Fire Marshal Division

August 20, 2018

Christopher Dull
P.O. Box 27497
Greensboro, NC 27498

Re: USPS Facility
Cameron, NC

Application Number BCOM1808-0006

Mr. Dull,

Thank you for submitting the plans for the building alterations. The plans have been carefully reviewed by a qualified code enforcement official to examine for compliance with the North Carolina Fire Prevention Code and all other fire protection regulatory documents. There are some items that were found during the plan review process that need to be addressed before a final inspection of the facility can be given. These items are outlined and described below.

- **906.1 Fire Extinguishers**
  - Fire extinguishers shall be placed in approved locations and may be field verified on final inspection.
  - The fire extinguishers provided shall have a minimum rating of 2A 10B: C and shall not be installed higher than 5 feet above the finished grade.

- **1011 Exit Signs**
  - Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel.

- **1006 Means of Egress Illumination**
  - The means of egress, including the exit discharge, shall be illuminated at all times building space served by the means of egress is occupied.
  - The means of egress illumination level shall not be less than 1 foot-candle at the walking surface.

- **505.1 Physical Address**
  - Install approved address numbers on the building that are visible from the street. Also, approved address numbers are needed on rear tenant doors for multi-tenant buildings. Numbers must be 6” in size and contrast with the building’s exterior.

- **Please schedule fire final inspection through the Fire marshal's office at 910-893-0743**

Thank you again for submitting the plans for the building alterations. Please review the plans and adhere to any notes and alterations that were made in addition to the original drawings. If you have any questions, please do not hesitate to call this office.

Again, thank you and we look forward to working with you during the construction period!

Sincerely,

D. Banks Wallace

D. Banks Wallace
Chief Deputy Fire Marshal

Harnett COUNTY NORTH CAROLINA

Emergency Services Department
www.harnett.org

Plan Review, Inspection, and Permit Fees

Application Number : **FMFW1808-0006**

$200.00		☐	Explosive Material (90 Days)	$	-
$100.00		☐	Explosive Materials (72 Hours)	$	-
$100.00		☐	Fireworks Public Display	$	-
$50.00		☑	Final Inspection	$	50.00
$35.00	**+ $2.00 per device**	☐	Fire Alarm Testing	$	-
$35.00	**+ $2.00 per nozzle**	☐	Fixed Fire Suppression	$	-
$75.00		☐	Insecticide Fog/Fumigation	$	-
$100.00		☐	Pipe Test/UST/AGST	$	-
$50.00		☐	Plans up to 5000 sq ft	$	-
$100.00		☐	Plans 5001 sq ft to 10,000 sq ft	$	-
$150.00		☐	Plans 10,001 sq ft to 25,000 sq ft	$	-
$250.00		☐	Plans 25,001 sq ft and over	$	-
$35.00	**+ 2.00 per head**	☐	Sprinkler Certification Test	$	-
$50.00		☐	Standpipe Testing	$	-
$50.00		☐	Special Assembly **(ie. amusement buildings, carnivals, fairs)**	$	-
$75.00		☐	Tents/Canopies/Air Supported Structure	$	-
$100.00		☐	Tank Installation (charge for each tank)	$	-
$100.00		☐	Tank Removal (charge for each tank)	$	-
			Total Devices/Heads	$	-
			Total Cost	**$**	**-**

Federal Exempt

Code Enforcement Official D. Banks Wallace 8/20/2018

2012 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMECIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: **USPS Spout Springs Interior Upfit**

Address: **H M Eagle Drive, Cameron, NC (Johnsonville Township)** Zip Code: **28326**

Proposed Use: **Carrier Annex**

Owner or Authorized Agent: **Beth B. Walker, AIA** Phone # : **252-636-9778** E-Mail : **beth@wgarc.com**

Owned By: [ ] City/County [X] Private [ ] State

Code Enforcement Jurisdiction: [ ] City _____ [X] County **Harnett County, NC** [ ] State

LEAD DESIGN PROFESSIONAL: Beth B. Walker, Project Architect

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-Mail
Architectural	**The Walker Group Architecture, Inc.**	**Beth B. Walker**	**#9419**	**252-636-9778**	**beth@wgarc.com**
Civil	-	-	-	-	-
Electrical	**McKnight, Smith, Ward, Griffin Engineers**	**Greg Mcdowell**	-	**704-527-2112**	**cchamplon@mswg.com**
Fire Alarm	-	-	-	-	-
Plumbing	**McKnight, Smith, Ward, Griffin Engineers**	**Greg Mcdowell**	-	**704-527-2112**	**cchamplon@mswg.com**
Mechanical	**McKnight, Smith, Ward, Griffin Engineers**	**Greg Mcdowell**	-	**704-527-2112**	**cchamplon@mswg.com**
Sprinkler-Standpipe	-	-	-	-	-
Structural	**NRW Engineering**	**Kevin Roorenburg**	-	**707-474-0012**	**knr@nrwengineering.com**
Retaining Walls > 5' High	-	-	-	-	-
Other	-	-	-	-	-

2012 EDITION OF NC CODE FOR: [ ] New Construction [ ] Addition [X] Upfit

EXISTING: [ ] Reconstruction [ ] Alteration [ ] Repair

CONSTRUCTED_____ **ORIGINAL USE** _____ **RENOVATED**_____ **CURRENT USE** _____

BUILDING DATA

Construction Type:

[ ] I-A [ ] II-A [ ] III-A [ ] IV [ ] V-A
[ ] I-B [ ] II-B [ ] III-B [X] V-B

Mixed Construction: [X] NO [ ] YES Types _____

Sprinklers: [X] No [ ] Partial [ ] Yes [ ] NFPA 13 [ ] NFPA 13R [ ] NFPA 13D

Standpipes: [X] No [ ] Yes Class [ ] I [ ] II [ ] III [ ] Wet [ ] Dry

Fire District: [X] No [ ] Yes **Flood Hazard Area :** [X] No [ ] Yes

Building Height: Feet **15'-2"** Number of Stories **1**

Mezzanine: [X] No [ ] Yes

Gross Building Area:

FLOOR	EXISTING(SQ.FT.)	NEW (SQ.FT.)	SUBTOTAL
6th Floor			
5th Floor			
4th Floor			
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		6,000 SF	
Loading		545 SF	
TOTAL		6,545 SF	

ALLOWABLE AREA

Primary Occupancy: Assembly [ ] A-1 [ ] A-2 [ ] A-3 [ ] A-4 [ ] A-5
[X] Business [ ] Educational [ ] Factory F-1 Moderate [ ] F-2 Low
High-Hazard [ ] H-1 Detonate [ ] H-2 Deflagrate [ ] H-3 Combust [ ] H-4 Health [ ] H-5 HPM
Institutional [ ] I-1 [ ] I-2 [ ] I-3 [ ] I-4
[ ] I-3 Use Condition 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
[ ] Mercantile [ ] Residential [ ] R-1 [ ] R-2 [ ] R-3 [ ] R-4
Storage [ ] S-1 Moderate [ ] S-2 Low [ ] High-piled
[ ] Utility and Miscellaneous [ ] Parking Garage [ ] Open [ ] Enclosed [ ] Repair

Secondary Occupancy: -

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

Special Provisions: [ ] 508.2 [ ] 508.3 [ ] 508.4 [ ] 508.5 [ ] 508.6 [ ] 508.7 [ ] 508.8

Mixed Occupancy: [X] No [ ] Yes Separation _____ Hr. Exception:_____

[ ] Incidental Use Separation (302.1.1)
This separation is not exempt as a Non-Separated Use (see exceptions)

[X] Non-Separated Use (302.3.1)
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 (302.3.2) - 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

Actual Area of Occupancy A / *Allowable Area of Occupancy A* + *Actual Area of Occupancy B* / *Allowable Area of Occupancy B* ≤1
0.45 + NA = 0.41 ≤1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG. AREA PER STORY (ACTUAL)	(B) TABLE 503 [1] AREA	(C) AREA FOR FRONTAGE INCREASE [2]	(D) AREA FOR SPRINKLER INCREASE [3]	(E) ALLOWABLE AREA OR UNLIMITED [4]	(F) MAXIMUM BUILDING AREA [5]
1st Floor	Shell Building	6,545 SF	9,000	8,750	N/A	15,750	31,500

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 = 320 (F)
b. Total Building Perimeter = 325 (P)
c. Ratio (F/P) = 1 (F/P)
d. W = Minimum width of public way = 30 (W)
e. Percent of frontage increase I_f = 100 [F/P-0.25] x W/30 = 75 (%)

2 The sprinkler increase as per Section 506.3 is as follows:
a. Multi-story building I_s = 200 percent
b. Single story building I_s = 300 percent

3 Unlimited area applicable under conditions of Sections Group B ,F, M, S, A-4 (507);
Group A motion picture (507.9); Malls (402.8), and H-2 aircraft paint hangers (507.7).

4 Maximum Building Area = total number of stories in the building x Y. (506.4)

5 The maximum area of parking garages must comply with 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 PLAN	CODE REFERENCE
Type of Construction	Type V-B		Type V-B	503
Building Height in Feet	Feet 40'	Feet =H + 20' N/A	18'-2"	504.2
Building Height in Stories	Stories 2	Stories = 1 + N/A	Stories 1	504.2

FIRE PROTECTION REQUIREMENTS

Life Safety Plan Sheet #, if Provided LS-101

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 Ft	0	0	N/A	N/A	N/A	N/A
Bearing walls							
Exterior	>30 Ft	0	0	N/A	N/A	N/A	N/A
North	>30 Ft	0	0	N/A	N/A	N/A	N/A
East	>30 Ft	0	0	N/A	N/A	N/A	N/A
West	>30 Ft	0	0	N/A	N/A	N/A	N/A
South	>30 Ft	0	0	N/A	N/A	N/A	N/A
Interior		0	0	N/A	N/A	N/A	N/A
Nonbearing walls and partitions							
Exterior	>30 Ft	0	0	N/A	N/A	N/A	N/A
North	>30 Ft	0	0	N/A	N/A	N/A	N/A
East	>30 Ft	0	0	N/A	N/A	N/A	N/A
West	>30 Ft	0	0	N/A	N/A	N/A	N/A
South	>30 Ft	0	0	N/A	N/A	N/A	N/A
Interior		0	0	N/A	N/A	N/A	N/A
Floor construction Including supporting beams and joists		0	0	N/A	N/A	N/A	N/A
Roof construction Including supporting beams and joists		0	0	N/A	N/A	N/A	N/A
Shaft Enclosures - Exit		N/A	N/A	N/A	N/A	N/A	N/A
Shaft Enclosures - Elevator		N/A	N/A	N/A	N/A	N/A	N/A
Coorider Separation		N/A	N/A	N/A	N/A	N/A	N/A
Occupancy Separation		N/A	N/A	N/A	N/A	N/A	N/A
Party-Fire Wall Separation		N/A	N/A	N/A	N/A	N/A	N/A
Smoke Barrier Separation		N/A	N/A	N/A	N/A	N/A	N/A
Tenant Separation		N/A	N/A	N/A	N/A	N/A	N/A
Incidental Use Separation		N/A	N/A	N/A	N/A	N/A	N/A

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	[X] No	[ ] Yes	Section 1006.1
Exit Signs:	[X] No	[ ] Yes	Section 1011.1
Fire Alarm:	[X] No	[ ] Yes	Section 907.2
Smoke Detection Systems:	[X] No	[ ] Yes	Section 907.2.10.1
Panic Hardware:	[X] No	[ ] Yes	Section 1008.1.9

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR/ROOM OR SPACE DESIGNATION	MINIMUM [1] NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS [2] (SECTION 1014.2)	
	REQUIRED	SHOWN ON PLAN	ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
BUSINESS	2	3	200'-0"	88'-3"	56'-11"	78'-11"

1 Corridor dead ends (Section 1016.3)
2 Single exits (Table 1018.2)
3 Common Path of Travel (Section 1013.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a)	(b)		(c)	EXIT WIDTH (in) [2,3,4,5,6]
	AREA [1] sq.ft	AREA [1] PER OCCUPANT (TABLE 1004.1.2)	CALCULATED OCCUPANT LOAD	EGRESS WIDTH PER OCCUPANT (SECTION 1005.1) (TABLE 1005.1)	REQUIRED WIDTH (SECTION 1005.1) (a/b) x c
				STAIR LEVEL	STAIR LEVEL
SEE LIFE SAFETY PLAN					

1 See Table 1004.1.2 to determine whether net or gross area is applicable.
See definition "Area, Gross" and "Area, Net" (Section 1002)
2 Minimum stairway width (Section 1005.1); min. corridor width (Section 1016.2); min. door width (Section 1018.1)
3 Minimum width of exit passageway (Section 1020.2)
4 See Section 1004.5 for cost-verging exits.
5 The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
6 Assembly occupancies (Section 1024)

STRUCTURAL DESIGN

DESIGN LOADS:

Importance Factors: Wind (I_w) 1.0; Snow (I_s) 1.0; Seismic (I_E) 1.0

Live Loads: Roof 20 psf; Mezzanine N/A psf; Floor 100 psf

Snow Load: 15 psf

Wind Load: Basic Wind Speed 100 mph (ASCE-7-02); Exposure Category C; Wind Base Shears (for MWFRS) V_x = _____ V_y = _____

SEISMIC DESIGN CATEGORY A
Compliance with section 1616.4 only? [ ] Yes [X] No

SEISMIC DESIGN CATEGORY
Provide the following Seismic Design Parameters: [ ] B [X] C [ ] D

Seismic Use Group X

Spectral Response Acceleration S_s .251 %g S_1 .092 %g

Site Classification [X] Field Test [ ] Presumptive [ ] Historical Data

Basic structural system (check one)
_____ Barrier Wall
_____ Building Frame
_____ Moment Frame
X Ordinary Reinforced Masonry Shear Walls
_____ Dual w/ Intermediate R/C or Special Steel
_____ Inverted Pendulum

Seismic base shear V_x= 29kps V_y= 29kps

Analysis Procedure _____ Simplified X Equivalent Lateral Force _____ Modal

Architectural, Mechanical, Components anchored? Yes

LATERAL DESIGN CONTROL: Earthquake _____ Wind X

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity: 2,000 psf
Pile size, type and capacity _____

PLUMBING FIXTURE REQUIREMENTS

USE		WATER CLOSETS		URINALS	LAVATORIES		SHOWERS/ TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE		MALE	FEMALE		REGULAR	ACCESSIBLE
Business-59 occupants total									
First Floor	SHOWN	2	2	0	2	2	0	1	1
	REQUIRED	1 & (1 URINAL)	2	1	2	2		1	1

ACCESSIBLE PARKING

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACE WITH 8' ACCESS AISLE		
25,205SF	6	40	2	2		4

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attributes 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 energy cost budget method, state the annual energy cost budget vs. allowable annual energy cost budget.

THERMAL ENVELOPE

Method of Compliance:
[X] Prescriptive [ ] Performance [ ] Energy Cost Budget

Roof/ceiling Assembly (each assembly)
Description of assembly: STEEL JOISTS, STEEL DECKING, 5" RIGID ISO INSULATION, WITE TPO ROOF SYSTEM.
U-Value of total assembly: U-Value of total assembly 0.03
R-Value of insulation: R-Value of insulation 29.5.
Skylights in each assembly: Skylight - NA
U-Value of skylight
total square footage of skylights in each assembly

Exterior Walls (each assembly)
Description of assembly: 8" CONCRETE MASONRY BLOCK WITH FOAM IN-PLACE INSULATION, EXTERIOR FACE DAMP PROOFED; 1" AIR GAP, 4" BRICK VENEER, OR, 12" CONCRETE MASONRY BLOCK WITH FOAM IN-PLACE INSULATION, EXTERIOR FACE DAMP PROOFED;
U-Value of total assembly: U-Value of total assembly 0.290/0.43 Respectively
R-Value of insulation: R-Value of insulation 25.0/45.0 Respectively,
Openings (windows or doors with glazing)
U-Value of assembly: N/A
shading coefficient: N/A
projection factor: N/A
low e required, if applicable: N/A
Door R-Values: N/A

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:
[X] Prescriptive [ ] Performance [ ] Energy Cost Budget

Lighting schedule

lamp type required in fixture	Refer to Lighting fixture schedule
number of lamps in fixture	Refer to Lighting fixture schedule
ballast type used in the fixture	Refer to Lighting fixture schedule
number of ballasts in fixture	Refer to Lighting fixture schedule
total wattage per fixture	Refer to Lighting fixture schedule
total interior wattage specified vs allowed	30899 Specified/ 45139 Allowed
total exterior wattage specified vs allowed	83.9 Lumens/Watt

Additional Prescriptive Compliance: 506.2.2 Reduced Lighting Power Density

MECHANICAL REQUIREMENTS

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Method of Compliance:
Energy Code: [X] Prescriptive [ ] Performance
ASHRAE 90.1: [ ] Prescriptive [ ] Performance

Thermal Zone: 4A
winter dry bulb 22
summer dry bulb 94

Interior design conditions:
winter dry bulb 65
summer dry bulb 78
relative humidity 55%

Building heating load: 60.8 MBH

Building cooling load: 8.2 Tons

Mechanical Spacing Conditioning system
Unitary: Split System heat Pumps
description of unit: Refer to HVAC Equipment Schedules
heating efficiency: Refer to HVAC Equipment Schedules
cooling efficiency: Refer to HVAC Equipment Schedules
size category of unit: Refer to HVAC Equipment Schedules
Boiler
Size category. If oversized, state reason. N/A
Chiller
Size category. If oversized, state reason. N/A

List Equipment efficiencies: Refer to HVAC Equipment Schedules

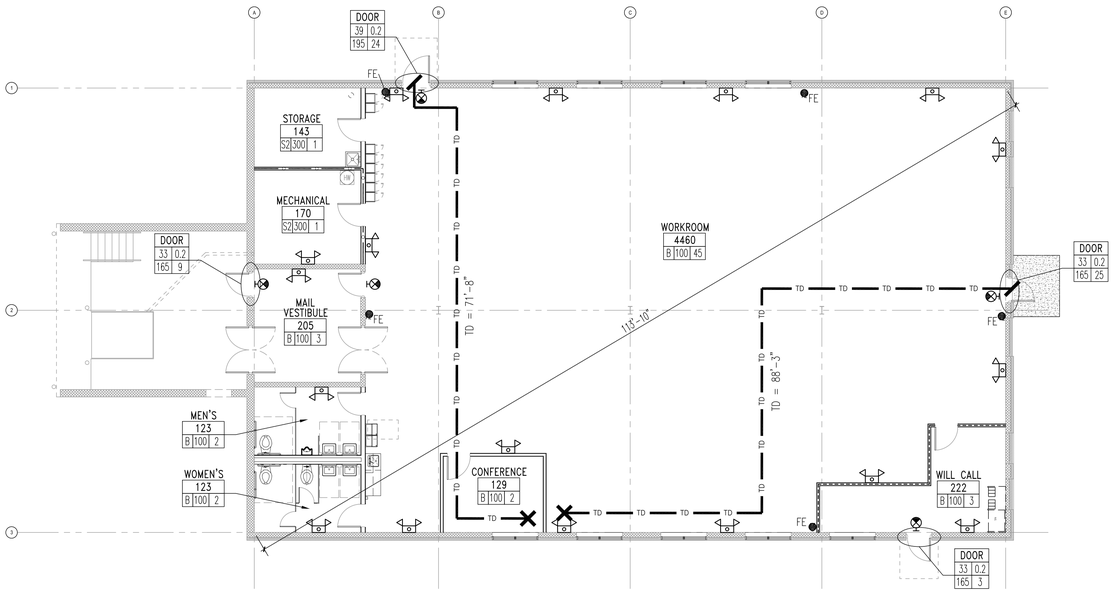
Equipment Schedules with motors (mechanical systems)

#	motor horsepower	Comply with 2012 NCECC
	number of phases	Comply with 2012 NCECC
	minimum efficiency	Comply with 2012 NCECC
	motor type	Comply with 2012 NCECC
#	of poles	Comply with 2012 NCECC

Reviewed For Code Compliance By:
D. Banks Wallace
Chief Deputy Fire Marshal
08/20/2018 8:19:59 AM

LIFE SAFETY LEGEND

- EXITS, BUILDING
- CEILING MOUNTED EXIT SIGN
- FE — FIRE EXTINGUSHER RECESSED CABINET LOCATION (CLASS A)
- F — FIRE ALARM PULL STATION
- FACP — FIRE ALARM CONTROL PANEL
- EMERGENCY BATTERY PACK FIXTURE
- ROOM NAME / XXXX / B 100 300 — ROOM LABEL; SQUARE FOOTAGE; PERSONS PER SPACE; OCCUPANCY LOAD FACTOR; OCCUPANCY
- XXXXX / 33 0.2 / 165 103 — EGRESS ELEMENT; EXIT WIDTH PER PERSON (IN); EGRESS WIDTH (CLEAR); ACTUAL PEOPLE; CAPACITY (PEOPLE)
- TD=XX' / TD — TRAVEL DISTANCE TO AN EXIT
- CP=XX' / CP — COMMON PATH TO POINT WHERE TWO PATHS OF EGRESS AVAILABLE



LIFE SAFETY PLAN
SCALE: 1/8" = 1'-0"

1/8" = 1'-0" 0 4' 8' 16'

BETH BOXLEY WALKER — REGISTERED ARCHITECT — 9419 — 8-15-18 — NORTH CAROLINA — NEW BERN, NC

The Walker Group Architecture, Inc WALKER GROUP ARCHITECTURE
PO Box 541 New Bern, NC 28563
252.636.8778 (PHONE)
252.636.8999 (FAX)

INTERIOR UPFIT
USPS SPOUT SPRINGS NC CAX
XXXXXXXXX
XXXXXXXXX

UNITED STATES POSTAL SERVICE®
Columbia FSO,10500 Little Patuxent Parkway, Second Floor, Columbia, MD 21045-0701

Revisions:

LS1.0 Architectural
Life Safety Plan

Scale: As indicated Date: 5/17/2018
Project: SPOUT SPRINGS, INTERIOR UPFIT
USPS File Number: XXXXXX
USPS Project Number: C97932