



City of Pensacola

Architectural Review Board

Agenda

City of Pensacola
222 W. Main Street
Pensacola, FL 32502

December 21, 2023, 2:00 PM

Whibbs Conference Room, 1st Floor

The meeting can be watched via live stream at cityofpensacola.com/video.

CALL TO ORDER / QUORUM

APPROVAL OF MINUTES

1. 23-1079 ARCHITECTURAL REVIEW BOARD MEETING MINUTES

Attachments: 11-16-23 ARB minutes

OPEN FORUM

NEW BUSINESS

2. 23-1080 610 E. GOVERNMENT STREET
PENSACOLA HISTORIC DISTRICT / ZONE HC-1 / CITY COUNCIL
DISTRICT 6
EXTERIOR IMPROVEMENTS AT A NONCONTRIBUTING STRUCTURE

Attachments: Images
Application and Materials

3. 23-1081 433 E. ZARRAGOSSA STREET
PENSACOLA HISTORIC DISTRICT / ZONE HC-1 / CITY COUNCIL
DISTRICT 6
CHANGE OF WINDOWS ON ACCESSORY BUILDING AT A
CONTRIBUTING STRUCTURE

Attachments: Florida Master Site File Form
Images
Application and Materials

4. 23-1082 517 E. GOVERNMENT STREET
PENSACOLA HISTORIC DISTRICT / ZONE HC-1 / CITY COUNCIL
DISTRICT 6
EXTERIOR ALTERATION AT A CONTRIBUTING STRUCTURE

Attachments: Florida Master Site File Form
Images
Application and Materials

5. 23-1083 **600 S. PALAFOX STREET
PALAFOX HISTORIC BUSINESS DISTRICT / ZONE C-2A / CITY COUNCIL
DISTRICT 6
FINAL REVIEW FOR A NEW HOTEL DEVELOPMENT**

Attachments: Images
Application and Materials_12-12-23

6. 23-1084 **DISCUSSION
NATIONAL PARK SERVICE PRESERVATION BRIEF NO. 16: THE USE
OF SUBSTITUTE MATERIALS ON HISTORIC BUILDING EXTERIORS**

Attachments: Preservation Brief 16: The Use of Substitute Materials on Historic
Building Exteriors

ADJOURNMENT

The City of Pensacola adheres to the Americans with Disabilities Act and will make reasonable accommodations for access to City services, programs and activities. Please call 850-435-1606 (or TDD 850-435-1666) for further information. Request must be made at least 48 hours in advance of the event in order to allow the City time to provide the requested services.

If any person decides to appeal any decision made with respect to any matter considered at such meeting, he will need a record of the proceedings, and that for such purpose he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.



City of Pensacola

ARCHITECTURAL REVIEW BOARD

MINUTES

City of Pensacola
222 W. Main Street
Pensacola, FL
32502

November 16, 2023

2:00 PM

Hagler-Mason Conference Room,
2nd Floor

CALL TO ORDER / QUORUM

Members Present: Derek Salter, George R Mead, II, Anna Fogarty, Brian Spencer, Jordan Yee, Yuri Ramos, Ross Pristera

Members Absent: Lou Courtney

Also Present: Ken Niemeyer, Tony Patel, Robert Landers, Lynsey Hatch, Jeff Fernandez, Tosh Belsinger, Alex Grace, Ashley King, Assistant Planning & Zoning Division Manager Harding, Digital Media Specialist Russo, Historic Preservation Planner Walker

APPROVAL OF MINUTES

Board Member Spencer made a motion to approve the October 19, 2023, minutes, seconded by Board Member Mead, and it carried 6-0.

1. 23-929 ARCHITECTURAL REVIEW BOARD MEETING MINUTES

OPEN FORUM

NEW BUSINESS

2. 23-930 255 W. BRAINERD STREET
NORTH HILL PRESERVATION DISTRICT / ZONE PR-1AAA / CITY COUNCIL DISTRICT 6
EXTERIOR ALTERATIONS AT A NON-CONTRIBUTING STRUCTURE

Dr. Daniel Hohman is seeking approval to replace two existing windows with Jeld-Wen Premium Atlantic Vinyl single hung windows to match existing, replace one door with a Jeld-Wen Gladiator Steel Door to match existing, and construct a brick wall and patio to match the existing structure. The work was undertaken without a permit or ARB approval resulting in a stop work order in October 2023.

Mr. Ken Niemeyer, representing Dr. Hohman, presented to the board. Chairperson Salter shared comments from the North Hill Preservation Association that ARB approval is needed for the changes; there are no objections to the style of the windows or doors as submitted; a more detailed plan for the stairs should be submitted; from the height of the new door the stairs may require a longer run than what is depicted; and railings, should they be required, should be submitted for approval. There is concern on the dirt slope shown in the pictures to the south of the patio. Mr. Niemeyer clarified that the slope is natural and was scraped for the patio, and it is typically covered in grass and will be sodded once the project is complete. North Hill Preservation Association also questioned the requirement of a silt fence, but that is not under the ARB jurisdiction.

Chairperson Salter noted the main concern appears to be the proposed steps coming off the back of the house from the new door. Mr. Niemeyer noted there is an existing patio, and this would be a continuation of the existing. The previous steps were steep and narrow, it is preferred to not match the rear steps and attempt to match the front steps that are less steep. Chairperson Salter asked if the stairs leading from the landing outside the new door will require railings or if a rail will be provided. Mr. Niemeyer answered that a rail was to be provided once the steps are chosen and the application does not include the railings.

Board Member Spencer asked Chairperson Salter for clarification on the board's current stance on how to move forward and does the applicant need to provide drawings to be approved. Mr. Niemeyer noted that rough drawings were included. Board Member Spencer noted that drawings with dimensions would help the board make a decision. Mr. Niemeyer noted that the drawing depicts what is proposed but is lacking the railing detail. Board Member Yee clarified that dimensions and details are required. Chairperson Salter noted that the application has two parts, the window replacement which includes sufficient information that is clear and the expanded patio with drawings including materials. In Chairperson Salter's opinion the item that is lacking is the specifics on the stairs and railing, but there is enough to discuss. The windows and doors are appropriate, the brick is a good match, and the only question is the size and dimension of the stair and railing which could be handled through an abbreviated review. Mr. Niemeyer asked if the drawing was to scale with dimensions and Chairperson Salter answered it does not have sufficient detail.

Board Member Ramos echoed Chairperson Salter's statement and noted that the stair material must be identified. Mr. Niemeyer answered the steps will be made of brick and they will match the existing. Board Member Ramos agreed that an

abbreviated review is needed for the steps and railing. Mr. Niemeyer noted the existing steps are narrow and steep and should that be matched. Board Member Ramos answered that the new steps should meet current codes and complement the existing, but proportions do not have to be matched exactly. Board Member Fogarty asked for clarification on property lines and setbacks which are not clear on the provided documents. Mr. Niemeyer answered the house is 35-40 feet away from the property line and 25-30 feet away to the east at the existing driveway. The patio is 35 feet or more from the rear property line.

Board Member Spencer made a motion the applicant provide necessary dimensions and other information that is maybe missing, certainly someone can add to the motion, sufficient for abbreviated or administrative review. Board Member Spencer's goal with the motion is to not bring this back to the full Architectural Review Board.

Chairperson Salter noted he did not hear a motion to approve or deny, based on Board Member Spencer's further comment was that it intended to be a motion to approve with the specifically discussed items regarding the steps and railing to be brought back for abbreviated review.

Board Member Spencer stated his motion is to reflect for the record that the ARB today has been presented and does approve the insertion of windows and French doors, that existing unpermitted work has been reviewed and approved by the ARB; the future contemplated work that has been presented in sketch form by the applicant be resubmitted with clear dimensions as well as a guard rail if needed and handrail designs for abbreviated review.

Board Member Yee seconded the motion. Board Member Ramos asked if he could amend the motion. Assistant Planning and Zoning Division Manager Harding noted that the board could entertain an amendment since it has not been voted on yet. Board Member Ramos suggested the applicant provide a site plan showing the proper, required setbacks for the alteration.

Board Members Spencer and Yee accepted the amendment. The amended motion carried 6-0.

Mr. Niemeyer asked for clarification on how the drawings will be submitted. Historic Preservation Planner Walker noted that instructions will be provided to the applicant following the meeting.

3. 23-931 521 N. ALCANIZ STREET
OLD EAST HILL PRESERVATION DISTRICT / ZONE PR-1AAA / CITY COUNCIL DISTRICT 6
CHANGE OF WINDOWS AT A NON-CONTRIBUTING STRUCTURE

Robert Landers is seeking approval to replace eighteen (18) wood windows with

Jeld-Wen W-5500 series auralast pine aluminum-clad double hung windows with impact glass at a non-contributing structure. The exterior color will be bronze or black with four over four simulated divided lites. The applicant is proposing to infill one west-facing double window with original, matching brick from a partially dismantled chimney. A new front door is depicted in the packet but is not a part of this application.

Mr. Landers presented to the board. Board Member Mead asked if a subsequent review would be provided for the front door. Historic Preservation Planner Walker answered that the door can be handled through an abbreviated review. Board Member Mead asked the applicant for clarification on the covered porch. Mr. Landers answered it was lattice but is now covered up. Chairperson Salter noted there were no comments from Old East Hill.

Board Member Mead made a motion to approve. Board Member Ramos seconded the motion and it carried 6-0.

4. 23-932 9 W. DE SOTO STREET
NORTH HILL PRESERVATION DISTRICT / ZONE PR-2 & PR-1AAA / CITY
COUNCIL DISTRICT 6
EXTERIOR ALTERATIONS AT A CONTRIBUTING STRUCTURE

Lynsey and Neal Hatch are seeking approval to remove painted plywood over four former window openings. There are no frames, sashes, or glazing behind the plywood and the interior has drywall. The applicants are proposing to remove the existing trim and infill the openings with KDAT pressure treated lumber milled with a specialty saw blade to match the two different existing, narrow novelty wood siding types and will be painted to match existing. The transom window will remain with infilled siding below.

Ms. Hatch presented to the board. Chairperson Salter asked if the intent was to remove all traces of the windows and infill with the two different, matching siding types that are present. Ms. Hatch answered yes. Board Member Mead asked if there were bookcases inside where the windows are located. Ms. Hatch answered no. Chairperson Salter noted the North Hill Preservation Association had no objection to the request.

Board Member Fogarty made a motion to approve the application as submitted. Board Member Spencer seconded the motion and the motion carried 6-0.

5. 23-933 600 E. BELMONT STREET
OLD EAST HILL PRESERVATION DISTRICT / ZONE OEHR-2 / CITY COUNCIL
DISTRICT 6
CHANGE OF WINDOWS AT A CONTRIBUTING STRUCTURE

Godinez Construction is seeking approval to replace five (5) existing wood windows with Andersen 400 series vinyl-clad wood double hung windows with two over two full divided lites to match existing Andersen windows.

Jeff Fernandez, homeowner, presented to the board. Chairperson Salter clarified that the proposed windows will match newer windows that were previously installed. Board Member Ramos asked if the new windows would match the existing green color. Mr. Fernandez answered yes, Andersen's Forest Green is the color. Chairperson Salter noted there no comments from the Old East Hill Preservation Association.

Board Member Mead made a motion to approve as submitted. Board Member Ramos seconded, and it carried 6-0.

6. 23-934 600 S. PALAFOX STREET
PALAFOX HISTORIC BUSINESS DISTRICT / ZONE C-2A / CITY COUNCIL
DISTRICT 6
CONCEPTUAL REVIEW FOR A NEW HOTEL DEVELOPMENT

Buck Lindsay is seeking conceptual approval for a new eight-story Tempo by Hilton hotel with 213 guest rooms, lobby area, dining, a meeting space, fitness area, swimming pool, and surface parking. This project was denied for conceptual approval at the September 2023 meeting; a final review will be required a later date.

Alex Grace presented to the board. Chairperson Salter noted that a lot of positive progress has been made and opening the rooms to the south works well, while keeping windows on the Palafox Street side. The colonnade along Palafox continues what the street has and that is a positive step forward. Board Member Mead echoed the Chairperson's comments and that the rhythm around the structure is much better, the gallery is nice and the attention to detail on the panels at the top of the gallery area will have a nice street effect, and looks forward to seeing activation of that area. Board Member Spencer appreciated the modifications from the previous design.

Board Member Spencer asked for clarification if the project was still conceptual. Mr. Grace answered yes. Board Member Spencer noted that Palafox is depicted as a three-lane street in the rendering, which is inaccurate. Mr. Grace noted that nothing is changing on Palafox Street from a civil perspective and the development is solely within the property boundaries. Board Member Spencer noted for the record that there is almost 16 feet wide, inlaid brick pavers and a cadence of trees and sidewalk on Palafox Street and the renderings depict a four to six foot wide sidewalk to the face of the building, with the columns shown in the two-dimensional site plan as abutting the street curb as opposed to being set back. Mr. Grace answered that working with city staff, the applicants are aware they must maintain the sidewalk, brick, and tree wells and that Cedar Street may be redesigned toward

the baseball field and the applicants are waiting to see the progress on that. Board Member Spencer noted the current site plan indicates a three-lane Palafox Street and parallel parking. Mr. Grace answered that currently the applicants are graphically showing Cedar Street and are not paying particular attention to that area. It is Mr. Grace's understanding that Cedar Street may become one directional and more pedestrian friendly and the applicants stepped the building back from the property line to accommodate those changes. Board Member Spencer noted it is vitally important that promenades with tree wells continue.

Board Member Spencer asked staff about landscaping buffers for hotels and is there an exception. Assistant Planning and Zoning Division Manager Harding answered that Palafox Historic Business District provides an exception and any work in the right of way that shows parking where there is not currently will fall under the parking lease agreement with the Parking Services Department and that will be contingent on the design of this building. Conversations with additional staff will occur after conceptual review and input from the board. Board Member Spencer asked about Gateway Development District requiring screening for surface parking and does Gimble Street require landscaping? Assistant Planning and Zoning Division Manager Harding answered that zoning district C-2A is a little different and things like parking lots are not required to be screened, but other districts do have stricter landscape requirements. Board Member Spencer encouraged the applicant to consider screening on the south side, like a vertical low wall, though not required. Mr. Grace noted that they could look into screening the parking area from pedestrians.

Assistant Planning and Zoning Division Manager Harding noted those exceptions are part of Chapter 12-6 Tree and Landscape Regulations, and the C-2A downtown retail commercial district is exempt from the provisions of that chapter. Board Member Spencer noted that areas of Jefferson Street are permeable and for the license to use, the applicants will need to find some way to replace the square footage, but that is not under the board's purview. Board Member Fogarty thanked the applicants for listening to the board's previous feedback and making those changes. Board Member Yee agreed the improvements are great and the south facing façade particularly with the views. Board Member Yee suggested the arcades along Palafox and Cedar Streets could provide an opportunity for the hotel rooms at that level to also take advantage of the top of the arcade, like conditions north on Palafox. It may increase the scale and height of that gallery. Mr. Grace noted they will consult with the architect about that potential. Board Member Yee echoed Board Member Spencer's comments about being clear about property lines and rights of way and the relationship of the arcade gallery to the existing sidewalks.

Board Member Spencer made a motion to approve the 600 S. Palafox hotel as submitted with an understanding the applicant will be returning for final approval. Board Member Fogarty second the motion and it carried 6-0.

7. 23-935 18 E. GARDEN STREET
PALAFOX HISTORIC BUSINESS DISTRICT / ZONE C-2A / CITY COUNCIL
DISTRICT 6
DEMOLITION OF A CONTRIBUTING STRUCTURE

SMP Architecture is seeking approval to demolish one (1) contributing structure at 18 E. Garden Street. The application includes a narrative which advocates unusual and compelling circumstances and six considerations the board should consider to justify approval of the demolitions. These criteria are required when economic hardship cannot be shown. As part of the demolition request, the applicants must also seek at least conceptual review of replacement plans. Final review of the new development will follow as the next agenda item. Board Member Spencer signed a recusal form for Items 7 and 8.

Philip Partington and William Brantley presented to the board. Mr. Partington noted that the structure is built of CMU and does not retain the historical nature it once had. Advisor Pristera noted that he provided historic photographs for the application and the façade has changed since the 1930s. The Jefferson Street extension was done in 1981-82 and had to shore up some of the walls of the building when the road was cut through. Advisor Pristera noted it has been heavily modified and the section that is proposed to be demolished has lost all significance in Advisor Pristera's opinion.

Board Member Mead asked Advisor Pristera if a different structure was present in the 1930s. Advisor Pristera answered it is the same building, but it changed post-1930. Board Member Mead asked staff for the standards of consideration for a contributing structure. Historic Preservation Planner Walker answered since economic hardship is not being demonstrated, the six criteria for unusual and compelling circumstances are outlined in Sec. 12-3-10i.2. Assistant Planning and Zoning Division Manager Harding noted that the board does have the power to alter contributing statuses if it is going from contributing to noncontributing since it is supported evidence that wasn't available before. But when altering from noncontributing to contributing, the decision must go to City Council.

Board Member Mead asked the applicant if the west wall is the abutting wall of the inboard of the two units. Mr. Partington answered that the adjacent or demising wall is partially brick and the other three walls are just CMU. Board Member Yee asked if it is known how much building was removed when Jefferson was cut through. Advisor Pristera answered that an entire bay of the building was removed and other buildings to the east were taken out. Board Member Mead asked if the demolition proposal and replacement plans must be taken in any particular order. Assistant Planning and Zoning Division Manager Harding answered no, contributing structures need approval for replacement plans for the permit. Typically, with contributing structures final approval of replacement plans is necessary before the demolition permit can be issued. Board Member Yee asked if the contributing status is removed, does that still apply. Assistant Planning and

Zoning Division Manager Harding answered that if the contributing status was removed and the replacement plans were not approved, the applicants could still pull the demolition permit since the building is now noncontributing. The board typically handles the demolition application separately, knowing that the applicant has provided replacement plans. The ordinance reads that the applicants must immediately seek approval or review of the replacement plans.

Chairperson Salter stated the applicant has made the case that compelling circumstances are present that the building is not as historically significant as it may have been considered and this makes it a candidate for demolition for a better and higher use of the property. Board Member Mead complimented the application demonstrating the history of the building and history of its modification and structural changes. For that reason, the board can use this as an example of altering a contributing structure to noncontributing status. Board Member Mead noted he would support a motion to change the structure to noncontributing.

Board Member Mead made a motion to make finding based upon the package submitted and the representations of the applicant as to the nature of the existing construction and modification from the historical evidence that the board has seen that this no longer is a contributing structure within the meaning of the code and that the board approve the demolition as submitted. Board Member Ramos seconded the motion and it carried 6-0.

8. 23-936 18 E. GARDEN STREET
PALAFOX HISTORIC BUSINESS DISTRICT / ZONE C-2A / CITY COUNCIL
DISTRICT 6
FINAL REVIEW FOR NEW COMMERCIAL DEVELOPMENT

SMP Architecture is seeking final approval for a new commercial development to replace the contributing structure and private parking lot at 18 E. Garden Street. The current plans depict a one-story restaurant establishment with primary façade elements being brick and cast stone with a metal roof, metal canopies, and a metal railing system. This development is part of the East Garden District project, constructed through a public-private partnership, with the streetscape partially funded by the city's Community Redevelopment Agency.

Philip Partington and William Brantley presented to the board. Chairperson Salter noted that the new package adds distinction to the building and presence on the street and how it will define the corner. Chairperson Salter asked about the two gable sides, if the lighting below the signage was bar lighting. Mr. Brantley answered yes and the lighting and signage will be submitted through an abbreviated review. Board Member Ramos asked the applicant why the alley is there and that the proposed building is separated from the building next door. Mr. Partington answered there is an existing easement for the adjacent buildings that is currently a parking lot. Tosh Belsinger addressed the board and shared that there is an existing alley easement that connects Garden Street to the back of 2 N.

Palafox and the Wade Palmer law office, Rock Hard Jewelry, and Rex Theatre. There is an existing 9-foot alley easement. As the easement is described legally, it can be moved along Garden Street but must be maintained to the back of the properties. It is being moved next to Papa's Pizza and is being widened to 12 feet.

Board Member Ramos noted on the site plan there is a parking lot on the rear of the building, but later renderings show a building mass. Board Member Ramos noted the rear of the building will be highly visible coming down Jefferson Street and there is a harsh transition between the brick and stucco material. Mr. Partington noted the mass is a future residential development so the parking lot is a place holder as the development is phased over time. Board Member Ramos questioned if there is something that can be done to the north elevation to be more intentional. Mr. Brantley answered that area is the kitchen and cold storage on those walls, so every opportunity was taken to place an opening. There is a window in the receiving office. Board Member Ramos noted he is speaking more to materiality. The brick turns the corner and becomes stucco and similar discussions took place with Union Public House. Board Member Ramos noted the face of the building is brick but it abruptly stops when the corner is turned and it looks unfinished. Mr. Belsinger questioned how this was handled with Union Public House. Board Member Ramos and Assistant Planning and Zoning Division Manager Harding noted Union Public House was approved largely, but the rear treatment was required to be addressed through an abbreviated review. Mr. Partington asked if the brick pier could wrap the corner and could have a stucco band. The applicants discussed possibilities to address Board Member Ramos' concerns.

Chairperson Salter asked about the grout color. Mr. Partington answered grey to complement the brick. Assistant Planning and Zoning Division Manager Harding shared the abbreviated review from 2022 for Union Public House. The original proposal had a brick north façade with a small stucco addition that jutted out. The board felt it was too contrasting. Through an abbreviated review, the full façade of the rear was approved to be stucco. Board Member Yee noted it is not as much the materials, but how they join together and Board Member Yee agrees with Board Member Ramos' comments. Board Member Mead agreed that the rear façade needs a treatment to make it more balanced.

Board Member Ramos made a motion to approve the application as submitted with the exception that the rear or north elevation come back for abbreviated review based on the comments given by the board. Chairperson Salter provided an amendment for clarification that the signage indicated and lighting indicated for the signage is not a part of the approval. Board Member Ramos accepted the amendment. Board Member Mead seconded the motion and it carried 6-0.

9. 23-937 1301 N. PALAFOX STREET
NORTH HILL PRESERVATION DISTRICT / ZONE PC-1 & PR-2 / CITY COUNCIL

DISTRICT 6

NEW WINDOWS AT A CONTRIBUTING STRUCTURE

Ashley King is seeking approval to add seventeen (17) new storefront windows, varying between four and six lites, within existing brick surrounds and four (4) new skylights at a contributing structure.

Ashley King presented to the board. Chairperson Salter noted that what is being proposed is appropriate and the North Hill Preservation Association had no objections. Board Member Mead complimented the package. Ms. King noted the interior needs more daylighting which is why skylights are being proposed.

Board Member Ramos made a motion to approve the package as submitted. Board Member Fogarty seconded, and the motion carried 6-0.

10. 23-938 400 S. JEFFERSON STREET
PENSACOLA HISTORIC DISTRICT / ZONE HC-2 / CITY COUNCIL DISTRICT 6
FINAL REVIEW FOR A NEW ROOFTOP VENUE AT A CONTRIBUTING
STRUCTURE

Carter Quina is seeking final approval for a rooftop venue at the Clark Family Cultural Center, a contributing structure in the Pensacola Historic District. This project received conceptual approval at the October 2022 ARB meeting.

Andrew Guarisco and Mohammad Mahasneh presented to the board. Chairperson Salter noted not much had changed from the conceptual review and Board Member Mead complimented the application.

Board Member Mead made a motion to approve as submitted. Board Member Spencer seconded the motion and it carried 6-0.

ADJOURNMENT



City of Pensacola

222 West Main Street
Pensacola, FL 32502

Memorandum

File #: 23-1080

Architectural Review Board

12/21/2023

LEGISLATIVE ACTION ITEM

SUBJECT:

610 E. Government Street
Pensacola Historic District / Zone HC-1 / City Council District 6
Exterior Improvements at a Noncontributing Structure

SUMMARY:

Jeff Cutter is seeking approval for exterior improvements at a non-contributing structure, including a new gunite pool with a raised wall with two fire bowls and a six-foot waterfall, landscaping, a new paver driveway, and replacing the existing grass in the front with artificial turf.

Please find attached all relevant documentation for your review.

RECOMMENDED CODE SECTIONS

Sec. 12-3-10(1)d.2. Pensacola Historic District; Procedure for Review; Decisions.

Sec. 12-3-10(1)e.6. PHD; Regulations and guidelines for any development within the historic zoning districts; Landscaping.

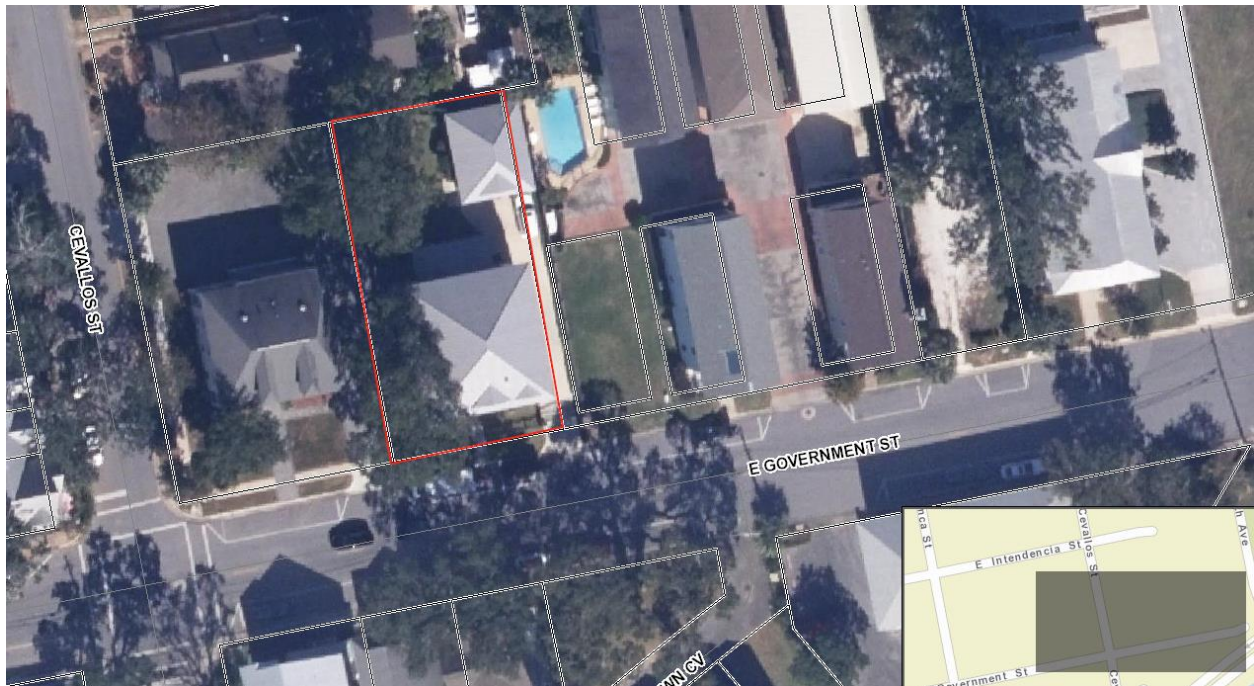
Sec. 12-3-10(1)e.7i. PHD; Driveways, sidewalks and off-street parking; Driveways.

Sec. 12-3-10(1)g. PHD; Renovation, alterations and additions to noncontributing and modern infill structures within the historic district.

ATTACHMENTS:

1. Images
2. Application and Materials

610 E. Government Street





**Architectural Review Board Application
Full Board Review**

Application Date: November 14, 202

Project Address: 601 E Government Street

Applicant: Jeff Cutter Pool Designs of Florida, LLC

Applicant's Address: 4100 Menendez Drive

Email: jcutter4@yahoo.com **Phone:** 850-232-3440

Property Owner: Brandon & Andra Sandefur

District: ☒ **PHD** ☐ **NHPD** ☐ **OEHPD** ☐ **PHBD** ☐ **GCD**

(If different from Applicant)

Application is hereby made for the project as described herein:

- ☒ Residential Homestead – \$50.00 hearing fee
- ☐ Commercial/Other Residential – \$250.00 hearing fee

** An application shall be scheduled to be heard once all required materials have been submitted and it is deemed complete by the Secretary to the Board. You will need to include eight (8) copies of the required information. Please see pages 3 – 4 of this application for further instruction and information.*

Project specifics/description:

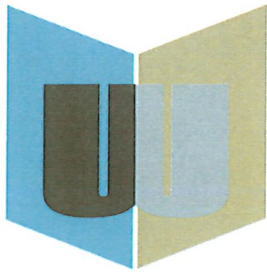
Install new gunite pool, raised wall to include two fire bowls and 6ft waterfall. Riveria coping & decking. Install new paver driveway. Remove existing grass upfront and replace with artifical turf.

I, the undersigned applicant, understand that payment of these fees does not entitle me to approval and that no refund of these fees will be made. I have reviewed the applicable zoning requirements and understand that I must be present on the date of the Architectural Review Board meeting.


Applicant Signature

November 14, 2023
Date

Planning Services
222 W. Main Street * Pensacola, Florida 32502
(850) 435-1670
Mail to: P.O. Box 12910 * Pensacola, Florida 32521



THE **WALLACE** company

COMPLETE LANDSCAPE SOLUTIONS



Back looking towards house



House looking towards back fence



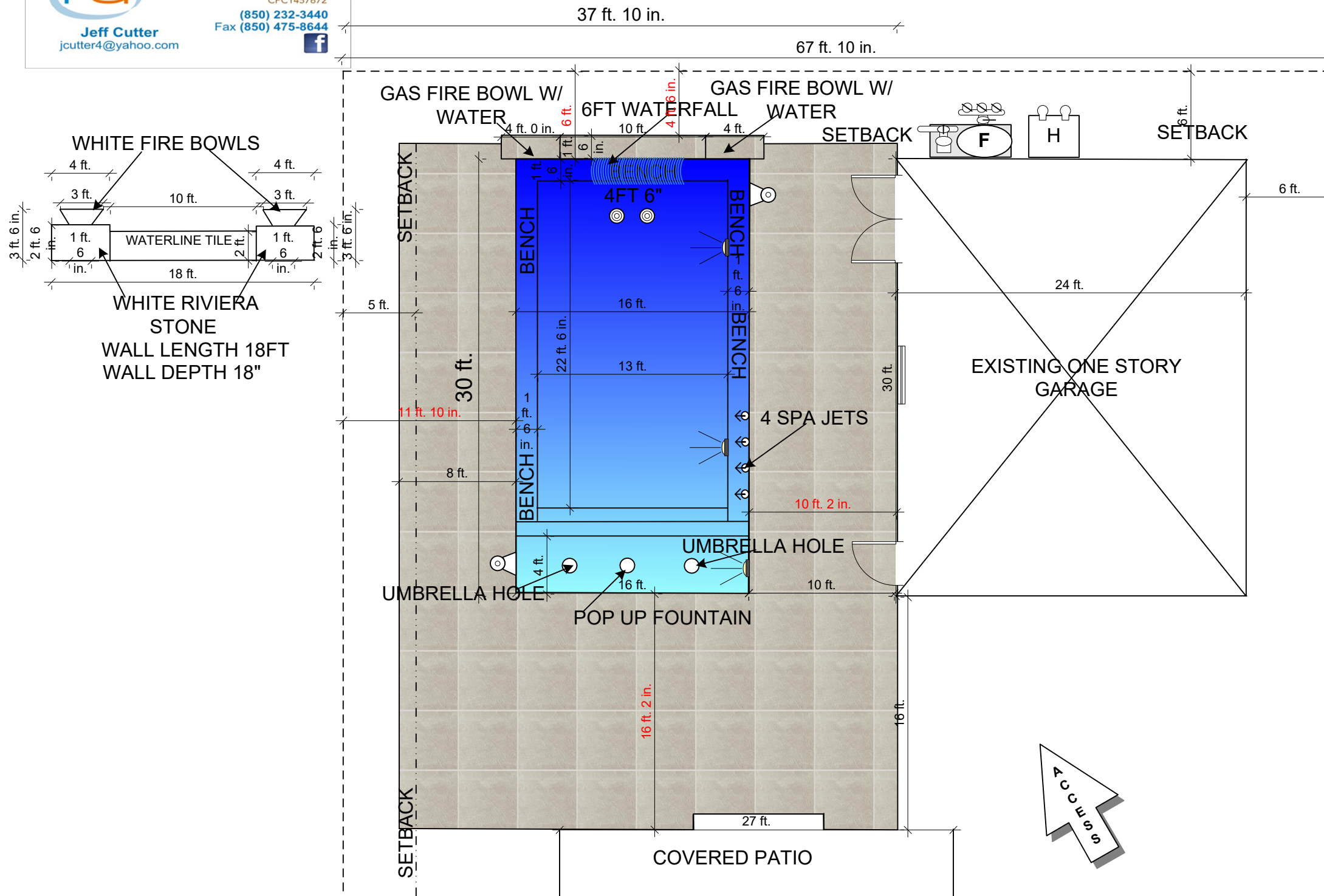
Driveway looking towards road

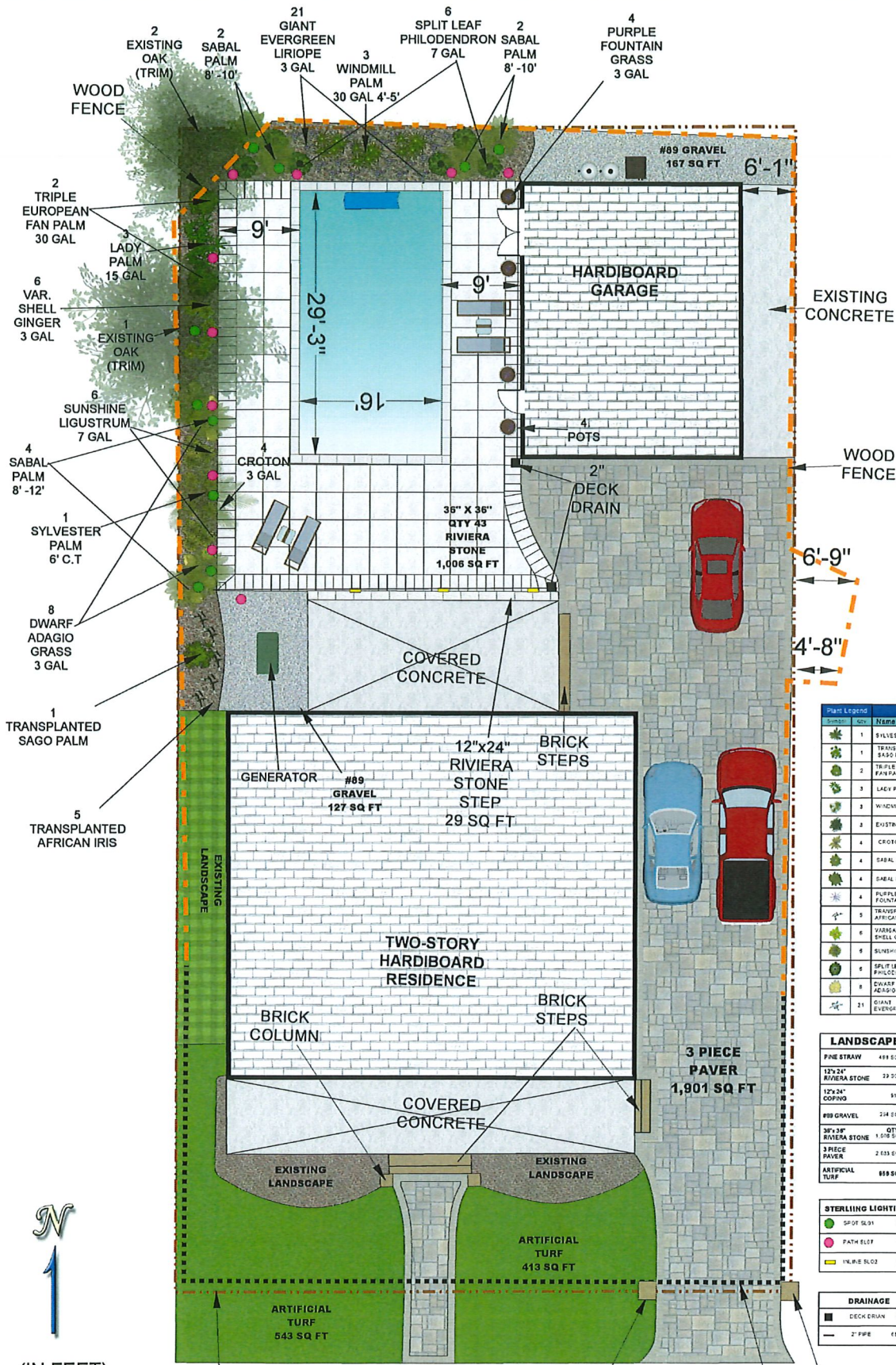


Driveway looking towards house



Front of house



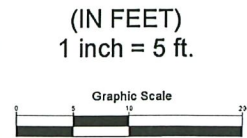


Plant Legend	Qty	Name	Size
1	1	SYLVESTER PALM	6' C.T.
1	1	TRANSPLANTED SAGO PALM	
2	2	TRIPLE EUROPEAN FAN PALM	30 GAL
3	3	LADY PALM	15 GAL
3	3	WINDMILL PALM	30 GAL 4'-5'
3	3	EXISTING OAK (TRIM)	
4	4	CROTON	3 GAL
4	4	SABAL PALM	8'-12'
4	4	SABAL PALM	8'-10'
4	4	PURPLE FOUNTAIN GRASS	3 GAL
5	5	TRANSPLANTED AFRICAN IRIS	
6	6	VARIABLE SHELL GINGER	3 GAL
6	6	SUNSHINE LIGUSTRUM	7 GAL
6	6	SPLIT LEAF PHILODENDRON	7 GAL
8	8	DWARF ADAGIO GRASS	3 GAL
21	21	GIANT EVERGREEN LIRIOPE	3 GAL

LANDSCAPE	Qty	Size
FINE STRAW	489	52 FT
12" X 24" RIVIERA STONE	29	29 FT
12" X 24" COPING	91	FT
#89 GRAVEL	24	52 FT
35" X 36" RIVIERA STONE	43	52 FT
3 PIECE PAVER	2	52 FT
ARTIFICIAL TURF	543	52 FT

STERLING LIGHTING	Qty	Size
SPOT LIGHT	10	
PATH LIGHT	10	
WALL LIGHT	3	

DRAINAGE	Qty	Size
DECK DRAIN	2	
2" PIPE	13	FT



Sheet 01

Date: 09.20.23

San Rev: 03 Ver: 2

Job Number: 200

File Number: 200

Sandefur Residence

610 East Government St.
Pensacola, FL



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Designed by	Checked by	Created by
MATT B. MARKHAM	LALI	MATT B. MARKHAM

DRIVEWAY

MEGA-CAMBRIDGE™

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LOW MAINTENANCE AND DURABLE PAVER THAT GIVES YOUR
HARDSCAPE A NATURAL LOOK AND FEEL EVOKING ANOTHER AGE



BELGARD
PAVES THE WAY



AVAILABLE COLORS



AMARETTO



NAPOLI



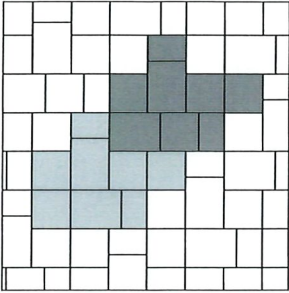
SLATE



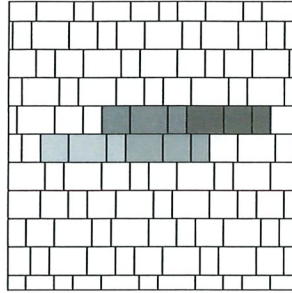
TITANIUM

For additional color options, contact your local sales representative.

LAYING PATTERNS



3-PIECE RUNNING BOND



RUNNING BOND

Visit [Beldgard.com/Patterns](http://Belgard.com/Patterns) for more options.

PALLET INFORMATION

		SQFT/ LAYER	LAYER/ CUBE	SQFT/ CUBE
30MM 3-PIECE	WPB ONLY	8.53	15	128
60MM 3-PIECE	WPB/ORL		12	103
80MM 3-PIECE	WPB/ORL		10	86

	UNITS	PLANTS	SQFT/ PALLET	PIECES/CUBE	LAYERS/ CUBE	PIECES/ LAYER	WEIGHT/ CUBE	NOTES
30MM	RECTANGLE 6X9	JAX	136	96	12	8	1875 lbs	Sold in full cubes only.
	SQUARE 9X9			96	12	8		
	RECTANGLE 9X12			48	12	4		
60MM	RECTANGLE 6X9	JAX/FP /LA	114	80	10	8	3080 lbs	Sold in full cubes only.
	SQUARE 9X9			80	10	8		
	RECTANGLE 9X12			40	10	4		
80MM	RECTANGLE 6X9	JAX/FP	92	64	8	8	3325 lbs	Sold in full cubes only.
	SQUARE 9X9			64	8	8		
	RECTANGLE 9X12			32	8	4		

MEGA-CAMBRIDGE™

PAVER/TILE

LOW MAINTENANCE AND DURABLE PAVER THAT GIVES YOUR HARDSCAPE A NATURAL LOOK AND FEEL EVOKING ANOTHER AGE

FEATURES & BENEFITS

- Gently rounded corners with domed "pillow-top" surface
- Clean lines and an architectural appearance
- Wide range of natural color blends

SHAPES & SIZES

3-PIECE TILE 30MM*



6 x 9 x 1 3/4



9 x 9 x 1 3/4



9 x 12 x 1 3/4

3-PIECE MODULAR 60MM



6 x 9 x 2 3/8



9 x 9 x 2 3/8



9 x 12 x 2 3/8

3-PIECE MODULAR 80MM



6 x 9 x 3 1/8



9 x 9 x 3 1/8



9 x 12 x 3 1/8

*30mm not recommended for vehicular use.



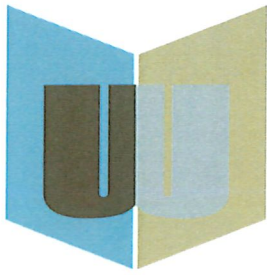
POOL TILE



WHITE FIRE BOWLS WITH WATER 36" X 36" X 12" HIGH



POOL PLASTER FRENCH GRAY



THE WALLACE company

COMPLETE LANDSCAPE SOLUTIONS



Sylvester Palm 5'-6' ct



Splitleaf Philodendron



Sabal Palm



Windmill Palm



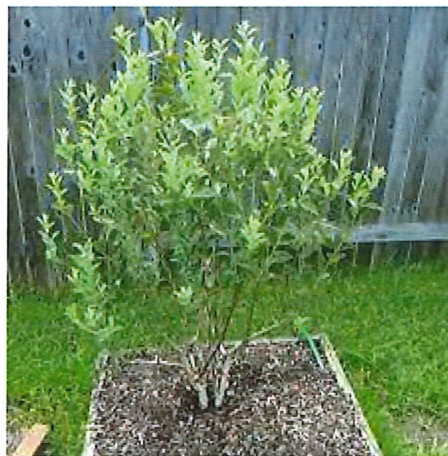
Var Shell Ginger



Dwarf Adagio Grass



Croton



Blueberry



Property of Edible Landscaping LLC

Rosemary



Sunshine Ligustrum



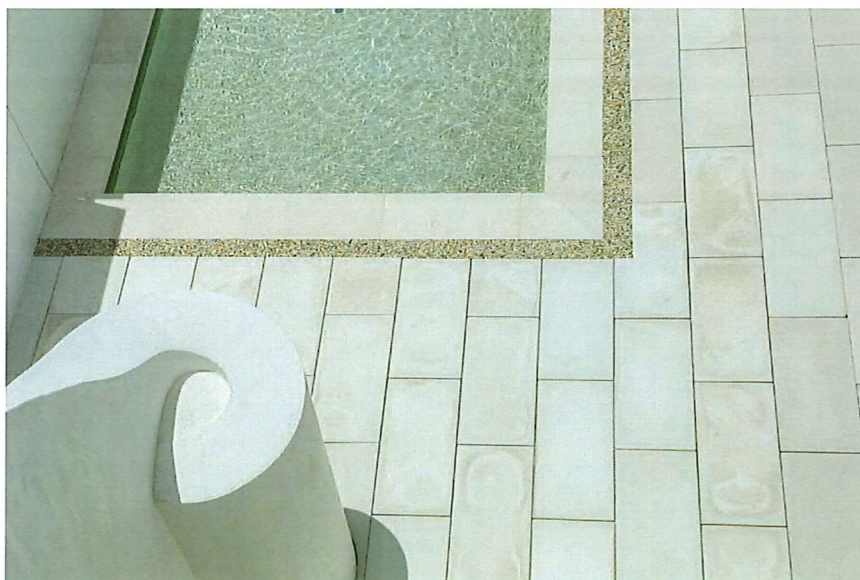
Liriope



Lady Palm



Triple European Fan Palm



Riviera Stone 12"x24" (White) for Pool Deck and Coping



Sterling SL02 Inline



Sterling SL07 Path



Sterling SL01 Spot



SL01 Up Light

Color Temp.	2700K/3000K/4000K/5000K
Lumen Output	230 lm - 730 lm
Wattage	3W - 10.5W
CRI	92+



SL02 In Line Light

Color Temp.	2700K/3000K
Lumen Output	60 lm
Wattage	1W
CRI	82+



SL04 Mini Flood Light

Color Temp.	2700K/3000K
Lumen Output	100 lm - 430 lm
Wattage	1.5W - 6.5W
CRI	92+



SL05 Step Light

Color Temp.	2700K/3000K
Lumen Output	5 lm - 50 lm
Wattage	0.5W - 3.5W
CRI	97+



SL06 Well Light

Color Temp.	2700K/3000K/4000K/5000K
Lumen Output	0 lm - 1,000 lm
Wattage	0W - 12W
CRI	97+



SL07 Path Light

Color Temp.	2700K/3000K
Lumen Output	210 lm
Wattage	5W
CRI	92+



SL07B Bollard Light

Color Temp.	2700K/3000K
Lumen Output	210 lm
Wattage	5W
CRI	92+



SL07P Pinnacle Light

210 lm	2700K/3000K
Lumen Output	210 lm
Wattage	5W
CRI	92+



SL09 Underwater Light

Color Temp.	2700K/3000K
Lumen Output	390 lm
Wattage	4.6W
CRI	83+



SL11 Archer Light

Color Temp.	2700K/3000K
Lumen Output	230 lm or 320 lm
Wattage	4W or 7.3W
CRI	97+



SL12 Hanging Light

Color Temp.	2700K/3000K
Lumen Output	0 lm - 250 lm
Wattage	0W - 6.3W
CRI	98+



SL13 Dock Light

Color Temp.	2700K/3000K
Lumen Output	35 lm
Wattage	4.5W
CRI	92+



SL17 Riley Light

60 lm	2700K/3000K
Lumen Output	60 lm
Wattage	1W
CRI	83+



SL21 Up Light

Color Temp.	2700K/3000K
Lumen Output	0 lm - 1,000 lm
Wattage	0W - 12W
CRI	97+



SL23 Down Light

Color Temp.	2700K/3000K
Lumen Output	0 lm - 805 lm
Wattage	0W - 12W
CRI	92+



SL24 Flood Light

Color Temp.	2700K/3000K
Lumen Output	0 lm - 650 lm
Wattage	0W - 10W
CRI	92+



SL31 Mini Up Light

Color Temp.	2700K/3000K/5000K
Lumen Output	0 lm - 275 lm
Wattage	0W - 4W
CRI	97+



SL33 Mini Down Light

Color Temp.	2700K/3000K/5000K
Lumen Output	0 lm - 150 lm
Wattage	0W - 4W
CRI	90+



SL36 Mini Well Light

100 lm	2700K/3000K
Lumen Output	100 lm
Wattage	1.6W
CRI	94+



Cafe Lights

Color Temp.	2200K
Lumen Output	80 lm
Wattage	1W/bulb
CRI	80+



SYNLAWN®

Plant-Based Artificial Grass

PRODUCT SPECIFICATIONS



SYNAUGUSTINE X47

A TOP SELLER, this grass variety rises above the competition with the safest and softest turf blades and incredible durability. Featuring Super Yarn™ technology, the multi-color grass blades and dense thatch combine to make this the #1 contender.



SUPER YARN™ TECHNOLOGY

SANITIZED®
ANTIMICROBIAL

DUALCHILL™
IR REFLECTIVE

STATBLOCK™
ANTI-STATIC



SKU	SAX47
Grass Zone Yarn/Color	PE / Field Green / Olive / Apple
Grass Zone Denier	9,900 / 9
Thatch Zone Yarn/Color	PE / Field Green / Beige
Thatch Zone Denier	5,000 / 8
Grass Zone Yarn Shape	Soft Omega
Finished Pile Height	1 5/8"
Finished Pile Weight	100 oz.
Backing	13PP/18PET 2pt / 22oz. EnviroLoc+™
Tuft Gauge	3/8"
Total Weight	128 oz.
Tuft Bind	> 8 lbs.
Permeability	> 1,000 inches p/hr
Features	Sanitized®, EnviroLoc+™, StatBlock™ Anti-Static, DualChill™ IR Reflective, Deluster, UV Stabilizers
Test Data	ASTM E108 CLASS A FIRE, D2859, E648, F1292, F1551, F1951, CAL 1350, PFA-FREE



UNMATCHED LIFETIME WARRANTY



OPTIMAL DRAINAGE > 1,000" P/HR



USE IN ALL CLIMATES AND REGIONS



SAFE FOR CHILDREN AND PETS

ASK ABOUT OUR...
**USDA CERTIFIED
ORGANIC INFILL
SYSTEM**



**USDA
CERTIFIED
BIOBASED
PRODUCT**
PRODUCT 67%

SYNAugustine X47 is a USDA Certified Bio-Based artificial grass system in combination with organic infill, able to display a unique USDA label highlighting its percentage of biobased content.


LANDSCAPE


PETS


PLAY


ROOFTOP



SYNLAWN®
a sportgroup company

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SPECIFICATIONS SUBJECT TO CHANGE

Page 31 of 168
12/01/2022



City of Pensacola

222 West Main Street
Pensacola, FL 32502

Memorandum

File #: 23-1081

Architectural Review Board

12/21/2023

LEGISLATIVE ACTION ITEM

SUBJECT:

**433 E. Zarragossa Street
Pensacola Historic District / Zone HC-1 / City Council District 6
Change of Windows on Accessory Building at a Contributing Structure**

SUMMARY:

Arthus Davis is seeking approval to replace five windows on an accessory building at a contributing structure. Five existing wood windows are to be replaced with vinyl windows that match the sides and rear of the primary structure with six over six grilles-between-the-glass. The proposed vinyl windows have already been purchased.

Please find attached all relevant documentation for your review.

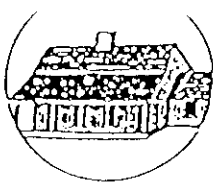
RECOMMENDED CODE SECTIONS

Sec. 12-3-10(1)d.2. Pensacola Historic District; Procedure for Review; Decisions.

Sec. 12-3-10(1)f.6. PHD; Restoration, rehabilitation, alterations or additions to existing contributing structures in the historic district; Windows.

ATTACHMENTS:

1. Florida Master Site File Form
2. Images
3. Application and Materials



HISTORICAL STRUCTURE FORM FLORIDA SITE FILE

Version 2.0 7/92

☒ Original
☒ Update

Site #8 ES 2500
Recorder #
Field Date 4/25/95
Form Date 7/25/95

SITE NAMES (addr. if none) 433 E. ZARAGOZA ST.SURVEY PENSACOLA HISTORIC DISTRICTNATIONAL REGISTER CATEGORY

[MULT. LIST. #8

[SURVEY #

4758☒ building

structure

☒ district

site

object

LOCATION IDENTIFICATION

ADDRESS (Include N,S,E,W; st., ave., etc.) 433 E. ZARAGOZA ST.CROSS STREETS nearest/between BETW. S. ALCANIZ ST. AND S. FLORIDA BLANCA ST.NEAREST CITY/TOWN PENSACOLACOUNTY ESCAMBIA

IN CURRENT CITY LIMITS

☒ yes

no

SUBDIVISION NAME PENSACOLA HIST DIST BLOCK 5 TAX PARCEL # 9001-005-003OWNERSHIP private-profit priv-nonprofit ☒ priv-indiv priv-unspecified city county state federal unknownNAME OF PUBLIC TRACT (e.g., park) OLD CITY TRACTROUTE TO

MAPPING

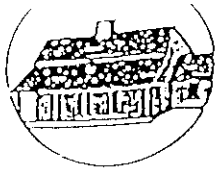
USGS 7.5' MAP NAME 30087-D2-TF-024 1987TOWNSHIP 2S RANGE 30W SECT. 46 1/4[UTM: ZONE 16 17 EASTING NORTHING]PLAT OR OTHER MAP (Map's name, location)

DESCRIPTION

STYLE FRAMSTRUCTURAL SYSTEMS WFFOUNDATION: Types PIEREXTERIOR FABRICS WTBDROOF: Types HIPSecondary strucs. (dormers etc.) CHIMNEY: No. 1 Materials BRICWINDOWS (types, materials, and placements) DHS, 2/4, WOODMAIN ENTRANCE (stylistic details) PORCHES: #open #closed #incised Locations ONE HALF WIDTH PORCH ON RIGHTPorch roof types SIDE OF HOUSEEXTERIOR ORNAMENT GINGERBREAD PORCH POSTS AND POST ROOF TRIMINTERIOR PLAN SURROUNDINGS (N=None, S=Some, M=Most, A=All or nearly all) excellent ☒ good fair deteriorated ruinousANCILLARY FEATURES (No., type of outbuildings; major landscape features) commercial residential institutional ruralARCHAEOLOGICAL REMAINS AT SITE Archaeological form completed? y n (No-explain; yes-attach!)Artifacts or other remains

NARRATIVE (E.g. description of interior, landscape, architecture, etc; please limit to 3 lines and attach full statement on separate sheet)

This is a fairly large house which sits about two feet off the ground on brick piers.
There is a half-width porch on the right side of the house which has gingerbread rails
and post-roof trim. There is a two-pinnacled brick chimney sitting on the left side of the
hip roof. There has been a left; front gabled-roof wing added to the house.



HISTORICAL STRUCTURE FORM

Site #8 _____

HISTORYCONSTRUCTION DATE 1895 CIRCA xyes noARCHITECT: (last name first) UNKNOWNBUILDER: (last name first) UNKNOWNMOVES yes no Dates _____ Orig. addr. _____ALTERATIONS yes no Dates _____ Nature _____ADDITIONS yes no Dates _____ Nature _____ORIGINAL USES (give dates) RESIDENCE

INTERMEDIATE USES (give dates) _____

PRESENT USES (give dates) RESIDENCEOWNERSHIP HISTORY (especially original owner) MARY MILLER (ORIGINAL),BEN B. HOOD AND CAROL A. HOOD (CURRENT)**SURVEYOR'S EVALUATION OF SITE**

Potentially elig. for local designation? yes no insuff. info
 Individually elig. for Nat. Register? yes no insuff. info
 Potential contributor to NR district? yes no insuff. info

Local Designation Category _____

HISTORICAL ASSOCIATIONS (ethnic heritage, etc.) _____

EXPLANATION OF EVALUATION (required; limit to three lines; attach full statement on separate sheet)

CROSS-REFERENCES

BIBLIOGRAPHIC REFERENCES (Author, date, title, publication information. If unpublished, give FSF Manuscript Number, or location where available) _____

PHOTOGRAPHS (REQUIRED) B&W print(s) at least 3 x 5, at least one main facade. Label the back of the print with the FSF site number (site name if not available), direction and date of photograph: use pencil. Attach to back of the second to last page with a plastic or coated clip.
 Location of negatives/neg. nos. R8, F19-20

RECORDERNAME (last first)/ADDR/PHONE/AFFILIATION HPPBFOR DETAILED INSTRUCTIONS: *Guide to the 1992 Historic Structure Form of the Florida Site File.*

DEPT. USE ONLY		OFFICIAL EVALUATIONS				DHR USE ONLY	
NR DATE	KEEPER NR ELIGIBILITY	Y	N	PE	N	Date	
DELIST DATE	SHPO NR ELIGIBILITY	Y	N	PE	N	Date	
	LOCAL DESIGNATION					Date	
	Local office						

* y=Yes; n=No; pe=Potentially Eligible; n=Insufficient Information

REQUIRED:

- (1) USGS MAP WITH STRUCTURE PINPOINTED
- (2) LARGE SCALE STREET OR PLAT MAP
- (3) PHOTO OF MAIN FACADE, PREFER B&W, AT LEAST 3X5



Sanders Beach

INNER HARBOR CHANNEL

433 E. ZARAGOZA

502500



433 E. Zarragossa Street



**Architectural Review Board Application
Full Board Review**

Application Date: 16 Nov 2023

Project Address: 433 E Zaragoza St
Applicant: Arthur Davis
Applicant's Address: 1215 E Gadsden St Pensacola FL 32501
Email: davisad551@gmail.com **Phone:** 575-749-9683
Property Owner: Meant to Be Reward LLC

District: ☒ **PHD** ☐ **NHPD** ☐ **OEHPD** ☐ **PHBD** ☐ **GCD**
(If different from Applicant)

Application is hereby made for the project as described herein:

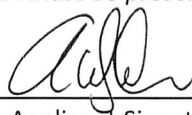
- ☒ Residential Homestead – \$50.00 hearing fee
☐ Commercial/Other Residential – \$250.00 hearing fee

** An application shall be scheduled to be heard once all required materials have been submitted and it is deemed complete by the Secretary to the Board. You will need to include eight (8) copies of the required information. Please see pages 3 – 4 of this application for further instruction and information.*

Project specifics/description:

Replace five windows on backyard outbuilding. Outbuilding is behind and not visible form the
street. Vinyl windows will replace wood, but design and color will remain the same. Main house
has vinyl windiws in sides and back from 2015 renovation. Windows have been purchased. I am
I am asking for consideration as the 6x6 window grille is inside the panes but the structure is a
backyard outbuilding.

I, the undersigned applicant, understand that payment of these fees does not entitle me to approval and that no refund of these fees will be made. I have reviewed the applicable zoning requirements and understand that I must be present on the date of the Architectural Review Board meeting.



Applicant Signature

16 Nov 2023

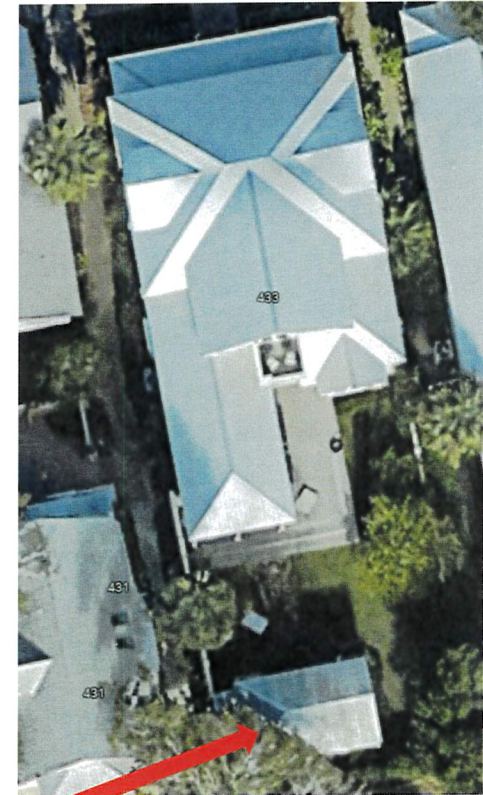
Date

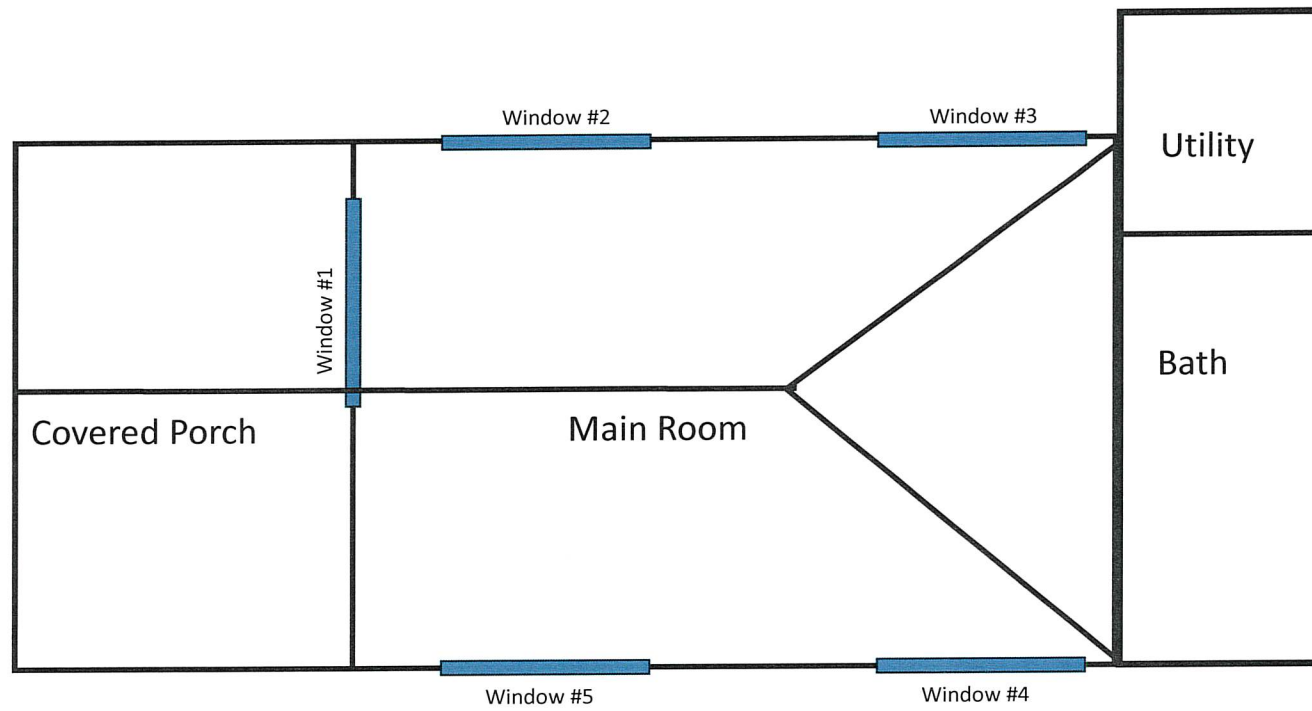
Planning Services
222 W. Main Street * Pensacola, Florida 32502
(850) 435-1670
Mail to: P.O. Box 12910 * Pensacola, Florida 32521

433 E Zaragoza St.



Guest cottage *behind* 433 E Zaragoza St.







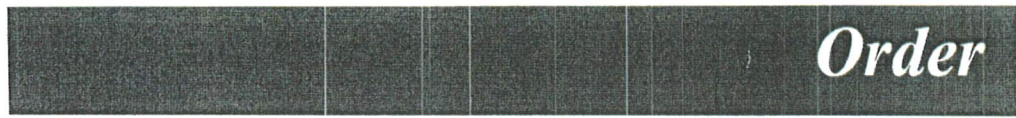
Window #5

Window #4



Window #1





Order

By: Jackie Rivera

Order: 947405

100 S.W. 44th Avenue, Ocala, FL 34474
Ph: 352-368-6922 Fax: 352-368-2928

Attention: forrest@folkers.com

Order Date: 9/19/2023

Est. Ship Date: 10/16/2023

Route: PEN

Cust No. WEM100-P3491

Cust PO#: DAVIS 31701

FOLKERS WINDOW COMPANY#	
Bill To:	Ship To:
5030 COMMERCE PARK CIRCLE PENSACOLA, FL 32505 Ph: 850 477-1772	SHIP TO 5030 COMMERCE PARK CIRCLE PENSACOLA, FL 32505 Ph: 850 477-1772

Order

Item No. 1 Qty: 2 Window for main house upstairs x 2

Model: 6100-SH Color: WHITE

Desc: Series 6100 Storm Strong Single Hung DP:+50/-50, CUSTOM GRILL
LOCATIONS-SEE VARIABLES, [FLANGE], [AUTO-LOCK], WHITE FRAME, 18 x16
Screen

LOW E 366, Insulated, IMPACT, FLANGE

ROLL FORMED Half Screen

CUSTOM GRIDS AS SHOWN, SCREEN

AAMA Std. Gold Labeling

2 WIDE

FPA #17791.1, WHITE

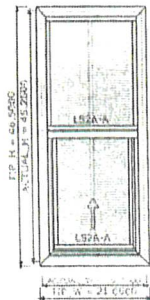
DOES NOT MEET EGRESS, ID: A

Dimensions

TIP: 21 x 46 1/2

ACTUAL: 19 3/4 x 45 1/4

SCREEN: 18 X 16



6100-SH- NFRC Rating: GWS-K-29-00649-00001 / U-Factor=0.29, Solar SHGC=0.2, V-Transmit=0.44

Item No. 2 Qty: 5 Windows for guest cottage x 5

Model: 610-SH Color: WHITE

Desc: 610 Aria Series Single Hung DP:+50/-50, CUSTOM GRILL LOCATIONS-SEE
VARIABLES, [FLANGE], [AUTO-LOCK], WHITE FRAME, 18 x16 Screen

LOW E 366, Insulated, FLANGE

ROLL FORMED Half Screen

CUSTOM GRIDS AS SHOWN, SCREEN

AAMA Std. Gold Labeling

3 WIDE, 2 HI

FPA #17234.1, WHITE

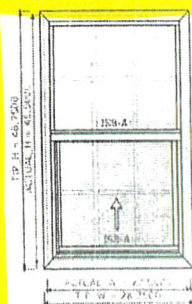
DOES NOT MEET EGRESS, ID: B

Dimensions

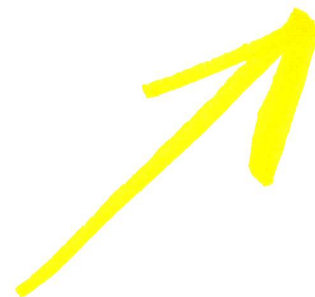
TIP: 26 3/4 x 46 3/4

ACTUAL: 27 1/2 x 45 1/2

SCREEN: 18 X 16



610-SH- NFRC Rating: CWS-K-29-00712-00002 / U-Factor=0.29, Solar SHGC=0.2, V-Transmit=0.45





City of Pensacola

222 West Main Street
Pensacola, FL 32502

Memorandum

File #: 23-1082

Architectural Review Board

12/21/2023

LEGISLATIVE ACTION ITEM

SUBJECT:

**517 E. Government Street
Pensacola Historic District / Zone HC-1 / City Council District 6
Exterior Alteration at a Contributing Structure**

SUMMARY:

Ronald Nelson is seeking approval to add a 46 x 76 inch window opening on the rear of a contributing structure. The proposed window is a Jeld Wen double hung siteline clad Auralast pine window in the color Hartford green with six over six simulated divided lites to match the existing windows. The shutters will be made of red cedar and will be painted green to match the existing and the hinges and tiebacks will match existing.

Please find attached all relevant documentation for your review.

RECOMMENDED CODE SECTIONS

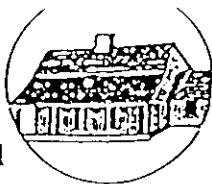
Sec. 12-3-10(1)d.2. Pensacola Historic District; Procedure for Review; Decisions.

Sec. 12-3-10(1)f.6. PHD; Restoration, rehabilitation, alterations or additions to existing contributing structures in the historic district; Windows.

Sec. 12-3-10(1)f.7. PHD; Restoration, rehabilitation, alterations or additions to existing contributing structures in the historic district; Shutters.

ATTACHMENTS:

1. Florida Master Site File Form
2. Images
3. Application and Materials



HISTORICAL STRUCTURE FORM FLORIDA SITE FILE

Version 2.0 7/92

Site #8 652420
Recorder #
Field Date 4/25/95
Form Date 7/19/95

☒ Original
☒ Update

SITE NAMES (addr. if none) 517 E. GOVERNMENT ST. [MULT. LIST. #8]
SURVEY PENSACOLA HISTORIC DISTRICT [SURVEY # 4758]
NATIONAL REGISTER CATEGORY ☒ building ☐ structure ☒ district ☐ site ☐ object

LOCATION IDENTIFICATION

ADDRESS (Include N,S,E,W; st., ave., etc.) 517 E. GOVERNMENT ST.
CROSS STREETS nearest/between SOUTH SIDE, BETW. S. FLORIDA BLANCA AND S. EIGHTH AVE.
NEAREST CITY/TOWN PENSACOLA IN CURRENT CITY LIMITS ☒ yes ☐ no
COUNTY ESCAMBIA TAX PARCEL # 9001-002-095
SUBDIVISION NAME PENSACOLA HIST DIST BLOCK 8 LOT NO. 94
OWNERSHIP ☒ private-profit ☐ priv-nonprofit ☐ priv-indiv ☐ priv-unspecified ☐ city ☐ county ☐ state ☐ federal ☐ unknown
NAME OF PUBLIC TRACT (e.g., park) OLD CITY TRACT
ROUTE TO

MAPPING

USGS 7.5' MAP NAME 30087-D2-TF-024 1987
TOWNSHIP 2S RANGE 30W SECT. 46 1/4 1/4-1/4 IRREG. SECT.? ☐ y ☐ n
[UTM: ZONE 16 17 EASTING 1 1 1 0 NORTHING 1 1 1 0]
PLAT OR OTHER MAP (Map's name, location)

DESCRIPTION

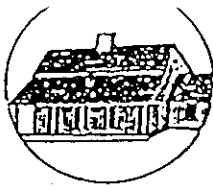
STYLE FRAM EXTERIOR PLAN RECT NO. STORIES 1
STRUCTURAL SYSTEMS WF
FOUNDATION: Types PIER Materials BRIC
EXTERIOR FABRICS WTBD
ROOF: Types HIP Materials SMCO
Secondary strucs. (dormers etc.)
CHIMNEY: No. 1 Materials BRIC LOCATIONS CENTER RIDGE
WINDOWS (types, materials, and placements) DHS, 2/4, WOOD

MAIN ENTRANCE (stylistic details)
PORCHES: #open 1 #closed 0 #incised 0 Locations N/ 1 STORY APRON, 3 BAY,
Porch roof types ACCESS FROM NORTH
EXTERIOR ORNAMENT

INTERIOR PLAN CONDITION: ☐ excellent ☒ good ☐ fair ☐ deteriorated ☐ ruins
SURROUNDINGS (N=None, S=Some, M=Most, A=All or nearly all) ☒ commercial ☐ residential ☐ institutional ☐ rural
ANCILLARY FEATURES (No., type of outbuildings; major landscape features)

ARCHAEOLOGICAL REMAINS AT SITE Archaeological form completed? ☐ y ☐ n (No-explain; yes-attach!)

Artifacts or other remains
NARRATIVE (E.g. description of interior, landscape, architecture, etc; please limit to 3 lines and attach full statement on separate sheet)
This is a small, rectangular-shaped house which sits about two feet off the
ground on brick piers. There is a full-width, front porch which has floor length windows.



HISTORICAL STRUCTURE FORM

Site #8

HISTORYCONSTRUCTION DATE 1860 CIRCA xyes noARCHITECT: (last name first) UNKNOWNBUILDER: (last name first) UNKNOWNMOVES yes no Dates Orig. addr. ALTERATIONS yes no Dates Nature ADDITIONS yes no Dates Nature ORIGINAL USES (give dates) RESIDENCEINTERMEDIATE USES (give dates) PRESENT USES (give dates) RESIDENCEOWNERSHIP HISTORY (especially original owner) FERNANDO BARRIOS (ORIGINAL),
EAST HILL BLUEBERRY CO. (CURRENT)**SURVEYOR'S EVALUATION OF SITE**Potentially elig. for local designation? yes no insuff. infoIndividually elig. for Nat. Register? yes no insuff. infoPotential contributor to NR district? yes no insuff. infoLocal Designation Category HISTORICAL ASSOCIATIONS (ethnic heritage, etc.) EXPLANATION OF EVALUATION (required; limit to three lines; attach full statement on separate sheet)

 CROSS-REFERENCESBIBLIOGRAPHIC REFERENCES (Author, date, title, publication information. If unpublished, give FSF Manuscript Number, or location where available)

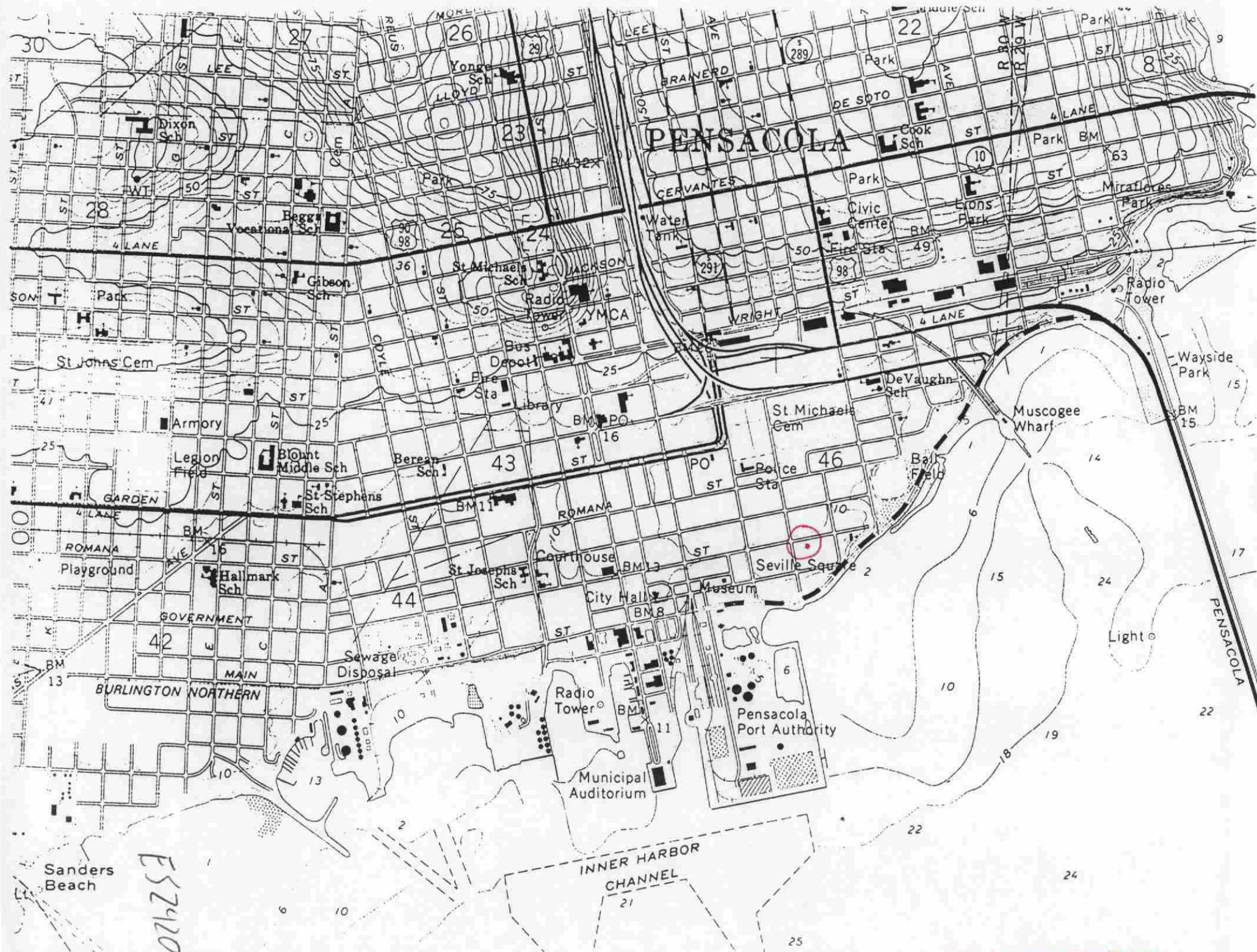
 PHOTOGRAPHS (REQUIRED) B&W print(s) at least 3 x 5, at least one main facade. Label the back of the print with the FSF site number (site name if not available), direction and date of photograph: use pencil. Attach to back of the second to last page with a plastic or coated clip. Location of negatives/neg. nos. R11, F5-6**RECORDER**NAME (last first)/ADDR/PHONE/AFFILIATION HPPBFOR DETAILED INSTRUCTIONS: *Guide to the 1992 Historic Structure Form of the Florida Site File.*

DEPT. USE ONLY		OFFICIAL EVALUATIONS				DEPT. USE ONLY	
NR DATE		KEEPER NR ELIGIBILITY	<u>y</u>	<u>n</u>	<u>pe</u>	<u>ni</u>	Date <u>1/1/92</u>
		SEPC NR ELIGIBILITY	<u>y</u>	<u>n</u>	<u>pe</u>	<u>ni</u>	Date <u>1/1/92</u>
DEPT. DATE		LOCAL DESIGNATION	<u>y</u>	<u>n</u>	<u>pe</u>	<u>ni</u>	Date <u>1/1/92</u>
		Local office					

* y=Yes; n=No; pe=Potentially Eligible; ni=Insufficient Information

REQUIRED:

- (1) USGS MAP WITH STRUCTURE PINPOINTED
- (2) LARGE SCALE STREET OR PLAT MAP
- (3) PHOTO OF MAIN FACADE, PREFER B&W, AT LEAST 3X5



ES2420

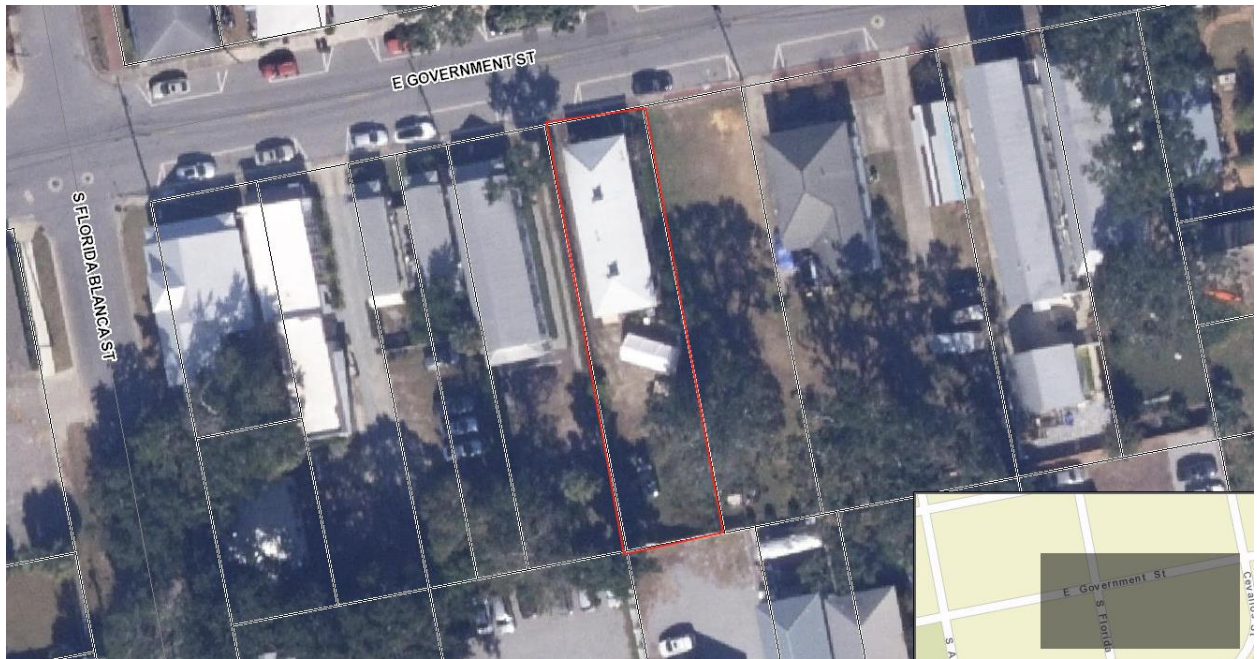


- 1.
2. 517 E. GOVERNMENT ST.
3. J. SCOTT JANCY
4. 25 APRIL 1995
5. HPPB
6. S
7. R11, F5

ES 2920

517 E. GOVERNMENT ST.
J. SCOTT JANCY
25 APRIL 1995
HPPB
S
R11, F5

517 E. Government Street





City of
Pensacola
*America's First Settlement
And Most Historic City*

**Architectural Review Board Application
Full Board Review**

Application Date: 11/30/2023

Project Address: 517 East Government Street

Applicant: Ronald L. Nelson

Applicant's Address: 517 East Government Street

Email: rln@nelsonlawflorida.com **Phone:** 850-434-1700

Property Owner: _____

District: ☒ **PHD** ☐ **NHPD** ☐ **OEHPD** ☐ **PHBD** ☐ **GCD**
(If different from Applicant)

Application is hereby made for the project as described herein:

- ☒ Residential Homestead – \$50.00 hearing fee
☐ Commercial/Other Residential – \$250.00 hearing fee

** An application shall be scheduled to be heard once all required materials have been submitted and it is deemed complete by the Secretary to the Board. You will need to include fourteen (14) copies of the required information. Please see pages 3 – 4 of this application for further instruction and information.*

Project specifics/description:

Install a new 46"x76" window in the rear wall of the building. Window to be a Jeld Wen double hung siteline clad Auralast pine Hartford green impact window with simulated divided lites to match the existing windows. Shutters will be made of red cedar and will be painted green to match existing shutters. Shutter hinges and tiebacks will match those on building.

I, the undersigned applicant, understand that payment of these fees does not entitle me to approval and that no refund of these fees will be made. I have reviewed the applicable zoning requirements and understand that I must be present on the date of the Architectural Review Board meeting.

RLN

Applicant Signature

11/30/2023

Date

Planning Services
222 W. Main Street * Pensacola, Florida 32502
(850) 435-1670
Mail to: P.O. Box 12910 * Pensacola, Florida 32521

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1. Architectural Review Board Application
2. Site Plan
3. Photographs of Building and Views from Building
4. Photographs of Existing Windows
5. Drawings Showing Location of Proposed Window
6. Quote Sheet and Product Literature for Window
7. Quote Sheet and Product Literature for Shutters

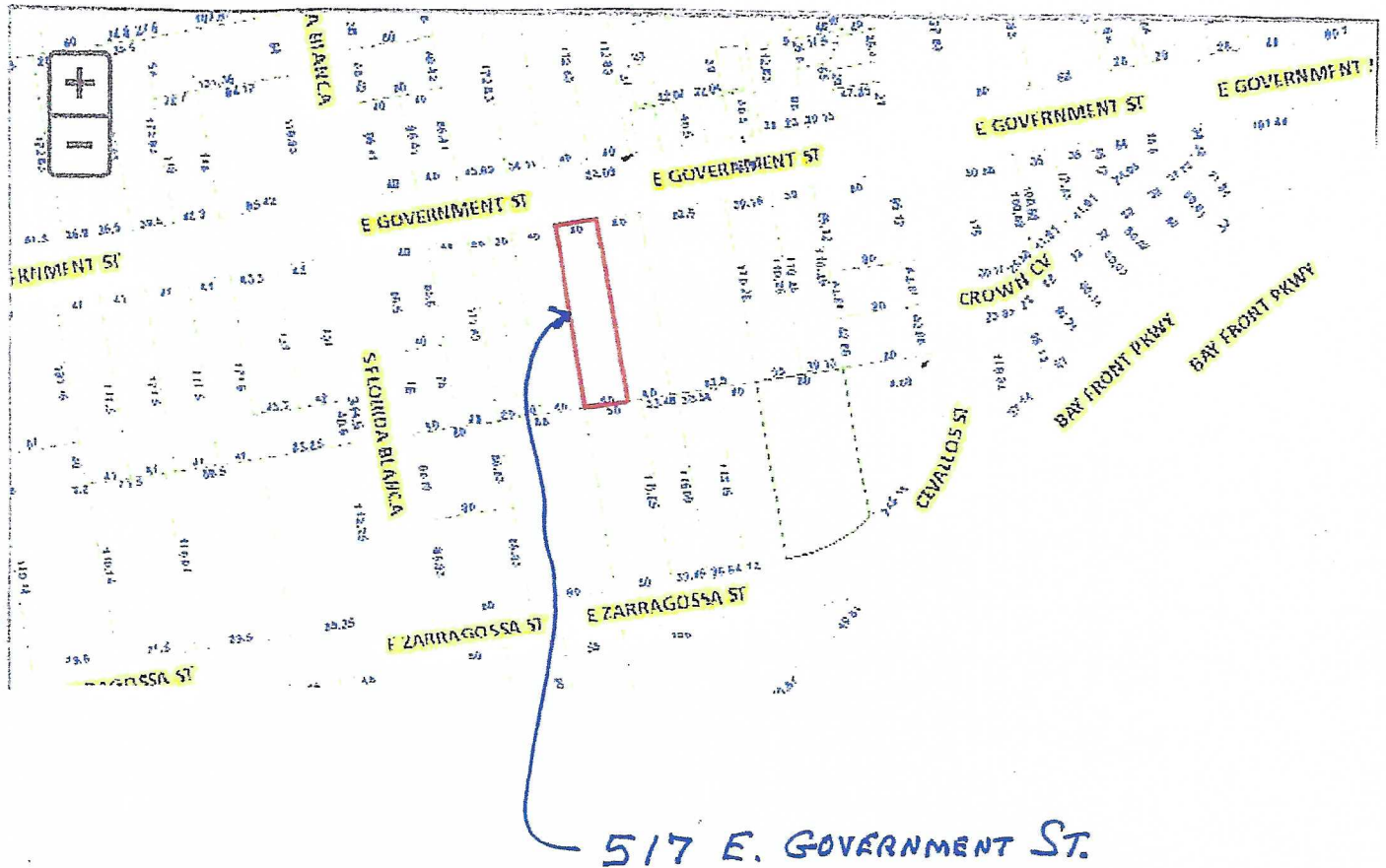
TAB 2

Site Plan

SITE PLAN

517 E. GOVERNMENT ST.

[Page 1 of 3]



SITE PLAN

517 E. GOVERNMENT ST.

[Page 2 of 3]

517 E. GOVERNMENT ST.

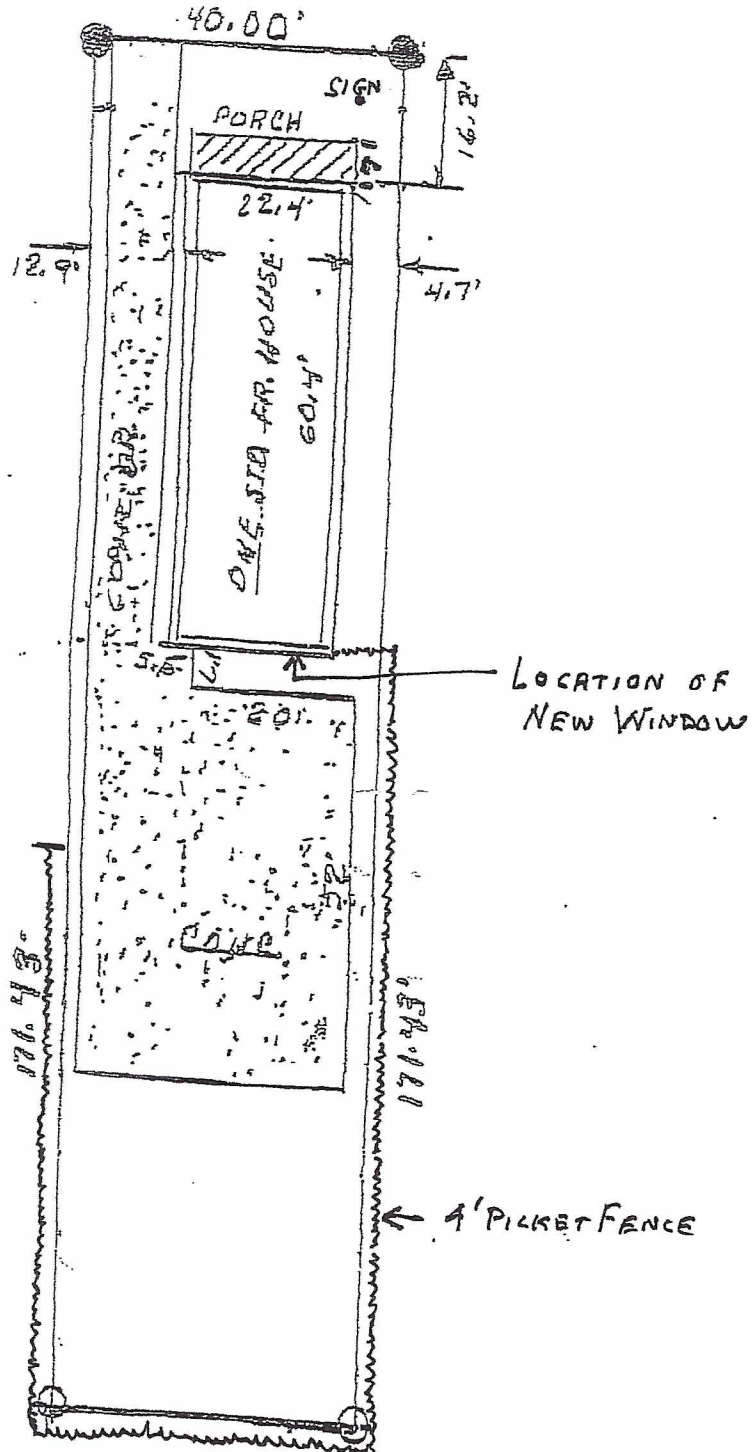


SITE PLAN

517 E. GOVERNMENT ST.

[Page 3 of 3]

← E. GOVERNMENT ST. →

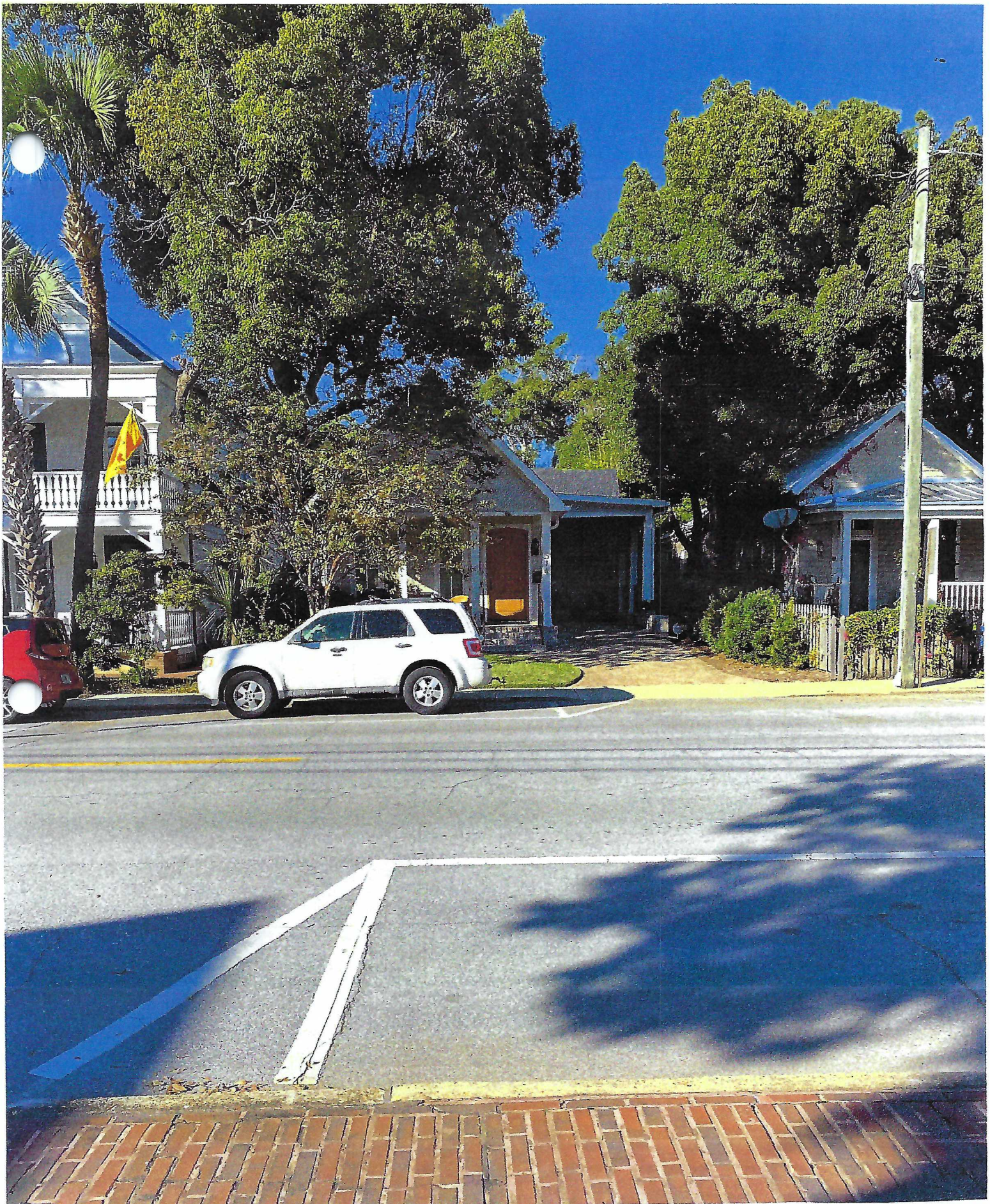


TAB 3

Photographs of Building and Views from Building



NORTH SIDE (FRONT) OF BUILDING



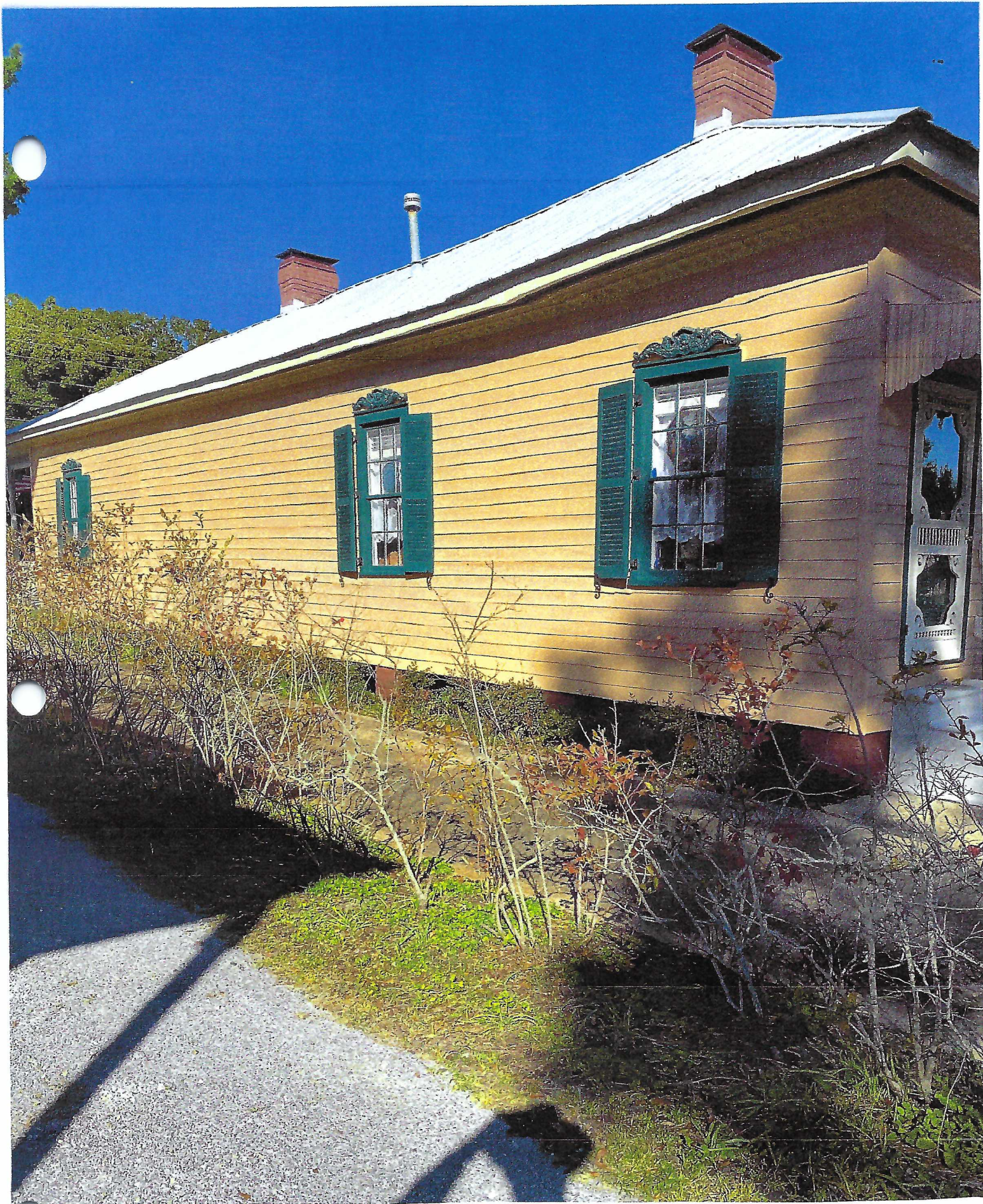
VIEW FROM NORTH SIDE (FRONT) OF BUILDING



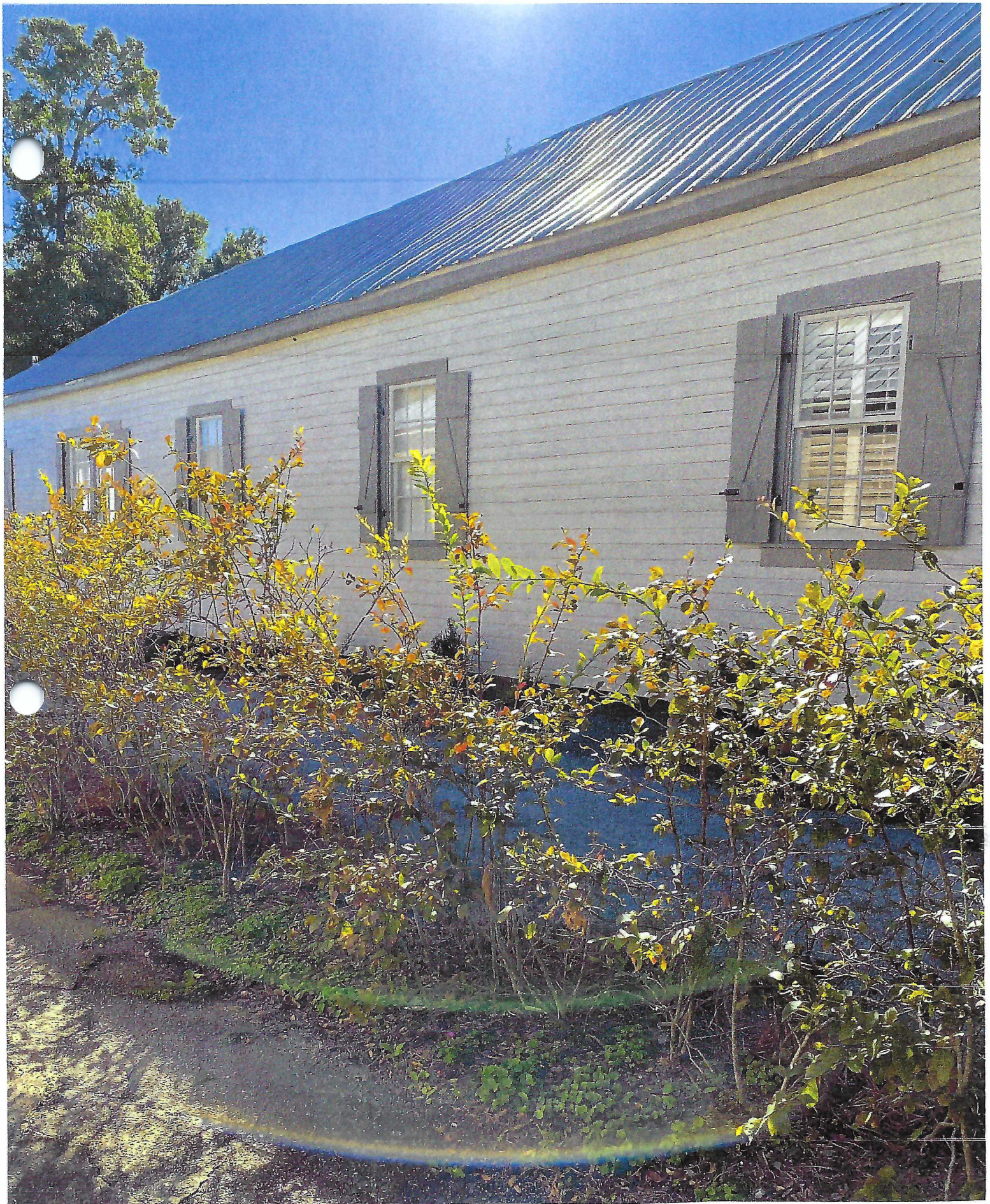
EAST SIDE OF BUILDING



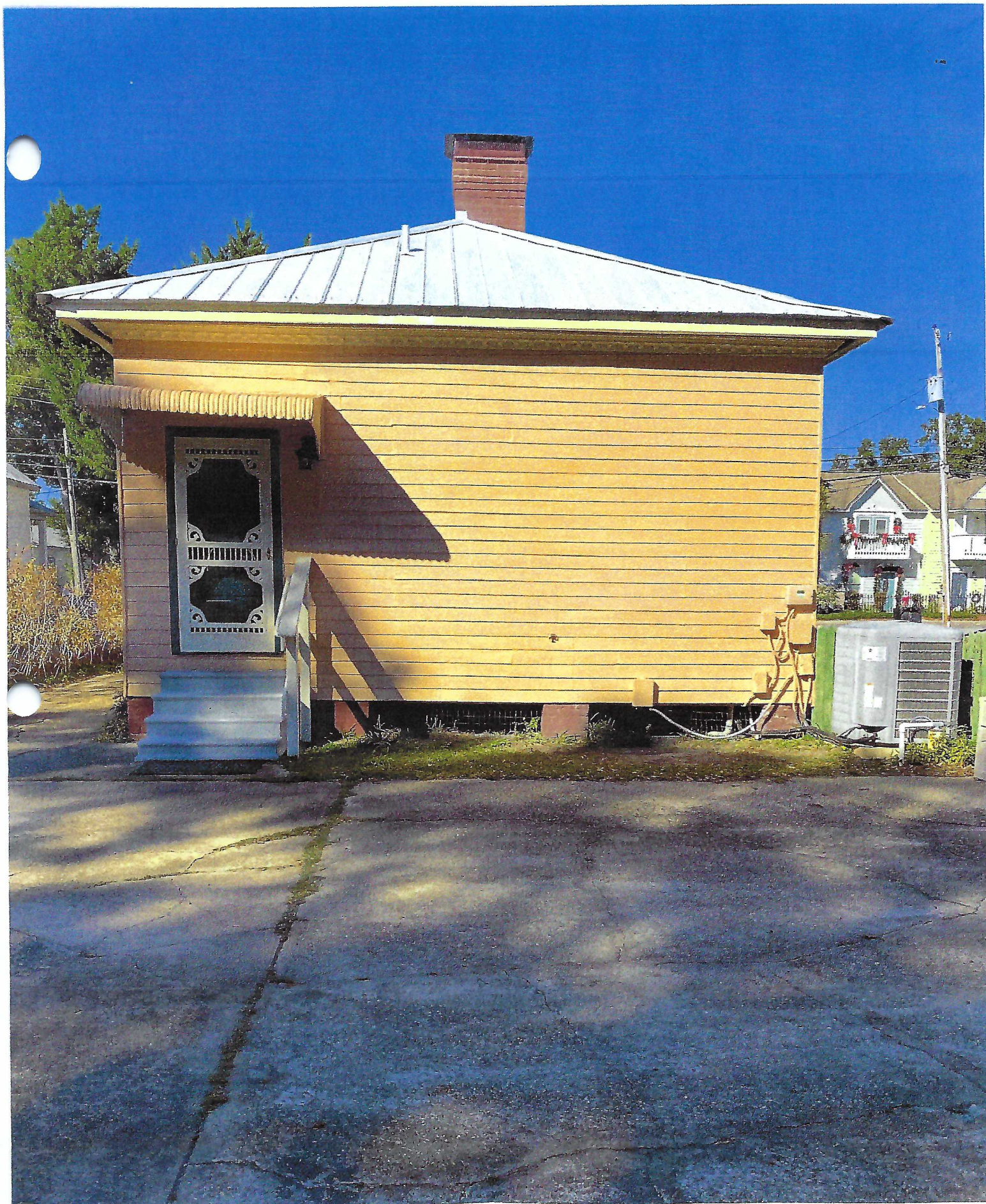
VIEW FROM EAST SIDE OF BUILDING



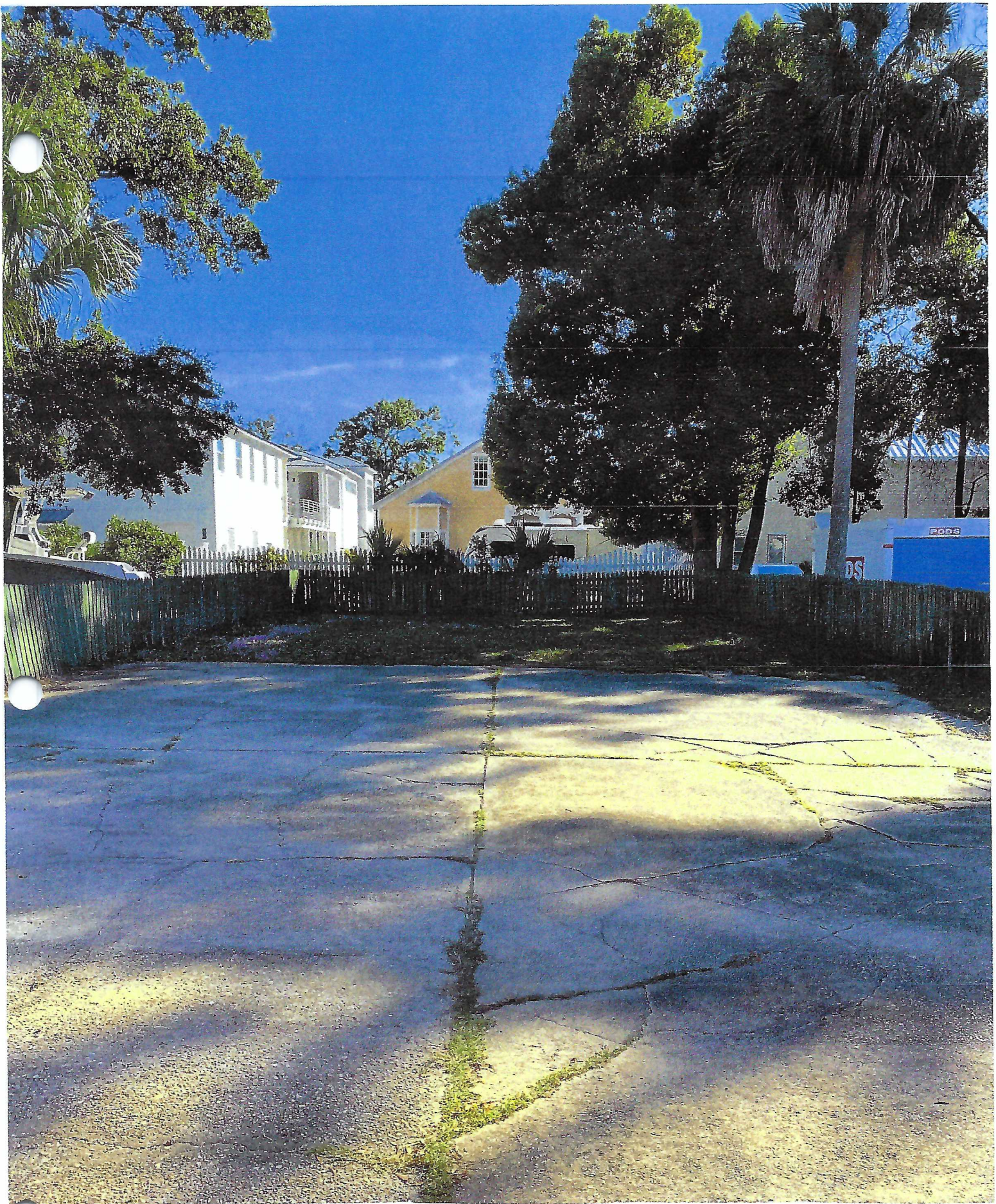
WEST SIDE OF BUILDING



VIEW FROM WEST SIDE OF BUILDING



SOUTH SIDE (BACK) OF BUILDING



VIEW FROM SOUTH SIDE (BACK) OF BUILDING

TAB 4

Photographs of Existing Windows



THERE ARE TWO OF THESE WINDOWS
ON THE NORTH SIDE (FRONT) OF THE BUILDING



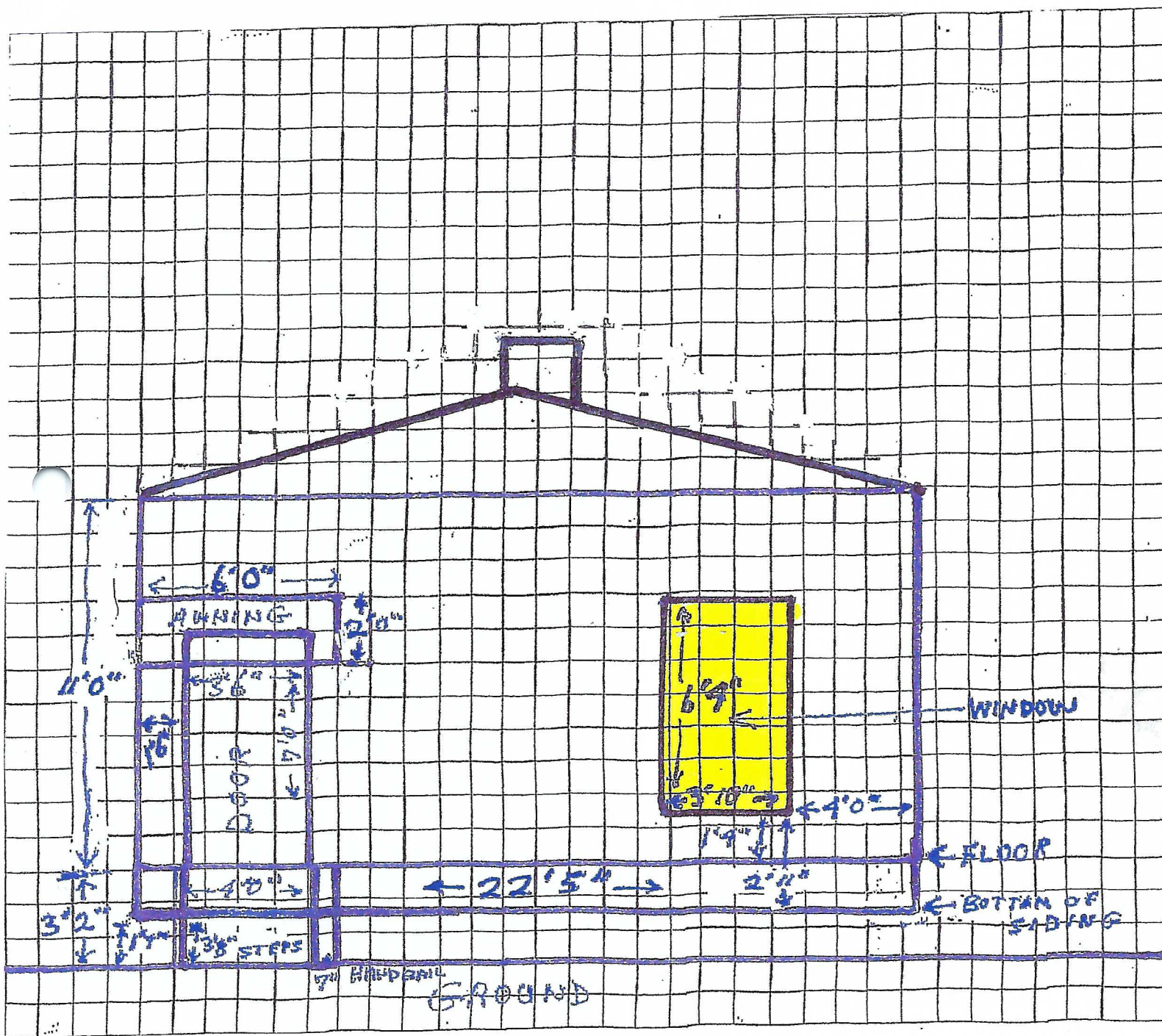
THERE ARE SIX OF THESE WINDOWS ON THE EAST SIDE OF
THE BUILDING, AND THREE OF THESE WINDOWS
ON THE WEST SIDE OF THE BUILDING

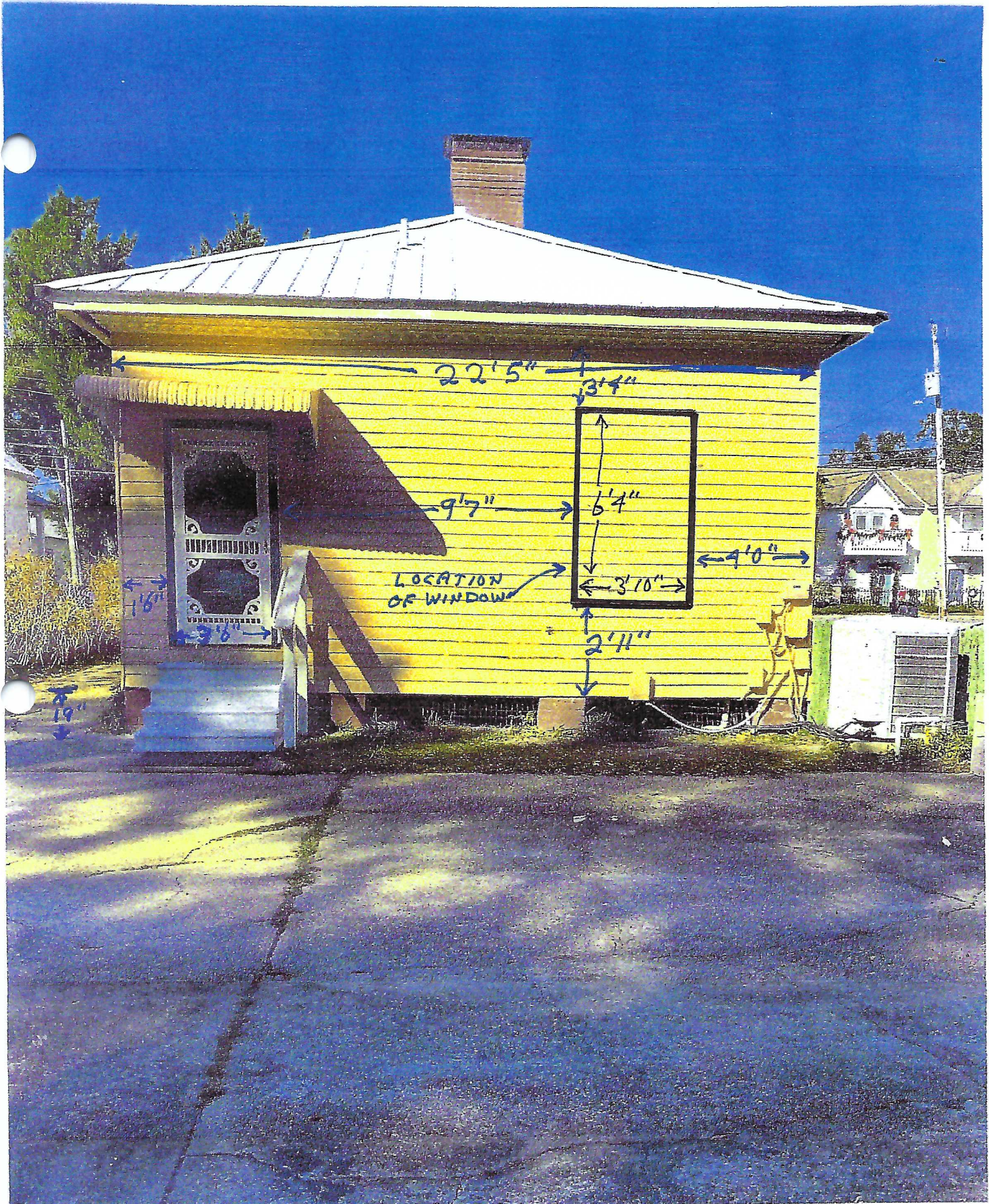
TAB 5

Drawings Showing Location of Proposed Window

LOCATION OF PROPOSED WINDOW IN SOUTH SIDE (BACK) OF BUILDING

SCALE: 1/4" = 1 FOOT





LOCATION OF PROPOSED WINDOW IN SOUTH SIDE (BACK)
OF BUILDING

SCALE: 1/4" = 1 FOOT

TAB 6

Quote Sheet and Product Literature for Window

Jaime Brooks

QUOTE BY : Jaime Brooks

QUOTE # : JW23090103L - Version 0

SOLD TO :

SHIP TO :

PO# :

PROJECT NAME: Mal Sims - 517 E Government

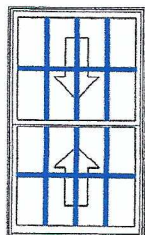
Ship Via : Ground

REFERENCE : Mal Sims

U-Factor Weighted Average: 0.34

SHGC Weighted Average: 0.18

LINE	LOCATION SIZE INFO	BOOK CODE DESCRIPTION	NET UNIT PRICE	QTY	EXTENDED PRICE
Line 1		SCD4576			
	Rough Opening : 46 1/8 X 76 3/4	Frame Size : 45 3/8 X 76 Siteline Clad Double Hung, Auralast Pine, Hartford Green Exterior, Primed Interior, Nail Fin (Standard), Color Match Metal DripCap, 4 9/16 Jamb, Standard Double Hung, White Jambliner, Concealed Jambliner White Hardware, Florida - FBC, Wind Zone 3 Rated, PG 50, (+50/-65) FL# 20118.2 Insulated SunResist Impact w/Annealed Out, PVB Interlayer, Protective Film, Black Spacer, Argon Filled, Traditional Glz Bd, Hartford Green SDL, 5/8" Putty SDL w/Perm Wood Putty Int BAR, Light Bronze Shadow Bar, Colonial All Lite(s) 4 Wide 2 High Top, 4 Wide 2 High Btm, BetterVue Mesh Hartford Green Screen, IGThick=0.706(9/32 / 1/8), The selected colors may vary slightly in appearance between their AAMA-2604 and AAMA-2605 versions. Please contact your sales representative to review color samples as needed prior to finalizing order.. Clear Opening: 41.6w, 34.4h, 9.9 sf U-Factor: 0.34, SHGC: 0.18, VLT: 0.40, Energy Rating: 7.00, CR: 56.00, CPD: JEL-N-880-06517-00001 PEV 2023.3.0.4399/PDV 7.119.(09/06/23)NW			
			\$2,287.54	1	\$2,287.54
			Total:		\$2,287.54



Viewed from Exterior. Scale: 1/2" = 1'

Total Units: 1

AuraLast Protect yourself when you choose JELD-WEN AuraLast pine products backed by a limited lifetime warranty against wood rot and termite damage.



SITELINE® | DOUBLE-HUNG

CLAD-WOOD WINDOWS

ARCHITECTURAL DESIGN MANUAL | July 2023

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TRIM & SILL NOSE OPTIONS	8
JAMB EXTENDER, RETURN KERF & PREP FOR STOOL OPTIONS	9
MULLION OPTIONS	10

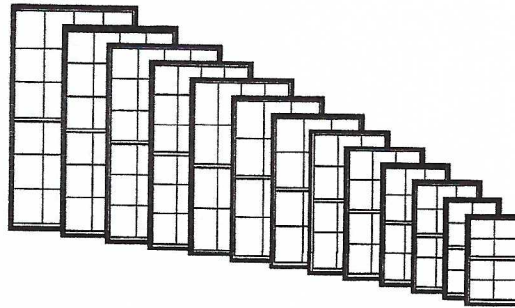
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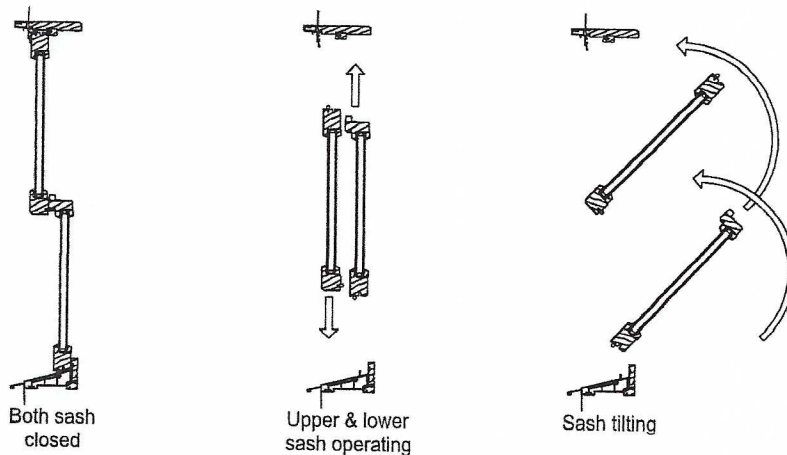
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GENERAL INFORMATION



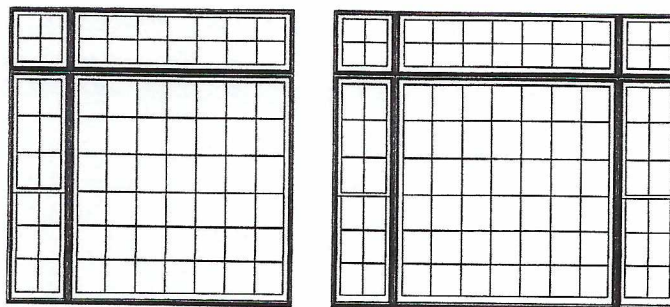
Dimensional Windows

Siteline® Clad-Wood Double-Hung windows may be specified as "dimensional", by adjusting the desired rough opening width or height. Siteline® Clad-Wood Double-Hung windows feature fully operating upper and lower sash which can be tilted or removed for easy cleaning.



Multiple Assemblies

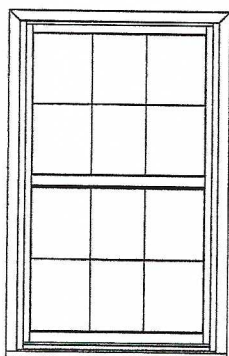
Siteline® Clad-Wood Double-Hung windows may be mulled beside other clad-wood double-hung or clad-wood fixed windows, or below clad-wood transom windows, to fulfill a wide variety of needs.



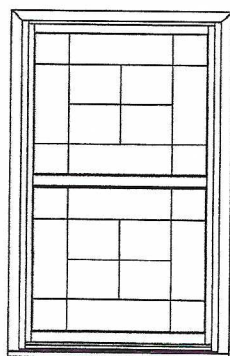
GRID PATTERNS

Siteline® Clad-Wood Double-Hung Windows are available with Grilles Between Glass (GBG), or Simulated Divided Lites (SDL) in various widths and styles. Standard grid patterns are shown below.

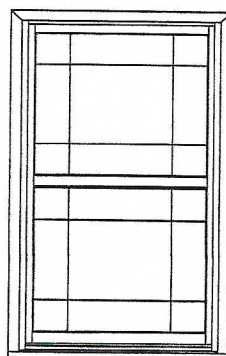
Special grid patterns can include a wide variety of straight line and radius patterns. Non-standard patterns are subject to factory approval.



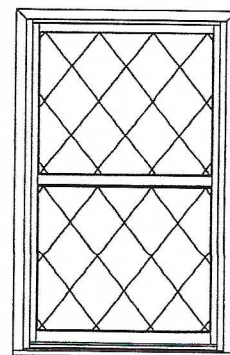
Colonial



Uneven



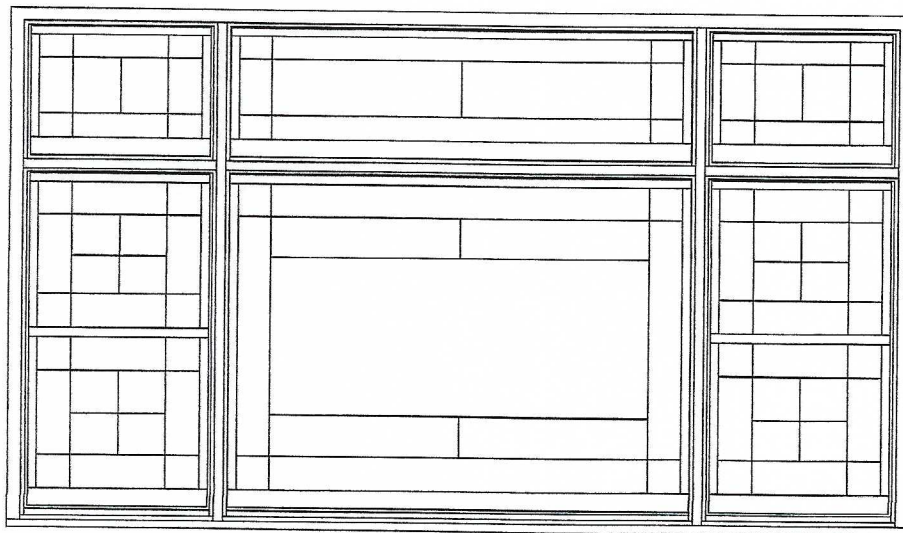
Prairie



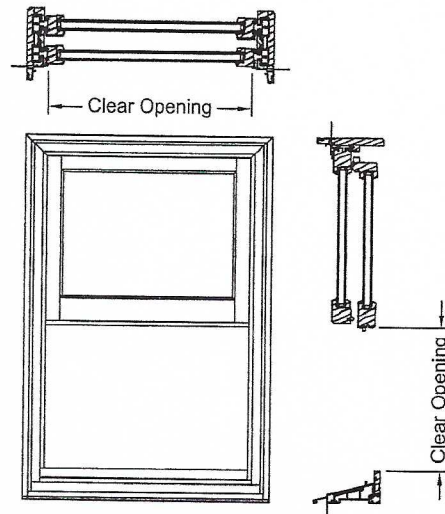
Diamond

Bar Alignment

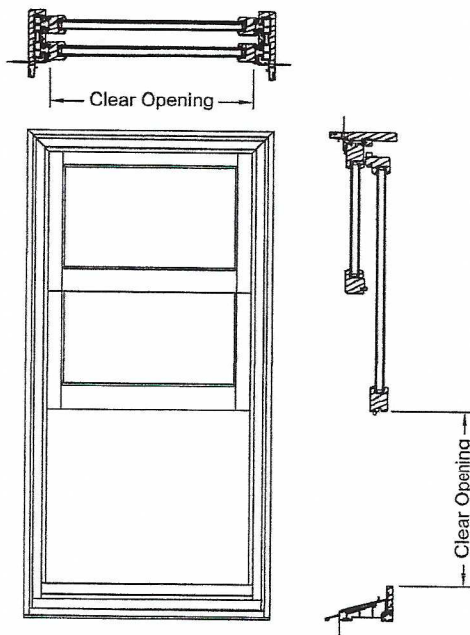
Alignment of bars is often required. SDL, GBG, and wood grilles may be specified with bars aligned.



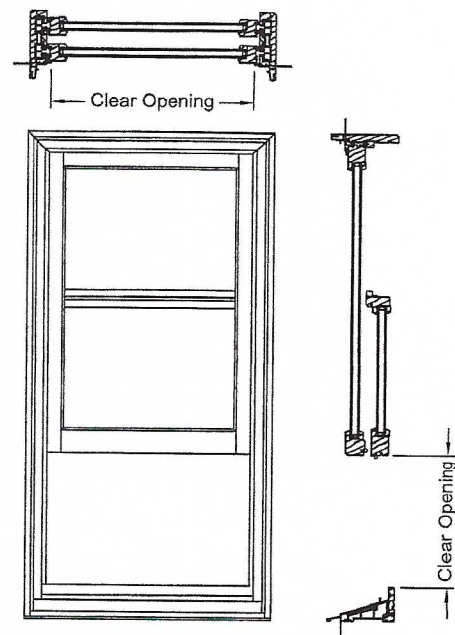
CLEAR OPENING LAYOUT



Double-Hung (Even Divide)
Width = Frame Width - 3 3/4"
Height = (Frame Height / 2) - 3 5/8"



Cottage Double-Hung
Width = Frame Width - 3 3/4"
Height = (Frame Height / 2) - 8 5/32"

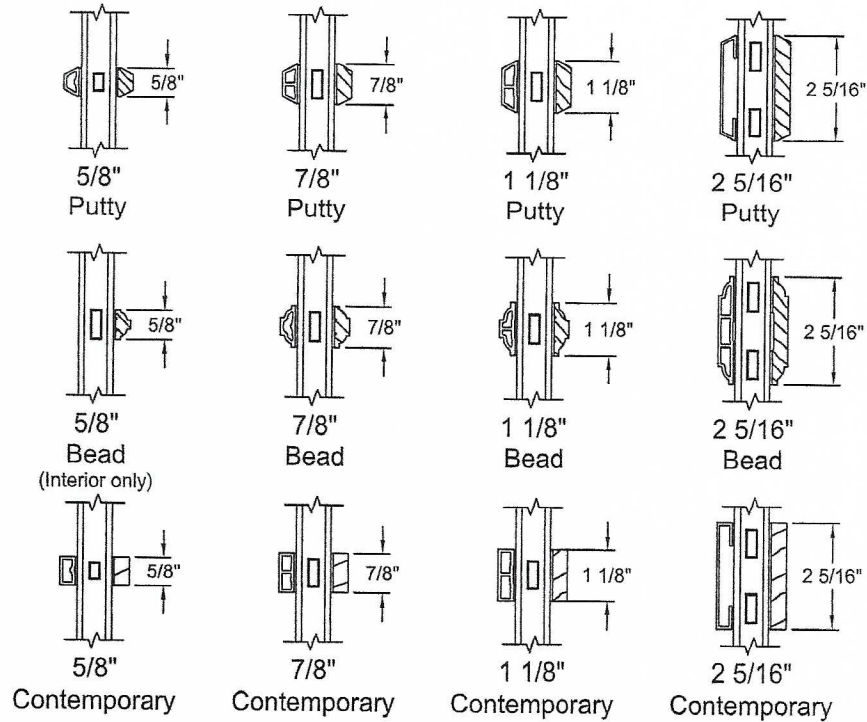


Reverse Cottage Double-Hung
Width = Frame Width - 3 3/4"
Height = (Frame Height / 2) - 7 29/32"

GRID, BOTTOM RAIL & GLASS STOP OPTIONS

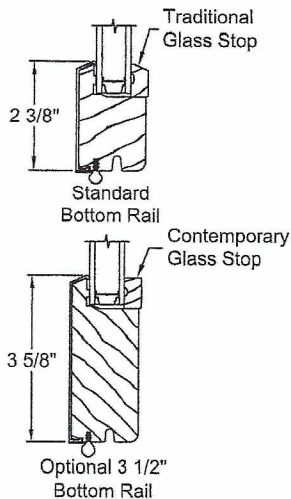
Exterior ← → Interior

SDL Options

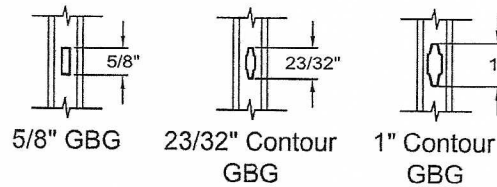


Various Combinations of the SDL Bars Shown are Available

Bottom Rail & Glass Stop Options



GBG Options



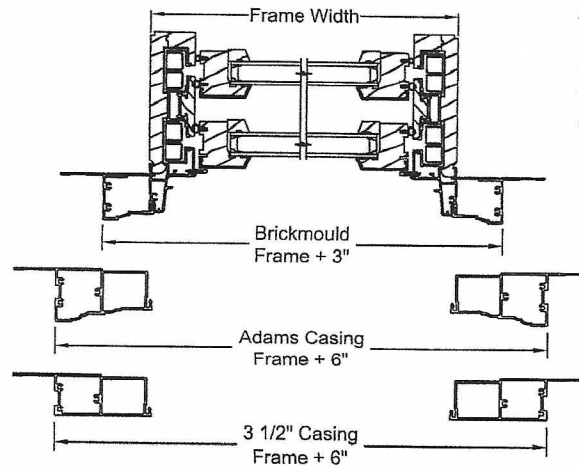
UNIT SIZING

Rough Opening:

The frame size of the window plus 3/4".

Masonry Opening:

The overall size of the window, including trim, plus 1/2"

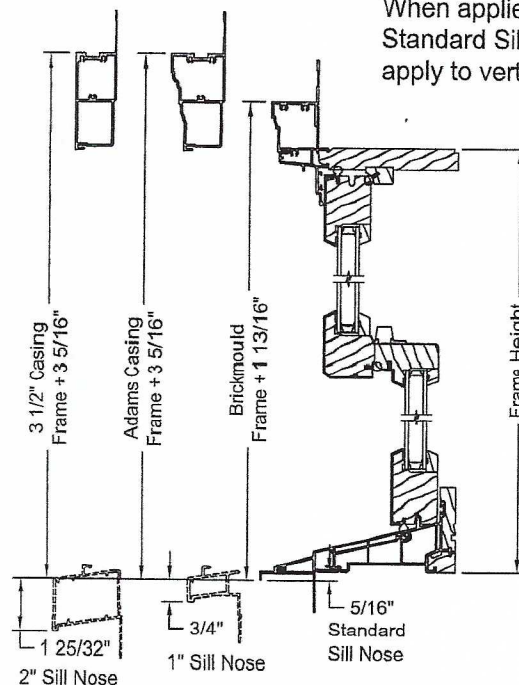


Trim- 4 Sides Of Unit

When applied to 4 sides of unit, these dimensions apply to both vertical and horizontal window sections.

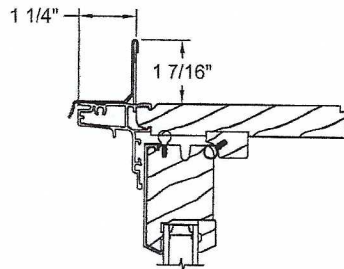
Trim- 3 Sides Of Unit

When applied to 3 sides of unit, with Standard Sill Nose, these dimensions apply to vertical window sections only.

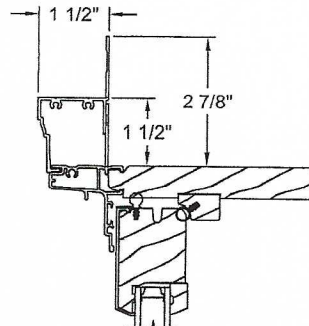


TRIM & SILL NOSE OPTIONS

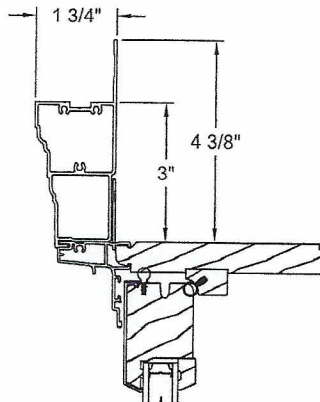
Trim Options



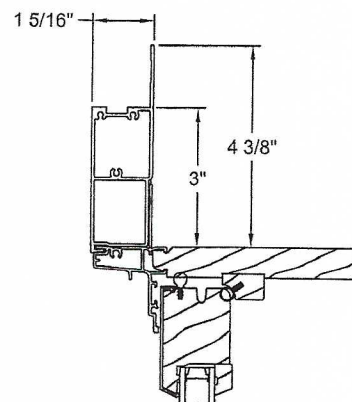
Standard Nail Fin



Brickmould

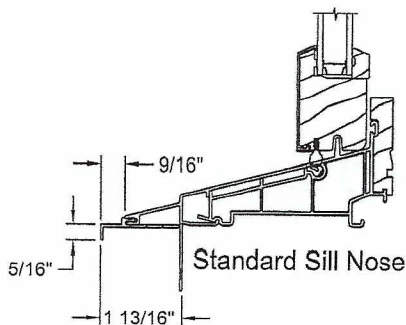


Adams
Casing

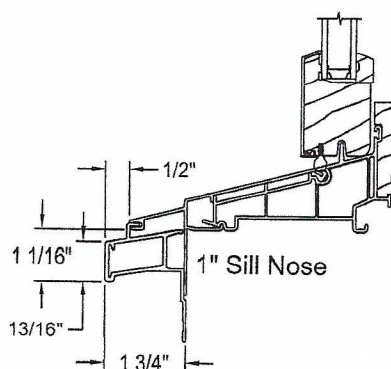


3 1/2" Flat
Casing

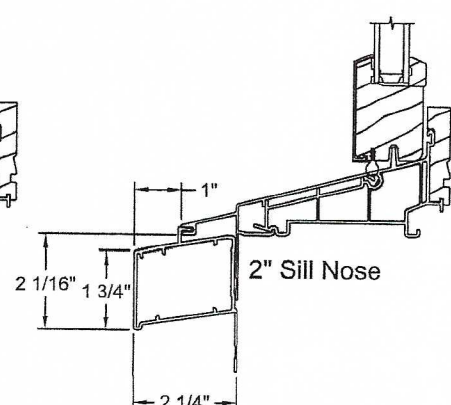
Sill Nose Options



Standard Sill Nose



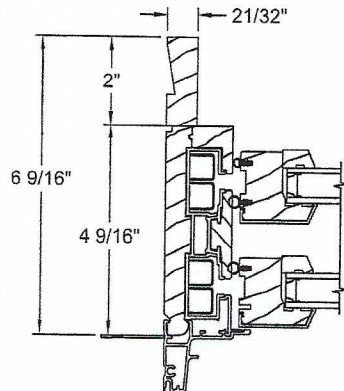
1" Sill Nose



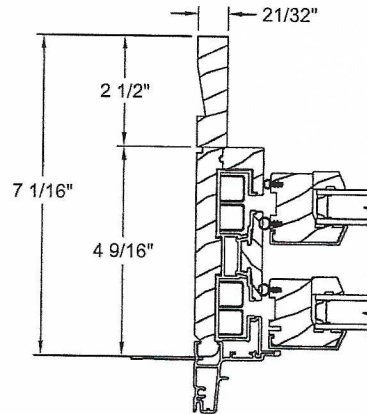
2" Sill Nose

JAMB EXTENDER, RETURN KERF & PREP FOR STOOL OPTIONS

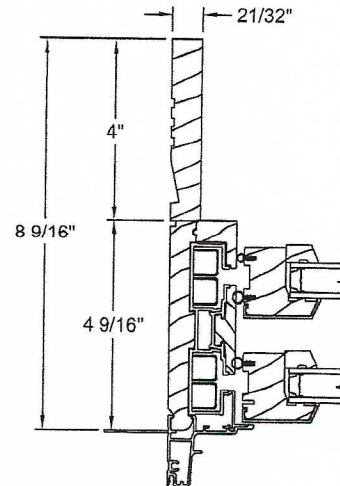
Interior Extenders



6 9/16" Jamb Width
4/4 Jamb Thickness



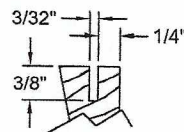
7 1/16" Jamb Width
4/4 Jamb Thickness



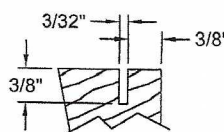
8 9/16" Jamb Width
4/4 Jamb Thickness

Return Kerf:

Generally located from first visible interior frame line. Kerfed option available on all jamb extender sizes.

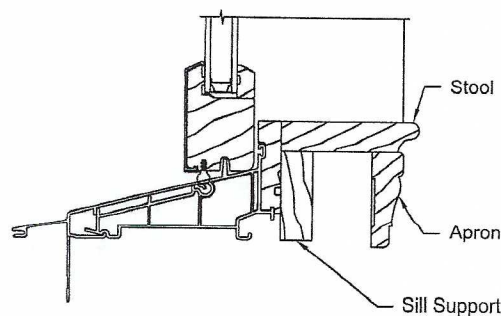


4/4 Jamb Typ.



5/4 Jamb Typ.

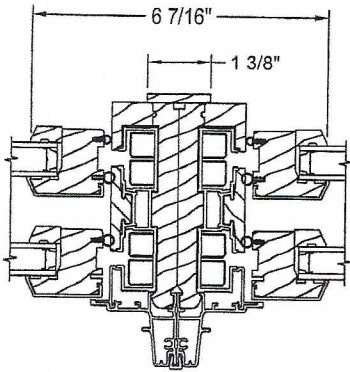
Prep for Stool



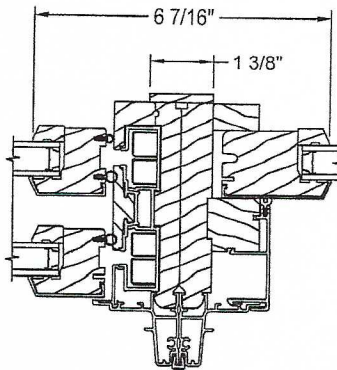
Stool, apron, and sill support are applied by trim carpenter after window is installed and are not provided by JELD-WEN. Unit is shipped without sill jamb extenders.

Exterior jamb extenders may only be applied to windows with jambs 6 9/16" or greater.

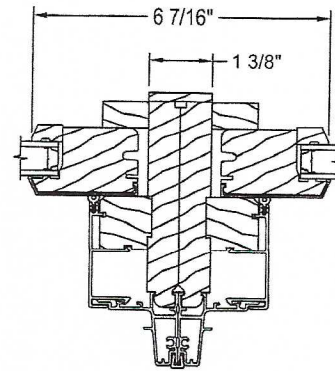
MULLION OPTIONS



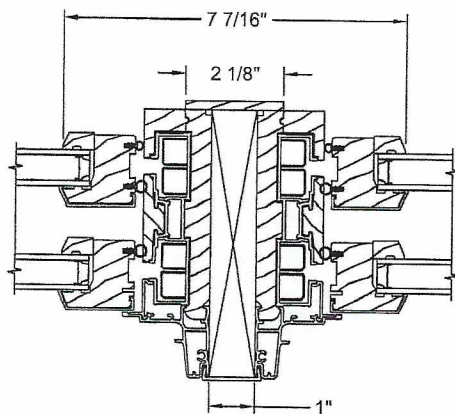
Operator | Operator



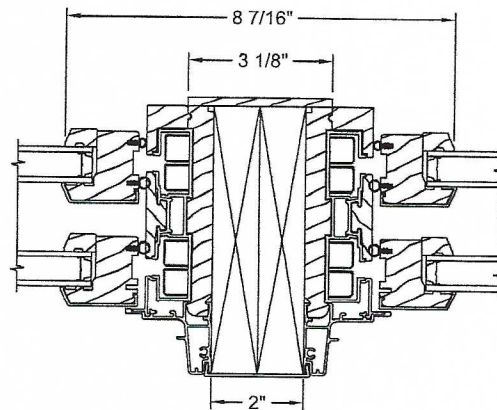
Operator | Fixed



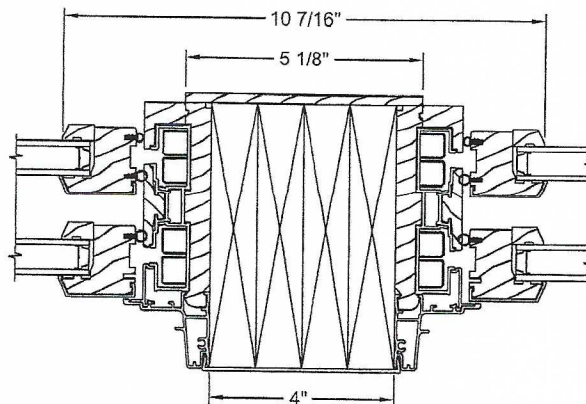
Fixed | Fixed



Operator | Operator
with 1" Solid Spread Mull

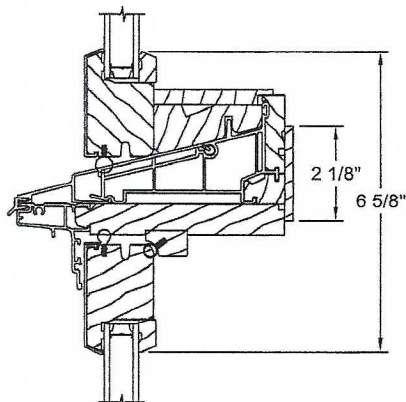


Operator | Operator
with 2" Solid Spread Mull

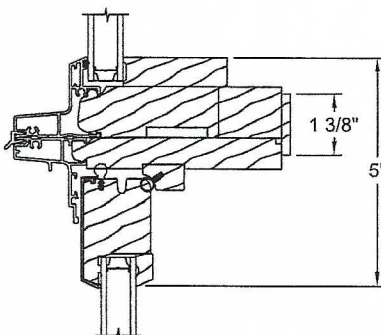


Operator | Operator
with 4" Solid Spread Mull

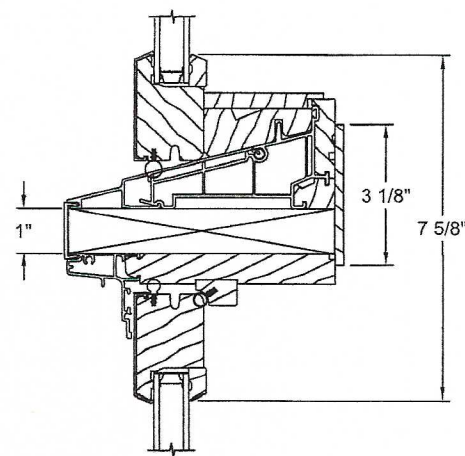
MULLION OPTIONS



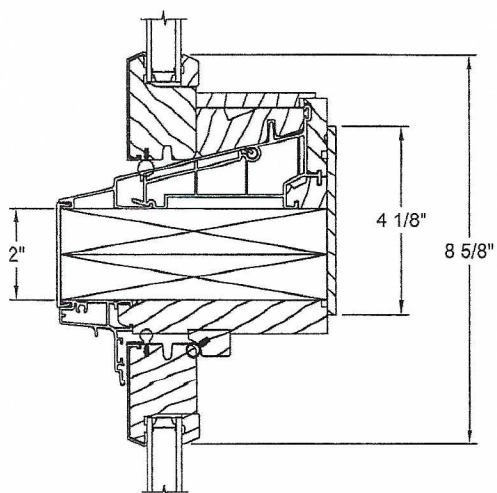
Transom
Operator



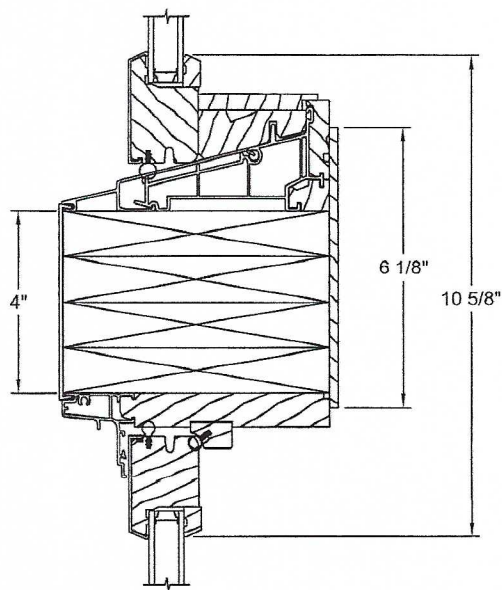
Direct Set
Operator



Transom
Operator
with 1" Solid Spread Mull

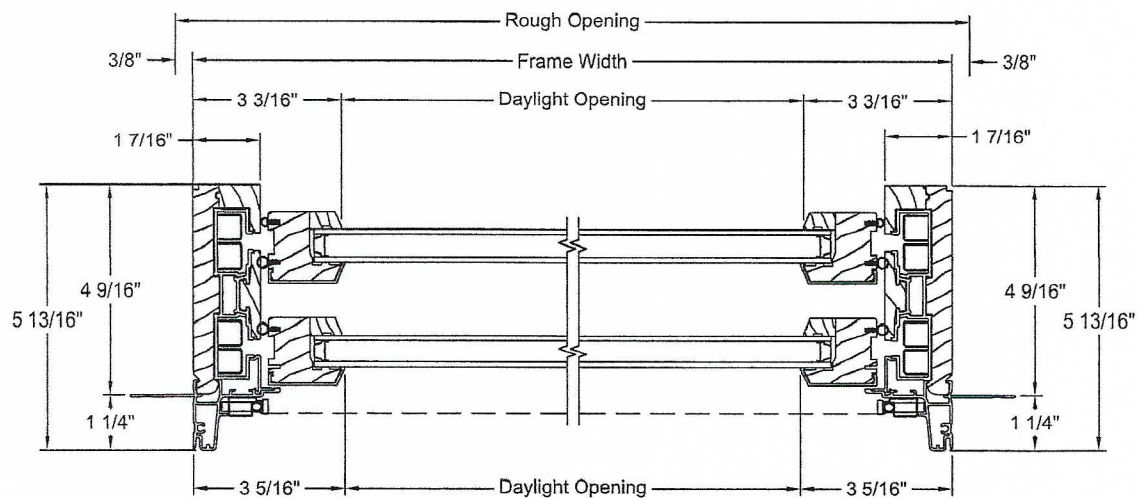
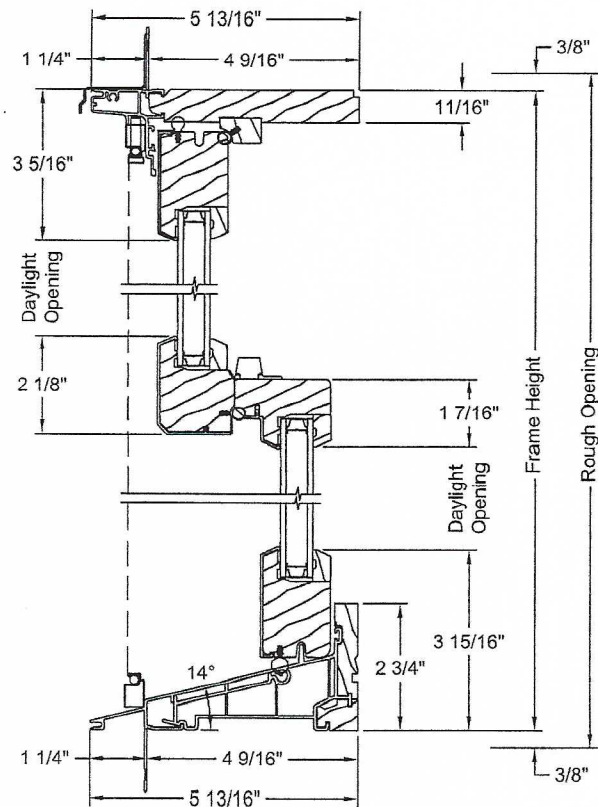
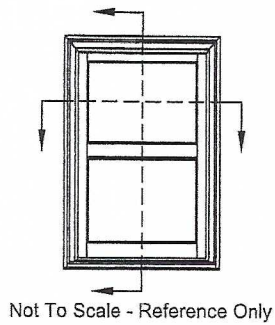


Transom
Operator
with 2" Solid Spread Mull

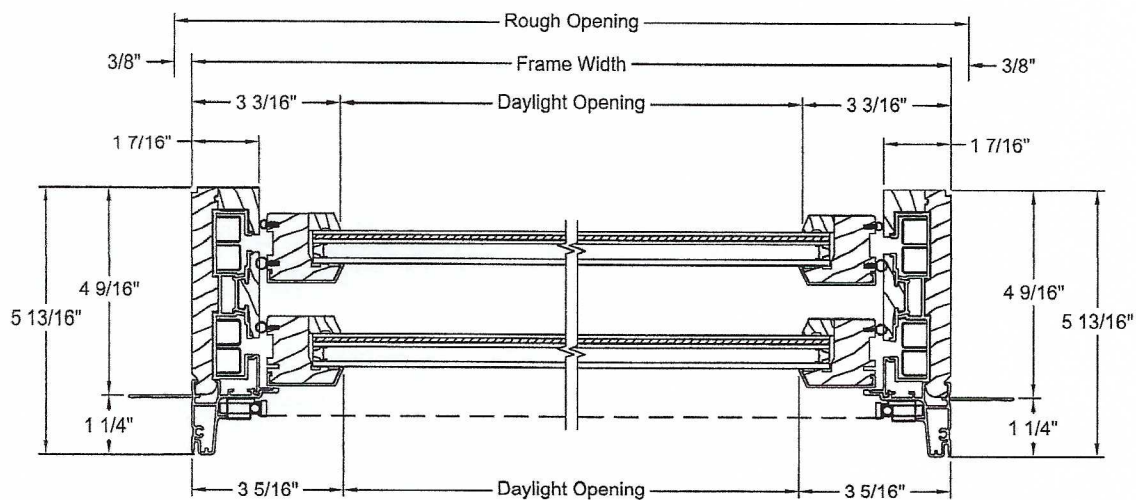
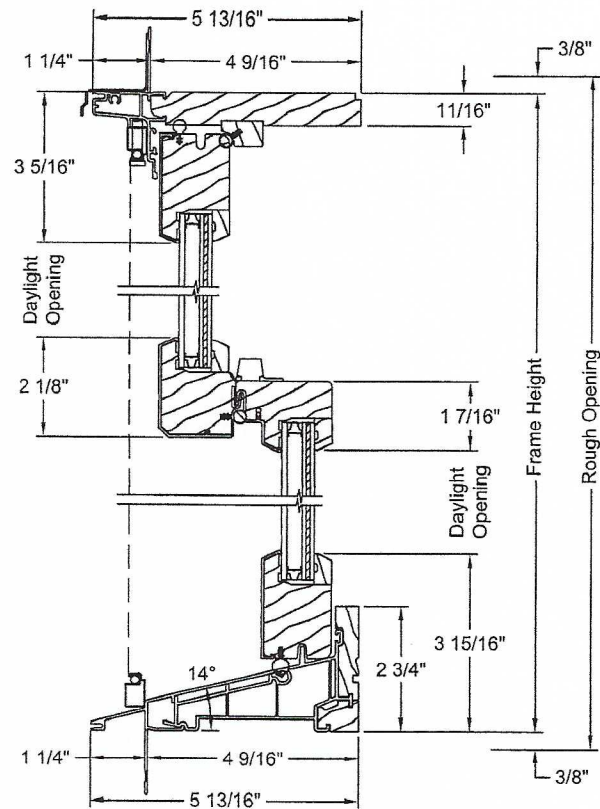
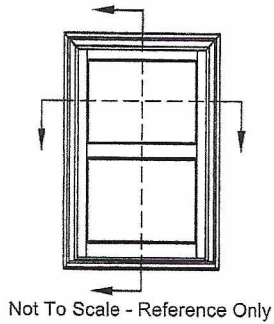


Transom
Operator
with 4" Solid Spread Mull

OPERATOR SECTIONS

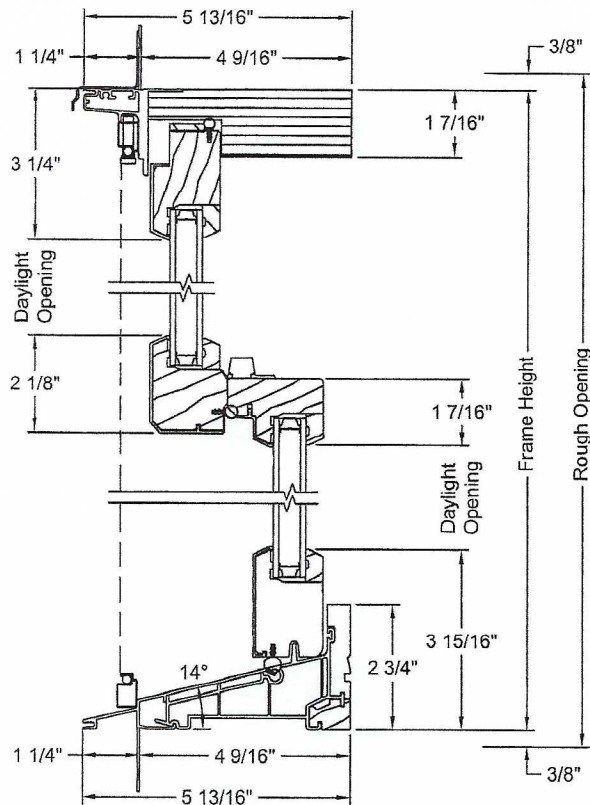


OPERATOR IMPACT SECTIONS

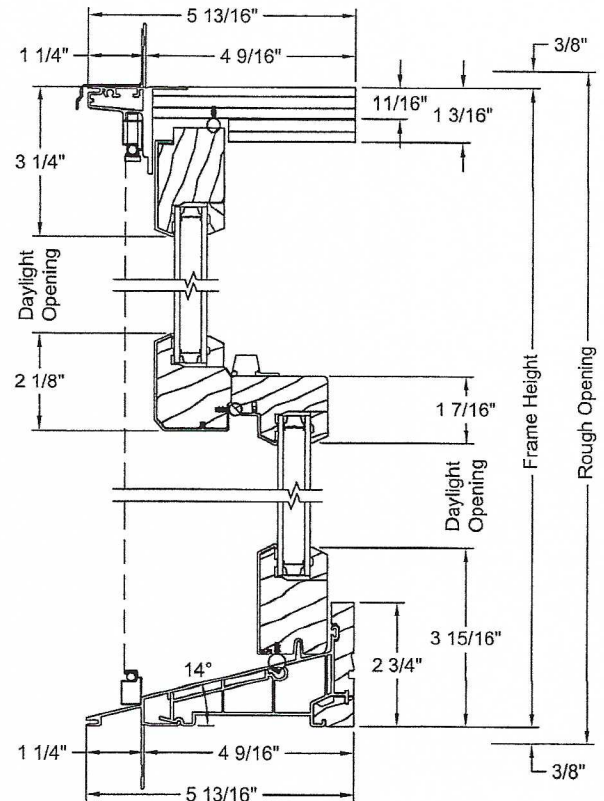


OPERATOR RADIUS TOP & SEGMENT HEAD VERTICAL SECTIONS

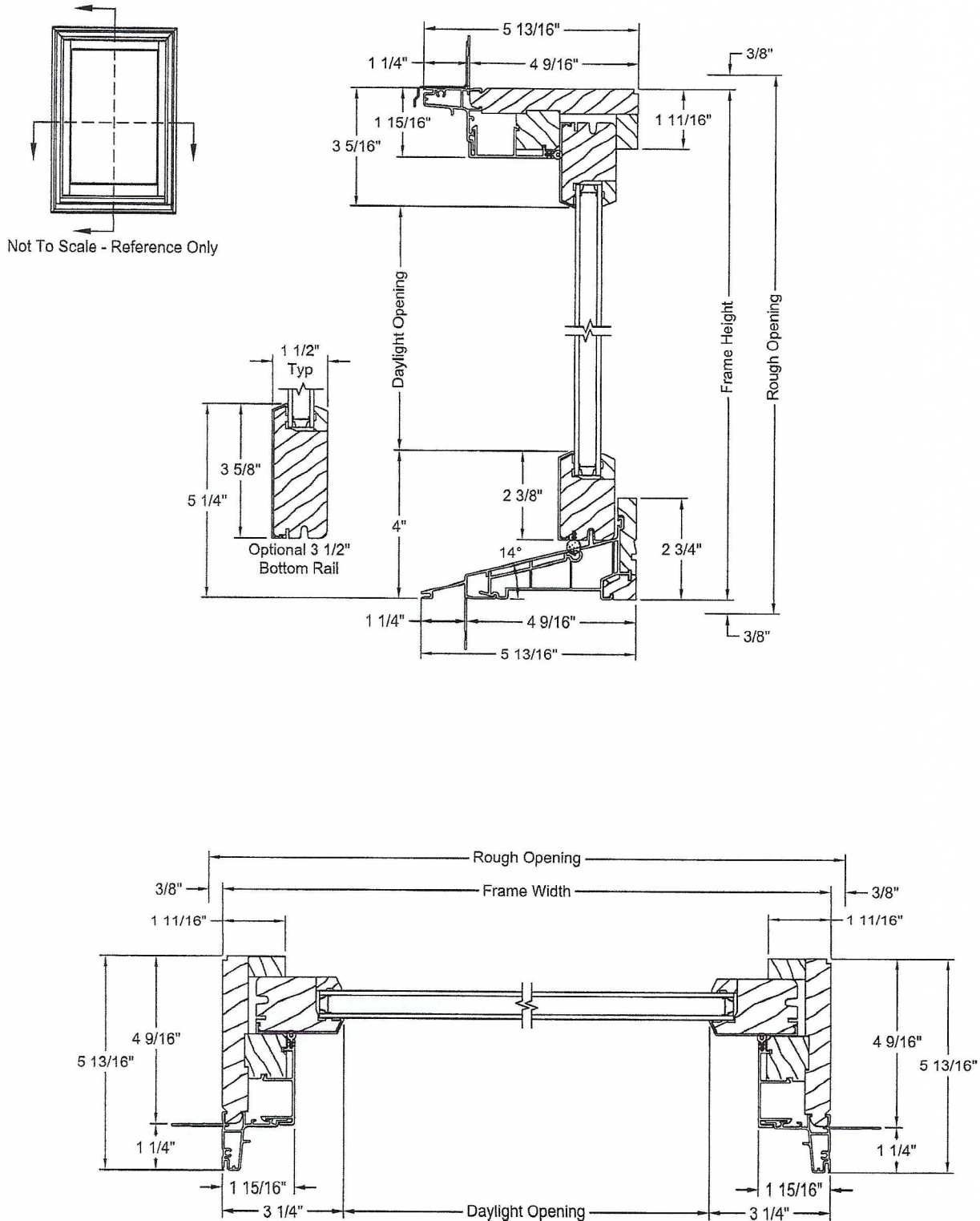
Operator Radius-Top



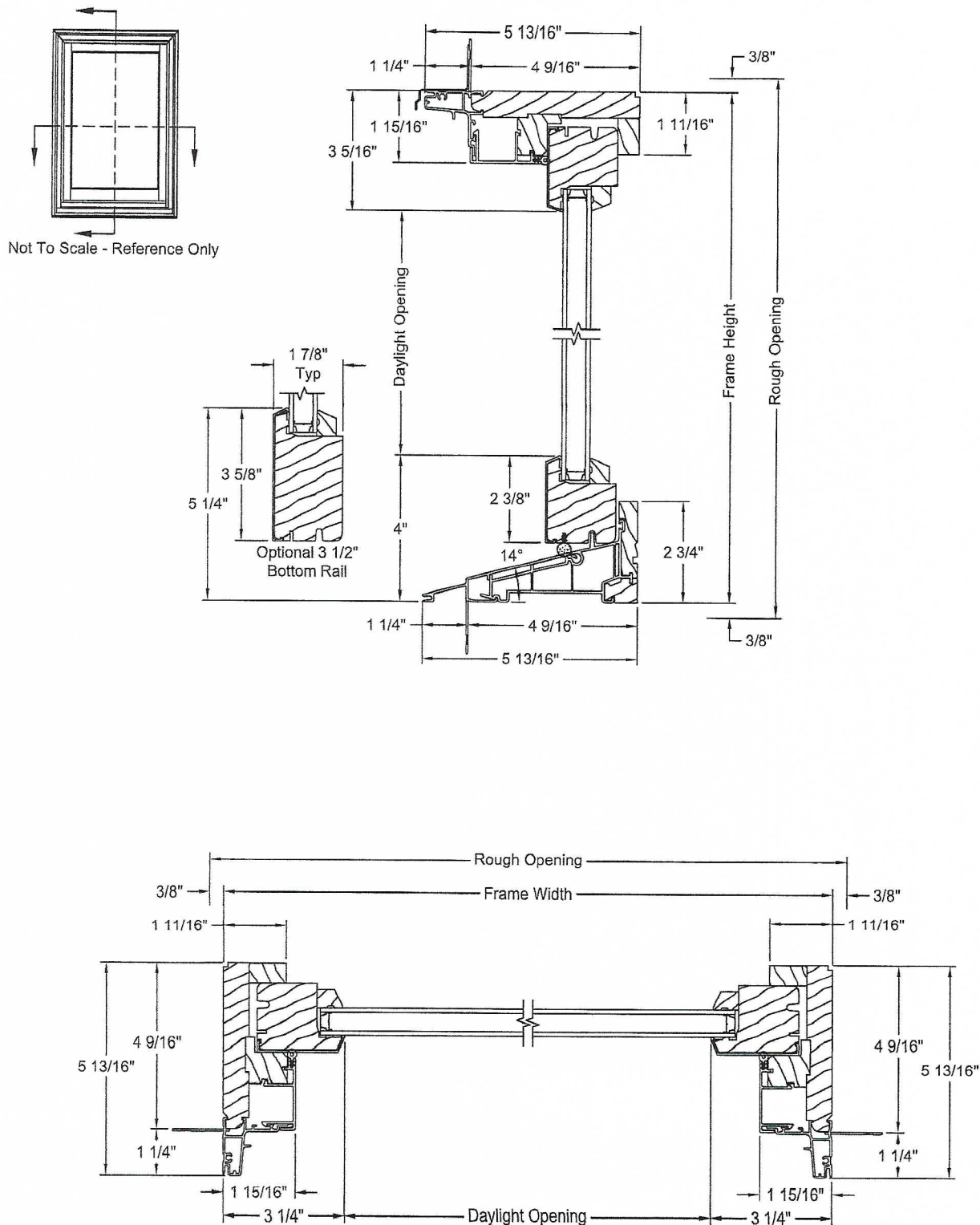
Operator Segment Head



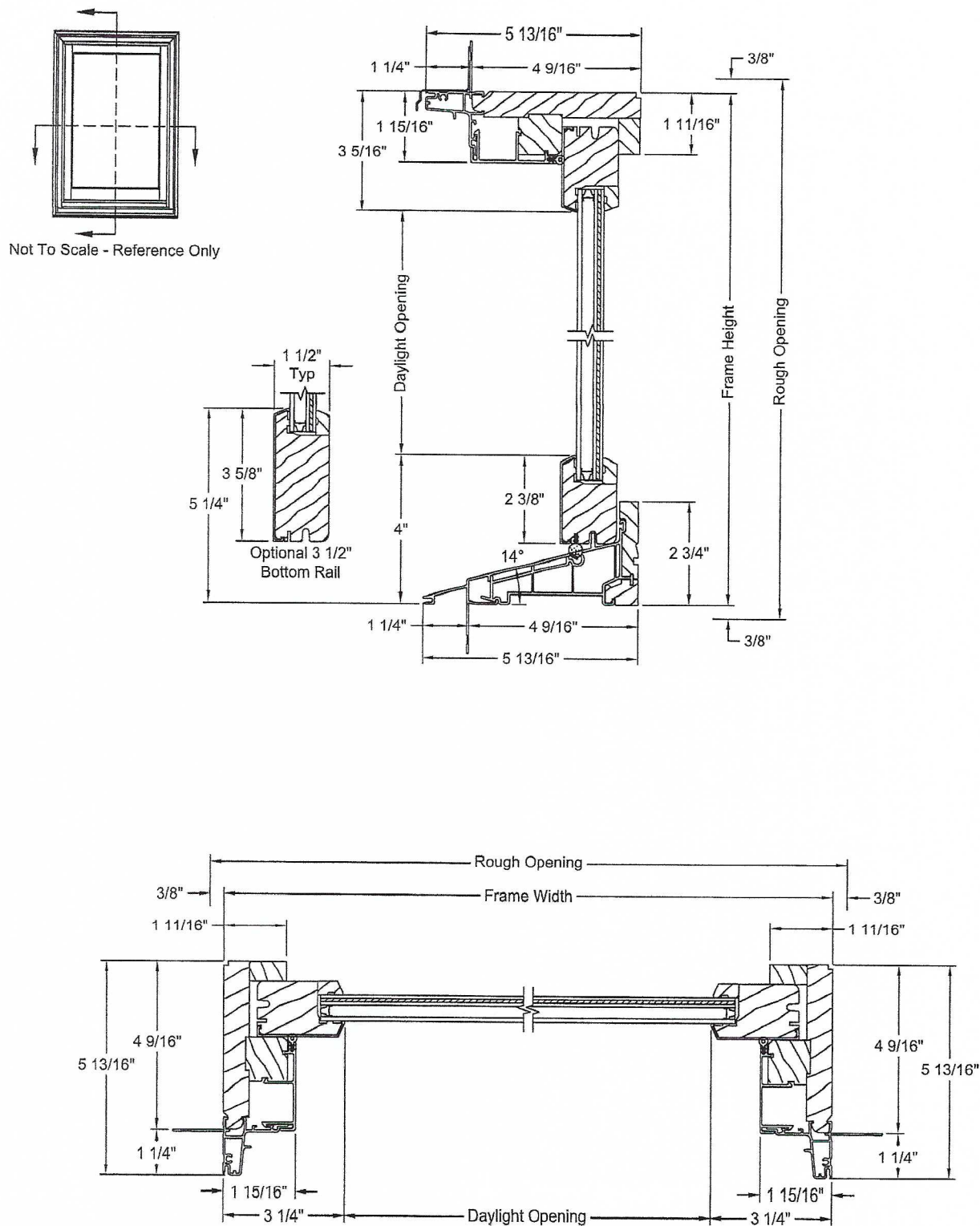
FIXED SECTIONS - 6/4 SASH



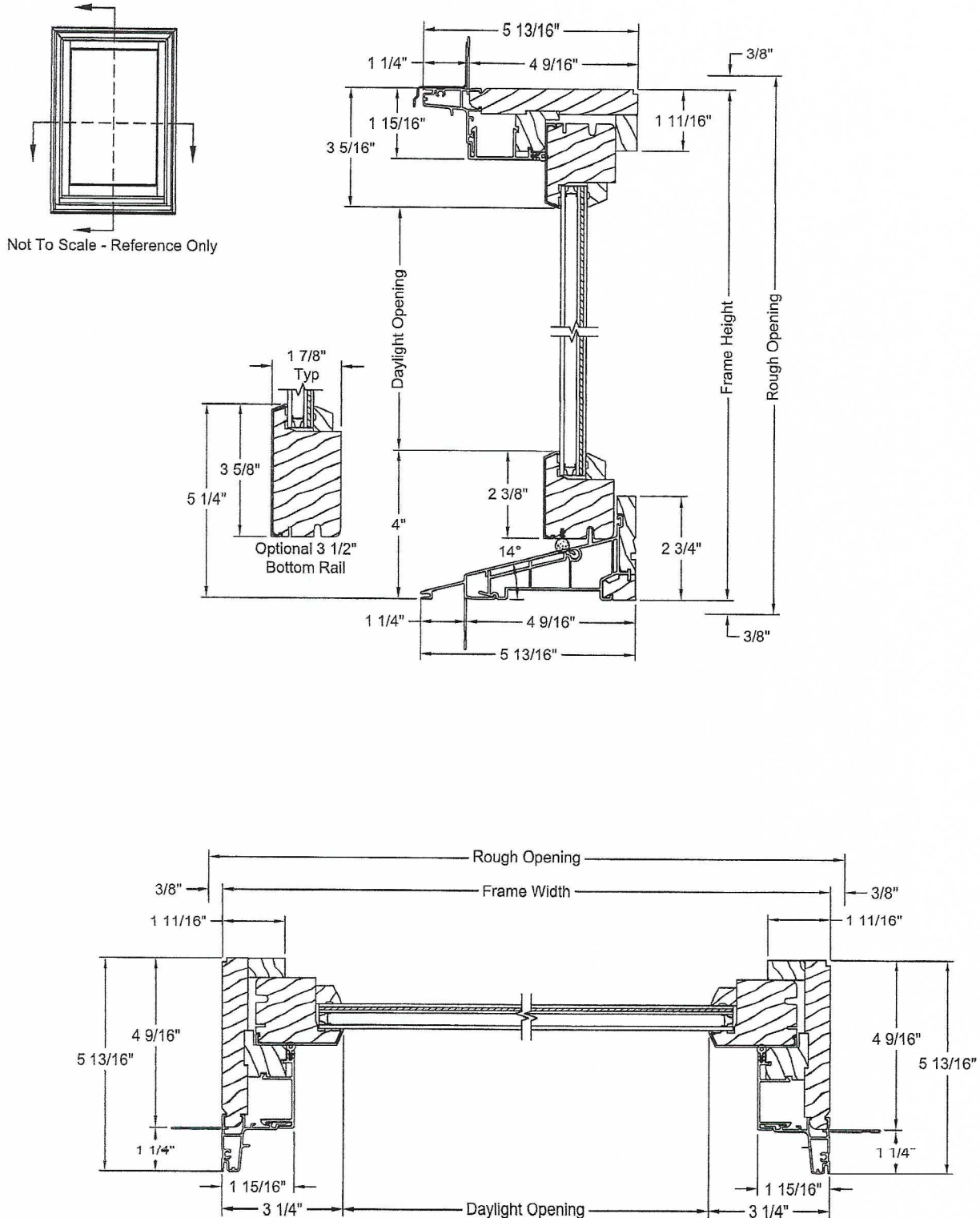
FIXED SECTIONS - 8/4 SASH



FIXED IMPACT SECTIONS- 6/4 SASH



FIXED IMPACT SECTIONS - 8/4 SASH



TAB 7

Quote Sheet and Product Literature for Shutters

THE SHUTTER HOUSE

1765 East Nine Mile Road - Suite 1 - #240 | Pensacola, FL 32514

ph: (850) 462-3717

QUOTE

<u>Date:</u>	11/27/2023	<u>Reference No:</u>	203310
<u>Customer Name</u>	Ron Nelson - Cedar	<u>Customer Phone #:</u>	8404341700
<u>Customer Address:</u>	517 E. Government St. Pensacola, FL 32502	<u>Customer E-Mail:</u>	rln@nelsonlawflorida.com

Comments:

All Prices quoted are valid for 30 days from the date stated on the quotation. A deposit of 50% is required to process an order. All sales are final and non-refundable. Dimensions provided by customer. We will field measure prior to production. ***Thank you for allowing us to provide you with pricing ***

<u>Item #</u>	<u>Product</u>	<u>Size</u>	<u>Unit Price</u>	<u>Quantity</u>	<u>Unit</u>	<u>Total</u>
10	Red Cedar Shutters - Louver Style	22.5 x 76	\$1,554.09	1	Pair	\$1,554.09
<u>Louver Blade</u>		<u>Mid Rail Option</u>	<u>Shutter Thickness</u>			
Custom Louver Blade		3 Section Layout	1 1/2" Thickness			
<u>Item #</u>	<u>Product</u>	<u>Size</u>	<u>Unit Price</u>	<u>Quantity</u>	<u>Unit</u>	<u>Total</u>
20	Stainless Steel - 6" I-Hinge and Pintel Combo: (pair)		\$52.56	2	Each	\$105.12
30	Stainless Steel - S-Holdbacks: (pair)		\$34.01	1	Pair	\$34.01
40	Optional Installation		\$200.00	1	Each	\$200.00
Total:						\$1,893.22
Tax:						\$141.99
Grand Total:						\$2,180.21

Cedar Shutters

Architectural Style

Cedar shutters are built to order. Below are some standard configurations but we can customize these styles with mid rail placements, arched tops and panel cutouts.

Select a style below to learn more about our cedar shutters.

Superior Craftsmanship

Our hand crafted cedar shutters are custom built to specification using high quality material and superior craftsmanship. Modern production techniques preserve historical accuracy in both design and durability of our shutters. While our facility is capable of mass production, custom woodworkers hand assemble every shutter to ensure accuracy and quality. Accuracy and quality are ensured by high manufacturing standards and quality assurance processes. Components are milled at our factory ensuring structural integrity from specifications to a finished product.

Built to Specification

We offer four standard styles of cedar shutters. Standard styles are custom built to the eighth inch on width and length. The four standard designs can be customized to match existing shutters or to maintain architectural integrity.

Custom Design

Custom options such as rail placement, rail modification, louver angles and arched tops are available due to the expertise our master craftsmen. Such custom options are inexpensive and allow for flexibility and allow our clients to use their creativity to design shutters which fit their taste and style. Keen attention to detail and careful planning is given to each shutter design to ensure that the product meet and exceeds customer expectation. Whether your needs include cedar shutters built to custom specification or simply to standard styles, you will be pleased with our extensive knowledge and ability to produce a truly superior custom shutter.

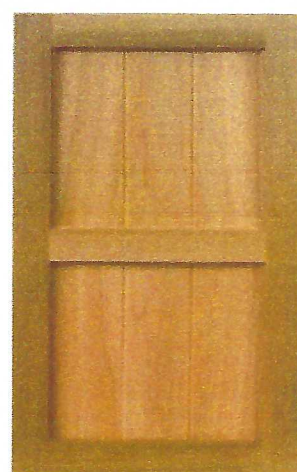
Cedar Shutter Styles



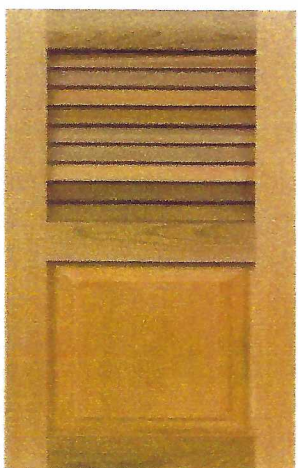
Louver



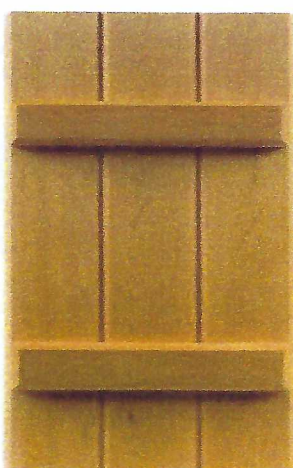
Panel



V-Groove



Combo



Batten



City of Pensacola

222 West Main Street
Pensacola, FL 32502

Memorandum

File #: 23-1083

Architectural Review Board

12/21/2023

LEGISLATIVE ACTION ITEM

SUBJECT:

**600 S. Palafox Street
Palafox Historic Business District / Zone C-2A / City Council District 6
Final Review for a New Hotel Development**

SUMMARY:

Buck Lindsay is seeking final approval for a new eight-story Tempo by Hilton hotel with 213 guest rooms, lobby area, dining, a meeting space, fitness area, swimming pool, and surface parking. This project received conceptual approval at the November 2023 meeting.

Please find attached all relevant documentation for your review.

RECOMMENDED CODE SECTIONS

Sec. 12-3-27(f)(2)b. Palafox Historic Business District, Decision guidelines.
Sec. 12-3-27(f)(3) PHBD, Recommendation for changes.

ATTACHMENTS:

1. Images
2. Application and Materials_12-12-23

600 S. Palafox Street





**Architectural Review Board Application
Full Board Review**

Application Date: 11/30/2023

Project Address: 600 South Palafox Street

Applicant: Winford Lindsay

Applicant's Address: 344 West Pike Street, Lawrenceville GA 30046

Email: blindsay@lpbatlanta.com Phone: 770-407-5800

Property Owner: Cell: 404-520-0058

District: ☒ **PHD** ☐ **NHPD** ☐ **OEHPD** ☒ **PHBD** ☐ **GCD**
(If different from Applicant)

Application is hereby made for the project as described herein:

- ☐ Residential Homestead – \$50.00 hearing fee
☒ Commercial/Other Residential – \$250.00 hearing fee (Previously Paid)

** An application shall be scheduled to be heard once all required materials have been submitted and it is deemed complete by the Secretary to the Board. You will need to include eight (8) copies of the required information. Please see pages 3 – 4 of this application for further instruction and information.*

Project specifics/description:

PLEASE SPECIFY IF CONCEPTUAL DISCUSSION ITEM, CONCEPTUAL REVIEW, OR FINAL REVIEW.

For Final Review:

8 Story Hilton Brand Hotel with 213 Guestrooms, Lobby, Dining, Meeting, Fitness, Pool, Surface Parking.

Demolition of Existing Structure.

I, the undersigned applicant, understand that payment of these fees does not entitle me to approval and that no refund of these fees will be made. I have reviewed the applicable zoning requirements and understand that I must be present on the date of the Architectural Review Board meeting.

Winford Lindsay
Applicant Signature

11-30-23
Date

TEMPO SUITES /
HOME 2 SUITES by HILTON

600 SOUTH PALAFOX STREET
PENSACOLA, FLORIDA 32502



OWNER:

3H GROUP HOTELS
6716 HERITAGE BUSINESS COURT
SUITE 100
CHATTANOOGA, TN 37421

423-834-9311

DEVELOPER:

GRACE CONSTRUCTION CONSULTANTS
5720 MARLIN ROAD #200
CHATTANOOGA, TN 37411

423-208-9833

ARCHITECT:

ARCHITECTURE, INTERIOR DESIGN, STRUCTURAL
ENGINEERING, MECHANICAL, ELECTRICAL, PLUMBING AND
FIRE PROTECTION ENGINEERING:
LINDSAY POPE BRAYFIELD & ASSOCIATES, INC.
344 WEST PIKE STREET
LAWRENCEVILLE, GEORGIA 30046

770-963-8989

CIVIL ENGINEER:

REBOL BATTLE AND ASSOCIATES
2301 N. 9TH AVE, SUITE 300
PENSACOLA, FLORIDA 32503

850-438-0400

LANDSACPE DESIGNER:

DANIEL ROGERS LANDSCAPE ARCHITECTURE
500 WINDERLEY PLACE,
SUITE 325
MAITLAND, FLORIDA 32751

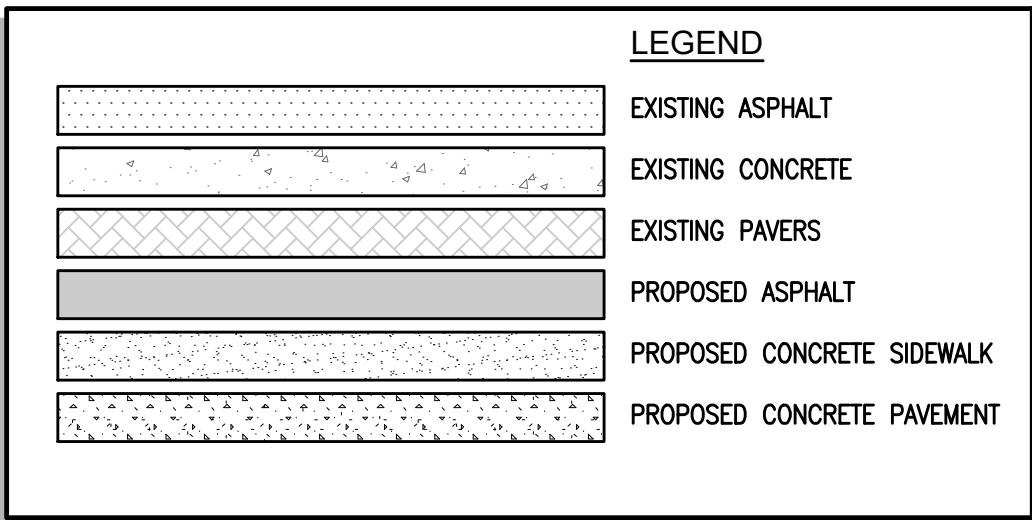
407-353-0112



PROJECT DATA				
PROPOSED:	213 ROOM HOTEL, 8 STORY			
ZONING:	C-2A			
SITE:	1.333 ACRES			
PARCEL NO.:	00-05-0900-001-012			
BUILDING HT.:	ALLOWED 100'	PROPOSED 96'-0"		
SET BACKS:	ZERO REQUIRED, 2.5' PROVIDED			
PARKING:	REQUIRED	128	SPACES	
	PROPOSED ON SITE	71	SPACES	
	ON STREET	57	SPACES	
	TOTAL	128	SPACES	
FLOOD ZONE:	A E, SPECIAL FLOOD HAZARD AREA			

DRAWING INDEX			
A1	COVER SHEET	A8	EIGHTH FLOOR PLAN
A2	SURVEY PLAN	A9	NORTH EXTERIOR ELEVATION
C200	SITE LAYOUT & DIMENSION PLAN	A10	SOUTH EXTERIOR ELEVATION
C201	SITE DETAILS	A11	WEST EXTERIOR ELEVATIONS
L-1.00	ILLUSTRATIVE HARDSCAPE PLAN & IMAGES	A12	EAST EXTERIOR ELEVATION
L-1.01	HARDSCAPE PLAN	A13	EXTERIOR ELEVATION FINISHES
L-1.02	HARDSCAPE PLAN	A14	EXTERIOR ARCHITECTURAL FEATURES
L-1.03	HARDSCAPE PLAN	A14.1	EXTERIOR MATERIAL SPECIFICATIONS
L-2.01	HARDSCAPE DETAILS	A14.2	MORGAN WINDOWS SPECIFICATIONS
L-3.00	ILLUSTRATIVE LANDSCAPE PLAN	A15	WEST WALL SECTION
L-3.00A	PLANT IMAGES	A16	EXTERIOR RENDERING
L-3.01	LANDSCAPE PLAN	A17	PERSPECTIVE VIEWS
L-3.02	LANDSCAPE PLAN	A18	PERSPECTIVE VIEW - NIGHT
L-3.03	LANDSCAPE PLAN	A19	PERSPECTIVE VIEW - NIGHT
L-3.10	PLANT SCHEDULE. DETAILS, & NOTES	A20	PERSPECTIVE VIEW - NIGHT
L-4.01	IRRIGATION PLAN & NOTES	A21	GOOGLE AERIAL VIEW 1
L-4.10	IRRIGATION DETAILS	A22	GOOGLE AERIAL VIEW 2
A3	DEMOLITION PLAN	A23	GOOGLE AERIAL VIEW 3
A4	FIRST FLOOR PLAN	E100	SITE LIGHTING PLAN
A5	SECOND FLOOR PLAN	E101	LIGHTING SPECIFICATION SHEETS
A6	THIRD - SIXTH FLOORS	E102	LIGHTING SPECIFICATION SHEETS
A7	SEVENTH FLOOR PLAN		

[illegible]



N.T.S.

NOTE:
ALL CONCRETE SIDEWALKS, RAMPS, DRIVEWAYS
AND CURBING SHALL BE MINIMUM 3000 PSI, 28
DAY PCC, FIBER MESH REINFORCED CONCRETE
UNLESS NOTED OTHERWISE.



SITE LAYOUT & DIMENSION PLAN

TEMPO SUITES
HOME 2 SUITES
600 South Palafox Street
Pensacola, Florida 32502

600 South Palafox Street
Pensacola, Florida 32502

No.	DATE	REVISION

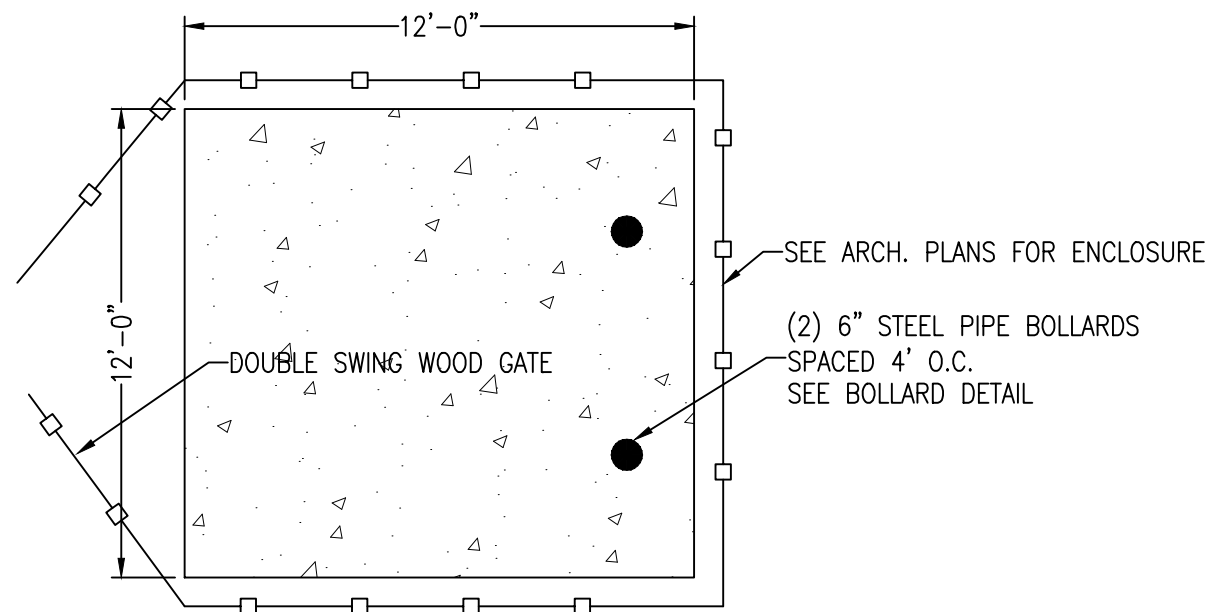
SEAL
NOT FOR CONSTRUCTION

PAUL A. BATTLE, PE
53126

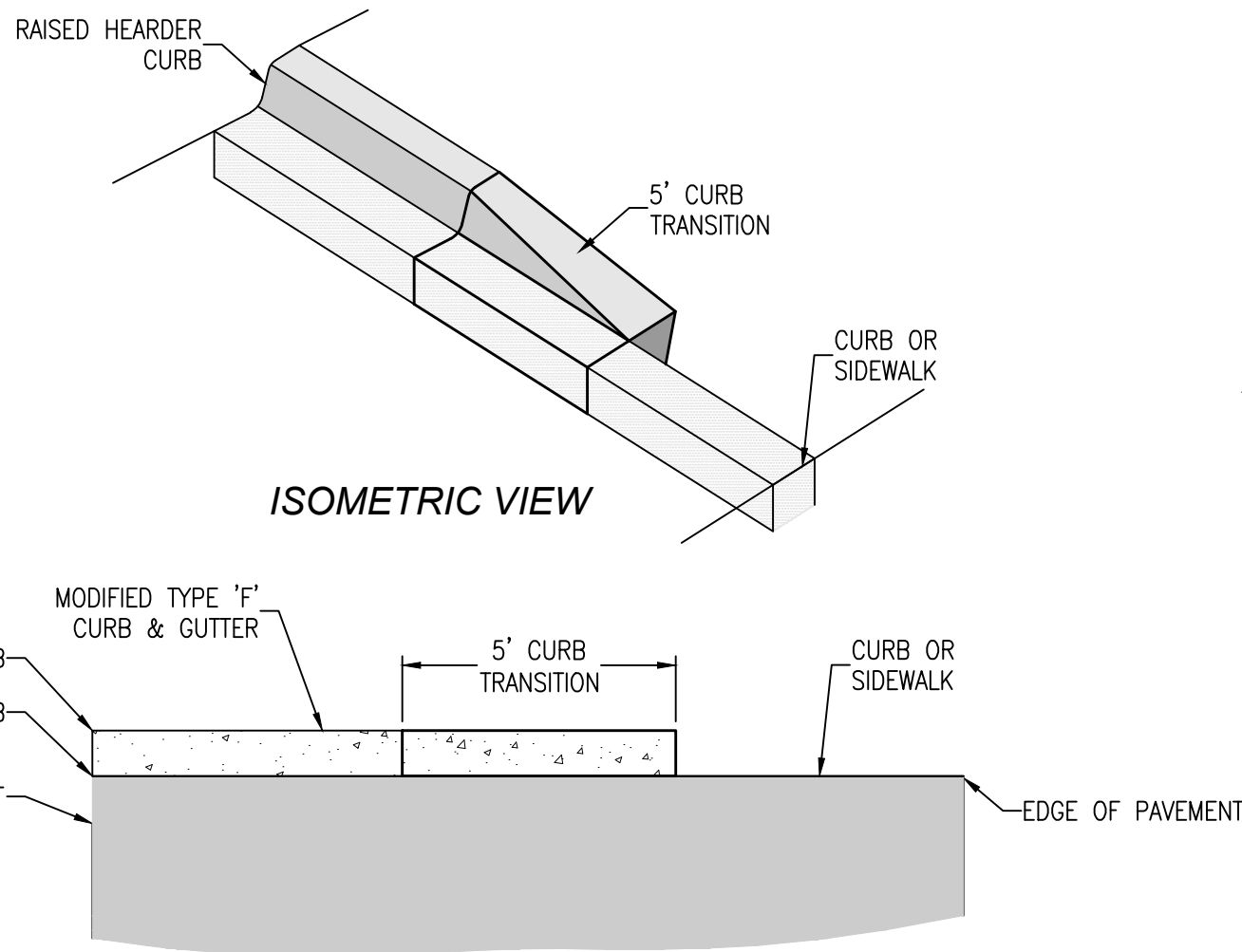
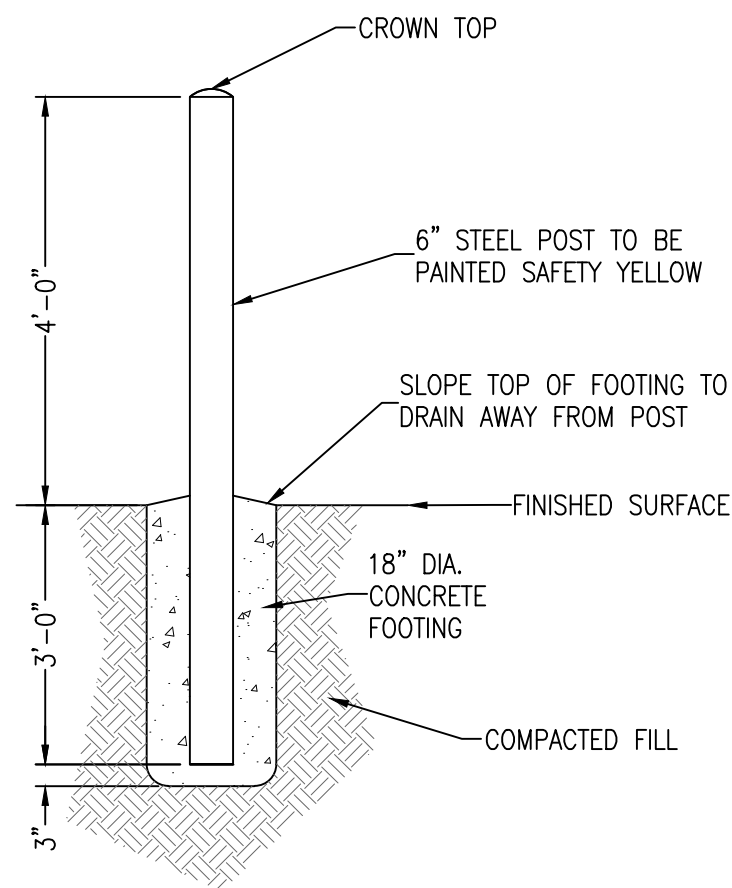
Dr. By: JRR
Ck By: PAB
Job No.: 2023.134
Date: Nov. 28, 2023

DRAWING No.

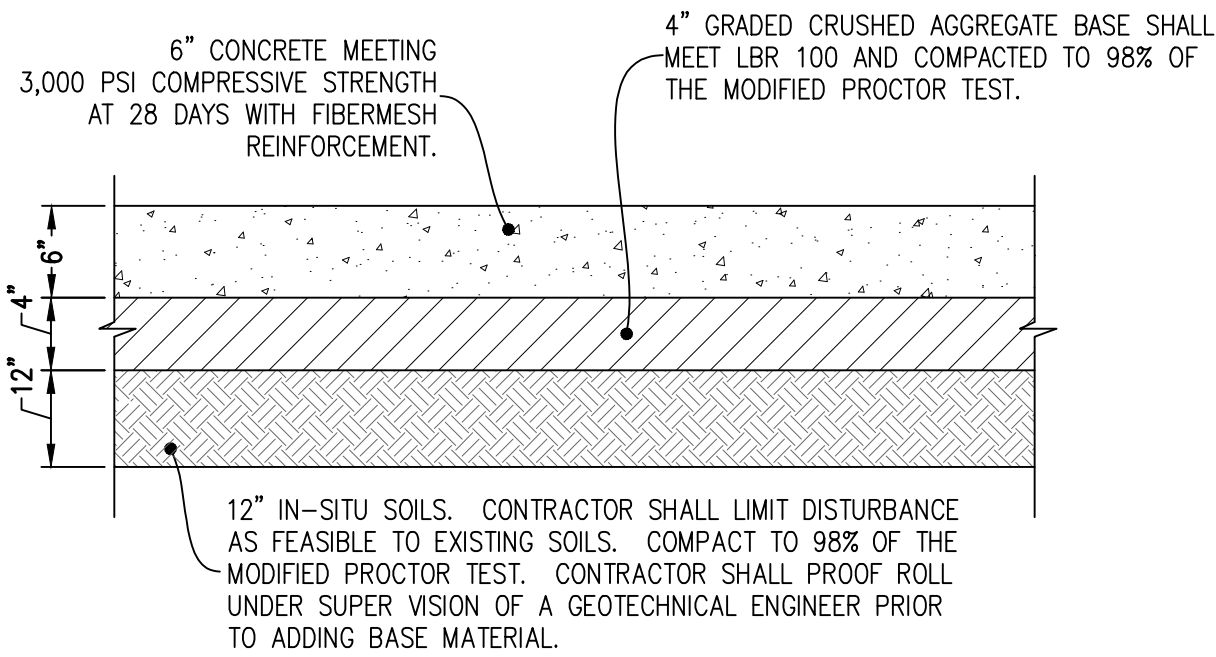
C200



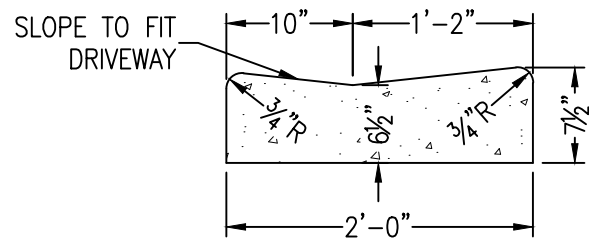
DUMPSTER PAD DETAIL
N.T.S.



CURB TRANSITION
RAISED HEADER CURB
N.T.S.

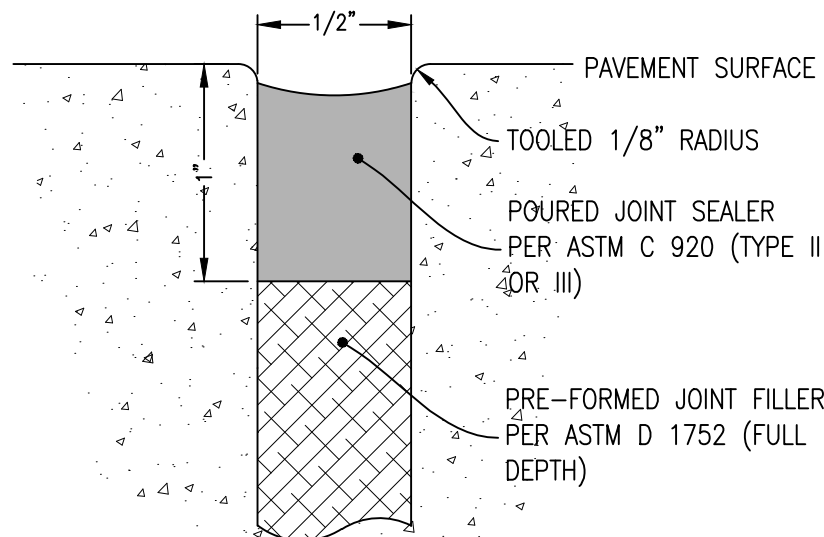


REINFORCED CONCRETE PAVEMENT SECTION
N.T.S.



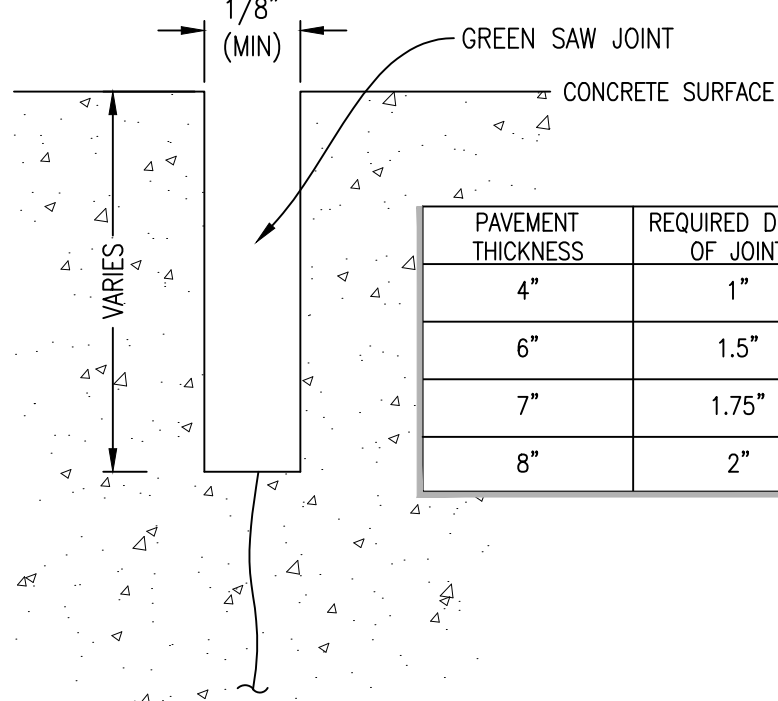
- NOTE:
1. ALL CURB TO HAVE DUMMY JOINT AT 10' ON CENTER. MIN. DEPTH OF JOINT TO BE 2".
 2. EXPANSION JOINTS ARE TO BE 30' ON CENTER. TYPICAL FOR ALL CURB.

VALLEY CURB
N.T.S.

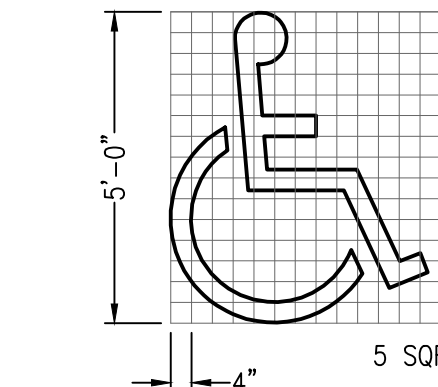
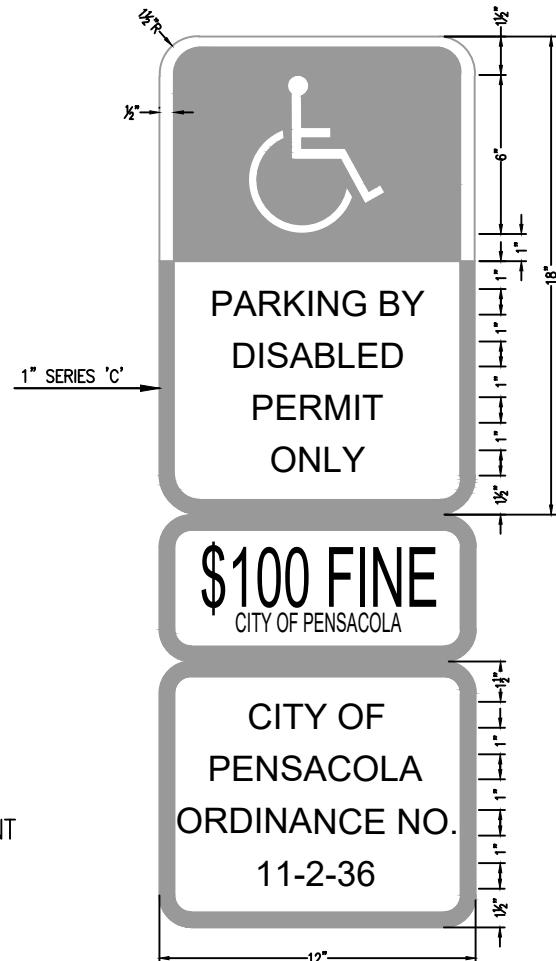


- NOTES:
1. TOP OF SEALANT SHALL BE 1/4" BELOW TOP OF PAVEMENT.
 2. PRIOR TO SEALANT APPLICATION THOROUGHLY CLEAN JOINT.

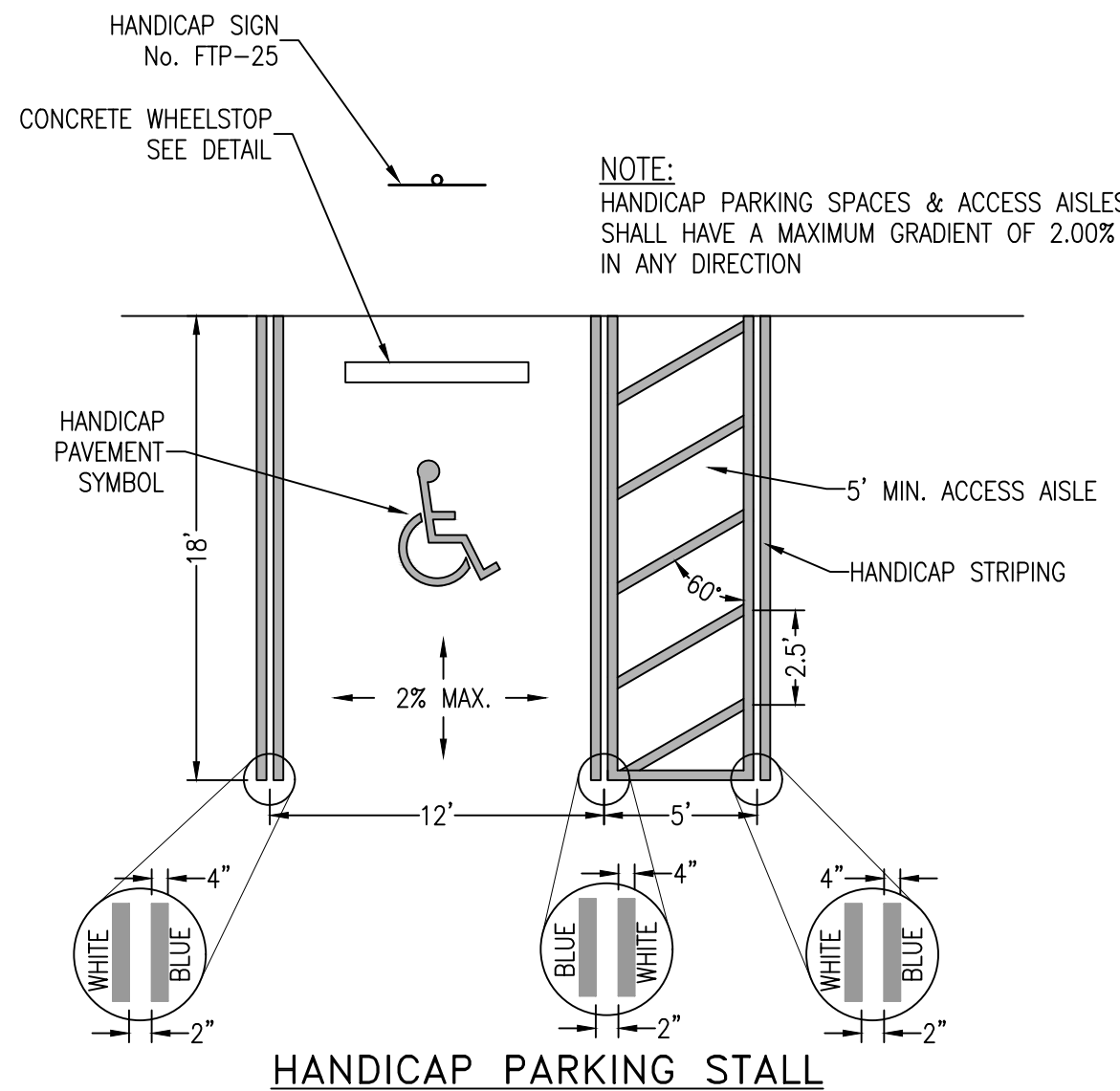
EXPANSION JOINT DETAIL
N.T.S.



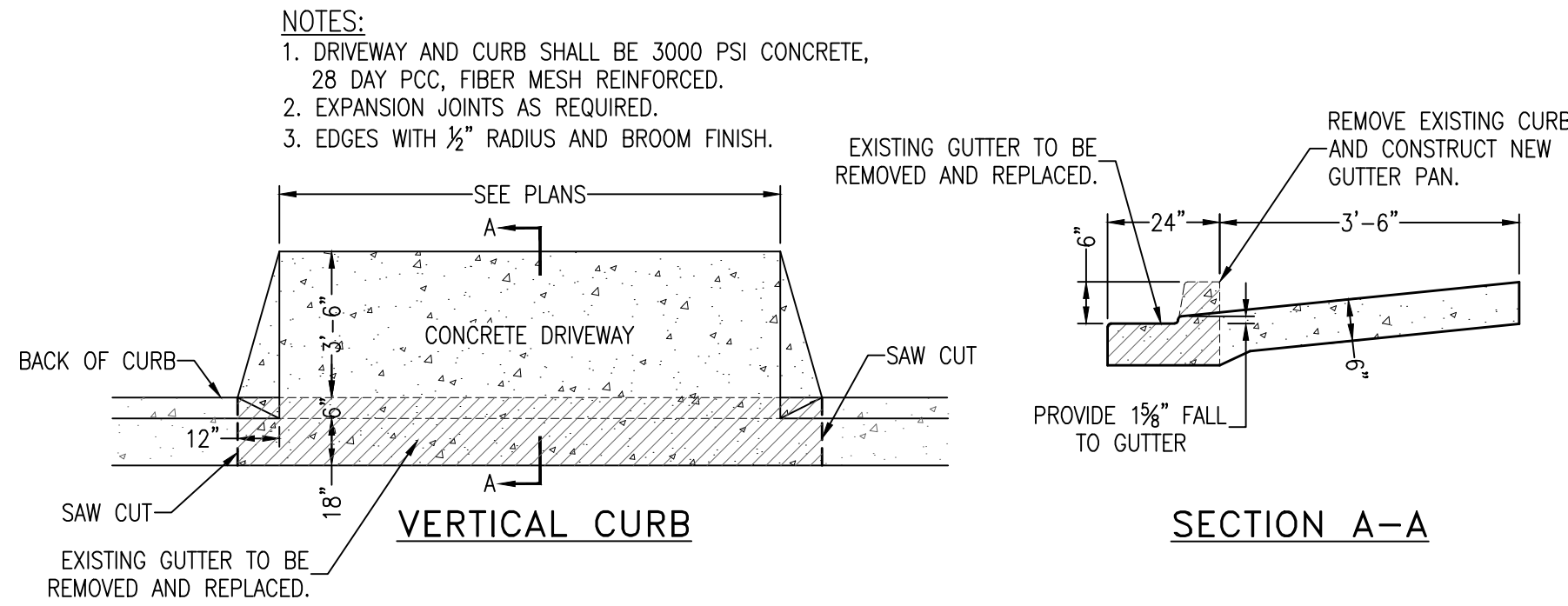
CONTRACTION JOINT DETAIL
N.T.S.



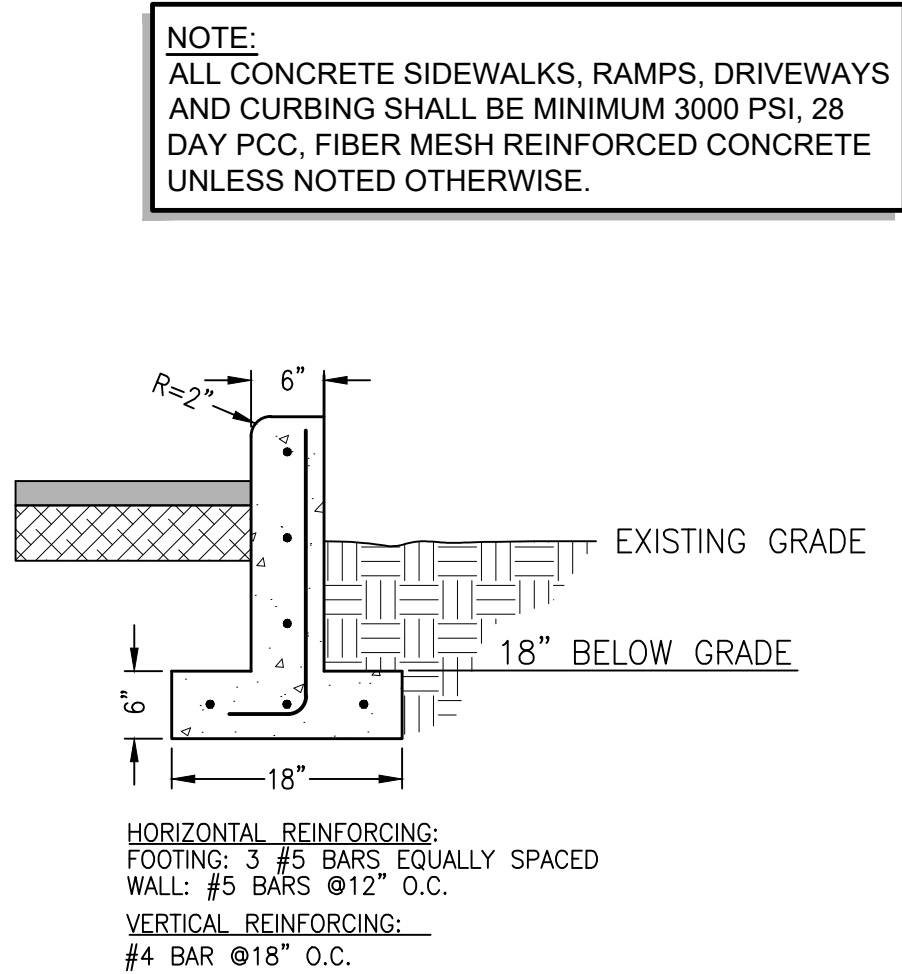
HANDICAP PAVEMENT SYMBOL
SIGN USED AS PER FLORIDA STATUTES
FTP 25 Per FS 316.1955, FS 316.1956



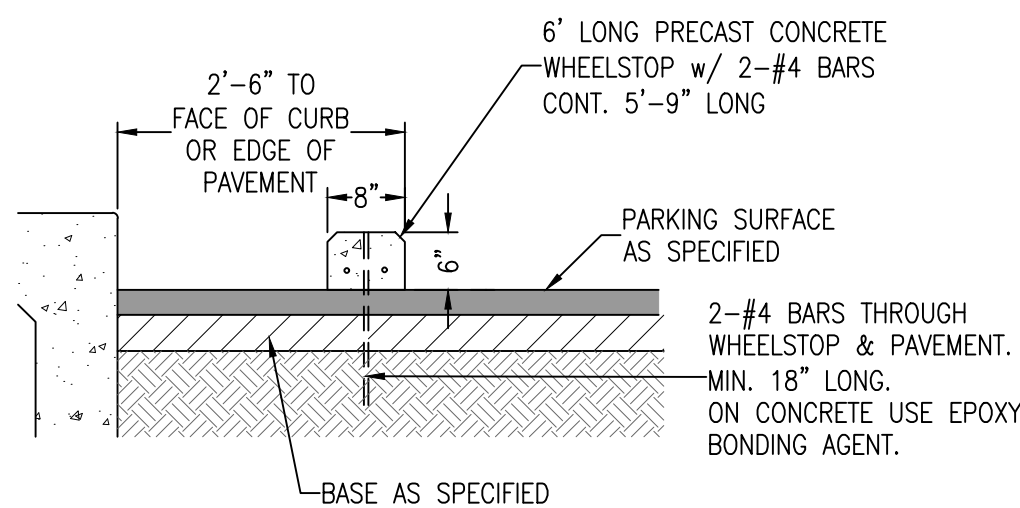
HANDICAP PARKING STALL DETAILS
N.T.S.



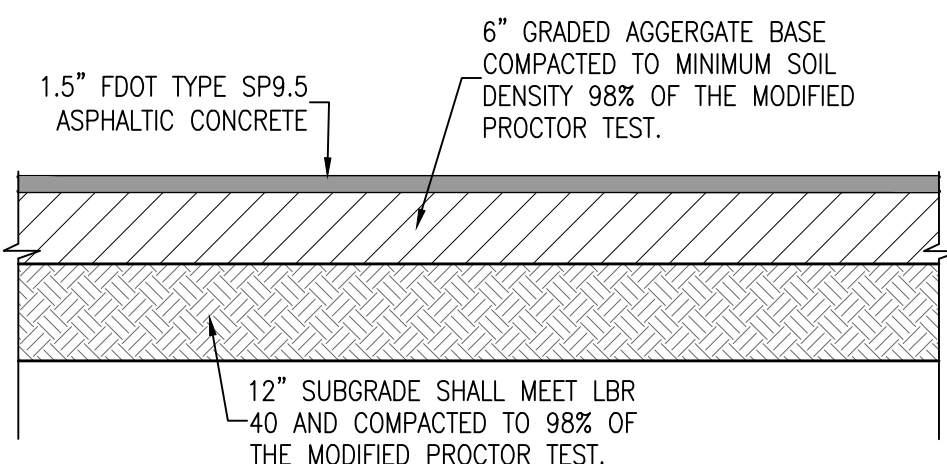
CITY OF PENSACOLA
STANDARD DRIVEWAY CONSTRUCTION DETAIL
N.T.S.



RETAINING WALL DETAIL
N.T.S.



WHEEL STOP DETAIL
N.T.S.



ASPHALT PAVEMENT DETAIL
N.T.S.



2301 N. Ninth Avenue, Suite 300
Pensacola, Florida 32503
Telephone 850.438.0400
Fax 850.438.0448
EB 00009657 LB 9716

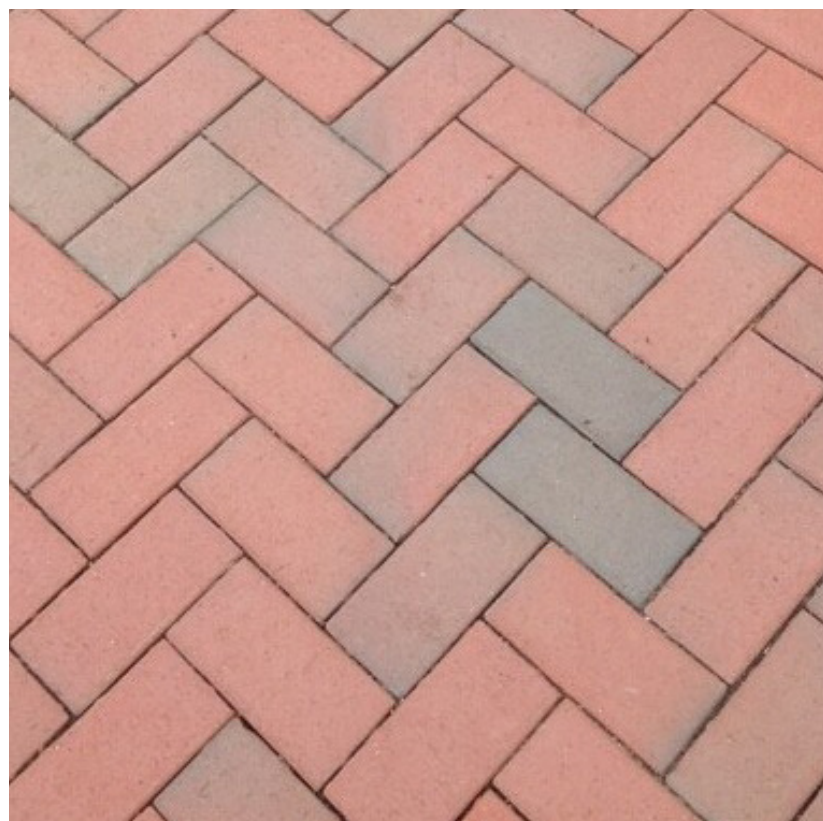
SITE DETAILS

TEMPO SUITES
HOME 2 SUITES
600 South Palatka Street
Pensacola, Florida 32502

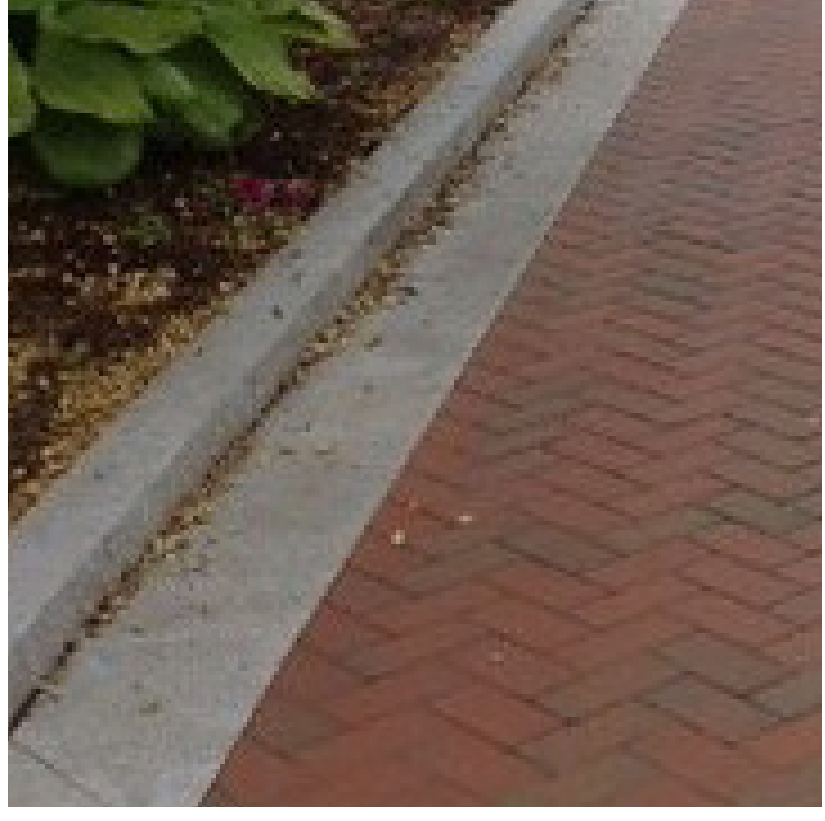
REVISION				
No.	DATE			

SEAL	
NOT FOR CONSTRUCTION	
PAUL A. BATTLE, PE 53126	
Dr. By: JRR	Ck By: PAB
Job No.: 2023.134	
Date: Nov. 28, 2023	
DRAWING No.	
C201	

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(A) VEHICULAR PAVING FIELD



(B) VEHICULAR CONCRETE BAND @ CURB FACE



(C) CONCRETE WALK - BROOM FINISH WITH 3" WINDOW PANE BORDER



(D) CONCRETE BROOM FINISH



(E) TRASH RECEPTACLE



(F) BENCH



(G) CAST IRON URN



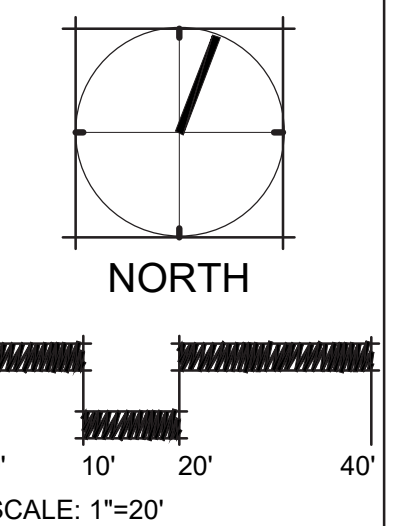
(H) BOLLARD



(I) CIP STEPS W/ HANDRAIL

SHEET KEY & NOTES:

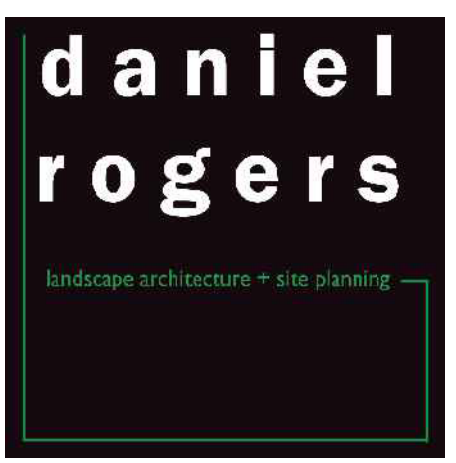
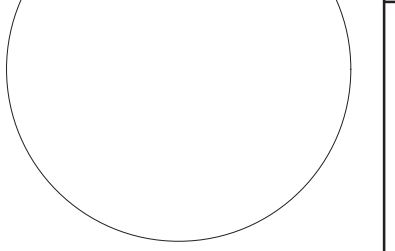
- (A)** Vehicular Paving Field
- (B)** Vehicular Concrete Band
- (C)** Concrete Walk - W.P.
- (D)** Concrete Walk - B.F.
- (E)** Trash Receptacle
- (F)** Bench
- (G)** Cast Iron Urn
- (H)** Bollard
- (I)** CIP Steps w/ Handrail
- (J)** Pilaster
- (K)** Brick Accent Band
- (L)** Retaining Wall



ISSUED		
NO.	DESCRIPTION	DATE
1	Issued for Review	11-30-2023

REVISIONS		
REV.	DATE	REVISION

LANDSCAPE ARCHITECT DANIEL A. ROGERS, RLA 6666866	NOVEMBER 30, 2023
---	-------------------



1775 McHawk Trail, Maitland, Florida 32751 | P: 407.353.0112

ARB Review

PROJECT NAME
**HAMPTON INN & SUITES
by HILTON**

SHEET NAME
**ILLUSTRATIVE HARDSCAPE
PLAN & IMAGES**

SCALE	
AS SHOWN	
DATE 11.30.2023	DRAWN DAR
SHEET NUMBER	

L-1.00

PALAFIX STREET

CEDAR STREET

PROPOSED HOTEL

MATCHLINE - SEE SHEET L-1.03A

MATCHLINE - SEE SHEET L-1.03A

MATCHLINE - SEE SHEET L-1.03

MATCHLINE - SEE SHEET L-1.03

SHEET KEY & NOTES:

REFER TO HARDSCAPE DETAILS
SHEET L-2.01/2

- A

VEHICULAR PAVING
FIELD
- B

VEHICULAR CONCRETE
BAND & CURB FACE
- C

CONCRETE WALK
BROOM FINISH W/ 3"
WINDOW PANE BORDER
- D

CONCRETE WALK
BROOM FINISH
- E

TRASH
RECEPTACLE
- F

BENCH
- G

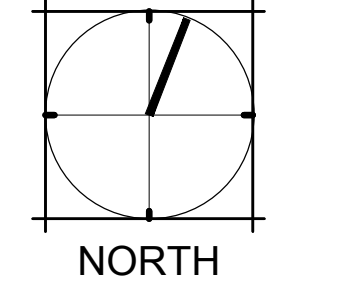
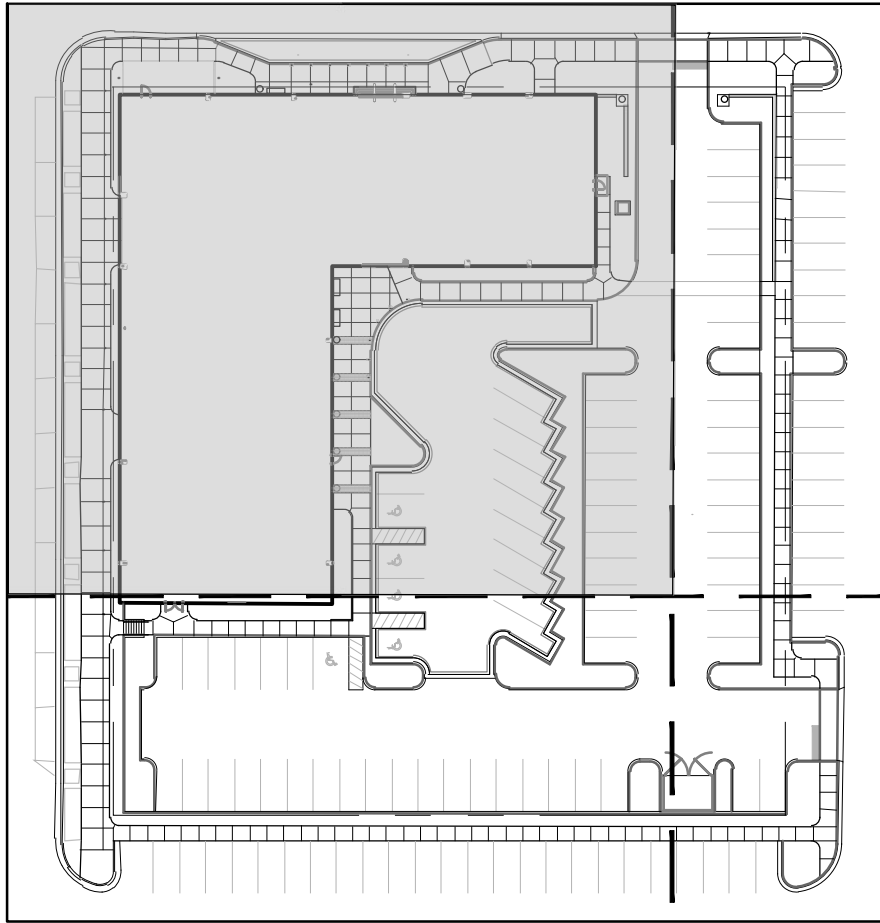
CAST IRON URN
- H

BOLLARD
- I

RETAINING WALL
- J

BRICK ACCENT BAND
- PA- PLANTING AREA

KEY MAP



0' 5' 10' 20'
SCALE: 1"=10'

NO.	DESCRIPTION	DATE
1	Issued for Review	11-30-2023

REV.	DATE	REVISION
------	------	----------

LANDSCAPE ARCHITECT
DANIEL A. ROGERS, RLA
6666866

NOVEMBER 30, 2023

11.30.2023

SCALE
AS SHOWN

DATE	DRAWN
11.30.2023	DAR

SHEET NUMBER

daniel
rogers

landscape architecture + site planning

1775 MCHAWK TRAIL, MAITLAND, FLORIDA 32751 | P: 407.353.0112

ARB Review

PROJECT NAME

HAMPTON INN & SUITES
by HILTON

SHEET NAME

HARDSCAPE
PLAN

SCALE

AS SHOWN

DATE

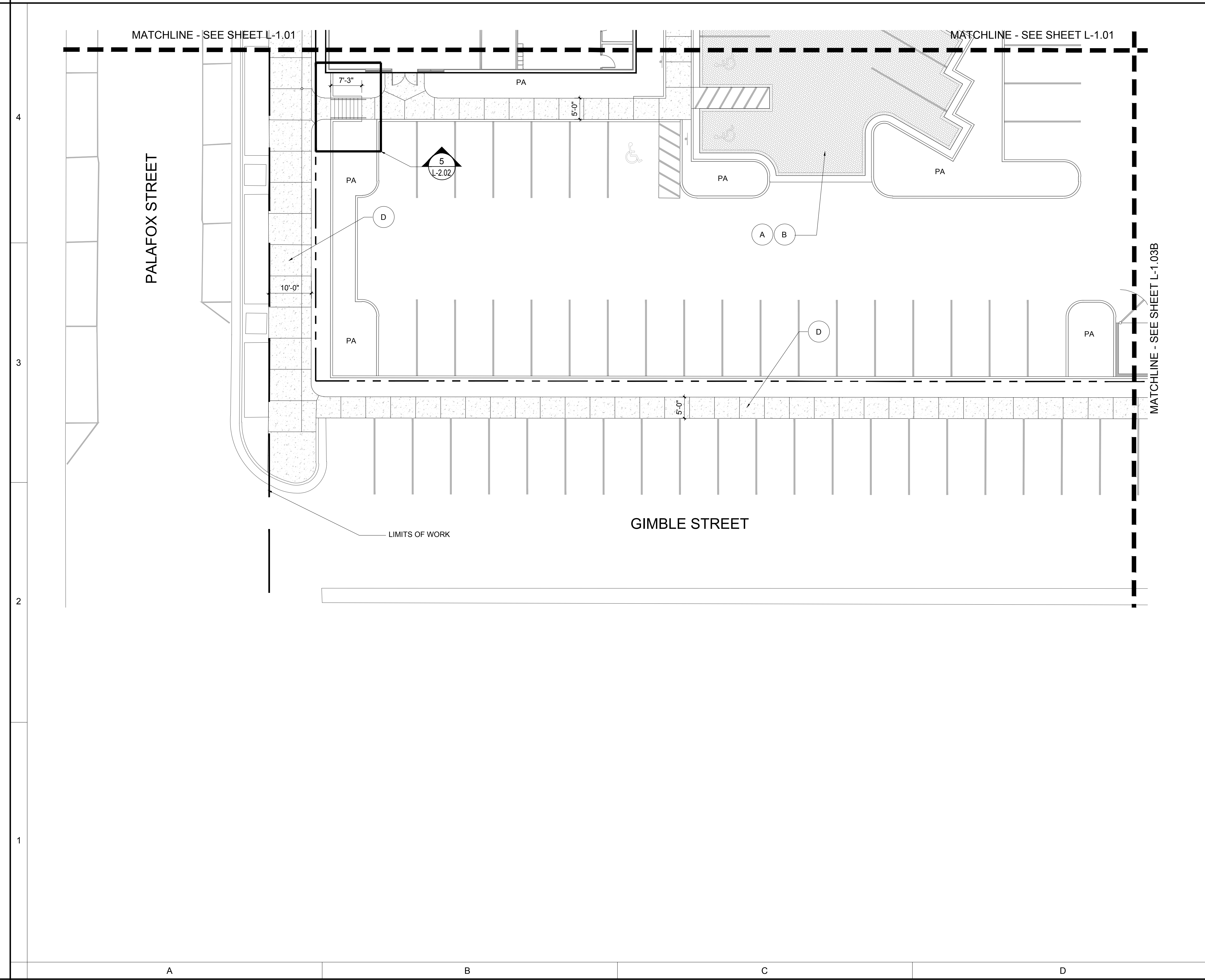
11.30.2023

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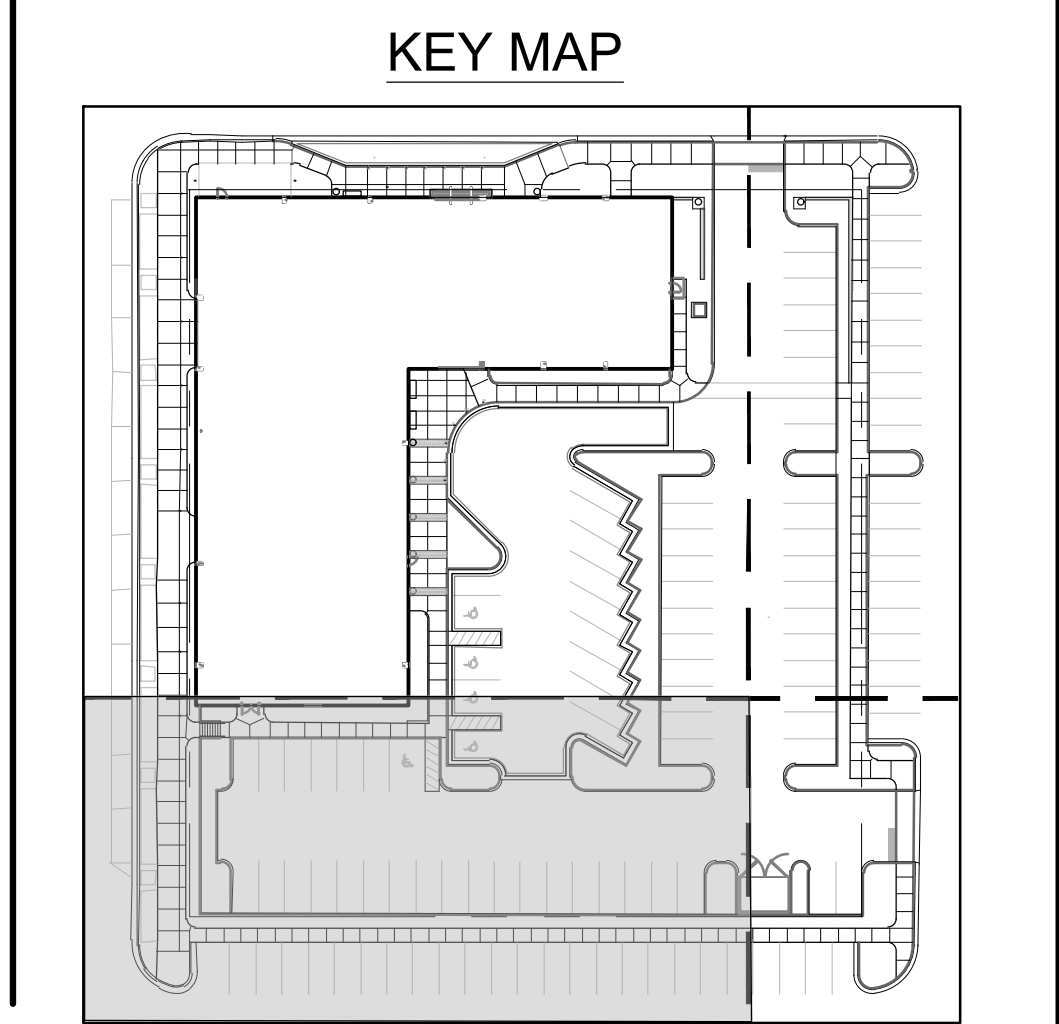
DAR

SHEET NUMBER

L-1.01



- SHEET KEY & NOTES:**
- REFER TO HARDSCAPE DETAILS
SHEET L-2.01/2
- A VEHICULAR PAVING FIELD
 - B VEHICULAR CONCRETE BAND & CURB FACE
 - C CONCRETE WALK BROOM FINISH W/ 3" WINDOW PANE BORDER
 - D CONCRETE WALK BROOM FINISH
 - E TRASH RECEPTACLE
 - F BENCH
 - G CAST IRON URN
 - H BOLLARD
 - I RETAINING WALL
 - J BRICK ACCENT BAND
 - PA- PLANTING AREA



NORTH

0' 5' 10' 20'

SCALE: 1"=10'

ISSUED

NO.	DESCRIPTION	DATE
1	Issued for Review	11-30-2023

REVISIONS

REV.	DATE	REVISION
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LANDSCAPE ARCHITECT
DANIEL A. ROGERS, RLA
6666866

NOVEMBER 30, 2023

**daniel
rogers**

landscape architecture + site planning

1775 MCHAWK TRAIL, NAITLAND, FLORIDA 32751 | P: 407.353.0112

ARB Review

PROJECT NAME

HAMPTON INN & SUITES
by HILTON

SHEET NAME

HARDSCAPE
PLAN

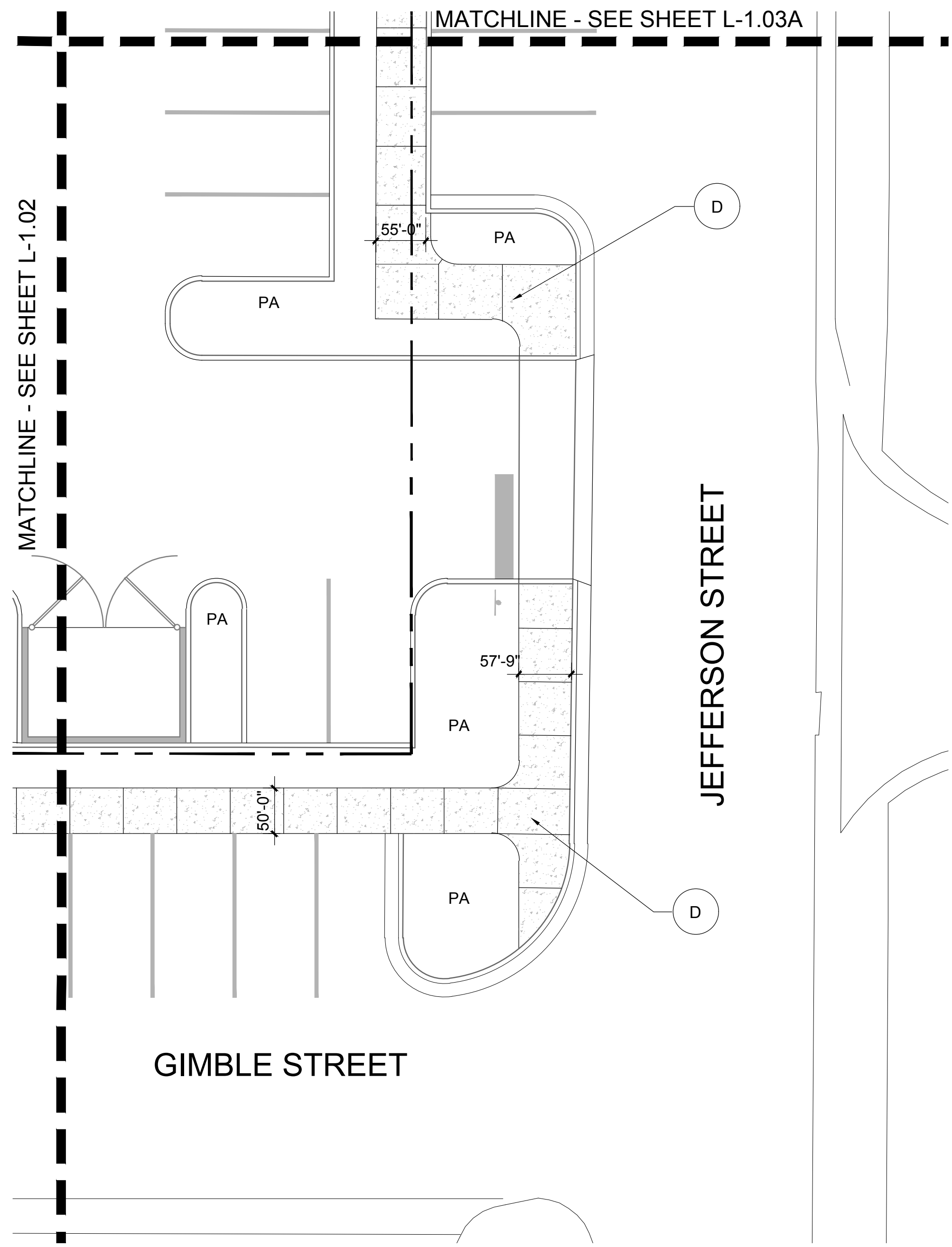
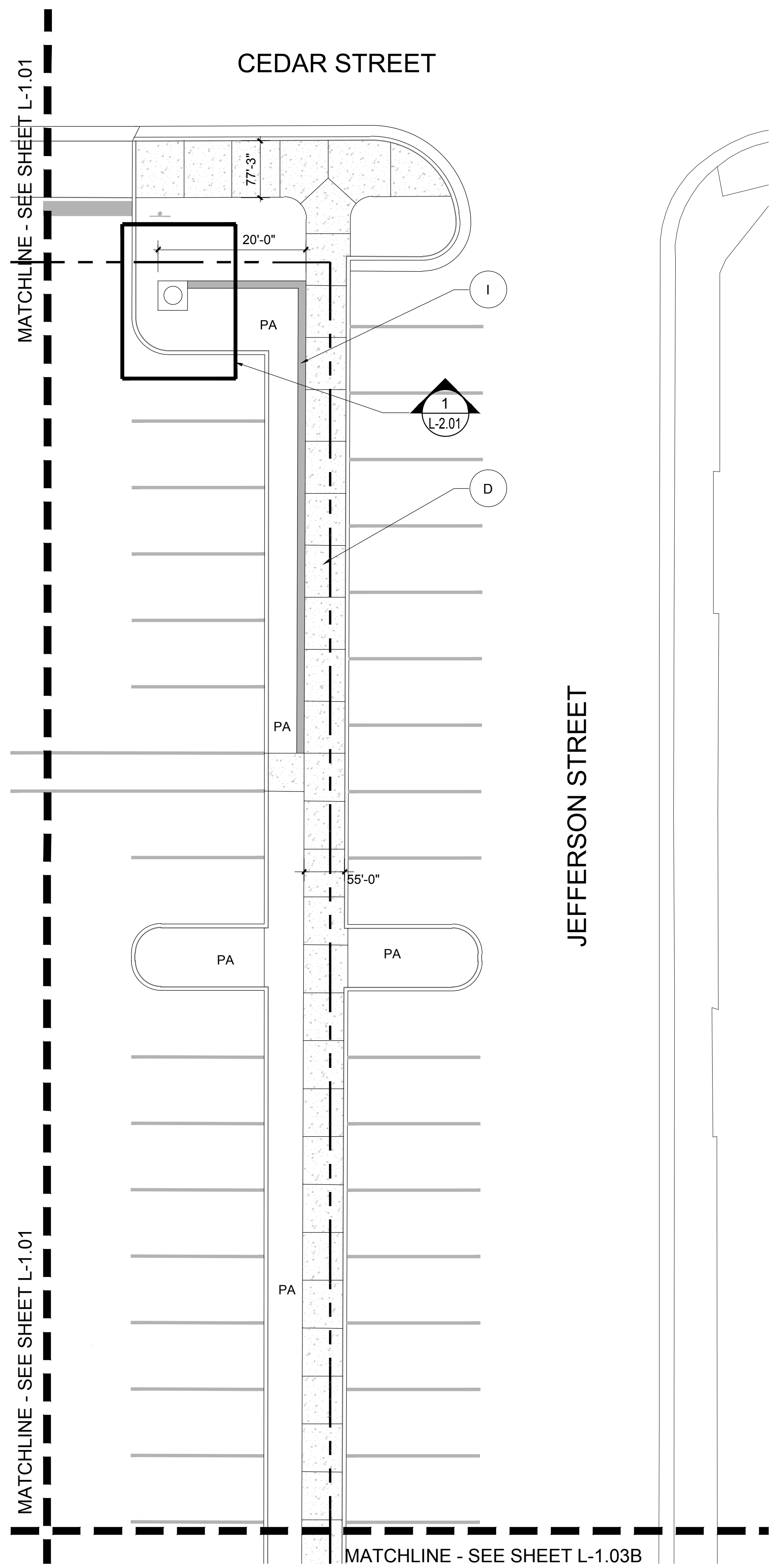
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AS SHOWN

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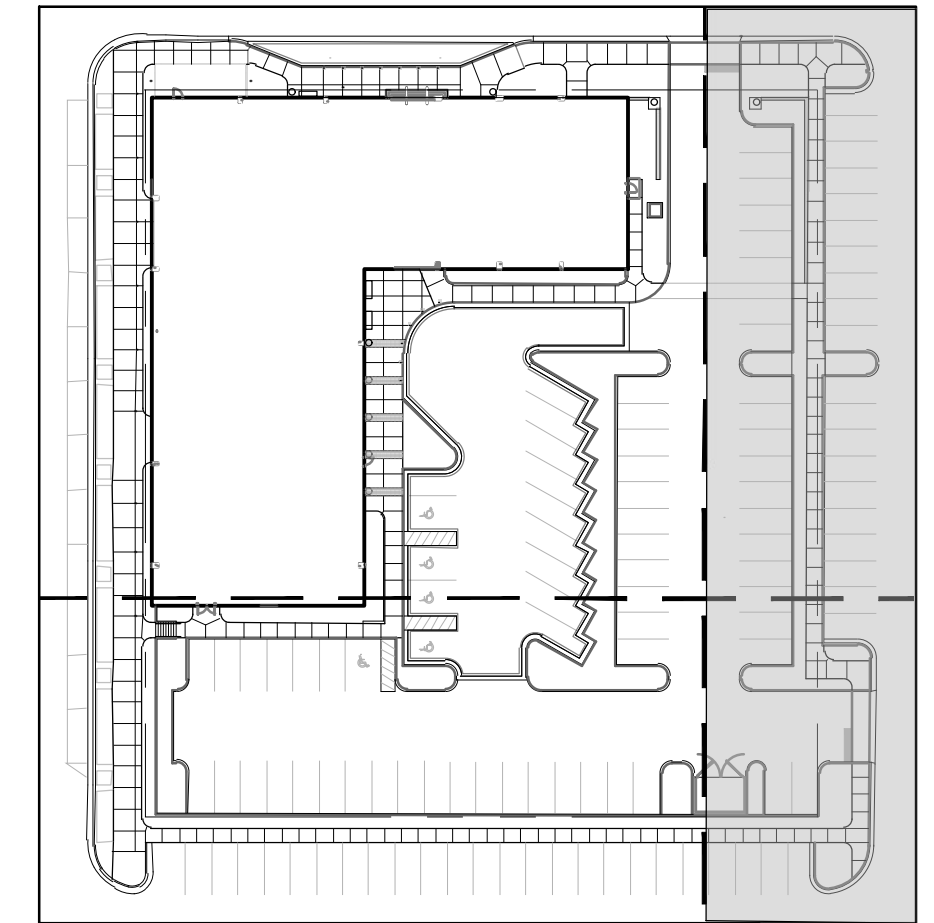
SHEET NUMBER

L-1.02



- SHEET KEY & NOTES:**
- REFER TO HARDSCAPE DETAILS
SHEET L-2.01/2
- A VEHICULAR PAVING FIELD
 - B VEHICULAR CONCRETE BAND & CURB FACE
 - C CONCRETE WALK BROOM FINISH W/ 3" WINDOW PANE BORDER
 - D CONCRETE WALK BROOM FINISH
 - E TRASH RECEPTACLE
 - F BENCH
 - G CAST IRON URN
 - H BOLLARD
 - I RETAINING WALL
 - J BRICK ACCENT BAND
 - PA- PLANTING AREA

KEY MAP



NORTH

SCALE: 1"=10'

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by HILTON

SHEET NAME

HARDSCAPE
PLAN

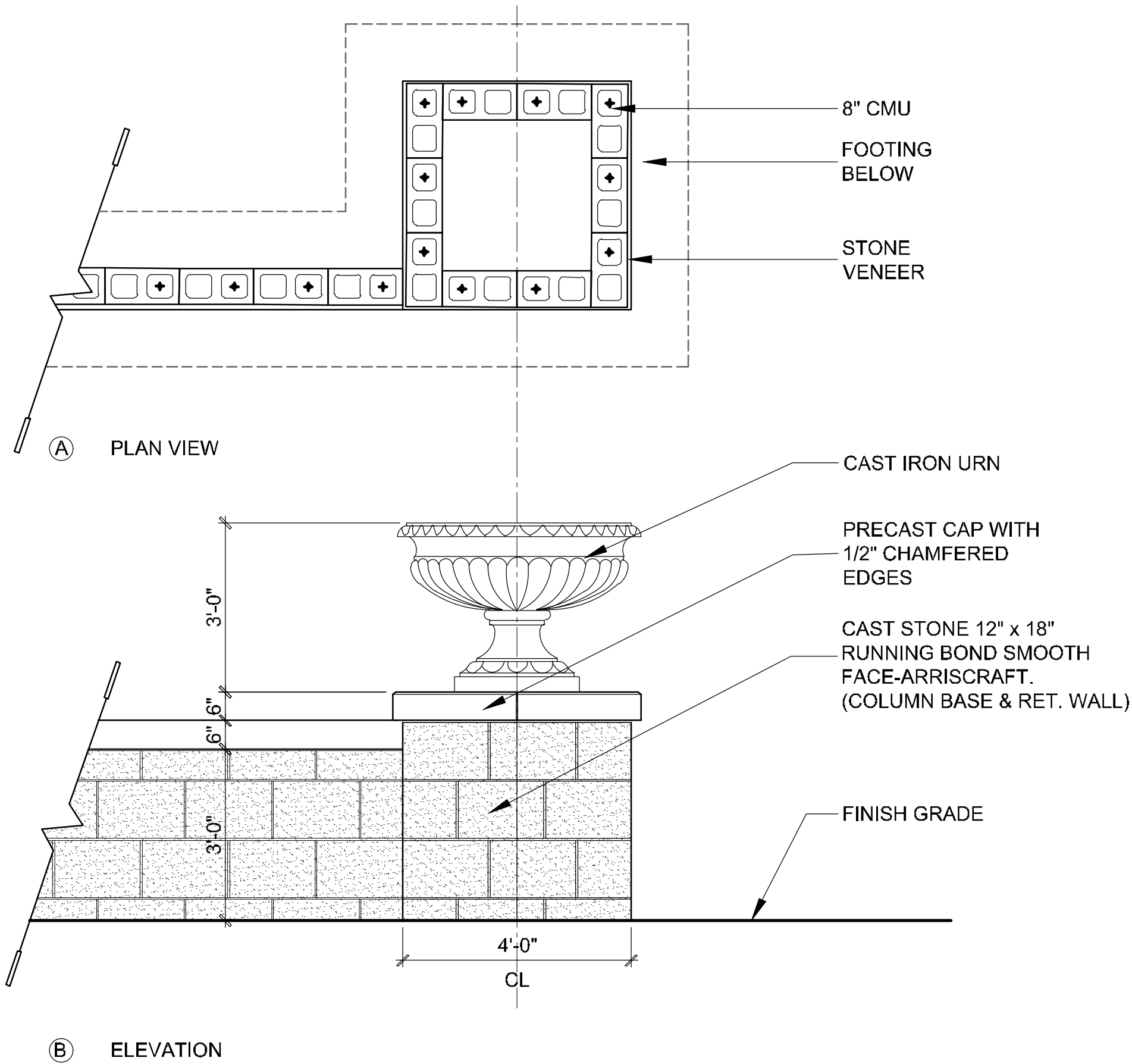
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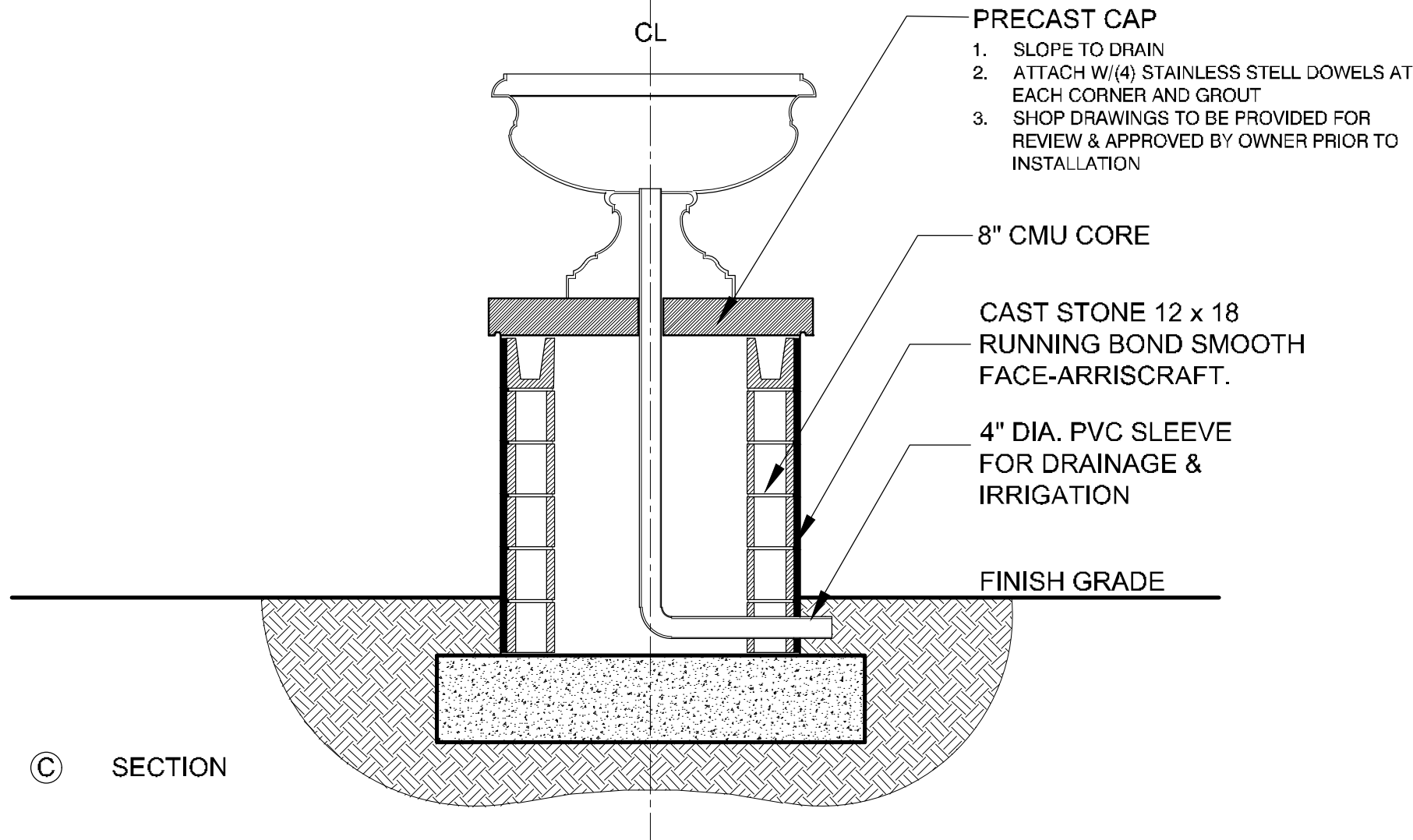
DATE	DRAWN
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L-1.03

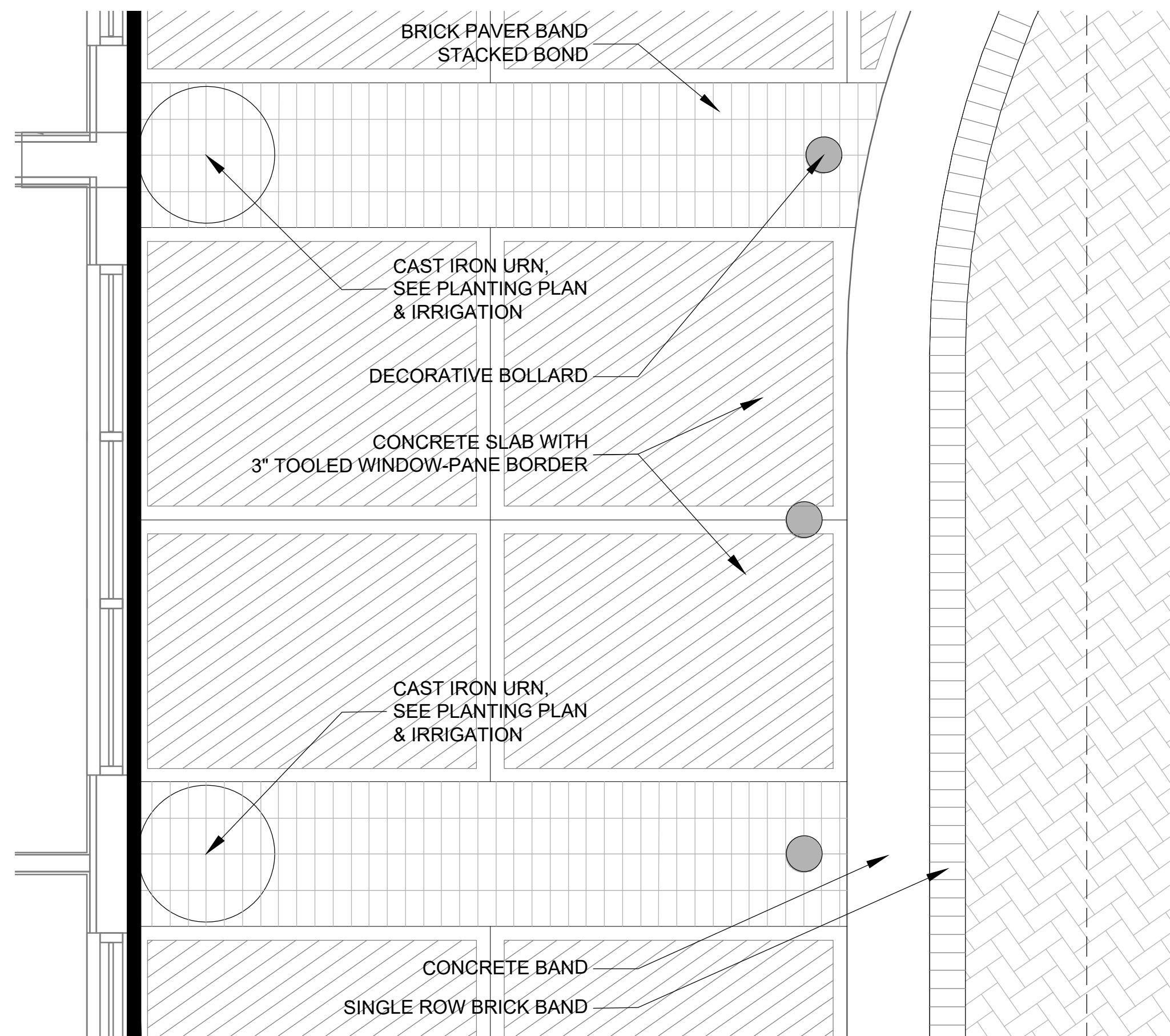


1 ELEVATION/PLAN/SECTION VIEW
4' H COLUMN W/ URN
SHOP DRAWINGS TO BE PROVIDED BY
STRUCTURAL ENGINEER (BY OWNER)



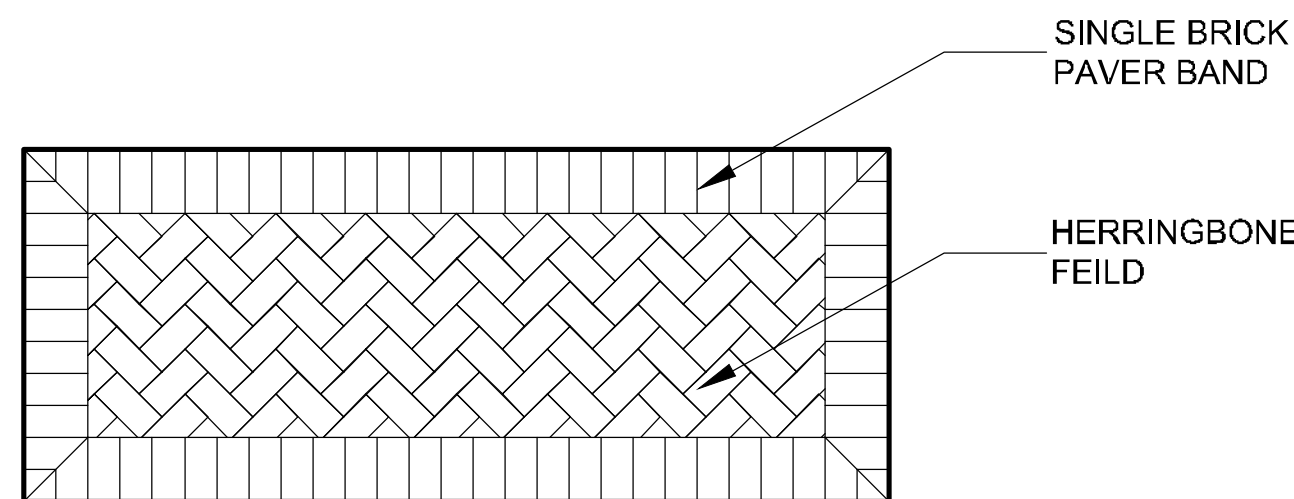
SECTION

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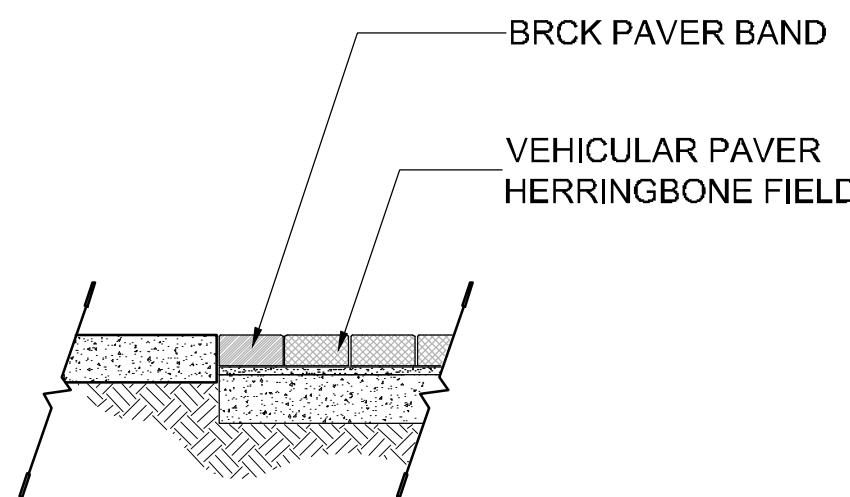
2 PLAN VIEW ENLARGEMENT
HARDSCAPE TREATMENT
SHOP DRAWINGS TO BE PROVIDED BY
STRUCTURAL ENGINEER (BY OWNER)

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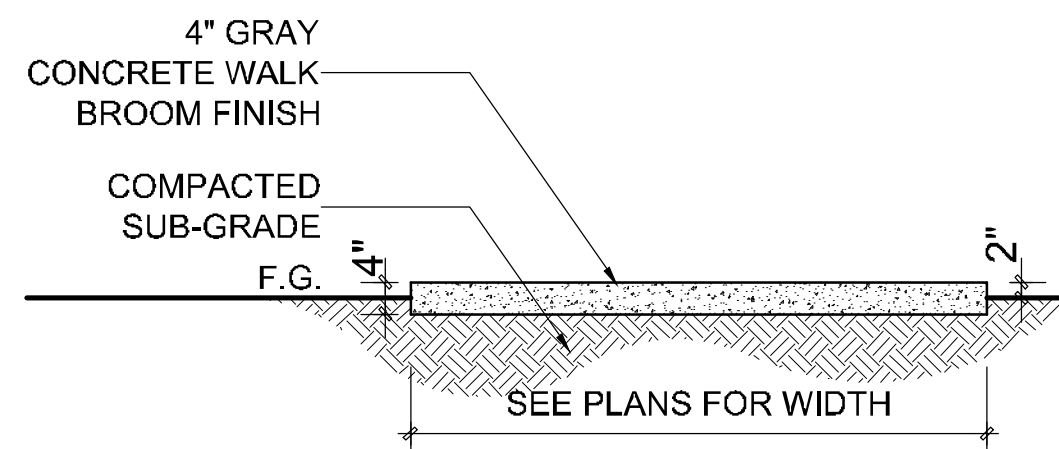
3 PLAN VIEW
PAVER DETAIL

SCALE: 1/2"=1'-0"



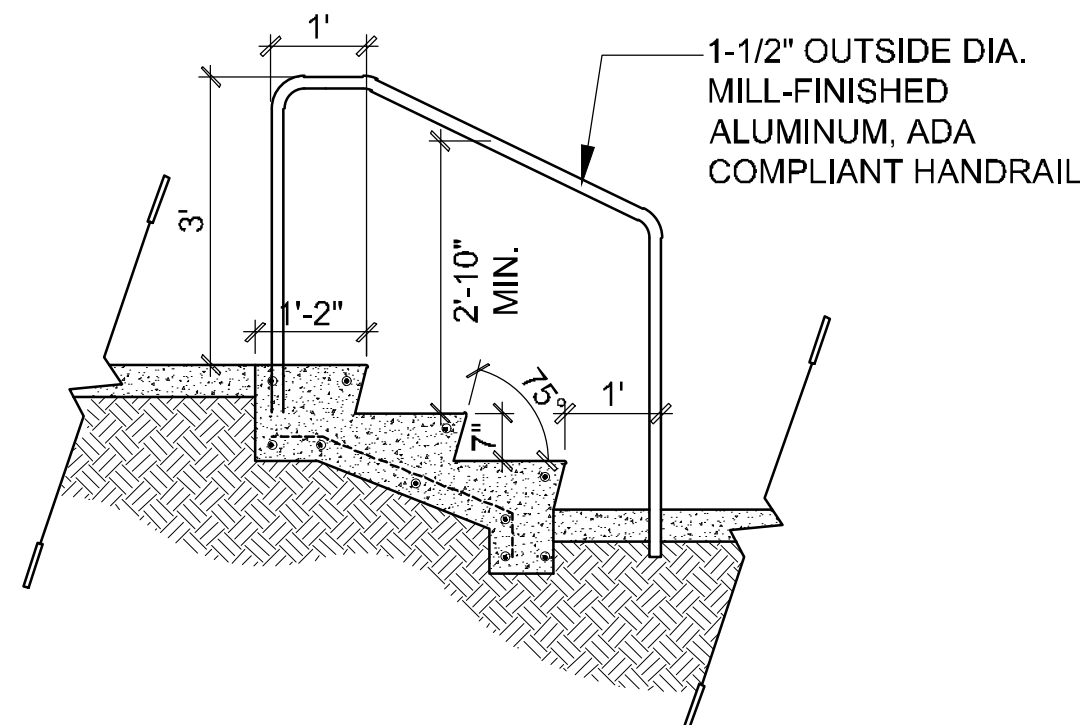
4 SECTION
VEHICULAR PAVES DETAIL

SCALE: 1/2"=1'-0"



5 SECTION
PEDESTRIAN WALK DETAIL

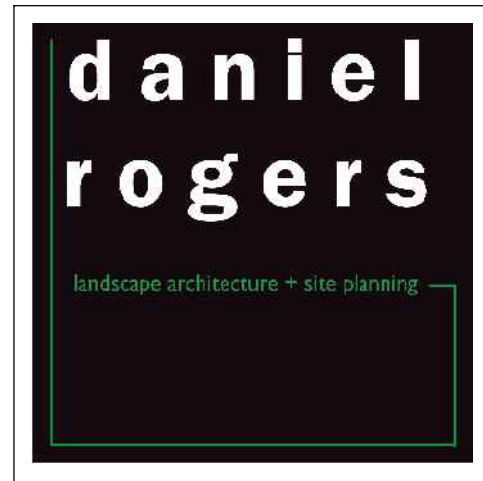
SCALE: 1/2"=1'-0"



6 SECTION
TYPICAL STAIR/HANDRAIL DETAIL

SCALE: 1/2"=1'-0"

SHEET KEY & NOTES:



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by HILTON

SHEET NAME

HARDSCAPE
DETAILS

SCALE

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SHEET NUMBER

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DAR

L-2.01

SHEET KEY & NOTES:

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4



1 RIVER BIRTCH MULTI-TRUNK

3



2 D.D. BLANCHARD SOUTHERN MAGNOLIA

2



3 LIVE OAK

1



4 BLOOD GOOD™ JAPANESE MAPLE



5 MARY NELL HOLLY



6 NATCHEZ CRAPE MYRTLE



7 JAPANESE BLUEBERRY



8 JAPANESE CAMELLIA



9 PANICLE HYDRANGEA



10 OAKLEAF HYDRANGEA



11 PODOCARPUS



12 LITTLELEAF BOXWOOD



13 RED RUFFLE AZALEA



14 GARDENIA



15 COONTIE PALM



16 CAST IRON PLANT



17 EVERGREEN GIANT LILYTURF



18 BRONZE BEAUTY ASIATIC JASMINE

SHEET KEY & NOTES:



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6666866

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by HILTON

SHEET NAME

PLANT IMAGES

SCALE

AS SHOWN

DATE

11.30.2023

SHEET NUMBER

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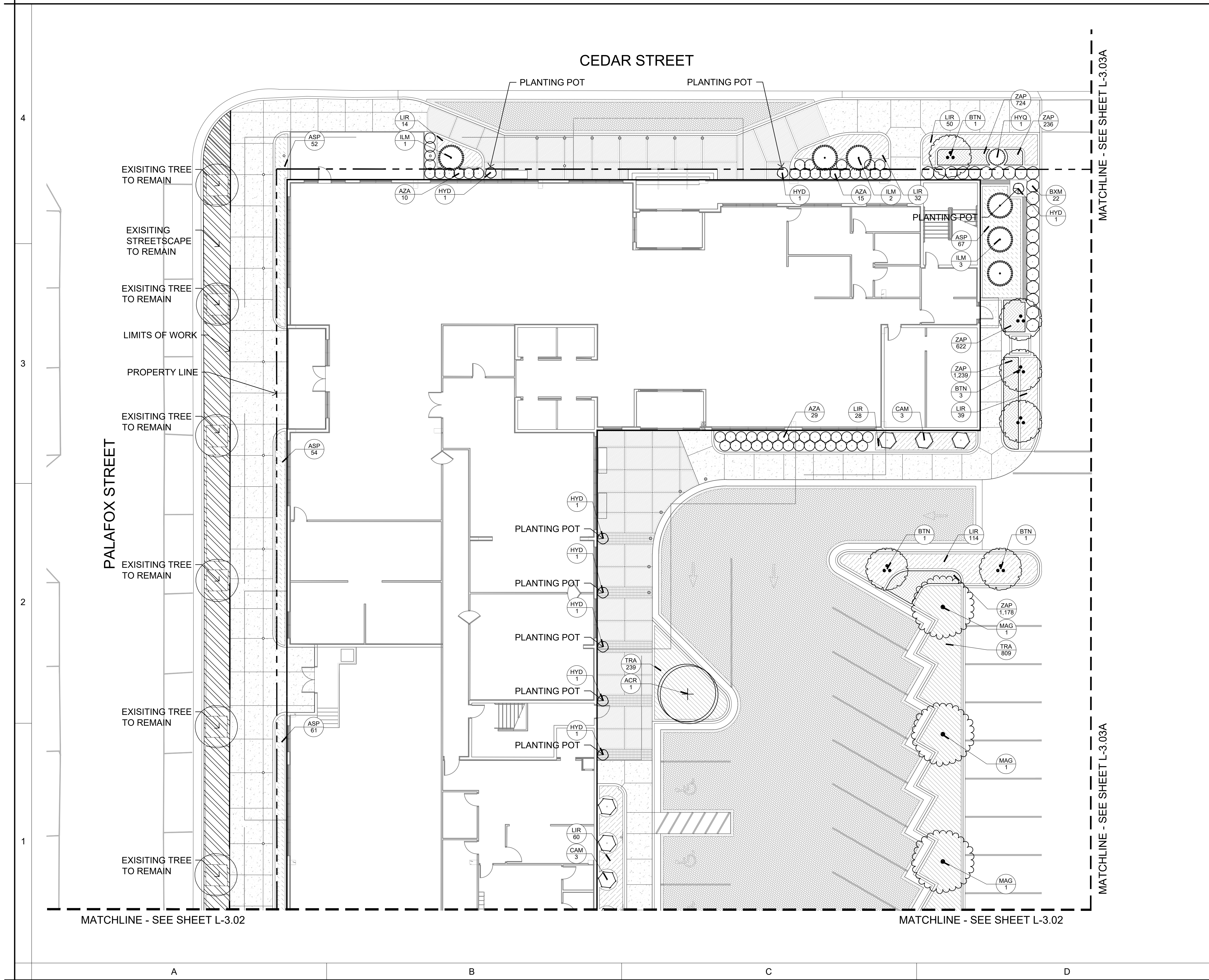
L-3.00A

A

B

C

D



SHEET KEY & NOTES:

Refer to Sheet L-3.10 for Detailed Plant Schedule

- EXISTING TREE TO REMAIN
- EXISTING STREETScape TO REMAIN
- PROPERTY LINE
- MATCH LINE

KEY MAP

NORTH

0' 5' 10' 20'

SCALE: 1"=10'

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PROJECT NAME

**HAMPTON INN & SUITES
by HILTON**

SHEET NAME

**LANDSCAPE
PLAN**

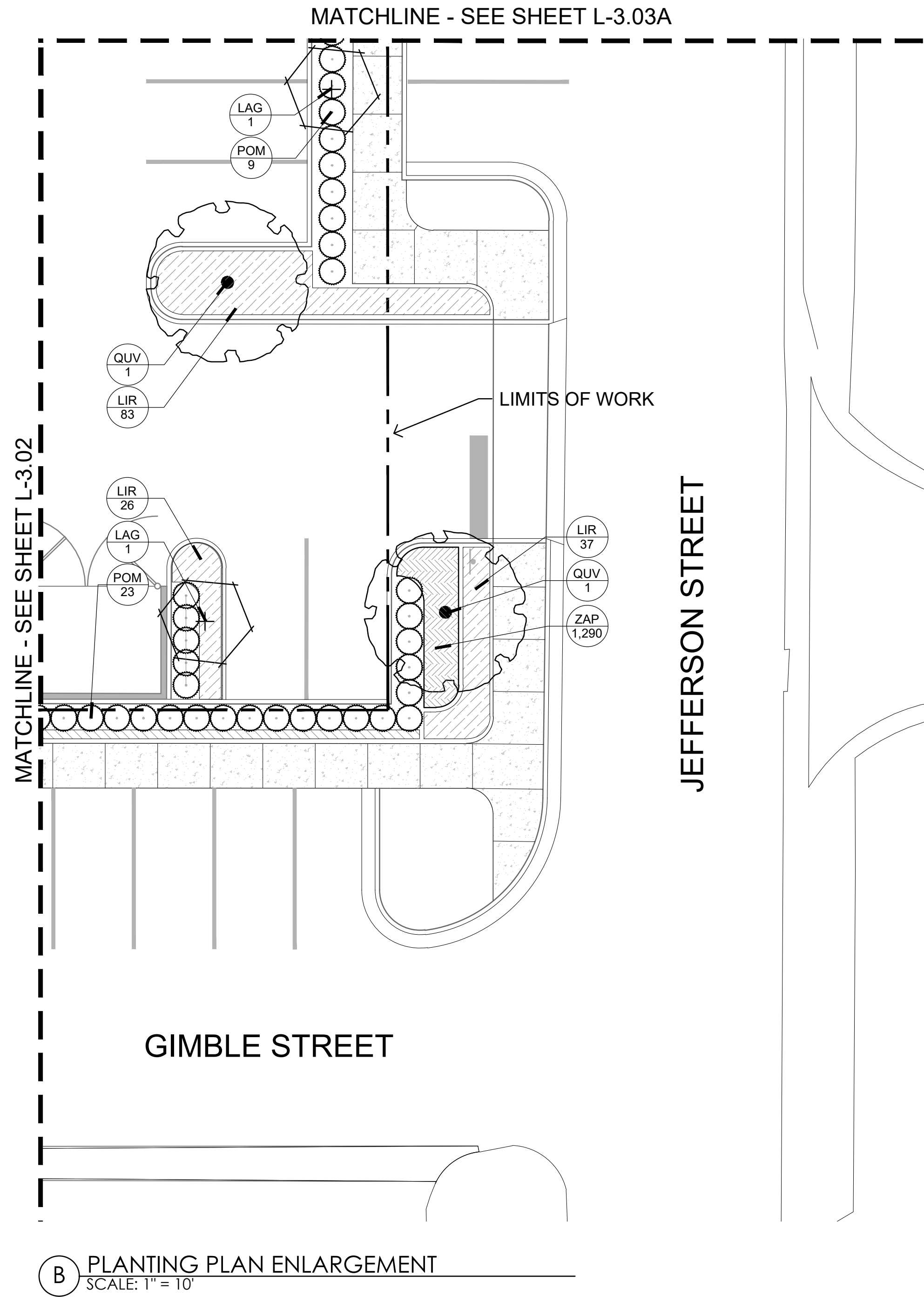
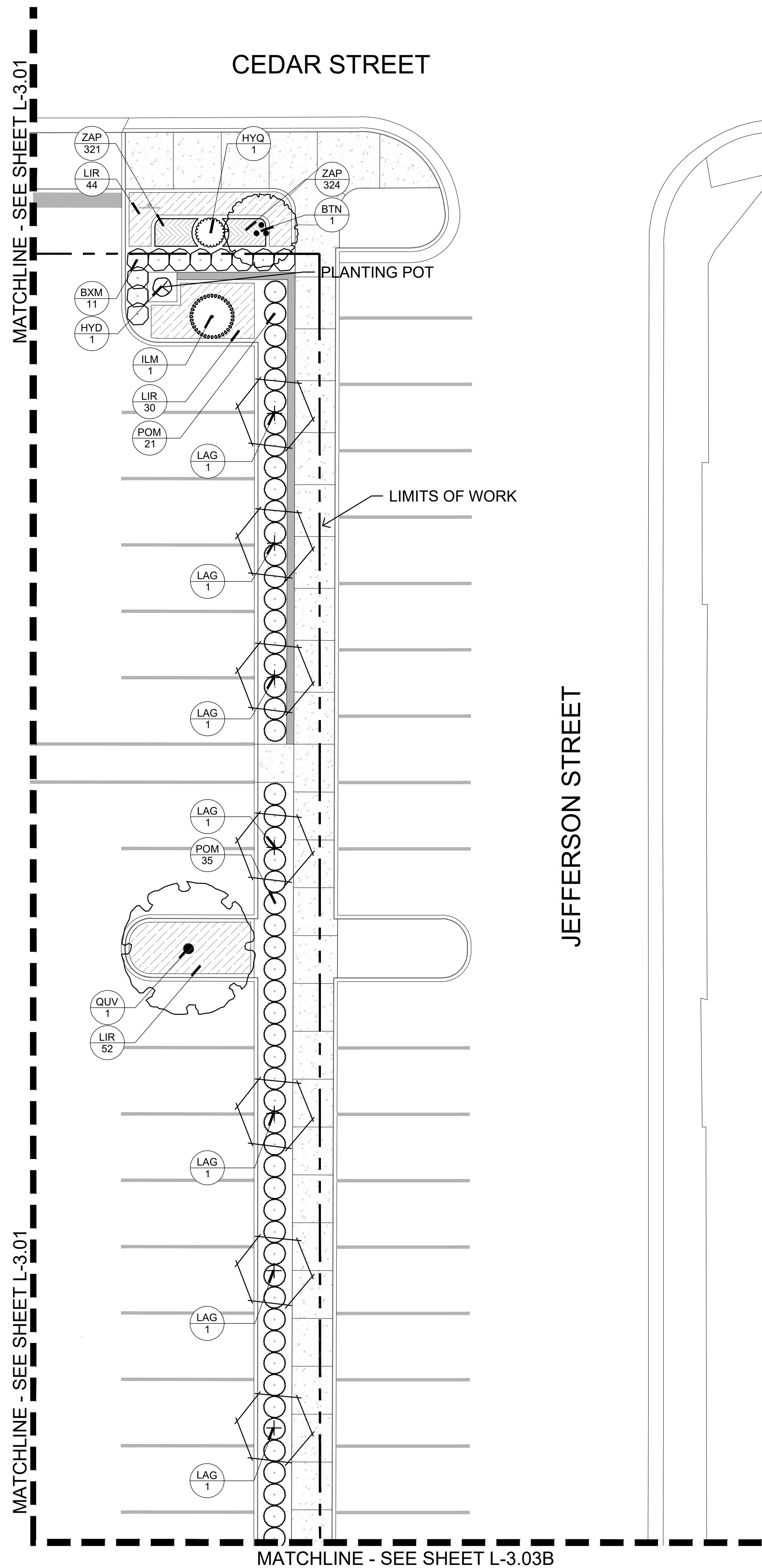
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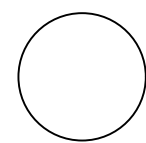
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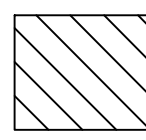


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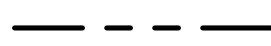
Refer to Sheet L-3.10 for Detailed Plant Schedule



EXISTING TREE
TO REMAIN



EXISTING STREETScape
TO REMAIN

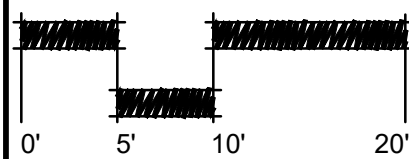
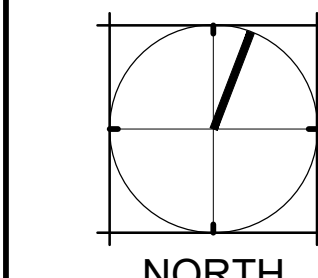
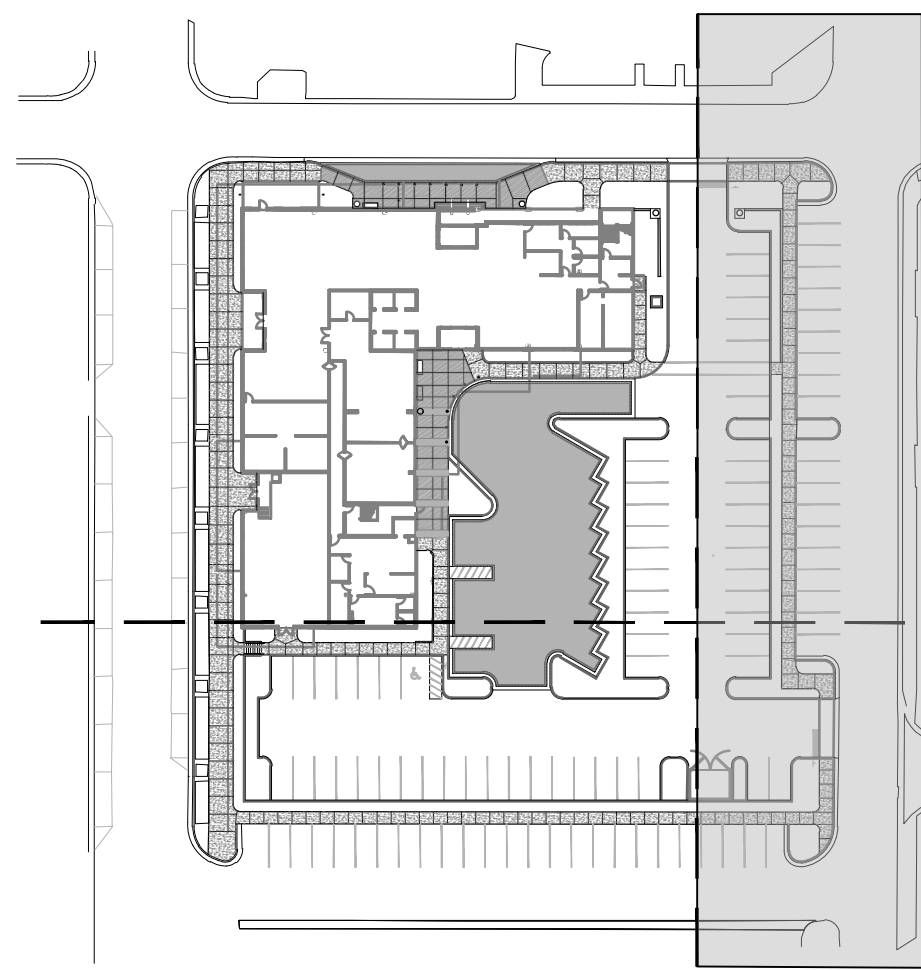


PROPERTY LINE



MATCH LINE

KEY MAP



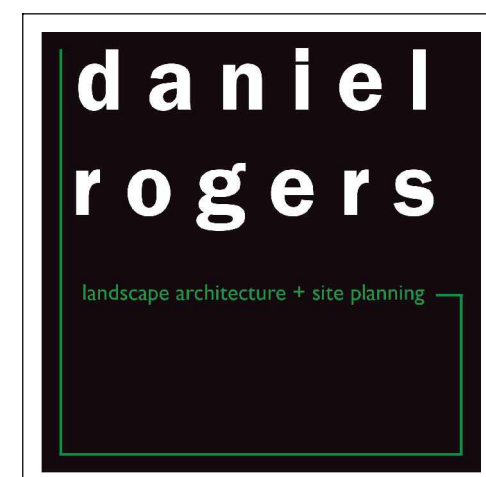
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SHEET NAME

LANDSCAPE
PLAN

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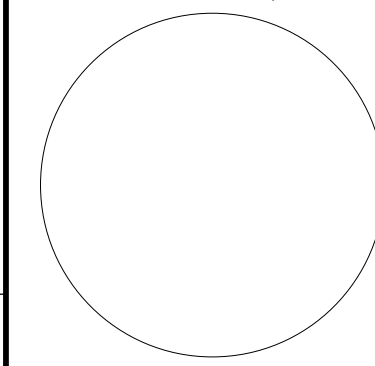
11.30.2023

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L-3.03

LANDSCAPE ARCHITECT
DANIEL A. ROGERS, RLA
6666866

NOVEMBER 30, 2023

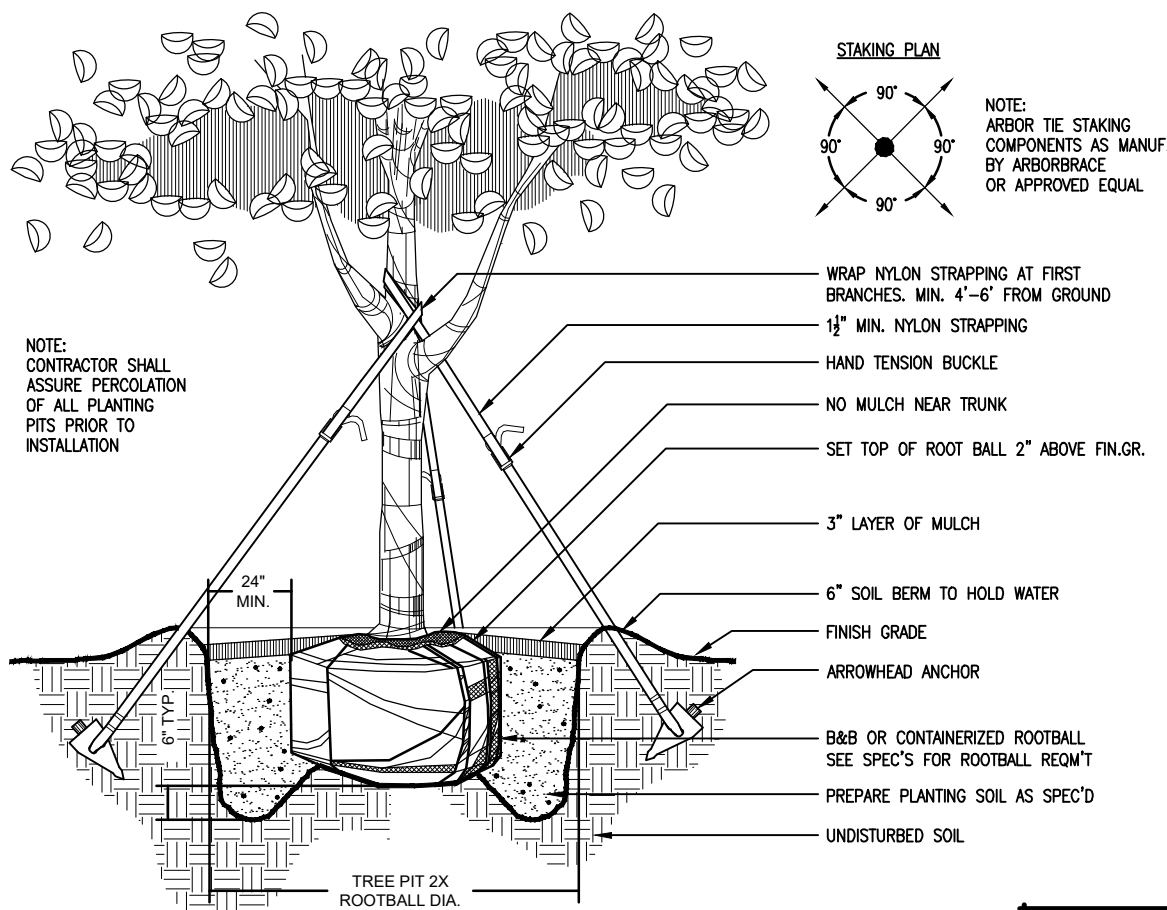


LANDSCAPE NOTES

1. NEWLY INSTALLED "CANOPY" TREES SHALL HAVE THEIR D.B.H. MEASURED 4.5' ABOVE THE TOP OF THE ROOT BALL. ALL NEWLY INSTALLED "UNDERSTORY" TREES SHALL HAVE THEIR D.B.H. MEASURED 12" ABOVE THE TOP OF THE ROOT BALL.
2. ALL PLANT MATERIAL SHALL MEET OR EXCEED THE STANDARDS OF FLORIDA NO 1 AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS 2015," STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, AND ANY AMENDMENTS THERETO.
3. THE LANDSCAPE ARCHITECT MAY REJECT ANY PLANT MATERIAL BROUGHT TO THE SITE WHICH HE DEEMS TO BE OF INFERIOR QUALITY OR APPEARANCE.
4. ALL PLANT BEDS SHALL BE TOP DRESSED WITH A MINIMUM OF 3" DEPTH PINE BARK MULCH. MAINTAIN A 4" CLEAR SPACE BETWEEN MULCH AND THE PLANT STEM.
5. ALL TREES SHALL HAVE ALL SYNTHETIC BURLAP REMOVED FROM THE ENTIRE ROOT BALL. JUTE BURLAP SHALL BE REMOVED FROM THE TOP ONE-THIRD OF THE ROOT BALL. THE TOP THREE ROWS OF SQUARES ON ALL CAGES AROUND THE ROOT BALLS SHALL BE CLIPPED OFF AND REMOVED.
6. THE CONTRACTOR SHALL READ AND ADHERE TO ALL WRITTEN SPECIFICATIONS.
7. THE CONTRACTOR SHALL VISUALLY INSPECT THE SOILS CONDITION OF THE SITE. HE SHALL DIG A MINIMUM OF 12 TEST HOLES 3 FOOT DEEP RANDOMLY AROUND THE SITE. HE SHALL PERFORM PERCOLATION TESTS IN THESE HOLES FOR A PERIOD OF ONE HOUR EACH. THE HOLES SHALL BE FILLED WITH WATER AND IF THE HOLES HOLD MORE THAN 6" OF WATER AFTER ONE HOUR, THE LANDSCAPE ARCHITECT SHOULD BE NOTIFIED OF THE PROBLEM. THE CONTRACTOR SHALL RECOMMEND SUBSTITUTIONS OF PLANT MATERIAL AND PLANTING INSTALLATION TO ACCOMMODATE POOR DRAINING SOILS.
8. THE CONTRACTOR SHALL PROVIDE A SOIL TEST IN FOUR LOCATIONS AND PROVIDE RECOMMENDATIONS FOR AMENDMENTS BASED ON THE RESULTS. IMPROPER SOIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL RECTIFY ALL INCURRED DAMAGES AT NO ADDITIONAL COST TO THE OWNER.
9. THE CONTRACTOR SHALL REVIEW THE SOILS REPORT ON FILE WITH THE OWNER.
10. THE INSTALLATION OF PLANT MATERIAL SHALL BE VIEWED AS ACCEPTANCE BY THE CONTRACTOR OF EXISTING GRADES AS GIVEN TO HIM. THE CONTRACTOR SHALL PROVIDE TO THE LANDSCAPE ARCHITECT A WRITTEN LETTER OF ACCEPTABILITY OF GRADES. FAILURE TO DO SO WILL BE VIEWED AS AN ACCEPTANCE OF EXISTING GRADES BY THE CONTRACTOR.
11. THE CONTRACTOR SHALL BERM ALL PARKING LOT ISLANDS 12" ABOVE TOP OF CURB ELEVATION WITHOUT EXCEEDING A 4:1 SLOPE (TYPICAL).
12. WHERE LIGHT POLES AND TREES BOTH OCCUR IN A PARKING LOT ISLANDS, THE TREE SHALL BE SPACED AN ADEQUATE DISTANCE FROM THE POLE.
13. THE CONTRACTOR WILL BE REQUIRED TO SAND AREAS OF SOD THAT ARE NOT SMOOTHLY APPLIED TO ELIMINATE SMALL IRREGULARITIES IN GRADES. LARGE IRREGULARITIES IN GRADE WILL REQUIRE REGRADING & RESODDING.
14. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF THE SITE INCLUDING ALL MOWING, EDGING, TRIMMING, PRUNING & SPRAYING OF PESTICIDES & FUNGICIDES UNTIL THE TIME OF FINAL ACCEPTANCE BY THE OWNER.

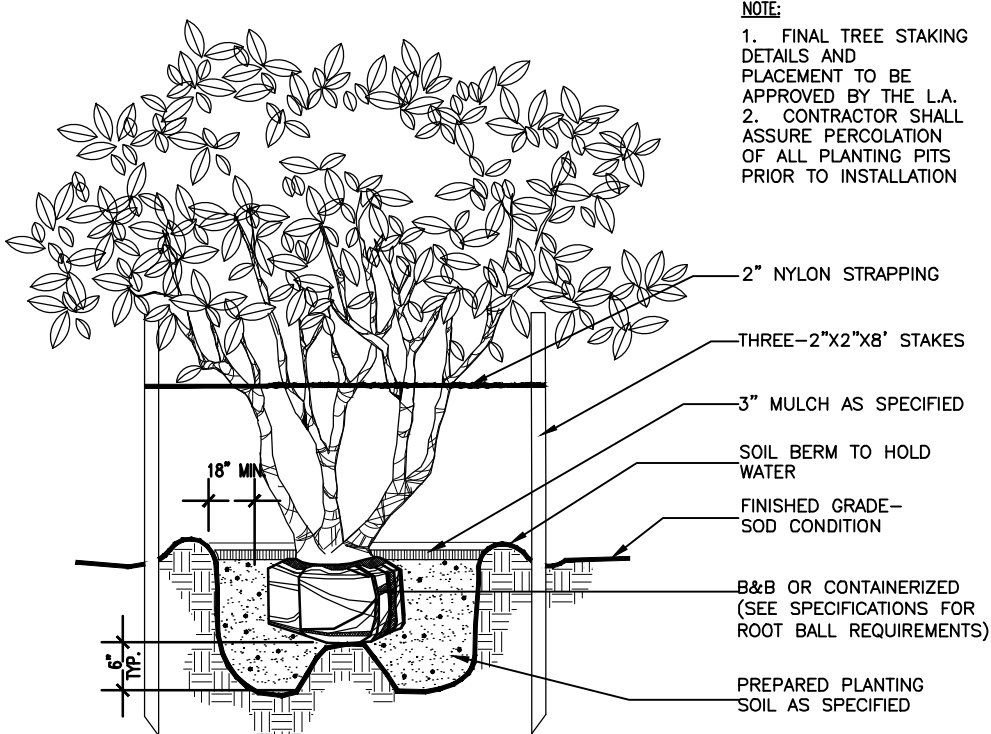
PLANTER / POT NOTES

1. ALL POTS SHALL HAVE A 1" DIA DRAINAGE HOLE DRILLED INTO THE BASE, WITH A 4" GRAVEL LAYER IN THE BOTTOM. GEOTEXTURAL FABRIC SHALL BE PLACED ABOVE THE GRAVEL LAYER TO CONTAIN THE SOIL SUBSTRATE WITHIN THE PLANTER.
2. POTS TO BE SEALED ON THE INSIDE WITH A WATER PROOFING ASPHALT SEALER TO WITHIN 2" OF THE POT RIM.
3. ALL POTS ON PAVING TO RECEIVE IRRIGATION FROM TUBING RUNNING UP BACKSIDE OF POT OUT OF GUEST SIGHT. REFER TO IRRIGATION DRAWINGS FOR DETAILS. IRRIGATION CONTRACTOR TO VERIFY POT PLACEMENT PRIOR TO IRRIGATION INSTALLATION.
4. FINAL PLACEMENT OF ALL PLANT MATERIAL DESIGNATED TO BE LOCATED IN POTS SHALL BE DETERMINED BASED ON FIELD CONDITIONS. LANDSCAPE ARCHITECT TO REVIEW PLANT QUANTITIES & ARRANGEMENTS PRIOR TO PLANTING, ADJUSTMENTS MAY BE REQUIRED.
5. PROVIDE MATCHING SAUCER FOR EACH PLANTER / POT.



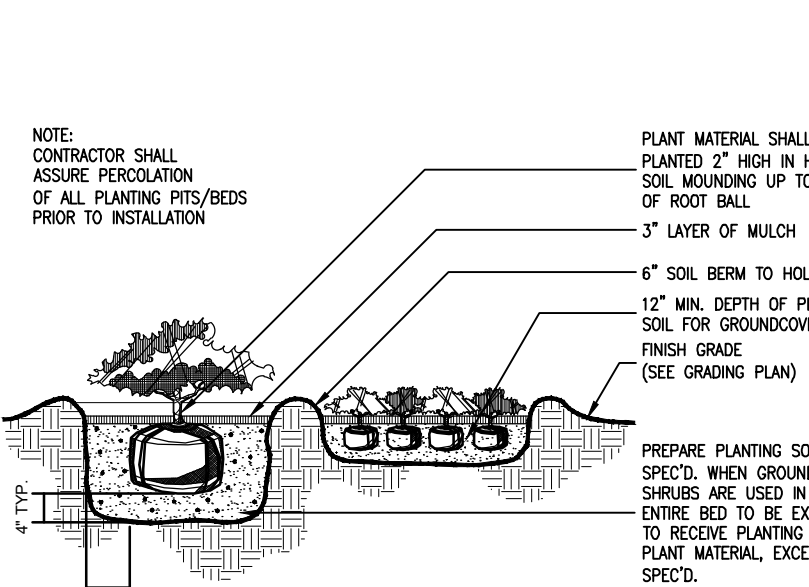
CANOPY TREE PLANTING DETAIL

SCALE: NTS



UNDERSTORY TREE PLANTING DETAIL

SCALE: NTS



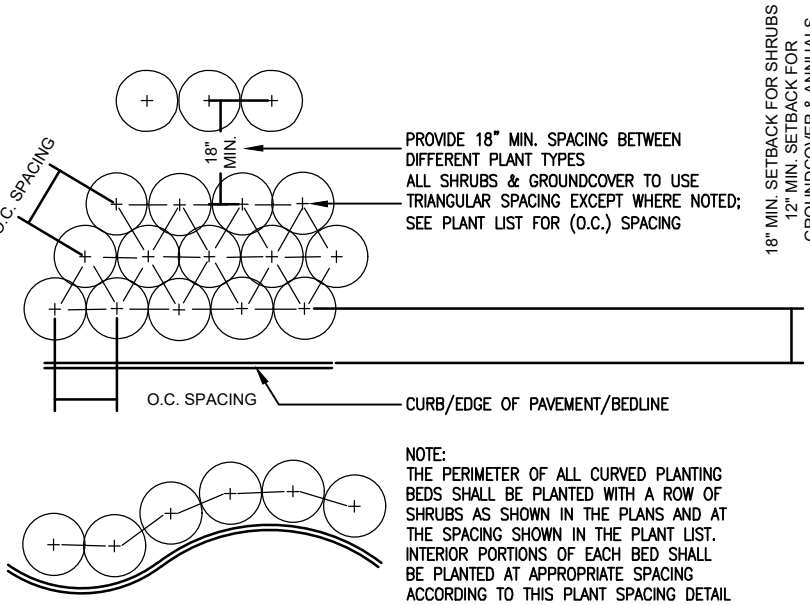
SHRUB & GROUNDCOVER PLANTING DETAIL

SCALE: NTS

PLANT SCHEDULE TEMPO-H2S PENSACOLA

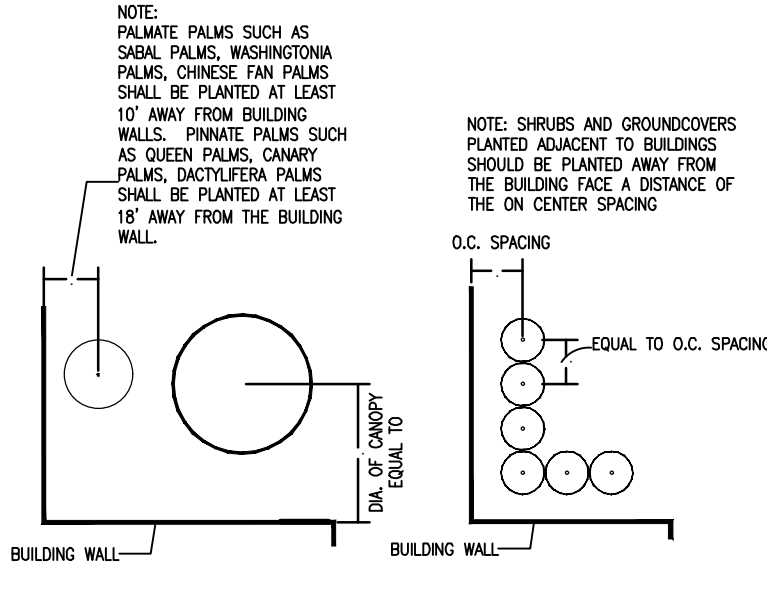
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPEC	NATIVE	DROUGHT TOLERANT	SPACING
MEDIUM AND LARGE TREES								
	BTN	10	Betula nigra	River Birch Multi-Trunk	100 gal.	Yes	High	AS
	MAG	4	Magnolia grandiflora 'D.D. Blanchard'	D.D Blanchard Southern Magnolia	300 gal.	Yes	High	AS
	QUV	6	Quercus virginiana	Southern Live Oak	200 gal.	Yes	High	AS
SMALL TREES								
	ACR	1	Acer palmatum 'Bloodgood'	Bloodgood Japanese Maple	100 gal.	Yes	High	AS
	ILM	7	Ilex x 'Mary Nell'	Mary Nell Holly	8' Ht., Matched	Yes	High	AS
	LAG	9	Lagerstroemia indica	Crape Myrtle	10'-12' Ht., Multi., Specimen	No	Medium	AS
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NATIVE	DROUGHT TOLERANT	SPACING
SHRUBS								
	BXM	55	Buxus microphylla 'Apple Green'	Apple Green Littleleaf Boxwood	7 gal.	No	High	36" o.c.
	CAM	7	Camellia japonica	Camellia	15 gal.	No	High	AS
	ELD	22	Elaeocarpus decipiens	Japanese Blueberry Tree	6' Ht.	No	High	48" O.C.
	HYD	9	Hydrangea paniculata	Panicle Hydrangea	3 gal.	Yes	Medium	AS
	HYQ	2	Hydrangea quercifolia 'Gatsby Moon'	Oakleaf Hydrangea	7 gal.	Yes	Medium	AS
	POM	179	Podocarpus macrophyllus	Yew Podocarpus	15 gal.	No	High	36" o.c.
	AZA	77	Rhododendron x 'Red Ruffles'	Red Ruffles Rutherfordiana Azalea	3 gal.	No	Medium	36" o.c.

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPEC	NATIVE	DROUGHT TOLERANT	SPACING
SHRUB AREAS								
	ZAP	12,529	Zamia pumila	Coontie Cycad	3 gal.	Yes	High	36" o.c.
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPEC	NATIVE	DROUGHT TOLERANT	SPACING
GROUND COVERS								
	ASP	234	Aspidistra elatior	Cast Iron Plant	1 gal.	Yes	High	
	LIR	788	Liriope muscari 'Evergreen Giant'	Evergreen Giant Lilyturf	1 gal.	No	High	
	TRA	1,505	Trachelospermum asiaticum 'Bronze Beauty'	Bronze Beauty Asiatic Jasmine	1 gal.	No	High	



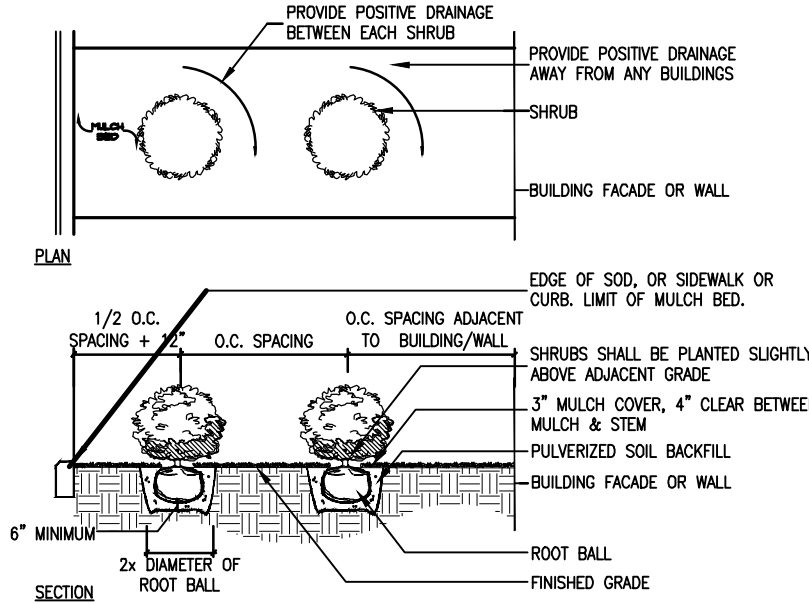
SHRUB PLANTING DETAIL

SCALE: NTS



SHRUB PLANTING DETAIL

SCALE: NTS



SHRUB PLANTING DETAIL

SCALE: NTS

SHEET KEY & NOTES:



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SHEET NAME

PLANT SCHEDULE,
DETAILS, & NOTES

LANDSCAPE ARCHITECT
DANIEL A. ROGERS, RLA
66668666

NOVEMBER 30, 2023

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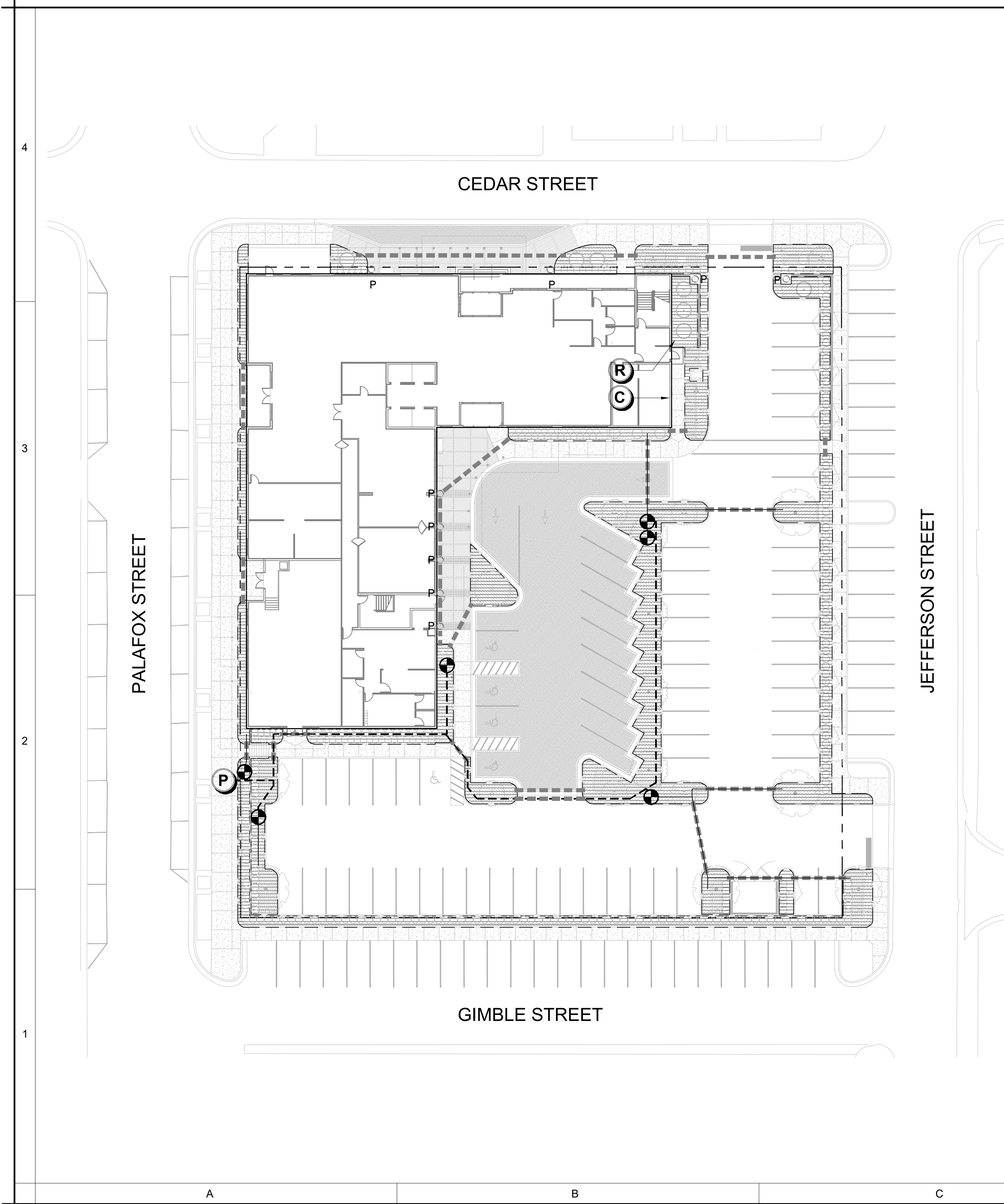
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L-3.10



LEGEND	
	HUNTER PRS40 6" POP-UP SPRAY HEAD
	CLASS 200 PVC DRIP HEADER PIPE-REFER TO DETAIL
	NETAFIM DRIP BUBBLER TREE RING- REFER TO DRIP BUBBLER DETAIL
	HUNTER DRIP ZONE ECO-INDICATOR- REFER TO THE DETAIL
	NETAFIM FLUSH VALVE
	NETAFIM TECHLINE CV 17MM DRIP TUBING- 1 GPH EMITTERS EVERY 12". PLACE ROWS 12" APART IN ALL GROUND COVER BEDS. INSTALL A DOUBLE ROW ON ALL HEDGE ROWS. REFER TO ALL NOTES AND DETAILS ON THIS SHEET.
	HEDGE
	CLASS 200 PVC MAINLINE-2 1/2"
	CLASS 200 PVC LATERAL LINE- SIZE AS SHOWN UNTIL A SMALLER SIZE IS SHOWN. MINIMUM SIZE OF 3/4"
	SCH. 40 SLEEVE (MINIMUM OF 24" DEPTH AND 2 SIZES LARGER THAN THE PIPE SIZE OR AS LABELED ON THE PLAN)
	HUNTER ICV ELECTRIC VALVE. SIZE AS SHOWN BELOW. INSTALL VALVE IN A 11"x17" VALVE BOX AND COVER 0-25 GPM=1" 26-50 GPM=1 1/2" 51 AND HIGHER GPM=2"
	HUNTER ZONE CONTROL KIT- REFER TO THE DETAIL.
	PLANTER POT LOCATION

GENERAL NOTES	
1)	REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREES AND SHRUBS. HAND DIG AROUND ANY EXISTING TREES. DO NOT CUT ANY ROOTS OVER 2" IN DIAMETER.
2)	ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER. ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
3)	ALL POP-UP ROTATORS AND SPRAYS SHALL BE INSTALLED USING AN 18" PVC FLEX PIPE CONNECTION. DO NOT USE POLYETHYLENE PIPE. USE VELDON 737 WITH A PURPLE PRIMER OR RED HOT CHRISTY'S BLUE GLUE ON ALL CONNECTIONS.
4)	ADJUST ALL NOZZLES TO REDUCE WATER WASTE ON HARD SURFACES, WINDOWS AND BLDG. WALLS. THROTTLE ALL VALVES ON SHRUB LINES AS REQUIRED TO PREVENT FOGGING. USE ADJUSTABLE NOZZLES WHERE REQUIRED TO AVOID ANY WATER ON BUILDING WINDOWS.
5)	ALL RISERS SHALL BE PAINTED BLACK OR A COLOR CHOSEN BY THE OWNER'S REPRESENTATIVE AND SHALL BE STAKED WITH A STEEL ANGLE AND SECURED WITH STAINLESS STEEL CLAMPS. LEAVE THE BOTTOM 12" OF THE PIPE PURPLE ON RECLAIMED SYSTEMS.
6)	ALL CONTROL WIRE CONNECTIONS SHALL BE MADE IN VALVE BOXES USING 3M DBR-Y WIRE CONNECTORS AND SEALANT WITH WIRE NUTS.
7)	THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING SHOWING ALL IRRIGATION INSTALLATION. THE CONTRACTOR SHALL NEATLY MARK IN RED INK ON A WHITE BOND PAPER COPY OF THE IRRIGATION PLAN ANY INSTALLATION THAT DEVIATES FROM THE PLAN. THE AS-BUILT DRAWING SHALL ALSO LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES. MEASUREMENTS SHALL BE MARKED ON THE PLAN EVEN WHEN THE EQUIPMENT IS INSTALLED IN THE EXACT LOCATION AS THE PLAN. PROVIDE THE OWNER A PDF OF THE AS-BUILT PLAN.
8)	ALL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES. THE VALVE BOXES SHALL BE PURPLE WHEN USING RECLAIMED WATER.
9)	ANY PIPING SHOWN OUTSIDE THE PROPERTY LINE OR RUNNING OUTSIDE A LANDSCAPE AREA IS SHOWN THERE FOR CLARITY ONLY. ALL LINES SHALL BE INSTALLED ON THE PROPERTY AND INSIDE THE LANDSCAPE AREAS OR INSIDE A SCH. 40 SLEEVE.
10)	ALL HEADS SHALL BE INSTALLED A MINIMUM OF 24" FROM ANY WALL AND A MINIMUM OF 6" FROM ANY SIDEWALK, PATIO OR ROAD. (MINIMUM OF 2'-0" WHERE THERE ARE NO BUMPER STOPS) THE EXACT HEIGHT OF ANY 12" POP-UP THAT IS SHOWN IN A SHRUB BED SHALL BE DETERMINED BY THE OWNER'S REPRESENTATIVE IN THE FIELD. INSTALL THE 12" POP-UP HIGHER WHERE BLOCKED BY TALL SHRUBS.
11)	THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO DAMAGE ANY EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIRS AND COST OF ANY DAMAGE CAUSED BY THEIR WORK.
12)	ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT AND WORKMANSHIP OR AS OUTLINED IN THE WRITTEN SPECIFICATIONS.
13)	ELECTRICAL SERVICE TO LOCATION OF THE CONTROLLER, WELL OR PUMP SHALL BE PROVIDED TO A JUNCTION BOX OR DISCONNECT AT THE EQUIPMENT LOCATION BY THE ELECTRICAL CONTRACTOR OR BY OWNER WHEN IT IS NOT PART OF THE BID PACKAGE. CONFIRM THE LOCATION OF THE CONTROLLER WITH THE OWNER OR GENERAL CONTRACTOR BEFORE ANY INSTALLATION.
14)	IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCALE THE PLAN AND CHECK NOZZLE TYPES TO DETERMINE THE CORRECT SPACING OF THE HEADS. THE CONTRACTOR SHALL NOT SPACE THE HEADS FURTHER APART OR USE LESS HEADS THAN SHOWN ON THE PLAN. ANY CHANGES TO THE HEAD SPACING OR LAYOUT, WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT OR OWNER, SHALL HOLD THE IRRIGATION CONTRACTOR RESPONSIBLE FOR WARRANTY OF THE PLANTS AND OR SOD IN THESE AREAS.
15)	48 HOURS BEFORE DIGGING, CALL 1-800-432-4770 (SUNSHINE STATE ONE CALL CENTER)
16)	INSTALL THREE EXTRA CONTROL WIRES TO EACH TERMINATION OF THE MAIN. ALL CONTROL WIRES SHALL BE INSTALLED INSIDE OF SCH. 40 GRAY PVC CONDUIT WHERE THEY CANNOT BE UNDER THE MAIN.

DRIP TUBING NOTES	
1)	INSTALL ALL DRIP TUBING AT GROUND LEVEL AFTER PLANT INSTALLATION. INSTALL NETAFIM TSL6 U SHAPED WIRE STABILIZERS A MIN. OF 4' O.C. TO HOLD THE LINES IN PLACE.
2)	KEEP ALL DRIP LINE CLEAN AT ALL TIMES BEFORE THE FINAL CONNECTION. ALL TUBE ENDS SHALL BE INTERCONNECTED TO ALL OTHER DRIP TUBES. DO NOT DEAD END TUBING. SINGLE ROWS SHALL HAVE A END CAP AND NOT BENT OVER OR TAPED.
3)	AVOID SHARP BENDS IN THE TUBING. DO NOT BEND THE TUBING WITH LESS THEN A 12" RADIUS. THERE SHALL NOT BE ANY KINKS IN THE TUBING.
4)	ALL DRIP TUBING SHALL HAVE UNIFORM SPACING AND BURIAL DEPTH. THE PLAN DOES NOT ALWAYS REFLECT THE EXACT SPACING OR LAYOUT OF THE TUBING. LAYOUT THE TUBING DOWN THE LONGEST WIDTH WHEN POSSIBLE. ADAPT THE TUBING TO CURVED BEDS OR PLANTERS AS REQUIRED. ADJUST AND ADAPT THE TUBING FOR ALL TREES. REFER TO THE TREE DRIP RING DETAIL.
5)	INSTALL DRIP TUBING TO ALL AREAS THAT SHALL RECEIVE PLANT MATERIAL. SEE THE LANDSCAPE PLAN FOR THE EXACT LOCATIONS. THERE SHALL BE A MINIMUM OF TWO ROWS OF TUBING ON A SINGLE ROW OF PLANTS.
6)	SPACE TUBING AS NOTED ON THE PLAN. DO NOT SNAKE TUBING BACK AND FORTH EXCEPT WHERE SHOWN ON THE PLAN. ALWAYS INSTALL A HEADER PIPE UNLESS THE TOTAL GALLONAGE OF AN AREA IS 3 GPM OR LESS.
7)	REFER TO THE MANUFACTURERS DRIP INSTALLATION MANUAL FOR INSTALLATION INSTRUCTIONS. ALL FITTINGS SHALL BE THE SAME TYPE AND MANUFACTURER AS THE DRIP TUBING.
8)	ALWAYS FLUSH ALL LINES BEFORE FINAL CONNECTION.
9)	INSTALL A "SYSTEM ON" INDICATOR FLAG ON EVERY ZONE WHERE IT IS SEEN FROM THE CONTROL VALVE.
10)	INSTALL FLUSH VALVES WHERE SHOWN AT THE ENDS OF EACH RUN OF DRIP TUBING AND ONE FOR EVERY 15 GPM OF TUBING.
11)	CLEARLY AND NEATLY MARK THE TOP OF EACH VALVE BOX WITH THE TYPE OF EQUIPMENT THAT IT CONTAINS. (I.E. VALVE, FLUSH VALVE, ETC.)
12)	THE DRIP ZONE VALVE ASSEMBLY SHALL BE PLACED INSIDE AN ARMOR JUMBO VALVE BOX. THE VALVE SHALL BE INSTALLED AS PER THE DETAIL ON THE PLANS.
13)	THE DRIP TUBING SHALL HAVE EMITTERS EVERY 12" AND SHALL BE SPACED 12" APART IN GROUND COVER BEDS AND A MINIMUM OF TWO RUNS FOR EACH ROW OF SHRUBS WHEN THE SHRUBS ARE SPACED FARTHER THAN 2' ON CENTER.
14)	REFER TO THE ZONE CONTROL KIT DETAIL FOR FILTER SIZES.
15)	THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE HISHER WORK WITH THE LANDSCAPE CONTRACTOR.

SHEET KEY & NOTES:

	PROPERTY LINE
	MATCH LINE

NORTH

SCALE: 1"=20'

landscape architecture + site planning 1775 MCHAWK TRAIL, MAITLAND, FLORIDA 32751 P: 407.353.0112	
ISSUED	
NO.	DESCRIPTION DATE
1	Issued for Review 11-30-2023
REVISIONS	
REV.	DATE REVISION
ARB Review	
PROJECT NAME	
HAMPTON INN & SUITES by HILTON	
SHEET NAME	
IRRIGATION PLAN & NOTES	
SCALE	
AS SHOWN	
DATE	DRAWN
11.30.2023	DAR
SHEET NUMBER	
L-4.01	

LANDSCAPE ARCHITECT
DANIEL A. ROGERS, RLA
66668666

NOVEMBER 30, 2023

4

3

2

1

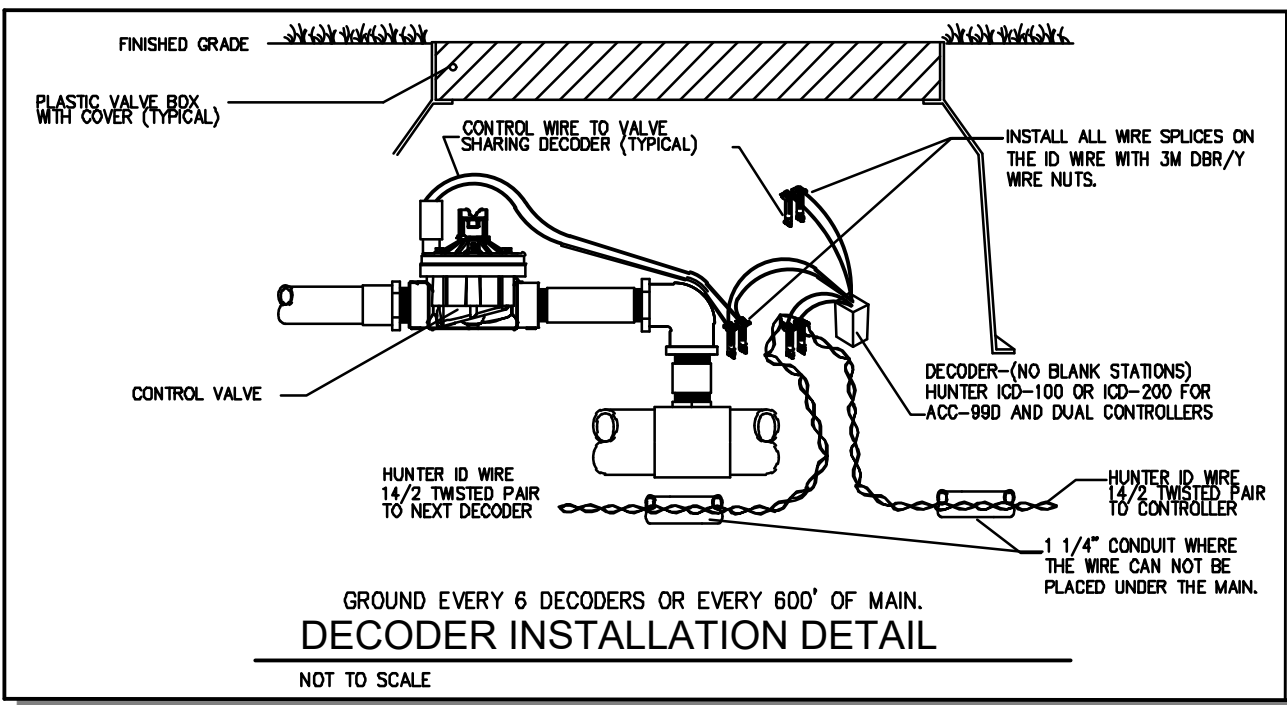
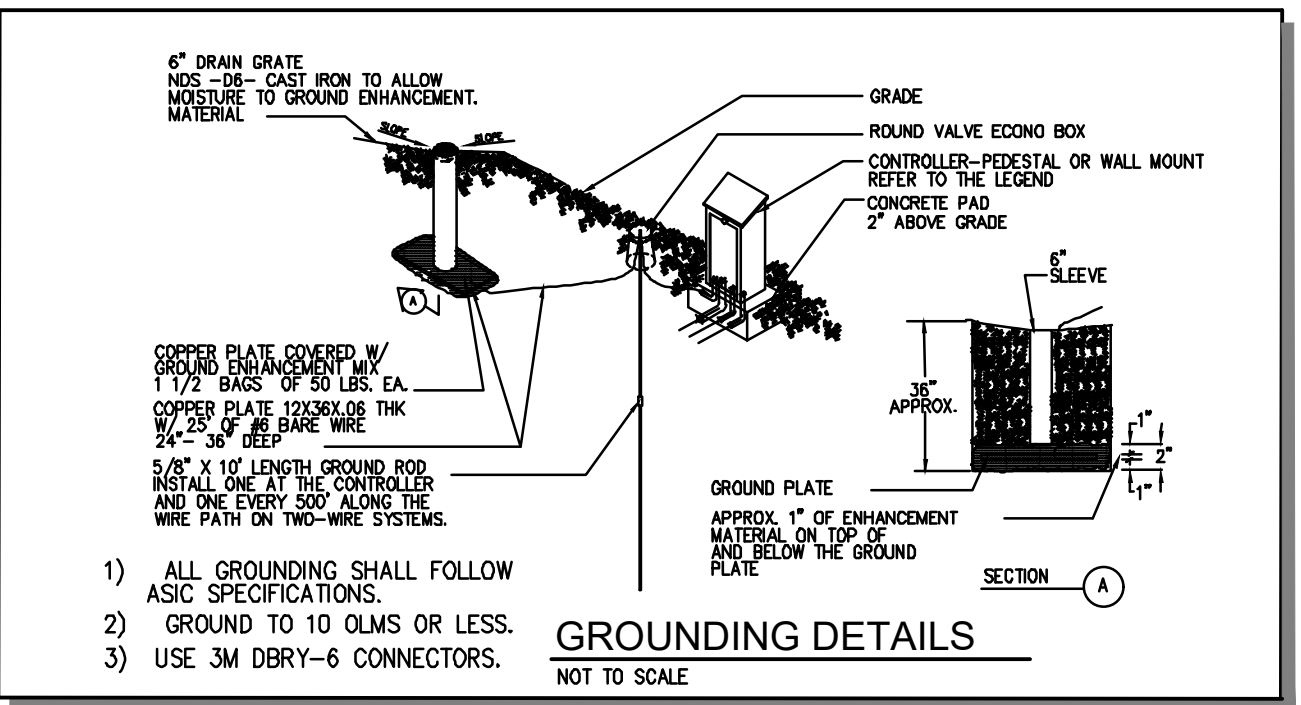
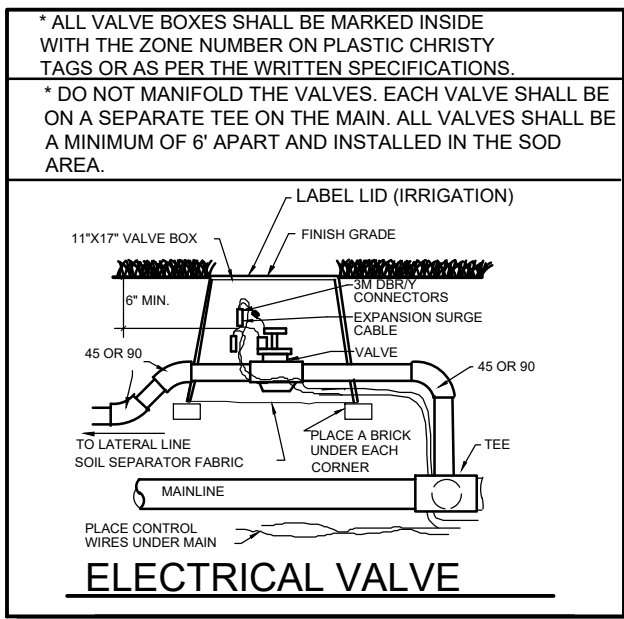
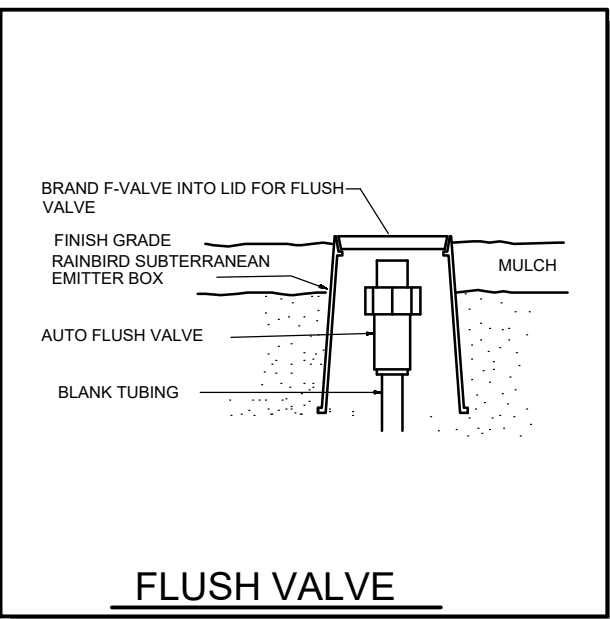
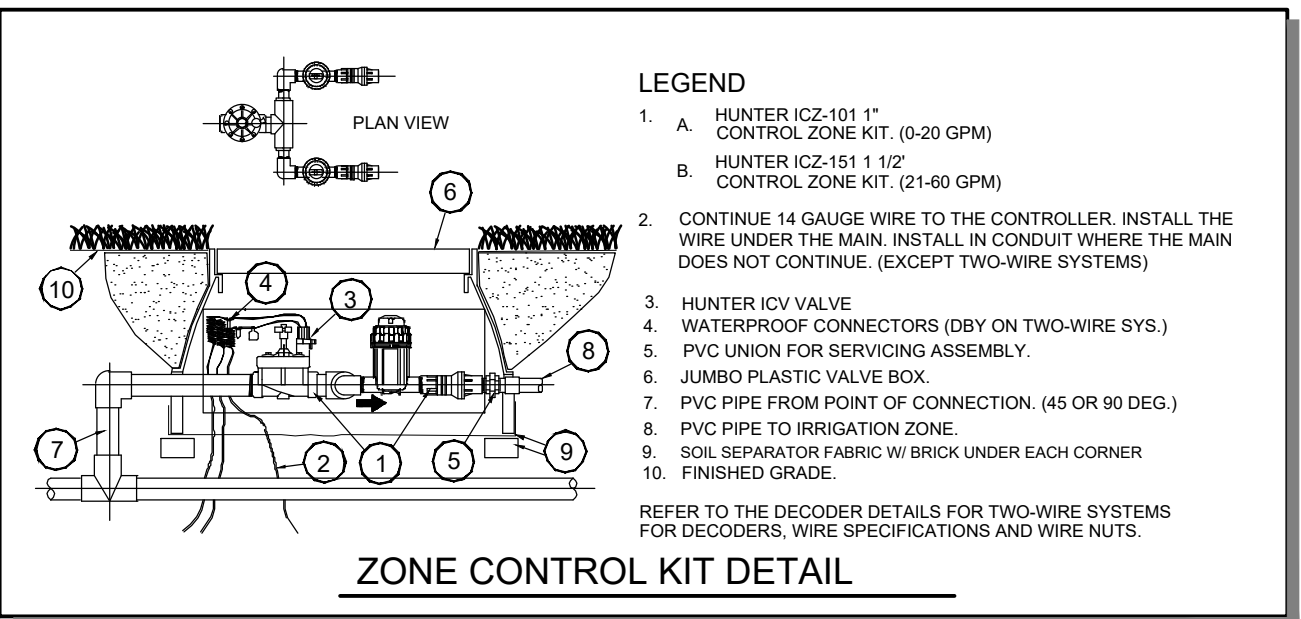
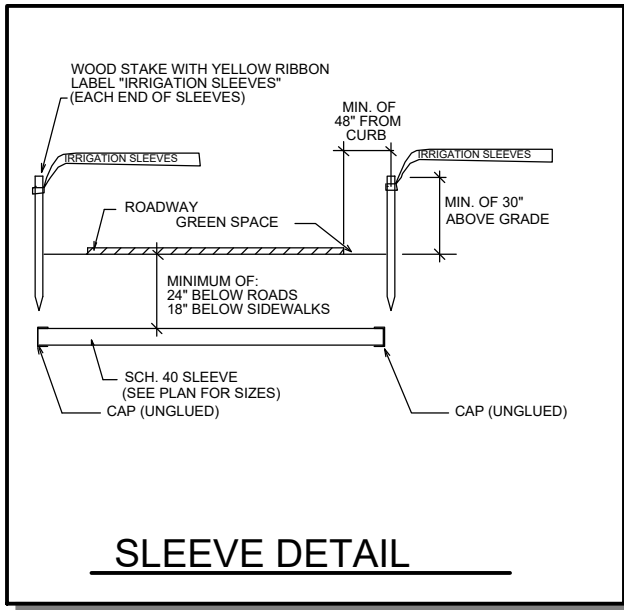
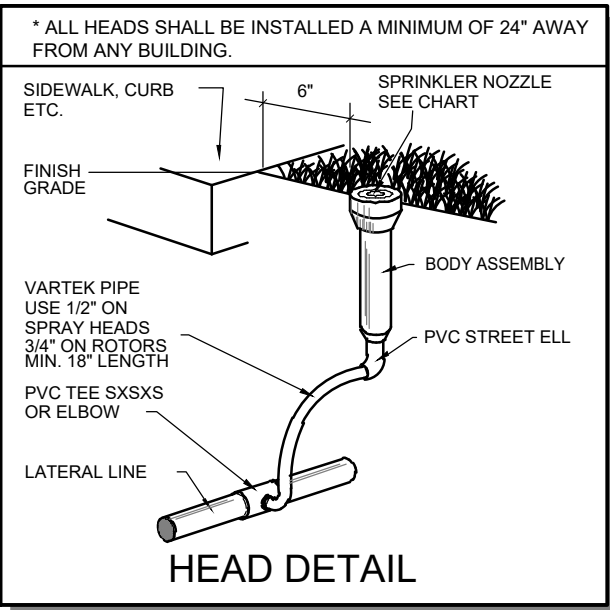
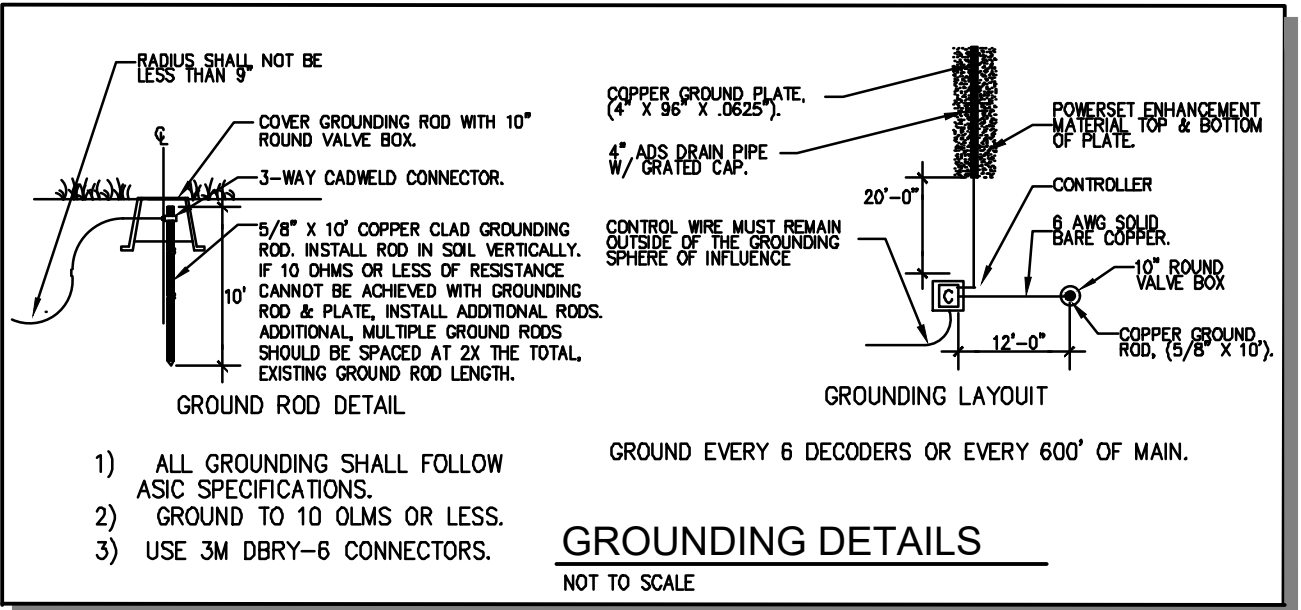
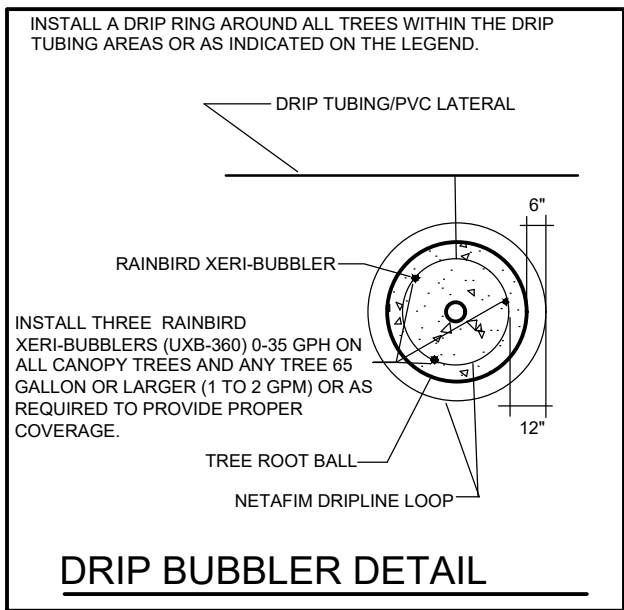
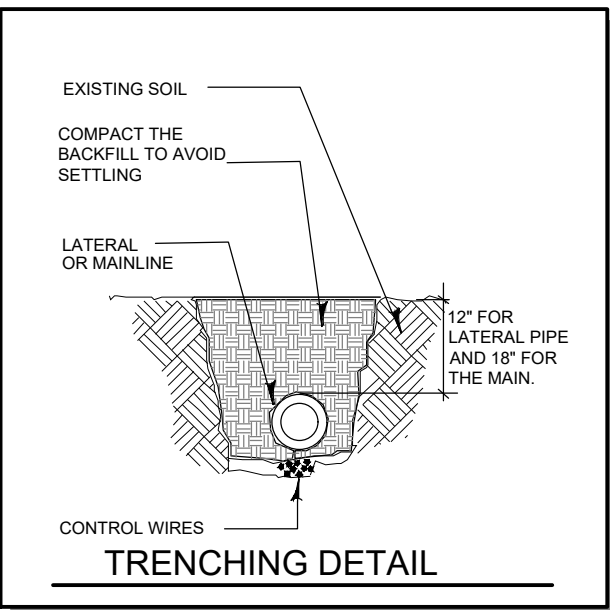
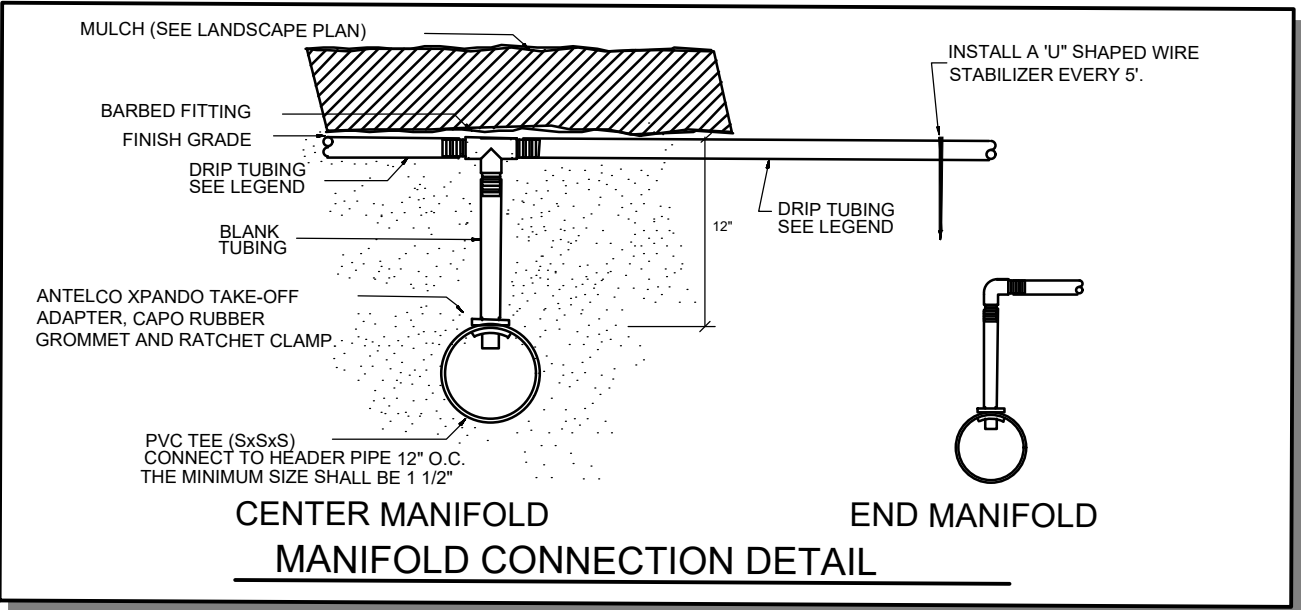
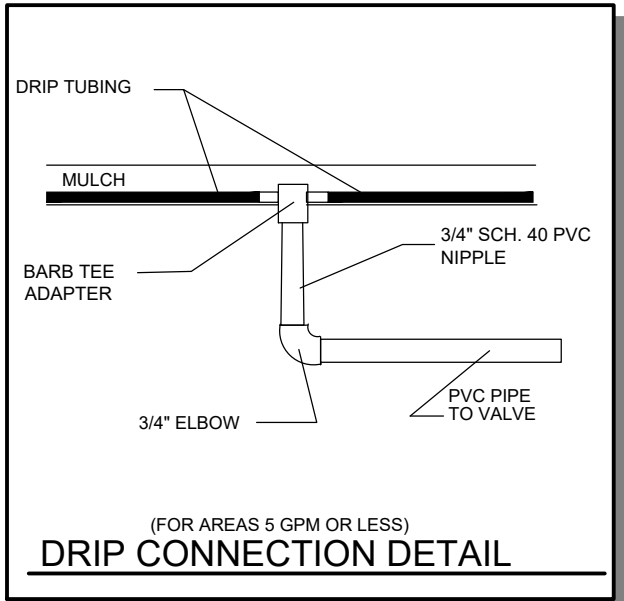
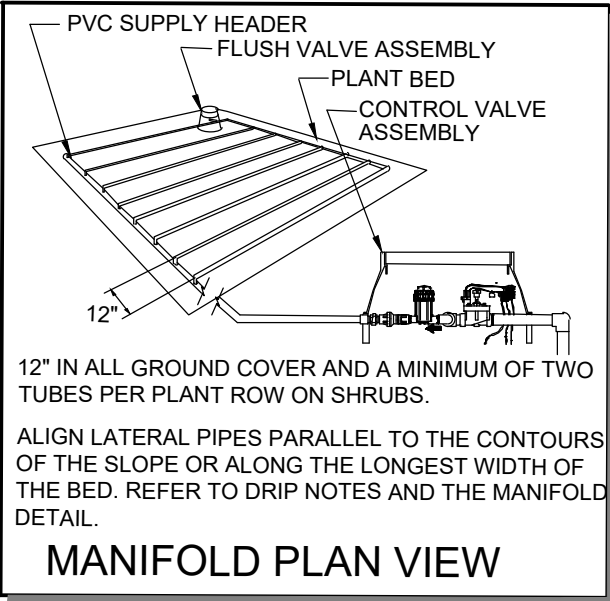
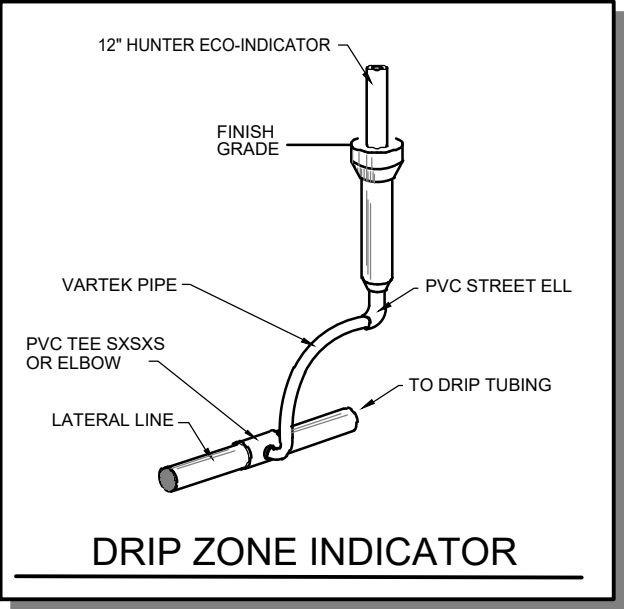
A

B

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D

SHEET KEY & NOTES:

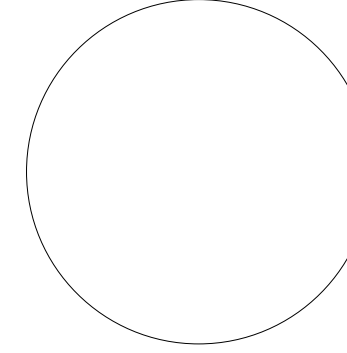


ISSUED		
NO.	DESCRIPTION	DATE
1	Issued for Review	11-30-2023

REVISIONS		
REV.	DATE	REVISION

LANDSCAPE ARCHITECT
DANIEL A. ROGERS, RLA
6666866

NOVEMBER 30, 2023



ARB Review

PROJECT NAME

HAMPTON INN & SUITES
by HILTON

SHEET NAME

IRRIGATION DETAILS

SCALE

AS SHOWN

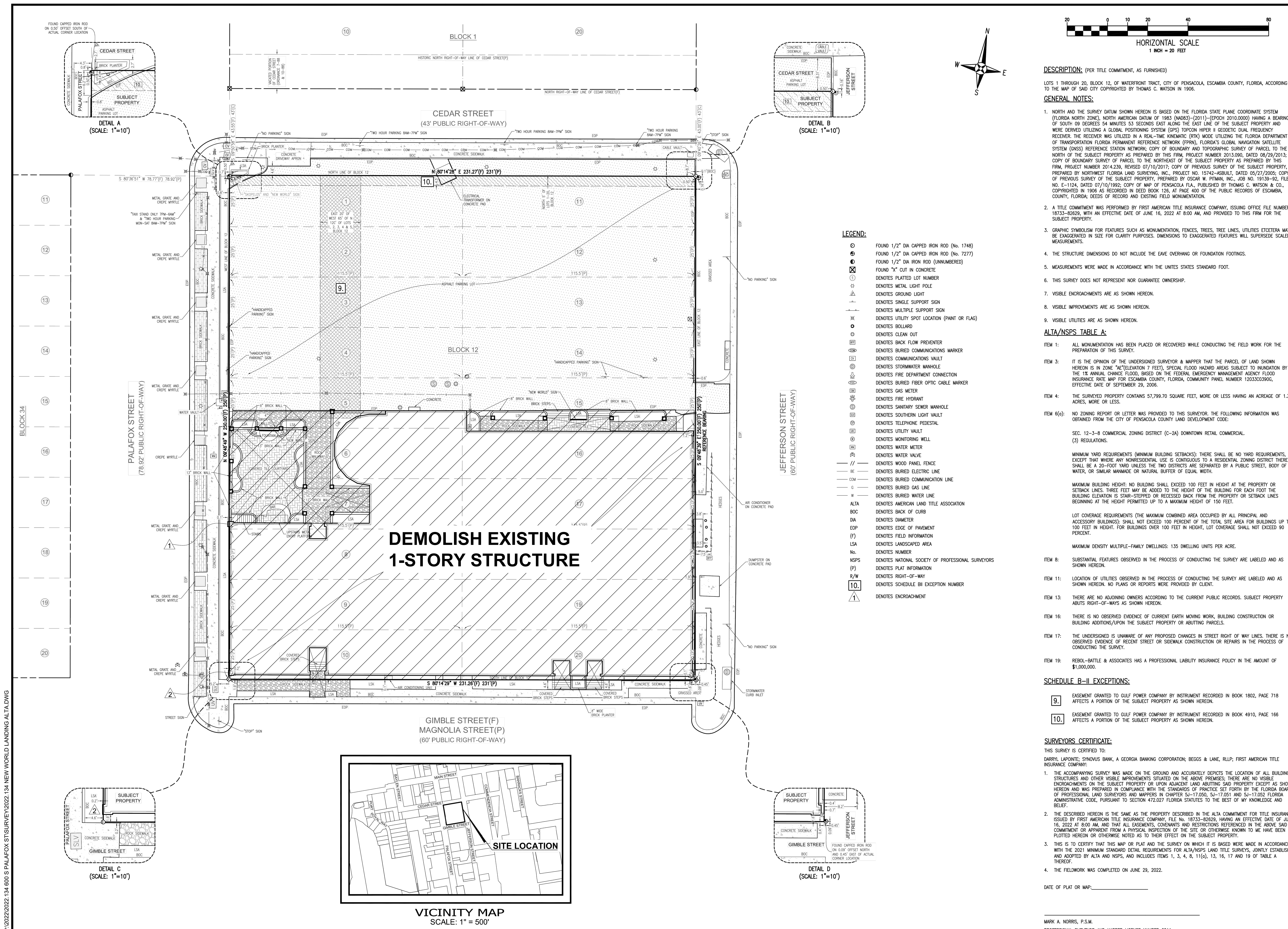
DATE

11.30.2023

SHEET NUMBER

DRAWN
DAR

L-4.10



P:\2022\2022-134 600 S PALAFOX ST SURVEY\2022-134 NEW WORLD LANDING ALTA.DWG

DESCRIPTION: (PER TITLE COMMITMENT, AS FURNISHED)

LOTS 1 THROUGH 20, BLOCK 12, OF WATERFRONT TRACT, CITY OF PENSACOLA, ESCAMBA COUNTY, FLORIDA, ACCORDING TO THE MAP OF SAID CITY COPYRIGHTED BY THOMAS C. WATSON IN 1906.

GENERAL NOTES:

1. NORTH AND THE SURVEY DATUM SHOWN HEREON IS BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM (FLORIDA NORTH ZONE), NORTH AMERICAN DATUM OF 1983 (NAD83)-(2011)-(EPOCH 2010.0000) HAVING A BEARING OF SOUTH 09 DEGREES 54 MINUTES 53 SECONDS EAST ALONG THE EAST LINE OF THE SUBJECT PROPERTY AND WERE DERIVED UTILIZING A GLOBAL POSITIONING SYSTEM (GPS) TOPCON HPER II GEODETIC DUAL FREQUENCY RECEIVER. THE RECEIVER WAS UTILIZED IN A REAL-TIME KINEMATIC (RTK) MODE UTILIZING THE FLORIDA DEPARTMENT OF TRANSPORTATION FLORIDA PERMANENT REFERENCE NETWORK (FPRN), FLORIDA'S GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) REFERENCE STATION NETWORK. COPY OF BOUNDARY AND TOPOGRAPHIC SURVEY OF PARCEL TO THE NORTH OF THE SUBJECT PROPERTY AS PREPARED BY THIS FIRM PROJECT NUMBER 2013.590, DATED 08/29/2015, COPY OF BOUNDARY SURVEY OF PARCEL TO THE NORTHEAST OF THE SUBJECT PROPERTY AS PREPARED BY THIS FIRM, PROJECT NUMBER 2014.239, REVISED 07/10/2017, COPY OF PREVIOUS SURVEY OF THE SUBJECT PROPERTY, PREPARED BY NORTHWEST FLORIDA LAND SURVEYING, INC., PROJECT NO. 15742-ASBULT, DATED 05/27/2006, COPY OF PREVIOUS SURVEY OF THE SUBJECT PROPERTY, PREPARED BY OSCAR W. PITMAN, INC., JOB NO. 19139-92, FILE NO. E-1124, DATED 07/10/1992, COPY OF MAP OF PENSACOLA FLA., PUBLISHED BY THOMAS C. WATSON & CO., COPYRIGHTED IN 1906 AS RECORDED IN DEED BOOK 126, AT PAGE 400 OF THE PUBLIC RECORDS OF ESCAMBA COUNTY, FLORIDA; DEEDS OF RECORD AND EXISTING FIELD MONUMENTATION.
2. A TITLE COMMITMENT WAS PERFORMED BY FIRST AMERICAN TITLE INSURANCE COMPANY, ISSUING OFFICE FILE NUMBER: 18733-82629, WITH AN EFFECTIVE DATE OF JUNE 16, 2022 AT 8:00 AM, AND PROVIDED TO THIS FIRM FOR THE SUBJECT PROPERTY.
3. GRAPHIC SYMBOLISM FOR FEATURES SUCH AS MONUMENTATION, FENCES, TREES, TREE LINES, UTILITIES ETCETERA MAY BE ENLARGED IN SIZE FOR CLARITY PURPOSES. DIMENSIONS TO DISCREPANCY FEATURES WILL SUPERSEDE SCALED MEASUREMENTS.
4. THE STRUCTURE DIMENSIONS DO NOT INCLUDE THE EAVE OVERHANG OR FOUNDATION FOOTINGS.
5. MEASUREMENTS WERE MADE IN ACCORDANCE WITH THE UNITS STATES STANDARD FOOT.
6. THIS SURVEY DOES NOT REPRESENT NOR GUARANTEE OWNERSHIP.
7. VISIBLE ENCROACHMENTS ARE AS SHOWN HEREON.
8. VISIBLE IMPROVEMENTS ARE AS SHOWN HEREON.
9. VISIBLE UTILITIES ARE AS SHOWN HEREON.

ALTA/NSPS TABLE A:

ITEM 1: ALL MONUMENTATION HAS BEEN PLACED OR RECOVERED WHILE CONDUCTING THE FIELD WORK FOR THE PREPARATION OF THIS SURVEY.

ITEM 3: IT IS THE OPINION OF THE UNDERSIGNED SURVEYOR & MAPPER THAT THE PARCEL OF LAND SHOWN HEREON IS IN ZONE "A"(ELEVATION 7 FEET), SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR ESCAMBA COUNTY, FLORIDA, COMMUNITY PANEL NUMBER 12033030906, EFFECTIVE DATE OF SEPTEMBER 29, 2006.

ITEM 4: THE SURVEYED PROPERTY CONTAINS 57,799.70 SQUARE FEET, MORE OR LESS HAVING AN ACREAGE OF 1.33 ACRES, MORE OR LESS.

ITEM 6(G): NO ZONING REPORT OR LETTER WAS PROVIDED TO THIS SURVEYOR. THE FOLLOWING INFORMATION WAS OBTAINED FROM THE CITY OF PENSACOLA COUNTY LAND DEVELOPMENT CODE:

SEC. 12-3-8 COMMERCIAL ZONING DISTRICT (C-2A) DOWNTOWN RETAIL COMMERCIAL (3) REGULATIONS.

MINIMUM YARD REQUIREMENTS (MINIMUM BUILDING SETBACKS): THERE SHALL BE NO YARD REQUIREMENTS, EXCEPT THAT WHERE ANY NONRESIDENTIAL USE IS CONTIGUOUS TO A RESIDENTIAL ZONING DISTRICT THERE SHALL BE A 20-FOOT YARD UNLESS THE TWO DISTRICTS ARE SEPARATED BY A PUBLIC STREET, BODY OF WATER, OR SIMILAR MANMADE OR NATURAL BUFFER OF EQUAL WIDTH.

MAXIMUM BUILDING HEIGHT: NO BUILDING SHALL EXCEED 100 FEET IN HEIGHT AT THE PROPERTY OR SETBACK LINES. THREE FEET MAY BE ADDED TO THE HEIGHT OF THE BUILDING FOR EACH FOOT THE BUILDING ELEVATION IS STEP-STEPPED OR RECESSED BACK FROM THE PROPERTY OR SETBACK LINES BEGINNING AT THE HEIGHT PERMITTED UP TO A MAXIMUM HEIGHT OF 150 FEET.

LOT COVERAGE REQUIREMENTS (THE MAXIMUM COMBINED AREA OCCUPIED BY ALL PRINCIPAL AND ACCESSORY BUILDINGS): SHALL NOT EXCEED 100 PERCENT OF THE TOTAL SITE AREA FOR BUILDINGS UP TO 100 FEET IN HEIGHT. FOR BUILDINGS OVER 100 FEET IN HEIGHT, LOT COVERAGE SHALL NOT EXCEED 90 PERCENT.

MAXIMUM DENSITY MULTIPLE-FAMILY DWELLINGS: 135 DWELLING UNITS PER ACRE.

ITEM 8: SUBSTANTIAL FEATURES OBSERVED IN THE PROCESS OF CONDUCTING THE SURVEY ARE LABELED AND AS SHOWN HEREON.

ITEM 11: LOCATION OF UTILITIES OBSERVED IN THE PROCESS OF CONDUCTING THE SURVEY ARE LABELED AND AS SHOWN HEREON. NO PLANS OR REPORTS WERE PROVIDED BY CLIENT.

ITEM 13: THERE ARE NO ADJOINING OWNERS ACCORDING TO THE CURRENT PUBLIC RECORDS. SUBJECT PROPERTY ABUTS RIGHT-OF-WAYS AS SHOWN HEREON.

ITEM 16: THERE IS NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS/UPON THE SUBJECT PROPERTY OR ADJUTING PARCELS.

ITEM 17: THE UNDERSIGNED IS UNAWARE OF ANY PROPOSED CHANGES IN STREET RIGHT OF WAY LINES. THERE IS NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS IN THE PROCESS OF CONDUCTING THE SURVEY.

ITEM 19: REBOL-BATTLE & ASSOCIATES HAS A PROFESSIONAL LIABILITY INSURANCE POLICY IN THE AMOUNT OF \$1,000,000.

SCHEDULE B-II EXCEPTIONS:

9. EASEMENT GRANTED TO GULF POWER COMPANY BY INSTRUMENT RECORDED IN BOOK 1802, PAGE 718 AFFECTS A PORTION OF THE SUBJECT PROPERTY AS SHOWN HEREON.

10. EASEMENT GRANTED TO GULF POWER COMPANY BY INSTRUMENT RECORDED IN BOOK 4910, PAGE 166 AFFECTS A PORTION OF THE SUBJECT PROPERTY AS SHOWN HEREON.

SURVEYORS CERTIFICATE:

THIS SURVEY IS CERTIFIED TO:

DARREY LAPORTE, SYNDICUS BANK, A GEORGIA BANKING CORPORATION; BEGGS & LANE, RLLP; FIRST AMERICAN TITLE INSURANCE COMPANY;

1. THE ACCOMPANYING SURVEY WAS MADE ON THE GROUND AND ACCURATELY DEPICTS THE LOCATION OF ALL BUILDINGS, STRUCTURES AND OTHER VISIBLE IMPROVEMENTS STATED ON THE ABOVE PREMISES; THERE ARE NO VISIBLE ENCROACHMENTS ON THE SUBJECT PROPERTY OR UPON ADJUTING LAND ADJUTING SAID PROPERTY EXCEPT AS SHOWN HEREON AND WAS PREPARED IN COMPLIANCE WITH THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS AND MAPPERS IN CHAPTER SJ-17.020, SJ-17.051 AND SJ-17.052 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.007 FLORIDA STATUTES TO THE BEST OF MY KNOWLEDGE AND BELIEF.
2. THE DESCRIBED HEREON IS THE SAME AS THE PROPERTY DESCRIBED IN THE ALTA COMMITMENT FOR TITLE INSURANCE, ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY HAVING AN EFFECTIVE DATE OF JUNE 16, 2022 AT 8:00 AM, AND THAT ALL EASEMENTS, COVENANTS AND RESTRICTIONS REFERENCED IN THE ABOVE SAID COMMITMENT OR APPARENT FROM A PHYSICAL INSPECTION OF THE SITE OR OTHERWISE KNOWN TO ME HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE SUBJECT PROPERTY.
3. THIS IS TO CERTIFY THAT THIS MAP OR PLAN AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 3, 4, 6, 11(G), 13, 16, 17 AND 19 OF TABLE A THEREOF.
4. THE FIELDWORK WAS COMPLETED ON JUNE 23, 2022.

DATE OF PLAT OR MAP: _____

MARK A. NORRIS, P.S.M.
PROFESSIONAL SURVEYOR AND MAPPER LICENSE NUMBER 4211

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PALAFOX STREET

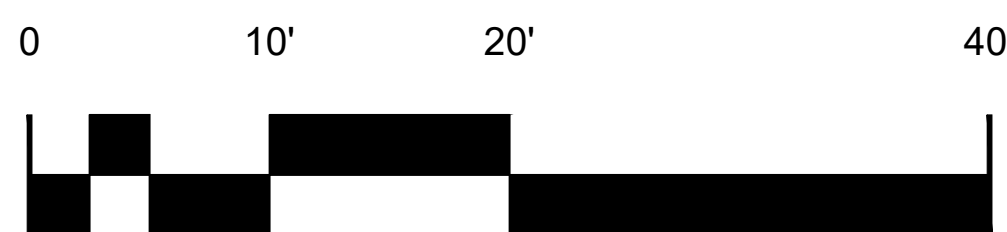
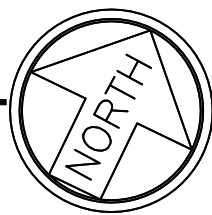
CEDAR STREET

JEFFERSON STREET

PARKING

FIRST FLOOR PLAN

LPB 223038



OWNER

3H GROUP
HOTELS

6716 HERITAGE
BUSINESS CT.
CHATTANOOGA, TN
37421

DEVELOPER

GRACE
CONSTRUCTION
CONSULTANTS

5726 MARLIN ROAD
#200
CHATTANOOGA, TN
37411

PROJECT

TEMPO

HOME2
SUITES BY HILTON

TEMPO SUITES /
HOME 2 SUITES

600 SOUTH PALAFOX ST.
PENSACOLA, FL 32502

EDITION

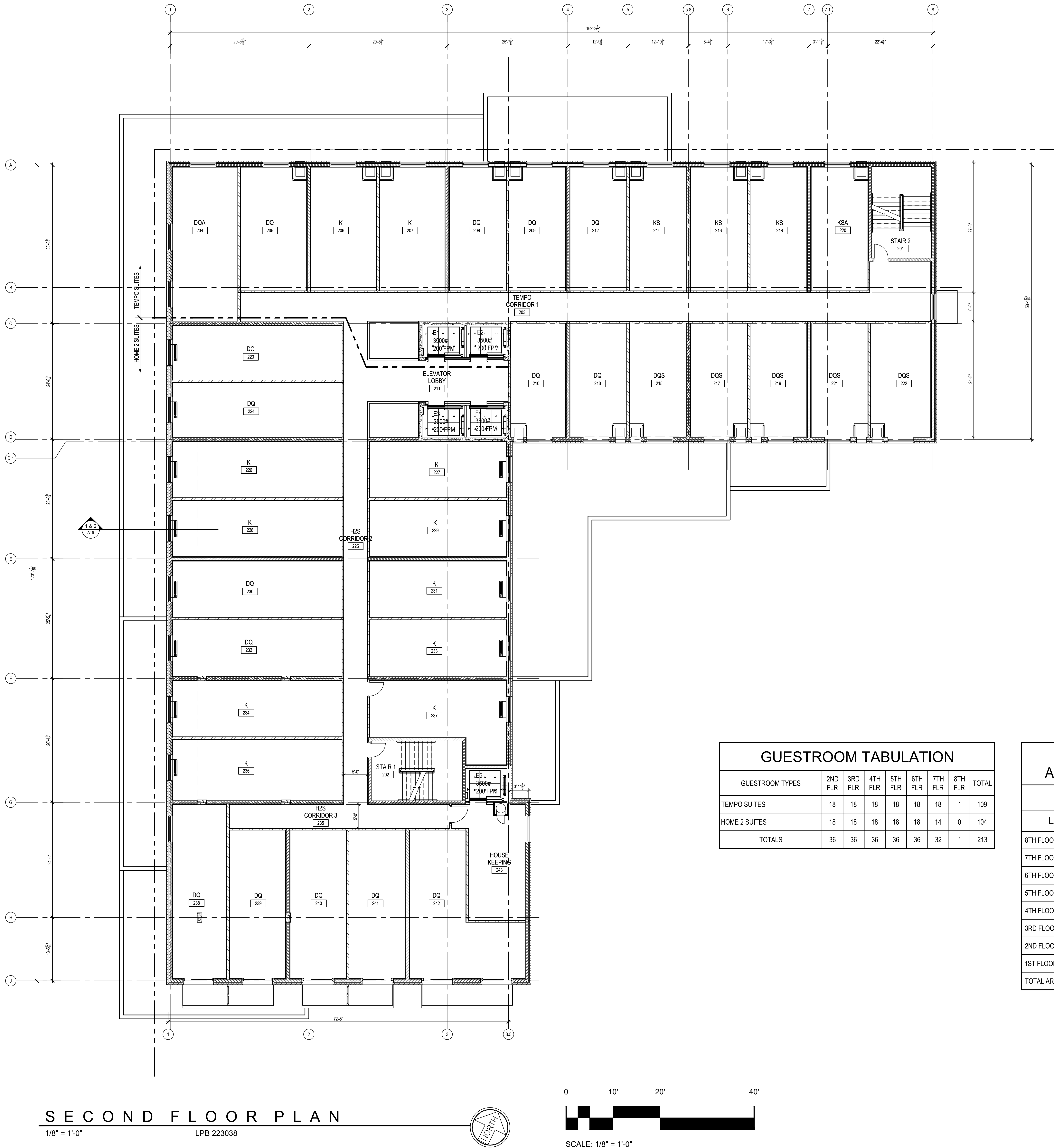
08-15-23 ARB SUBMITTAL
10-02-23 REVISED PLANS
10-26-23 ARB SUBMITTAL 2
11-30-23 ARB FINAL APPROVAL

PROJECT NO.: 223038

DRAWN BY: _____
CHECKED BY: _____
APPROVED BY: _____
PLOT DATE: _____

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LINDSAY ARCHITECT

SECOND FLOOR
PLAN



OWNER



6716 HERITAGE
BUSINESS CT.
CHATTANOOGA, TN
37421

DEVELOPER

GRACE
CONSTRUCTION
CONSULTANTS

5726 MARLIN ROAD
#200
CHATTANOOGA, TN
37411

PROJECT



TEMPO SUITES /
HOME 2 SUITES

600 SOUTH PALAFOX ST.
PENSACOLA, FL 32502

EDITION

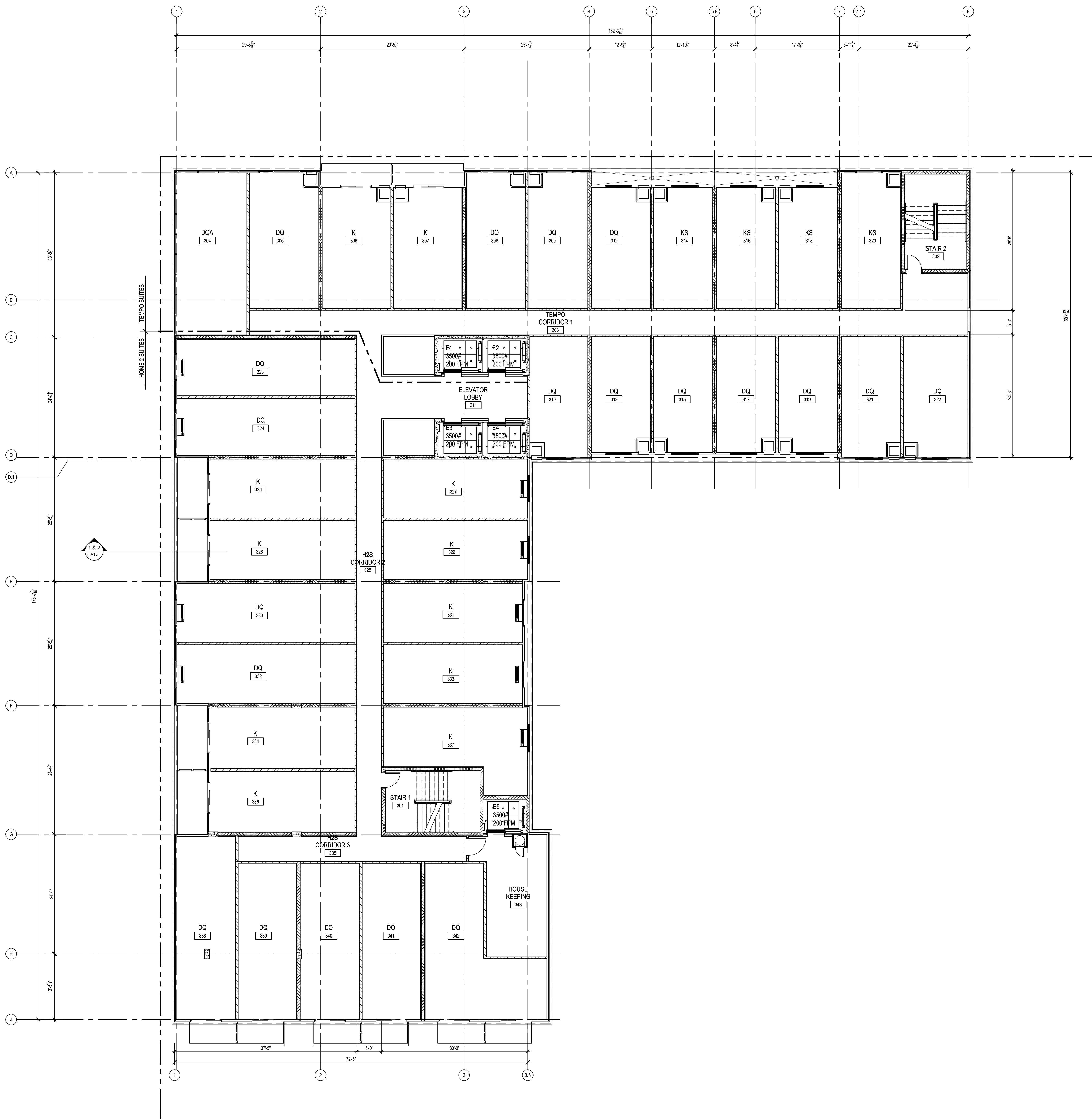
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10-02-23 REVISED PLANS
10-26-23 ARB SUBMITTAL 2
11-30-23 ARB FINAL APPROVAL

PROJECT NO.: 223038

DRAWN BY: _____
CHECKED BY: _____
APPROVED BY: _____
PLOT DATE: _____

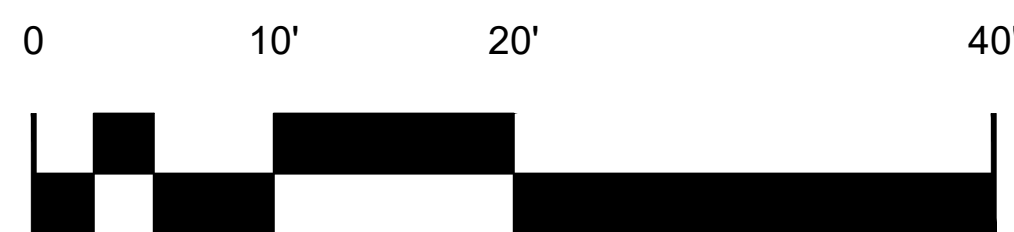
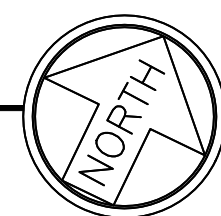
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LINDSAY ARCHITECT

THIRD - SIXTH
FLOORS FLOOR
PLAN



THIRD - SIXTH FLOOR PLAN

LPB 223038



OWNER

3H GROUP
HOTELS
6716 HERITAGE
BUSINESS CT.
CHATTANOOGA, TN
37421

DEVELOPER

GRACE
CONSTRUCTION
CONSULTANTS

5726 MARLIN ROAD
#200
CHATTANOOGA, TN
37411

PROJECT

TEMPO
HOME 2
SUITES BY HILTON

TEMPO SUITES /
HOME 2 SUITES

600 SOUTH PALAFOX ST.
PENSACOLA, FL 32502

EDITION

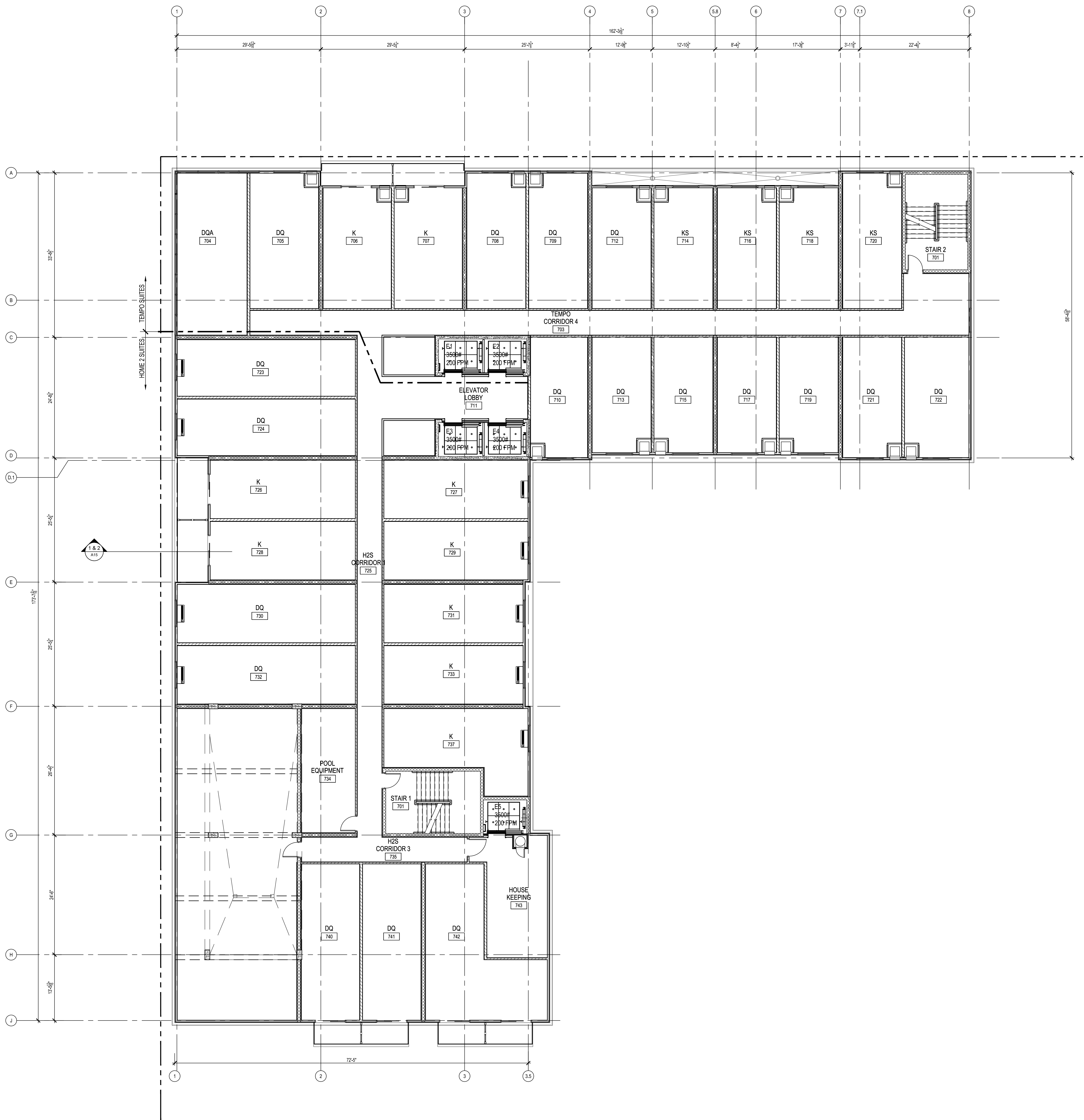
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10-02-23 REVISED PLANS
10-26-23 ARB SUBMITTAL 2
11-30-23 ARB FINAL APPROVAL

PROJECT NO.: 223038

DRAWN BY:
CHECKED BY:
APPROVED BY:
PLOT DATE:

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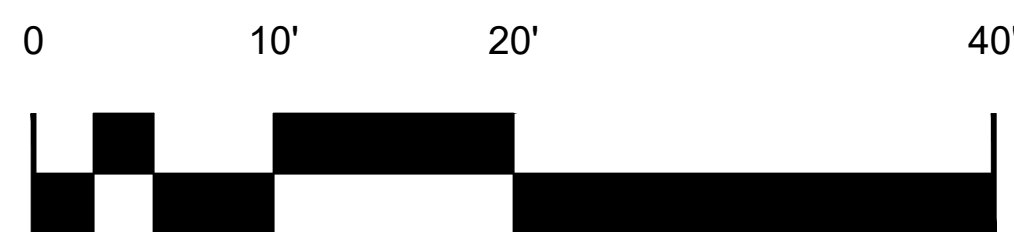
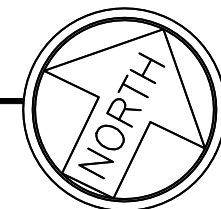
SEVENTH FLOOR
PLAN



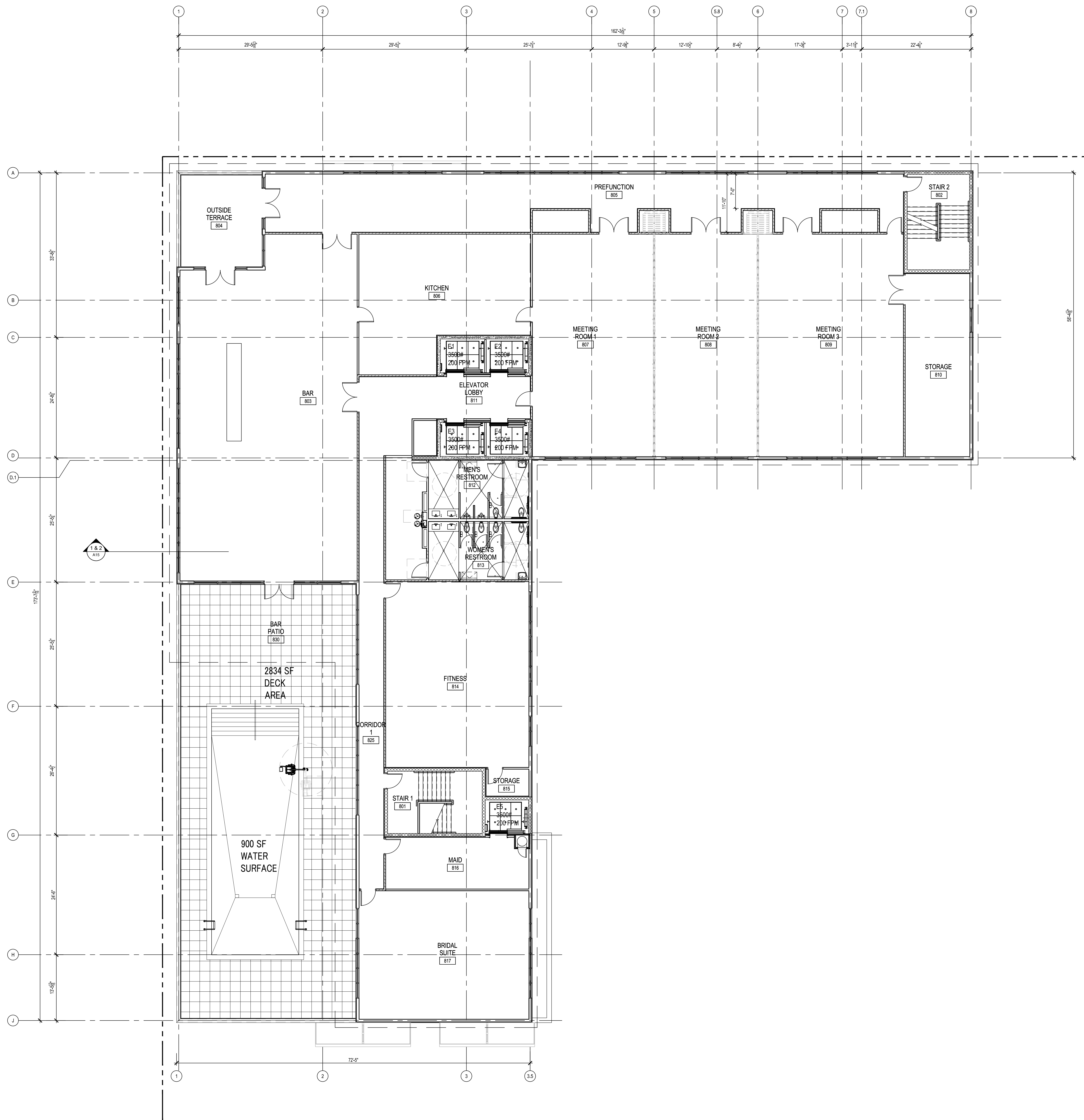
SEVENTH FLOOR PLAN

1/8" = 1'-0"

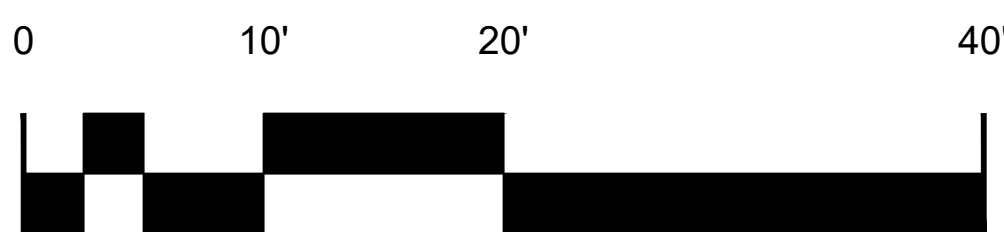
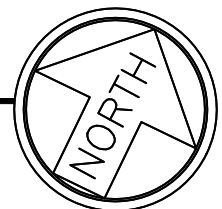
LPB 223038



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



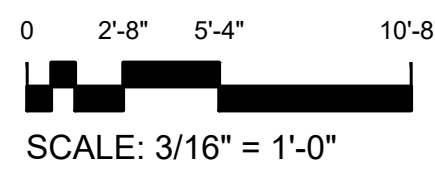
EIGHTH FLOOR PLAN
LPB 223038





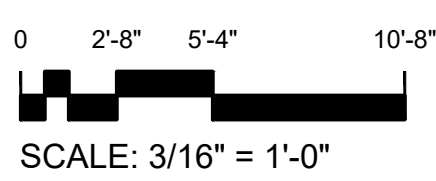


SOUTH ELEVATION
3/16" = 1'-0" LPB 223038





WEST ELEVATION
3/16" = 1'-0" LPB 223038



SCALE: 3/16" = 1'-0"

LINDSAY POPE BRAYFIELD &
ASSOCIATES, INC.
344 WEST PIKE STREET
LAWRENCEVILLE, GA 30046
770 963 8989
770 822 9492 FAX
www.lpbatlanta.com

OWNER



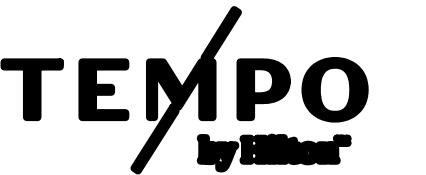
6716 HERITAGE
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TEMPO SUITES /
HOME 2 SUITES

600 SOUTH PALAFOX ST.
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EDITION

09-15-23	ARB SUBMITTAL
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10-26-23	ARB SUBMITTAL 2
11-30-23	ARB FINAL APPROVAL

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WEST EXTERIOR
ELEVATION



EAST ELEVATION
3/16" = 1'-0" LPB 223038

0 2'-8" 5'-4" 10'-8"
SCALE: 3/16" = 1'-0"



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EAST EXTERIOR
ELEVATION



EXTERIOR FINISH MATERIALS			
ITEM TAG	FINISH MATERIAL	MANUFACTURER	COLOR
1	BRICK	CAROLINA CERAMICS BRICK COMPANY	DESERT TAN VELOUR
2	EFIS	DRYVIT	111 PRAIRIE CLAY SANDPEBBLE
3	EFIS	DRYVIT	SW 7063ST NEBULOUS WHITE
4	EFIS	DRYVIT	SW 6993ST BLACK OF NIGHT
5	CAST STONE	ARRISCRAFT - RENAISSANCE	OYSTER
6	CAST STONE	ARRISCRAFT - RENAISSANCE	HAZEL
7	GLASS	GUARDIAN GLASS	GREEN
8	ALUMINUM	MORGAN WINDOWS	BLACK



1. DECORATIVE LOUVERS AT THRU WALL AIR CONDITIONERS - CUSTOM



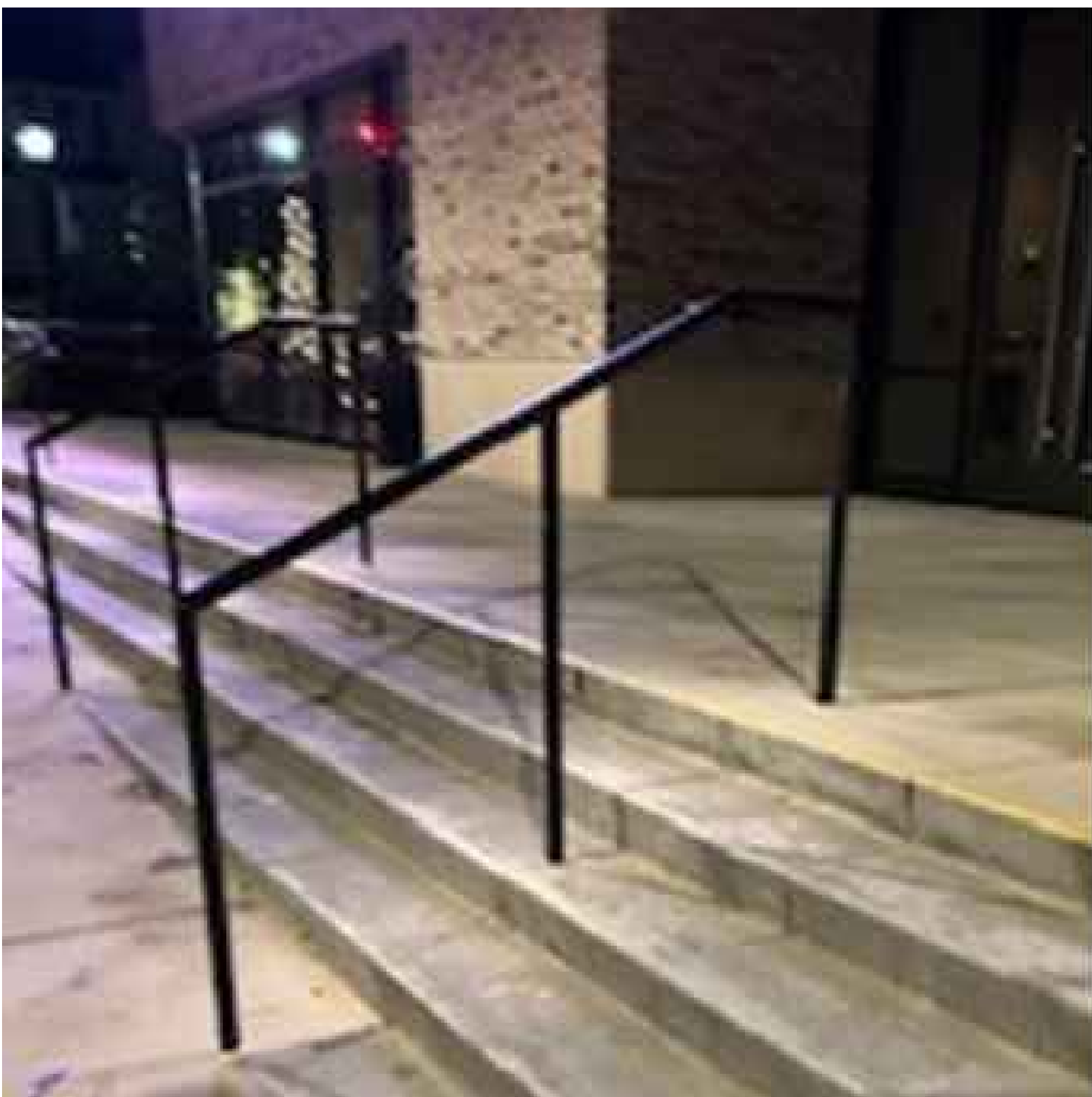
2. HANDICAP RAMP AT ENTRY - CUSTOM



3. ACCENT RAILING AT CORNER PATIO - CUSTOM



4. GLASS RAILING AT 8TH FLOOR TERRACE



5. TUBE RAILING AT FRONT STEPS



7. STOREFRONT - KAWNEER TRI-FAB 450, BLACK

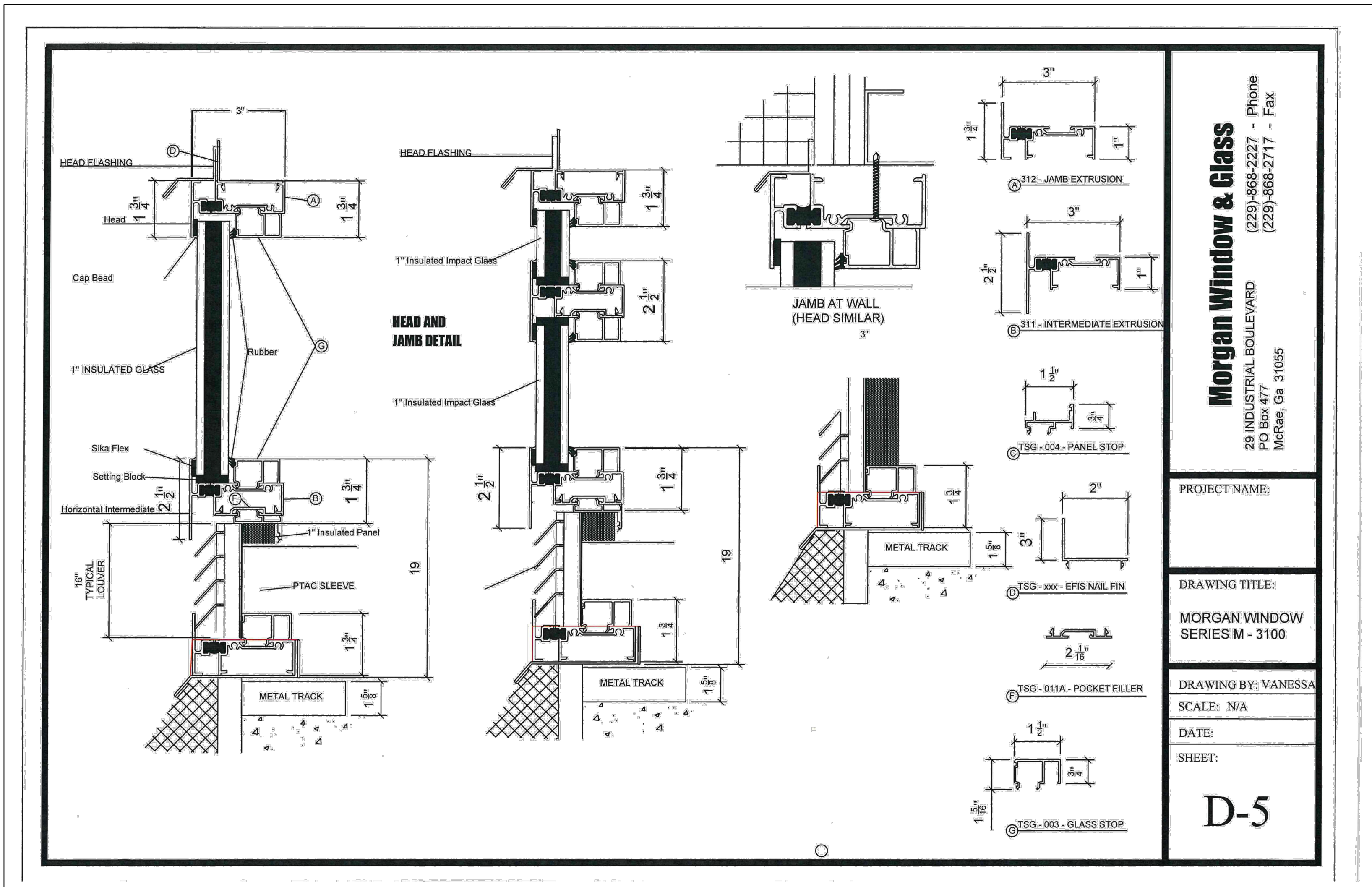
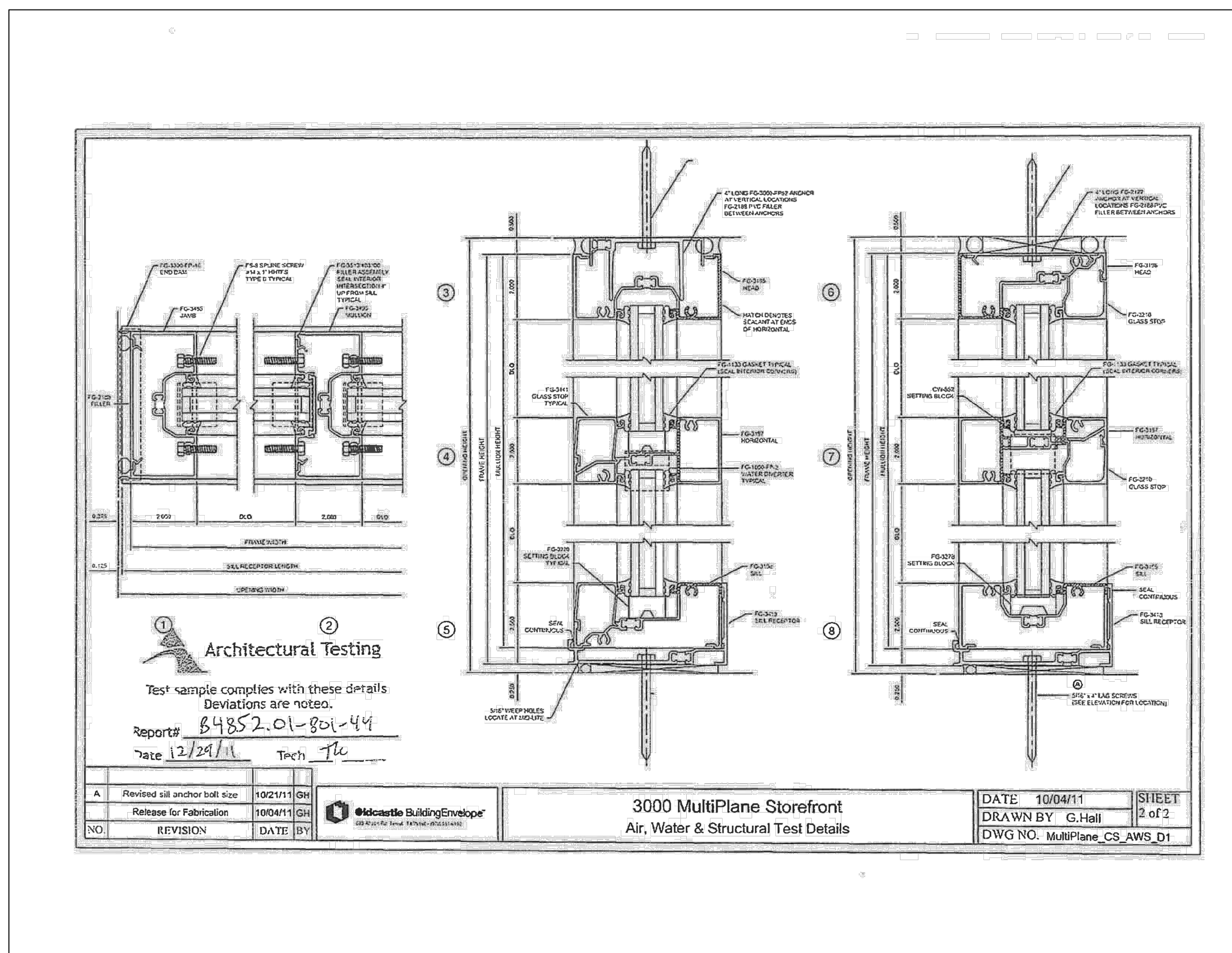
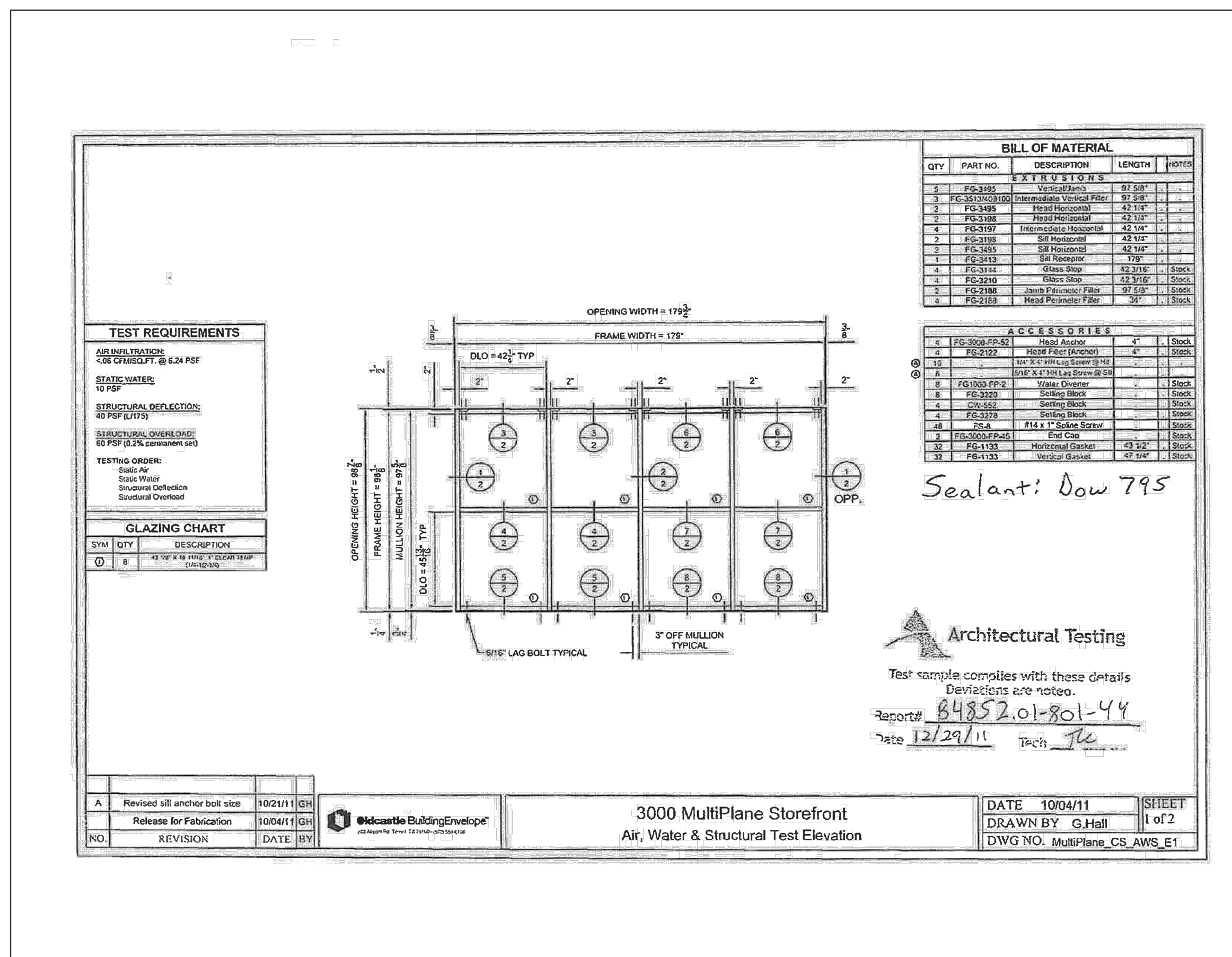
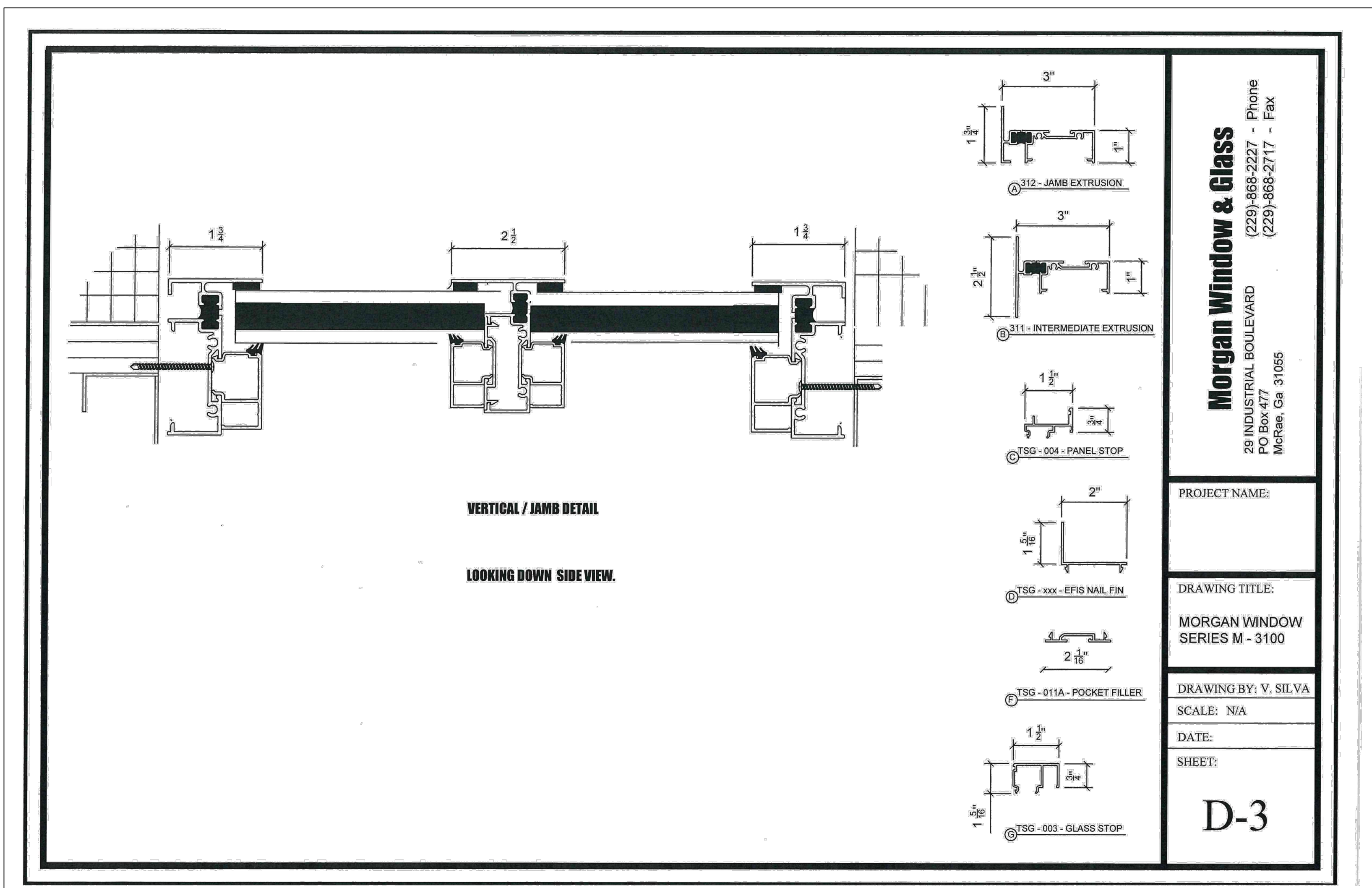
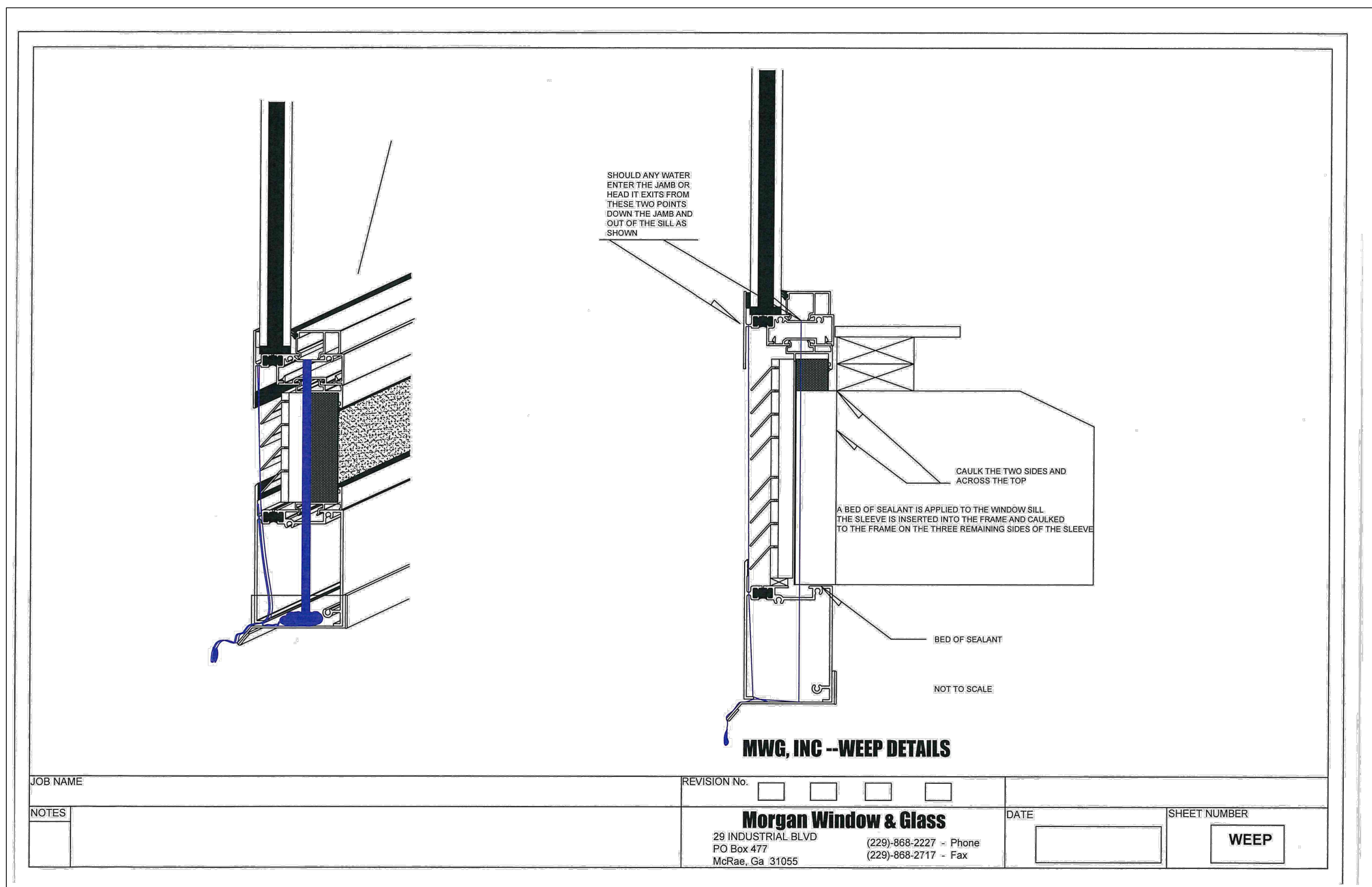
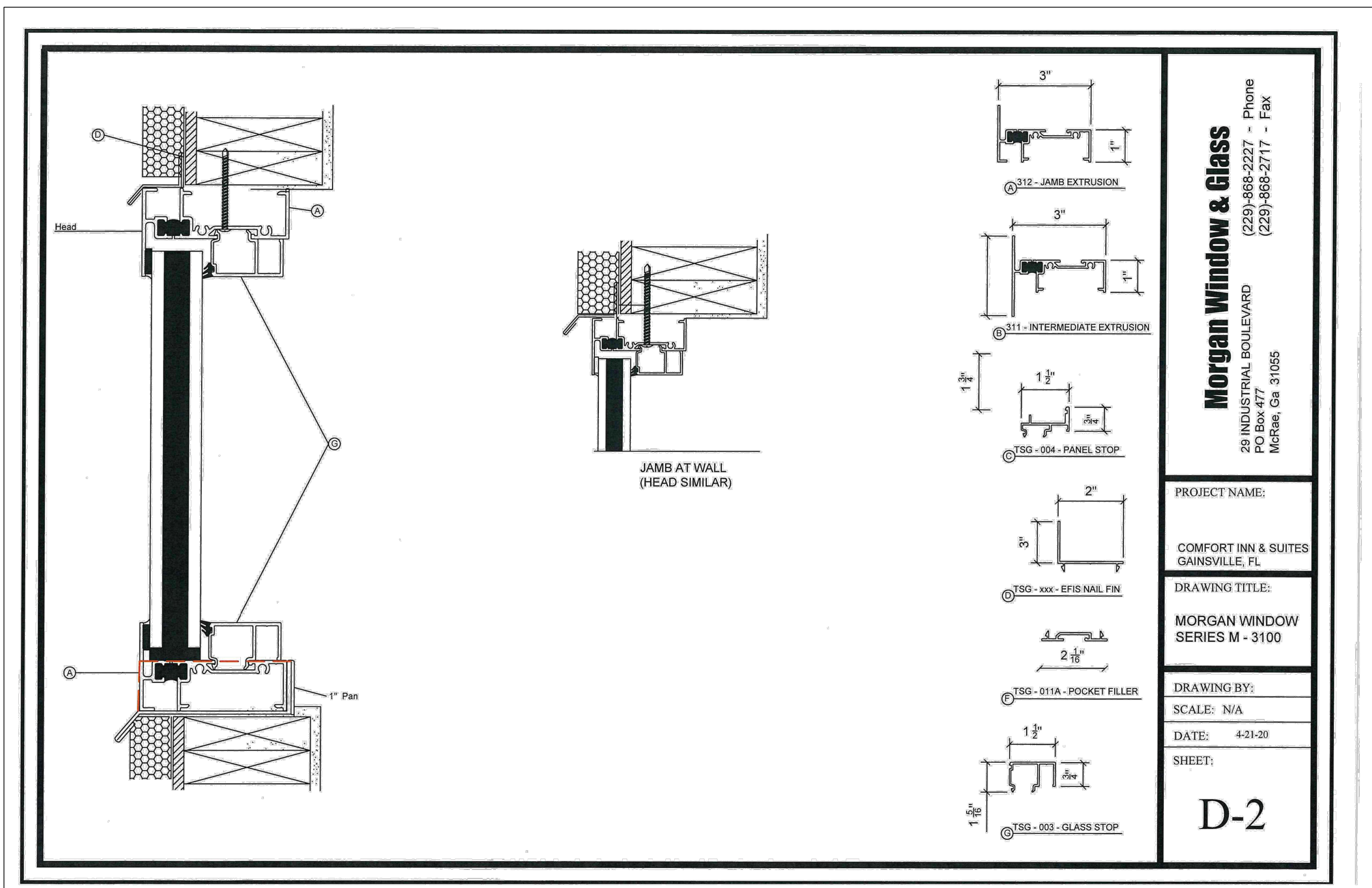
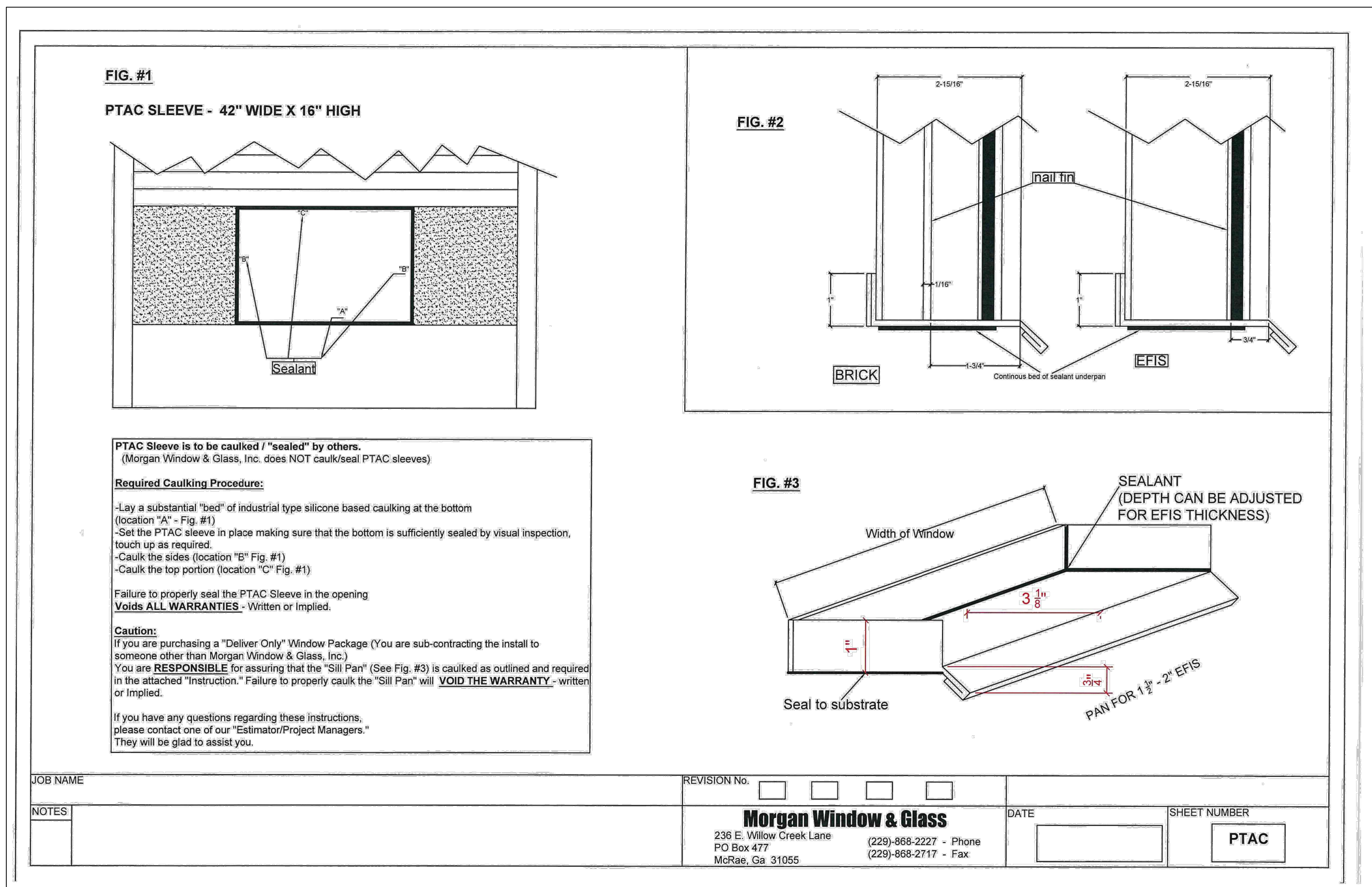


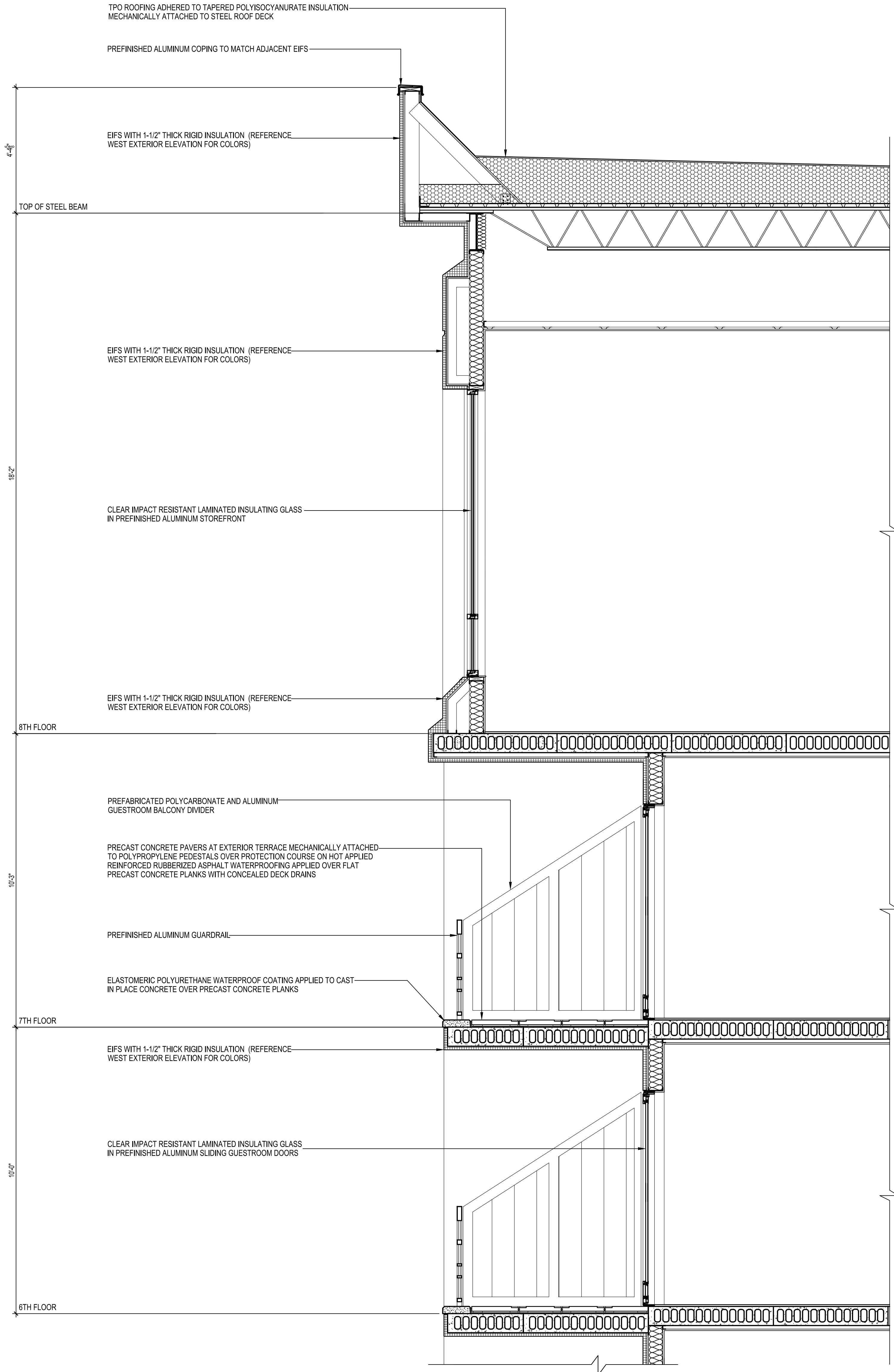
6. WINDOWS - MORGAN 3100, BLACK WITH PANNING



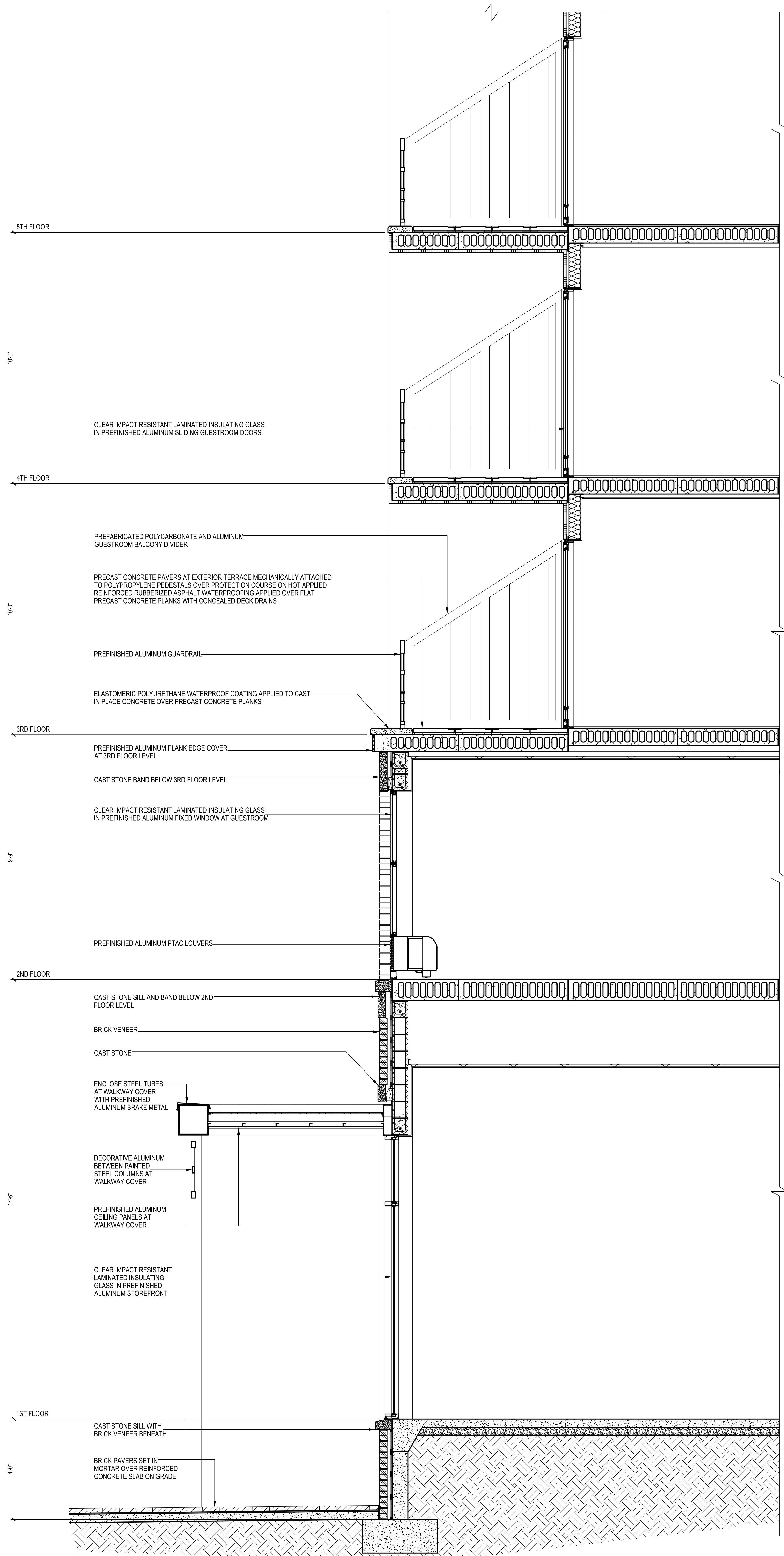
8. STEEL COLUMNS AT ARCADE, BLACK







2 WEST WALL SECTION - UPPER
SCALE 1/2" = 1'-0"



1 WEST WALL SECTION - LOWER
SCALE 1/2" = 1'-0"



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PEDESTRIAN WALK VIEW @ CEDAR STREET



PEDESTRIAN WALK VIEW @ PALAFOX STREET



PEDESTRIAN WALK VIEW @ PARKING AREA



PEDESTRIAN VIEW @ BUILDING REAR



PEDESTRIAN VIEW @ BUILDING ARRIVAL

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PERSPECTIVE
VIEWS

A17



PEDESTRIAN WALK VIEW @ PULLOVER LANE

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PERSPECTIVE
VIEW - NIGHT



PEDESTRIAN WALK VIEW @ ARRIVAL LANE

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PERSPECTIVE
VIEW - NIGHT



AERIAL PERSPECTIVE VIEW @ POOL DECK

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engineering

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PERSPECTIVE
VIEW - NIGHT



GOOGLE AERIAL VIEW 1

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GOOGLE AERIAL
VIEW 1



GOOGLE AERIAL VIEW 2

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GOOGLE AERIAL
VIEW 2



GOOGLE AERIAL VIEW 3

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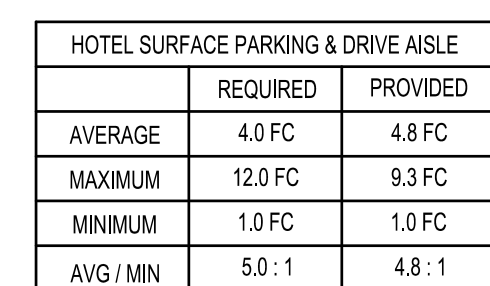
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GOOGLE AERIAL VIEW 3

A23





City of Pensacola

222 West Main Street
Pensacola, FL 32502

Memorandum

File #: 23-1084

Architectural Review Board

12/21/2023

PRESENTATION

SUBJECT:

Discussion

National Park Service Preservation Brief No. 16: The Use of Substitute Materials on Historic Building Exteriors

SUMMARY:

This item is meant to give the Board an opportunity to discuss a recently released preservation brief from the National Park Service regarding substitute materials for historic building exteriors. The term *substitute materials* is used to describe building materials that have the potential to match the appearance, physical properties, and related attributes of historic materials well enough to make them alternatives for use in current preservation practice when historic materials require replacement. The Board adopted a policy on June 17, 2021 regarding alternative materials for siding and decking, railings, and other architectural details to be considered on a case-by-case basis.

Please find attached all relevant documentation for your review.

ATTACHMENTS:

1. Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors

16 PRESERVATION BRIEFS

The Use of Substitute Materials on Historic Building Exteriors

John Sandor, David Trayte, and Amy Elizabeth Uebel



National Park Service
U.S. Department of the Interior
Technical Preservation Services

The *Secretary of the Interior's Standards for Rehabilitation* generally require that deteriorated distinctive architectural features of a historic property be repaired rather than replaced. Standard 6 of the *Standards for Rehabilitation* further states that when replacement of a distinctive feature is necessary, the new feature must “match the old in composition, design, color, texture, and other visual properties, and, *where possible*, materials” (emphasis added). While the use of matching materials to replace historic ones is always preferred under the *Standards for Rehabilitation*, the Standards also purposely recognize that flexibility may sometimes be needed when it comes to new and replacement materials as part of a historic rehabilitation project. Substitute materials that closely match the visual and physical properties of historic materials can be successfully used on many rehabilitation projects in ways that are consistent with the Standards.

The flexibility inherent in the *Standards for Rehabilitation* must always be balanced with the preservation of the historic character and the historic integrity of a building, of which historic materials are an important aspect. Any replacement work reduces the historic integrity of a building to some degree, which can undermine the historic character of the property over time. With limited exceptions, replacement should only be considered when damage or deterioration is too severe to make repair feasible. When needed replacement is made with a material that matches the historic material, the impact on integrity can be minimal, especially when only a small amount of new material is needed. When a substitute material is used for the replacement, the loss in integrity can sometimes, although not always, be greater than that of a matching material. Also, whether historic or substitute material, there is a point where the amount of replacement can become excessive and the building's historic integrity is diminished to an unacceptable degree, regardless of the material used—that is, a loss of authenticity and the physical features and characteristics closely associated with the property's historic significance.

The term *substitute materials* is used to describe building materials that have the potential to match the appearance, physical properties, and related attributes of historic materials well enough to make them alternatives for use in current preservation practice when historic materials require replacement.

Compelling reasons to use a substitute material instead of the historic material include the unavailability or poor performance of the historic material, or environmental pressures or code-driven requirements that necessitate a change in material. When using a substitute material for replacement it is critical that it match the historic material in all of its visual and physical properties to preserve the historic character of the building and minimize the impact on its integrity.

Substitute materials can be cost-effective, permit the accurate visual duplication of historic materials, and provide improved durability. While the behavior of traditional, historic materials is generally well understood, the behavior of newer materials can be less established and sometimes less predictable. Substitute materials are most successful when the properties of both the original material and the substitute are thoroughly understood by all those involved in the design and construction process. The architect must be adept at the selection of substitute materials and their incorporation into architectural plans and specifications. The contractor or tradesperson in the field must also be experienced with their use.

This Preservation Brief provides general guidance on the use of substitute materials as replacement materials for distinctive features on the exterior of historic buildings. Due to the ever-evolving product market for construction materials, this Brief does not provide specifications for substitute materials. This guidance should be used in conjunction with qualified professionals who are knowledgeable in current construction and historic preservation practices.

This Brief includes a discussion of the appropriate use of substitute materials and provides a path for decision-making in their use. In considering the use of substitute materials, such issues as the deterioration or failure of the historic building component and material must be understood. The existing component's physical and visual properties, profile, surface texture, dimensions, and performance should be identified to establish the basis for evaluating a possible replacement material. The physical and visual properties of the various substitute materials available should also be assessed and compared to the original material for their physical and visual compatibility. Lastly, the suitability of a given substitute replacement material should be determined based on how well the material matches both the physical and visual properties of the existing material as well as any specific performance or application needs. The Brief's descriptions of common substitute materials are not meant to be comprehensive, and, as the performance history of newer materials continues to grow and new materials are developed, available options will change, and our understanding of current material performance will continue to evolve.

Historical Use of Substitute Materials

The tradition of using affordable and common materials in imitation of more expensive and less available materials is a long one. At Mount Vernon, for example, George Washington used wood painted with sand-impregnated paint to imitate rusticated stone. This technique, along with scoring stucco into block patterns, was common in Colonial America to imitate stone.

Nineteenth-century technology made a variety of materials readily available and widely used that were not only able to imitate traditional materials but were also cheaper to fabricate and easier to use. Traditionally, carved stone units were individually worked. Molded or cast materials greatly increased efficiency in creating repetitive elements. Cement-based products such as cast stone could provide convincing imitations of natural stone with carefully chosen aggregates and cements and was typically a commercially manufactured product. It could be tooled like natural stone, though that could reduce much of the cost advantage. These carefully-crafted cementitious products were widely used as trim elements for masonry structures or as the face material for an entire building. At the other end of the spectrum, mail-order catalogs provided a wide variety of forms for molding concrete that were merely evocative of natural stone and did little to match its appearance. Concrete masonry units could be fabricated locally and on site, avoiding expensive quarrying and shipping costs.

Offering similar efficiencies as cast stone for reproducing repetitive and even complex decorative shapes, terra cotta could mimic the surface characteristics of stone with various textures and glazes. It was popular in the late nine-

teenth and early twentieth centuries for details on stone or brick buildings as well as for the entire skin of large and elaborately detailed buildings.

Cast iron was also used to imitate stone, often with very decorative profiles, for a variety of architectural features ranging from window hoods to columns, piers, balustrades, and even whole façades. Cast iron offered its own set of efficiencies including cost, fabrication time, and weight, but required a painted finish.

While cast stone, terra cotta, and cast iron offered efficiencies over quarried and, particularly, carved stone, they were not cheap or impermanent materials. Less costly, but also less durable, stamped or brake-formed sheet metal, typically galvanized, could also be used instead of masonry for cornices, window hoods, roofing tiles, and even entire building façades.

Substitute Materials and Applying the Standards for Rehabilitation

The *Standards for Rehabilitation* are focused on preserving the important and distinctive character-defining features of a historic property (Standards 2 and 6), and they are to be applied in a reasonable manner, taking into account economic and technical feasibility ([36 CFR 67.7](#) and [36 CFR 68](#)). The Standards have an inherent flexibility that facilitates their application to diverse projects, historic properties, and conditions. They are to be applied on a "cumulative-effect" basis, when the overall effect of all work in the context of the specific conditions of the property and the project is consistent with the property's historic character.

The *Standards for Rehabilitation* require that the replacement of a distinctive feature match the old in physical and visual properties. While the use of matching materials is always preferred, the Standards purposely allow for the use of substitute materials when the use of original materials is not reasonably possible, such as in consideration of economic and technical feasibility or in new construction. They also provide additional flexibility in the treatment of secondary, less distinctive features that are less important in defining the historic character of the property. The *Standards for Rehabilitation* recognize that flexibility is appropriate to facilitate "a compatible use for a property ... while preserving those portions or features which convey its historical, cultural, or architectural values" (definition of "Rehabilitation," [36 CFR 67.2\(b\)](#)).

Examples of Historical Use of Substitute Materials



Figure 2a: Casting concrete blocks to mimic quarried stone was a popular late 19th- to mid 20th-century technique. Concrete masonry units could be completed by local craftsman, saving time and shipping costs. Photo: John Sandor, NPS.



Figure 2b: The 19th century also produced a variety of metal products used to imitate other materials. Across the country, cast iron was used in storefronts to imitate stone. Photo: John Sandor, NPS.



Figure 2c: Stucco has been used to imitate a number of building materials for many centuries. Seen here, stucco was applied to a brick structure and scored to represent a stone façade. Photo: John Sandor, NPS.

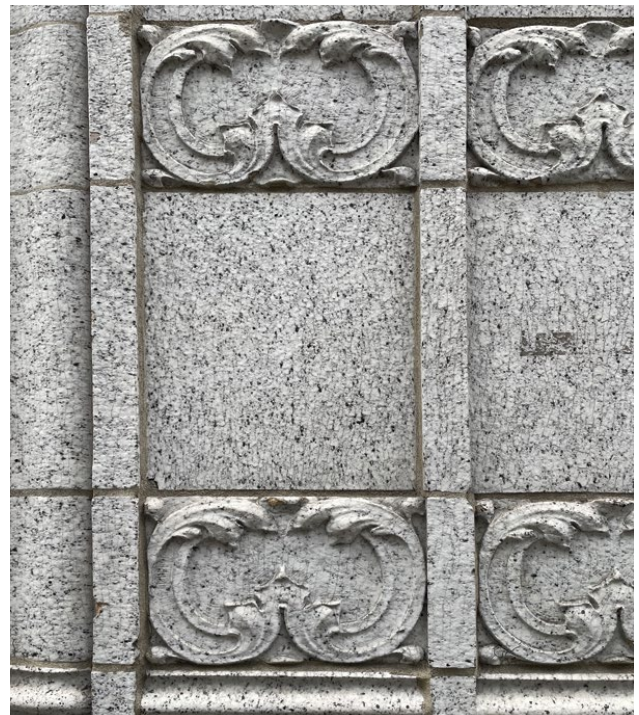


Figure 2d: Terra cotta gained popularity in the late 19th century as a cheap and lightweight alternative to stone. Glazing techniques allowed the blocks to imitate a variety of natural stone materials. Photo: John Sandor, NPS.

These examples of one material used to imitate another, more often in initial construction than for later repair and replacement purposes, are referred to as *imitative materials* in the *Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*, updated in 2017, that accompany the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. These imitative materials, while evoking other materials, usually had distinctive qualities of their own and were not always a very close match in appearance to the historic material they were meant to imitate.

Many of the traditional materials discussed above are still available and used to replace damaged or missing original features, both to replace matching historic materials and sometimes as substitute materials. Because of their extensive use over time and their known physical and chemical properties, cast stone, cast iron, and terra cotta are well understood substitute materials. This continued usage and familiarity means their installation requirements and service life are well established, which in turn makes it easier to determine when and how to use these traditional materials as substitutes for a deteriorated material. However, innovation in replacement materials continues, and new products (many of them consisting of synthetic materials) are continually introduced. These non-traditional products are an increasing part of both the new construction and rehabilitation industries. Some materials, like glass fiber reinforced polymers, glass fiber reinforced concrete, or fiber cement, have been in use long enough for an accurate prediction of their service life and performance. Other newer, non-traditional materials may be too new to have established performance records, thus, understanding their material properties is critical, and their use should be approached with more caution.

When to Consider Using Substitute Materials in Preservation Projects

According to the *Standards for Rehabilitation*, deterioration should generally be addressed through repair if in repairable condition. Repair can entail a variety of treatments that retain the unit of building material and remove and patch or replace only the damaged portion. This approach can be done with traditional methods and materials such as a dutchman, where like-kind material is precisely inserted into wood or stone, or it may employ other materials such as epoxies for wood repair or cementitious compounds for masonry. As long as the repair methods are sound and do not damage or accelerate the deterioration of the historic material, repairs are generally preferable to replacement of an entire element. More complex manufactured products, typical of more recent historic materials (as well as a lot of modern building materials generally), may be more difficult to repair, if they can be repaired at all.

There are situations, however, when the level of deterioration makes localized repairs infeasible and entire fea-



Figure 3: Incremental repair is best done using in-kind material to minimize differences in the performance characteristics that could negatively affect the overall assembly. Photo: NPS.

tures or units of historic material must be replaced. While achieving an effective match of all of the visual qualities of a material can be challenging, even when replacement is in kind, it can be even more challenging when the replacement is a substitute material. A good visual match is not the only consideration when a substitute material is to be used for incremental replacement within a larger assembly of historic material. When an individual siding board or a single block of ashlar is being replaced, it is usually best achieved with the original material. Introduction of a different material into an intact assembly requires that its inherent properties, such as expansion and contraction, moisture resistance, or permeability, be thoroughly considered relative to those of the surrounding historic materials to avoid causing damage.



Figure 4. While occasionally used to imitate other materials such as wood or slate shingle, many asbestos shingles and siding materials had their own distinct shape and profile. No longer manufactured today, alternative materials must be found to replace these materials when they are distinctive features on a historic structure. Drawing: Association for Preservation Technology, Building Technology Heritage Library.



Figure 5. (Left) Asbestos shingles were often used as a substitute for traditional slate roof shingles. The historic asbestos roof on this rehabilitation project had reached the end of its lifespan and required complete replacement. (Right) Given the limited replacement materials available to match the historic asbestos shingles, utilizing natural slate was determined to be the best visual match for the original shingles and design intent in this instance. Photos: Crosskey Architects.

Circumstances in which the use of substitute materials may generally be considered appropriate, taking into consideration technical and economic feasibility reasons, include: the unavailability of historic materials; the unavailability of skilled artisans or historic craft techniques; inadequate durability of the original materials; the replacement of a secondary feature; construction of a new addition; the reconstruction of a missing feature; code-required performance; and for enhanced resilience and sustainability:

- **Unavailability of historic material.** A common reason for using substitute materials is the difficulty in finding a good match using the historic material (particularly a problem for masonry materials where the color and texture are derived from the material itself). This may be due to the actual unavailability of the material or to protracted delivery dates, particularly if the material cannot be sourced domestically. It is not uncommon for a local quarry that is no longer in operation to have been the source of an original stone. If another quarry cannot supply a satisfactory match, a substitute material such as dry-tamp cast stone or textured precast concrete may be an appropriate alternative, if care is taken to ensure that the detail, color, and texture of the original stone are matched. Even when the color is successfully matched, the appearance of a cementitious product may diverge from that of the historic stone as the substitute material ages.

Many manufactured materials that were used historically on buildings are no longer made. Terne-plated steel, which was the material most typically used for painted standing-seam or flat-seam roofing, is no longer made. However, because it was always painted, other metals including galvanized steel or copper can generally be substituted if painted. When the historic material needing to be replaced is a manufactured product developed as an imitation of

a natural material, which was the case with asbestos shingles meant to imitate slate, the natural material may now be an appropriate substitute material to consider for the manufactured one that is no longer produced.

- **Unavailability of skilled artisans or historic craft techniques.** These two issues can complicate any preservation or rehabilitation project. This is particularly true for intricate ornamental work, such as carved wood, carved stone, wrought iron, or cast iron. While skilled craftsmen may not be as difficult to find as they once were, there can still be limitations geographically, even in finding less specialized skills, and particularly if a project is small. Technical advances have allowed some stone or wood carvers to take advantage of computerized equipment, but complex designs will likely still require hand work. It may also be possible to mimic a carved element using a material that can be cast in a mold, adding significant efficiency where an historic element survives from which a mold can be made. Options for casting include aluminum, cast stone, fiberglass, glass fiber reinforced concretes, and terra cotta, but not all carved elements can be duplicated by a casting, and mold-making and casting still require skilled craftsmen.
- **Inadequate durability of the original material.** Some historic building materials were of inherently poor quality or were not durable. In other cases, one material was naturally incompatible with other materials on the building, causing staining or galvanic corrosion. Examples of poor-quality materials are very soft sandstones, which eroded quickly, and brownstone, which is vulnerable to delamination. In some cases, more durable natural stones may be visually similar enough to stand in for these soft stones but cast stone or another material may be needed to achieve an appropriate match.

The ready availability of manufactured ornamental wood features fed a nineteenth-century taste for decorative architectural details that were often used on the exterior of buildings with little concern for how they would be affected by moisture or maintained. Even old-growth wood from decay-resistant species often could not prevent features with severe exposure from eventually needing to be replaced. Today's available commercial supplies of lumber no longer provide the denser, more decay-resistant wood of old-growth forests, so even careful matching to species, which is not always possible, will not yield a replacement equal in performance to the historic material. Old-growth wood is likely to be very expensive, if it can be found, and may not be available from a sustainable, environmentally responsible source. When features with severe exposure need to be replaced or reproduced, substitute materials that are less susceptible to decay can have a longer life, and when the feature is painted, as exterior wood features generally are, the visual effect of a substitute material can be minimal.

- **Replacement of a secondary feature.** When it is necessary to replace a less distinctive, secondary feature that is less important in defining the historic character of the property, there is more flexibility in how it can be replaced. While it may be less important to find an exact match in materials when replacing

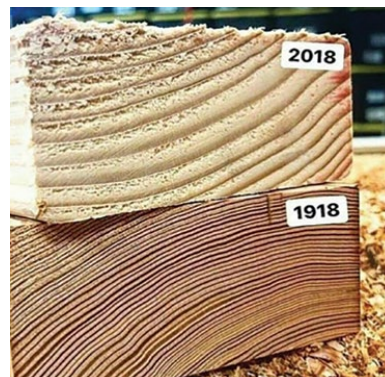


Figure 6. The dramatic difference in the number of growth rings between old-growth wood and wood that was recently harvested from second- or third-growth forests is indicative of the diminished dimensional stability and durability of most lumber currently available. Photo: Zachary Dettmore.

such a feature, the retention of the overall historic character should still guide selection of an appropriate replacement material. For example, replacing secondary features such as those with limited visibility (e.g., siding materials on a rear elevation) may permit replacement materials that are similar in appearance or character without having to be a perfect match.

- **Construction of a new addition.** The *Standards* require that new additions to historic buildings and related new construction be differentiated from the old as well as be compatible with the historic character of the property and its site and environment. Using materials that evoke, without matching, the historic material can be an effective means of achieving the needed balance between compatibility and



Figure 7. A new addition replaced non-historic construction on the rear elevation of this building. Fiber cement gives the addition a compatible appearance without replicating the exposure for thickness of the historic siding. Photo: Ward Architecture + Preservation.

differentiation for new additions and new construction. Even if differentiation is achieved through design rather than materials, there generally is no basis for requiring the use of matching historic materials for new additions and new construction as part of a rehabilitation project.

- **Reconstruction of a missing feature.**

Many buildings lose significant features over the course of their lives for reasons such as those previously discussed. When a missing feature is to be reconstructed, the importance of matching the original material may be less important to the effect replacing the missing feature may have on the overall historic character and appearance of the building. Though replacement of missing features must be substantiated by documentary, physical, or pictorial evidence, in many cases the authenticity of the material may be secondary to the overall visual qualities. The use of a more cost-effective substitute material for the construction of a missing feature can often be an important factor in the feasibility of undertaking such work.

- **Code-required performance.**

Modern building codes are regularly amended to require higher performance levels for new and existing buildings in such areas as life safety, seismic retrofits, and accessibility. Rehabilitation projects often trigger compliance with code requirements that were not in place when a building was constructed. Although building codes may often allow for the retention of historic materials and assemblies, substitute materials can offer an alternative in situations when the historic materials are non-compliant and cannot otherwise be reasonably retained. In these instances, a change in material may be appropriate to meet code requirements, while in other instances selecting the optimal code compliance method for the project may achieve code-compliant solutions that also allow for the preservation of a building's historic materials and finishes.

For example, fire codes may require increased resistance to flame spread for buildings within dense urban environments where building proximity and separation between buildings is a concern. Some substitute materials are non-combustible, have good ratings for flame spread, and can provide an alternative to help meet

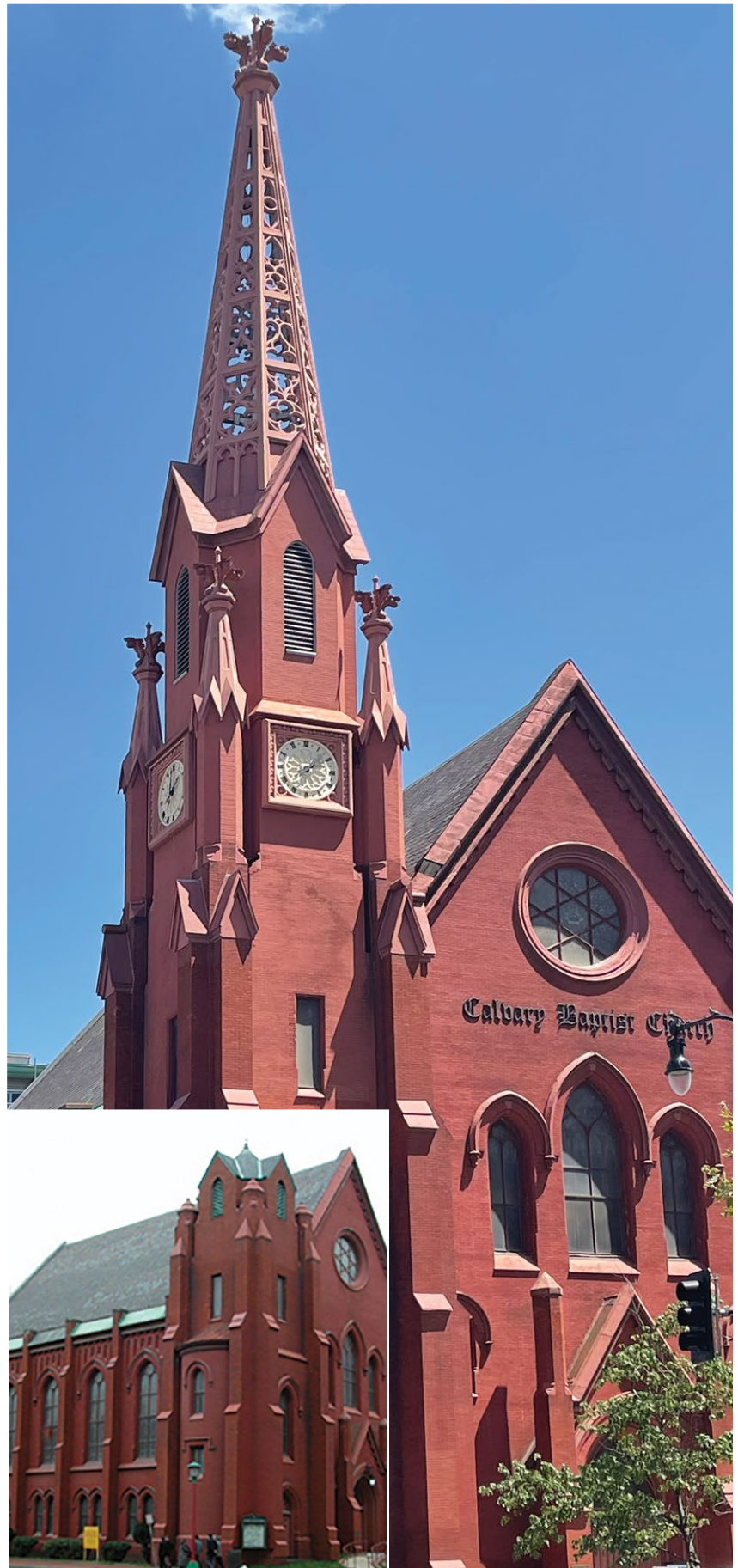


Figure 8. A long-missing cast-iron steeple was reconstructed in aluminum and fiber-reinforced polymer (FRP). Photo: John Sandor, NPS, Inset: Quinn Evans.

fire code requirements. Depending on the building component and the material, however, a substitute material may not resist fire any better than the historic material. In addressing code issues, all feasible alternatives should be considered to minimize the impact on the historic character of the building while still meeting code requirements.

With specific provisions in building code related to issues such as seismic hazards, the choice of materials for features inherently unstable in a seismic event can be a key part of a code-compliant retrofit solution. Elements at risk of falling such as parapets, finials, and overhanging cornices may be made safe by anchoring them to new structural frames. However, for some heavy masonry features, especially where there is deterioration or the feature is difficult to effectively brace, adequately anchoring the existing feature may not prove feasible. In such cases removing and replacing these features with lighter-weight replicas that incorporate a resilient structural framework can help preserve the historic character of the building while improving life safety performance.

- **Enhanced resilience and sustainability.** Wildfires, earthquakes, floods, hurricanes, and other extreme weather events put historic buildings and their occupants at risk and may require adaptive treatments that are more invasive than might be accepted in other circumstances, including related to the use of substitute materials. In these contexts, it is still necessary to try to minimize impacts on a building's historic character as much as possible while still adapting it to be more resilient. Widespread wildfires, for example, have increased demand for fire resistant materials for the exterior building envelope. Flood events may necessitate the replacement of historic materials that have been damaged or inundated with hazardous substances in contaminated floodwaters. When undertaking repairs in such circumstances, substitute materials may offer greater resilience to anticipated future exposure to natural hazard risks.

Similarly, efforts to improve energy efficiency and performance may include the use of substitute materials as replacement components when modifications to building assemblies are required and the historic materials cannot be preserved. When evaluating substitute materials in the context of sustainability objectives, factors such as the environmental impact of production, the full life cycle of products, and the embodied carbon of the materials already in place should be carefully analyzed. There may be more sustainable choices for a replacement material, including the use of more traditional materials in place of manufactured products that may consist of non-renewable resources or hazardous materials. While some synthetic substitute materials are made from recycled materials or are otherwise sustainably produced, many are not repairable, salvageable, or recyclable themselves, and

they may have shorter lifespans to their historic material counterparts. When either greater resilience or sustainability is a factor, all feasible alternatives should be considered in finding a balanced approach that maintains historic character while meeting resilience and sustainability goals.

Substitute Materials and Economic Feasibility

Economic feasibility is inevitably a concern when choosing a material for any part of a project, whether a historic or substitute material, but it should not be the sole determinant factor at the expense of maintaining the



Figure 9. Previously bricked-in openings below the flood line were reopened and new aluminum windows installed with cellular PVC trim detailed to hold back moderate flood waters and survive exposure to water. Photo: John Sandor, NPS.

historic character and historic integrity of a building. Other factors may prompt the consideration of a substitute material, such as the cost of maintaining the historic material, because it is comparatively difficult or costly to reach or access, or the frequency of required maintenance the historic material needs. Additionally, where in-kind replacement material is found to be prohibitively expensive, it may be reasonable to consider a substitute that offers an alternative and is a good physical and visual match. Not all substitute materials are, however, cost-effective replacements. Long-term durability and maintainability are other factors that should be considered in conjunction with initial cost.

Maintenance of a material, particularly where accessibility is difficult or expensive, can be an important part of a

cost evaluation. Maintenance costs should not be considered without also considering life-cycle expenses. While some substitute materials may offer reduced initial costs, they may be as or more costly than traditional materials to maintain over time. For example, many substitute materials are not readily repairable, necessitating full replacement when damaged. The cost to replace a material or assembly at the end of its lifespan may also be greater than the accumulated incremental expense to maintain the historic material, particularly if it is a more traditional, repairable material. Maintenance cost should never be the sole reason for replacing a historic material that is not deteriorated.

Criteria for the Appropriate Use of Substitute Materials

Substitute materials must meet three basic criteria to be considered: they must be compatible with the historic materials in appearance; their physical properties must be similar to those of the historic materials, or the materials must be installed in a manner that tolerates differences; and they must meet certain basic performance expectations over an extended period of time.

- **Matching the Appearance of the Historic Material**

Any material's appearance varies depending on the nature of the material and how it is used. Some historic materials, such as wood and ferrous metals, were typically painted, making the color of the substitute unimportant, though the texture of the surface, which telegraphs through a paint layer, is still an important consideration. Texture can be a large part of distinguishing a material formed by hand from one that is machine-made. Many historic materials, such as most building stones, are used without any coating, making the color, pattern, and reflectivity, as well as surface texture, dependent on the material itself. Matching the color and surface

characteristics of a historic natural material with a man-made substitute can often be quite difficult.

When the color and surface characteristics of an existing material are important, cleaning the material should be the starting point for evaluating a potential matching material. In situations where there are subtle variations in color and texture within the original material, the substitute material should be similarly varied so that it is not conspicuous by its uniformity. If a material is custom fabricated, a sufficient number of samples should be supplied to permit on-site comparison of color, texture, detailing, and other critical visual qualities. For a manufactured product with preset choices of color or texture, it may be necessary to look at samples from more than one manufacturer to find the best match. Similarly, prefabricated products, such as roofing slate, may offer limited, if any, choice of unit size, which can be a critical factor for achieving a good match. A substitute material should not be used to replace distinctive, character-defining materials and features if an adequate match in design and appearance is not possible.

As all exposed materials are subject to ultraviolet degradation, samples of a new material, particularly when custom formulated, should be prepared during the early planning phases to allow for evaluation of the effects of weathering on color stability. When that is not possible, or if a prefabricated product is used, the fabricator or manufacturer may be able to identify regional locations where equivalent products have been installed long enough ago to get a better sense of how the material weathers and performs.

While a perfect match is the desired goal for replacing distinctive features, it is not always possible, even when the same matching material is chosen for the replacement. When any compromise



Figure 10. Polymer slates offer a choice of shapes but not sizes, limiting their ability to achieve a good visual match for some historic slate. With the size of the polymer slates (right) being nearly twice that of the historic slates (left), the scale of the entire feature is incompatibly altered. The molded edges of this material, which contribute to its ability to replicate slate, would be lost if each shingle was resized by cutting. Photo: John Sandor, NPS.



Figure 11. The thickness of the wood siding on the front (left) creates a deeper shadow line than is achieved with the fiber cement siding used on the side (right) elevation. While the exposure can be adjusted, fiber cement siding is not available in a matching thickness. Photo: John Sandor, NPS.

must be made in the precision of the match, it is wise to consider the vantage point from which the material will be seen. Sometimes what seems important at close range, such as variations in the texture of a surface, may be secondary to other aspects of the material when viewed from some distance. The closer a feature is to the viewer, the more closely the material and craftsmanship should match the original. An on-site mock-up using a sample of the proposed material can help evaluate whether it is an adequate visual match.

- **Matching the Physical Properties of the Historic Material**

Carefully chosen substitute materials can often closely match the appearance of historic materials, but their physical properties may differ greatly. These differences are most critical when incrementally replacing components of a larger assembly that retains significant historic material. The chemical composition of the material (e.g., the presence of acids, alkalis, salts, or metals) should be evaluated to ensure that the replacement materials will be compatible with the adjacent historic materials. Materials that will cause galvanic corrosion or other chemical reactions must be isolated from one another.

The thermal- and moisture-driven expansion and contraction coefficients of each adjacent material must be within narrow limits or be accommodated



Figure 12. Cellulose composite materials, like wood, expand and contract with moisture. Here it was used to reconstruct a missing storefront. Unlike solid wood that is dimensionally stable parallel to the grain, this composite moves equally in all dimensions, resulting in gaps that were not adequately anticipated in the design. Photo: John Sandor, NPS.

by carefully designed joints and fasteners. Joints can play a role both in accommodating movement of materials as well as in managing moisture, either to keep it from entering the enclosure assembly or to let it escape from the building envelope, or both. Because some synthetic materials are less permeable to moisture than more traditional materials, installations must take into account the potential to trap moisture and cause deterioration of historic and new materials. An assembly incorporating new and historic materials should be designed so that if material failures occur, the failures occur within the new material rather than the historic one.

During installation, surface preparation is critical to ensure proper attachment. Deteriorated underlying material must be removed or stabilized. Non-corrosive anchoring devices or fasteners that are designed to carry the new material and to withstand wind, rain, snow, and other destructive elements should be used. Since physical failures often result from poor anchorage or improper installation techniques, a structural engineer should be included in planning any major project. For readily available, off-the-shelf materials, manufacturers' recommendations for attachment and spacing should be followed.

Nearly all substitute materials have some properties that are different from the historic materials they may replace. Even when substitute materials are isolated from historic materials and features, it is important to understand the substitute materials' properties in order to use them successfully.

- **Performance of the Material Over Time**

When more traditional materials are used to replace damaged historic materials and features, their performance is predictable in most cases. An exception may be modern wood that has durability and other prop-

erties different than those of historic wood from old-growth forests. Many of the materials used as substitutes have been in use long enough to provide some idea of how they perform over time. Other material may only have test results from accelerated weathering. The length of manufacturer warranties may be an indicator of expected durability and lifespan. Warranties only predict a manufacturer's expectation of a product's performance and are no guarantee that the manufacturers will still be in business at the time needed to stand behind them. Just as new manufacturers emerge with new materials, others disappear. Where possible, projects involving substitute materials in similar installations and exposures should be examined before selecting a new, less-tested material. It is unrealistic to expect a substitute material, which can be quite different in composition than the historic material, not to age differently.

Even traditional materials will not perform well if not used or detailed appropriately, and experienced architects, engineers, fabricators, and installers rely on their professional knowledge and experience to ensure proper installation and techniques when working with familiar materials. This is just one of many reasons that using the original materials for needed replacement is usually the best choice. Some of the materials now available as substitutes have properties that differ greatly from the traditional materials they may be used to replace. It is critical to the successful performance of substitute materials that everyone involved in the selection, design, and installation fully understands the material's properties, especially how it is different than the material it is replacing, and how that will affect the surrounding materials and building systems.

Many traditional building materials can be repaired either with traditional methods and materials or with more modern conservation techniques using substances like epoxies. However, many modern substitute materials (particularly synthetic ones) are not as easily repaired, if repairable at all, as their more traditional counterparts. Confirming that a material is repairable may be important for those used, e.g., where impact or significant wear or abrasion is likely.

Finally, it is critical that the substitute materials be documented as part of the historical record of the building so that proper care and maintenance of all of the building materials continue, ensuring the continued life of the historic building.

Choosing an Appropriate Substitute Material

Once all reasonable options for repair and replacement in kind have been considered and sufficient justification for substitute materials has been established, the choice among the variety of substitute materials currently available must be made. Rapidly developing technologies allow a wide variety of materials to choose from that are intended to mimic historic materials. Many of the materials that were historically used as substitutes for more traditional historic materials have themselves become historic, and some of these early substitutes continue to be reasonable options as substitute materials today. No substitute material will exactly match the historic material in all aspects, but many are able to adequately match the appearance and relevant physical attributes to make for a potential substitute. If a substitute material is not

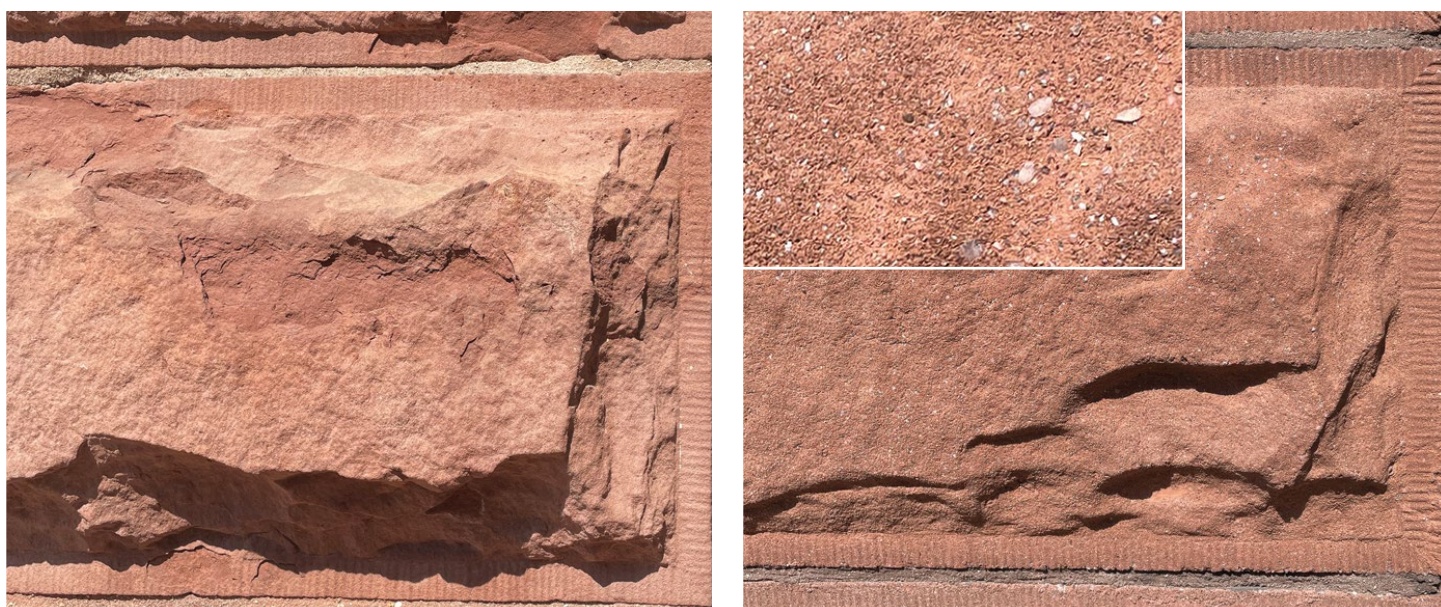


Figure 13. Cast stone was used to effectively replace individual blocks of sandstone. Both the original (left) and the substitute material (right) retain similar physical and visible properties. Having weathered for over 30 years, some erosion of the binder has revealed quartz grains of the aggregate (inset), but it is only noticeable upon close inspection. Photo: John Sandor, NPS.

an adequate physical and visual match given the specific conditions of the building and the project, then it should not be used to replace distinctive, character-defining materials and features.

Listed below are various building components or features and the substitute materials which may, in some circumstances, be considered for use as possible replacement materials in a historic rehabilitation project consistent with the *Standards for Rehabilitation*. This list includes different substitute material options available today for these building features and poses questions that should be asked and considered when choosing between the original material and various types of substitute materials. This is followed by a list of some of the more commonly used, currently available materials that may have some applications as substitute materials and the properties of each that affect their suitability for use as substitutes. This list should not be read as an endorsement of any of these materials, generally, or their appropriateness for use as a substitute material, but it serves as a reminder that the successful use of any building material requires a careful consideration of its properties relative to where and how it will be used.

Considering Substitute Materials

Considering the use of a substitute material should begin with the following questions about the conditions and location where it will be used:

- Will the significance or visibility of the historic feature require a very precise match?
- Is the entire feature being replaced or just a component of it?
- Are pre-existing conditions contributing to the failure of the existing material, and, if so, how will they be addressed/corrected?
- Is the need for replacement due to inherent deficiencies of the original material?
- Will the material need to resist any environmental hazards such as flooding or fire?

Historic Features and Substitute Materials

		Historic Building Features					
		Masonry Stone, terra cotta	Architectural Metals Cast & wrought iron, steel, pressed metal	Siding Wood, asbestos	Roofing Wood shingle, slate, tile	Decking Tongue-and-groove & square-edge wood	Molding / Trim Wood
Potential Substitute Materials	Aluminum	●	●	●			●
	Cast Stone & Precast Concrete	●			●		
	Fiber Reinforced Concretes	●					
	Glass Fiber Reinforced Polymers	●	●				
	Fiber Cement			●	●		●
	Mineral / Polymer Composite			●	●	●	●
	Cellulose Fiber / Polymer Composite			●	●	●	●
	Non-composite Polymers		●			●	●
	Cellular PVC			●		●	●

The above chart lists materials that are sometimes used as substitutes for replacement of historic building features. Even within a given category, all materials may not be equally suitable as a substitute replacement material for the actual historic material or feature. Any substitute material should be selected based on its specific physical and visual characteristics, conditions, and intended application consistent with the Secretary of the Interior's Standards for Rehabilitation.

Historic Building Features: Criteria for selecting an appropriate replacement material

Masonry

FEATURES: corbels, brackets, balusters, cornices, window and door surrounds, friezes, wall surfaces, horizontal surfaces, incidental ornament, columns

HISTORIC MATERIALS: terra cotta, cast stone, stone, concrete

POTENTIAL SUBSTITUTES: cast stone, pre-cast concrete, GFRC, GFRP, non-composite polymers (polyurethane), cast or stamped metal

Questions to ask about the replacement material:

- Can it serve a structural function?
- How is the material affected by moisture?
- Can the material survive flooding and be reused?
- Can it reproduce the surface texture of the original?
- Is its shrinkage in curing low enough to allow it to be molded from existing stones?
- Can matching color be achieved without a coating and with UV stability?
- Can an adequate match of the surface (color and texture) be achieved with a coating?
- Is a coating required?
- If it is not self-supporting, is it lightweight enough to be supported by an underlying framework?
- Can multiple original units be replicated with a single replacement piece?
- Where thermal movement is different from the original material, how will joints accommodate?
- Is the material combustible?

Architectural Metals

FEATURES: pilasters, door and window surrounds, cornices, incidental ornament, columns, spandrels, ceilings, sheathing, roofing

HISTORIC MATERIALS: cast and wrought iron, steel, bronze, lead, aluminum, and stamped steel (usually galvanized or terne-coated)

POTENTIAL SUBSTITUTES: GFRP, aluminum, non-composite polymer (polyurethane), GFRC, metallic/polymer composite

Questions to ask about the replacement material:

- Will the replacement material serve a structural or cosmetic role?
- Will it expand and contract with temperature change enough to require special accommodation in its installation?
- If part of an assembly of mixed materials, how will any expansion and contraction of the dissimilar materials be accommodated?
- Will the replacement material increase deterioration of the historic or surrounding elements, for instance due to galvanic corrosion, moisture entrapment, jacking of original material, off-gassing creating a corrosive environment, or poor original design of the historic material?
- How will the replacement material mimic the surface color/patination of the original material?
- If a coating is needed, what preparation is needed, and what is its durability or service life of the finish?
- What attachment and support systems are necessary?
- If the original element is structural, but the new material is not, how can supplemental structure be introduced to support the new?



Figure 14. Surface texture is an important aspect in matching the appearance of a historic material, especially when a material is viewed at close range. As seen in these two images, many of the substitute materials produced for siding and trim have an embossed wood grain, making them incompatible for replacing historic wood that was typically planed to a smooth surface. Some substitute products are available with a smooth surface as well. Photos: John Sandor, NPS.

Siding

FEATURES: clapboard, tongue-and-groove or shiplap siding, board and batten, shingles

HISTORIC MATERIALS: wood and asbestos

POTENTIAL SUBSTITUTES: cellular PVC, wood fiber/polymer composite, fiber cement, mineral/polymer composite

Questions to ask about the replacement material:

- What are the widths, lengths, profiles, thicknesses, and textures available?
- What, if any, are the finishing requirements, and/or is it available factory-finished?
- How well does it hold paint, and can prefinished surfaces be renewed?
- What tools are needed to cut it, and can it be machined?
- Does it absorb moisture and, if so, to what effect?
- Can the material survive flooding and be reused?
- Will it expand and contract with temperature change enough to require special accommodation in its installation?
- What characteristics can affect its handling (e.g., weight, flexibility, brittleness)?
- Does it have specific fastening requirements?
- Is it susceptible to insect damage?
- What is its impact resistance?
- Does it have a flame spread rating?
- What is the expected lifespan and/or warranty?

Roofing

HISTORIC MATERIALS: wood shingle, slate shingle, asbestos shingle, clay tile, concrete tile, metal

POTENTIAL SUBSTITUTES: fiber cement, mineral/polymer composite, wood fiber/polymer composite, pre-cast concrete, metal

Questions to ask about the replacement material:

- What sizes and shapes are available?
- What are color choices?
- What is the color stability of the new material, and how will it age/weather?
- What is the impact resistance?
- What is its flame spread rating?
- What are the installation requirements of the new material?
- Can the feature being replaced be custom-produced if ready-made ones of the new material are not an accurate match?
- What is the expected lifespan and/or warranty?

Decking

FEATURES: tongue-and-groove, square-edge flooring

HISTORIC MATERIALS: wood

POTENTIAL SUBSTITUTES: cellular PVC, wood fiber/polymer composite, mineral/polymer composite, non-composite polymers (solid PVC)

Questions to ask about the replacement material:

- What are the widths, lengths, and textures available?
- Is it site painted or prefinished?
- How well does it hold paint, and can prefinished surfaces be renewed?
- What tools are needed to cut it, and can it be machined?
- What dimensional span does its strength allow?
- Does it absorb water, and if so, to what effect?
- Can the material survive flooding and be reused?
- Does it require a drainage plane, or can it be installed atop a membrane?
- Will it expand and contract with temperature change enough to require special accommodation in its installation?
- Is it susceptible to insect damage?
- Is it impact resistant?
- Does it have a flame spread rating?
- What is the expected lifespan and/or warranty?

Molding / Trim

FEATURES: run moldings, flat boards, casings, cornice, frieze, railings, balustrade, columns

HISTORIC MATERIALS: wood, metal

POTENTIAL SUBSTITUTES: cellular PVC, wood fiber/polymer composite, mineral/polymer composite, non-composite polymer (polyurethane), GFRP, sheet metal

Questions to ask about the replacement material:

- What are the widths, lengths, and textures available?
- What, if any, are the finishing requirements and/or is it available factory-finished?
- How well does it hold paint, and can prefinished surfaces be renewed?
- What tools are needed to cut it, and can it be machined?
- Does it absorb moisture, and if so, to what effect?
- Can the material survive flooding and be reused?
- Will it expand and contract with temperature change enough to require special accommodation in its installation?
- What characteristics can affect its handling (e.g., weight, flexibility, brittleness)?
- Does it have specific fastening requirements?
- Is it susceptible to insect damage?
- What is its impact resistance?
- Does it have a flame spread rating?
- What is the expected lifespan and/or warranty?



Figure 15. Tongue-and-groove porch flooring is manufactured in several different substitute materials. Each type has different properties, though most are more moisture-resistant than wood. The prefinished product shown can be painted when worn, but repainting is not recommended for some product choices. Photo: Oak Alley Foundation.

Potential Substitute Materials: Matching properties and performance needs

Physical Composition and Properties

After assessing different material options based on the intended application, the appropriateness of a substitute material should also be considered in context of the material's physical composition, associated properties, and necessary visual match.

Aluminum

MATERIAL: Aluminum is a highly corrosion-resistant alloy that can be cast, wrought, or extruded. Molten aluminum is cast into permanent (metal) molds or one-time sand molds forming cast aluminum. Extruded aluminum is formed by passing heated aluminum through a die which produces the desired form. Wrought aluminum is worked using the heated metal and then bending, stamping, and otherwise shaping the metal. If not self-supporting, aluminum elements are generally screwed or bolted to a structural frame. Aluminum can be welded, but more often sections, particularly extruded ones, are mechanically connected.

PROPERTIES:

- Isotropic
- Lightweight
- Thermal movement greater than cast iron or wood
- Corrosion-resistant, but direct contact with other metals may trigger galvanic corrosion
- Lower structural strength than iron or steel
- Ductile - less brittle than cast iron
- Non-combustible
- Retains high definition through molding process and produces crisp profiles through extrusion
- Can be given a durable metallic finish through anodization. Surface etching required for paint adhesion
- Can be machined into a large variety of shapes/ dimensions



Figure 16. Aluminum is a highly corrosion-resistant metal that is commonly used as a substitute material for cast iron. Aluminum can be a more affordable and lightweight alternative to cast iron that retains a similar texture, shape, and maintenance cycle. Photo: NPS.



Figure 17. The balustrade consists of multiple prior campaigns of using cast stone to replace the natural stone. The effective match for the surface texture and color of the original stone allowed individual elements to be incrementally replaced only when they had failed, thus retaining the maximum amount of original material as long as possible. Photo: EverGreene Architectural Arts.

Cast Stone & Precast Concrete

MATERIAL: A cement lime and aggregate mixture that is dry-tamped into a mold is generally referred to as cast stone. Cast stone is one of the original substitute materials. Its longevity has proved that the material ages compatibly with stone. A wet mix of cement and aggregate poured into molds also has a long history of being used to produce concrete masonry units mimicking stone and roofing tiles mimicking clay tile. Both methods have minimal shrinkage during curing, though they employ different curing and finishing techniques. Both can include reinforcing bars and anchorage devices installed during fabrication. The dry-tamp fabrication method is especially effective at producing an outer surface with the appearance of stone.

PROPERTIES:

- Isotropic
- Weight equivalent to stone
- Expansion/contraction similar to stone
- Water absorption may differ from that of any particular stone
- Can be structural
- Non-combustible
- Vapor-permeable
- May achieve a wide range of color and surface textures by varying mix, but use of pigments may reduce UV stability
- Can be coated
- May be tooled to match the appearance of tooled stone
- Repairs similarly to stone



Figure 18. Missing historic terra cotta spandrel panels on all floor levels were recreated utilizing glass fiber reinforced concrete (GFRC) replacements. New spandrels were fabricated as individual components and attached with metal clips between historic terra cotta piers. Photo: Kris Frail, Dewberry.

Fiber Reinforced Concretes (GFRC, CFRC)

MATERIAL: Fiber reinforced concretes are lightweight concrete compounds modified with additives and reinforced with alkaline resistant glass fibers (GFRC), or less frequently carbon fibers (CFRC). They are generally fabricated as thin-shelled panels and applied to a separate structural frame or anchorage system. GFRC is typically sprayed into forms, although it can be poured, and anchoring devices are included in the fabrication. The color is derived from the natural aggregates and, if necessary, a small percentage of added pigments. Because of its low shrinkage in curing, it can be produced using molds taken directly from the building.

PROPERTIES:

- Isotropic
- Lighter weight than solid masonry
- Expansion/contraction similar to stone
- No load bearing capacity, so underlying framework must be used to accommodate any loads
- Material can be fire-rated
- Vapor-permeable
- Can be produced in larger sections efficiently reproducing repetitive elements or features that were originally made up of small individual units
- Large range of colors achievable by varying aggregates, but when pigments are needed UV stability may be reduced
- May be left uncoated or may be painted



Figure 19. A new, lightweight fiber reinforced polymer is attached to a new metal armature to replicate damaged and missing elements of a terra cotta cornice. Photo: Quinn Evans.

Glass Fiber Reinforced Polymers (FRP, Fiberglass)

MATERIAL: Fiberglass is the most well-known of the FRP products generally produced as a thin, rigid, laminate shell formed by pouring a polyester or epoxy resin gelcoat into a mold. When tack-free, layers of chopped glass or glass fabric are added along with additional resins. The surface gel coat can be pigmented or painted. Reinforcing rods and attachment devices can be added when necessary. Because of its low shrinkage in curing, it can be produced using molds taken directly from the building. Rather than being produced as standard components, FRP is custom fabricated for individual applications.

PROPERTIES

- Isotropic
- Lighter weight than masonry, similar to sheet metal
- More thermally driven expansion than masonry or metals
- No load bearing capacity, so underlying framework must be used to accommodate any loads
- High strength to weight ratio
- Flammable
- Not vapor-permeable
- Can be produced in larger sections efficiently reproducing repetitive elements or features that were originally made up of small individual units
- May be difficult to match false joints in multi-unit assemblies to actual joints that need to accommodate movement
- Color can be incorporated into the surface gel-coat, or the surface may be coated



Figure 20. Cement board was used to replace a non-historic infill and mimics the configuration of a typical vehicular door of the period.
Photos: Historic Augusta.

Fiber Cement

MATERIAL: Fiber cement products are made from fiber, sand that is ground to a powder, cement, and proprietary additives to reduce moisture absorption. The fiber used in roof products is glass fiber alone, whereas siding and trim board products are primarily wood fiber. The material is formed with a smooth or textured surface, cut to standard sizes of panels, boards, or shingles, and cured in an autoclave. Roofing material has integral color, but board and siding products are produced with a primer, if not fully factory finished. Most siding and trim boards are embossed with a wood grain on one surface and are smooth on the other, the smooth side being the appropriate surface to imitate planed wood.

PROPERTIES:

- Products are minimally orthotropic
- Heavier and more brittle than wood, limiting available lengths
- Very little thermal- and no moisture-driven movement
- Low water absorption, but not recommended for ground or roof contact
- Class A flame spread
- Resists insect damage
- Available in limited thicknesses and widths
- Not machinable, but may be cut with special carbide blades; cutting requires dust collection and personal protective equipment
- Cut edges require sealing
- Available unfinished, primed, or prefinished, and must be painted (with latex paint)
- 15-year limited warranty typical



Figure 21. A mineral polymer composite siding was available in the profile very similar to the historic siding. The replacement siding was used where the original material was almost completely missing beneath a more modern covering. Areas where the original wood was largely intact were replaced with matching wood to sustain more of the material integrity of the building. Photo: Belk Architecture.

Mineral / Polymer Composite

MATERIAL: Calcium carbonate or fly ash are mineral ingredients held in a matrix of various polymers to produce materials formed or molded into a number of building products. Additives found in some of the roofing products include pigments and UV stabilizers. Some use a substantial portion of recycled material. Different combinations yield products with different properties, each formulated for a specific building component. When the material is fly ash with some glass fibers bound in a matrix of polyurethane, it is identified as polyash. Siding, trim, bead board, and deck products are primed or prefinished, whereas roof products have integral color.

PROPERTIES:

Fly ash (siding and trim)

- Isotropic
- Heavier and more brittle than wood, and lacking structural capacity
- Little thermal or moisture-driven movement
- Sufficiently low water absorption to permit ground contact
- Class C flame spread
- Resists insect damage
- Available in limited thicknesses and widths
- Machinable with carbide tools blades; requires dust collection
- Cut edges do not require sealing

- Must be painted
- 30-year limited warranty typical

Calcium carbonate or recycled rubber (roofing)

- Isotropic
- More thermally-driven movement than slate or wood
- Little to no moisture absorption
- As shingles: lighter and more flexible than slate
- As tongue-and-groove decking: heavier and harder than wood
- Not vulnerable to insect damage
- Available in limited dimensions
- As shingles: Class 4 impact resistance, and flame spread ratings ranging from Class A to Class C depending on the specific product
- As shingles: integral color, that may be subject to fading
- As tongue-and-groove decking: prefinished with non-renewable finish, and can be cut with woodworking tools
- 50-year limited warranties on roofing products typical

Cellulose Fiber / Polymer Composite

MATERIAL: Wood strands or fibers are coated with resin for moisture resistance and zinc-borate for insect and fungal-decay resistance, then consolidated under heated pressure. Solid composite core boards are cut from sheets of material, then factory-primed or finished. Resulting siding and trim board products can be referred to as engineered wood, fiber board, or hardboard. Products may be embossed with a wood grain or have a smooth finish, the smooth side being the appropriate surface to imitate planed wood. Siding, trim, and tongue-and-groove decking with a slightly different properties are produced by extruding polyvinyl chloride (PVC) combined with non-wood cellulose. Roofing shingles are molded from fine wood fibers, color additives, and UV stabilizers bound with polypropylene or polyethylene (thermoplastics).

PROPERTIES:

Predominantly Cellulose (siding, trim and decking)

- Minimal thermal movement
- Resistant to moisture-driven movement
- Lighter and more flexible than solid wood, but lacks structural capacity
- Rice hull cellulose: can span typical floor-framing spacing as decking
- Low water absorption (for wood, no ground or roof contact)
- Class A or Class C flame spread
- Resists insect damage
- Available in limited dimensions
- Machinable with woodworking tools
- Wood cellulose: Cut edges must be sealed and may need additional surface prep for finish; must be painted if unfinished or primed, also available prefinished
- Rice hull cellulose: Accepts stain/paint, but no finish required
- 30–50 year limited warranty, depending on manufacturer

Predominantly Polymer (roofing)

- Minimal thermal movement
- Little to no moisture absorption
- Lighter and more flexible than slate
- Class 4 impact-resistance
- Class A flame spread
- Available in limited shingle size
- 50-year limited warranty typical



Figure 22. A porch was reconstructed using posts fabricated on site from a smooth-surface cellulose/polymer composite material. Though the face of the posts are painted, the lack of paint on the bottom at the cut ends is not consistent with manufacturers' recommendations. This treatment will allow moisture to be absorbed, shortening the life of the new replacement feature. Photo: John Sandor, NPS.



Figure 23. 3-D printing using various polymers is occasionally used to replicate missing metal or wood features. This new application is continually being refined, but the application can be successful when a painted, lightweight feature needs to be replicated. Photo: NPS.

Non-composite Polymers

MATERIALS: The main two polymer materials used without significant other components are polyurethane and polyvinyl chloride (PVC). Polyurethane millwork is constructed of urethane foam created by mixing isocyanate and resin. The polyurethane mixture is kept under pressure in a mold as it expands to any desired shape. These molded products have a closed-cell, foamed core with a denser surface skin. Polyurethane products can have exterior applications but are more often used for interior features. Polyvinyl chloride (PVC) in a solid extruded form is another polymer that can have architectural application as tongue-and-groove decking. Various polymers formed using 3-D printing are also being explored as replacements for painted metal or wood ornamental features.

PROPERTIES: Each of the two groupings has distinct physical properties

Urethane Foam (moldings and decorative elements)

- Lightweight and flexible, but lacking structural capacity
- More thermally-driven movement than wood or stone, but less than cellular PVC
- Does not absorb water
- Flammable
- Resists insect damage
- Can be cut with standard woodworking tools
- Adhesive and mechanical fasteners both recommended for installation

- Supplied primed and must be painted (latex paint)
- Lifetime limited warranty typical

Solid PVC (flooring)

- Isotropic
- Heavier and less flexible than wood
- Minimal thermal movement
- Does not absorb water
- Strength to span typical floor-framing spacing
- Impact-resistance greater than wood
- Class A flame spread
- No insect susceptibility
- Good paint adhesion, but also available prefinished
- 20-year warranty typical

Cellular Polyvinyl Chloride (PVC)

MATERIAL: Varying amounts of calcium carbonate and a foaming agent are added to melted PVC before passing through an injection die and then a calibrator to produce the shape and size of the finished product. Cellular PVC is produced as sheets, boards, and moldings. Differences in the specifics of the equipment and the rate of cooling create two varieties of product, with distinct properties. One is known as free-foam, having a fairly consistent structure throughout its section, and the other is identified as Celuka, having a skin that is denser than its core. This primarily affects the ease with which the product can be milled and shaped. The material is white and needs no applied finish. When produced for decking the material has a colored and textured wear layer over the PVC core.

PROPERTIES

- Isotropic
- Lighter and more flexible than wood
- Less strong than wood (in tension and shear), but can span typical floor- framing spacing as decking
- More impact-resistance than wood
- Negligible water absorption; no moisture-driven movement, unlike wood
- Subject to thermal expansion and contraction significantly greater than wood, though the thermal movement is less for the same dimension than the cross-grain moisture-driven movement of wood
- For longer pieces, thermal movement requires manufacturer's specifications to be followed for attachment, and inclusion of expansion joints when installed at low temperature (joints should be glued)
- Class A flame spread
- Resists insect damage
- Machinable with woodworking tools, though cut edges may need additional surface prep for finish
- Good paint adhesion; if painted, high light reflectance (HLV) is recommended to minimize heat driven expansion
- 25–30-year limited warranty, depending on manufacturer



Figure 24. Cellular PVC when painted can be used to replace deteriorated wood features. This beadboard set in a wood frame was not historically designed to shed water effectively and had deteriorated. Cellular PVC was able to match the appearance of the wood details, while its properties were well matched to the shady location, painted finish, and limited size and configuration within the overall assembly; thus, it should provide a long-lasting solution for this application. Photo: Jennifer Balson Alvarez, NPS.

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