COOK-OUT RESTAURANTS

WINTERVILLE TOWNSHIP - PITT COUNTY - NORTH CAROLINA

SEE SHEET S-1 FOR STRUCTURAL
DATA FOR PROTOTYPE BUILDING

Name of Project: COOK OUT RESTAURANT
Address: 4145 S. MEMORIAL DRIVE — Zip Code: 28590
Proposed Use: DRIVE-THRU RESTAURANT WITH DINING ROOM
Owner or Authorized Agent: JEREMY REAVES — Phone # (336) 215-7025 — E-mail
Owned By: ☐ City/County ☒ Private ☐ State
Code Enforcement Jurisdiction: City ☒ WINTERVILLE ☐ County PITT COUNTY ☐ State NC

LEAD DESIGN PROFESSIONAL: H. MACK SUMMEY, JR., PE

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	ARCHITECTURE FOR HEALTH	BRIAN R. LATHROP	8489	770-993-7300	blathrop@architectureforhealth.com
Civil	COMMERCIAL SITE DESIGN	JEREMY J. BECKETT	26411	919-848-6121	www.csitedesign.com
Electrical	SUMMEY ENGINEERING	H. MACK SUMMEY, JR.	26447	336-328-0902	mack@summeyengineering.com
Fire Alarm	N/A	N/A	N/A	N/A	
Plumbing	SUMMEY ENGINEERING	H. MACK SUMMEY, JR.	26447	336-328-0902	mack@summeyengineering.com
Mechanical	SUMMEY ENGINEERING	H. MACK SUMMEY, JR.	26447	336-328-0902	mack@summeyengineering.com
Sprinkler-Standpipe	N/A	N/A	N/A	N/A	
Structural	SUMMEY ENGINEERING	WILLIAM B. ATKINSON	45665	336-328-0902	will@summeyengineering.com
Retaining Walls>5' High	N/A	N/A	N/A	N/A	
Other	N/A	N/A	N/A	N/A	

YEAR EDITION OF CODE: 2018

☒ New Construction ☐ Addition ☐ Upfit

EXISTING: ☐ Reconstruction ☐ Alteration ☐ Repair

CONSTRUCTED (DATE) ______ ORIGINAL USE(S) ______
RENOVATED (DATE) ______ PROPOSED USES(S) ______
CURRENT USE(S) ______

BASIC BUILDING DATA

Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A ☐ I-B ☐ II-B ☐ III-B ☒ V-B
Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes (Primary) Flood Hazard Area: ☒ No ☐ Yes
Building Height: 25 Feet
Mezzanine: ☒ No ☐ Yes
Gross Building Area:

Floor	Existing (Sq. Ft.)	New (Sq. Ft.)	Subtotal
6th Floor	0	0	0
5th Floor	0	0	0
4th Floor	0	0	0
3rd Floor	0	0	0
2nd Floor	0	0	0
Mezzanine	0	0	0
1st Floor	0	3,652	3,652
Basement	0	0	0
Total	0	3,652	3,652 (INCLUDING EXTERIOR WALLS)

ALLOWABLE AREA

Occupancy: Assembly (303) ☐ A-1 ☒ A-2 ☐ A-3 ☐ A-4 ☐ A-5
☐ Business (304) ☐ Educational (305) Factory (306) ☐ F-1 Moderate ☐ F-2 Low
Hazardous (307) ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional (308) ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ Mercantile (309) Residential (310) ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage (311) ☐ S-1 Moderate ☐ S-2 Low ☐ High-Piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
☐ Utility and Miscellaneous (312)

Accessory Occupancies ☒ N/A
Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5 Business ☐ Educational ☐
Factory ☐ F-1 Moderate ☐ F-2 Low Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4 Mercantile ☐
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 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 ☐

Incidental Uses (Table 508.2.5)
- ☐ Furnace room where any piece of equipment is over 400,000 Btu per hour input
- ☐ Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
- ☐ Refrigerant machine room
- ☐ Hydrogen cutoff rooms, not classified as Group H
- ☐ Incinerator rooms
- ☐ Paint shops, not classified as Group H, located in occupancies other than Group F
- ☐ Laboratories and vocational shops, not classified as Group H, located in a Group E or I-2 occupancy
- ☐ Laundry rooms over 100 square feet
- ☐ Group I-3 cells equipped with padded surfaces
- ☐ Group I-2 waste and linen collection rooms
- ☐ Waste and linen collection rooms over 100 square feet
- ☐ Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies
- ☐ Rooms containing fire pumps
- ☐ Group I-2 storage rooms over 100 square feet
- ☐ Group I-2 commercial kitchens
- ☐ Group I-2 laundries equal to or less than 100 square feet
- ☐ Group I-2 rooms or spaces that contain fuel-fired heating equipment

Special Uses: ☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412 ☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421 ☐ 422 ☐ 423 ☐ 424 ☐ 425 ☐ 426 ☐ 427

Special Provisions: ☐ 509.2 ☐ 509.3 ☐ 509.4 ☐ 509.5 ☐ 509.6 ☐ 509.7 ☐ 509.8 ☐ 509.9

Mixed Occupancy: (508.5) ☒ No ☐ Yes Seperation: 0 Hr. Exception: ______
- ☐ Incidental Use Separation (508.2.5)
  This separation is not exempt as a Non-Separated Use (see exceptions).
- ☐ Non-Separated Use (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 Use (508.4) - 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.

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

______ + ______ + ... = ______ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG. AREA PER STORY (ACTUAL)	(B) TABLE 503 AREA [5]	(C) AREA FOR OPEN SPACE INCREASE [1]	(D) AREA FOR SPRINKLER INCREASE [2]	(E) ALLOWABLE AREA OR UNLIMITED [3]	(F) MAXIMUM BUILDING AREA [4]
ONE	RESTAURANT	3,652	6000	0	0	6000	6000

1 Frontage area increases from Section 506.2 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 The sprinkler increase per Section 506.3 is as follows:
  a. Multi-story building I = 200 percent
  b. Single-story building I = 300 percent
3 Unlimited area applicable under conditions of Section 507
4 Maximum Building Area = total number of stories in the building x E (506.4).
5 The maximum area of parking garages must comply wiyh 406.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	TYPE V-B		TYPE V-B	602.5
Building Height in Feet	Feet 40	Feet = H + 20' = N/A	25 FEET	TABLE 503
Building Height in Stories	Stories ONE	Stories + 1 = N/A	STORIES ONE	TABLE 503

FIRE PROTECTION REQUIREMENTS

Life Safety Plan Sheet #, if Provided N/A

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/ ___ * REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural frame, including columns, girders, trusses	>30	0					
Bearing walls							
Exterior	>30	0					
North	>30	0					
East	>30	0					
West	>30	0					
South	>30	0					
Interior	>30	0					
Nonbearing walls and partitions							
Exterior walls	>30	0					
North	>30	0					
East	>30	0					
West	>30	0					
South	>30	0					
Interior walls and partitions	>30	0					
Floor construction Including supporting beams and joists		0					
Roof construction Including supporting beams and joists		0					
Shaft enclosures - Exit		0					
Shaft enclosures - Other		0					
Corridor Separation		0					
Occupancy Separation		0					
Party/Fire Wall Separation		0					
Smoke Barrier Separation		0					
Tenant Separation		0					
Incidental Use Separation		0					

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

THIS SECTION IS REQUIRED TO BE COMPLETED FOR ALL PROJECTS

- Emergency Lighting: (S1006) ☐ No ☒ Yes
- Exit Signs: (S1011) ☐ No ☒ Yes
- Fire Alarm: (S907, NFPA 72-07) ☒ No ☐ Yes
- Smoke Detection Systems: (S907) ☐ No ☒ Yes ☐ Partial ______
- Panic Hardware: (S1008.1.10) ☐ No ☒ Yes
- Life safety systems generator: (S2702.2) ☒ No ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS

Incidental Uses
- ☐ Fire and/or smoke rated wall locations (Chapter 7)
- ☐ Assumed and real property line locations
- ☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
- ☐ Existing structures within 30' of the proposed building
- ☒ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)
- ☒ Occupant loads for each area
- ☒ Exit access travel distances (1016)
- ☒ Common path of travel distances (1014.3 & 1028.8)
- ☒ Dead end lengths (1018.4)
- ☒ Clear exit widths for each exit door
- ☒ Maximum calculated occupant load capactiy each exit door can accomodate based on egress width (1005.1)
- ☒ Actual occupant load for each exit door
- ☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- ☐ Location of doors with panic hardware (1008.1.10)
- ☐ Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
- ☐ Location of doors with electromagnetic egress locks (1008.1.9.8)
- ☐ Location of doors equipped with hold-open devices
- ☐ Location of emergency escape windows (1029)
- ☐ The square footage of each fire area (902)
- ☐ The square footage of each smoke compartment (407.4)
- ☐ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS

(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING

(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED: REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
		(SEE PLAN PREPARED BY OTHERS)				
TOTAL						

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS: REQUIRED	SHOWN ON PLANS	TRAVEL DISTANCE: ALLOWABLE TRAVEL DISTANCE (TABLE 1004.2.4)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1004.1): REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
RESTAURANT	2	3	200'	92'	51'-5"	64'-0"

1 Corridor dead ends (Section 1004.3.2.3)
2 Single exits (Table 1005.2.2)
3 Common Path of Travel (Section 1004.2.5)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1003.2.2.2)	(c) EGRESS WIDTH PER OCCUPANT (TABLE 1003.2.3) STAIR	(c) LEVEL	EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1003.2.3) (a/b) x c STAIR	REQUIRED WIDTH LEVEL	ACTUAL WIDTH SHOWN ON PLANS STAIR	ACTUAL WIDTH LEVEL
RESTAURANT	1236 SF	15 NET	N/A	0.2"	N/A	16.8"	N/A	108"
COMMERCIAL KITCHEN	1178 SF	200 GROSS	N/A	0.2"	N/A	1.2"	N/A	42"

1 See Table 1003.2.2.2 to determine whether net or gross area is applicable. See definition "Area, Gross" and "Area, Net" (Section 1002)
2 The sprinkler increase per Section 506.3 is as follows:
  c. Multi-story building I_s = 200 percent
  d. Single-story building I_s = 300 percent
3 Minimum stairway width (Section 1003.3.3); min. corridor width (Section 1004.3.2.2); min. door width (Section 1003.3.1)
4 Minimum width of exit passageway (Section 1005.3.3)
5 The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1003.2.3)
6 Assembly occupancies (Section 1008)
7 2nd floor occupancy is limited to 5 people (maximum) (Accessibility Code Section 15.11.1.1) A placard indicating the 5 person occupant capacity will be installed on the wall beside the entrance door to the lower landing of the stairs.

PLUMBING FIXTURE REQUIREMENTS

OCCUPANCY	WATER CLOSETS MALE	WATER CLOSETS FEMALE	WATER CLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS/ TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
COMM. KITCHEN	–	–	1	1	–	–	1	0	0	–
DINING ROOM	1	2	–	1	1	1	–	0	0	–
TOTAL REQUIRED	1	2	0	1	1	1	0	0	0	–

SPECIAL APPROVALS

SPECIAL APPROVAL: (Local Jurisdiction, Department of Insurance, SBCCI, ICC, etc., describe below)
NONE

STRUCTURAL DESIGN

DESIGN LOADS: (ASCE/SEI 7.05)
IMPORTANCE FACTORS: Wind (Iw) ______ Snow (Is) ______ Seismic (Ie) ______
LIVE LOADS: Roof ______ psf Mezzanine ______ psf Floor ______ psf
GROUND SNOW LOAD (Pg): ______ psf
SNOW LOADS: ______ psf
WIND LOADS: Basic Wind Speed (3-second gust) ______ mph (ASCE-7-05)
Exposure Category ______
Wind Base Shears for MWFRS: Vx = - K Vy = - K

SEISMIC DESIGN CATEGORY ☐ A ☐ B ☐ C ☐ D
Provide the following Seismic Design Parameters:
OCCUPANCY CATEGORY (Table 1604.5) ☐ I ☐ II ☐ III ☐ IV
SPECTRAL RESPONSE ACCELERATION S_S - %g S_1 - %g
SITE CLASSIFICATION (Table 20.3-1) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F
Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data
BASIC STRUCTURAL SYSTEM (check one)
___ Bearing Wall ___ Dual w/Special Moment Frame
___ Building Frame ___ Dual w/Intermediate R/C or Special Steel
___ Moment Frame ___ Inverted Pendulum
SEISMIC BASE SHEAR V_x = - K V_y = - K
ANALYSIS PROCEDURE ☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED? ☐ YES ☐ NO
LATERAL DESIGN CONTROL: Earthquake ______ Wind X
SOIL BEARING CAPACITIES:
FIELD TEST (provide copy of test report) ______ psf
PRESUMPTIVE BEARING CAPACITY ______ psf
PILE SIZE, TYPE, AND CAPACITY ______
SPECIAL INSPECTIONS REQUIRED: ☐ YES ☐ NO

ENERGY SUMMARY

ENERGY REQUIRMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Climate Zone: ☐ 3 ☒ 4 ☐ 5
Method of Compliance:
- ☐ Prescriptive (Energy Code)
- ☒ Performance (Energy Conservation Code OR COMcheck)
- ☐ Prescriptive (ASHRAE 90.1 - 2010 with addenda 2013 supplement)
- ☐ Performance (ASHRAE 90.1 - 2010)

THERMAL ENVELOPE
ROOF/CEILING ASSEMBLY (each assembly)
- Description of assembly -
- U-Value of total assembly -
- R-Value of insulation -
- Skylights in each assembly - N/A
- U-Value of skylight - N/A
- total square footage of skylights in each assembly - N/A

EXTERIOR WALLS (each assembly)
- Description of assembly -
- U-Value of total assembly -
- R-Value of insulation -
- Openings (windows with 1" insulated glass)
- U-Value of assembly -
- Solar heat gain coefficient
- projection factor
- Door R-Values

WALLS BELOW GRADE (each assembly)
- Description of assembly - N/A
- U-Value of total assembly - N/A
- R-Value of insulation - N/A

FLOORS OVER UNCONDITIONED SPACE (each assembly)
- Description of assembly - N/A
- U-Value of total assembly - N/A
- R-Value of insulation - N/A

FLOORS SLAB ON GRADE
- Description of assembly -
- U-Value of total assembly -
- R-Value of insulation -
- Horizontal/vertical requirement -
- slab heated -

MECHANICAL SUMMARY
(SEE MECHANICAL PLANS FOR MECHANICAL SUMMARY COMPLIANCE)

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

METHOD OF COMPLIANCE: ☒ Prescriptive ☐ Energy Cost Budget
THERMAL ZONE
- winter dry bulb N/A
- summer dry bulb N/A

INTERIOR DESIGN CONDITIONS
- winter dry bulb N/A
- summer dry bulb N/A
- relative humidity N/A

ELECTRICAL SUMMARY
(SEE ELECTRICAL PLANS FOR ELECTRICAL SUMMARY COMPLIANCE)

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE:
ENERGY CODE: ☒ Prescriptive ☐ Performance
ASHRAE 90.1: ☐ Prescriptive ☐ Performance

DRAWING INDEX

DESIGN CODES

- 2018 NORTH CAROLINA BUILDING CODE
- 2018 NORTH CAROLINA FIRE CODE
- 2018 NORTH CAROLINA PLUMBING CODE
- 2018 NORTH CAROLINA EXISTING BUILDING CODE
- 2018 NORTH CAROLINA FUEL GAS CODE
- 2018 NORTH CAROLINA MECHANICAL CODE
- 2018 NORTH CAROLINA ENERGY CONSERVATION CODE
- 2017 NATIONAL ELECTRICAL CODE (NFPA 70)
- ICC A117.1-2009 STANDARD AND COMMENTARY FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

BRIAN LATHROP, ARCHITECT
Healthcare Architecture Planning Project Analysis Interiors
6270 Black Rock Court Cumming, GA 30041 (770)993-7300

WINTERVILLE, NORTH CAROLINA

REV. NO.	DATE	DESCRIPTION

STAMP: BRIAN LATHROP, REGISTERED ARCHITECT, 8489, NORTH CAROLINA, CUMMING, GA — 4-5-19

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BUILDING PLANS FOR
COOK-OUT RESTAURANTS
4145 S. MEMORIAL DRIVE
PITT COUNTY - WINTERVILLE TOWNSHIP - NORTH CAROLINA

KEY PLAN

JOB NO. E-5450
DRAWN WBA
CHECKED BRL
DATE 02.15.2019
TITLE COVER SHEET AND APPENDIX B
SHEET NO. CS-1

1 INCH