

TOWN OF CHAPIN
Architectural Review Board
Regular Meeting
Council Chambers, Chapin Town Hall
October 1, 2025
6:00 PM

AGENDA

Call to Order and Determine Quorum

Statement of Freedom of Information Act Compliance

Approval of Minutes

1. September 10, 2025 Meeting Minutes

Public Comments related to agenda items

Action Items

2. Architectural Application Review
 - a. TMS # 000700-01-017, 519 Columbia Avenue – Carolina Wings
 - i. Applicant Comments
 - ii. Staff Comments
 - iii. ARB Questions
 - b. TMS # 000700-01-017, 515 Columbia Avenue – Express Oil
 - i. Applicant Presentation
 - ii. Staff Comments
 - iii. ARB Questions

Discussions

3. UDO Amendment Recommendation discussion

Staff Updates

Adjourn

PUBLIC COMMENT POLICY

PROCEDURE:

Persons wishing to make public comments concerning items related to the current meeting agenda, with the exception of personnel and contractual matters, shall first sign in with the Municipal Clerk before the meeting and provide the following information:

1. Name, Address, and Contact Information;
2. Topic of Public Comment; and
3. Indicate whether a Chapin Resident, Chapin Water/Sewer Customer, or Reside in the Chapin Water/Sewer District.

Comments are limited to three (3) minutes per person and no personal or verbal attacks will be entertained. The Council is interested in hearing your concerns, but speakers should not expect action or deliberation on subject matter brought up during any Public Comments on the agenda. Topics requiring further investigation may be referred to Town Staff and may be scheduled for a future agenda.

DEFINITIONS:

Chapin Resident: Reside in Town limits.

Chapin Water/Sewer Customer: Customer of the designated Chapin Water/Sewer District - Including an owner or operator of a local business.

Reside in Chapin Water/Sewer District: Reside in the designated Chapin Water/Sewer District – Area of Lexington County north of Lake Murray.

APPEARANCE OF CITIZENS

Town Code 2.212 – Any citizen of the Town shall be entitled to be placed on the agenda of any regular meeting to discuss any municipal matter, with the exception of personnel and contractual matters. Persons desiring to be placed on the agenda shall notify the Municipal Clerk not less than a week prior to the meeting. The request shall be in writing stating the reason therefor.

**TOWN OF CHAPIN
ARCHITECTURAL REVIEW BOARD
REGULAR MEETING MINUTES**

**Wednesday September 10, 2025
6:00 P.M.**

Town Hall

Members Present: Member Gerald Meetze, Chair Jason King, Vice Chair Harmon Reed, Member Bryson Tucker, Member Daniel Powell

Staff Present: Municipal Clerk Shannon Bowers, Planning & Zoning Manager Reid Radtke, Town Administrator Nicholle Burroughs

Guests: Chad Lindler – Chapin Commercial Construction, Sam Walker – The Keith Corporation, Claire Hunter – HGP Architects

Call to Order: Chair King called the meeting to order at 6:01 p.m., determined there was a quorum, and acknowledged the appropriate notifications in compliance with the SC Freedom of Information Act had been met.

Approval of minutes: Member Meetze moved to approve the June 11, 2025 meeting minutes as presented. Member Tucker seconded the motion. No further discussion, motion passed unanimously.

Chair Jason King:	Yes
Vice Chair Harmon Reed:	Yes
Member Gerald Meetze:	Yes
Member Bryson Tucker:	Yes
Member Daniel Powell:	Yes

Public Comments Related to Agenda Items

There were no public comments

Action Items

Architectural Application Review – 133 Clark Street – Collo Rosso Dermatology: Mr. Chad Lindler with Chapin Commercial Construction began the presentation by stating that all changes as discussed from the previous meeting were completed. Mr. Radtke indicated on the staff report that all items are in compliance with the Unified Zoning and Development Ordinance (UDO). The Architectural Review Board (ARB) reviewed the application and Member Meetze moved to approve the application for a certificate of appropriateness with the condition that an additional tree be added on the west elevation. Member Powell seconded the motion. No further discussion, motion to approve with conditions passed unanimously.

Chair Jason King:	Yes
Vice Chair Harmon Reed:	Yes
Member Gerald Meetze:	Yes

Member Bryson Tucker: Yes
Member Daniel Powell: Yes

Architectural Application Review – 207 Lexington Avenue – Medical Office: Mr. Sam Walker with the Keith Corporation began the presentation by stating that all changes as discussed from the previous meeting were completed. He then provided updated brick samples for the ARB to review and noted that they matched the brick colors as closely as possible to colors on the approved color palette. Administrator Burroughs indicated on the staff report that all elements are in compliance with the UDO and recommends for approval.

The ARB then discussed the windows and store front color, parking lot lighting fixtures not matching the existing fixtures, and light spilling from wall packs onto Lexington Avenue. Mr. Walker noted that the silver mullion color presented is consistent with other buildings in the area and the parking lot fixtures are the same style fixture that is being used by the Mavis Tire.

Member Meetze moved to approve the application for a certificate of appropriateness with the following conditions:

1. Adjustment to wall pack distribution to reduce light off of Lexington Avenue
2. Wall pack color to be black
3. Storefront and window mullions – consideration to be made for a medium bronze color
4. Pole lights to match existing pole colors (bronze) and height (24ft)

Vice Chair Reed seconded the motion. No further discussion, motion to approve with conditions passed unanimously.

Chair Jason King: Yes
Vice Chair Harmon Reed: Yes
Member Gerald Meetze: Yes
Member Bryson Tucker: Yes
Member Daniel Powell: Yes

Architectural Application Review – 203 Lexington Avenue – Fifth-Third Bank: Clair Hunter with HGP Architects began the presentation by stating that all changes as discussed from the previous meeting were completed. She indicated that consideration for the Mavis Tire colors was used in the selection of the slate gray/white/stone colors used. The building now has a sloped roof design, with match mixed roof designs, as previously discussed. She also indicated that the window glazing has been increased to meet the 40% requirement. Mr. Radtke indicated on the staff report that all items are in compliance with the UDO.

The ARB then discussed the parking lot light poles – need to match adjacent properties in height and color, and update the lighting plan to show the sidewalk on Lexington Avenue side for lighting compliance.

Member Meetze moved to approve the application for a certificate of appropriateness with the following conditions:

1. Update light poles to match adjacent properties in height and color

2. Updated lighting plan to show sidewalks for light compliance
3. Wall pack color to compliment building, but match adjacent properties
4. Adjustment to wall pack distribution to reduce light off of Lexington Avenue

Member Tucker seconded the motion. No further discussion, motion to approve with conditions passed with a majority vote.

Chair Jason King:	Yes
Vice Chair Harmon Reed:	No
Member Gerald Meetze:	Yes
Member Bryson Tucker:	Yes
Member Daniel Powell:	Yes

Staff Updates

Mr. Radtke gave an update to the ARB on the UDO amendments. The PC reviewed the recommended changes and approved the recommendation to Council for approval. The ARB expressed their desire to make further UDO changes to include use of metal roofs, mill finish for windows and doors, accent parapet walls, and language to ensure consistency among developments. Administrator Burroughs noted that the PC makes changes to the UDO, and that considerations made by the ARB would be presented to the PC for recommendation. This would require further discussion, to which she noted topics could be added to an agenda for a future meeting.

Adjournment: Member Tucker moved to adjourn the meeting. Member Meetze seconded the motion. Meeting adjourned at 7:34 p.m.

ARB APPROVED (Date): _____

Attest:

Shannon Bowers, Town Clerk

Jason King, ARB Chair

Memorandum Architectural Review

To: Architectural Review Board
From: R. Radtke, Planning & Zoning Manager
Date: September 24, 2025
Re: **Carolina Wings** –Wade Bozeman / Commercial Sub-division

Property Location: 519 Columbia Ave.
Tax Map Number: 000700-01-017
Property Zoning District: Corridor Commercial (CC)
Property Overlay District: Corridor
Applicant: Maria Hochendoner
Zoning Permit: **20250100**

Proposal

The applicant is proposing the construction of a Carolina Wings on a property located off of Columbia Ave. across from Goodwill and directly behind McCallister's within the commercial sub-division. The review of this project (Lot C) is the final completion of the 3-plot separation that was approved in 2024.

This commercial development within the Town of Chapin was approved into 3 separate developments. Total square footage of interior is 4996. The breakdown consisted of the following: **Lot A** is McAlister's, General Retail and Fast Food. **Lot B** is proposed as Express Oil & **Lot C** is being proposed of Carolina Wings (Approx 1.50 acres).

Staff Recommendation

In review of the changes from the preliminary meeting in August, staff identified the proposed development to be complaint with the majority of requirements of the Town's Zoning Ordinance. The following items need clarification for compliance or cannot be ascertained:

- Exterior color of building that are shown. Brick colors – 1. Cream White, 2. Brown, 3. Accent= Gunstock, 4. Siding Navajo Beige. **6.12.3.C.3. In Compliance**
 - Required tree mitigation would be 11 trees added to CW for replacement. (1 canopy tree per 6000sq ft) 15 trees planned for CW. **In Compliance**
 - Locations of exterior mounted lighting on building- **Review by ARB**
 - Cutsheets on any building mounted exterior lighting. **Review by ARB**
 - Contributions on photometric plan of building mounted exterior lighting – **Review by ARB**
1. **Building mounted lights are not indicated on (included in) photometric plan. Locations and contributions need to be included on photometric plan for all exterior lighting.**
 2. **Photometric plan does not include calculation zone on sidewalk at back of building.**

Documents that are needed for clarity:

1. Exterior Lighting plan.
2. Traffic engineer to provide details to PC on the 29th.



CAROLINA WINGS & RIBHOUSE



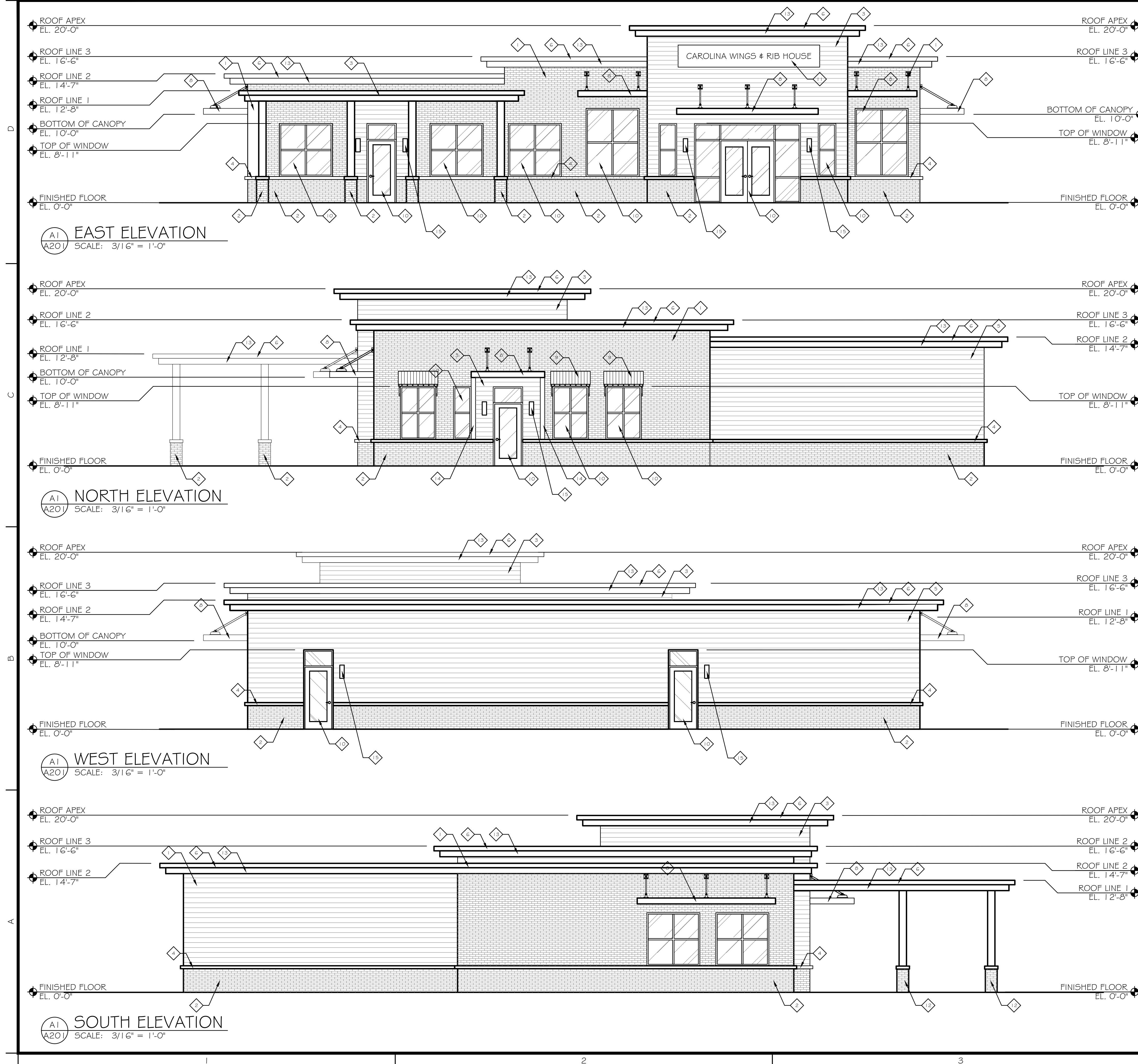


CAROLINA WINGS & RIBHOUSE



DRAWING NOTES

- ◇ BRICK #1
- ◇ BRICK #2
- ◇ ARCHITECTURAL FAUX WOOD METAL OR FIBER CEMENT BOARD RUN HORIZONTALLY
- ◇ 4" CAST STONE SILL
- ◇ HARDIE PLANK SIDING OR EQUAL
- ◇ 8" HARDIE BOARD TRIM
- ◇ 6" HARDIE BOARD TRIM
- ◇ METAL CANOPY
- ◇ METAL AWNINGS
- ◇ STOREFRONT DOOR AND WINDOW SYSTEM.
- ◇ SIGNAGE
- ◇ STEEL COLUMN CLAD IN HARDIE BOARD OR EQUAL
- ◇ 8" FREIZE BOARD
- ◇ 6" METAL TRIM
- ◇ WALL SCONCE LIGHTING FIXTURE

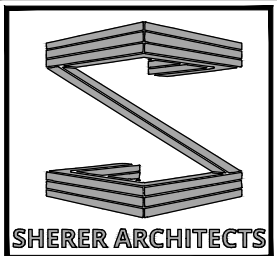


A1 EAST ELEVATION
A201 SCALE: 3/16" = 1'-0"

A1 NORTH ELEVATION
A201 SCALE: 3/16" = 1'-0"

A1 WEST ELEVATION
A201 SCALE: 3/16" = 1'-0"

A1 SOUTH ELEVATION
A201 SCALE: 3/16" = 1'-0"



1201 MAIN STREET
SUITE 1980
COLUMBIA, SC 29201
Phone: 803.748.1345
www.shererarch.com

255A005

LD
DS
DS

CAROLINA WINGS
COLUMBIA AVE., TOWN
OF CHAPIN, LEXINGTON
COUNTY, SC

EXTERIOR ELEVATIONS

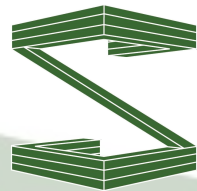
ELEVATIONS
10 SEP 2025

NOT FOR
CONSTRUCTION

A201

40% REVIEW

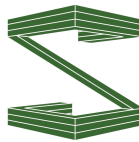
PLOT DATE/TIME: 09/10/2025 11:29:52 PM Wednesday, September 10, 2025 11:29:52 PM



SHERER ARCHITECTS

Exterior Material and Finishes

Carolina Wings
Chapin, SC



SHERER ARCHITECTS



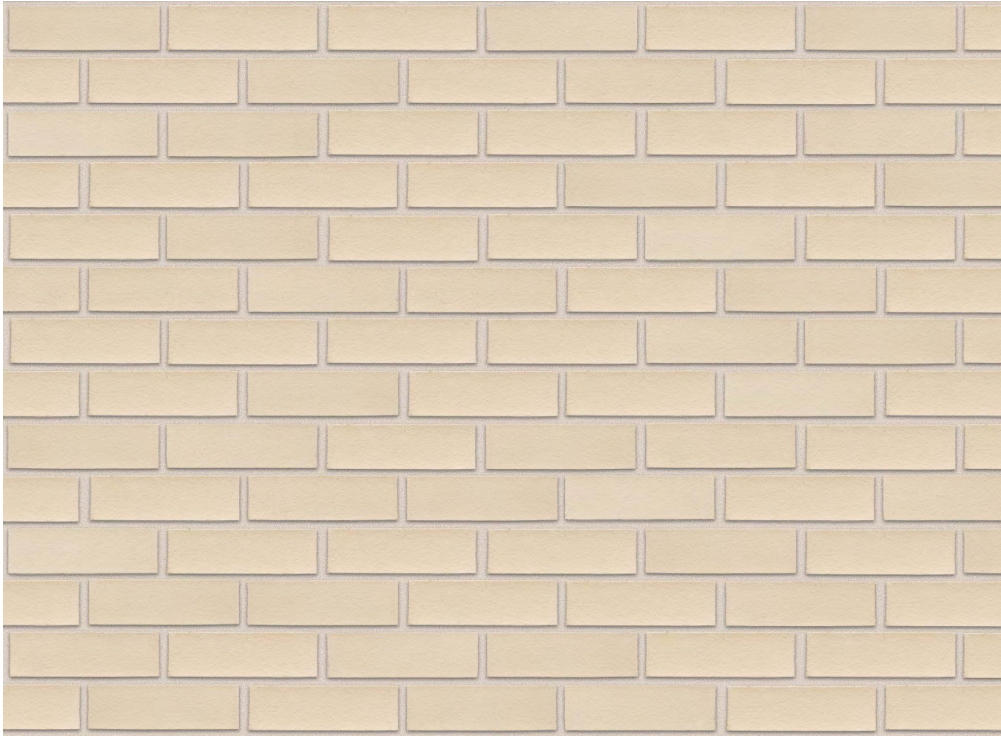
BRINGING STRUCTURE TO LIFE

info@shererarch.com

shererarch.com

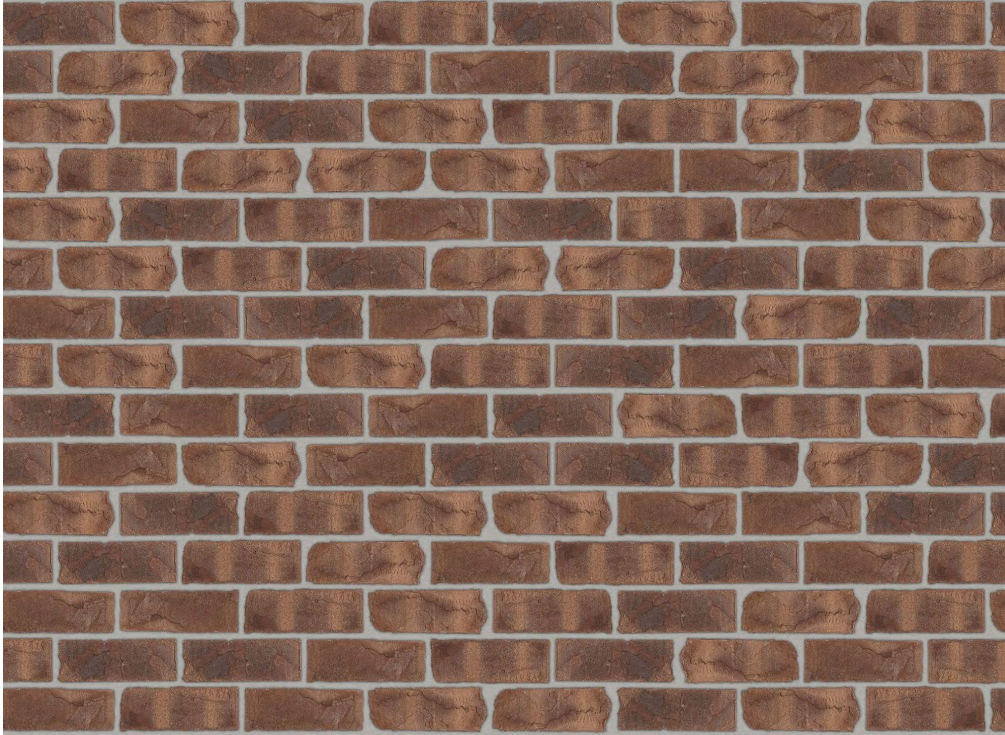


BRICK 1- MAIN BRICK



GLEN GERY
Cream White Smooth
Color: Buff
Size: 3 ⁵/₈"T x 2 ¹/₄"Hx7 ⁵/₈"L

BRICK 2- ACCENT BRICK



GLEN GERY
Hampton Williamsburg
Color: Brown
Size: 3 $\frac{5}{8}$ "T x 2 $\frac{1}{4}$ "Hx7 $\frac{5}{8}$ "L

ENTRY ACCENT- FAUX WOOD ARCHITECTURAL PANEL



MODERN STEEL
Steel FormaPlank Siding
Color: Gunstock
Size: 7/8”T x 6 1/4”W

SIDING- COMPOSITE SIDING



HARDIE
Select Cedarmill Plank Siding
Color: Navajo Beige
Size: 7 ¼"

LIGHTING- EXTERIOR WALL

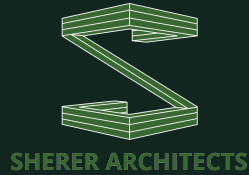
SCENE



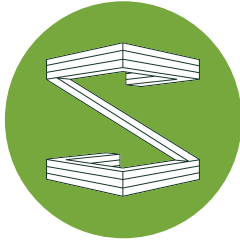
Width: 6 in
Height: 18 in
Depth: 8-7/8 in
H/CTR: 8 in

PROGRESS LIGHTING
P5644-31 Square
Color: Matte Black
Aluminum

TEAM



CONTRACTOR
Bozeman
Contracting



ARCHITECT
Sherer Architects



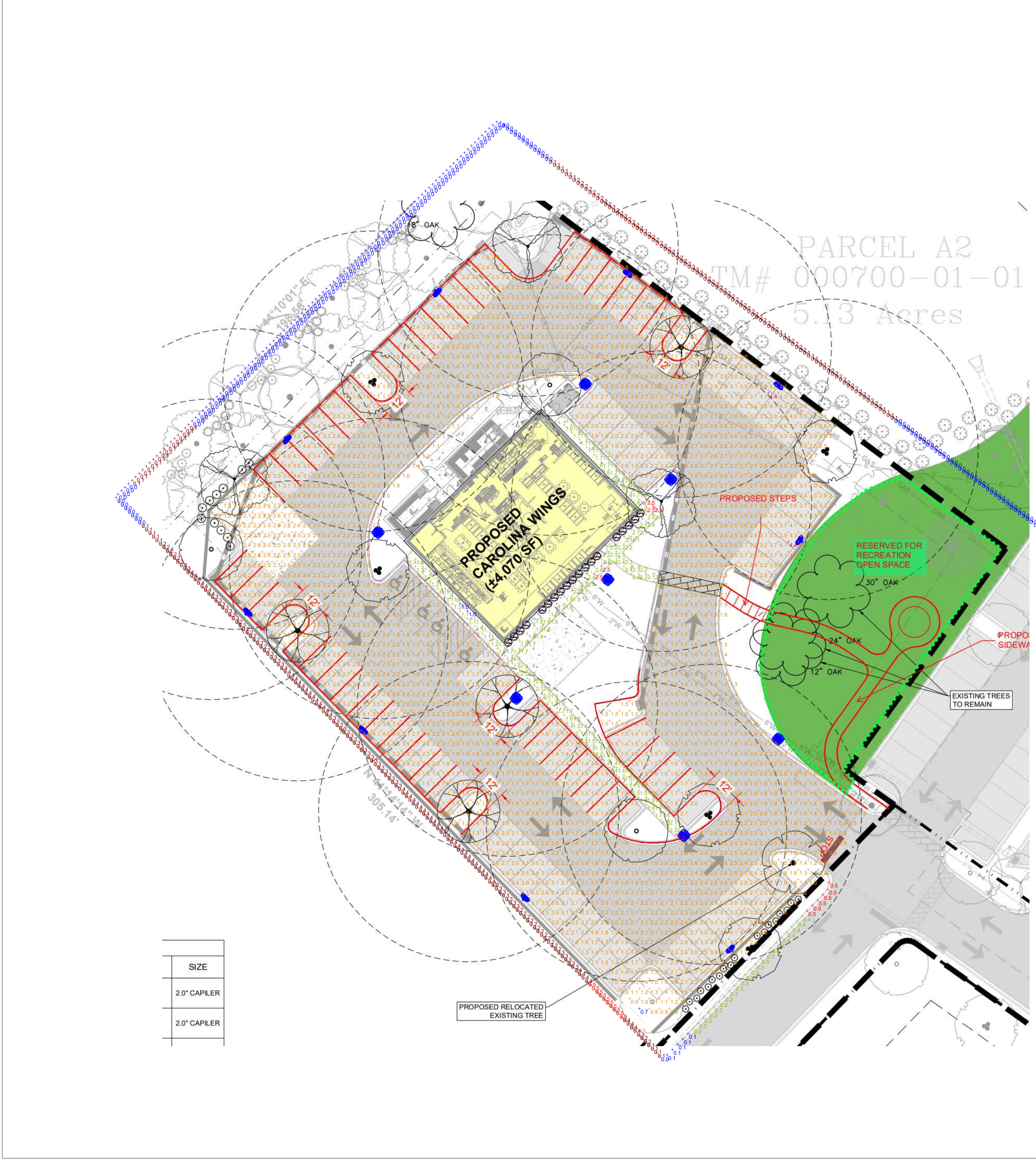
MEP ENGINEER
National MEP



**STRUCTURAL
ENGINEER**
Derrick Structural
Engineering, LLC



CIVIL ENGINEER
CES Group
Engineers



Plan View
Scale - 1" = 25ft

Symbol	Label	Image	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	Polar Plot
	P-BLC		9	ECF-S-32L-700-WW-G2-BLC	EcoForm Area LED ECF - Small, 32 LED's, 3000K CCT, TYPE BLC OPTIC.	(2) LEDGINE SLD LIGHT ARRAY(S) DRIVEN AT 700mA	1	6409	0.92	71.82	
	P-5		7	ECF-S-32L-700-WW-G2-5	EcoForm Area LED ECF - Small, 32 LED'S, 3000K CCT, TYPE 5 OPTIC, No Shield	(2) LEDGINE SLD LIGHT ARRAY(S) DRIVEN AT 700mA	1	9708	0.92	72.9	

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PARKING LOT	+	2.2 fc	4.4 fc	0.7 fc	6.3:1	3.1:1
PROPERTY LINE	+	0.2 fc	0.5 fc	0.0 fc	N/A	N/A
ROADWAY LINE	+	0.3 fc	0.5 fc	0.1 fc	5.0:1	3.0:1
SIDEWALK	+	1.7 fc	2.5 fc	1.0 fc	2.5:1	1.7:1

Luminaire Locations										
		Location						Aim		
No.	Label	X	Y	Z	MH	Orientation	Tilt	X	Y	Z
1	P-5	162.07	54.03	20.00	20.00	42.43	0.00	162.07	54.03	0.00
2	P-5	38.89	176.12	20.00	20.00	42.43	0.00	38.89	176.12	0.00
3	P-5	122.37	235.93	20.00	20.00	42.43	0.00	122.37	235.93	0.00
4	P-5	156.80	197.48	20.00	20.00	42.43	0.00	156.80	197.48	0.00
5	P-5	94.57	109.31	20.00	20.00	42.43	0.00	94.57	109.31	0.00
7	P-5	200.06	92.87	20.00	20.00	42.43	0.00	200.06	92.87	0.00
8	P-5	131.41	157.14	20.00	20.00	42.43	0.00	131.41	157.14	0.00
1	P-BLC	32.27	95.76	20.00	20.00	45.32	0.00	32.27	95.76	0.00
2	P-BLC	-14.30	143.27	20.00	20.00	45.32	0.00	-14.30	143.27	0.00
4	P-BLC	1.56	214.21	20.00	20.00	131.97	0.00	1.56	214.21	0.00
6	P-BLC	97.45	28.30	20.00	20.00	45.32	0.00	97.45	28.30	0.00
7	P-BLC	181.43	7.52	20.00	20.00	317.76	0.00	181.43	7.52	0.00
8	P-BLC	62.04	273.45	20.00	20.00	131.97	0.00	62.04	273.45	0.00
9	P-BLC	200.82	236.04	20.00	20.00	217.06	0.00	200.82	236.04	0.00
10	P-BLC	140.08	281.17	20.00	20.00	217.06	0.00	140.08	281.17	0.00
11	P-BLC	209.48	172.49	20.00	20.00	303.13	0.00	209.48	172.49	0.00



Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lamps: _____ Qty: _____

Notes: _____

Ordering guide

Example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	
ECF-S							
ECF-S EcoForm site and area, small	32L 32 LEDs (2 modules) 48L 48 LEDs (3 modules) 64L 64 LEDs (4 modules)	365 365mA 530 530mA 700 700mA 1A 1050mA 1.2A 1200mA 900 900mA 1A 1050mA 1.2A¹⁹ 1200mA 900 900mA 1A¹⁹ 1050mA	WW-G2 Warm White 3000K, 70CRI Generation 2 NW-G2 Neutral White 4000K, 70CRI Generation 2 CW-G2 Cool White 5000K, 70CRI Generation 2	AR² Arm Mount (standard) The following mounting kits must be ordered separately (See accessories) SF³ Slip Fitter Mount (fits to 2 3/8" O.D. tenon) WS Wall mount with surface conduit rear entry permitted RAM² Retrofit arm mount kit	Type 2 2 Type 2 2-90 Rotated left 90° 2-270 Rotated right 270° Type 3 3 Type 3 3-90 Rotated left 90° 3-270 Rotated right 270° Type 4 4 Type 4 4-90 Rotated left 90° 4-270 Rotated right 270° Type 5 5 Type 5 5W Type 5W	AFR Auto Front Row AFR-90 Auto Front Row, Rotated left 90° AFR-270 Auto Front Row, Rotated right 270° BLC Back Light Control BLC-90 Back Light Control rotated at 90° BLC-270 Back Light Control rotated at 270° LCL¹⁹ LEED Corner Optic Left RCL¹⁹ LEED Corner Optic Right	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)

Options		Dimming controls	Motion sensing lens	Photo-sensing	Options	Luminaire	Finish
DD^{4,18}	0-10V External dimming (for controls by others)	DCC^{4,5,6,18} Dual Circuit Control		PCB^{9,9} Photocontrol Button	Fusing	Square Pole Adapter included in standard product	Textured
FAWS^{4,5,18}	Field Adjustable Wattage Selector	SRDR^{4,5,6,8,17} SR driver connected to Zhaga socket		TLRD5^{10,17} Twist Lock Receptacle 5 Pin	F1⁹ Single (120, 277, 347VAC)	TB¹² Terminal Block	BK Black
DynaDimmer: Automatic Profile Dimming				TLRD7^{10,17} Twist Lock Receptacle 7 Pin	F2⁹ Double (208, 240, 480VAC)	RPA¹³ Round Pole Adapter (fits to 3"- 3.9" O.D. pole)	WH White
CS50^{4,8}	Safety 50% Dimming, 7 hours			TLRPC^{9,10,11,17} Twist Lock Receptacle w/Photocell	Pole Mount Fusing	HIS¹⁴ Internal House Side Shield	BZ Bronze
CM50^{4,8}	Median 50% Dimming, 8 hours				FP1⁹ Single (120, 277, 347VAC)		MGY Medium Gray
CS30^{4,8}	Safety 30% Dimming, 7 hours				FP2⁹ Double (208, 240, 480VAC)		Customer specified
CM30^{4,8}	Median 30% Dimming, 8 hours				FP3⁹ Canadian Double Pull (208, 240, 480VAC)		RAL Specify optional color or RAL (ex: RAL7024)
BL^{14,7,18}	Bi-level functionality		IMRI3¹⁵ Integral with #3 lens IMRI7¹⁵ Integral with #7 lens		Surge Protection (10kA standard)		CC Custom color (Must supply color chip for required factory quote)
WIAP^{4,6,16}	Wireless Interact (includes SR driver and SR receptacle - do NOT select SRDR)		LB Low (7'-15' mounting height) sensor, Black color housing LW Low (7'-15' mounting height) sensor, White color housing HB High (15'-40' mounting height) sensor, Black color housing HW High (15'-40' mounting height) sensor, White color housing		SP2 Increased 20kA		
					BAC^{20,21} Meets the requirements of the Buy American Act of 1933 (BAA)		

1. BL-IMRI3/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)

2. Mounts to a 4" round pole with adapter included for square poles.

3. Limited to a maximum of 45 degrees aiming above horizontal.

4. Not available with other dimming control options.

5. Not available with motion sensor.

6. Not available with photocontrol.

7. Must specify a motion sensor lens.

8. Not available in 347 or 480V

9. Must specify input voltage.

10. TLRD5, TLRD7 and TLRPC receptacle pins 4 & 5 are capped off when ordered with any of the Dimming controls DD or FAWS or LLC.

11. Not available in 480V. Order photocell separately with TLRD5/7.

12. Not available with DCC.

13. Not available with SF and WS. RPAs provided with black finish standard.

14. HIS not available with Type 5, 5W, BLC, BLC-90, BLC-270, LCL or RCL optics.

15. Not available with DD, DCC, FAWS, SRDR, or WIAP dimming control options.

16. WIAP must be combined with Motion sensing lens LB or LW or HB or HW.

17. When ordering SRDR, controller (by others) to be used on socket must be SR compatible (See specifications for more details). Consult factory for lead time. All 7 pins in NEMA receptacle are connected to SR driver. SRDR not available with TLRD5 or TLRPC.

18. 0-10V dimming driver standard.

19. LCL and RCL not available with 48L-1.2A or 64L-1A.

20. Extended lead times apply. Contact factory for details

21. Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.

ECF-S EcoForm small

Area luminaire

EcoForm Accessories²¹ (ordered separately, field installed)

Shielding Accessories

House Side Shield

Standard optic orientation

HIS-32-H²⁰	Internal House Side Shield for 32 LEDs (2 modules)
HIS-48-H²⁰	Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-H²⁰	Internal House Side Shield for 64 LEDs (4 modules)

Optic at 90 or 270 orientation

HIS-32-V²⁰	Internal House Side Shield for 32 LEDs (2 modules)
HIS-48-V²⁰	Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-V²⁰	Internal House Side Shield for 64 LEDs (4 modules)

Footnotes

20. Not available with Type 5 or 5W optics.

21. Consult Signify to confirm whether specific accessories are BAA-compliant.

Luminaire Accessories

ECF-BD-G2	Bird deterrent
ECF-RAM-G2-(F)	Retrofit Arm mount kit
ECF-SF-G2-(F)	Slip Fitter Mount (fits to 2 3/8" O.D. tenon)
ECF-WS-G2-(F)	Wall mount with surface conduit rear entry permitted

Controls Accessories

IRT9015 Handheld remote for grouping and configuration of Wireless Interact WIAP (at least 1 required per site or use the Interact Pro App).

Pole Top Fitters

(F) = Specify finish

PTF2 - Pole top fitter fits 23/8-21/2" OD x 4" depth tenon

PTF2-1-90-(F)	1 luminaire at 90°
PTF2-2-90-(F)	2 luminaires at 90°
PTF2-2-180-(F)	2 luminaires at 180°
PTF2-3-90-(F)	3 luminaires at 90°
PTF2-4-90-(F)	4 luminaires at 90°
PTF2-3-120-(F)	3 luminaires at 120°

PTF3 - Pole top fitter fits 3-31/2" OD x 6" depth tenon

PTF3-1-90-(F)	1 luminaire at 90°
PTF3-2-90-(F)	2 luminaires at 90°
PTF3-2-180-(F)	2 luminaires at 180°
PTF3-3-90-(F)	3 luminaires at 90°
PTF3-4-90-(F)	4 luminaires at 90°
PTF3-3-120-(F)	3 luminaires at 120°

Ready to Go configurations (when ordered with the "RS-" catalog code, the following configurations will ship in 2 weeks):

Catalog Number	12NC	Catalog Number	12NC
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BZ	912401466002	RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BK	912401534560
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-MGY	912401466003	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BZ	912401466016
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BK	912401534554	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-MGY	912401466017
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BZ	912401466004	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BK	912401534561
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-MGY	912401466005	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BZ	912401466018
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BK	912401534555	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-MGY	912401466019
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RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-MGY	912401466007	RS-ECF-RAM-G2-DGY	912401466487
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BK	912401534556	RS-ECF-RAM-G2-MGY	912401466488
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BZ	912401466008	RS-ECF-RAM-G2-WH	912401466485
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-MGY	912401466009	RS-ECF-RAM-G2-BZ	912401466486
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BK	912401534557	RS-ECF-RAM-G2-BK	912401466484
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BZ	912401466010	RS-HIS-32-H	912401466489
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-MGY	912401466011	RS-HIS-48-H	912401466491
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BK	912401534558	RS-HIS-64-H	912401466493
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BZ	912401466012		
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-MGY	912401466013		
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BK	912401534559		
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BZ	912401466014		
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-MGY	912401466015		

ECF-S EcoForm small

Area luminaire

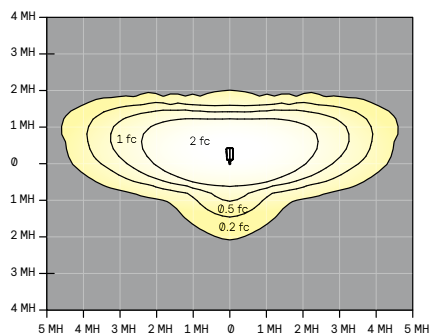
Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours

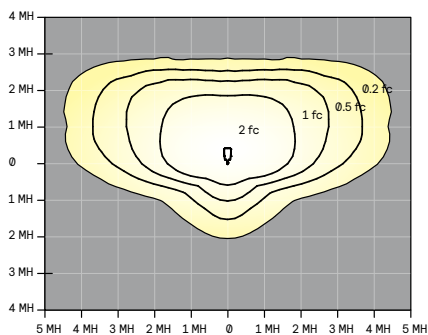
Ambient Temperature °C	Driver mA	Calculated L70 Hours	L70 per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1200 mA	>100,000 hours	>120,000 hours	>99%

Optical Distributions

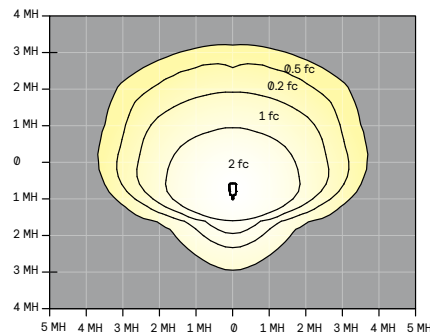
Based on configuration ECF-S-48L-1A-NW-G2 (159W) mounted at 20ft.



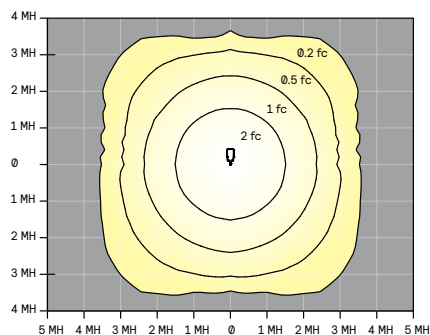
Type 2



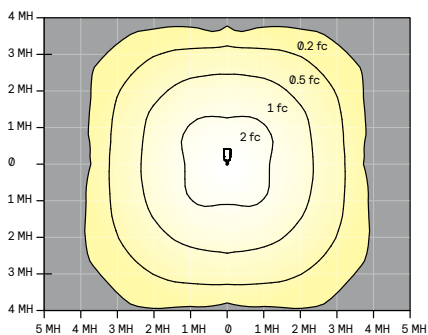
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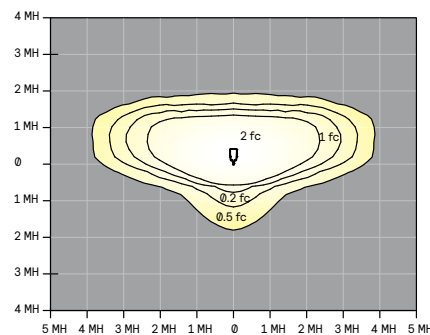
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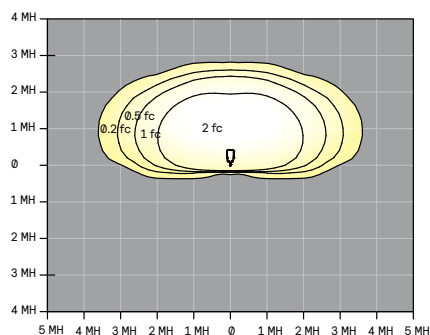
Type 5



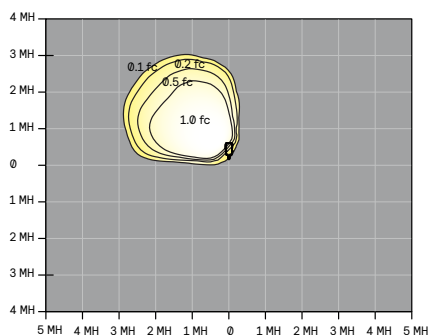
Type 5W



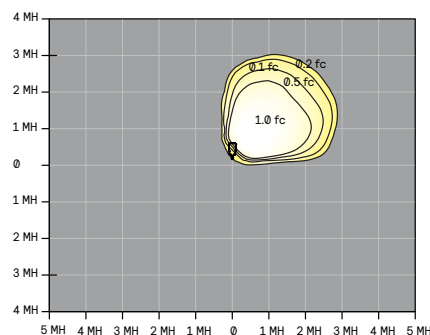
AFR



BLC



LCL



RCL

ECF-S EcoForm small

Area luminaire

3000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,508	B1-U0-G1	138	5,428	B1-U0-G2	136	5,637	B1-U0-G2	141	5,790	B3-U0-G1	145	5,604	B3-U0-G1	140
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,159	B2-U0-G2	129	7,055	B1-U0-G2	127	7,327	B1-U0-G2	132	7,526	B3-U0-G2	135	7,284	B3-U0-G2	131
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,234	B2-U0-G2	127	9,034	B2-U0-G2	124	9,452	B2-U0-G2	130	9,707	B4-U0-G2	133	9,395	B4-U0-G2	129
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,001	B3-U0-G2	123	12,719	B2-U0-G2	120	13,306	B2-U0-G3	126	13,665	B4-U0-G2	129	13,227	B4-U0-G2	125
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,421	B3-U0-G3	119	14,108	B2-U0-G3	116	14,760	B2-U0-G3	121	15,158	B4-U0-G2	125	14,671	B4-U0-G2	121
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,115	B3-U0-G3	127	16,744	B3-U0-G3	124	17,518	B2-U0-G3	130	17,990	B4-U0-G2	133	17,413	B5-U0-G3	129
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	19,381	B3-U0-G3	122	18,960	B3-U0-G3	119	19,836	B3-U0-G4	125	20,372	B5-U0-G3	128	19,717	B5-U0-G3	124
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	21,515	B3-U0-G3	118	21,048	B3-U0-G4	115	22,020	B3-U0-G4	121	22,616	B5-U0-G3	124	21,888	B5-U0-G3	120
ECF-S-64L-900-WW-G2-x	64	900	3000	178	22,652	B3-U0-G3	127	22,161	B3-U0-G4	125	23,185	B3-U0-G4	130	23,810	B5-U0-G3	134	23,045	B5-U0-G3	130
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	25,520	B3-U0-G3	124	24,966	B3-U0-G4	121	26,120	B3-U0-G4	127	26,150	B5-U0-G3	127	25,964	B5-U0-G4	126

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,706	B2-U0-G1	143	3,691	B0-U0-G1	94	2,449	B0-U0-G1	62
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,417	B2-U0-G1	133	5,005	B0-U0-G2	91	3,183	B0-U0-G1	58
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,567	B2-U0-G2	131	6,409	B0-U0-G2	89	4,106	B0-U0-G1	57
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,467	B3-U0-G2	128	9,024	B1-U0-G2	87	5,793	B0-U0-G2	56
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,939	B3-U0-G2	123	10,010	B1-U0-G2	84	6,426	B0-U0-G2	54
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,731	B3-U0-G2	131	11,880	B1-U0-G2	89	7,626	B0-U0-G2	57
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	20,076	B3-U0-G2	127	13,453	B1-U0-G2	86	8,636	B0-U0-G2	55
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	22,288	B3-U0-G2	122	14,934	B1-U0-G3	83			
ECF-S-64L-900-WW-G2-x	64	900	3000	178	23,465	B3-U0-G2	132	15,723	B1-U0-G3	90	10,093	B0-U0-G2	58
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	26,437	B4-U0-G3	128	17,714	B1-U0-G3	87			

4000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,536	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-NW-G2-x	32	700	4000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-NW-G2-x	64	900	4000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137	25,063	B5-U0-G3	141	24,258	B5-U0-G4	136
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134	27,526	B5-U0-G3	134	27,330	B5-U0-G4	133

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	6,006	B2-U0-G1	150	3,991	B0-U0-G1	101	2,633	B0-U0-G1	67
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,807	B2-U0-G1	140	5,412	B0-U0-G2	99	3,423	B0-U0-G1	62
ECF-S-32L-700-NW-G2-x	32	700	4000	73	10,070	B2-U0-G2	138	6,930	B0-U0-G2	96	4,415	B0-U0-G1	61
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	14,176	B3-U0-G2	134	9,756	B1-U0-G2	94	6,229	B0-U0-G2	60
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,725	B3-U0-G2	129	10,822	B1-U0-G2	90	6,910	B0-U0-G2	58
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18,664	B3-U0-G2	138	12,843	B1-U0-G2	96	8,200	B0-U0-G2	62
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	21,133	B3-U0-G2	133	14,544	B1-U0-G3	93	9,286	B0-U0-G2	59
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	23,461	B3-U0-G2	128	16,145	B1-U0-G3	90			
ECF-S-64L-900-NW-G2-x	64	900	4000	178	24,700	B3-U0-G2	139	16,998	B1-U0-G3	97	10,853	B0-U0-G2	62
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	27,828	B4-U0-G3	135	19,150	B1-U0-G3	94			

ECF-S EcoForm small

Area luminaire

5000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-CW-G2-x	32	530	5000	56	7,536	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-CW-G2-x	32	700	5000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-CW-G2-x	64	900	5000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137	25,063	B5-U0-G3	141	24,258	B5-U0-G4	136
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134	27,526	B5-U0-G3	134	27,330	B5-U0-G4	133

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	6,006	B2-U0-G1	150	3,991	B0-U0-G1	101	2,633	B0-U0-G1	67
ECF-S-32L-530-CW-G2-x	32	530	5000	56	7,807	B2-U0-G1	140	5,412	B0-U0-G2	99	3,423	B0-U0-G1	62
ECF-S-32L-700-CW-G2-x	32	700	5000	73	10,070	B2-U0-G2	138	6,930	B0-U0-G2	96	4,415	B0-U0-G1	61
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	14,176	B3-U0-G2	134	9,756	B1-U0-G2	94	6,229	B0-U0-G2	60
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,725	B3-U0-G2	129	10,822	B1-U0-G2	90	6,910	B0-U0-G2	58
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,664	B3-U0-G2	138	12,843	B1-U0-G2	96	8,200	B0-U0-G2	62
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	21,133	B3-U0-G2	133	14,544	B1-U0-G3	93	9,286	B0-U0-G2	59
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	23,461	B3-U0-G2	128	16,145	B1-U0-G3	90			
ECF-S-64L-900-CW-G2-x	64	900	5000	178	24,700	B3-U0-G2	139	16,998	B1-U0-G3	97	10,853	B0-U0-G2	62
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	27,828	B4-U0-G3	135	19,150	B1-U0-G3	94			

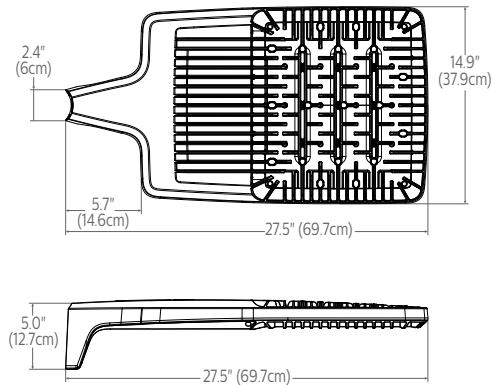
ECF-S EcoForm small

Area lumineuse

Dimensions

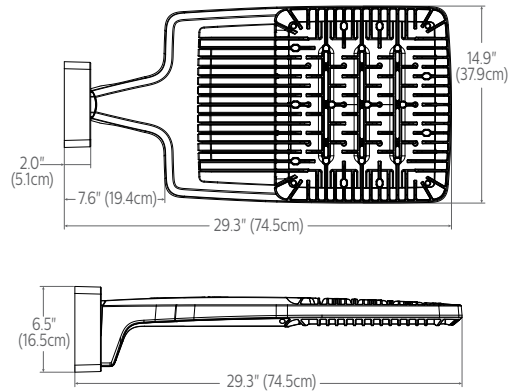
Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (.019m²)



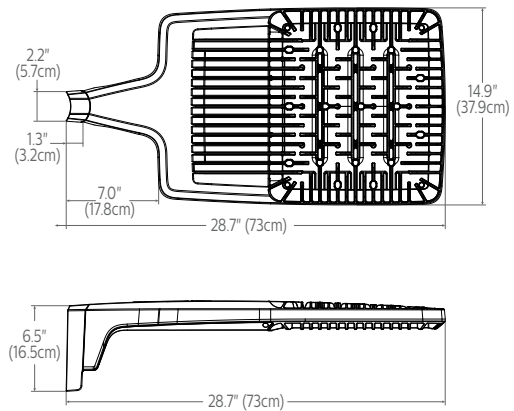
Wall (WS)

Weight: 27 Lbs. (12. 2Kg)EPA: 0.27ft² (.025m²)



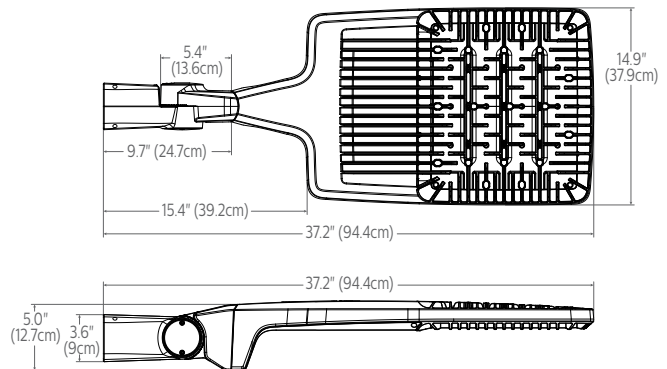
Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft² (.022m²)

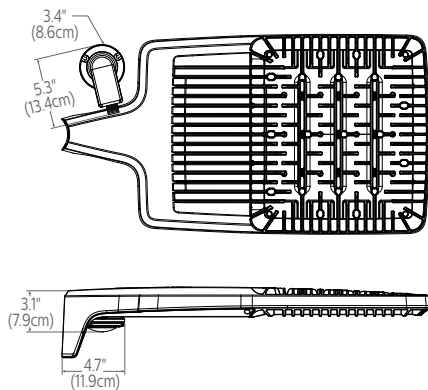


Slip fitter (SF)

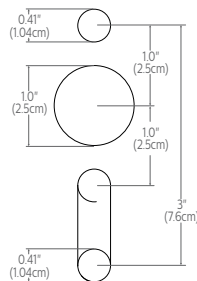
Weight: 27 Lbs (12.2 Kg) EPA: 0.33ft² (.031m²)



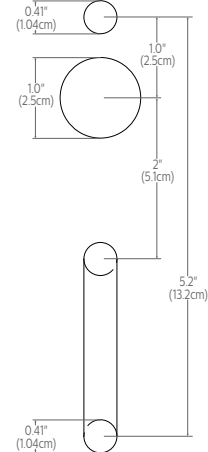
Outboard IMR-HVU sensor



Standard Arm (AR) drill pattern



Retrofit Arm (RAM) drill pattern



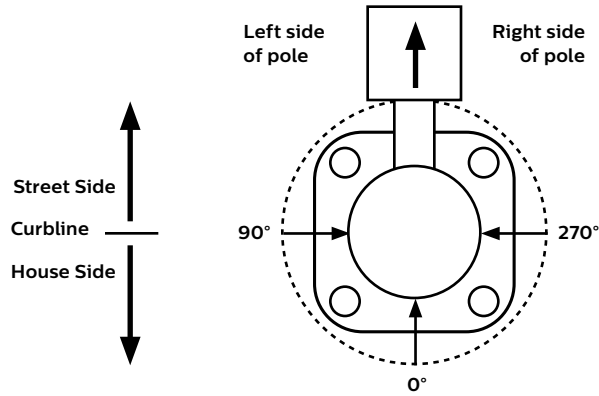
ECF-S EcoForm small

Area luminaire

Optical Orientation Information

Standard Optic Position

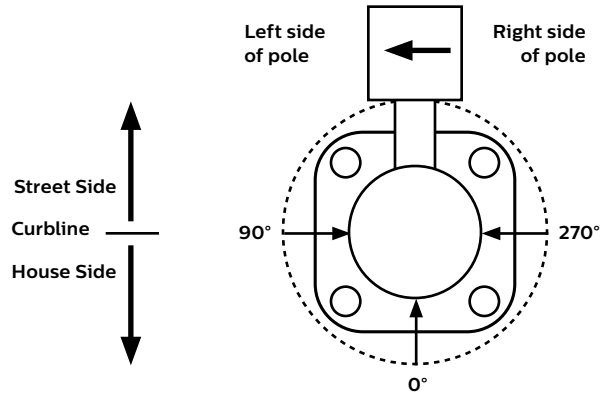
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Left (90°) Optic Position

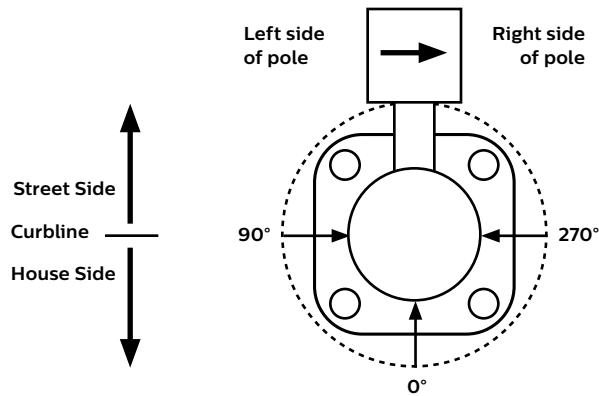
Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

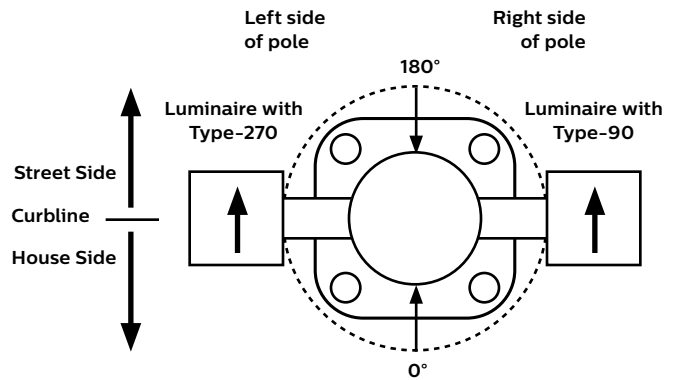
Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

ECF-S EcoForm small

Area luminaire

Specifications

Housing

One-piece die cast aluminum housing with integral arm and separate, self-retained hinged, one-piece die cast door frame. Luminaire housing rated to IP65, tested in accordance to Section 9 of IEC 60598-1.

Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31-2018. Testing includes vibration in three axes, all performed on the same luminaire.

Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 2, 3, and 4 modules or 32, 48, and 64 LEDs. Module is RoHS compliant. Color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy saving benefits

System efficacy up to 152 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions, including a dedicated BLC, LCL, and RCL optics to provide the best backlight control possible for those stringent requirements around property lines. Types 2, 3, 4, AFR, and BLC when specified and used as rotated, are factory set only. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Mounting

Standard luminaire arm mounts to 4" O.D. round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles. EcoForm features a retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately. Also optional are slipfitter and wall mounting accessories. Note that only fixed mounts (AR, RAM, WS) are required to meet IDA compliance. SF mounting will not meet IDA.

Control options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of separate modules controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

Sensor Ready Zhaga Socket Connector (SRDR): Product equipped with Sensor Ready drivers connected to 4-pin Zhaga Book 18 compliant receptacle designed for sensor and other control system applications. Receptacle is rated IP66 assembly in a compact design that provides a sealed electrical interface and rated UV resistance, mounted on underside of the luminaire, protective dust cap included. When a controller not provided by Signify is used with Sensor Ready Zhaga socket connector, the controller must be certified to work with the Xitanium SR LED drivers as part of the SR certified program. SRDR can be used with NEMA 7-pin twist lock receptacle, which is mounted on top of the luminaire.

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM – 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM – 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1 or 2 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

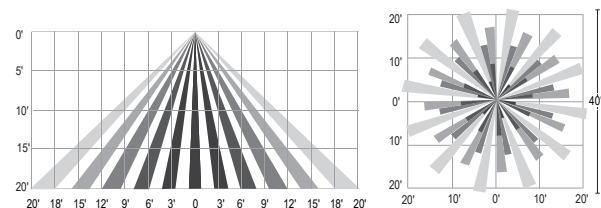
Motion response options

Bi-Level Infrared Motion Response (BL-IMRI): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

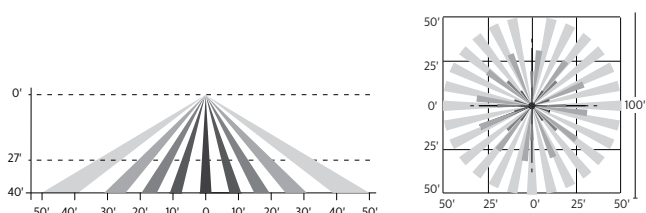
Infrared Motion Response with Other Controls: When used in combination with other controls (Automatic Dimming Profile), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

Infrared Motion Response Lenses (IMRI3/IMRI7): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. Lens #7 is designed for higher mounting heights up to 40' with larger coverage areas up to 100' diameter coverage area. See charts for approximate detection patterns:

IMRI3 Luminaire or remote mount controller with #3 lens



IMRI7 Luminaire or remote mount controller with #7 lens



ECF-S EcoForm small

Area luminaire

Specifications

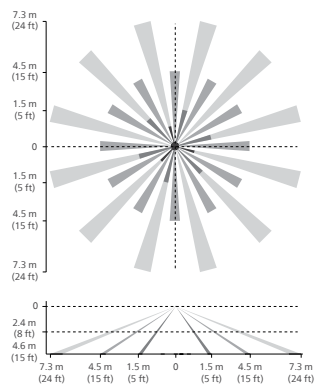
Control options

Outdoor Interact (WIAP): Connected sensor with integral occupancy and daylight sensing, supports wireless mesh connectivity. Sensor works in the standalone mode when configured without a gateway. When used with a gateway you are able to access additional functionalities such as energy monitoring, scheduling and BMS integration. Interact offers an App, a portal and a broad portfolio of Interact-ready Indoor and Outdoor luminaires, lamps and retrofit kits all working on the same system. The App provides flexibility to choose between a standalone or gateway mode. Setup with the gateway requires wired Internet access to the gateway. WIAP includes SR driver and SR receptacle. Daylight harvesting supported through dimming - activated via the Interact App. Sensors IP66 rated.

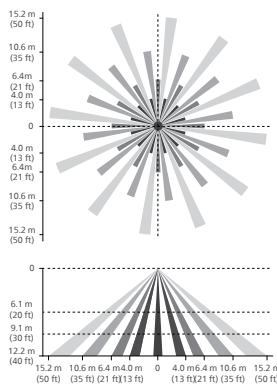
For more information on Interact Pro visit:

www.interact-lighting.com/interactproscalablesystem

LB or LW low sensor



HB or HW high sensor



Note: The beam patterns shown are intended solely as a general guide and are not to scale. Sensing capabilities and coverage area depend on many factors including the size, speed and direction of travel of persons and vehicles; sensor mounting height; environmental and site conditions; etc.

Electrical

Twist-Lock Receptacle (TLRD5/TLRD7/ TLRPC): Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering 7-pin Twist-lock receptacle (TLRD7), all 7 pins are wired to respective pins with the Sensor Ready (SR) driver, and photocell or shorting cap is not included. When ordering a twist-lock receptacle with a photocell (TLRPC), the receptacle used is a 5-pin receptacle, so pins 6 and 7 are not available (no SR driver). 0-10V dimming leads (pins 4 and 5) are connected if not ordered with any other dimming option.

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. All drivers are 0-10V dimming to 10% power standard, except when using Sensor Ready (SR) drivers, which uses DALI protocol (options CS50/CM50/CS30/CM30, SRDR, and TR7). Drivers are RoHS and FCC Title 47 CFR Part 15 compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA, 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

Listings

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most EcoForm configurations are qualified under Premium and Standard DesignLights Consortium® categories. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Approved.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: signify.com

Warranty

EcoForm luminaires feature a 5-year limited warranty. See signify.com/warranties for complete details and exclusions.



Project: _____

Fixture Type: _____

Location: _____

Contact: _____

P5644-31 Square

6" outdoor two-light up/down square with heavy duty aluminum construction and die cast wall bracket. Powder coated finish. Black finish. Wet location listed when used with P860047 top cover lens (sold separately).

- Black finish.
- Powder coat finish.
- Ideal for a wide variety of interior and exterior applications.
- Wet location listed when used with P860047 top cover lens (sold separately).
- Two 250w PAR-38 or 150w BR-40.

Category: Outdoor

Finish: Matte Black (Painted)

Construction: Aluminum Construction



Width: 6 in
Height: 18 in
Depth: 8-7/8 in
H/CTR: 8 in

MOUNTING	ELECTRICAL	LAMPING	ADDITIONAL INFORMATION
Wall mounted	Prewired	Quantity: two 250 W max. PAR-38 or LED equivalent	UL-CUL Damp Location Listed
Mounting strap for outlet box included	6 inches of wire supplied	E26 base porcelain sockets	1-year Limited Warranty
back plate covers a standard 4" recessed outlet box: 4.5" W., 4.5" ht., 2.911" depth	120 V		

Memorandum Architectural Review

To: Architectural Review Board
From: R. Radtke, Planning & Zoning Manager
Date: September 24,, 2025
Re: Express Oil – Commercial Sub-division

Property Location: 515 Columbia Ave.
Tax Map Number: 000700-01-017
Property Zoning District: Corridor Commercial (CC)
Property Overlay District: Corridor
Applicant: Brittany Youngblood
Zoning Permit: **20250103**

Proposal

The applicant is proposing the construction of an Express oil on a property located off of Columbia Ave. across from Goodwill and next to McCallister's commercial sub-division. This parcel was approved to be sub-divided into 3 parcels and is approx. This parcel was designated as Lot B from the original parcel and is approximately .80 of an acre and requires 5% of open space.

Open Space / Buffers / Lot size:

The parcel is proposed at .80 acres. This would require 5% of the area for open space.

Parking:

Total size of the building is 2957 Sq. Ft. / 1 space per 150 Sf = 24 Spaces. Applicant has planned for 16 spaces. **Parking requirements are short of minimum required.**

Staff Recommendation

In review of the requirements from preliminary ARB meeting in August, staff has identified the proposed development to be complaint. The following items need clarification for compliance or cannot be ascertained:

- Exterior color of building have been changed. Brick colors – New Ashbury, Stone color - Sedona, Clay face brick – Whitestone. Overhead doors –Brown. **In Compliance**
- Remove glass & change the color of metal slats- garage bay doors. **In Compliance. Changed to brown & added panels to 4.**
- ARB commented; prefer shingled roof instead of the metal roof. **No Change. In Compliance.**
- Lighting plan with spec sheets & Photometrics -provided – **Review by ARB.**
- Parking is short of the 25 spaces required. Currently 16 spaces. **(Table 8.4.1). Recommend written agreement with adjacent property.**

Documents that are needed for clarity:

1. Include traffic design for crosswalks and interconnectivity. **Working w/ Carolina Wings**

August 18, 2025

City of Chapin, SC

RE: Trip Generation Assessment for Express Oil Change & Tire Engineers – Trip Generation Assessment

TRAFFIC ASSESSMENT

The purpose of this section is to document a trip generation evaluation specifically for the proposed automobile service/oil change facility included in the broader mixed-use development on Parcel 000700-01-017 in Chapin, SC. This specific use was part of the land use assumptions considered in previous traffic studies prepared for the parcel and surrounding area. A traffic impact study dated October 18, 2021, and its addendum dated August 22, 2022, assessed a mixed-use development with similar or greater land use intensities across the site. Those studies concluded that no off-site traffic improvements were warranted based on trip generation and roadway capacity. A subsequent traffic study dated 2024 evaluated a refined development program and projected lower trip generation than the 2022 study. This memorandum updates the analysis to reflect a revised square footage for the automobile service/oil change component, which has increased from 4,000 SF (used in the 2024 study) to 5,444 SF, and evaluates whether this change alters prior conclusions.

TRIP GENERATION

The current proposal includes 5,444 SF of automobile service/oil change space, which is 1,444 SF greater than the 4,000 SF previously evaluated in the 2024 traffic study. This increase corresponds to an estimated increase of approximately 100 daily trips, based on ITE Trip Generation Manual, 11th Edition, Land Use Code 943 (Automobile Care Center). Attachment B and C show the 2022 and 2024 Trip Generation calculations.

Table 1 summarizes the estimated trips generated by the 5,444 SF automobile service/oil change use proposed as part of this memorandum.

Table 1. Trip Generation										
ITEM #	Use	Quantity (Units)	Units	Weekday	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
941	Quick Lubrication Vehicle Shop	5.44	1000 SF GFA	378	32	24	8	47	20	27

Table 2 presents a comparison of the total estimated site trips under three scenarios: the original 2022 traffic study, the updated 2024 study, and the current development program as documented in this memorandum. This provides a clear view of how the revised site plan, despite a slight increase in automobile service use, still generates fewer total trips than the 2022 scenario that required no off-site improvements.

Scenario	Weekday	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
2022 Concept Plan	2479	293	158	135	206	107	99
2024 Concept Plan	1883	130	74	56	173	91	82
2025 Memo	1983	139	81	58	185	96	89
Difference 2025 vs 2022	496	154	77	77	21	11	10
% Difference 2025 vs 2022	-20%	-53%	-49%	-57%	-10%	-10%	-10%

SUMMARY / RECOMMENDATIONS

This memorandum documents the trip generation assessment for the proposed mixed-use development on Parcel 000700-01-017 in Chapin, SC, with specific focus on the increase in automobile service/oil change space from 4,000 SF (2024 study) to 5,444 SF. This increase is estimated to generate approximately 100 additional daily trips based on ITE trip generation data.

Despite this increase, the total site-generated trips remain below those evaluated in the 2022 traffic study, which assessed a higher-intensity development program and determined that no off-site improvements were necessary. The subsequent 2024 study projected fewer trips than the 2022 analysis, and the current proposal, with a modest increase in automobile service square footage, continues to fall within previously acceptable thresholds.

As shown in Table 1, the automobile service/oil change use is expected to generate a limited number of daily and peak-hour trips. Table 2 confirms that the overall site trip generation under the current proposal remains lower than the 2022 study findings, reinforcing that no off-site roadway improvements are warranted.

Accordingly, the current development scenario is consistent with prior traffic planning assumptions, and no additional mitigation measures are recommended based on the updated trip generation.

If you should have any questions or comments related to this memo, please feel free to email me at watson@mcadams.com

ATTACHMENTS

Attachment A – Site Plan

Attachment B – 2022 Trip Generation Calculations

Attachment C – 2024 Trip Generation Calculations

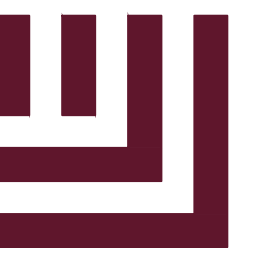
Sincerely,

MCADAMS

Ray Watson, PE

Technical Manager

ATTACHMENT A – AUTOMOTIVE SERVICE/OIL CHANGE SITE PLAN



McAdams

The John R. McAdams Company, Inc.
4400 State Highway 121, Suite 800
Lewisville, Texas 75056

phone 972. 436. 9712
fax 972. 436. 9715
TBPE: F-19762 TBPLS: F-10194440
SC license number: 552, 402
www.mcadamscs.com

CONTACT

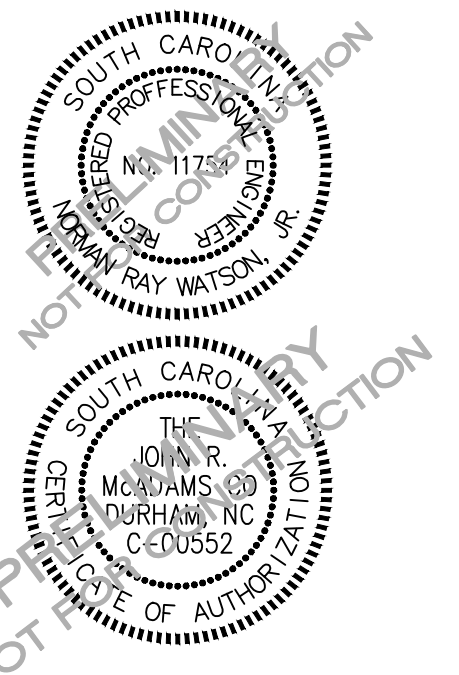
BRITTANY YOUNGBLOOD
BYOUNGBLOOD@MCADAMSCO.COM
PHONE: 501.840.0001

CLIENT

JUSTIN DUCK
1880 SOUTH PARK DRIVE
BIRMINGHAM, AL 35244
PHONE: 205.906.2006



EXPRESS OIL - CHAPIN, SC
CONSTRUCTION PLANS
XX COLUMBIA AVENUE
CHAPIN, SOUTH CAROLINA 29036



REVISIONS

NO.	DATE	DESCRIPTION
1	07.15.2025	1ST SUBMITTAL
2	08.19.2025	2ND SUBMITTAL

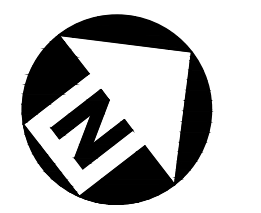
PLAN INFORMATION

PROJECT NO. EXO25002
FILENAME EXO25002-S1.DWG
CHECKED BY BY
DRAWN BY JE
SCALE 1"=20'
DATE 08.19.2025

SHEET

SITE PLAN

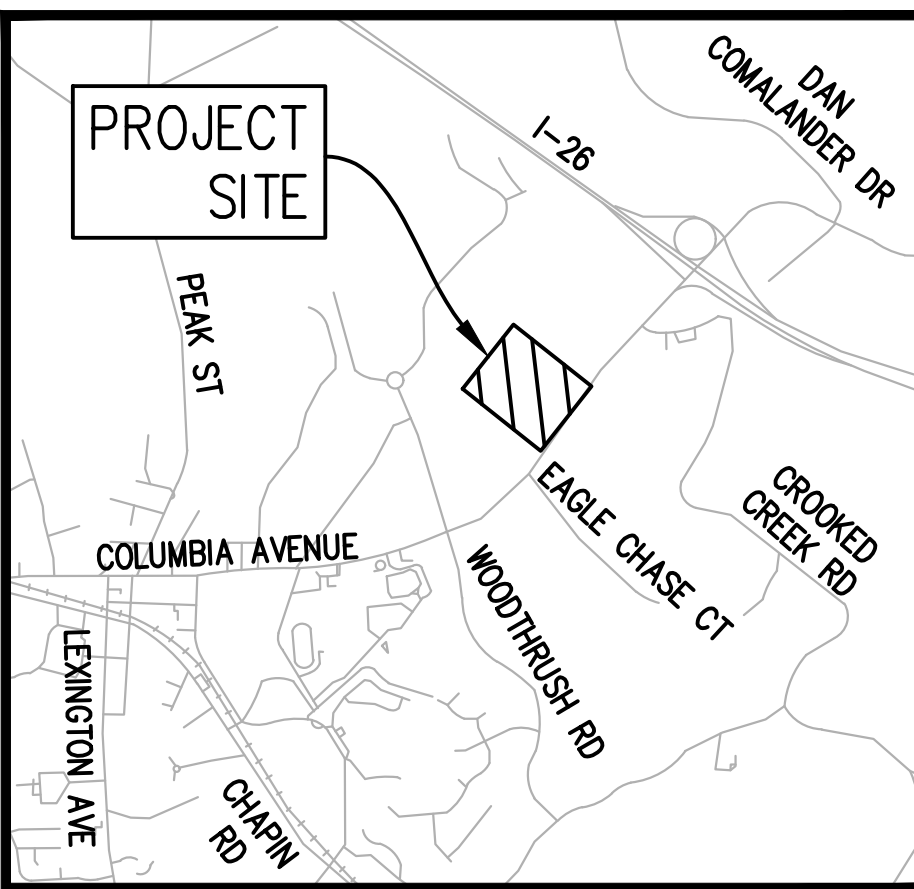
C2.00



GRAPHIC SCALE
0 10 20 40
1 inch = 20 ft.

SITE LEGEND

- TRAFFIC DIRECTIONAL ARROW
- VAN ACCESSIBLE PARKING STALL
- PARKING SPACE COUNT
- SIGNAGE
- CURB INLET
- GRATE INLET
- TRENCH DRAIN
- PROPERTY LINE
- EASEMENT LINE
- SETBACK AND BUFFER LINES
- FIRELANE STRIPING



VICINITY MAP
N.T.S.

BENCHMARKS:

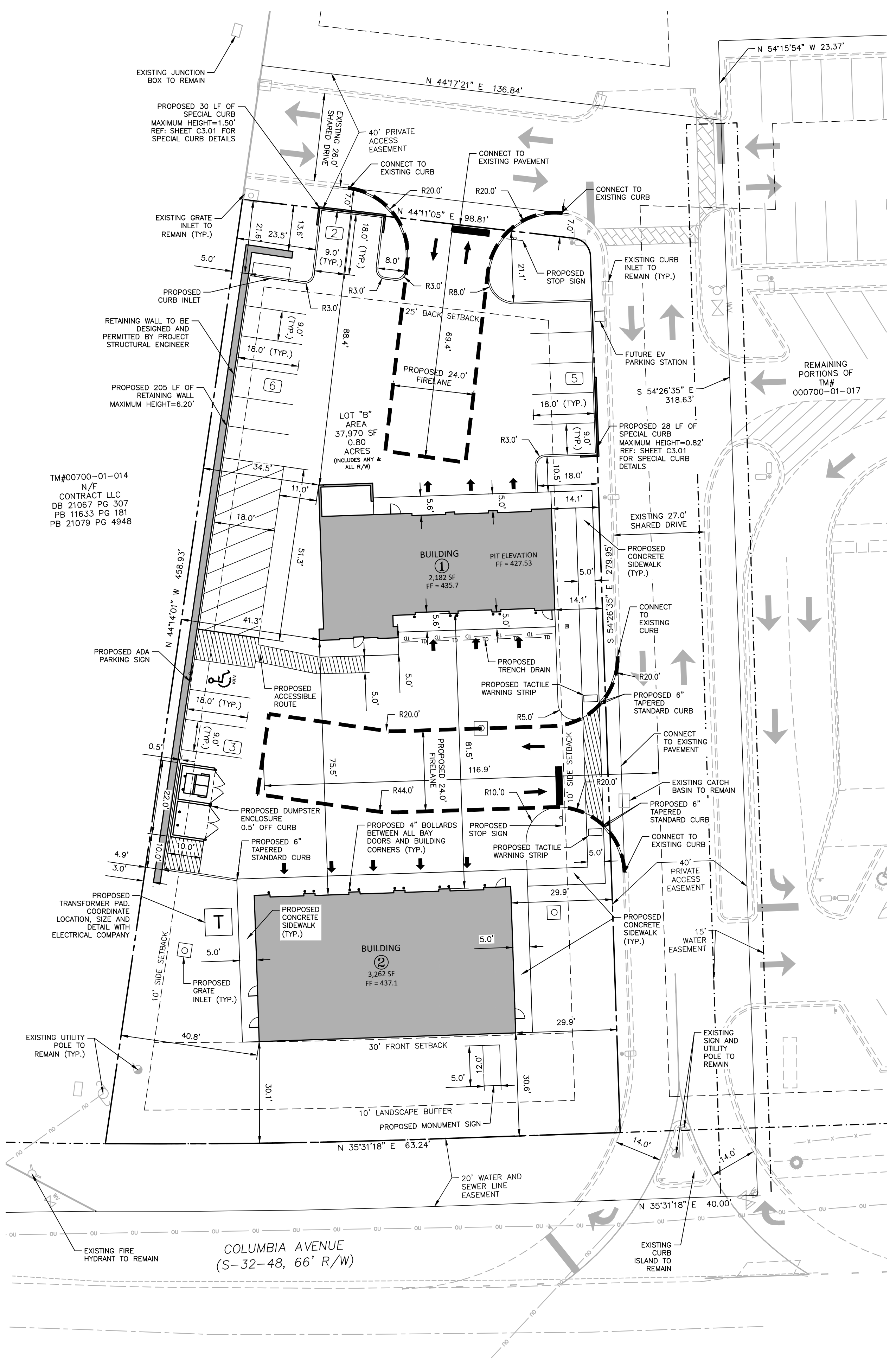
BM #1: N850952.10 E 1899593.31 ; ELEV: 430.80 SC GRID, NAD83/NAVD88
BM #2: N851096.14 E 1899682.09 ; ELEV: 431.90 SC GRID, NAD83/NAVD88

SITE PLAN NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST LEXINGTON COUNTY AND/OR SCDOT STANDARDS AND SPECIFICATIONS AS APPLICABLE.
- ALL DIMENSIONS SHOWN ON SITE PLAN ARE MEASURED TO FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE ENGINEER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE OWNER.
- EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED/RESTORED TO THEIR ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER, BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
- THE CONTRACTOR SHALL NOTE THAT THE DRAWINGS MAY NOT SHOW EVERY OFFSET, TRANSITION, FITTING, ETC. THAT MAY BE REQUIRED. THE CONTRACTOR SHALL INSTALL SUCH STANDARD APPURTENANCES AS REQUIRED TO CLOSELY FOLLOW THE GRADES AND ALIGNMENTS DEPICTED ON THE PLANS.
- CONTRACTOR SHALL NOTIFY "SC811" (811) OR 1-888-721-7877 AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "SC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE UTILITY COMPANIES FOR ANY REQUIRED RELOCATIONS (I.E. POWER POLES, TELEPHONE PEDESTALS, WATER METERS, ETC.).
- PRIOR TO BEGINNING CONSTRUCTION BEYOND EROSION CONTROL MEASURES, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT AND A REPRESENTATIVE OF THE ENGINEER AND OWNER IF REQUIRED. THE PURPOSE OF THIS MEETING IS TO REVIEW THE SPECIFIC COMPONENTS OF THE PLAN AND OPERATION OF THE FACILITIES DURING CONSTRUCTION.
- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. FOR DIMENSIONAL PLAN OR GRADE CHANGES, NO EXTRA COMPENSATION SHALL BE PAID TO CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- ALL SIDEWALKS MUST BE ACCESSIBLE TO PERSONS WHO ARE BLIND, HAVE LOW VISION AND PEOPLE WITH MOBILITY DISABILITIES. PEDESTRIAN EXISTING ROUTES AND ALTERNATE PEDESTRIAN ROUTES DURING CONSTRUCTION WILL BE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG), 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- TYPICAL PAVEMENT SECTION DETAILS ARE SHOWN WITHIN THIS PLAN SET AND INTENDED TO BE A MINIMUM PAVEMENT SECTION REQUIREMENT. THE CURRENT GEOTECHNICAL REPORT SHALL OVER-RIDE ALL TYPICAL PAVEMENT SECTIONS SHOWN, IF THE GEOTECHNICAL ENGINEER DEEMS A HEAVIER SECTION IS REQUIRED.
- EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING OR INSTALLATION. THE CONTRACTOR SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO SUBSTITUTION OF ALTERNATE EQUIPMENT.
- IF UNFORESEEN CONDITIONS DEVELOP DURING CONSTRUCTION, REFER TO THE LATEST VERSION OF LEXINGTON COUNTY AND SOUTH CAROLINA SPECIFICATIONS AND STANDARDS.
- VERIFY ELECTRICAL REQUIREMENTS OF ABOVE GROUND HEATED ENCLOSURES, SITE LIGHTS, SIGNS THAT REQUIRE ELECTRICAL SERVICE WITH ELECTRICAL PLANS AND NOTIFY PROJECT ELECTRICAL ENGINEER OF MISSING INFORMATION.
- SIGNS TO BE PERMITTED SEPARATELY.

SITE DATA TABLE

PHYSICAL ADDRESS	TBD
LEGAL DESCRIPTION	PORTION OF TMS#00700-01-017 PARCEL A2 LOT B
GROSS SITE AREA	0.80 ACRES
NET SITE AREA	0.87 ACRES
ZONING	COMMERCIAL CORRIDOR (CC)
CURRENT USE	NONE - UNDEVELOPED
PROPOSED USED	AUTO REPAIR SERVICE
FRONT SETBACK	30'
REAR SETBACK	25'
SIDE SETBACK	REQUIRED 10' / PROVIDED 15'
LANDSCAPE BUFFER	10' FRONT AND SIDE YARD
LOT COVERAGE DATA	
BUILDING COVERAGE	0.125 AC 15.4%
IMPERVIOUS AREA	0.558 AC 68.6%
PERVIOUS AREA	0.255 AC 31.4%
PARKING SUMMARY	
REQUIRED PARKING - 6 EMPLOYEES (1 SPACE PER 2 EMPLOYEES AT PEAK SHIFT)	3 SPACES
REQUIRED PARKING - 2957 SF (1 SPACE PER 150 SQUARE FEET OF THE AUTOMOBILE REPAIR SPACE)	20 SPACES
REQUIRED ACCESSIBLE SPACES	1 SPACE
TOTAL REQUIRED PARKING	24 SPACES
OFFSITE (ACCOUNTS FOR SHARED PARKING AGREEMENT)	5 SPACES
STANDARD SPACES PROVIDED	15 SPACES
ACCESSIBLE SPACES PROVIDED	1 SPACE
TOTAL PROVIDED PARKING	16 SPACES
BUILDING DATA	
TOTAL BUILDING SQUARE FOOTAGE BUILDING 1 - 2,182 SF BUILDING 2 - 3,262 SF	5,444 SF
NUMBER OF BUILDING STORIES	1 STORY
MAXIMUM BUILDING HEIGHT	<25 FT



Z:\2025\Projects\EXO25002\04-Production\Engineering\Sheets\EXO25002-S1.dwg, 8/20/2025, Robert Page

ATTACHMENT B – 2022 TRIP GENERATION CALCULATIONS

2022 Chapin Mixed Use Trip Generation									
Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Retail Land Uses			327	11	7	4	27	14	13
822 - Strip Retail Plaza (<40k)	2.3	KSF	327	11	7	4	27	14	13
Restaurant Land Uses			1,874	259	134	125	144	78	66
932 - High-Turnover (Sit-Down) Restaurant	5.54	KSF	594	53	29	24	50	31	19
937 - Coffee/Donut Shop with Drive-Through Window	2.4	KSF	1,280	206	105	101	94	47	47
Other Land Uses			278	23	17	6	35	15	20
941 - Quick Lubrication Vehicle Shop	4.0	KSF	278	23	17	6	35	15	20
Subtotal			2,479	293	158	135	206	107	99
Internal Capture			162	4	2	2	22	11	11
ITE Pass-By			385	0	0	0	14	7	7
<i>Adjacent Street Traffic</i>			15,200	1,800			1,900		
<i>10% Adjacent Street Traffic</i>			1,520	180	90	90	190	95	95
Pass-By			385	0	0	0	14	7	7
Total Net New External Trips			1,932	289	156	133	170	89	81

Note: Trip generation was calculated using the following data:

Daily Traffic Generation

Retail Land Uses

822 - Strip Retail Plaza (<40k) ITE 822 = $T = 42.2 * (X) + (229.68)$; (50 % In; 50 % Out)

Restaurant Land Uses

932 - High-Turnover (Sit-Down) Restaurant ITE 932 = $T = 107.2 (X)$; (50 % In; 50 % Out)

937 - Coffee/Donut Shop with Drive-Through Window ITE 937 = $T = 533.37 (X)$; (50 % In; 50 % Out)

Other Land Uses

941 - Quick Lubrication Vehicle Shop ITE 941 = $T = 69.57 (X)$; (50 % In; 50 % Out)

AM Peak-Hour Traffic Generation

Retail Land Uses

822 - Strip Retail Plaza (<40k) ITE 822 = $LN (T) = 0.66 * LN (X) + (1.84)$; (60 % In; 40 % Out)

Restaurant Land Uses

932 - High-Turnover (Sit-Down) Restaurant ITE 932 = $T = 9.57 (X)$; (55 % In; 45 % Out)

937 - Coffee/Donut Shop with Drive-Through Window ITE 937 = $T = 85.88 (X)$; (51 % In; 49 % Out)

Other Land Uses

941 - Quick Lubrication Vehicle Shop ITE 941 = $T = 5.8 (X)$; (75 % In; 25 % Out)

PM Peak-Hour Traffic Generation

Retail Land Uses

822 - Strip Retail Plaza (<40k) ITE 822 = $LN (T) = 0.71 * LN (X) + (2.72)$; (50 % In; 50 % Out)

Restaurant Land Uses

932 - High-Turnover (Sit-Down) Restaurant ITE 932 = $T = 9.05 (X)$; (61 % In; 39 % Out)

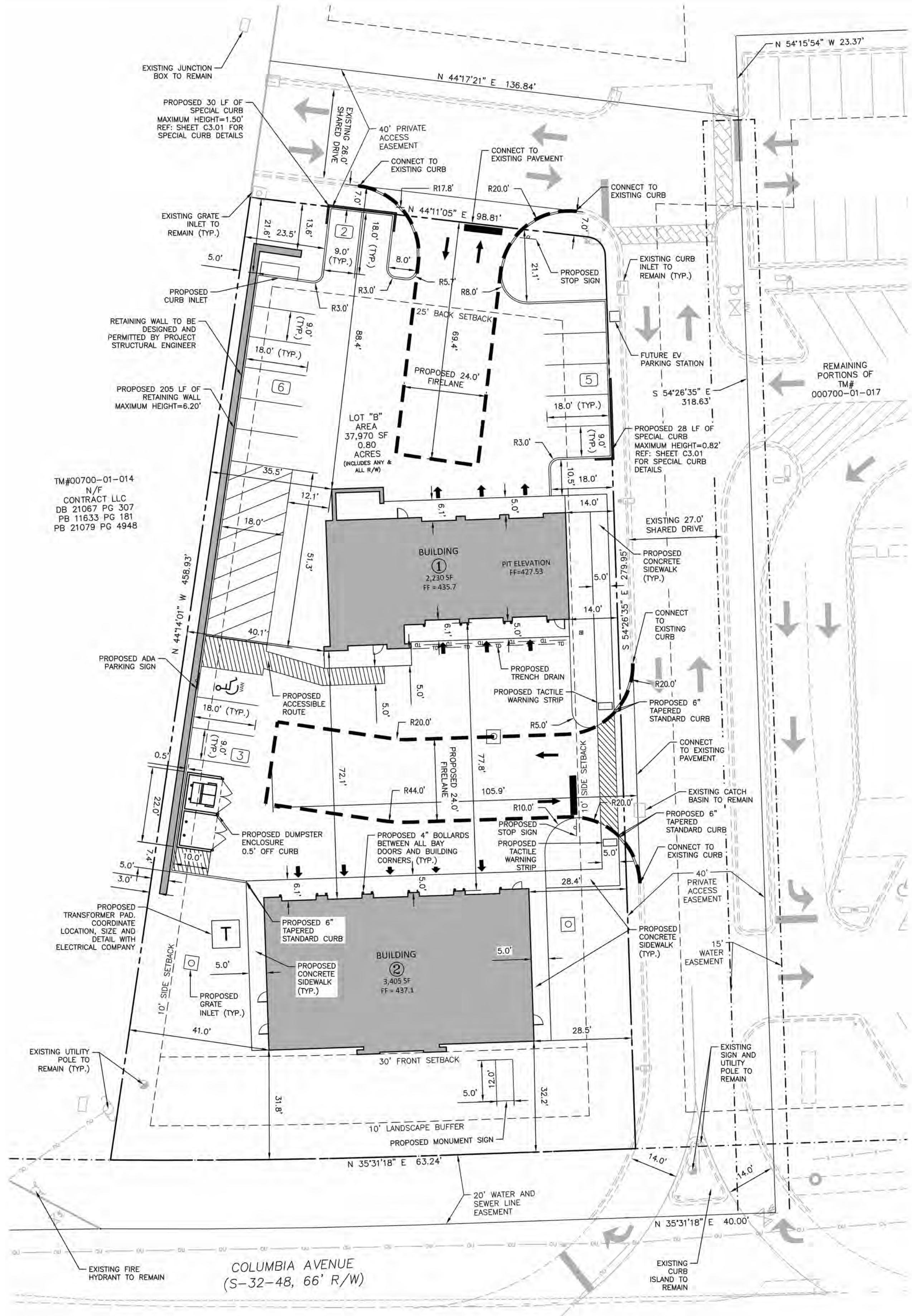
937 - Coffee/Donut Shop with Drive-Through Window ITE 937 = $T = 38.99 (X)$; (50 % In; 50 % Out)

Other Land Uses

941 - Quick Lubrication Vehicle Shop ITE 941 = $T = 8.7 (X)$; (42 % In; 58 % Out)

ATTACHMENT C – 2024 TRIP GENERATION CALCULATIONS

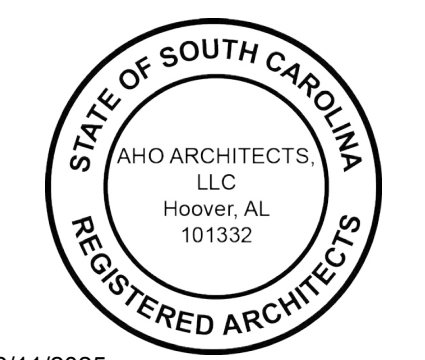
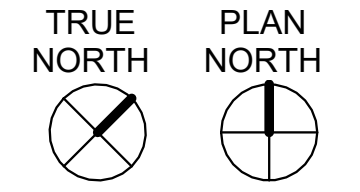
2024 Chapin Mixed Use Trip Generation									
Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Retail Land Uses			297	9	5	4	21	11	10
822 - Strip Retail Plaza (<40k)	1.6	KSF	297	9	5	4	21	11	10
Restaurant Land Uses			1,308	98	52	46	117	65	52
934 - Fast-Food Restaurant with Drive-Through Window	1.4	KSF	654	62	32	30	46	24	22
930 - Fast Casual Restaurant	3.2	KSF	311	5	3	2	42	23	19
932 - High-Turnover (Sit-Down) Restaurant	3.2	KSF	343	31	17	14	29	18	11
Other Land Uses			278	23	17	6	35	15	20
941 - Quick Lubrication Vehicle Shop	4.0	KSF	278	23	17	6	35	15	20
Subtotal			1,883	130	74	56	173	91	82
Internal Capture			148	2	1	1	16	8	8
ITE Pass-By			913	30	15	15	30	15	15
<i>Adjacent Street Traffic</i>			15,200	1,800			1,900		
<i>10% Adjacent Street Traffic</i>			1,520	180	90	90	190	95	95
Pass-By			913	30	15	15	30	15	15
Total Net New External Trips			822	98	58	40	127	68	59
Note: Trip generation was calculated using the following data:									
<u>Daily Traffic Generation</u>									
Retail Land Uses									
822 - Strip Retail Plaza (<40k)			ITE 822	=	T = 42.2 * (X) + (229.68); (50 % In; 50 % Out)				
Restaurant Land Uses									
934 - Fast-Food Restaurant with Drive-Through Window			ITE 934	=	T = 467.48 (X); (50 % In; 50 % Out)				
930 - Fast Casual Restaurant			ITE 930	=	T = 97.14 (X); (50 % In; 50 % Out)				
932 - High-Turnover (Sit-Down) Restaurant			ITE 932	=	T = 107.2 (X); (50 % In; 50 % Out)				
Other Land Uses									
941 - Quick Lubrication Vehicle Shop			ITE 941	=	T = 69.57 (X); (50 % In; 50 % Out)				
<u>AM Peak-Hour Traffic Generation</u>									
Retail Land Uses									
822 - Strip Retail Plaza (<40k)			ITE 822	=	LN (T) = 0.66 * LN (X) + (1.84); (60 % In; 40 % Out)				
Restaurant Land Uses									
934 - Fast-Food Restaurant with Drive-Through Window			ITE 934	=	T = 44.61 (X); (51 % In; 49 % Out)				
930 - Fast Casual Restaurant			ITE 930	=	T = 1.43 (X); (50 % In; 50 % Out)				
932 - High-Turnover (Sit-Down) Restaurant			ITE 932	=	T = 9.57 (X); (55 % In; 45 % Out)				
Other Land Uses									
941 - Quick Lubrication Vehicle Shop			ITE 941	=	T = 5.8 (X); (75 % In; 25 % Out)				
<u>PM Peak-Hour Traffic Generation</u>									
Retail Land Uses									
822 - Strip Retail Plaza (<40k)			ITE 822	=	LN (T) = 0.71 * LN (X) + (2.72); (50 % In; 50 % Out)				
Restaurant Land Uses									
934 - Fast-Food Restaurant with Drive-Through Window			ITE 934	=	T = 33.03 (X); (52 % In; 48 % Out)				
930 - Fast Casual Restaurant			ITE 930	=	T = 17.96 * (X) + (-15.94); (55 % In; 45 % Out)				
932 - High-Turnover (Sit-Down) Restaurant			ITE 932	=	T = 9.05 (X); (61 % In; 39 % Out)				
Other Land Uses									
941 - Quick Lubrication Vehicle Shop			ITE 941	=	T = 8.7 (X); (42 % In; 58 % Out)				



NOTE:
 THIS PLAN IS TO SHOW THE BUILDING AS IT RELATES TO THE SITE. A COMPLETE SET OF CIVIL DRAWINGS ARE TO BE SUBMITTED TO THE AHJ INDEPENDENT OF THIS SUBMITTAL. REFER TO THOSE DRAWINGS FOR ACTUAL INFORMATION.

TM#00700-01-014
 N/F
 CONTRACT LLC
 DB 21067 PG 307
 PB 11633 PG 181
 PB 21079 PG 4948

1 Architectural Site Plan
 N.T.S.



Express Oil Change & Tire Engineers
 Service Building
 Chapin, South Carolina

FINAL

No.	Description	Date

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Architectural Site Plan

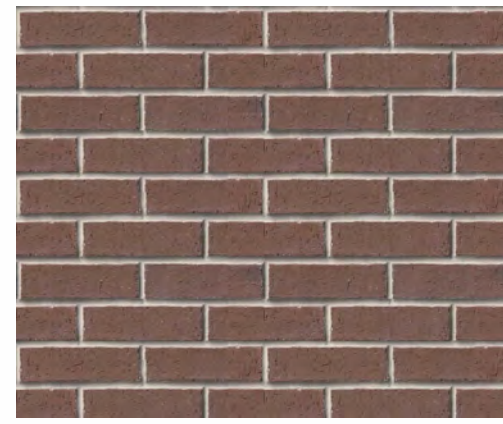
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Date	08/11/2025
Drawn by	ARC
Checked by	N/A
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Scale	N.T.S.

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EXTERIOR FINISH MATERIAL LEGEND



ADHERED STONE VENEER
Color: Sedona (Handcrafted)
Manuf: Horizon Stone
Keynote: 19b



CLAY FACE BRICK (FIELD)
Color: New Ashbury
Manuf: Watstown Brick
Keynote: 18b



CLAY FACE BRICK (SOLDIER)
Color: Whitestone
Manuf: Palmetto Brick
Keynote: 17b



CAST STONE WATERTABLE SILL
Color: Pearl White
Manuf: Bassco Cast Stone
Keynote: 210



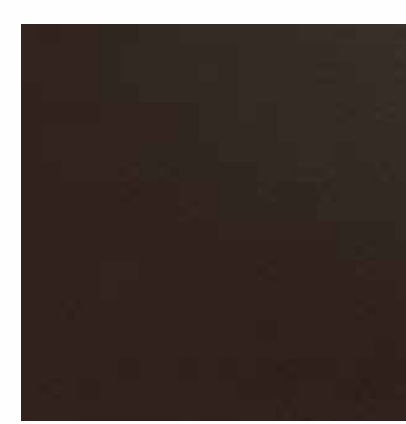
STANDING SEAM METAL ROOF
Color: Aged Bronze
Manuf: Berridge
Keynote: 9



HM DOORS
Color: SW7514 Foothills
Manuf: Sherwin Williams



STOREFRONT DOORS/WINDOWS
Color: Clear Anodized Aluminum
Manuf: YKK



OVERHEAD DOORS
Color: Kynar Brown
Manuf: Raynor



SOLARBAN® 90 (2) Clear + Clear Glass Insulating Glass Unit					
U-Factor	SHGC	Visible Transmittance	Light Transmittance	Acoustic Coefficient	Acoustic Coefficient
0.25	0.17	0.79	0.79	0.21	0.22

TINTED GLAZING
Color: Solarban 90 on Clear
Manuf: Vitro Architectural Glass



MORTAR
Color: Southern Ivory
Manuf: Southern Heritage

Tag	Text
1	Wall Pack / Electrical Fixture. See Electrical.
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Prefinished metal gutter. Match roof color.
12b	Prefinished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefinished elbow and concrete splash block. See Specification 077100 Roof Specialties.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
20	4" diameter painted concrete-filled steel pipe bollard. Color as indicated on Finish Schedule. Paint embedded portion of bollard. Use primer and two finish coats. See Details. See Specification 055000 Metal Fabrications.
22	Signage (By Others). See Electrical.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" max from wall intersection or corner and every 20'-0".
26	Fire Department Lock Box. Locate as directed by the Local Fire Marshal or AHJ. See Specification 104413 Fire Department Lock Box.
59	Gas meter. See Plumbing.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
278	Prefinished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).



① 01_Exterior Elevation_Front (West)
3/16" = 1'-0"

Express Oil Change & Tire Engineers
 Service Building
 Chapin, South Carolina

FINAL		
No.	Description	Date

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Exterior Elevation - Front (West)

Project number	25003
Date	08/11/2025
Drawn by	ARC
Checked by	N/A

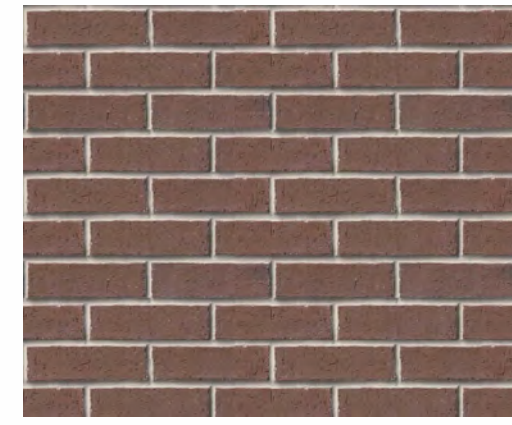
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Scale 3/16" = 1'-0"

EXTERIOR FINISH MATERIAL LEGEND



ADHERED STONE VENEER

Color: Sedona (Handcrafted)
Manuf: Horizon Stone
Keynote: 19b



CLAY FACE BRICK (FIELD)

Color: New Ashbury
Manuf: Watsontown Brick
Keynote: 18b



CLAY FACE BRICK (SOLDIER)

Color: Whitestone
Manuf: Palmetto Brick
Keynote: 17b



CAST STONE WATERTABLE SILL

Color: Pearl White
Manuf: Bassco Cast Stone
Keynote: 210



STANDING SEAM METAL ROOF

Color: Aged Bronze
Manuf: Berridge
Keynote: 9



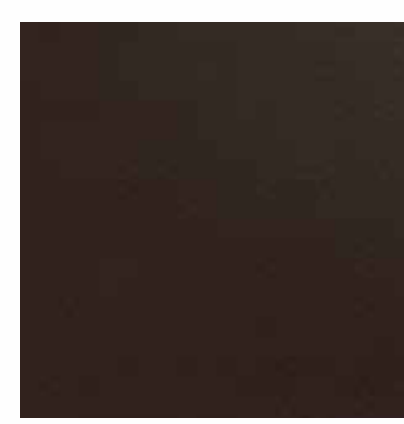
HM DOORS

Color: SW7514 Foothills
Manuf: Sherwin Williams



STOREFRONT DOORS/WINDOWS

Color: Clear Anodized Aluminum
Manuf: YKK



OVERHEAD DOORS

Color: Kynar Brown
Manuf: Raynor



TINTED GLAZING

Color: Solarban 90 on Clear
Manuf: Vitro Architectural Glass



MORTAR

Color: Southern Ivory
Manuf: Southern Heritage

SOLARBAN 90 (Clear + Clear Glass Tinting) Data Sheet					
U-T	Energy Reflectance (%)	Infrared Reflectance (%)	Visible Light Transmittance (%)	Visible Light Reflection (%)	SHGC
0.18	12%	18%	0.78	0.02	0.22

Glazing Percentage

Total ground floor SF of facade: 1187
Total ground level SF of glazing: 357
Percentage of glazing on East Elevation: 30%

Keynote Schedule	
Tag	Text
1	Wall Pack / Electrical Fixture. See Electrical.
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Prefinished metal gutter. Match roof color.
11	Pre-finished metal canopy. See Details.
12b	Prefinished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefinished elbow and concrete splash block. See Specification 077100 Roof Specialties.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
20	4" diameter painted concrete-filled steel pipe bollard. Color as indicated on Finish Schedule. Paint embedded portion of bollard. Use primer and two finish coats. See Details. See Specification 055000 Metal Fabrications.
22	Signage (By Others). See Electrical.
23	Wall sconce (By Others). See Electrical. Locate junction box for sconces 5'-0" a.f. vertically and 4" from center horizontally. Verify with sign company prior to rough-in.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" max from wall intersection or corner and every 20'-0".
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
47	Provide address identification as directed by the Local Fire Marshal or AHJ.
56	Metal louver or vent. Color to match adjacent surface. See Mechanical.
59	Gas meter. See Plumbing.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
278	Prefinished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).



02 Exterior Elevation Rear (East)
3/16" = 1'-0"



Express Oil Change & Tire Engineers
Service Building
Chapin, South Carolina

FINAL		
No.	Description	Date

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Exterior Elevation - Rear (East)

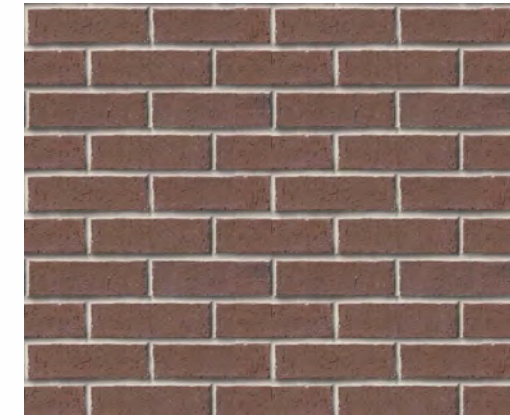
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Date: 08/11/2025
Drawn by: ARC
Checked by: N/A

A201
Scale: 3/16" = 1'-0"

EXTERIOR FINISH MATERIAL LEGEND



ADHERED STONE VENEER
Color: Sedona (Handcrafted)
Manuf: Horizon Stone
Keynote: 19b



CLAY FACE BRICK (FIELD)
Color: New Ashbury
Manuf: Watsontown Brick
Keynote: 18b



CLAY FACE BRICK (SOLDIER)
Color: Whitestone
Manuf: Palmetto Brick
Keynote: 17b



CAST STONE WATERTABLE SILL
Color: Pearl White
Manuf: Bassco Cast Stone
Keynote: 210



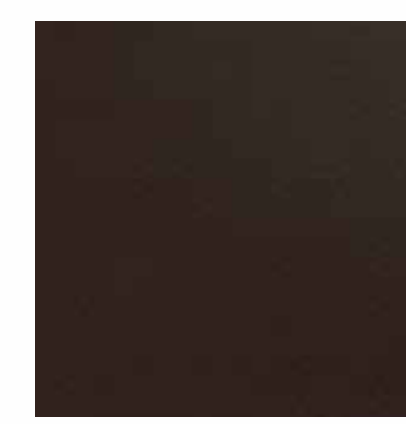
STANDING SEAM METAL ROOF
Color: Aged Bronze
Manuf: Berridge
Keynote: 9



HM DOORS
Color: SW7514 Foothills
Manuf: Sherwin Williams



STOREFRONT DOORS/WINDOWS
Color: Clear Anodized Aluminum
Manuf: YKK



OVERHEAD DOORS
Color: Kynar Brown
Manuf: Raynor



TINTED GLAZING
Color: Solarban 90 on Clear
Manuf: Vitro Architectural Glass



MORTAR
Color: Southern Ivory
Manuf: Southern Heritage

Keynote Schedule	
Tag	Text
1	Wall Pack / Electrical Fixture. See Electrical.
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Prefinished metal gutter. Match roof color.
11	Prefinished metal canopy. See Details.
12b	Prefinished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefinished elbow and concrete splash block. See Specification 077100 Roof Specialties.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
20	4" diameter painted concrete-filled steel pipe bollard. Color as indicated on Finish Schedule. Paint embedded portion of bollard. Use primer and two finish coats. See Details. See Specification 055000 Metal Fabrications.
22	Signage (By Others). See Electrical.
23	Wall sconce (By Others). See Electrical. Locate junction box for sconces 5'-0" a.f.f. vertically and 4" from center horizontally. Verify with sign company prior to rough-in.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" max from wall intersection or corner and every 20'-0".
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
44	Concrete apron as required. Slope away from building with 3% slope minimum. See Civil. Maintain 2% slope max at all man doors.
47	Provide address identification as directed by the Local Fire Marshal or AHJ.
56	Metal louver or vent. Color to match adjacent surface. See Mechanical.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
278	Prefinished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).



08/11/2025



08/11/2025

Express Oil Change & Tire Engineers
Service Building
Chapin, South Carolina

FINAL

No.	Description	Date

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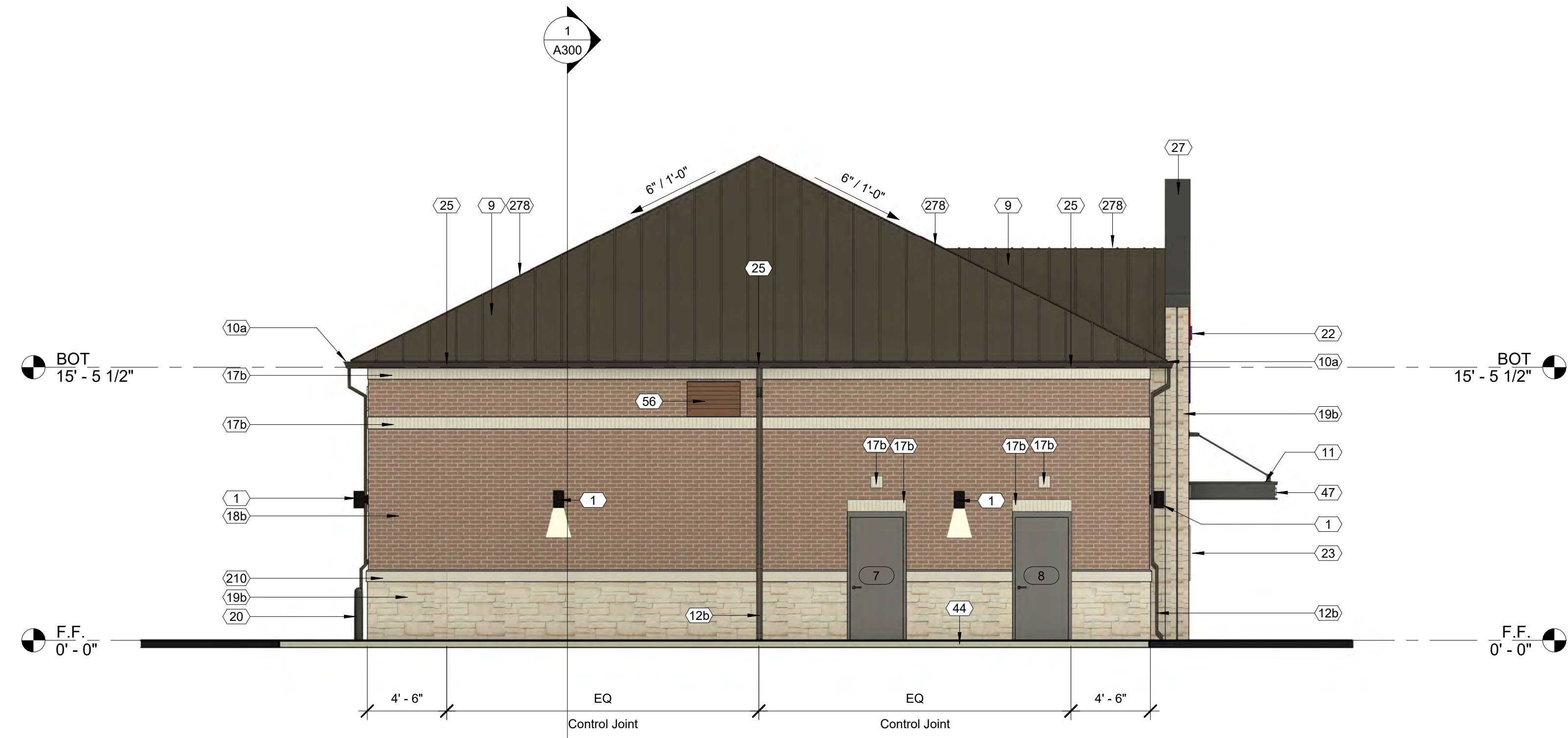
Exterior Elevation - Right (South)

Project number 25003
Date 08/11/2025
Drawn by ARC
Checked by N/A

A202

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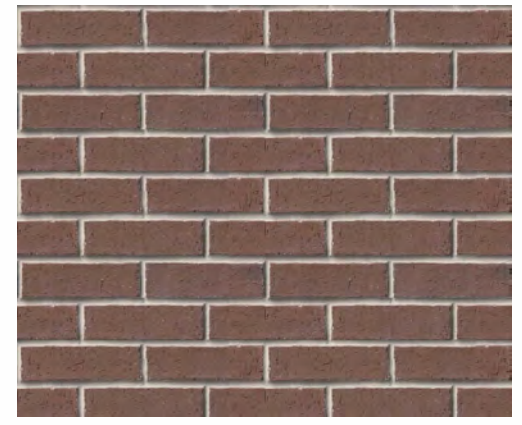


1 03 Exterior Elevation Right (South)
3/16" = 1'-0"

EXTERIOR FINISH MATERIAL LEGEND



ADHERED STONE VENEER
 Color: Sedona (Handcrafted)
 Manuf: Horizon Stone
 Keynote: 19b



CLAY FACE BRICK (FIELD)
 Color: New Ashbury
 Manuf: Watson Brick
 Keynote: 18b



CLAY FACE BRICK (SOLDIER)
 Color: Whitestone
 Manuf: Palmetto Brick
 Keynote: 17b



CAST STONE WATERTABLE SILL
 Color: Pearl White
 Manuf: Bassco Cast Stone
 Keynote: 210



STANDING SEAM METAL ROOF
 Color: Aged Bronze
 Manuf: Berridge
 Keynote: 9



HM DOORS
 Color: SW7514 Foothills
 Manuf: Sherwin Williams



STOREFRONT DOORS/WINDOWS
 Color: Clear Anodized Aluminum
 Manuf: YKK



OVERHEAD DOORS
 Color: Kynar Brown
 Manuf: Raynor

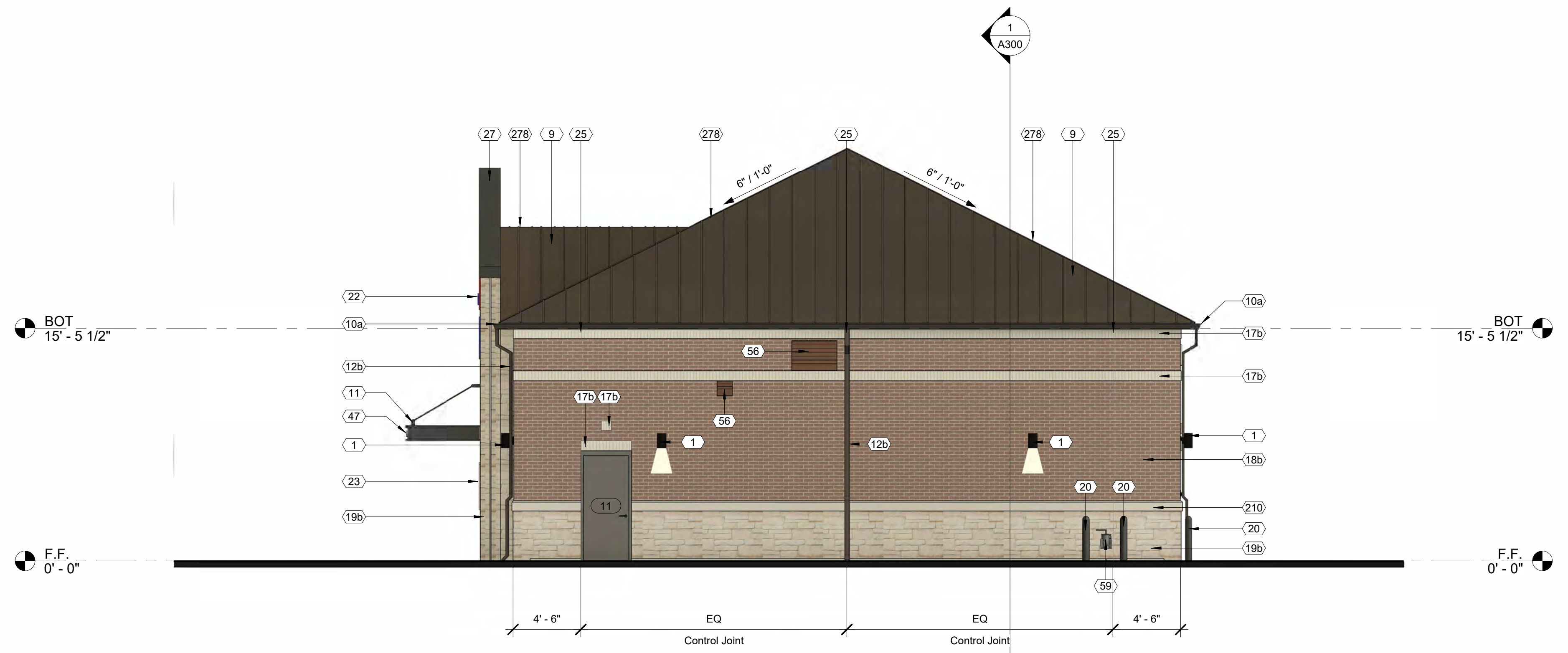


TINTED GLAZING
 Color: Solarban 90 on Clear
 Manuf: Vitro Architectural Glass

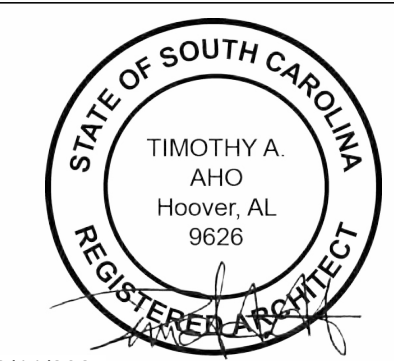


MORTAR
 Color: Southern Ivory
 Manuf: Southern Heritage

Keynote Schedule	
Tag	Text
1	Wall Pack / Electrical Fixture. See Electrical.
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Prefinished metal gutter. Match roof color.
11	Pre-finished metal canopy. See Details.
12b	Prefinished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefabricated elbow and concrete splash block. See Specification 077100 Roof Specialties.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
20	4" diameter painted concrete-filled steel pipe bollard. Color as indicated on Finish Schedule. Paint embedded portion of bollard. Use primer and two finish coats. See Details. See Specification 055000 Metal Fabrications.
22	Signage (By Others). See Electrical.
23	Wall sconce (By Others). See Electrical. Locate junction box for sconces 5'-0" a.f.f. vertically and 4" from center horizontally. Verify with sign company prior to rough-in.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" max from wall intersection or corner and every 20'-0".
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
47	Provide address identification as directed by the Local Fire Marshal or AHJ.
56	Metal louver or vent. Color to match adjacent surface. See Mechanical.
59	Gas meter. See Plumbing.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
278	Prefinished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).



① 04_ Exterior Elevation Left (North)
 3/16" = 1'-0"



Express Oil Change & Tire Engineers
 Service Building
 Chapin, South Carolina

FINAL

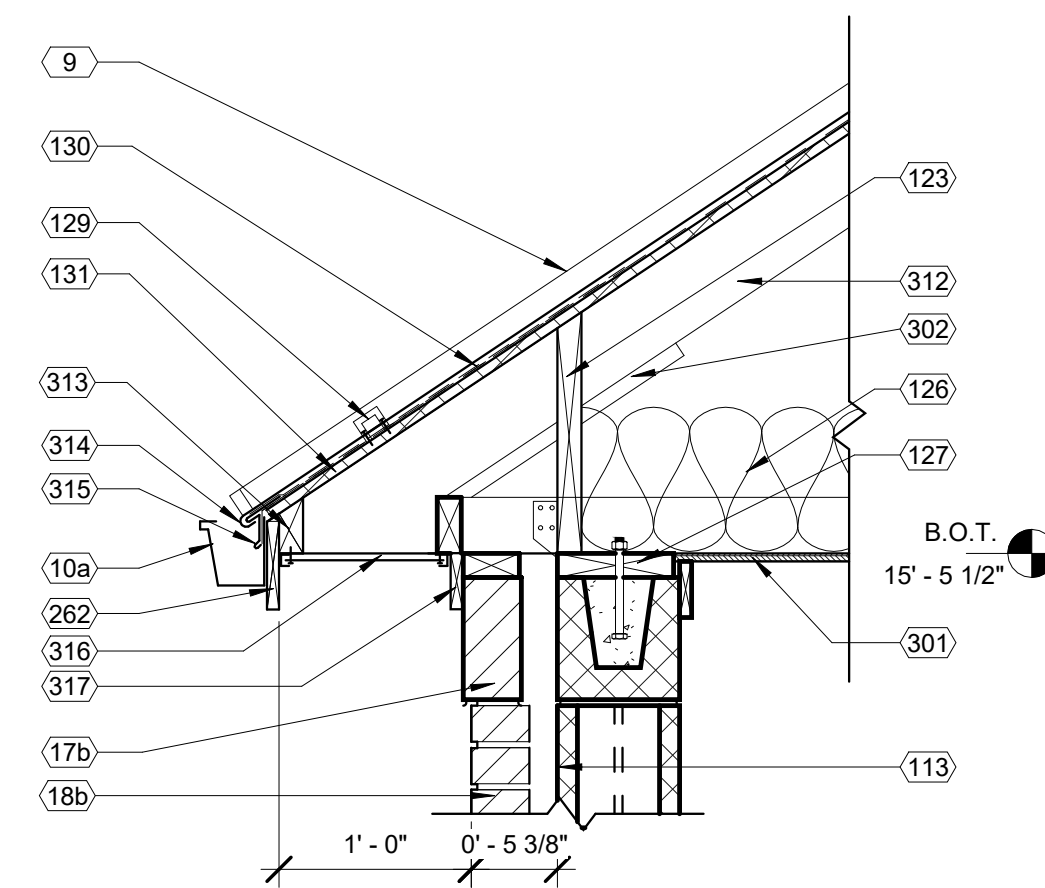
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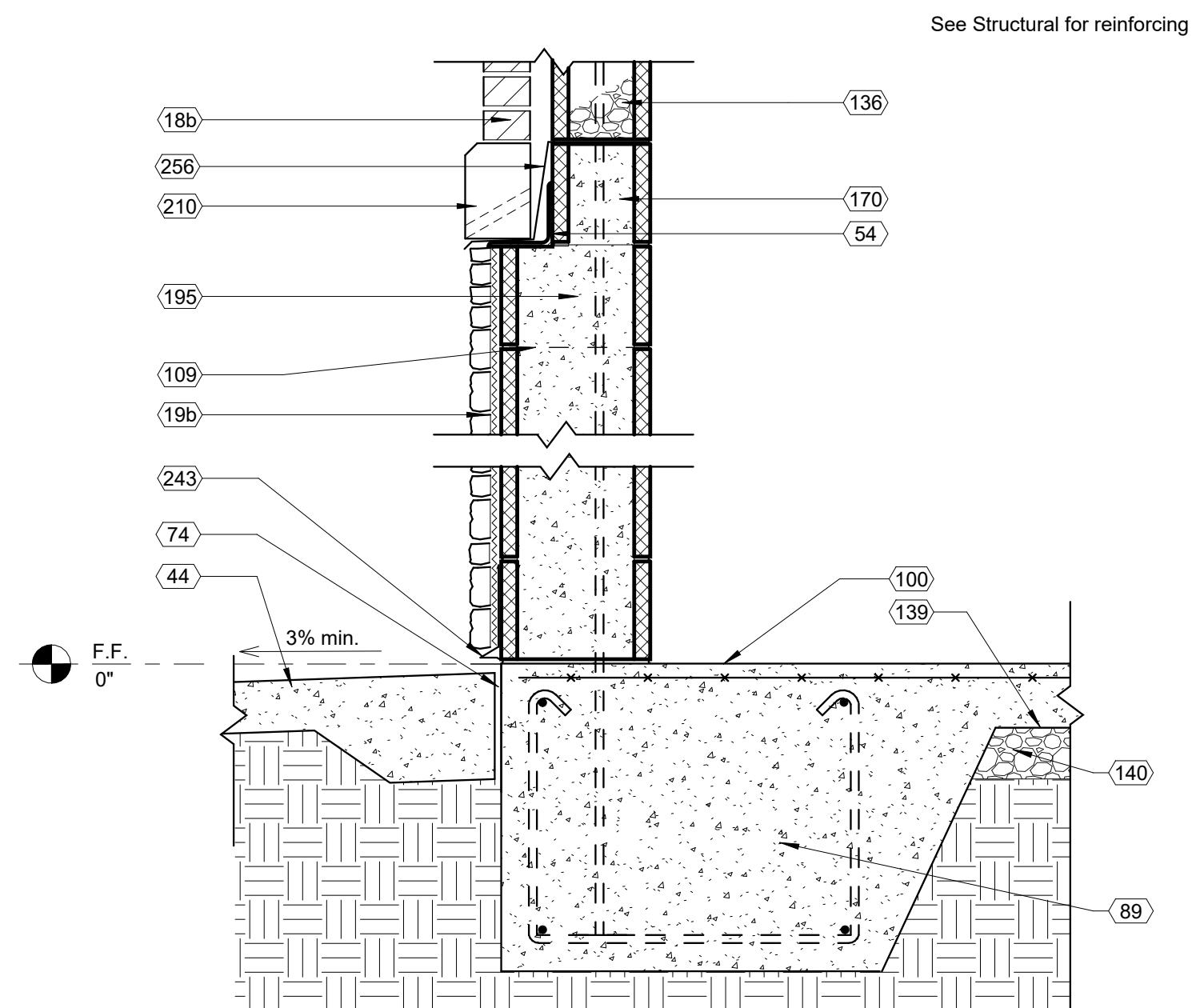
Exterior Elevation - Left (North)

Project number	25003
Date	08/11/2025
Drawn by	ARC
Checked by	N/A

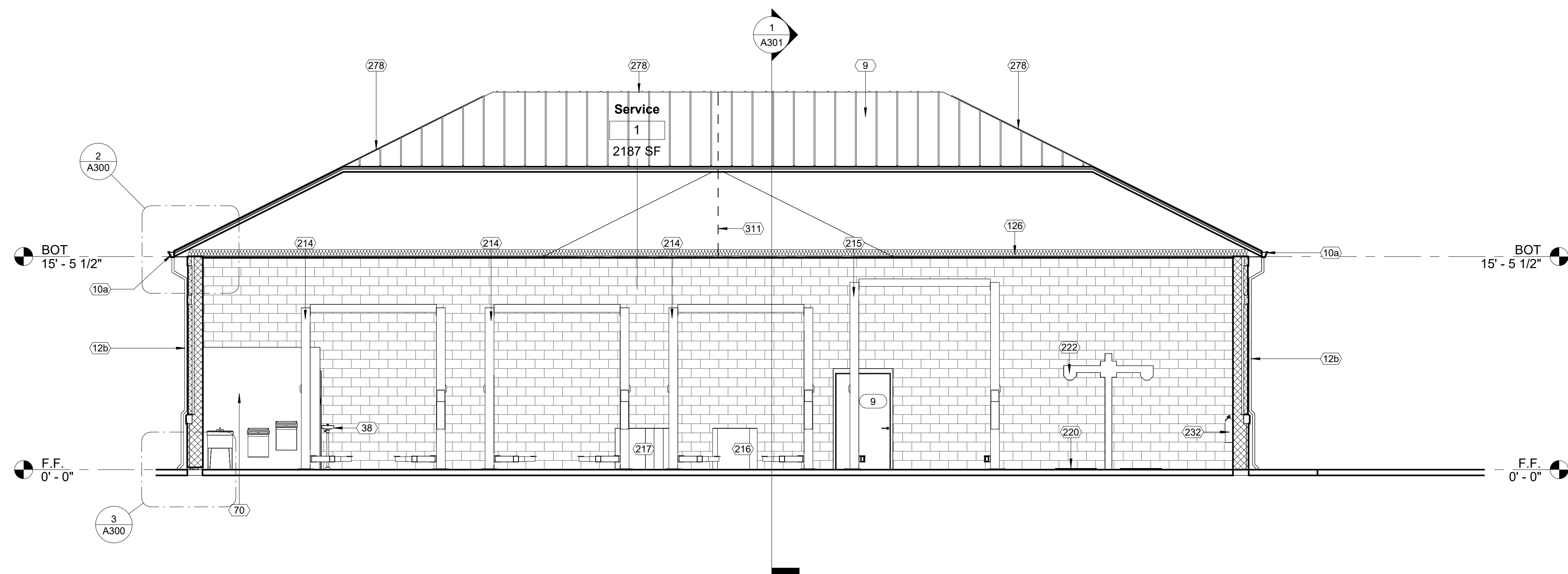
A203
 Scale 3/16" = 1'-0"



2 DT A300 Eave Detail @ Masonry
1" = 1'-0"

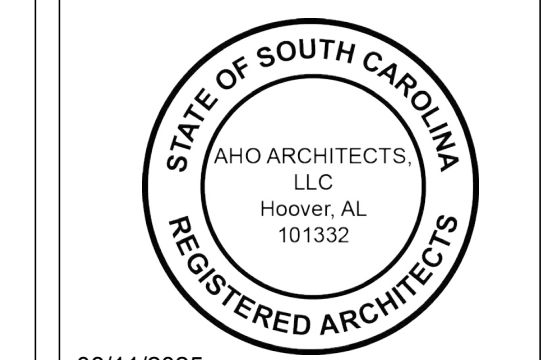


3 DT Sheet A300 Slab On Grade
1" = 1'-0"

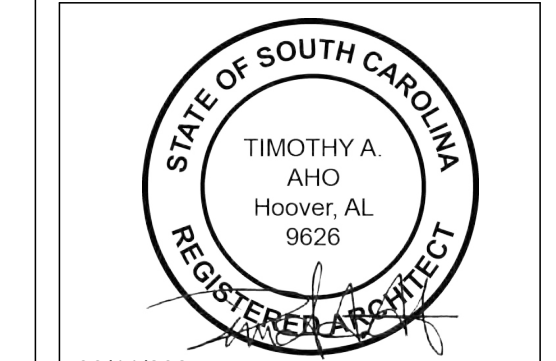


1 Building Section 1
3/16" = 1'-0"

Keynote Schedule	
Tag	Text
9	Pre-finished standing seam metal roof system. See Specification 074113.16
	Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Prefinished metal gutter. Match roof color.
12b	Prefinished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefinished elbow and concrete splash block. See Specification 077100 Roof Specialties.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
38	Eyewash station. See Plumbing.
44	Concrete apron as required. Slope away from building with 3% slope minimum. See Civil. Maintain 2% slope max at all man doors.
54	Steel angle. See Structural.
70	Full-height FRP, entire wall, unless otherwise noted. See Specification 066400 Plastic Paneling (Fiberglass Reinforced Panels).
74	1/2" expansion joint with backer rod and sealant.
89	Concrete foundation. See Structural.
100	Concrete slab. See Structural.
109	Horizontal joint reinforcement at 16" o.c. vertical.
113	Fluid applied vapor permeable air barrier. See Specification 072726 Fluid Applied Membrane Air Barrier.
123	Blocking. See Structural.
126	Unfaced R-38 batt insulation. See Specification 072100 Thermal Insulation.
127	2x pressure treated wood nailer.
129	"H" clips at mid-span on standing seam metal roof.
130	2 layers of #15 roofing felt.
131	5/8" pressure treated plywood decking. See Structural.
136	Pea gravel above through wall flashing.
139	10 mil vapor barrier. See Specification 072600 Vapor Retarders.
140	Porous fill. See Geotechnical Report.
170	Fill first course of CMU with grout.
195	CMU.
210	Cast stone waterable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
214	10K Lift (By Others).
215	12K Lift (By Others).
216	Tire changer (By Others).
217	Wheel balancer (By Others).
220	Scissor lift alignment (By Others).
222	Alignment scarecrow (By Others).
232	Bracket mounted fire extinguisher. See Specification Section 104416 Fire Extinguishers. Provide sign at all fire extinguisher locations which may be visually obstructed. See Details.
243	Weep screed. Keep adhered stone veneer 2" above paved areas and 4" above grade, typical.
256	Prefinished metal flashing and counterflashing.
262	2x pressure treated painted wood fascia.
278	Prefinished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).
301	Painted fire rated 1/2" thick plywood with painted 1/4" x 1 1/2" wood batten strips at seams and secured to underside of roof trusses.
302	Insulation baffle.
311	Provide attic draftstop partition and access door per IBC. Wall shall read "Seal All Penetrations" every 25'-0" o.c. Attic "floor" area within draftstop areas shall not exceed 3,000 s.f. Draftstop materials shall not be less
312	Pre-engineered wood roof truss. See Structural.
313	2x wood sub-fascia, continuous.
314	Field cut seam and form pan around eave flashing.
315	Eave flashing with drip edge.
316	Painted, vented soffit. Provide paintable PVC jointer between soffit panels.
317	Painted PT 1x frieze board continuous.



08/11/2025



08/11/2025

Express Oil Change & Tire Engineers
Service Building
Chapin, South Carolina

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No.	Description	Date

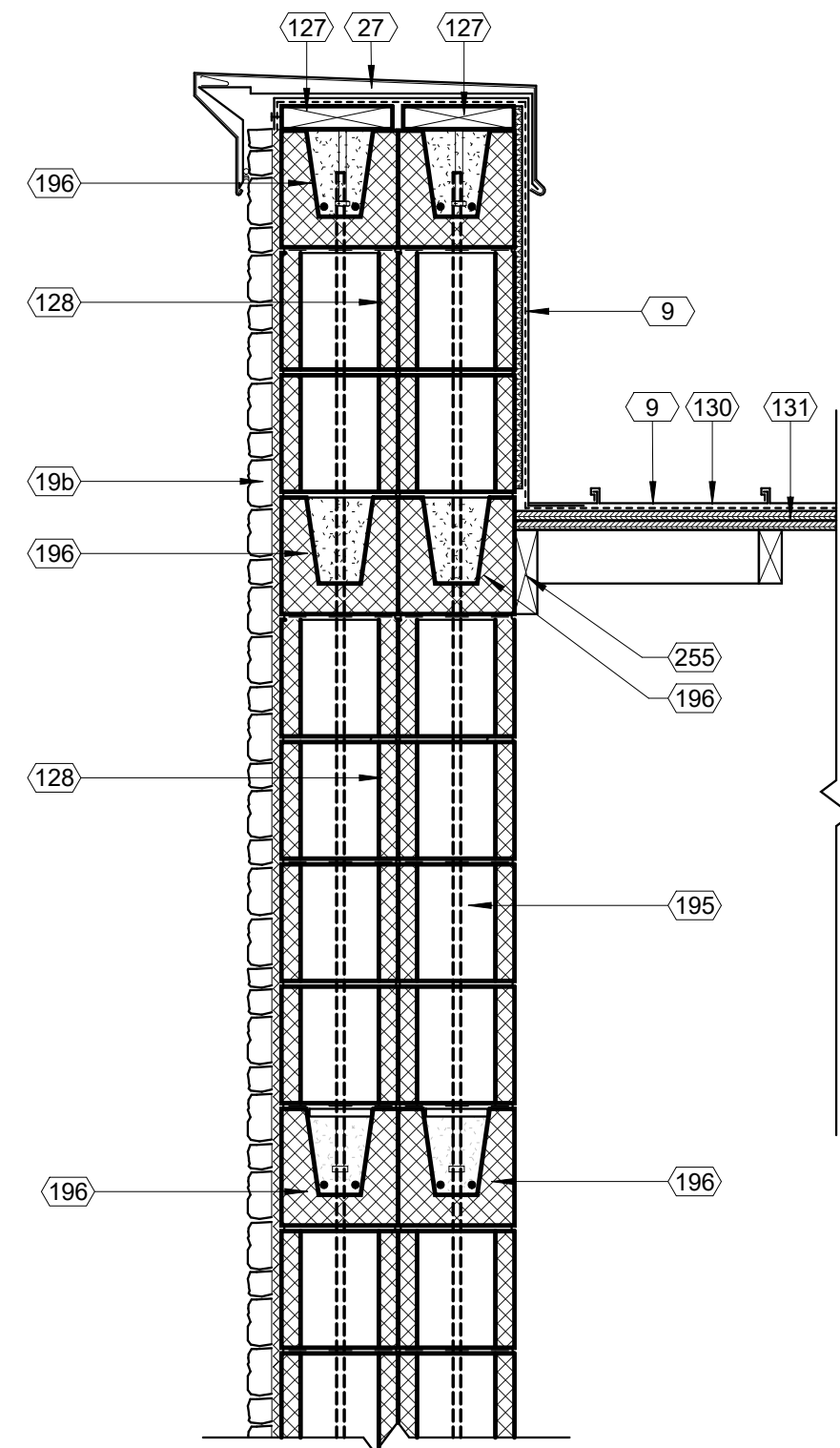
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Building Sections

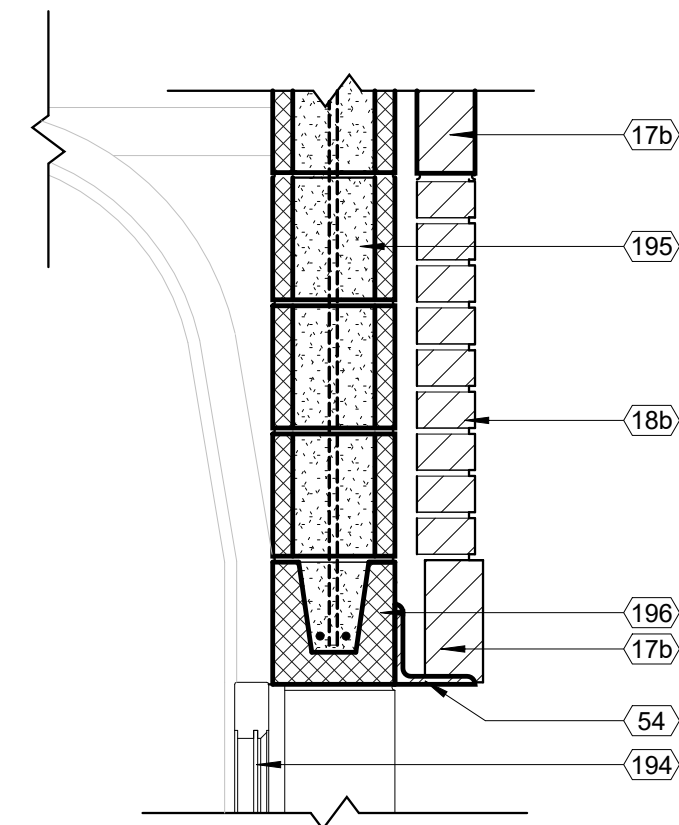
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Date	08/11/2025
Drawn by	ARC
Checked by	N/A

A300
Scale As indicated

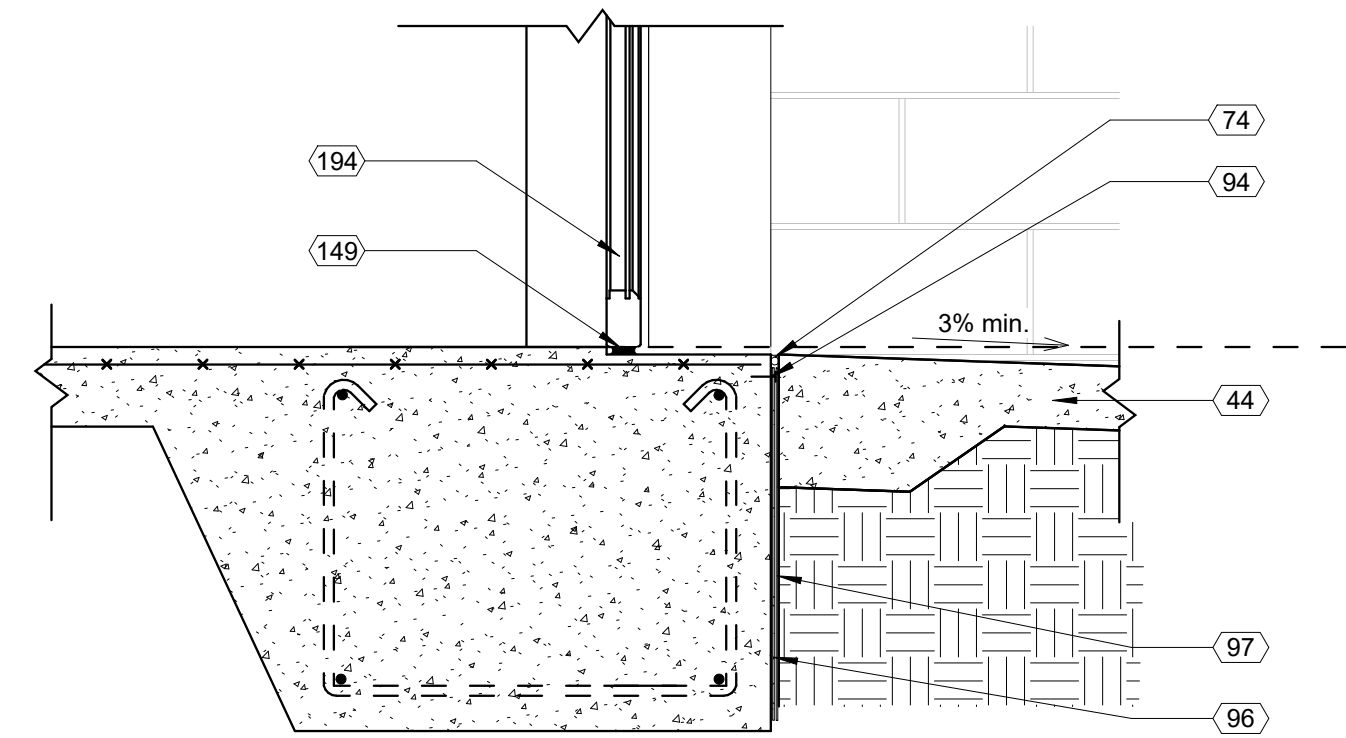
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2 DT Sheet A302 Roof at Stone wall
1" = 1'-0"

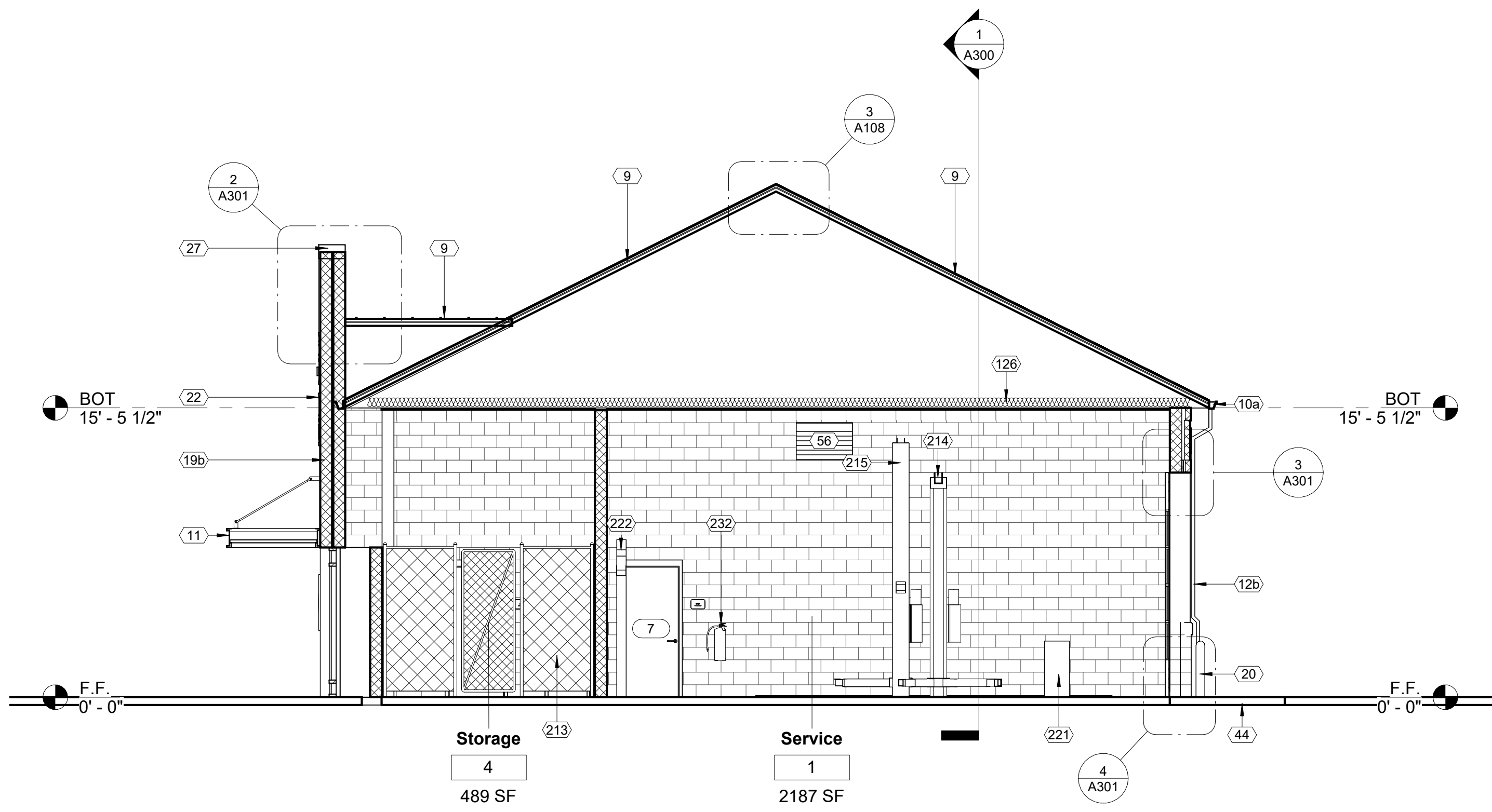


3 DT Sheet A302_OH Door Head Detail
1" = 1'-0"



4 DT Sheet A301 Slab Detail @ O.H. Door
1" = 1'-0"

Keynote Schedule	
Tag	Text
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Pre-finished metal gutter. Match roof color.
11	Pre-finished metal canopy. See Details.
12b	Pre-finished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefinished elbow and concrete splash block. See Specification 077100 Roof Specialties.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
20	4" diameter painted concrete-filled steel pipe bollard. Color as indicated on Finish Schedule. Paint embedded portion of bollard. Use primer and two finish coats. See Details. See Specification 055000 Metal Fabrications.
22	Signage (By Others). See Electrical.
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
44	Concrete apron as required. Slope away from building with 3% slope minimum. See Civil. Maintain 2% slope max at all man doors.
54	Steel angle. See Structural.
56	Metal louver or vent. Color to match adjacent surface. See Mechanical.
74	1/2" expansion joint with backer rod and sealant.
94	Fasteners at 12" max o.c. for securing subdrainage to pit wall. Follow manufacturer's installation instructions.
96	CCW MiraClay woven geotextile against wall/slab.
97	CCW MiraDrain 6200.
126	Unfaced R-38 batt insulation. See Specification 072100 Thermal Insulation.
127	2x pressure treated wood nailer.
128	Painted smooth-face 8" concrete-filled "U" block bond beam. Condition varies. See Structural.
130	2 layers of #15 roofing felt.
131	5/8" pressure treated plywood decking. See Structural.
149	1/2" recess at scheduled door. See Structural.
194	Scheduled door. See plans for details.
195	CMU.
196	Closed bottom CMU bond beam. See Structural.
213	Full height chain-link fence with 3'-0"x7'-0" gate.
214	10K Lift (By Others).
215	12K Lift (By Others).
221	Scissor lift alignment console (By Others). Provide conduit in slab as required. See alignment lift specifications (By Others).
222	Alignment scarecrow (By Others).
232	Bracket mounted fire extinguisher. See Specification Section 104416 Fire Extinguishers. Provide sign at all fire extinguisher locations which may be visually obstructed. See Details.
255	2x pressure treated wood blocking.



1 Building Section 2
3/16" = 1'-0"



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08/11/2025

Express Oil Change & Tire Engineers
Service Building
Chapin, South Carolina

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Building Sections

Project number 25003
Date 08/11/2025
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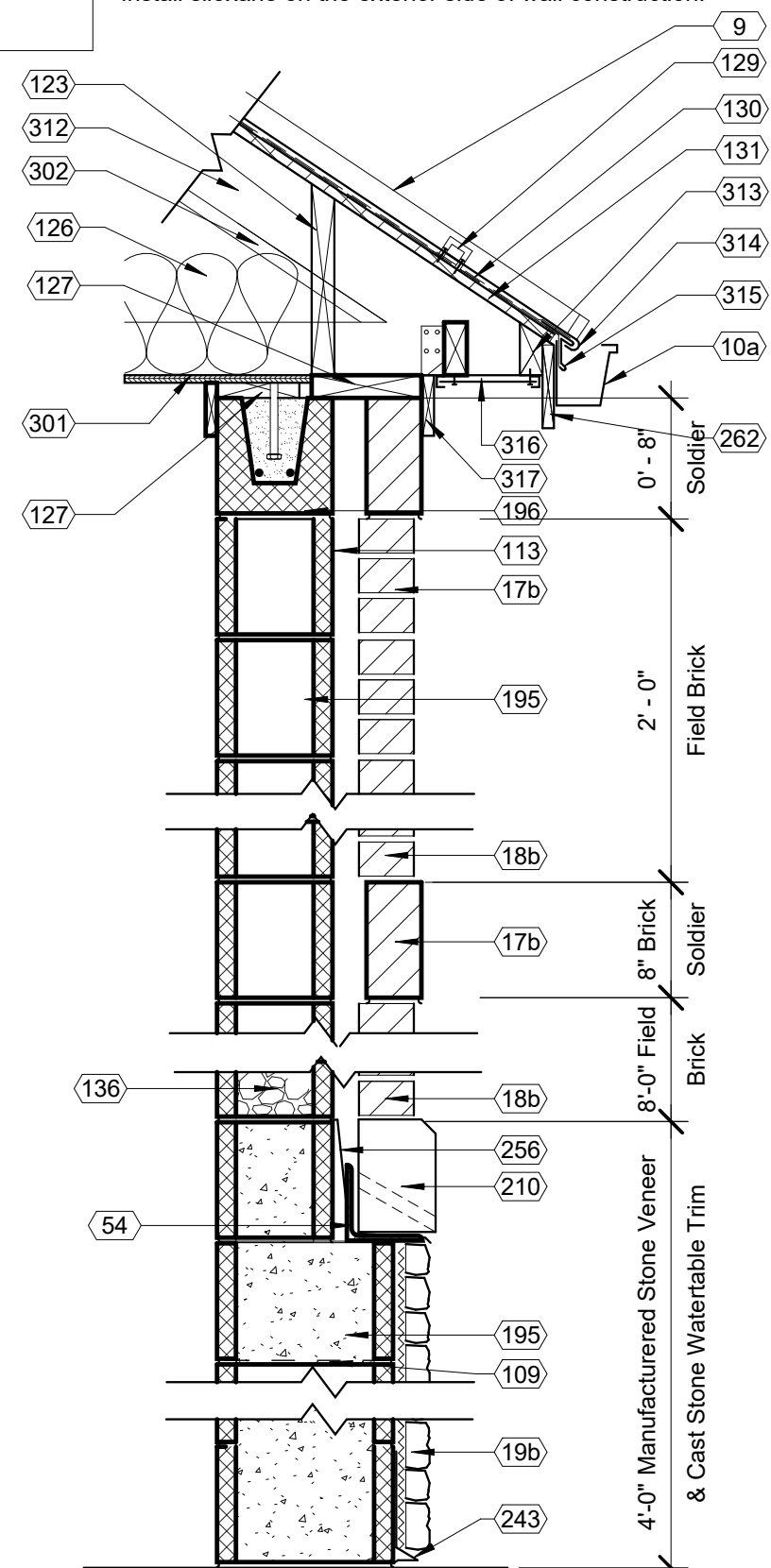
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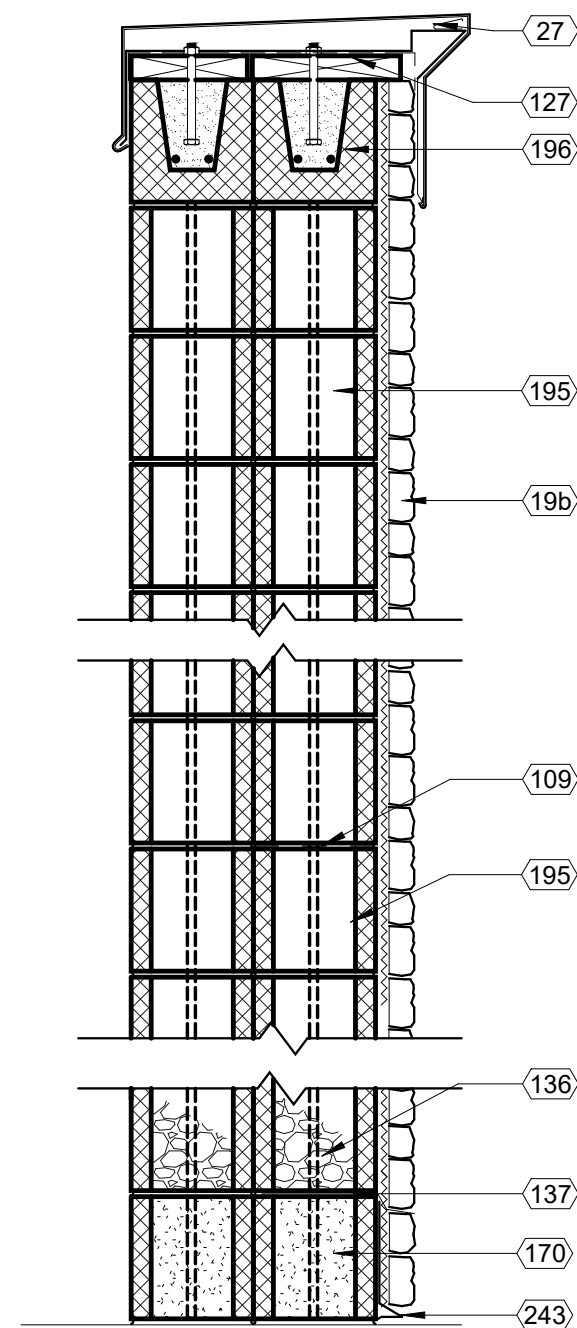
E2

Refer to structural drawings for reinforcing, grouting, and other information.
Install siloxane on the exterior side of wall construction.



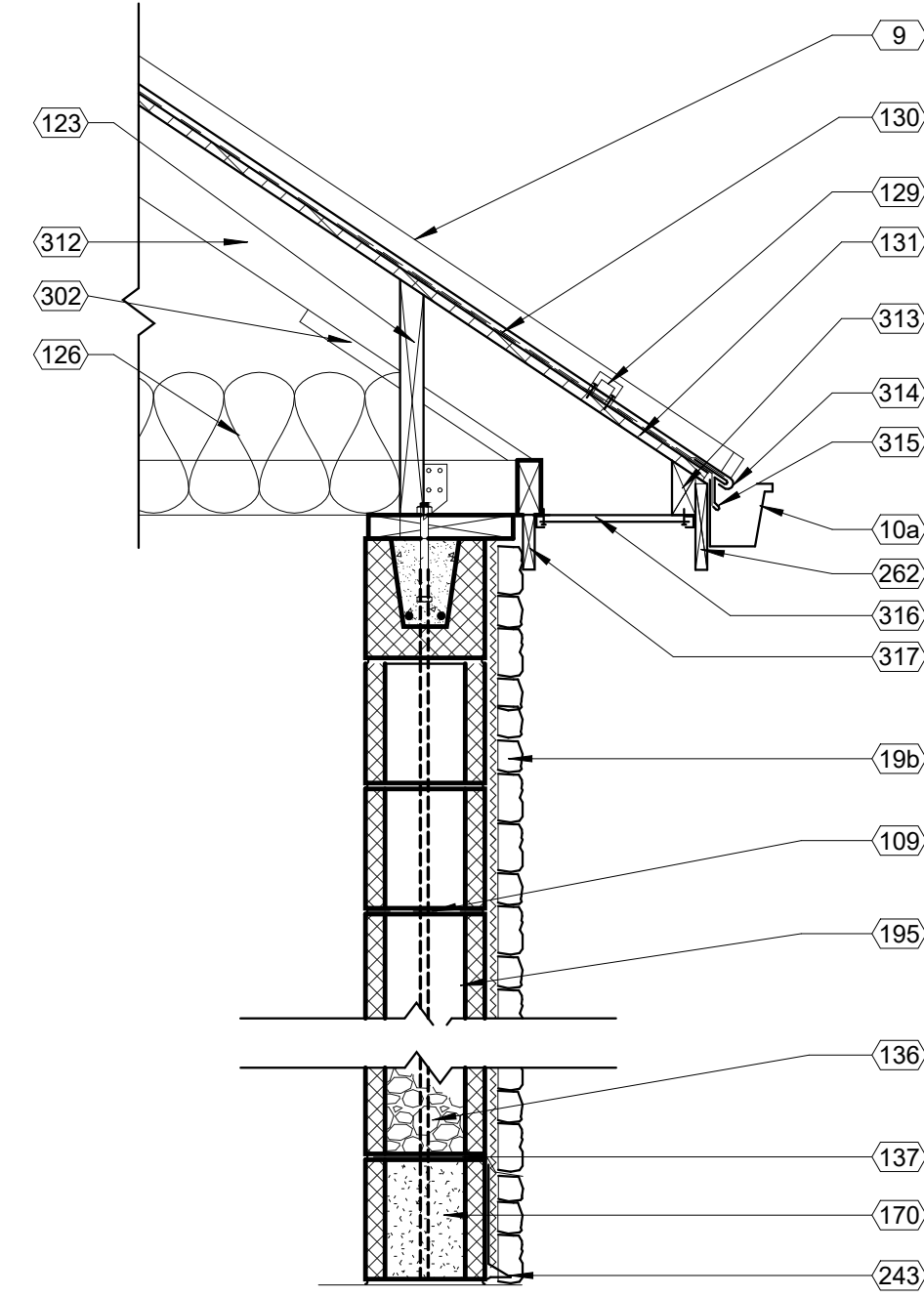
E3

Refer to structural drawings for reinforcing and other information.
Install siloxane on the exterior side of wall construction



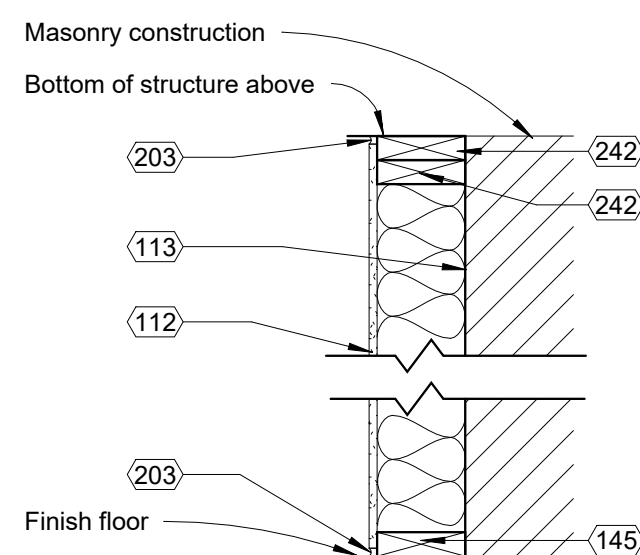
E4

Refer to structural drawings for reinforcing and other information.
Install siloxane on the exterior side of wall construction



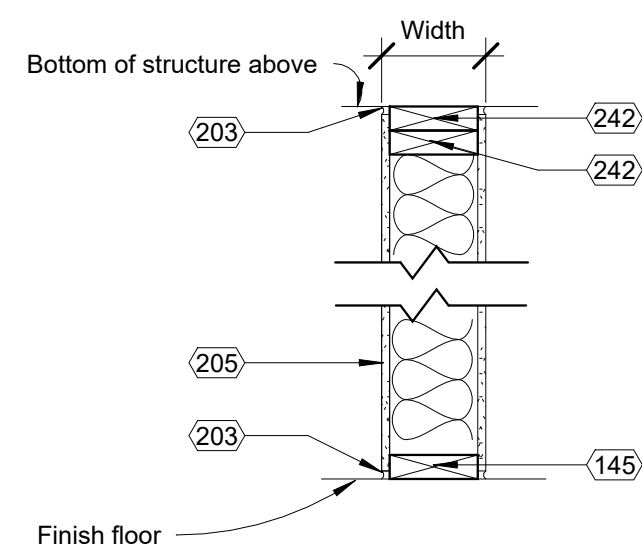
Wall Type No.	Description	Width	Ref Test	Wall Type No.	Description	Width	Ref Test	Wall Type No.	Description	Width	Ref Test
E2	As shown	VARIES	-	E3	As shown	1'-6"	-	E3	As shown	10"	-

I2



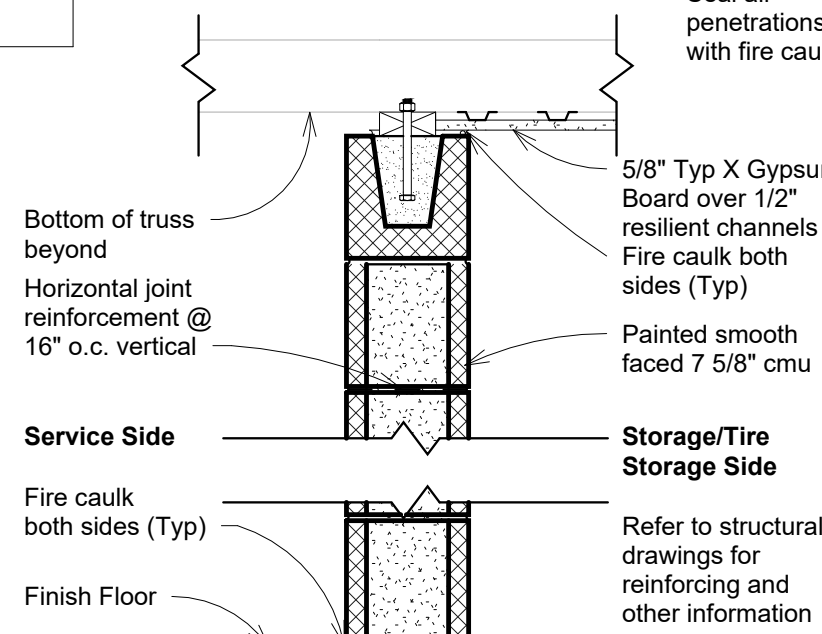
I3

Note: Stagger electrical outlet boxes, switches, etc. Seal around all penetrations in wall with acoustical sealant.

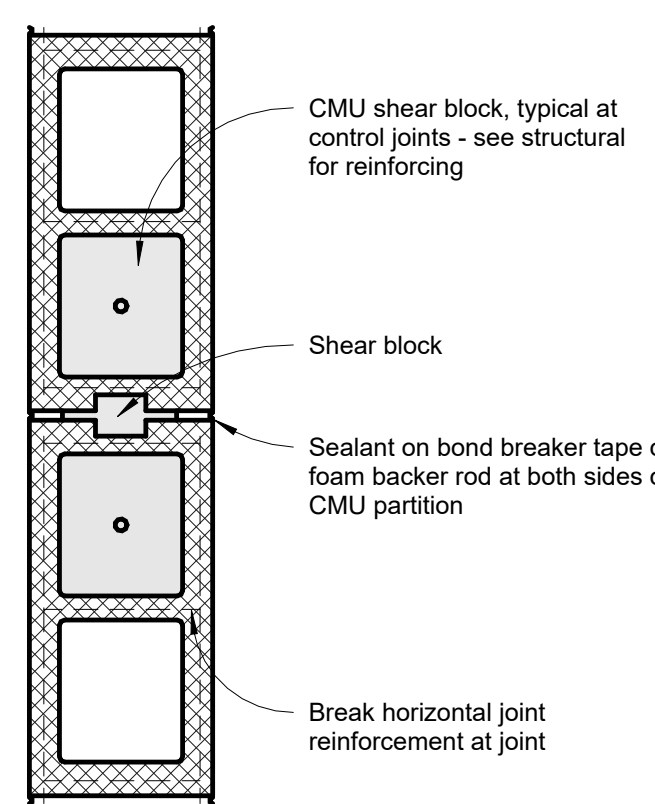


I4

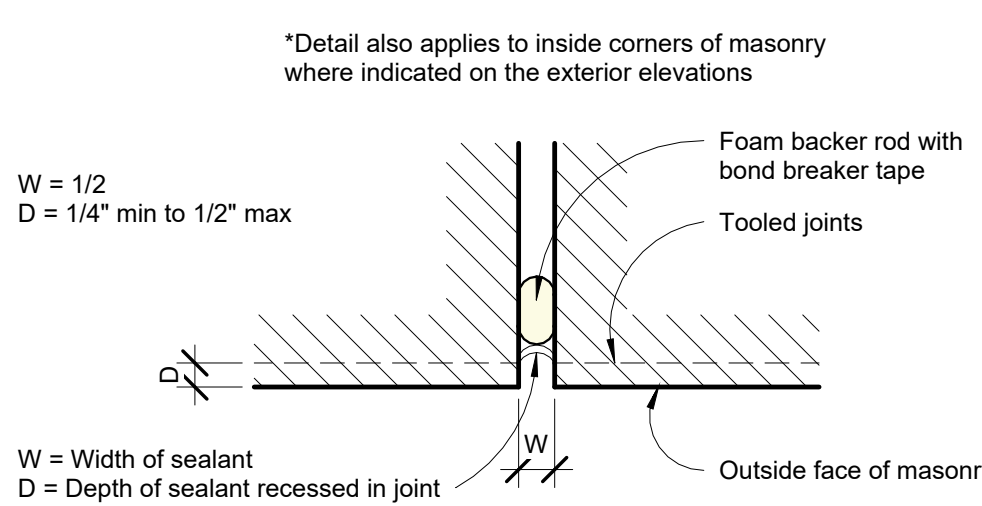
Seal all penetrations with fire caulk



Wall Type No.	Description	Width	Ref Test	Wall Type No.	Description	Width	Ref Test	Wall Type No.	Description	Width	Ref Test
I2	As shown	6"	-	I3	As shown	6 1/2"	-	I4	2 Hour rated wall assembly. (1 hour required.) 1 Hour rated ceiling assembly.	Varies	U905 (CMU) / P522 Ceiling



1 DT_Sheet A400_Masonry Control Joint
1 1/2" = 1'-0"



2 DT_Sheet A400_Sealant Detail
6" = 1'-0"

Keystone Schedule

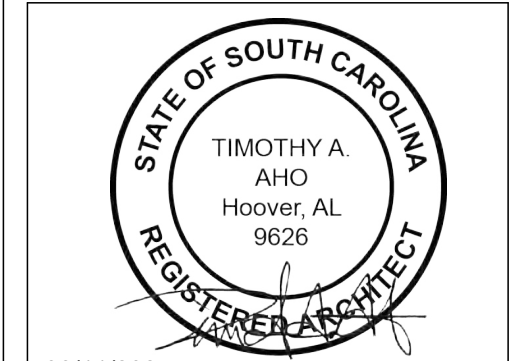
Tag	Text
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Prefinished metal gutter. Match roof color.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
54	Steel angle. See Structural.
109	Horizontal joint reinforcement at 16" o.c. vertical.
112	Painted 1/2" gypsum board on 2x6 wood studs at 16" o.c. with kraft-face R-20 batt insulation (kraft in contact with gypsum board). See Details.
113	Fluid applied vapor permeable air barrier. See Specification 072726 Fluid Applied Membrane Air Barrier.
123	Blocking. See Structural.
126	Unfaced R-38 batt insulation. See Specification 072100 Thermal Insulation.
127	2x pressure treated wood nailer.
129	"H" clips at mid-span on standing seam metal roof.
130	2 layers of #15 roofing felt.
131	5/8" pressure treated plywood decking. See Structural.
136	Pea gravel above through wall flashing.
137	Flashing between first and second course to utilize BlockFlash in addition to the pea gravel specified. Provide a drainage mat in open masonry cell directly above the BlockFlash pan.

Keystone Schedule

Tag	Text
145	2x pressure treated wood sill plate.
170	Fill first course of CMU with grout.
195	CMU.
196	Closed bottom CMU bond beam. See Structural.
203	Acoustical sealant and backer rod. See Specification 079219 Acoustical Joint Sealants.
205	1 layer of 1/2" painted gypsum board on both sides of 2"x6" wood studs at 16" o.c. Infill with kraft-faced R-20 batt insulation. Kraft in contact with gypsum board.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
242	2x pressure treated wood top plate.
243	Weep screed. Keep adhered stone veneer 2" above paved areas and 4" above grade, typical.
256	Prefinished metal flashing and counterflashing.
262	2x pressure treated painted wood fascia.
301	Painted fire rated 1/2" thick plywood with painted 1/4" x 1 1/4" wood batten strips at seams and secured to underside of roof trusses.
302	Insulation baffle.
312	Pre-engineered wood roof truss. See Structural.
313	2x wood sub-fascia, continuous.
314	Field cut seam and form pan around eave flashing.
315	Eave flashing with drip edge.
316	Painted, vented soffit. Provide paintable PVC jointer between soffit panels.
317	Painted PT 1x frieze board continuous.



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Express Oil Change & Tire Engineers
Service Building
Chapin, South Carolina

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Wall Types

Project number	25003
Date	08/11/2025
Drawn by	ARC
Checked by	N/A

A400

Scale As indicated



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Interior Elevations

Project number 25003
Date 08/11/2025

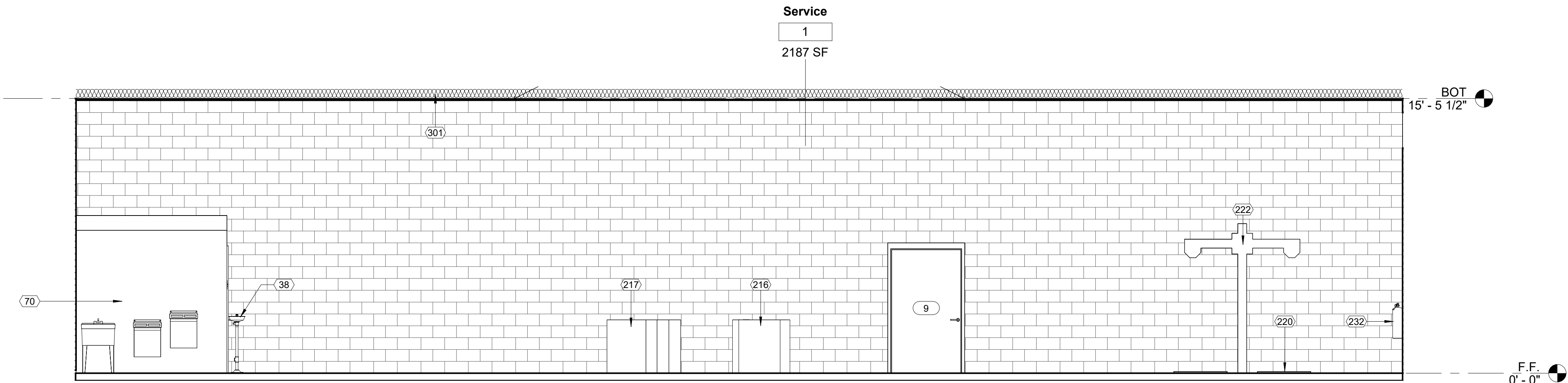
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A600

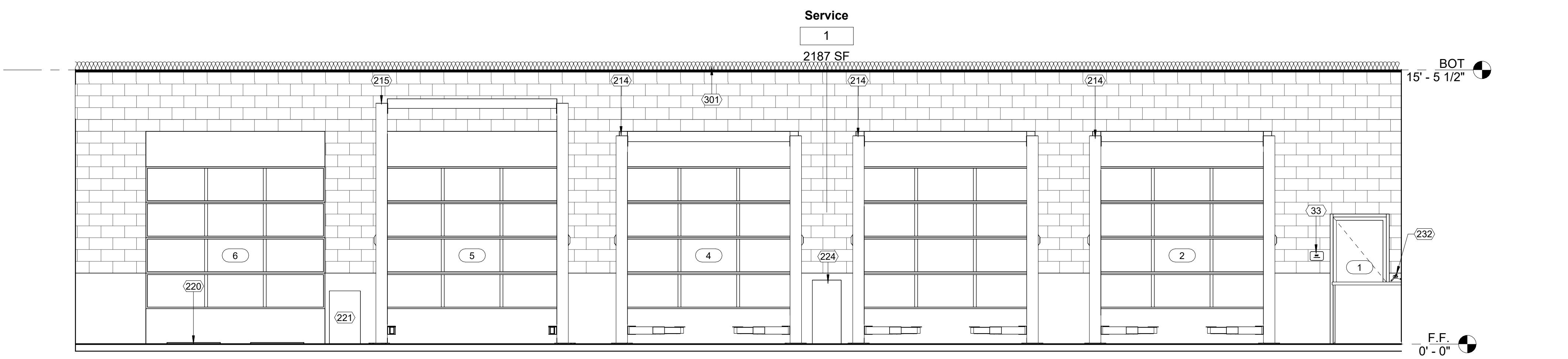
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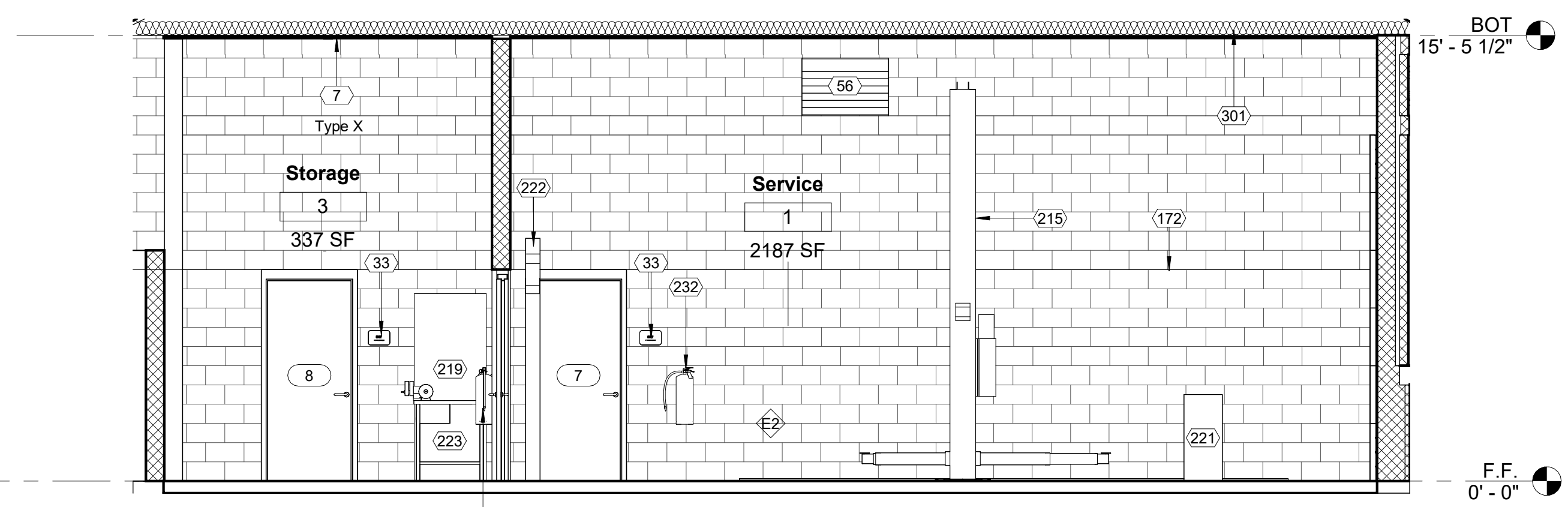
Tag	Text
7	Painted 1/2" gypsum board ceiling secured to structure above. 5/8" Type X where indicated. See Details for # of layers.
33	ADA compliant room / exit sign. See Details.
38	Eyewash station. See Plumbing.
56	Metal louver or vent. Color to match adjacent surface. See Mechanical.
70	Full-height FRP, entire wall, unless otherwise noted. See Specification 066400 Plastic Paneling (Fiberglass Reinforced Panels).
172	Ensure paint line occurs at top of door and window frames. Ensure all openings, alcoves and windows align with top of door frame. Typical in Oil and Service Bays.
213	Full height chain-link fence with 3'-0"x7'-0" gate.
214	10K Lift (By Others).
215	12K Lift (By Others).
216	Tire changer (By Others).
217	Wheel balancer (By Others).
219	Air compressor (By Others).
220	Scissor lift alignment (By Others).
221	Scissor lift alignment console (By Others). Provide conduit in slab as required. See alignment lift specifications (By Others).
222	Alignment scarecrow (By Others).
223	Work bench (By Others).
224	Strut compressor (By Others).
232	Bracket mounted fire extinguisher. See Specification Section 104416 Fire Extinguishers. Provide sign at all fire extinguisher locations which may be visually obstructed. See Details.
301	Painted fire rated 1/2" thick plywood with painted 1/4" x 1 1/4" wood batten strips at seams and secured to underside of roof trusses.



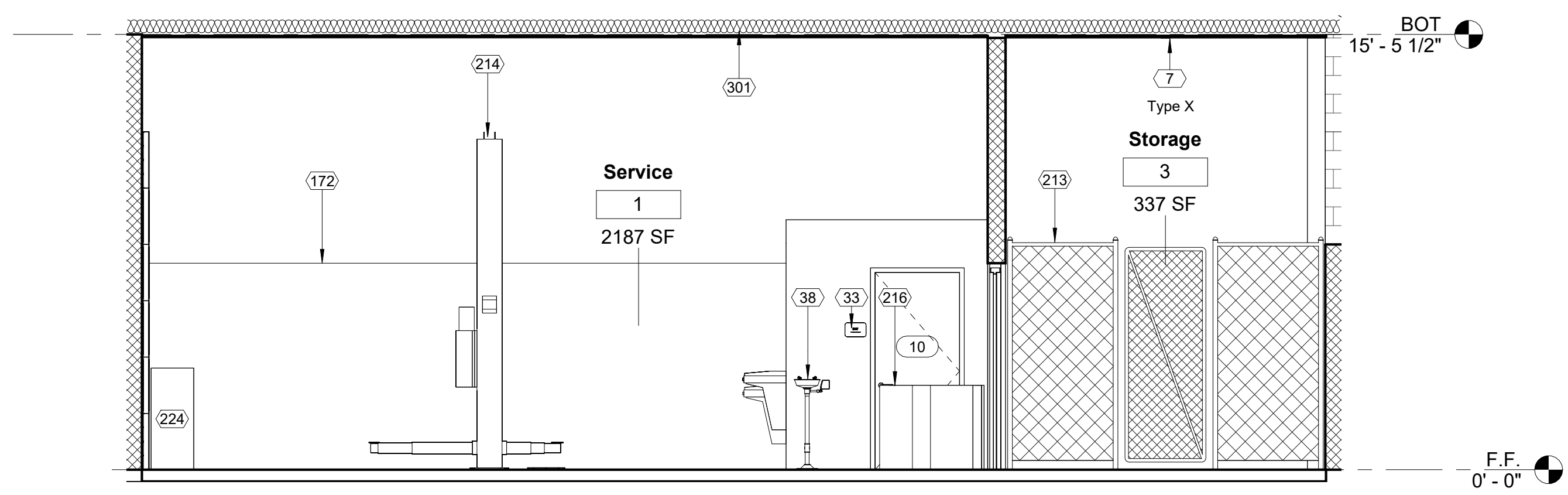
① Service Bay Interior Elevation A
1/4" = 1'-0"



③ Service Bay Interior Elevation C
1/4" = 1'-0"



② Service Bay Interior Elevation B
1/4" = 1'-0"



④ Service Bay Interior Elevation D
1/4" = 1'-0"



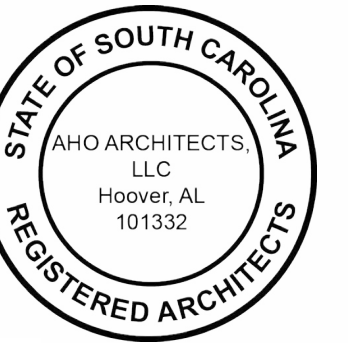
① 02_3D View_Front (West)

*See Civil for actual site conditions, including dumpster enclosure location.

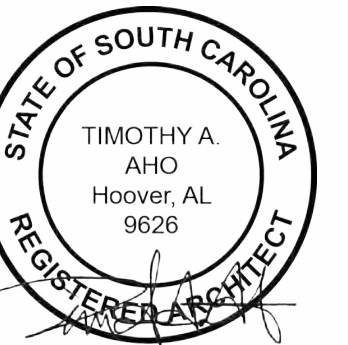


② 03_3D View_Rear (East)

*See Civil for actual site conditions, including dumpster enclosure location.



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08/11/2025

Express Oil Change & Tire Engineers
 Service Building
 Chapin, South Carolina

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No.	Description	Date

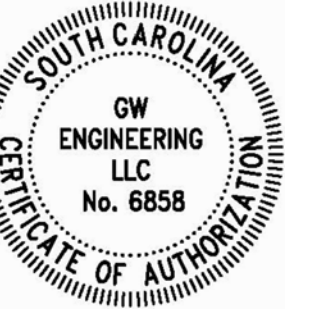
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3D Views

Project number	25003
Date	08/11/2025
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Checked by	N/A

R100

Scale



Express Oil Change & Tire Engineers
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COMcheck

Project number 25003
Date 08/11/2025

Drawn by TH
Checked by GW

E600

Scale NO SCALE

GW ENGINEERING, LLC

4120 OVERLOOK CIRCLE, TRUSSVILLE, AL 35173
GHWAME@GW-ENG.COM | 205.413.4112
THISIGNBOTHAM@GW-ENG.COM | 205.317.3969

COMcheck Software Version 4.1.5.5
Interior Lighting Compliance Certificate

Section 1: Project Information
Energy Code: 2009 IECC
Project Title: Express Oil Change & Tire Engineers
Project Type: New Construction
Construction Site: Chapin, SC
Owner/Agent: Express Oil Change & Tire Engineers, Birmingham, AL
Designer/Contractor: Taylor Higginbotham, GW Engineering, Trussville, AL

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area (SQ)	C Allowed Watts /F2	D Allowed Watts (B x C)
Automotive Facility	5133	0.9	2820
Total Allowed Watts =			2820

Section 3: Interior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D E Watt. (C X D)
Automotive Facility (5133 sq ft.)			
LED 9' L/P: Other	1	15	90
LED 10' LSE: Other	1	1	35
Total Proposed Watts =			1305

Section 4: Requirements Checklist

Interior Lighting PASSES: Design 5/25, 6/26, 6/28, 6/29, 6/30, 7/1, 7/2, 7/3, 7/4, 7/5, 7/6, 7/7, 7/8, 7/9, 7/10, 7/11, 7/12, 7/13, 7/14, 7/15, 7/16, 7/17, 7/18, 7/19, 7/20, 7/21, 7/22, 7/23, 7/24, 7/25, 7/26, 7/27, 7/28, 7/29, 7/30, 7/31, 8/1, 8/2, 8/3, 8/4, 8/5, 8/6, 8/7, 8/8, 8/9, 8/10, 8/11, 8/12, 8/13, 8/14, 8/15, 8/16, 8/17, 8/18, 8/19, 8/20, 8/21, 8/22, 8/23, 8/24, 8/25, 8/26, 8/27, 8/28, 8/29, 8/30, 8/31, 9/1, 9/2, 9/3, 9/4, 9/5, 9/6, 9/7, 9/8, 9/9, 9/10, 9/11, 9/12, 9/13, 9/14, 9/15, 9/16, 9/17, 9/18, 9/19, 9/20, 9/21, 9/22, 9/23, 9/24, 9/25, 9/26, 9/27, 9/28, 9/29, 9/30, 9/31, 10/1, 10/2, 10/3, 10/4, 10/5, 10/6, 10/7, 10/8, 10/9, 10/10, 10/11, 10/12, 10/13, 10/14, 10/15, 10/16, 10/17, 10/18, 10/19, 10/20, 10/21, 10/22, 10/23, 10/24, 10/25, 10/26, 10/27, 10/28, 10/29, 10/30, 10/31, 11/1, 11/2, 11/3, 11/4, 11/5, 11/6, 11/7, 11/8, 11/9, 11/10, 11/11, 11/12, 11/13, 11/14, 11/15, 11/16, 11/17, 11/18, 11/19, 11/20, 11/21, 11/22, 11/23, 11/24, 11/25, 11/26, 11/27, 11/28, 11/29, 11/30, 11/31, 12/1, 12/2, 12/3, 12/4, 12/5, 12/6, 12/7, 12/8, 12/9, 12/10, 12/11, 12/12, 12/13, 12/14, 12/15, 12/16, 12/17, 12/18, 12/19, 12/20, 12/21, 12/22, 12/23, 12/24, 12/25, 12/26, 12/27, 12/28, 12/29, 12/30, 12/31

Section 5: Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.5.5 and to comply with the mandatory requirements in the Requirements Checklist.

Taylor Higginbotham
Signature: Taylor Higginbotham Date: 08/11/2025

COMcheck Software Version 4.1.5.5
Exterior Lighting Compliance Certificate

Section 1: Project Information
Energy Code: 2009 IECC
Project Title: Express Oil Change & Tire Engineers
Project Type: New Construction
Exterior Lighting Zone: 2 (Neighborhood business district (LZ2))
Construction Site: Chapin, SC
Owner/Agent: Express Oil Change & Tire Engineers, Birmingham, AL
Designer/Contractor: Taylor Higginbotham, GW Engineering, Trussville, AL

Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts /Unit	D Tradable Wattage	E Allowed Watts (B x C)	F Proposed Watts
Illuminated area of facade wall or surface	750 ft2	0.1	No	75	297
Entry canopy	9 ft2	0.25	Yes	2	155
Total Tradable Wattage =			2	155	
Total Allowed Supplemental Watts** =			77		
Total Allowed Supplemental Watts** =			600		

* Wattage tradeoffs are only allowed between tradable areas/surfaces.
** A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D E Watt. (C X D)
Illuminated area of facade wall or surface (750 ft2): Non-tradable Wattage			
LED 2' L4: Other	1	9	33
Entry canopy (9 ft2): Tradable Wattage			
LED 3' LABELS: Other	1	5	33
Total Tradable Proposed Watts =			155

Section 4: Requirements Checklist

Lighting Wattage:
 1. Within each non-tradable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.
Compliance: Passes using supplemental allowance watts.

Controls, Switching, and Wiring:
 2. All exemption claims are associated with fixtures that have a control device independent of the control of the nonsanitary lighting.
 3. Lighting not designated for dusk-to-dawn operation is controlled by either a photocell (with time switch), or an astronomical time switch.
 4. Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photocell.
 5. All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.

Exterior Lighting Efficacy:
 6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumen/watt.
Exceptions:
 Lighting that has been claimed as exempt and is identified as such in Section 3 table above.
 Lighting that is specifically designated as required by a health or life safety statute, ordinance, or regulation.
 Emergency lighting that is automatically off during normal building operation.
 Lighting that is controlled by motion sensor.

Exterior Lighting PASSES: Design 5/25, 6/26, 6/28, 6/29, 6/30, 7/1, 7/2, 7/3, 7/4, 7/5, 7/6, 7/7, 7/8, 7/9, 7/10, 7/11, 7/12, 7/13, 7/14, 7/15, 7/16, 7/17, 7/18, 7/19, 7/20, 7/21, 7/22, 7/23, 7/24, 7/25, 7/26, 7/27, 7/28, 7/29, 7/30, 7/31, 8/1, 8/2, 8/3, 8/4, 8/5, 8/6, 8/7, 8/8, 8/9, 8/10, 8/11, 8/12, 8/13, 8/14, 8/15, 8/16, 8/17, 8/18, 8/19, 8/20, 8/21, 8/22, 8/23, 8/24, 8/25, 8/26, 8/27, 8/28, 8/29, 8/30, 8/31, 9/1, 9/2, 9/3, 9/4, 9/5, 9/6, 9/7, 9/8, 9/9, 9/10, 9/11, 9/12, 9/13, 9/14, 9/15, 9/16, 9/17, 9/18, 9/19, 9/20, 9/21, 9/22, 9/23, 9/24, 9/25, 9/26, 9/27, 9/28, 9/29, 9/30, 9/31, 10/1, 10/2, 10/3, 10/4, 10/5, 10/6, 10/7, 10/8, 10/9, 10/10, 10/11, 10/12, 10/13, 10/14, 10/15, 10/16, 10/17, 10/18, 10/19, 10/20, 10/21, 10/22, 10/23, 10/24, 10/25, 10/26, 10/27, 10/28, 10/29, 10/30, 10/31, 11/1, 11/2, 11/3, 11/4, 11/5, 11/6, 11/7, 11/8, 11/9, 11/10, 11/11, 11/12, 11/13, 11/14, 11/15, 11/16, 11/17, 11/18, 11/19, 11/20, 11/21, 11/22, 11/23, 11/24, 11/25, 11/26, 11/27, 11/28, 11/29, 11/30, 11/31, 12/1, 12/2, 12/3, 12/4, 12/5, 12/6, 12/7, 12/8, 12/9, 12/10, 12/11, 12/12, 12/13, 12/14, 12/15, 12/16, 12/17, 12/18, 12/19, 12/20, 12/21, 12/22, 12/23, 12/24, 12/25, 12/26, 12/27, 12/28, 12/29, 12/30, 12/31

Section 5: Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.5.5 and to comply with the mandatory requirements in the Requirements Checklist.

Taylor Higginbotham
Signature: Taylor Higginbotham Date: 08/11/2025

COMcheck Software Version 4.1.5.5
Interior Lighting Compliance Certificate

Section 1: Project Information
Energy Code: 2009 IECC
Project Title: Express Oil Change & Tire Engineers
Project Type: New Construction
Construction Site: Chapin, SC
Owner/Agent: Express Oil Change & Tire Engineers, Birmingham, AL
Designer/Contractor: Taylor Higginbotham, GW Engineering, Trussville, AL

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area (SQ)	C Allowed Watts /F2	D Allowed Watts (B x C)
Automotive Facility	5133	0.9	2820
Total Allowed Watts =			2820

Section 3: Interior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D E Watt. (C X D)
Automotive Facility (5133 sq ft.)			
LED 9' L/P: Other	1	15	90
LED 10' LSE: Other	1	1	35
Total Proposed Watts =			1305

Section 4: Requirements Checklist

Interior Lighting PASSES: Design 5/25, 6/26, 6/28, 6/29, 6/30, 7/1, 7/2, 7/3, 7/4, 7/5, 7/6, 7/7, 7/8, 7/9, 7/10, 7/11, 7/12, 7/13, 7/14, 7/15, 7/16, 7/17, 7/18, 7/19, 7/20, 7/21, 7/22, 7/23, 7/24, 7/25, 7/26, 7/27, 7/28, 7/29, 7/30, 7/31, 8/1, 8/2, 8/3, 8/4, 8/5, 8/6, 8/7, 8/8, 8/9, 8/10, 8/11, 8/12, 8/13, 8/14, 8/15, 8/16, 8/17, 8/18, 8/19, 8/20, 8/21, 8/22, 8/23, 8/24, 8/25, 8/26, 8/27, 8/28, 8/29, 8/30, 8/31, 9/1, 9/2, 9/3, 9/4, 9/5, 9/6, 9/7, 9/8, 9/9, 9/10, 9/11, 9/12, 9/13, 9/14, 9/15, 9/16, 9/17, 9/18, 9/19, 9/20, 9/21, 9/22, 9/23, 9/24, 9/25, 9/26, 9/27, 9/28, 9/29, 9/30, 9/31, 10/1, 10/2, 10/3, 10/4, 10/5, 10/6, 10/7, 10/8, 10/9, 10/10, 10/11, 10/12, 10/13, 10/14, 10/15, 10/16, 10/17, 10/18, 10/19, 10/20, 10/21, 10/22, 10/23, 10/24, 10/25, 10/26, 10/27, 10/28, 10/29, 10/30, 10/31, 11/1, 11/2, 11/3, 11/4, 11/5, 11/6, 11/7, 11/8, 11/9, 11/10, 11/11, 11/12, 11/13, 11/14, 11/15, 11/16, 11/17, 11/18, 11/19, 11/20, 11/21, 11/22, 11/23, 11/24, 11/25, 11/26, 11/27, 11/28, 11/29, 11/30, 11/31, 12/1, 12/2, 12/3, 12/4, 12/5, 12/6, 12/7, 12/8, 12/9, 12/10, 12/11, 12/12, 12/13, 12/14, 12/15, 12/16, 12/17, 12/18, 12/19, 12/20, 12/21, 12/22, 12/23, 12/24, 12/25, 12/26, 12/27, 12/28, 12/29, 12/30, 12/31

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Taylor Higginbotham
Signature: Taylor Higginbotham Date: 08/11/2025

COMcheck Software Version 4.1.5.5
Exterior Lighting Compliance Certificate

Section 1: Project Information
Energy Code: 2009 IECC
Project Title: Express Oil Change & Tire Engineers
Project Type: New Construction
Construction Site: Chapin, SC
Owner/Agent: Express Oil Change & Tire Engineers, Birmingham, AL
Designer/Contractor: Taylor Higginbotham, GW Engineering, Trussville, AL

Section 2: Exterior Lighting Area/Surface Power Calculation

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Total Allowed Supplemental Watts** =			77		
Total Allowed Supplemental Watts** =			600		

* Wattage tradeoffs are only allowed between tradable areas/surfaces.
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Section 3: Exterior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D E Watt. (C X D)
Illuminated area of facade wall or surface (750 ft2): Non-tradable Wattage			
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Total Tradable Proposed Watts =			155

Section 4: Requirements Checklist

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 4. Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photocell.
 5. All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.

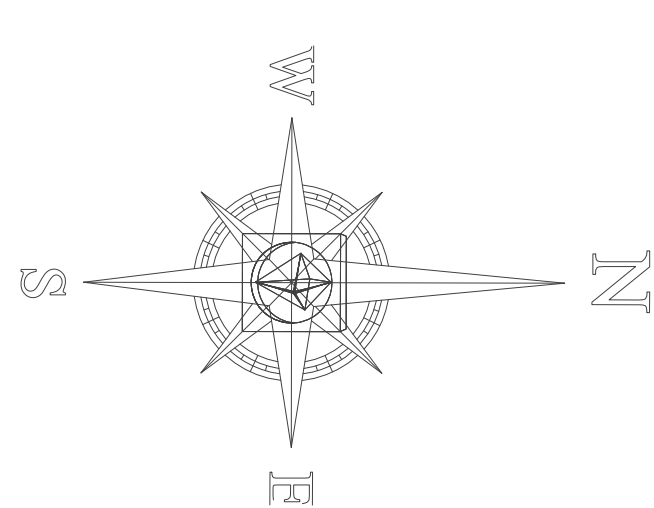
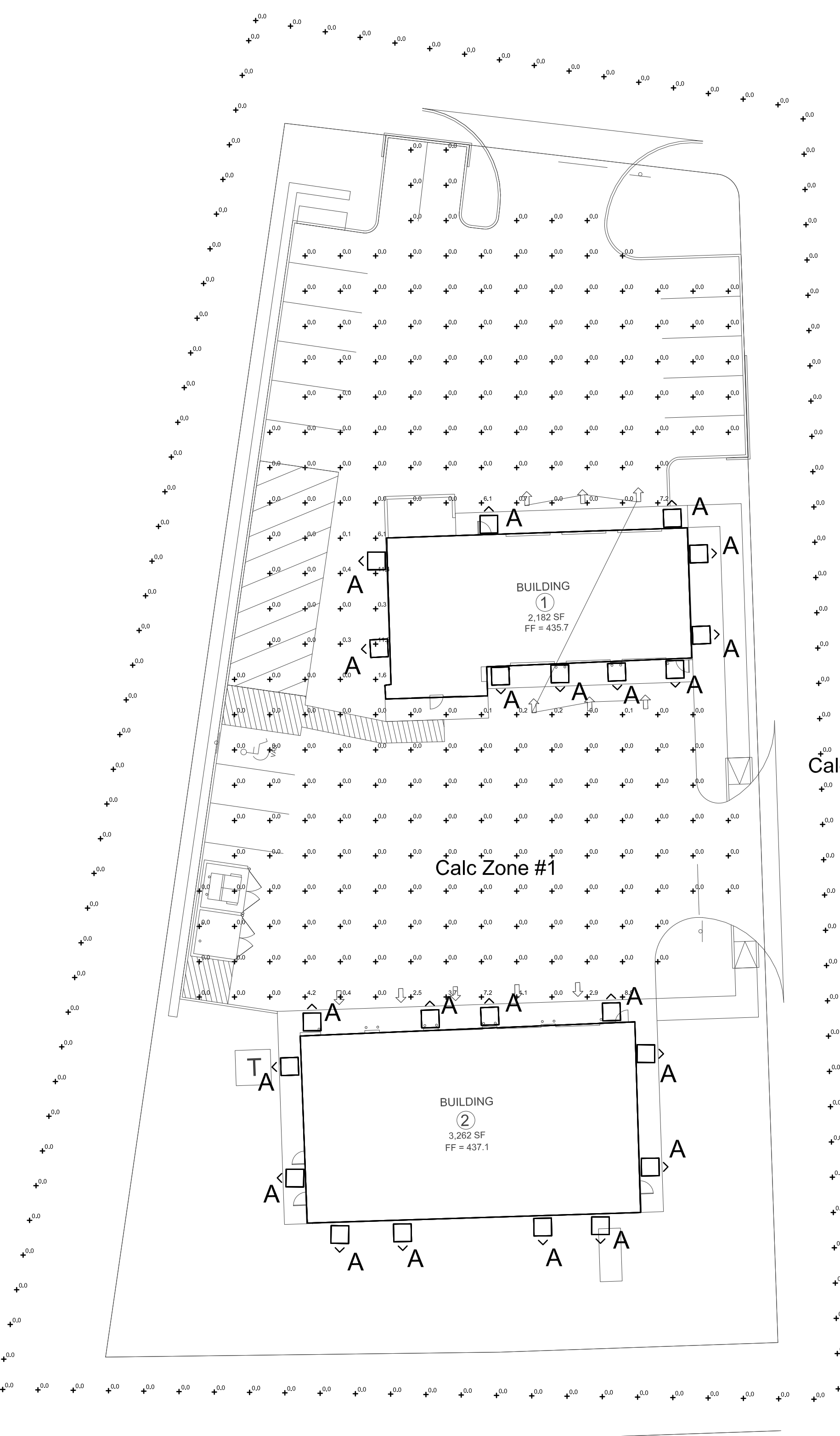
Exterior Lighting Efficacy:
 6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumen/watt.
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 Lighting that is specifically designated as required by a health or life safety statute, ordinance, or regulation.
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 Lighting that is controlled by motion sensor.

Exterior Lighting PASSES: Design 5/25, 6/26, 6/28, 6/29, 6/30, 7/1, 7/2, 7/3, 7/4, 7/5, 7/6, 7/7, 7/8, 7/9, 7/10, 7/11, 7/12, 7/13, 7/14, 7/15, 7/16, 7/17, 7/18, 7/19, 7/20, 7/21, 7/22, 7/23, 7/24, 7/25, 7/26, 7/27, 7/28, 7/29, 7/30, 7/31, 8/1, 8/2, 8/3, 8/4, 8/5, 8/6, 8/7, 8/8, 8/9, 8/10, 8/11, 8/12, 8/13, 8/14, 8/15, 8/16, 8/17, 8/18, 8/19, 8/20, 8/21, 8/22, 8/23, 8/24, 8/25, 8/26, 8/27, 8/28, 8/29, 8/30, 8/31, 9/1, 9/2, 9/3, 9/4, 9/5, 9/6, 9/7, 9/8, 9/9, 9/10, 9/11, 9/12, 9/13, 9/14, 9/15, 9/16, 9/17, 9/18, 9/19, 9/20, 9/21, 9/22, 9/23, 9/24, 9/25, 9/26, 9/27, 9/28, 9/29, 9/30, 9/31, 10/1, 10/2, 10/3, 10/4, 10/5, 10/6, 10/7, 10/8, 10/9, 10/10, 10/11, 10/12, 10/13, 10/14, 10/15, 10/16, 10/17, 10/18, 10/19, 10/20, 10/21, 10/22, 10/23, 10/24, 10/25, 10/26, 10/27, 10/28, 10/29, 10/30, 10/31, 11/1, 11/2, 11/3, 11/4, 11/5, 11/6, 11/7, 11/8, 11/9, 11/10, 11/11, 11/12, 11/13, 11/14, 11/15, 11/16, 11/17, 11/18, 11/19, 11/20, 11/21, 11/22, 11/23, 11/24, 11/25, 11/26, 11/27, 11/28, 11/29, 11/30, 11/31, 12/1, 12/2, 12/3, 12/4, 12/5, 12/6, 12/7, 12/8, 12/9, 12/10, 12/11, 12/12, 12/13, 12/14, 12/15, 12/16, 12/17, 12/18, 12/19, 12/20, 12/21, 12/22, 12/23, 12/24, 12/25, 12/26, 12/27, 12/28, 12/29, 12/30, 12/31

Section 5: Compliance Statement

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Taylor Higginbotham
Signature: Taylor Higginbotham Date: 08/11/2025



Calc Zone #2

Calc Zone #1

COLUMBIA AVENUE
(S-32-48, 66'
R/W)

1 Site Plan - Photometrics
1" = 20'-0"

gotham | EVO
Multiple Layers of Light

Luminaire Type: General Illumination Wall Mount Cylinder
Catalog Number: 6"

General Illumination Wall Mount Cylinder 6"

Features Set

- Housing fabricated with hardened edge, provides beam illumination on horizontal and vertical surfaces
- Bounding Ray™ optical design
- A45 cast to specific and accurate angle
- Fully adjustable internal LED light engine
- 70% lumen maintenance at 50,000 hours
- 2.5 BECMV, 85 CRI typical, 90+ CRI optional
- Features an optional location dimming, 10% option available, contact calling card required.

Options

- 2.5 BECMV, 85 CRI typical, 90+ CRI optional
- 10% lumen maintenance at 50,000 hours
- 2.5 BECMV, 85 CRI typical, 90+ CRI optional
- Features an optional location dimming, 10% option available, contact calling card required.

Superior Performance

Footcandle	300	400	500	1000	2000	3000	4000	4000	6000	8000	8000
Footcandle	300	400	500	1000	2000	3000	4000	4000	6000	8000	8000
Wattage	1.4	4.2	8.2	16.7	32.7	49.1	65.5	81.9	122.8	163.7	204.6
Lumens	81.9	245.7	491.4	982.8	1965.6	2948.4	3931.2	4914.0	7371.0	9828.0	12285.0

Coordinated Apertures | Multiple Layers of Light

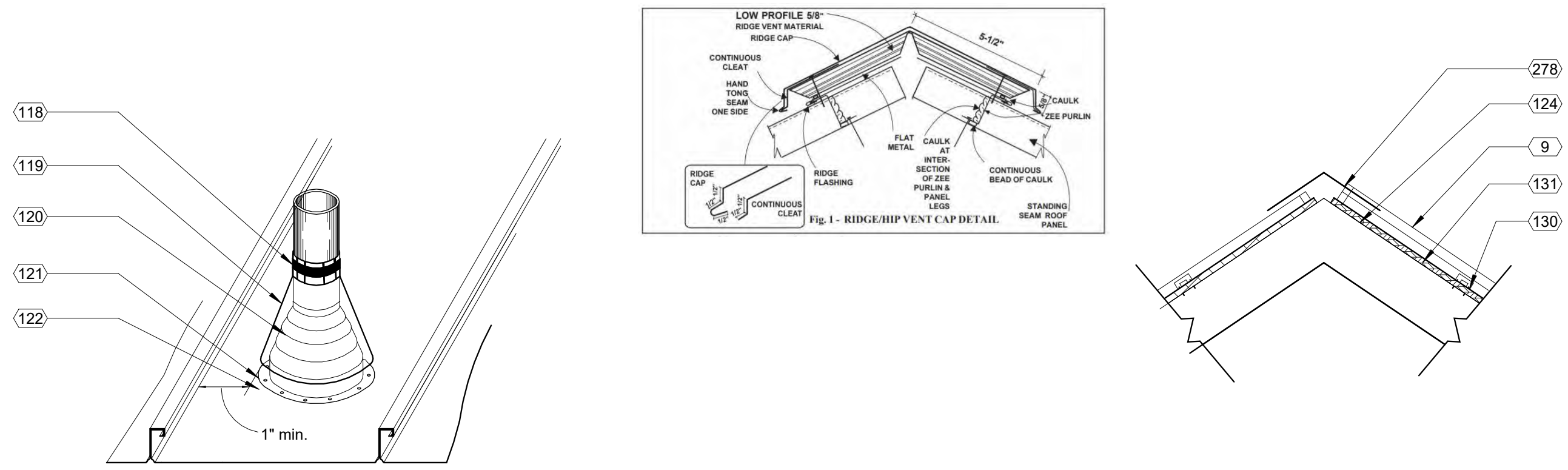
General Illumination Layer 1 LED | High Center Beam Layer 1 LED | 6" x 6" - Multiple Layers of Light

Core | Healthcare | Special Applications

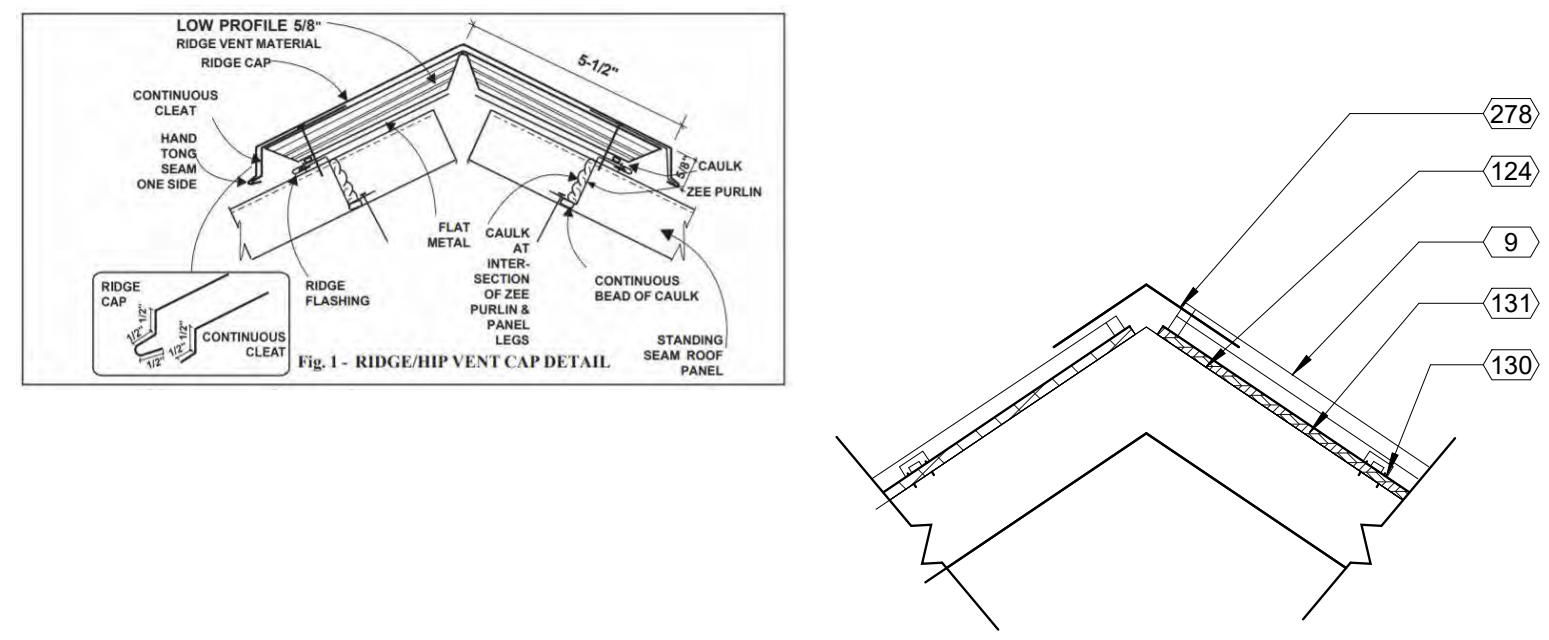
gotham | EVO
6" General Illumination Wall Mount Cylinder

EXAMPLE: EVO6WC AR LSS AR LSS AR LSS AR LSS AR LSS

Series	Color Temperature	Lumens	Reflector Color	Reflector Finish	Dimensions	Height
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
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EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	White	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White	Black	4.25" x 6.0" x 1.75"	1.75"
EVO6WC	3000K	81.9	White			

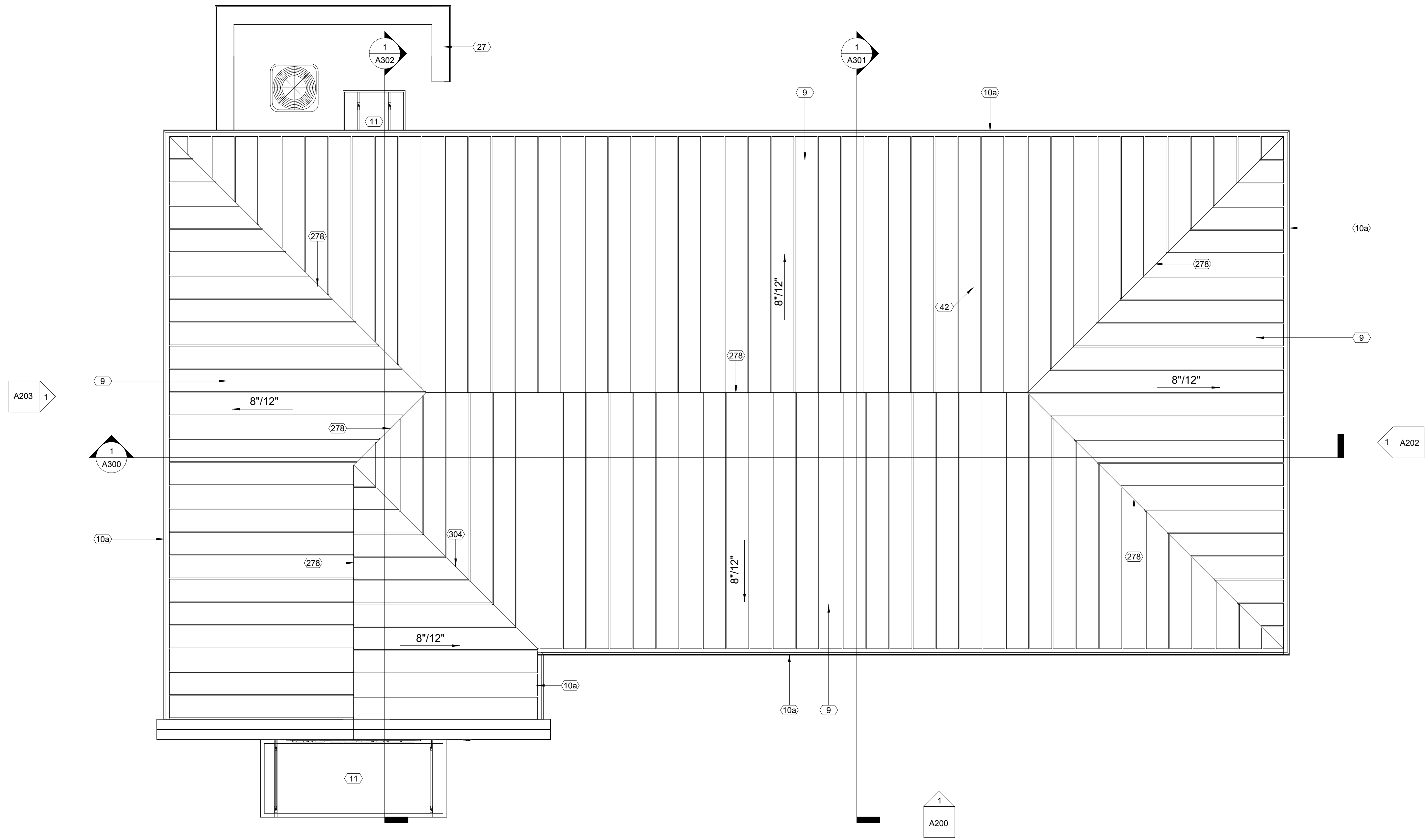


2 DT_Sheet A106_SSMR Roof Penetration Detail
1 1/2" = 1'-0"

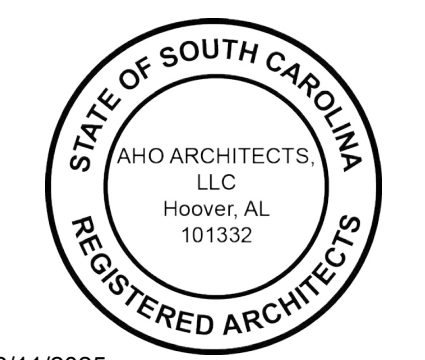


4 Draft Template_Typical Ridge-Hip Detail
1" = 1'-0"

Keynote Schedule	
Tag	Text
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Pre-finished metal gutter. Match roof color.
11	Pre-finished metal canopy. See Details.
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
42	Paint all roof penetrations to match roof color.
118	Stainless steel draw band.
119	Metal storm collar. Finish to match roof.
120	Rubber boot. Cut to suit pipe penetration.
121	Rivet boot to panel with continuous bead of sealant between boot and panel.
122	When pipe is fixed to structure and not designed to float with roof panel, cut hole in panel to allow for thermal expansion.
124	6" metal stud framing at 16" o.c. with R-20 batt insulation.
130	2 layers of #15 roofing felt.
131	5/8" pressure treated plywood decking. See Structural.
278	Pre-finished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).
304	Pre-finished metal valley flashing. Color to match roof.



1 03_Roof Plan
1/4" = 1'-0"



08/11/2025



08/11/2025

Express Oil Change & Tire Engineers
Right Hand Oil Change Building
 Chapin, South Carolina

FINAL

No.	Description	Date

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Roof Plan

Project number	25003
Date	08/11/2025
Drawn by	ARC
Checked by	N/A

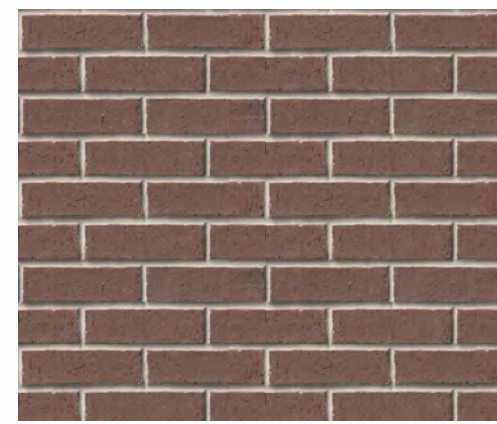
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8/29/2025 1:21:30 PM

EXTERIOR FINISH MATERIAL LEGEND



ADHERED STONE VENEER
Color: Sedona (Handcrafted)
Manuf: Horizon Stone
Keynote: 19b



CLAY FACE BRICK (FIELD)
Color: New Ashbury
Manuf: Watstown Brick
Keynote: 18b



CLAY FACE BRICK (SOLDIER)
Color: Whitestone
Manuf: Palmetto Brick
Keynote: 17b



CAST STONE WATERTABLE SILL
Color: Pearl White
Manuf: Bassco Cast Stone
Keynote: 210



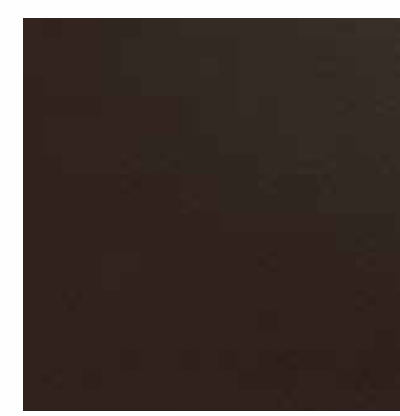
STANDING SEAM METAL ROOF
Color: Aged Bronze
Manuf: Berridge
Keynote: 9



HM DOORS
Color: SW7514 Foothills
Manuf: Sherwin Williams



STOREFRONT DOORS/WINDOWS
Color: Clear Anodized Aluminum
Manuf: YKK



OVERHEAD DOORS
Color: Kynar Brown
Manuf: Raynor

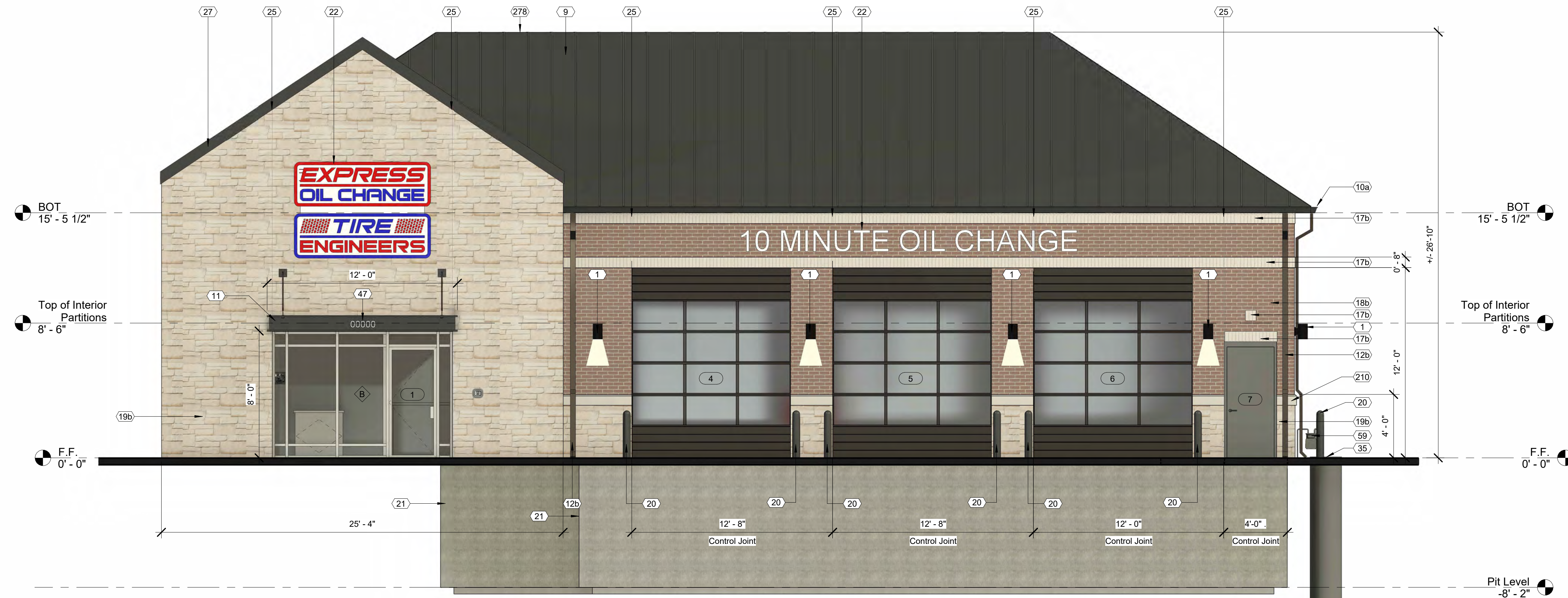


TINTED GLAZING
Color: Solarban 90 on Clear
Manuf: Vitro Architectural Glass



MORTAR
Color: Southern Ivory
Manuf: Southern Heritage

Keynote Schedule	
Tag	Text
1	Wall Pack / Electrical Fixture. See Electrical.
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Pre-finished metal gutter. Match roof color.
11	Pre-finished metal canopy. See Details.
12b	Pre-finished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefinished elbow and concrete splash block. See Specification 077100 Roof Specialties.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
20	4" diameter painted concrete-filled steel pipe bollard. Color as indicated on Finish Schedule. Paint embedded portion of bollard. Use primer and two finish coats. See Details. See Specification 055000 Metal Fabrications.
21	Cast-in-place concrete wall. See Structural. Membrane waterproofing at perimeter of foundation wall as specified. See Specification 334600 Subdrainage.
22	Signage (By Others). See Electrical.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" max from wall intersection or corner and every 20'-0".
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
35	Submersible foundation sump pump. Provide Zoeller M96 or comparable product. Coordinate location with Civil and tie into Civil's storm drainage system.
47	Provide address identification as directed by the Local Fire Marshal or AHJ.
59	Gas meter. See Plumbing.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
278	Pre-finished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).



① 01 Exterior Elevation Front (East)
1/4" = 1'-0"



08/11/2025



08/11/2025

Express Oil Change & Tire Engineers
Right Hand Oil Change Building
Chapin, South Carolina

FINAL		
No.	Description	Date

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Exterior Elevation - Front (East)

Project number 25003
Date 08/11/2025
Drawn by ARC
Checked by N/A

A200

Scale As indicated

EXTERIOR FINISH MATERIAL LEGEND



ADHERED STONE VENEER
Color: Sedona (Handcrafted)
Manuf: Horizon Stone
Keynote: 19b

CLAY FACE BRICK (FIELD)
Color: New Ashbury
Manuf: Watstown Brick
Keynote: 18b

CLAY FACE BRICK (SOLDIER)
Color: Whitestone
Manuf: Palmetto Brick
Keynote: 17b

CAST STONE WATERTABLE SILL
Color: Pearl White
Manuf: Bassco Cast Stone
Keynote: 210

STANDING SEAM METAL ROOF
Color: Aged Bronze
Manuf: Berridge
Keynote: 9

HM DOORS
Color: SW7514 Foothills
Manuf: Sherwin Williams

STOREFRONT DOORS/WINDOWS
Color: Clear Anodized Aluminum
Manuf: YKK

OVERHEAD DOORS
Color: Kynar Brown
Manuf: Raynor

TINTED GLAZING
Color: Solarban 90 on Clear
Manuf: Vitro Architectural Glass

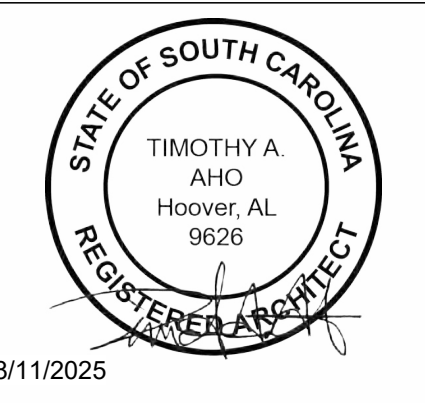
MORTAR
Color: Southern Ivory
Manuf: Southern Heritage

Color	Transmittance (%)	U-Value (BTU/hr-ft²-F)	SHGC
17	85%	0.27	0.24
18	75%	0.29	0.24
19	65%	0.31	0.24
20	55%	0.33	0.24

Tag	Text
1	Wall Pack / Electrical Fixture. See Electrical.
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Pre-finished metal gutter. Match roof color.
11	Pre-finished metal canopy. See Details.
12b	Pre-finished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefinished elbow and concrete splash block. See Specification 077100 Roof Specialties.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
20	4" diameter painted concrete-filled steel pipe bollard. Color as indicated on Finish Schedule. Paint embedded portion of bollard. Use primer and two finish coats. See Details. See Specification 055000 Metal Fabrications.
21	Cast-in-place concrete wall. See Structural. Membrane waterproofing at perimeter of foundation wall as specified. See Specification 334600 Subdrainage.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" max from wall intersection or corner and every 20'-0".
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
35	Submersible foundation sump pump. Provide Zoeller M98 or comparable product. Coordinate location with Civil and tie into Civil's storm drainage system.
59	Gas meter. See Plumbing.
102	Provide opening in wall to allow water to drain.
144	Electrical meter. See Electrical.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
278	Pre-finished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).



1 02 Exterior Elevation Rear (West)
1/4" = 1'-0"



Express Oil Change & Tire Engineers
Right Hand Oil Change Building
 Chapin, South Carolina

FINAL

No.	Description	Date

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Exterior Elevation - Rear (West)

Project number 25003
Date 08/11/2025
Drawn by ARC
Checked by N/A

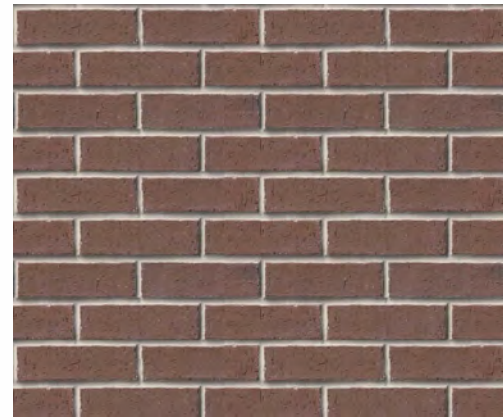
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Scale As indicated

EXTERIOR FINISH MATERIAL LEGEND



ADHERED STONE VENEER
Color: Sedona (Handcrafted)
Manuf. Horizon Stone
Keynote: 19b



CLAY FACE BRICK (FIELD)
Color: New Ashbury
Manuf. Watstown Brick
Keynote: 18b



CLAY FACE BRICK (SOLDIER)
Color: Whitestone
Manuf. Palmetto Brick
Keynote: 17b



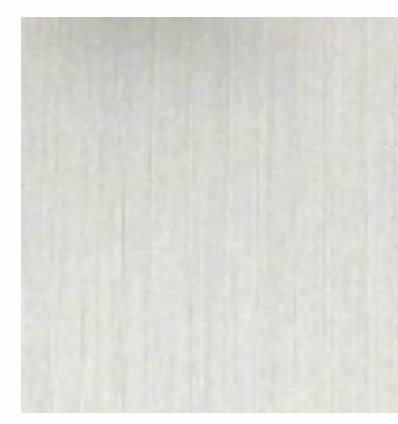
CAST STONE WATERTABLE SILL
Color: Pearl White
Manuf. Bassco Cast Stone
Keynote: 210



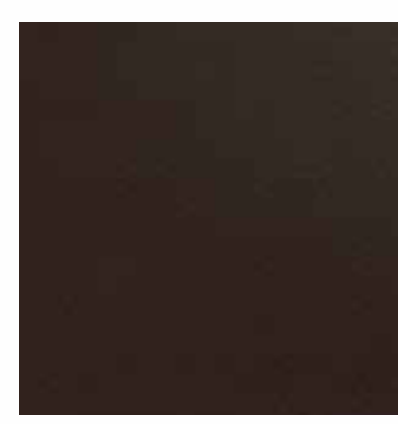
STANDING SEAM METAL ROOF
Color: Aged Bronze
Manuf. Berridge
Keynote: 9



HM DOORS
Color: SW7514 Foothills
Manuf. Sherwin Williams



STOREFRONT DOORS/WINDOWS
Color: Clear Anodized Aluminum
Manuf. YKK



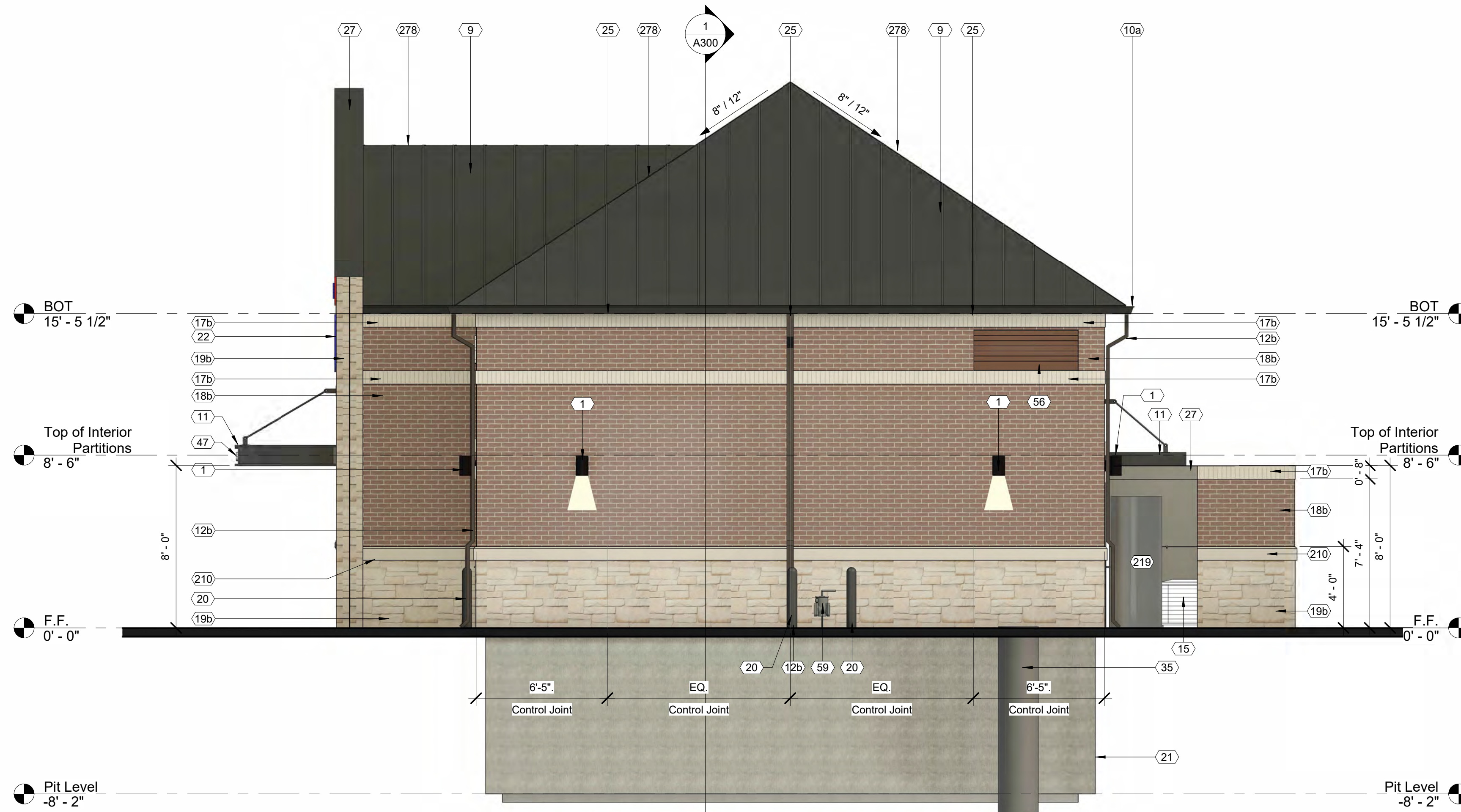
OVERHEAD DOORS
Color: Kynar Brown
Manuf. Raynor



TINTED GLAZING
Color: Solarban 90 on Clear
Manuf. Vitro Architectural Glass

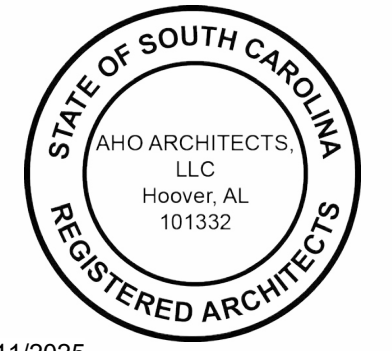


MORTAR
Color: Southern Ivory
Manuf. Southern Heritage

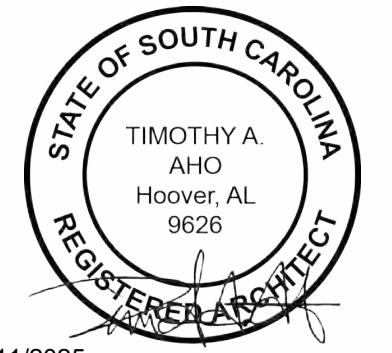


1 03_Exterior Elevation_Right (North)
1/4" = 1'-0"

Keynote Schedule	
Tag	Text
1	Wall Pack / Electrical Fixture. See Electrical.
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Pre-finished metal gutter. Match roof color.
11	Pre-finished metal canopy. See Details.
12b	Pre-finished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefinished elbow and concrete splash block. See Specification 077100 Roof Specialties.
15	HVAC condensing unit. See Mechanical.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
20	4" diameter painted concrete-filled steel pipe bollard. Color as indicated on Finish Schedule. Paint embedded portion of bollard. Use primer and two finish coats. See Details. See Specification 055000 Metal Fabrications.
21	Cast-in-place concrete wall. See Structural. Membrane waterproofing at perimeter of foundation wall as specified. See Specification 334600 Subdrainage.
22	Signage (By Others). See Electrical.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" max from wall intersection or corner and every 20'-0".
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
35	Submersible foundation sump pump. Provide Zoeller M98 or comparable product. Coordinate location with Civil and tie into Civil's storm drainage system.
47	Provide address identification as directed by the Local Fire Marshal or AHJ.
56	Metal louver or vent. Color to match adjacent surface. See Mechanical.
59	Gas meter. See Plumbing.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
219	Air compressor (By Others).
278	Pre-finished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).



08/11/2025



08/11/2025

Express Oil Change & Tire Engineers
Right Hand Oil Change Building
Chapin, South Carolina

FINAL

No.	Description	Date

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Exterior Elevation - Right (North)

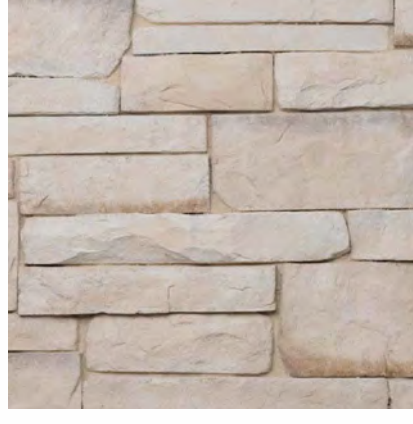
Project number 25003
Date 08/11/2025

Drawn by ARC
Checked by N/A

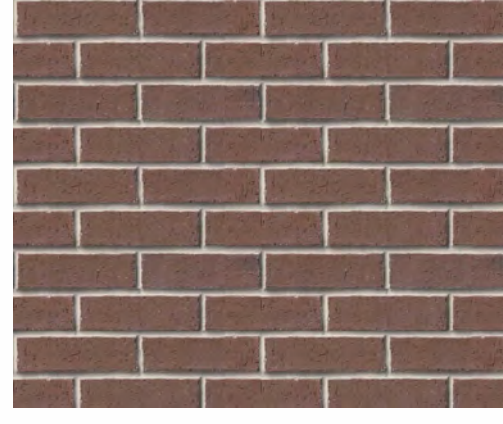
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EXTERIOR FINISH MATERIAL LEGEND



ADHERED STONE VENEER
Color: Sedona (Handcrafted)
Manuf: Horizon Stone
Keynote: 19b



CLAY FACE BRICK (FIELD)
Color: New Ashbury
Manuf: Watstown Brick
Keynote: 18b



CLAY FACE BRICK (SOLDIER)
Color: Whitestone
Manuf: Palmetto Brick
Keynote: 17b



CAST STONE WATERTABLE SILL
Color: Pearl White
Manuf: Bassco Cast Stone
Keynote: 210



STANDING SEAM METAL ROOF
Color: Aged Bronze
Manuf: Berridge
Keynote: 9



HM DOORS
Color: SW7514 Foothills
Manuf: Sherwin Williams



STOREFRONT DOORS/WINDOWS
Color: Clear Anodized Aluminum
Manuf: YKK



OVERHEAD DOORS
Color: Kynar Brown
Manuf: Raynor



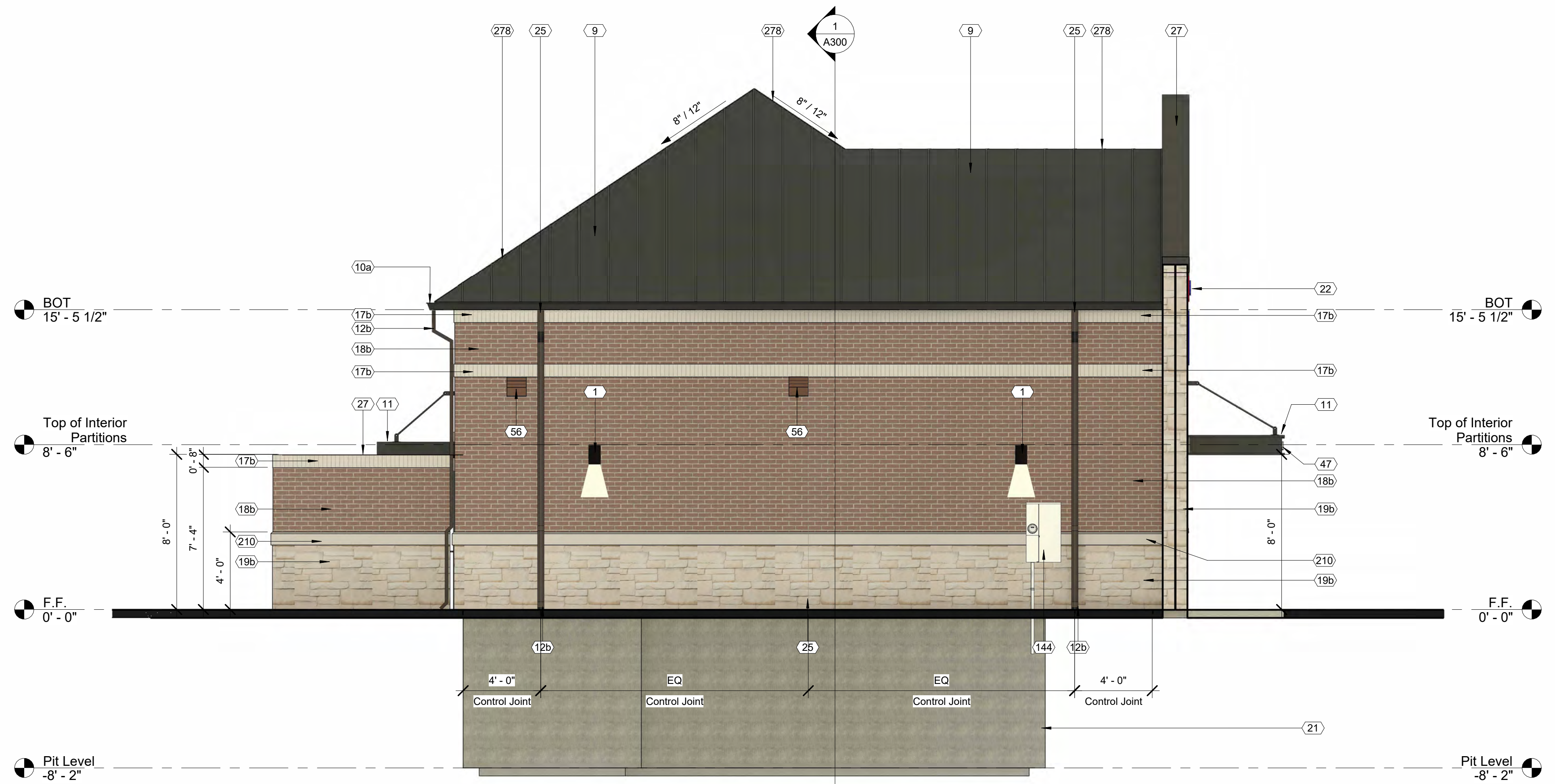
SOLARBAN® 90 (2) Clear + Clear Glass Insulating Glass Unit					
Exterior Surface	Interior Surface	U-Value (Imperial)	U-Value (Metric)	SHGC	VTG
WT	WT	0.27	0.27	0.25	0.78

TINTED GLAZING
Color: Solarban 90 on Clear
Manuf: Vitro Architectural Glass

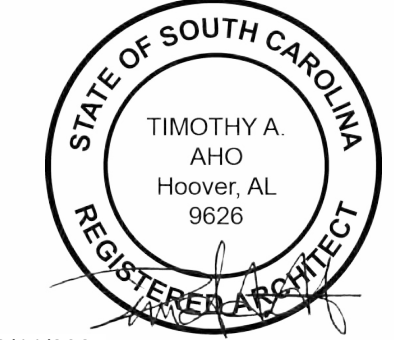


MORTAR
Color: Southern Ivory
Manuf: Southern Heritage

Keynote Schedule	
Tag	Text
1	Wall Pack / Electrical Fixture. See Electrical.
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Pre-finished metal gutter. Match roof color.
11	Pre-finished metal canopy. See Details.
12b	Pre-finished metal downspout. Discharge on grade unless otherwise indicated to be piped to storm. (See Civil). Provide prefinished elbow and concrete splash block. See Specification 077100 Roof Specialties.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
21	Cast-in-place concrete wall. See Structural. Membrane waterproofing at perimeter of foundation wall as specified. See Specification 334600 Subdrainage.
22	Signage (By Others). See Electrical.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" max from wall intersection or corner and every 20'-0".
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
47	Provide address identification as directed by the Local Fire Marshal or AHJ.
56	Metal louver or vent. Color to match adjacent surface. See Mechanical.
144	Electrical meter. See Electrical.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
278	Pre-finished metal ridge/hip cap by metal roofing manufacturer. Provide vent material at ridge only (Match roof color).



① 04 Exterior Elevation Left (South)
1/4" = 1'-0"



Express Oil Change & Tire Engineers
 Right Hand Oil Change Building
 Chapin, South Carolina

FINAL

No.	Description	Date

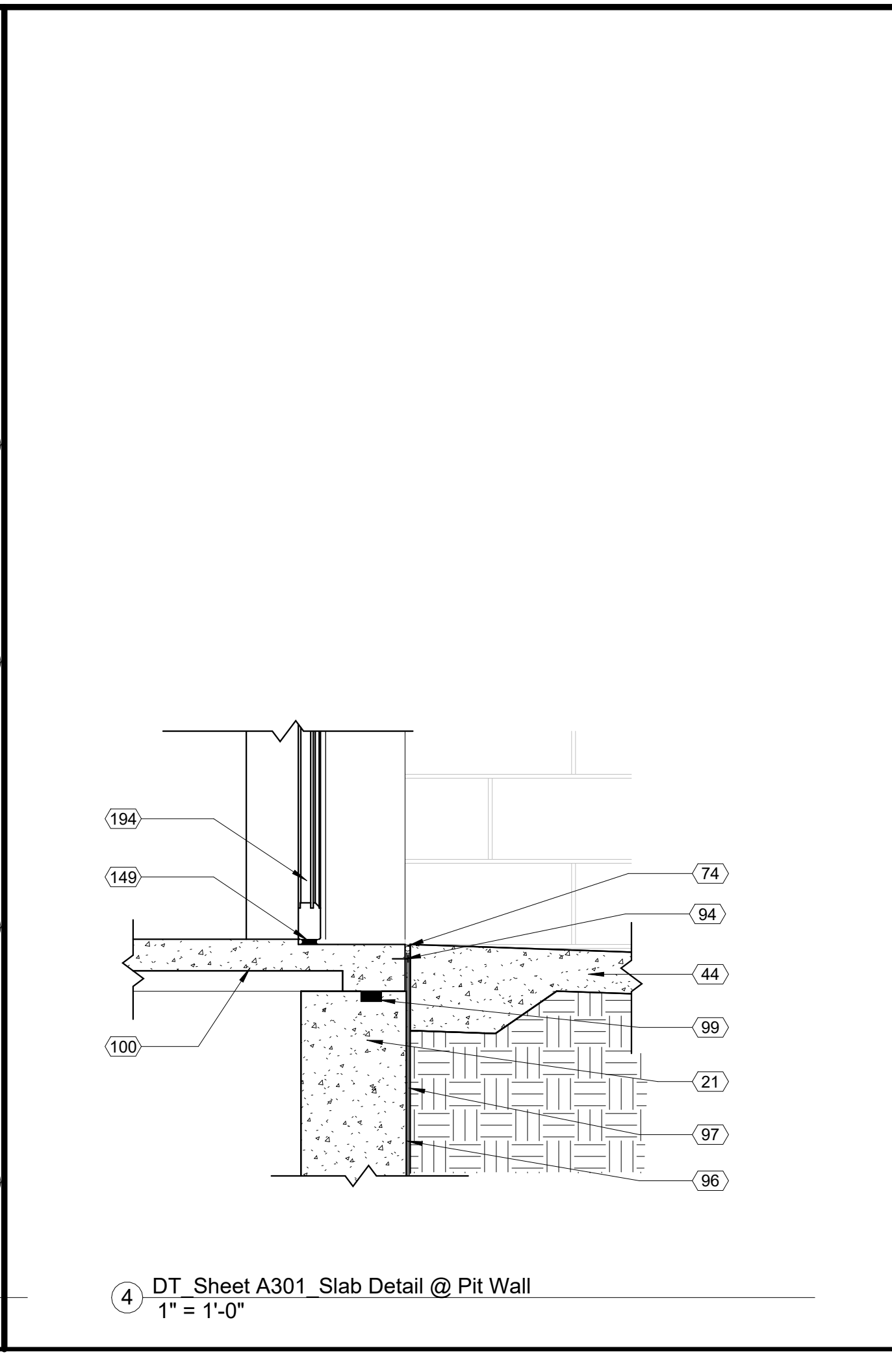
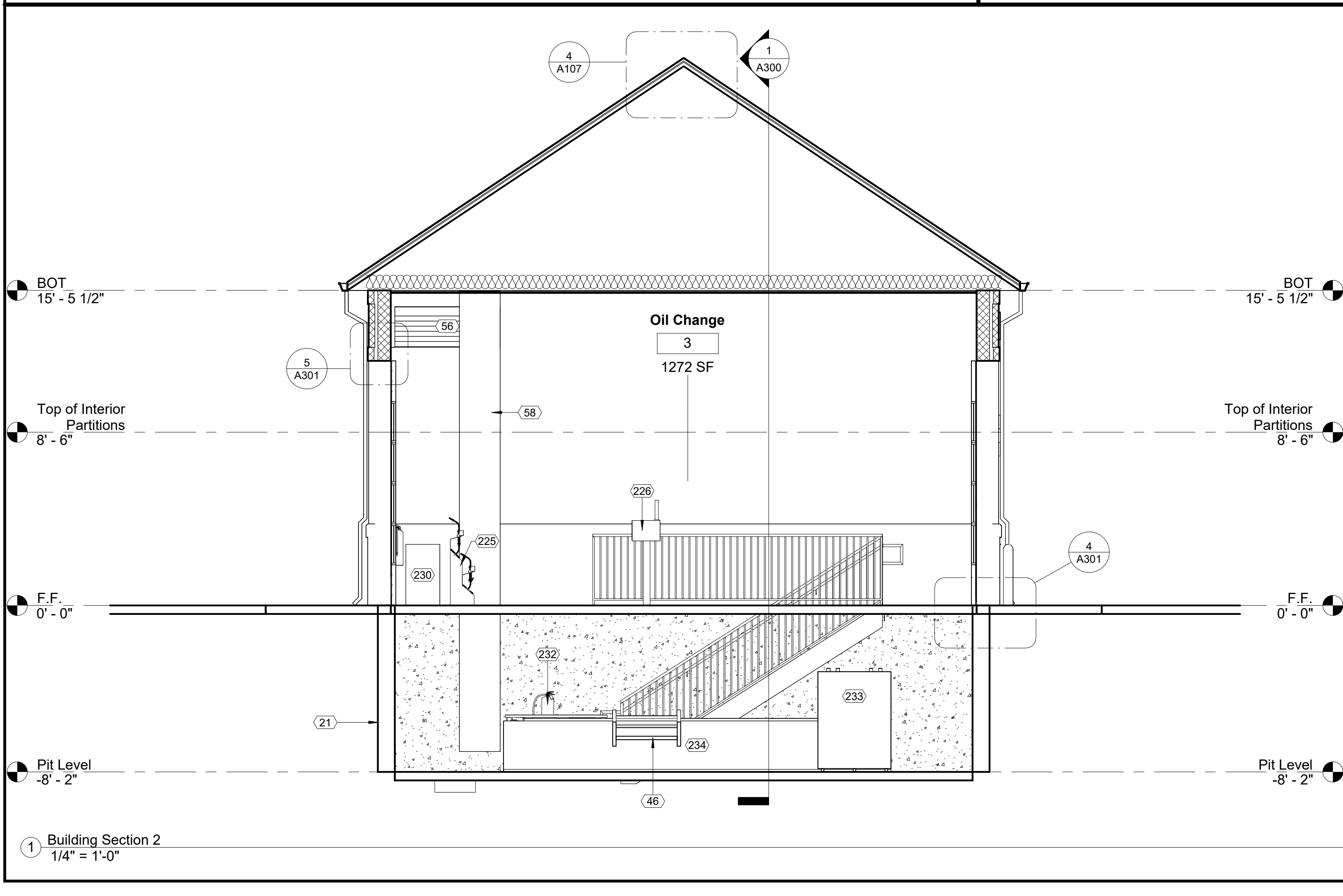
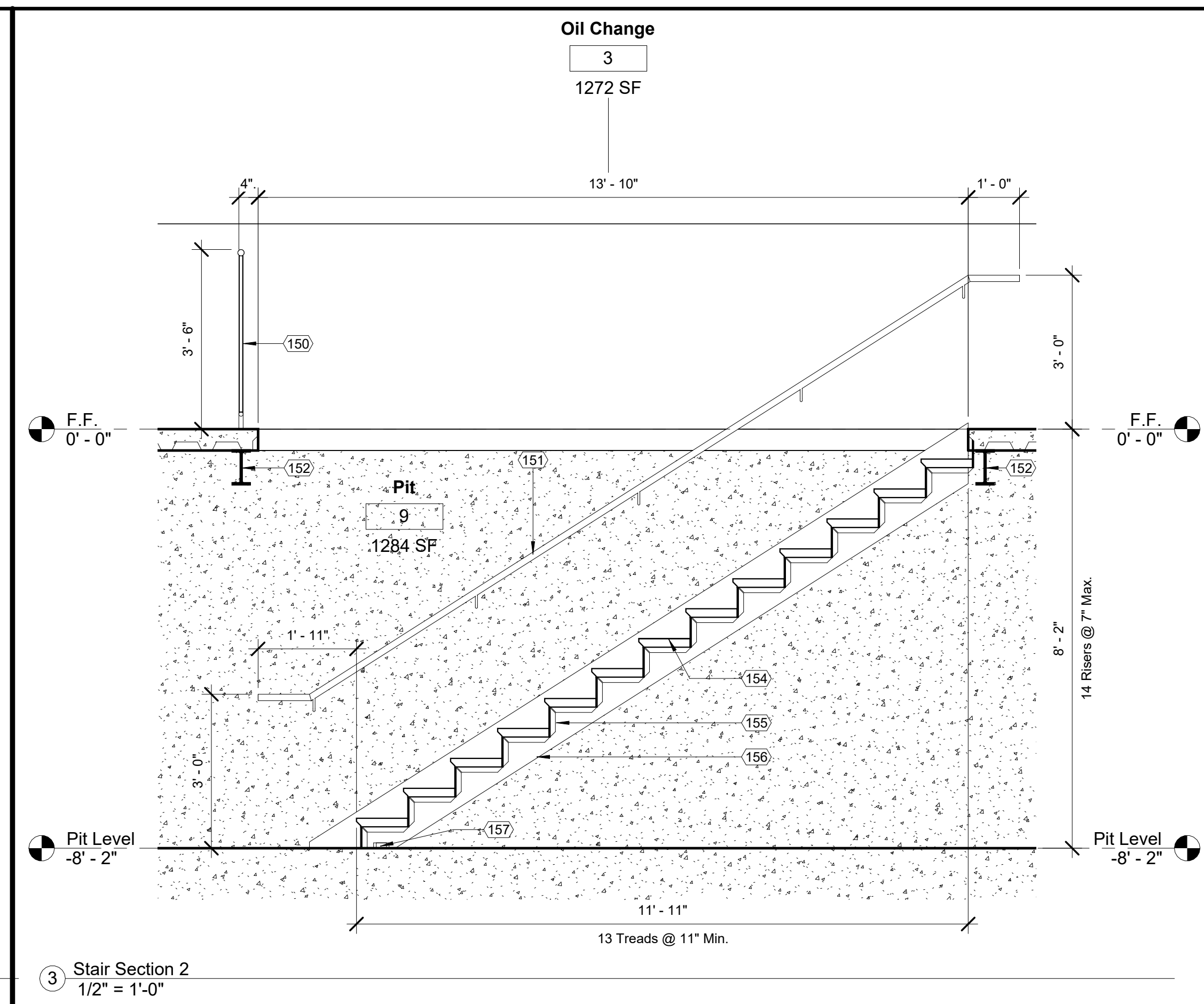
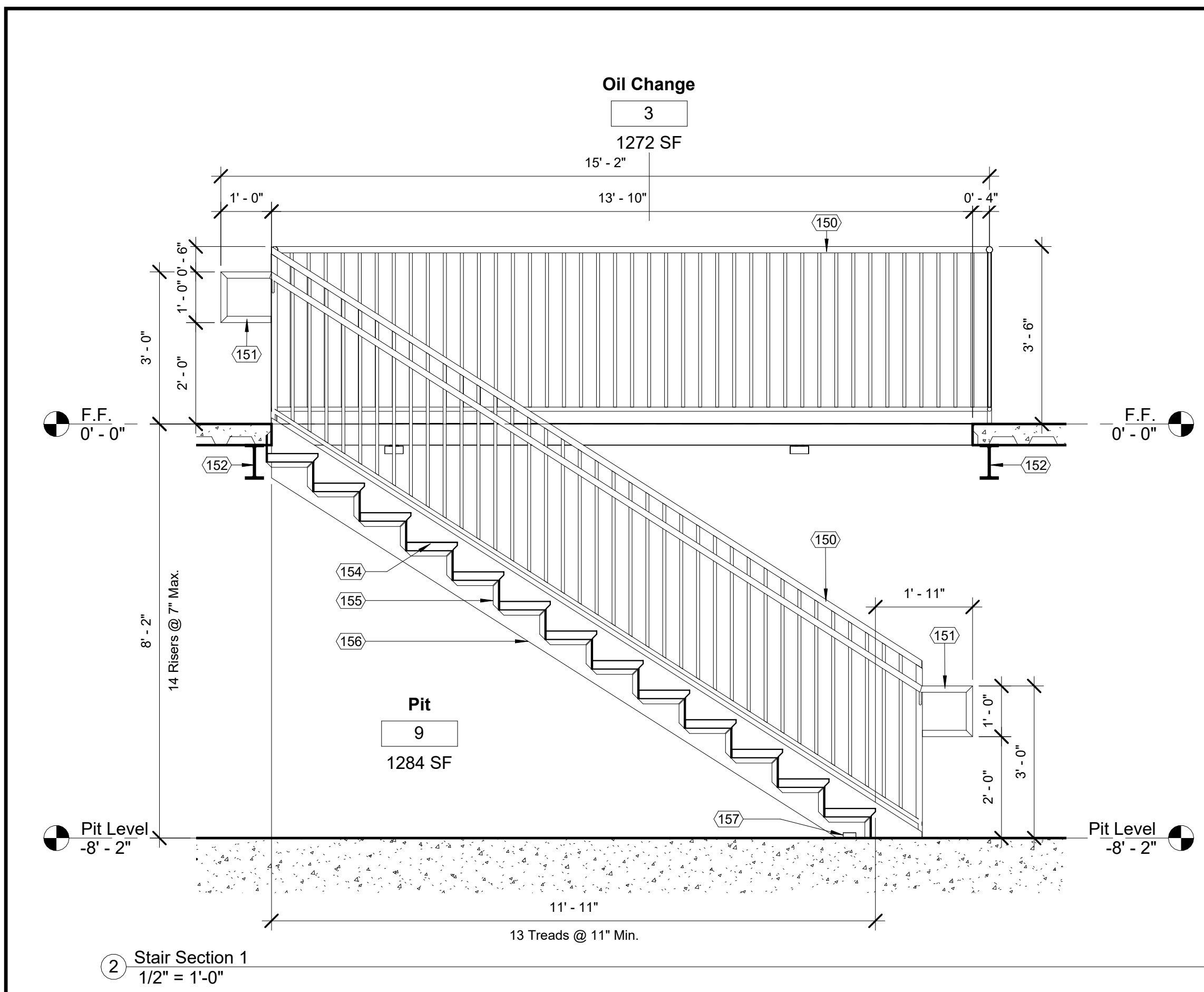
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Exterior Elevation - Left (South)

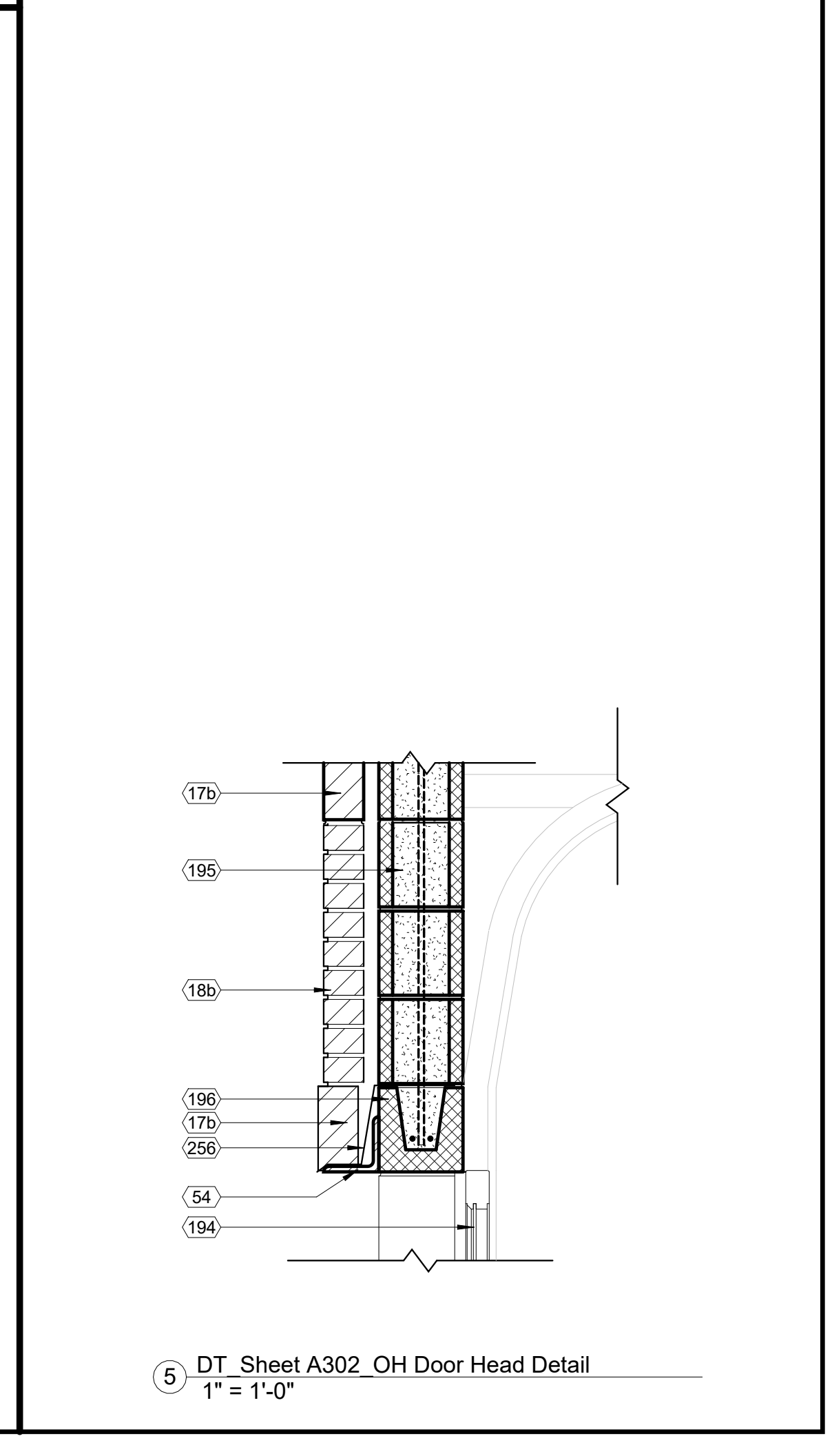
Project number	25003
Date	08/11/2025
Drawn by	ARC
Checked by	N/A

A203

Scale As indicated



Keynote Schedule	
Tag	Text
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
21	Cast-in-place concrete wall. See Structural. Membrane waterproofing at perimeter of foundation wall as specified. See Specification 334600 Subdrainage.
44	Concrete apron as required. Slope away from building with 3% slope minimum. See Civil. Maintain 2% slope max at all man doors.
46	Oil tank stairs (By Others).
54	Steel angle. See Structural.
56	Metal louver or vent. Color to match adjacent surface. See Mechanical.
58	Verify location and size of pit exhaust opening with Structural and Mechanical drawings.
74	1/2" expansion joint with backer rod and sealant.
94	Fasteners at 12" max o.c. for securing subdrainage to pit wall. Follow manufacturer's installation instructions.
96	CCW MiraClay woven geotextile against wall/slab.
97	CCW MiraDrain 6200.
99	CCW MiraStop BW.
100	Concrete slab. See Structural.
149	1/2" recess at scheduled door. See Structural.
150	Painted guardrail with painted 1/2" round pickets at 4" max o.c. See Finish Schedule for color. See Specification 055213 Pipe and Tube Railings.
151	Painted 1-1/2" outside diameter pipe handrail. Return handrail to guard/wall. Typical. See Finish Schedule for color. See Specification 055213 Pipe and Tube Railings.
152	Paint all structural steel P-5 Safety Yellow.
154	Concrete filled pre-fabricated metal pan stair treads with safety yellow abrasive nosing, full grit, full length, adhered and fastened. Typical. See Finish Schedule for color. See Specification 055113 Metal Pan Stairs.
155	1-1/4" steel angle clips.
156	10" steel channel stringer. See Finish Schedule for color. See Specification 055113 Metal Pan Stairs.
157	3"x3"x3-1/4" angle floor clip.
194	Scheduled door. See plans for details.
195	CMU.
196	Closed bottom CMU bond beam. See Structural.
225	Lube console (By Others).
226	Computer podium (By Others).
230	Tool cart (By Others).
232	Bracket mounted fire extinguisher. See Specification Section 104416 Fire Extinguishers. Provide sign at all fire extinguisher locations which may be visually obstructed. See Details.
233	275-gallon Class IIIB new oil tank (By Others).
234	928-gallon Class IIIB new oil tank (By Others). Provide a 2" concrete walkway cap with non-slip surface over (oil tank By Others). Coordinate with equipment supplier prior to installation.
256	Prefinished metal flashing and counterflashing.





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Express Oil Change & Tire Engineers
Right Hand Oil Change Building
Chapin, South Carolina

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No.	Description	Date

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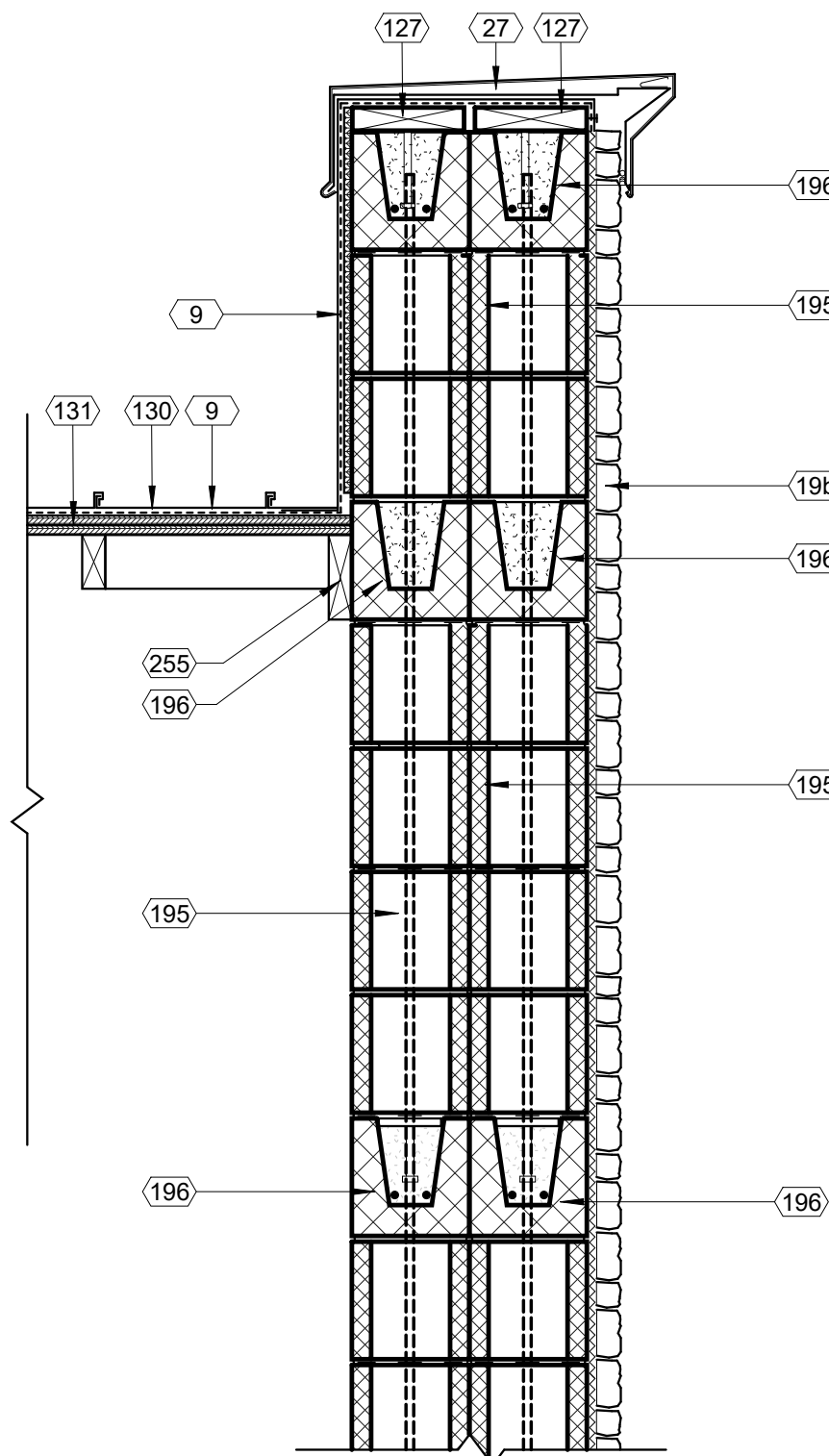
Building Sections

Project number	25003
Date	08/11/2025
Drawn by	ARC
Checked by	N/A

A301

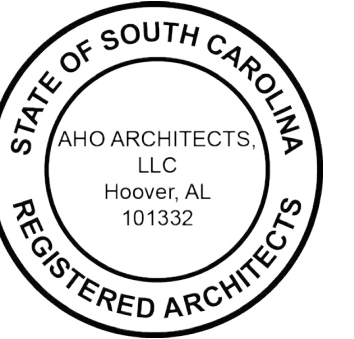
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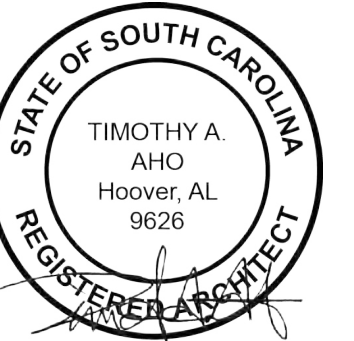


2 DT_Sheet A302 Roof at Stone wall
1" = 1'-0"

Tag	Text
6	Lay-in acoustical ceiling tile and grid, supported from structure.
7	Painted 1/2" gypsum board ceiling secured to structure above. 5/8" Type X where indicated. See Details for # of layers.
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
11	Pre-finished metal canopy. See Details.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3/4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
21	Cast-in-place concrete wall. See Structural. Membrane waterproofing at perimeter of foundation wall as specified. See Specification 334600 Subdrainage.
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
44	Concrete apron as required. Slope away from building with 3% slope minimum. See Civil. Maintain 2% slope max at all man doors.
51	Attic access ladder.
89	Concrete foundation. See Structural.
127	2x pressure treated wood nailer.
130	2 layers of #15 roofing felt.
131	5/8" pressure treated plywood decking. See Structural.
195	CMU.
196	Closed bottom CMU bond beam. See Structural.
210	Cast stone watertable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
218	Service Writing Desk.
219	Air compressor (By Others).
232	Bracket mounted fire extinguisher. See Specification Section 104416 Fire Extinguishers. Provide sign at all fire extinguisher locations which may be visually obstructed. See Details.
243	Weep screed. Keep adhered stone veneer 2" above paved areas and 4" above grade, typical.
255	2x pressure treated wood blocking.
256	Prefinished metal flashing and counterflashing.



08/11/2025



08/11/2025

Express Oil Change & Tire Engineers
Right Hand Oil Change Building
Chapin, South Carolina

FINAL

No.	Description	Date

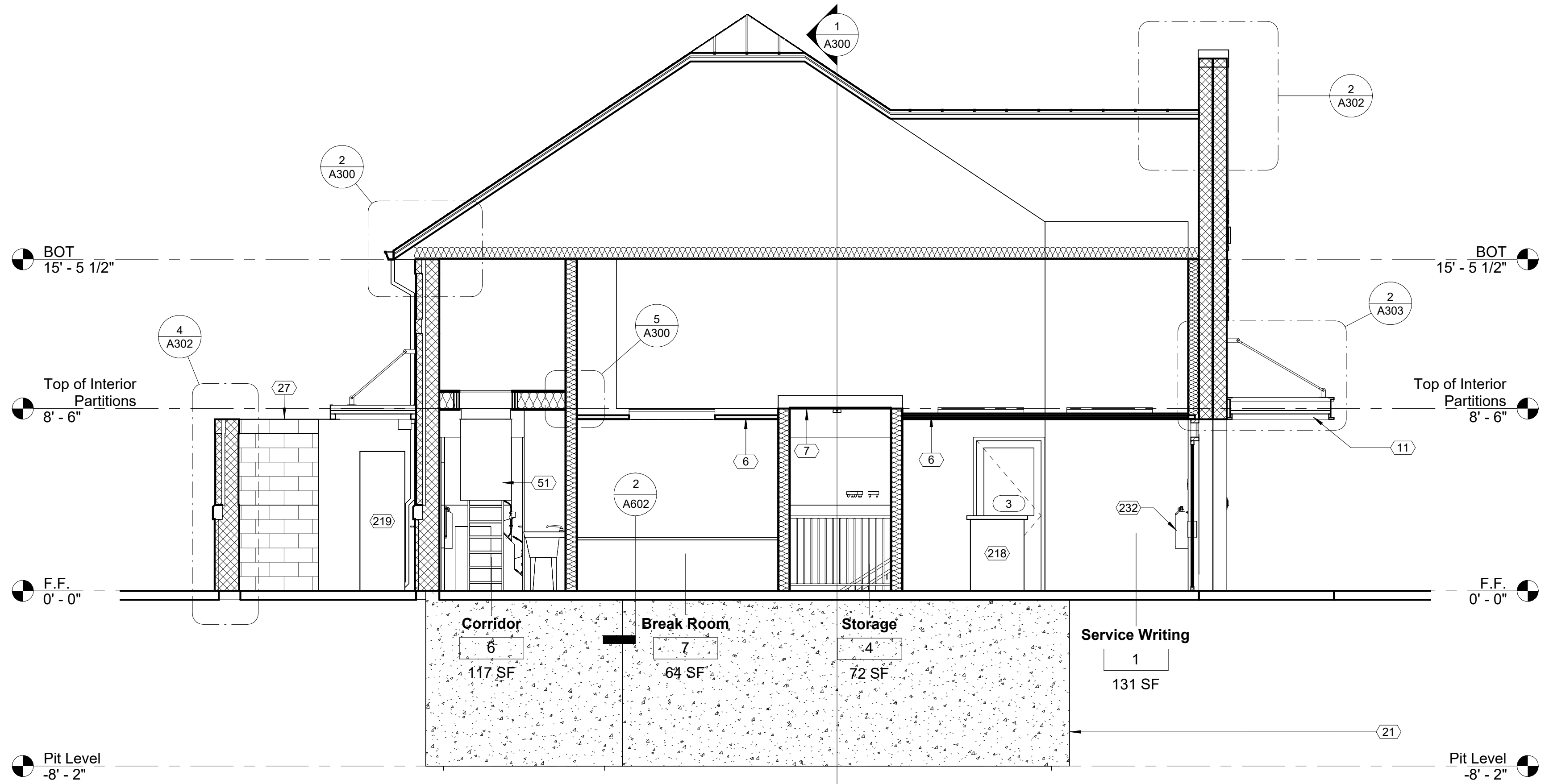
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Building Sections

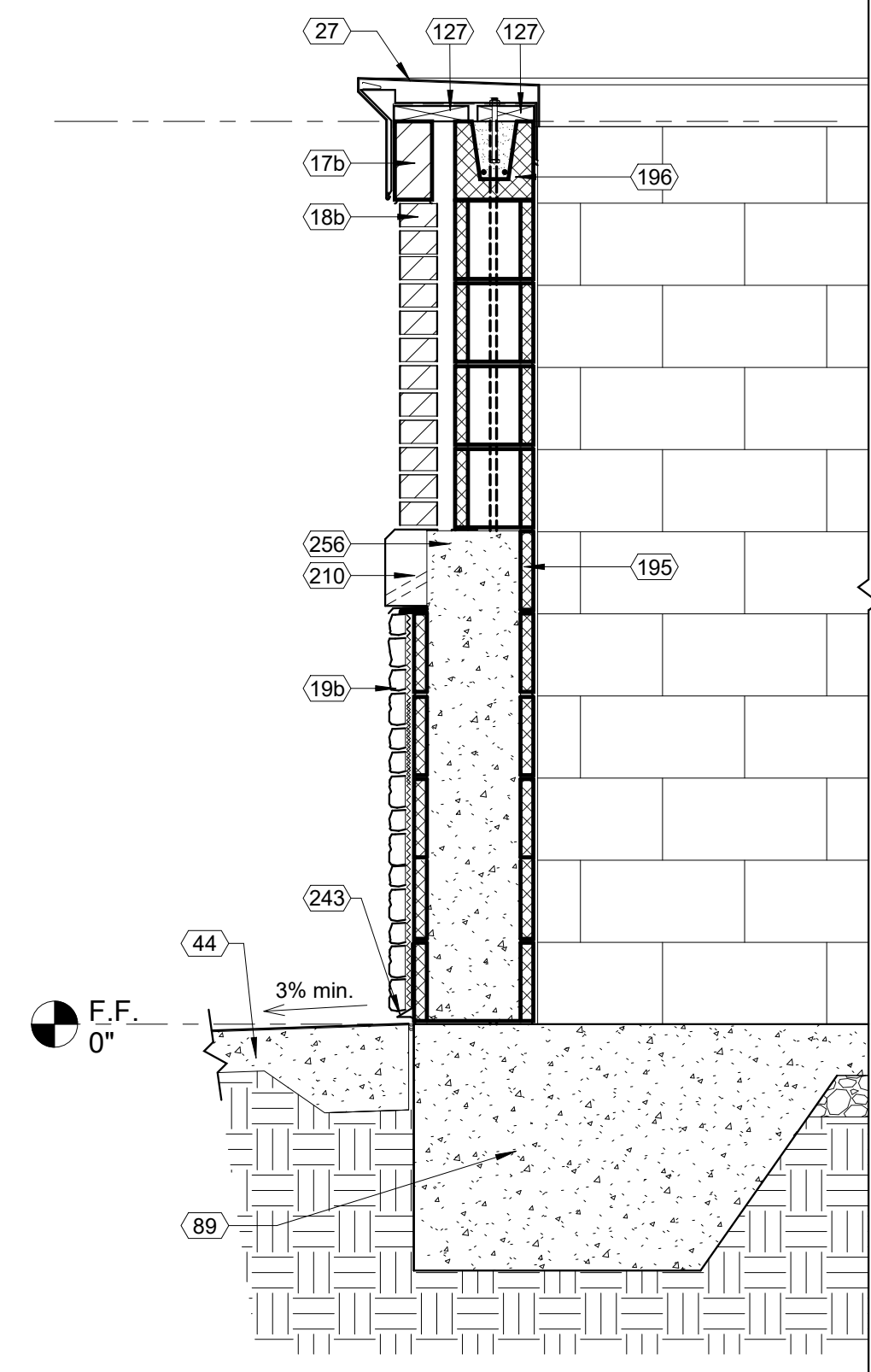
Project number 25003
Date 08/11/2025
Drawn by ARC
Checked by N/A

A302

Scale As indicated



1 Building Section 3
1/4" = 1'-0"

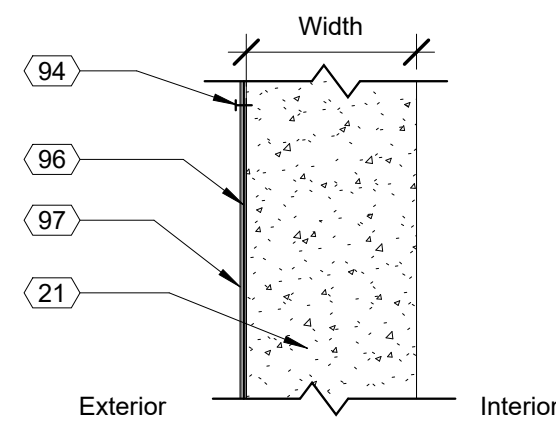


4 DT_Sheet A302 Section @ Covered HVAC Enclosure
3/4" = 1'-0"

E1

Refer to structural drawings for reinforcing and other information

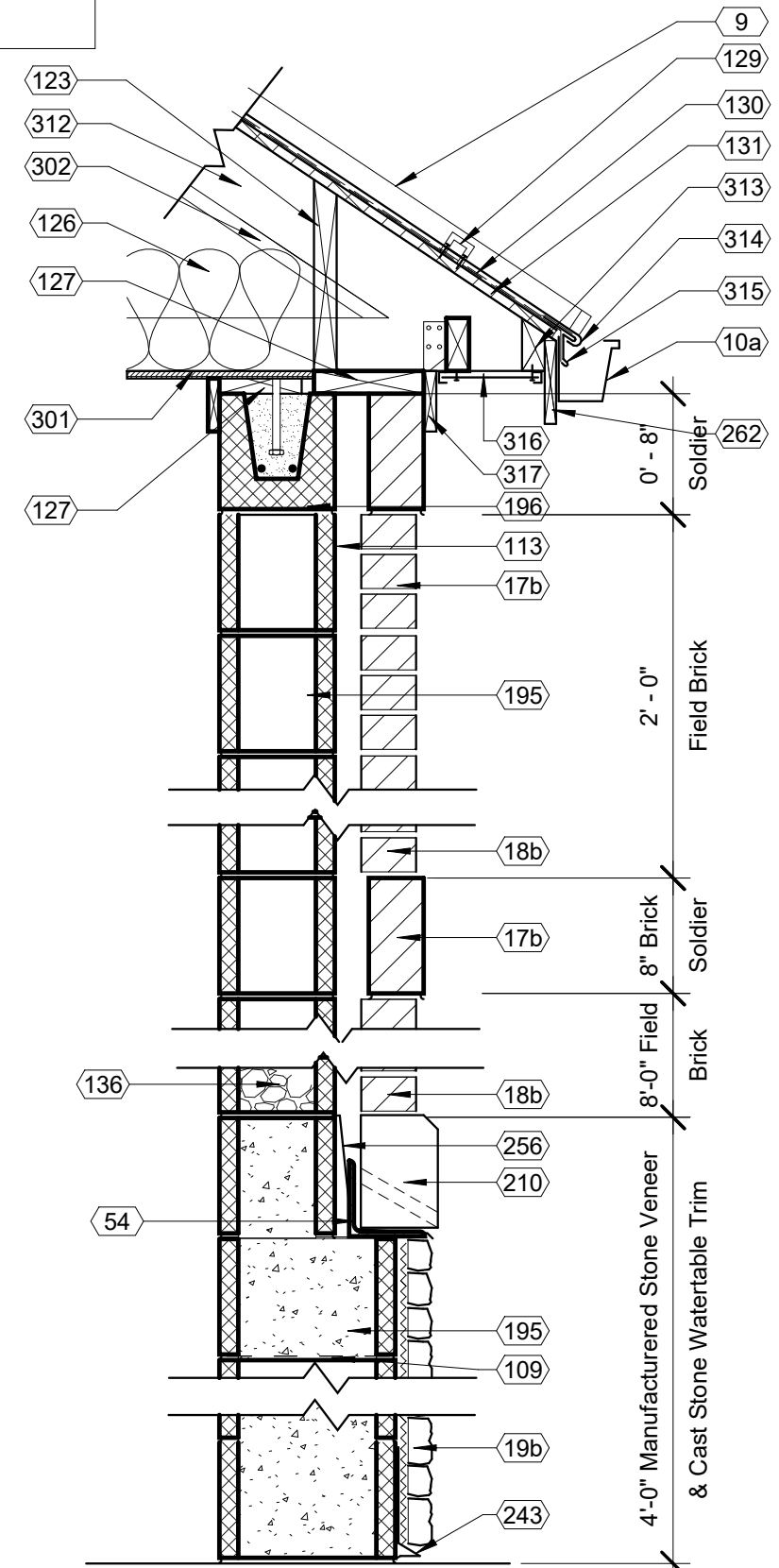
Install all waterproofing per manufacturer's recommendations.



Wall Type No.	Description	Width	Ref Test
E1	As shown	See Struct.	-

E2

Refer to structural drawings for reinforcing, grouting, and other information.
Install siloxane on the exterior side of wall construction.

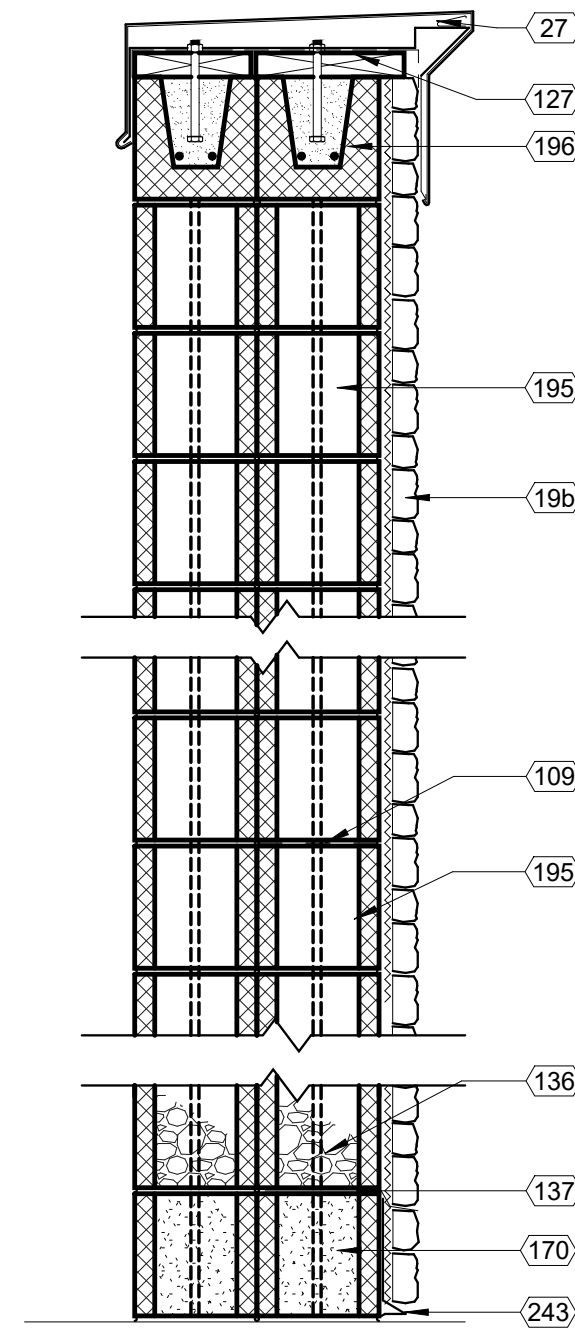


Wall Type No.	Description	Width	Ref Test
E2	As shown	VARIES	-

E3

Refer to structural drawings for reinforcing and other information

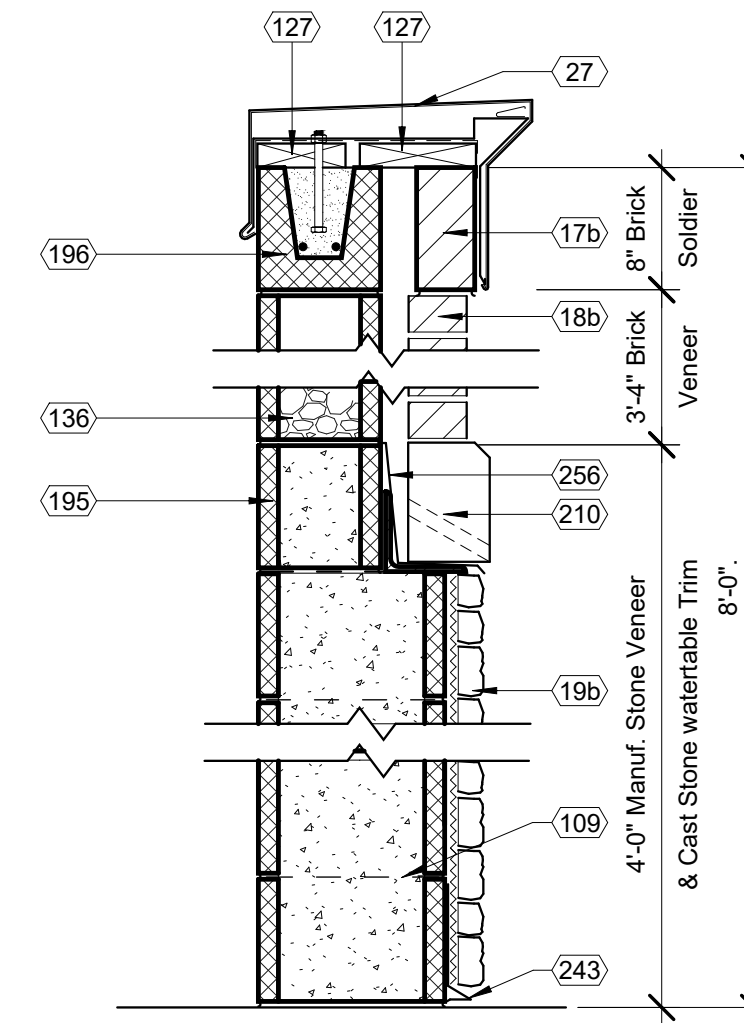
Install siloxane on the exterior side of wall construction



Wall Type No.	Description	Width	Ref Test
E3	As shown	1'-6"	-

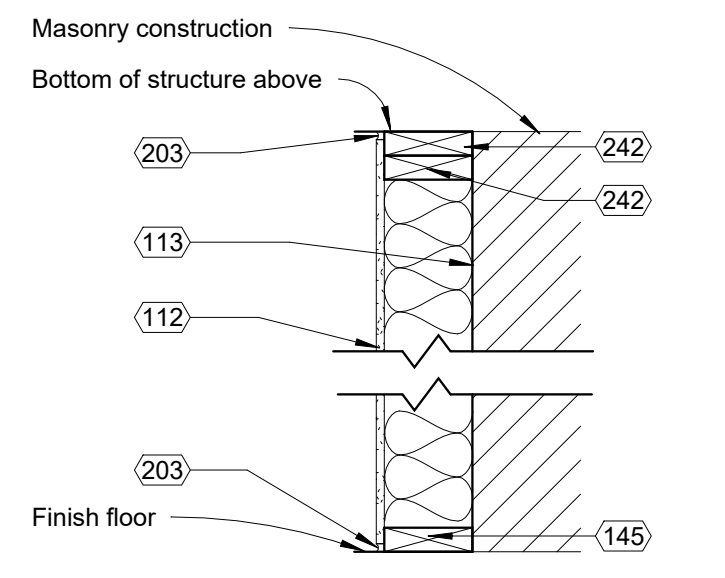
E5

Refer to structural drawings for reinforcing, grouting, and other information



Wall Type No.	Description	Width
E5	As shown	Varies
E5a	As shown, except without coping and field brick veneer to roof. See Elevations on A101.	Varies

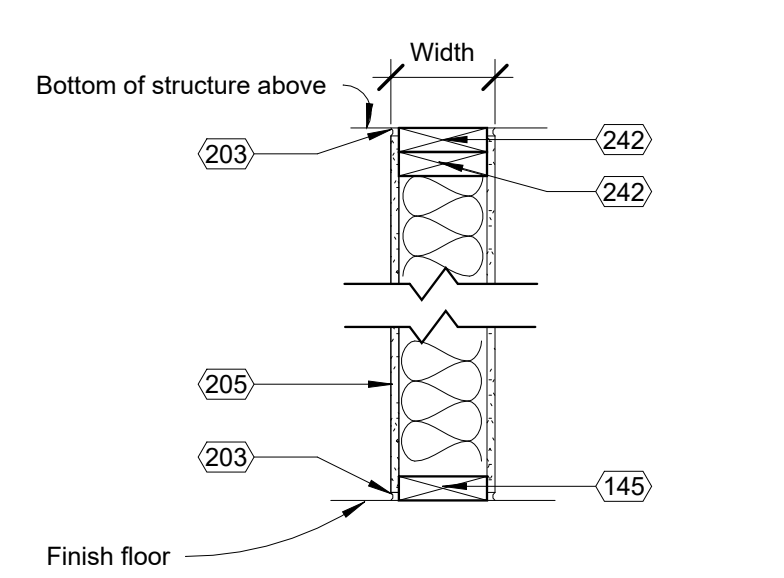
I2



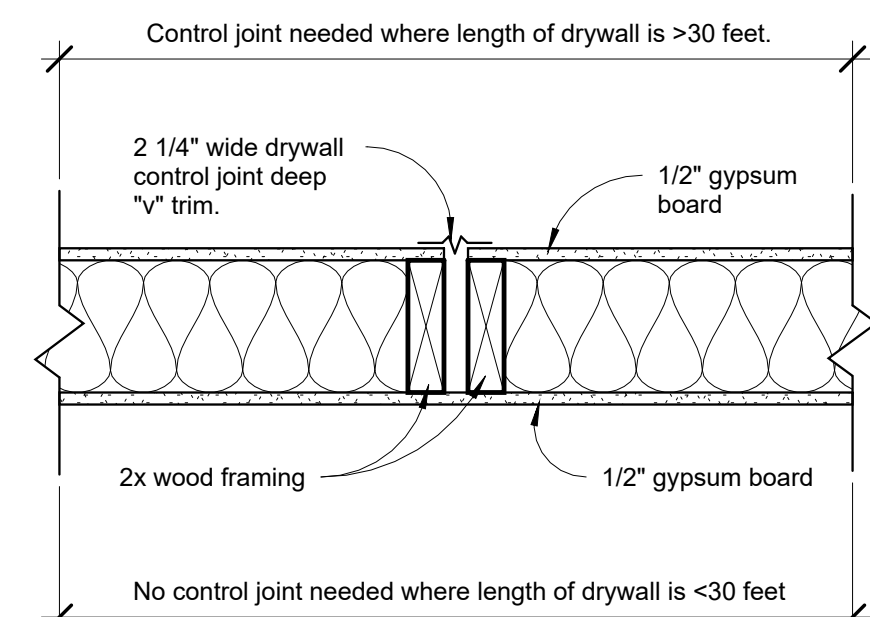
Wall Type No.	Description	Width	Ref Test
I2	As shown	6"	-

I3

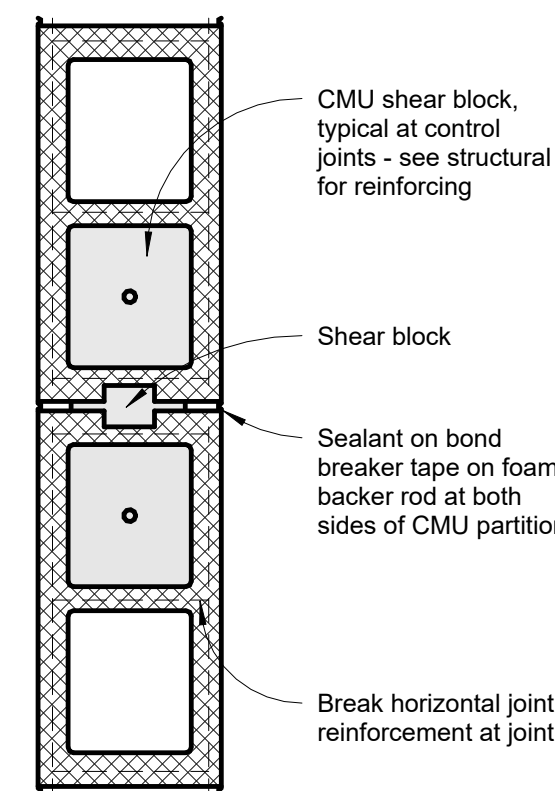
Note: Stagger electrical outlet boxes, switches, etc. Seal around all penetrations in wall with acoustical sealant.



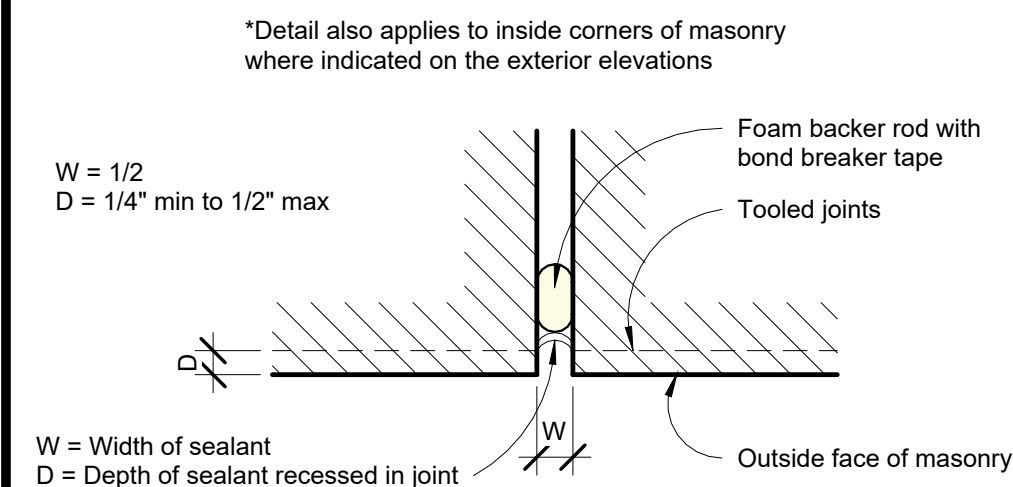
Wall Type No.	Description	Width	Ref Test
I3	As shown	6 1/2"	-



1 DT. Sheet A400 Gypsum Board Control Joint
1 1/2" = 1'-0"



2 DT. Sheet A400 Masonry Control Joint
1 1/2" = 1'-0"



3 DT. Sheet A400 Sealant Detail
6" = 1'-0"

Keynote Schedule

Tag	Text
9	Pre-finished standing seam metal roof system. See Specification 074113.16 Standing Seam Metal Roof Panels. See Finish Schedule for color.
10a	Pre-finished metal gutter. Match roof color.
17b	Clay face soldier brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
18b	Clay face brick over CMU backup, with brick ties at 16" o.c. vertically and horizontally along with horizontal joint reinforcement at 16" o.c. vertically.
19b	Adhered manufactured stone veneer over substrate. Install on mortar setting bed, over scratch coat, on 3.4 # galvanized metal lath on rainscreen drainage mat over fluid applied vapor permeable air barrier applied to substrate. Provide manufacturer's finished edge at corners and openings, typical. See Specification 047300 Manufactured Stone Veneer.
21	Cast-in-place concrete wall. See Structural. Membrane waterproofing at perimeter of foundation wall as specified. See Specification 334600 Subdrainage.
27	Pre-finished metal coping at exposed tops only over self-adhered membrane flashing and pressure treated wood blocking. Slope to drain. Color as indicated on Finish Schedule.
54	Steel angle. See Structural.
94	Fasteners at 12" max o.c. for securing subdrainage to pit wall. Follow manufacturer's installation instructions.
96	CCW MiraClay woven geotextile against wall/slab.
97	CCW MiraDrain 6200.
109	Horizontal joint reinforcement at 16" o.c. vertical.
112	Painted 1/2" gypsum board on 2x6 wood studs at 16" o.c. with kraft-face R-20 batt insulation (kraft in contact with gypsum board). See Details.
113	Fluid applied vapor permeable air barrier. See Specification 072726 Fluid Applied Membrane Air Barrier.
123	Blocking. See Structural.
126	Unfaced R-38 batt insulation. See Specification 072100 Thermal Insulation.
127	2x pressure treated wood nailer.
129	"H" clips at mid-span on standing seam metal roof.

Keynote Schedule

Tag	Text
130	2 layers of #15 roofing felt.
131	5/8" pressure treated plywood decking. See Structural.
136	Pea gravel above through wall flashing.
137	Flashing between first and second course to utilize BlockFlash in addition to the pea gravel specified. Provide a drainage mat in open masonry cell directly above the BlockFlash pan.
145	2x pressure treated wood sill plate.
170	Fill first course of CMU with grout.
195	CMU.
196	Closed bottom CMU bond beam. See Structural.
203	Acoustical sealant and backer rod. See Specification 079219 Acoustical Joint Sealants.
205	1 layer of 1/2" painted gypsum board on both sides of 2"x6" wood studs at 16" o.c. Infill with kraft-faced R-20 batt insulation. Kraft in contact with gypsum board.
210	Cast stone waterable sill with drip edge with through wall flashing below and cell vents every third mortar joint.
242	2x pressure treated wood top plate.
243	Weep screed. Keep adhered stone veneer 2" above paved areas and 4" above grade, typical.
256	Pre-finished metal flashing and counterflashing.
262	2x pressure treated painted wood fascia.
301	Painted fire rated 1/2" thick plywood with painted 1/4" x 1 1/2" wood batten strips at seams and secured to underside of roof trusses.
302	Insulation baffle.
312	Pre-engineered wood roof truss. See Structural.
313	2x wood sub-fascia, continuous.
314	Field cut seam and form pan around eave flashing.
315	Eave flashing with drip edge.
316	Painted, vented soffit. Provide paintable PVC jointer between soffit panels.
317	Painted PT 1x frieze board continuous.



08/11/2025



08/11/2025

Express Oil Change & Tire Engineers
Right Hand Oil Change Building
Chapin, South Carolina

FINAL

No.	Description	Date

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Wall Types

Project number	25003
Date	08/11/2025
Drawn by	ARC
Checked by	N/A

A400

Scale As indicated



① 02_3D View Front (East)

*See Civil for actual site conditions, including dumpster enclosure location.



② 03_3D View Rear (West)

*See Civil for actual site conditions, including dumpster enclosure location.

08/11/2025

08/11/2025

Express Oil Change & Tire Engineers
Right Hand Oil Change Building
Chapin, South Carolina

FINAL

No.	Description	Date

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3D Views

Project number	25003
Date	08/11/2025
Drawn by	ARC
Checked by	N/A

R100

Scale



Express Oil Change & Tire Engineers
Right Hand Oil Change Building
Chapin, South Carolina

FINAL

No.	Description	Date

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COMcheck	
Project number	25003
Date	8/11/2025
Drawn by	TH
Checked by	GW
E600	
Scale	NO SCALE

GW ENGINEERING, LLC
4120 OVERLOOK CIRCLE, TRUSSVILLE, AL 35173
GWNAME@GW-ENG.COM | 205.413.4112
THIGGINBOTHAM@GW-ENG.COM | 205.317.3969

Exterior Lighting Compliance Certificate

Section 1: Project Information
Energy Code: 2009 IECC
Project Title: Express Oil Change & Tire Engineers
Project Type: New Construction
Exterior Lighting Zone: 2 (Neighborhood business district (LZ2))
Construction Site: Chapin, SC
Owner/Agent: Express Oil Change & Tire Engineers, Birmingham, AL
Designer/Contractor: Taylor Higginbotham, GW Engineering, Trussville, AL

Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (E x C)	F Proposed Watts
Entry canopy	110 ft2	0.25	Yes	28	125
Illuminated area of facade wall or surface	648 ft2	0.1	No	65	288
Total Tradable Wattage				28	125
Total Allowed Watts				62	
Total Allowed Supplemental Watts**				600	

* Wattage tradeoffs are only allowed between tradable areas/surfaces.
** A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

A Fixture ID - Description / Lamp / Wattage Per Lamp / Ballast	B Lamp/ Fixture	C # of Fixture	D Fixture Watt.	E Total (C x D)
Entry canopy (110 ft2) Tradable Wattage	1	6	25	125
LED 1: L4E1.5: Other	1	6	38	228
Illuminated area of facade wall or surface (648 ft2): Non-tradable Wattage	1	6	38	228
LED 2: L4: Other	1	6	38	228
Total Tradable Proposed Watts				125

Section 4: Requirements Checklist

Lighting Wattage:

1. Total proposed watts must be less than or equal to total allowed watts.
Compliance: Passes using supplemental allowance watts.

Controls, Switching, and Wiring:

2. All exemption claims are associated with fixtures that have a control device independent of the control of the nonexempt lighting.
 3. Lighting not designated for dusk-to-dawn operation is controlled by either a photosensor (with time switch), or an astronomical time switch.
 4. Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.
 5. All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.

Exterior Lighting Efficacy:

6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 80 lumen/watt.
Exceptions:
 Lighting that has been claimed as exempt and is identified as such in Section 3 table above.
 Lighting that is specifically designated as required by a health or life safety statute, ordinance, or regulation.
 Emergency lighting that is automatically off during normal building operation.
 Lighting that is controlled by motion sensor.

Section 5: Compliance Statement
Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.5.5 and to comply with the mandatory requirements in the Requirements Checklist.
Taylor Higginbotham 08/29/2025
Name - Title Signature Date

Project Title: Express Oil Change & Tire Engineers Report date: 08/29/25
Data filename: C:\Users\Taylor Higginbotham\Documents\GW Engineering\2025 - AHO - EOC Chapin, SC\Project Files\08 - Lighting Calculations & Compliance\COMcheck - EOC Chapin, SC - OC Bldg.cad Page 3 of 4

Interior Lighting Compliance Certificate

Section 1: Project Information
Energy Code: 2009 IECC
Project Title: Express Oil Change & Tire Engineers
Project Type: New Construction
Exterior Lighting Zone: 2 (Neighborhood business district (LZ2))
Construction Site: Chapin, SC
Owner/Agent: Express Oil Change & Tire Engineers, Birmingham, AL
Designer/Contractor: Taylor Higginbotham, GW Engineering, Trussville, AL

Section 2: Interior Lighting Area/Surface Power Calculation

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B x C)
Automotive Facility	3467	0.8	3120
Total Allowed Watts			3120

Section 3: Interior Lighting Fixture Schedule

A Fixture ID - Description / Lamp / Wattage Per Lamp / Ballast	B Lamp/ Fixture	C # of Fixture	D Fixture Watt.	E Total (C x D)
Automotive Facility (3467 sq ft.)	1	8	150	1200
LED 5: L1P: Other	1	19	35	665
LED 6: L2L2P: Other	1	8	38	288
LED 7: L3L3E: Other	1	1	30	30
LED 8: W1: Other	1	1	30	30
Total Proposed Watts				2183

Section 4: Requirements Checklist

Lighting Wattage:

1. Total proposed watts must be less than or equal to total allowed watts.
Compliance: Passes using supplemental allowance watts.

Controls, Switching, and Wiring:

2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
 3. Daylight zones have individual lighting controls independent from that of the general area lighting.
Exceptions:
 Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
 Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.

4. Independent controls for each space (switch/occupancy sensor).
Exceptions:

Section 5: Compliance Statement
Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.5.5 and to comply with the mandatory requirements in the Requirements Checklist.
Taylor Higginbotham
Name - Title Signature Date

Project Title: Express Oil Change & Tire Engineers Report date: 08/29/25
Data filename: C:\Users\Taylor Higginbotham\Documents\GW Engineering\2025 - AHO - EOC Chapin, SC\Project Files\08 - Lighting Calculations & Compliance\COMcheck - EOC Chapin, SC - OC Bldg.cad Page 2 of 4

Interior Lighting Compliance Certificate

Section 1: Project Information
Energy Code: 2009 IECC
Project Title: Express Oil Change & Tire Engineers
Project Type: New Construction
Exterior Lighting Zone: 2 (Neighborhood business district (LZ2))
Construction Site: Chapin, SC
Owner/Agent: Express Oil Change & Tire Engineers, Birmingham, AL
Designer/Contractor: Taylor Higginbotham, GW Engineering, Trussville, AL

Section 2: Interior Lighting Area/Surface Power Calculation

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B x C)
Automotive Facility	3467	0.8	3120
Total Allowed Watts			3120

Section 3: Interior Lighting Fixture Schedule

A Fixture ID - Description / Lamp / Wattage Per Lamp / Ballast	B Lamp/ Fixture	C # of Fixture	D Fixture Watt.	E Total (C x D)
Automotive Facility (3467 sq ft.)	1	8	150	1200
LED 5: L1P: Other	1	19	35	665
LED 6: L2L2P: Other	1	8	38	288
LED 7: L3L3E: Other	1	1	30	30
LED 8: W1: Other	1	1	30	30
Total Proposed Watts				2183

Section 4: Requirements Checklist

Lighting Wattage:

1. Total proposed watts must be less than or equal to total allowed watts.
Compliance: Passes using supplemental allowance watts.

Controls, Switching, and Wiring:

2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
 3. Daylight zones have individual lighting controls independent from that of the general area lighting.
Exceptions:
 Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
 Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.

4. Independent controls for each space (switch/occupancy sensor).
Exceptions:

Section 5: Compliance Statement
Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.5.5 and to comply with the mandatory requirements in the Requirements Checklist.
Taylor Higginbotham
Name - Title Signature Date

Project Title: Express Oil Change & Tire Engineers Report date: 08/29/25
Data filename: C:\Users\Taylor Higginbotham\Documents\GW Engineering\2025 - AHO - EOC Chapin, SC\Project Files\08 - Lighting Calculations & Compliance\COMcheck - EOC Chapin, SC - OC Bldg.cad Page 2 of 4

Interior Lighting Compliance Certificate

Section 1: Project Information
Energy Code: 2009 IECC
Project Title: Express Oil Change & Tire Engineers
Project Type: New Construction
Exterior Lighting Zone: 2 (Neighborhood business district (LZ2))
Construction Site: Chapin, SC
Owner/Agent: Express Oil Change & Tire Engineers, Birmingham, AL
Designer/Contractor: Taylor Higginbotham, GW Engineering, Trussville, AL

Section 2: Interior Lighting Area/Surface Power Calculation

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B x C)
Automotive Facility	3467	0.8	3120
Total Allowed Watts			3120

Section 3: Interior Lighting Fixture Schedule

A Fixture ID - Description / Lamp / Wattage Per Lamp / Ballast	B Lamp/ Fixture	C # of Fixture	D Fixture Watt.	E Total (C x D)
Automotive Facility (3467 sq ft.)	1	8	150	1200
LED 5: L1P: Other	1	19	35	665
LED 6: L2L2P: Other	1	8	38	288
LED 7: L3L3E: Other	1	1	30	30
LED 8: W1: Other	1	1	30	30
Total Proposed Watts				2183

Section 4: Requirements Checklist

Lighting Wattage:

1. Total proposed watts must be less than or equal to total allowed watts.
Compliance: Passes using supplemental allowance watts.

Controls, Switching, and Wiring:

2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
 3. Daylight zones have individual lighting controls independent from that of the general area lighting.
Exceptions:
 Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
 Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.

4. Independent controls for each space (switch/occupancy sensor).
Exceptions:

Section 5: Compliance Statement
Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.1.5.5 and to comply with the mandatory requirements in the Requirements Checklist.
Taylor Higginbotham
Name - Title Signature Date

Project Title: Express Oil Change & Tire Engineers Report date: 08/29/25
Data filename: C:\Users\Taylor Higginbotham\Documents\GW Engineering\2025 - AHO - EOC Chapin, SC\Project Files\08 - Lighting Calculations & Compliance\COMcheck - EOC Chapin, SC - OC Bldg.cad Page 1 of 4

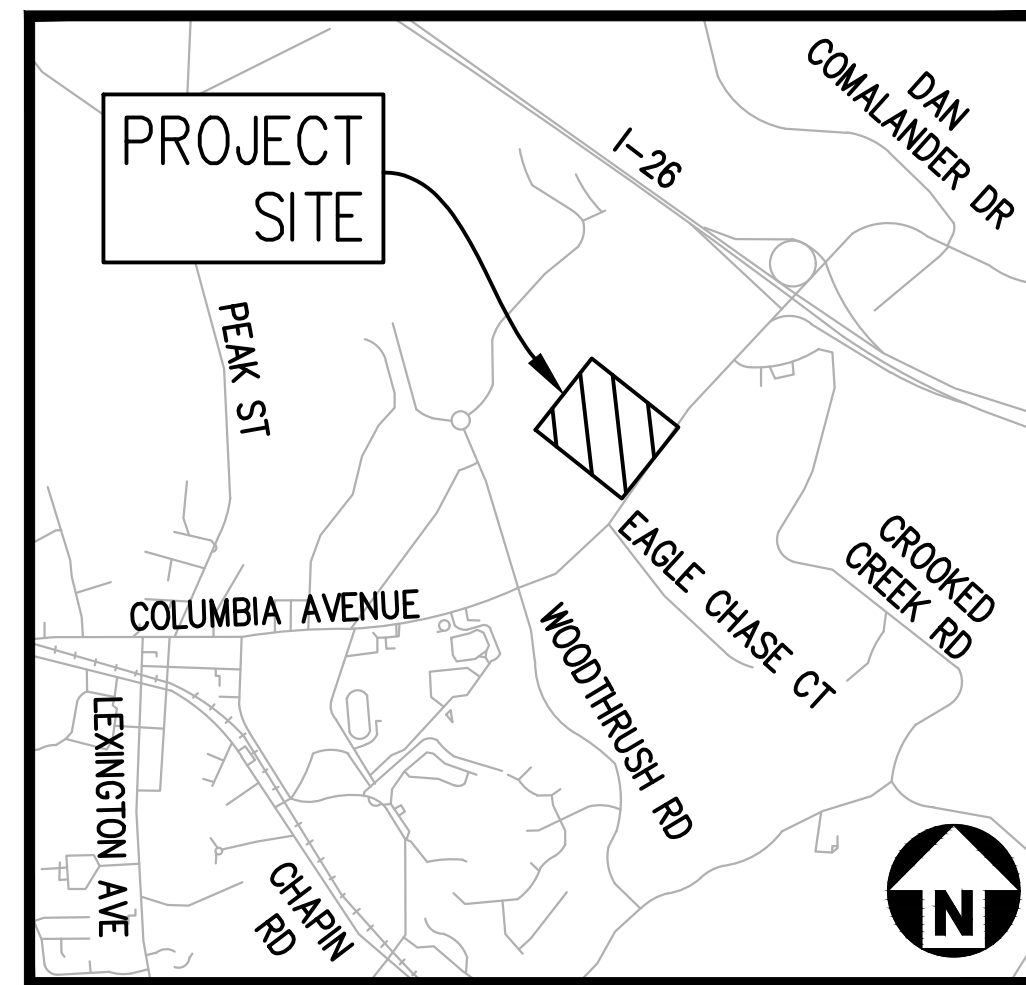
EXPRESS OIL - CHAPIN, SC

XX COLUMBIA AVENUE
 TOWN OF CHAPIN
 LEXINGTON COUNTY, SOUTH CAROLINA
 PARCEL A2 LOT B, TMS NO. 00700-01-017
 0.80 ACRES
 ZONING: COMMERCIAL CORRIDOR (CC)

CONSTRUCTION PLANS PROJECT NUMBER: EXO25002 DATE: JULY 2025

Sheet List Table

C0.00	COVER SHEET
V0.00	ALTA SURVEY
C0.01	GENERAL NOTES
C1.00	EXISTING CONDITIONS & DEMOLITION PLAN
C2.00	SITE PLAN
C3.00	GRADING PLAN
C3.01	RETAINING WALL PLAN
C3.02	EXISTING DRAINAGE AREA MAP
C3.03	PROPOSED DRAINAGE AREA MAP
C4.00	WATER & SEWER PLAN
C4.01	UTILITY PLAN
C4.02	STORM SEWER PLAN
C4.03	STORM SEWER PROFILES
C5.00	GARBAGE TRUCK TURN EXHIBIT
C6.00	EROSION CONTROL PLAN
C6.01	EROSION CONTROL DETAILS
C6.02	EROSION CONTROL DETAILS
C6.03	EROSION CONTROL DETAILS
C7.00	PAVING, STRIPING & SIGNAGE PLAN
C8.00	STANDARD CONSTRUCTION DETAILS
C8.01	STANDARD CONSTRUCTION DETAILS
C8.02	STANDARD CONSTRUCTION DETAILS
C8.03	STANDARD CONSTRUCTION DETAILS
C8.04	STANDARD CONSTRUCTION DETAILS
L5.00	CODE LANDSCAPE PLAN
L5.01	PLANTING DETAILS



VICINITY MAP
 N.T.S.

SCDES ENGINEER'S CERTIFICATION STATEMENT:

I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENT SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000.



APPLICANT'S CERTIFICATION
 I (WE) HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND I (WE) ARE RESPONSIBLE FOR THE LAND DISTURBANCE AND RELATED MAINTENANCE THEREOF. LEXINGTON COUNTY AUTHORITIES WILL BE ALLOWED TO ENTER THE PROJECT SITE FOR THE PURPOSES OF ON-SITE INSPECTIONS.

DATE _____ OWNER/PERSON FINANCIALLY RESPONSIBLE _____

DESIGNER'S CERTIFICATION
 "I HEREBY CERTIFY THAT THIS PLAN IS DESIGNED TO CONTAIN ON THE PROPERTY CONCERNED TO THE MAXIMUM EXTENT, TO PROVIDE FOR THE PROTECTION OF THE PROPERTY AND THE PROPOSED IMPROVEMENTS THEREON FROM THE EFFECTS OF FLOODING, TO PROVIDE FOR THE CONTROL OF THE RUNOFF FROM THE PROPERTY, AND THAT ALL THE PROVISIONS FOR SEDIMENT CONTROL AND STORM DRAINAGE ARE IN ACCORDANCE WITH THE STORMWATER MANAGEMENT AND SEDIMENT CONTROL ORDINANCE FOR LEXINGTON COUNTY, SOUTH CAROLINA."

DATE _____ OWNER/PERSON FINANCIALLY RESPONSIBLE _____

AL KOON
 MAYOR

LELAND TEAL
 COUNCIL MEMBER

GREGG WHITE
 MAYOR PRO TEM

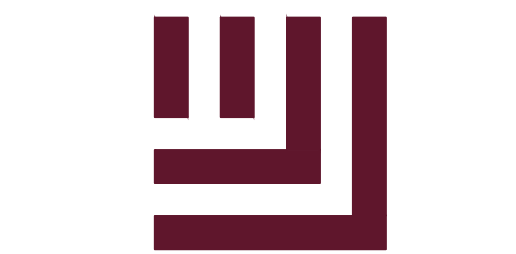
MIKE CLONTS
 COUNCIL MEMBER

SHANNON BOWERS
 MUNICIPAL CLERK

VICKY SHEALY
 COUNCIL MEMBER

THE CONTRACTOR SHALL KEEP ON SITE A CURRENT SET OF THE APPROVED CONSTRUCTION WORKING DRAWINGS AT ALL TIMES. THE CONTRACTOR SHALL MARK (IN RED INK) ALL APPROVED CHANGES INCURRED FOLLOWING PUBLIC WORKS DEPARTMENT APPROVAL OF THE INITIAL DRAWINGS. THESE CHANGES MAY BE INITIATED FROM FIELD CONDITIONS OR CHANGES MADE BY THE DESIGN ENGINEER OR THE PUBLIC WORKS ENGINEER. EXCEPT FOR MINOR FIELD ADJUSTMENTS, ALL CHANGES SHALL BE REVIEWED AND AGREED TO BY THE DESIGN ENGINEER AND THE PUBLIC WORKS ENGINEER PRIOR TO FINAL APPROVAL OF THE PROJECT. THE CONTRACTOR SHALL SUBMIT THE WORKING DRAWINGS TO THE ENGINEER OF RECORD (DESIGN ENGINEER) AFTER FINAL INSPECTION OF PROJECT TO SERVE AS A BASIS FOR DEVELOPMENT OF FINAL AS-BUILT RECORD DRAWINGS.

NO SUBSURFACE UTILITY SURVEY (SUE) HAS BEEN PERFORMED FOR THE PREPARATION OF THESE PLANS. ADDITIONAL UNDERGROUND UTILITIES MAY BE IN THE AREA. CONTRACTOR SHALL NOTIFY "SC811" (811) OR 1-800-721-7877 AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR TO CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "SC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.



McADAMS

The John R. McAdams Company, Inc.
 4400 State Highway 121, Suite 800
 Lewisville, Texas 75056

phone 972. 436. 9712
 fax 972. 436. 9715
 TBPE: F-19762 TBPELS: F-10194440
 SC license number: 552, 402
 www.mcadamsco.com

CONTACT

BRITTANY YOUNGBLOOD
 BYOUNGBLOOD@MCADAMSCO.COM
 PHONE: 501.840.0001

CLIENT

JUSTIN DUCK
 1880 SOUTHPARK DRIVE
 BIRMINGHAM, AL 35244
 PHONE: 205.906.2006



PROJECT DIRECTORY

GEOTECHNICAL
 TERRACON
 521 CLEMSON ROAD
 COLUMBIA, SC 29229
 PHONE: 803.741.9000
 ENGINEER OF RECORD MCADAMS
 RAY WATSON
 621 HILLSBOROUGH STREET, SUITE 500
 RALEIGH, NC 27603
 PHONE: 919.418.4715



REVISIONS

NO.	DATE	REVISIONS
1	09.22.2025	2ND SUBMITTAL
2		
3		
4		
5		
6		

CONSTRUCTION PLANS
 FOR:
 EXPRESS OIL - CHAPIN, SC
 TOWN OF CHAPIN, SOUTH CAROLINA
 29036
 PROJECT NUMBER: EXO25002

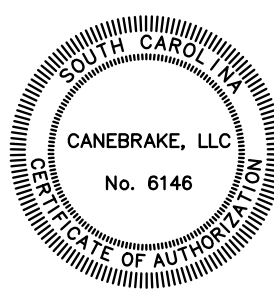


Commercial Real Estate
Due Diligence Management
3465 South Arlington Rd Suite E#183
Akron, OH 44312
866.290.8121
www.amnational.net

ALTA/NSPS Land Title Survey

FOR
EOC CHAPIN SC
COLUMBIA AVE
CHAPIN, SC 29036
COUNTY OF LEXINGTON

TO: FIDELITY NATIONAL TITLE INSURANCE COMPANY; EXPRESS OIL CHANGE, LLC, A LIMITED LIABILITY COMPANY; AND AMERICAN NATIONAL, LLC, THIS IS TO CERTIFY THAT THIS MAP OR PLAT 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, 2, 3, 4, 5, 6A, 6B, 7A, 7B1, 7C, 8, 9, 10, 11B, 13, 14, 16, 17, 18, 19, 20 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON 4/21/2025.



BY: JOSEPH T. DYCHES, P.L.S.

LAND SURVEYOR NO. 32272
STATE OF SOUTH CAROLINA
DATE OF PLAT: 4/23/2025
DATE OF LAST REVISION: 6/18/2025

SURVEY PREPARED BY:



202 W MAIN STREET (PO BOX 1330)
CLINTON, SC 29325
PROJ#: 25.006-S

FOR A SURVEY UPDATE OF THIS SURVEY PLEASE CONTACT
SURVEYS@AMNATIONAL.NET
WHEN PROVIDING SURVEY COMMENTS REGARDING THIS SURVEY
PLEASE CONTACT CLIENTCOMMENTS@AMNATIONAL.NET

NETWORK REFERENCE #20250118-1

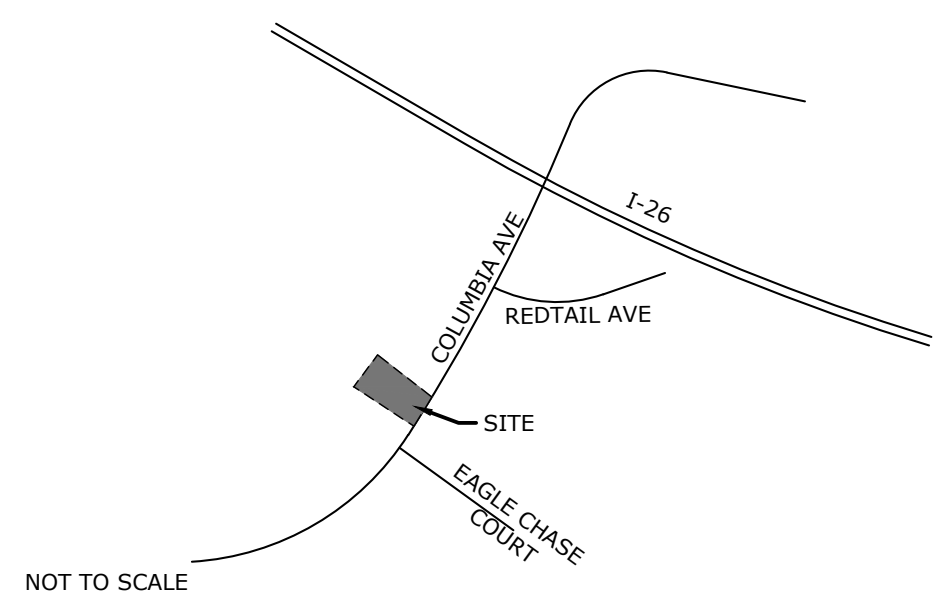
Legal Description

FROM TITLE COMMITMENT:

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN LEXINGTON COUNTY, SOUTH CAROLINA, BEING SHOWN AS LOT "B", ON 0.87 ACRE ON A PLAT PREPARED FOR CHAPIN PEACH, PREPARED BY BAXTER LAND SURVEYING CO., INC., BEARING THE SEAL AND CERTIFICATION OF ROSSER W. BAXTER, JR., SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR NO. 7613, DATED MARCH 20, 2025, AS MORE PARTICULARLY DEPICTED ON A PLAT RECORDED IN PLAT BOOK 21162, PAGE 4382, IN THE REGISTER OF DEEDS FOR LEXINGTON COUNTY, SOUTH CAROLINA, WHICH PLAT IS INCORPORATED HEREIN BY REFERENCE HERETO.

THIS BEING THE SAME PROPERTY AS DESCRIBED IN FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT NO. 3-02973(R5) BEARING AN EFFECTIVE DATE OF MAY 9, 2025 AT 8:00 A.M.

LOCATION MAP



NOT TO SCALE

Legend of Symbols & Abbreviations

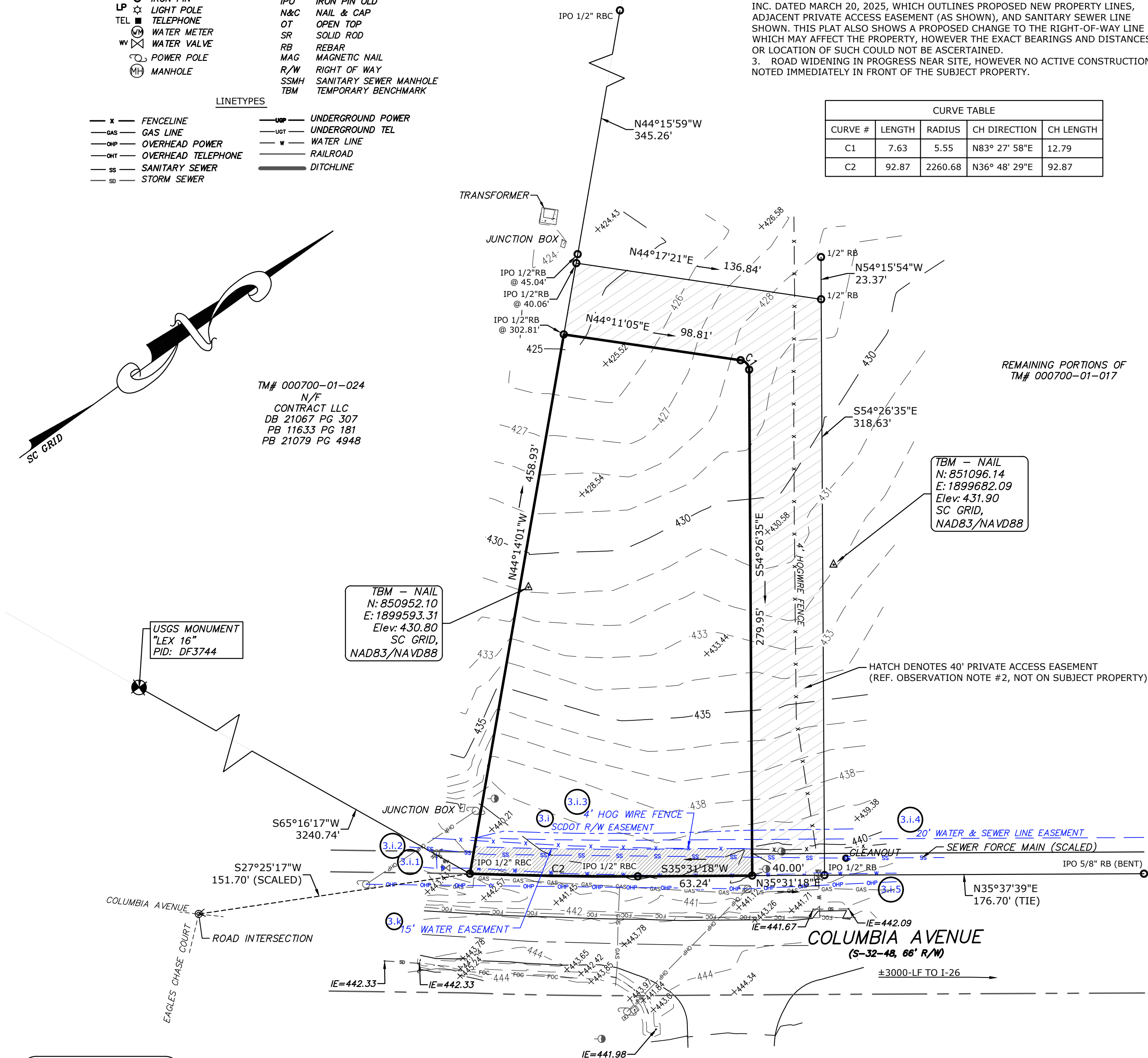
SYMBOLS		ABBREVIATIONS	
	FIRE HYDRANT	CT	CRIMP TOP
	GAS METER	EP	EDGE OF PAVEMENT
	GAS VALVE	FFE	FINISHED FLOOR
	IRON PIN	IPS	IRON PIN SET
	LIGHT POLE	IPO	IRON PIN OLD
	TELEPHONE	N&C	NAIL & CAP
	WATER METER	OT	OPEN TOP
	WATER VALVE	SR	SOLID ROD
	POWER POLE	RB	REBAR
	MANHOLE	MAG	MAGNETIC NAIL
		R/W	RIGHT OF WAY
		SSMH	SANITARY SEWER MANHOLE
		TBM	TEMPORARY BENCHMARK

LINETYPES			
	FENCELINE		UNDERGROUND POWER
	GAS LINE		UNDERGROUND TEL
	OVERHEAD POWER		WATER LINE
	OVERHEAD TELEPHONE		RAILROAD
	SANITARY SEWER		DITCHLINE
	STORM SEWER		

Significant Observations

- SANITARY SEWER NOT IDENTIFIED IN PRIVATE UTILITY LOCATE OR MARKED ON THE SITE. SANITARY SEWER CLEANOUT APPURTENANCE IDENTIFIED AND SURVEYED AS SHOWN ON THIS PLAT. FORCE MAIN SHOWN PER SURVEY BY BAXTER LAND SURVEYING CO., INC. FOR CHAPIN PEACH, DATED MARCH 20, 2025.
- SUBJECT PARCEL IS IDENTIFIED AS LOT "B" ON AN UNRECORDED PLAT PROVIDED BY THE CLIENT, "PLAT PREPARED FOR CHAPIN PEACH" BY BAXTER LAND SURVEYING CO., INC. DATED MARCH 20, 2025, WHICH OUTLINES PROPOSED NEW PROPERTY LINES, ADJACENT PRIVATE ACCESS EASEMENT (AS SHOWN), AND SANITARY SEWER LINE SHOWN. THIS PLAT ALSO SHOWS A PROPOSED CHANGE TO THE RIGHT-OF-WAY LINE WHICH MAY AFFECT THE PROPERTY, HOWEVER THE EXACT BEARINGS AND DISTANCES OR LOCATION OF SUCH COULD NOT BE ASCERTAINED.
- ROAD WIDENING IN PROGRESS NEAR SITE, HOWEVER NO ACTIVE CONSTRUCTION NOTED IMMEDIATELY IN FRONT OF THE SUBJECT PROPERTY.

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CH DIRECTION	CH LENGTH
C1	7.63	5.55	N83° 27' 58"E	12.79
C2	92.87	2260.68	N36° 48' 29"E	92.87



TM# 000700-01-024
N/F
CONTRACT LLC
DB 21067 PG 307
PB 11633 PG 181
PB 21079 PG 4948

REMAINING PORTIONS OF
TM# 000700-01-017

TBM - NAIL
N: 851096.14
E: 1899682.09
Elev: 431.90
SC GRID,
NAD83/NAVD88

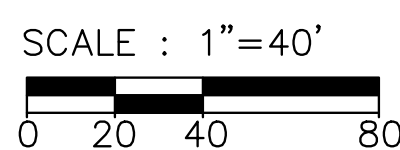
TBM - NAIL
N: 850952.10
E: 1899593.31
Elev: 430.90
SC GRID,
NAD83/NAVD88

USGS MONUMENT
"LEX 16"
PID: DF3744

HATCH DENOTES 40' PRIVATE ACCESS EASEMENT
(REF. OBSERVATION NOTE #2, NOT ON SUBJECT PROPERTY)

COLUMBIA AVENUE
(S-32-48, 66' R/W)

LOT "B"
AREA
37,970 SF
0.87 ACRES
(INCLUDES ANY & ALL R/W)



FLOOD NOTE: By graphic plotting only, this property is in Zone(s) "ZONE X" of the Flood Insurance Rate Map, Community Panel No. 450630040J, which bears an effective date of 7/5/2018 and is not in a Special Flood Hazard Area.

Utility Notes

- WITH REGARD TO TABLE A, ITEM 11, SOURCE INFORMATION FROM PROVIDED PLANS AND MARKINGS IS COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION AND/OR A PRIVATE UTILITY LOCATE REQUEST MAY BE NECESSARY.
- PRIVATE UTILITY LOCATE REPORT COMPLETED 4/1/2025 BY UNDERGROUND DETECTIVE, AND PROVIDED TO THE SURVEYOR BY THE CLIENT. MARKINGS ON-SITE CORRESPOND TO REPORT AND REFERENCE IS MADE TO ANY NOTES OF THE REPORT.
- FROM OBSERVED ABOVE GROUND APPURTENANCES AND MARKINGS IDENTIFIED DURING FIELD WORK AND SHOWN HEREON, GAS, ELECTRIC, STORM SEWER, TELEPHONE, AND WATER LINES AND/OR SERVICE APPEARS AVAILABLE FOR THE SUBJECT PROPERTY WITHIN THE RIGHT-OF-WAY OF SC HWY 219 OR ADJACENT AREAS. PRIVATE LOCATE DID NOT SHOW SANITARY SEWER LOCATION, HOWEVER SANITARY APPURTENANCES WERE IDENTIFIED AS SHOWN HEREON.

Notes Corresponding to Schedule B

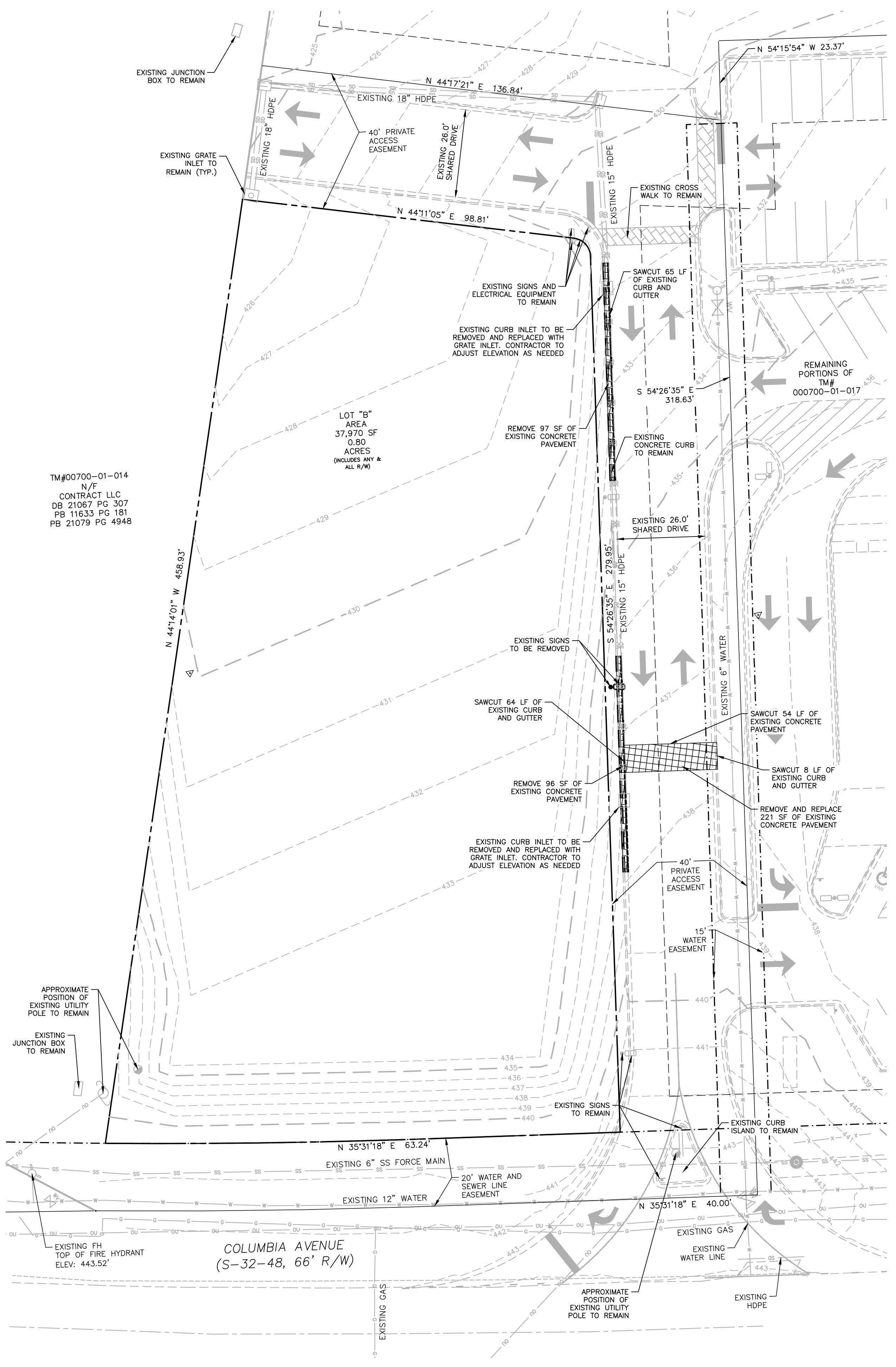
NUMBERS CORRESPOND TO SCHEDULE B EXCEPTION ITEMS
FIDELITY NATIONAL TITLE INSURANCE COMPANY
COMMITMENT NO. 3-02973(R5)
DATED MAY 9, 2025 AT 8:00 A.M.

- ANY DEFECT, LIEN, ENCUMBRANCE, ADVERSE CLAIM, OR OTHER MATTER THAT APPEARS FOR THE FIRST TIME IN THE PUBLIC RECORDS OR IS CREATED, ATTACHES, OR IS DISCLOSED BETWEEN THE COMMITMENT DATE AND THE DATE ON WHICH ALL OF THE SCHEDULE B, PART I REQUIREMENTS ARE MET.
NO GRAPHIC REPRESENTATION
- STANDARD EXCEPTIONS:
(a) RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS.
NO GRAPHIC REPRESENTATION
(b) EASEMENTS, OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS.
NO GRAPHIC REPRESENTATION
(c) ENCROACHMENTS, OVERLAPS, BOUNDARY LINE DISPUTES, OR OTHER MATTERS WHICH WOULD BE DISCLOSED BY AN ACCURATE SURVEY OR INSPECTION OF THE PREMISES.
APPLICABLE MATTERS SHOWN HEREON
(d) ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS.
NO GRAPHIC REPRESENTATION
(e) TAXES OR SPECIAL ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS.
NO GRAPHIC REPRESENTATION
- SPECIAL EXCEPTIONS:
(a) ALL GENERAL OR SPECIAL TAXES AND ASSESSMENTS, INCLUDING PUBLIC SERVICE DISTRICT ASSESSMENTS, IF ANY, FOR LEXINGTON COUNTY, SOUTH CAROLINA FOR THE YEAR 2025 AND SUBSEQUENT YEARS.
NO GRAPHIC REPRESENTATION
(b) DOES NOT AFFECT
(c) DOES NOT AFFECT
(d) ROLL-BACK TAXES AS PROVIDED UNDER TITLE 12, ARTICLE 3, OF THE SOUTH CAROLINA CODE OF LAWS, 1976, AS AMENDED, PROVISIONS SECTION 12-43-220(D) AND OTHERS.
NO GRAPHIC REPRESENTATION
(e) DOES NOT AFFECT
(f) EASEMENT FROM OTIS W. HORTON, III TO SOUTH CAROLINA ELECTRIC & GAS COMPANY, A SOUTH CAROLINA CORPORATION, DATED APRIL 18, 2007, FILED FOR RECORD MAY 9, 2007 AT 11:05 A.M., RECORDED IN BOOK 11978, PAGE 205, IN THE REGISTER OF DEEDS FOR LEXINGTON COUNTY, SOUTH CAROLINA.
RELEVANT TO PARENT TRACT - NOT WITHIN SURVEY AREA
(g) DOES NOT AFFECT
(h) DOES NOT AFFECT
(i) RIGHT OF WAY EASEMENT FROM EAGLE NEST PROPERTIES, LLC TO SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION, DATED JANUARY 13, 2025, FILED FOR RECORD FEBRUARY 19, 2025 AT 1:26 P.M., RECORDED IN BOOK 21147, PAGE 107, AFORESAID RECORDS.
AS GRAPHICALLY SHOWN HEREON
(j) SEWER AGREEMENT BY AND BETWEEN CHAPIN PEACH, LLC AND TOWN OF CHAPIN, DATED FEBRUARY 17, 2025, FILED FOR RECORD FEBRUARY 19, 2025 AT 10:34 A.M., RECORDED IN BOOK 21146, PAGE 5540, AFORESAID RECORDS.
NO GRAPHIC REPRESENTATION
(k) EASEMENT FROM CHAPIN PEACH, LLC TO CITY OF COLUMBIA, DATED MAY 22, 2025, FILED FOR RECORD MAY 29, 2025 AT 4:20 P.M., RECORDED IN BOOK 21163, PAGE 802, AFORESAID RECORDS.
AS GRAPHICALLY SHOWN HEREON
(l) THOSE MATTERS AS DISCLOSED BY THAT CERTAIN PRELIMINARY SURVEY ENTITLED "ALTA/NSPS LAND TITLE SURVEY TO: FIDELITY NATIONAL TITLE INSURANCE COMPANY; EXPRESS OIL CHANGE, LLC, A LIMITED LIABILITY COMPANY; AND AMERICAN NATIONAL, LLC" PREPARED BY CANEBRAKE CIVIL, BEARING THE SEAL AND CERTIFICATION OF JOSEPH T. DYCHES, SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR NO. 32272, DATED APRIL 23, 2025, BEING DESIGNATED AS NETWORK REFERENCE NO. 20250118-1, AS FOLLOWS:
(1) WATER LINE WITH WATER VALVES CROSSING THE SOUTHWESTERLY AND SOUTHEASTERLY BOUNDARY LINES OF SUBJECT PROPERTY;
(2) SANITARY SEWER LINE WITH MANHOLES AND CLEANOUTS CROSSING THE SOUTHWESTERLY AND NORTHEASTERLY BOUNDARY LINES OF SUBJECT PROPERTY;
(3) FOUR (4) FOOT HOGWIRE FENCE CROSSING THE SOUTHWESTERLY AND NORTHEASTERLY BOUNDARY LINES OF SUBJECT PROPERTY;
(4) TWENTY (20') FOOT WATER LINE AND SEWER LINE EASEMENT LOCATED IN THE SOUTHEASTERLY PORTION OF SUBJECT PROPERTY AND CROSSING THE SOUTHWESTERLY AND NORTHEASTERLY BOUNDARY LINES OF SUBJECT PROPERTY AS SHOWN ON THAT CERTAIN PLAT RECORDED IN PLAT BOOK 13154, PAGE 65, AFORESAID RECORDS;
(5) OVERHEAD POWER LINES WITH GUY WIRES AND POLES CROSSING THE SOUTHWESTERLY BOUNDARY LINE OF SUBJECT PROPERTY.
(m) ANY SECURITY INTEREST CREATED AT CLOSING.
NO GRAPHIC REPRESENTATION

Surveyors Notes

- AT THE TIME OF SURVEY THERE WAS NO OBSERVED EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WITHIN RECENT MONTHS.
- SURVEY PREPARED BASED ON TITLE WORK PROVIDED. ADDITIONAL TITLE RECORDS MAY INDICATE OTHER RIGHTS OR RESTRICTIONS MAY EXIST.
- THERE ARE NO KNOWN CHANGES IN THE STREET RIGHT-OF-WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE REFERENCE FILE OR PROVIDED TITLE INFORMATION.
- THERE IS EVIDENCE OF ROADWORK WITHIN THE VICINITY OF THE SITE, HOWEVER NOT IMMEDIATELY IN FRONT OF THE SITE.
- THERE IS NO OBSERVED EVIDENCE OF SUBSTANTIAL AREAS OF REFUSE LOCATED ON THE SUBJECT PROPERTY.
- NO GAPS OR OVERLAPS ARE OBSERVED.
- ALL CAPPED REBAR PINS LABELED AS "CIVIL ENGINEERING OF COLUMBIA". MISCELLANEOUS 1/2" REBAR PINS WERE LOCATED WITHIN THE SITE, HOWEVER THERE WAS NO CORRELATION TO KNOWN RECORD PLATS OR SURVEYS.
- ELEVATIONS / VERTICAL RELIEF BY GROUND SURVEY. 1' CONTOURS PROVIDED.
- NO WETLANDS OBSERVED OR NOTES ON THE SITE.
- NO PARTY WALLS OBSERVED OR NOTED ON THE SITE.

ACCESS NOTE
ACCESS TO SUBJECT PROPERTY VIA COLUMBIA AVENUE AS SHOWN HEREON. POSSIBLE CONNECTION TO "PRIVATE COMMERCIAL DRIVE" TO THE WEST OF SITE AS SHOWN ON PLAT RECORDED AT BOOK 21079 PAGE 4948.
ENCROACHMENTS / PROJECTIONS
NONE OBSERVED
REFERENCE DEED
DB 21153 PG 0443
REFERENCE PLAT
"PARCEL "A2" AS SHOWN ON "BOUNDARY SURVEY OF T.M.S. 00700-01-017" PREPARED FOR THOMAS L. AND CHRISTINA G. BURRIS" BY CIVIL ENGINEERING OF COLUMBIA DATED SEPT. 02, 2008.
TAX ASSESSOR PARCEL NUMBER
000700-01-017
BASIS OF BEARINGS
SOUTH CAROLINA STATE PLANE COORDINATES WERE USED AS THE BASIS OF BEARINGS FOR THIS SURVEY. NAD 83/NAVD 88 (BY SCRTN GPS OBSERVATIONS).

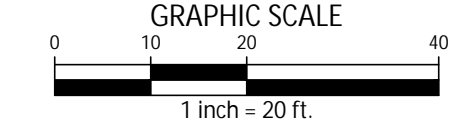
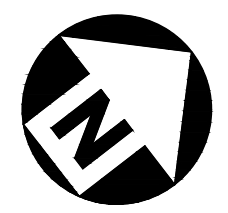


BENCHMARKS:

BM #1: N850952.10 E 1899593.31 ; ELEV: 430.80 SC GRID, NAD83/NAVD88
 BM #2: N851096.14 E 1899682.09 ; ELEV: 431.90 SC GRID, NAD83/NAVD88

EXISTING CONDITIONS AND DEMOLITION PLAN NOTES :

1. THIS IS AN EXISTING CONDITIONS PLAN PREPARED TO MEET ENTITLEMENTS AND PERMITTING REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION AND USED TO INFORM PRELIMINARY SITE DESIGN. IT IS NOT A TOPOGRAPHIC OR BOUNDARY SURVEY PREPARED AND SEALED BY A LICENSED PROFESSIONAL, UNLESS OTHERWISE INDICATED.
2. EXISTING CONDITIONS WERE COMPILED FROM A SURVEY OF THE SITE PREPARED BY AMERICAN NATIONAL, DATED 04/01/2025. ALTHOUGH EFFORT HAS BEEN MADE TO ACCURATELY LOCATE EXISTING CONDITIONS, ACTUAL FIELD CONDITIONS MAY VARY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS BEFORE STARTING LAND DISTURBING ACTIVITY, DEMOLITION, OR CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ACTUAL CONDITIONS AS THEY EXIST ON SITE.
3. UNDERGROUND UTILITIES MAY EXIST THAT ARE NOT SHOWN HEREIN, THE LOCATION OF UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE BASED ON INFORMATION PROVIDED BY OTHERS OR BY FIELD LOCATION. ACTUAL LOCATION, SIZE AND DEPTH OF LINE SHOULD BE VERIFIED WITH THE INDIVIDUAL UTILITY COMPANY PRIOR TO CONSTRUCTION.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES DURING THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACEMENT OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING THE CONSTRUCTION OF THIS PROJECT.
5. THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE X AS DEFINED BY FEMA F.I.R.M. MAP NUMBER 45063C004QJ DATED 07/05/2018.
6. SUE NOT PERFORMED OR VERIFIED BY MCADAMS.
7. SIDEWALK RAMP ARE TO BE DESIGNED AND INSTALLED SO THEY ARE IN COMPLIANCE WITH THE ADA AND SOUTH CAROLINA ACCESSIBILITY STANDARDS.
8. CONSTRUCTION SITE SHALL ADHERE TO THE TOWN OF CHAPIN REQUIREMENTS.
9. CONTRACTOR TO CONFIRM STOCKPILE AND OTHER CONSTRUCTION ITEMS FROM MCALLISTERS HAVE BEEN REMOVED FROM THE EXPRESS OIL SITE PRIOR TO CONSTRUCTION AND NOTIFY DEVELOPER, IN WRITING, IF ANY ITEMS REMAIN THAT WOULD IMPACT CONSTRUCTION.



LINETYPE LEGEND

	PROPERTY LINE
	SETBACK AND BUFFER LINES
	WATER AND SANITARY SEWER EASEMENT
	SAWCUT LINE
	EXISTING CONTOUR
	EXISTING SANITARY SEWER LINE
	EXISTING WATER LINE
	EXISTING STORM SEWER LINE
	EXISTING GAS LINE
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING EDGE OF PAVEMENT
	SAWCUT AND REMOVAL HATCH

SYMBOL LEGEND

	BENCHMARK LOCATIONS
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	EXISTING POWER POLE
	EXISTING JUNCTION BOX
	EXISTING SIGN
	EXISTING GRATE INLET
	EXISTING CURB INLET

ABBREVIATION LEGEND

R.O.W. OR R/W = RIGHT OF WAY



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CONTACT

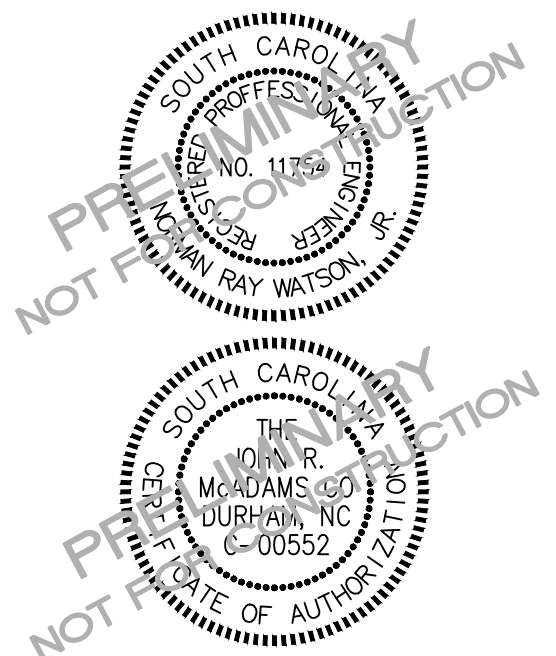
BRITTANY YOUNGBLOOD
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EXPRESS OIL - CHAPIN, SC
 CONSTRUCTION PLANS
 XX COLUMBIA AVENUE
 CHAPIN, SOUTH CAROLINA 29036



REVISIONS

NO.	DATE	DESCRIPTION
1	09.22.2025	2ND SUBMITTAL
2		

PLAN INFORMATION

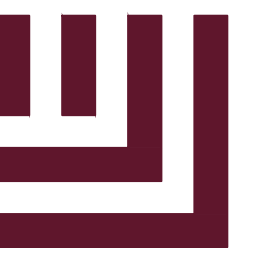
PROJECT NO.	EX025002
FILENAME	EX025002-XC1.DWG
CHECKED BY	BY
DRAWN BY	JE
SCALE	1"=20'
DATE	07.15.2025

SHEET

EXISTING CONDITIONS & DEMOLITION PLAN
C1.00



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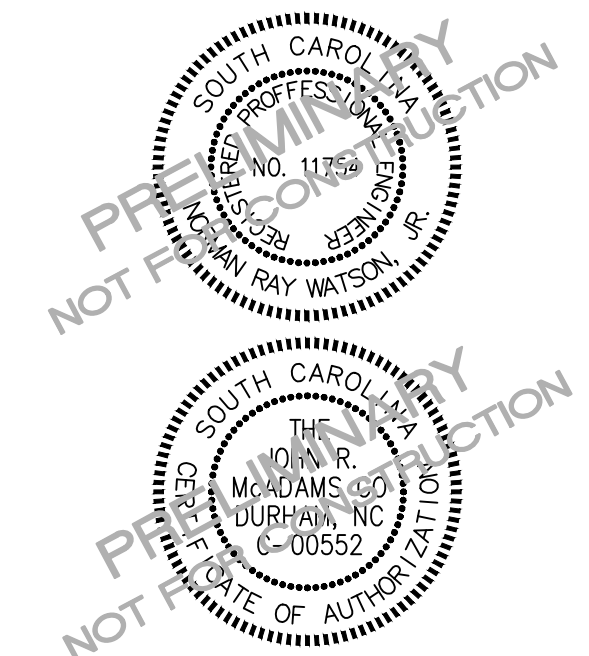
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EXPRESS OIL - CHAPIN, SC
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CHAPIN, SOUTH CAROLINA 29036



REVISIONS

NO.	DATE	DESCRIPTION
1	09.22.2025	2ND SUBMITTAL
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PLAN INFORMATION

PROJECT NO. EX025002
FILENAME EX025002-S1.DWG
CHECKED BY BY
DRAWN BY JE
SCALE 1"=20'
DATE 07.15.2025

SHEET

SITE PLAN

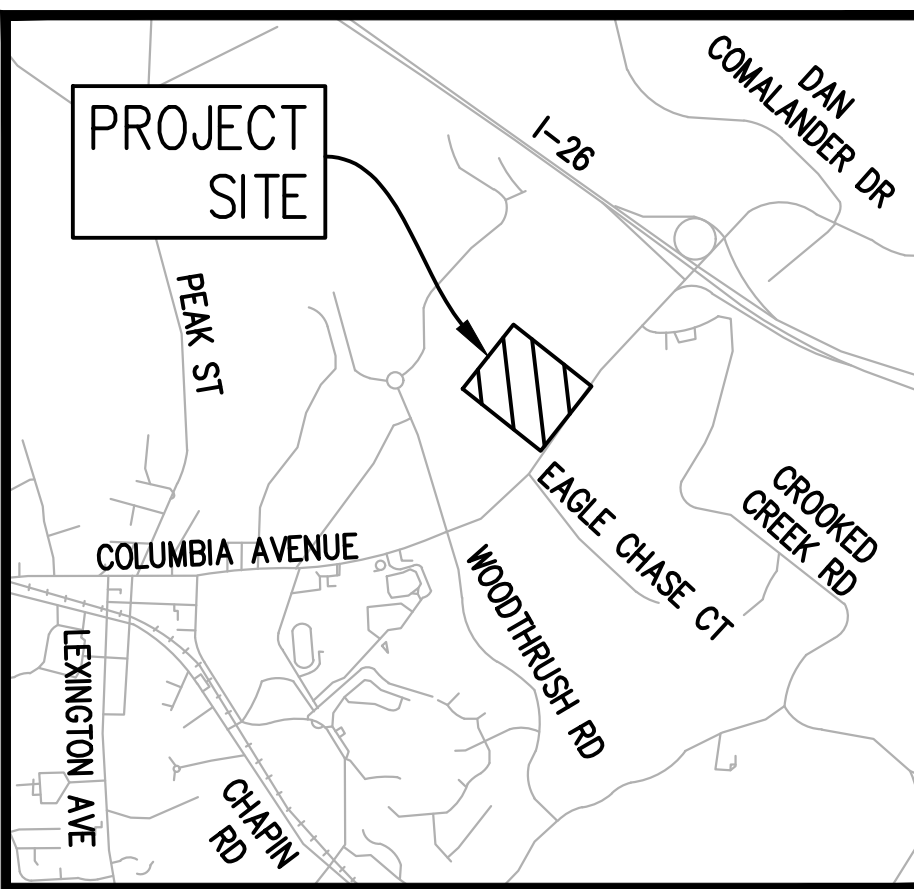
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GRAPHIC SCALE
0 10 20 40
1 inch = 20 ft.

SITE LEGEND

- TRAFFIC DIRECTIONAL ARROW
- VAN ACCESSIBLE PARKING STALL
- PARKING SPACE COUNT
- SIGNAGE
- CURB INLET
- GRATE INLET
- TRENCH DRAIN
- PROPERTY LINE
- EASEMENT LINE
- SETBACK AND BUFFER LINES
- FIRELANE STRIPING



VICINITY MAP
N.T.S.

BENCHMARKS:

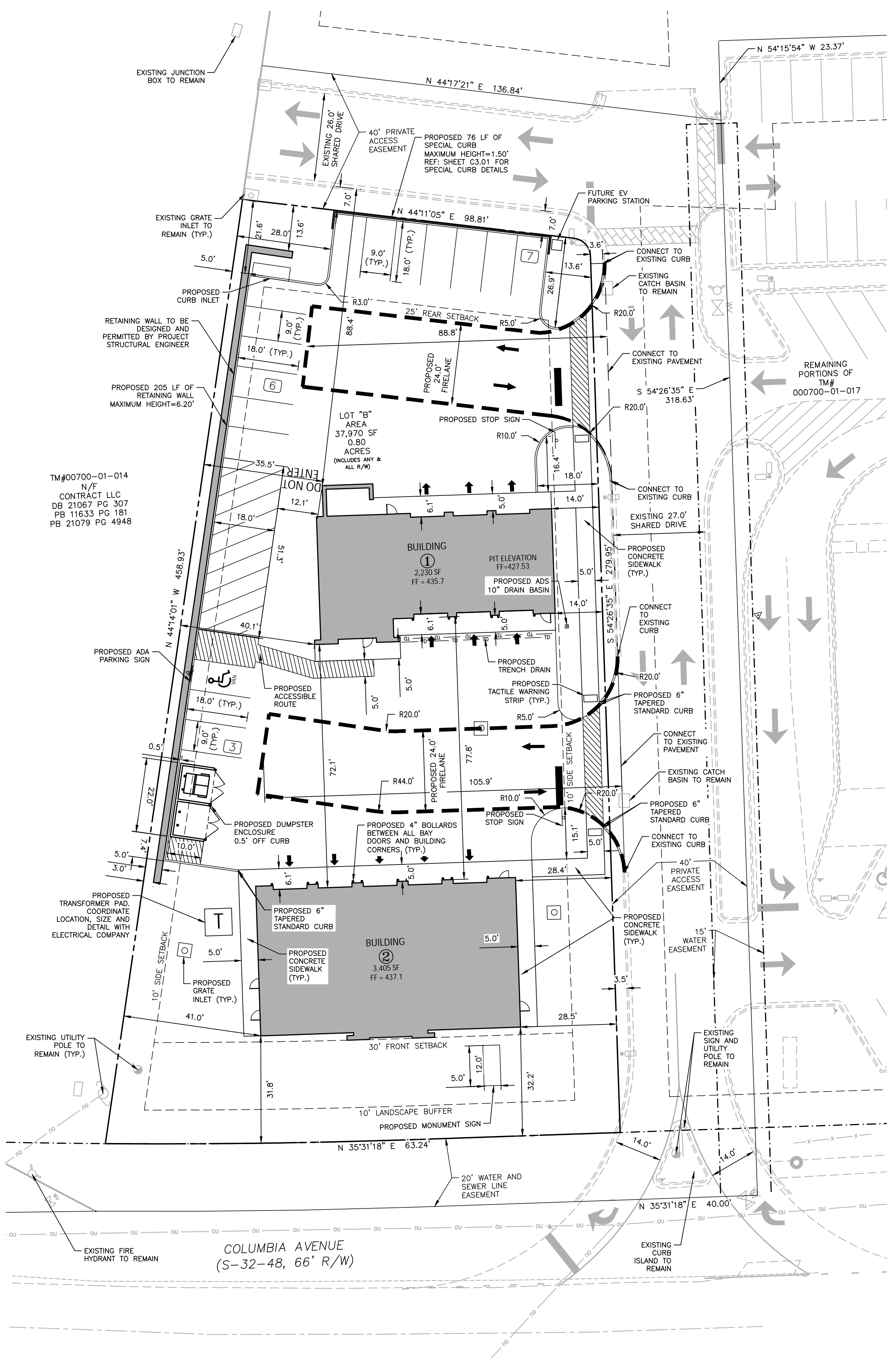
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SITE PLAN NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST LEXINGTON COUNTY AND/OR SCODT STANDARDS AND SPECIFICATIONS AS APPLICABLE.
- ALL DIMENSIONS SHOWN ON SITE PLAN ARE MEASURED TO FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE ENGINEER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE OWNER.
- EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED/RESTORED TO THEIR ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER, BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
- THE CONTRACTOR SHALL NOTE THAT THE DRAWINGS MAY NOT SHOW EVERY OFFSET, TRANSITION, FITTING, ETC. THAT MAY BE REQUIRED. THE CONTRACTOR SHALL INSTALL SUCH STANDARD APPURTENANCES AS REQUIRED TO CLOSELY FOLLOW THE GRADES AND ALIGNMENTS DEPICTED ON THE PLANS.
- CONTRACTOR SHALL NOTIFY "SC811" (811) OR 1-888-721-7877 AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "SC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE UTILITY COMPANIES FOR ANY REQUIRED RELOCATIONS (I.E. POWER POLES, TELEPHONE PEDESTALS, WATER METERS, ETC.).
- PRIOR TO BEGINNING CONSTRUCTION BEYOND EROSION CONTROL MEASURES, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE LEXINGTON COUNTY PUBLIC WORKS DEPARTMENT AND A REPRESENTATIVE OF THE ENGINEER AND OWNER IF REQUIRED. THE PURPOSE OF THIS MEETING IS TO REVIEW THE SPECIFIC COMPONENTS OF THE PLAN AND OPERATION OF THE FACILITIES DURING CONSTRUCTION.
- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. FOR NECESSARY PLAN OR GRADE CHANGES, NO EXTRA COMPENSATION SHALL BE PAID TO CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- ALL SIDEWALKS MUST BE ACCESSIBLE TO PERSONS WHO ARE BLIND, HAVE LOW VISION AND PEOPLE WITH MOBILITY DISABILITIES. PEDESTRIAN EXISTING ROUTES AND ALTERNATE PEDESTRIAN ROUTES DURING CONSTRUCTION WILL BE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROVAG), 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- TYPICAL PAVEMENT SECTION DETAILS ARE SHOWN WITHIN THIS PLAN SET AND INTENDED TO BE A MINIMUM PAVEMENT SECTION REQUIREMENT. THE CURRENT GEOTECHNICAL REPORT SHALL OVER-RIDE ALL TYPICAL PAVEMENT SECTIONS SHOWN, IF THE GEOTECHNICAL ENGINEER DEEMS A HEAVIER SECTION IS REQUIRED.
- EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING OR INSTALLATION. THE CONTRACTOR SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO SUBSTITUTION OF ALTERNATE EQUIPMENT.
- IF UNFORESEEN CONDITIONS DEVELOP DURING CONSTRUCTION, REFER TO THE LATEST VERSION OF LEXINGTON COUNTY AND SOUTH CAROLINA SPECIFICATIONS AND STANDARDS.
- VERIFY ELECTRICAL REQUIREMENTS OF ABOVE GROUND HEATED ENCLOSURES, SITE LIGHTS, SIGNS THAT REQUIRE ELECTRICAL SERVICE WITH ELECTRICAL PLANS AND NOTIFY PROJECT ELECTRICAL ENGINEER OF MISSING INFORMATION.
- SIGNS TO BE PERMITTED SEPARATELY.

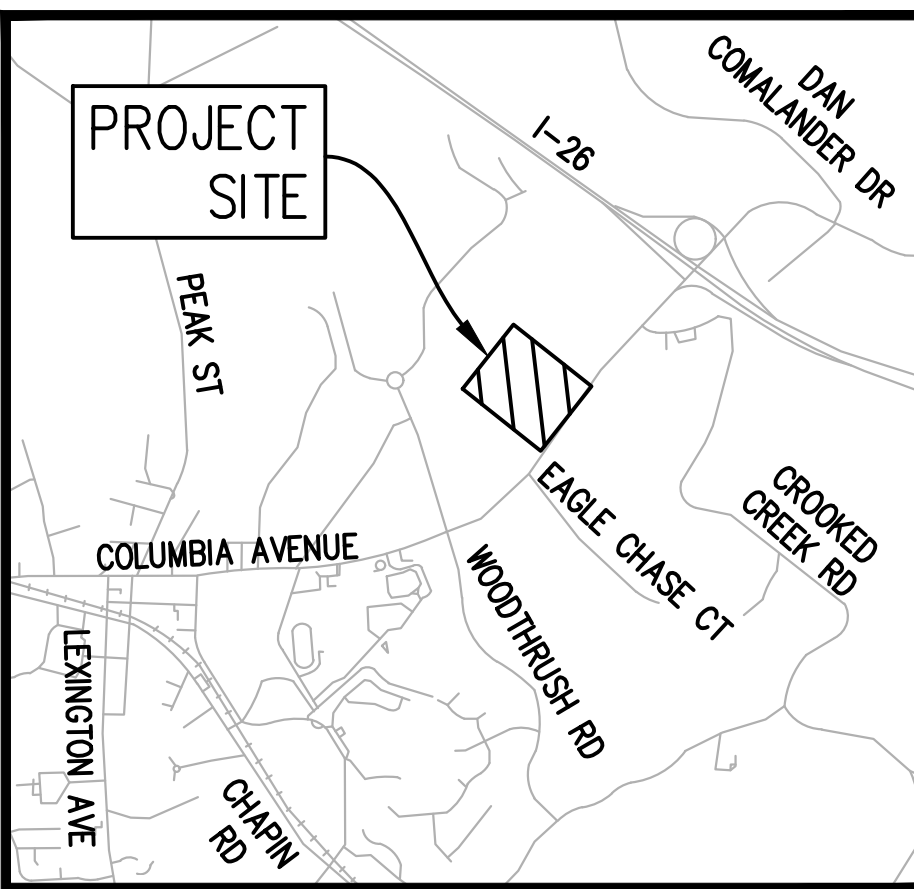
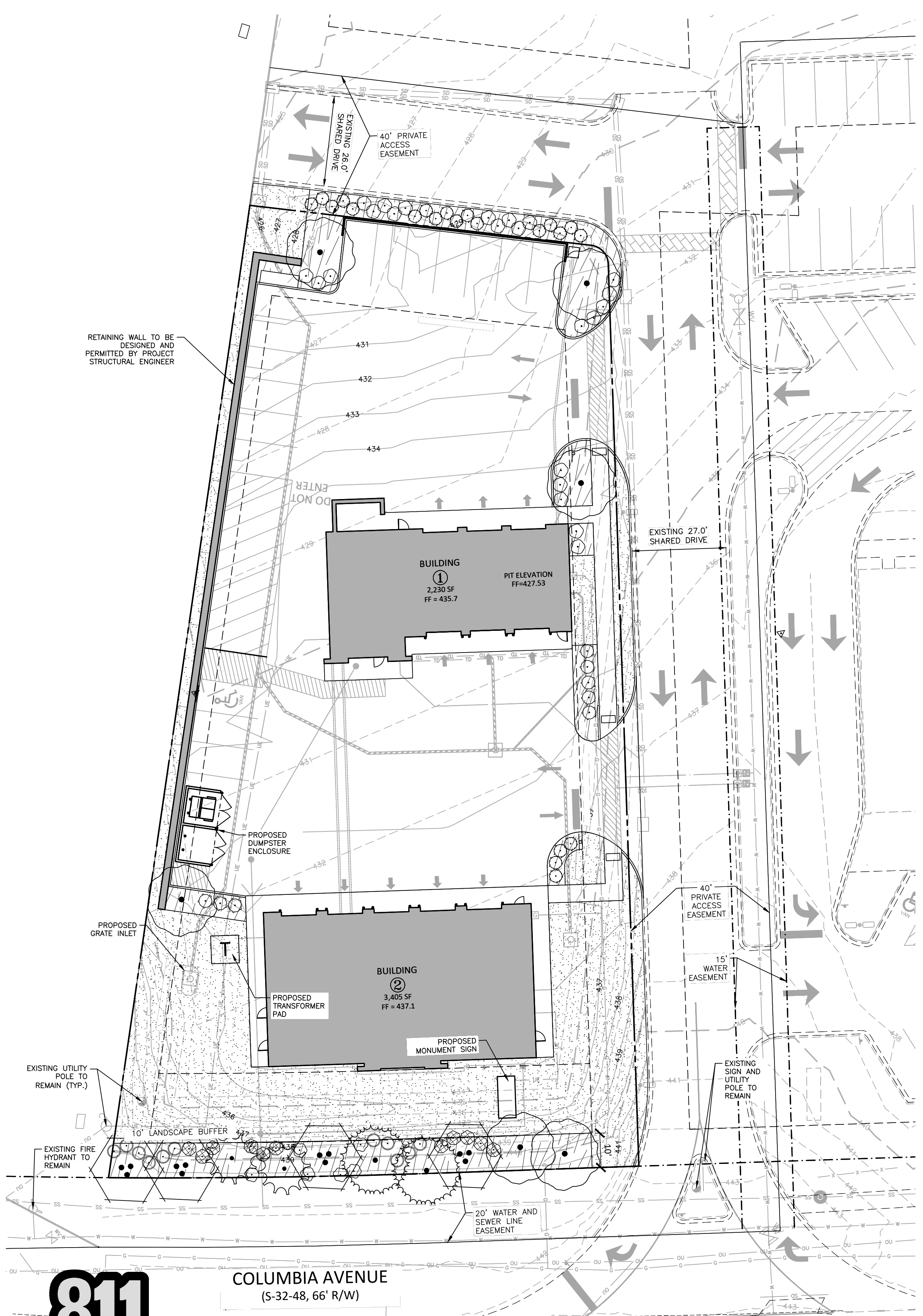
SITE DATA TABLE

PHYSICAL ADDRESS	TBD
LEGAL DESCRIPTION	PORTION OF TMS#00700-01-017 PARCEL A2 LOT B
GROSS SITE AREA	0.80 ACRES
NET SITE AREA	0.87 ACRES
ZONING	COMMERCIAL CORRIDOR (CC)
CURRENT USE	NONE - UNDEVELOPED
PROPOSED USED	AUTO REPAIR SERVICE
FRONT SETBACK	30'
REAR SETBACK	25'
SIDE SETBACK	REQUIRED 10' / PROVIDED 15'
LANDSCAPE BUFFER	10' FRONT AND SIDE YARD
LOT COVERAGE DATA	
BUILDING COVERAGE	0.125 AC 15.4%
IMPERVIOUS AREA	0.581 AC 71.5%
PERVIOUS AREA	0.232 AC 28.5%
PARKING SUMMARY	
REQUIRED PARKING - 6 EMPLOYEES (1 SPACE PER 2 EMPLOYEES AT PEAK SHIFT)	3 SPACES
REQUIRED PARKING - 2957 SF (1 SPACE PER 150 SQUARE FEET OF THE AUTOMOBILE REPAIR SPACE)	20 SPACES
REQUIRED ACCESSIBLE SPACES	1 SPACE
TOTAL REQUIRED PARKING	24 SPACES
OFFSITE (ACCOUNTS FOR SHARED PARKING AGREEMENT)	5 SPACES
STANDARD SPACES PROVIDED	15 SPACES
ACCESSIBLE SPACES PROVIDED	1 SPACE
TOTAL PROVIDED PARKING	16 SPACES
BUILDING DATA	
TOTAL BUILDING SQUARE FOOTAGE BUILDING 1 - 2,182 SF BUILDING 2 - 3,262 SF	5,444 SF
NUMBER OF BUILDING STORIES	1 STORY
MAXIMUM BUILDING HEIGHT	<25 FT



TM#00700-01-014
N/F
CONTRACT LLC
DD 21067 PG 307
PB 11633 PG 181
PB 21079 PG 4948

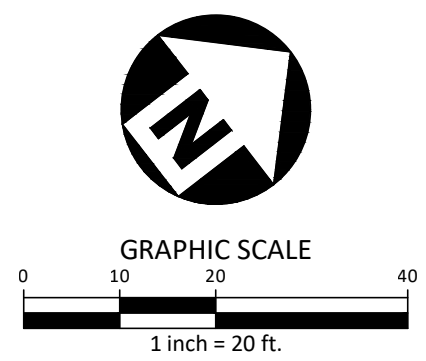
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VICINITY MAP
N.T.S.

SITE LEGEND

	SIGNAGE
	YARD LIGHTS
	LIGHT POLE
	POWER POLE
	TRAFFIC DIRECTIONAL ARROW
	ACCESSIBLE PARKING STALL
	VAN ACCESSIBLE PARKING STALL
	PARKING SPACE COUNT
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	LOT LINE
	EASEMENT LINE



CHAPIN REQUIRED PLANTING	
TREE COMPLIANCE CALCULATIONS	
STREET YARD CALCULATIONS	
PERIMETER PLANTING:	
PROPERTY BUFFER TYPE B:	
6 LARGE MATURING TREE FOR EVERY 100 FEET	
18 SHRUBS FOR EVERY 100 FEET	
PROPERTY BUFFERS REQUIRED TREES, 153 LF/100 x 6:	10 TREES
PROPERTY BUFFERS PROVIDED TREES:	10 TREES
PROPERTY BUFFERS REQUIRED SHRUBS, 153 LF/100 x 18:	28 SHRUBS
PROPERTY BUFFERS PROVIDED SHRUBS:	28 SHRUBS
PARKING LANDSCAPE	
TOTAL PARKING SPOTS:	16 SPACES
BUILDING EXTERIOR PERIMETER PLANTING, 245 LF X 0.10:	25 SHRUBS
STREET BUFFERING CALCULATIONS	
TREE PLANTING REQUIREMENTS, CANOPY TREES 1 PER 0.015 LF OF FRONTAGE	03 TREES
174 LF X 0.015:	

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CAL	
CANOPY TREES					
	MGB	2	MAGNOLIA GRANDIFLORA 'BRACKENS BROWN BEAUTY' BRACKEN'S BEAUTY SOUTHERN MAGNOLIA	2.5" MIN.	
	PPL	2	PINUS PALUSTRIS LONGLEAF PINE	2.5" MIN.	
	QSO	6	QUERCUS SHUMARDII SHUMARD OAK	2.5" MIN.	
EVERGREEN TREES					
	CDA	4	CEDRUS DEODARA DEODAR CEDAR	2.5" MIN.	
EVERGREEN SHRUB					
	CICA	8	CAMELLIA JAPONICA CAMELLIA	36" MIN	
	IGIH	11	ILEX GLABRA INKBERRY HOLLY	24" MIN	
	IVYH	11	ILEX VOMITORIA YAUPON HOLLY	36" MIN	
	JVGO	21	JUNIPERUS VIRGINIANA 'GREY OWL' GREY OWL EASTERN REDCEDAR	24" MIN	
	MCWM	23	MYRTICA CERIFERA WAX MYRTLE	24" MIN	
	RIIA	6	RHODODENDRON INDICUM INDICA AZALEA	24" MIN	
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SPACING
GROUND COVERS					
	CYDA	7,622 SF	CYNODON DACTYLON 'TIFTUF' BERMUDA 'TIFTUF'	SOD	
	MULCH	3,309 SF	DOUBLE SHREDDED HARDWOOD MULCH	MULCH	

NOTE: CONTRACTOR WILL BE RESPONSIBLE FOR IRRIGATION DESIGN AND INSTALLATION.

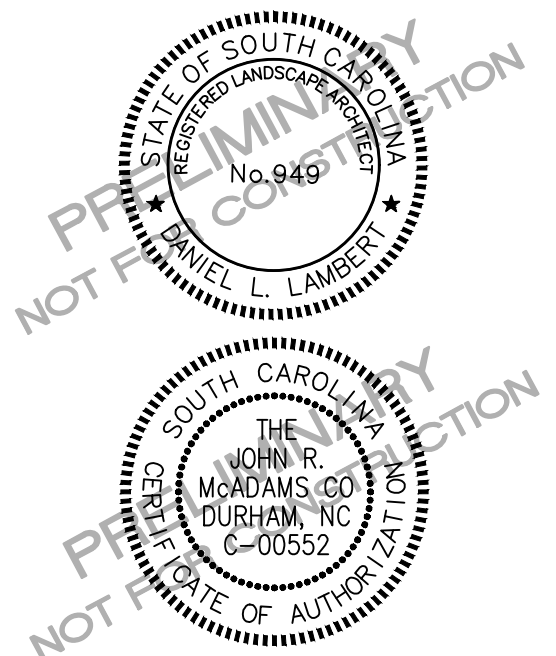
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EXPRESS OIL - CHAPIN, SC
CONSTRUCTION PLANS
XX COLUMBIA AVENUE
CHAPIN, SOUTH CAROLINA 29036



REVISIONS

NO.	DATE	DESCRIPTION
1	09.22.2025	2ND SUBMITTAL
2		

PLAN INFORMATION

PROJECT NO. EXO25002
FILENAME EXO25002-LS1.DWG
CHECKED BY DLL
DRAWN BY ASB
SCALE 1"=20'
DATE 07.15.2025

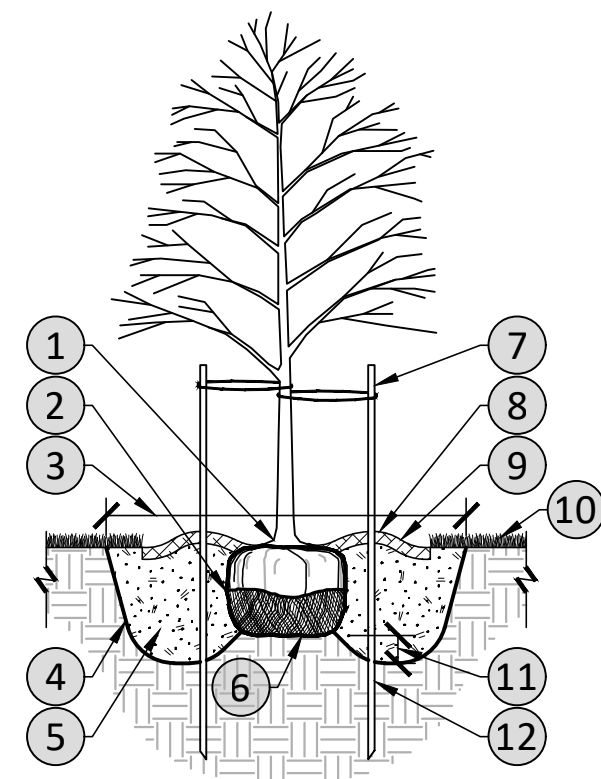
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CODE LANDSCAPE PLAN

L5.00

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CONTRACTOR SHALL NOTIFY "SC811" (811) OR (1-888-721-7877) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "SC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.



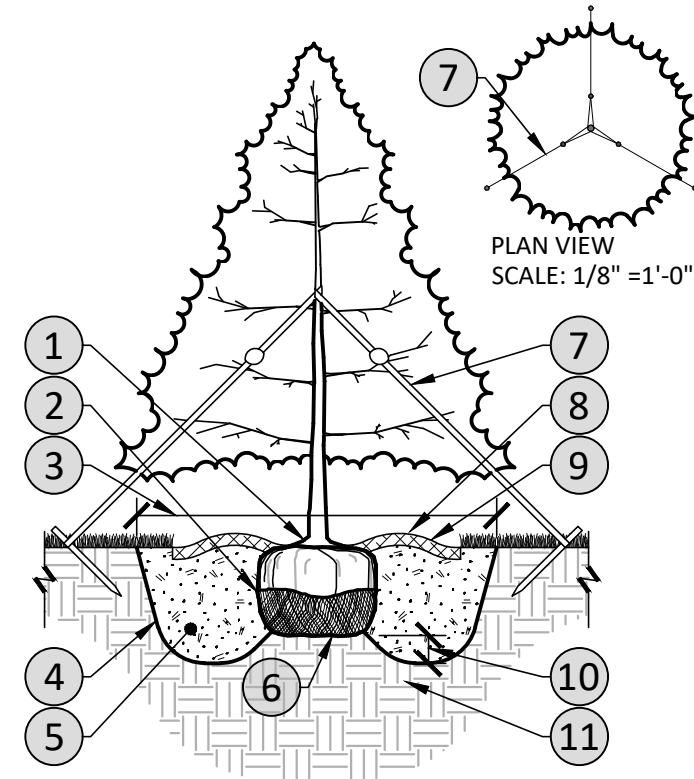
- 1 TRUNK FLARE AND TOP OF ROOT BALL SHOULD BE 2" ABOVE FINISHED GRADE AFTER SETTLING
- 2 CUT BURLAP, ROPE AND WIRE BASKET AWAY FROM TOP AND SIDES OF ROOT BALL AND REMOVE DURING BACKFILL PROCESS. IF USING CONTAINER GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
- 3 WIDTH OF PLANTING HOLE SHALL BE 3 TIMES THE ROOT BALL DIAMETER IN HIGHLY COMPACTED OR CLAY SOIL; 2 TIMES THE ROOT BALL DIAMETER MINIMUM IN ALL OTHERS
- 4 DIG WIDE PLANTING HOLE WITH TAPERED SIDES.
- 5 TO STABILIZE, COMPACT THE PLANTING SOIL MIX BACKFILL AROUND ROOT BALL; COMPACT SOIL BY SOAKING WITH WATER AND OR LIGHTLY HAND TAMPING.
- 6 SET ROOT BALL ON UNDISTURBED SOIL TO PREVENT SETTLING.
- 7 IF STAKING IS NECESSARY, USE TWO OPPOSING STAKES WITH SEPARATE FLEXIBLE TIES. REMOVE STAKING AT END OF FIRST GROWING SEASON.
- 8 4" RAISED RING OF SOIL TO DIRECT WATER INTO ROOT BALL - ESPECIALLY IMPORTANT IF TOP OF ROOT BALL IS RAISED ABOVE GRADE
- 9 3" BARK MULCH; DO NOT PLACE MULCH WITHIN 3" OF TREE TRUNK.
- 10 FINAL GRADE
- 11 5"-7" DEEPER THAN ROOT BALL FOR LOWERED PLANTING HOLE AS NEEDED WITH POOR DRAINAGE
- 12 EXTEND STAKES INTO 24" OF UNDISTURBED SOIL.

NOTES:

1. SELECT TREES THAT HAVE: STRONG CENTRAL LEADER; CROWN WITH FULL FOLIAGE; GROWN IN HEAVY CLAY SOIL WITH DRIP IRRIGATION.
2. BEFORE INSTALLING PLANTING SOIL MIX BACKFILL AROUND ROOT BALL, SOAK HOLE TO CONFIRM WATER FILTERS THROUGH UNDISTURBED SOIL. DESIGN ALTERNATIVE DRAINAGE SYSTEM IF REQUIRED.
3. A SOIL EXPERT CAN BE CONSULTED TO HELP MODIFY AND FERTILIZE TOPSOIL TO CREATE AN ACCEPTABLE PLANTING SOIL MIX FOR THE SITE CONDITIONS AND SPECIFIC TREE SPECIES.
4. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND DURING DRY PERIODS.

1 TREE PLANTING

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



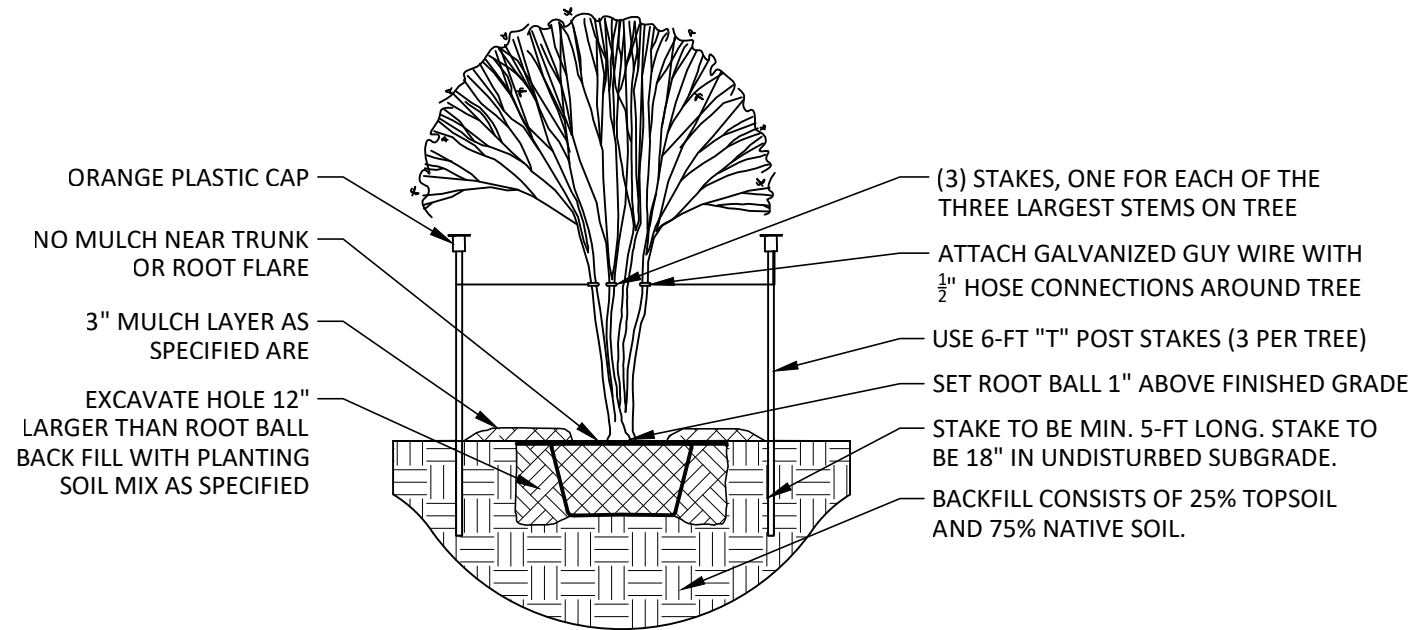
- 1 TRUNK FLARE AND TOP OF ROOT BALL SHOULD BE 2" ABOVE FINISHED GRADE AFTER SETTLING
- 2 CUT BURLAP, ROPE AND WIRE BASKET AWAY FROM TOP AND SIDES OF ROOT BALL AND REMOVE DURING BACKFILL PROCESS. IF USING CONTAINER GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
- 3 WIDTH OF PLANTING HOLE SHALL BE 3 TIMES THE ROOT BALL DIAMETER IN HIGHLY COMPACTED OR CLAY SOIL; 2 TIMES THE ROOT BALL DIAMETER IN ALL OTHERS (12" MIN. OF PLANTING SOIL ON ALL SIDES)
- 4 DIG WIDE PLANTING HOLE WITH TAPERED SIDES
- 5 TO STABILIZE, COMPACT THE PLANTING SOIL MIX BACKFILL AROUND ROOT BALL; COMPACT SOIL BY SOAKING WITH WATER AND OR LIGHTLY HAND TAMPING
- 6 SET ROOT BALL ON UNDISTURBED SOIL TO PREVENT SETTLING AND LOOSEN SUBGRADE
- 7 STAKE TREES ON THREE SIDES WITH ARBORVITIS AND NAIL/STAPLE STRAPS TO 2"x2"x18" WOOD STAKE OR APPROVED EQUAL. REMOVE STAKING AT END OF SECOND GROWING SEASON.
- 8 4" RAISED RING OF SOIL TO DIRECT WATER INTO ROOT BALL - ESPECIALLY IMPORTANT IF TOP OF ROOT BALL IS RAISED ABOVE GRADE
- 9 3" BARK MULCH; DO NOT PLACE MULCH WITHIN 3" OF TREE TRUNK
- 10 5"-7" DEEPER THAN ROOT BALL FOR LOWERED PLANTING HOLE AS NEEDED WITH POOR DRAINAGE
- 11 MOUNT STAKES IN UNDISTURBED SOIL AT 45 DEGREE ANGLE. LEAVE TOP 6" OF STAKE ABOVE GROUND

NOTES:

1. SELECT TREES THAT HAVE: STRONG CENTRAL LEADER; DISEASE AND PEST FREE; GROWN IN HEAVY CLAY SOIL WITH DRIP IRRIGATION.
2. PROVIDE WATER STORING CRYSTALS PER NURSERY RECOMMENDATIONS FOR PINE TREES.
3. BEFORE INSTALLING PLANTING SOIL MIX BACKFILL AROUND ROOT BALL, SOAK HOLE TO CONFIRM WATER FILTERS THROUGH UNDISTURBED SOIL. DESIGN ALTERNATIVE DRAINAGE SYSTEM IF REQUIRED.
4. A SOIL EXPERT CAN BE CONSULTED TO HELP MODIFY AND FERTILIZE TOPSOIL TO CREATE AN ACCEPTABLE PLANTING SOIL MIX FOR THE SITE CONDITIONS AND SPECIFIC TREE SPECIES.
5. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND DURING DRY PERIODS.

2 EVERGREEN TREE PLANTING

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



NOTES:

1. SELECT SHRUBS THAT MEET THE SPECIFIED HEIGHT IN THE PLANT SCHEDULE, MEASURED PER THE AMERICAN STANDARD FOR NURSERY STOCK METHODS; PEST AND DISEASE FREE; CROWN WITH FULL FOLIAGE; GROWN IN HEAVY CLAY SOIL WITH DRIP IRRIGATION.
2. BEFORE INSTALLING PLANTING SOIL MIX BACKFILL AROUND ROOT BALL, SOAK HOLE TO CONFIRM WATER FILTERS THROUGH UNDISTURBED SOIL. DESIGN ALTERNATIVE DRAINAGE SYSTEM IF REQUIRED.
3. A SOIL EXPERT CAN BE CONSULTED TO HELP MODIFY AND FERTILIZE TOPSOIL TO CREATE AN ACCEPTABLE PLANTING SOIL MIX FOR THE SITE CONDITIONS AND SPECIFIC PLANT SPECIES.
4. THOROUGHLY SOAK THE SHRUB ROOT BALLS AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND DURING DRY PERIODS.

3 ORNAMENTAL TREE PLANTING

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

4 SHRUB PLANTING

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

LANDSCAPE NOTES

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT APPLICABLE TOWN OF CHAPIN AND THE STATE OF SOUTH CAROLINA STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR IS RESPONSIBLE FOR INSPECTING THE SITE BEFORE LANDSCAPE CONSTRUCTION AND INSTALLATION IN ORDER TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS.
3. CONTRACTOR IS RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES, NEW AND PRIOR EXISTING, BEFORE BEGINNING LANDSCAPE INSTALLATION. DAMAGE TO UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
4. THE LANDSCAPE PLAN IS FOR PLANTING PURPOSES ONLY. FOR INFORMATION REGARDING BUILDINGS, GRADING, WALLS, ETC., REFER TO ARCHITECTURE, SITE, GRADING DRAWINGS, ETC.
5. CONTRACTOR SHALL FULLY REVIEW PLANS PRIOR TO INSTALLATION AND SHALL NOTIFY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT OF DISCREPANCIES BETWEEN THE NOTES, SPECIFICATIONS, DRAWINGS, OR SITE CONDITIONS FOR RESOLUTION PRIOR TO INSTALLATION.
6. VERIFICATION OF TOTAL PLANT QUANTITIES AS SHOWN IN THE PLANT SCHEDULE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DISCREPANCIES BETWEEN THE PLANT SCHEDULE AND LANDSCAPE PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO SUBMITTING THE BID/PROPOSAL.
7. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT PLANT MATERIAL IS AVAILABLE AS SPECIFIED WHEN BID/PROPOSAL IS SUBMITTED AND RESERVING / SECURING PLANT MATERIAL AS NECESSARY TO MEET THE REQUIREMENTS OF THE LANDSCAPE PLAN.
8. PLANTS TO MEET MINIMUM REQUIREMENTS AS SPECIFIED IN THE PLANT SCHEDULE. ROOT TYPE MAY BE FREELY SUBSTITUTED FOR BALLED AND BURLAPPED OR CONTAINER GROWN TREES, WITH OTHER SPECIFICATIONS REMAINING UNCHANGED. OTHER CHANGES OR SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT AND GOVERNING JURISDICTION PRIOR TO PROCUREMENT OF PLANT MATERIAL.
9. DEVIATION FROM THESE PLANS MUST BE SPECIFICALLY APPROVED BY LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS OR REVISIONS WITHOUT APPROVAL.
10. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT TO ESTABLISH THE EXTENTS OF MULCH/SEED/SOD IF NOT SPECIFICALLY SHOWN ON PLANS.
11. CONTRACTOR SHALL VERIFY CONDITIONS AND ELEVATIONS OF EXISTING TREES TO REMAIN ADJACENT TO OR WITHIN LIMITS OF DISTURBANCE PRIOR TO INSTALLATION OF NEW PLANT MATERIAL. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF DISCREPANCIES.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE TESTING, AMENDING AND SPREADING OF TOPSOIL PRIOR TO PLANT INSTALLATION, SUPPLEMENTING WITH AMENDMENTS TO ADJUST PH AND FERTILITY AS NECESSARY BASED ON THE TEST RESULTS.
13. TOPSOIL SHALL BE FREE OF MATERIAL LARGER THAN 1.0 INCH IN DIAMETER OR LENGTH AND SHALL NOT CONTAIN SLAG, CINDERS, STONES, LUMPS OF SOIL, STICKS, ROOTS, TRASH, OR OTHER EXTRANEOUS MATERIAL.
14. CONTRACTOR SHALL PREPARE PLANTING BEDS BY TILLING SOIL TO A 12" DEPTH PRIOR TO INSTALLING PLANT MATERIAL. CONTRACTOR SHALL ENSURE THAT SHALLOW BEDROCK WILL NOT INHIBIT THE ROOT GROWTH OF PLANT MATERIAL. PLANTING BEDS SHALL NOT BE BACKFILLED WITH ANY MATERIAL OTHER THAN AMENDED OR IMPORTED PLANTING SOIL.
15. APPLY SOIL AMENDMENTS AND FERTILIZERS AS REQUIRED BY THE SOIL TEST RESULTS TO ACHIEVE A HEALTHY GROWING MEDIA AND MIX THOROUGHLY INTO TOP 4 INCHES OF SOIL. SPREAD PLANTING SOIL MIX TO A DEPTH OF 6 INCHES BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
16. IF IMPORTED TOPSOIL IS REQUIRED, THE SUBGRADE SHALL BE SCARIFIED OR TILLED TO A DEPTH OF AT LEAST 6 INCHES PRIOR TO INSTALLATION OF IMPORTED TOPSOIL. FOLLOWING INSTALLATION OF IMPORTED TOPSOIL, THE TOPSOIL SHALL BE TILLED TO INTEGRATE THE SOIL PROFILES.
17. FINE GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN PLUS OR MINUS 1/2 INCH OF FINISH ELEVATION. HAND ROLL AND RAKE, REMOVE RIDGES AND DEBRIS, AND FILL DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINISHED GRADING TO AREAS THAT CAN BE PLANTED IN THE IMMEDIATE FUTURE.
18. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE IN PLANTING AREAS.
19. AFTER TREE PLANTING HOLES HAVE BEEN DUG AND PRIOR TO INSTALLATION OF TREES, CONTRACTOR TO CONFIRM THAT WATER DRAINS OUT OF THE SOIL. USE LOWERED PLANTING HOLE DEPTH AND INSTALL ALTERNATIVE DRAINAGE AND AERATION SYSTEMS AS REQUIRED.
20. PERFORM PERCOLATION TEST FOR EACH TREE PIT. PROVIDE GRAVEL SUMP FILTER FABRIC & VENT PIPE IF DRAINAGE DOES NOT OCCUR WITHIN 24 HOURS. INCLUDE ALL SUMPS IN BASE BID. SHOULD SUMPS NOT BE NECESSARY AFTER PERCOLATION TEST, PROVIDE CHANGE ORDER DEDUCT TO OWNER.
21. IF PLANTING HOLES ARE DUG WITH A LARGE AUGER, BREAK DOWN THE SIDES OF THE HOLE WITH A SHOVEL TO ELIMINATE GLAZING AND TO CREATE THE SPECIFIED SIDE SLOPE ON THE INSIDE OF THE PLANTING HOLE.
22. CONTRACTOR SHALL KEEP AREAS OF WORK CLEAN, NEAT, AND ORDERLY. PAVED SURFACES ARE TO BE CLEANED OF SOIL AND DEBRIS AT THE CLOSE OF EACH WORKDAY.
23. LANDSCAPE MATERIAL SHALL BE WELL FORMED, VIGOROUS, GROWING SPECIMENS WITH GROWTH TYPICAL OF VARIETIES SPECIFIED AND SHALL BE FREE FROM DAMAGE, INSECTS, AND DISEASES. MATERIAL SHALL EQUAL OR SURPASS #1 QUALITY AS DEFINED IN THE CURRENT ISSUE OF "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN HORT (F.K.A. AMERICAN NURSERY & LANDSCAPE ASSOCIATION).
24. PLANT MATERIAL IS TO BE WELL ROOTED, NOT ROOT BOUND, SUCH THAT THE ROOT BALL REMAINS INTACT THROUGHOUT THE PLANTING PROCESS. DEFICIENT PLANT MATERIAL SHALL BE REJECTED BY THE LANDSCAPE ARCHITECT.
25. CONTAINER GROWN STOCK SHALL HAVE BEEN GROWN IN A CONTAINER LONG ENOUGH FOR THE ROOT SYSTEM TO HAVE DEVELOPED SUFFICIENTLY TO HOLD THE SOIL TOGETHER FIRMLY, BUT NOT SO LONG AS TO HAVE BECOME POT BOUND. CONTAINER GROWN STOCK SHALL HAVE A WELL-ESTABLISHED ROOT SYSTEM REACHING THE SIDES OF THE CONTAINER TO MAINTAIN A FIRM BALL BUT SHALL NOT HAVE EXCESSIVE ROOT GROWTH ENCIRCLING THE INSIDE OF THE CONTAINER.
26. DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT

BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF EXTERIOR PLANTS DURING DELIVERY.

27. DELIVER EXTERIOR PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IMMEDIATELY AFTER UNLOADING, STAND THE TREES UP TO REDUCE THE RISK OF SUN SCALD. PROPERLY STAGED TREES ARE STANDING, UNTIED AND SPACED. UNLESS IMMEDIATELY INSTALLED, SET EXTERIOR PLANTS AND TREES IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.

28. PLANT MATERIAL IS TO BE CAREFULLY HANDLED BY THE ROOT BALL, NOT THE TRUNK, BRANCHES, AND/OR FOLIAGE OF THE PLANT. DO NOT DROP EXTERIOR PLANTS DURING DELIVERY AND HANDLING. MISHANDLED PLANT MATERIAL SHALL BE REJECTED BY THE LANDSCAPE ARCHITECT. PLANTS WITH BROKEN ROOT BALLS OR SUBSTANTIAL DAMAGE SHALL BE REPLACED PRIOR TO PLANTING.

29. CONTRACTOR SHALL STAKE TREE LOCATIONS FOR APPROVAL PRIOR TO INSTALLATION. CONFLICTS OR DISCREPANCIES SHALL BE FIELD ADJUSTED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. NOTIFY THE GOVERNING JURISDICTION AND OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT OF SIGNS, POWER LINES, OR OTHER CONFLICTS BEFORE PLANTING TREES.

30. NO TREE PLANTING SHALL OCCUR WITHIN SIGHT DISTANCE TRIANGLE AREAS INDICATED ON THE PLAN SET. CONTRACTOR SHALL STAKE THE LOCATION OF TREE PLANTING IN THE RIGHT-OF-WAY IN THE FIELD PRIOR TO INSTALLATION FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT AND AUTHORITIES HAVING JURISDICTION. OWNER SHALL AGREE TO MAINTAIN THE STRUCTURE OF TREE PLANTING IN THE RIGHT-OF-WAY TO ELIMINATE SIGHT DISTANCE CONFLICTS.

31. PROPOSED TREES TO BE PLANTED A MINIMUM 20 FEET FROM LIGHT POLES AS MEASURED FROM TRUNK OF THE TREE TO THE POLE.

32. PROPOSED TREES TO BE PLANTED A MINIMUM 10 FEET FROM FIRE HYDRANTS AS MEASURED FROM TRUNK OF THE TREE TO THE HYDRANT.

33. CONTRACTOR SHALL LAY OUT ON THE GROUND SHRUBS, ORNAMENTAL GRASSES, AND GROUNDCOVERS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR SHALL ANTICIPATE THAT SOME REARRANGEMENT OF MATERIAL WILL OCCUR.

34. SEE LANDSCAPE DETAILS FOR TREE STAKING REQUIREMENTS.

35. ALL TREE PLANTINGS SHALL BE MULCHED TO A DEPTH OF 3 INCHES AND WITH A MINIMUM 3 FOOT RADIUS FROM BASE OF TREE OR TO DRIPLINE. MULCH SHALL NOT COVER THE ROOT FLARE.

36. MULCH SHALL BE ORGANIC, FREE OF TRASH, AND MAINTAINED WEED FREE. MULCH SHALL BE APPLIED IMMEDIATELY AFTER COMPLETION OF PLANTING OPERATIONS.

37. PLANT MATERIALS ARE TO BE GUARANTEED FOR A PERIOD OF 12 MONTHS. CONTRACTOR WILL REPLACE PLANT MATERIAL WHICH REMAINS UNHEALTHY BEFORE THE EXPIRATION OF THE GUARANTEE PERIOD OR IMMEDIATELY IF SO DIRECTED BY THE OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT.

38. CONTRACTOR IS RESPONSIBLE FOR WATERING PLANTED AREAS THROUGHOUT THE WARRANTY PERIOD TO ENSURE PLANT ESTABLISHMENT.

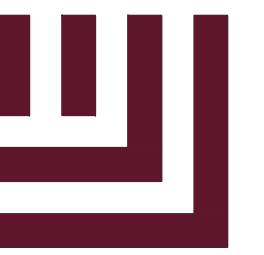
39. REPAIR OR REPLACE, IN A MANNER APPROVED BY THE OWNER'S REPRESENTATIVE, NEW TREES AND OTHER PLANTS THAT ARE DAMAGED AFTER INSTALLATION BY CONSTRUCTION OPERATIONS.

40. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MONITOR THE PROJECT DURING THE GUARANTEE PERIOD AND INFORM THE OWNER IF PROBLEMS DEVELOP WITH THE PLANT MATERIAL. CONTRACTOR SHALL REMOVE DEAD AND UNHEALTHY PLANT MATERIAL AND IMMEDIATELY REPLACE AT THE CONTRACTOR'S EXPENSE.

41. CONTRACTOR SHALL REMOVE GUYS AND STAKES AT END OF WARRANTY PERIOD OR ESTABLISHMENT.

42. LANDSCAPE WORK SHALL INCLUDE THE FURNISHING, INSTALLATION, AND WARRANTY OF ALL PLANTING MATERIALS WITHIN THE PROJECT AREA.

43. CONTRACTOR TO ENSURE PROPER STABILIZATION AND SEEDING OF THE SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.



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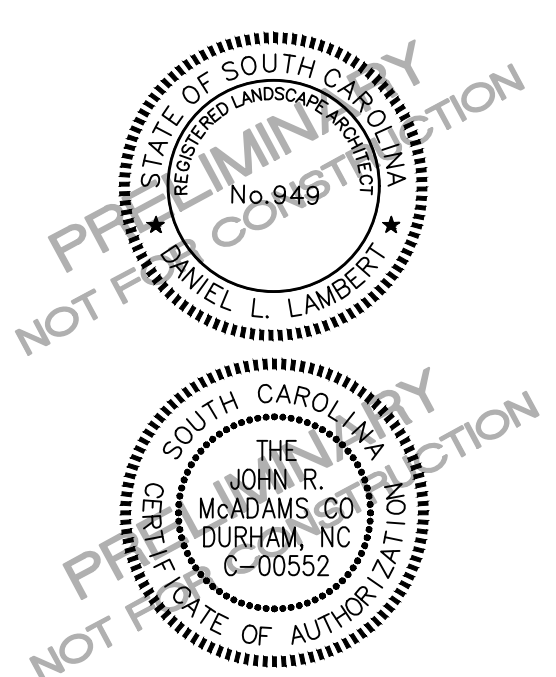
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EXPRESS OIL - CHAPIN, SC
CONSTRUCTION PLANS
XX COLUMBIA AVENUE
CHAPIN, SOUTH CAROLINA 29036



REVISIONS

NO.	DATE	DESCRIPTION
1	09.22.2025	2ND SUBMITTAL
2		

PLAN INFORMATION

PROJECT NO. EXO25002
FILENAME EXO25002-LS1.DWG
CHECKED BY DLL
DRAWN BY ASB
SCALE AS SHOWN
DATE 07.15.2025

SHEET

PLANTING DETAILS

L5.01

Staff Evaluation
UDO Amendments

What: Amendments to the UDO for consideration by Planning Commission

Request made by: Chapin Architectural Review Board

Request made to: Chapin Planning Commission

Date: September 12, 2025

The Chapin Architectural Review Board has requested amendments to the Unified Zoning and Development Ordinance (UDO). Language discussion regarding roofs, parapet walls, Aluminum storefront and Planned Developments and combined lots.

6.11.4.a. / 6.12.4.a. / 6.13.4.a. currently reads:

c. Roof Materials

Asphalt Shingles, Tile (clay, cement, natural or manufactured stone), Nonreflective pre-finished metal, with the exception of copper, and slate. Thermoplastic Polyolefin (TPO) for parapet or flat roofs is permitted. 2. Multiple materials on the same roof line are generally discouraged. 3. Ancillary roofs may be a different material, however it shall be appropriately transitioned with flashing and sloped.

6.11.4.d.2. / 6.12.4.d.2 / 6.13.4.d.2. currently reads:

Awnings and Canopies

1. Size: Shall not span more than one window or door opening, except for storefront windows that expand over 90% of the building's primary façade. A minimum of 8 feet of vertical clearance must be maintained from the sidewalk grade.
2. **Materials: Awnings should be made of a durable, weather fabric and metal only.**
3. Supports: It is encouraged that the awning supports are concealed from view.
4. Colors: Colors and patterns shall be subject to the review body. In general colors and/or patterns shall complement the building materials and colors, as well as adjacent structures.

6.11.4.c.1.a to be amended to: APPROVED by PC / Recommended to Council

c. Roof Forms

1. Standards Roof types: Common roof types such as gabled, hipped, shed, barrel vaulted, flat, mono-pitch, and domed are permitted. Shed, flat, and mono-pitched roofs may be required to be concealed by the review body except when used for porches, balconies, or building extensions.

a. Buildings 10,000 sq. ft. or less: Buildings 10,000 sq. ft. or less shall have sloped roofs with a minimum pitch of 4:12. Roof materials shall be architectural grade asphalt shingles or standing seam metal. Roof materials and color shall be approved by ARB. Parapets are not permitted on sloped roof buildings.

b. Buildings over 10,000 sq. ft.: Buildings over 10,000 SF may have sloped roofs or flat roofs. All roof mounted electrical, or mechanical shall be concealed from adjacent roadways using roof mounted screens or parapets. Buildings with parapets are discouraged but may be considered by the ARB if the parapet has appropriate cornice, design caps and periodic line interruptions.

6.12.4.c.1.a reads:

c. Roof Forms

a. Specific to Flat Roofs: A parapet shall be required for all flat roofs, or primary roofs with less than a 3:12 slope. Flat roofs, even when concealed by a parapet, shall not be permitted for buildings less than 10,000 sq. ft. Parapet roofs are discouraged, but may be considered by the ARB if the parapet has appropriate cornice design, caps, periodic roof line interruptions, or used in an effort to provide variety to a multi-building site.

6.12.4.c.1.a to be amended to:

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Add Section for the following:

- a. Developments of residential sub-divisions, planned developments and commercial combined parcels adjacent to each other shall have similar exterior fixtures to match the structures of the area. Town staff will review building colors, storefronts, roof material to ensure architectural style aligns with overall aesthetics of the development.
- b. Landscaping plans, exterior building lighting and parking lot lighting shall be reviewed by Town staff to ensure they are coordinated to be a seamless transition of the area.

Include in Article 14: Definitions:

Roofline: The area where the roof edge meets the wall and includes elements such as fascias, soffits, guttering, and other related components.