will provide retail services while the upper floors will be residential. The fourth floor is slightly recessed from the third floor by just over 5' and its exterior envelope will consist of a storefront window system with vertical and horizontal mullions. The rooftop will include a roof deck, two penthouse stair enclosures, and screened mechanical equipment. Like the building facing South Patrick Street, fiber cement window spandrels provide detailing, while window headers and sills will be composed of TruExterior trim, and brick cladding will have horizontal accent course details in the same color. The windows will comply with *Alexandria New and Replacement Window Performance Specifications in the Historic Districts*. The property will have access to a small paved outdoor area situated on the south elevation of the garage.



Figure 4: 116 South Henry W elevation



Figure 5: 116 South Henry north elevation

## Site context

The project site consists of a single parcel of land currently owned by the City and used as a surface public parking lot. It fronts South Henry and South Patrick Streets, and the public Downham Alley to the north. Across the alley to the north are the rear elevations of commercial buildings in the 1000 block of King Street. At the southern boundary of the parcel lie the two buildings associated with the Virginia Tech Washington Alexandria Architecture Center. The southeast corner of the block adjacent to the site along South Patrick Street consists of three attached historic townhouses of various styles. The subject parcel encompasses 15,322 square feet and is presently improved with 48 paved parking spaces, a parking attendant hut, and a multi-space parking meter.

## II. HISTORY

Frame dwellings stood on this parcel along South Henry and South Patrick streets beginning around 1890. By 1931, the buildings had two parking areas behind them, each holding four cars in

the center of the site. These buildings served residential purposes until the 1950s, when the two included commercial uses. By the mid-1970s buildings on the site were in poor condition.

The City purchased several properties on South Henry and South Patrick streets in 1974 to create a Central Business District parking lot for 44 vehicles (SIT74-00027). In October of 2007, the Mayor's Economic Sustainability Work Group made several recommendations regarding the City's economic vision and future. The Work Group recommended that the City sell, lease, or otherwise dispose of properties that it determines are not needed, based on the highest and best economic use for the City. In 2008, City Council approved four parcels for immediate disposition, including 116 South Henry Street. On April 3, 2017, the City issued a Request for Proposals (RFP) for the disposition, sale, and redevelopment of the City-owned surplus property at 912, 916, 920 King Street, and 116 S. Henry Street. The RFP closed on July 24, 2017. The City ranked the Galena Capital Partners' proposal as the highest and best offer.

### *Previous BAR Approvals*

BAR2012-00282      8/17/12      Administrative approval for wayfinding parking signage

### **III. ANALYSIS**

As noted above, the Board unanimously endorsed the height, mass, scale, and architectural character of the project at the June 3, 2020 Concept Review and advised the applicant to move forward with the Certificate of Appropriateness. Staff finds that the applicant's proposed scheme responds to comments made during the concept review phase, as outlined below:

*Brick color:* The Board was not satisfied with the brick color scheme on the South Henry Street building, which proposed, north to south: dark grey/black, blue, tan. The new proposal replaces the blue brick with a more traditional red brick.

*Alley safety:* The Board expressed concern about pedestrian safety in the alley, as the applicant intends to widen the alley to allow for both pedestrian use and two-way vehicle traffic. The applicant therefore incorporated a brick-paved sidewalk, following City standards, along the south side of the alley.

*EIFS:* The Board suggested that the applicant consider a higher quality material than EIFS. On the residential and multi-use buildings, the applicant replaced the previously proposed EIFS detailing with fiber cement. While the current application still proposes EIFS for the garage, the applicant has made subtle changes to lessen its visibility. The first level of the garage will be a black brick instead of gray and will therefore better blend into and obscure the black EIFS cladding on the second level. This also locates the more fragile EIFS material at a distance from pedestrian and vehicular traffic. The lighter color EIFS on levels three and above will be scored more prominently to break up the mass. Recessing the first from the second level and the second level from the third of the garage further reduces the view of the EIFS from the pedestrian. While these design changes reduce the amount and impact of the EIFS on the project, staff and the Board have asked that the applicant consider alternative materials for use on the parking garage.

### Certificate of Appropriateness

Within the historic districts, the Board utilizes the *Design Guidelines* to determine if a potential new building would be compatible with nearby buildings of historic merit. The Guidelines do not mandate the use of historic styles for new construction. Additionally, the *Design Guidelines* also note that “new and untried approaches to common design problems are encouraged and should not be rejected out of hand simply because they appear to be outside the common practices outlined in the guidelines.” This section of North Patrick and North Henry streets was not added to the historic district until the mid-1980s and it therefore features a wide range of architectural styles and building sizes and types, from large commercial office buildings to small historic townhouses. Staff finds the proposed new construction to be generally in keeping with the scale and transitional character of this diverse commercial section of the historic district.

Two-unit townhouse at 109 South Patrick: Staff finds that the building will fit well into the surrounding community. As seen in Figure 1, the building two doors south at 113 South Patrick is very modern, with a sort of metal mesh screen and modern brick detailing on the front elevation. 115 South Patrick and 111 South Patrick are more traditionally designed but with creative paint detailing that gives them an updated look. While Figure 1 appears to indicate that the building will tower over its adjacent neighbors on South Patrick Street, Figure 6 better depicts how the recessed fourth story will not overwhelm the adjacent buildings. As required by Zoning Ordinance regulations for the CD zone, Section 9-4-506(2)(A), the front plane of the building is at the lot line. The proposed design for 109 South Patrick clearly differentiates the building from the older buildings on the block by providing compatibility without resorting to inserting faux historic design elements to the exterior.



Figure 6: Northeast corner of 109 South Patrick

Parking structure on Downham Alley: The location of this automated garage in the middle of the block between South Patrick and South Henry streets precludes any sort of jarring contrast between its modern design and older/historic buildings nearby. While visible from the two major arteries, the building does not disrupt a historic blockface. The large “PARKING” sign will be visible from South Henry Street, so drivers can easily locate the garage without disrupting traffic. The plain and simple design is appropriate for this commercial building and clearly signifies its use. While



staff appreciates the modifications to the design to reduce the amount and visibility of the EIFS proposed on the parking garage, staff recommends that the applicant work with staff to consider alternate cladding materials.

Mixed-use building at 116 South Henry: Like the residential building at 109 South Patrick, this building will not be mistaken for an older building, yet it fits well into the streetscape. The building adjacent to the south, Figure 7, is neither historic nor architecturally significant and will not be negatively affected by the proposed design. The recessed fourth level, just over 5' deep, and its storefront glass system moderate the visual impact of the height, especially as seen from ground level. Rooftop mechanical elements and stair enclosures will be screened and placed at the rear of the rooftop, adjacent to the proposed garage, and will therefore be minimally visible from the street. At street level, two entries will have a canopy over the door with signage on the outside edge of the canopy announcing the business or residence. Each sign will consist of 6" deep 1' high metal channel letters. Plans indicate that the building will have a residential lobby entrance and four retail entrances, yet the elevation does not differentiate between residential and commercial. Staff therefore recommends that the applicant work with staff to clearly define the commercial entrances from the residential entrance.



Figure 7: 1021 Prince, adjacent to south elevation of 116 South Henry

With the condition that the applicant work with staff to differentiate the commercial entrances from the residential entrance at 116 South Henry and that the applicant work with staff to consider alternate cladding materials to the proposed EIFS, staff recommends approval of the project. Staff notes the recommendations of Alexandria Archaeology.

#### **STAFF**

Susan Hellman, Historic Preservation Planner, Planning & Zoning

Tony LaColla, AICP, Land Use Services Division Chief, Planning & Zoning

#### **IV. CITY DEPARTMENT COMMENTS**

Legend: C- code requirement R- recommendation S- suggestion F- finding

##### **Development**

F-1 Consistent with DSUP2019-00033

##### **Code Administration**

C-1 A building permit and plan review are required prior to the start of construction.

##### **Transportation and Environmental Services**

F-1 Previously reviewed under BAR2019-00557 (T&ES)

##### **Comments:**

1. Comply with all requirements of DSP2019-00033 (T&ES)
2. The Final Site Plan must be approved and released and a copy of that plan must be attached to the demolition permit application. No demolition permit will be issued in advance of the building permit unless the Final Site Plan includes a demolition plan which clearly represents the demolished condition. (T&ES)

##### **Alexandria Archaeology**

F-1 This section of upper King St. experienced development in the early nineteenth century. For example, as detailed in the 1810 tax assessor's list there were eight standing houses on the street face. Moreover, Levin Moreland and James Nutt lived on the street face in the vicinity of 116 S. Henry St. in 1810. Both lots likely contain significant archaeological evidence of the development of late eighteenth- and nineteenth-century Alexandria, especially considering that most of the two lots are paved which suggests modern impacts to the archaeological resources could be minimal.

F-2 All required archaeological preservation measures shall be completed in compliance with Section 11-411 of the Zoning Ordinance.

##### **Open Space and Landscaping**

R-1 Hire a professional consultant to work with staff and the landscape designers to incorporate and interpret elements of the historical character and archaeological findings into the design of the open space and to prepare interpretive elements, which shall be erected as part of the development project. The site plan shall indicate themes and locations of interpretive elements. Prior to release of the final site plan, the consultant shall provide text and graphics for the signage subject to approval by the Office of Historic Alexandria/Alexandria Archaeology and the Directors of P&Z and/or RP&CA.\* (Arch)(P&Z)(RP&CA)

##### **Archaeology Comments**

R-1 Hire an archaeological consultant to complete a Documentary Study and an Archaeological Evaluation. If significant resources are discovered, the consultant shall

complete a Resource Management Plan, as outlined in the City of Alexandria Archaeological Standards. Preservation measures presented in the Resource Management Plan, as approved by the City Archaeologist, will be implemented. (Archaeology)

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- R-3 Call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds. The language noted above shall be included on all final site plan sheets involving any ground disturbing activities. (Archaeology)
- R-4 The applicant shall not allow any metal detection and/or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology. Failure to comply shall result in project delays. The language noted above shall be included on all final site plan sheets involving any ground disturbing activities. (Archaeology)
- R-5 Certificates of Occupancy shall not be issued for this property until interpretive elements have been constructed, interpretive markers have been erected, and the final archaeological report has been received and approved by the City Archaeologist.\*\*\* (Archaeology)

**V. ATTACHMENTS**

- 1 – Application Materials*  
*2 – Supplemental Materials*

ADDRESS OF PROJECT: 116 S. Henry Street

DISTRICT: ☐ Old & Historic Alexandria ☐ Parker – Gray ☐ 100 Year Old Building

TAX MAP AND PARCEL: 074.01-5-12

ZONING: CD

APPLICATION FOR: (Please check all that apply)

☒ CERTIFICATE OF APPROPRIATENESS☐ PERMIT TO MOVE, REMOVE, ENCAPSULATE OR DEMOLISH  
(Required if more than 25 square feet of a structure is to be demolished/impacted)☐ WAIVER OF VISION CLEARANCE REQUIREMENT and/or YARD REQUIREMENTS IN A VISION  
CLEARANCE AREA (Section 7-802, Alexandria 1992 Zoning Ordinance)☐ WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT  
(Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)Applicant: ☒ Property Owner ☐ Business (Please provide business name & contact person)

Name: Galena Capital Partners

Address: 1010 Pendleton St.

City: Alexandria State: VA Zip: 22314

Phone: (703) 898-9236 E-mail: oab@galenacap.com

Authorized Agent (if applicable): ☐ Attorney ☒ Architect ☐ \_\_\_\_\_

Name: Winstanley Architects &amp; Planners

Phone: (703) 519-8081

E-mail: ljh@winstanleyarchitects.com

Legal Property Owner:

Name: City of Alexandria

Address: 301 King Street

City: Alexandria State: VA Zip: 22314

Phone: (703) 746-3834 E-mail: catherine.miliaras@alexandriava.gov

- ☐ Yes ☒ No Is there an historic preservation easement on this property?
- ☐ Yes ☐ No If yes, has the easement holder agreed to the proposed alterations?
- ☐ Yes ☒ No Is there a homeowner's association for this property?
- ☐ Yes ☐ No If yes, has the homeowner's association approved the proposed alterations?

If you answered yes to any of the above, please attach a copy of the letter approving the project.



**NATURE OF PROPOSED WORK:** *Please check all that apply*

- ☒ NEW CONSTRUCTION  
☐ EXTERIOR ALTERATION: *Please check all that apply.*  
     ☐ awning                      ☐ fence, gate or garden wall    ☐ HVAC equipment                      ☐ shutters  
     ☐ doors                              ☐ windows                              ☐ siding                              ☐ shed  
     ☐ lighting                              ☐ pergola/trellis                      ☐ painting unpainted masonry  
     ☐ other \_\_\_\_\_  
☐ ADDITION  
☐ DEMOLITION/ENCAPSULATION  
☒ SIGNAGE

**DESCRIPTION OF PROPOSED WORK:** *Please describe the proposed work in detail (Additional pages may be attached).*

This site front two streets - S. Henry & S. Patrick with the majority of the development elevation facing a public alley. The development consists of three separate buildings: a townhouse condo with 2 units facing S. Patrick, an automated parking structure that will provide spaces for the new developments on this site, across the street on 912-920 King in addition to the public, and lastly a mix used 4 story building on S. Henry with retail at the street level and residential above. The S. Henry building includes flexible live/work spaces (x2) at the ground floor. To address the length of the site, the massing is broken down further with vertical expressions on the exterior and strategic setback at the upper floors of the S. Henry & S. Patrick street frontage.

**SUBMITTAL REQUIREMENTS:**

Items listed below comprise the **minimum supporting materials** for BAR applications. Staff may request additional information during application review. Please refer to the relevant section of the *Design Guidelines* for further information on appropriate treatments.

Applicants must use the checklist below to ensure the application is complete. Include all information and material that are necessary to thoroughly describe the project. Incomplete applications will delay the docketing of the application for review. Pre-application meetings are required for all proposed additions. All applicants are encouraged to meet with staff prior to submission of a completed application.

**Demolition/Encapsulation :** *All applicants requesting 25 square feet or more of demolition/encapsulation must complete this section. Check N/A if an item in this section does not apply to your project.*

- N/A
- ☐ ☒ Survey plat showing the extent of the proposed demolition/encapsulation.  
☐ ☒ Existing elevation drawings clearly showing all elements proposed for demolition/encapsulation.  
☐ ☒ Clear and labeled photographs of all elevations of the building if the entire structure is proposed to be demolished.  
☐ ☒ Description of the reason for demolition/encapsulation.  
☐ ☒ Description of the alternatives to demolition/encapsulation and why such alternatives are not considered feasible.

**Additions & New Construction:** Drawings must be to scale and should not exceed 11" x 17" unless approved by staff. Check N/A if an item in this section does not apply to your project.

- ☒ ☐ N/A Scaled survey plat showing dimensions of lot and location of existing building and other structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment.
- ☒ ☐ FAR & Open Space calculation form.
- ☒ ☐ Clear and labeled photographs of the site, surrounding properties and existing structures, if applicable.
- ☒ ☐ Existing elevations must be scaled and include dimensions.
- ☒ ☐ Proposed elevations must be scaled and include dimensions. Include the relationship to adjacent structures in plan and elevations.
- ☒ ☐ Materials and colors to be used must be specified and delineated on the drawings. Actual samples may be provided or required.
- ☒ ☐ Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- ☒ ☐ For development site plan projects, a model showing mass relationships to adjacent properties and structures.

**Signs & Awnings:** One sign per building under one square foot does not require BAR approval unless illuminated. All other signs including window signs require BAR approval. Check N/A if an item in this section does not apply to your project.

- ☒ ☐ N/A Linear feet of building: Front: 21' Secondary front (if corner lot): 36.5' (alley side).
- ☐ ☒ Square feet of existing signs to remain: \_\_\_\_\_.
- ☐ ☒ Photograph of building showing existing conditions.
- ☒ ☐ Dimensioned drawings of proposed sign identifying materials, color, lettering style and text.
- ☒ ☐ Location of sign (show exact location on building including the height above sidewalk).
- ☒ ☐ Means of attachment (drawing or manufacturer's cut sheet of bracket if applicable).
- ☒ ☐ Description of lighting (if applicable). Include manufacturer's cut sheet for any new lighting fixtures and information detailing how it will be attached to the building's facade.

**Alterations:** Check N/A if an item in this section does not apply to your project.

- ☐ ☒ N/A Clear and labeled photographs of the site, especially the area being impacted by the alterations, all sides of the building and any pertinent details.
- ☐ ☒ Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- ☐ ☒ Drawings accurately representing the changes to the proposed structure, including materials and overall dimensions. Drawings must be to scale.
- ☐ ☒ An official survey plat showing the proposed locations of HVAC units, fences, and sheds.
- ☐ ☒ Historic elevations or photographs should accompany any request to return a structure to an earlier appearance.

**ALL APPLICATIONS:** *Please read and check that you have read and understand the following items:*

- ☒ I have submitted a filing fee with this application. (Checks should be made payable to the City of Alexandria. Please contact staff for assistance in determining the appropriate fee.)
- ☒ I understand the notice requirements and will return a copy of the three respective notice forms to BAR staff at least five days prior to the hearing. If I am unsure to whom I should send notice I will contact Planning and Zoning staff for assistance in identifying adjacent parcels.
- ☒ I, the applicant, or an authorized representative will be present at the public hearing.
- ☒ I understand that any revisions to this initial application submission (including applications deferred for restudy) must be accompanied by the BAR Supplemental form and revised materials.

The undersigned hereby attests that all of the information herein provided including the site plan, building elevations, prospective drawings of the project, and written descriptive information are true, correct and accurate. The undersigned further understands that, should such information be found incorrect, any action taken by the Board based on such information may be invalidated. The undersigned also hereby grants the City of Alexandria permission to post placard notice as required by Article XI, Division A, Section 11-301(B) of the 1992 Alexandria City Zoning Ordinance, on the property which is the subject of this application. The undersigned also hereby authorizes the City staff and members of the BAR to inspect this site as necessary in the course of research and evaluating the application. The applicant, if other than the property owner, also attests that he/she has obtained permission from the property owner to make this application.

**APPLICANT OR AUTHORIZED AGENT:**

Signature: LEEJUNG HONG

Printed Name: LEEJUNG HONG

Date: 03/07/2022

## OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

**1. Applicant.** State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. Omar Abdul-Baki	1010 Pendelton Street Alexandria VA 22314	xxx%
2. Ahmad Abdul-Baki	1010 Pendelton Street Alexandria VA 22314	xxx%
3.		

**2. Property.** State the name, address and percent of ownership of any person or entity owning an interest in the property located at 109 S.Patrick St. & 116 S.Henry St. (address), unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. City of Alexandria	301 King Street Alexandria VA 22314	100%
2.		
3.		

**3. Business or Financial Relationships.** Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose **any** business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the 12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1. Omar Abdul-Baki	None	None
2. Ahmad Abdul-Baki	None	None
3. City of Alexandria		

**NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.**

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

_____ Date	LEEJUNG HONG _____ Printed Name	LEEJUNG HONG _____ Signature
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# Department of Planning and Zoning

## Floor Area Ratio and Open Space Calculations

**B**

### A. Property Information

A1. 116 S. Henry Street and 109 S. Patrick Street CD  
 Street Address ~~R-20~~  
 Zone

A2. 15,332.00 x 2.50 = 38,330.00  
 Total Lot Area Floor Area Ratio Allowed by Zone Maximum Allowable Floor Area

### B. Existing Gross Floor Area

<u>Existing Gross Area</u>		<u>Allowable Exclusions**</u>		
Basement		Basement**		B1. 0.00 Sq. Ft.
First Floor		Stairways**		Existing Gross Floor Area*
Second Floor		Mechanical**		B2. 0.00 Sq. Ft.
Third Floor		Attic less than 7***		Allowable Floor Exclusions**
Attic		Porches**		B3. 0.00 Sq. Ft.
Porches		Balcony/Deck**		Existing Floor Area Minus Exclusions
Balcony/Deck		Lavatory***		(subtract B2 from B1)
Lavatory***		Other**		Comments for Existing Gross Floor Area
Other**		Other**		
B1. <u>Total Gross</u>		B2. <u>Total Exclusions</u>		

### C. Proposed Gross Floor Area

<u>Proposed Gross Area</u>		<u>Allowable Exclusions**</u>		
Basement	1,328.00	Basement**	1,328.00	C1. 67,849.00 Sq. Ft.
First Floor	13,591.00	Stairways**	14,773.00	Proposed Gross Floor Area*
Second Floor	13,269.00	Mechanical**	654.00	C2. 43,871.00 Sq. Ft.
Third Floor	13,269.00	Attic less than 7***		Allowable Floor Exclusions**
Attic	12,311.00	Porches**		C3. 23,978.00 Sq. Ft.
Porches	6,771.00	Balcony/Deck**		Proposed Floor Area Minus Exclusions
Balcony/Deck	6,771.00	Lavatory***	1,516.00	(subtract C2 from C1)
Lavatory***		Other**	25,241.00	
Other**	539.00	Other**	359.00	
C1. <u>Total Gross</u>	67,849.00	C2. <u>Total Exclusions</u>	43,871.00	

### D. Total Floor Area

D1. 23,978.00 Sq. Ft.  
 Total Floor Area (add B3 and C3)

D2. 38,330.00 Sq. Ft.  
 Total Floor Area Allowed by Zone (A2)

### E. Open Space (RA & RB Zones)

E1. Existing Open Space

E2. 6,132.00 Sq. Ft.  
 Required Open Space

E3. 3,103.00 Sq. Ft.  
 Proposed Open Space

### Notes

\*Gross floor area is the sum of all areas under roof of a lot, measured from the face of exterior walls, including basements, garages, sheds, gazebos, guest buildings and other accessory buildings.

\*\* Refer to the Zoning Ordinance (Section 2-145(B)) and consult with Zoning Staff for information regarding allowable exclusions. Sections may also be required for some exclusions.

\*\*\*Lavatories may be excluded up to a maximum of 50 square feet, per lavatory. The maximum total of excludable area for lavatories shall be no greater than 10% of gross floor area.

The undersigned hereby certifies and attests that, to the best of his/her knowledge, the above computations are true and correct.

Signature: \_\_\_\_\_

*[Handwritten Signature]*

Date: \_\_\_\_\_

03/07/2022

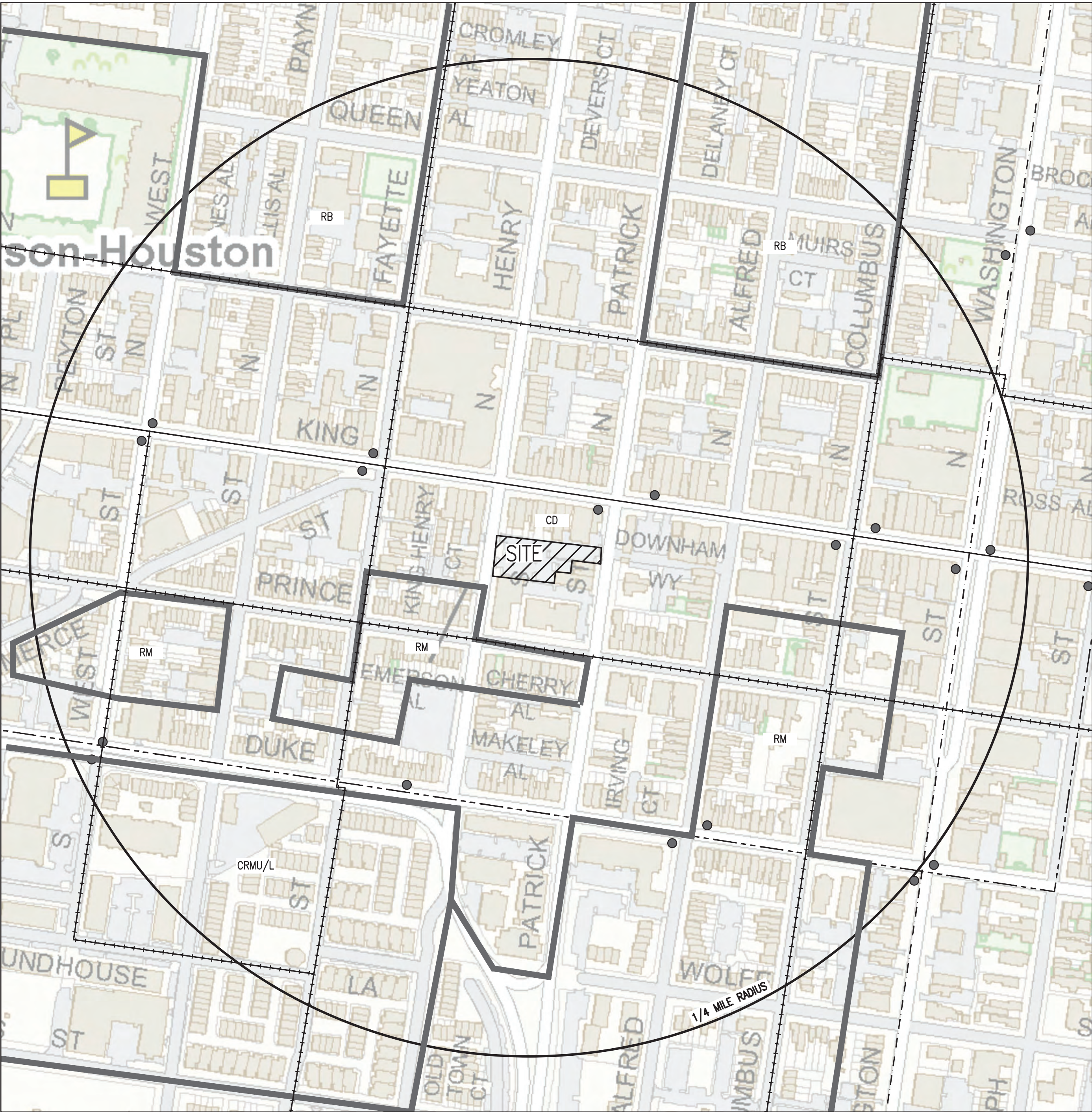
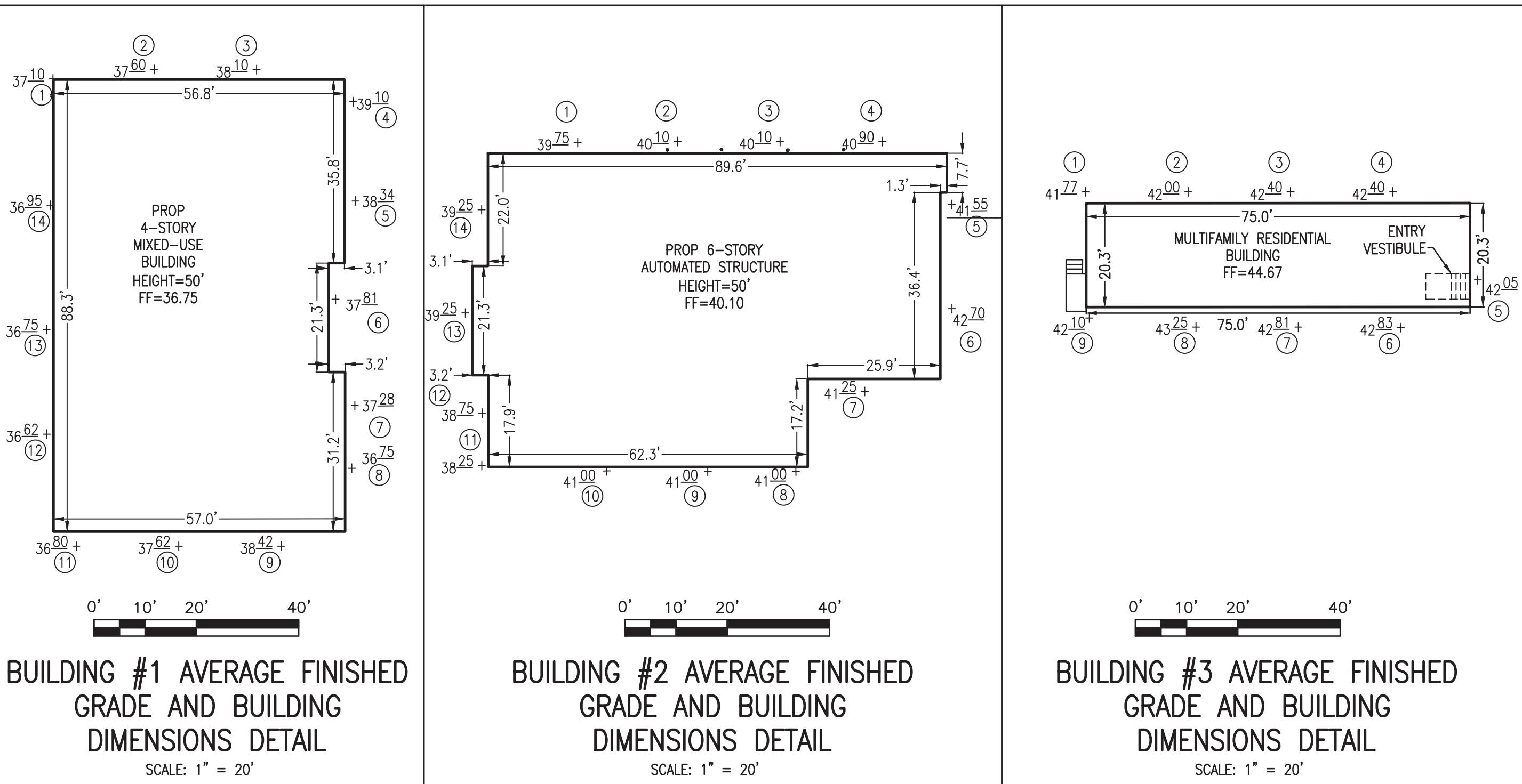
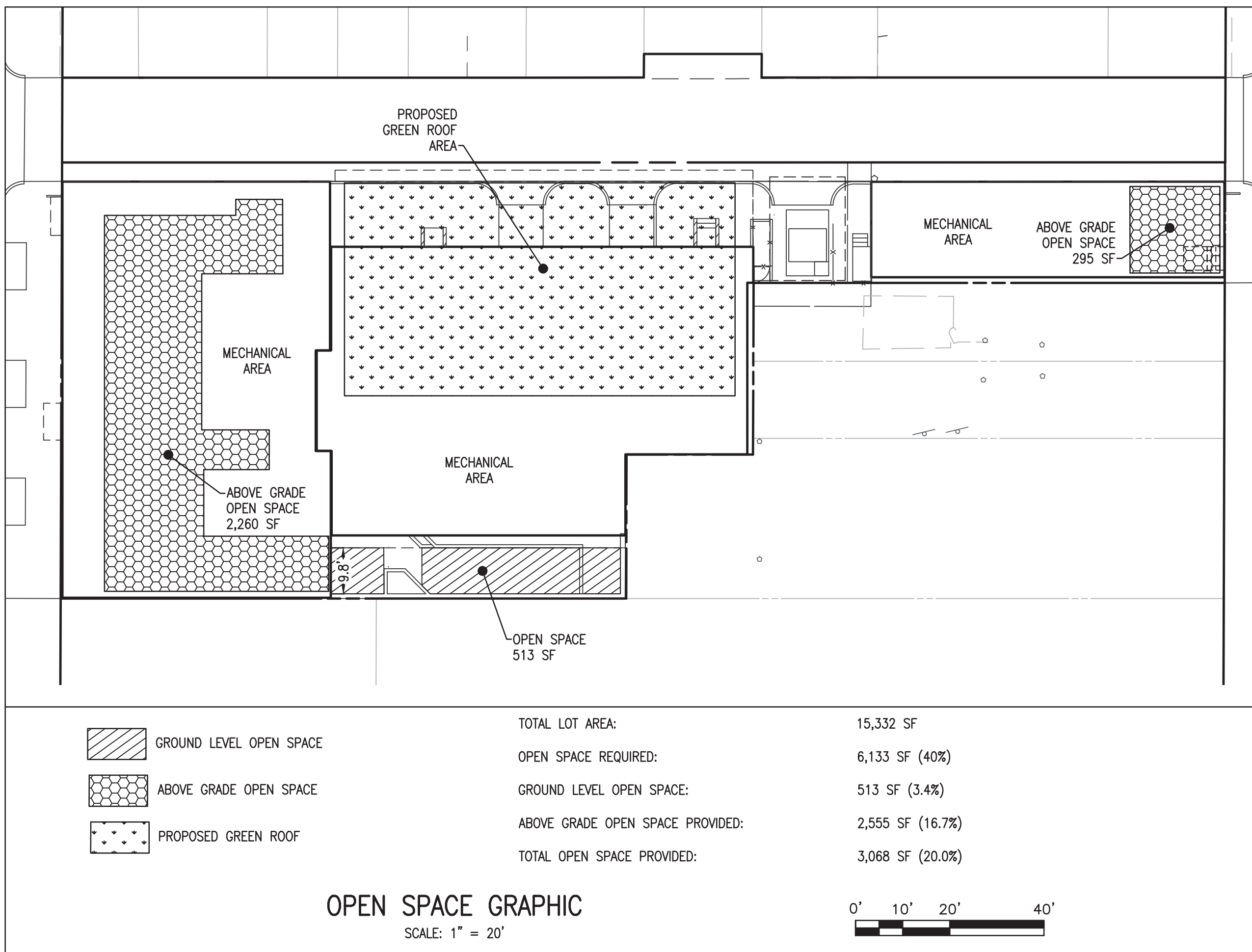
1 1 6 S. HENRY STREET

ALEXANDRIA, VA

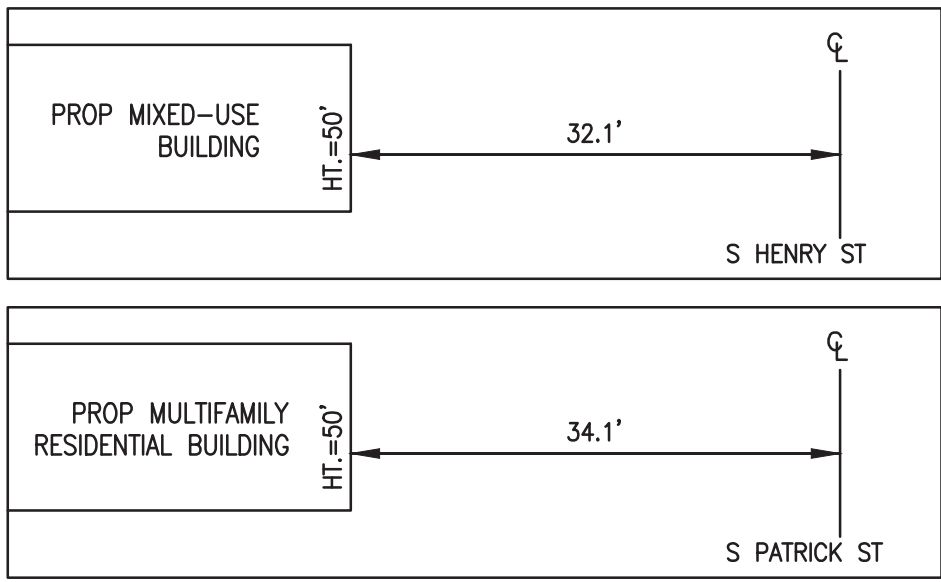
WINSTANLEY  
ARCHITECTS & PLANNERS

MARCH 07, 2022 - BAR CERTIFICATE OF  
APPROPRIATENESS





SECTION 6-403 DETAILS:



SECTION 6-403 COMPLIANCE NOTE:

SECTION 6-403 STATES "IN ALL HEIGHT DISTRICTS, THE ALLOWABLE HEIGHT OF A BUILDING AT ANY POINT SHALL NOT EXCEED TWICE THE DISTANCE FROM THE FACE OF THE BUILDING AT THAT POINT TO THE CENTERLINE OF THE STREET FACING SUCH BUILDING." SEE DETAILS BELOW FOR SECTION SHOWING COMPLIANCE.

APPROVED

SPECIAL USE PERMIT NO. 2019-0033

DEPARTMENT OF PLANNING & ZONING

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

CHAIRMAN, PLANNING COMMISSION \_\_\_\_\_ DATE \_\_\_\_\_

DATE RECORDED \_\_\_\_\_

INSTRUMENT NO. \_\_\_\_\_ DEED BOOK NO. \_\_\_\_\_ DATE \_\_\_\_\_

ESI

PEER REVIEW

THIS DRAWING IS A SERVICE DOCUMENT OF R.C. FIELDS & ASSOCIATES, INC. AND MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER AND/OR LAND SURVEYOR.

EXISTING UTILITIES SHOWN ON THIS PLAN TAKEN FROM AVAILABLE RECORDS AND/OR FROM FIELD OBSERVATIONS. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-552-7001, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.

LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. INTERFERENCE OR DISRUPTION OF SAME WILL NOT BE THE RESPONSIBILITY OF THIS OFFICE.

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA.

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FINAL SITE PLAN

OLD TOWN ALEXANDRIA DEVELOPMENT

116 SOUTH HENRY STREET

CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION
11/19/21	PER CITY COMMENTS

DESIGN: VMM

CHECKED: ACS

SCALE: AS NOTED

DATE: JAN 2022

CONTEXTUAL PLAN



ADJOINING LOT INFORMATION

<div>1</div> <div>LOT 500 T. CLIFTON HOWARD SUBD. N/F MAL RE OH 111 S. PATRICK ST. ALEXANDRIA, VA 22314 TM #074.01-05-13 ZONE: CD USE: MIXED RETAIL W/ OFFICE INSTR. #120013655</div>	<div>2</div> <div>LOT 501 T. CLIFTON HOWARD SUBD. N/F JACOB E. BAER III &amp; ROBERT M. GURNEY 113 S. PATRICK ST. ALEXANDRIA, VA 22314 TM #074.01-05-14 ZONE: CD USE: OFFICE BLDG. INSTR. #000001727</div>	<div>3</div> <div>N/F JRB SOUTH PATRICK LLC 1825 I ST. NW SUITE 300 WASHINGTON, DC 20036 TM #074.01-05-15 ZONE: CD USE: MULTIPLE RESIDENTIAL INSTR. #180017182</div>	<div>4</div> <div>LOT 2 PRINCE ST. SCHOOL N/F VIRGINIA TECH FNDN. 3914 CENTREVILLE RD. #300 CHANTILLY, VA 20151 TM #074.01-05-17 ZONE: CD USE: COLLEGE DB. 1265, PG. 354</div>	<div>5</div> <div>LOT 1 PRINCE ST. SCHOOL N/F VIRGINIA TECH FOUNDATION 3914 CENTREVILLE RD. #300 CHANTILLY, VA 20151 TM #074.01-05-17 ZONE: CD USE: COLLEGE INSTR. #020014613</div>	<div>6</div> <div>LOT 601 SYLVAN COHEN SUBD. N/F BRENDAN M. &amp; WENDY A. OWENS 121 S. HENRY ST. ALEXANDRIA, VA 22314 TM #074.01-04-16 ZONE: CD USE: MIXED RETAIL/RES. INSTR. #190011257</div>	<div>7</div> <div>LOT 602 SYLVAN COHEN SUBD. N/F RONALD J. MRAZ 119 S. HENRY ST. ALEXANDRIA, VA 22314 TM #074.01-04-15 ZONE: CD USE: MIXED RETAIL/RES. DB. 1191, PG. 1029</div>
<div>8</div> <div>LOT 603 SYLVAN COHEN SUBD. N/F GABRIEL Z. &amp; SURPUHI MURADIAN 117 S. HENRY ST. ALEXANDRIA, VA 22314 TM #074.01-04-14 ZONE: CD USE: MIXED RETAIL/RES. DB. 1186, PG. 1043</div>	<div>9</div> <div>N/F PAUL SWARTZ 115 S. HENRY ST. ALEXANDRIA, VA 22314 TM #074.01-04-13 ZONE: CD USE: MIXED RETAIL/RES. INSTR. #010018009</div>	<div>10</div> <div>LOT 604 SYLVAN COHEN SUBD. N/F KING HENRY COURT CONDOMINIUM 100 KING HENRY CT. ALEXANDRIA, VA 22314 TM #074.01-04-00 ZONE: CL USE: OPEN INSTR. #790007617</div>	<div>11</div> <div>LOT 500 CONSOLIDATION OF LOT 1100 KING STREET N/F OLD TOWN #1 LLC 1616 CAMDEN RD. #210 CHARLOTTE, NC 28203 TM #074.01-04-12 ZONE: KR USE: MIXED RETAIL/RES. INSTR. #160020385</div>	<div>12</div> <div>N/F JOHN C. LOZINYAK 945 BRYANT AVE. COLONIAL BEACH, VA 22443 TM #074.01-05-01 ZONE: KR USE: RESTAURANT DB. 1112, PG. 1990</div>	<div>13</div> <div>LOT 501 CONSOLIDATION OF 1024 &amp; 1026 KING STREET N/F PT NA ENTERPRISES LLC 1024 KING ST. ALEXANDRIA, VA 22314 TM #074.01-05-18 ZONE: KR USE: MIXED RETAIL/OFFICE INSTR. #100019892</div>	<div>14</div> <div>N/F DW22 LLC 1022 KING ST. ALEXANDRIA, VA 22314 TM #074.01-05-04 ZONE: KR USE: MIXED RETAIL/RES. INSTR. #150003289</div>
<div>15</div> <div>N/F DW20 LLC 1020 KING ST. ALEXANDRIA, VA 22314 TM #074.01-05-05 ZONE: KR USE: MIXED RETAIL/RES. INSTR. #040050645</div>	<div>16</div> <div>N/F K1 SUP &amp; REINA ISABEL CHOI 3700 FAIRFIELD LN. WOODBRIDGE, VA 22193 TM #074.01-05-06 ZONE: KR USE: MIXED RETAIL/RES. INSTR. #040044584</div>	<div>17</div> <div>N/F CASTLE AND PEMBROKE LLC 1313 KING ST. ALEXANDRIA, VA 22314 TM #074.01-05-07 ZONE: KR USE: MIXED RETAIL/RES. INSTR. #100010237</div>	<div>18</div> <div>N/F JEFFERSON S. HOGFARD 9385 JUHASZ DR. GREAT FALLS, VA 22066 TM #074.01-05-08 ZONE: KR USE: MIXED RETAIL/RES. INSTR. #120027840</div>	<div>19</div> <div>N/F FORTY OAKS SPA LLC 7628 ENON CHURCH RD. THE PLAINS, VA 20198 TM #074.01-05-09 ZONE: KR USE: MIXED RETAIL/RES. INSTR. #130015647</div>	<div>20</div> <div>N/F OLD TOWN 2 LLC 802 GERVAIS ST. #200 COLUMBIA, SC 29201 TM #074.01-05-10 ZONE: KR USE: RETAIL STORE INSTR. #170014797</div>	<div>21</div> <div>N/F HOPKINS INVESTMENT CO. INC. 313 S. WASHINGTON ST. ALEXANDRIA, VA 22314 TM #074.01-05-11 ZONE: KR USE: MIXED RETAIL/OFFICE INSTR. #170007817</div>

ARCHAEOLOGY NOTES:

THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.

THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

TEXT LEGEND:

= DEGREES  
' = MINUTES (OR FEET)  
" = SECONDS (OR INCHES)  
% = PERCENT  
# = NUMBER  
@ = AT  
lbs = POUNDS  
A = ARC  
AC = ACRE  
ADA = AMERICANS W/ DISABILITIES ACT  
APPROX = APPROXIMATE  
BC = BOTTOM OF CURB  
BF = BASEMENT FLOOR  
BFE = BASE FLOOD ELEVATION  
BLDG = BUILDING  
BM = BENCHMARK  
BSMT = BASEMENT  
BOL = BOLLARD  
BW = BOTTOM OF WALL  
CATV = CABLE UTILITY  
CL = CLASS  
C/L = CENTERLINE  
CLR = CLEARANCE  
CLF = CHAIN LINK FENCE  
CMP = CORRUGATED METAL PIPE  
CI = CURB INLET  
CO = CLEAN OUT  
CONC = CONCRETE  
C&G = CURB & GUTTER  
CVR = COVER  
DB = DEED BOOK  
DHF = DRILL HOLE FOUND  
DIP = DUCTILE IRON PIPE  
DOM = DOMESTIC  
DU = DWELLING UNIT  
E = EAST  
EBOX = ELECTRICAL BOX  
ESMT = EASEMENT

EP = EDGE OF PAVEMENT  
EVE = EMERGENCY VEHICLE EASEMENT  
EX = EXISTING  
FDC = FIRE DEPT. CONNECTION  
FF = FINISH FLOOR  
FH = FIRE HYDRANT  
FT = FEET  
GI = GRATE INLET  
G/L = GAS LINE  
GM = GAS METER  
G/S = GAS SERVICE  
GV = GAS VALVE  
HC = HEADER CURB  
HDPC = HANDICAP  
HDPE = HIGH DENSITY POLYETHYLENE  
HP = HIGH POINT  
HPS = HIGH PRESSURE SODIUM  
IPF = IRON PIPE FOUND  
INV = INVERT  
INSTR = INSTRUMENT  
INTX = INTERSECTION  
IRF = IRON ROD FOUND  
L = LUMENS  
LAT = LATERAL  
LED = LIGHT EMITTING DIODE  
LL = LANDSCAPE LIGHT  
LOC = LOCATION  
LP = LIGHT POLE  
MAX = MAXIMUM  
ME = MATCH EXISTING  
MH = MANHOLE  
MIN = MINIMUM  
MON = MONUMENT  
MHP = MILES PER HOUR  
MW = MONITORING WELL  
N = NORTH  
OHW = OVERHEAD WIRE  
PED = PEDESTRIAN  
PN = PANEL

PG = PAGE  
PP = POWER POLE  
PROP = PROPOSED  
PVC = POLYVINYL CHLORIDE  
R = RADIUS  
RCP = REINFORCED CONCRETE PIPE  
RELOC = RELOCATED  
RET = RETAINING  
RESID = RESIDENTIAL  
REQ = REQUIRED  
ROW = RIGHT-OF-WAY  
S = SOUTH  
SAN = SANITARY  
SEW = SEWER  
SF = SQUARE FEET  
SQ FT = SQUARE FEET  
STM = STORM  
STR = STRUCTURE  
SW = SIDEWALK  
TBR = TO BE REMOVED  
TBS = TO BE SAVED  
TM = TAX MAP  
TMH = TELEPHONE MANHOLE  
TC = TOP OF CURB  
TW = TOP OF WALL  
TRAF SIG = TRAFFIC SIGNAL  
TYP = TYPICAL  
USE = UNDERGROUND ELECTRIC  
UP = UTILITY POLE  
VCS = VIRGINIA COORDINATE SYSTEM  
VPD = VEHICLES PER DAY  
W = WEST  
W/L = WATER LINE  
WM = WATER METER  
W/S = WATER SERVICE  
WSE = WATER SURFACE ELEVATION  
WV = WATER VALVE  
WW = WINDOW WELL  
XING = CROSSING

SYMBOLS LEGEND

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
FIRE HYDRANT			TRANSFORMER		
AIR CONDITIONING UNIT			ELECTRIC MANHOLE		
UTILITY POLE			ELECTRIC METER		
FIRE DEPARTMENT CONNECTION			ELEC BOX/STRUCTURE		
STORM STRUCTURE IDENTIFIER			ELECTRIC LINE		
STORM MANHOLE			TELECOMMUNICATION LINE		
STORM SEWER LAYOUT			CABLE LINE		
SANITARY STRUCTURE IDENTIFIER			CABLE/ELECTRIC/TELECOMMUNICATION LINE		
SANITARY MANHOLE			TELECOMMUNICATION MANHOLE		
SANITARY SEWER LAYOUT			TELECOMMUNICATION STRUCTURE		
SIDEWALK			OVERHEAD STREET LIGHT		
SIGN			LIGHT POLE		
SIGN (DOUBLE POST)			LANDSCAPE LIGHT		
GAS VALVE			FENCES		
GAS LINE			GRADING SPOT		
GAS METER			GRADING CONTOUR		
IRRIGATION VALVE			BUILDING ENTRANCE		
BOLLARD			PAVING		
CLEANOUT			GUARDRAIL		
WELL			CURB AND GUTTER		
WATERLINE			PROPOSED SPILL CURB		
WATER VALVE			PROPOSED TRANSITION/NOSE DOWN CURB		
WATER METER			LIMITS OF DISTURBANCE		

EX. SANITARY SEWER DETAILS

<div>A</div> <div>EX. SAN. M.H. TOP=36.99 INV. IN=29.93 OUT=29.71</div>	<div>B</div> <div>BENCHMARK #2 EX. SAN. M.H. TOP=41.86 INV. IN=33.31 INV. OUT=33.26</div>	<div>C</div> <div>EX. SAN. M.H. TOP=41.77 INV. IN=33.17 INV. OUT=33.12</div>	<div>D</div> <div>EX. SAN. M.H. TOP=36.22 INV. IN=29.45 INV. OUT=29.40</div>	<div>E</div> <div>EX. SAN. M.H. TOP=37.11 INV. IN=29.31 (12") INV. OUT=29.26 (12")</div>
<div>F</div> <div>EX. SAN. M.H. TOP=37.37 INV. IN=30.45 (12") INV. OUT=30.39 (12")</div>	<div>G</div> <div>EX. SAN. M.H. TOP=35.57 INV. IN=26.66 (12") INV. OUT=26.43 (18")</div>	<div>H</div> <div>EX. SAN. M.H. TOP=34.54 INV. IN=25.06 (N) (18") INV. IN=27.60 (E) (18") INV. OUT=25.46 (SE) (8") INV. OUT=25.00 (36")</div>	<div>I</div> <div>EX. SAN. M.H. TOP=34.31 INV. IN=24.51 (36") INV. OUT=24.49 (36")</div>	

EX. STORM SEWER DETAILS

<div>1</div> <div>EX. CURB INLET TOP=37.68 INV. OUT=34.25</div>	<div>2</div> <div>EX. CURB INLET TOP=37.15 INV. IN=34.10 (A) INV. IN=33.75 (B) INV. OUT=33.65</div>	<div>3</div> <div>BENCHMARK #1 EX. STORM MH TOP=39.47 INV. IN=35.32 INV. OUT=35.12</div>	<div>4</div> <div>EX. STORM MH TOP=36.54 INV. IN=33.44 INV. OUT=33.42</div>
<div>5</div> <div>EX. GRATE INLET TOP=40.07</div>	<div>6</div> <div>EX. CURB INLET TOP=35.27 INV. IN=32.58 INV. OUT=32.10</div>	<div>7</div> <div>EX. CURB INLET TOP=35.30 INV. IN=32.57 (6") BOTTOM=29.24</div>	<div>8</div> <div>EX. CURB INLET TOP=35.31 INV. IN=29.27 INV. OUT=29.25</div>

UTILITY OWNERSHIP NOTE:

- GAS: ALL GAS LINES SHOWN ON THIS PLAN ARE OWNED AND MAINTAINED BY WASHINGTON GAS COMPANY. CONTACT: KEN MCCONKEY 703-750-4756; ADDRESS: WASHINGTON GAS, 6801 INDUSTRIAL ROAD, SPRINGFIELD, VA 22151.
- ELECTRIC: ALL ELECTRIC UTILITIES SHOWN ON THIS PLAN ARE OWNED AND MAINTAINED BY DOMINION VIRGINIA POWER. ANY RELOCATION OF EXISTING POLES AND LINES WILL BE COORDINATED WITH DOMINION VIRGINIA POWER. CONTACT: 1-866-366-4357; ADDRESS: DOMINION POWER, P.O. BOX 26666, RICHMOND, VA 23261.
- WATER: ALL EXISTING WATER LINES AND FIRE HYDRANTS SHOWN ON THIS PLAN ARE OWNED AND MAINTAINED BY VIRGINIA AMERICAN WATER COMPANY (V.A.W.C.). EXISTING WATER SERVICES FROM METERS TO THE EXISTING BUILDINGS ARE OWNED AND MAINTAINED BY THE PROPERTY OWNER. PROPOSED WATER SERVICES FROM METERS TO THE PROPOSED BUILDINGS ARE OWNED AND MAINTAINED BY THE PROPERTY OWNER. CONTACT: NETWORK SUPERVISOR FOR THE SOUTHEAST REGION HAO (STEVEN) CHEN 703-706-3889; ADDRESS: VIRGINIA AMERICAN WATER COMPANY, 2223 DUKE STREET, ALEXANDRIA, VA 22314.
- SANITARY SEWER: ALL EXISTING SANITARY SEWER MAINS SHOWN ON THIS PLAN ARE OWNED AND MAINTAINED BY THE CITY OF ALEXANDRIA. CONTACT: PUBLIC WORKS SERVICES, 2900 BUSINESS CENTER DRIVE, ALEXANDRIA, VA. TELEPHONE: 703-746-4357.
- STORM SEWER: ALL EXISTING AND PROPOSED STORM SEWER LOCATED IN THE PUBLIC RIGHT-OF-WAY SHOWN ON THIS PLAN IS OWNED AND MAINTAINED BY THE CITY OF ALEXANDRIA. ANY PROPOSED ON-SITE STORM SEWER WILL BE MAINTAINED BY THE PROPERTY OWNER. CONTACT: PUBLIC WORKS SERVICES, 2900 BUSINESS CENTER DRIVE, ALEXANDRIA, VA. TELEPHONE: 703-746-4357.
- TELEPHONE: ALL TELEPHONE LINES ARE OWNED BY VERIZON. CONTACT: SECTION MANAGER MIKE TYSINGER 804-772-6625; ADDRESS: VERIZON VIRGINIA, INC., 3011 HUNGARY SPRING ROAD, 2ND FLOOR, RICHMOND, VA 23228.

GENERAL NOTES:

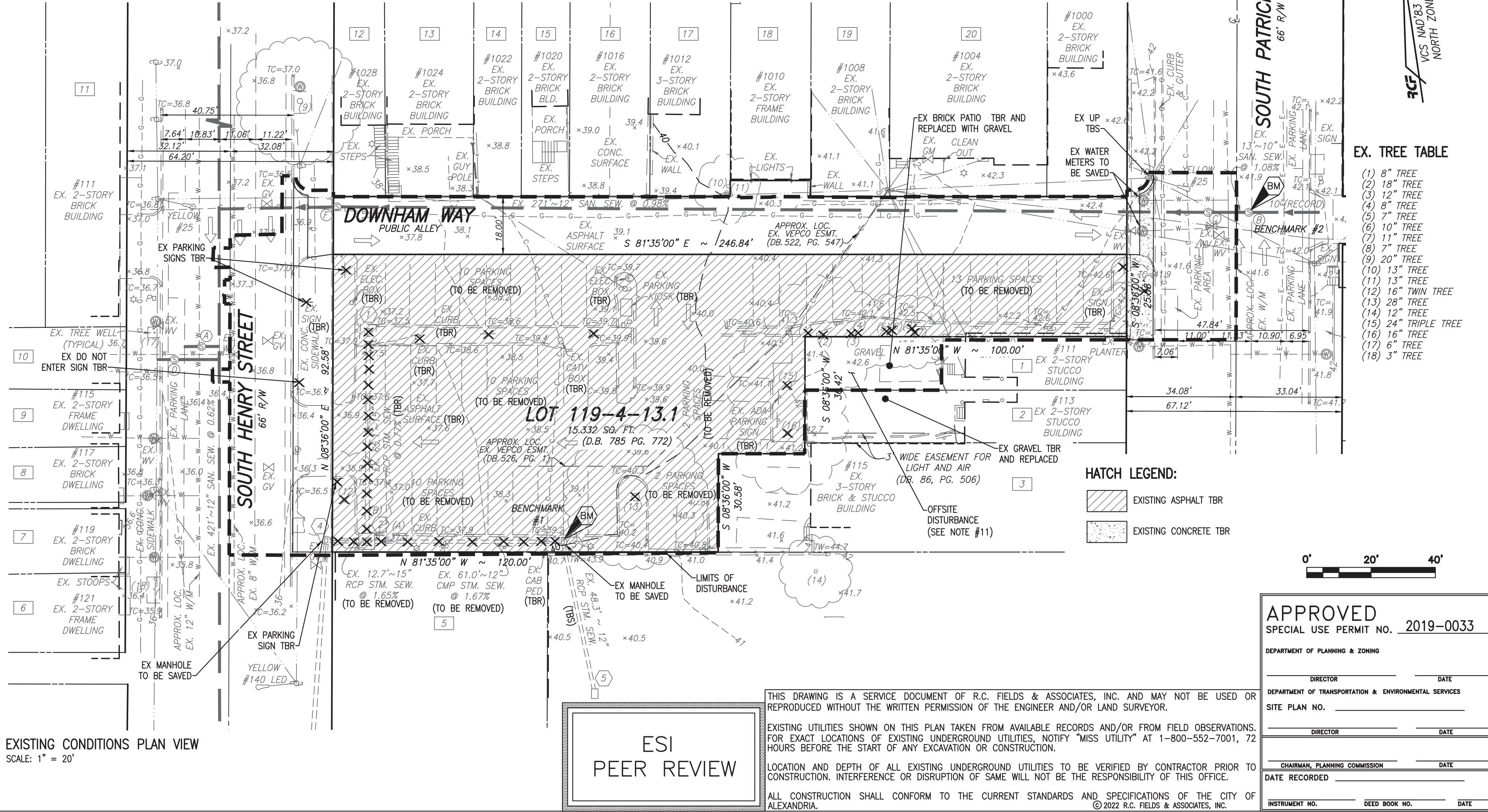
- TAX MAP: #074.01-05-12
- ZONE: CD
- OWNER: CITY OF ALEXANDRIA P.O. BOX 178 ALEXANDRIA, VA 22313 DB. 785, PG. 772
- A TITLE REPORT WAS NOT FURNISHED, THUS ALL EASEMENTS MAY NOT BE SHOWN.
- PLAT SUBJECT TO RESTRICTIONS OF RECORD.
- TOTAL SITE AREA = 15,332 S.F. OR 0.3520 AC.
- THERE ARE NO RESOURCE PROTECTION AREAS (RPA'S), TIDAL WETLANDS, SHORES, TRIBUTARY STREAMS, FLOOD PLAINS, OR BUFFER AREAS FOR SHORES, WETLANDS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS OR HIGHLY ERODIBLE/PERMEABLE SOILS LOCATED ON THIS SITE.
- THERE ARE NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE.
- THE "GENERALIZED ALEXANDRIA SOILS MAP" IDENTIFIES THE SOILS FOR THIS SITE AS KEYPORT SILT LOAM. THE KEYPORT SILT LOAM OCCURS IN THE LOW, SMOOTH TERRACES ALONG THE POTOMAC RIVER. IT IS GENTLY UNDULATING WITH FAIRLY WELL ESTABLISHED DRAINAGE.
- THIS SITE DOES NOT CONTAIN ANY AREA WITH PREVIOUSLY MAPPED MARINE CLAYS.
- A LETTER OF PERMISSION FROM ADJACENT PROPERTY OWNERS FOR OFFSITE DISTURBANCE WILL BE PROVIDED UPON PURCHASE OF THE PROPERTY AND PRIOR TO PERMIT ISSUANCE.

EXISTING CONDITIONS SURVEY NOTES:

- UTILITY INFORMATION, AS SHOWN ON THIS PLAN, IS TAKEN FROM THE RECORDS AND/OR FIELD SURVEY COMPLETED AND CANNOT BE GUARANTEED. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-552-7001, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.
- LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR/ENGINEER SHOULD DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS TO VERIFY EXACT LOCATION.

TOPOGRAPHY NOTE:

THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF WM DE SUTTER, LS FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON OCTOBER 28, 2019 AND THIS PLAT, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.



**R. C. FIELDS & ASSOCIATES, INC.**  
ENGINEERING • LAND SURVEYING • PLANNING  
700 S. Washington Street, Suite 220  
Alexandria, Virginia 22314  
(703) 549-6422  
www.rcfieldsoc.com

**ANDREA SPRUCH**  
Lic. No. 047883  
Jan. 7, 2022  
PROFESSIONAL ENGINEER

**FINAL SITE PLAN**  
**OLD TOWN ALEXANDRIA DEVELOPMENT**  
116 SOUTH HENRY STREET  
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION
11/19/21	PER CITY COMMENTS

DESIGN: VMM  
CHECKED: ACS  
SCALE: 1" = 20'  
DATE: JAN 2022

EXISTING CONDITIONS AND DEMOLITION PLAN

SHEET **09** OF **38**  
FILE: **19-153**

**APPROVED**  
SPECIAL USE PERMIT NO. **2019-0033**

DEPARTMENT OF PLANNING & ZONING

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

CHAIRMAN, PLANNING COMMISSION \_\_\_\_\_ DATE \_\_\_\_\_

DATE RECORDED \_\_\_\_\_

INSTRUMENT NO. \_\_\_\_\_ DEED BOOK NO. \_\_\_\_\_ DATE \_\_\_\_\_

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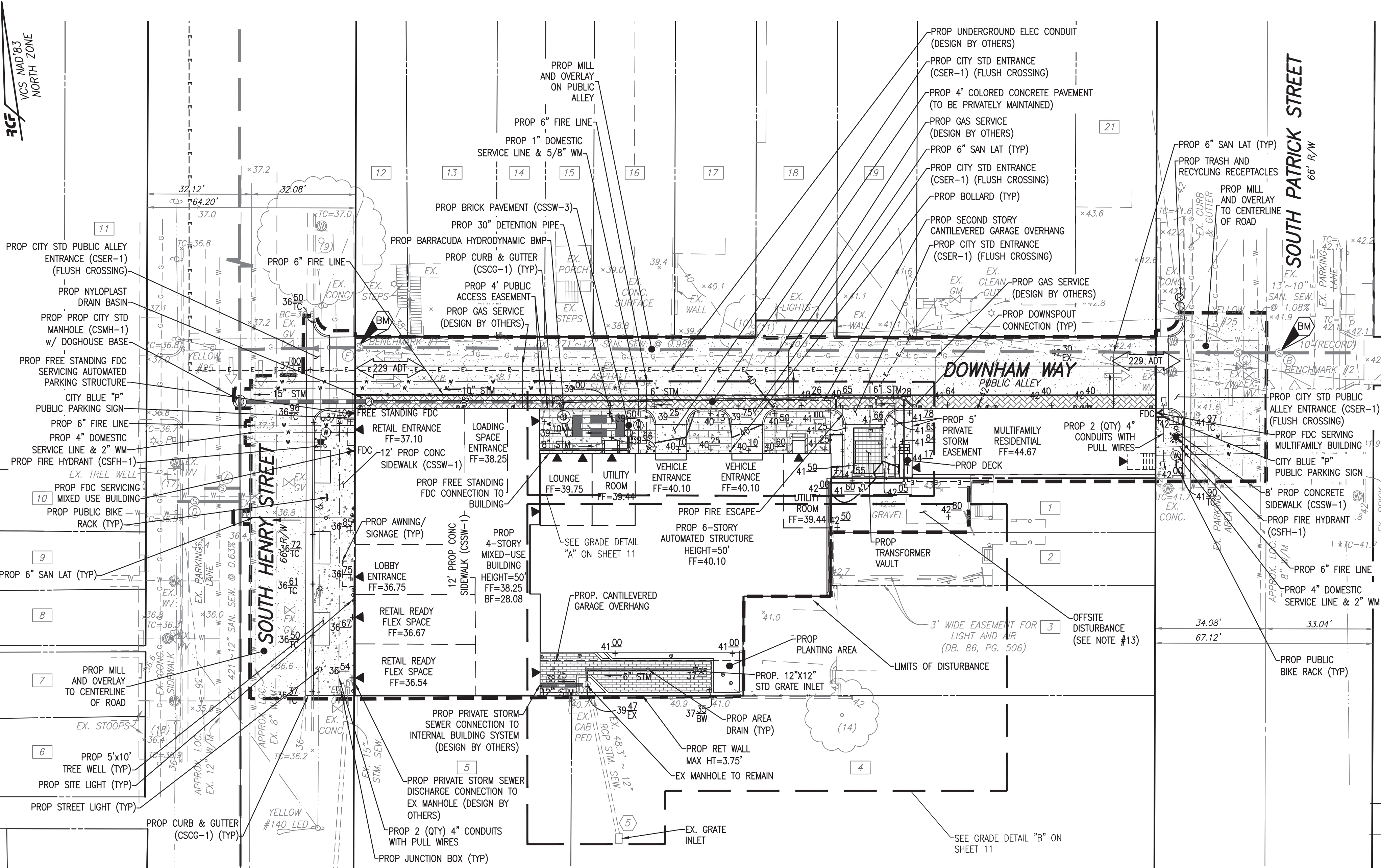
ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA.

**PEER REVIEW**

EXISTING CONDITIONS PLAN VIEW  
SCALE: 1" = 20'

L:\2019\19153\DWG\ELVIS Henry Street\08-EXISTING CONDITIONS.dwg  
Tue, Jan 18, 2022 8:31:30am





PLAN VIEW  
SCALE: 1" = 20'

SYMBOLS LEGEND

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
FIRE HYDRANT			TRANSFORMER		
AIR CONDITIONING UNIT			ELECTRIC MANHOLE		
UTILITY POLE			ELECTRIC METER		
FIRE DEPARTMENT CONNECTION			ELEC BOX/STRUCTURE		
STORM STRUCTURE IDENTIFIER			ELECTRIC LINE		
STORM MANHOLE			TELECOMMUNICATION LINE		
STORM SEWER LAYOUT			CABLE LINE		
SANITARY STRUCTURE IDENTIFIER			CABLE/ELECTRIC/TELECOMMUNICATION LINE		
SANITARY MANHOLE			TELECOMMUNICATION MANHOLE		
SANITARY SEWER LAYOUT			TELECOMMUNICATION STRUCTURE		
SIDEWALK			OVERHEAD STREET LIGHT		
SIGN			LIGHT POLE		
SIGN (DOUBLE POST)			LANDSCAPE LIGHT		
GAS VALVE			FENCES		
GAS LINE			GRADING SPOT		
GAS METER			GRADING CONTOUR		
IRRIGATION VALVE			BUILDING ENTRANCE		
BOLLARD			PAVING		
CLEANOUT			GUARDRAIL		
WELL			CURB AND GUTTER		
WATERLINE			PROPOSED SPILL CURB		
WATER VALVE			PROPOSED TRANSITION/NOSE DOWN CURB		
WATER METER			LIMITS OF DISTURBANCE		

TEXT LEGEND:

\* = DEGREES  
' = MINUTES (OR FEET)  
" = SECONDS (OR INCHES)  
% = PERCENT  
# = NUMBER  
@ = AT  
lbs = POUNDS  
A = ARC  
AC = ACRE  
ADA = AMERICANS W/ DISABILITIES ACT  
APPROX = APPROXIMATE  
BC = BOTTOM OF CURB  
BF = BASEMENT FLOOR  
BFE = BASE FLOOD ELEVATION  
BLDG = BUILDING  
BM = BENCHMARK  
BSMT = BASEMENT  
BOL = BOLLARD  
BW = BOTTOM OF WALL  
CATV = CABLE UTILITY  
CL = CLASS  
C/L = CENTERLINE  
CLR = CLEARANCE  
CLF = CHAIN LINK FENCE  
CMP = CORRUGATED METAL PIPE  
CI = CURB INLET  
CO = CLEAN OUT  
CONC = CONCRETE  
C&G = CURB & GUTTER  
CVR = COVER  
DB = DEED BOOK  
DHF = DRILL HOLE FOUND  
DIP = DUCTILE IRON PIPE  
DOM = DOMESTIC  
DU = DWELLING UNIT  
E = EAST  
EBOX = ELECTRICAL BOX  
ESMT = EASEMENT

EP = EDGE OF PAVEMENT  
EVE = EMERGENCY VEHICLE EASEMENT  
EX = EXISTING  
FDC = FIRE DEPT. CONNECTION  
FF = FINISH FLOOR  
FH = FIRE HYDRANT  
FT = FEET  
GI = GRATE INLET  
G/L = GAS LINE  
GM = GAS METER  
G/S = GAS SERVICE  
GV = GAS VALVE  
HC = HEADER CURB  
HDOP = HANDICAP  
HDPE = HIGH DENSITY POLYETHYLENE  
HP = HIGH POINT  
HPS = HIGH PRESSURE SODIUM  
IPF = IRON PIPE FOUND  
INV = INVERT  
INSTR = INSTRUMENT  
INTX = INTERSECTION  
IRF = IRON ROD FOUND  
L = LUMENS  
LAT = LATERAL  
LED = LIGHT EMITTING DIODE  
LL = LANDSCAPE LIGHT  
LOC = LOCATION  
LP = LIGHT POLE  
MAX = MAXIMUM  
ME = MATCH EXISTING  
MH = MANHOLE  
MIN = MINIMUM  
MON = MONUMENT  
MPH = MILES PER HOUR  
MW = MONITORING WELL  
N = NORTH  
OHV = OVERHEAD WIRE  
PED = PEDESTRIAN  
PN = PANEL

PG = PAGE  
PP = POWER POLE  
PROP = PROPOSED  
PVC = POLYVINYL CHLORIDE  
R = RADIUS  
RCP = REINFORCED CONCRETE PIPE  
RELOC = RELOCATED  
RET = RETAINING  
RESID = RESIDENTIAL  
REQ = REQUIRED  
ROW = RIGHT-OF-WAY  
S = SOUTH  
SAN = SANITARY  
SEW = SEWER  
SF = SQUARE FEET  
SQ FT = SQUARE FEET  
STM = STORM  
STR = STRUCTURE  
SW = SIDEWALK  
TBR = TO BE REMOVED  
TBS = TO BE SAVED  
TM = TAX MAP  
TMH = TELEPHONE MANHOLE  
TC = TOP OF CURB  
TW = TOP OF WALL  
TRAF SIG = TRAFFIC SIGNAL  
TYP = TYPICAL  
UGE = UNDERGROUND ELECTRIC  
UP = UTILITY POLE  
VCS = VIRGINIA COORDINATE SYSTEM  
VPD = VEHICLES PER DAY  
W = WEST  
W/L = WATER LINE  
WM = WATER METER  
W/S = WATER SERVICE  
WSE = WATER SURFACE ELEVATION  
WV = WATER VALVE  
WW = WINDOW WELL  
XING = CROSSING

HATCH LEGEND

SCORED CONCRETE PAVING	
CITY STANDARD BRICK PAVING	
CONCRETE PAVING	
UNIT PAVERS	
ASPHALT MILL AND OVERLAY	

ESI  
PEER REVIEW

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GENERAL NOTES:

- TAX MAP: #074.01-05-12
- ZONE: CD
- OWNER: CITY OF ALEXANDRIA  
P.O. BOX 178  
ALEXANDRIA, VA 22313  
DB. 785, PG. 772
- TOPOGRAPHIC SURVEY WAS RUN BY THIS FIRM. VERTICAL DATUM USED = NAVD '88 PER CITY OF ALEXANDRIA MONUMENT #642 ELEVATION 33.53'.
- TITLE REPORT WAS FURNISHED BY INDEPENDENCE TITLE, CLIENT/CASE# MONUMENT, EFFECTIVE DATE 8/9/2018 AND IS RELIED UPON AS ACCURATE BY THE SURVEYOR.
- PLAT SUBJECT TO RESTRICTIONS OF RECORD.
- TOTAL SITE AREA = 15,332 S.F. OR 0.3520 AC.
- THERE ARE NO RESOURCE PROTECTION AREAS (RPA'S), TIDAL WETLANDS, SHORES, TRIBUTARY STREAMS, FLOOD PLAINS, OR BUFFER AREAS FOR SHORES, WETLANDS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS OR HIGHLY ERODIBLE/PERMEABLE SOILS LOCATED ON THIS SITE.
- THERE ARE NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE.
- THE "GENERALIZED ALEXANDRIA SOILS MAP" IDENTIFIES THE SOILS FOR THIS SITE AS KEYPORT SILT LOAM. THE KEYPORT SILT LOAM OCCURS IN THE LOW, SMOOTH TERRACES ALONG THE POTOMAC RIVER. IT IS GENTLY UNDULATING WITH FAIRLY WELL ESTABLISHED DRAINAGE.
- THIS SITE DOES NOT CONTAIN ANY AREAS WITH PREVIOUSLY MAPPED MARINE CLAYS.
- THIS PROJECT IS LOCATED WITHIN THE COMBINED SEWER SHED.
- A LETTER OF PERMISSION FROM ADJACENT PROPERTY OWNERS FOR OFFSITE DISTURBANCE WILL BE PROVIDED UPON PURCHASE OF THE PROPERTY AND PRIOR TO PERMIT ISSUANCE.

REFUSE TRUCK NOTE:

TRASH WILL BE COLLECTED WITHIN EACH BUILDING AND STORED ONSITE. TRASH WILL BE WHEELED OUT TO THE CURB SIDE WITHIN THE PUBLIC ALLEY FOR PICKUP. SEE REFUSE TRUCK TURNING MOVEMENTS ON SHEETS 31 & 32.

ALEXRENEW NOTES:

CONTRACTOR SHALL ENSURE ALL DISCHARGES ARE IN ACCORDANCE WITH CITY OF ALEXANDRIA CODE TITLE 5, CHAPTER6, ARTICLE B.

DEWATERING AND OTHER CONSTRUCTION RELATED DISCHARGE LIMITS TO THE SEWER SYSTEM ARE REGULATED BY ALEXRENEW PRETREATMENT. CONTRACTOR IS REQUIRED TO CONTACT ALEXRENEW'S PRETREATMENT COORDINATOR AT 703-721-3500 X2020.

ARCHAEOLOGY NOTES:

THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.

THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

SUMP PUMP NOTE:

BUILDING SUMP PUMPS ARE TO DRAIN TO THE STORM SEWER SYSTEM.

PAVEMENT MARKING NOTE:

EXISTING PAVEMENT STRIPING ALONG S HENRY STREET AND S PATRICK STREET IN FRONT OF THE SITE SHALL BE MAINTAINED AND RESTORED IN KIND AFTER THE PROPOSED UTILITIES ALONG THE RIGHTS-OF-WAY ARE INSTALLED.

MOCK-UP PANEL NOTE:

THE MOCK-UP PANEL FOR THIS PROJECT WILL BE LOCATED ALONG KING STREET WITH THE MOCK-UP PANEL LOCATION FOR DSP2019-0032. SEE THE FINAL SITE PLAN SHEET FOR DSP2019-0032 FOR REFERENCE TO THE LOCATION.

APPROVED  
SPECIAL USE PERMIT NO. 2019-0033

DEPARTMENT OF PLANNING & ZONING	
DIRECTOR	DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO.	
DIRECTOR	DATE
CHAIRMAN, PLANNING COMMISSION	
DATE RECORDED	
INSTRUMENT NO.	DEED BOOK NO.
DATE	

FINAL SITE PLAN  
OLD TOWN ALEXANDRIA DEVELOPMENT  
116 SOUTH HENRY STREET  
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION
11/19/21	PER CITY COMMENTS

DESIGN: VMM  
CHECKED: ACS  
SCALE: 1" = 20'  
DATE: JAN 2022

FINAL SITE  
PLAN

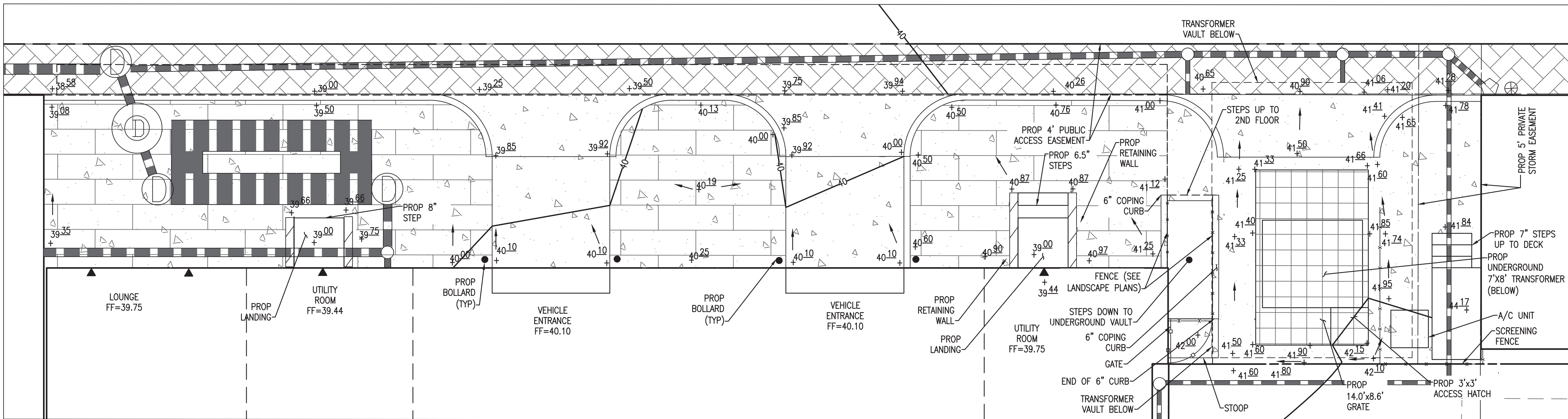
SHEET 10 OF 38  
FILE: 19-153

R.C. FIELDS & ASSOCIATES, INC.  
ENGINEERING • LAND SURVEYING • PLANNING  
700 S. Washington Street, Suite 220  
Alexandria, Virginia 22314  
(703) 549-6422

ANDREA SPRUCH  
Lic. No. 047883  
JAN. 7, 2022  
PROFESSIONAL ENGINEER

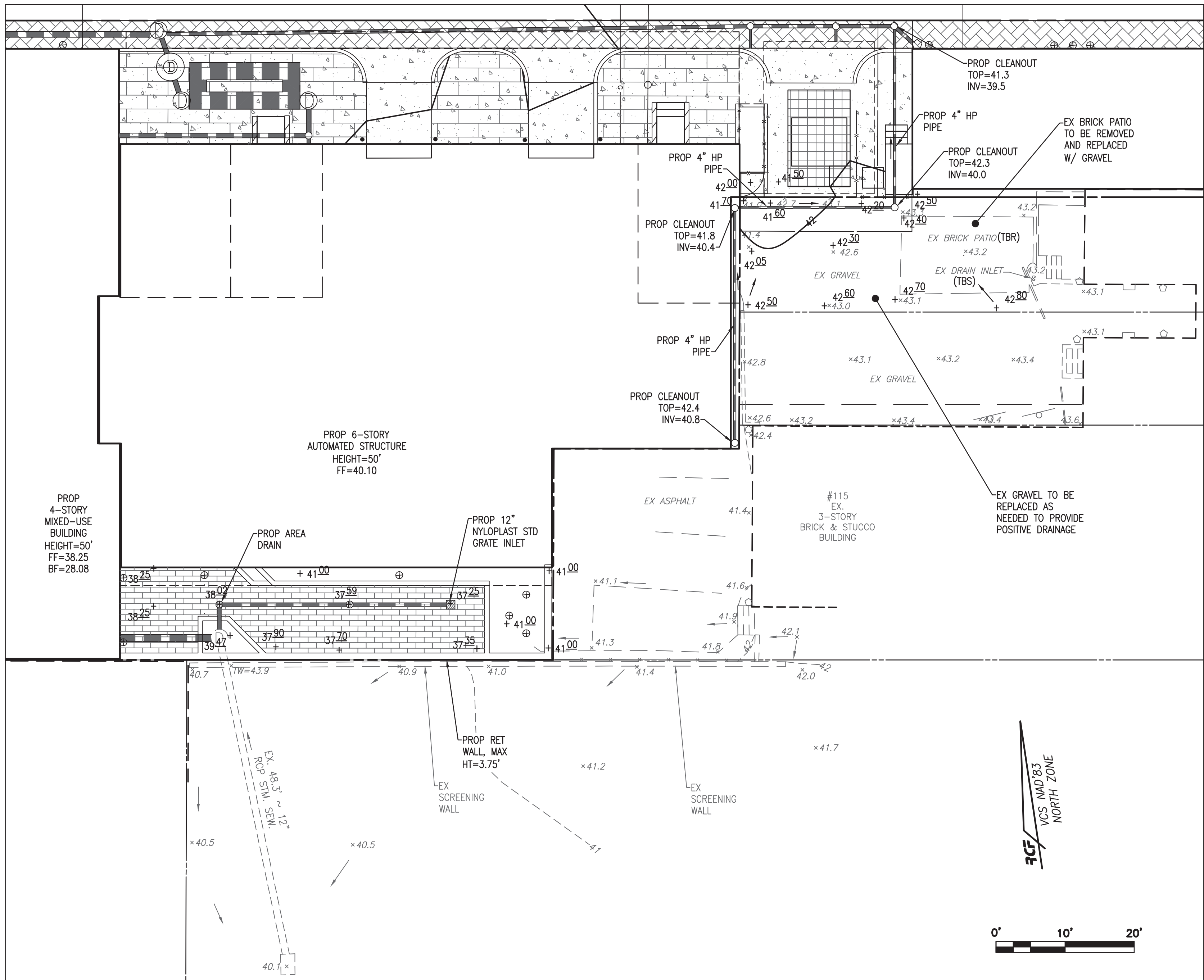


\\2019\1915\DWG\DELVS Henry Street\08-FINAL SITE PLAN.dwg  
Tue, Jan 18 2022 8:31:48am



GRADE DETAIL "A"  
SCALE: 1" = 5'

0' 5' 10'

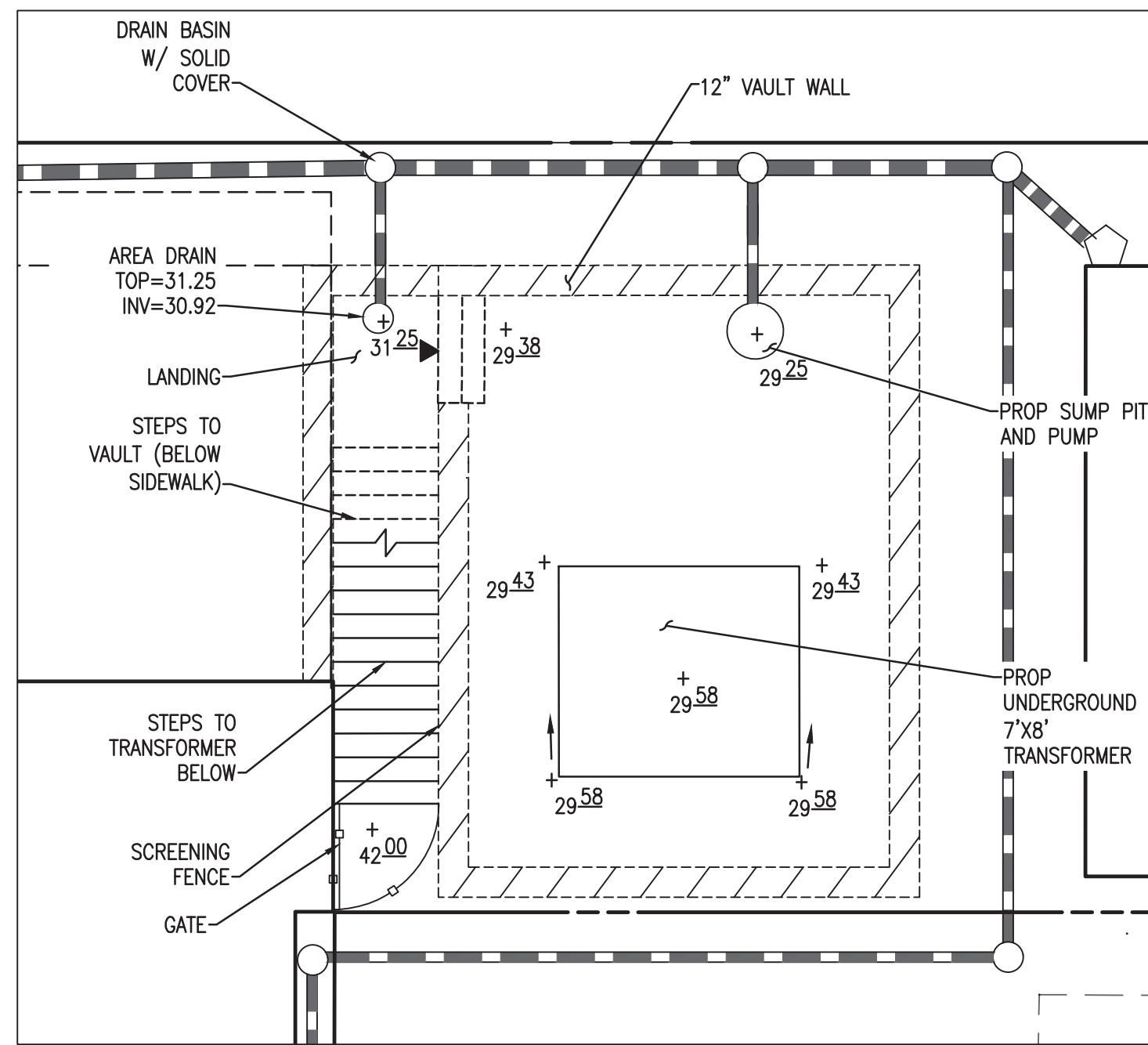


GRADE DETAIL "B"  
SCALE: 1" = 10'

0' 10' 20'

#### HATCH LEGEND

SCORED CONCRETE PAVING	
CITY STANDARD BRICK PAVING	
CONCRETE PAVING	
UNIT PAVERS	



TRANSFORMER VAULT BELOW GRADE DETAIL  
SCALE: 1" = 5'

0' 5' 10'

#### ARCHAEOLOGY NOTES:

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ESI  
PEER REVIEW

APPROVED  
SPECIAL USE PERMIT NO. 2019-0033

DEPARTMENT OF PLANNING & ZONING

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_  
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES  
SITE PLAN NO. \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_  
CHAIRMAN, PLANNING COMMISSION \_\_\_\_\_ DATE \_\_\_\_\_

DATE RECORDED \_\_\_\_\_

INSTRUMENT NO. \_\_\_\_\_ DEED BOOK NO. \_\_\_\_\_ DATE \_\_\_\_\_

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COMMONWEALTH OF VIRGINIA  
*Andrea Spruch*  
ANDREA SPRUCH  
Lic. No. 047863  
JAN. 7, 2022  
PROFESSIONAL ENGINEER

FINAL SITE PLAN  
OLD TOWN ALEXANDRIA DEVELOPMENT  
116 SOUTH HENRY STREET  
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION
11/19/21	PER CITY COMMENTS

DESIGN: VMM  
CHECKED: ACS  
SCALE: AS NOTED  
DATE: JAN 2022

DETAIL  
GRADING

SHEET 11 OF 38

FILE: 19-153



TEXT LEGEND:

' = DEGREES	EP = EDGE OF PAVEMENT	PG = PAGE
' = MINUTES (OR FEET)	EVE = EMERGENCY VEHICLE EASEMENT	PP = POWER POLE
" = SECONDS (OR INCHES)	EX = EXISTING	PROP = PROPOSED
% = PERCENT	FDC = FIRE DEPT. CONNECTION	PVC = POLYVINYL CHLORIDE
# = NUMBER	FF = FINISH FLOOR	R = RADIUS
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lbs = POUNDS	FT = FEET	RELOC = RELOCATED
A = ARC	GI = GRATE INLET	RET = RETAINING
AC = ACRE	G/L = GAS LINE	RESID = RESIDENTIAL
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APPROX = APPROXIMATE	G/S = GAS SERVICE	ROW = RIGHT-OF-WAY
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BSMT = BASEMENT	HPS = HIGH PRESSURE SODIUM	STM = STORM
BOL = BOLLARD	IPF = IRON PIPE FOUND	STR = STRUCTURE
BW = BOTTOM OF WALL	INV = INVERT	SW = SIDEWALK
CATV = CABLE UTILITY	INTX = INTERSECTION	TBR = TO BE REMOVED
CL = CLASS	IRF = IRON ROD FOUND	TBS = TO BE SAVED
C/L = CENTERLINE	L = LUMENS	TM = TAX MAP
CLR = CLEARANCE	LAT = LATERAL	TMH = TELEPHONE MANHOLE
CLF = CHAIN LINK FENCE	LED = LIGHT EMITTING DIODE	TC = TOP OF CURB
CMP = CORRUGATED METAL PIPE	LL = LANDSCAPE LIGHT	TW = TOP OF WALL
CI = CURB INLET	LOC = LOCATION	TRAF SIG = TRAFFIC SIGNAL
CO = CLEAN OUT	LP = LIGHT POLE	TYP = TYPICAL
CONC = CONCRETE	MAX = MAXIMUM	UGE = UNDERGROUND ELECTRIC
C&G = CURB & GUTTER	ME = MATCH EXISTING	UP = UTILITY POLE
CVR = COVER	MH = MANHOLE	VCS = VIRGINIA COORDINATE SYSTEM
DB = DEED BOOK	MIN = MINIMUM	VPD = VEHICLES PER DAY
DHF = DRILL HOLE FOUND	MON = MONUMENT	W = WEST
DIP = DUCTILE IRON PIPE	MPH = MILES PER HOUR	W/L = WATER LINE
DOM = DOMESTIC	N = NORTH	WM = WATER METER
DU = DWELLING UNIT	OHW = OVERHEAD WIRE	W/S = WATER SERVICE
E = EAST	PN = PANEL	WSE = WATER SURFACE ELEVATION
EBOX = ELECTRICAL BOX		WV = WATER VALVE
ESMT = EASEMENT		WW = WINDOW WELL
		XING = CROSSING

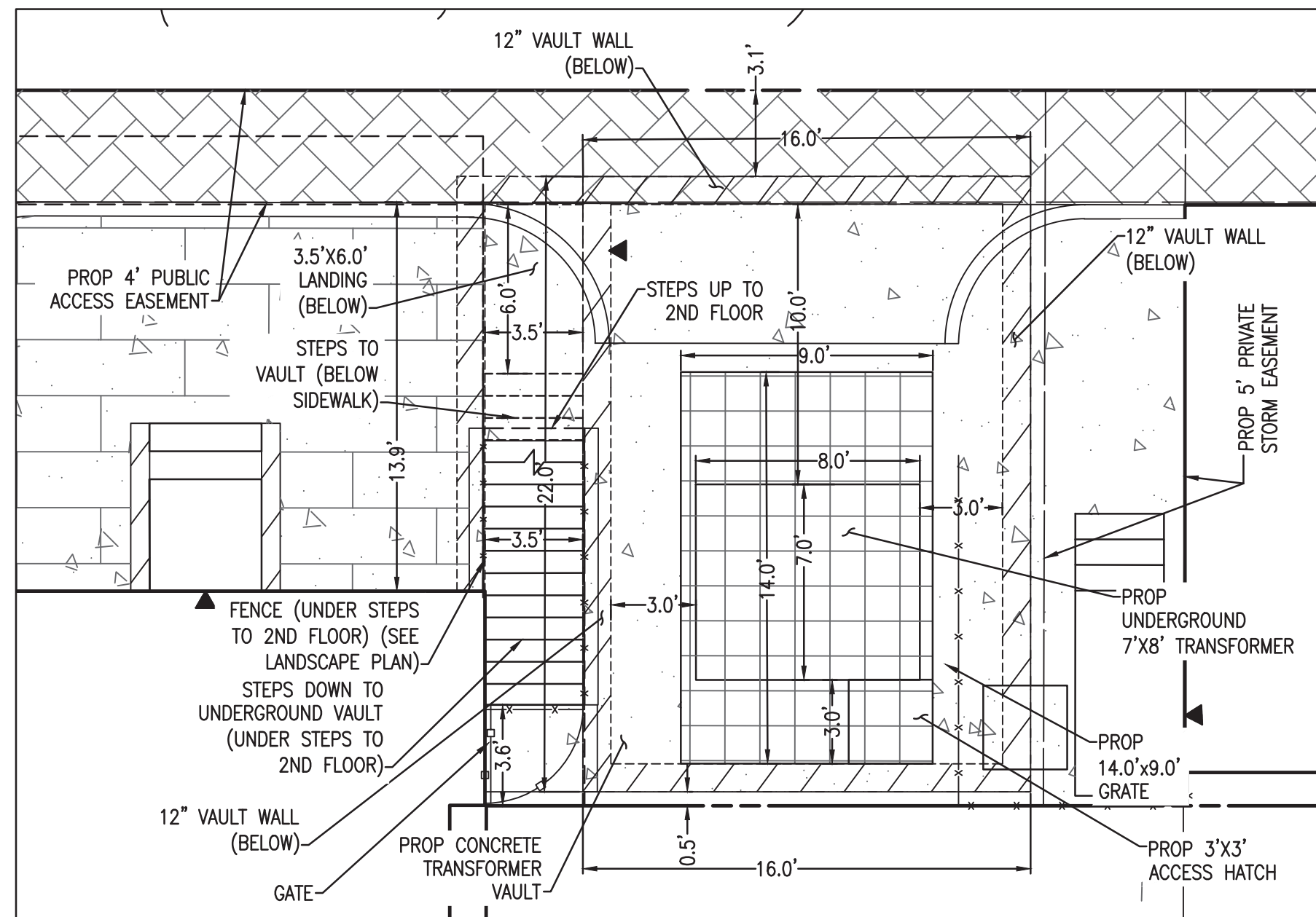
SYMBOLS LEGEND

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FIRE HYDRANT			TRANSFORMER		
AIR CONDITIONING UNIT			ELECTRIC MANHOLE		
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STORM STRUCTURE IDENTIFIER			ELECTRIC LINE		
STORM MANHOLE			TELECOMMUNICATION LINE		
STORM SEWER LAYOUT			CABLE LINE		
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SANITARY MANHOLE			TELECOMMUNICATION MANHOLE		
SANITARY SEWER LAYOUT			TELECOMMUNICATION STRUCTURE		
SIDEWALK			OVERHEAD STREET LIGHT		
SIGN			LIGHT POLE		
SIGN (DOUBLE POST)			LANDSCAPE LIGHT		
GAS VALVE			FENCES		
GAS LINE			GRADING SPOT		
GAS METER			GRADING CONTOUR		
IRRIGATION VALVE			BUILDING ENTRANCE		
BOLLARD			PAVING		
CLEANOUT			GUARDRAIL		
WELL			CURB AND GUTTER		
WATERLINE			PROPOSED SPILL CURB		
WATER VALVE			PROPOSED TRANSITION/NOSE DOWN CURB		
WATER METER			LIMITS OF DISTURBANCE		

ARCHAEOLOGY NOTES:

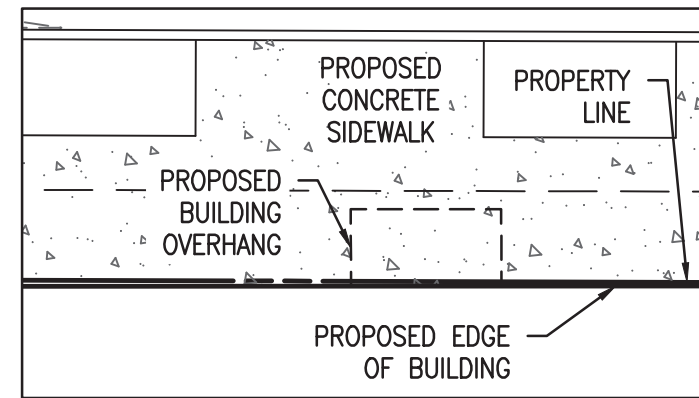
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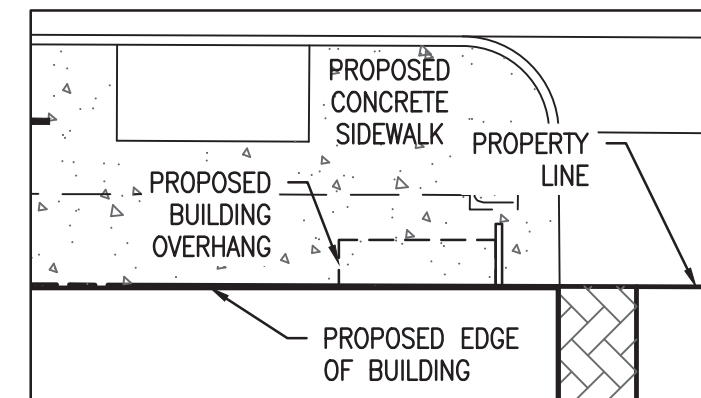


TRANSFORMER VAULT DIMENSION DETAILS  
SCALE: 1" = 5'

DIMENSION PLAN VIEW  
SCALE: 1" = 20'



OVERHANG #1 DIMENSION PLAN VIEW  
SCALE: 1" = 10'



OVERHANG #2 DIMENSION PLAN VIEW  
SCALE: 1" = 10'

HATCH LEGEND

SCORED CONCRETE PAVING	
CITY STANDARD BRICK PAVING	
CONCRETE PAVING	
UNIT PAVERS	

ESI  
PEER REVIEW

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APPROVED  
SPECIAL USE PERMIT NO. 2019-0033

DEPARTMENT OF PLANNING & ZONING

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

CHAIRMAN, PLANNING COMMISSION \_\_\_\_\_ DATE \_\_\_\_\_

DATE RECORDED \_\_\_\_\_

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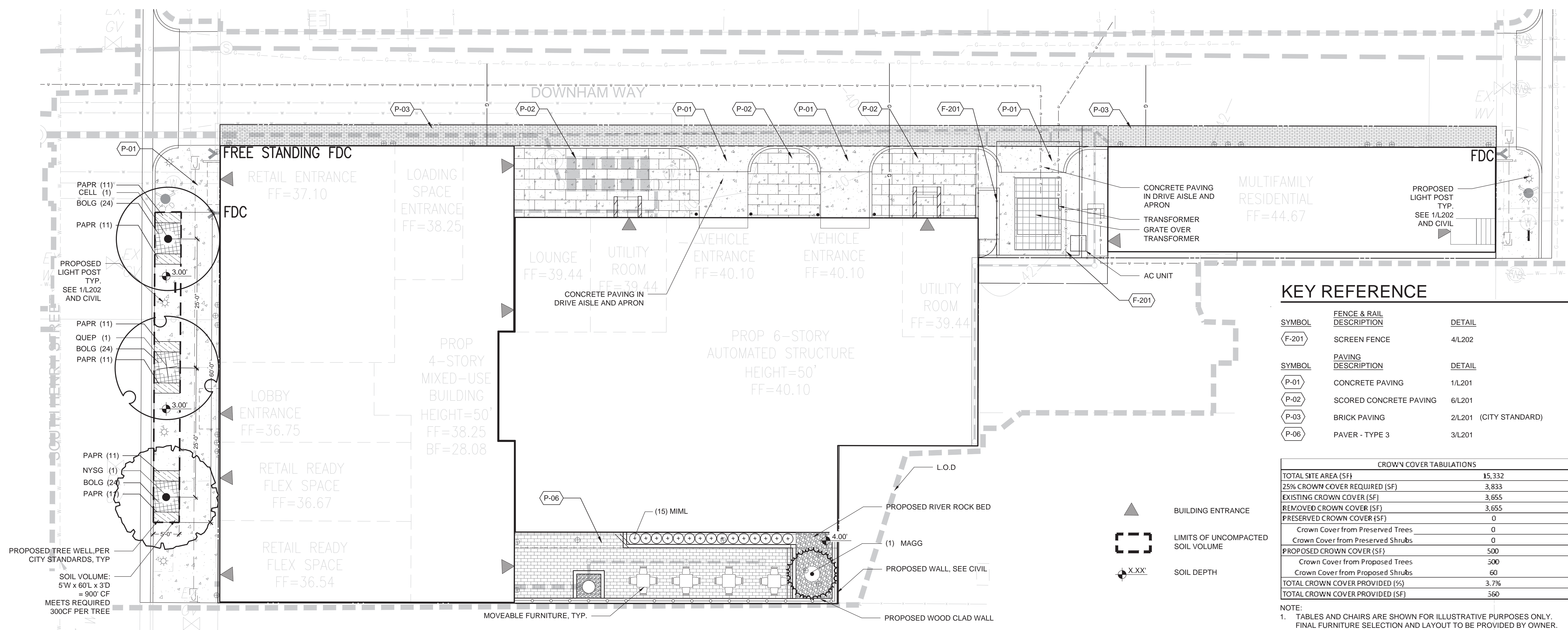
DATE	REVISION
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DESIGN: VMM  
CHECKED: ACS  
SCALE: AS NOTED  
DATE: JAN 2022


SITE  
DIMENSIONS  
PLAN

SHEET 12 OF 38  
FILE: 19-153





## PLANT SCHEDULE S HENRY

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	HT.	REMARKS	
	CELL	1	CELTIS LAEVIGATA SUGAR HACKBERRY	B & B	3" - 3.5"		NATIVE	
	NYSG	1	NYSSA SYLVATICA 'GREEN GABLE' TM BLACK GUM	B & B	3" - 3.5"		NATIVE	
	QUEP	1	QUERCUS PHELLOS WILLOW OAK	B & B	3" - 3.5"		NATIVE	
EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	HT.	REMARKS	
	MAGG	1	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA ALTA	B & B		6' - 8'		
LARGE ORNAMENTAL GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	HEIGHT	SPREAD	REMARKS	
	MIML	15	MISCANTHUS SINENSIS 'MORNING LIGHT' MORNING LIGHT GRASS	1 GAL		18" - 24"	OCCAS. INVASIVE IN VA	
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	COLOR	BLOOMS	SPACING	REMARKS
	PAPR	66	PACHYSANDRA PROCUMBENS ALLEGHENY SPURGE	1 QUART			12" o.c.	
SMALL ORNAMENTAL GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	COLOR	BLOOMS	SPACING	REMARKS
	BOLG	72	BOUTELOUA GRACILIS BLUE GRAMA	1 GAL		JUNE - SEPTEMBER	12" o.c.	GROWS 12" - 16" HT.

## CITY OF ALEXANDRIA STANDARD NOTES:

- THE PROPERTY OWNER AND/OR APPLICANT, SPECIFIED, CONTRACTOR AND INSTALLER OF PLANT MATERIAL ARE RESPONSIBLE FOR UNDERSTANDING AND ADHERING TO THE STANDARDS SET FORTH IN THE MOST RECENT VERSION OF THE CITY OF ALEXANDRIA LANDSCAPE GUIDELINES AND APPLICABLE CONDITIONS OF APPROVAL. ALL QUESTIONS REGARDING APPLICATION OF, OR ADHERENCE TO, THE STANDARDS AND/OR CONDITIONS OF APPROVAL SHALL BE DIRECTED TO THE CITY PRIOR TO COMMENCEMENT OF DEMOLITION, CONSTRUCTION, OR ANY LAND DISTURBING ACTIVITY.
- THE CITY-APPROVED LANDSCAPE PLAN SUBMISSION, INCLUDING PLANT SCHEDULE, NOTES AND DETAILS SHALL BE THE DOCUMENT USED FOR INSTALLATION PURPOSES AND ALL PROCEDURES SET FORTH IN THE LANDSCAPE GUIDELINES MUST BE FOLLOWED.
- THE CONTRACTOR SHALL NOT INTERFERE WITH ANY TREE PROTECTION MEASURES OR IMPACT ANY EXISTING VEGETATION IDENTIFIED TO BE PRESERVED PER THE APPROVED TREE AND VEGETATION PROTECTION PLAN.
- ANY CHANGES, ALTERATIONS OR MODIFICATIONS TO THE SITE CONDITIONS THAT AFFECT VEGETATION PROTECTION ZONES WILL REQUIRE AN AMENDMENT TO THE APPROVED TREE AND VEGETATION PROTECTION PLAN AND/OR DETAILS.
- INSTALLATION OF PLANT MATERIAL MAY ONLY OCCUR DURING THE PLANTING SEASONS IDENTIFIED IN THE LANDSCAPE GUIDELINES.
- IN LIEU OF MORE STRENUOUS SPECIFICATIONS, ALL LANDSCAPE RELATED WORK SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CURRENT AND MOST UP-TO-DATE EDITION (AT TIME OF CONSTRUCTION) OF LANDSCAPE SPECIFICATION GUIDELINES AS PRODUCED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MARYLAND, DISTRICT OF COLUMBIA AND VIRGINIA; GATHERSBURG, MARYLAND.
- SUBSTITUTIONS TO THE APPROVED PLANT MATERIAL SHALL NOT OCCUR UNTIL WRITTEN APPROVAL IS PROVIDED BY THE CITY.
- MAINTENANCE FOR THIS PROJECT SHALL BE PERFORMED BY THE OWNER, APPLICANT, SUCCESSOR(S) AND/OR ASSIGN(S) IN PERPETUITY AND IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES AND AS CONDITIONED BY PROJECT APPROVAL, AS APPLICABLE.
- THE APPROVED METHOD(S) OF PROTECTION MUST BE IN PLACE FOR ALL VEGETATION TO BE PRESERVED ON-SITE AND ADJACENT TO THE PROJECT SITE PURSUANT TO THE APPROVED TREE AND VEGETATION PROTECTION PLAN AND DETAILS PRIOR TO COMMENCEMENT OF DEMOLITION, CONSTRUCTION, OR ANY LAND DISTURBANCE. THE APPLICANT SHALL NOTIFY THE PLANNING & ZONING (P&Z) PROJECT MANAGER ONCE THE TREE PROTECTION METHODS ARE IN PLACE. NO DEMOLITION, CONSTRUCTION, OR LAND DISTURBANCE MAY OCCUR UNTIL AN INSPECTION IS PERFORMED BY THE CITY AND WRITTEN CONFIRMATION IS PROVIDED BY THE CITY WHICH VERIFIES CORRECT INSTALLATION OF THE TREE PROTECTION MEASURES.
- THE APPLICANT MUST CONTACT THE P&Z PROJECT MANAGER PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION/PLANTING OPERATION TO SCHEDULE A PRE-INSTALLATION MEETING. THE MEETING SHOULD BE HELD BETWEEN THE APPLICANT'S GENERAL CONTRACTOR, LANDSCAPE CONTRACTOR, LANDSCAPE ARCHITECT, THE P&Z PROJECT MANAGER AND THE CITY ARBORIST (AS APPLICABLE) TO REVIEW THE SCOPE OF INSTALLATION PROCEDURES AND PROCESSES DURING AND AFTER INSTALLATION.
- THE FOLLOWING INFORMATION SHALL BE PROVIDED TO THE P&Z PROJECT MANAGER AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO THE LANDSCAPE PRE-INSTALLATION MEETING: 1) A LETTER THAT CERTIFIES THAT THE PROJECT LANDSCAPE ARCHITECT PERFORMED PRE-SELECTION TAGGING FOR ALL TREES PROPOSED WITHIN THE PUBLIC RIGHT OF WAY AND ON PUBLIC LAND PRIOR TO INSTALLATION. THIS LETTER MUST BE SIGNED AND SEALED BY THE PROJECT LANDSCAPE ARCHITECT, AND 2) A COPY OF THE SOIL BULK DENSITY TEST REPORT VERIFYING THAT MAXIMUM COMPRESSION RATES ARE MET.
- ALL CONSTRUCTION WASTE SHALL BE REMOVED PRIOR TO PLANTING.
- AS-BUILT DRAWINGS FOR THIS LANDSCAPE AND/OR IRRIGATION/WATER MANAGEMENT SYSTEM WILL BE PROVIDED IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES. THE CITY CODE OF ORDINANCES, AND ALL APPLICABLE PLAN PREPARATION CHECKLISTS. AS-BUILT DRAWINGS SHALL INCLUDE CLEAR IDENTIFICATION OF ALL VARIATION(S) AND CHANGES FROM APPROVED DRAWINGS INCLUDING LOCATION, QUANTITY AND SPECIFICATION OF ALL PROJECT ELEMENTS.
- AREAS OF BARE SOIL WILL NOT BE ACCEPTED. MULCHED AREAS AND PLANTING AREAS SHALL BE WEED FREE UPON ACCEPTANCE OF THE PROJECT BY THE CITY.

APPROVED  
SPECIAL USE PERMIT NO. 2019-0033

DEPARTMENT OF PLANNING &amp; ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION &amp; ENVIRONMENTAL SERVICES

SITE PLAN NO.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. DATE

ESI  
PEER REVIEW

KEY MAP

SEAL

PROJECT

116 S. HENRY ST.

GALENA CAPITAL PARTNERS

920 KING ST + 116 SOUTH HENRY

ALEXANDRIA, VIRGINIA

LANDDESIGN PROJ#

2019086

## REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
1	CONCEPT II SUBMISSION	12.20.19
2	PRELIMINARY I SUBMISSION	02.28.2020
3	PRELIMINARY I SUBMISSION	05.01.2020
4	PRELIMINARY I SUBMISSION	06.12.2020
5	FSP SUBMISSION	09.03.2021
6	FSP2 SUBMISSION	01.07.2022

DESIGNED BY:

DRAWN BY:

CHECKED BY:

SCALE

VERT: N/A

HORZ: 1"=10'

SHEET TITLE

MATERIALS AND PLANTING

SHEET NUMBER

L102





Hartranft Lighting Design  
401 Hawthorne Ln, Ste.  
110-269  
Charlotte, NC 28204  
(240) 731-1058

116 S HENRY STREET  
ALEXANDRIA, VA

No. \_\_\_\_\_ Revision \_\_\_\_\_  
Date \_\_\_\_\_

Seal & Signature \_\_\_\_\_

Date  
**03/03/2022**  
Scale  
**1:10**  
Project No. & Title  
**116 S HENRY STREET**  
Drawn By  
**KD**  
Checked  
**ADH**

**LIGHTING  
CALCULATIONS**

Sheet:

**LP-01**

APPROVED  
SPECIAL USE PERMIT NO. 2019-0033

DEPARTMENT OF PLANNING & ZONING

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

CHAIRMAN, PLANNING COMMISSION \_\_\_\_\_ DATE \_\_\_\_\_

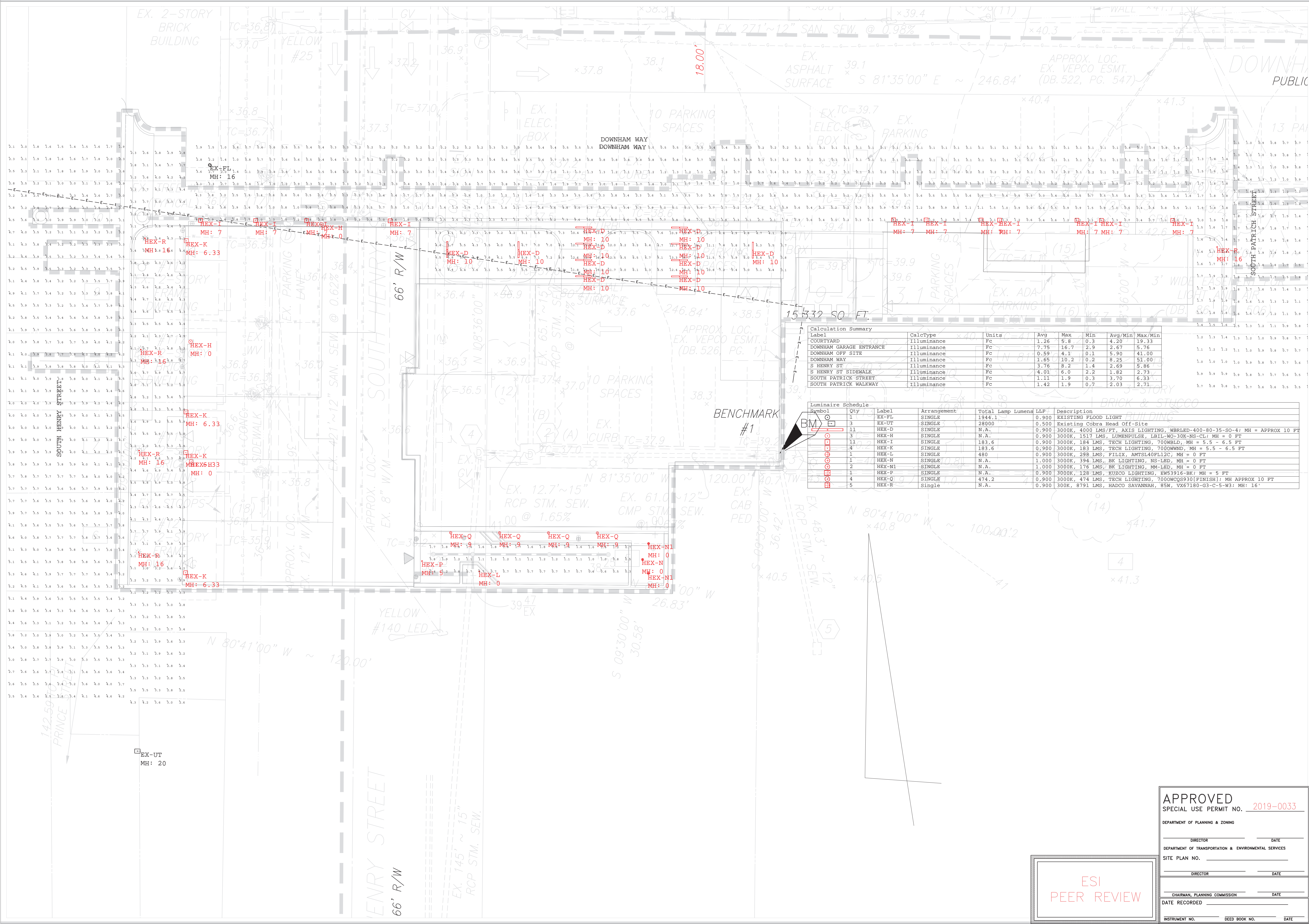
DATE RECORDED \_\_\_\_\_

INSTRUMENT NO. \_\_\_\_\_ DEED BOOK NO. \_\_\_\_\_ DATE \_\_\_\_\_

ESI  
PEER REVIEW

Calculation Summary									
Label	Qty	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
COURTYARD	1	Illuminance	Fc	1.26	5.8	0.3	4.20	19.33	
DOWNHAM GARAGE ENTRANCE	3	Illuminance	Fc	7.75	16.7	2.9	2.67	5.76	
DOWNHAM OFF SITE	1	Illuminance	Fc	0.59	4.1	0.1	5.90	41.00	
DOWNHAM WAY	1	Illuminance	Fc	1.65	10.2	0.2	8.25	51.00	
S HENRY ST	1	Illuminance	Fc	3.76	8.2	1.4	2.69	5.86	
S HENRY ST SIDEWALK	1	Illuminance	Fc	4.01	6.0	2.2	1.82	2.73	
SOUTH PATRICK STREET	1	Illuminance	Fc	1.11	1.9	0.3	3.70	6.33	
SOUTH PATRICK WALKWAY	1	Illuminance	Fc	1.42	1.9	0.7	2.03	2.71	

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description			
1	3	EX-UT	SINGLE	1944.1	0.900	EXISTING FLOOD LIGHT			
3	11	HEX-D	SINGLE	28000	0.500	Existing Cobra Head Off-Site			
11	3	HEX-H	SINGLE	N.A.	0.900	3000K, 4000 LMS/FT, AXIS LIGHTING, WBRLED-400-80-35-SO-4; MH = APPROX 10 FT			
3	4	HEX-T	SINGLE	N.A.	0.900	3000K, 1517 LMS, LUMENPULSE, LBIL-WO-30K-NS-CL; MH = 0 FT			
4	1	HEX-K	SINGLE	183.6	0.900	3000K, 184 LMS, TECH LIGHTING, 700WBLED, MH = 5.5 - 6.5 FT			
1	1	HEX-L	SINGLE	183.6	0.900	3000K, 183 LMS, TECH LIGHTING, 7000WBLED, MH = 5.5 - 6.5 FT			
1	2	HEX-N	SINGLE	N.A.	0.900	3000K, 298 LMS, FILIX, AMTSL40FL12C, MH = 0 FT			
2	1	HEX-N1	SINGLE	N.A.	1.000	3000K, 394 LMS, BK LIGHTING, NS-LED, MH = 0 FT			
1	4	HEX-P	SINGLE	N.A.	1.000	3000K, 176 LMS, BK LIGHTING, MM-LED, MH = 0 FT			
4	1	HEX-O	SINGLE	N.A.	0.900	3000K, 128 LMS, KUZCO LIGHTING, EWS3916-BK; MH = 5 FT			
5	1	HEX-R	Single	474.2	0.900	3000K, 474 LMS, TECH LIGHTING, 7000WBLED; MH APPROX 10 FT			







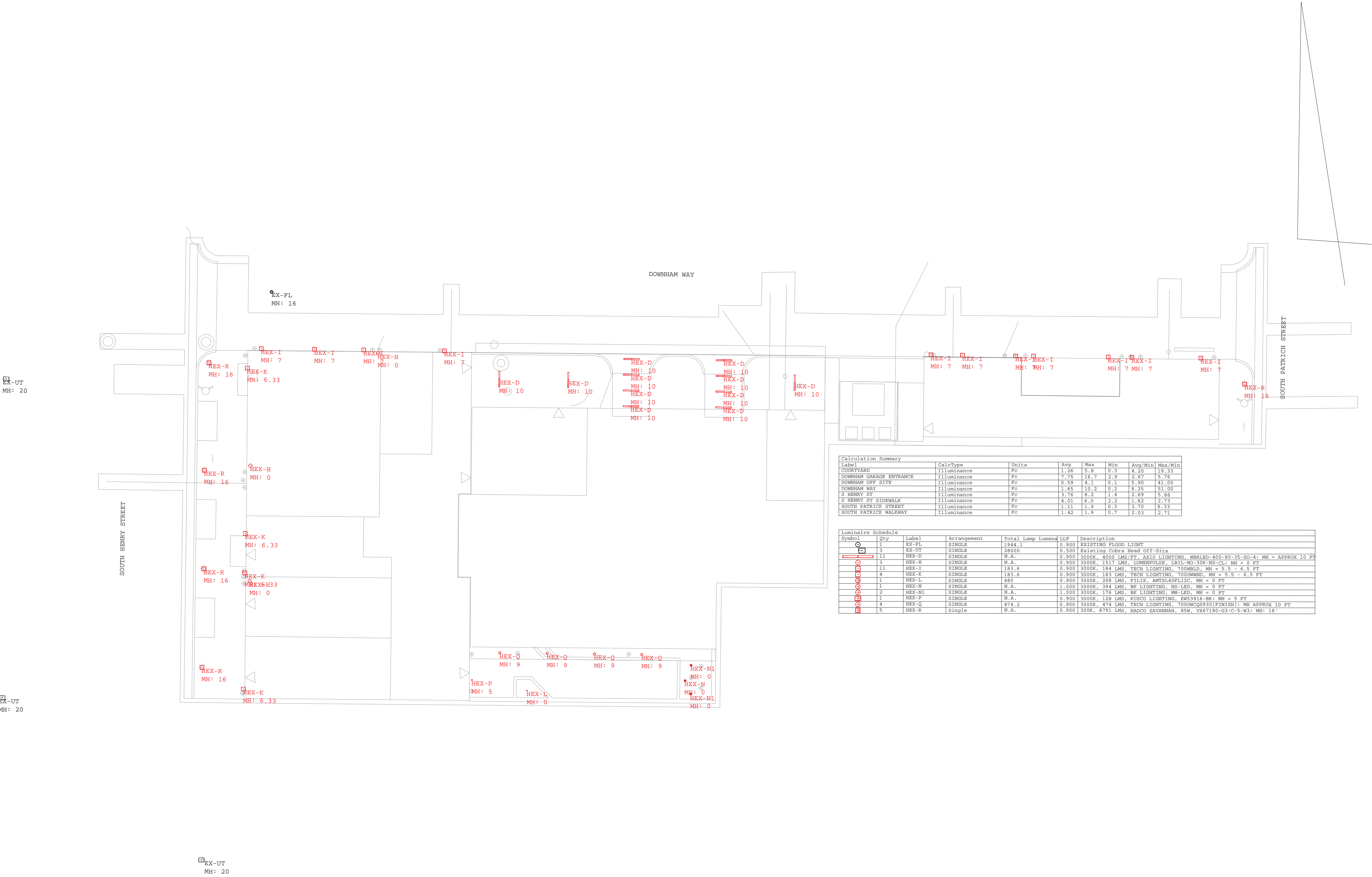
Hartranft Lighting Design  
401 Hawthorne Ln, Ste.  
110-209  
Charlotte, NC 28204  
(240) 731-1058

116 S HENRY STREET  
ALEXANDRIA, VA

No. \_\_\_\_\_ Date \_\_\_\_\_ Revision \_\_\_\_\_  
Seal & Signature \_\_\_\_\_

Date  
03/03/2022  
Scale  
1:15  
Project No. & Title  
116 S HENRY STREET  
Drawn By  
KD  
Checked  
ADH

LIGHTING LOCATIONS  
Sheet:  
LP-02



Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
COURTYARD	Illuminance	Fc	1.28	5.8	0.3	19.33
DOWNHAM GARAGE ENTRANCE	Illuminance	Fc	7.75	16.7	2.9	5.76
DOWNHAM OFF SITE	Illuminance	Fc	0.65	4.1	0.1	41.00
DOWNHAM WAY	Illuminance	Fc	1.65	10.2	0.2	51.00
S HENRY ST	Illuminance	Fc	1.79	8.2	0.4	20.50
S HENRY ST SIDEWALK	Illuminance	Fc	4.01	6.0	2.2	2.73
SOUTH PATRICK STREET	Illuminance	Fc	1.11	6.9	0.3	23.00
SOUTH PATRICK WALKWAY	Illuminance	Fc	1.42	1.9	0.7	2.71

Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	Description
EX-FL	1	EX-FL	SINGLE	1944.1	0.900 EXISTING FLOOD LIGHT
EX-H	3	EX-H	SINGLE	28000	0.900 EXISTING CHINA MOUNT DEC SITE
EX-D	11	EX-D	SINGLE	0.900 1000K	4000 LANS/FT, AXIS LIGHTING, WBLKED-400-80-35-SO-4, MH = APPROX 10 FT
EX-H	3	EX-H	SINGLE	N.A.	0.900 1000K 1517 LMS, LUMINUSPULSE, LBL-NO-30K-NS-CL, MH = 0 FT
EX-I	11	EX-I	SINGLE	183.6	0.900 3000K 184 LMS, TECH LIGHTING, 7000K, MH = 5.5 - 6.5 FT
EX-K	4	EX-K	SINGLE	183.6	0.900 3000K 183 LMS, TECH LIGHTING, 7000K, MH = 5.5 - 6.5 FT
EX-L	1	EX-L	SINGLE	480	0.900 3000K 294 LMS, FILIA, AMPLA-08-12, MH = 0 FT
EX-N	1	EX-N	SINGLE	N.A.	1.000 3000K 394 LMS, BK LIGHTING, NS-LED, MH = 0 FT
EX-N1	2	EX-N1	SINGLE	N.A.	1.000 3000K 174 LMS, BK LIGHTING, NS-LED, MH = 0 FT
EX-P	1	EX-P	SINGLE	N.A.	0.900 3000K 128 LMS, KUCO LIGHTING, RM53916-BK, MH = 5 FT
EX-O	4	EX-O	SINGLE	674.2	0.900 3000K 474 LMS, TECH LIGHTING, 7000K/8301 PANTHER, MH APPROX 10 FT
EX-R	5	EX-R	Single	N.A.	0.900 300K 8791 LMS, RADCO SAVANNAH 85W, VZ67180-03-C-5-W3, MH: 16'

ESI  
PEER REVIEW

APPROVED  
SPECIAL USE PERMIT NO. 2019-0033

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_  
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. \_\_\_\_\_  
DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

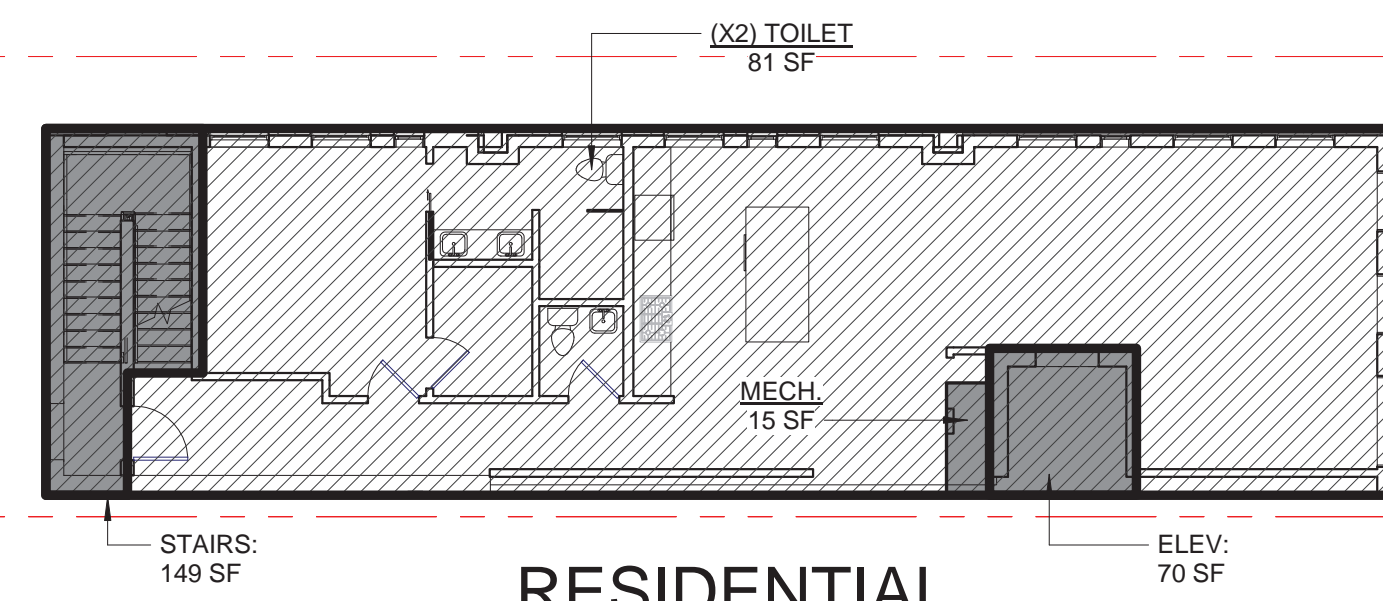
CHAIRMAN, PLANNING COMMISSION \_\_\_\_\_ DATE \_\_\_\_\_  
DATE RECORDED \_\_\_\_\_

INSTRUMENT NO. \_\_\_\_\_ DEED BOOK NO. \_\_\_\_\_ DATE \_\_\_\_\_









NON-RESIDENTIAL  
6,771 GSF

**SHAFT/ UTILITY:**  
77 SF

**STAIRS/ ELEV:**  
188 SF

**2**  
**A-012**

**3' - 6"**  
**CANOPY OVERHANG**

**2' - 6"**

**MECH**  
26 SF

**(X3) TOILET**  
50 SF  
35 SF

**STAIRS:**  
65 = SF

**3517 = SF**

**(new) SHAFT/ UTILITY:**  
8 SF

**STAIRS/ ELEV:**  
285 SF

**MECH**  
13 SF

**(X1) TOILET**  
50 SF

**NON-RESIDENTIAL**  
**6,771 GSF**

**LIFT/ SHAFT AREA**  
1847 = SF

**1,342 SF**

**SHAFT/ UTILITY:**  
12 SF

**MECH**  
16 SF

**(X1) TOILET**  
50 SF

**2' - 6"**  
**4' - 0"**  
**CANOPY OVERHANG**

**RESIDENTIAL 4,487 GSF**

MECH  
17 SF

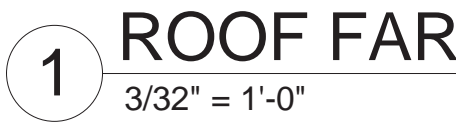
(2) TOILET  
100 SF

2'-0" CANOPY

NON-RESIDENTIAL  
6,771 GSF

original drawing is 24" x 36". Scale  
titles accordingly if reduced.





Original drawing is 24" x 36". Scale  
titles accordingly if reduced.



A/E PROJECT NO: 19 - 24

SHEET NUMBER:

APPROVED  
SPECIAL USE PERMIT NO. 2019-0033

DEPARTMENT OF PLANNING &amp; ZONING

\_\_\_\_\_  
DIRECTOR

\_\_\_\_\_  
DATE

SITE PLAN NO.

\_\_\_\_\_  
DIRECTOR

\_\_\_\_\_  
DATE

CHAIRMAN, PLANNING COMMISSION	DATE
-------------------------------	------

DATE RECORDED \_\_\_\_\_

INSTRUMENT NO.	DEED BOOK NO.	DATE
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Original drawing is 24" x 36". Scale  
entitles accordingly if reduced.

## 116 S.HENRY STREET - RESIDENTIAL

* Includes Mezzanine area with the units	% Deductions	0.24
--	--------------	------

MAX. HEIGHT 50'-0" ABOVE AFG - SEE ELEVATION

* Includes Mezzanine area with the units	4,533
--	-------

* Not counted towards FAR	% Deductions	0.22
---------------------------	--------------	------

MAX. HEIGHT 50'-0" ABOVE AFG - SEE ELEVATION

* Not counted towards FAR	1258
---------------------------	------

# OF UNITS ALLOWED (35 PER ACRE)	19
PROPOSED # OF UNITS	19

ALLOWABLE HEIGHT ABOVE AFG	50'-0"
PROPOSED HEIGHT ABOVE AFG	50'-0"

## 116 S.HENRY STREET - NON RESIDENTIAL

* Not counted towards FAR	% Deductions	0.03
---------------------------	--------------	------

MAX. HEIGHT 50'-0" ABOVE AFG - SEE ELEVATION

\* Not counted towards FAR

* Not counted towards FAR	% Deductions	0.91
---------------------------	--------------	------

MAX. HEIGHT 50'-0" ABOVE AFG - SEE ELEVATION

ALLOWABLE HEIGHT ABOVE AFG	50'-0"
PROPOSED HEIGHT ABOVE AFG	50'-0"

ESI  
PEER REVIEW



[illegible]

0 4' 8' 16'

SCALE : 1/8" = 1'-0"

N  
VIRGINIA  
STATE GRID  
NORTH  
NAD 83/93

**A-A111**

DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	DATE _____
DATE RECORDED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____ DATE _____

original drawing is 24" x 36". Scale  
titles accordingly if reduced.

ESI  
PEER REVIEW



ESI  
PEER REVIEW



GALENA CAPITAL PARTNERS  
1010 Pendleton Street, Alexandria, VA 22314

PATRICK - HENRY

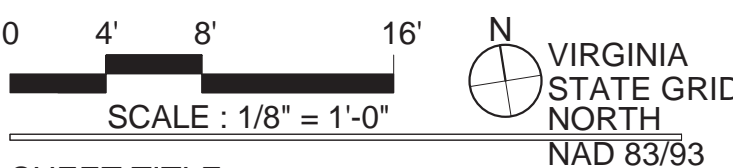
**Alexandria, VA**

**WINSTANLEY**  
ARCHITECTS & PLANNERS

Professional Certification.  
I certify that these documents were prepared or  
approved by me, and that I am duly licensed architect  
under the laws of the state of Virginia, license number  
0401012577, expiration date 08/31/2022



REGISTRATION:

A/E PROJECT NO: 19 - 24

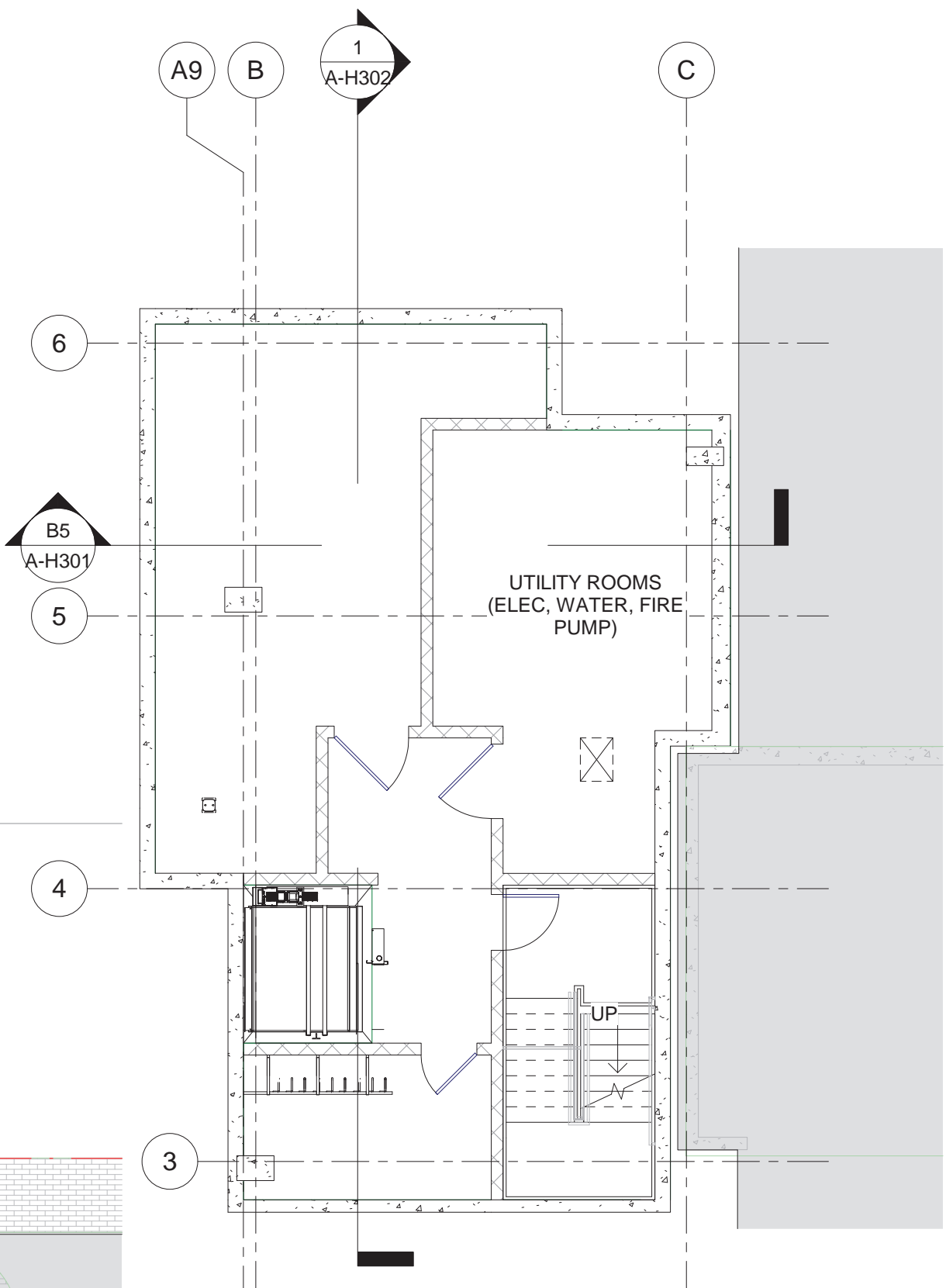
SHEET TITLE: **HENRY CONSTRUCTION PLANS**

SHEET NUMBER:

## A-H111

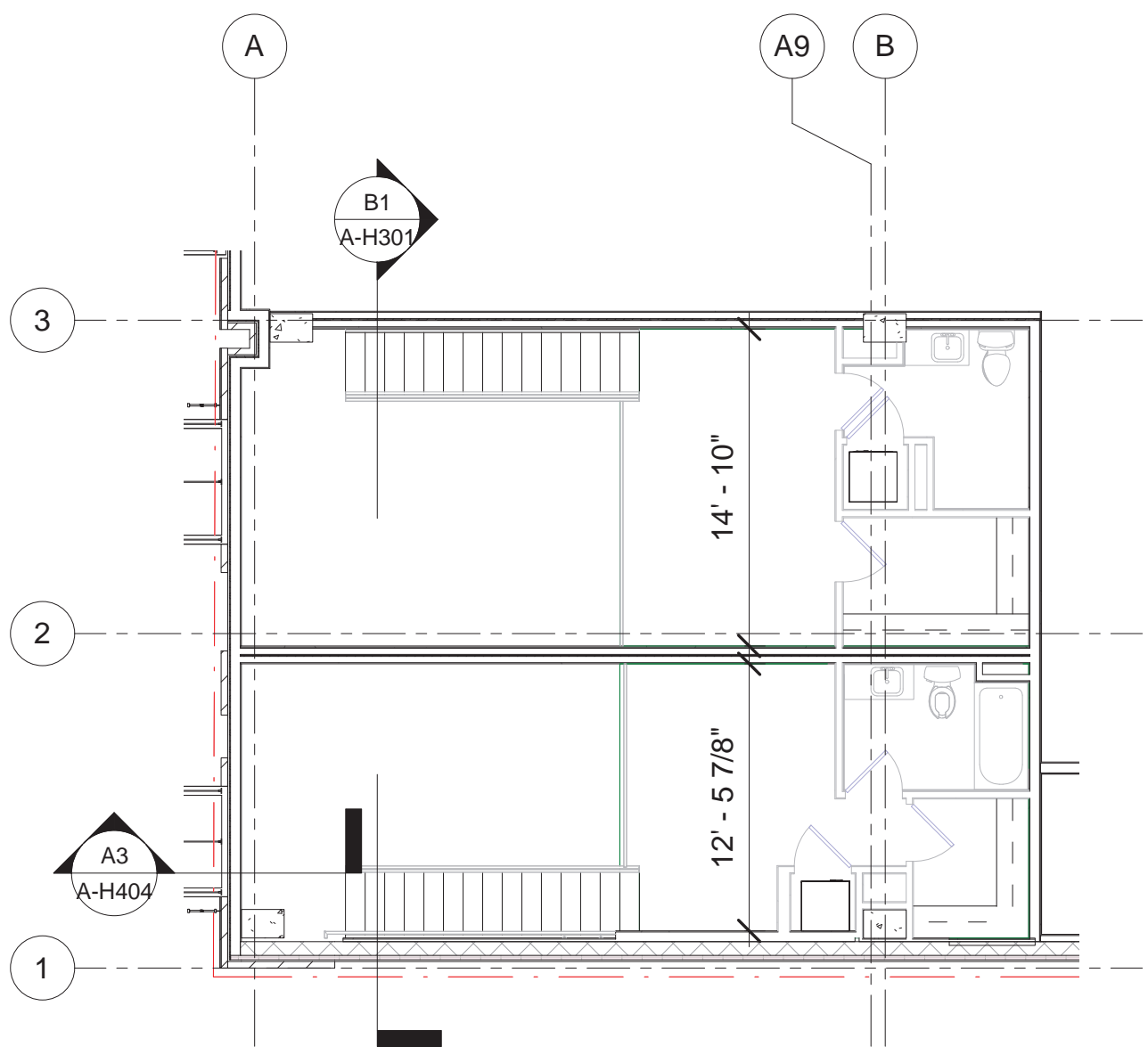
<b>APPROVED</b>	
SPECIAL USE PERMIT NO.	2019-0033
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	DATE _____
DATE RECEIVED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____ DATE _____

Original drawing is 24" x 36". Scale entities accordingly if reduced.

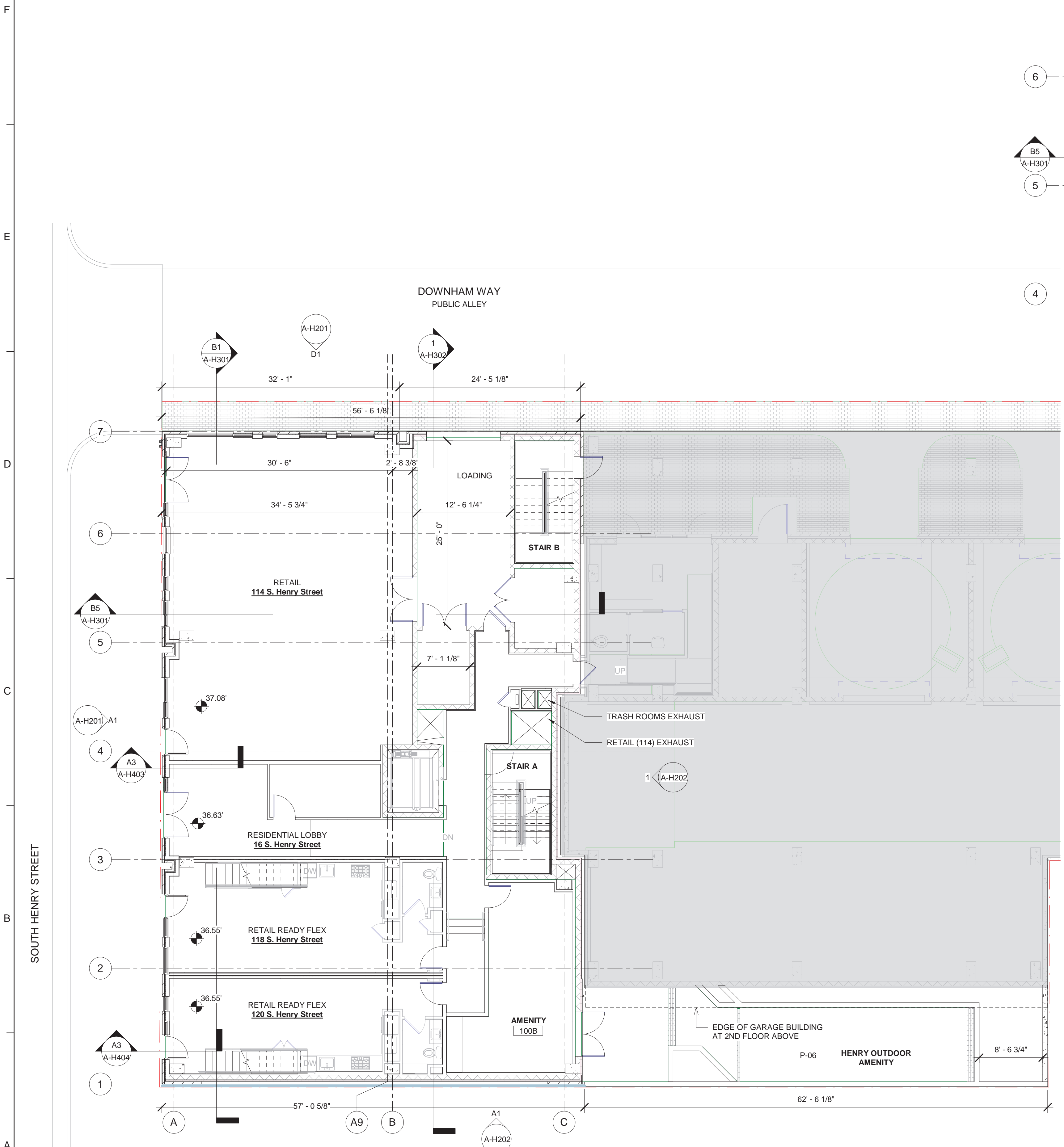


**D6 HENRY BASEMENT PLAN**  
1/8" = 1'-0"

Unit Summary - Ground Floor				
Unit No.	Occupancy	Unit Type	Type A	Type B
HENRY 1ST FLR				
101	Residential	RETAIL READY FLEX		Yes
102	Residential	RETAIL READY FLEX		Yes
Amenity	Residential			
Lobby	Residential			
Lobby North	Residential			
Mail	Residential			
Tenant	Mercantile			



**E6** HENRY 1ST FLOOR LOFT  
1/8" = 1'-0"

ESI  
PEER REVIEW

**A1** HENRY 1ST FLOOR PLAN  
1/8" = 1'-0"



## GENERAL NOTES

- 1 REFER TO DEMOLITION DWGS. FOR EXTENT OF DEMOLITION WORK. REFER TO  
ARCH. E.O.S. PLANS FOR LOCATION OF SLAB CUT-OUT WITHIN SHAFT WALLS.
- 2 REFER TO CIVIL, ARCH. AND LANDSCAPE DWGS. FOR EXTENT OF SITE &  
LANDSCAPE WORK.
- 3 REFER TO SECT. DWGS. FOR EXTENT OF STRUCT. WORK. REFER TO ARCH.  
DETAILS FOR LOCATIONS.
- 4 REFER TO MECH. ELEC. & PLUMB. DRAWINGS FOR EXTENT OF MECH. ELEC. &  
PLUMB. WORK AND GENERAL LOCATION OF EQUIPMENT. REFER TO ARCH.  
DWGS. FOR FIXTURE, RECEPTACES, AND DEVICE LOCATIONS.
- 5 PROTECT ALL EXIST. WALL AND FLOOR DURING CONSTRUCTION.
- 6 PROVIDE 2-HR FIRE RATED STAIR AND ELEVATOR ENCLOSURES.
- 7 REFER TO 7006 DWGS FOR ENLARGED STAIRS & ELEVATOR AS INDICATED  
ON THE ARCH. PLANS.
- 8 ALL DIMENSION LINES ARE TO THE COLUMN CENTERLINE, FACE OF MASONRY,  
OR FACE OF STUD UNO
- 9 FLOOR LEVELS INDICATE TOP OF CONC. SLAB WITH THE EXCEPTION OF ROOF  
LEVEL. ROOF LEVEL IS TO TOP OF GREEN ROOF H.P.
- 10 SECURITY DEVICES TO BE COORDINATED & APPROVED BY OWNER. REFER TO  
ELEC. DWGS FOR TIE-OUTS.
- 11 PROVIDE FIRE EXTINGUISHER & CABINETS LOCATED WITHIN 75'-0" WITH THE  
EXCEPTION OF R-2 OCCUPANCY FLOORS (2,3,4).
- 12 PROVIDE KERDI-MAT WATERPROOFING AT ALL SHOWER, RESTROOMS,  
BATHROOMS & LAUNDRY ROOMS.
- 13 ALL COMMERCIAL ENTRANCES TO BE ADA-ACCESSIBLE INCLUDING  
ENTRANCES TO RETAIL AND STORAGE SPACES
- 14 MINIMUM 50% OF ALL CONSTRUCTION WASTE TO BE DIVERTED FROM  
LANDFILL FOR GREEN GLOBES
- 15 REFER TO AREA PLANS G-004 FOR UNIT SQUARE FOOTAGE
- 16 SEE A-4206 ENLARGED UNIT PLANS FOR UNIT LAYOUT DIMENSIONS
- 17 LAUNDRY EQUIPMENT (WASHER AND DRYER) & APPLIANCES TO BE PROVIDED  
& INSTALLED BY G.C.
- 18 CEILING ELEVATIONS ARE FROM TOP OF F.F.
- 19 SLAB TO SLAB AND FLOOR TO FLOOR HEIGHT VARIES. REFER TO ELEVATIONS,  
SECTIONS AND EOS SPOT ELEVATIONS
- 20 REFER TO ID AND ELEC. DWGS. FOR FIXTURE SCHEDULE & CIRCUITING. REFER  
TO ARCH. DWGS FOR LOCATION OF FIXTURES. LIGHT FIXTURES TO BE  
LOCATED CENTER OF CLG U.O.N.
- 21 REFER TO ID ELEVATIONS FOR LOCATION OF WALL MOUNTED LIGHT FIXTURES  
& DESIGN INTENT
- 22 SCRAPE, PATCH AND PAINT EXPOSED CEILINGS.
- 23 CEILING/FLOOR ASSEMBLIES: PROVIDE 1-HR RATED ASSEMBLIES.
- 24 REFERENCE 7006 STAIR SECTIONS FOR STAIR TOWER LIGHTING LOCATIONS.

**GALENA CAPITAL PARTNERS**  
1010 Pendleton Street, Alexandria, VA 22314

PATRICK - HENRY

Alexandria, VA

**WINSTANLEY**  
ARCHITECTS & PLANNERS

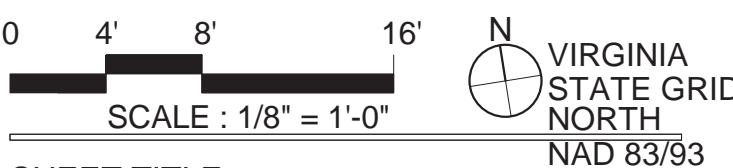
Professional Certification.  
I certify that these documents were prepared or approved by me, and that I am duly licensed architect under the laws of the state of Virginia, license number 0401012577, expiration date 08/31/2022



REGISTRATION:

[illegible]

A/E PROJECT NO: 19 - 24



SHEET TITLE: **HENRY CONSTRUCTION PLANS**

SHEET NUMBER:

A-H112

APPROVED  
SPECIAL USE PERMIT NO. 2019-0033

DEPARTMENT OF PLANNING &amp; ZONING

\_\_\_\_\_  
DIRECTOR

\_\_\_\_\_  
DATE

DEPARTMENT OF TRANSPORTATION &amp; ENVIRONMENTAL SERVICE

SITE PLAN NO.

\_\_\_\_\_  
DIRECTOR

\_\_\_\_\_  
DATE

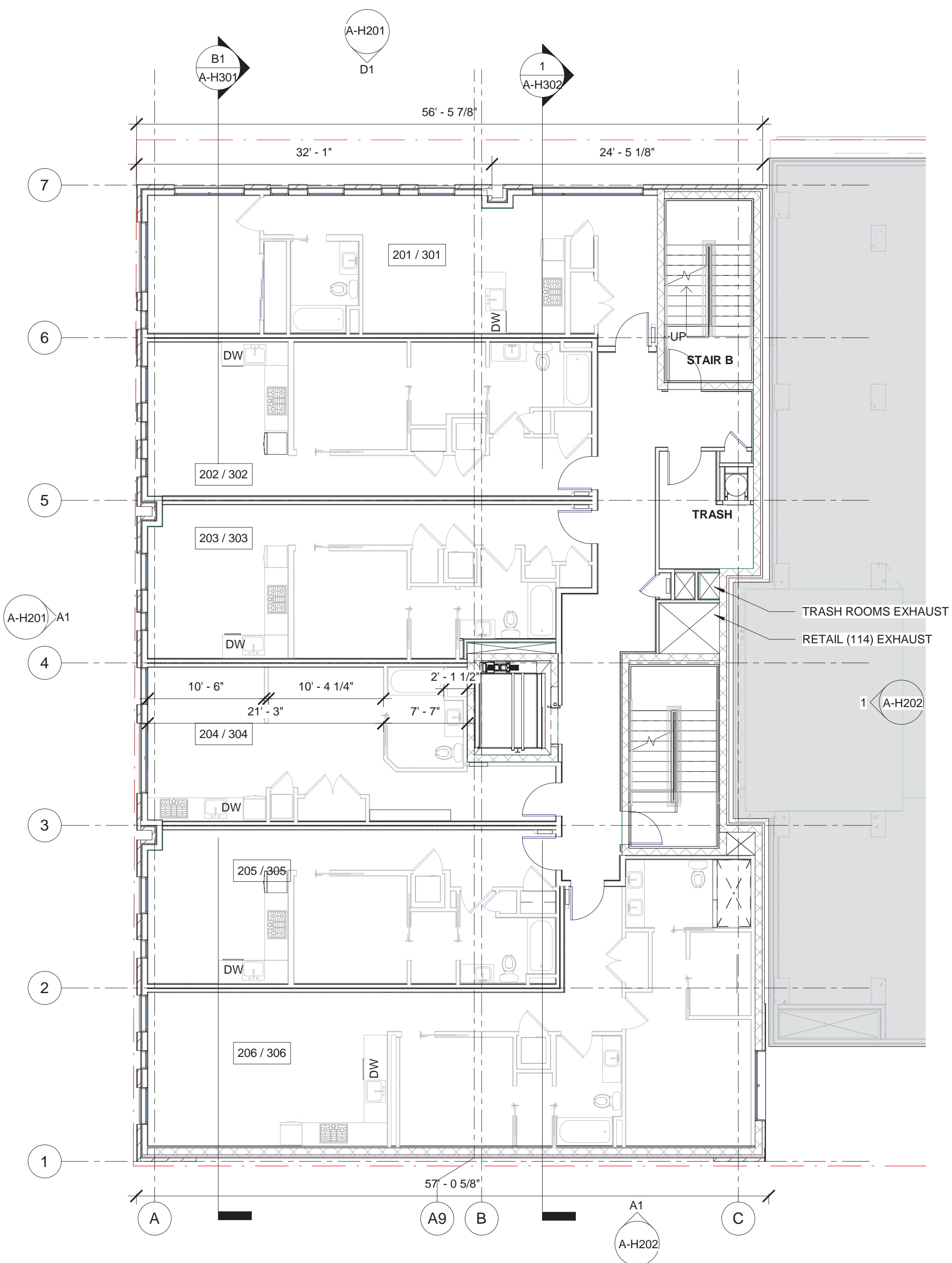
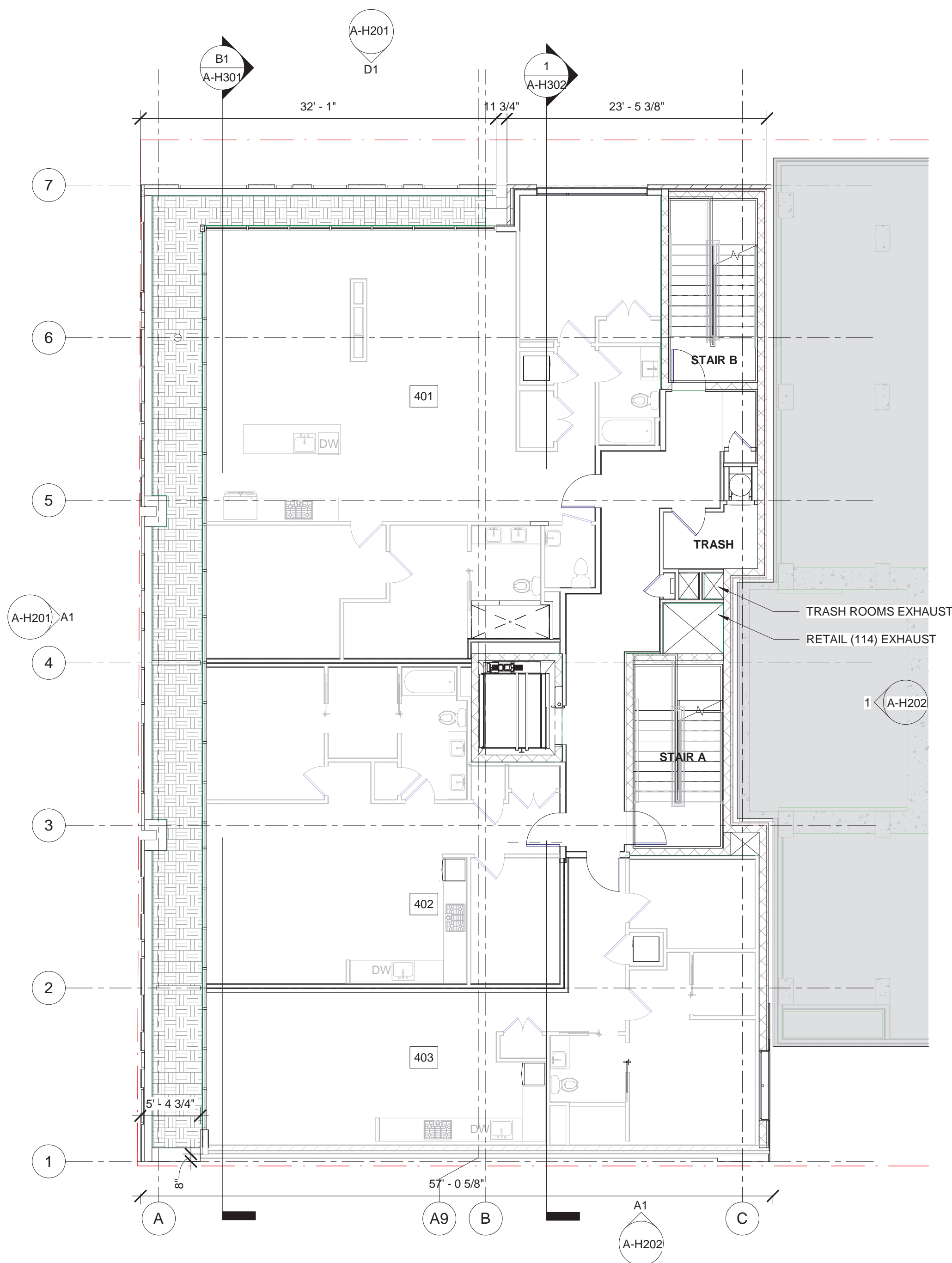
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CHAIRMAN, PLANNING COMMISSION

\_\_\_\_\_  
DATE

DATE RECORDED \_\_\_\_\_

INSTRUMENT NO.	DEED BOOK NO.	DATE
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Original drawing is 24" x 36". Scale options accordingly if reduced.

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GALENA CAPITAL PARTNERS  
1010 Pendleton Street, Alexandria, VA 22314

**Alexandria, VA**

**WINSTANLEY**  
ARCHITECTS & PLANNERS

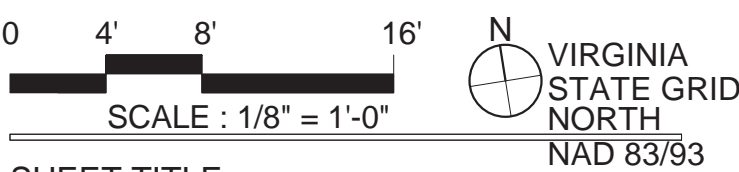
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under the laws of the state of Virginia, license number  
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REGISTRATION:

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A/E PROJECT NO: 19 - 24



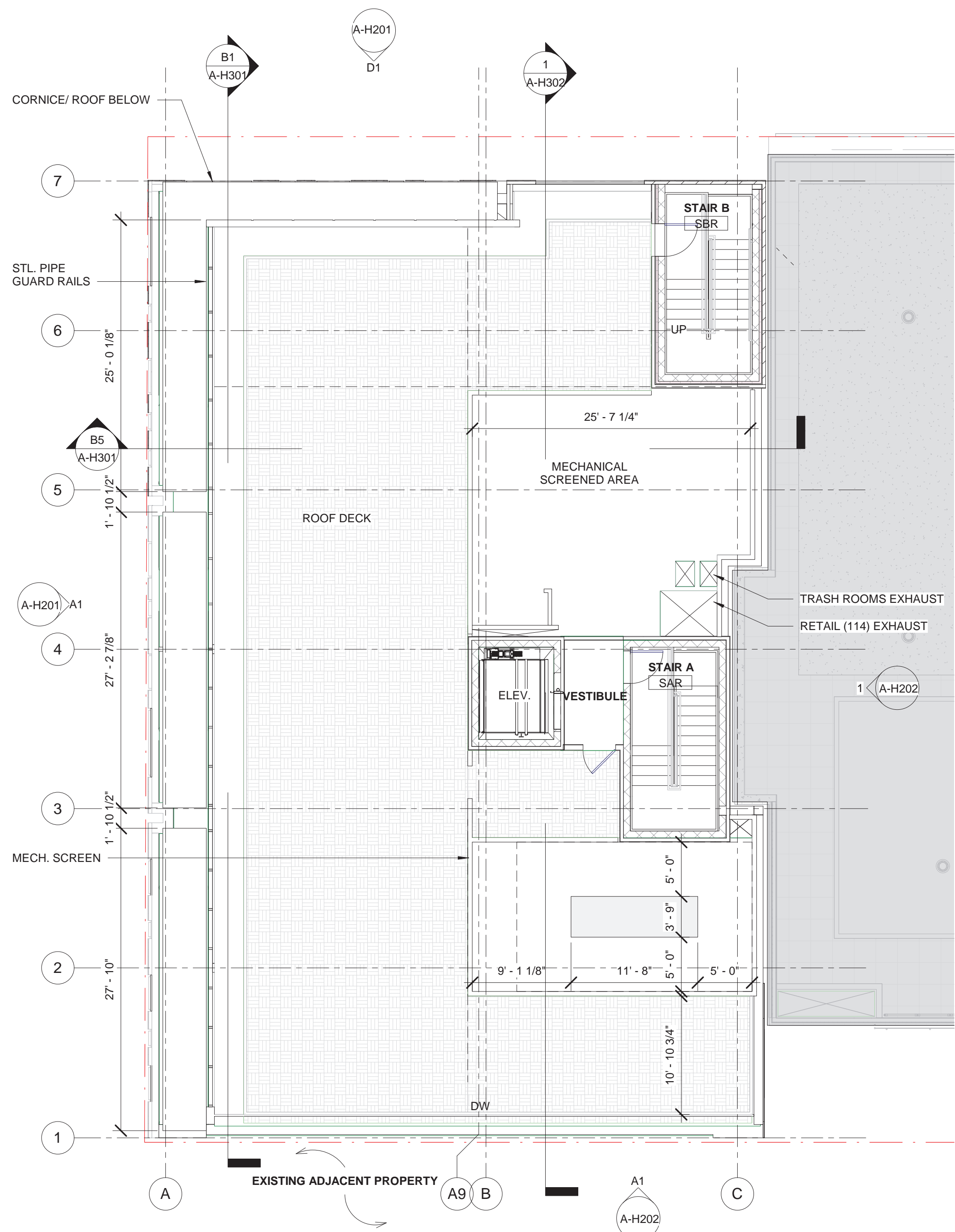
SHEET TITLE:  
**HENRY CONSTRUCTION  
PLANS**

SHEET NUMBER:

## A-H113

<b>APPROVED</b>	
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**A5 HENRY ROOF AMENITY PLAN**  
1/8" = 1'-0"

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PEER REVIEW





Original drawing is 24" x 36". Scale  
entitles accordingly if reduced.

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## GENERAL CONSTRUCTION NOTES

- 1 REFER TO INTERIORS DRAWINGS FOR MILLWORK SIZE, LOCATION AND DETAILS
- 2 REFER CIVIL DWGS. FOR EXTENT OF SITE & LANDSCAPE WORK.
- 3 REFER TO STRUCT. DWGS. FOR EXTENT OF STRUCT. WORK. REFER TO ARCH. DETAILS FOR LOCATIONS.
- 4 REFER TO MECH. ELEC. & PLUMB. DRAWINGS FOR EXTENT OF MECH. ELEC. & PLUMB. WORK AND GENERAL LOCATION OF EQUIPMENT. REFER TO ARCH. DWGS. FOR FIXTURE, RECEPTACLES, AND DEVICE LOCATIONS.
- 5 PROVIDE 2-HR FIRE RATED STAIR AND ELEVATOR ENCLOSURES.
- 6 REFER TO A-700s FOR ENLARGED STAIRS & ELEVATOR AS INDICATED ON THE ARCH. PLANS.
- 7 ALL DIMENSION LINES ARE TO THE COLUMN LINE OR FACE OF GWB UNO
- 8 SECURITY DEVICES TO BE COORDINATED & APPROVED BY OWNER. REFER TO ELEC. DWGS FOR STUB-OUTS.
- 9 PROVIDE FIRE EXTINGUISHER & CABINETS LOCATED WITHIN 75'-0" WITH THE EXCEPTION OF R-2 OCCUPANCY FLOORS (2,3,4).
- 10 PROVIDE KERDI-MAT WATERPROOFING AT ALL SHOWER, RESTROOMS, BATHROOMS & LAUNDRY ROOMS.
- 11 LAUNDRY EQUIPMENT (WASHER AND DRYER) & APPLIANCES TO BE PROVIDED & INSTALLED BY G.C.

GALENA CAPITAL PARTNERS

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PATRICK - HENRY

Alexandria, VA

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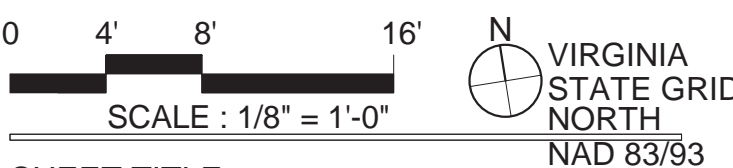
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REGISTRATION:

[illegible]

A/E PROJECT NO: 19 - 24



SHEET TITLE:  
**PATRICK FLOOR PLANS**

SHEET NUMBER:

**A-P112**

<b>APPROVED</b>	
SPECIAL USE PERMIT NO.	<u>2019-0033</u>
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INSTRUMENT NO. _____	DEED BOOK NO. _____
DATE _____	

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**NOT TO EXCEED 50' MAX**

**PATRICK STREET**

**PROPERTY LINE**

**GUARDRAIL**

**PATRICK ROOF**  
88' - 3"

**PATRICK 4TH FLOOR**  
77' - 2"

**PATRICK 3RD FLOOR**  
66' - 0"

**PATRICK 2ND FLOOR**  
55' - 4"

**PATRICK 1ST FLOOR**  
44' - 8"

**PATRICK AFG**  
42' - 6"

**STREET LEVEL**

**BRICK**

**EXTERIOR ACCESS STAIRCASE, PTD. PNT-3**

**METAL TRIM**

**ALUM. & GLASS WINDOW SYSTEM MULLIONS (GLAZING PER ALEXANDRIA STANDARD)**

**FACE BRICK W/ ACCENT COURSE DTL IN THE SAME COLOR**

**NICHIHA "NichiPanel" IN SMOOTH FINISH**

**TruEXTERIOR TRIM PTD. PNT-4 HEADER AND SILLS**

**WALL SCONE (HEX-K)**

**UNDERGROUND TRANSFORMER**

**ROOF LEVEL**  
90' - 0"

**GARAGE 6TH FLR**  
81' - 2 1/4"

**GARAGE 5TH FLR**  
73' - 1 1/4"

**GARAGE 4TH FLR**  
65' - 0 1/4"

**GARAGE 3RD FLR**  
56' - 11 1/4"

**GARAGE 2ND FLR**  
48' - 7 1/4"

**GARAGE AFG**  
40' - 3 5/8"

**SINFWAI K**

**GARAGE LEVEL 10**  
40' - 1 3/16"

**NOT TO EXCEED 50' MAX**

**NORTH ELEVATION (109 S. PATRICK ST. BUILDING AT DOWNHAM ALLEY)**

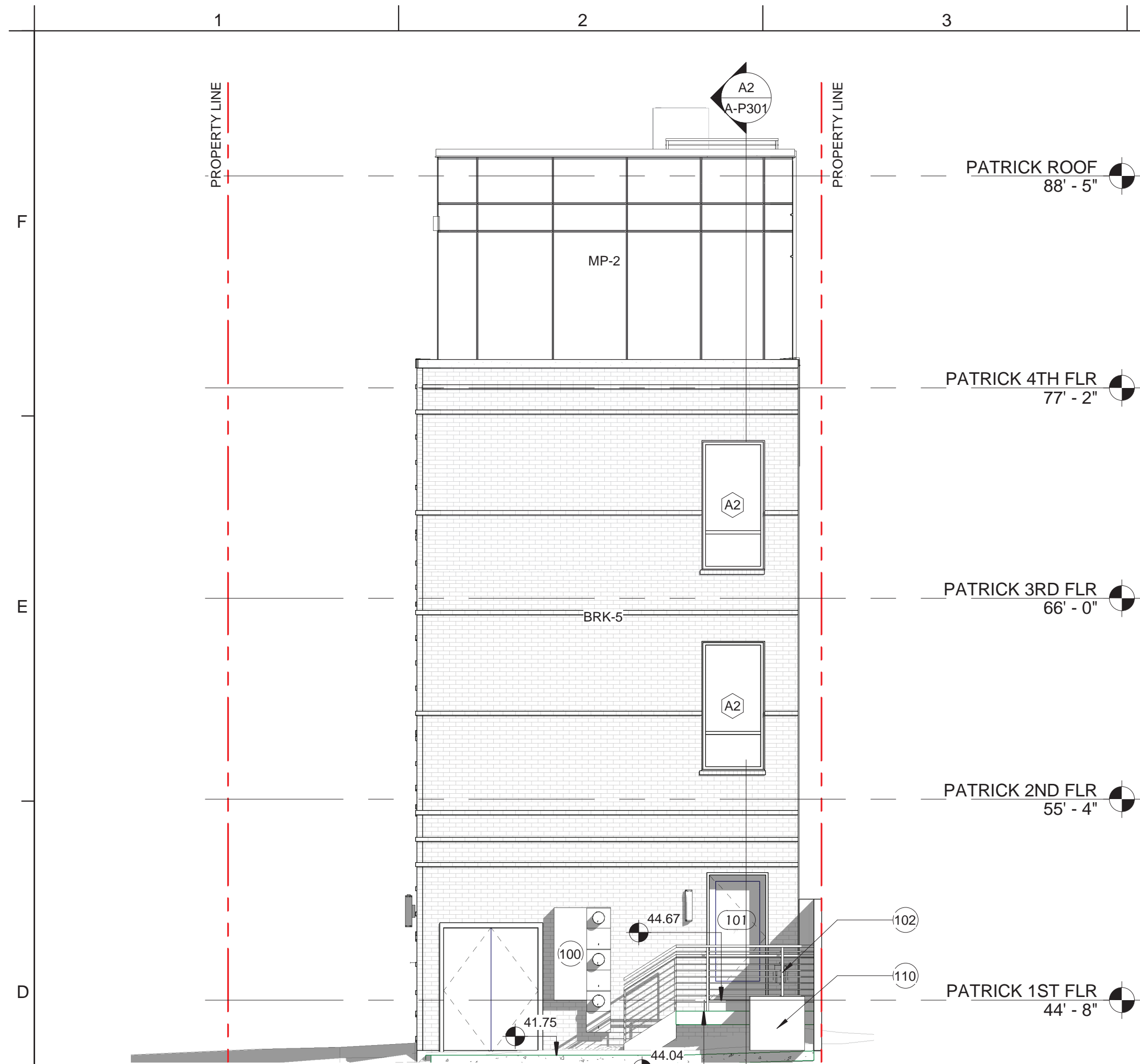


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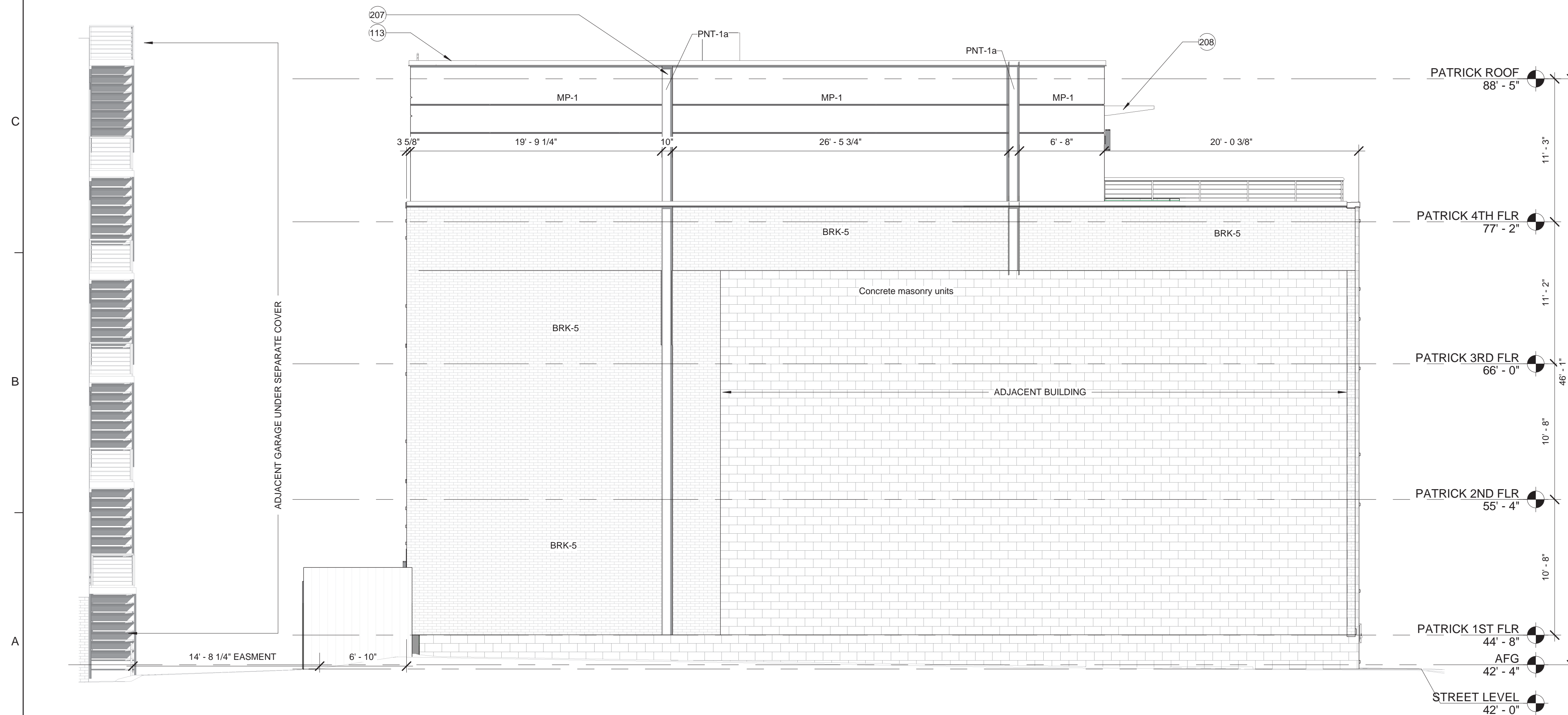








**D1** West (Rear) Elevation - DSUP  
3/16" = 1'-0"



**A1** South Elevation - DSUP  
3/16" = 1'-0"

7		8
	KEY NOTES	
	Key #	Keynote Text
	100	ELECTRIC METER(S) - Refer to MEP, dry utility for stack configuration and size
	102	GAS METER(S)- REFER TO PLUMBING DRAWINGS FOR SIZING
	110	CONDENSER UNIT(S) ON PAD, SEE MEP
	113	ROOF HATCH
	207	DECORATIVE 1/4" BUILT-UP STL. CHANNEL
	208	CANOPY (FINISH TBD)

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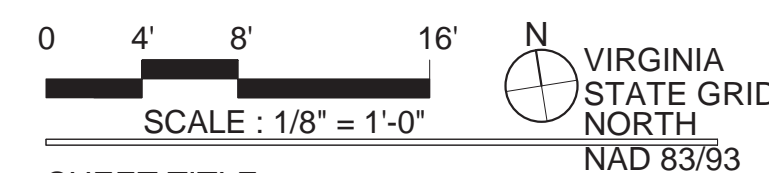
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REGISTRATION:

[illegible]

A/E PROJECT NO: 19 - 24



SHEET TITLE:  
**EXTERIOR ELEVATIONS**

SHEET NUMBER:

A-P202

APPROVED		2019-0033	
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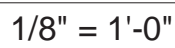
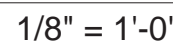
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PFFR REVIEW

Original drawing is 24" x 36". Scale entities accordingly if reduced.



Original drawing is 24" x 36". Scale  
notation accordingly if reduced

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PEER REVIEW





## GENERAL NOTES

- 1 REFER TO DEMOLITION DWGS. FOR EXTENT OF DEMOLITION WORK. REFER TO ARCH. E.O.S. PLANS FOR LOCATION OF SLAB CUT-OUT WITHIN SHAFT WALLS.
- 2 REFER TO CIVIL, ARCH. AND LANDSCAPE DWGS. FOR EXTENT OF SITE & LANDSCAPE WORK.
- 3 REFER TO STRUCT. DWGS. FOR EXTENT OF STRUCT. WORK. REFER TO ARCH. DETAILS FOR LOCATIONS.
- 4 REFER TO MECH. ELEC. & PLUMB. DRAWINGS FOR EXTENT OF MECH. ELEC. & PLUMB. WORK AND GENERAL LOCATION OF EQUIPMENT. REFER TO ARCH. DWGS. FOR FIXTURE, RECEPTACLES, AND DEVICE LOCATIONS.
- 5 PROTECT ALL EXIST. WALL AND FLOOR DURING CONSTRUCTION.
- 6 PROVIDE 2-HR FIRE RATED STAIR AND ELEVATOR ENCLOSURES.
- 7 REFER TO A-700s DWGS FOR ENLARGED STAIRS & ELEVATOR AS INDICATED ON THE ARCH. PLANS.
- 8 ALL DIMENSION LINES ARE TO THE COLUMN CENTERLINE, FACE OF MASONRY, OR FACE OF STUD UNO
- 9 FLOOR LEVELS INDICATE TOP OF CONC. SLAB WITH THE EXCEPTION OF ROOF LEVEL, ROOF LEVEL INDICATE TOP OF GREEN ROOF H.P.
- 10 SECURITY DEVICES TO BE COORDINATED & APPROVED BY OWNER. REFER TO ELEC. DWGS FOR STUB-OUTS.
- 11 PROVIDE FIRE EXTINGUISHER & CABINETS LOCATED WITHIN 75'-0" WITH THE EXCEPTION OF R-2 OCCUPANCY FLOORS (2,3,4).
- 12 PROVIDE KERDI-MAT WATERPROOFING AT ALL SHOWER, RESTROOMS, BATHROOMS & LAUNDRY ROOMS.
- 13 ALL COMMERCIAL ENTRANCES TO BE ADA-ACCESSIBLE INCLUDING ENTRANCES TO "RETAIL-READY" SPACES
- 14 MINIMUM 50% OF ALL CONSTRUCTION WASTE TO BE DIVERTED FROM LANDFILL FOR GREEN GLOBES
- 15 REFER TO AREA PLANS G-004 FOR UNIT SQUARE FOOTAGE
- 16 SEE A-420s ENLARGED UNIT PLANS FOR UNIT LAYOUT DIMENSIONS
- 17 LAUNDRY EQUIPMENT (WASHER AND DRYER) & APPLIANCES TO BE PROVIDED & INSTALLED BY G.C.
- 18 CEILING ELEVATIONS ARE FROM TOP OF F.F.
- 19 SLAB TO SLAB AND FLOOR TO FLOOR HEIGHT VARIES. REFER TO ELEVATIONS, SECTIONS AND EOS SPOT ELEVATIONS
- 20 REFER TO ID AND ELEC. DWGS. FOR FIXTURE SCHEDULE & CIRCUITING. REFER TO ARCH. DWGS FOR LOCATION OF FIXTURES. LIGHT FIXTURES TO BE LOCATED CENTER OF GLG UNO
- 21 REFER TO ID ELEVATIONS FOR LOCATION OF WALL MOUNTED LIGHT FIXTURES & DESIGN INTENT.
- 22 SCRAPE, PATCH AND PAINT EXPOSED CEILINGS.
- 23 CEILING/FLOOR ASSEMBLIES: PROVIDE 1-HR RATED ASSEMBLIES.
- 24 REFERENCE 700s STAIR SECTIONS FOR STAIR TOWER LIGHTING LOCATIONS.

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PATRICK - HENRY

Alexandria, VA

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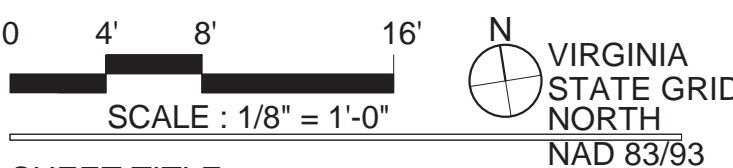
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REGISTRATION:

[illegible]

A/E PROJECT NO: 19 - 24



SHEET TITLE:  
**BUILDING SECTIONS**

SHEET NUMBER:

## A-H302

APPROVED		2019-0033	
SPECIAL USE PERMIT NO.			
DEPARTMENT OF PLANNING & ZONING			
DIRECTOR _____		DATE _____	
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		DATE _____	

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PEER REVIEW

Original drawing is 24" x 36". Scale entities accordingly if reduced.











[illegible]

**D4** PATRICK-HENRY MOCK-UP PANEL COLOR  
3/4" = 1'-0"

Architectural elevation drawing of a building facade showing various brickwork patterns and materials. The drawing includes labels for different brick types (BRK-5, BRK-6, BRK-7, BRK-2, BRK-4), mortar colors (MORTAR X, MORTAR 2, MORTAR 4, MORTAR 5), and structural elements like precast concrete head and sill, aluminum clad windows, and a decorative accent coursing. The base is labeled "PANEL CONSTRUCTION BASE - MIN. 8" ABOVE GRADE".

Labels on the left side (from top to bottom):

- DECORATIVE ACCENT COURSING, 3/4" PROJECTION, TYPICAL
- BRK-5 WITH MORTAR X
- BRK-7 WITH MORTAR X
- BRK-6 (Henry only) WITH MORTAR X
- 1/4" DECORATIVE BENT STL. PLATE, GREY (PT-X)
- BRK-5 (RED) WITH MORTAR 5
- PANEL CONSTRUCTION BASE - MIN. 8" ABOVE GRADE

Labels on the right side (from top to bottom):

- FCP-1 OR MP-1
- PRECAST CONC HEAD
- BRK-2 (GREY) WITH MORTAR 2
- ALUMINUM CLAD WINDOWS
- BRK-4 (CREAM) WITH MORTAR 4
- ST-2 PRECAST CONC SILL
- ST-1

**D4** PATRICK-HENRY MOCK-UP PANEL COLOR  
3/4" = 1'-0"

Original drawing is 24" x 36". Scale entities accordingly if reduced.



[illegible]

0 4' 8' 16'

SCALE : 1/8" = 1'-0"

N

VIRGINIA  
STATE GRID  
NORTH  
NAD 83/93

**A-A401**

<b>APPROVED</b>	
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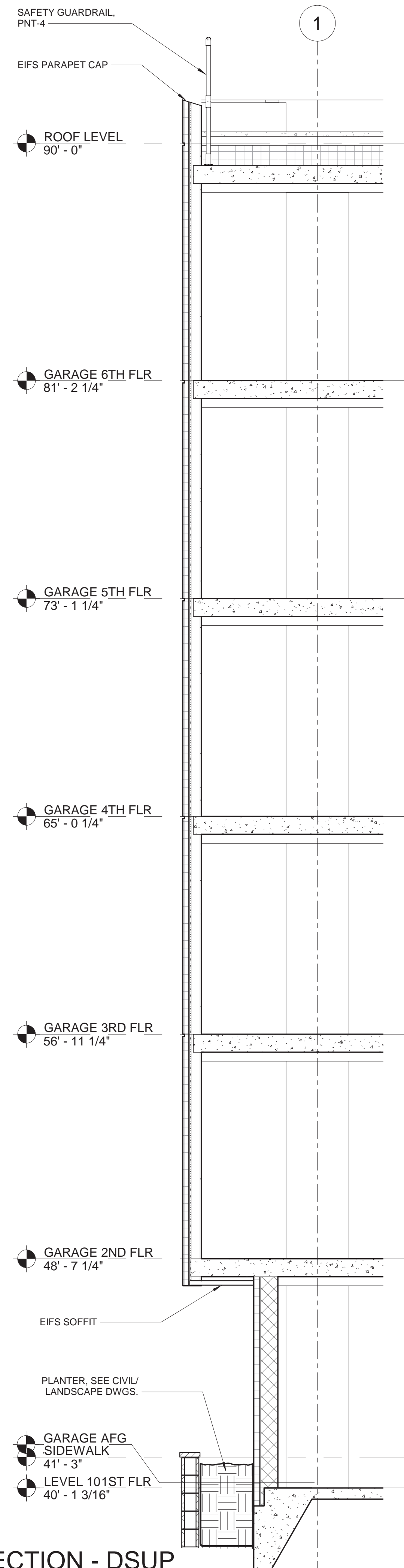
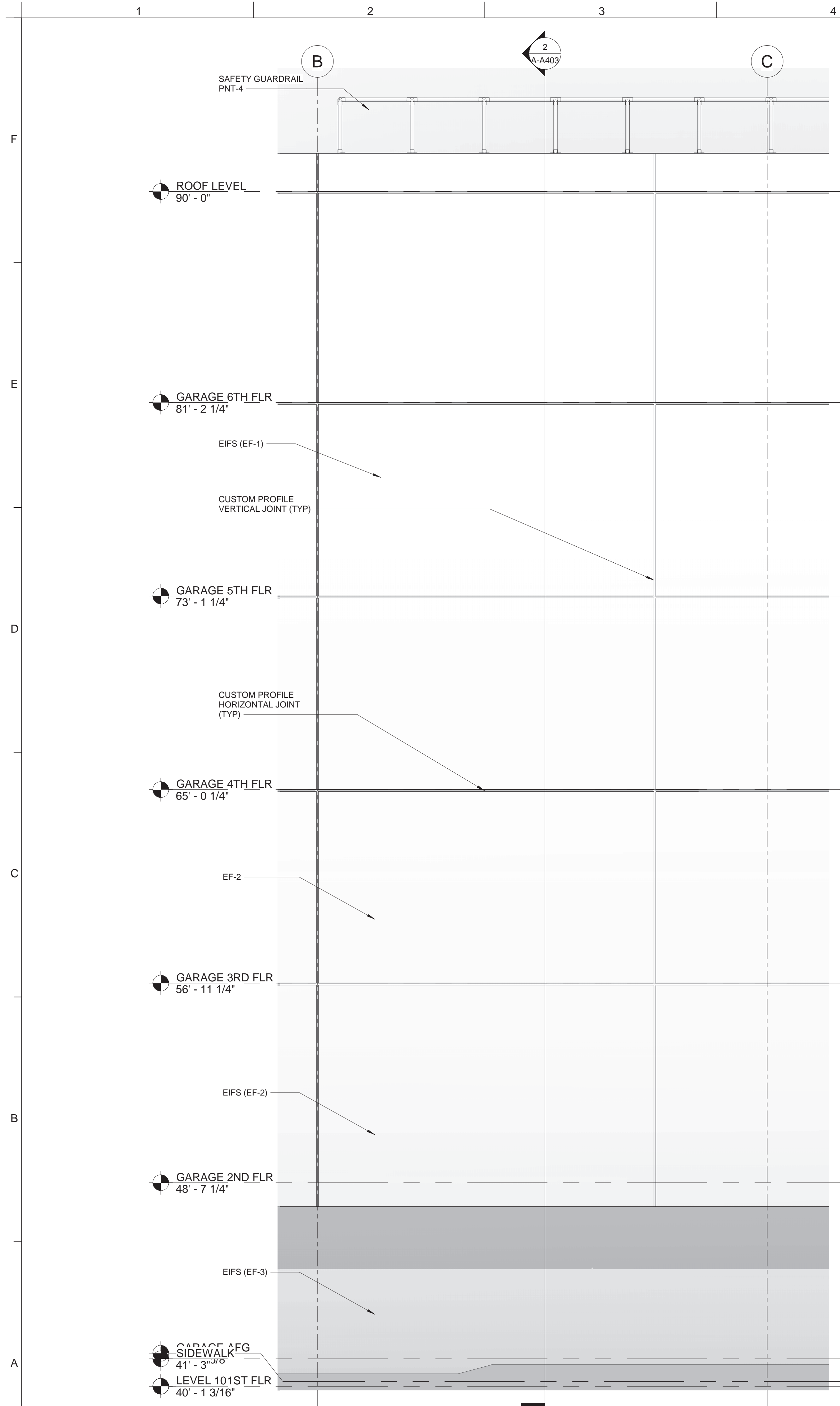
ALUM. & GL. STOREFRONT  
W/ STOREFRONT DOORS -

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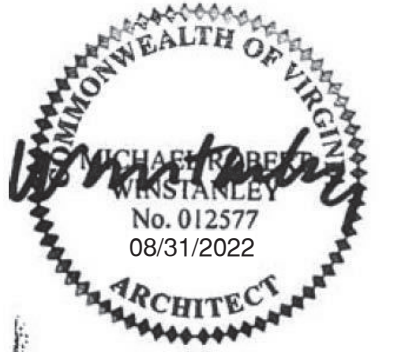
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PATRICK - HENRY

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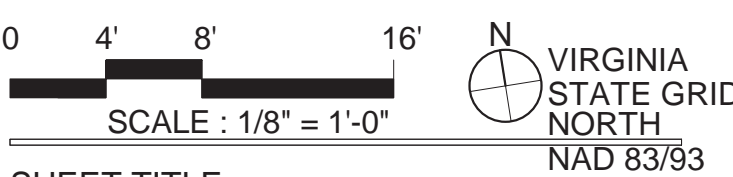
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REGISTRATION:

[illegible]

A/E PROJECT NO: 19 - 24



SHEET TITLE:  
**ENLARGED ELEVATION  
AND WALL SECTION**

SHEET NUMBER:

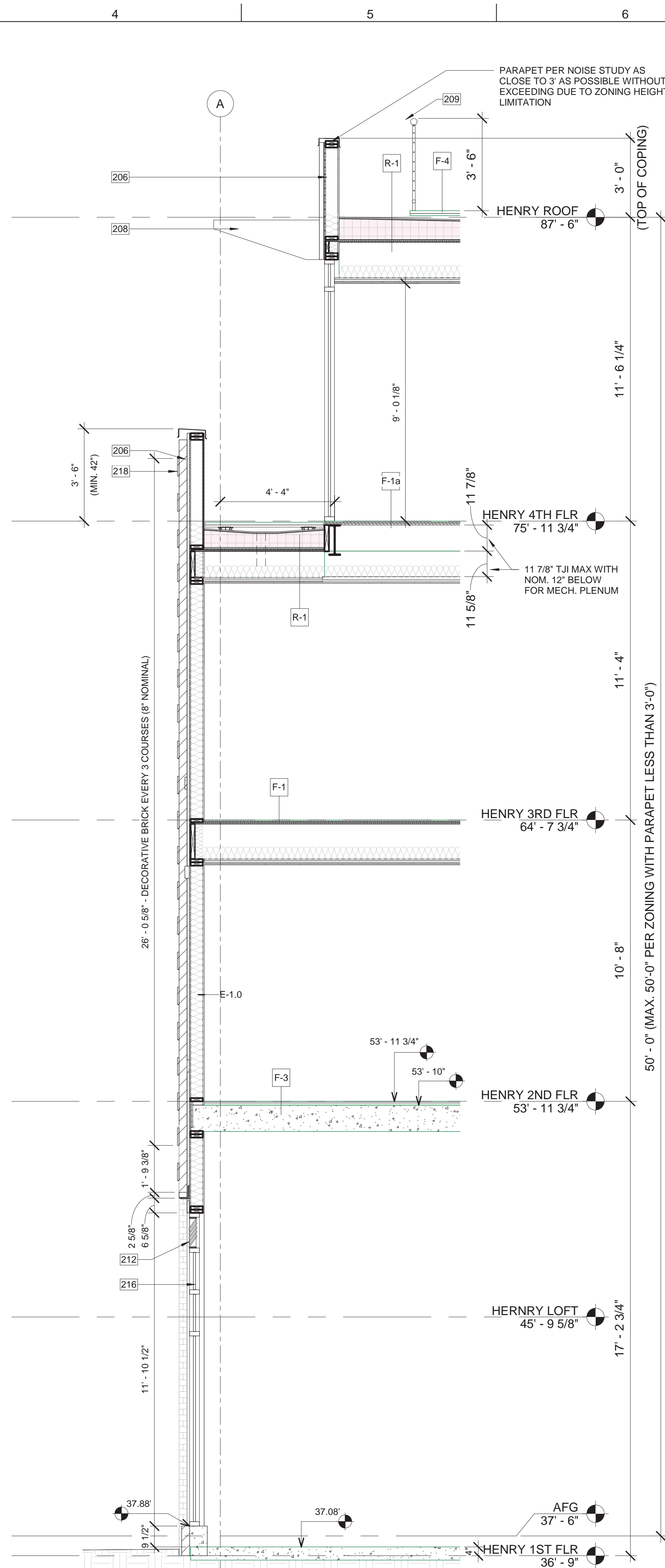
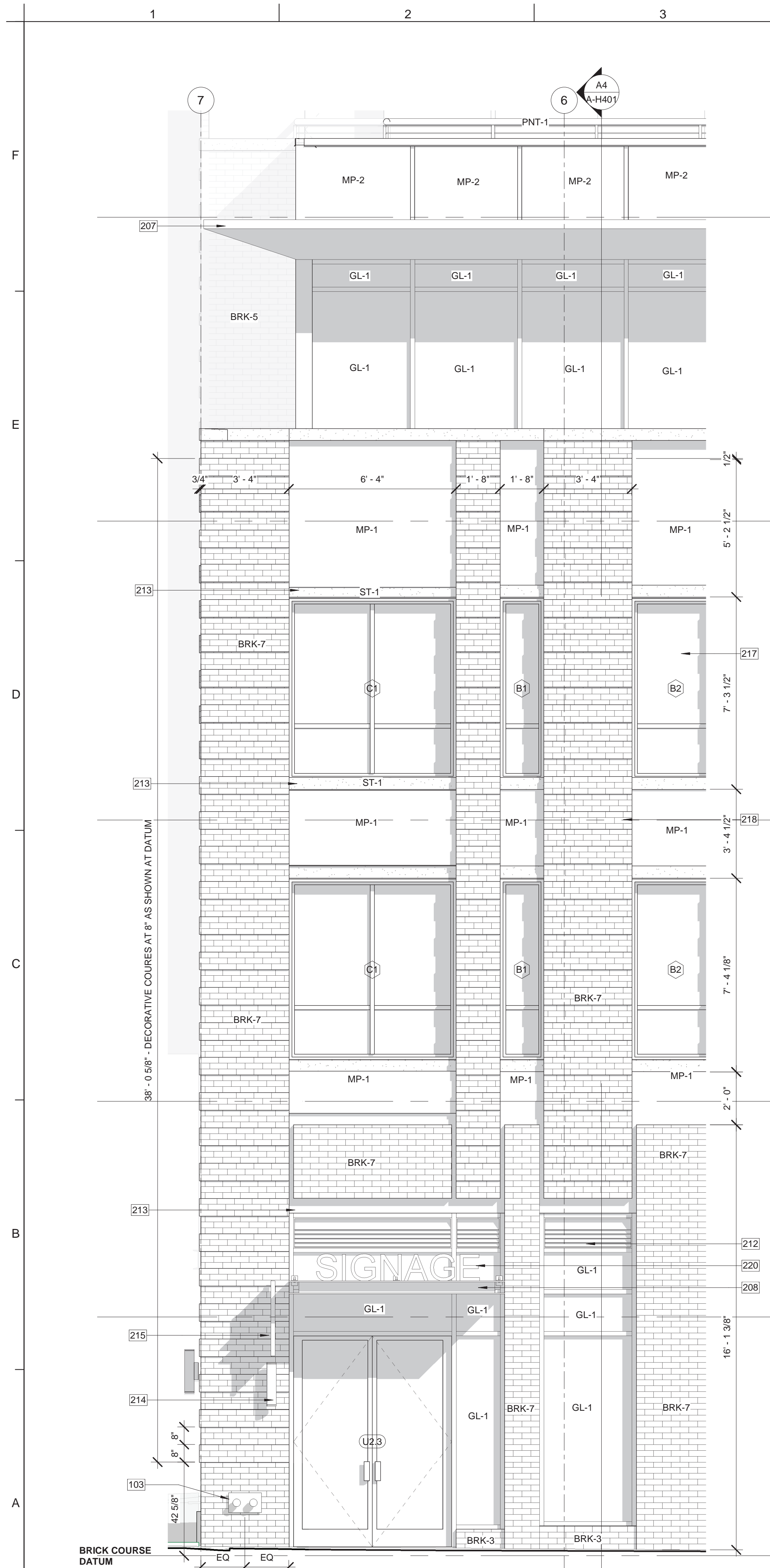
**A-A403**

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INSTRUMENT NO. _____	DEED BOOK NO. _____
_____	DATE _____

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EXTERIOR FINISH LEGEND (*See full material list on sheet A-630)				
MARK	DESCRIPTION	MODEL	MFR.	COMMENTS
AG-1	Glazing System - Storefront	Trifab 451, black finish	KAWNEER	
BRK-1 THUR BRK-2 (NOT USED)				THROUGH-BODY BRICK FOR PATTERN SEE ELEVATIONS
BRK-3	Black Brick	BLACK PEARL SM	Glen-Gery	
BRK-3M	Mortar	Graphite WR-2070	Workrite	
BRK-4	Tan Brick	Golden Dawn SZ27-28	Belden	
BRK-4M	Mortar	Sand WR-2443	Workrite	
BRK-5	Red Brick	Dk Red Wire Cut	Palmetto	
BRK-5M	Mortar	Canyon WR-2031	Workrite	
BRK-6	Merlot Brick	Ironspot VLR	Glen-Gery	
BRK-6M	Mortar	Redwood WR-2492	Workrite	
BRK-7	Dark Grey Brick	Black Diamond VLR	Belden	
BRK-7M	Mortar	Smoke WR-2062	Workrite	
EF-1	EIFS - White	China White #310	Dryvit Limestone PMR Finish	
EF-2	EIFS - Dk Grey Custom:	Ben Moore Jet Black 2120-10	Dryvit Limestone PMR Finish	
EF-3	EIFS - Tan	Dover Sky 104ST	Dryvit	Sandblast Finish
FCP-1	Fiber Cement reveal system, smooth		@ Roof PH, not visible from ground level	
GL-1	1" Fully Tempored, Insulated Glass Unit (IGU) with Low-E Coated vision glass.			L1, 4 Floor Storefront System (AG-1)
GL-2	Fire-rated glass, insulated with Low-E coated vision glass			L1 Floor Storefront System (AG-1)
GRL-1	Galvanized pnt'd guard rail at roof terrace	PNT-1		
GRL-4	Galvanized pnt. exterior rail	PNT-1		
MP-1	Fiber Cement	Raven	Nichiha	Infill on Pat/Hen.
MP-2	Metal Panel	Empenay Champagne Metallic, Alucobond		4th floor Henry
MP-3	Metal Panel	JLR Champagne Metallic Alucobond		4th floor Patrick
MP-4	Metal Panel		4th floor King (TBD)	
P-03	City Stnd. Paver	Belcrest 760	Belden	Standard pattern
P-06	Henry Patio Paver	Landmark Grey Vel.	Belden	
PNT-1	Exterior Paint	Jet Black 2120-10	Ben Moore	Trim, fences, railings
PNT-2	Exterior Paint	Medium Grey, TBD		PH structures
PNT-3	Exterior Paint	Cloud White 967		mt. coping, garage stair person doors
PNT-4	Exterior Paint	Muskoka Trail 974	Ben Moore	On ST-1
ST-1	Poly-ash	PNT-4	TruExterior	Headers, sills and coping trim

KEYNOTES	
Key #	Keynote Text
103	FDC or HOSE BIBB AS SHOWN
206	COPING CAP, PTD, PNT-1
207	MTL. CANOPY, DELEGATED DESIGN. PROVIDE SHOP DRAWINGS
208	CANOPY (FINISH TBD)
209	EXT. MTL. GUARDRAIL, MIN. 42" HIGH, PNT-1
212	MECHANICAL LOUVRE/GRILLE
213	PRECAST-LOOKING FIBER CEMENT HEADER/SILL OR COPING CAP. SEE SECTION DETAILS
214	EXTERIOR SCONCE (HEX-K)
215	BLADE SIGNAGE, 1'-4" WIDE x 2'-10" HIGH
216	STOREFRONT (AG-1). Kawneer: T1fab 451UT Framing System/ 250T Insulpuir Thermal Entrances (10 in. high min. kick plate) or approved equal
217	WINDOW SYSTEM WITH EXT. APPLIED MUNTINS (AG-2) (GLAZING PER ALEXANDRIA STANDARD)
218	DECORATIVE BRICK COURSE AS NOTED
220	RETAIL: 6" DEEP, 1'-0" HIGH MTL. CHANNEL LETTERS MOUNTED AT OUTSIDE EDGE OF CANOPY, PNT-X

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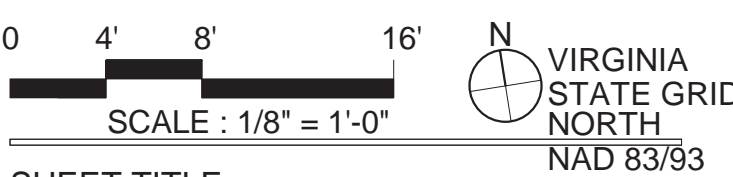
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REGISTRATION:

[illegible]

A/E PROJECT NO: 19 - 24



SHEET TITLE: **ENLARGED ELEVATION & WALL SECTION**

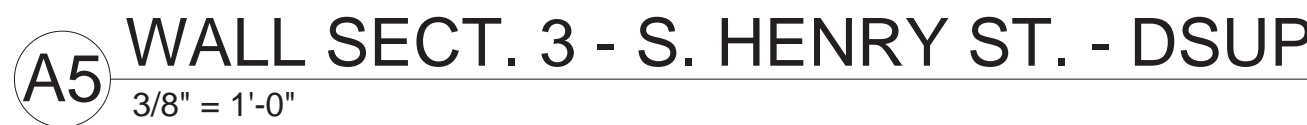
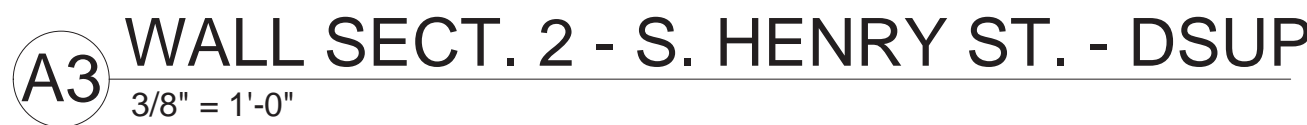
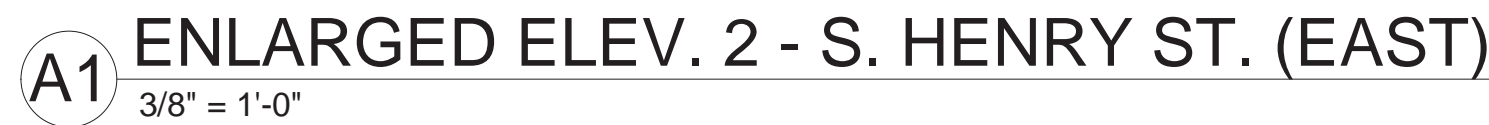
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## A-H401

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INSTRUMENT NO. _____	DEED BOOK NO. _____ DATE _____

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KEYNOTES	
Key #	Keynote Text
207	MTL. CANOPY, DELEGATED DESIGN, PROVIDE SHOP DRAWINGS
209	EXT. MTL. GUARDRAIL, MIN. 42" HIGH, PNT-1
212	MECHANICAL LOUVER/GRILLE
213	PRECAST-LOOKING FIBER CEMENT HEADER/SILL OR COPING CAP. SEE SECTION DETAILS
217	WINDOW SYSTEM WITH EXT. APPLIED MUNTINS (AG-2) (GLAZING PER ALEXANDRIA BRAND COURSE)
218	DECORATIVE BRICK COURSE AS NOTED

A-H402

Original drawing is 24" x 36". Scale  
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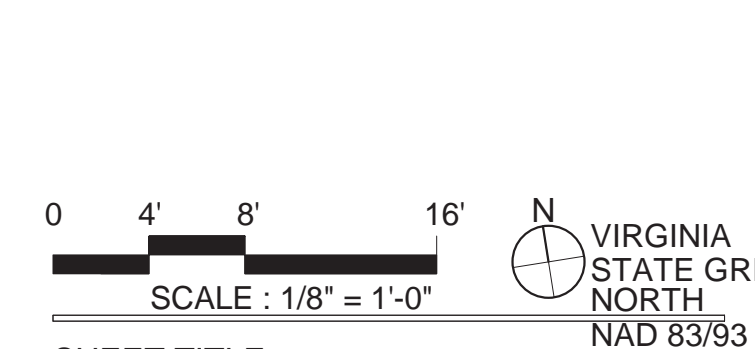
KEYNOTES	
Key #	Keynote Text
207	MTL. CANOPY, DELEGATED DESIGN, PROVIDE SHOP DRAWINGS
208	CANOPY (FINISH TBD)
209	EXT. MTL. GUARDRAIL, MIN. 42" HIGH, PNT-1
212	MECHANICAL LOUVRE/GRILLE
213	PRECAST-LOOKING FIBER CEMENT HENDER/SILL OR COPING CAP. SEE SECTION DETAILS
214	EXTERIOR SCONCE (HEX-K)
217	WINDOW SYSTEM WITH EXT. APPLIED MUNTINS (AG-2) (GLAZING PER ALEXANDRIA STANDARD)
218	DECORATIVE BRICK COURSE AS NOTED
222	RESIDENTIAL: 6" DEEP, 1'-0" HIGH MTL. CHANNEL LETTERS MOUNTED AT OUTSIDE EDGE OF CANOPY, PNT-X

Original drawing is 24" x 36". Scale entities accordingly if reduced.





KEYNOTES	
Key #	Keynote Text
207	MTL. CANOPY, DELEGATED DESIGN. PROVIDE SHOP DRAWINGS
208	CANOPY (FINISH TBD)
213	PRECAST-LOOKING FIBER CEMENT HEADER/SILL OR COPING CAP. SEE SECTION DETAILS
214	EXTERIOR SCONCE (DETAIL TBD)
215	BLADE SIGNAGE, 1'-4" WIDE x 2'-10" HIGH
217	WINDOW SYSTEM WITH EXT. APPLIED MUNTINS (AG-2) (GLAZING PER ALEXANDRIA STANDARD)
218	DECORATIVE BRICK COURSE AS NOTED



SHEET TITLE:  
**ENLARGED ELEVATION &  
WALL SECTION**

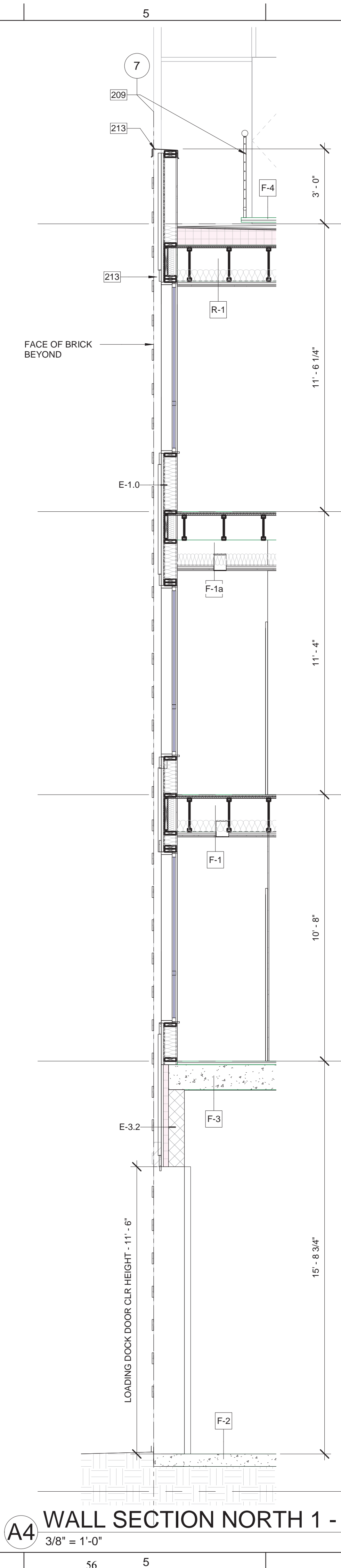
SHEET NUMBER:

**A-H404**

APPROVED		
SPECIAL USE PERMIT NO.	2019-0033	
DEPARTMENT OF PLANNING & ZONING		
_____	_____	
DIRECTOR	DATE	
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES		
SITE PLAN NO.		
_____	_____	
DIRECTOR	DATE	
_____		
CHAIRMAN, PLANNING COMMISSION	DATE	
DATE RECORDED _____		
INSTRUMENT NO.	DEED BOOK NO.	DATE

Original drawing is 24" x 36". Scale entities accordingly if reduced.





EXTERIOR FINISH LEGEND (*See full material list on sheet A-630)				
MARK	DESCRIPTION	MODEL	MFR.	COMMENTS
AG-1	Glazing System - Storefront	Trifab 451, black finish	KAWNEER	
<b>BRK-1 THUR BRK-2 (NOT USED)</b>				THROUGH-BODY BRICK. FOR PATTERN SEE ELEVATIONS
BRK-3	Black Brick	BLACK PEARL SM	Glen-Gery	
BRK-3M	Mortar	Graphite WR-2070	Workrite	
BRK-4	Tan Brick	Golden Dawn S27-28	Belden	
BRK-4M	Mortar	Sand WR-2443	Workrite	
BRK-5	Red Brick	Dk Red Wire Cut	Palmetto	
BRK-5M	Mortar	Canyon WR-2031	Workrite	
BRK-6	Merlot Brick	Ironspot VLR	Glen-Gery	
BRK-6M	Mortar	Redwood WR-2492	Workrite	
BRK-7	Dark Grey Brick	Black Diamond VLR	Belden	
BRK-7M	Mortar	Smoke WR-2062	Workrite	
EF-1	EIFS - White	China White #310	Dryvit Limestone PMR Finish	
EF-2	EIFS - Dk Grey Custom:	Ben Moore Jet Black 2120-10	Dryvit Limestone PMR F	
EF-3	EIFS - Tan	Dover Sky 104ST	Dryvit	Sandblast Finish
FCP-1	Fiber Cement reveal system, smooth		@ Roof PH, not visible from ground level	
GL-1	Fully Tempered, Insulated Glass Unit (IGU) with Low-E Coated vision glass.			L1, 4 floor Storefront System (AG-1)
GL-2	Fire-rated glass, insulated with Low-E coated vision glass			L1 Floor Storefront System (AG-1)
GRL-1	Galvanized pnt'd. guard rail at roof terrace	PNT-1		
GRL-4	Galvanized pnt. exterior rail	PNT-1		
MP-1	Fiber Cement	Raven	Nichiha	Infill on Pat/Hen.
MP-2	Metal Panel	Empernay Champagne Metallic, Alucobond		4th floor Henry
MP-3	Metal Panel	JLR Champagne Metallic Alucobond		4th floor Patrick
MP-4	Metal Panel		4th floor King (TBD)	
P-03	City Strnd. Paver	Belcrest 760	Belden	Standard pattern
P-06	Henry Patio Paver	Landmark Grey Vel.	Belden	
PNT-1	Exterior Paint	Jet Black 2120-10	Ben Moore	Trim, fences, railings
PNT-2	Exterior Paint	Medium Grey, TBD		PH structures
PNT-3	Exterior Paint	Cloud White 967		mt. coping, garage stair person doors
PNT-4	Exterior Paint	Musokota Trail 974	Ben Moore	On ST-1
ST-1	Poly-ash	PNT-4	TruExterior	Headers, sills and coping trim

KEYNOTES	
Key #	Keynote Text
207	MTL. CANOPY, DELEGATED DESIGN, PROVIDE SHOP DRAWINGS
209	EXT. MTL. GUARDRAIL, MIN. 42" HIGH, PNT-1
212	MECHANICAL LOUVRE/GRILLE
213	PRECAST-LOOKING FIBER CEMENT HEADER/SILL OR COPING CAP, SEE SECTION DETAILS
214	EXTERIOR SCONE (HEX-K)
217	WINDOW SYSTEM WITH EXT. APPLIED MUNTINS (AG-2) (GLAZING PER ALEXANDRIA STANDARD)

GALENA CAPITAL PARTNERS  
1010 Pendleton Street, Alexandria, VA 22314

PATRICK - HENRY  
Alexandria, VA

**WINSTANLEY**  
ARCHITECTS & PLANNERS

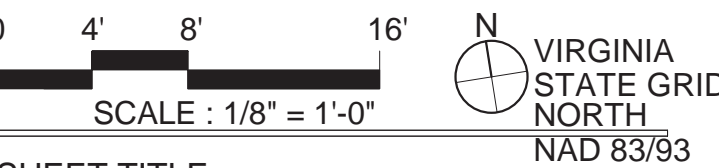
Professional Certification.  
I certify that these documents were prepared or  
approved by me, and that I am duly licensed architect  
under the laws of the state of Virginia, license number  
0401012577, expiration date 08/31/2022



REGISTRATION:

[illegible]

A/E PROJECT NO: 19 - 24



SHEET TITLE:  
**ENLARGED ELEVATION &  
WALL SECTION**

SHEET NUMBER:

## A-H405

APPROVED	
SPECIAL USE PERMIT NO.	2019-0033
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR	DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO.	
DIRECTOR	DATE
CHAIRMAN, PLANNING COMMISSION	
DATE RECEIVED	
INSTRUMENT NO.	DEED BOOK NO.
	DATE

Original drawing is 24" x 36". Scale  
entities accordingly if reduced.

## ESI PEER REVIEW



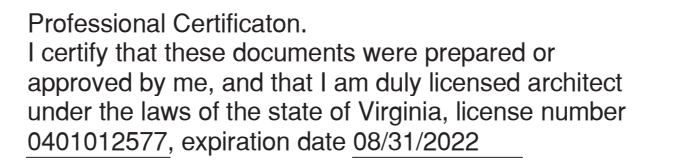






ESI  
PEER REVIEW



A/E PROJECT NO: 19 - 24

SHEET NUMBER:

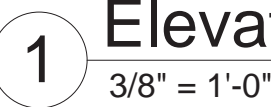
**A-A610**

Original drawing is 24" x 36". Scale  
entitles accordingly if reduced.

## WINDOW GENERAL NOTES

2. ALL FENESTRATION TO MEET NOISE STUDY STC RECOMMENDATIONS AND ALEXANDRIA MINIMUM REQUIREMENTS

ENERGY CODE TABLE C402.4:		GREEN GLOBES SEC. 3.3.4.3:	
<i>U</i> -factor		<i>U</i> -factor	
fixed fenestration	0.38	fixed fenestration	0.38
Operable fenestration	0.45	Operable fenestration	0.45
Entrance doors	0.77	Entrance doors	0.77
SHGC	0.40	SHGC	0.40
SKYLIGHTS		SKYLIGHTS	
U-factor	0.50	U-factor	0.50
SHGC	0.40	SHGC	0.40

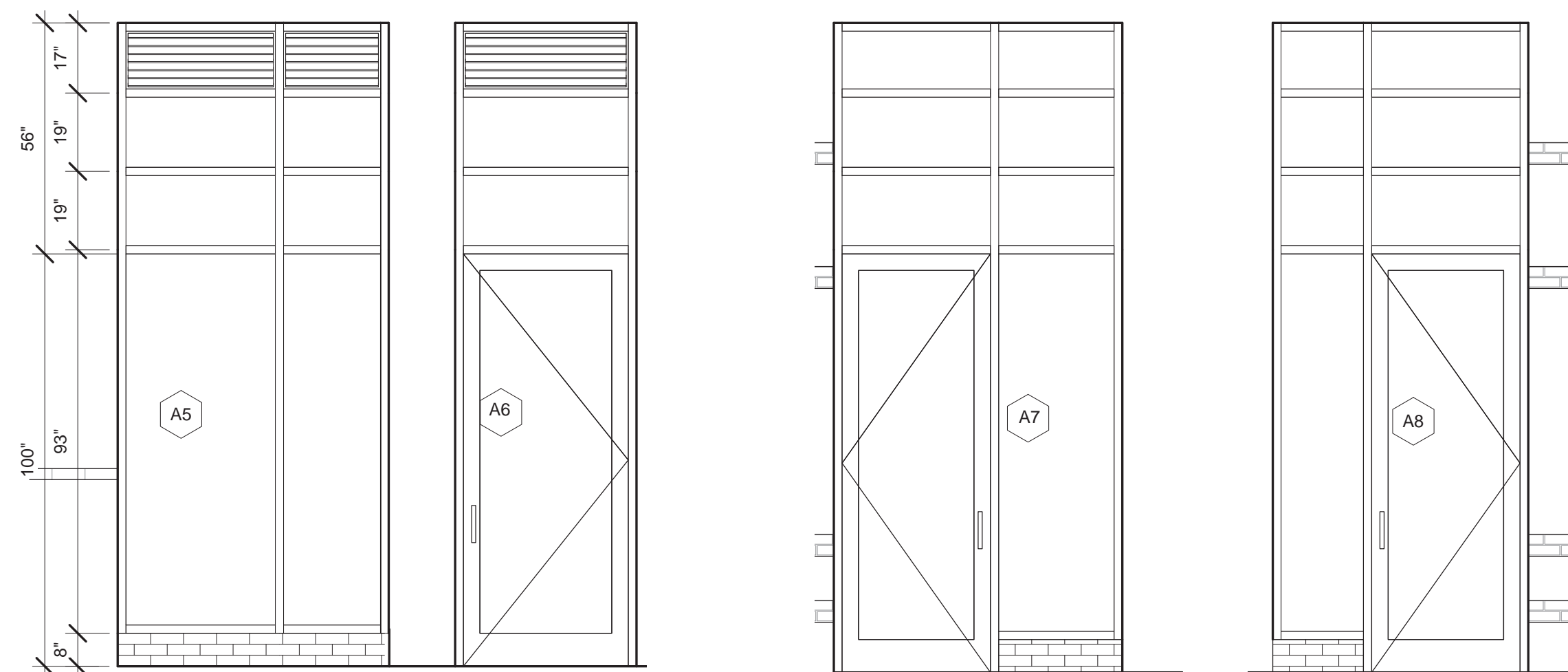


## Elevation 2 - a

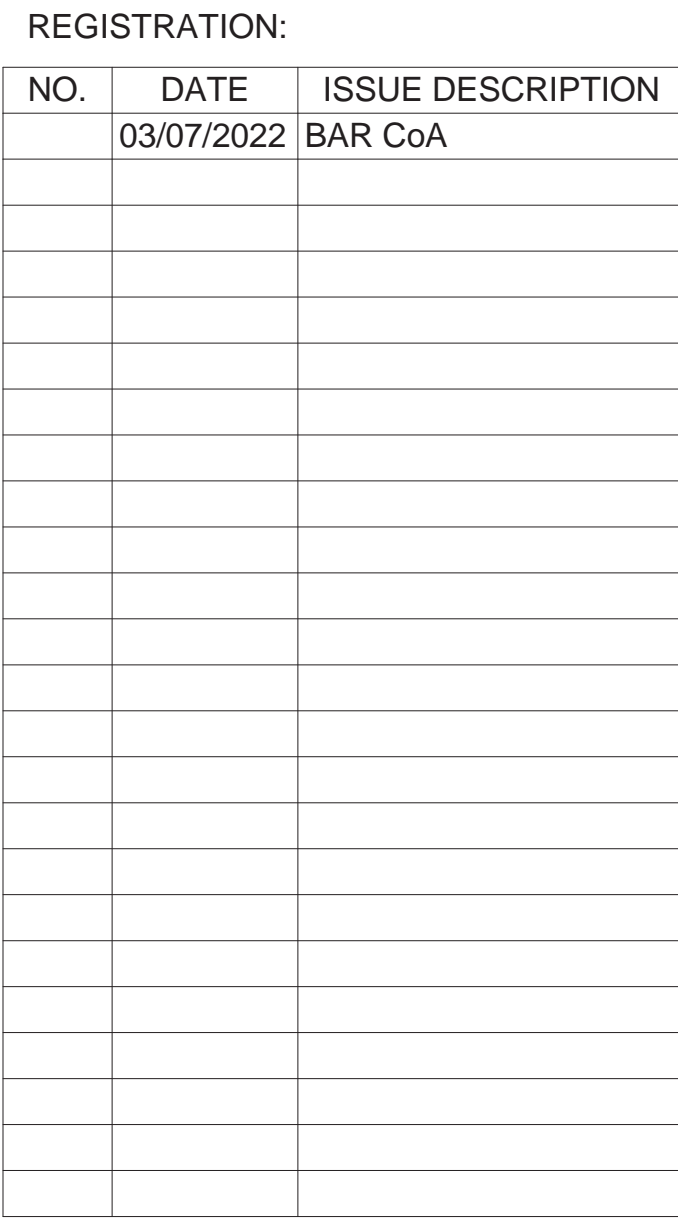
$$3/8'' = 1'-0''$$



2. ALL FENESTRATION TO MEET NOISE STUDY STC RECOMMENDATIONS AND ALEXANDRIA MINIMUM REQUIREMENTS

ESI  
PEER REVIEW





0 4' 8' 16'

SCALE : 1/8" = 1'-0"

N

VIRGINIA  
STATE GRID  
NORTH  
NAD 83/93

SHEET TITLE:  
**WINDOW TYPES**

## A-H611

ESI  
PEER REVIEW

Original drawing is 24" x 36". Scale entities accordingly if reduced.





[illegible]

SHEET TITLE:  
**MASSING STUDIES -  
PATRICK**

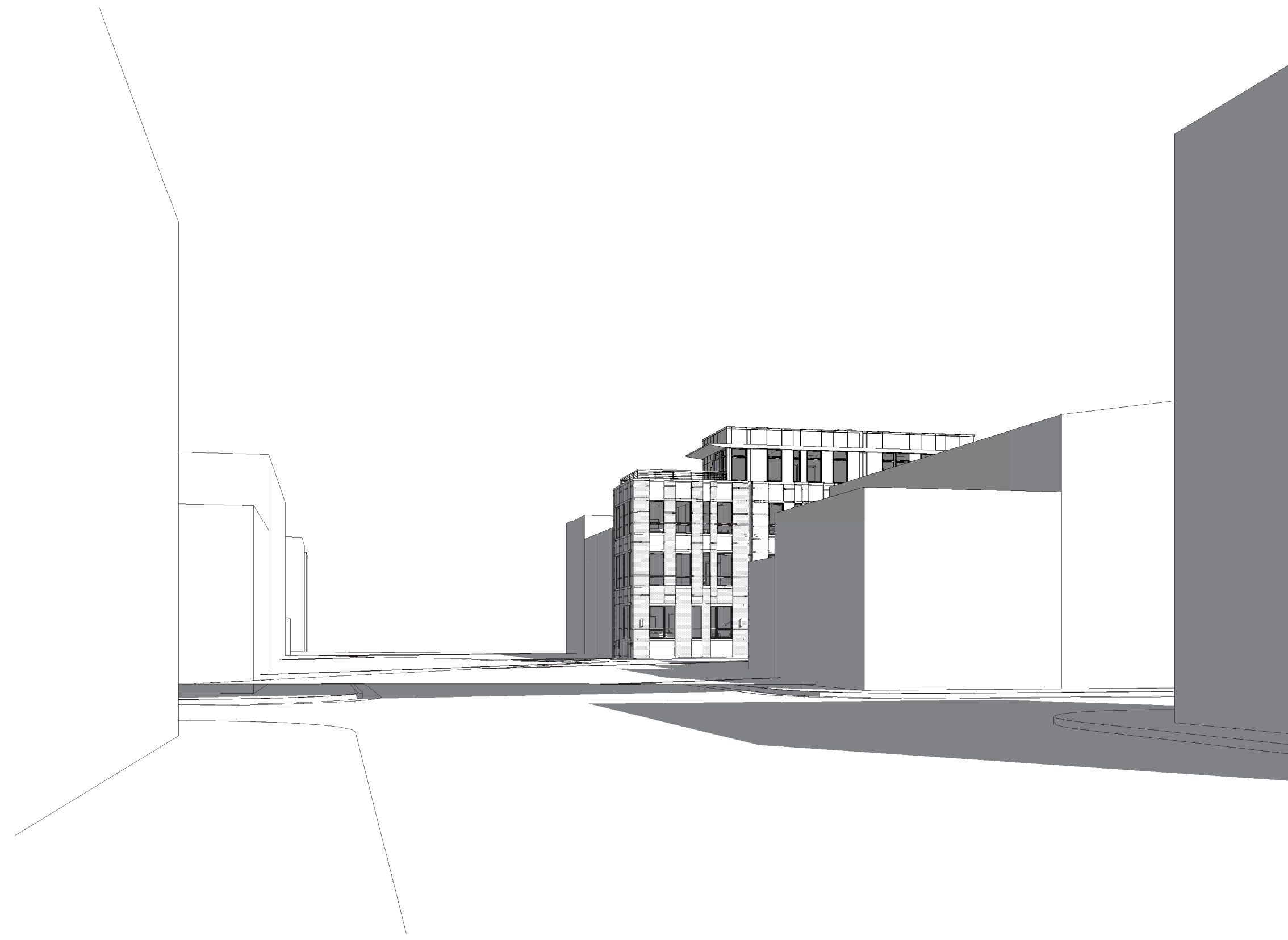
**A- 801**

APPROVED		2019-0033	
SPECIAL USE PERMIT NO.			
DEPARTMENT OF PLANNING & ZONING			
DIRECTOR		DATE	
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES			
SITE PLAN NO.			
DIRECTOR		DATE	
CHAIRMAN, PLANNING COMMISSION			
DATE RECORDED		DATE	
INSTRUMENT NO.		DEED BOOK NO.	
		DATE	

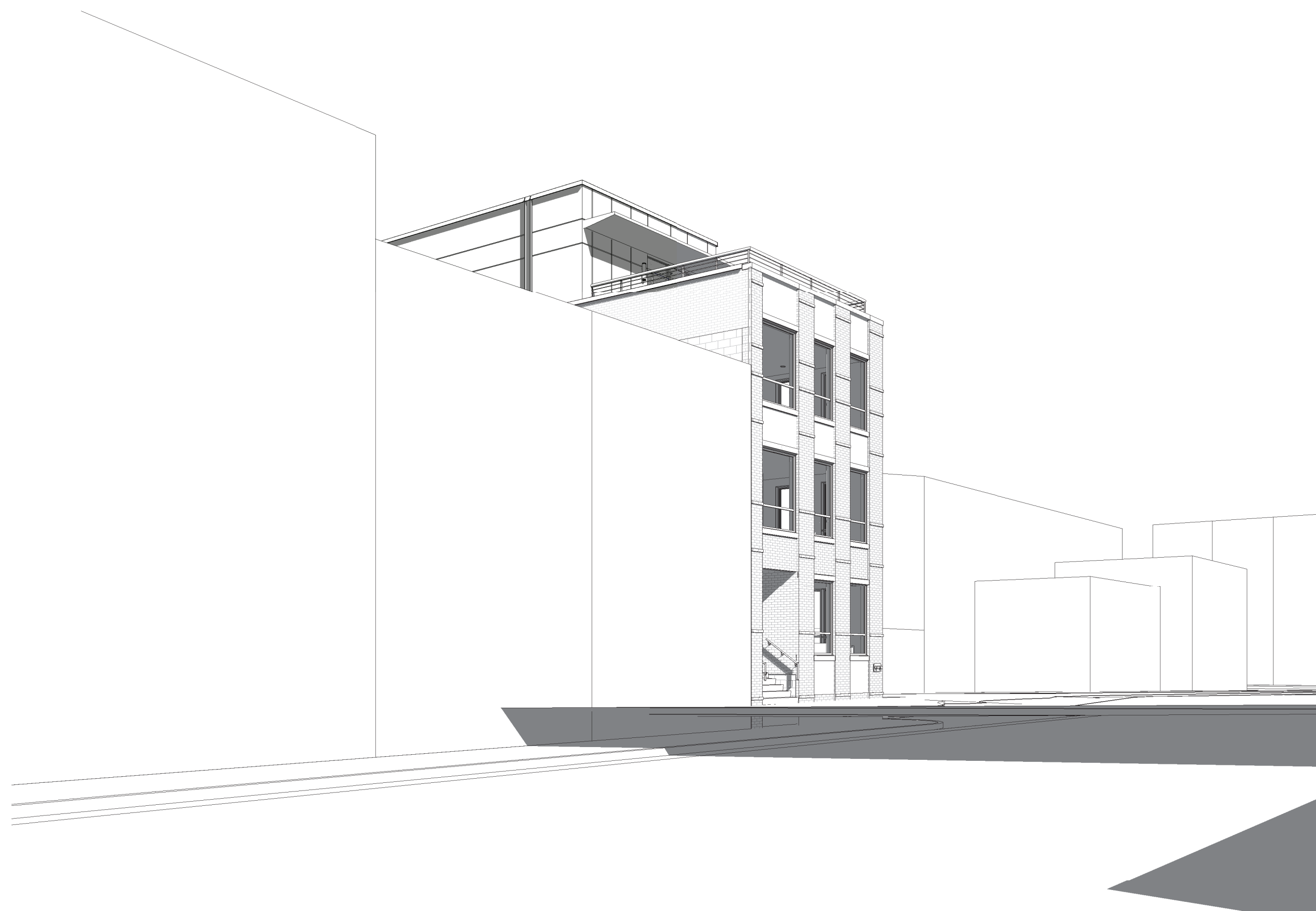
original drawing is 24" x 36". Scale  
titles accordingly if reduced.



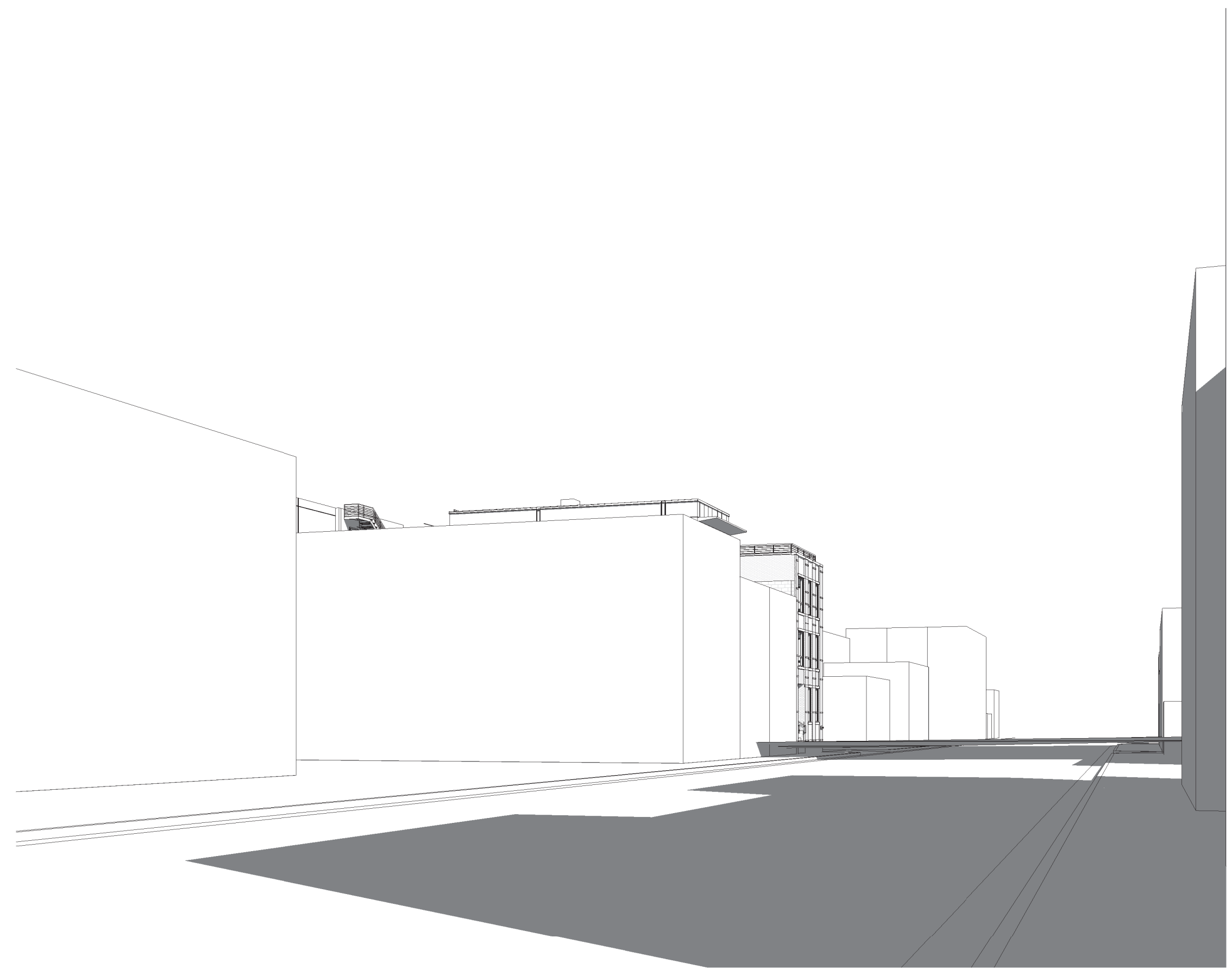
**(D1) STREET VIEW - FROM S. PATRICK ST. FACING WEST**



STREET VIEW - FROM NE CORNER OF KING ST. & N. PATRICK ST.  
FACING SOUTH



**A1 STREET VIEW - FROM S. PATRICK ST. FACING WEST**



STREET VIEW - FROM CORNER OF S. PATRICK ST & PRINCE ST  
FACING NORTH

ESI  
PEER REVIEW



[illegible]

SHEET TITLE:  
**MASSING STUDIES -  
HENRY**

**A- 802**

<b>APPROVED</b>	
<b>SPECIAL USE PERMIT NO.</b>	<u>2019-0033</u>
DEPARTMENT OF PLANNING & ZONING	
_____ DIRECTOR	_____ DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
_____ DIRECTOR	_____ DATE
CHAIRMAN, PLANNING COMMISSION	
DATE RECORDED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____
DATE _____	

original drawing is 24" x 36". Scale  
titles accordingly if reduced.



(D1) STREET VIEW - FROM S. HENRY ST. FACING EAST



2 STREET VIEW - FROM DOWNHAM ALLEY FACING EAST



1 STREET VIEW - FROM NW CORNER OF KING ST. & N. HENRY STREET  
FACING EAST



STREET VIEW - FROM SW CORNER OF KING ST. & S. HENRY ST.  
FACING EAST

ESI  
PEER REVIEW







MARCH 07, 2022

## 110 S. HENRY STREET BAR #2019-00557 BAR CERTIFICATE OF APPROPRIATENESS

### LIST OF PRODUCT CUT SHEETS

1. Windows & Doors

- a. Typical punched opening windows (AG-1):  
Manufacturer: Sierra Pacific  
Series: Aluminum Clad Wood Casement (Fixed & Operable) with Terrace Doors (outswing)  
Glazing: Cardinal glass, 1" IGU Low-E 272, argon filled
- b. Storefront at Retail & Residential Lobby (AG-1):  
Manufacturer: Kawneer  
Series: 451UT Framing System with 350 T medium stile Insulpour Thermal Entrances.  
Glazing (AG-1): Cardinal glass, 1" IGU Low-E 272 w/ argon fill.
- c. Fire resistant window (only at South Elevation Alley facing) (AG-2):  
Manufacturer: Fire Frames  
Series: TGP Aluminum Series – 60 min.  
Glazing: Fireglass Pilkington Pryrostop (Interior side) + Cardinal glass (exterior side)

2. Exterior Lighting Cutsheets:

See lighting cutsheets on BAR COA Drawings, sheets LP-03.



INSPIRED DESIGN BEAUTIFULLY CRAFTED



SIERRA  
PACIFIC  
WINDOWS



## OUR STORY

### EARTH-FRIENDLY. MORE THAN AN APPROACH, AN OBLIGATION.

Sierra Pacific Windows is part of Sierra Pacific Industries, which sustainably manages over 2 million acres of timberland in California and Washington State. We're the largest millwork producer and one of the largest lumber companies in the U.S.

Our size creates a big obligation to protect our environment.

At Sierra Pacific, we believe healthy trees, good water quality and enduring wildlife habitat are the natural result of sound forest management. That's why we adhere to the environmental protection standards of the Sustainable Forestry Initiative® (SFI) and why all our pine and Douglas fir windows and doors are labeled SFI certified.

We bring in our own Professional Foresters and Wildlife Biologists to help protect wildlife habitat, watercourses and plant life, and to help manage our lands based on "sustained yield" practices. As a result, Sierra Pacific Industries plants 7 million new trees every year and will nearly triple the amount of wood growing on its lands in the next 100 years, with average tree diameters nearly doubling in that time.

To learn more about how Sierra Pacific Industries protects, preserves and invests in its own forest lands, visit [spt-ind.com](http://spt-ind.com).



©Karl Neumann Photography | Marlo Construction



### TRUE VERTICAL INTEGRATION SETS US APART.



As a proud part of this family-owned, environmentally-committed company, Sierra Pacific is the only window company that manufactures its products with complete vertical integration. The full cycle makes use of every part of our wood resources, all the way down to wood shavings that become animal bedding and chips that are used as part of our cogeneration power process. It also allows continuous quality control from the moment our tree seeds are planted until our beautiful wood windows are produced, approved and delivered to you.



## MATERIALS

### FIVE BEAUTIFUL CHOICES, ONE EXACTING STANDARD.

Sierra Pacific windows and doors are crafted in four unique manufacturing styles. Each delivers its own design and performance advantages. In other words, there are no bad choices, only good ones.



#### ALUMINUM CLAD WOOD

The best of both worlds, combining beautiful wood inside with low maintenance aluminum cladding outside. Wood is select pine, or upgrade to one of eight other species, all protected by CoreGuard Plus® wood preservative. Double thick cladding is finished with a powder coating process that leads the industry in durability and environmental safety.



#### ALL-WOOD

For a classic, distinctive look, our all-wood windows and patio doors offer timeless elegance with exceptional thermal performance. As with all our wood products, long-term durability is ensured by CoreGuard Plus®, a leading wood treatment against rot and insects.



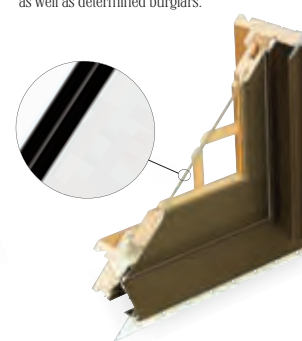
#### H3®

Inventive Fusion Technology™ integrates three components (extruded aluminum, vinyl and wood) into one perfect window with greater energy efficiency and performance. Double thick aluminum exteriors are protected by our industry-leading powder coated finishes, while the wood interior is preserved with CoreGuard Plus®.



#### FEELSAFE™

Our hurricane-resistant windows and patio doors feature high-strength, laminated glass, plus highly reinforced engineering and construction. They're built to withstand heavy storm impact as well as determined burglars.



#### VINYL

All the benefits of vinyl windows and patio doors with Sierra Pacific DNA, our vinyl new construction and replacement products offer many of the same features and design options as our premium wood products. Choose from a complete lineup of operating styles, sizes and shapes.



6

ye-h photography | Previews + Balance + Midline Architects

7



## CLAD EXTERIORS

# BEAUTIFUL INSIDE, LOW MAINTENANCE OUTSIDE.

Sierra Pacific clad windows and doors feature exteriors with industry-leading, extruded aluminum cladding that's twice as thick as roll-form cladding. All come with rich, wood interiors in a wide selection of species and finishes.

Choose from multiple leading-edge glazing options.

Also available with FeedSafe impact rated glazing.

Protected to the very core by our CoreGuard Plus™ wood treatment.

Exterior is fully encased in weatherproof, low maintenance, aluminum cladding.

Unlimited color choices in powder coat for extreme durability. Anodized finishes also available.

Our heavy duty extruded aluminum cladding is at least twice as thick as roll-form cladding.

Designer hardware in many luxurious finishes.

Optional stained or painted interior factory finish on select products.



Windows and doors crafted from pine and Douglas fir are third-party certified to meet the SFI fiber sourcing requirements.

Dual or triple panes, plus decorative glass options.



Wood interior for natural beauty & insulation.

Available with simulated divided lites or a variety of decorative grilles.

Choose from beautiful, select species of interior wood.

Large variety of interior trim profiles.





## CLAD EXTERIOR COLORS

### INSPIRED BY NATURE. DESIGNED TO LAST.

The exteriors of our clad windows and doors are fully encased in low maintenance, heavy-duty, extruded aluminum that's at least twice as thick as roll-form cladding.

What's more, our finishing process leads the industry in durability and environmental safety. Non-hazardous AAMA 2604 and 2605 powder-coatings have the color retention, surface hardness and scratch resistance necessary to withstand even the harshest conditions.

As for colors? Nobody gives you more choices than Sierra Pacific. 75 colors and some sensational textures allow you to add warmth, a splash of cheerfulness or a new statement to your designs. We'll also custom match any color you choose.



See your local representative for actual cladding samples. Printing limits our ability to show colors precisely.

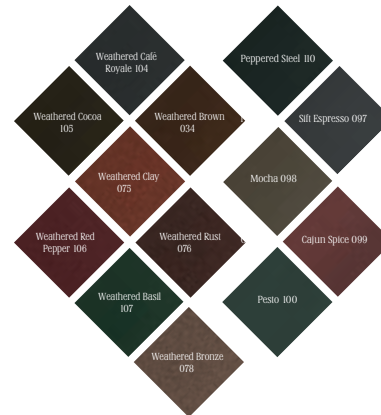
#### COLOR STAY™ COLLECTION



Ⓥ Available in vinyl.



#### WEATHERED COLLECTION



#### TEXTURED COLLECTION



#### PEARL METALLIC COLLECTION



#### METALLIC COLLECTION

#### ANODIZED COLLECTION



#### INDUSTRIAL COLLECTION



\* Available on select products only.

Pricing may vary by collection.



## DIVIDED LITE GRILLES

### A MODERN APPROACH TO A TIMELESS LOOK.

To add your personal touch, our simulated divided lite profiles give you a number of starting points, while our grille configurations are limited only by your imagination. Start with our standard geometries and dream from there.



#### SIMULATED DIVIDED LITE

The classic look of traditional true divided lite without the energy loss of individual glass panes, our simulated divided lite grilles offer tough extruded aluminum outside with beautiful natural wood inside. Complete the look with optional spacers between the glass. Profiles are also available in all-wood.

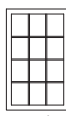
#### GRILLES BETWEEN THE GLASS

Grilles stay out of the way while you still get the look you want.



#### GRILLE CONFIGURATIONS

Your grilles can be as traditional or as unique as you choose. Our standard configurations include equal lite and Prairie. But with our custom configurations, we're ready to transform your inspiration into reality.



Equal



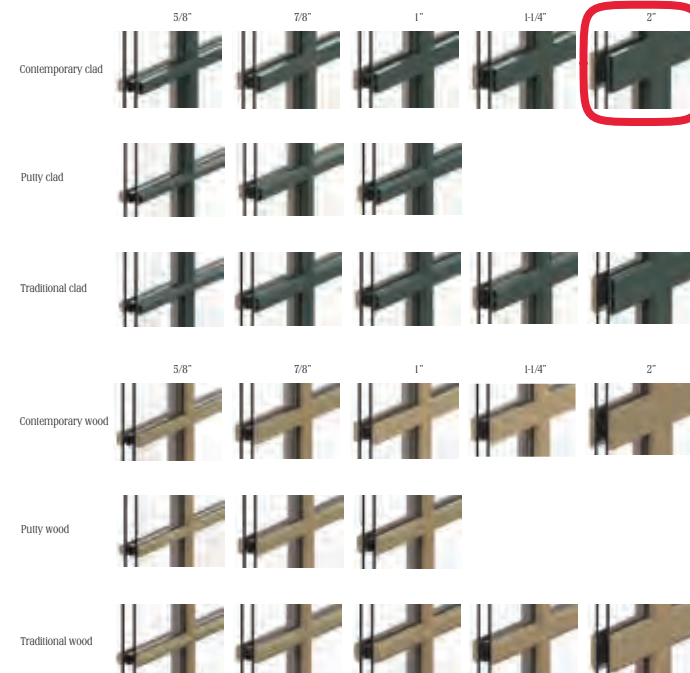
Prairie



Bronze spacer  
option shown.



#### SIMULATED DIVIDED LITE PROFILES

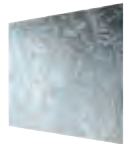




## WHEN SEEING LESS IS MORE.

Sometimes you need some privacy and security, or you need to filter out harsh sunlight. Other times you want a remarkable window design that gets lots of comments.

That's why we offer multiple decorative glass styles, each with its own personality to lend to your décor. If you can imagine it, chances are we can deliver it.



Gluechip



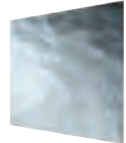
Obscure



Rain



Narrow Reed



Spray Lite\*



Delta Frost\*



Satin Eich



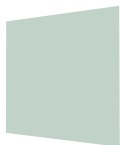
White Laminated



Bronze Tint



Gray Tint

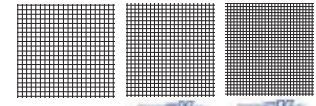


Green Tint

\* Available on select products.



## LET VIEWS IN. KEEP BUGS OUT.



Standard

BetterVue

UltraVue



Metal



Wood

### STANDARD AND PREMIUM SCREENS

Choose from our standard aluminum framed screen that matches your hardware or your exterior clad color, with optional wood wrap available for casements and awnings. Even choose your screen mesh, from standard fiberglass to the improved visibility and even smaller insect barrier of BetterVue® or UltraVue®.

### FLEXSCREEN

Hidden and beautifully simple, FlexScreen is the first screen of its kind made of flexible spring steel to fit firmly into screen tracks. No screen frames, no hardware, just refreshingly easy installation.



### GENIUS CUSTOMIZABLE RETRACTABLE SCREENS

Available as an interior screen on select products.



There when you need them, and disappear when you don't, these screens provide quiet, smooth operation, and give protection against airborne pests.



## WOOD FINISHES

### STATE-OF-THE-ART FACTORY FINISH.

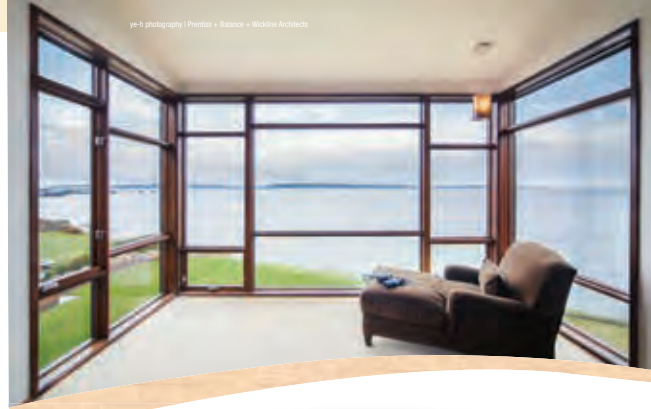
We invest in the finest finishing equipment for one reason—to bring you the best wood stain and paint coatings in the industry. Choose from two premium options: Ultra Stain and Ultra Coat.

Ultra Stain is an advanced, multi-step process that brings out all the beauty of your wood interior. Ultra Coat is a white or black durable interior paint. Both resist scratching and marring while providing advanced protection against moisture.



Jira Construction

24



ye-h photography | Prentiss + Basser + Winkler Architects



Factory finishes available on select products.  
Ask your sales representative for details.

#### ULTRA STAIN

Clear

Espresso

Toffee



#### ULTRA COAT

White

Black



25



## PERFORMANCE GLASS

### GLAZING TECHNOLOGY FINE-TUNED FOR YOU.

The right glass will make your home more comfortable and potentially improve your energy efficiency. It can capture the sun's heat, or reflect it. You can also reduce outside noise, block more of the sun's damaging UV rays, even enhance your privacy.

We offer some of the most advanced glazing options in the industry. With your builder, we'll help you select the glass that suits you and your environment.

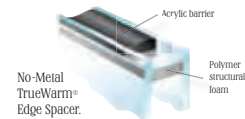
Taylor Proctor & AJ Canada  
Prestis + Balance + Midline Architects

Jeremy Ellermann Photography

### THE ADVANTAGE OF NO-METAL SPACERS.

One of the technological advances that makes our glazing perform so well are patented No-Metal TrueWarm® Edge spacers. Many window manufacturers use aluminum spacers between their panes of glass. These conduct cold and heat, and that's not good for thermal performance.

Our no-metal warm edge spacers are 100% polymer structural foam, for excellent thermal performance and a superior seal.



#### Low-E 366



Cardinal's triple layer silver product for superior performance. 95% UV protection. Solar heat gain coefficient of 0.27\*. Also available with Preserve® protective film or with Preserve and Neat® coating for a naturally cleaner glass when selecting XL Edge or Endur Spacer.

#### Low-E 366 with I89 Coating\*\*



The same superior performance as regular Low-E 366 (above), but with the addition of I89 coating on the interior surface to increase insulating value and reduce solar heat gain. Meets even the most extreme requirements in the majority of the Canadian Energy Star zones. Also available with Preserve® protective film or with Preserve and Neat® coating for a naturally cleaner glass when selecting XL Edge or Endur Spacer.

#### Low-E 340



Cardinal's newest glazing innovation. It has an amazingly low 0.18\* solar heat gain coefficient to keep out the heat even in the blazing sun. Slightly tinted. Blocks 98% of UV rays. Less heat gain when it's hot, less heat loss when it's cold, and the best glare control under the sun. Also available with Preserve® protective film or with Preserve and Neat® coating for a naturally cleaner glass when selecting XL Edge or Endur Spacer.

#### Low-E 180 Passive Solar



A very high (0.70\*) solar heat gain coefficient. Ideal for reducing your heating bills in colder climates. Superior insulation value blocks cold and keeps in the heat. Also available with Preserve® protective film or with Preserve and Neat® coating for a naturally cleaner glass when selecting XL Edge or Endur Spacer.

#### Low-E 180 Passive Solar with I89 Coating\*\*



The same superior performance as regular Low-E 180 (above), but with the addition of I89 coating on the interior surface to increase insulating value. Meets even the most extreme requirements in the majority of the Canadian Energy Star zones. Also available with Preserve® protective film or with Preserve and Neat® coating for a naturally cleaner glass when selecting XL Edge or Endur Spacer.

#### Dual Pane Low-E



Insulated for improved energy efficiency. Single surface Low-E coating to reduce solar heat gain and block UV rays.

#### Triple Pane Low-E



Available in a variety of Low-E coating combinations for superior insulation and energy performance.

#### Insulated Glass



For moderate climates. Basic glazing with basic performance.

#### Sound Control



Reduces outside noise by as much as 50% while blocking 99% of damaging UV rays. Laminated for shatter resistance. Available insulated or non-insulated.

#### FeelSafe® Insulated Low-E with or without Sea Turtle Glazing



Protect your home and our sea turtle population. FeelSafe windows and patio doors are engineered inside and out to resist hurricane-force winds, pounding rain, wind-borne debris, and rapid pressure changes that could implode your home or literally blow off the roof. Available in Low-E, Low-E 366 or Low-E 340.

#### FeelSafe® Laminated with or without Sea Turtle Glazing



For moderate climates, our non-insulated, shatter-resistant FeelSafe glass provides the utmost security—whether your concern is severe storms or intruders. Also available in Low-E 366 or Low-E 340.

\*All values shown are center of glass. \*\*Interior surface coatings, also known as surface "4," are applied to the interior (room side surface) of a dual pane IG unit, resulting in improved thermal performance and lower heating costs. Because the coating reflects heat back into the room, the room-side pane of glass will be slightly colder in winter, causing a higher potential for interior condensation.



## WOOD PROTECTION

### THE ADVANTAGES OF COREGUARD PLUS™

Sierra Pacific wood windows and doors are protected by CoreGuard Plus™ wood treatment, a patented process that, when needed, penetrates wood right to the core to repel water, so our windows and patio doors have superior dimensional stability making them less likely to warp or swell.

In addition, CoreGuard Plus contains fungicides and insecticides to deeply protect all wood species from pests and rotting. Amazingly, this strong protection comes from a naturally organic, water-based treatment with nearly zero VOC's, which helps us maintain our strict environmental stewardship.

To ensure CoreGuard Plus effectiveness, sections of our windows undergo harsh testing in a Hawaiian rainforest that mimics decades of typical residential exposure. No wonder we have one of the strongest wood rot warranties in the industry.



Thoroughly tested in Hawaiian rain forests  
against water, insects and rot.



©2020 Fox.com | Jim Morrison Construction and Walker Architecture and Engineering

28



COREGUARD PLUS™

Jim Early Photographer | Faye Grove Architect, LLC

29



— STANDARD CASEMENT —

## OPEN A WORLD OF POSSIBILITIES.

Top-to-bottom unobstructed views, clean lines and wide-open ventilation make our Sierra Pacific casement windows a favorite across the country. Smooth operation is ensured by our Encore handle. It folds out when you need it, then folds back to stay out of the way of window treatments. These windows also swing open a full 90 degrees for easy cleaning.

Choose the charm of our all-wood exteriors or the low-maintenance convenience of our aluminum cladding, and combine them with other fixed or operable Sierra Pacific windows to create the perfect look.



### ENCORE HANDLE

Available in 11 decorator finishes, it folds out for easy use, then folds back out of the way.

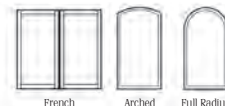


### BEAUTIFUL FINISHES \*Special order. Extended lead-time.



### EXTERIOR TRIM

Group A on page 17  
Shown: 2" Backmould



### TOP IT OFF

For added charm or to complete a look, add a radius top or consider French style casements.





For support and answers to any questions, call 800-824-7744,  
or visit [SierraPacificWindows.com](http://SierraPacificWindows.com)

*Instagram* Follow us @SierraPacificWindows



# SIERRA PACIFIC

WINDOWS THAT  
NEVER COMPROMISE





## Fire-Rated, Narrow-Profile Aluminum Frames

**Patent No. 9,045,900**

**Fire Rating: 45/60/120 Minutes**

Fireframes® Aluminum Series combined with Pilkington Pyrostop® glass, provides a barrier to radiant and conductive heat transfer. The narrow aluminum profiles allow unlimited areas of glazing in interior and exterior fire separations.

### FEATURES

- Fire ratings of 45-120 minutes
- Patented system features extruded aluminum framing with crisp edges and narrow sightlines
- Custom aluminum face caps available to meet project needs
- Easy installation
- Frames supplied “K-D” (knock-down) ready for installation
- Incorporates large individual panes of Pilkington Pyrostop fire-resistive-rated glass, comprised of low-iron Pilkington OptiWhite™ glass and clear intumescent interlayers
- Compatible with doors in full-lite single leaf or double leaf design from TGP (see Fireframes® Designer Series or Fireframes Heat Barrier Series)
- Standard finish is clear anodized. Powder coating and other anodized finishes are available
- Door hardware available to fit functional requirements. Check with TGP for compatibility
- Passes wall assembly test standard UL 263 / ASTM E119 for 60 and 120 minute ratings

### LISTINGS/STANDARDS

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File numbers R19207 (doors), R25229 (windows), R25274 (walls), design number U558 (U416 Canada). Frame tests performed in accordance with:

UL 9	NFPA 251	CAN/ULC-S101	ASTM E119	LARR 25798
UL 10B	NFPA 257		ASTM E283	
UL 263			ASTM E330	
			ASTM E331	

### SPECIFICATIONS

Complete 3-part CSI format specifications are available online at [fireglass.com](http://fireglass.com), or by calling 800.426.0279.



BIM 3D Model Available



UL Classified & Labeled



Fire-Rated



Hose Stream Tested



Heat Barrier



Positive Pressure Tested



## FRAMING

RATING	MAX. EXPOSED GLASS AREA PER PIECE	MAX. EXPOSED GLASS DIMENSION
45 min.*	4,500 in <sup>2</sup> (2.90 m <sup>2</sup> )	95-1/4 in (2.42 m)
60 min.**	7,442 in <sup>2</sup> (4.80 m <sup>2</sup> )	118-1/8 in (3.00 m)
120 min.**	3,730 in <sup>2</sup> (2.41 m <sup>2</sup> )	111 in (2.81 m)

\*45 minute window systems are classified as an Opening Protective as per UL 9 with a maximum overall frame size of 152 square feet.

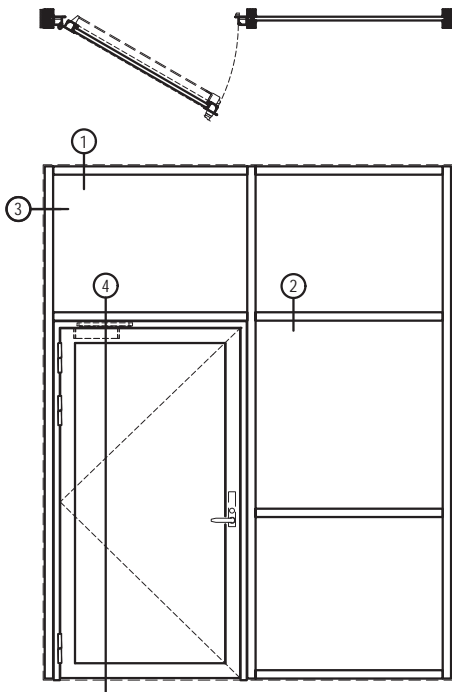
\*\* 60 and 120-minute tests conducted per UL 263 / ASTM E-119.

Therefore assembly is classified as a wall assembly, and not subject to "opening" area limitations.

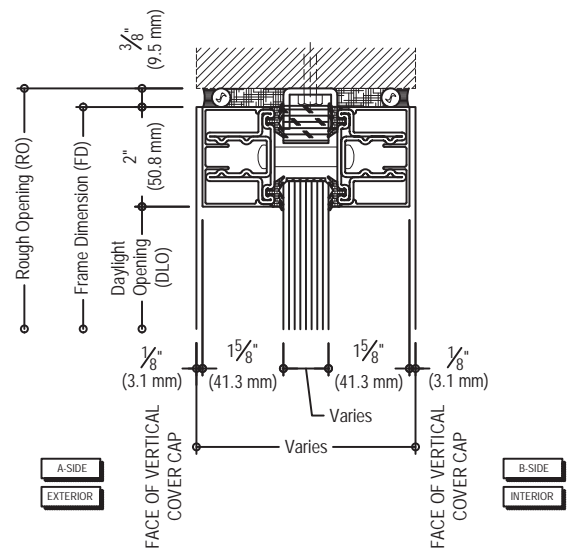
## DOORS

RATING	MAX. SINGLE DOOR LEAF SIZE	MAX. EXPOSED GLASS SIZE PER PIECE
Fireframes Designer Series		
20 min.	42" x 96" (1.07 m x 2.44 m)	36" x 89" (.91 m x 2.26 m)
45 min.	42" x 96" (1.07 m x 2.44 m)	36" x 89" (.91 m x 2.26 m)
60 min.	42" x 96" (1.07 m x 2.44 m)	36" x 89" (.91 m x 2.26 m)
90 min.	43" x 95-7/8" (1.09 m x 2.44 m)	36" x 56-1/2" (divided lite door) (.91 m x 1.44 m)
Fireframes Designer Series Temperature Rise Doors with Pilkington Pyrostop		
60 min.	43" x 95-7/8" (1.09 m x 2.44 m)	35-7/8" x 88-3/4" (.91 m x 2.25 m)
90 min.	43" x 95-7/8" (1.09 m x 2.44 m)	35-7/8" x 88-3/4" (.91 m x 2.25 m)
Fireframes Heat Barrier Series Temperature Rise Doors with Pilkington Pyrostop		
60 min.	48-7/8" x 95-15/16" (1.24 m x 2.44 m)	41-5/8" x 89-3/4" (1.06 m x 2.28 m)
90 min.	48-7/8" x 95-15/16" (1.24 m x 2.44 m)	41-5/8" x 89-3/4" (1.06 m x 2.28 m)

### ELEVATION VIEW

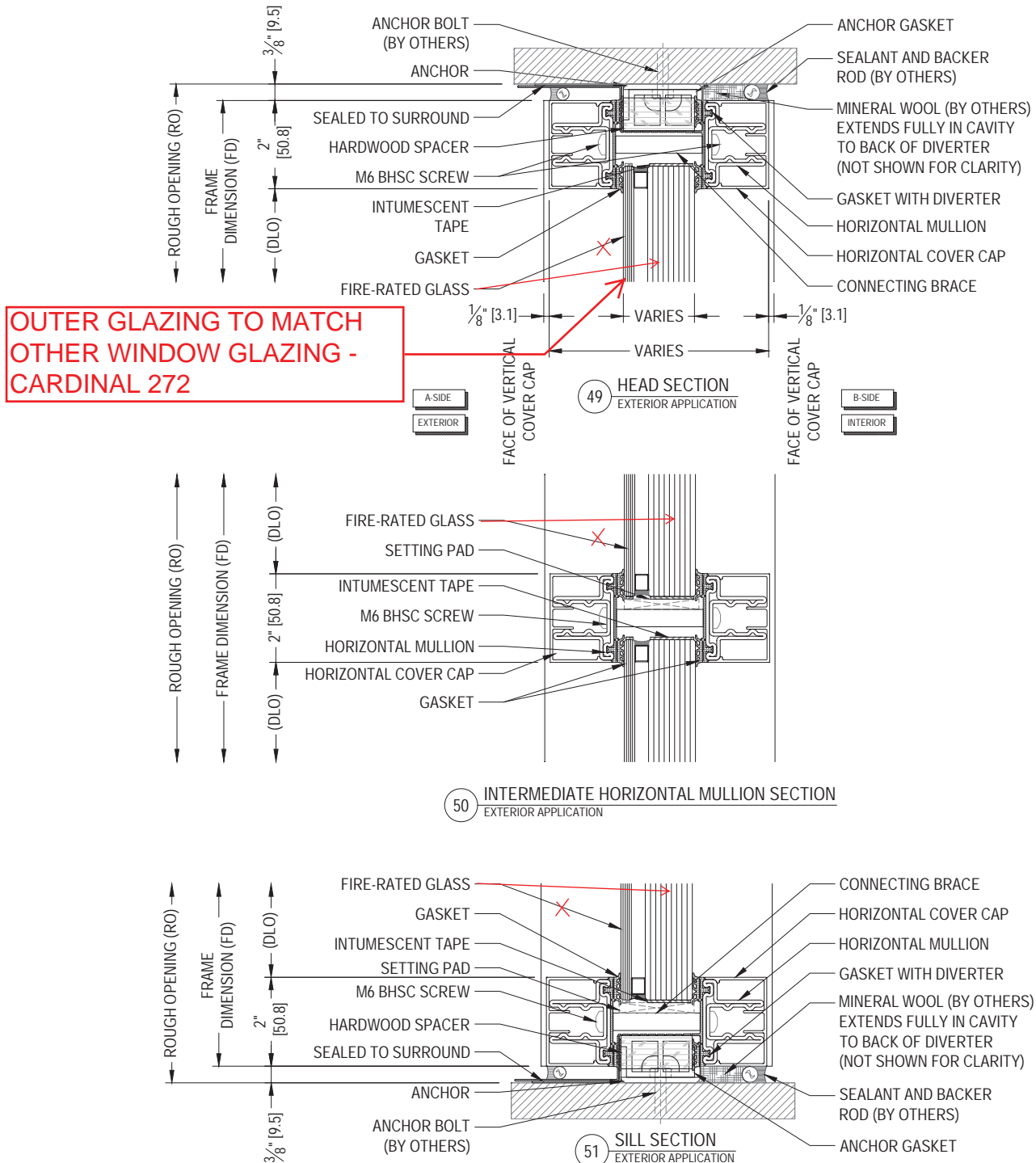


### 1 HEAD SECTION INTERIOR APPLICATION



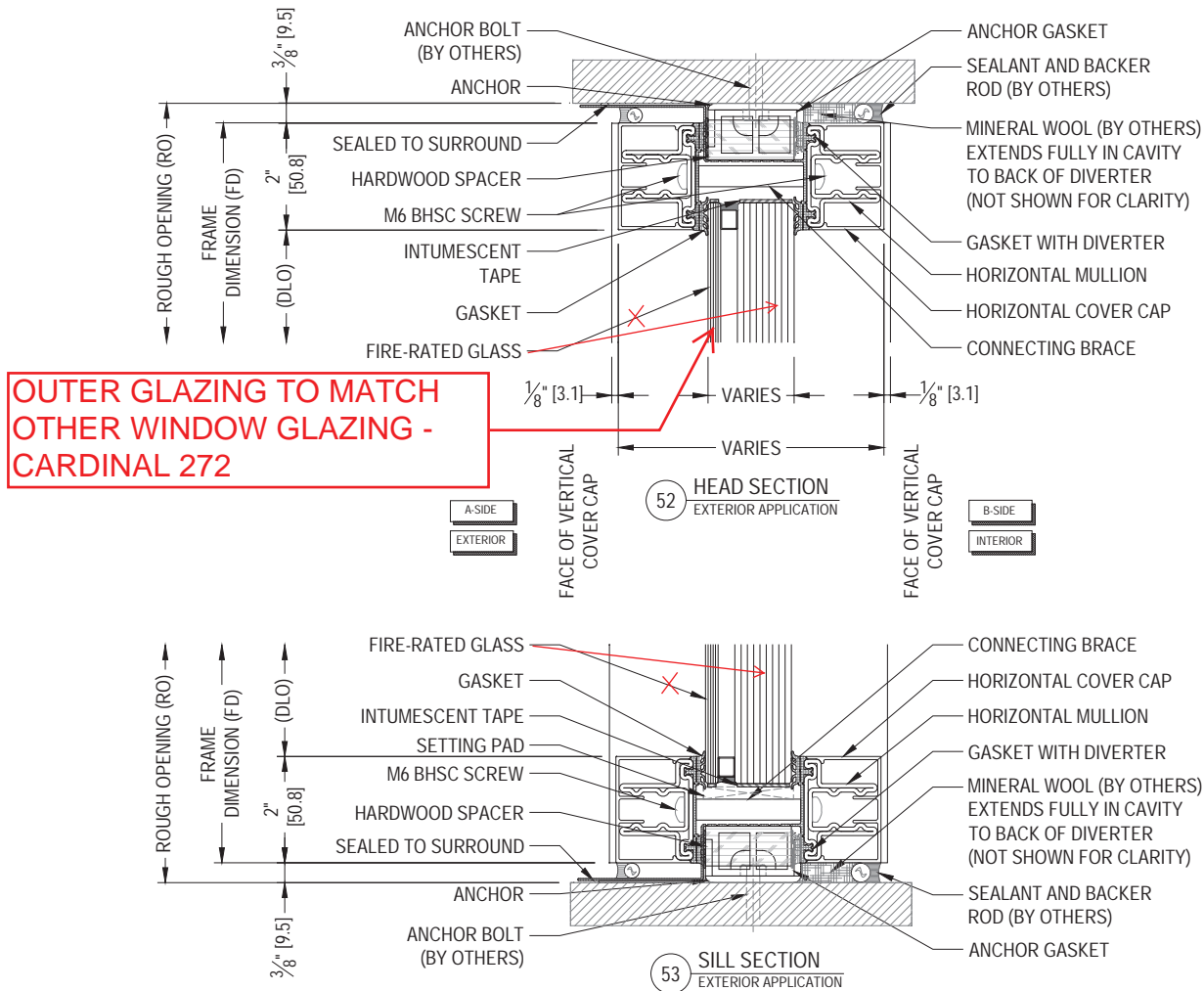


## 60 and 120 Minute – Window Details Exterior Application





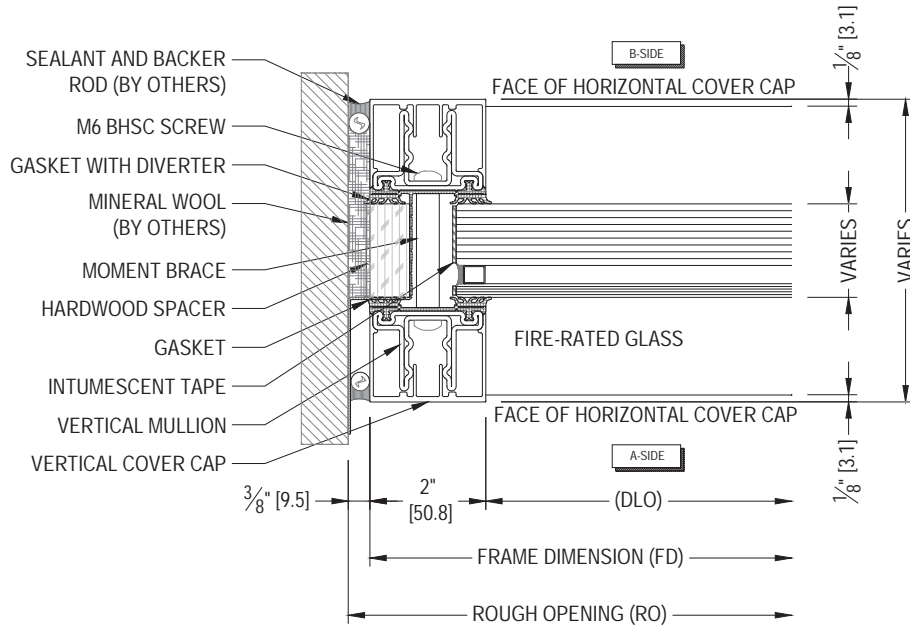
## 60 and 120 Minute – Window Details Exterior Application



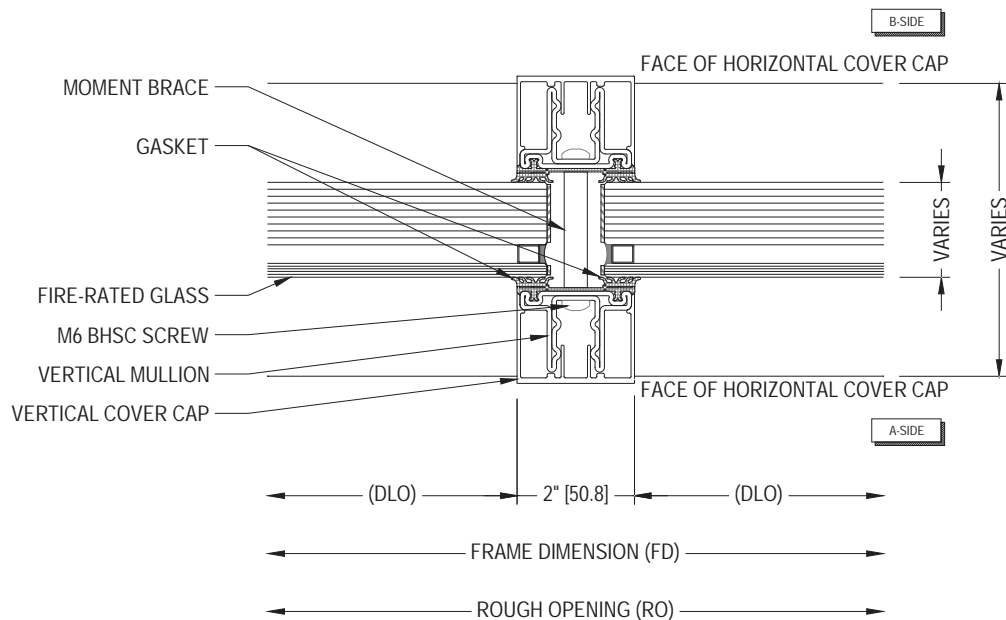
**NOTE:** 1. The anchors are flush with the notched portions of the gasket with diverter.



## 60 and 120 Minute – Window Details Exterior Application



54 JAMB SECTION  
EXTERIOR APPLICATION



55 INTERMEDIATE VERTICAL MULLION SECTION  
EXTERIOR APPLICATION

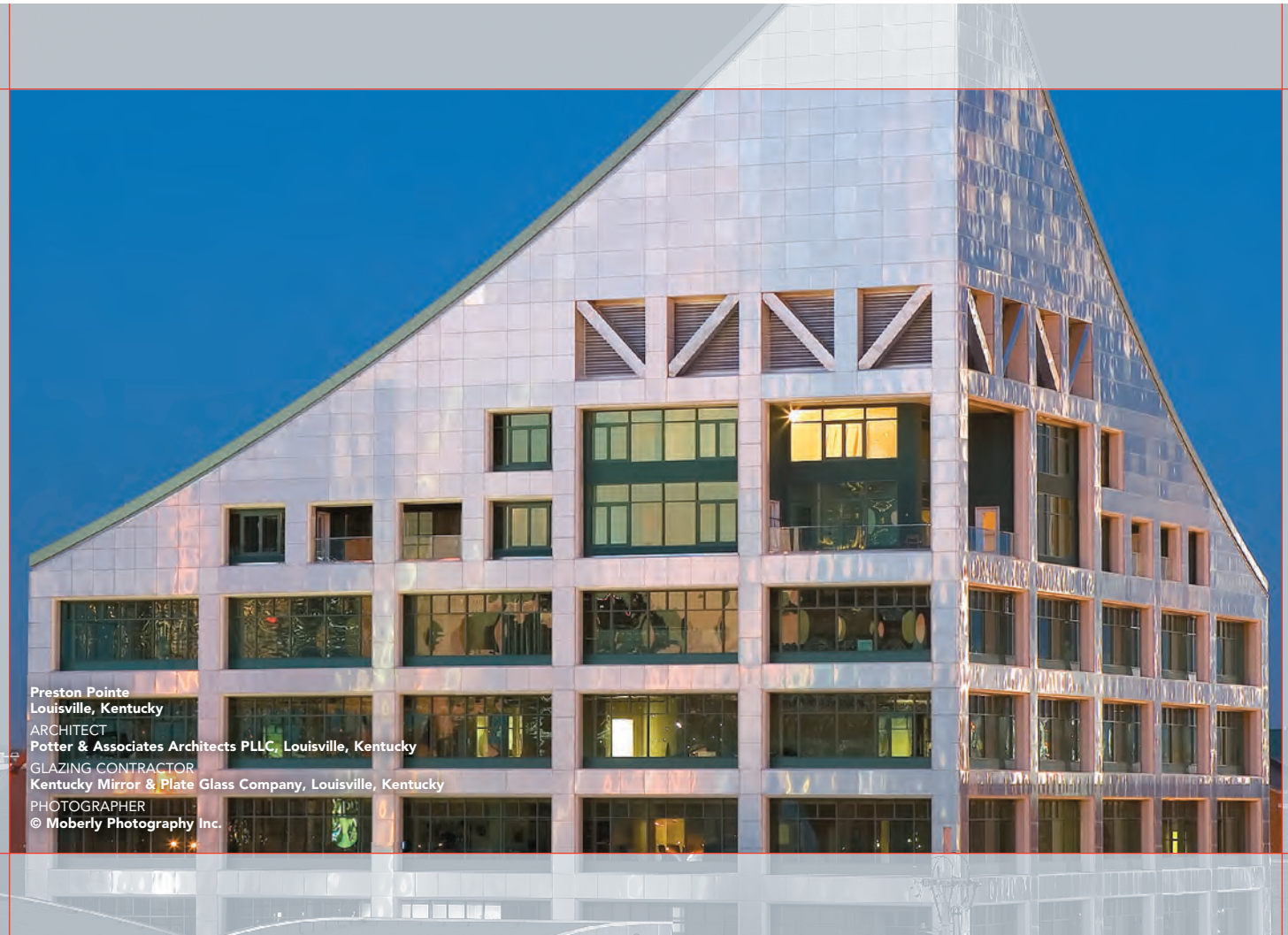


## TRIFAB™ VG (VERSAGLAZE™)

TRIFAB™ VG 450, 451 & 451T (THERMAL) FRAMING SYSTEMS &  
TRIFAB™ 451UT (ULTRA THERMAL) FRAMING SYSTEM



# Design + Performance Versatility with Unmatched Fabrication Flexibility



Preston Pointe  
Louisville, Kentucky  
ARCHITECT  
Potter & Associates Architects PLLC, Louisville, Kentucky  
GLAZING CONTRACTOR  
Kentucky Mirror & Plate Glass Company, Louisville, Kentucky  
PHOTOGRAPHER  
© Moberly Photography Inc.

Trifab™ VersaGlaze™ is built on the proven and successful Trifab™ platform – with all the versatility its name implies. There are enough framing system choices, fabrication methods, design options and performance levels to please the most discerning building owner, architect and installer. The Trifab™ VersaGlaze™ family's newest addition, the Trifab™ 451UT (Ultra Thermal) Framing System, is designed for the most demanding thermal performance and employs a dual Isolock™ thermal break.

### AESTHETICS

Trifab™ VersaGlaze™ Framing Systems offer designers a choice of front-, center-, back- or multi-plane glass applications. Structural silicone

glazing (SSG) and weatherseal glazing options further expand designers' choices, allowing for a greater range of design possibilities for specific project requirements and architectural styles. All systems have a 4-1/2" frame depth; Trifab™ VersaGlaze™ 450 has 1-3/4" sightlines, while Trifab™ VersaGlaze™ 451/451T and Trifab™ 451UT have 2" sightlines.

With seamless incorporation of Kawneer entrances or windows, including GLASSvent™ visually frameless ventilators, Trifab™ VersaGlaze™ can be used on almost any project. These framing systems can also be packaged with Kawneer curtain walls and overhead glazing, thereby providing a full range of proven, and tested, quality products for the owner, architect and installer from a single-source supplier.



**Features**

- Trifab™ 451UT is 4-1/2" (114.3) deep with a 2" (50.8) sightline
- Center Plane glass applications
- Flush glazed from either the inside or outside
- Screw Spline fabrication
- Dual IsoLock™ lanced and debridged thermal break
- Infill options up to 1-1/8" (28.6) thickness
- High performance sill flashing
- Permanodic™ anodized finishes in seven choices
- Painted finishes in standard and custom choices

**Optional Features**

- Acoustical rating per AAMA 1801 and ASTM E 1425
- Project specific U-factors (See Thermal Charts)
- Integrates with Versoleil™ SunShade Outrigger System and Horizontal Single Blade System

**Product Applications**

- Storefront, Ribbon Window or Punched Openings
- Single-span
- Integrated entrance framing allowing Kawneer standard entrances or other specialty entrances to be incorporated
- Kawneer windows, GLASSvent™ UT windows are easily incorporated

For specific product applications,  
consult your Kawneer representative.



Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.  
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<b>BASIC FRAMING DETAILS (CENTER - Outside Glazed).....</b>	<b>4</b>
<b>BASIC FRAMING DETAILS (CENTER - Inside Glazed).....</b>	<b>5</b>
<b>MISCELLANEOUS FRAMING (CENTER) .....</b>	<b>6</b>
<b>CURVING &amp; TRIM DETAILS .....</b>	<b>7</b>
<b>AIR/VAPOR BARRIER TIE-IN OPTION .....</b>	<b>8</b>
<b>AA™ 250/425 THERMAL ENTRANCE DETAILS .....</b>	<b>9</b>
<b>GLASSvent™ UT WINDOW DETAILS.....</b>	<b>10</b>
<b>8225TL THERMAL WINDOW DETAILS .....</b>	<b>11</b>
<b>WINDLOAD / DEADLOAD CHARTS .....</b>	<b>12-15</b>
<b>THERMAL CHARTS .....</b>	<b>16-22</b>

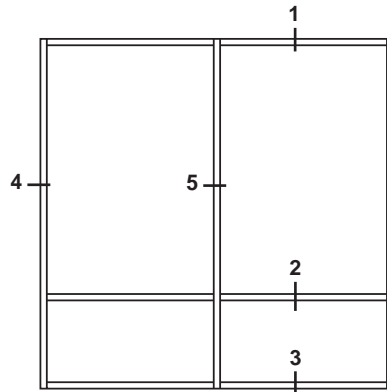
Metric (SI) conversion figures are included throughout these details for reference. Numbers in parentheses ( ) are millimeters unless otherwise noted.

The following metric (SI ) units are found in these details:

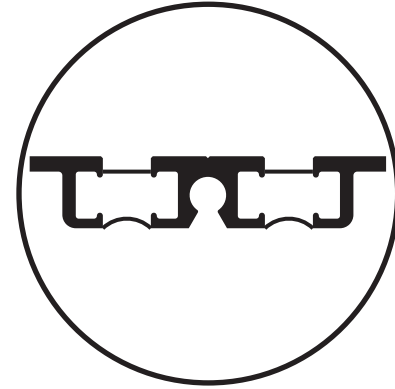
m – meter  
cm – centimeter  
mm – millimeter  
s – second  
Pa – pascal  
MPa – megapascal



Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)

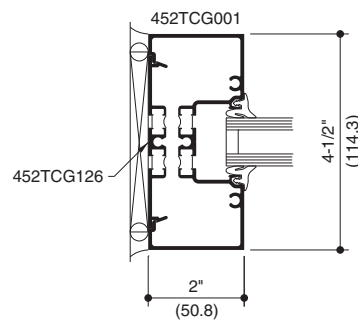


ELEVATION IS NUMBER KEYED TO DETAILS

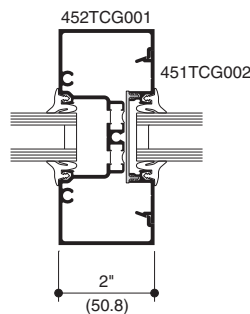


DUAL IsoLock™ THERMAL BREAK

## SCREW SPLINE

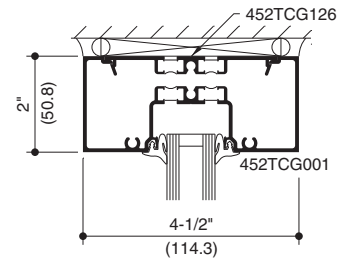


4  
JAMB

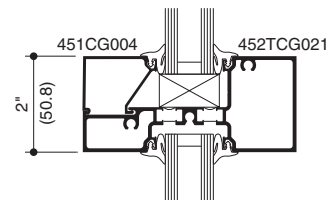


5  
VERTICAL

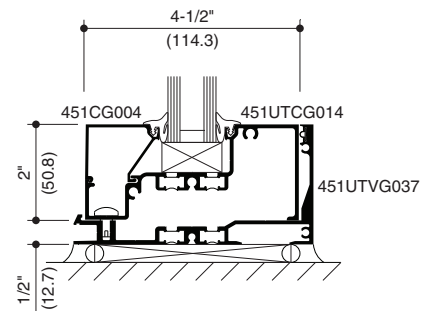
1  
HEAD



2  
HORIZONTAL



3  
SILL



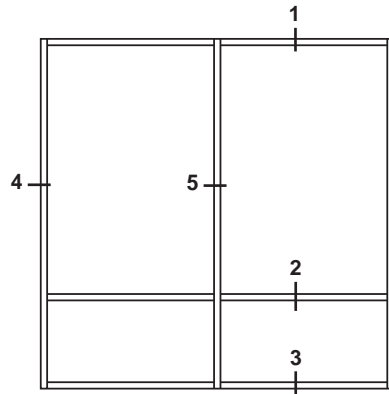
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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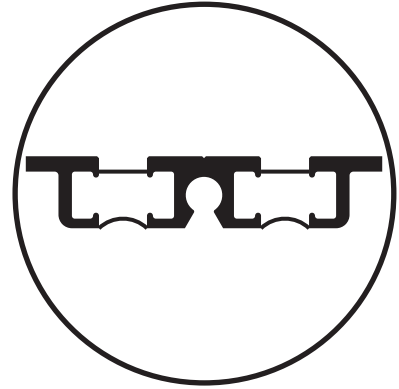
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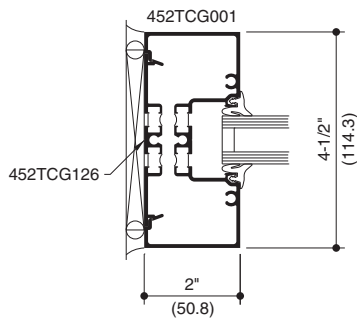


ELEVATION IS NUMBER KEYED TO DETAILS

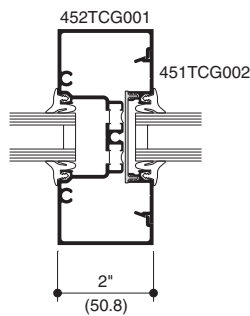


DUAL IsoLock™ THERMAL BREAK

## SCREW SPLINE

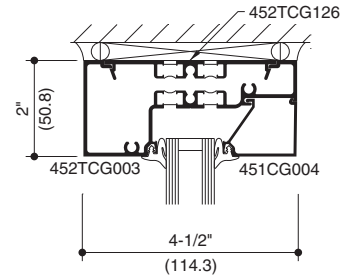


4  
JAMB

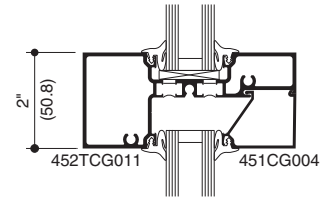


5  
VERTICAL

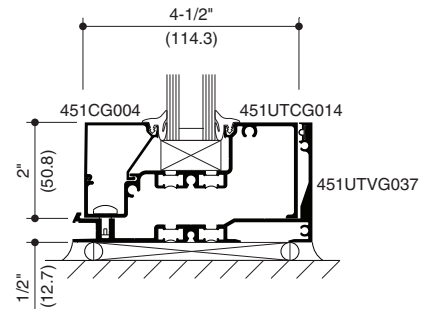
1  
HEAD



2  
HORIZONTAL

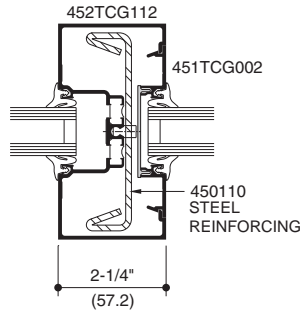


3  
SILL

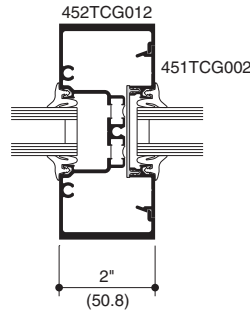




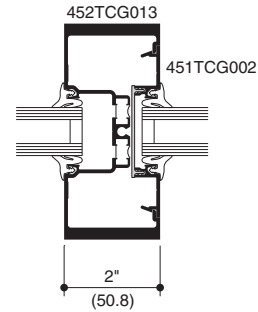
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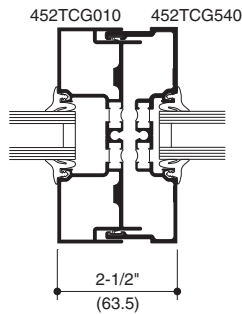
**2-1/4" (57.2) MULLION  
W/ STEEL**



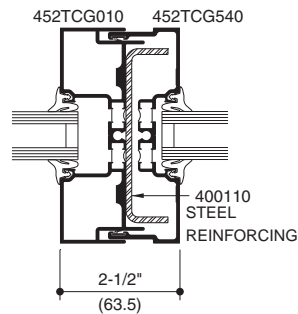
**MEDIUM WEIGHT  
MULLION**



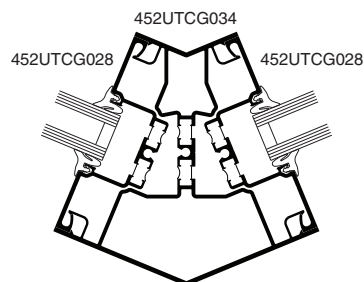
**HEAVY WEIGHT  
MULLION**



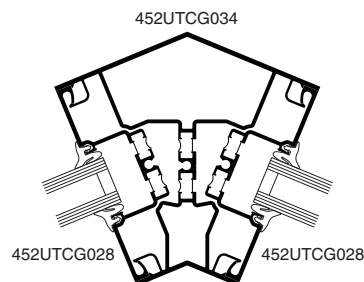
**TUBULAR  
EXPANSION MULLION**



**TUBULAR  
EXPANSION MULLION  
WITH OPTIONAL STEEL**



**135° CORNER  
(THERMAL)**



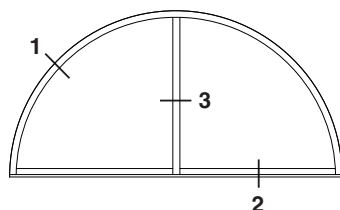
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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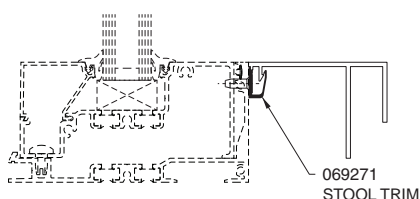
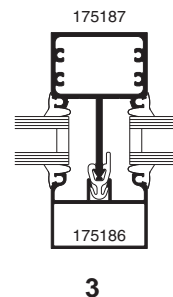
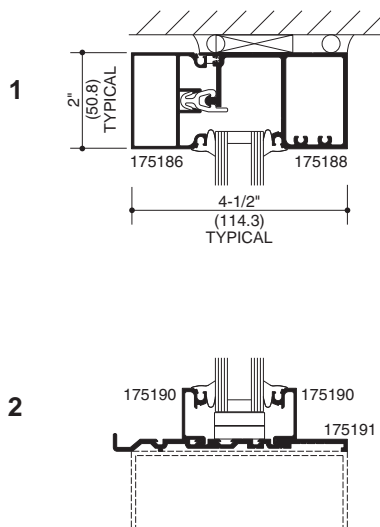
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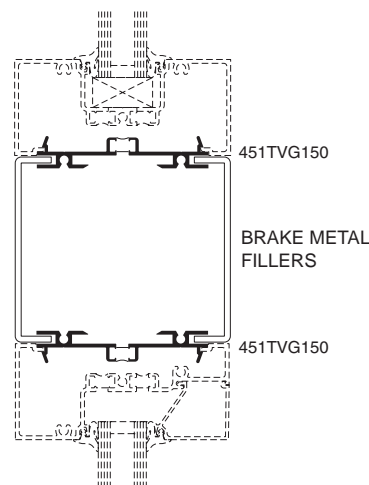


**CURVING DETAILS**  
(Center Plane Only)

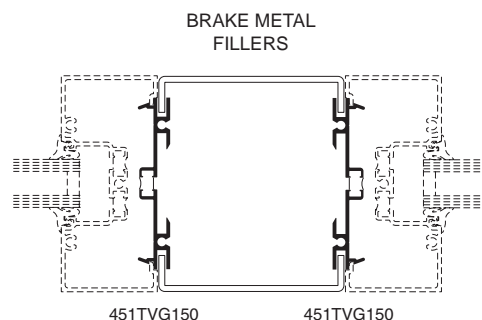


**STOOL TRIM CLIP**  
**WITH HIGH PERFORMANCE**  
**FLASHING**

Seal over Stool Trim fasteners  
to prevent water infiltration.



**BRAKE METAL**  
**ADAPTOR AT HORIZONTAL**



**BRAKE METAL**  
**ADAPTOR AT VERTICAL**



The following applications utilize Tremco Proglaze® ETA Connections as the transition assembly from the wall air/vapor barrier membrane to the storefront framing perimeter. Corners are sealed with either Proglaze® ETA 3D molded silicone corners or lapped Proglaze® ETA silicone sheet material. Transition assembly components are set in Tremco Spectrem® 1 silicone sealant. For complete installation instructions of Tremco Proglaze® ETA products, contact your local Tremco representative or visit [www.tremcosealants.com](http://www.tremcosealants.com).

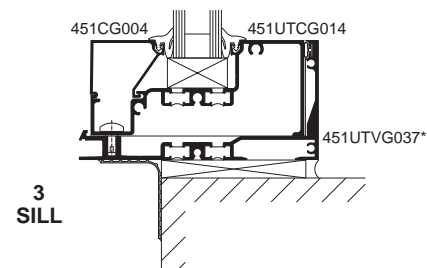
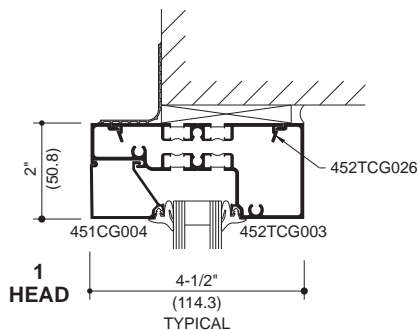
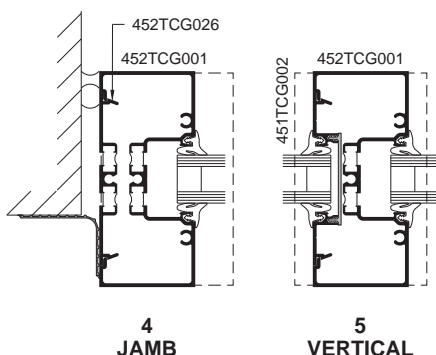
For integration of a silicone engineered transition assembly, the Trifab™ storefront system must use continuous head and jamb mullion fillers, a head receptor with continuous jamb fillers or a head receptor with jamb receptors.

Reference air/vapor barrier installation instructions 451VG977EN. All storefront framing to be installed according to applicable Kawneer storefront system installation instructions, project specific plans, specifications and shop details.

Storefront installations require the sill to be structurally supported directly under the glass setting blocks and mullion locations, as well as where the sill is anchored to the substrate. Any projecting or cantilevered sill applications that are not supported must be reviewed by Kawneer application engineering.

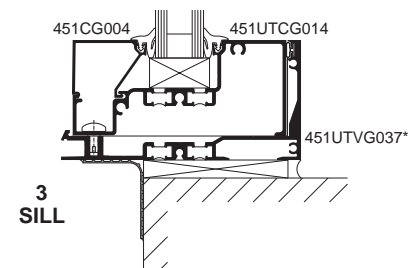
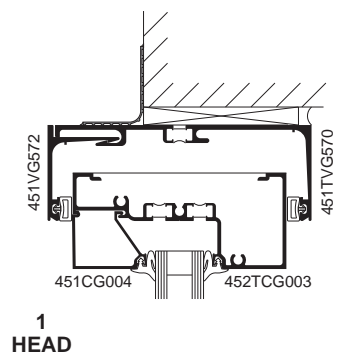
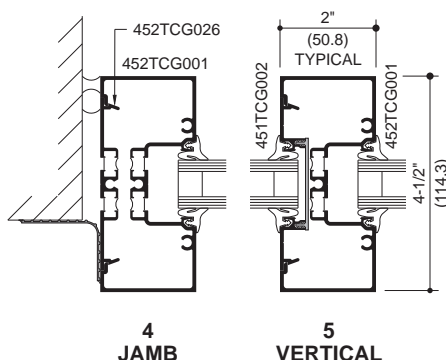
Installer to independently confirm sealant compatibility and adhesion with all job specific storefront framing materials, silicone ETA sheet material and wall AVB material.

### CONTINUOUS HEAD AND JAMB MULLION FILLERS



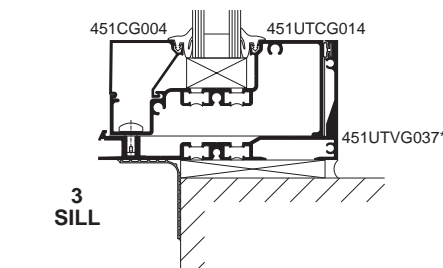
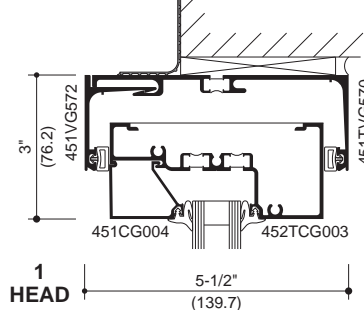
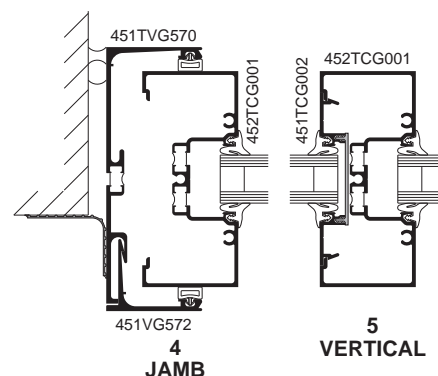
\* HP Sill Flashing shown with optional gasket.

### HEAD RECEPTOR WITH CONTINUOUS JAMB FILLERS (EXTERIOR INSTALLED)



\* HP Sill Flashing shown with optional gasket.

### HEAD AND JAMB RECEPTORS (EXTERIOR INSTALLED)



\* HP Sill Flashing shown with optional gasket.

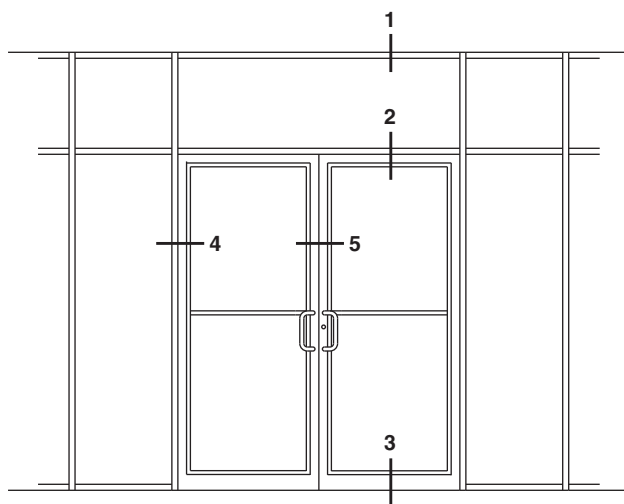
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Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)

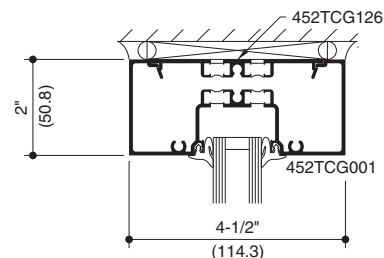
Trifab™ VG 451T CENTER DOOR FRAMING SHOWN.  
OTHER FRAMING OPTIONS AVAILABLE.  
CONSULT YOUR KAWNEER REPRESENTATIVE.



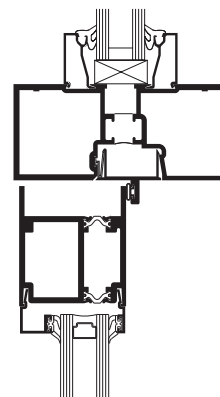
ELEVATION IS NUMBER KEYED  
TO DETAILS.

**NOTE: Butt Hung or Offset Pivot Doors Only.**

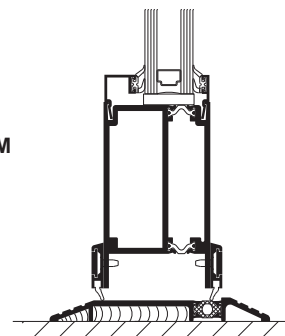
**1  
HEAD**



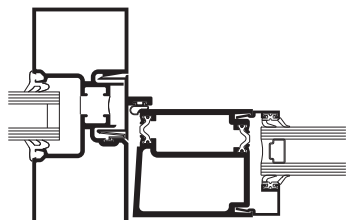
**2  
TRANSOM  
BAR**



**3  
BOTTOM  
RAIL**



**4  
DOOR  
JAMB**



**5  
MEETING  
STILES**



## AA™ 250/425 THERMAL DOOR



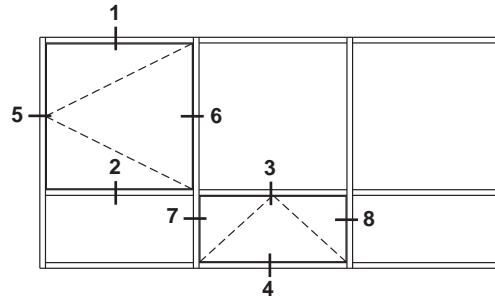
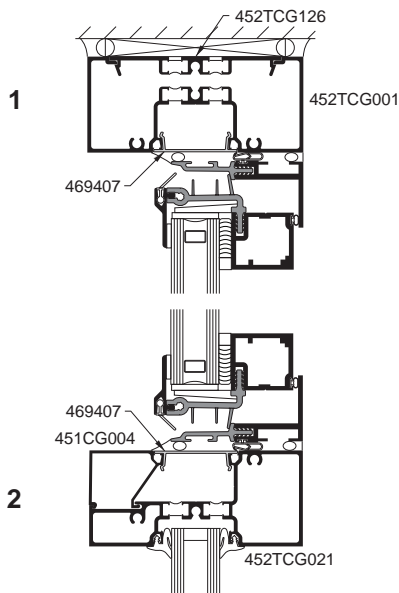
Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)

Trifab™ 451UT FRAMING SHOWN.

OTHER FRAMING OPTIONS AVAILABLE.

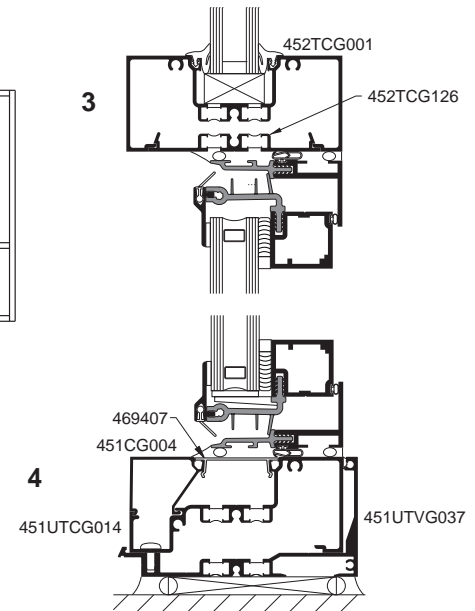
CONSULT YOUR KAWNEER REPRESENTATIVE.

### OUTSWING CASEMENT VERTICAL SECTION

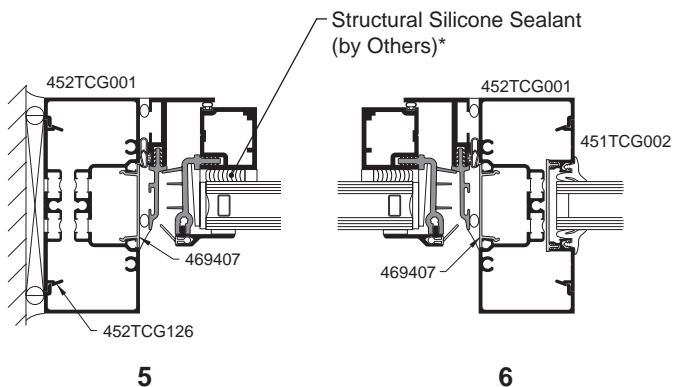


ELEVATION IS NUMBER KEYED TO DETAILS

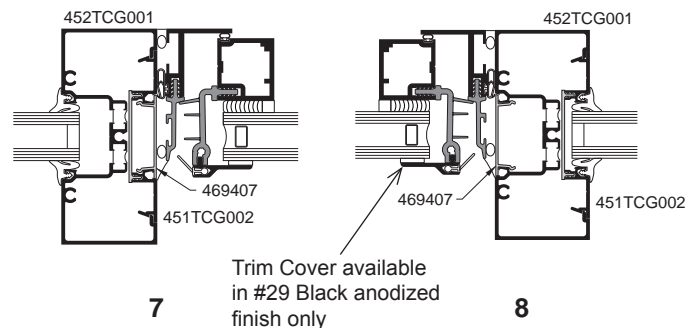
### PROJECT-OUT VERTICAL SECTION



### OUTSWING CASEMENT HORIZONTAL SECTION



### PROJECT-OUT HORIZONTAL SECTION



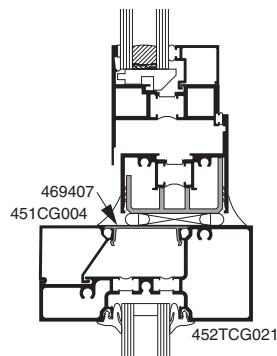
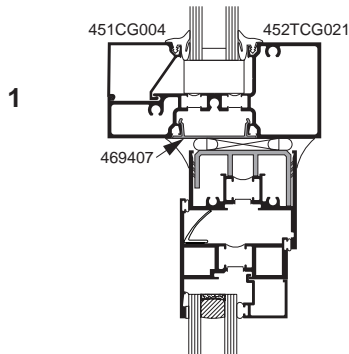
**NOTE:** Black spacer is recommended when 1" (25.4) insulating glass is used.

\* **INSTALLER NOTE:** Installer is responsible for all required compatibility review and approvals with the Structural Silicone Manufacturer and the Insulating Glass Unit Manufacturer.

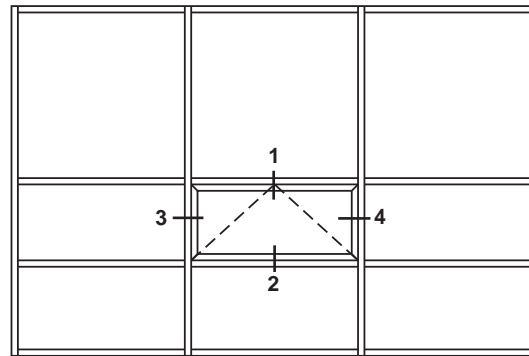


Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)

## PROJECT-OUT VERTICAL SECTION

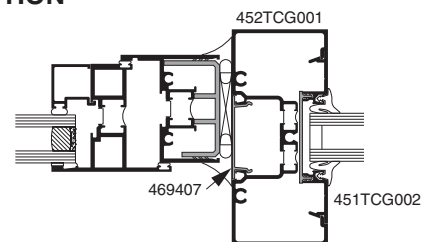
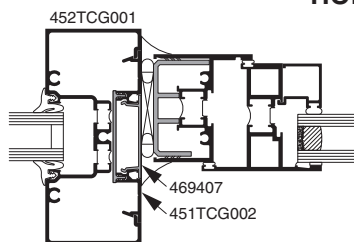


**8225TL THERMAL WINDOWS SHOWN**  
**NOTE:** OTHER VENT TYPES CAN BE  
 ACCOMMODATED, CONSULT YOUR KAWNEER  
 REPRESENTATIVE FOR OTHER OPTIONS



ELEVATION IS NUMBER KEYED TO DETAILS

## PROJECT-OUT HORIZONTAL SECTION



Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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## WIND LOAD CHARTS

Mullions are designed for deflection limitations in accordance with AAMA TIR-A11 of L/175 up to 13'-6" and L/240 +1/4" above 13'-6". These curves are for mullions WITH HORIZONTALS and are based on engineering calculations for stress and deflection. Allowable wind load stress for ALUMINUM 15,152 psi (104 MPa), STEEL 30,000 psi (207 MPa). Charted curves, in all cases are for the limiting value. Wind load charts contained herein are based upon nominal wind load utilized in allowable stress design. A conversion from Load Resistance Factor Design (LRFD) is provided. To convert ultimate wind loads to nominal loads, multiply ultimate wind loads by a factor of 0.6 per ASCE/SEI 7. A 4/3 increase in allowable stress has not been used to develop these curves. For special situations not covered by these curves, contact your Kawneer representative for additional information.

If the end reaction of the mullion [mullion spacing (ft.) times height (ft.) times specified wind load (psf) divided by two] is more than 500 lbs., the optional Mullion Anchors must be used. Consult Application Engineering. (*Mullion Anchor not used with Lightweight Receptor.*)

## DEADLOAD CHARTS

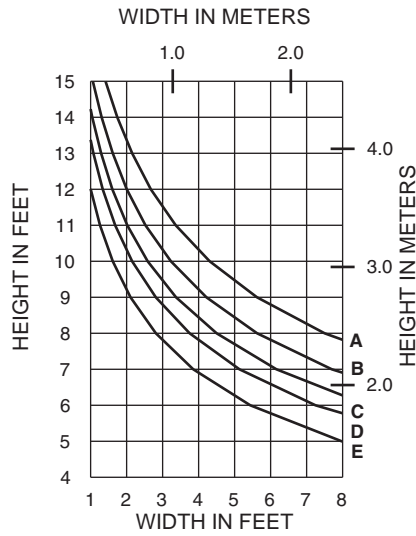
Horizontal or deadload limitations are based upon 1/8" (3.2), maximum allowable deflection at the center of an intermediate horizontal member. The accompanying charts are calculated for 1" (25.4) thick insulating glass or 1/4" (6.35) thick glass supported on two setting blocks placed at the loading points shown.

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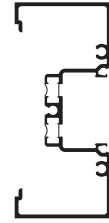
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**WITH HORIZONTALS**



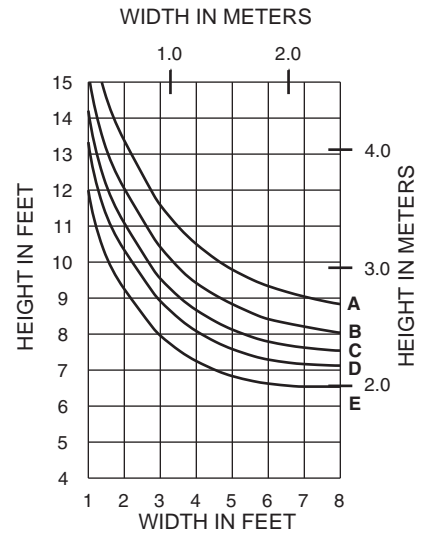
	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	15 PSF (720)	25 PSF (1200)
B =	20 PSF (960)	33 PSF (1580)
C =	25 PSF (1200)	42 PSF (2000)
D =	30 PSF (1440)	50 PSF (2400)
E =	40 PSF (1920)	67 PSF (3200)



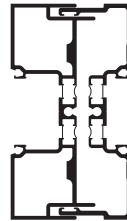
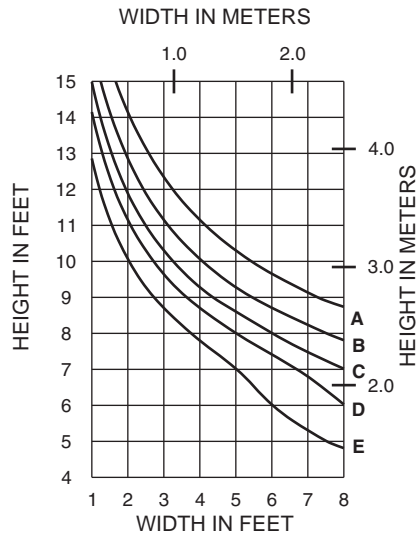
**452TCG001**

WINDLOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

**WITHOUT HORIZONTALS**



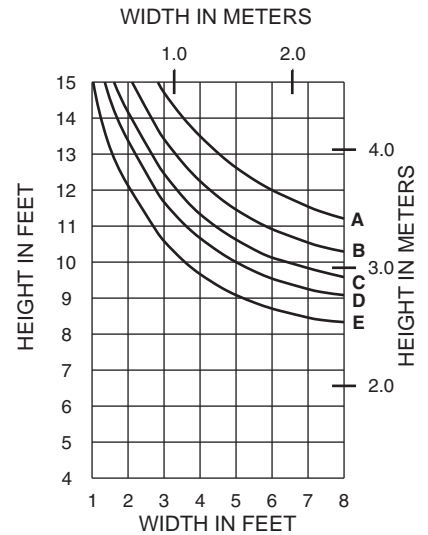
**WITH HORIZONTALS**



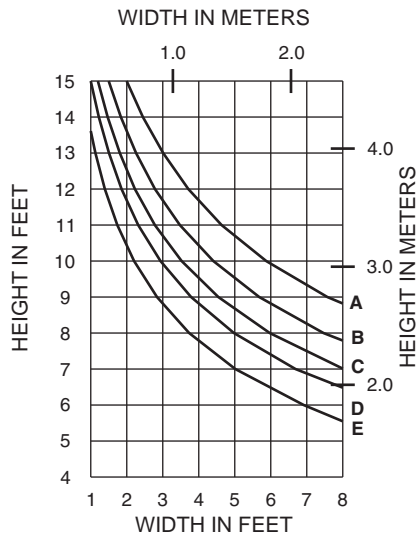
**452TCG010 / 452TCG540**

WINDLOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

**WITHOUT HORIZONTALS**



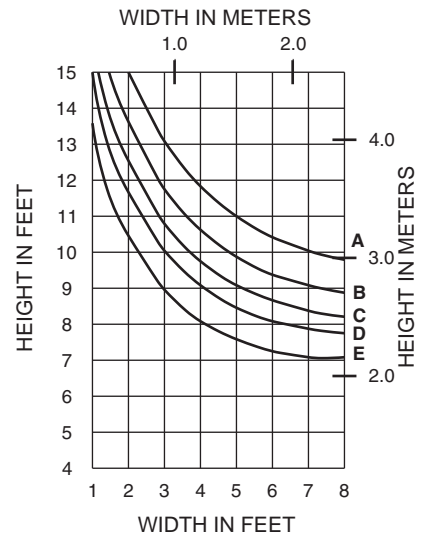
**WITH HORIZONTALS**



**452TCG012**

WINDLOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

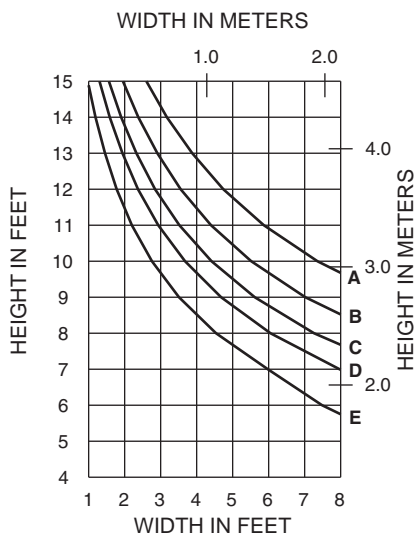
**WITHOUT HORIZONTALS**



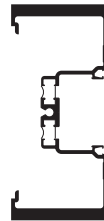
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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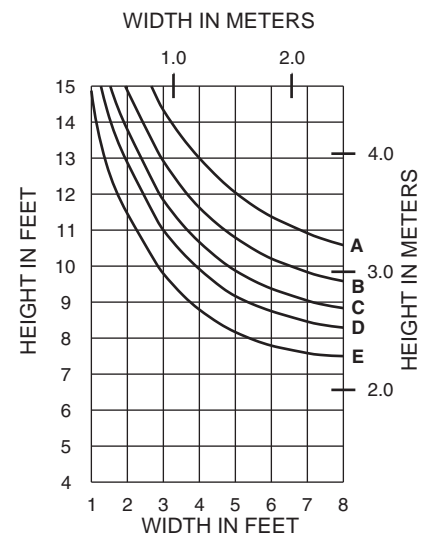
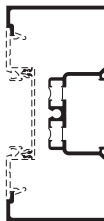
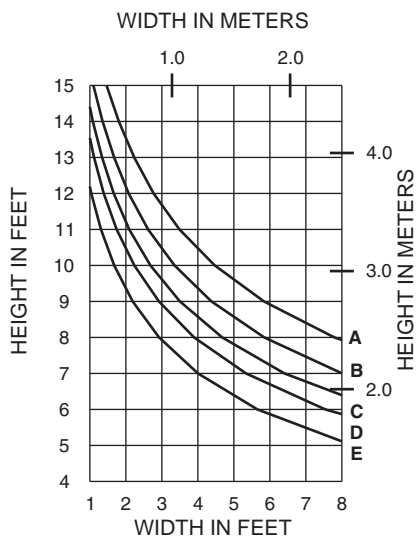


**WITH HORIZONTALS**

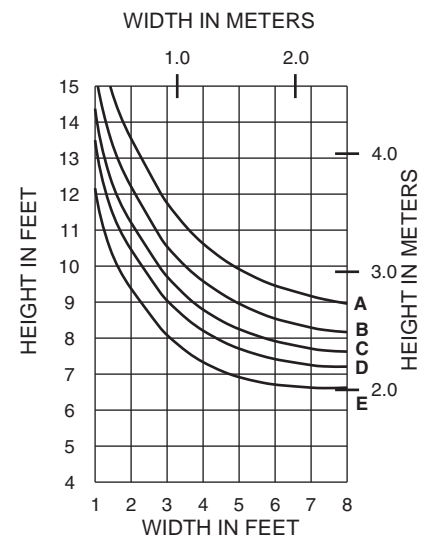
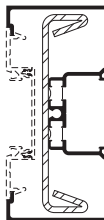
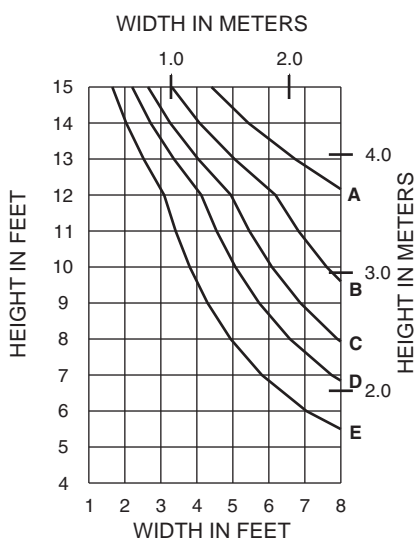
	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	15 PSF (720)	25 PSF (1200)
B =	20 PSF (960)	33 PSF (1580)
C =	25 PSF (1200)	42 PSF (2000)
D =	30 PSF (1440)	50 PSF (2400)
E =	40 PSF (1920)	67 PSF (3200)

**452TCG013**

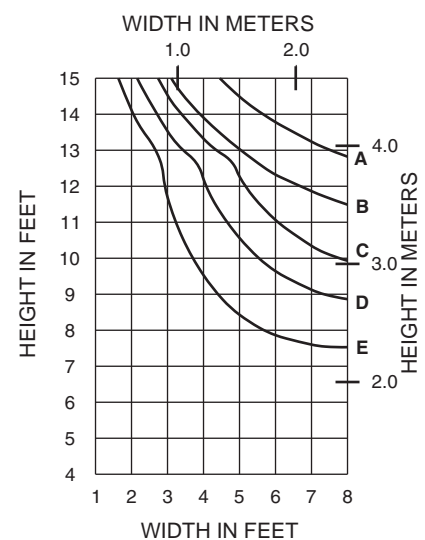
WINDLOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

**WITHOUT HORIZONTALS****WITH HORIZONTALS****452TCG112**

WINDLOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

**WITHOUT HORIZONTALS****WITH HORIZONTALS****452TCG112  
with 450110 STEEL**

WINDLOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

**WITHOUT HORIZONTALS**

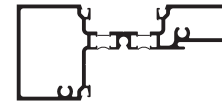
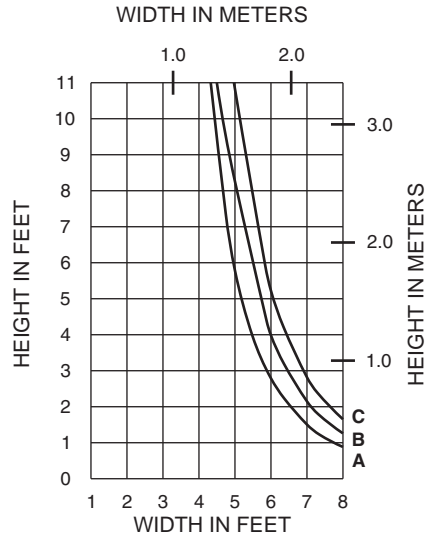
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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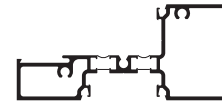
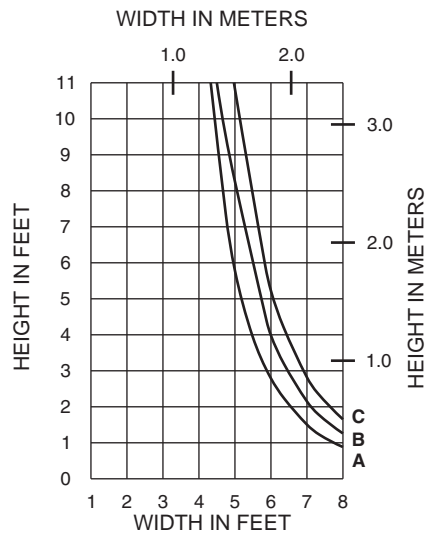
A = (1/4 POINT LOADING)  
B = (1/6 POINT LOADING)  
C = (1/8 POINT LOADING)

WITH HORIZONTALS



452TCG011

WITH HORIZONTALS



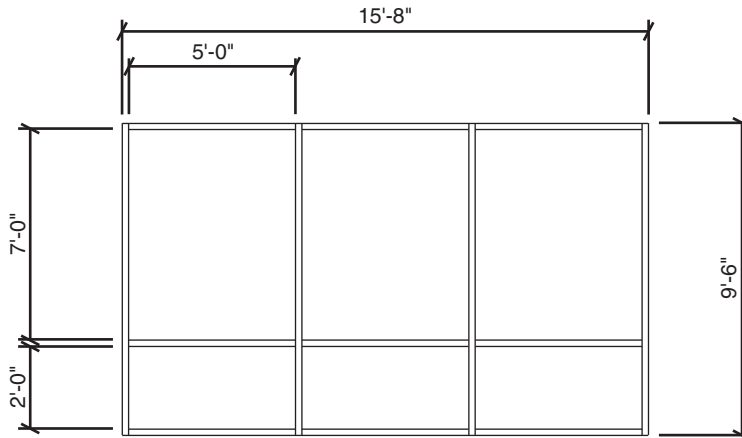
452TCG021

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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**Generic Project Specific U-factor Example Calculation**  
**(Percent of Glass will vary on specific products depending on sitelines)**



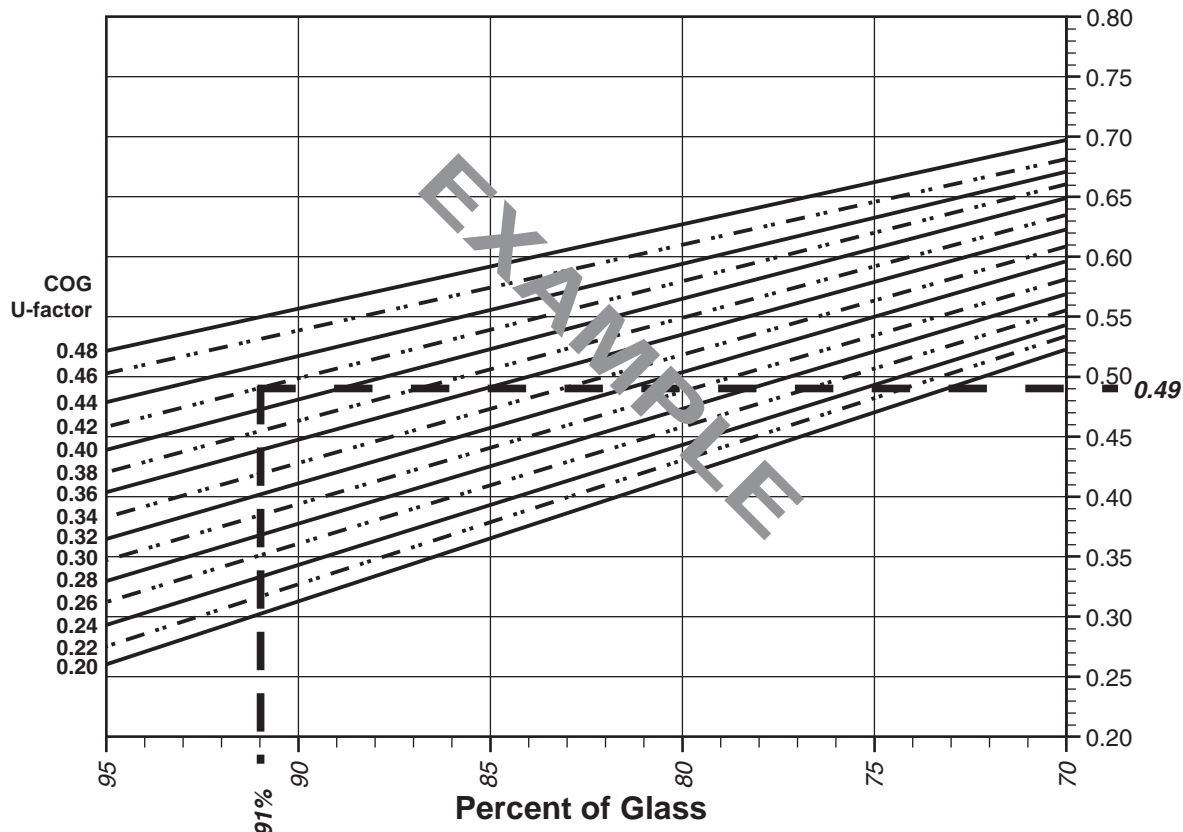
Example Glass U-factor = 0.42 Btu/hr-ft<sup>2</sup>·°F

Total Daylight Opening = 3(5' x 7') + 3(5' x 2') = 135ft<sup>2</sup>

Total Projected Area = (Total Daylight Opening + Total Area of Framing System)  
 = 15'-8" x 9'-6" = 148.83ft<sup>2</sup>

Percent of Glass = (Total Daylight Opening ÷ Total Projected Area)  
 = (135 ÷ 148.83)100 = 91%

**System U-factor vs Percent of Glass Area**



Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

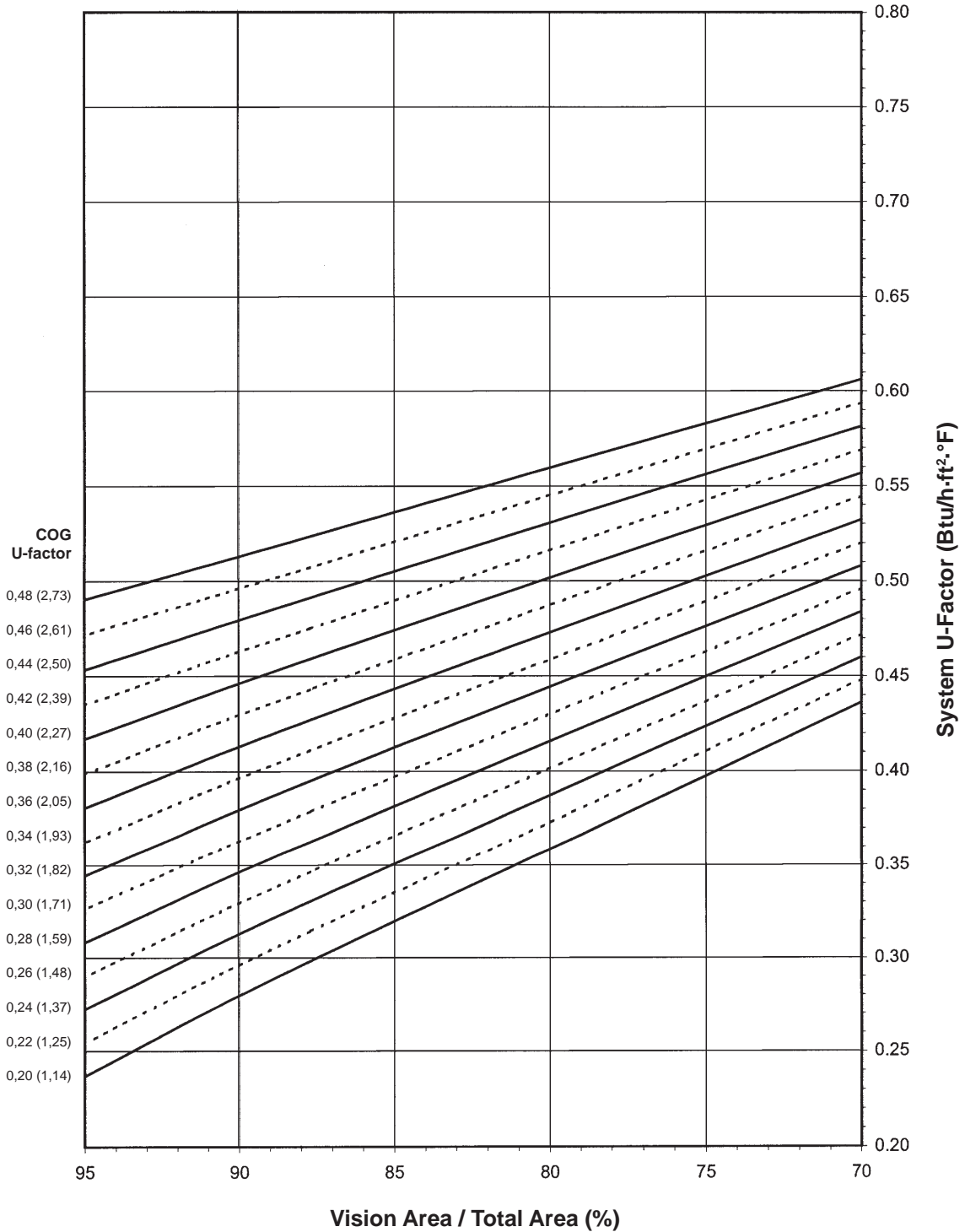
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Note:  
Values in parentheses are metric.  
COG=Center of Glass.  
Charts are generated per AAMA 507.

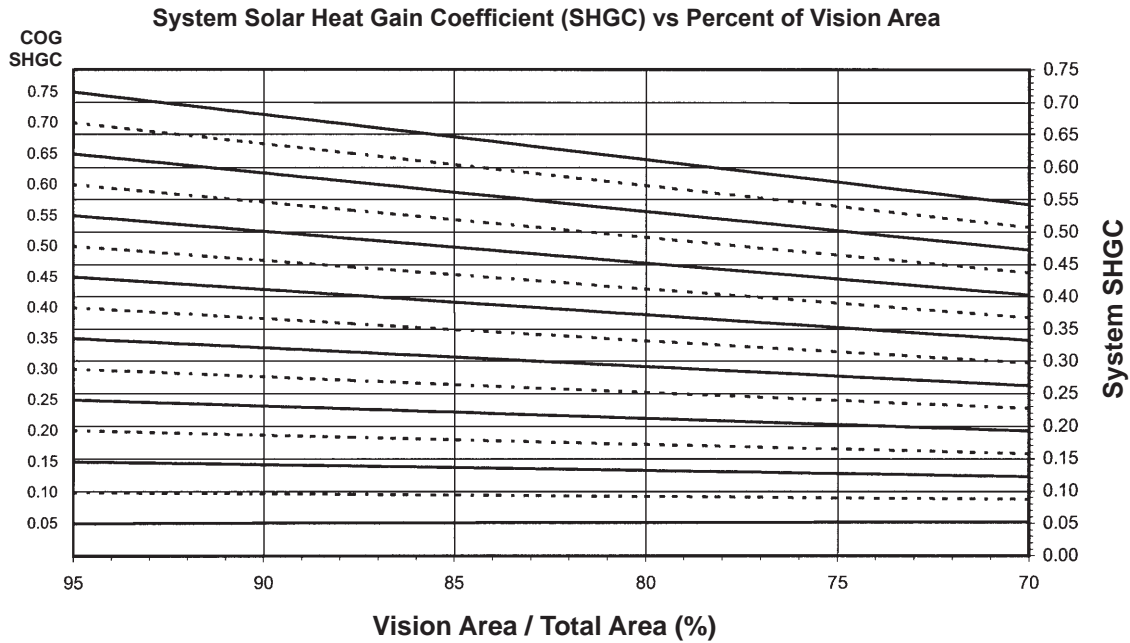
### System U-Factor for Vision Glass



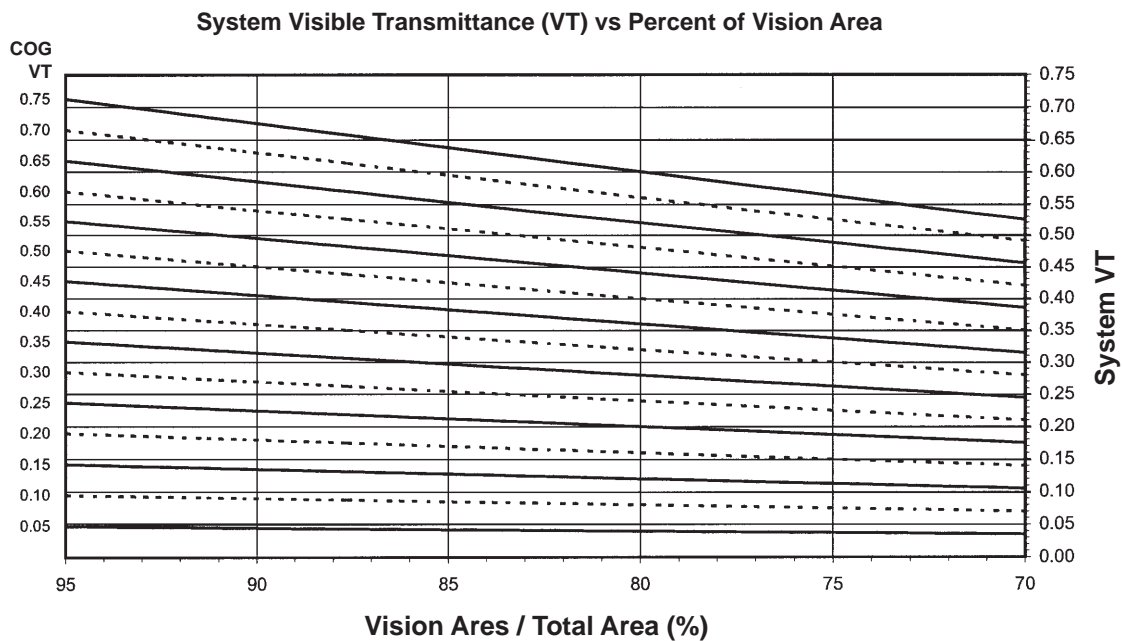
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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Charts are generated per AAMA 507.



Charts are generated per AAMA 507.

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Thermal Transmittance <sup>1</sup> (BTU/hr • ft<sup>2</sup> • °F)

Glass U-Factor <sup>3</sup>	Overall U-Factor <sup>4</sup>
0.48	0.52
0.46	0.51
0.44	0.49
0.42	0.48
0.40	0.46
0.38	0.44
0.36	0.43
0.34	0.41
0.32	0.39
0.30	0.38
0.28	0.36
0.26	0.35
0.24	0.33
0.22	0.31
0.20	0.30

## Trifab™ 451UT

**NOTE:** For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matrices are based on the standard NFRC specimen size of 2,000 mm wide by 2,000 mm high (78-3/4" by 78-3/4").

SHGC Matrix <sup>2</sup>

Glass SHGC <sup>3</sup>	Overall SHGC <sup>4</sup>
0.75	0.66
0.70	0.62
0.65	0.58
0.60	0.53
0.55	0.49
0.50	0.45
0.45	0.40
0.40	0.36
0.35	0.31
0.30	0.27
0.25	0.23
0.20	0.18
0.15	0.14
0.10	0.09
0.05	0.05

Visible Transmittance <sup>2</sup>

Glass VT <sup>3</sup>	Overall VT <sup>4</sup>
0.75	0,66
0.70	0,61
0.65	0,57
0.60	0,53
0.55	0,48
0.50	0,44
0.45	0,39
0.40	0,35
0.35	0,31
0.30	0,26
0.25	0,22
0.20	0,18
0.15	0,13
0.10	0,09
0.05	0,04

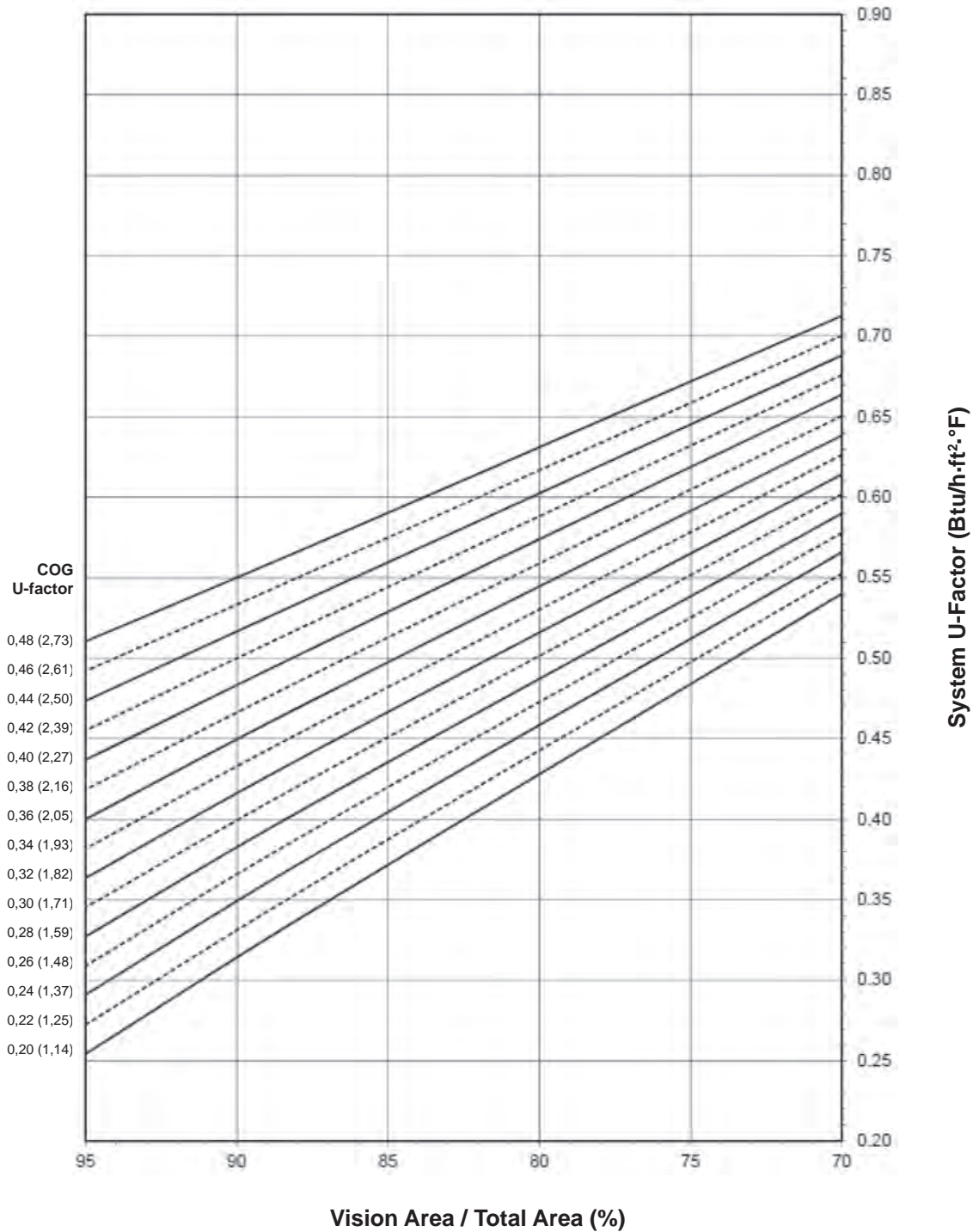


**Note:**

Values in parentheses are metric.

COG=Center of Glass.

Charts are generated per AAMA 507.

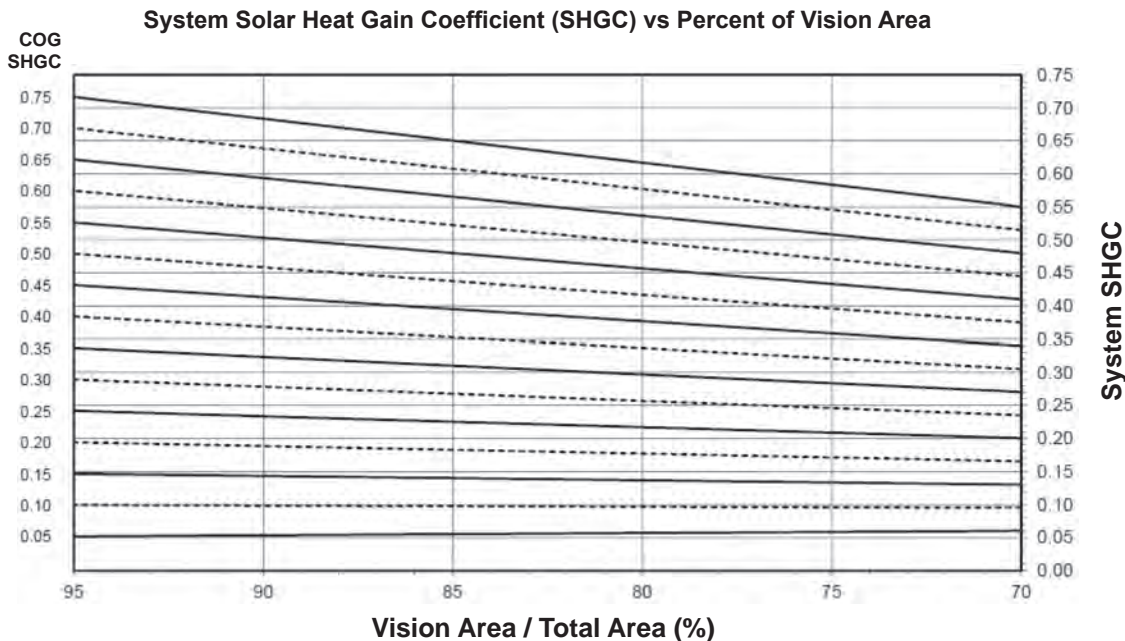
**System U-Factor for Vision Glass**

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

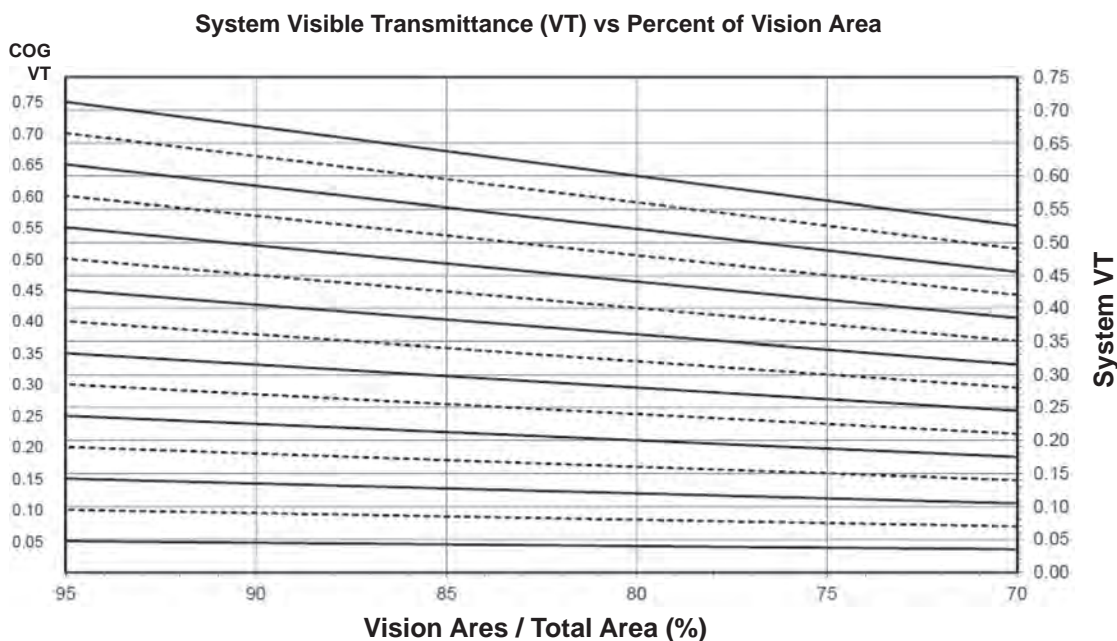
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Charts are generated per AAMA 507.



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Thermal Transmittance <sup>1</sup> (BTU/hr • ft <sup>2</sup> • °F)

Glass U-Factor <sup>3</sup>	Overall U-Factor <sup>4</sup>
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0.40	0.51
0.38	0.49
0.36	0.48
0.34	0.46
0.32	0.45
0.30	0.43
0.28	0.41
0.26	0.40
0.24	0.38
0.22	0.36
0.20	0.35

Trifab™ 451UT  
with Steel

**NOTE:** For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 2,000 mm wide by 2,000 mm high (78-3/4" by 78-3/4").

SHGC Matrix <sup>2</sup>

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0.40	0.36
0.35	0.32
0.30	0.27
0.25	0.23
0.20	0.19
0.15	0.14
0.10	0.10
0.05	0.05

Visible Transmittance <sup>2</sup>

Glass VT <sup>3</sup>	Overall VT <sup>4</sup>
0.75	0.65
0.70	0.61
0.65	0.57
0.60	0.52
0.55	0.48
0.50	0.44
0.45	0.39
0.40	0.35
0.35	0.30
0.30	0.26
0.25	0.22
0.20	0.17
0.15	0.13
0.10	0.09
0.05	0.04

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## ECONOMY

Trifab™ VersaGlaze™ 450/451/451T Framing Systems offer four fabrication choices to suit your project (Trifab™ 451UT is available as screw spline fabrication only):

- **Screw Spline** – for economical continuous runs utilizing two-piece vertical members that provide the option to pre-assemble units with controlled shop labor costs and smaller field crews for handling and installation.
- **Shear Block** – for punched openings or continuous runs using tubular moldings with shear block clips that provide tight joints for transporting large pre-assembled multi-lite units.
- **Stick** – for fast, easy field fabrication. Field measurements and material cuts can be done when metal is on the jobsite.
- **Type B** – Same fabrication benefits as shear block except the head and sill run through.



**Brighton Landing**  
Cambridge, Massachusetts  
ARCHITECT  
ADD Inc., Cambridge, Massachusetts  
GLAZING CONTRACTOR  
Ipswich Bay Glass Company, Inc., Rowley, Massachusetts  
PHOTOGRAPHER  
© Gordon Schenck, Jr.

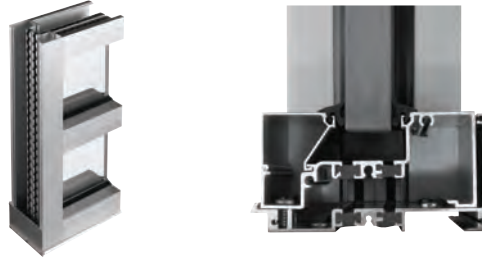
All systems can be flush glazed from either the inside or outside. The weatherseal option provides an alternative to SSG vertical mullions for Trifab™ VersaGlaze™ 450/451/451T. This ABS/ASA rigid polymer extrusion allows complete inside glazing and creates a flush glass appearance on the building exterior without the added labor of scaffolding or swing stages. Additionally, high-performance flashing options are engineered to eliminate perimeter sill fasteners and associated blind seals.

## FOR THE FINISHING TOUCH

Architectural Class I anodized aluminum and painted finishes in fluoropolymer (AAMA 2605) and solvent-free powder coatings (AAMA 2604) offer a variety of color choices.

## PERFORMANCE

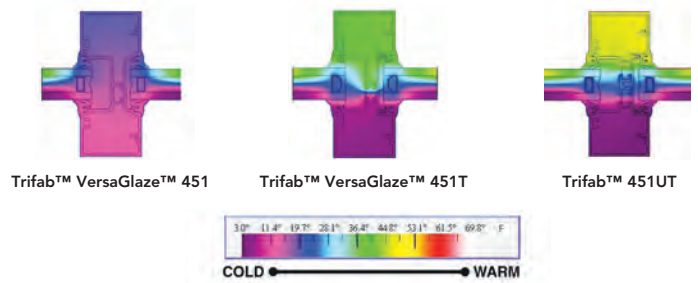
Kawneer's Isolock™ thermal break technology creates a composite section, prevents dry shrinkage and is available on Trifab™ VersaGlaze™ 451T. For even greater thermal performance, a dual Isolock™ thermal break is used on Trifab™ 451UT.



Trifab™ 451UT uses a dual Isolock™ thermal break (right) and features a new high-performance sill design, which incorporates a screw-applied end dam (left), ensuring positive engagement and tight joints between the sill flashing and end dam.

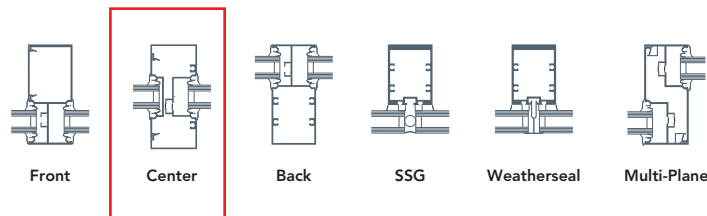
U-factor, CRF values and STC ratings for Trifab™ VersaGlaze™ vary depending upon the glass plane application. Project-specific U-factors can be determined for each individual project. (See the Kawneer Architectural Manual or Kawneer.com for additional information.)

Thermal simulations showing temperature variations from exterior/cold side to interior/warm side.



## PERFORMANCE TEST STANDARDS

Air Infiltration	ASTM E283
Water	AAMA 501, ASTM E331
Structural	ASTM E330
Thermal	AAMA 1503
Thermal Break	AAMA 505, AAMA TIR-A8
Acoustical	AAMA 1801, ASTM E1425



**Features**

- 250T narrow stile has 2-1/2" (63.5) vertical stile, 2-15/16" (74.6) top and 3-7/8" (98.4) bottom rail
- 350T medium stile has 3-1/2" (88.9) vertical stile, 3-1/2" (88.9) top and 6-1/2" (165.1) bottom rail
- 500T wide stile has 5" (127) vertical stile, 5" (127) top and 6-1/2" (165.1) bottom rail
- Door is 2-1/4" (57.2) deep
- Door has 1/8" (3.2) wall thickness
- Dual moment welded corner construction
- IsoPour™ thermal break
- Single acting
- 1" (25.4) infill
- Offset pivots, butt hinges, continuous geared hinge
- MS locks or exit device hardware
- Surface mounted or concealed closers
- Architects Classic push/pulls
- Adjustable astragal utilizing pile weathering with polymeric fin at meeting stiles
- Polymeric bulb weatherstripping and secondary weathering in door frames
- Permanodic™ anodized finishes in seven choices
- Painted finishes in standard and custom choices

**Optional Features**

- Wide variety of bottom rail and cross rail
- Two color finish capability

**Product Applications**

- 250T narrow stile - engineered for moderate traffic in applications such as offices and stores
- 350T medium stile - provides extra strength for schools, institutions and other high traffic applications
- 500T wide stile - creates a monumental visual statement for banks, libraries or buildings that experience heavy traffic conditions
- Engineered for high performance buildings

For specific product applications,  
Consult your Kawneer representative.



Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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LAWS AND BUILDING AND SAFETY CODES GOVERNING THE DESIGN AND USE OF GLAZED ENTRANCE, WINDOW, AND CURTAIN WALL PRODUCTS VARY WIDELY. KAWNEER DOES NOT CONTROL THE SELECTION OF PRODUCT CONFIGURATIONS, OPERATING HARDWARE, OR GLAZING MATERIALS, AND ASSUMES NO RESPONSIBILITY THEREFOR.

Metric (SI) conversion figures are included throughout these details for reference. Numbers in parentheses ( ) are millimeters unless otherwise noted.

The following metric (SI ) units are found in these details:

m – meter  
 cm – centimeter  
 mm – millimeter  
 s – second  
 Pa – pascal  
 MPa – megapascal

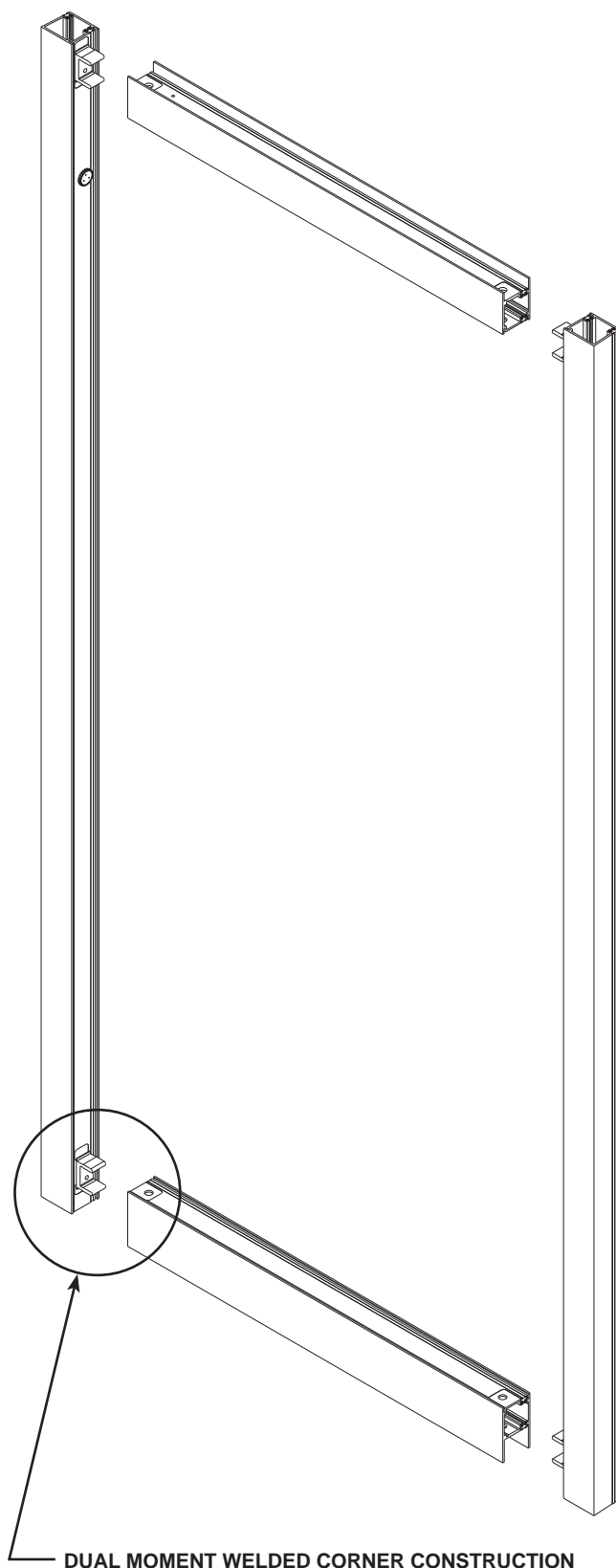
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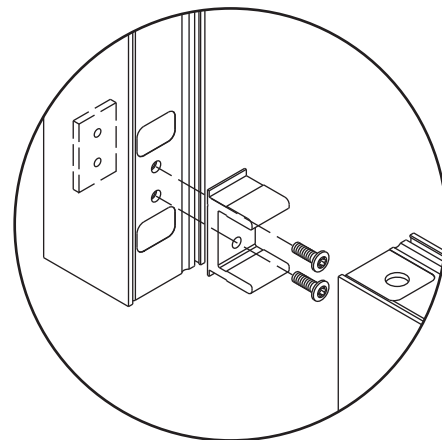


Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

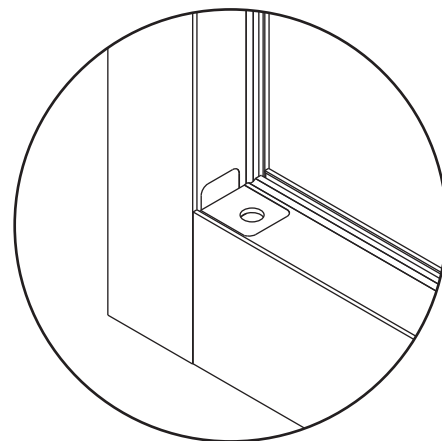
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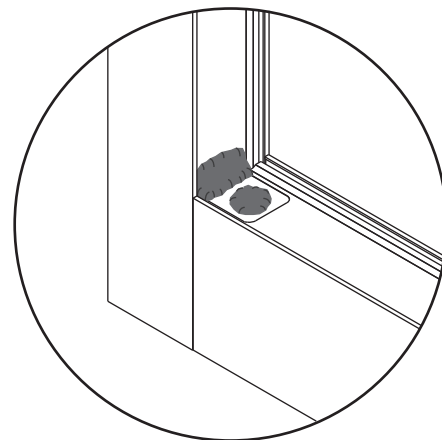
DUAL MOMENT WELDED CORNER CONSTRUCTION



**#1 MECHANICAL FASTENING** is accomplished by attaching a 5/16" (7.9) thick extruded aluminum channel clip to the vertical stile with 1/4"-20 heat strengthened bolts and 3/16" thick steel nut plates for a high strength welding base for attachment horizontal member.



**#2 SIGMA\* DEEP PENETRATION PLUG WELDS** are made top and bottom after the horizontal is properly positioned over the channel clip to help provide the strongest door corner joint currently available.



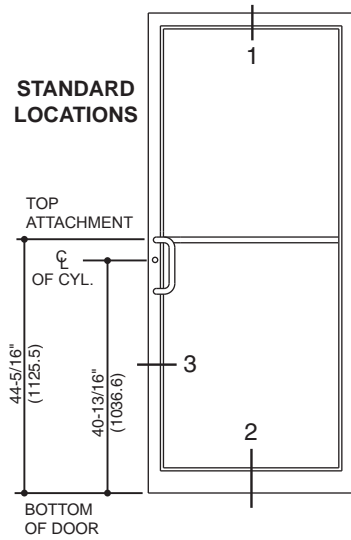
**#3 SIGMA\* FILLET WELDS** along both top and bottom webs of the rail extrusion complete the welded corner construction.

\* An arc welding process known as Shielded Inert Gas Metal Arc (SIGMA) or also known as Metal Inert Gas (MIG).

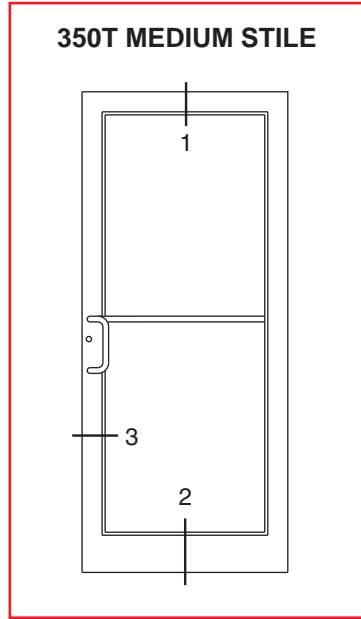


Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)

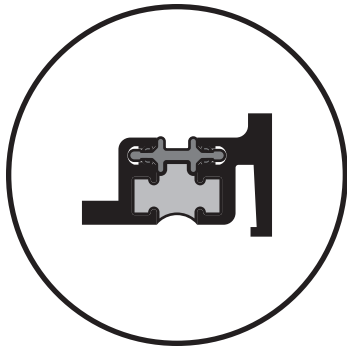
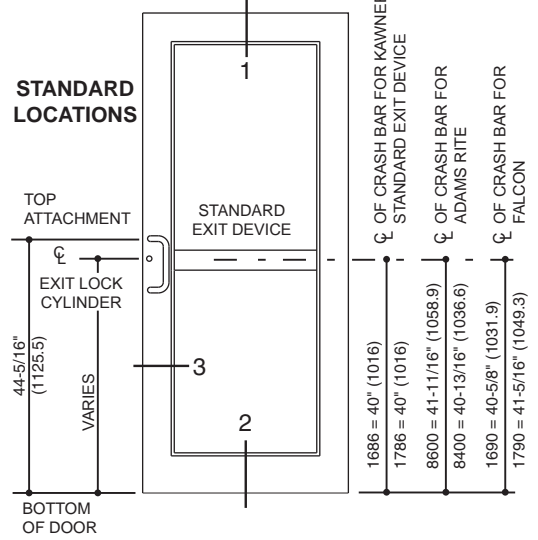
## 250T NARROW STILE

STANDARD  
LOCATIONS

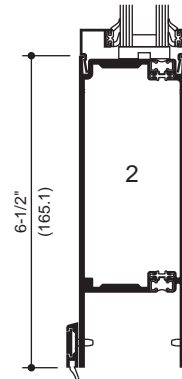
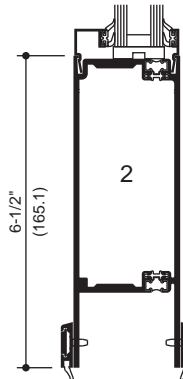
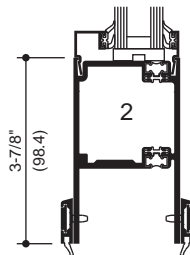
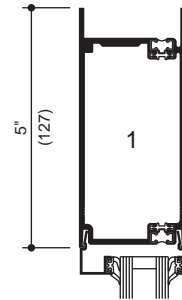
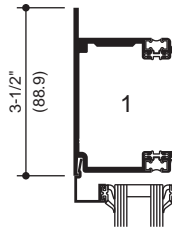
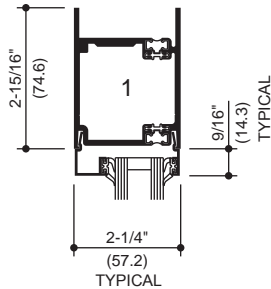
## 350T MEDIUM STILE



## 500T WIDE STILE

STANDARD  
LOCATIONS

## IsoPour™ THERMAL BREAK

250T NARROW STILE  
SINGLE ACTING350T MEDIUM STILE  
SINGLE ACTING500T WIDE STILE  
SINGLE ACTING

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

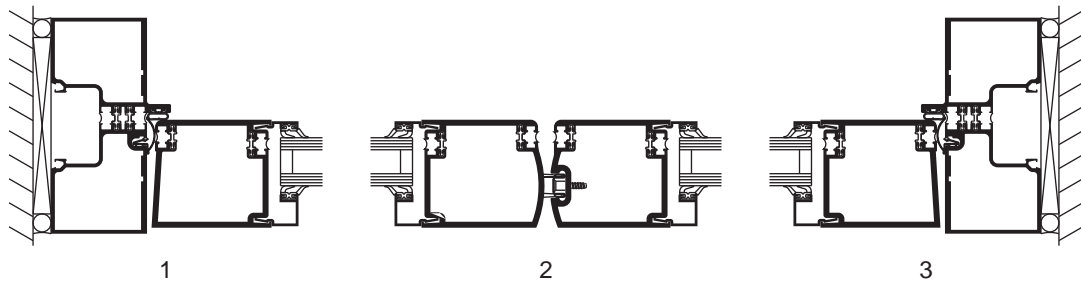
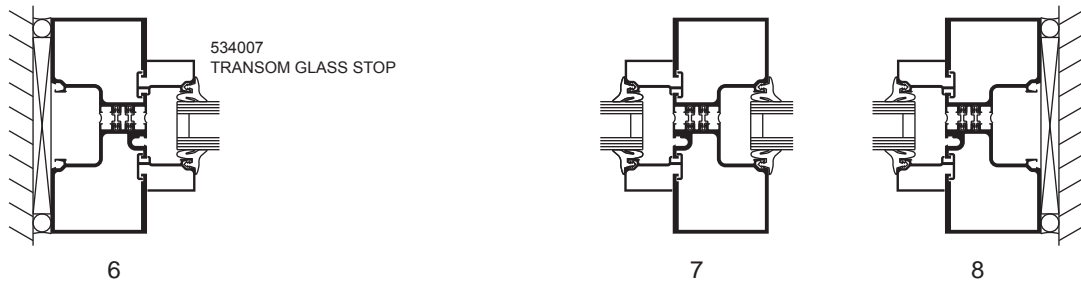
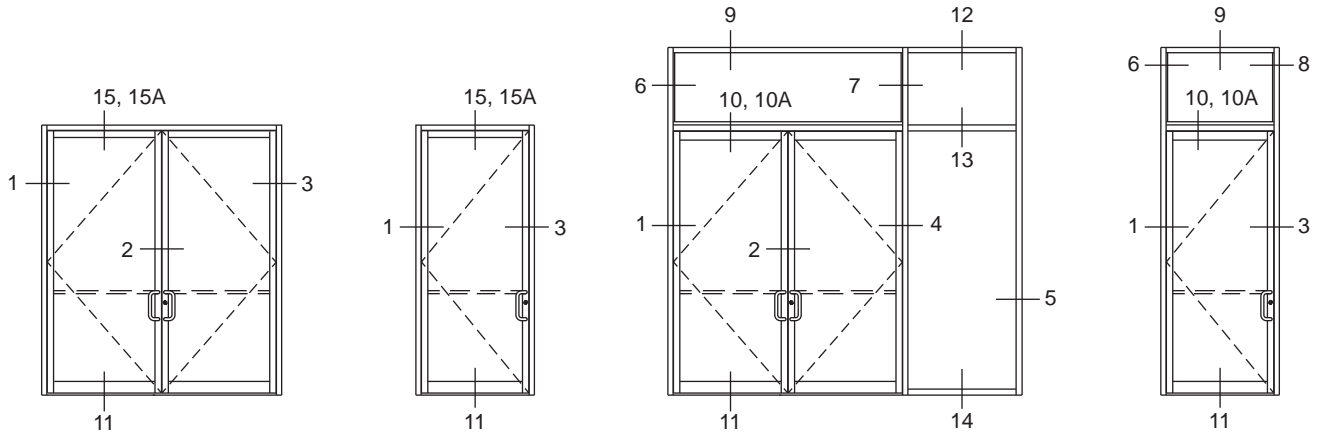
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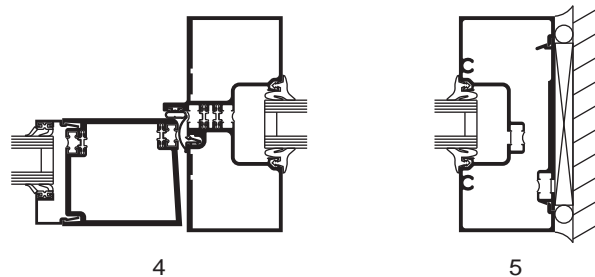
Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)

**NOTE:**

1. SERIES 250T NARROW STILE DOORS ARE DETAILED, MEDIUM STILE 350T DOORS AND WIDE STILE 500T DOORS ALSO MAY BE USED.
2. TRIFAB™ VG 451T CENTER, 2" x 4-1/2" (50.8 x 114.3) FRAMING IS DETAILED WITH THE DOORS FOR REFERENCE. OTHER KAWNEER FRAMING SERIES OR CURTAIN WALL SYSTEMS MAY BE USED.



**SINGLE ACTING DOORS**

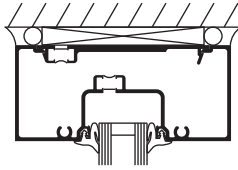


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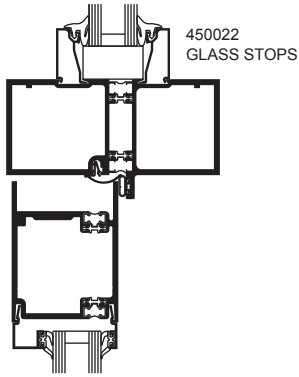


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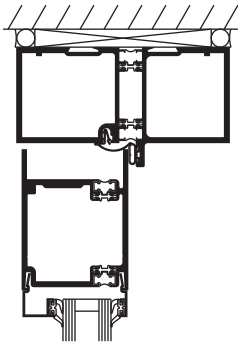


9

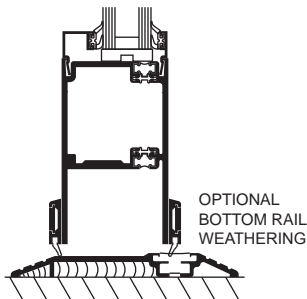
### SINGLE ACTING DOORS



10

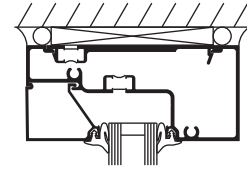


15



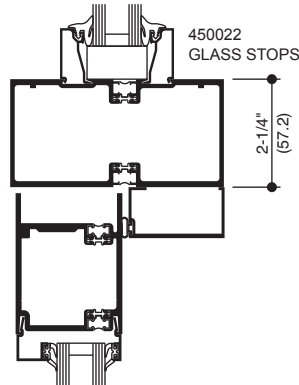
11

### SURFACE OVERHEAD CLOSER

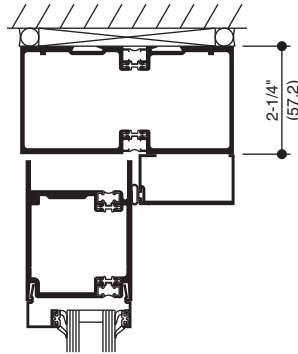


12

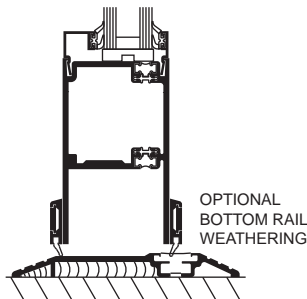
### COC WITH SINGLE ACTING OFFSET ARM



10A

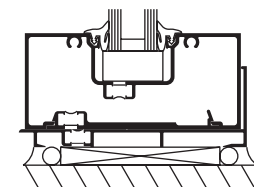


15A



11

### CONSEALED OVERHEAD CLOSER



14

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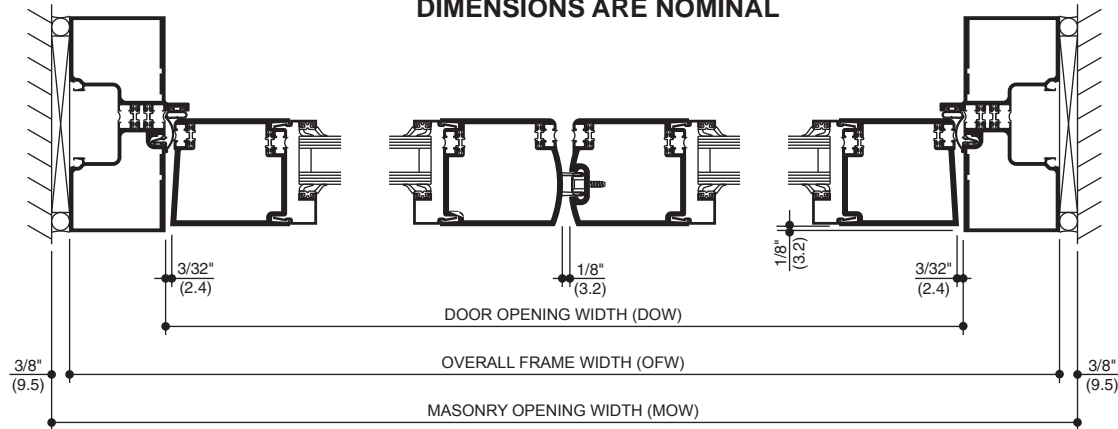
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INTENTIONALLY**

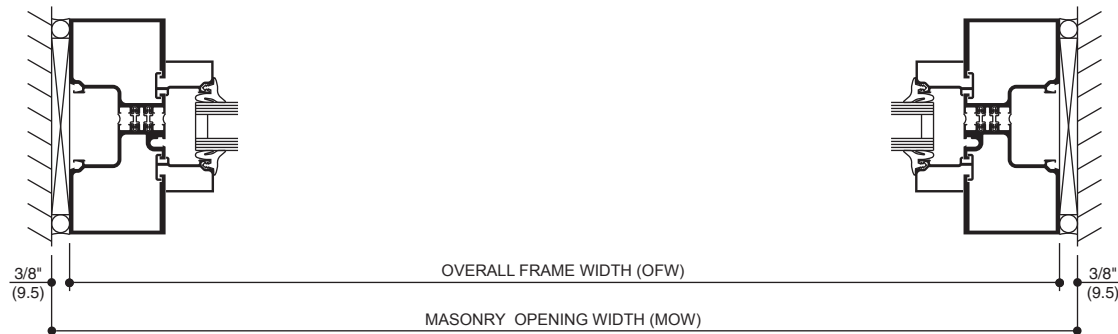


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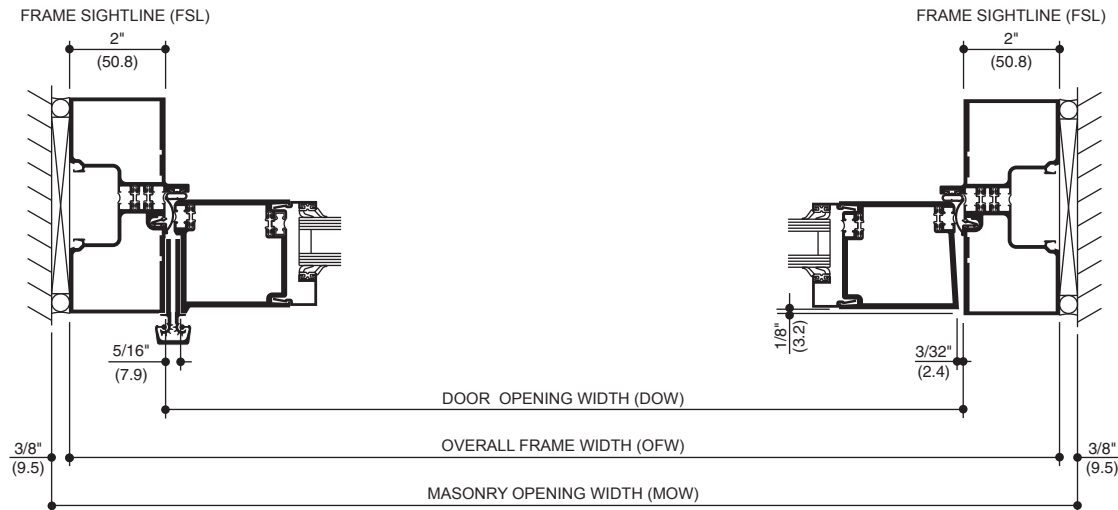
### DIMENSIONS ARE NOMINAL



### SINGLE ACTING DOORS



### TRANSOM JAMBS



### CONTINUOUS HINGE JAMB

#### STANDARD SIZES (TRIFAB™ VG 451T CENTER FRAMES)

##### WITH AND WITHOUT TRANSOM

##### Door Opening Dimension (DOW)

3' 0"	(914)
3' 6"	(1,067)
6' 0"	(1,829)

##### Overall Frame Dimension (OFW)

3' 4"	(1,016)
3' 10"	(1,168)
6' 4"	(1,930)

##### Masonry Opening Dimension (MOW)

3' 4-3/4"	(1,035)
3' 10-3/4"	(1,187)
6' 4-3/4"	(1,949)

##### WITH AND WITHOUT TRANSOM

$$\text{OFW} = \text{DOW} + 2 \text{ FSL}$$

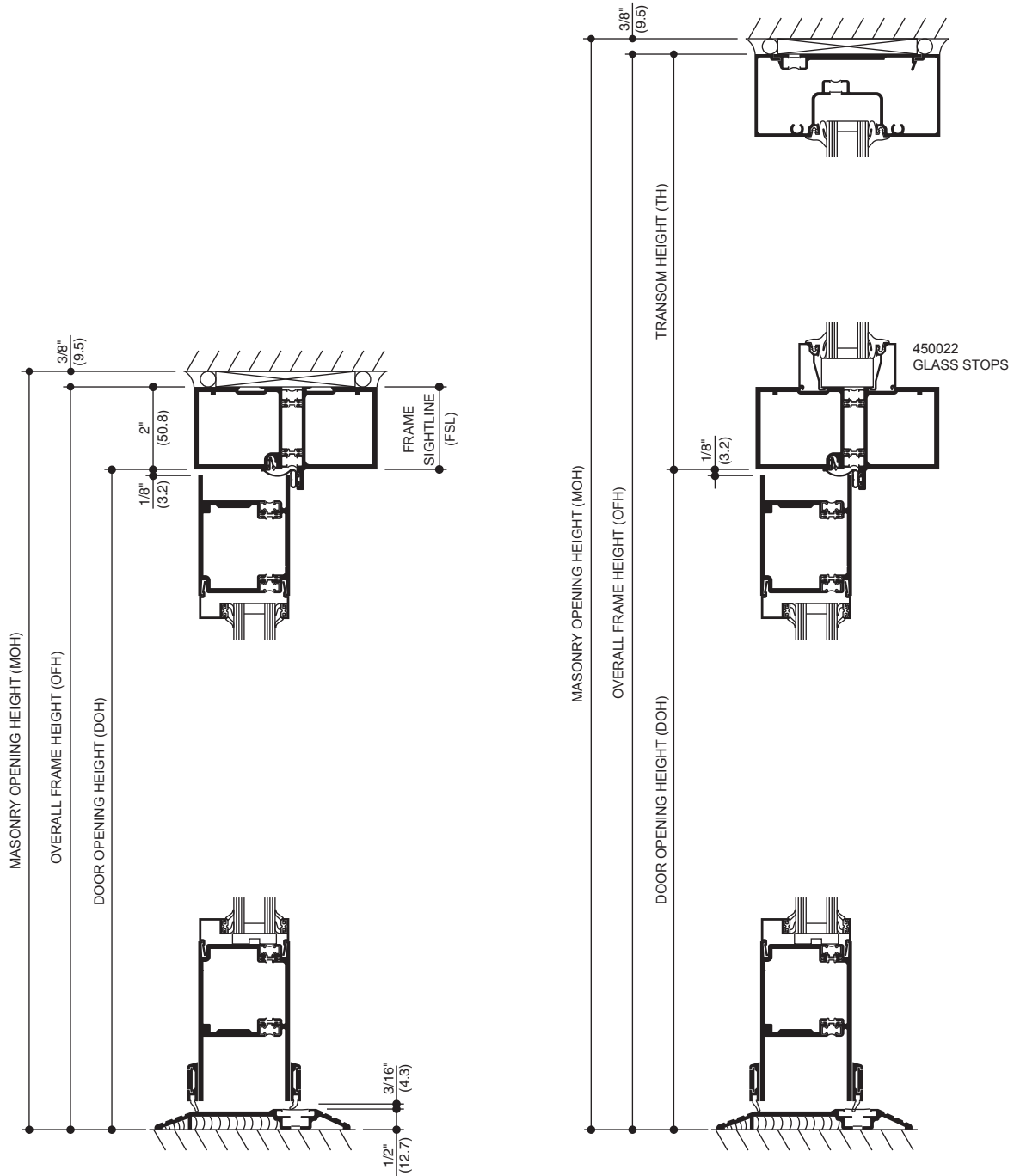
$$\text{MOW} = \text{OFW} + \frac{3}{4}"$$

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**STANDARD SIZES (TRIFAB™ VG 451T CENTER FRAMES)**

**WITHOUT TRANSOM**

Door Opening Dimension (DOH)	
7' 0"	(2,134)
7' 0"	(2,134)
7' 0"	(2,134)

Overall Frame Dimension (OFH)	
7' 2"	(2,184)
7' 2"	(2,184)
7' 2"	(2,184)

Masonry Opening Dimension (MOH)	
7' 2-3/8"	(2,194)
7' 2-3/8"	(2,194)
7' 2-3/8"	(2,194)

**WITHOUT TRANSOM**

OFH = DOH + FSL  
MOH = OFH + 3/8"

**WITH TRANSOM**

OFH = DOH + TH  
MOH = OFH + 3/8"



## NARROW STILE

## MEDIUM AND WIDE STILE

<b>Doors</b>	Narrow stile 250T doors prepared for attachment hardware.	Medium stile 350T or wide stile 500T.
<b>Door Sizes Std.</b>	Standard sizes shown on page 10.	Any size up to 4' 0" x 9' 0" (1,219 x 2,743).
<b>Glass Stops</b>	1" (25.4) stops.	1" (25.4) stops.
<b>Door Frames</b>	Trifab™ VG 451T Center - 2" x 4-1/2" (50.8 x 114.3) for double glazing.	Any Kawneer framing system suitable for door frames may be selected, but manufactured per order.
<b>Push-Pulls</b>	<b>Single Acting:</b> Architects Classic Hardware CO-9 Pull and CP-II Push Bar.  Architects Classic Hardware CO-9 Pull and CP Push Bar.	<b>Single Acting:</b> Architects Classic Hardware CO-12 and CP-II push bar.  Architects Classic Hardware CO-12 and CP push bar.  Architects Classic Hardware CO-9/CO-9 Pulls.  Architects Classic Hardware CO-12/CO-12 Pulls.
<b>Door Closers</b>	<b>Single Acting:</b> Norton 1601 adjustable or 1601 BF adjustable surface closer with back-check and with or without adjustable hold-open.  Standard concealed overhead closer with single acting offset arm.	<b>Single Acting:</b> LCN 4040 surface closer with or without adjustable hold-open.  LCN 2010, 2030 or 5010 concealed overhead closers with or without hold-open.  LCN 1260 adjustable surface closer.  Norton 8100 surface closer with a 50% spring power adjustment (for opening forces of less than 8 pounds). Closer is available with standard back-checks and with or without the hold-open feature.  International single acting concealed overhead closer.  Falcon SC 60 Surface closer.
<b>Hinging</b>	<b>Single Acting:</b> Kawneer top and bottom offset pivots (or) Kawneer top and bottom 4-1/2" x 4" (114.3 x 101.6) ball bearing butt hinge with non-removable pin (NRP) (or) Kawneer continuous gear hinge.	
<b>Intermediate Pivots/Butts</b>	<b>Single Acting:</b> Kawneer intermediate offset pivot (or) Kawneer 4-1/2" x 4" (114.3 x 101.6) ball bearing butt hinge with non-removable pin (NRP).	<b>Single Acting:</b> Rixson M-19 or IVES #7215-INT intermediate offset pivot.
<b>Power Transfers</b>	<b>Single Acting:</b> Kawneer EL intermediate offset pivot (or) Kawneer EL 4-1/2" x 4" (114.3 x 101.6) ball bearing butt hinge with wire transfer (or) EPT (Electric Power Transfer).	
<b>Power Supply</b>		<b>NP1 Power Supply:</b> For use with Kawneer 1686 MEL and 1786 MEL exit devices only.
<b>Locks - Active Leaf</b>	Adams-Rite MS 1850A deadlock with two 1-5/32" (29.4) diameter 5 pin cylinders.	Adams-Rite #4510 latch lock. Adams-Rite #1850A-500 short throw deadlock. Adams-Rite #1850A-505 hookbolt lock. Adams-Rite #4015 two-point Lock. Adams-Rite #4085 three-point Lock. Adams-Rite #4089 exit indicator. Adams-Rite #2190 deadbolt latch lock. Adams-Rite #1890 deadbolt latch lock. Adams-Rite #1850 hurricane 3-point locking. Kawneer cylinder guard. Kawneer thumbturn (in lieu of cylinder).

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NARROW STILE		MEDIUM AND WIDE STILE
<b>Locks - Inactive Leaf</b>	One pair of Kawneer flush bolts in the inactive leaf of a pair of doors.	
<b>Thresholds</b>	A 1/2" x 4" (12.7 x 101.6) aluminum mill finish threshold.	
<b>Weathering</b>	<b>Single Acting:</b> Weathering system in the door and frame consisting of a dense, bulb polymeric material, which remains resilient and retains its weathering ability under temperature extremes. (The system is complete with an optional EPDM blade gasket sweep strip applied to interior and exterior of bottom door rail with concealed fasteners).	Bottom Door Sweep
<b>Exit Device</b>	<p><b>Kawneer 1686 Concealed Rod Exit Device</b> with or without a mortised type cylinder.</p> <p><b>Kawneer 1786 Rim Exit Device</b> is a rim type exit device with or without a rim type cylinder. Pairs of doors require a Kawneer RM-86 removable mullion.</p>	<p>Kawneer 1686 MEL Concealed Rod Exit Device electric modification is available.</p> <p>Kawneer 1786 MEL Rim Exit Device electric modification is available.</p> <p>Kawneer 1686 CD Concealed Rod Exit Device available with cylinder dogging.</p> <p>Kawneer 1786 CD Rim Exit Device available with cylinder dogging.</p> <p>Kawneer 1686 Lever Handle is available for the Kawneer 1686 concealed rod exit device.</p> <p>Kawneer 1786 Lever Handle is available for the Kawneer 1786 rim type exit device.</p> <p>Falcon 1690 Concealed Rod Exit Device with or without a mortised type cylinder.</p> <p>Falcon 1790 Rim Exit Device is a rim type exit device with or without a rim type cylinder.</p> <p>Falcon EL 1690 electric modification is also available.</p> <p>Falcon EL 1790 electric modification is also available.</p> <p>Falcon 1990 is a concealed rod exit device with or without a rim type cylinder.</p> <p>Falcon 2090 is a rim type exit device with or without a rim type cylinder. Pairs of doors require a removable aluminum mullion. RM-70 with the Falcon 2090 exit device.</p> <p>Falcon HH1690 Conc. Rod Exit Device (EL option)</p> <p>Von Duprin 9947 Concealed Rod Exit Device</p> <p>Von Duprin HH9947 Concealed Rod Exit Device</p> <p>Von Duprin 3347A Concealed Vertical Rod Exit Device</p> <p>Von Duprin 99 XP Rim Device</p> <p>Corbin Russwin ED5200SA Rim Device</p> <p>Adams-Rite 8600 Concealed Rod Exit Device.</p> <p>Adams-Rite 8400 Rim Exit Device.</p>
	<b>Exit Device Pulls:</b> Architects Classic CO-9 Pull with Kawneer 1686 and 1786 exit devices. Architects Classic.	<b>Optional Exit Device Pulls:</b> Architects Classic CO-12 Pull with Kawneer 1686 and 1786 exit devices.

## APPLICATION CRITERIA

As indicated on Page 10, the standard sizes of swing doors are 3'-0" x 7'-0" (914.4 x 2,133.6) or 3'-6" x 7'-0" (1,067 x 2,134) for single doors and 6'-0" x 7'-0" (1,828.8 x 2,133.6) for pairs of doors. When these sizes are exceeded the following criteria should be administered.

1. Larger doors should not be subject to heavy traffic or strong prevailing wind conditions.
2. Larger doors should use a door closer with a good back check action.
3. When a door exceeds 9'-0" (2,743.2) in height, a cross rail or push bar is recommended to reinforce the vertical stiles.
4. When an offset hung door exceeds 7'-6" (2,286.0) in height, an intermediate butt or offset pivot should be used.
5. Tall doors should be prevented from racking by proper utilization of hardware, including door closers, door holders and door stops.

**NOTE:** SOME OF THESE CRITERIA ARE OF A SUBJECTIVE NATURE, CONTACT YOUR FACTORY REPRESENTATIVE FOR APPLICATION ASSISTANCE.





LOCKING OPTIONS	MAXIMUM DOOR SIZE	MAXIMUM DESIGN PRESSURE	HINGING OPTIONS	GLAZING STOP OPTIONS	GLASS THICKNESS
MS 1850 3-Point Lock (Active leaf) Flushbolts (Inactive leaf)	Single 4'-0" x 8'-0" (1,219.2 x 2,438.4) Pair 8'-0" x 8'-0" (2,438.4 x 2,438.4)	± 70 PSF	Offset Pivots Butt Hinges Continuous Hinge	1, 2	1" (25.4)
Kawneer 1686 Concealed Rod Exit Device	Single 4'-0" x 8'-0" (1,219.2 x 2,438.4) Pair 8'-0" x 8'-0" (2,438.4 x 2,438.4)	± 70 PSF	Offset Pivots Butt Hinges Continuous Hinge	1, 2	1" (25.4)
Falcon HH1690 Concealed Rod Exit Device (EL option)	Single 4'-0" x 8'-0" (1,219.2 x 2,438.4) Pair 8'-0" x 8'-0" (2,438.4 x 2,438.4)	± 70 PSF	Offset Pivots Butt Hinges Continuous Hinge	1, 2	1" (25.4)
Von Duprin HH9947 Concealed Rod Exit Device	Single 4'-0" x 8'-0" (1,219.2 x 2,438.4) Pair 8'-0" x 8'-0" (2,438.4 x 2,438.4)	± 70 PSF	Offset Pivots Butt Hinges Continuous Hinge	1, 2	1" (25.4)

**Glazing Stop Options:**

- 1 - Structural silicone with 0.090 Kuraray or Eastman PVB inter layer or 0.090 Kuraray Sentry Glas® inter layer.  
 2 - 3M VHB structural tape with 0.090 Kuraray or Eastman PVB inter layer or 0.090 Kuraray Sentry Glas® inter layer.

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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LOCKING OPTIONS	MAXIMUM DOOR SIZE	MAXIMUM BLAST LOADING	HINGING OPTIONS	GLAZING STOP OPTIONS	GLASS THICKNESS
MS 1850 3-Point Lock (Active leaf)  Flushbolts (Inactive leaf)	Single 4'-0" x 8'-0" (1,219.2 x 2,438.4) Pair 8'-0" x 8'-0" (2,438.4 x 2,438.4)	Peak Pressure: 6 PSF  Impulse: 42 PSI/M-SEC	Butt Hinges Offset Pivots	1, 2	1" (25.4)

Test conditions shown. Other conditions may be supported through calculation.

Glazing Stop Options:

- 1 - Structural silicone with 0.060 Kuraray or Eastman PVB inter layer.
- 2 - Door size tested in stock tube. Larger door sizes supported through engineering analysis.

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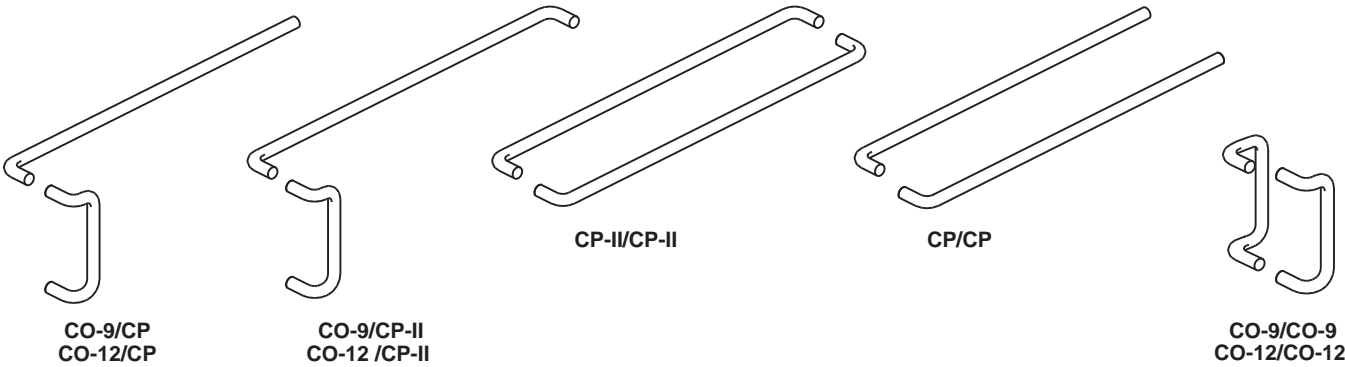
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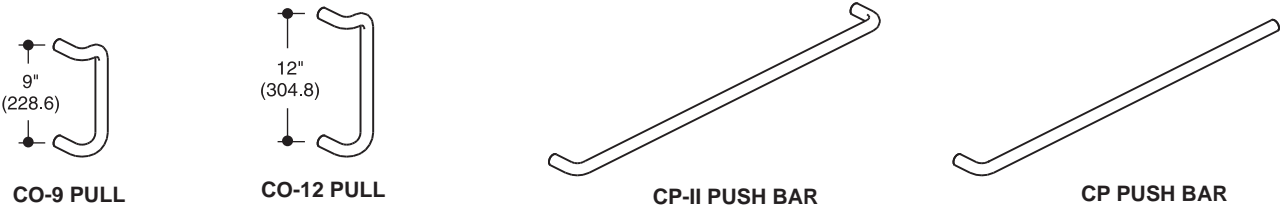
REFER TO **HARDWARE SECTION** FOR COMPLETE HARDWARE INFORMATION.

**ARCHITECTS CLASSIC (PUSH PULL SETS)**

SINGLE ACTING DOORS USE A PULL HANDLE AND PUSH BAR AS STANDARD



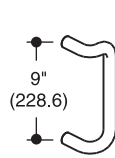
**ARCHITECTS CLASSIC (COMPONENTS)**



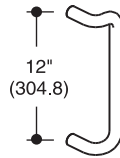
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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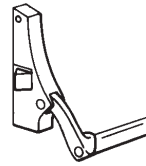
EXIT DEVICES AND PULLS



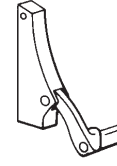
CO-9 PULL



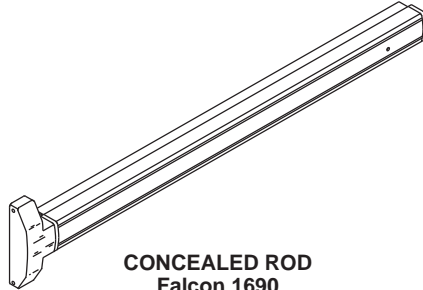
CO-12 PULL



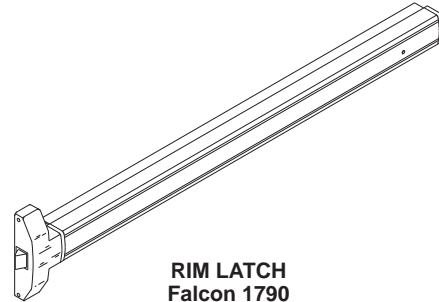
RIM LATCH  
Falcon 2090



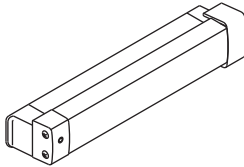
CONCEALED ROD  
Falcon 1990



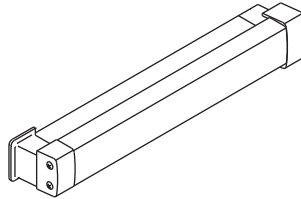
CONCEALED ROD  
Falcon 1690  
Falcon EL 1690  
Falcon HH1690



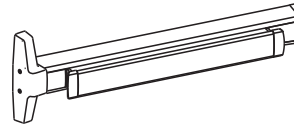
RIM LATCH  
Falcon 1790  
Falcon EL 1790



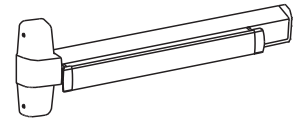
MORTISE EXIT DEVICE  
Adams-Rite 8400



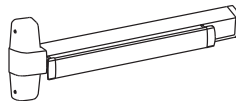
CONCEALED EXIT DEVICE  
Adams-Rite 8600



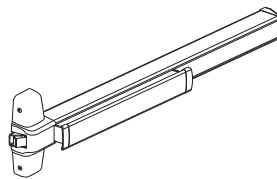
CONCEALED EXIT DEVICE  
Von Duprin 3347A



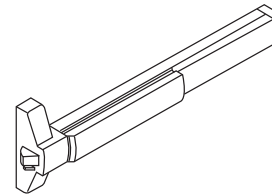
CONCEALED EXIT DEVICE  
Von Duprin 9947



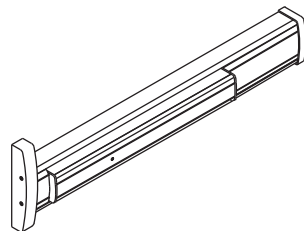
CONCEALED ROD  
Von Duprin  
9947HH



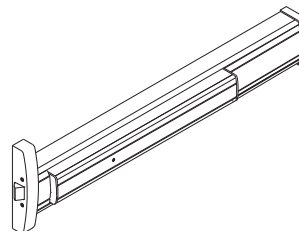
RIM EXIT DEVICE  
Von Duprin 99 XP



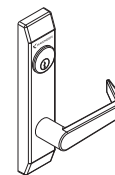
RIM EXIT DEVICE  
Corbin Russwin  
ED5200S



CONCEALED ROD  
Kawneer 1686  
Kawneer 1686 MEL  
Kawneer 1686 CD



RIM LATCH  
Kawneer 1786  
Kawneer 1786 MEL  
Kawneer 1786 CD



LEVER HANDLE  
Kawneer 1686  
Kawneer 1786

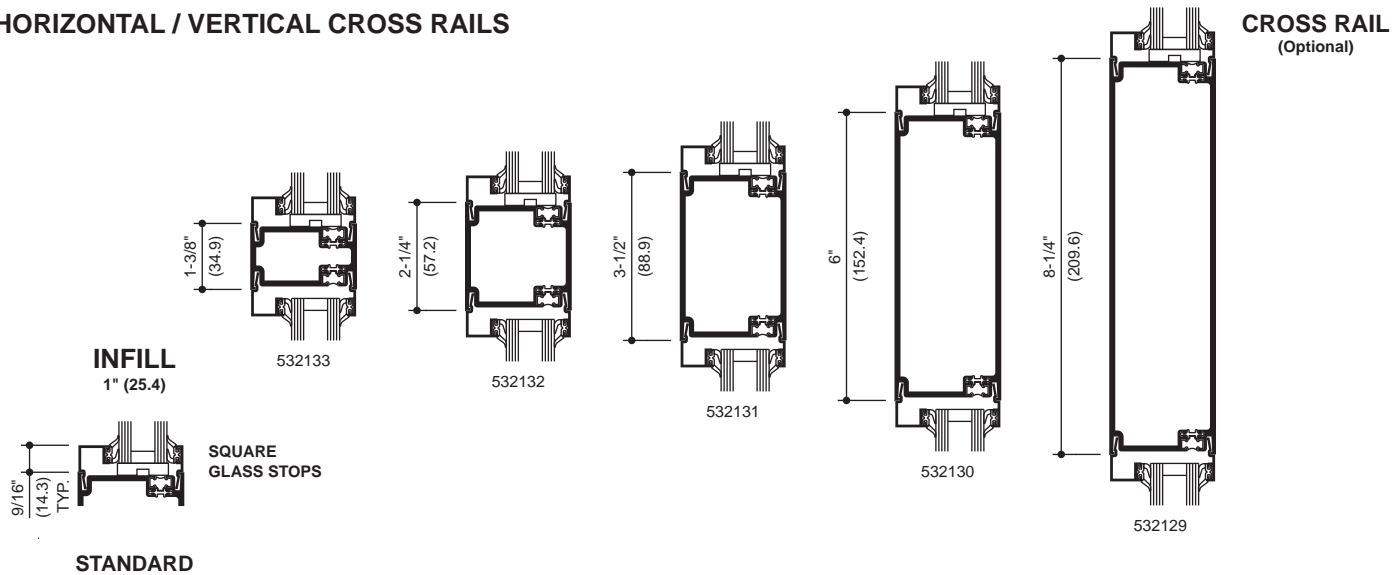
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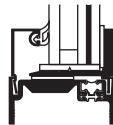
Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)

## HORIZONTAL / VERTICAL CROSS RAILS

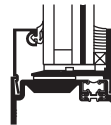


## INFILL OPTIONS

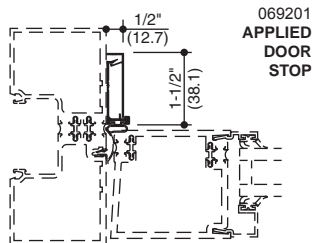
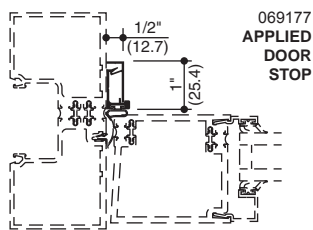
1" INFILL TAPE GLAZED  
(Blast)



1" INFILL WET GLAZED  
(Blast)



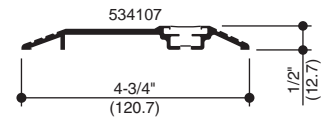
## ACCESSORY ITEMS



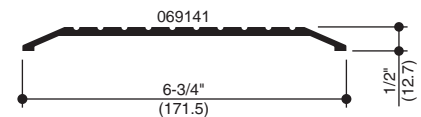
## THRESHOLDS

### APPLICATION

FOR SINGLE ACTING DOOR



FOR FLOOR CLOSERS



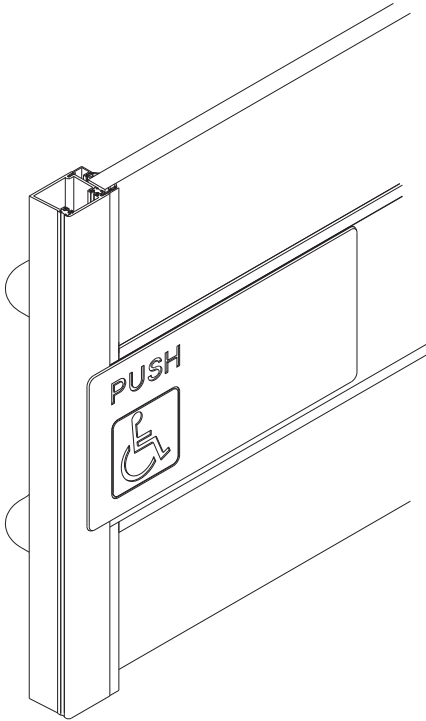
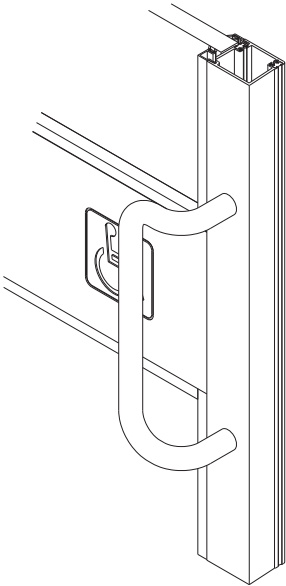
SOME BUILDING CODES LIMIT THRESHOLD HEIGHT TO 1/2" (12.7) MAX.

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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PUSH-PULLS



Description	Architects Classic CO-12 Pull	BF3 Push Shield with symbol
Application	Door with or without exit device	Door cross rail (omit w/exit device)
Length/Size	12" OC Pull attachment	15-7/8" x 7-7/8" (403.2 x 200.0) 1/8" (3.2) Thick
Height Location	44-5/16" from Top Mounting Hole to Btm. of Door	
Total Projection	3-1/4" (82.6)	1/8" (3.2)
Material / Finish	See Hardware Section	Black Plastic Pebble Finish

**Note:** The symbol of access is an adhesive backed decal applied to the surface of the optional cross rail. Letters and symbols on plastic push shield are engraved and filled with white epoxy enamel.

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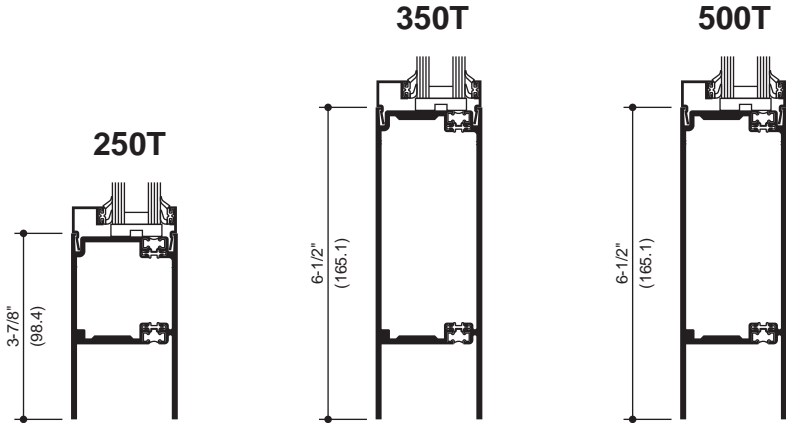


Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)

STANDARD BOTTOM RAILS

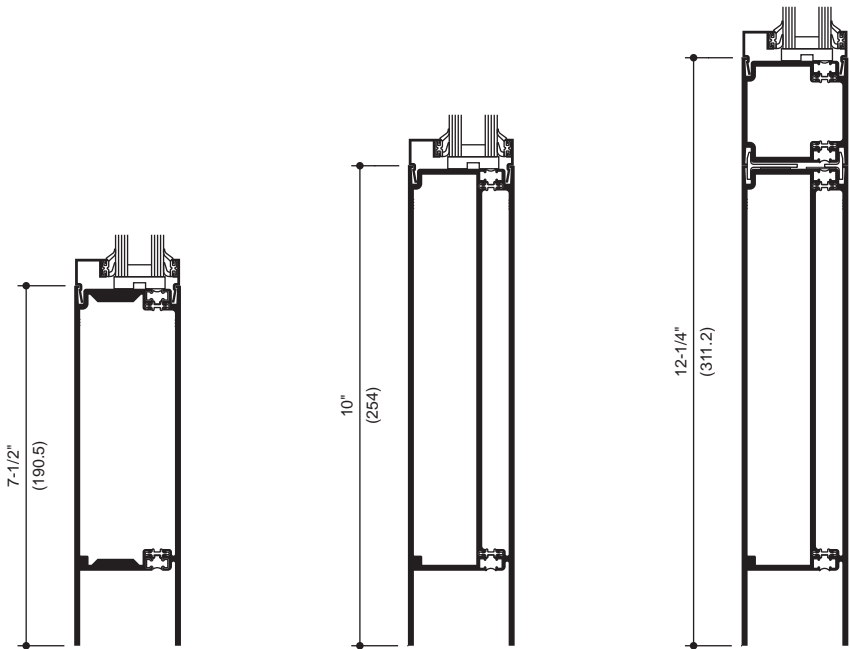
Rail heights shown may be used on 250T, 350T, and 500T doors.

NOTE:  
See Page 18 for available  
Horizontal Intermediate Members.



OPTIONAL BOTTOM RAILS

Rail heights shown may be used on 250T, 350T, and 500T doors.  
Custom heights available.



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## WIND LOAD CHARTS

Mullions are designed for deflection limitations in accordance with AAMA TIR-A11 of L/175 up to 13'-6" and L/240 +1/4" above 13'-6". These curves are for mullions WITH HORIZONTALS and are based on engineering calculations for stress and deflection. Allowable wind load stress for ALUMINUM 15,152 psi (104 MPa), STEEL 30,000 psi (207 MPa). Charted curves, in all cases are for the limiting value. Wind load charts contained herein are based upon nominal wind load utilized in allowable stress design. A conversion from Load Resistance Factor Design (LRFD) is provided. To convert ultimate wind loads to nominal loads, multiply ultimate wind loads by a factor of 0.6 per ASCE/SEI 7. A 4/3 increase in allowable stress has not been used to develop these curves. For special situations not covered by these curves, contact your Kawneer representative for additional information.

## DEADLOAD CHARTS

Horizontal or deadload limitations are based upon 1/8" (3.2), maximum allowable deflection at the center of an intermediate horizontal member. The accompanying charts are calculated for 1" (25.4) thick insulating glass or 1/4" (6.35) thick glass supported on two setting blocks placed at the loading points shown.

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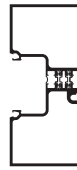
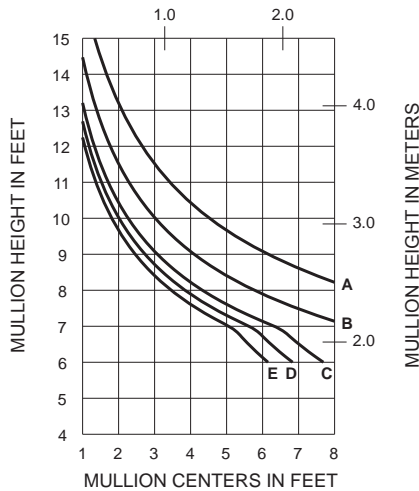
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	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	20 PSF (960)	33 PSF (1580)
B =	30 PSF (1440)	50 PSF (2400)
C =	40 PSF (1920)	67 PSF (3200)
D =	45 PSF (2160)	75 PSF (3600)
E =	50 PSF (2400)	83 PSF (4000)

**WITH HORIZONTALS**

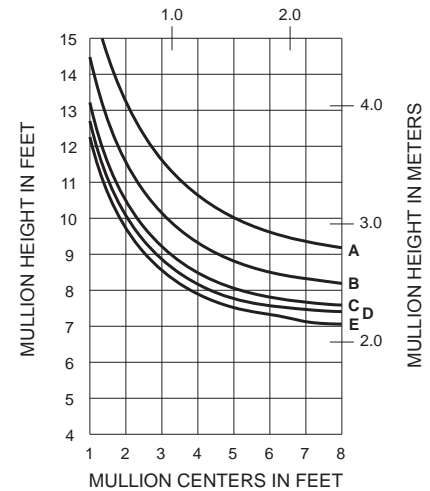
MULLION CENTERS IN METERS

**534109**

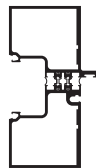
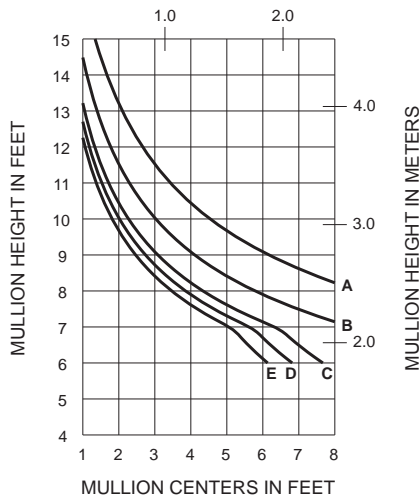
WIND LOAD CHARTS ARE BASED ON  
COMPOSITE PROPERTIES WHICH  
ARE CALCULATED IN ACCORDANCE  
WITH AAMA TIR-A8 AND AAMA 505

**WITHOUT HORIZONTALS**

MULLION CENTERS IN METERS

**WITH HORIZONTALS**

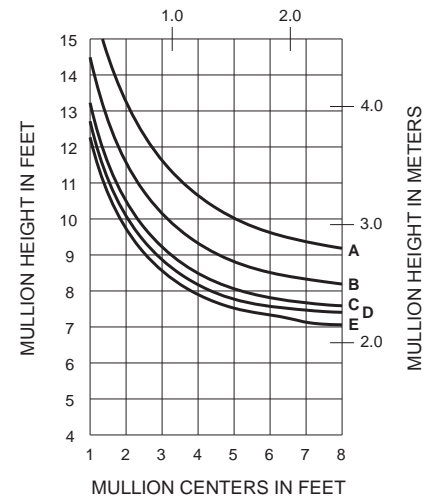
MULLION CENTERS IN METERS

**534103**

WIND LOAD CHARTS ARE BASED ON  
COMPOSITE PROPERTIES WHICH  
ARE CALCULATED IN ACCORDANCE  
WITH AAMA TIR-A8 AND AAMA 505

**WITHOUT HORIZONTALS**

MULLION CENTERS IN METERS



Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

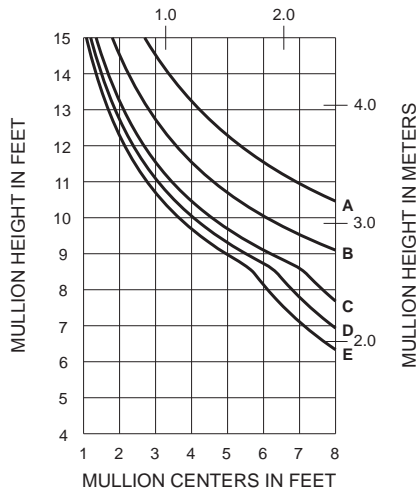
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	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	20 PSF (960)	33 PSF (1580)
B =	30 PSF (1440)	50 PSF (2400)
C =	40 PSF (1920)	67 PSF (3200)
D =	45 PSF (2160)	75 PSF (3600)
E =	50 PSF (2400)	83 PSF (4000)

WITH HORIZONTALS

MULLION CENTERS IN METERS

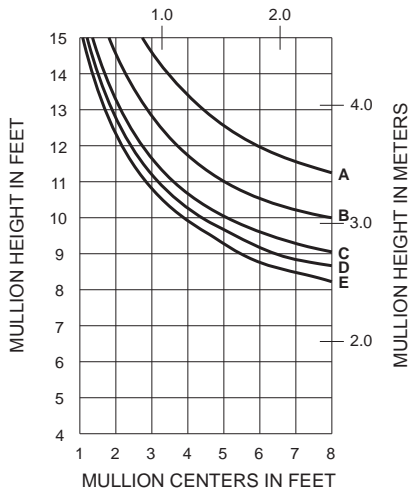


534110

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-A8 AND AAMA 505

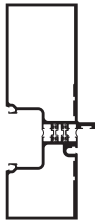
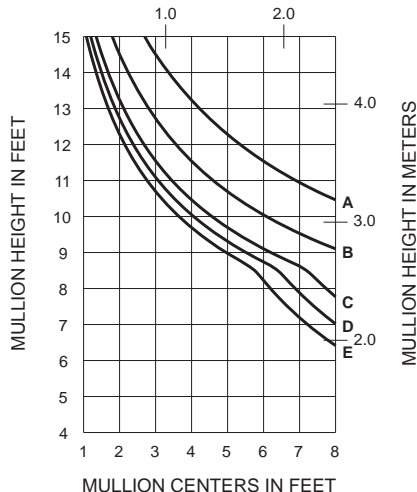
WITHOUT HORIZONTALS

MULLION CENTERS IN METERS



WITH HORIZONTALS

MULLION CENTERS IN METERS

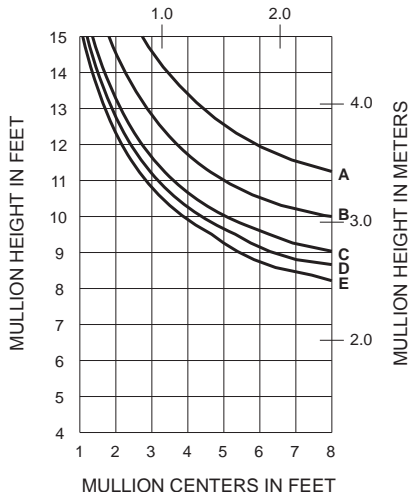


534106

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-A8 AND AAMA 505

WITHOUT HORIZONTALS

MULLION CENTERS IN METERS



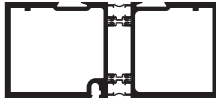
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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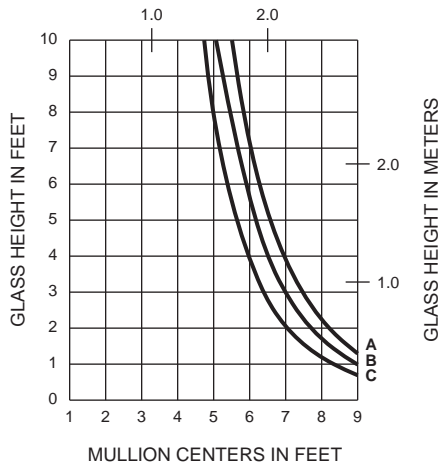


- A - 1" GLASS (1/8 POINT LOADING)  
 B - 1" GLASS (1/6 POINT LOADING)  
 C - 1" GLASS (1/4 POINT LOADING)

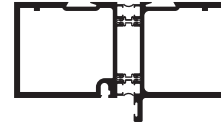
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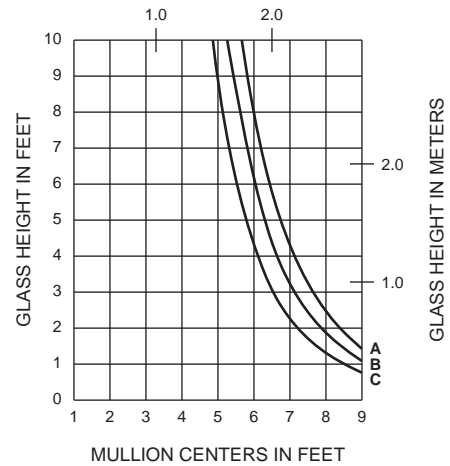
MULLION CENTERS IN METERS



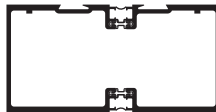
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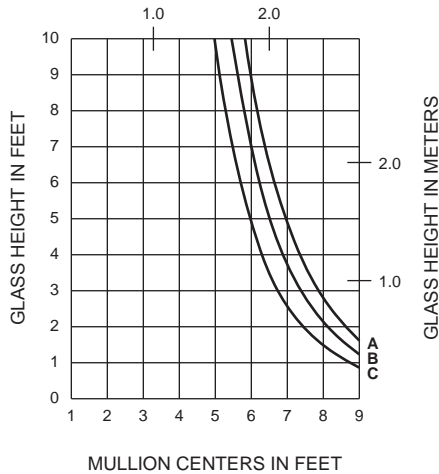
MULLION CENTERS IN METERS



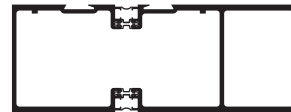
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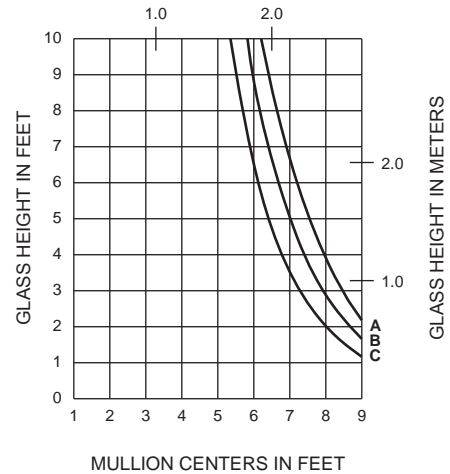
MULLION CENTERS IN METERS



534104



MULLION CENTERS IN METERS



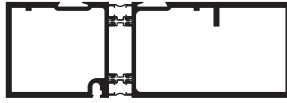
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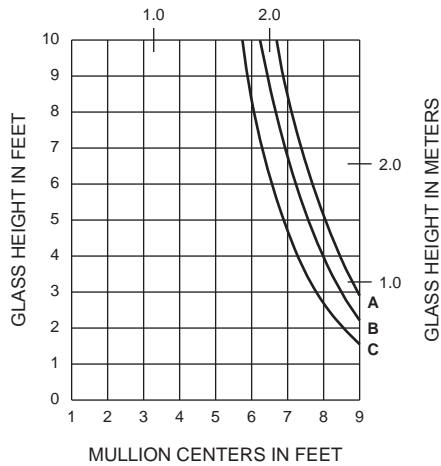
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- A - 1" GLASS (1/8 POINT LOADING)
- B - 1" GLASS (1/6 POINT LOADING)
- C - 1" GLASS (1/4 POINT LOADING)

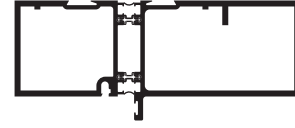
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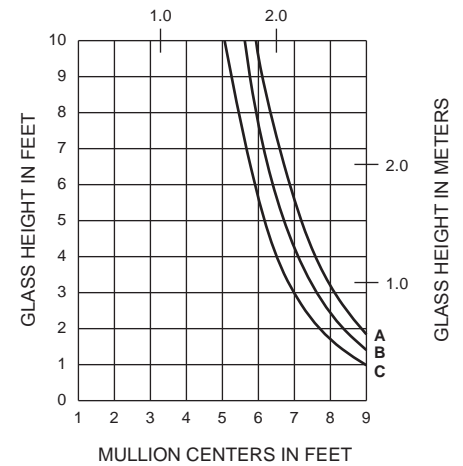
MULLION CENTERS IN METERS



534105



MULLION CENTERS IN METERS

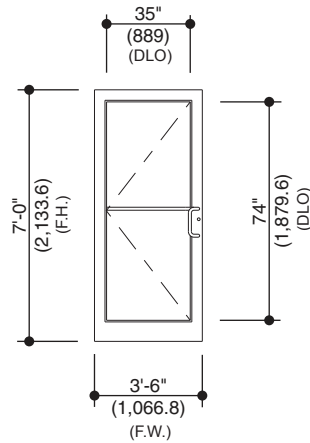


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**Generic Project Specific U-factor Example Calculation**  
**(Percent of Glass will vary on specific products depending on sitelines)**



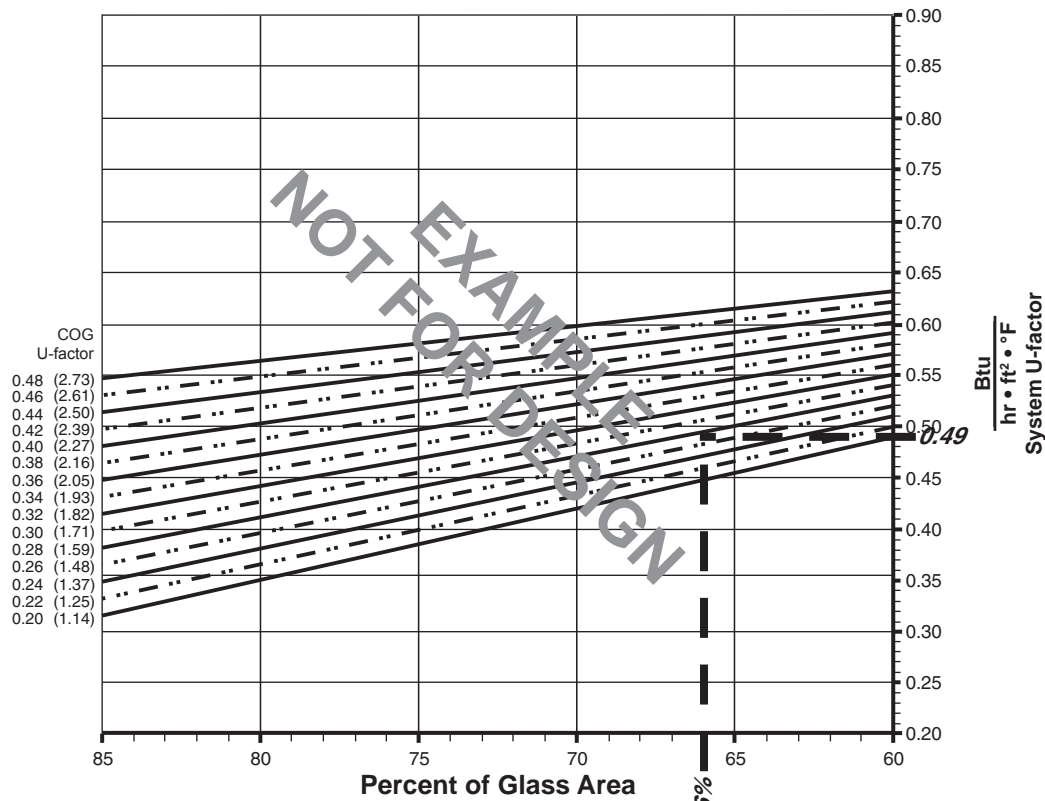
Example Glass U-Factor = 0.28 Btu/hr • ft<sup>2</sup> • °F

Total Daylight Opening = 30.125" x 75.75" = 15.85 ft<sup>2</sup>

Total Projected Area = 3'-4" x 7'-2" = 23.9 ft<sup>2</sup>

Percent of Glass = (Total Daylight Opening ÷ Total Projected Area)100  
 = (15.85 ÷ 23.9)100 = 66%

**System U-factor vs Percent of Glass Area**



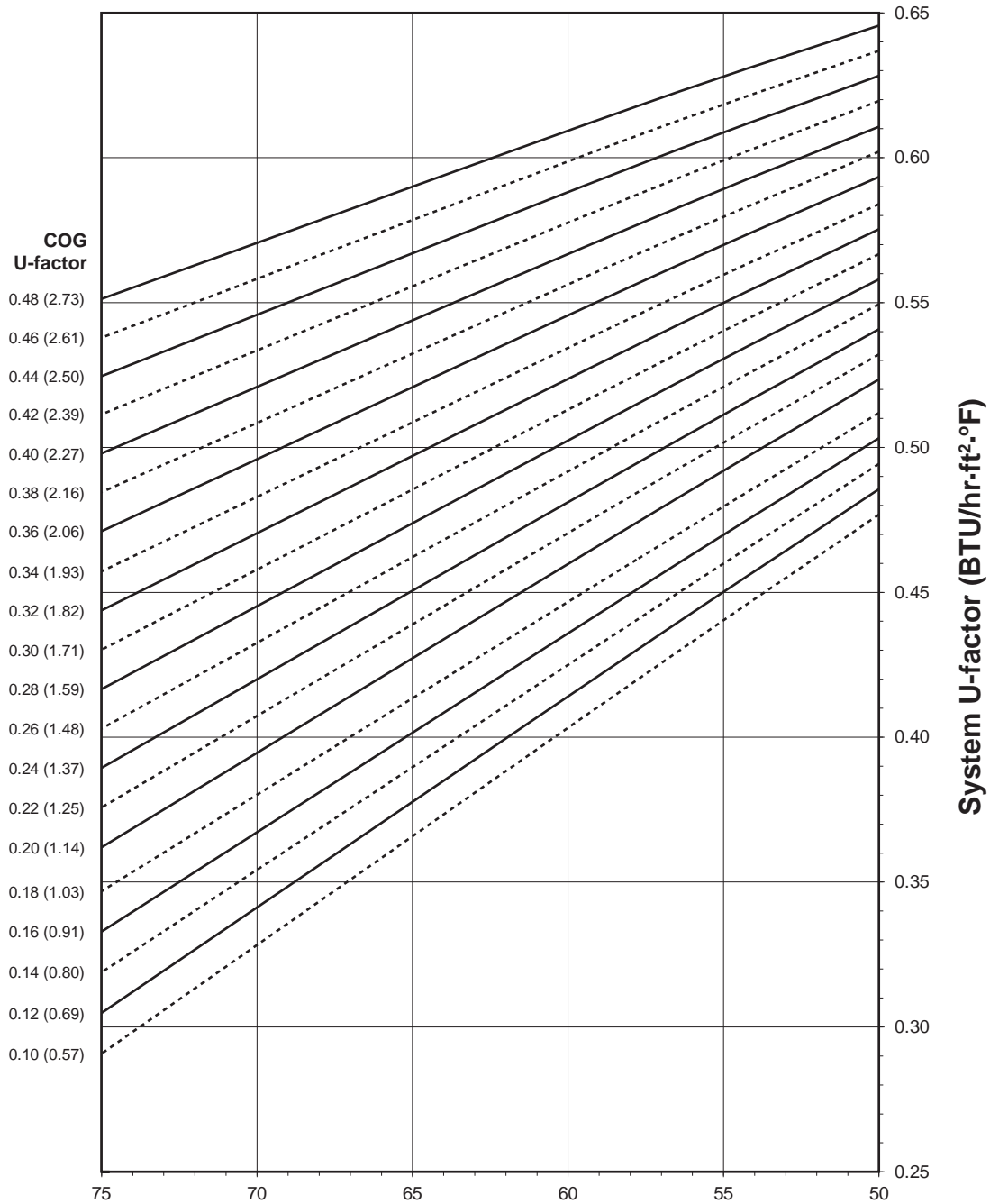
Based on 66% glass and center of glass (COG) U-factor of 0.28  
 System U-factor is equal to 0.49 Btu/hr • ft<sup>2</sup> • °F

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250T (SINGLE DOOR)

**System U-factor vs Percent of Glass Area**



**Percent of Glass = Vision Area/Total Area  
(Total Daylight Opening / Projected Area)**

**Notes for System U-Factor, SHGC and VT charts:**

For glass values that are not listed, linear interpolation is permitted.

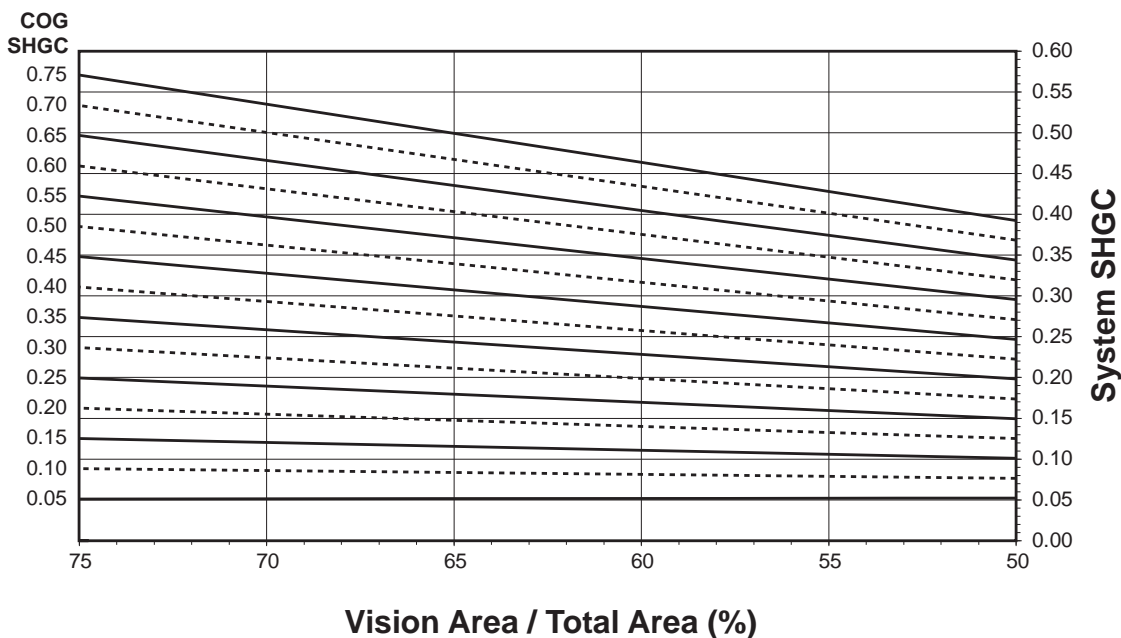
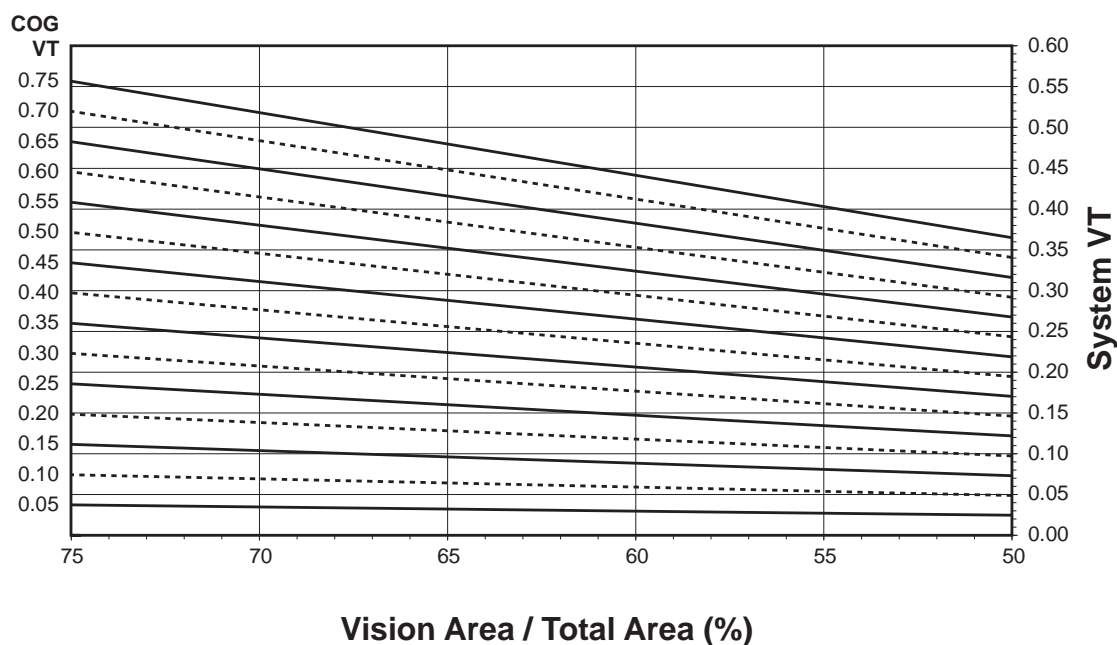
Glass properties are based on center of glass values and are obtained from your glass supplier.

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## 250T (SINGLE DOOR)

**System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area****System Visible Transmittance (VT) vs Percent of Vision Area**

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Thermal Transmittance <sup>1</sup> (BTU/hr • ft<sup>2</sup> • °F)

## 250T (SINGLE DOOR)

Glass U-Factor <sup>3</sup>	Overall U-Factor <sup>4</sup>
0.48	0.62
0.46	0.61
0.44	0.60
0.42	0.59
0.40	0.58
0.38	0.57
0.36	0.56
0.34	0.55
0.32	0.54
0.30	0.53
0.28	0.51
0.26	0.50
0.24	0.49
0.22	0.48
0.20	0.47
0.18	0.46
0.16	0.45
0.14	0.44
0.12	0.43
0.10	0.42

**NOTE:** For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matrices are based on the standard NFRC specimen size of 960 mm wide by 2,090 mm high (37-3/4" by 82-3/8").

SHGC Matrix <sup>2</sup>

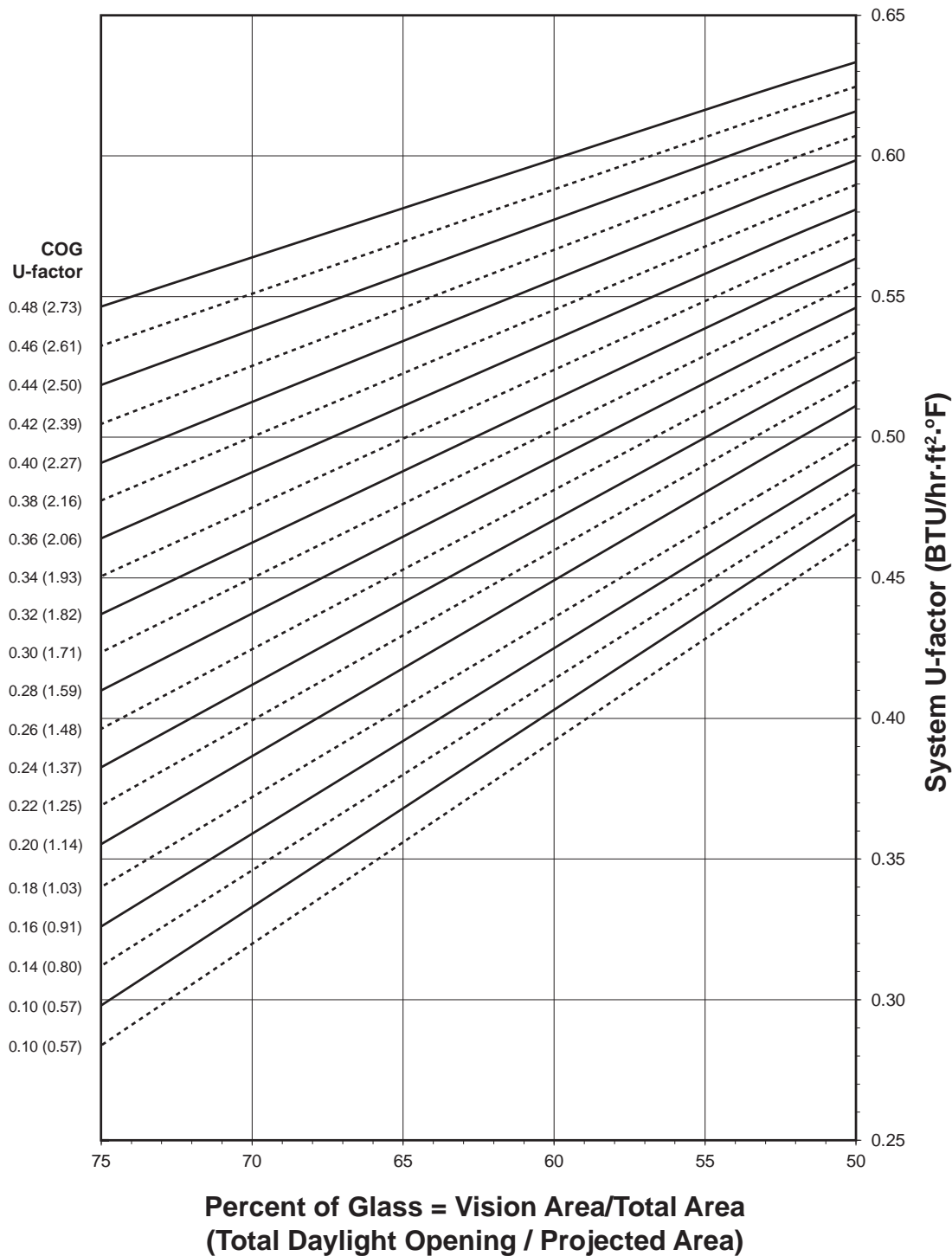
Glass SHGC <sup>3</sup>	Overall SHGC <sup>4</sup>
0.75	0.45
0.70	0.42
0.65	0.39
0.60	0.36
0.55	0.33
0.50	0.31
0.45	0.28
0.40	0.25
0.35	0.22
0.30	0.19
0.25	0.17
0.20	0.14
0.15	0.11
0.10	0.08
0.05	0.05

Visible Transmittance <sup>2</sup>

Glass VT <sup>3</sup>	Overall VT <sup>4</sup>
0.75	0.42
0.70	0.40
0.65	0.37
0.60	0.34
0.55	0.31
0.50	0.28
0.45	0.25
0.40	0.23
0.35	0.20
0.30	0.17
0.25	0.14
0.20	0.11
0.15	0.08
0.10	0.06
0.05	0.03



## 350T (SINGLE DOOR)

**System U-factor vs Percent of Glass Area****Notes for System U-Factor, SHGC and VT charts:**

For glass values that are not listed, linear interpolation is permitted.

Glass properties are based on center of glass values and are obtained from your glass supplier.

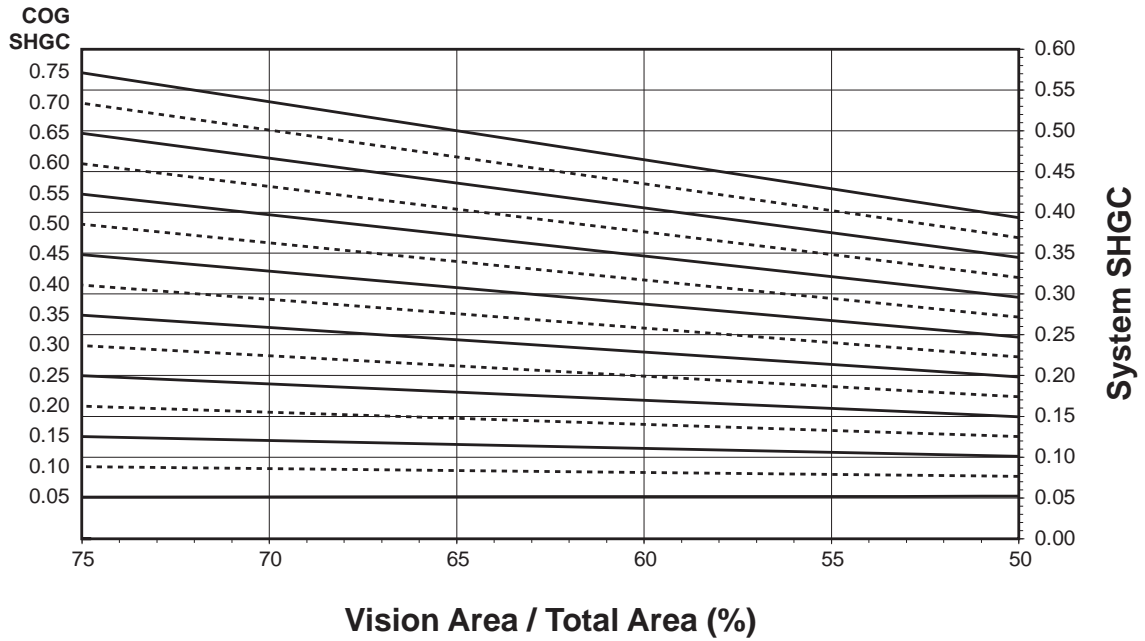
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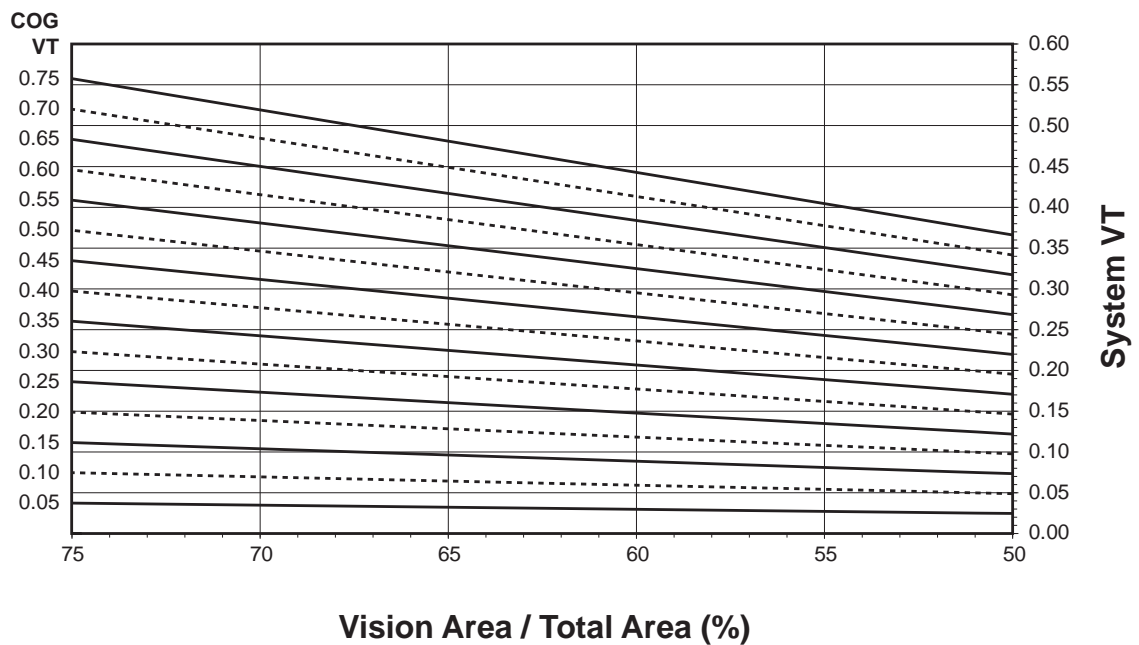
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350T (SINGLE DOOR)

**System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area**



**System Visible Transmittance (VT) vs Percent of Vision Area**



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Thermal Transmittance <sup>1</sup> (BTU/hr • ft<sup>2</sup> • °F)

Glass U-Factor <sup>3</sup>	Overall U-Factor <sup>4</sup>
0.48	0.62
0.46	0.61
0.44	0.60
0.42	0.59
0.40	0.59
0.38	0.58
0.36	0.57
0.34	0.56
0.32	0.55
0.30	0.54
0.28	0.53
0.26	0.52
0.24	0.51
0.22	0.50
0.20	0.49
0.18	0.48
0.16	0.47
0.14	0.46
0.12	0.45
0.10	0.44

## 350T (SINGLE DOOR)

**NOTE:** For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
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SHGC Matrix <sup>2</sup>

Glass SHGC <sup>3</sup>	Overall SHGC <sup>4</sup>
0.75	0.42
0.70	0.39
0.65	0.36
0.60	0.34
0.55	0.31
0.50	0.29
0.45	0.26
0.40	0.23
0.35	0.21
0.30	0.18
0.25	0.16
0.20	0.13
0.15	0.10
0.10	0.08
0.05	0.05

Visible Transmittance <sup>2</sup>

Glass VT <sup>3</sup>	Overall VT <sup>4</sup>
0.75	0.39
0.70	0.36
0.65	0.34
0.60	0.31
0.55	0.29
0.50	0.26
0.45	0.23
0.40	0.21
0.35	0.18
0.30	0.16
0.25	0.13
0.20	0.10
0.15	0.08
0.10	0.05
0.05	0.03

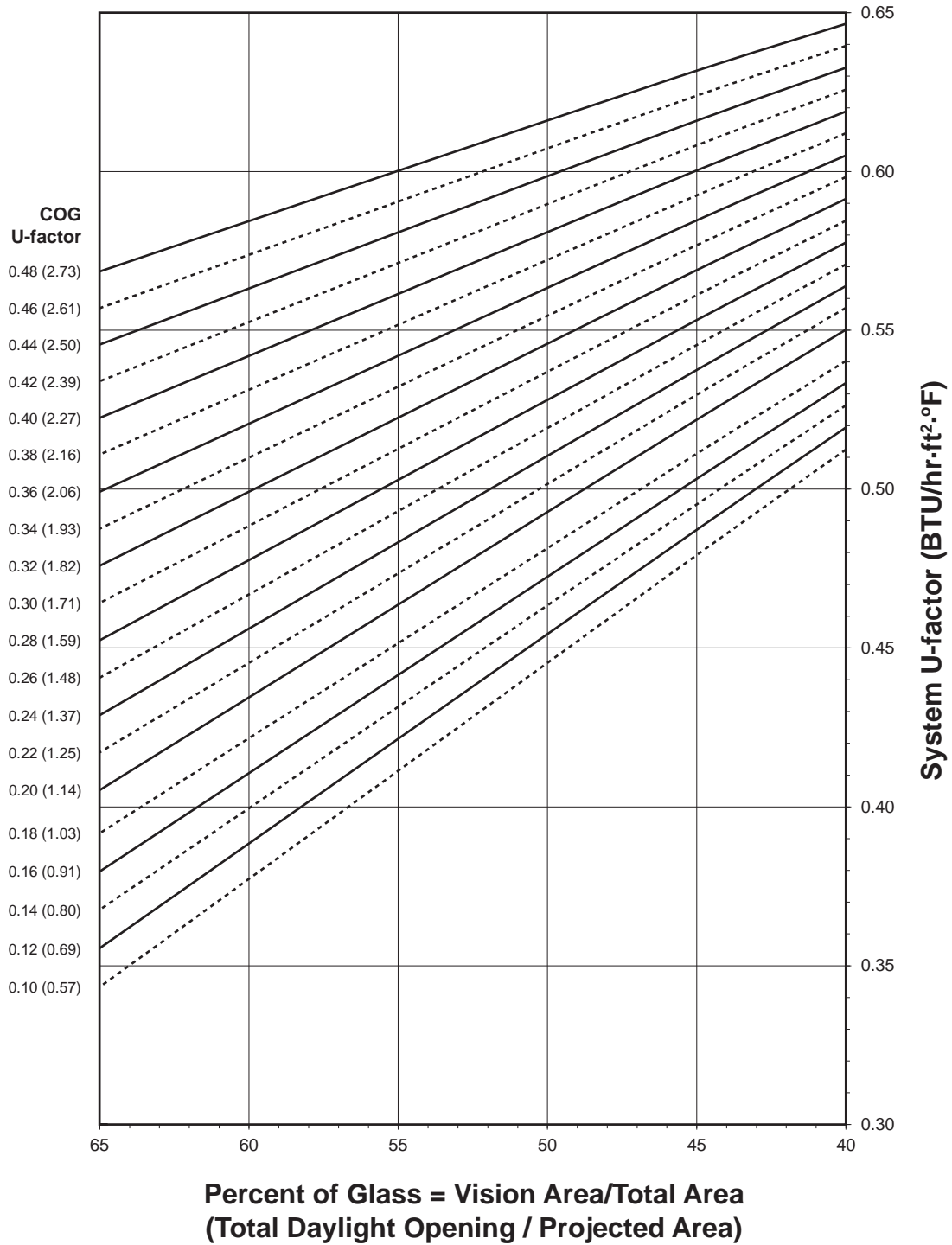
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500T (SINGLE DOOR)

**System U-factor vs Percent of Glass Area**



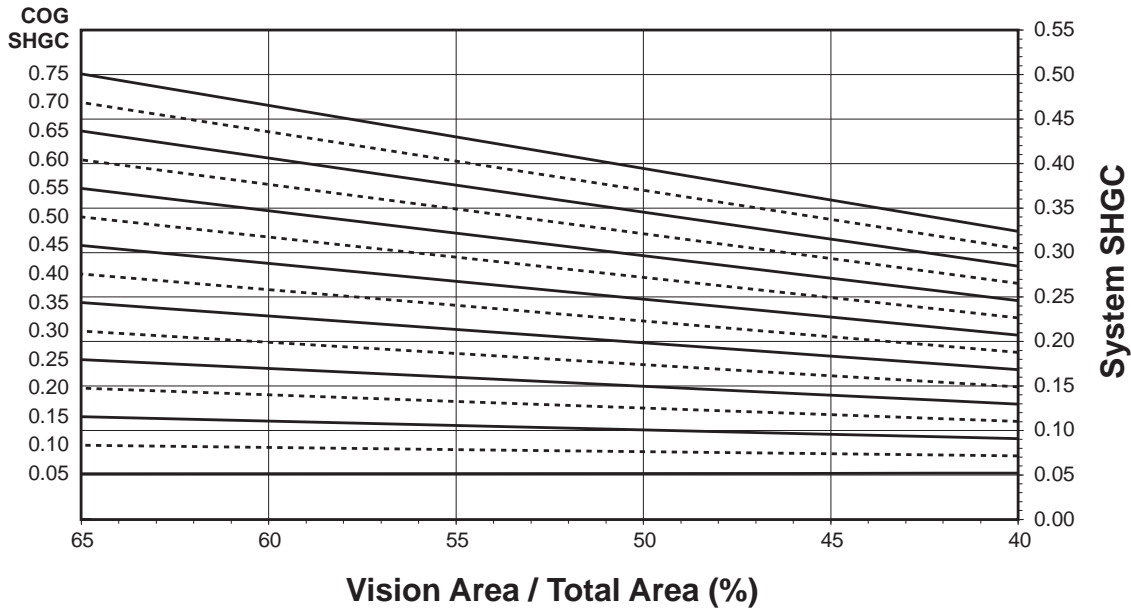
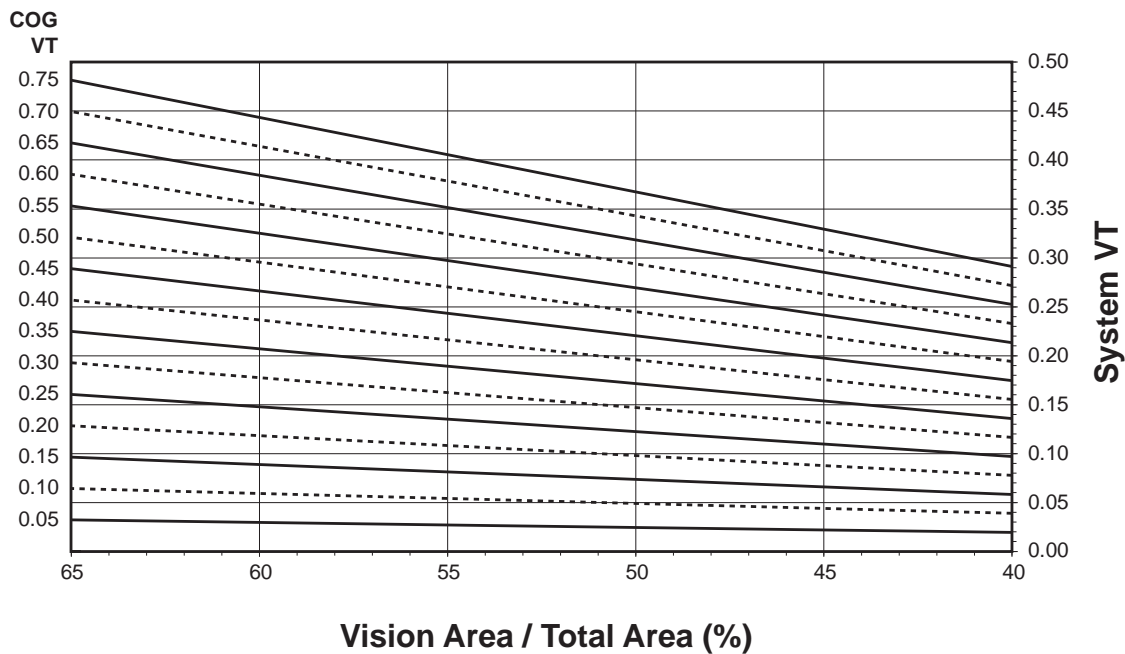
**Notes for System U-Factor, SHGC and VT charts:**

For glass values that are not listed, linear interpolation is permitted.

Glass properties are based on center of glass values and are obtained from your glass supplier.



## 500T (SINGLE DOOR)

**System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area****System Visible Transmittance (VT) vs Percent of Vision Area**

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Thermal Transmittance <sup>1</sup> (BTU/hr • ft<sup>2</sup> • °F)

## 500T (SINGLE DOOR)

Glass U-Factor <sup>3</sup>	Overall U-Factor <sup>4</sup>
0.48	0.63
0.46	0.62
0.44	0.61
0.42	0.61
0.40	0.60
0.38	0.59
0.36	0.58
0.34	0.57
0.32	0.57
0.30	0.56
0.28	0.55
0.26	0.54
0.24	0.53
0.22	0.53
0.20	0.52
0.18	0.51
0.16	0.50
0.14	0.49
0.12	0.48
0.10	0.47

**NOTE:** For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
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SHGC Matrix <sup>2</sup>

Glass SHGC <sup>3</sup>	Overall SHGC <sup>4</sup>
0.75	0.36
0.70	0.34
0.65	0.32
0.60	0.30
0.55	0.28
0.50	0.25
0.45	0.23
0.40	0.21
0.35	0.19
0.30	0.16
0.25	0.14
0.20	0.12
0.15	0.10
0.10	0.07
0.05	0.05

Visible Transmittance <sup>2</sup>

Glass VT <sup>3</sup>	Overall VT <sup>4</sup>
0.75	0.34
0.70	0.31
0.65	0.29
0.60	0.27
0.55	0.25
0.50	0.22
0.45	0.20
0.40	0.18
0.35	0.16
0.30	0.13
0.25	0.11
0.20	0.09
0.15	0.07
0.10	0.04
0.05	0.02

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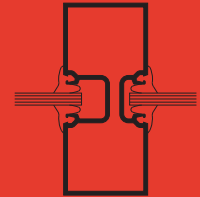
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# PRODUCT GREEN GUIDE

## Trifab™ 400 Framing System

Trifab™ 400 Framing System is a proven solution for storefront and low-rise applications.



## RATING SYSTEMS

### LEED v4 BD+C: New Construction

- ☐ EA: Optimize Energy Performance
- ☐ EA: Renewable Energy Production
- ☒ MR: Environmental Product Declarations
- ☒ MR: Sourcing of Raw Materials
- ☒ MR: Material Ingredients
- ☒ MR: Source Reduction - Lead, Cadmium, and Copper
- ☒ MR: Construction and Demolition Waste Management
- ☐ EQ: Thermal Comfort
- ☒ EQ: Daylight
- ☒ EQ: Quality Views
- ☒ EQ: Acoustic Performance

### Living Building Challenge 3.1

- |  |  |
|--|--|
| <input type="radio"/> IMP 06: Net Positive Energy              | <input type="radio"/> IMP 12: Responsible Industry               |
| <input type="radio"/> IMP 07: Civilized Environment            | <input checked="" type="radio"/> IMP 13: Living Economy Sourcing |
| <input checked="" type="radio"/> IMP 08: Healthy Interior      | <input checked="" type="radio"/> IMP 14: Net Positive Waste      |
| <input checked="" type="radio"/> IMP 09: Biophilic Environment | <input type="radio"/> IMP 16: Universal Access                   |
| <input checked="" type="radio"/> IMP 10: Red List              |  |

### WELL Building Standard

- |  |  |
|--|--|
| <input checked="" type="radio"/> 01: Air Quality Standards       | <input checked="" type="radio"/> 28: Cleanable Environment       |
| <input type="radio"/> 03: Ventilation Effectiveness              | <input checked="" type="radio"/> 54: Circadian Lighting          |
| <input checked="" type="radio"/> 04: VOC Reduction               | <input type="radio"/> 56: Solar Glare Control                    |
| <input type="radio"/> 08: Healthy Entrance                       | <input checked="" type="radio"/> 61: Right to Light              |
| <input checked="" type="radio"/> 11: Fundamental Material Safety | <input checked="" type="radio"/> 62: Daylight Modeling           |
| <input checked="" type="radio"/> 12: Moisture Mgmt               | <input checked="" type="radio"/> 63: Daylight Fenestration       |
| <input checked="" type="radio"/> 14: Air Filtration Mgmt         | <input type="radio"/> 72: Accessible Design                      |
| <input type="radio"/> 15: Increased Ventilation                  | <input checked="" type="radio"/> 74: Exterior Noise Intrusion    |
| <input type="radio"/> 19: Operable Windows                       | <input type="radio"/> 76: Thermal Comfort                        |
| <input checked="" type="radio"/> 25: Toxic Material Reduction    | <input checked="" type="radio"/> 97: Material Transparency       |
| <input type="radio"/> 26: Enhanced Material Safety               | <input checked="" type="radio"/> 98: Organizational Transparency |

## FEATURES

- 1-3/4" (44.5mm) sightline
- 4" (101.6mm) depth
- Non thermal performance
- Center glazed
- Flush glazed from either the inside or outside
- Screw Spline, Shear Block or Stick fabrication
- Single-span
- Standard anodized finishes only

## DOCUMENTS



### Environmental Product Declaration

Document no. 47868332121.104.1

Product-specific Type III EPD



### Material Transparency Summary

Document no. MTSC020EN

Manufacturer Material Ingredient Inventory