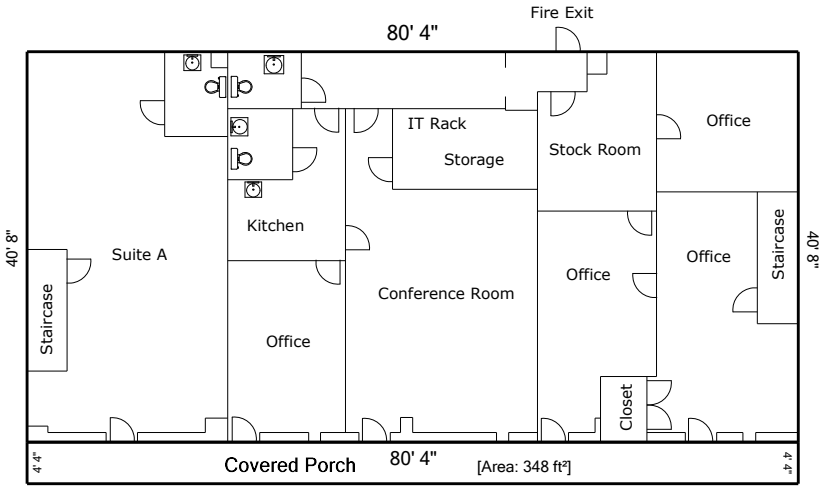
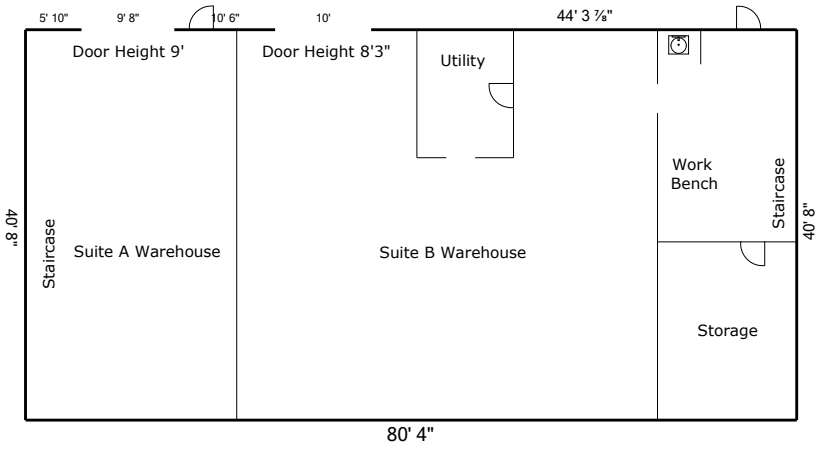
Sketch



First Floor [Area: 3267 ft²]



Lower Floor [Area: 3267 ft²]

20 ft

First Floor	3266.91 ft²	Covered Porch	348.11 ft²
Lower Floor	3266.91 ft²		
Total:	**6534 ft² Total:**		**348 ft²**

Griffin Realty Services LLC - All measurements are rounded to the nearest inch and intended for Marketing Purposes Only

Measurements for 12059 University City Blvd, Harrisburg NC

APPLE BLOSSOM ENERGY, INCORPORATED
12059 UNIVERSITY BLVD. - HARRISBURG, N.C.

CONTRACT DOCUMENTS FOR:

APPLE BLOSSOM ENERGY, INCORPORATED
WAREHOUSE ADDITION

12059 UNIVERSITY BLVD.
HARRISBURG, N.C. 28075

PLAN SHEET INDEX:

APPENDIX "B"

NAME OF PROJECT: APPLE BLOSSOM ENERGY, INC.
ADDRESS: 12059 UNIVERSITY CITY BLVD. HARRISBURG, N.C. 28075

PROPOSED USE: WAREHOUSE ADDITION
OWNER/CONTACT PERSON: RAYMOND H. CATHEY PHONE # 704-201-8873
OWNED BY: ( ) CITY/ COUNTY (X) PRIVATE ( ) STATE
Code Enforcement Jurisdiction: ( ) CITY (X) COUNTY CABARRUS

DESIGNER OF RECORD:

	Name	License#	Telephone#
Building	RAYMOND H. CATHEY	4842	(704) 201-8873
Electrical			
Plumbing			
Mechanical			
Structural	RAYMOND H. CATHEY	4842	(704) 201-8873
Sprinkler			
Fire Alarm			
Civil	RAYMOND H. CATHEY	4842	(704) 201-8873

YEAR EDITION OF CODE: 2012
(X) New Construction ( ) Renovation (Existing Building) ( ) Upfit ( ) Alteration

BUILDING DATA:
Construction type: ( ) I-A ( ) I-B ( ) II-A (X) II-B ( ) III-A ( ) III-B
( ) IV ( ) V-A ( ) V-B
Mixed Construction: Yes( ) No(X) Type
Sprinklers - ( ) Yes (X) No ( ) NFPA 13 ( ) NFPA 13R ( ) NFPA 13D
Standpipes - ( ) Yes (X) No Class ( ) I ( ) II ( ) III ( ) Wet ( ) Dry
Fire District - ( ) Yes (X) No
Building Height: 19'-8" One Stories ( ) Unlimited per Section N/A
Mezzanine: ( ) Yes (X) No
High Rise: ( ) Yes (X) No Central Reference Sheet # (If Provided) N/A

GROSS BUILDING AREA

FLOOR	EXISTING (SF)	NEW (SF)	SUBTOTAL (SF)
6th Floor			
5th Floor			
4th Floor			
3rd Floor			
2nd Floor			
Mezzanene			
1st Floor		4,800	4,800
Basement			
TOTAL		4,800	4,800

ALLOWABLE AREA

Primary Occupancy: () Assembly ( ) A-1 ( ) A-2 ( ) A-3 ( ) A-4 ( ) A-5
( ) Business ( ) Educational () Factory Industrial ( ) F-1( ) F-2
( ) High-Hazard ( ) H-1 ( ) H-2 ( ) H-3 ( ) H-4 ( ) H-5
( ) Institutional ( ) I-1 ( ) I-2 ( ) I-3 ( ) I-4
I-3 Use Condition ( ) 1 ( ) 2 ( ) 3 ( ) 4
( ) Merchantile ( ) Residential ( ) R-1 ( ) R-2 ( ) R-3 ( ) R-4
(X) Storage (X) S-1 ( ) S-2 ( ) High-Piled
( ) Utility & Miscellaneous Parking Garage ( ) Open ( ) Enclosed ( ) Repair

Secondary Occupancy:

Special Occupancy: ( ) 508.2 ( ) 508.3 ( ) 508.4 ( ) 508.5 ( ) 508.6 ( ) 508.7 ( ) 508.8
Mixed Occupancy: ( ) No (X) Yes Separation 1 HR. Exception N/A

( ) Non-Separated Mixed Occupancy (303.1 Exception)
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 (303.1/303.2) 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 of each use shall not exceed 1.

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

$$\frac{7200}{15{,}500} + \frac{1440}{17{,}500} = 0.46 + 0.08 = 0.54 \leq 1$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG. AREA PER STORY (ACTUAL)	(B) TABLE 503 AREA	(C) AREA FOR OPEN SPACE INCREASE	(D) AREA FOR SPRINKLER INCREASE	(E) ALLOWABLE AREA OR UNLIMITED	(F) MAXIMUM BUILDING AREA
1	S-1	4,800	17,500	N/A	N/A	17,500	17,500

Open space area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 150 (F)
b. Total Building Perimeter = N/A (P) ____
c. Ratio F/P = N/A (F/P) ____
d. W = Minimum width of public way = N/A (W) ____
e. Percent of Frontage Increase I(f) = 100(F/P - 0.25) x W/30 = N/A%

The sprinkler increase per Section 506.3 is as follows:
a. Multi-story Building I(s) = 200 %
a. Single-story Building I(s) = 300 %

Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4(507.1), 507.2, 507.3, 507.5); Group A motion picture (507.8); Malls(402.6), and Aircraft paint hangers(507.6).

Maximum Building Area = Total Number of stories in building x E, but not greater than 3 x E.

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 (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	IIB		IIB	602.3
Building Height in Feet	55'	Feet= H + 2" =	19'-8"	Table 503
Building Height in Stories	2 Stories	Stories + 1 =	1 Story	Table 503

BUILDING ELEMENT	FIRE SEPARATION DISTANCE	RATING REQUIRED	RATING PROVIDED (W/ * REDUCTION	DETAIL # AND SHEET #	DESIGN # FOR RATED PENETRATION	DESIGN # FOR JOINTS
Structural frame including columns, girders, and trusses	+20'	0	N/A	N/A	N/A	N/A
Exterior bearing walls:						
North	+20'	0	N/A	N/A	N/A	N/A
East	+20'	0	N/A	N/A	N/A	N/A
West	+20'	0	N/A	N/A	N/A	N/A
South	0	0	N/A	N/A	N/A	N/A
Interior	+30'	0	N/A	N/A	N/A	N/A
Exterior non-bearing Walls:						
North	+20'	0	N/A	N/A	N/A	N/A
East	+20'	0	N/A	N/A	N/A	N/A
West	+20'	0	N/A	N/A	N/A	N/A
South	+11'	0	N/A	N/A	N/A	N/A
Interior Walls:						
Floor Construction Including Supporting Beams and Joists	+20'	0	N/A	N/A	N/A	N/A
Roof Construction Including Supporting Beams and Joists	+20'	0	N/A	N/A	N/A	N/A
Shafts (Exit)	N/A	N/A	N/A	N/A	N/A	N/A
Shafts (Other)	N/A	N/A	N/A	N/A	N/A	N/A
Corridor 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

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM:

	Yes/No
Emergency Lighting	Yes/No No
Exit Signs	Yes/No YES
Fire Alarm Systems	Yes/No No
Smoke Detections Systems	Yes/No No
Panic Hardware	Yes/No No

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MIN. # EXITS * REQ'D	ON PLANS	TRAVEL DISTANCE ALLOWABLE* TRAVEL DIST.	ACTUAL TRAVEL DIST.	ARRANGEMENT MEANS OF EGRESS (1004.1) REQ'D DIST BETWEEN DOORS	ACTUAL * * DIST ON PLANS
S-1	2	4	250	44'	22'	58'

* Corridor Dead Ends (Section 1018.4)
* Single exits (Table 1021.2)
* Common Path of Travel (Section 1014.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA * SF	(b) OCC. LOAD (AREA/ OCC.FACT.)	(c) EGRESS WIDTH PER DOOR/(.005 x b) STAIR	LEVEL	EXIT WIDTH (in) * * * * REQUIRED WIDTH (.3 x c) STAIR	LEVEL	ACTUAL WIDTH (IN PLAN) STAIR	LEVEL
S-1	4,800	500	0.3	0.2	2.85	1.92	N/A	136"

(1) See Table 1004.1.1 to determine whether net or gross area is applicable.
(2) See Definition "Area", "Gross", and "Area Net" (Section 1002)
(3) The sprinkler increase per Section 506.3 is as follows:
a. Multi-story Building: I(s) = 200 %
b. Single-story Building: I(s) = 300 %
(4) Minimum stairway width (Section 1009.1); Minimum corridor width (Section 1018.2); Minimum door width (Section 1008.1.1)
(5) The loss of one means of egress shall not reduce the available capacity to less than 50% of the total required (Section 1005.1).
(6) Assembly Occupancies (Section 1028)

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
Mezzanene N/A
Floor 100 PSF

Snow Load: 10 PSF

Wind Load: 90 MPH (ASCE 7-98)
Exposure Catagory: B
Wind Base Shears (for MWFRS) V(x) 12.8K V(Y) 29.7K

SEISMIC DESIGN CATAGORY C

Provide the following Seismic Design Parameters:
Seismic Use Group I
Spectral Response Acceleration S(MS) 35.1% S(M1) 13.7%.
Site Classification: D
Basic Structural Classification (check one)
( ) Bearing Wall ( ) Dual w/ special Moment Frame
( ) Building Frame ( ) Dual w/ Intermediate R/C or Special Steel
(X) Moment Frame ( ) Inverted Pendulum
Seismic Base Shear: V(X) 10.6K V(Y) 10.6K
Analysis Procedure ( ) Simplified (X) Equivilant Lateral Force ( ) Model
Architectural, Mechanical, components Anchored? Yes

LATERAL DESIGN CONTROL: ( ) Earthquake (X) Wind

SOIL BEARING CAPACITIES:

Field Test (provide copy of Test Report)	N/A
Presumptive Bearing Capacity	2000 PSF
Pile size, type, and capacity	N/A

Soil Bearing Pressure to be determined at excavation of footings.

PLUMBING FIXTURE REQUIREMENTS

OCCUPANCY	WATER CLOSETS UNISEX	URINALS	LAVATORIES UNISEX	SHOWERS AND TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
	NO PLUMBING - TOILETS AVAILABLE IN EXISTING BUILDING					

* UNITS 8 BATHROOM IS UNISEX WITH 1- WATER CLOSET AND 1- LAVATORY IN EACH BATHROOM.

ACCESSIBLE PARKING

LOT OR PARKING AREA	TOTAL PARKING SPACES REQUIRED	PROVIDED	ACCESS. SPACES PROVIDED REGULAR	VAN	TOTAL ACCESSIBLE PROVIDED
LOT	9	10	1	1	2
TOTAL	9	10	1	1	2

SPECIAL APPROVALS

Special approval (Local Jurisdiction, Department of Insurance, SBCCI, ICC, etc.)

ELECTRICAL SYSTEM AND EQUIPMENT
METHOD OF COMPLIANCE
Prescriptive Performance Energy Cost Budget
Provide a standard riser diagram which indicates designated points for check metering
Provide a standard panel schedule description which identifies different endused loads

LIGHTING SCHEDULE NO ELECTRICAL
lamp types required in fixture
number of lamps in fixture
ballast type used in fixture
number of ballast in fixture
total wattage per fixture
total interior wattage specified vs. allowed
total exterior wattage specified vs. allowed

EQUIPMENT SCHEDULE WITH MOTORS (NOT USED FOR MECHANICAL SYSTEMS) NO ELECTRICAL
motor horsepower
number of phases
minimum efficiency
motor type
number of poles

DESIGNER STATEMENT:
To the best of my knowledge and belief, the design of this building complies with the thermal envelope requirements of the NC 2012 Energy Code
SIGNED:
NAME: RAYMOND H. CATHEY, PE
TITLE: PROJECT ENGINEER

MECHANICAL SYSTEMS, SERVICES SYSTEMS AND EQUIPMENT:
METHOD OF COMPLIANCE
Prescriptive X Energy Cost Budget

Thermal Zone	7A
Exterior Design Conditions	
winter dry bulb	14
summer dry bulb	91
Interior Design Conditions	
winter dry bulb	68 F
summer dry bulb	73 F
reletive humidity	50 %
Building Heating Load	N/A
Building Cooling Load	N/A
Mechanical Spacing Conditioning System	
Unitary	
description of unit	NO MECHANICAL
heating efficiency	
cooling efficiency	
heat output of unit	
cooling output of unit	
Boiler	
total boiler output, if oversized state reason	N/A
Chiller	
total boiler output, if oversized state reason	
List Equipment Efficiencies	
Equipment Schedule with Motors (mechanical system)	
motor horsepower	
number of phases	
minimum efficiency	
motor type	
number of poles	

DESIGNER STATEMENT:
To the best of my knowledge and belief, the design of this building complies with thethermal envelope requirements of the 2012 NC Energy Code.
SIGNED:
NAME: RAYMOND H. CATHEY
TITLE: PROJECT ENGINEER

ENERGY REQUIREMENTS: (NON-HEATED)
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 and shall sihn the Designer's sthatement for the appropriate portion, as required by G.S. 143-151.33. If energy cost budget method, state the annual energy cost budget vs allowable annual energy cost budget.

THERMAL ENVELOPE:

METHOD OF COMPLIANCE
Prescriptive X Performance Energy Cost Budget
Roof/ceiling Assembly (each assembly).
Description of assembly: Roof:

ROOF: 24 GA. METAL ROOF SHEETS / 6" VINYL-BACKED INSULATION

U - Value of total assembly:
R- Value of total assembly:
R - Value of insulation.: R-30

Skylights in each assembly: N/A
U - Value of skylight
total square footage of skylights in each assembly:

Exterior Walls (each assembly):
METAL WALL SHEETS

U - Value of total assembly: 0.063
R - Value of total assembly: R-19
R - Value of insulation:R-19
Openings (windows or doors with glazing)
U - Value of assembly:0.69
shading coefficient: N/A (clear glass)
projection factor: N/A
low e required, if applicable: N/A
Door R - Values: 5.29

Walls adjacent to unconditioned space (each assembly):
METAL WALL SHEETS

U - Value of total assembly:
R - Value of insulation: R-19
Openings (windows or doors with glazing)
U - Value of assembly: 0.63
R - Value of assembly: 33.22
low e required, if applicable: N/A
Door R - Values: 5.29

Walls below grade (each assembly): N/A
Description of assembly:
U - Value of total assembly
R - Value of insulation:

Floors over unconditioned space (each assembly): N/A
Description of assembly:
U - Value of total assembly
R - Value of insulation: N/A

Floors slab on grade: R-13 required for perimeter insulation
Description of assembly: 6" 3000 PSI concrete slab on 6 mil poly vapor barrier on compacted subgrade
U - Value of total assembly:
R - Value of perimeter insulation: R-13
Horizontal/Vertical requirement: 24" HORIZ.
slab heated: N/A

DESIGNER STATEMENT:
To the best of my knowledge and belief, the desitn of this building complies with the thermal envelope requirements of the 2012 NC Energy Code.
RAYMOND H. CATHEY
PROJECT ENGINEER

RECEIVED
NOV 30 2015

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raycathewena @aol.com

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 4842 RAYMOND H. CATHEY 11-11-15

PROJECT TITLE: APPLE BLOSSOM ENERGY, INC.
12059 UNIVERSITY CITY BLVD. - HARRISBUG, N.C.

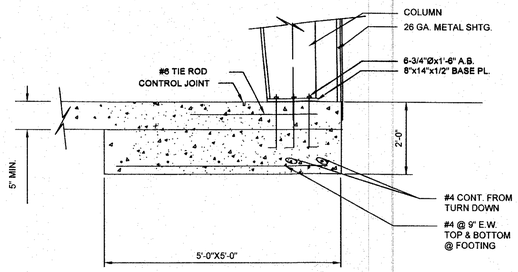
SHEET TITLE: COVER SHEET APPENDIX B

DATE: OCTOBER 2015
DRAWN BY: RAY CATHEY
CHECKED BY: RAY CATHEY
REVISIONS:

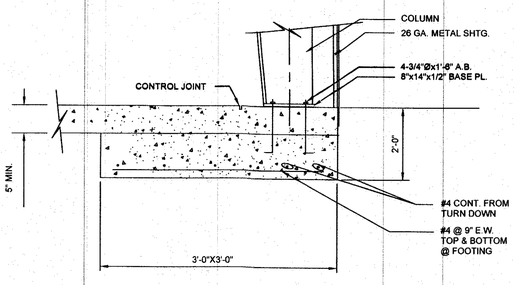
SHEET C-01

GENERAL NOTES: CONCRETE

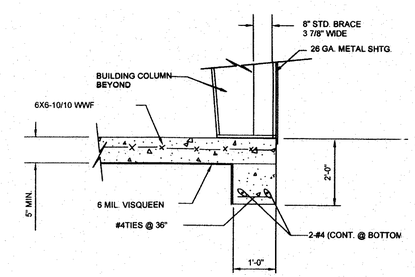
1. CONCRETE (28 DAY COMPRESSIVE STRENGTH)
   A. 3,000 PSI STRUCTURAL CONCRETE, (UNO).
      SHALL COMPLY WITH ACI 318 CRITERIA.
2. REINFORCING STEEL (ASTM A615 GRADE60)
3. ALUMINUM MEMBERS (ALUMINUM ALLOY 6061 -T6) (ISOLATE FROM CONCRETE)
4. ANCHOR BOLTS:
   A. CAST-IN (ASTM A307, OR A36)
   B. DRILLED-IN (ASTM A582, TYPE 303)(UNO)
5. CONCRETE COVER FOR ALL REINFORCING STEEL (UNO)
   A. CONCRETE PLACED AGAINST EARTH: 3" MIN.
   B. FORMED SURFACES EXPOSED TO OR ABOVE ANY LIQUID: 2" MIN
   C. FORMED SURFACES EXPOSED TO EARTH OR WEATHER: 2" MIN.
   D. INTERIOR SURFACES: 1 1/2" FOR ALL CONSTRUCTION NOT EXPOSED TO LIQUID.
6. MAINTAIN MINIMUN SLAB-ON-GRADE THICKNESS SPECIFIED WHEN SLOPE REQUIRED.
7. FLOOR SLAB ELEVATIONS SHOWN ARE AT HIGH POINTS UNLESS OTHERWISE NOTED. THE SLAB DEPTHS SHOWN ARE MINIMUM. SLOPE TOP OF SLAB AS REQUIRED. MAINTAIN REQUIRED CONCRETE COVER AROUND REINFORCING STEEL.
8. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 3/4". (UNO)
9. (UNO) ALL SIDEWALKS ARE 4 INCHES THICK WITH SCHEDULED REINFORCEMENT LOCATED AT MID THICKNESS.
10. ALL STRUCTURAL SLAB REINFORCING STEEL SHALL END WITH 180 DEGREE STANDARD HOOK AT EDGES OF OPENINGS.
11. ALL REINFORCEMENT SHALL BE DETAILED. FABRICATED AND PLACED PER ACI 315 REQUIREMENTS.
12. REINFORCING SHALL BE CONTINUOUS AROUND ALL CORNERS. (UNO)
13. DETAILS APPLY TO THE ENTIRE SET OF PLANS. (UNO)



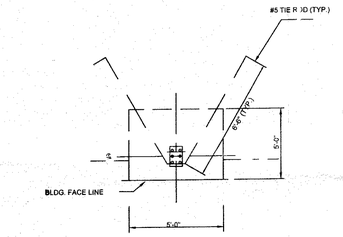
A (TYP.) COLUMN FOOTING
A NO SCALE



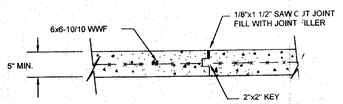
B (TYP.) COLUMN FOOTING
B NO SCALE



C TURN-DOWN FOOTING
C NO SCALE



COLUMN FOOTING - PLAN VIEW (A-A)
NO SCALE



CONSTRUCTION JOINT (TYP.)
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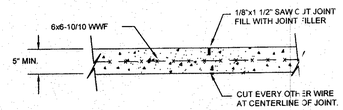

CONTROL JOINT (TYP.)
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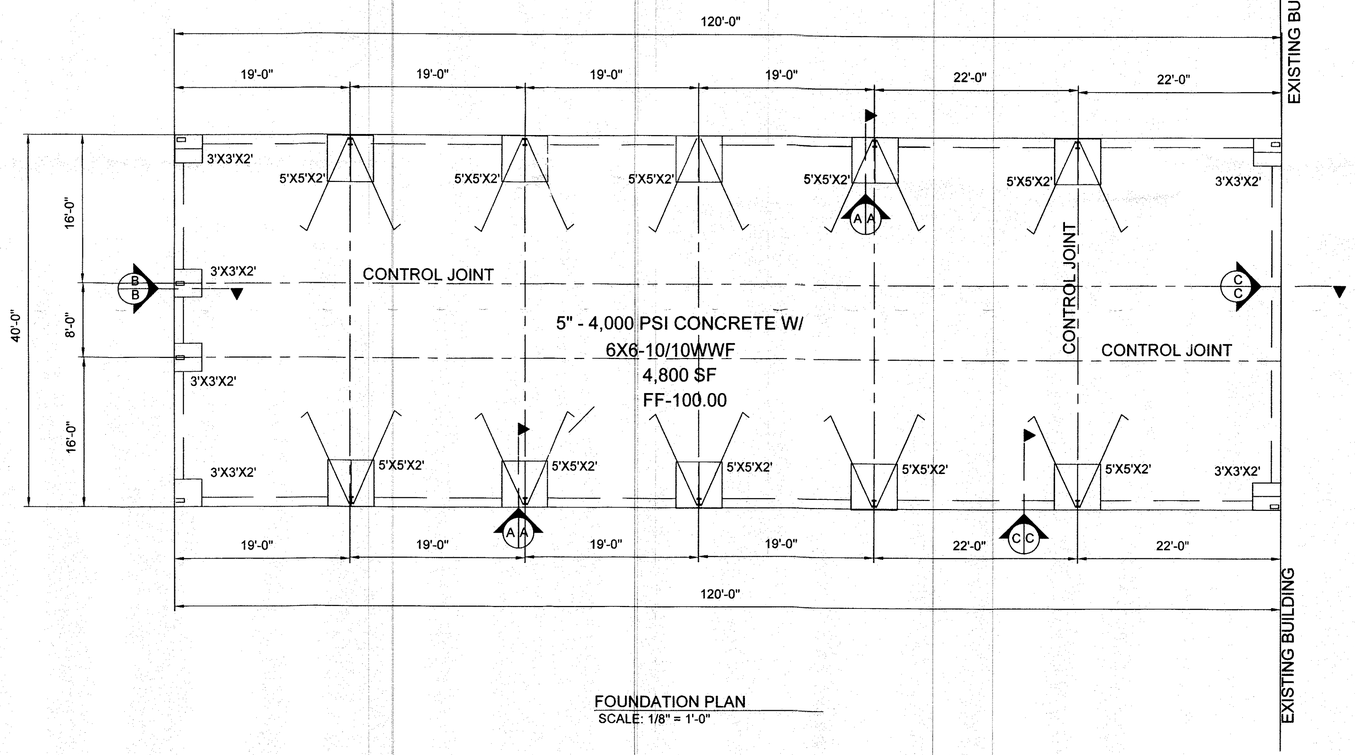

FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

NOTE:

FINAL ANCHOR BOLT LOCATION TO BE BASED UPON METAL BUILDING MANUFACTURER'S ANCHOR BOLT LAYOUT DRAWING SEE MANUFACTURER'S ANCHOR BOLT LAYOUT FOR BASE PLATE AND ANCHOR BOLT SPECIFICATIONS.

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raycatheyeng@aol.com

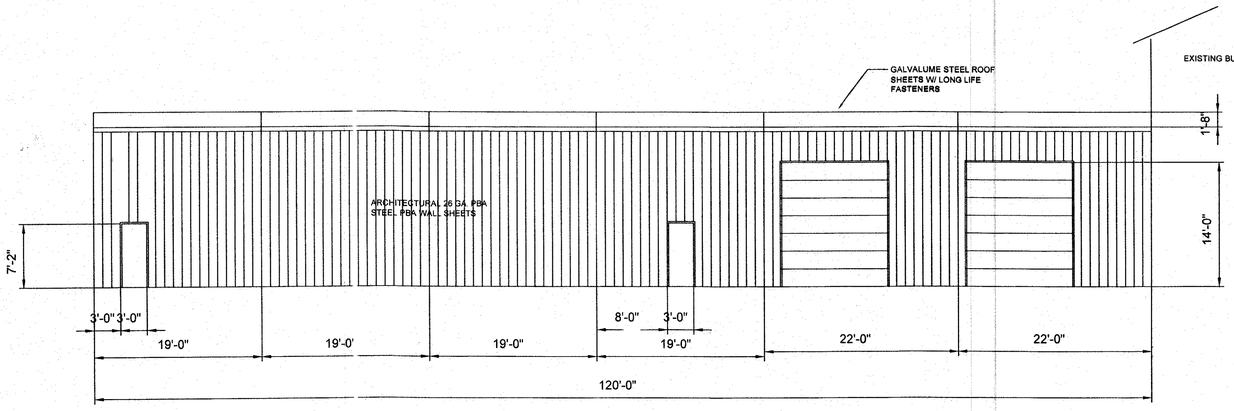
NORTH CAROLINA PROFESSIONAL SEAL 4842 ENGINEER RAYMOND H. CATHEY
10-11-15

PROJECT TITLE: APPLE BLOSSOM ENERGY INC.
12059 UNIVERSITY CITY BLVD
HARRISBURG, NORTH CAROLINA 28075

SHEET TITLE: FOUNDATION PLAN

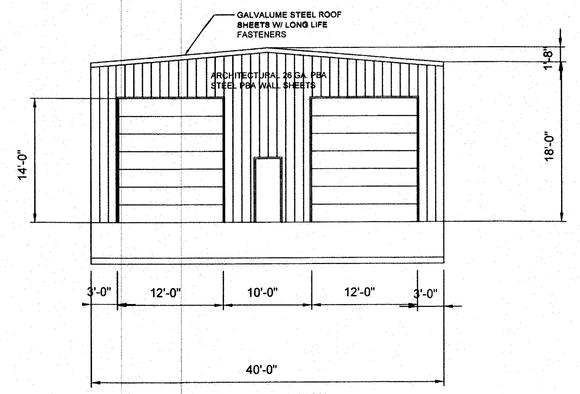
DATE: JUNE 2015
DRAWN BY: RAY CATHEY
CHECKED BY: RAY CATHEY
REVISIONS:

SHEET
C-02



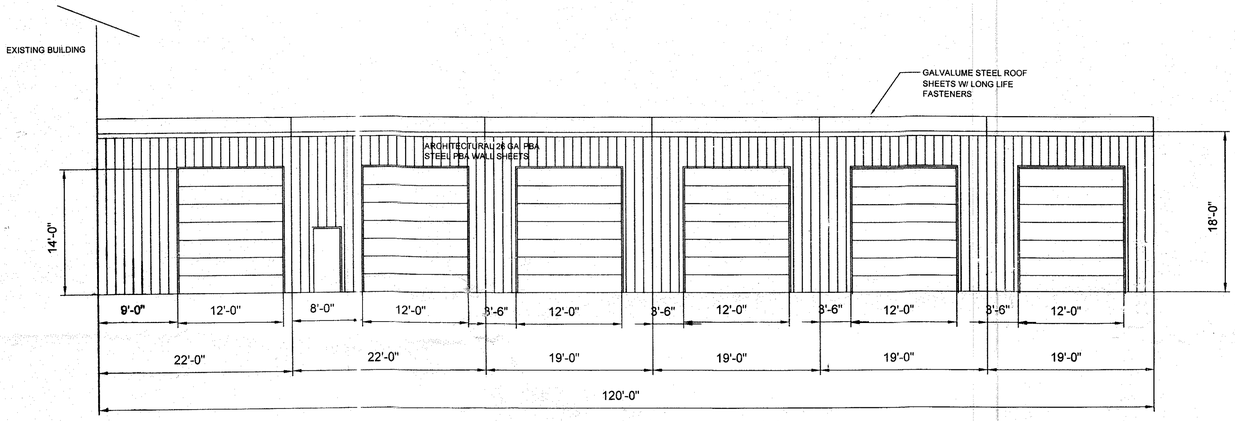
REAR ELEVATION

SCALE: 1/8" = 1'-0"



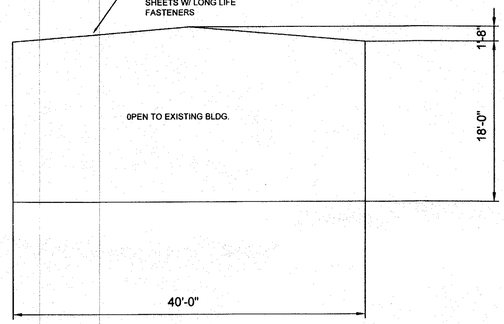
RIGHT ELEVATION

SCALE: 1/8" = 1'-0"



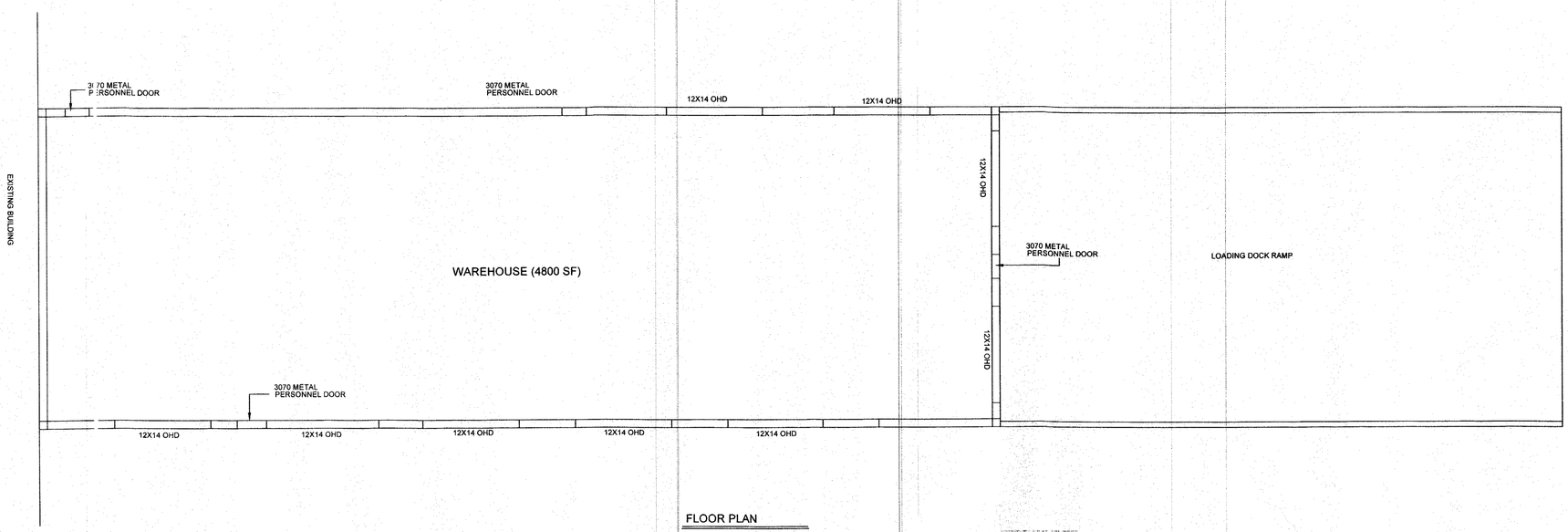
FRONT ELEVATION

SCALE: 1/8" = 1'-0"



EXISTING WALL

SCALE: 1/8" = 1'-0"



FLOOR PLAN

SCALE: 1/8" = 1'-0"

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PROJECT TITLE:
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HARRISBURG, NORTH CAROLINA 28075

SHEET TITLE:
FOUNDATION PLAN

DATE: JUNE 2015

DRAWN BY: RAY CATHEY

CHECKED BY: RAY CATHEY

REVISIONS:

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