Property Owner

James W. Jeffcoat Revocable Trust

Applicable Codes

2021 International Building Code w/ SC Modifications
2021 International Fire Code w/ SC Modifications

2021 International Mechanical Code w/ SC Modifications
2021 International Plumbing Code w/ SC Modifications
2020 National Electrical Code (NFPA70) w/ SC Modifications

2009 IECC

2017 ICC / ANSI A11.7

Project Description

New construction for an ancillary building with commercial on both floors.

Building located behind an existing retail shop known as Eggs 'n' Tricities.

Square Footage

Overall

Heated Square Footage= 1,180 square feet

Porches = 360 square feet

Each Floor

Heated Square Footage= 590 square feet
Porches = 180 square feet

<u>Each Floor Individual Rooms</u>

Office = 150 square feet

Restroom = 60 square feet

Storage = 43 square feet

Flex Space = 264 square feet

Construction Makeup

Wood-framed walls, floors and roof with concrete slab foundation.

Occupancy Classification
Section 304.1

Business Group B Section 309.1

Mercantile Group M (only allowed if building has sprinklers)

Type of Construction
Section 602.5
Type VB

Allowable Building Height

Table 504.3

without sprinklers = 40 feet with sprinklers = 60 feet

Allowable Numbers of Stories

*Table 504.4*Type VB Group B

Without sprinklers is limited to two stories.

With sprinklers is limited to three stories.

Type VB Group M

Type VB Group M
With sprinklers is limited to two stories.

(Group M only allowed with sprinklers)

Allowable Building Area

Table 506.2

Type VB Group B

Without sprinklers is allowed 9,000 square feet.

With sprinklers is allowed 27,000 square feet.

Type VB Group M

With sprinklers is allowed 27,000 square feet.

Fire Resistance Rating Requirements for Building Elements

Table 601

Type VB construction requires zero hours for the structural frame, exterior and interior bearing walls, exterior and interior nonbearing walls, floor construction

and roof construction.

Minimum Number of Exits or Access to Exits per Story

Table 1006.3.3

Two Exits Required

Table 1006.2.1

Spaces with one exit or exit Access doorway

Group B

Without sprinklers 100 feet
With sprinklers 100 feet
Group M

With sprinklers 75 feet

Maximum Exit Access Travel Distance

Table 1017.2

Group B

Without sprinklers = 200 feet

With sprinklers = 300 feet

Group M
With sprinklers = 250 feet

Maximum Floor Area per Occupant

Table 1004.5
Group B per floor
Office/Flex Space/Restrooms
474 square feet/150 gross = 3.16

Storage 43 square feet/300 gross = .14

Group M per floor
Office/Flex Space/Restrooms
474 square feet/60 gross = 7.9

Occupants = 3

Storage
43 square feet/300 gross = .14

Occupants = 8

Maximum Occupant Load

For all Group B = 6 Occupants

For mix of Group B and Group M = 11 Occupants

For all Group M = 16 Occupants

Required Separation of Occupancies

Table 508.4

No Separation Requirement

Horizontal Assemblies
Section 711.2.4.1

No Separation Requirement

Manual Fire Alarm System

[F] 907.2.2 Group B Not Required [F] 907.2.7 Group M

Not Required

Smoke Alarms
[F] 907.2.11
Not Required

Sprinklers
Section [F] 903

Section [F] 903

Not Required for Group B

Required for Group M

Portable Fire Extinguishers

[F] 906.1 Required

Fire Marshal to determine number, location and type

Fire Resistance Rating Requirements foe Exterior Walls Based on Fire

Separation Distance

Table 705.5

Exterior Walls at 5' setback required to be One Hour Fire Rated

Maximum Area of Exterior Wall Opening Based on Fire Separation

<u>Distance and Degree of Opening Protection</u> *Table 705.8*

Without Sprinkler and Unprotected 10%
With Sprinkler and Unprotected 25%

Protected 25%

Means of Egress Illumination
Section 1008

Fxit Signs

Exit Signs
Section 1013

Doors
Section 1010

Stairways
Section 1011
Minimum Width 36"
Minimum Headroom 80"
Maximum Riser 7"

Minimum Tread 11"

Handrails
Section 1014

Guards
Section 1015

Interior Finishes

Table 803.13

Fire Safety

Accessibility
Chapter 11

Section 502

Plumbing
[P] Table 2902.1
1 WC

1 LAV

Service Sink Not Required (footnote e)

Drinking Fountain Not Required [P] 2902.6

Separate Facilities Not Required [P] 2902.2



STUDIO, LLC BLUFFTON, SC

DATE :7/24/25 8/28/25

LC ct 29910

Ansley Hester Manuel, Archi 104 Pritchard Street, Bluffton, South Caroli 843.338.8932 cell manuel.studio@aol.

TUDIO

MANUE

House

ANALYSIS AND INDEX

Jeffcoat's Commercial Carriage F 5 LAWTON ST. BLUFFTON, SC 29910

INDEX

C-1 CODE ANALYSIS, INDEX

C-2 PROPOSED SITE PLAN

A-2 BUILDING ELEVATIONS

A-3 WALL & PORCH SECTIONS

A-1 FIRST & SECOND FLOOR PLANS,

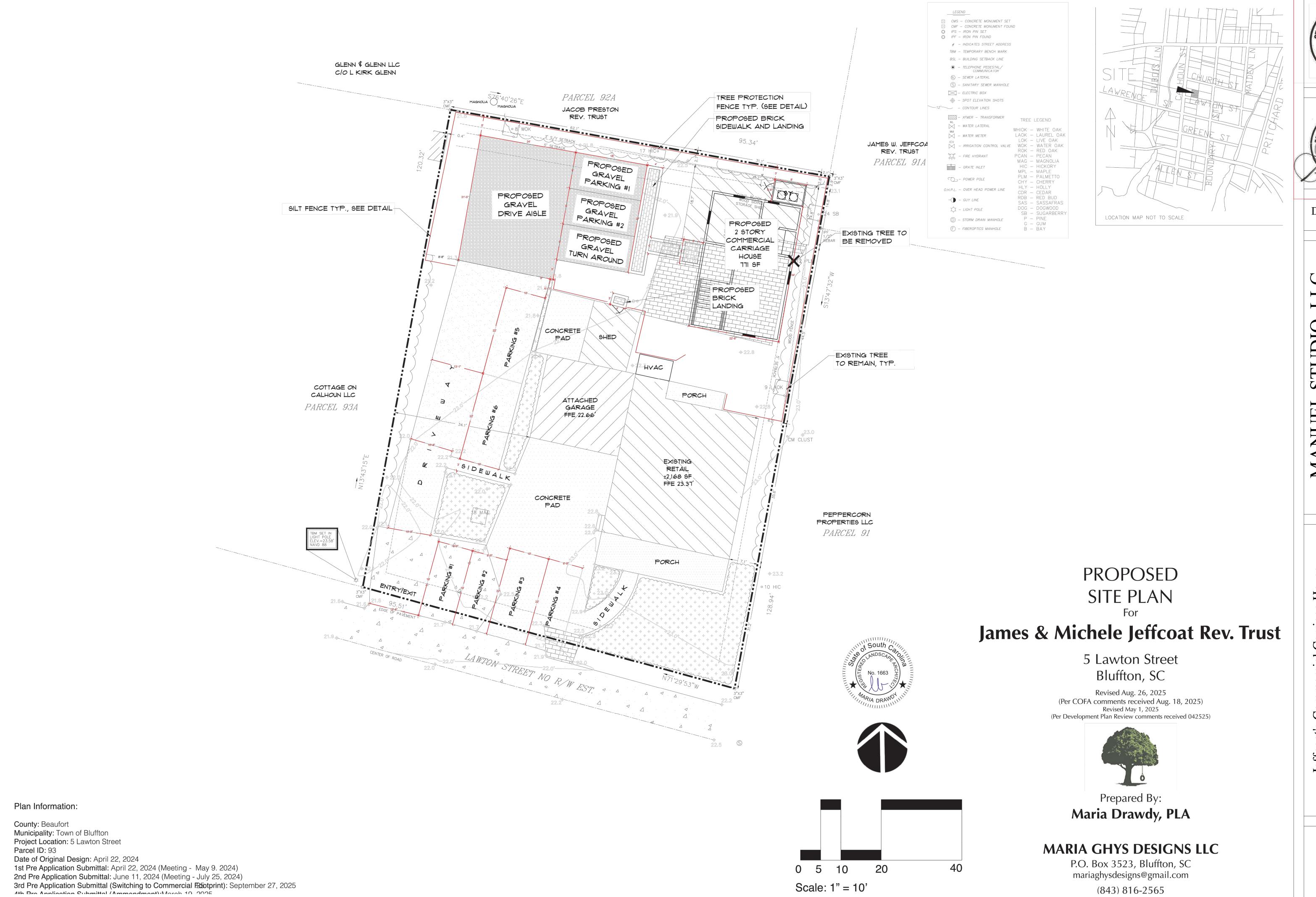
A-4 ROOF PLAN & ANSI ILLUSTRATIONS

SCHEDULES & DETAILS

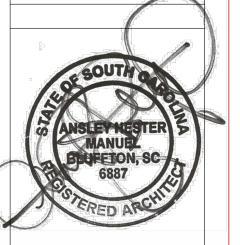
C-3 LIFE SAFETY PLAN

SHEET

C-



STUDIO, LLC

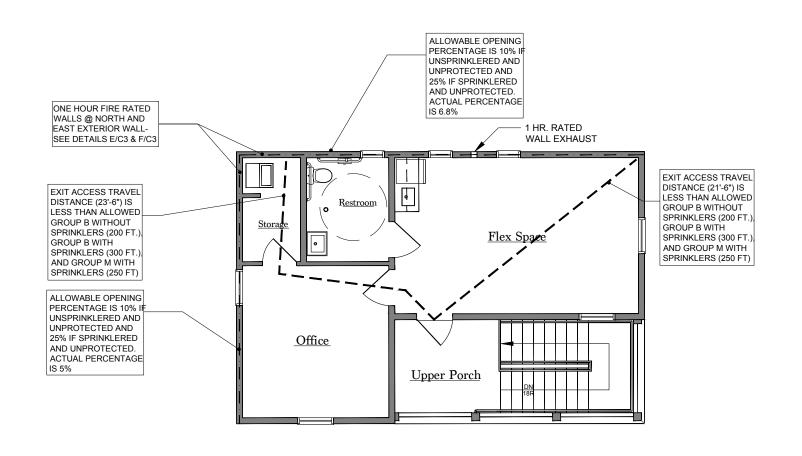


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29910

PROPOSED SITE PLAN

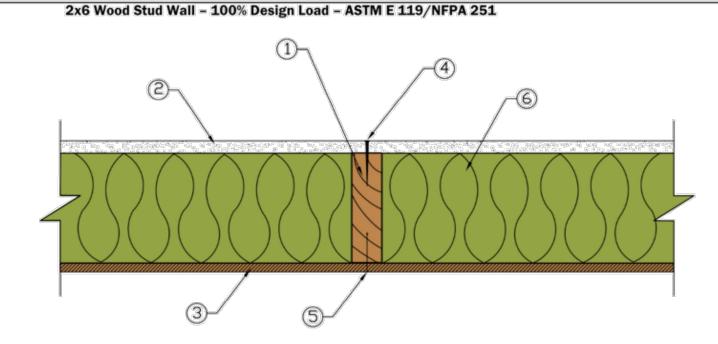
SHEET







WS6-1.3 One-Hour Fire-Resistive Wood-Frame Wall Assembly



- 1. Framing Nominal 2x6 wood studs, spaced 16 in. o.c., double top plates, single bottom plate
- Interior Sheathing 5/8 in. Type X gypsum wallboard, 4 ft. wide, applied horizontally. Horizontal joints are unblocked. Horizontal application of wallboard represents the direction of least fire resistance as opposed to vertical application.
- Exterior Sheathing 7/16 in. wood structural panels (oriented strand board), applied vertically, horizontal joints blocked
- 4. Gypsum Fasteners 2-1/4 in. #6 Type S drywall screws, spaced 12 in. o.c.
- 5. Panel Fasteners 6d common nails (bright) 12 in. o.c. in the field, 6 in. o.c. panel edges
- 6. Insulation 5-1/2 in. thick mineral wool insulation (2.5 pcf, nominal)
- Joints and Fastener Heads Wallboard joints covered with paper tape and joint compound, fastener heads covered with joint compound

Tests conducted at the Fire Test Laboratory of National Gypsum Research Center Test No: WP-1244 (Fire Endurance & Hose Stream) February 25, 2000

Third Party Witness: Intertek Testing Services Report J99-27259.2

This assembly was tested at 100% design load, calculated in accordance with the 2005 National Design Specification® for Wood Construction. The authority having jurisdiction should be consulted to assure acceptance of this report.

ONE HOUR FIRE RATED

C EXTERIOR WALL DETAIL

C3 SCALE: N.T.S.

EXTERIOR WOOD-FRAMED WALL



Hourly Rating: 1-hour

STC Rating: 30-34 STC

Fire Test Reference: UL U305,ULC W3011 and 3,cUL U305

Sound Test Reference: **OR 64-8**

Exterior Side: 5/8" (15.9 mm) DensGlass® Fireguard® Sheathing or ToughRock® Fireguard X® Sheathing applied vertically or horizontally to 2"x 4" wood studs 16" (406 mm) o.c. with 1-3/4" (45 mm) galvanized roofing nails 7" (178 mm) o.c. Exterior surface covered with weather exposed cladding or finish system. Interior Side: One layer 5/8" (15.9 mm) ToughRock® Fireguard XTM Products or 5/8" (15.9 mm) DensArmor Plus® Fireguard® gypsum board applied vertically or horizontally to studs with 1-7/8" (48 mm) 6d coated 7" (178 mm) o.c. Stagger joints each side. ULC W301 allows vertical application only.

Approved for Assembly:

DensArmor Plus® Fireguard C® Products, DensArmor Plus® Fireguard® Products, DensElement™

Barrier Sheathing, DensGlass® Fireguard® Sheathing, DensShield® Fireguard® Tile Backer, ToughRock®

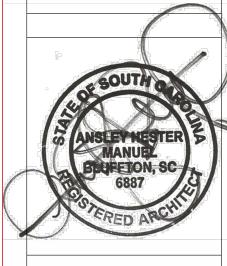
Fireguard C® Products, ToughRock® Fireguard X™ Mold-Guard™ Products, ToughRock® Fireguard X™

Products, ToughRock® Lite-Weight Fire-Rated Products

ALTERNATE ONE HOUR FIRE

D RATED EXTERIOR WALL DETAIL

C3 SCALE: N.T.S.



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Ansley Hester Manuel, Architect
A Pritchard Street, Bluffton, South Carolina 2991

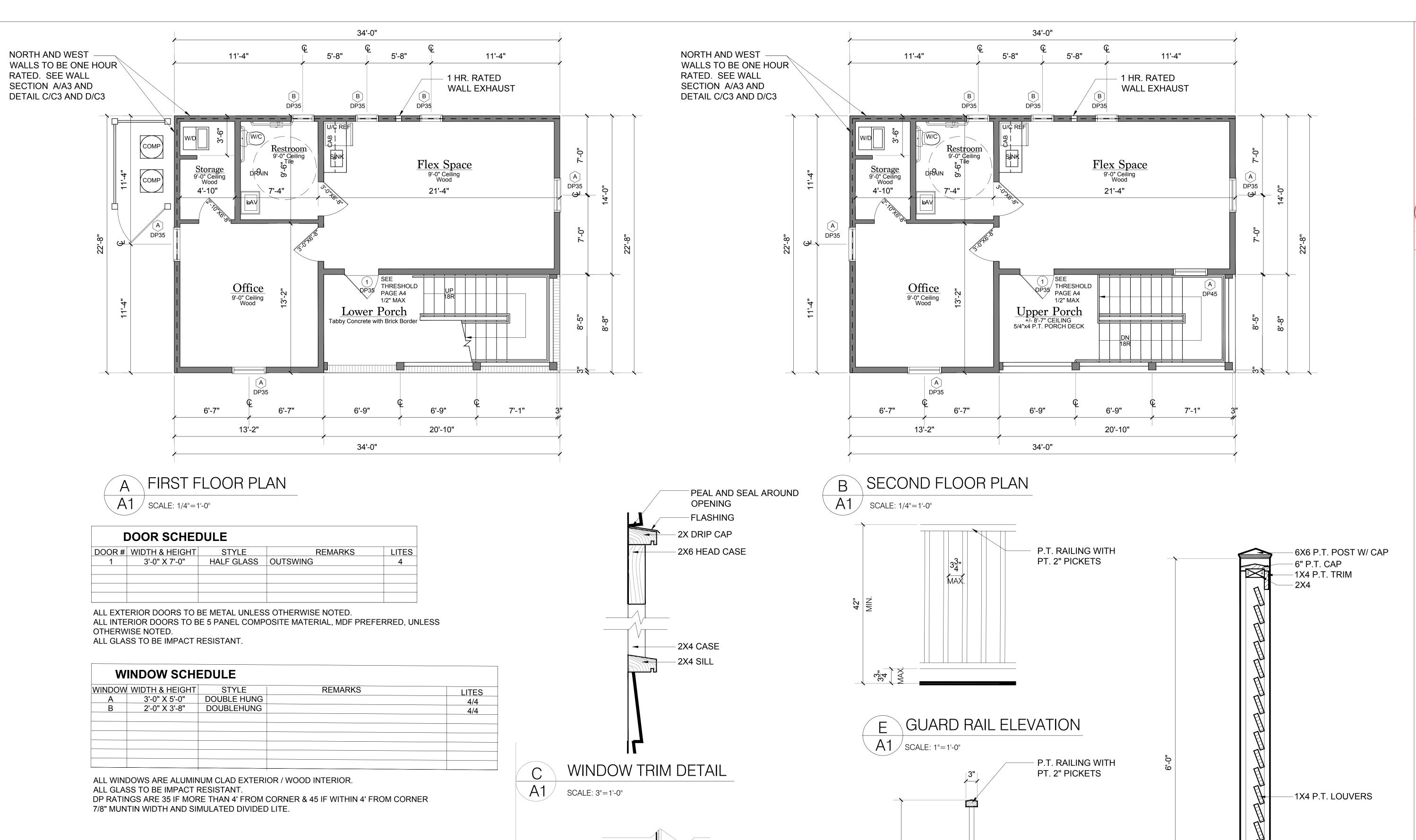
s Commercial Carriage House 5 LAWTON ST. BLUFFTON, SC 29910

SAFETY

SHEET

Jeffcoat's

C3



2X6 @ 16" O.C. (OR 2X4

HORIZONTAL SIDING **OVER HOUSEWRAP** OVER SHEATHING

GUARD RAIL DETAIL

A1 SCALE: 1"=1'-0"

AS PER PLAN)

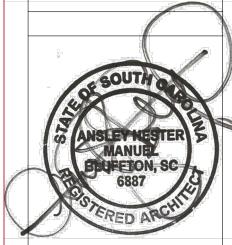
HARDIEPLANK

TYPICAL CORNER PLAN DETAIL

SHEETROCK

A1 | SCALE: 1"=1'-0"





DATE:7/24/25

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DETAILS Commercial Carriage House 5 LAWTON ST.
BLUFFTON, SC 29910 FLOOR PLANS, SCHEDULES SECOND

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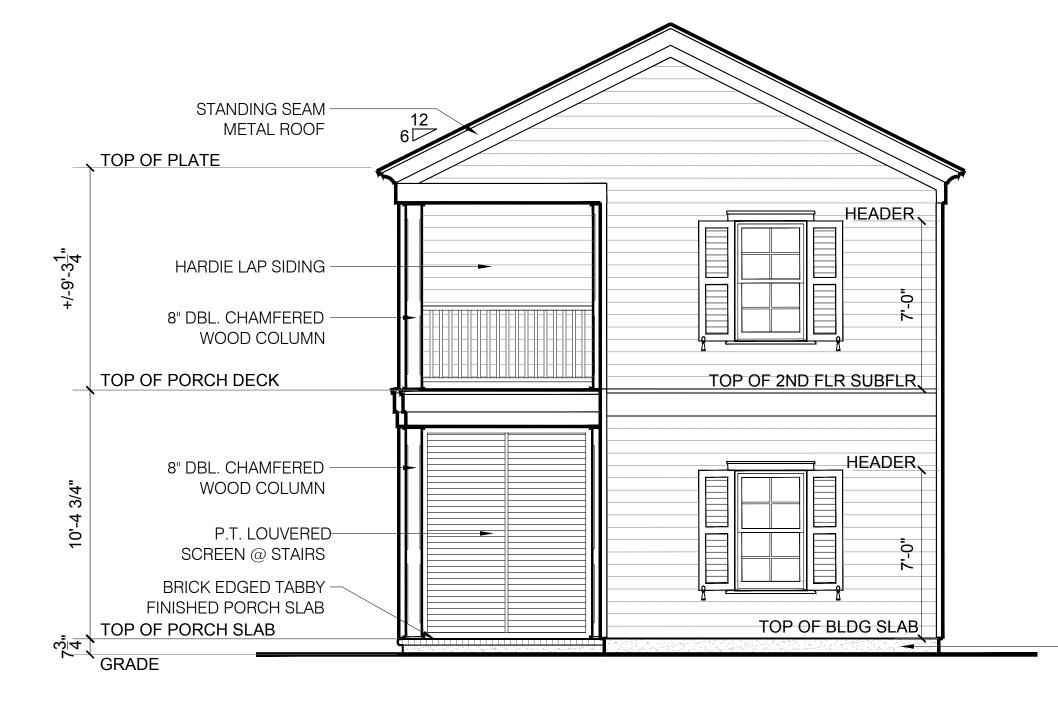
Jeffcoat's

SHEET

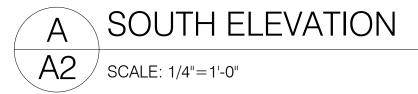
- 4" CONCRETE PAD

LOUVERED SERVICE YARD

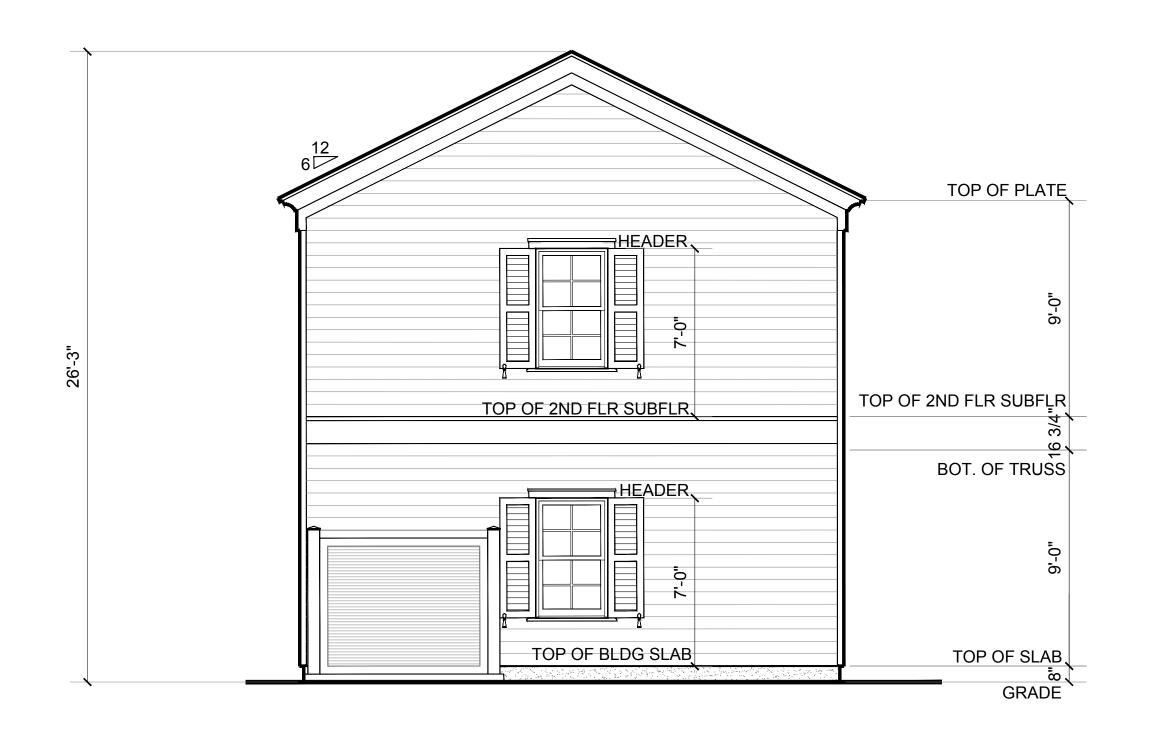
A1 SCALE: 3"=1'-0"

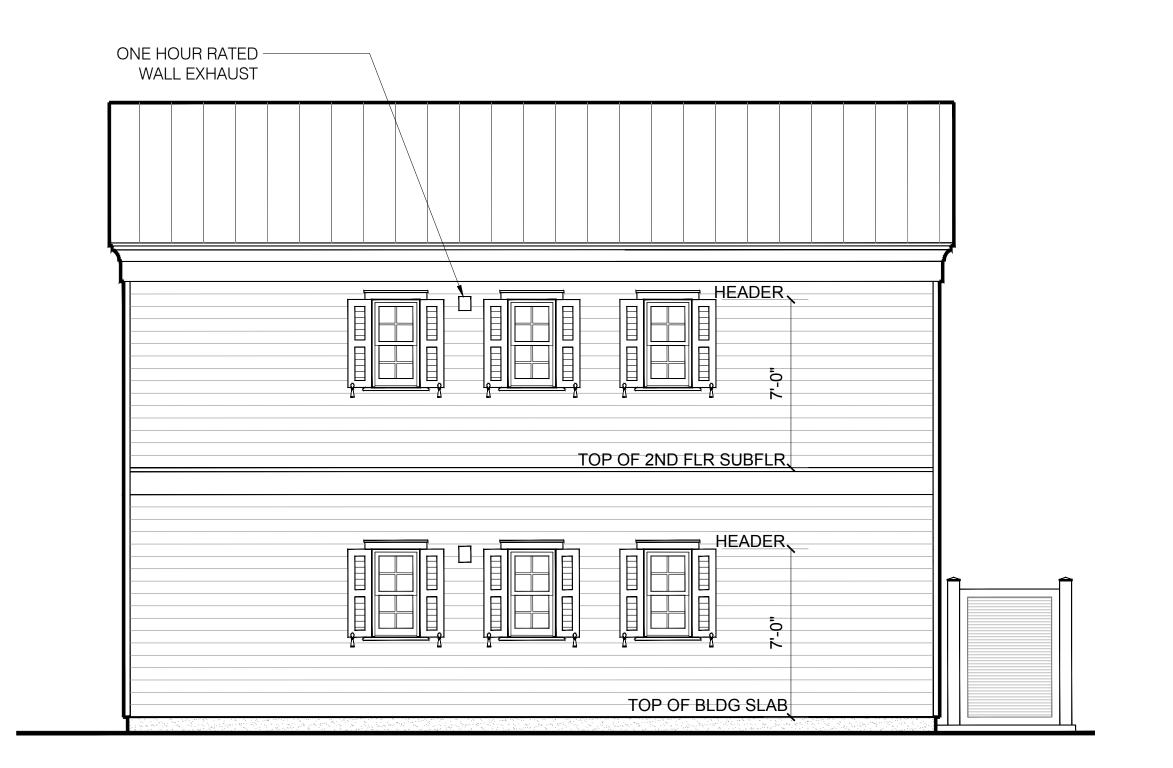


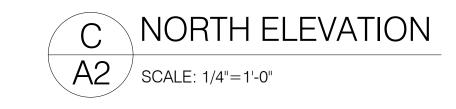






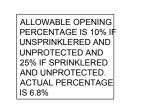


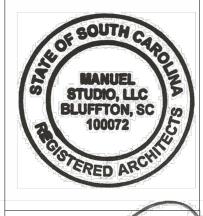


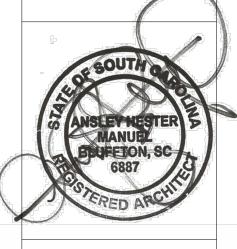












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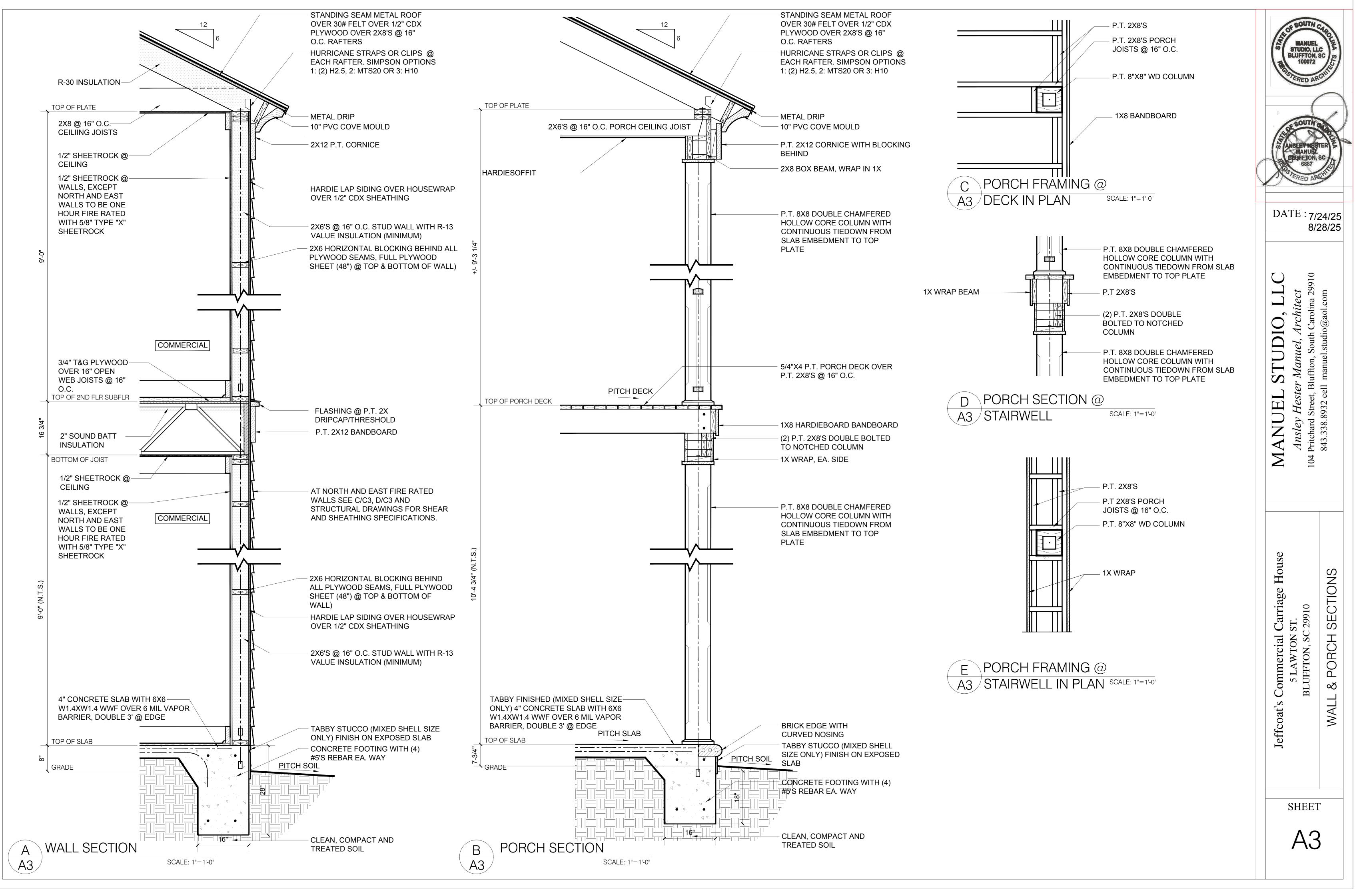
MANUEL STUDIO, LLC

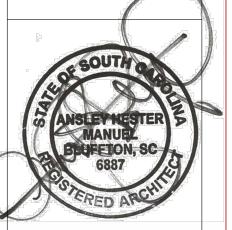
Ansley Hester Manuel, Architect
104 Pritchard Street, Bluffton, South Carolina 29910
843.338.8932 cell manuel.studio@aol.com

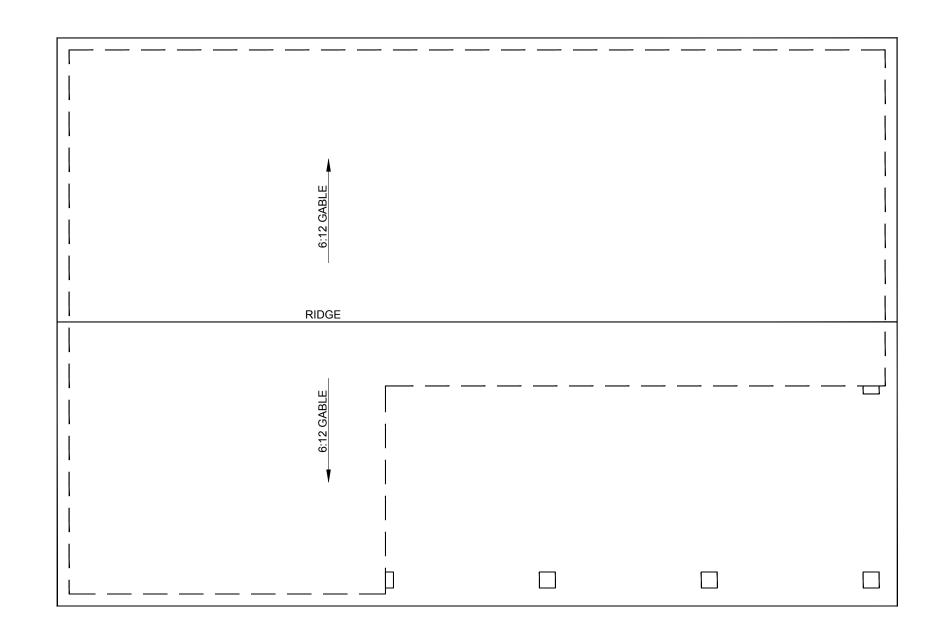
Commercial Carriage House 5 LAWTON ST.
BLUFFTON, SC 29910 BUILDING ELEVATIONS

Jeffcoat's

SHEET



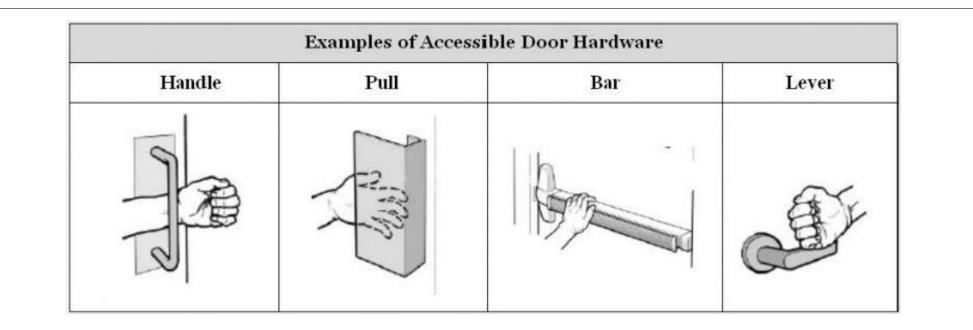


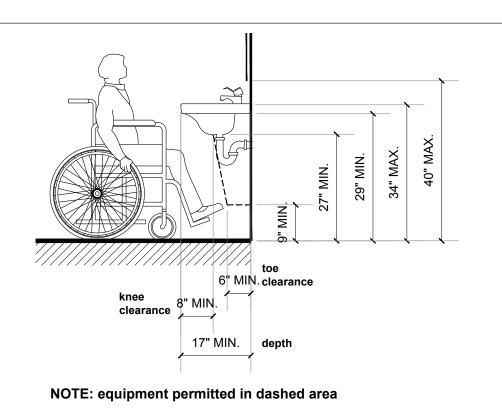


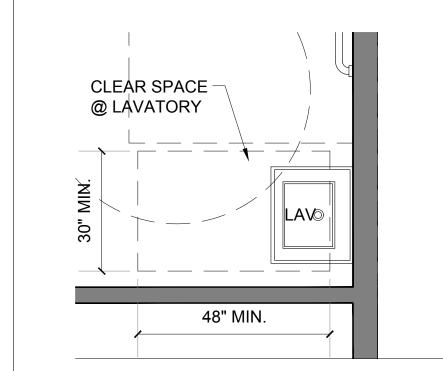
A ROOF PLAN

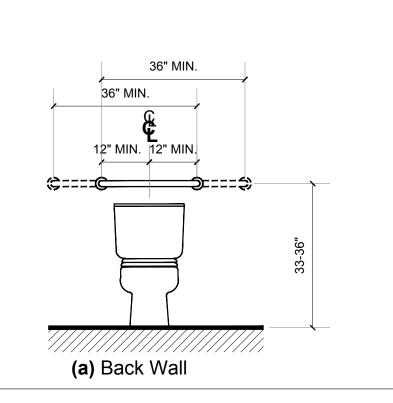
A4 SCALE: 1/4"=1'-0"

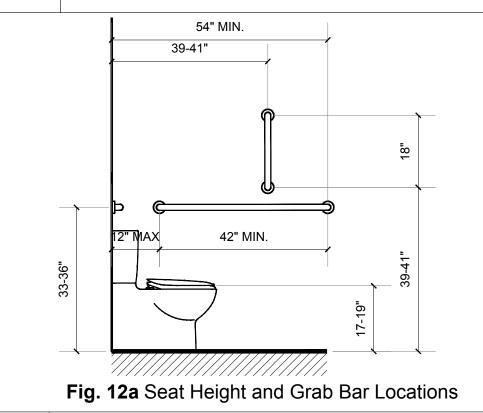
SEE WALL & PORCH SECTIONS FOR EAVE AND RAKE OVERHANGS

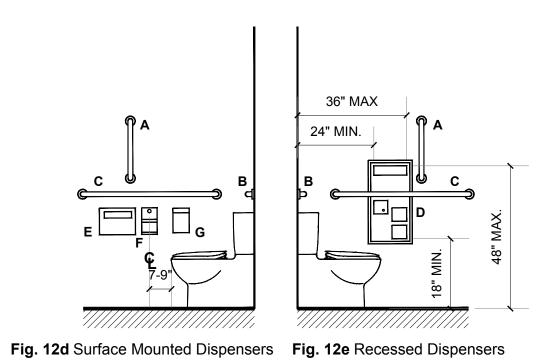


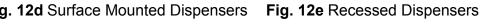




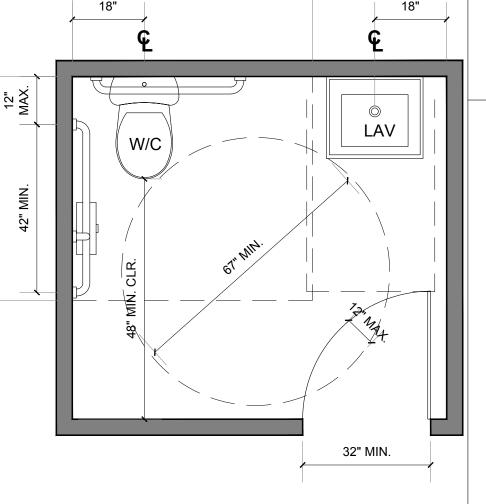


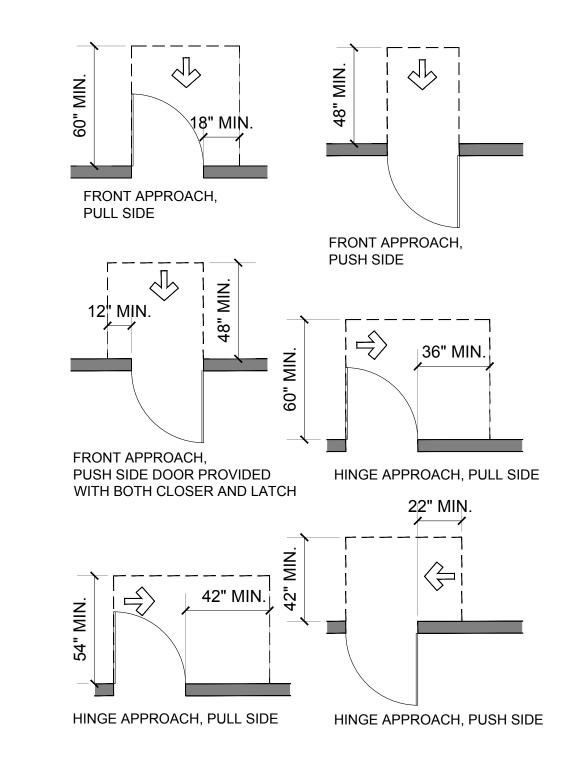




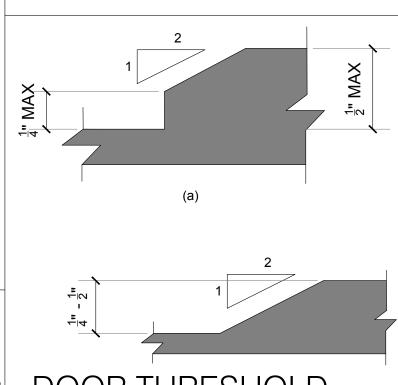


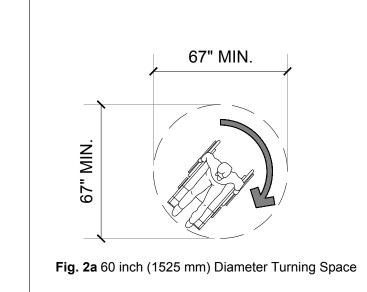
- A 18" VERTICAL GRAB BAR **B** 36" HORIZONTAL GRAB BAR
- C 42" HORIZONTAL GRAB BAR RECESSED TOILET SEAT DISPENSER, SANITARY NAPKIN DISPOSAL, TOILET TISSUE DISPENSER
- E SURFACE MOUNTED TOILET SEAT COVER DISPENSER (MOUNTS BELOW GRAB BAR) F SURFACE MOUNTÉD MULTI-ROLL
- TOILET TISSUE DISPENSER (MOUNTS BELOW GRAB BAR) SURFACE MOUNTED SANITARY NAPKIN DISPOSAL (MOUNTS BELOW GRAB BAR)



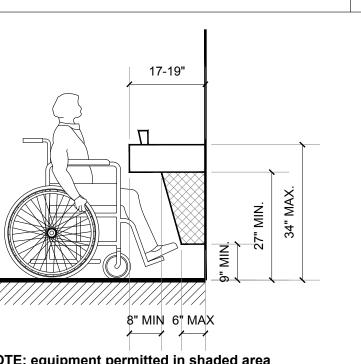


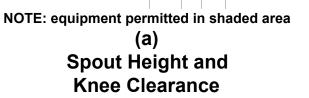
DOOR APPROACH

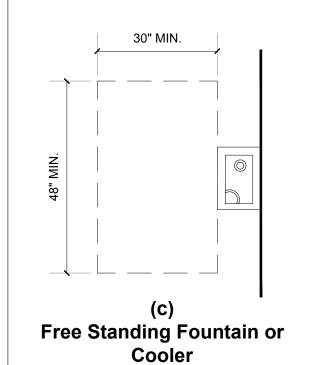


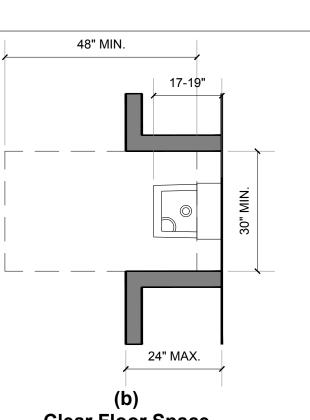




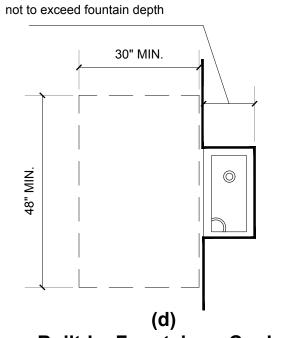








Clear Floor Space



(d) ['] Built-In Fountain or Cooler

ROOF PLAN & ANSI ILLUSTRATIONS

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SHEET