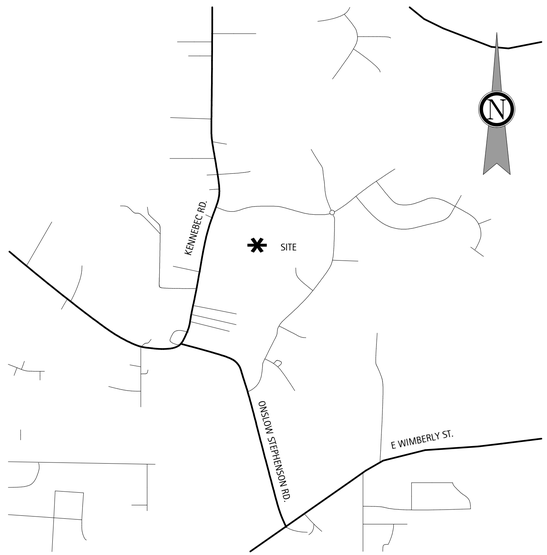
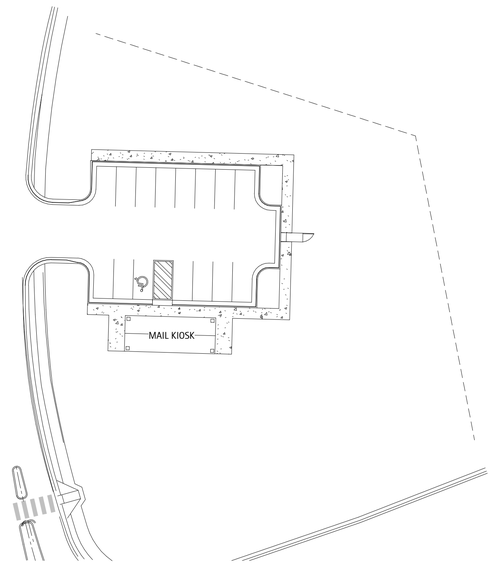
HIGHLAND RIDGE AMENITY CENTER MAIL KIOSK

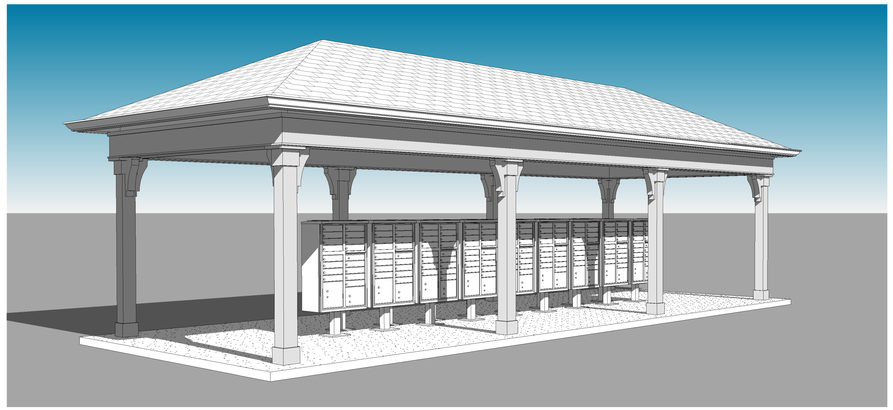
489 FREEDOM TRAIL DRIVE ANGIER, NORTH CAROLINA



VICINITY MAP



SITE MAP



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DRAWING INDEX

SHEET NUMBER	SHEET NAME	REV 01	REV 02	REV 03	REV 04	REV 05
0-GENERAL						
G0.1	COVER SHEET					
1-ARCHITECTURAL						
A1.0	KIOSK PLANS					
A2.0	ELEVATIONS, SECTIONS, & DETAILS					

Name of Project: Highland Ridge Amenity Center Mail Kiosk
Address: 489 Freedom Trail Drive, Angier, NC **Zip Code:** 27592
Owner or Authorized Agent: John Moxley **Phone #:** 919-691-1170
Email: john@dclugston.com **Fax #:**
Owned By: ☒ Privately ☐ City/County ☐ State
Code Enforcement Jurisdiction: ☒ City ☐ County ☐ City/County
Name of Jurisdiction: Town of Angier

PROJECT SUMMARY: (U) Utility - Construct a New Mail Kiosk

Building Description: U, Construct a New Mail Kiosk Covered Structure

Lead Design Professional/Project Coordinator: John Moxley 919-691-1170

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #
Architectural:				
Civil:				
Electrical:				
Fire Alarm:				
Plumbing:				
Mechanical:				
Sprinkler-Standpipe				
Structural:	Ross Linden Engineers	Brian Ross, PE	25539	919-832-5680
Precast:				
Trusses:	Truss Builders	Eric A Gilbert, PE	036322	919-467-9988
Retaining Walls >5' High				
Other:				
Note:				

Building Code: ☒ 2018 North Carolina State Building Code (NCSBC) ☐ 2009 North Carolina State Building Code
☐ 2009 NC Rehab ☐ 2006 NC Rehab ☐ 2006 North Carolina Building Code
☐ 2009 Chapter 34 ☐ 2006 Chaper 34 ☐ 1995 Existing Building Code

New Building: ☒ New Building ☐ Addition ☐ Shell Building ☐ Alteration to Shell ☐ First Time Interior Completion

Existing Building: ☐ Renovation ☐ Reconstruction ☐ Change of Use Tenant ☐ Interior Completion ☐ Repair ☐ Change of Occupancy ☐ Tenant Alteration ☐ Alteration to Shell

Note: Zoning Review May Be Required for Change of Use or Occupancy

Original Occupancy:
Proposed Occupancy: (U) Utility

OCCUPANCY INFORMATION

Primary Occupancies:

Assembly: ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Hazardous: ☐ H-1 ☐ H-2 ☐ H-3 ☐ H-4 ☐ H-5
Institutional: ☐ I-1 Condition ☐ 1 ☐ 2 ☐ I-2 Condition ☐ 1 ☐ 2 ☐ I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ I-4
Business: ☐
Educational: ☐
Factory: ☐ F-1 ☐ F-2
Mercantile: ☐
Residential: ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage: ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled ☐ Parking Garage: ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☒

Special Occupancies: ☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412 ☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421

Mixed Occupancy: ☒ No ☐ Yes Separation: ___Hr. Exception:_____

☐ Non-Separated Mixed Occupancy (508.3)- The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Mixed Occupancy (508.3.3) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1.$

_____ + _____ +-- = _____ ≤ 1

ALLOWABLE AREA AND HEIGHT CALCULATIONS

THIS SECTION FOR NEW, ADDITION, CHANGE OF USE, AND INTERIOR COMPLETIONS

Exterior Wall	Actual Length		Open Length		Width of Public Way / Open Space 30'	
North						
South						
East						
West						
Total				**F**		**W**

NO INCREASE REQUIRED

INCREASE FRONTAGE
FRONTAGE INCREASE I [illegible] ALLOWABLE AREA FORMULA

$I_f = 100\left(\frac{F}{P} - 0.25\right)\frac{W}{30}$

BOTH BUILDING AND TENANT MUST BE INDICATED ON CHART BELOW

Story No.	DISCRIP & USE	BLDG AREA PER STORY (ACTUAL SF)	TABLE 506.2 ALLOWABLE AREA (SF)	AREA FOR INCREASE FRONTAGE	SPRINKLER INCREASE	ALLOWABLE FLOOR AREA	RATE OF ACTUAL/ ALLOWABLE	MAXIMUM BUILDING AREA	SEPARATION RATING REQUIRED
Main Level	U	512.50	5,500	N/A	N/A	N/A	0.056	5,500 SF	N/A

1. Frontage area increases from Section 506.3 are computed thus:
   a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
   b. Total Building Perimeter = _____ (P)
   c. Ratio (F/P) = _____ (F/P)
   d. W = Minimum width of public way = _____ (W)
   e. Percent of frontage increase I = 100 [F/P - 0.25] x W/30 = _____ (%)
2. Unlimited area applicable under conditions of Section 507.
3. Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2)
4. The maximum area of open parking garages must comply with Table 406.5.4
5. Frontage increase is based on the unsprinklered area value in Table 506.2

ALLOWABLE HEIGHT

MOST RESTRICTIVE (GROUP)	ALLOWABLE BUILDING HEIGHT (TABLE 504.3)	INCREASE FOR SPRINKLERS	ACTUAL BUILDING HEIGHT AS SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type VB	Type VB	Type VB	403.3.1
Building Height in Feet	H = 40'-0"	N/A	H= 14'-2"	403.3.1
Building Height in Stories	S= 1	N/A	S= 1	403.3.1

BUILDING DATA

THIS SECTION REQUIRED FOR ALL PROJECTS

Construction Type: ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV-HT ☐ V-A ☒ V-B

Mixed construction: ☐ Yes ☒ No Types _____
Sprinklers: ☐ Yes ☒ No ☐ NFPA 13 ☐ NFPA 13R ☐ Partially Sprinklered ☐ Special Suppression

Standpipes: ☐ Yes ☒ No
Fire District: ☐ Yes ☒ No
Building Height: 14.17 Feet
Basement: ☐ Yes ☒ No
Mezzanine: ☐ Yes ☒ No
High Rise: ☐ Yes ☒ No

Class: ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
(Appendix D) ☐ Floor Hazard
1 Story

Life Safety Plan Sheet # (if provided): A1.0

Gross Building Area:

FLOOR	EXISTING (SQFT)	NEW (SQFT)	SUB-TOTAL
First Floor	0	512.50	512.50

Area of Project Tenant/Alteration/Renovation: _____
Area of Construction: _____

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COVER SHEET

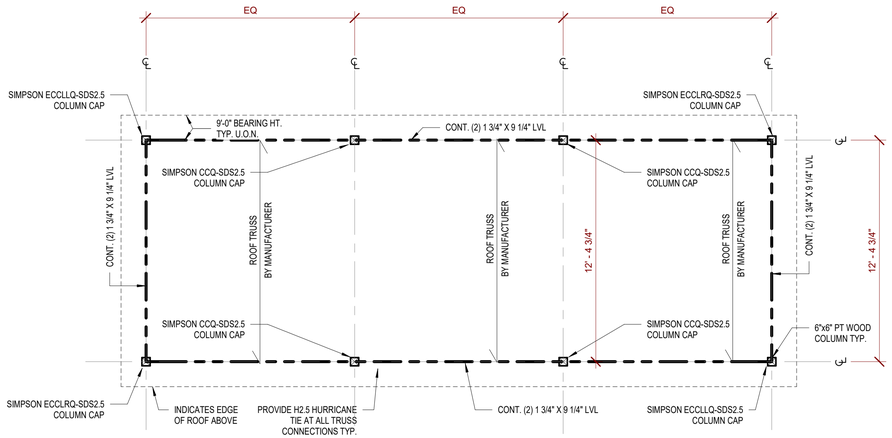
G0.1

GENERAL LIFE SAFETY NOTES:

USE:	B (BUSINESS) NCSBC 303.1.1
BUILDING AREA:	515 SF
PRIMARY LOAD FACTOR:	BUSINESS (100 SF)
OCCUPANT LOAD:	5 PPL
CONSTRUCTION TYPE:	V-B
SPRINKLERS:	NO
REQUIRED EXITS:	1
PROVIDED EXITS:	N/A - OPEN AIR STRUCTURE
DIAGONAL DISTANCE:	N/A - ONE EXIT REQUIRED
REQUIRED EXIT SEPARATION:	N/A - ONE EXIT REQUIRED
PROVIDED EXIT SEPARATION:	N/A - ONE EXIT REQUIRED
REQUIRED EGRESS WIDTH:	1"
PROVIDED EGRESS WIDTH:	OPEN AIR STRUCTURE
MAXIMUM COMMON PATH OF TRAVEL:	75'-0"
MAXIMUM ALLOWABLE TRAVEL DISTANCE:	200'-0"
ACTUAL MAX TRAVEL DISTANCE:	19' - 6"

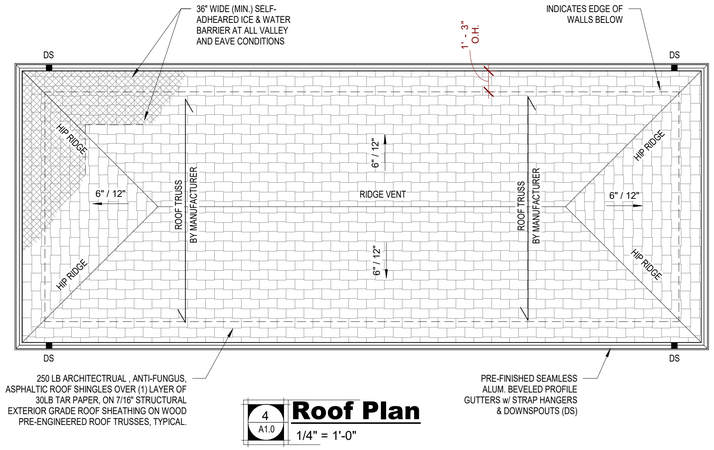
ROOF NOTES

1. Roof decks shall be covered with approved roof coverings secured to the building or structure in accordance with the NCSBC. Roof coverings shall be designed and installed in accordance with the building code and the approved manufacturer's instructions.
2. Crickets or saddles shall be installed on the ridge side of any chimney or penetration greater than 30 inches wide as measured perpendicular to the slope. Cricket or saddle coverings shall be sheet metal or of the same material as the roof covering.
3. Asphalt shingles shall only be used on roof slopes of 2:12 or greater.
4. Roof slopes from 2:12 to 4:12, underlayment shall be two layers applied in the following manner. Apply a minimum 19" wide strip of underlayment felt parallel with and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide sheets of underlayment overlapping successive sheets 19 inches minimum and fasten in place.
5. Roof slopes from 4:12 or greater, underlayment shall be a minimum of one layer.
6. Flashing shall be installed at the wall and roof intersections, at gutters, and wherever there is a change in roof slope or direction and around roof openings. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019in (No. 26 galvanized sheet)
7. Areas prone to ice formation along eaves causing a backup of water shall have an ice barrier that consists of at least (2) two layers of underlayment cemented together or of a self-adhering polymer-modified bitumen sheet. Extend ice barrier min. 18" each side of valleys and other ice prone areas. .
8. Overhangs: Truss manufacturer to provide shorter gable end trusses where overhangs exceed 1'-0" to allow for outriggers to be framed over the top cord of the end truss and attached to the top cord of the secondary truss towards the interior of the gable. GC to verify prior to manufacturing of trusses.
9. Light Location: Truss manufacturere to cooridinate truss layout with reflected ceiling plans, electrical plans, and mechical plans to avoid conflicts



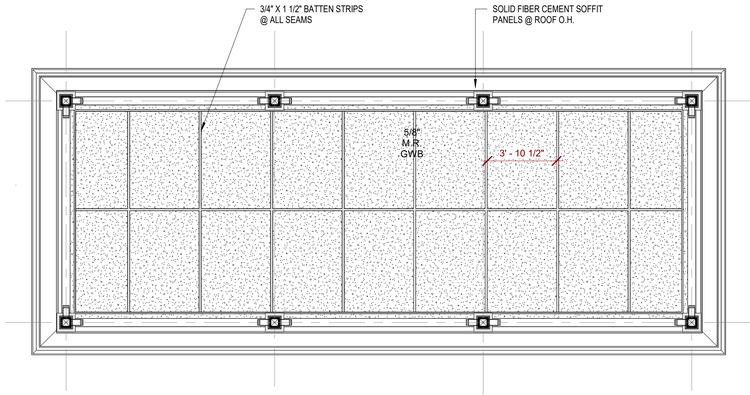
5 A1.0 **Ceiling Framing Plan**

1/4" = 1'-0"



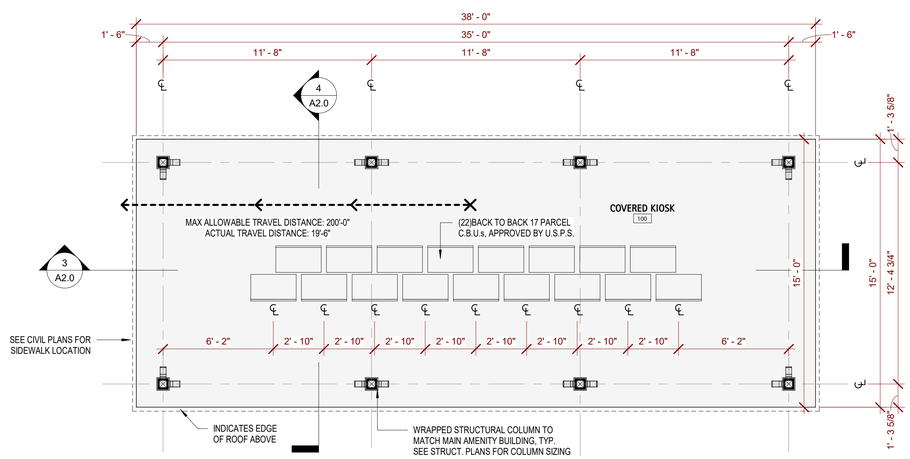
4 A1.0 **Roof Plan**

1/4" = 1'-0"



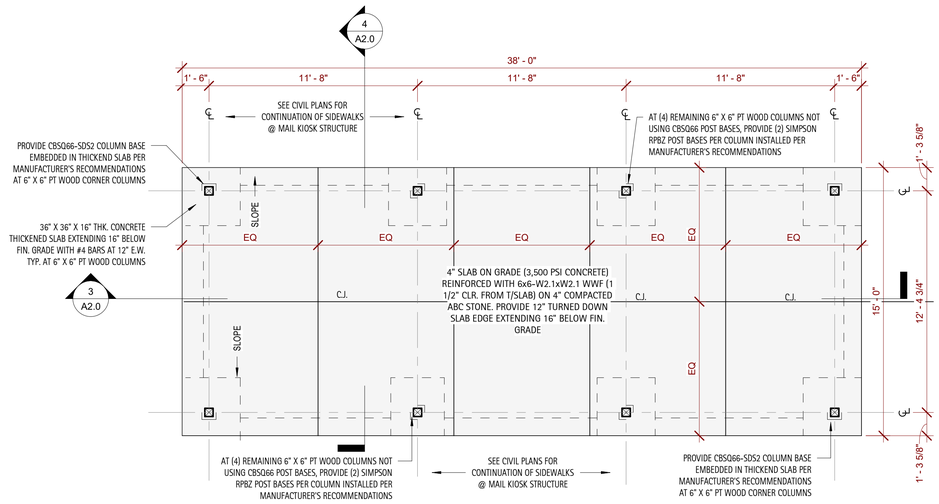
3 A1.0 **Reflected Ceiling Plan**

1/4" = 1'-0"



2 A1.0 **First Floor Plan**

1/4" = 1'-0"



1 A1.0 **Foundation Plan**

1/4" = 1'-0"

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NORTH CAROLINA PROFESSIONAL SEAL 25538 ENGINEER BRIAN M. ROSS 6/18/2025

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KIOSK PLANS

A1.0

STRUCTURAL NOTES

I. GENERAL

1. DESIGN CODES

NORTH CAROLINA BUILDING CODE, 2018 EDITION
(AMENDED 2015 INTERNATIONAL BUILDING CODE)

ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
(ACI 318-14)

ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES

2. DESIGN LOADS

LIVE LOADS: FLOOR: 100 PSF
ROOF: 20 PSF

ULTIMATE DESIGN WIND SPEED: 116 MPH

GROUND SNOW LOAD 15 PSF

SEISMIC DESIGN CATEGORY B
SITE CLASS D
Ss = 0.173
S1 = 0.083

3. ALL ELEVATIONS ARE REFERENCED FROM FINISHED FLOOR ELEVATION OF 0'-0". SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

II. CONCRETE

1. UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL HAVE THE FOLLOWING STRENGTH AND SLUMP REQUIREMENTS:
3,500 PSI 28-DAY COMPRESSIVE STRENGTH, MAX. 5" SLUMP.

2. ALL CONCRETE SHALL BE MOIST CURED PER ACI 301 OR CURED WITH AN APPROVED CURING COMPOUND. CONTRACTOR SHALL VERIFY THAT THE CURING COMPOUND IS COMPATIBLE WITH FLOOR COVERING ADHESIVES, COATINGS, OR TOPPINGS TO BE USED. CONCRETE SHALL BE CURED FOR A MINIMUM OF 7 DAYS.

3. UNLESS OTHERWISE NOTED, ALL REINFORCING STEEL SHALL BE NEW BILLET STEEL, CONFORMING TO ASTM A-615, GRADE 60, DEFORMED.

4. UNLESS OTHERWISE NOTED, ALL DETAILING, FABRICATION, AND PLACING OF REINFORCING STEEL SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. (ACI 315)

5. ALL BAR SPLICES SHALL BE CLASS "B" TENSION SPLICES PER ACI 318-14, UNLESS OTHERWISE SHOWN.

6. CONTRACTOR SHALL REFER TO DRAWINGS OF OTHER TRADES AND VENDOR DRAWINGS FOR EMBEDDED ITEMS AND RECESSES NOT SHOWN ON THE STRUCTURAL DRAWINGS.

7. ALL SPREAD FOOTINGS BEARING ON NATIVE SOIL OR STRUCTURAL FILL ARE DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 2,500 PSF. A GEOTECHNICAL REPRESENTATIVE SHALL INSPECT ALL FOOTING EXCAVATIONS TO CONFIRM ALLOWABLE BEARING PRESSURES.

8. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, PROTECTING, AND RELOCATING AS REQUIRED ALL SERVICE AND UTILITY LINES IN VICINITY OF THE WORK SITE.

9. ALL DOWELS WHICH ARE TO BE DRILLED AND GROUTED INTO EXISTING CONCRETE SHALL BE DONE WITH AN EPOXY GROUT. DRILL HOLE WITH DIAMETER 1/8" LARGER THAN DOWEL OR AS RECOMMENDED BY GROUT SUPPLIER. USE HIT-RE 500 V3 BY HILTI OR APPROVED EQUAL.

III. WOOD

1. FRAMING LUMBER SHALL BE #2 SOUTHERN YELLOW PINE (SYP) WITH THE FOLLOWING DESIGN PROPERTIES:
Fb = 800 PSI Fv = 175 PSI E = 1.4E6 PSI

2. FRAMING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE #2 SOUTHERN YELLOW PINE (SYP) TREATED IN ACCORDANCE WITH AWPA C22 WITH THE FOLLOWING DESIGN PROPERTIES:
Fb = 800 PSI Fv = 175 PSI E = 1.4E6 PSI

3. ENGINEERED WOOD BEAMS SHALL BE LAMINATED VENEER LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL) WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:
Fb = 2600 PSI Fv = 285 PSI E = 1.9E6 PSI

4. ENGINEERED WOOD BEAMS SHALL BE INSTALLED WITH ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.

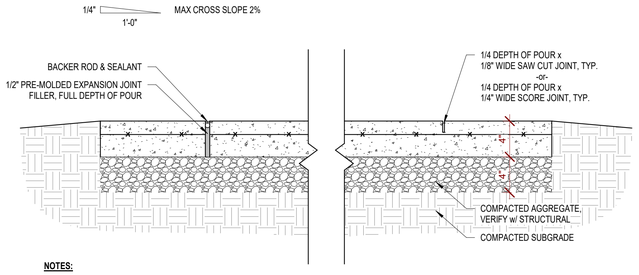
IV. WOOD TRUSSES

1. ENGINEERED ROOF TRUSS SYSTEMS SHALL BE PROVIDED FOR REVIEW AND COORDINATED WITH THE ENGINEER OF RECORD. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ROOF TRUSS DRAWINGS SHALL BE SIGNED AND SEALED BY THE MANUFACTURER AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

2. ALL TRUSSES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH BCSI 1-03 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."

3. THE TOP CHORD OF ALL ROOF TRUSSES SHALL BE SHEATHED WITH MINIMUM 7/16" WOOD STRUCTURAL SHEATHING (PLYWOOD -or- OSB). PROVIDE PLYWOOD EDGE CLIPS BETWEEN PANELS.

4. PROVIDE PERMANENT BOTTOM CHORD TRUSS BRACING AND WEB MEMBER PLANE BRACING IN ACCORDANCE WITH BCSI-B2 "TRUSS INSTALLATION AND TEMPORARY BRACING" AND BCSI-B3 "WEB MEMBER PERMANENT BRACING/WEB REINFORCEMENT."

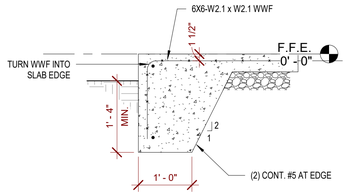


NOTES:

1. ALL JOINTS TO BE CUT w/ WET WALK BEHIND SAW TO ENSURE ALL CUTS ARE PERPENDICULAR W/ FACE OF CONCRETE
2. MAXIMUM CONTROL JOINT SPACING SHALL BE 10 FT. IN EACH DIRECTION UNLESS SHOWN OTHERWISE ON PLAN. SEE STRUCT.
3. PROVIDE EXPANSION JOINT WHERE SLABS ARE POURED AGAINST VERTICAL SURFACES AND/OR DIFFERENT PAVING MATERIALS AND AS SPECIFIED ON PLANS OR 25'-0" MAX O.C.

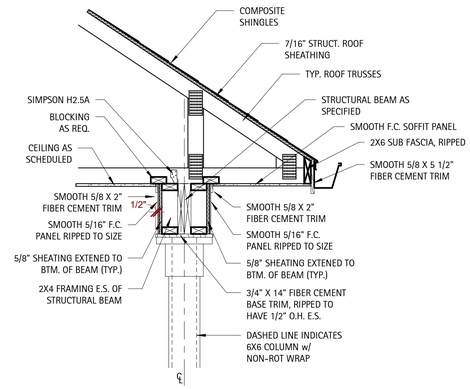
7 A2.0 Detail - Typ. Slab Control Joint

1 1/2" = 1'-0"



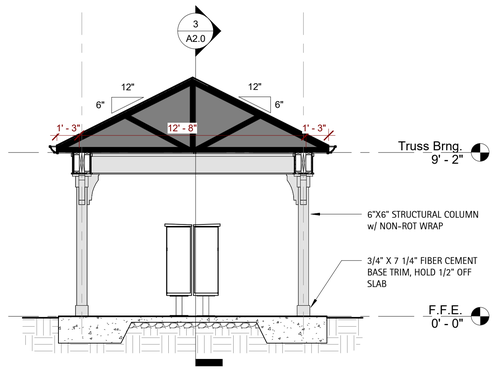
6 A2.0 Detail - Typ. Slab Edge

3/4" = 1'-0"



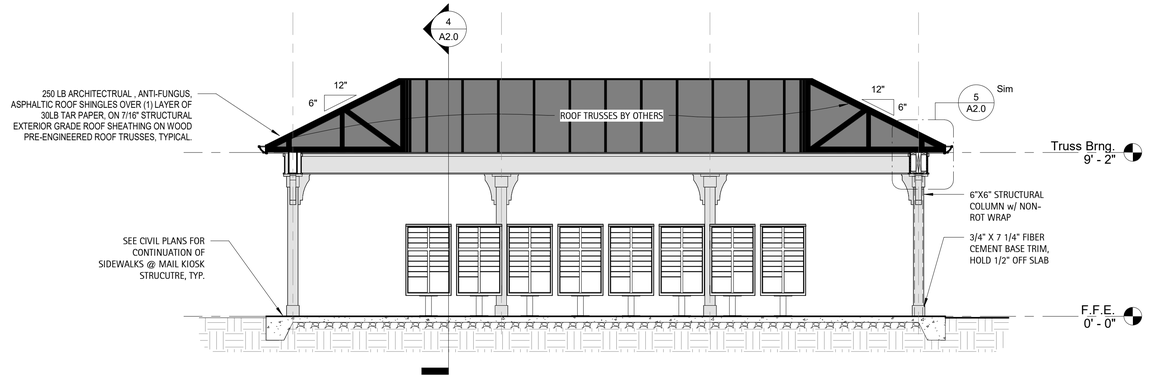
5 A2.0 Detail - Typ. Trim Band @ Soffits

3/4" = 1'-0"



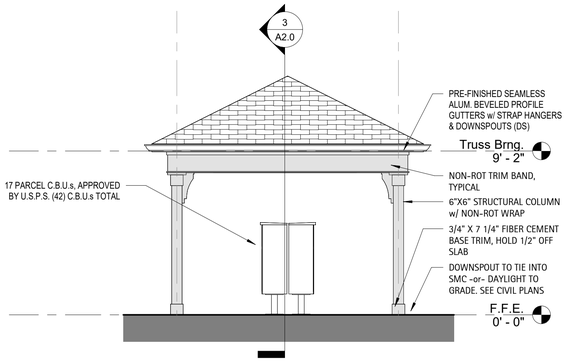
4 A2.0 Section - Through Gable

1/4" = 1'-0"



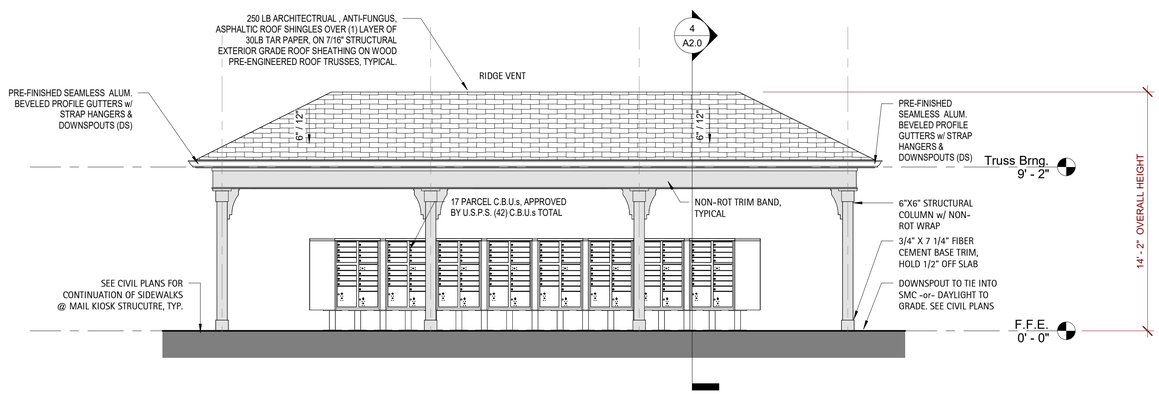
3 A2.0 Section - Through Ridge

1/4" = 1'-0"



2 A2.0 Elevation - Right/Left

1/4" = 1'-0"



1 A2.0 Elevation - Front/Rear

1/4" = 1'-0"

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ELEVATIONS, SECTIONS, & DETAILS

A2.0