COLUMBIA COUNTY BUILDING DEPARTMENT
PLANS EXAMINER
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Received for Code Compliance

REVISIONS

SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

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REVISIONS

REQUIREMENTS FOR INTERIOR WALL & CEILING FINISHES

INTERIOR WALL AND CEILING FINISHES SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM E 84. SUCH INTERIOR FINISH MATERIALS SHALL BE GROUPED IN THE FOLLOWING CLASSES IN ACCORDANCE WITH THEIR FLAME SPREAD AND SMOKE-DEVELOPED INDEX.

CLASS A:
FLAME SPREAD INDEX 0-25; SMOKE-DEVELOPED INDEX 0-450.

CLASS B:
FLAME SPREAD INDEX 26-75; SMOKE-DEVELOPED INDEX 0-450.

CLASS C:
FLAME SPREAD INDEX 76-200; SMOKE-DEVELOPED INDEX 0-450.

REQUIREMENTS BY OCCUPANCY (UNSPRINKLERED) PER FBC, TABLE 803.9

GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS (SEE NOTES a & b)	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES (SEE NOTE c)
B	CLASS A	CLASS B	CLASS C

TABLE NOTES:

a. Class C interior finish materials shall be permitted for wainscotting or paneling of not more than 1,000 square feet of applied surface area in the grade lobby where applied directly to a noncombustible base or over furring strips applied to a noncombustible base and fireblocked as required by Section 803.4.1.
b. In exit enclosures of buildings less than three stories in height of other than Group I-3, Class B interior finish for nonsprinklered buildings and Class C interior finish for sprinklered buildings shall be permitted.
c. Requirements for rooms and enclosed spaces shall be based upon spaces enclosed by partitions. Where a fire-resistance rating is required for structural elements, the enclosing partitions shall extend from the floor to the ceiling. Partitions that do not comply with this shall be considered enclosing spaces and the rooms or spaces on both sides shall be considered one. In determining the applicable requirements for rooms and enclosed spaces, the specific occupancy thereof shall be the governing factor regardless of the group classification of the building or structure.
d. Lobby areas in Group A-1, A-2 and A-3 occupancies shall not be less than Class B materials.
e. Class C interior finish materials shall be permitted in places of assembly with an occupant load of 300 persons or less.
f. For places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be permitted.
g. Class B material is required where the building exceeds two stories.
h. Class C interior finish materials shall be permitted in administrative spaces.
i. Class C interior finish materials shall be permitted in rooms with a capacity of four persons or less.
j. Class B materials shall be permitted as wainscotting extending not more than 48 inches above the finished floor in corridors.
k. Finish materials as provided for in other sections of this code.
l. Applies when the exit enclosures, exit passageways, corridors or rooms and enclosed spaces are protected by a sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

REQUIREMENTS FOR INTERIOR FLOOR FINISHES

INTERIOR FLOR FINISH AND FLOOR COVERING MATERIALS SHALL COMPLY WITH THE FOLLOWING ECEPT FOR FLOORS AND FLOOR COVERINGS OF A TRADITIONAL TYPE, SUCH AS WOOD, VINL, LINOLEUM OR TERRAZO, AND RESILIENT FLOOR COVERING MATERIALS WHICH ARE NT COMPRISED OF FIBERS.

INTERIOR FLOR FINISH AND FLOOR COVERING MATERIALS REQUIRED BY FBC, TO BE OF CLASS I OR II ATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH NFPA 253. THE CLASSIFICATIN REFERRED TO HEREIN CORRESPONDS TO THE CLASSIFICATIONS DETERMINED Y NFPA 253 AS FOLLOWS: CLASS I, 0.45 WATTS/CM2 OR GREATER; CLASS II, 0.22 WATTS/C2 OR GREATER.

IN ALL OCCUPNCIES, INTERIOR FLOOR FINISH IN VERTICAL EXITS, EXIT PASSAGEWAYS, EXIT ACCESS ORRIDORS AND ROOMS OR SPACES NOT SEPARATED FROM EXIT ACCESS CORRIDORS BFULL-HEIGHT PARTITIONS EXTENDING FROM THE FLOOR TO THE UNDERSIDE OTHE CEILING SHALL WITHSTAND A MINIMUM CRITICAL RADIANT FLUX AS FOLLOWS:
INTERIOR FLOR FINISH IN VERTICAL EXITS, EXIT PASSAGEWAYS AND EXIT ACCESS CORRIDORS SALL NOT BE LESS THAN CLASS I IN GROUPS I-2 AND I-3 AND NOT LESS THAN CLASS II IN GRUPS A, B, E, H, I- 4, M, R-1, R-2 AND S. IN ALL OTHER AREAS, THE INTERIOR FLOOR FINISHHALL COMPLY WITH THE DOC FF-1 "PILL TEST" (CPSC 16 CFR, PART 1630).

LIST OF APPLICABLE CODES

2010 FLORIDA EXISTING BUILDING CODE,

NFPA 70, NATIONAL ELECTRICAL CODE

2010 FLORIDA BUILDING CODE, BUILDING

2010 FLORIDA BUILDING CODE, FUEL GAS

2010 FLORIDA BUILDING CODE, MACHANICAL

2010 FLORIDA BUILDING CODE, PLUMBING

2010 FLORIDA FIRE PREVENTION CODE

2010 FLORIDA ENERGY EFFICIENCY CODE

2012 FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION

LIST OF DELEGATIONS

ELECTRICAL SYSTEM DESIGN:
TO BE FURNISHED BY THE ELECTRICAL CONTRACTOR

PLUMBING SYSTEM DESIGN:
NOT APPLICABLE

FIRE SPRINKLER SYSTEM DESIGN:
NOT APPLICABLE

HVAC SYSTEM DESIGN:
TO BE FURNISHED BY THE HVAC CONTRACTOR

SPECIALIZED SYSTEMS:
NOT APPLICABLE

LIFE SAFETY REVIEW:
IT IS THE CONTRACTOR / OWNER'S RESPONSIBILITY TO REQUEST A LIFE SAFETY REVIEW BY THE FIRE MARSHAL. LIFE SAFETY PLAN IS SUGGESTION ONLY, ACTUAL REQUIREMENTS TO BE DETERMINED BY FIRE MARSHAL BEFORE ORDERING ANY MATERIALS OR STARTING CONSTRUCTION.

ENERGY EFFICIENCY CALCULATION:
TO BE FURNISHED BY THE BUILDER. SIGNED AND SEALED BY: ARCHITECT, ENGINEER, AIR CONDITIONING OR MECHANICAL CONTRATOR, OR CERTIFIED COMMERICAL ENGERY RATER.

STRUCTURAL DESIGN:
ALL STRUCTURAL BUILDING ELEMENTS ARE EXISTING. THE BUILDER IS TO VERIFY THAT EXISTING CONDITIONS MEET THE REQUIREMENTS OF THE ORIGINAL BUILDING AS REQUIRED BY THE DESIGN PROFESSIONAL OF RECORD FOR THE STRUCTURE. IF ANY CHANGES ARE TO BE MADE OR IF EXISTING CONDITIONS DO NOT MEET THE ORIGINAL REQUIREMENTS THE BUILDER MUST CONTACT THE ENGINEERING OF RECORD FOR CLARIFICATION BEFORE PROCEEDING.

NOTE: IT IS THE RESPONSIBILITY OF THE BUILDING DEPARTMENT AND BUILDER TO MAKE SURE DELEGATED PLANS ARE COMPLETED AND APPROVED BY THE ENGINEER OF RECORD, THE OWNER, AND THE BUILDING OFFICIAL, PRIOR TO CONSTRUCTION OR ORDERING ANY MATERIALS.
ENGINEER OF RECORD DOES NOT HAVE CONSTRUCTION MANAGEMENT AUTHORITY.

BUILDING DESIGN DATA

1. SITE REQUIREMENTS:
 - THIS BUILDING PLAN DOES NOT INCLUDE SITE PLAN.
 THE BUILDER MUST VERIFY THAT THE EXISTING SITE HAS AN ACCESSIBLE EGRESS PATH. THIS IS SPECIFICALLY NOT PART OF THE SCOPE OF THIS PLAN. THIS ENGINEER DID NOT VISIT THE SITE.

2. OCCUPANCY GROUP REQUIREMENTS:
 - BUILDING GROUP: B, BUSINESS OCCUPANCY
 (A BUILDING USED FOR OFFICE, PROFESSIONAL OR SERVICE-TYPE)

3. MINIMUM TYPE OF CONSTRUCTION:
 - TYPE OF CONSTRUCTION: TYPE V
 (TYPE V CONSTRUCTION IS THAT TYPE OF CONSTRUCTION IN WHICH THE STRUCTURAL ELEMENTS, EXTERIOR WALLS AND INTERIOR WALLS ARE OF ANY MATERIAL PERMITTED BY FBC)
 - MAXIMUM HIGHT & AREA PER TABLE 503: 9000 FT2 PER STORY
 - BUILDING HEIGHT: 1 STORY
 - BUILDING AREA: +/- 4168 FT2

4. FIRE RESISTANT CONSTRUCTION REQUIREMENTS:
 - RATING REQUIREMENTS FOR BUILDING ELEMENTS (PER TABLE 601 & 602)
 TYPE V B CONSTRUCTION:

PRIMARY STRUCTURAL FRAME	0 HR.
BEARING WALLS - EXTERIOR BEARING WALLS - INTERIOR	0 HR. 0 HR.
NON-BEARING WALLS - EXTERIOR NON-BEARING WALLS - INTERIOR	0 HR. 0 HR.
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	0 HR.
ROOF CONSTRUCTION AND SECONDARY MEMBERS	0 HR.

 - FIRE SEPARATION DISTANCE = >30' (BUILDER MUST VERIFY)
 - MAXIMUM AREA OF EXTERIOR WALL OPENING (PER TABLE 705.80): PROTECTED OR UNPROTECTED - NO LIMIT

5. FIRE SUPPRESSION SYSTEM:
 - NONE

6. LIFE SAFETY SYSTEMS:
 - SHEET 1

7. OCCUPANCY LOAD / EGRESS REQUIREMENTS :
 - OCCUPANCY LOAD PER TABLE 1004.1.1 = 40 PERSONS
 EXISTING = 24 PERSONS, ADDITION = 16 PERSONS
 (BUSINESS AREAS = 100 FT PER PERSON GROSS)
 - EXIT CAPACITY (BASED ON 1005.1)
 TOTAL EXIT WIDTH 32"/ .2" = 160 PERSONS > 40 PERSONS
 - MINIMUN NUMBER OF EXITS (PER 1015.1)
 REQUIRED = 2 PROVIDED = 4 (3 IN EXISTING, 1 IN ADDITION)
 - MAXIMUM EXIT ACCESS TRAVEL DISTANCE (PER TABLE 1016.1)
 ALLOWABLE = 200' ACTUAL = 75'

8. STRUCTURAL REQUIREMENTS:
 - SEE SHEET S-1

9. MATERIALS AND FINISHES
 - THIS PLAN DOES NOT INCLUDE DETAILED FINISH SPECS. IT IS THE BUILDERS RESPONSIBILITY TO VERIFY THAT ALL MATERIALS AND FINISHES USED COMPLY WITH THE FBC AND THE FFPC.

10. ACCESSIBILITY REQUIREMENTS:
 - SHEET 3

11. INTERIOR FINISH REQUIREMENTS:
 - SHEET 0

12. SPECIAL SYSTEMS:
 - BUILDER IS TO PROVIDE SHOP DRAWING AND DETAILED SPECS OF ANY SPECIAL SYSTEMS.

13. SWIMMING POOLS:
 - NONE

ENGINEER OF RECORD: Mark Disosway, PE No.53915, POB 868, Lake City, FL 32056, 386-754-5419

DIMENSIONS:
Stated dimensions supercede scaled dimensions. Refer a questions to Mark Disosway, P.E for resolution. Do not proceed without clarification.

CERTIFICATION: These plans and Cover Sheet A-0, attached comply with applicable portions of the 2010 Florida Building Code to the best of my knowledge

LIMITATION: This design is valid for one building at specified location. In case of conflict, structural requirements, scope of work, and builder responsibilities control.

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MARK DISOSWAY III
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[illegible]
06 JUL 12

Bryant Construction Co.

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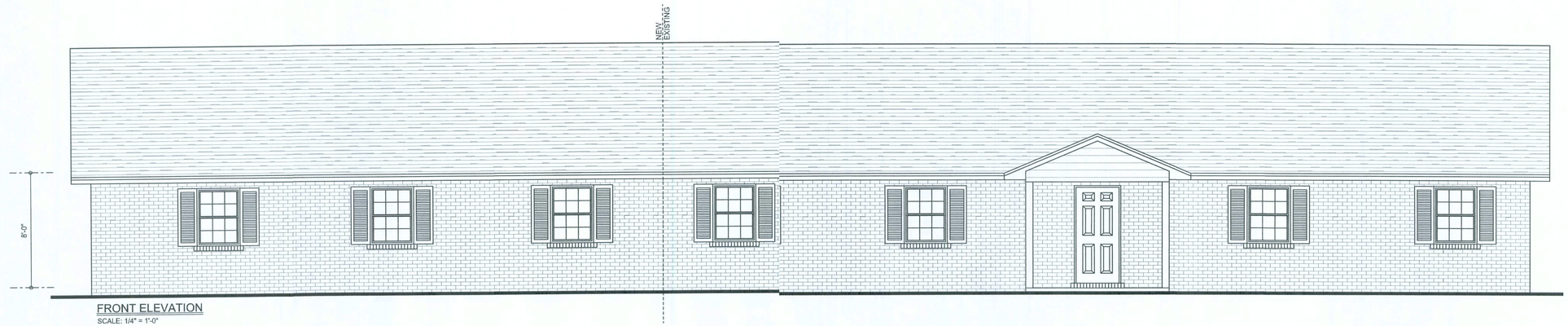
Evan Beamsley	

FINALES DATE:
2012-07-06

JOB NUMBER:
12)5066

DRAWING NUMBER
0
OF 8SHEETS



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

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

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

REVISIONS	

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ENGINEER O RECORD: Mark Disosway, PE No.53915, POB 868, Lake City, FL 32056, 386-75-5419

DIMENSIONS
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CERTIFICATIN: These plans and Cover Sheet A-0, attcbed, comply with applicabie portions of the2010 Florida Building Code to the best of ny knowledge

LIMITATION: his design is valid for one building at spcified location. In case of conflict, structural requirements, scope of work, and builder responsibilities control.

MARK DISOSWAY
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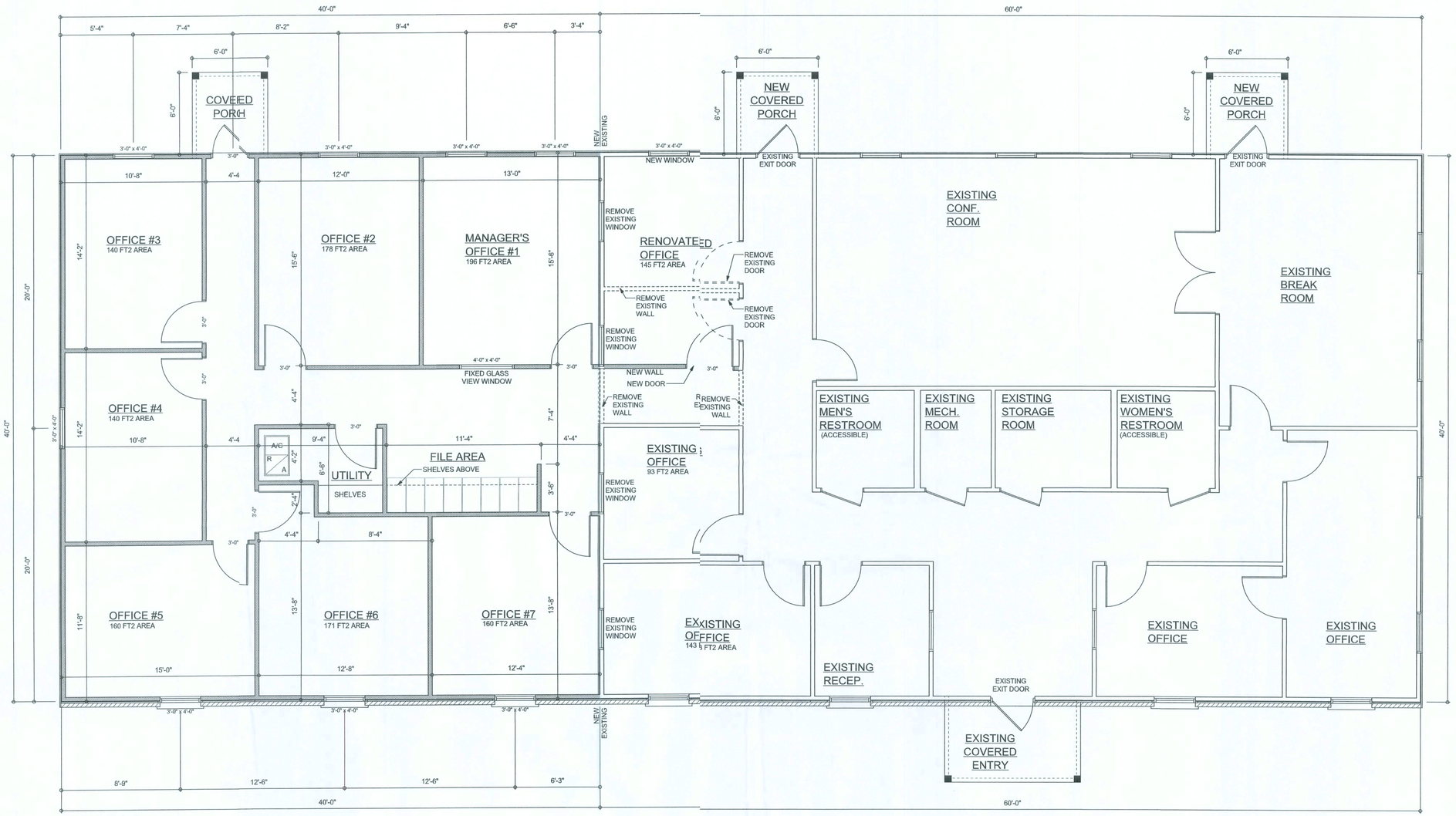
1
OF 8 SHEETS



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

AREA SUMMARY

EXISTING CONDITIONED AREA	2400	S.F.
NEW CONDITIONED AREA	1600	S.F.
EXISTING PORCH AREA	60	S.F.
NEW PORCH AREA	108	S.F.
TOTAL AREA	4168	S.F.

REVISIONS

SOFTPLAN ARCHITECTURAL DESIGN SOFTWARE

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DIMENSIOIS:
Stated dimensions supercede scaled dimensions.Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.

CERTIFICATION: These plans and Cover Sheet A-0, atached, comply with applicable portions of se 2010 Florida Building Code to the best of my knowledge

LIMITATIOI: This design is valid for one building at secified location. In case of conflict, structural rquirements, scope of work, and builder responsibilities control

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2
OF 8 SHEETS

MEANS OF EGRESS ILLUMINATION REQUIREMETS

ILLUMINATION OF MEANS OF EGRESS SHALL BE PROVIDED IN ACCORDANCE WITH THIS SECTIOFOR EVERY BUILDING AND STRUCTURE. FOR THE PURPOSES OF THIS REQUIREMENT, EXIT ACCESS SHALL INCLUDE ONLY DESIGNATED STAS, AISLES, CORRIDORS, RAMPS, ESCALATORS AND PASSAGEWAYS LEADING TO AN EXIT. FOR THE PURPOSES OF THIS REQUIREMENT, EXIT DCHARGE SHALL INCLUDE ONLY DESIGNATED STAIRS, AISLES, CORRIDORS, RAMPS, ESCALATORS, WALKWAYS AND EXIT PASSAGEWAYS LEANG TO A PUBLIC WAY.
EXCEPTIONS:
1. WHEN APPROVED BY THE BUILDING OFFICIAL, ILLUMINATION OF MEANS OF EGRESS SHALL NT BE REQUIRED IN INDUSTRIAL AND STORAGE OCCUPANCIES THAT ARE OCCUPIED ONLY DURING DAYLIGHT HOURS, WITH SKYLIGHTS OR WIIOWS ARRANGED TO PROVIDE THE REQUIRED LEVEL OF ILLUMINATION ON ALL PORTIONS OF THE MEANS OF EGRESS DURING THESE HOURS.
2. ASSEMBLY OCCUPANCY PRIVATE PARTY TENTS OF 1,200 SQUARE FEET (111 M2) OR LESS SHL NOT BE REQUIRED TO PROVIDE ILLUMINATION OF MEANS OF EGRESS.
3. OPEN STRUCTURES SHALL NOT BE REQUIRED TO PROVIDE ILLUMINATION OF MEANS OF EGRSS.
4. TOWERS OCCUPIED BY NOT MORE THAN THREE PERSONS SHALL NOT BE REQUIRED TO PRODE ILLUMINATION OF MEANS OF EGRESS.

ILLUMINATION OF MEANS OF EGRESS SHALL BE CONTINUOUS DURING THE TIME THAT THE CONTIONS OF OCCUPANCY REQUIRE THAT THE MEANS OF EGRESS BE AVAILABLE FOR USE. ARTIFICIAL LIGHTING SHALL BE EMPLOYED AT SUCPLACES AND FOR SUCH PERIODS OF TIME AS REQUIRED TO MAINTAIN THE ILLUMINATION TO THE MINIMUM CRITERIA VALUES HEREIN SPECIFD.
EXCEPTIONS: AUTOMATIC MOTION SENSOR-TYPE LIGHTING SWITCHES SHALL BE PERMITTED VHIN THE MEANS OF EGRESS, PROVIDED THAT SWITCH CONTROLLERS ARE EQUIPPED FOR FAIL-SAFE OPERATION, ILLUMINATION TIMERS AREET FOR A MINIMUM 15-MINUTE DURATION AND THE MOTION SENSOR IS ACTIVATED BY ANY OCCUPANT MOVEMENT IN THE AREA SERVED BY T: LIGHTING UNITS.

THE FLOORS AND OTHER WALKING SURFACES WITHIN AN EXIT AND WITHIN THE PORTIONS OF IE EXIT ACCESS AND EXIT DISCHARGE DESIGNATED IN SECTION 1006.1.1 SHALL BE ILLUMINATED TO VALUES OF AT LEAST 1 FOOTCANLE (10 LUX) MEASURED AT THE FLOOR. DURING CONDITIONS OF STAIR USE, THE MINIMUM ILLUMINATION FOR NEW STAIRS SHALL BE AT LEAST08 LUX (10 FOOT-CANDLE), MEASURED AT THE WALKING SURFACE.
EXCEPTION: IN ASSEMBLY OCCUPANCIES, THE ILLUMINATION OF THE FLOORS OF EXIT ACCESSHALL BE AT LEAST 0.2 FOOTCANDLE (2 LUX) DURING PERIODS OF PERFORMANCES OR PROJECTIONS INVOLVING DIRECTED LIGHT.

REQUIRED ILLUMINATION SHALL BE ARRANGED SO THAT THE FAILURE OF ANY SINGLE LIGHTINUNIT WILL NOT RESULT IN AN ILLUMINATION LEVEL IN ANY DESIGNATED AREA OF LESS THAN 0.2 FOOTCANDLE (2 LUX).

THE EQUIPMENT OR UNITS INSTALLED TO MEET THE REQUIREMENTS OF SECTION 1006.3 SHALIE PERMITTED ALSO TO SERVE THE FUNCTION OF ILLUMINATION OF MEANS OF EGRESS, PROVIDED THAT ALL REQUIREMENTS OF SECTION 10.1 FOR SUCH ILLUMINATION ARE MET.

SOURCES OF ILLUMINATION.
- ILLUMINATION OF MEANS OF EGRESS SHALL BE FROM A SOURCE OF REASONABLY ENSURED :LIABILITY.
- BATTERY-OPERATED ELECTRIC LIGHTS AND OTHER TYPES OF PORTABLE LAMPS OR LANTERNSHALL NOT BE USED FOR PRIMARY ILLUMINATION OF MEANS OF EGRESS. BATTERY-OPERATED ELECTRIC LIGHTS SHALL BE PERMIED TO BE USED AS AN EMERGENCY SOURCE TO THE EXTENT PERMITTED UNDER SECTION 1006.2.3.4.

EMERGENCY LIGHTING AND STANDBY POWER.
- EMERGENCY LIGHTING FACILITIES FOR MEANS OF EGRESS SHALL BE PROVIDED IN ACCORDANCE WITH THIS SECTIOON FOR THE FOLLOWING:
1. EVERY BUILDING OR STRUCTURE WHERE REQUIRED IN TABLE 1006.
2. WINDOWLESS AND UNDERGROUND STRUCTURES.
EXCEPTION: ONE- AND TWO-FAMILY DWELLINGS.
3. HIGH-RISE STRUCTURES.
4. AT DOORS EQUIPPED WITH DELAYED EGRESS LOCKS.
5. THE STAIR SHAFT AND VESTIBULE OF SMOKEPROOF ENCLOSURES.
A STANDBY GENERATOR THAT IS INSTALLED FOR THE SMOKEPROOF ENCLOSURE MECHANICAL VENTILATION EQUIPMENT SHALL BE PERMITTED TO BE USED FOR SUCH STAIR SHAFT AND VESTIBULE POWER SUPPLY.
FOR THE PURPOSES OF THIS REQUIREMENT, EXIT ACCESS SHALL INCLUDE ONLY DESIGNATED STAIRS, AISLES, CORRIDORS, RAMPS, ESCALATORS AND PASSAGEWAYS LEADING TO AN EXIT. FOR THE PURPOSES OF THIS REQUIREMENT, EXIT DISCHARGE SHALL INCLUDE ONLY DESIGNATED STAIRS, RAMPS, AISLES, WALKWAYS AND ESCALATORS LEADING TO A PUBLIC WAY.
EXCEPTIONS:
1. TOWERS OCCUPIED BY THREE OR FEWER PERSONS SHALL BE EXEMPT FROM EMERGENCY LIGHTING REQUIREMENTS.
2. LOCATIONS IN TOWERS NOT ROUTINELY INHABITED BY HUMANS SHALL BE EXEMPT FROM EMERGENCY LIGHTING REQUIREMENTS.
3. WHEN APPROVED BY THE BUILDING OFFICIAL, ILLUMINATION OF MEANS OF EGRESS SHALL NOT BE REQUIRED IN TOWERS THAT ARE OCCUPIED ONLY DURING DAYLIGHT HOURS, WITH WINDOWS ARRANGED TO PROVIDE THE REQUIRED LEVEL OF ILLUMINATION ON ALL PORTIONS OF THE MEANS OF EGRESS DURING THESE HOURS.
4. WATER-SURROUNDED STRUCTURES IN LOCATIONS NOT ROUTINELY INHABITED BY HUMANS SHALL BE EXEMPT FROM EMERGENCY LIGHTING REQUIREMENTS.
5. WHEN APPROVED BY THE BUILDING OFFICIAL, ILLUMINATION OF MEANS OF EGRESS SHALL NOT BE REQUIRED IN WATER-SURROUNDED STRUCTURES THAT ARE OCCUPIED ONLY DURING DAYLIGHT HOURS, WITH WINDOWS ARRANGED TO PROVIDE THE REQUIRED LEVEL OF ILLUMINATION ON ALL PORTIONS OF THE MEANS OF EGRESS DURING THESE HOURS.

WHERE MAINTENANCE OF ILLUMINATION DEPENDS UPON CHANGING FROM ONE ENERGY SOURCE TO ANOTHER, A DELAY OF NOT MORE THAN 10 SECONDS SHALL BE PERMITTED.

PERFORMANCE OF SYSTEM.
- EMERGENCY ILLUMINATION SHALL BE PROVIDED FOR A PERIOD OF HOURS 1½ IN THE EVENT OF FAILURE OF NORMAL LIGHTING. EMERGENCY LIGHTING FACILITIES SHALL BE ARRANGED TO PROVIDE INITIAL ILLUMINATION THAT IS AT LEAST AN AVERAGE OF 1 FOOTCANDLE (10 LUX) AND A MINIMUM AT ANY POINT OF 0.1 FOOTCANDLE (1 LUX) MEASURED ALONG THE PATH OF EGRESS AT FLOOR LEVEL. ILLUMINATION LEVELS SHALL BE PERMITTED TO DECLINE TO 0.6 FOOTCANDLE (6 LUX) AVERAGE AND A MINIMUM AT ANY POINT OF 0.06 FOOTCANDLE (0.6 LUX) AT THE END OF THE EMERGENCY LIGHTING TIME DURATION. A MAXIMUM-TO-MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40:1 SHALL NOT BE EXCEEDED.

- THE EMERGENCY LIGHTING SYSTEM SHALL BE ARRANGED TO PROVIDE THE REQUIRED ILLUMINATION AUTOMATICALLY IN THE EVENT OF ANY INTERRUPTION OF NORMAL LIGHTING, SUCH AS ANY FAILURE OF PUBLIC UTILITY OR OTHER OUTSIDE ELECTRICAL POWER SUPPLY; OPENING OF A CIRCUIT BREAKER OR FUSE OR ANY MANUAL ACT(S), INCLUDING ACCIDENTAL OPENING OF A SWITCH CONTROLLING NORMAL LIGHTING FACILITIES.
- EMERGENCY GENERATORS PROVIDING POWER TO EMERGENCY LIGHTING SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 110. STORED ELECTRICAL ENERGY SYSTEMS WHERE REQUIRED IN THIS CODE SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 111.
- BATTERY-OPERATED EMERGENCY LIGHTS SHALL USE ONLY RELIABLE TYPES OF RECHARGEABLE BATTERIES PROVIDED WITH SUITABLE FACILITIES FOR MAINTAINING THEM IN A PROPERLY CHARGED CONDITION. BATTERIES USED IN SUCH LIGHTS OR UNITS SHALL BE APPROVED FOR THEIR INTENDED USE AND SHALL COMPLY WITH CHAPTER 27 OF THE FLORIDA BUILDING CODE, BUILDING.
- THE EMERGENCY LIGHTING SYSTEM SHALL BE EITHER CONTINUOUSLY IN OPERATION OR SHALL BE CAPABLE OF REPEATED AUTOMATIC OPERATION WITHOUT MANUAL INTERVENTION.

STANDBY POWER.
HIGH-RISE BUILDINGS SHALL BE PROVIDED WITH CLASS 1, TYPE 60 STANDBY POWER IN ACCORDANCE WITH CHAPTER 27 OF THE FLORIDA BUILDING CODE, BUILDING AND NFPA 110. THE STANDBY POWER SYSTEM SHALL HAVE A CAPACITY AND RATING SUFFICIENT TO SUPPLY ALL REQUIRED EQUIPMENT. SELECTIVE LOAD PICKUP AND LOAD SHEDDING SHALL BE PERMITTED IN ACCORDANCE WITH CHAPTER 27 OF THE FLORIDA BUILDING CODE, BUILDING. THE STANDBY POWER SYSTEM SHALL BE CONNECTED TO THE FOLLOWING:
1. EMERGENCY LIGHTING SYSTEM.
2. AT LEAST ONE ELEVATOR SERVING ALL FLOORS AND TRANSFERABLE TO ANY ELEVATOR.
3. MECHANICAL EQUIPMENT FOR SMOKEPROOF ENCLOSURES.
(SEE SECTION 403 FOR ADDITIONAL REQUIREMENTS FOR STANDBY POWER IN HIGH-RISE STRUCTURES.)

EXIT SIGNS.
- EXITS SHALL BE MARKED BY AN APPROVED SIGN READILY VISIBLE FROM ANY DIRECTION OF EXIT ACCESS. EVERY EXIT SIGN SHALL BE SUITABLY ILLUMINATED BY A RELIABLE LIGHT SOURCE. EXTERNALLY AND INTERNALLY ILLUMINATED SIGNS SHALL BE VISIBLE IN BOTH NORMAL AND EMERGENCY LIGHTING.
EXCEPTION: MAIN EXTERIOR EXIT DOORS THAT OBVIOUSLY AND CLEARLY ARE IDENTIFIABLE AS EXITS.
- NEW SIGN PLACEMENT SHALL BE SUCH THAT NO POINT IN AN EXIT ACCESS CORRIDOR IS IN EXCESS OF THE RATED VIEWING DISTANCE OR 100 FEET (30 M) WHICHEVER IS LESS, FROM THE NEAREST SIGN.
- EVERY REQUIRED SIGN SHALL BE LOCATED AND OF SUCH SIZE, DISTINCTIVE COLOR AND DESIGN AS TO BE READILY VISIBLE AND SHALL PROVIDE CONTRAST WITH INTERIOR FINISH OR OTHER SIGNS. NO EQUIPMENT THAT IMPAIRS VISIBILITY OF AN EXIT SIGN SHALL BE PERMITTED, NOR SHALL THERE BE ANY BRIGHTLY ILLUMINATED SIGN OR OBJECT IN OR NEAR THE LINE OF VISION OF THE REQUIRED EXIT SIGN OF SUCH A CHARACTER AS TO DETRACT ATTENTION FROM THE EXIT SIGN. FLOOR PROXIMITY SIGNS, WHERE REQUIRED, SHALL BE IN ACCORDANCE WITH SECTION 1006.3.8.2 OR 1006.3.8.3.
- EXIT STAIR DOOR OR TACTILE SIGNAGE.
TACTILE SIGNAGE STATING "EXIT" AND COMPLYING WITH ICC/ANSI A117.1, AMERICAN NATIONAL STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES, SHALL BE INSTALLED ADJACENT TO THE LATCH SIDE OF THE DOOR 60 INCHES (1524 MM) ABOVE THE FINISHED FLOOR TO THE CENTER LINE OF THE SIGN.
- EXTERNALLY ILLUMINATED SIGNS SHALL HAVE THE WORD "EXIT" OR OTHER APPROPRIATE WORDING IN PLAINLY LEGIBLE LETTERS NOT LESS THAN 6 INCHES (15.2 MM) HIGH WITH THE PRINCIPAL STROKES OF LETTERS NOT LESS THAN ¾ INCHES (1.9 MM) WIDE. THE WORD "EXIT" SHALL HAVE LETTERS OF A WIDTH NOT LESS THAN 2 INCHES (51 MM), EXCEPT THE LETTER "I," AND THE MINIMUM SPACING BETWEEN LETTERS SHALL BE NOT LESS THAN 3/8 INCHES (10 MM). SIGNS LARGER THAN THE MINIMUM ESTABLISHED IN THIS PARAGRAPH SHALL HAVE LETTER WIDTHS, STROKES AND SPACING IN PROPORTION TO THEIR HEIGHT. EXTERNALLY ILLUMINATED SIGNS SHALL BE ILLUMINATED BY NOT LESS THAN 5 FOOTCANDLES (50 LUX) AT THE ILLUMINATED SURFACE AND SHALL HAVE A CONTRAST RATIO OF NOT LESS THAN 0.5.
EXCEPTIONS:
1. MARKING REQUIRED BY SECTION 1009.5.3.
2. GROUP R3 AND GROUP R4 (SMALL FACILITY) OCCUPANCIES.
- INTERNALLY ILLUMINATED SIGNS SHALL BE LISTED IN ACCORDANCE WITH UL 924, STANDARD FOR SAFETY EMERGENCY LIGHTING POWER EQUIPMENT. THE VISIBILITY OF AN INTERNALLY ILLUMINATED SIGN SHALL BE THE EQUIVALENT OF AN EXTERNALLY ILLUMINATED SIGN THAT COMPLIES WITH SECTION 1006.3.5.
EXCEPTIONS:
1. MARKING REQUIRED BY SECTION 1009.5.3.
2. SIGNS IN COMPLIANCE WITH SECTIONS 1006.3.4 AND 1006.3.8.2.
- WHERE EMERGENCY LIGHTING FACILITIES ARE REQUIRED BY SECTION 1006.2, THE EXIT SIGNS SHALL BE ILLUMINATED BY THE EMERGENCY LIGHTING FACILITIES. THE LEVEL OF ILLUMINATION OF THE EXIT SIGN SHALL BE AT THE LEVELS PROVIDED IN ACCORDANCE WITH SECTION 1006.3.5 FOR THE REQUIRED EMERGENCY LIGHTING TIME DURATION AS SPECIFIED IN SECTION 1006.2.3.1, BUT SHALL BE PERMITTED TO DECLINE TO 60 PERCENT OF THE ILLUMINATION LEVEL AT THE END OF THE EMERGENCY LIGHTING TIME DURATION.
- WHERE THE DIRECTION OF TRAVEL TO REACH THE NEAREST EXIT IS NOT APPARENT, A DIRECTIONAL SIGN COMPLYING WITH SECTIONS 1006.3.5 OR 1006.3.6 READING "EXIT," OR A SIMILAR DESIGNATION WITH A DIRECTIONAL INDICATOR SHOWING THE DIRECTION OF TRAVEL SHALL BE PLACED IN EVERY LOCATION. DIRECTIONAL SIGNS SHALL BE LISTED.
- THE DIRECTIONAL INDICATOR SHALL BE LOCATED OUTSIDE OF THE "EXIT" LEGEND, NOT LESS THAN 3/8 INCHES (10 MM) FROM ANY LETTER. THE DIRECTIONAL INDICATOR SHALL BE OF A CHEVRON TYPE AND SHALL BE IDENTIFIABLE AS A DIRECTIONAL INDICATOR AT A MINIMUM DISTANCE OF 40 FEET (12.2 M). A DIRECTIONAL INDICATOR LARGER THAN THE MINIMUM ESTABLISHED IN THIS SECTION SHALL BE PROPORTIONATELY INCREASED IN HEIGHT, WIDTH AND STROKE. THE DIRECTIONAL INDICATORS SHALL BE LOCATED AT THE END OF THE SIGN FOR THE DIRECTION INDICATED.
- WHERE FLOOR PROXIMITY EXIT SIGNS ARE REQUIRED, EXIT SIGNS SHALL BE PLACED NEAR THE FLOOR LEVEL IN ADDITION TO THOSE SIGNS REQUIRED FOR DOORS OR CORRIDORS. THESE SIGNS SHALL BE ILLUMINATED IN ACCORDANCE WITH SECTION 1006.3. EXTERNALLY ILLUMINATED SIGNS SHALL BE SIZED IN ACCORDANCE WITH SECTION 1006.3.5. THE BOTTOM OF THE SIGN SHALL BE AT LEAST 6 INCHES (152 MM) AND NO MORE THAN 8 INCHES (203 MM) ABOVE THE FLOOR. FOR EXIT DOORS, THE SIGN SHALL BE MOUNTED ON THE DOOR OR ADJACENT TO THE DOOR WITH THE NEAREST EDGE OF THE SIGN WITHIN 4 INCHES (102 MM) OF THE DOOR FRAME.
- WHERE FLOOR PROXIMITY EGRESS PATH MARKING IS REQUIRED, A LISTED AND APPROVED FLOOR PROXIMITY EGRESS PATH MARKING SYSTEM THAT IS INTERNALLY ILLUMINATED SHALL BE INSTALLED WITHIN 18 INCHES (457 MM) OF THE FLOOR. THE SYSTEM SHALL PROVIDE A VISIBLE DELINEATION OF THE PATH OF TRAVEL ALONG THE DESIGNATED EXIT ACCESS AND SHALL BE ESSENTIALLY CONTINUOUS, EXCEPT AS INTERRUPTED BY DOORWAYS, HALLWAYS, CORRIDORS OR OTHER SUCH ARCHITECTURAL FEATURES. THE SYSTEM SHALL OPERATE CONTINUOUSLY OR AT ANY TIME THE BUILDING FIRE ALARM SYSTEM IS ACTIVATED. THE ACTIVATION, DURATION AND CONTINUITY OF OPERATION OF THE SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 1006.2.
- SIGNS INSTALLED AS PROJECTIONS FROM A WALL OR CEILING WITHIN THE MEANS OF EGRESS SHALL PROVIDE VERTICAL CLEARANCE NO LESS THAN 80 INCHES (2134 MM) FROM THE WALKING SURFACE.

FIREBLOCKING REQUIREMENTS

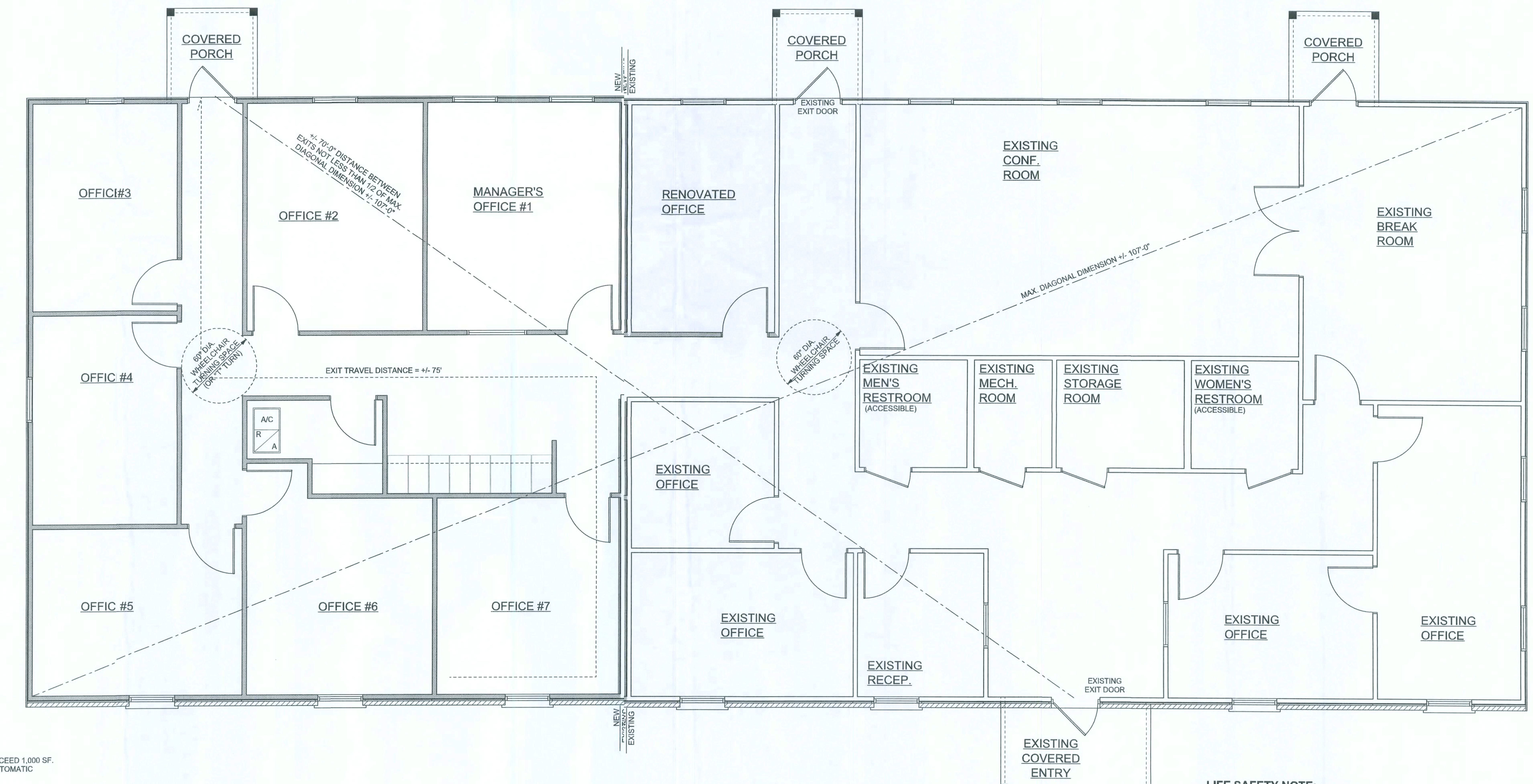
FIREBLOCKING:
- IN COMBUSTIBLE CONSTRUCTION, FIREBLOCKING SHALL BE INSTALLED TO CUT OFF CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND SHALL FORM AN EFFECTIVE BARRIER BETWEEN FLOORS, BETWEEN A TOP STORY AND A ROOF OR ATTIC SPACE.
- BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NONRIGID MATERIALS SHALL BE ALLOWED AS FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS.
- FIREBLOCKING SHALL BE PROVIDED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
A. VERTICALLY AT THE CEILING AND FLOOR LEVELS.
B. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.
- FIREBLOCKING SHALL BE PROVIDED AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL STUD WALL OR PARTITION SPACES AND CONCEALED HORIZONTAL SPACES CREATED BY AN ASSEMBLY OF FLOOR JOISTS OR TRUSSES, AND BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS AND SIMILAR LOCATIONS.
- FIREBLOCKING SHALL BE PROVIDED IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER STAIRS SHALL ALSO COMPLY WITH FBC04 SECTION 1019.1.5.
- CEILING AND FLOOR OPENINGS: WHERE ANNULAR SPACE PROTECTION IS PROVIDED IN ACCORDANCE WITH FBC07 EXCEPTION 6, SEC. 707.2, EXCEPTION 1, SEC. 712.4.2, OR SEC. 712.4.3, FIREBLOCKING SHALL BE INSTALLED AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVELS, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND THE PRODUCTS OF COMBUSTION. FACTORY-BUILT CHIMNEYS AND FIREPLACES SHALL BE FIREBLOCKED IN ACCORDANCE WITH UL 103 AND UL 127.
- ARCHITECTURAL TRIM: FIREBLOCKING SHALL BE INSTALLED WITHIN CONCEALED SPACES OF EXTERIOR WALL FINISH AND OTHER EXTERIOR ARCHITECTURAL ELEMENTS WHERE PERMITTED TO BE OF COMBUSTIBLE CONSTRUCTION AS SPECIFIED IN FBC04, SEC. 1406 OR WHERE ERECTED WITH COMBUSTIBLE FRAMES, AT MAXIMUM INTERVALS OF 20'. IF NONCONTINUOUS, SUCH ELEMENTS SHALL HAVE CLOSED ENDS, WITH AT LEAST 4" OF SEPARATION BETWEEN SECTIONS. FIREBLOCKING SHALL NOT BE REQUIRED WHERE INSTALLED ON NONCOMBUSTIBLE FRAMING AND THE FACE OF THE EXTERIOR WALL FINISH EXPOSED TO THE CONCEALED SPACE IS COVERED BY ONE OF THE FOLLOWING MATERIALS:
A. ALUMINUM HAVING A MINIMUM THICKNESS OF 0.019".
B. CORROSION-RESISTANT STEEL HAVING A BASE METAL THICKNESS NOT LESS THAN 0.016" AT ANY POINT.
C. OTHER APPROVED NONCOMBUSTIBLE MATERIALS.
- WHERE WOOD SLEEPERS ARE USED FOR LAYING WOOD FLOORING ON MASONRY OR CONCRETE FIRE-RESISTANCE-RATED FLOORS, THE SPACE BETWEEN THE FLOOR SLAB AND THE UNDERSIDE OF THE WOOD FLOORING SHALL BE FILLED WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION OR FIREBLOCKED IN SUCH A MANNER THAT THERE WILL BE NO OPEN SPACES UNDER THE FLOORING THAT WILL EXCEED 100 SF IN AREA AND SUCH SPACE SHALL BE FILLED SOLIDLY UNDER PERMANENT PARTITIONS SO THAT THERE IS NO COMMUNICATION UNDER THE FLOORING BETWEEN ADJOINING ROOMS.

FIREBLOCKING MATERIALS:

2" NOMINAL LUMBER OR TWO THICKNESSES OF 1" NOMINAL LUMBER WITH BROKEN LAP JOINTS OR ONE THICKNESS OF 0.719" WOOD STRUCTURAL PANEL WITH JOINTS BACKED BY 0.719" WOOD STRUCTURAL PANEL OR ONE THICKNESS OF 0.75" PARTICLEBOARD WITH JOINTS BACKED BY 0.75" PARTICLEBOARD. GYPSUM BOARD, CEMENT FIBER BOARD, BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE SHALL BE PERMITTED AS AN ACCEPTABLE FIREBLOCK. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NONRIGID MATERIALS SHALL BE PERMITTED FOR COMPLIANCE WITH THE 10' HORIZONTAL FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS.
LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE ITS ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASES. THE INTEGRITY OF FIREBLOCKS SHALL BE MAINTAINED.

DRAFTSTOP REQUIREMENTS

DRAFTSTOPPING IN FLOORS:
DRAFTSTOPPING SHALL BE INSTALLED SO THAT HORIZONTAL FLOOR AREAS DO NOT EXCEED 1,000 SF. (DRAFTSTOPPING IS NOT REQUIRED IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM.)
DRAFTSTOPPING IN ATTICS:
- IN COMBUSTIBLE CONSTRUCTION DRAFTSTOPPING SHALL BE INSTALLED IN ATTICS AND CONCEALED ROOF SPACES, SUCH THAT ANY HORIZONTAL AREA DOES NOT EXCEED 3,000 SF (DRAFTSTOPPING IS NOT REQUIRED IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM)
- OPENINGS IN THE PARTITIONS SHALL BE PROTECTED BY SELF-CLOSING DOORS WITH AUTOMATIC LATCHES CONSTRUCTED AS REQUIRED FOR THE PARTITIONS.
DRAFTSTOPPING MATERIALS:
DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 0.5" GYPSUM BOARD, 0.375" WOOD STRUCTURAL PANEL, 0.375" PARTICLEBOARD OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. THE INTEGRITY OF DRAFTSTOPS SHALL BE MAINTAINED.



LIFE SAFETY NOTE:
It is contractor / owner's responsibility to request life safety review by the fire marshal. All life safety requirements are to be as specified by the fire marshal. Emergency lighting and exit signs shall be provided as directed by the fire marshal and shall be wired per nec 700-12f. Emergency lighting and exit sign locations shown on the plans are suggestions only.

REVISIONS

SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

ENGINEER OF RECORD: Mark Disosway, PE No.53915, POB 868, Lake City, FL 32056, 386-754-5419

DIMENSIONS:
Stated dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.

CERTIFICATION: These plans and Cover Sheet A-0, attached, comply with applicable portions of the 2010 Florida Building Code to the best of my knowledge

LIMITATION: This design is valid for one building at specified location. In case of conflict, structural requirements, scope of work, and builder responsibilities control.

MARK DISOSWAY
P.E. 53915
SEAL
06 JUL 12

Bryant Construction Co.

Mayo Fertilizer & Farm Supply Office Addition (Mike Shaw)

ADDRESS:
41? NE McCloskey Av
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Mark Disosway P.E.
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windloadengineer@bellsouth.net

PRINTED DATE:
July 06, 2012

DRAWN BY: Evan Beamsley
CHECKED BY:

FINALES DATE:
2012-07-06

JOB NUMBER:
1205066

DRAWING NUMBER
3
OF 8 SHEETS

HVAC DESIGN NOTE:

The 2010 Florida Building Code, and Florida Building Code, Mechanical and Fuel Gas shall govern the heating, air conditioning, refrigeration, mechanical ventilation and plenums and the design and construction of factory-built chimneys, fireplaces and barbecues in this building.

Plans and design for HVAC system in this building are to be furnished by the HVAC contractor to the engineer of record, the owner, and the building official for approval prior to construction or ordering any materials.

2010 FBC, Does not require sealed engineering documents to be prepared by or under the direction of an engineer registered under chapter 471 Florida Statutes for heating, ventilation, and air-conditioning systems for any new building or addition which requires not more than a 15-ton-per-system capacity which is designed to accommodate less than 100 persons and for which the system costs not more than $50,000. An air-conditioning system may be designed by an installing air-conditioning contractor certified under Chapter 489, Florida Statutes to serve any building or addition which is designed to accommodate fewer than 100 persons and requires an air-conditioning system with value of $50,000 or less; and when a 15-ton-per system or less is designed for a singular space of a building and each 15-ton system or less has an independent duct system. Systems not complying with the above require design documents that are to be sealed by a professional engineer.

The mechanical plans should meet the following requirements:
1. Energy calculations
2. Exhaust systems:
Clothes dryer exhaust
Kitchen equipment exhaust
Specialty exhaust systems
3. Equipment
4. Equipment location
5. Make-up air
6. Roof-mounted equipment
7. Duct systems
8. Ventilation
9. Combustion air
10. Chimneys, fireplaces and vents
11. Appliances
12. Boilers
13. Refrigeration
14. Bathroom ventilation
15. Laboratory

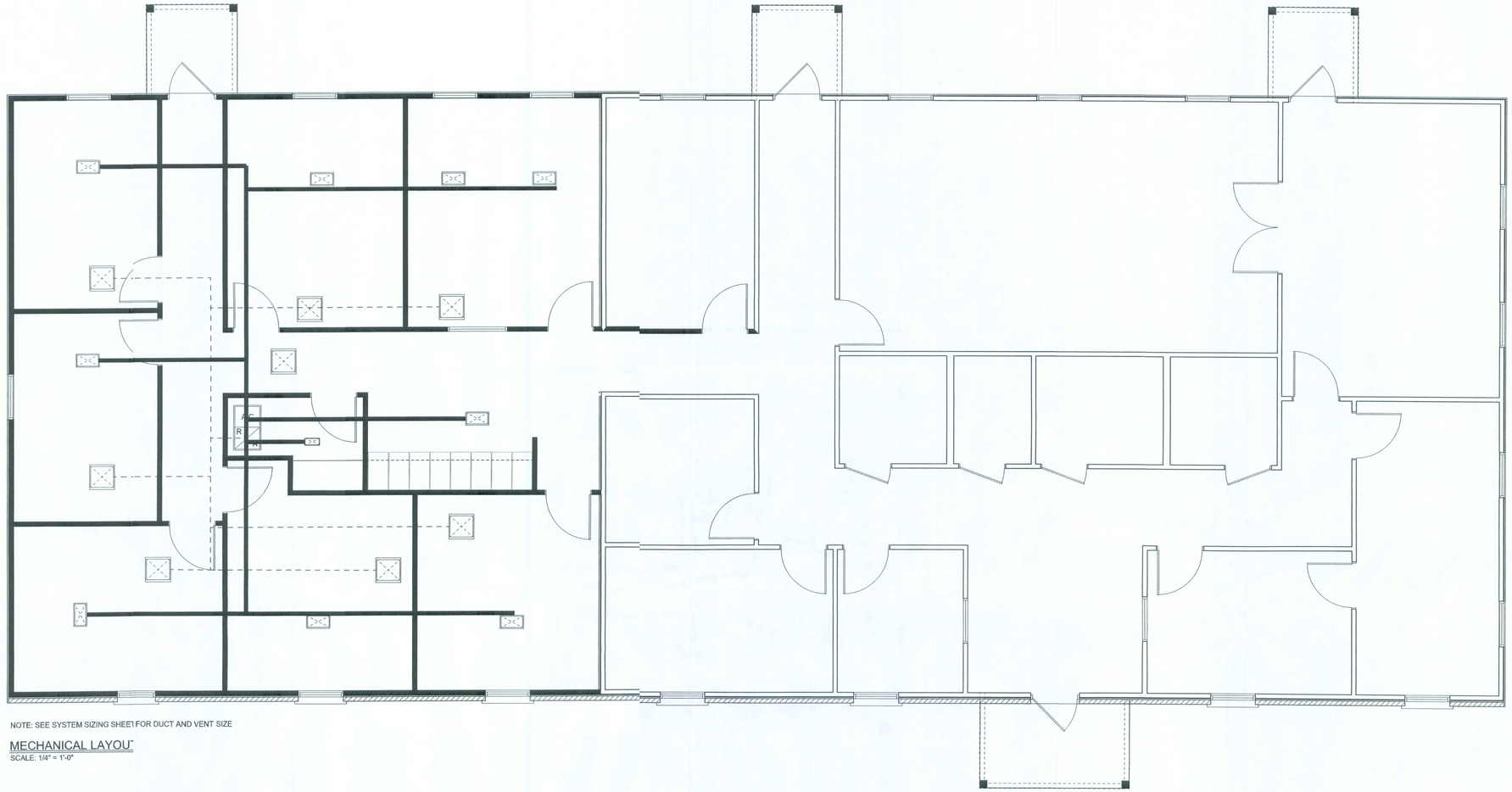
Gas plans should meet the following requirements:
1. Gas piping
2. Venting
3. Combustion air
4. Chimneys and vents
5. Appliances
6. Type of gas
7. Fireplaces
8. LP tank location
9. Riser diagram/shutoffs

Design of Heating, Ventilation and Air Conditioning Systems.
(1) Heating, Ventilating, and Air Conditioning (HVAC) Systems are those systems that control the temperature and/or humidity of a particular space or building. Items to be considered in the design and analysis of these systems are ambient dry and wet bulb temperatures, inside dry and wet bulb temperatures, inside design humidity, fresh air makeup, internal heat gains from any sources. Ventilation systems shall be designed to remove foul odors from a space or building, or to remove space heat from equipment rooms. All HVAC systems shall be designed in accordance with the ASHRAE Standards and Building Code as adopted by the authority having jurisdiction. The HVAC systems shall be designed and operated such that the entire building is under positive or neutral pressure when all primary HVAC systems are operating.
(2) "Design" documents applicable to HVAC systems shall, where applicable, include but are not limited to the following:
(a) Equipment selection schedule for each piece of mechanical equipment. All equipment shall have capacities listed including efficiencies, electrical or fuel requirements, static pressure and fan air quantities as applicable to the system, fluid flow and pressure head quantities as applicable to the system, and heat transfer capacities.
(b) Floor plans; site plans; and building and mechanical system elevations as appropriate.
(c) Outside (fresh) air make-up conditions.
(d) Cooling coil requirements based on sensible heat, latent heat and total heat gains.
(e) Heating equipment requirements.
(f) Outside and inside design dry and wet bulb conditions.
(g) Exhaust riser diagrams.
(h) Outside air riser diagrams.
(i) Process flow diagrams with pipe sizes and fluid flow quantities.
(j) Condensate discharge piping with pipe sizes.
(k) Instrumentation and Control System diagrams and sequence of operation.
(l) Ductwork layout and sizing; insulation, supply, return, and exhaust inlet and outlet sizes; and outside air intake sizes. Air quantities shall be specified for inlets and outlets.
(m) Florida Energy Code calculations as applicable.
(n) NFPA Standards and all required fire protection devices and systems.

ENERGY EFFICIENCY NOTE:

The 2010 Florida Building Code, Energy Conservation, shall govern design of building envelopes for adequate thermal resistance and low air leakage and design and selection of mechanical, electrical, and illumination systems and equipment which will enable the effective use of energy in this building project.

Important Note: A sealed copy of Form 400 for this project is incorporated in these plans by reference. There are equipment and material requirements and specifications in Form 400 which do not appear anywhere else in the plans. Construction must comply with the sealed Form 400. Conflicts between Form 400 and any other construction or contract documents are to be resolved by the builder prior to construction or ordering of materials.



NOTE: SEE SYSTEM SIZING SHEET FOR DUCT AND VENT SIZE

MECHANICAL LAYOUT

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

REVSIONS

SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

Bryant Corstruction Co.

Mayo Fertilizer & Farm Supply Ofice Addition (Mike Shaw)

ADDRESS:
413NE McCloskey Av
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Bounds Heating & Air, Inc
(352) 472-2761
(352) 472-1809 fax
P.O. Box 1617
2564 W Newberry Rd
Newberry, Fl 32669

PRINTED DATE:
July 06, 2012

DRAWN BY:
Evan Beasley

CHECKED BY:

FINALES IATE:
2012-07-06

JOB NUMBER:
1205066

DRAWING NUMBER

M-1

OF 8 SHEETS

REVSIONS	

SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

ELECTRICAL DESIGN NOTE:

The 2010 Florida Building Code and NFPA shall govern the electrical systems in this building project. Where provisions conflict, 2010 FBC shall govern.

Plans and design for electrical system in this building are to be furnished by the electrical contractor to the engineer of record, the owner, and the building official for approval prior to construction or ordering any materials.

2010 FBC, Does not require sealed engineering documents to be prepared by or under the direction of an engineer registered under chapter 471Florida Statutes for electrical systems for any new building or addition which requires an aggregate service capacity of not more than 600 amperes (240 volts) on a residential electrical system or 800 amperes (240 volts) on a commercial or industrial electrical system and which costs not more than $50,000.

The electrical plans should meet the following requirements:
1. Electrical:
   - Wiring
   - Services
   - Feeders and branch circuits
   - Overcurrent protection
   - Grounding
   - Wiring methods and materials
   - GFCIs
2. Equipment
3. Special occupancies
4. Emergency systems
5. Communication systems
6. Low voltage
7. Load calculations

Design of Power Systems:
(1) Power systems convey or distribute electrical energy. Items to be included in the design and analysis of these systems are: steady state and transient loads, short circuit protection (design and analysis), load flow, voltage drop, harmonics, and protective device coordination.
(2) "Design" documents applicable to power systems shall at a minimum indicate the following:
(a) System Riser Diagram
(b) Conductor Ampacities (sizes) and insulation type
(c) Protection devices and interrupting capability
(d) Main and distribution panelboard locations and sizes
(e) Circuitry of all outlets and devices
(f) Short circuit analysis
(g) Load computations
(h) Electrical legend
(i) Grounding and bonding
(j) Instrumentation control

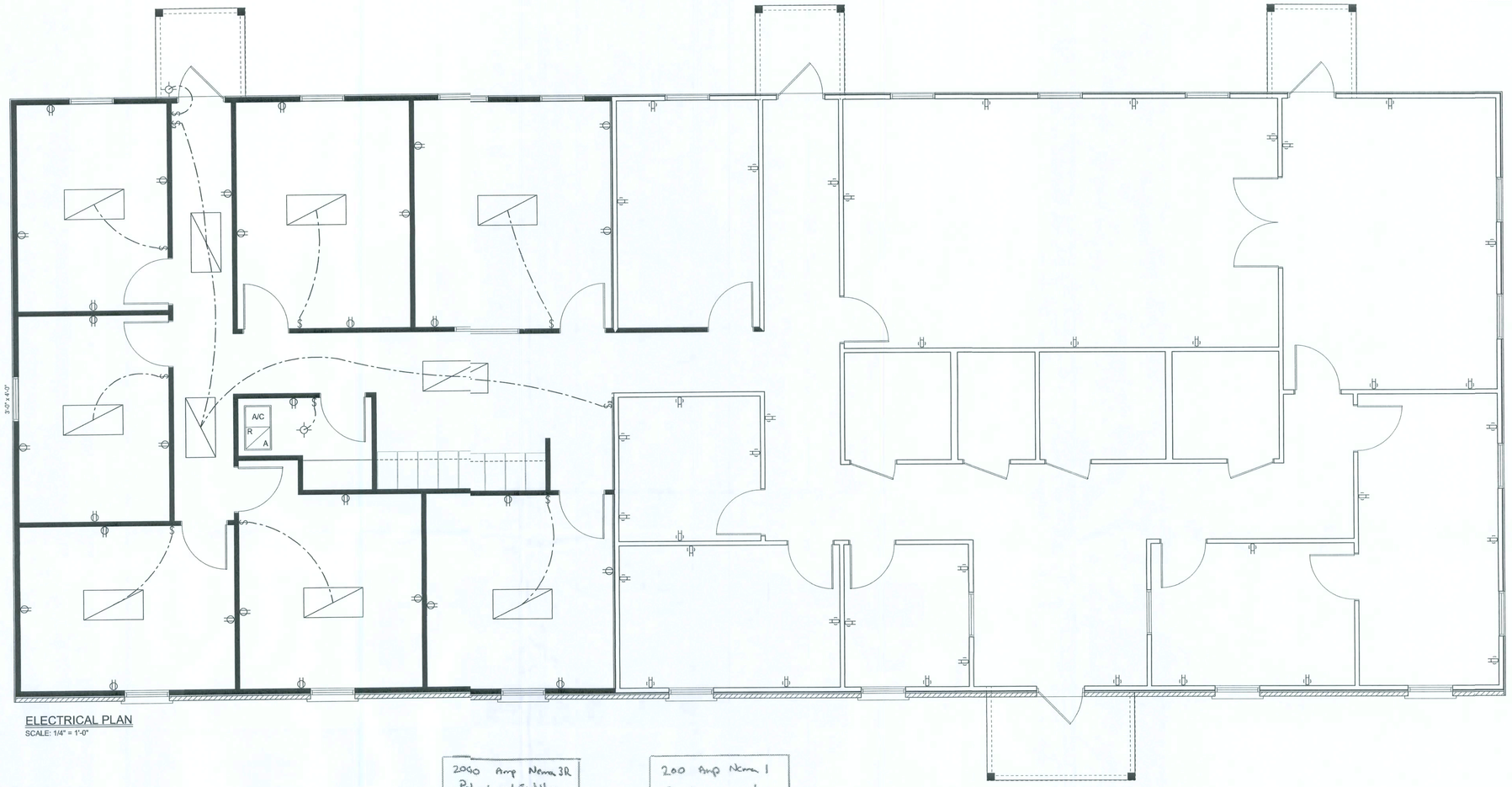
Design of Lighting Systems:
(1) Lighting systems convert electrical energy into light. Items to be included in the lighting design and analysis are: Average illuminance, Equivalent spherical illuminance, Uniformity ratios, Visual comfort probability, special purpose lighting, and the requirements of the Florida Energy Efficiency Code, part IX, Chapter 553, Florida Statutes.
(2) "Design" documents for lighting systems shall, at a minimum, indicate the following:
(a) Lighting fixture performance specifications and arrangements
(b) Emergency Lighting
(c) Exit Lighting
(d) Lighting Control and circuiting

Design of Communications Systems:
(1) Communications systems are utilized to convey messages or data. Items to be included in the design or analysis of these systems are: Human factors engineering, cabling requirements, installation requirements, performance requirements, backup power requirements, the interrelationship of the various systems, and applicable regulatory requirements.
(2) "Design" documents for communications systems shall, at a minimum, indicate the following:
(a) System riser diagram
(b) Equipment legend
(c) Conductor type and installation requirements
(d) Device type and locations
(e) Backup power sources where applicable

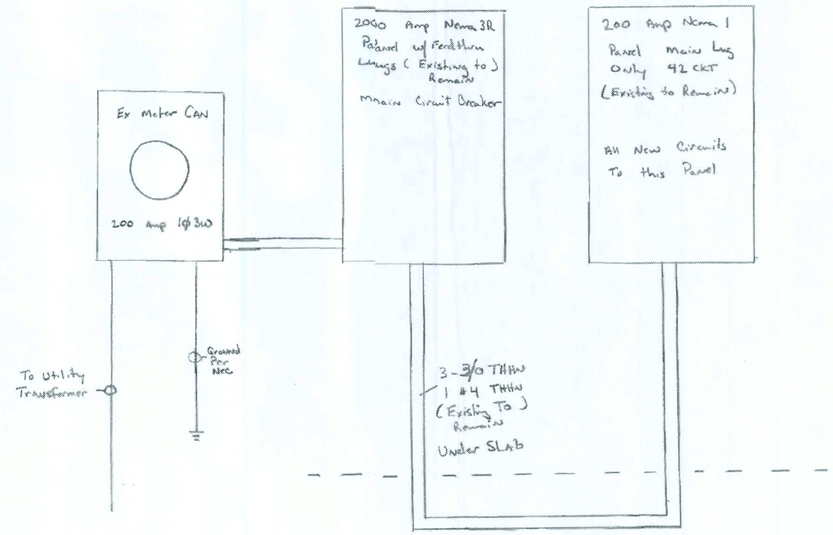
Design of Alarm Systems:
(1) Alarm systems are used to monitor and alarm a fire or other emergency condition. Items to be included in the design or analysis of these systems are: structure alarm requirements, location and audibility, types of alarms and initiation devices, notification requirements, installation requirements, backup power requirements, applicable regulatory requirements, and the provisions of rule 61G15-32.007, F.A.C.
(2) Design documents for alarm systems shall, at a minimum, indicate the following:
(a) System riser diagram
(b) Device types and locations
(c) Type of conductors and installation requirements including rating identification and listing requirements
(d) Notification requirements
(e) Backup power requirements
(f) Where applicable, backup power sources and inter-ties to other systems/components

Design of Lightning Protection Systems.
(1) Lightning Protection Systems are passive systems used to protect building and structures from damage caused by lightning and static discharges. Items to be considered in the design or analysis of this system include the requirements of NFPA-78.
(2) "Design" documents for lightning protection systems shall indicate:
(a) Air terminals height and spacing
(b) Arrangement of Main and Down conductors
(c) Grounding points and spacing
(d) Legend
(e) Testing requirements of grounds

Design of Grounding Systems.
(1) Grounding Systems are passive systems used to establish an electrical potential reference point in an electrical system for the proper dissipation of energy in case of abnormal or transient conditions.
(2) Design documents for grounding systems shall indicate at a minimum the following:
(a) type and location of grounding electrodes
(b) bonding requirements
(c) testing requirements
(d) conductor material type, size and protection requirements
(e) separate grounding systems, properly bonded, per code and use requirements



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



Re: Mayo Fertilizer

Permit

Load Calculation
120/240 Volt Single Phase 3 Wire

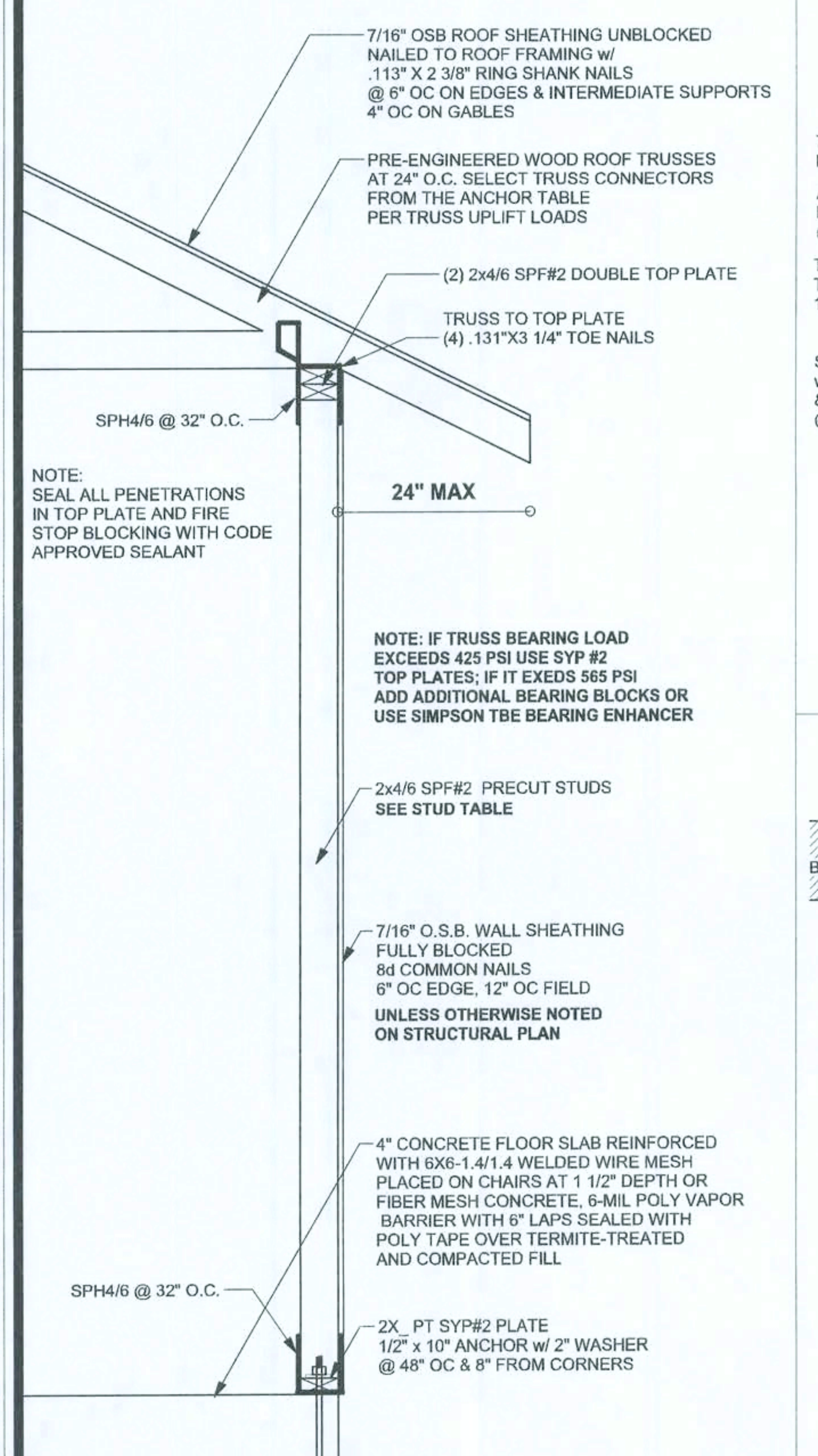
Lighting Loads 4000 Sq Ft @ 3 VA Per Sq. Ft.=	12,000 VA
Water Heater 1 @ 4500 Va Each =	4,500 VA
Air Handling Unit 2 @ 10,000 Va Each =	20,0,00 VA
Total	36,500 VA
36,500 VA / 240 =	152.08 Amps

Bryant Construction Co.

Nayo Fertilizer & Farm Supply Office Addition (Mike Shaw)

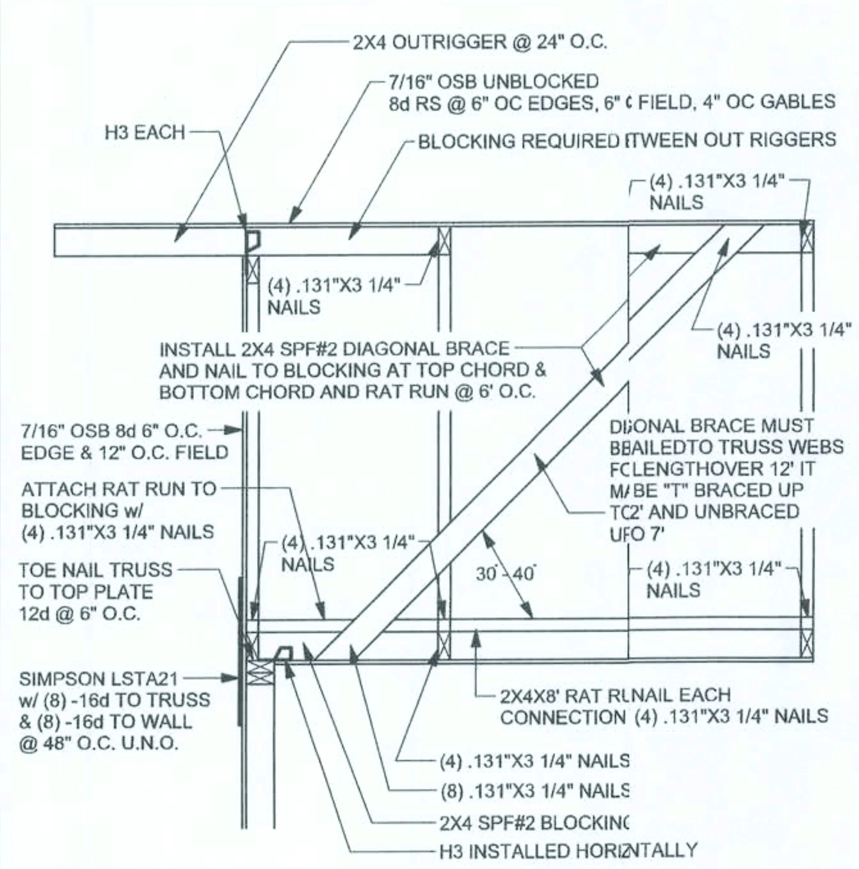
ADDRESS:
43 NE McCloskey Av
Lake City, FL 32055

PRINTED DATE: July 06, 2012
DRAWN BY: Evan Bamsley
CHECKED BY:
FINALIS DATE: 201;07-06
JOB NUMBER: 1205066
DRAWING NUMBER
E-1
OF 8 SHEETS



ONE STORY WALL SECTION

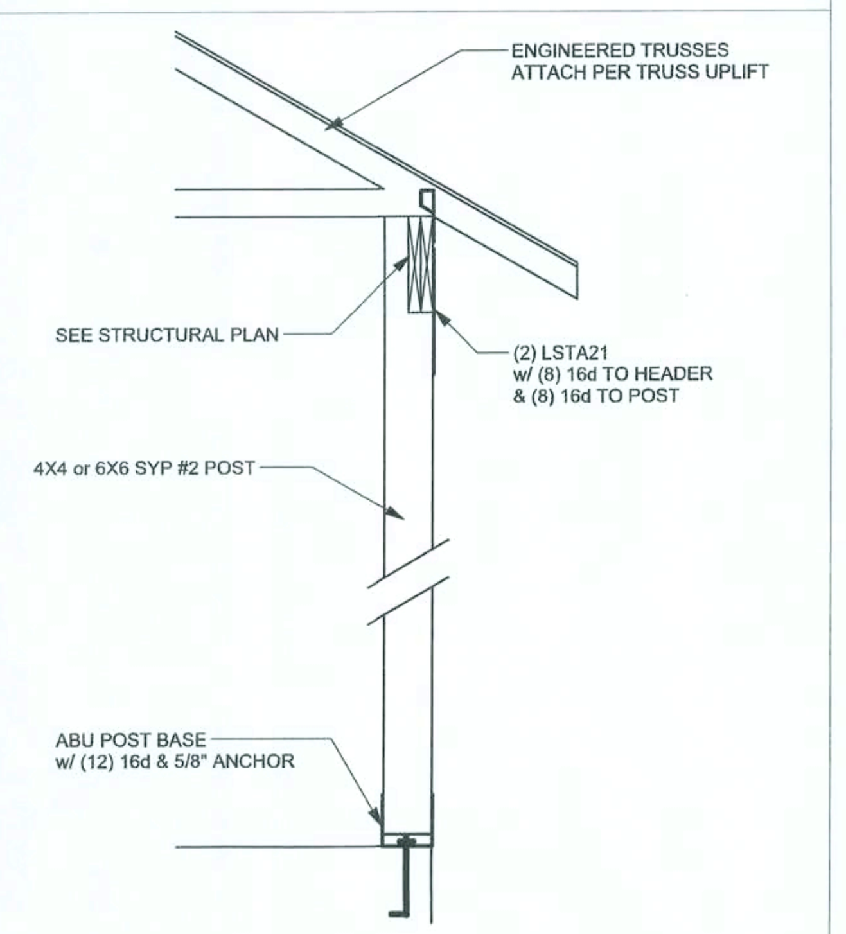
SCALE: 3/4" = 1'-0"



SPACE RAT RUN & DIAGONAL BRACE 6'" O.C.
FOR GABLE HEIGHT UP TO 25'-0'

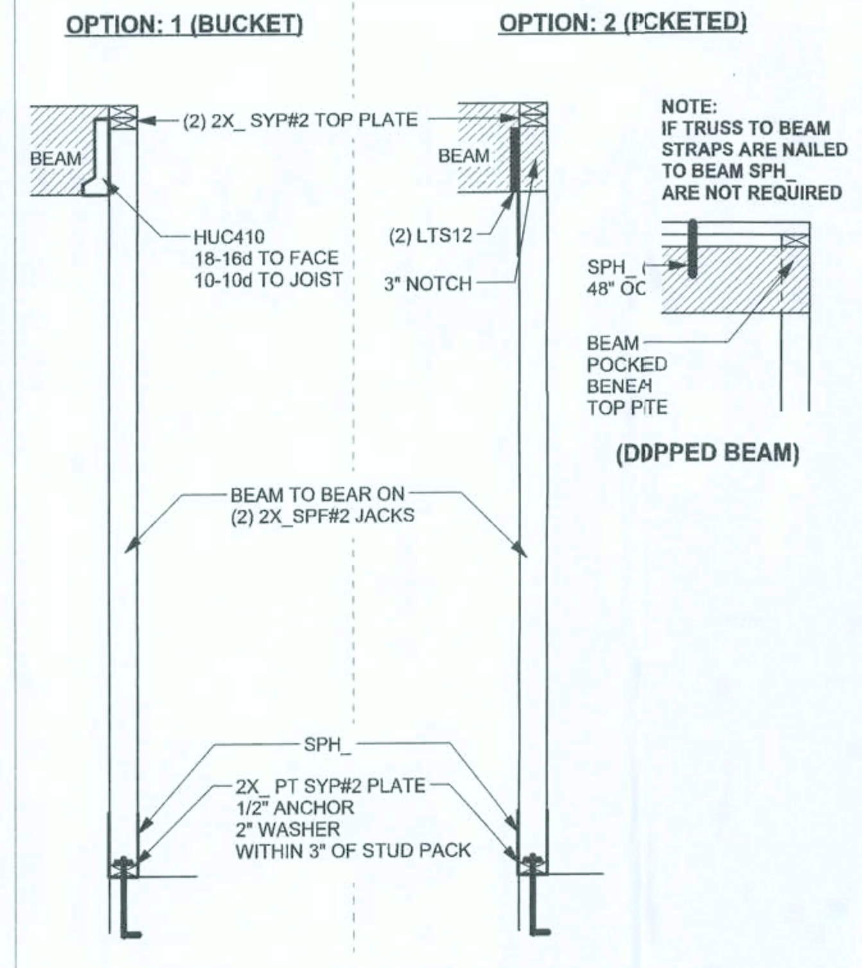
(TYP.) GABLE BRACING DTAIL

WOOD FRAME



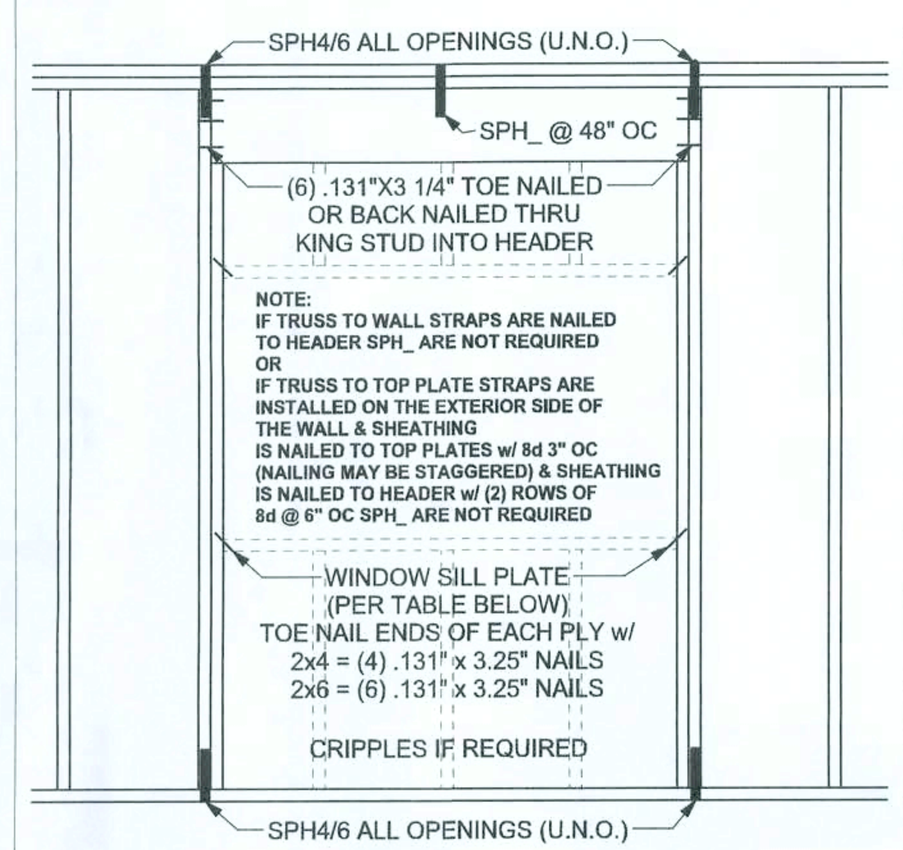
(TYP.) PORCH POST

ONE STORY WOOD



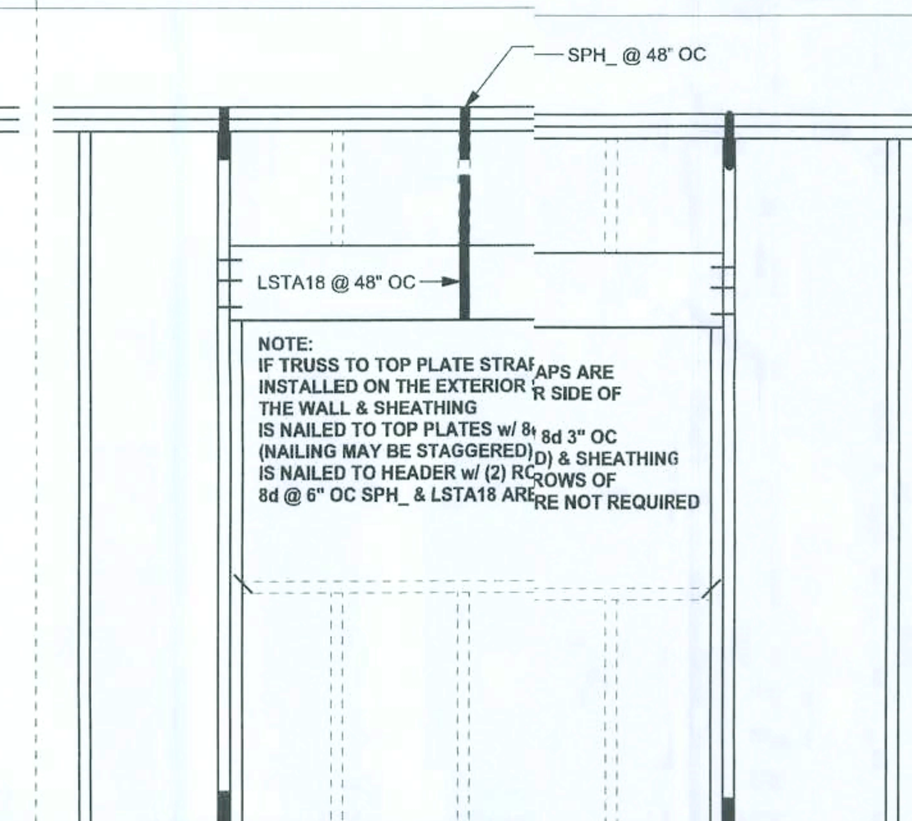
(TYP.) BEAM TO WALL

WOOD FRAME w/ STRAPS & ANCHORS



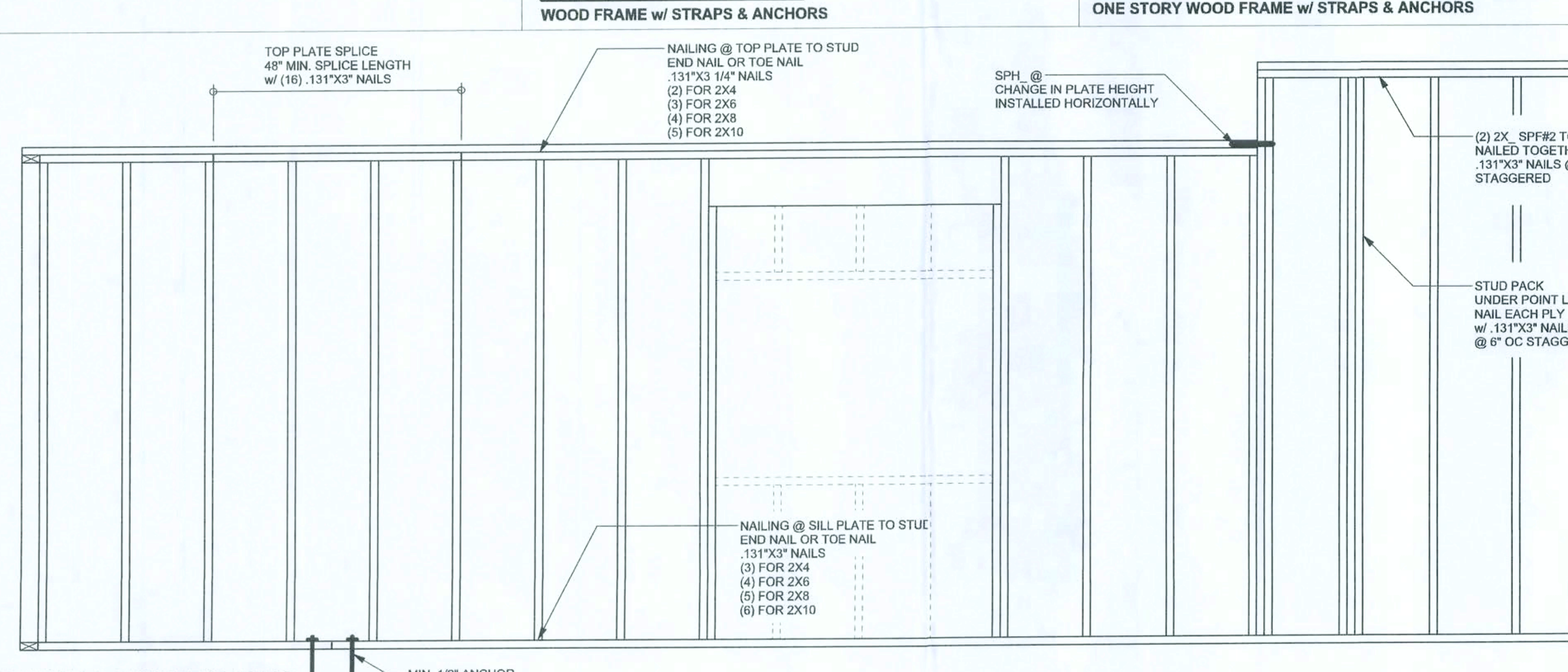
TYPICAL HEADER STRAPING DETAIL

ONE STORY WOOD FRAME w/ STRAPS & ANCHORS



OPTION: 2 (DROPPED HEADER)

SILL PLATE SPANS FOR 10'-0" WALL HEIGHT					
	MAX. SPANS FOR SPF #2				BASED ON WFCM TABLE A-3.23B
	(1) 2x4	(2) 2x4	(1) 2x6	(2) 2x6	
	4'-4"	6'-6"	6'-5"	9'-6"	FOR OTHER WALL HEIGHTS (H) SILL SPAN SHALL BE DIVIDED BY (H/10)



(TYP.) WALL CONNECTIONS

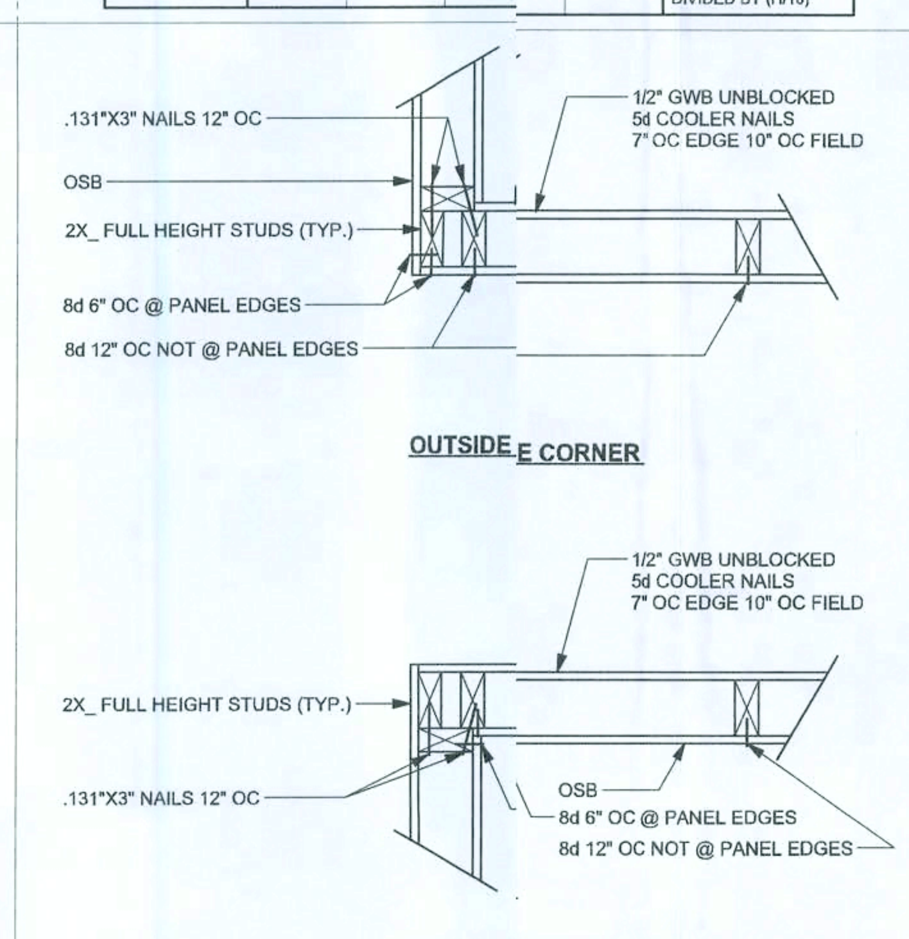
ONE STORY WOOD FRAME

ANCHOR TABLE

OBTAIN UPLIFT REQUIREMENTS FROM TRUSS MANUFACTURER'S ENGINEERING

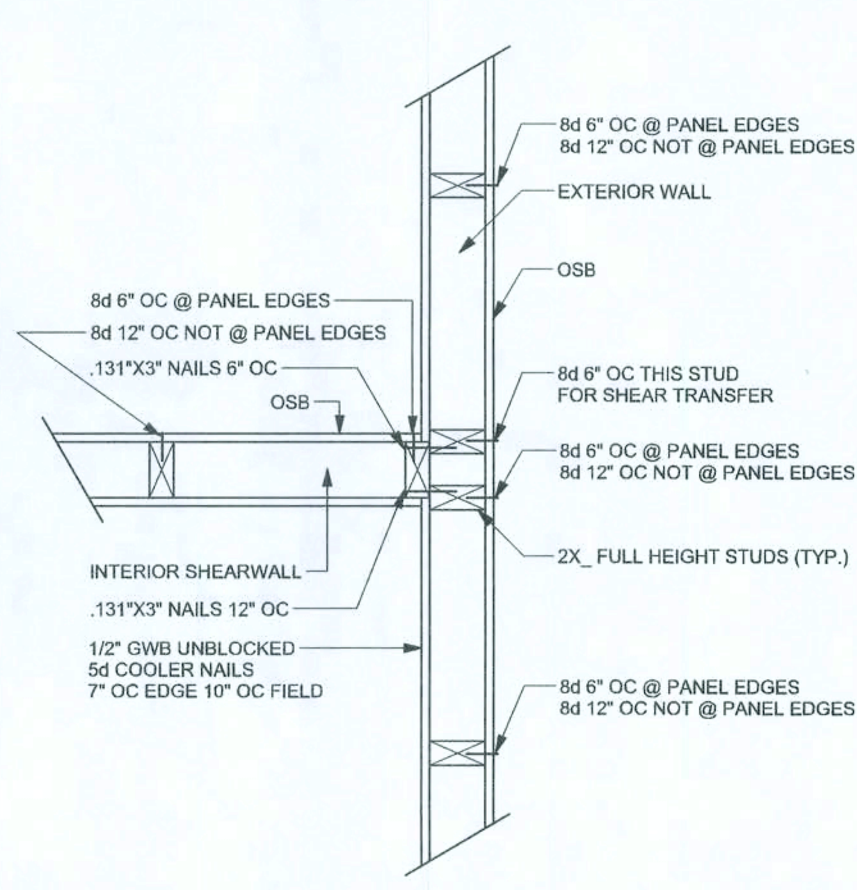
TRUSS CONNECTOR	UPLIFT SYP	UPLIFT SPF	F1 SYP	F2 SYP	F1 SPF	F2 SPF	TO RAFTER/TRUSS	TO PLATES	
H5	455	265	115	200	100	170	4-8d x 1 1/2"	4-8d x 1 1/2"	
H3	415	290	125	160	105	140	4-8d x 1 1/2"	4-8d x 1 1/2"	
H2.5	415	365	150	150	130	130	5-8d x 1 1/2"	5-8d x 1 1/2"	
H2.5A	480	480	110	110	110	110	5-8d x 1 1/2"	5-8d x 1 1/2"	
H6	950	820					8-8d	8-8d	
H8	745	565					5-10d x 1 1/2"	5-10d x 1 1/2"	
H14-1	1465	1050	515	265	480	245	12-8d x 1 1/2"	13-8d	
H14-2	1465	1050	515	265	480	245	12-8d x 1 1/2"	15-8d	
H10	990	850	585	525	505	450	8-8d x 1 1/2"	8-8d x 1 1/2"	
H10-2	760	655	455	395	390	340	6-10d	6-10d	
H16	1470	1265					2-10d x 1 1/2"	10-10d x 1 1/2"	
H16-2	1470	1265					2-10d x 1 1/2"	10-10d x 1 1/2"	
LTS12 - LTS20	1000	620					6-10d x 1 1/2"	6-10d x 1 1/2"	
MTS12 - MTS30	1000	860					7-10d x 1 1/2"	7-10d x 1 1/2"	
HTS16 - HTS30	1450	1245					12-10d x 1 1/2"	12-10d x 1 1/2"	
HEAVY GIRDER TIEDOWNS									**TO FOUNDATION**
LGT2	2050	1785	700	170	700	170	14-16d	14-16d	
LGT3-SDS2.5	3685	2655	795	410	795	410	12-SDS 1/4" x 2 1/2"	26-16dS	
LGT4-SDS3	4060	3860	2000	675	2000	675	12-SDS 1/4" x 3"	36-16dS	
MGT	3965	3330					22 -10d		5/8" ANCHOR
HGT-2	10980	6485					16 -10d		2-5/8" ANCHOR
HGT-3	10530	9035					16 -10d		2-5/8" ANCHOR
HGT-4	9250	9250					16 -10d		2-5/8" ANCHOR
STUD STRAP CONNECTOR									**TO STUDS**
SSP DOUBLE TOP PLATE	435	435						3-10d	4 -10d
SSP SINGLE SILL PLATE	455	420						1-10d	4 -10d
DSP DOUBLE TOP PLATE	825	825						6 -10d	8 -10d
DSP SINGLE SILL PLATE	825	600						2 -10d	8 -10d
SP1	585	535						4 -10d	6 -10d
SP2	1065	605						6 -10d	6 -10d
SP4	885	760							6-10d x 1 1/2"
SPH4	1240	1065							10-10d x 1 1/2"
SP6	885	760							6-10d x 1 1/2"
SPH6	1240	1065							10-10d x 1 1/2"
LSTA18	1235	1110							14-10d
LSTA21	1235	1235							16-10d
CS20	1030	1030							14-10d
CS16	1705	1705							22-10d
STUD ANCHORS							**TO STUDS**		**TO FOUNDATION**
LTT19	1350	1305					8-16d		1/2" ANCHOR
LTTI31	2310	2310					18-10d x 1 1/2"		5/8" ANCHOR
HD2A	2775	2570					2-5/8" BOLTS		5/8" ANCHOR
HTT16	4175	3695					18-16d		5/8" ANCHOR
HTT22	5260	5250					32-16d		5/8" ANCHOR
ABU44	2200	2200					12-16d		5/8" ANCHOR
ABU66	2300	2300					12-16d		5/8" ANCHOR
ABU88	2320	2320					18-16d		2-5/8" ANCHOR

(1) w/ INSTALLATION OF 4-16dS OPTIONAL NAIL HOLES
(2) FOR SYP GIRDER & SPF STUDS



(TYP.) CORNER FRAMING

WOOD FRAME



(TYP.) INTERSECTING WALL FRAMING

WOOD FRAME

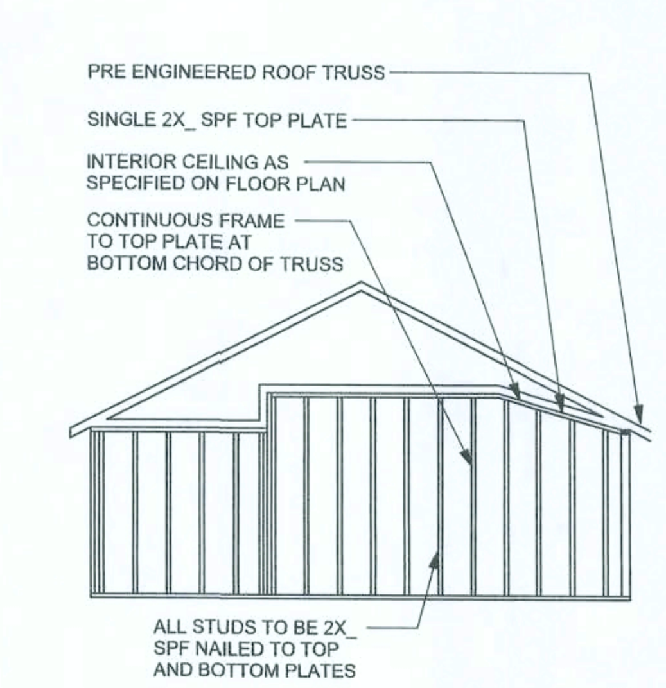
EXTERIOR WALL STUD TABLE FOR SPF #2 STUDS

(1) 2x4 @ 16" OC	TO 10'-1" STUD HEIGHT
(1) 2x4 @ 12" OC	TO 11'-2" STUD HEIGHT
(1) 2x6 @ 16" OC	TO 15'-7" STUD HEIGHT
(1) 2x6 @ 12" OC	TO 17'-3" STUD HEIGHT

THIS STUD HEIGHT TABLE IS PER 2012 WFCM, TABLE 3.20B4, EXTERIOR LOAD BEARING & NON LOAD BEARING STUD LENGTHS FOR WALLS WITH OSB EXTERIOR AND 1/2" GYP INTERIOR RESISTING INTERIOR ZONE WINDLOADS, 130 MPH, EXPOSURE C, STUD DEFLECTION LIMIT H/240 (NOT OK FOR SOME BRITTLE FINISH?). STUD SPACINGS SHALL BE MULTIPLIED BY 0.8 FOR FRAMING LOCATED WITHIN 4 FEET OF CORNERS FOR END ZONE LOADING. (END ZONE EXAMPLE 16" O.C. x 0.8 = 12.8" O.C.)

GRADE & SPECIES TABLE

		Fb (psi)	E (10^6 psi)
2x8	SYP #2	1200	1.6
2x10	SYP #2	1050	1.6
2x12	SYP #2	975	1.6
GLB	24F-V3 SP	2400	1.8
LSL	TIMBERSTRAND	1700	1.7
LVL	MICROLAM	2900	2.0
PSL	PARALAM	2900	2.0



CONTINUOUS FRAME TO CEILING DIAPHRAGM DETAIL

WOOD FRAME

GENERAL NOTES:

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE 2010 FBCR. TRUSS ENGINEERING SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS. TRUSS ENGINEERING IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER AND SHALL BE SIGNED & SEALED BY THE MANUFACTURER'S DESIGN ENGINEER. IT IS THE BUILDER'S RESPONSIBILITY VERIFY THE TRUSS DESIGNER FULLY SATISFIED ALL THE ABOVE REQUIREMENTS AND TO SELECT UPLIFT CONNECTIONS BASED ON TRUSS ENGINEERING UPLIFT AND PROVIDE FOOTINGS FOR INTERIOR BEARING WALLS. BUILDER IS TO FURNISH TRUSS ENGINEERING TO WIND LOAD ENGINEER FOR REVIEW OF TRUSS REACTIONS ON THE BUILDING STRUCTURE. STRAP 2X6 RAFTERS WITH MIN UPLIFT CONNECTION 415LB EACH END; 2X8 RAFTERS 700 LB EACH END.

SITE PREPARATION: SITE ANALYSIS AND PREPARATION IS NOT PART OF THIS PLAN

FOUNDATION: CONFIRM THAT THE FOUNDATION DESIGN & SITE CONDITIONS MEET GRAVITY LOAD REQUIREMENTS (ASSUME 1500 PSF BEARING CAPACITY UNLESS VISUAL OBSERVATION OR SOILS TEST PROVES OTHERWISE

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS, F'c = 3000 PSI.

WELDED WIRE REINFORCED SLAB: 6" x 6" W1.4 x W1.4, FB = 85KSI, WELDED WIRE REINFORCEMENT FABRIC (W.W.M.) CONFORMING TO ASTM A185; LOCATED IN MIDDLE OF THE SLAB; SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT SPACINGS NOT TO EXCEED 3'.

FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER REINFORCEMENT. FIBER LENGTH 1/2 INCH TO 2 INCHES. DOSAGE AMOUNTS FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD PER THE MANUFACTURER'S RECOMMENDATIONS. FIBERS TO COMPLY WITH ASTM C 1116. SUPPLIER TO PROVIDE ASTM C 1116 CERTIFICATION OF COMPLIANCE WHEN REQUESTED BY BUILDING OFFICIAL.

CONTROL JOINTS: WHERE SPECIFIED, SAWN CONTROL JOINTS IN SLAB-ON-GRADE SHALL BE CUT IN ACCORDANCE WITH ACI 302. JOINTS SHALL BE CUT WITHIN 12 HOURS OF SLAB PLACEMENT. THE LENGTH / WIDTH RATIOS OF SLAB AREAS SHALL NOT EXCEED 1.5 AND TYPICAL SPACING OF CUTS TO BE 12FT. DO NOT CUT WWM OR REINFORCING STEEL. (RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER AND CONTRACTOR'S APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCOURAGE THE SLAB TO CRACK ON A GIVEN LINE.)

REBAR: ASTM A 615, GRADE 60, DEFORMED BARS, FY = 60 KSI. ALL LAP SPLICES 40 * DB (25" FOR #5 BARS); UNO. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-96, U.N.O.

GLULAM BEAMS: GLB, 24F-V3SP, Fb = 2.4ksi, E = 1800ksi; UNO. SUPPLIER MAY SUPPLY AN ALTERNATE BEAM WITH EQUAL PROPERTIES OR MAY SUBMIT THEIR OWN SIZING CALCS.

ROOF SHEATHING: ALL ROOFS ARE HORIZONTAL DIAPHRAGMS; 7/16" OSB SHEATHING, UNBLOCKED, APPLIED PERPENDICULAR TO FRAMING, OVER A MINIMUM OF 3 FRAMING MEMBERS, WITH PANEL EDGES STAGGERED, FASTENED WITH 8d COMMON NAILS (.131), 6"OC PANEL EDGES, 12"OC INTERMEDIATE MEMBERS, GABLE ENDS AND DIAPHRAGM BOUNDARY; 4"OC, UNO.

STRUCTURAL CONNECTORS: MANUFACTURERS AND PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLE NOT ENDORSEMENT. AN EQUIVALENT DEVICE OF THE SAME OR OTHER MANUFACTURER CAN BE SUBSTITUTED FOR ANY DEVICES LISTED IN THE EXAMPLE TABLES AS LONG AS IT MEETS THE REQUIRED LOAD CAPACITIES. MANUFACTURER'S INSTALLATION INSTRUCTIONS MUST BE FOLLOWED TO ACHIEVE RATED LOADS.

ANCHOR BOLTS: A-307 ANCHOR BOLTS WITH MINIMUM EMBEDMENT AS SPECIFIED IN DRAWINGS BUT NO LESS THAN 7" IN CONCRETE OR REINFORCED BOND BEAM OR 15" IN GROUTED CMU.

WASHERS: WASHERS USED WITH 1/2" BOLTS TO BE 2" x 2" x 9/64"; WITH 5/8" BOLTS TO BE 3" x 3" x 9/64"; WITH 3/4" BOLTS TO BE 3" x 3" x 9/64"; WITH 7/8" BOLTS TO BE 3" x 3" x 5/16"; UNO.

NAILS: ALL NAILS ARE COMMON NAILS UNLESS OTHERWISE SPECIFIED OR ACCEPTED BY FBC TEST REPORTS AS HAVING EQUAL STRUCTURAL VALUES.

BUILDER'S RESPONSIBILITY

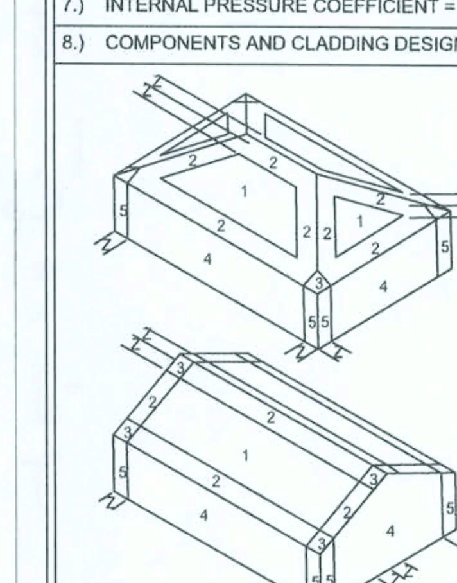
THE BUILDER AND OWNER ARE RESPONSIBLE FOR THE FOLLOWING, WHICH ARE SPECIFICALLY NOT PART OF THE WIND LOAD ENGINEER'S SCOPE OF WORK.
CONFIRM SITE CONDITIONS, FOUNDATION BEARING CAPACITY, GRADE AND BACKFILL HEIGHT, WIND SPEED AND DEBRIS ZONE, AND FLOOD ZONE.
PROVIDE MATERIALS AND CONSTRUCTION TECHNIQUES, WHICH COMPLY WITH 2010 FBCR REQUIREMENTS FOR THE STATED WIND VELOCITY AND DESIGN PRESSURES.
PROVIDE A CONTINUOUS LOAD PATH FROM TRUSSES TO FOUNDATION. IF YOU BELIEVE THE PLAN OMITS A CONTINUOUS LOAD PATH CONNECTION, CALL THE WIND LOAD ENGINEER IMMEDIATELY.
VERIFY THE TRUSS MANUFACTURER'S SEALED ENGINEERING INCLUDES TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS.

ROOF SYSTEM DESIGN

THE SEAL ON THESE PLANS FOR COMPLIANCE WITH 2010 FBC, SECTION 1609 IS BASED ON REACTIONS, UPLIFTS, AND BEARING LOCATIONS IN TRUSS ENGINEERING SUBMITTED TO THE WIND LOAD ENGINEER. IT IS THE RESPONSIBILITY OF THE BUILDER TO CHECK ALL DETAILS OF THE COMPLETE ROOF SYSTEM DESIGN SUBMITTED BY THE TRUSS MANUFACTURER AND HAVE IT SIGNED, AND SEALED BY A DESIGN PROFESSIONAL FOR CORRECT APPLICATION OF 2010 FBC REQUIRED LOADS AND ANY SPECIAL LOADS. THE BUILDER IS RESPONSIBLE TO REVIEW EACH INDIVIDUAL TRUSS MEMBER AND THE TRUSS ROOF SYSTEM AS A WHOLE AND TO PROVIDE RESTRAINT FOR ANY LATERAL BRACING. THE BUILDER SHOULD USE CARE CHECKING THE ROOF DESIGN BECAUSE THE WIND LOAD ENGINEER IS SPECIFICALLY NOT RESPONSIBLE FOR THE TRUSS LAYOUT WHICH WAS CREATED BY THE TRUSS MANUFACTURER AND THE TRUSS DESIGNER ALSO DENIES RESPONSIBILITY FOR THE LAYOUT PER NOTES ON THEIR SEALED TRUSS SHEETS.

DESIGN DATA

WIND LOADS PER 2010 FLORIDA BUILDING CODE, SECTION 1609
(ENCLOSED SIMPLE DIAPHRAGM BUILDINGS WITH FLAT, HIPPED, OR GABLE ROOFS; MEAN ROOF HEIGHT
BUILDING IS NOT IN THE HIGH VELOCITY HURRICANE ZONE
BUILDING IS NOT IN THE WIND-BORNE DEBRIS REGION
1.) BASIC WIND SPEED = 130 MPH, (3 SEC GUST, 33 FT, EXP. C)
2.) WIND EXPOSURE = C, BUILDER MUST FIELD VERIFY
3.) TOPOGRAPHIC FACTOR = 1.0, BUILDER MUST FIELD VERIFY
4.) BUILDING CATEGORY = II, (MRI = 700 YR)
5.) ROOF ANGLE = 7-45 DEGREES
6.) MEAN ROOF HEIGHT = <30 FT
7.) INTERNAL PRESSURE COEFFICIENT = N/A (ENCLOSED BUILDING)
8.) COMPONENTS AND CLADDING DESIGN WIND PRESSURES (TABLE R301.2(2))



Zone	Effective Wind Area (ft2)			
	10			
1	39	-43		
2	39	-68		
3	39	-100		
4	43	-46		
5	43	-57		

Garage Door 2010 FBCR, Table R301.2.(4)		
8x7 Garage Door	37	-42
16x7 Garage Door	36	-40

DESIGN LOADS	
FLOOR	100 PSF UNIFORM LOAD
	2000 LBS CONCENTRATED LOAD
ROOF	20 PSF (FLAT OR <4:12)
	16 PSF (4:12 TO <12:12)
SOIL BEARING CAPACITY 1500PSF	
NOT IN FLOOD ZONE (BUILDER TO VERIFY)	

REVISIONS	

SOFTPLAN ARCHITECTURAL DESIGN SOFTWARE

ENGINEER OF RECORD: Mark Disosway, PE No.53915, POB 868, Lake City, FL 32056, 386-75-5419

DIMENSIONS
Stated dimensons supercede scaled dimensions. Refer all questions to Mark Disoswa, P.E. for resolution. Do not proceel without clarification.

CERTIFICATION: These plans and Cover Sheet A-0, attached, comply with applicable portions of the2010 Florida Building Code to the best of my knowledge

LIMITATION: This design is valid for one building at speified location. In case of conflict, structural requrements, scope of work, and builder responibilities control.

MARK DISOSWAY P.E. 53915
MARK D DISOSWAY III LICENSE No 53915 STATE OF FLORIDA PROFESSIONAL ENGINEER
[illegible]
09 JUL 12
SEAL

Bryant Construction Co.

Mayo Fertilizer & Farm Supply Office Addition (Mike Shaw)

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Lake City, Florida 32025
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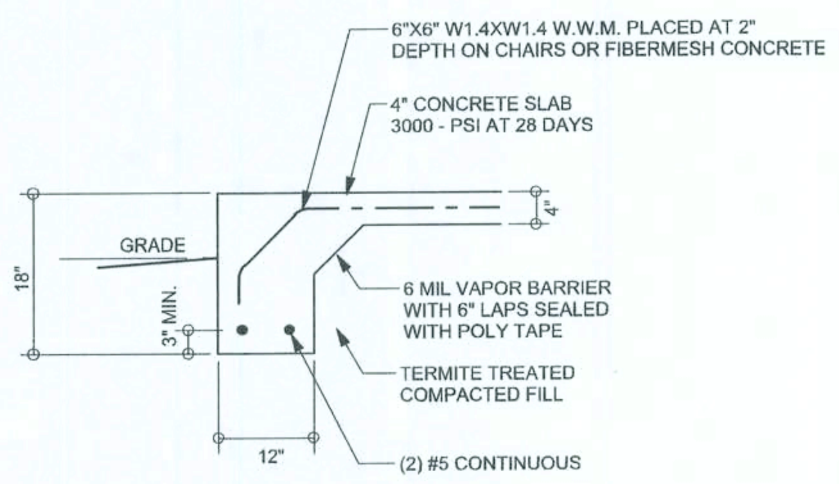
PRINTED DATE: July 06, 2012

DRAWN BY: Evan Beasley	CHECKED BY:

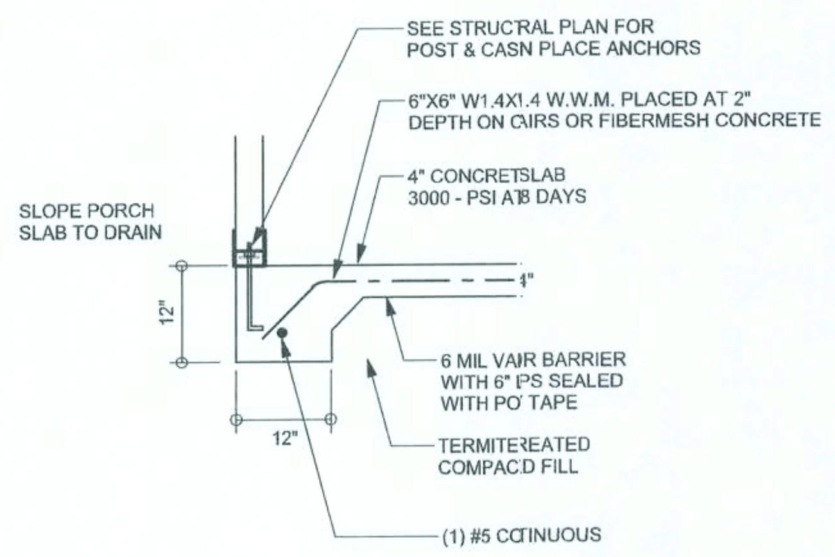
FINALES DATE: 2012-07-06

JOB NUMBER: 1205066

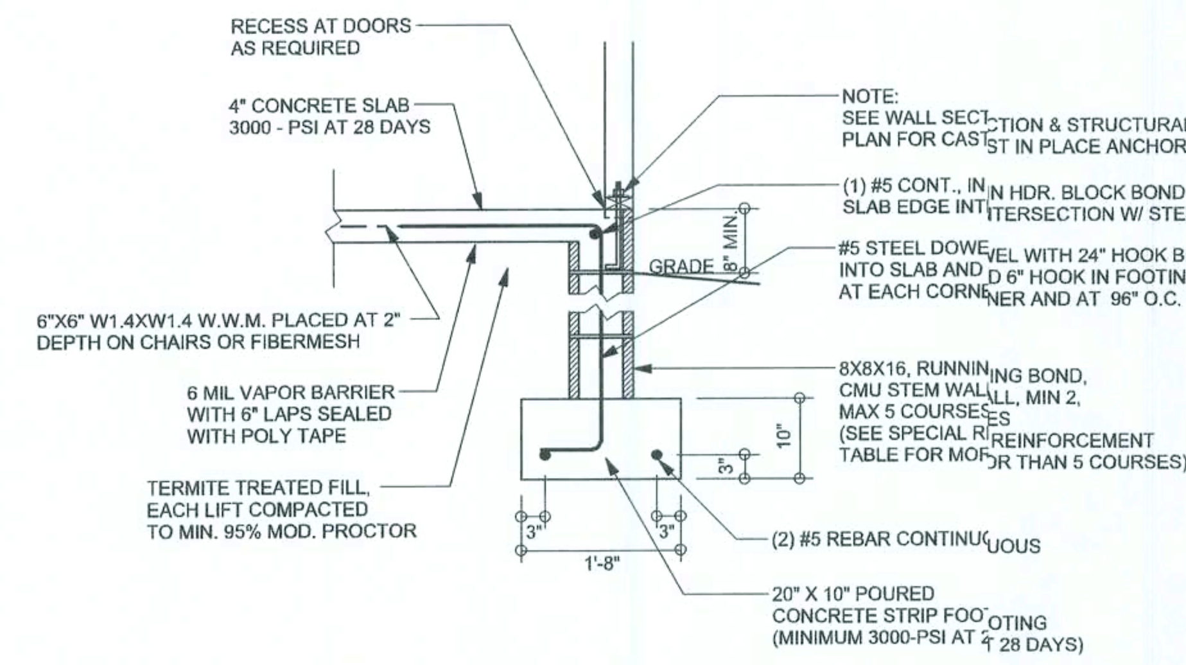
DRAWING NUMBER
S-1
OF 8 SHEETS



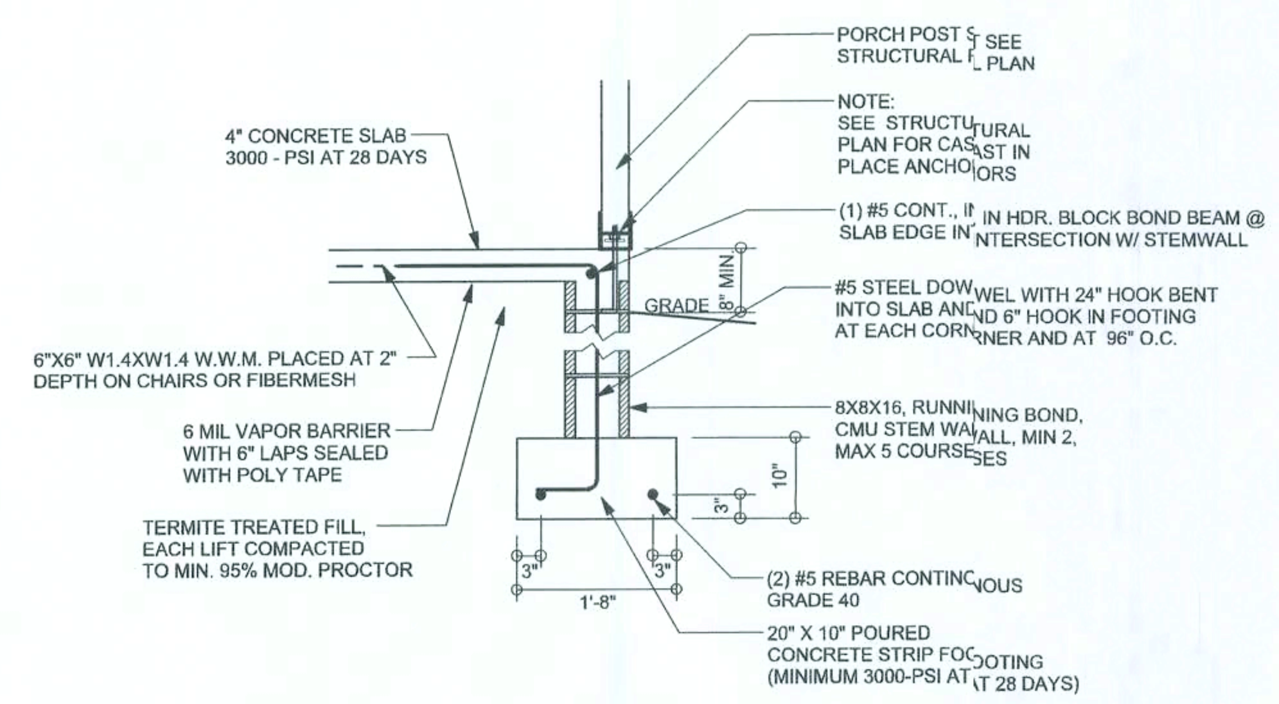
F1 S-2 MONOLITHIC FOOTING
SCALE: 1/2" = 1'-0"



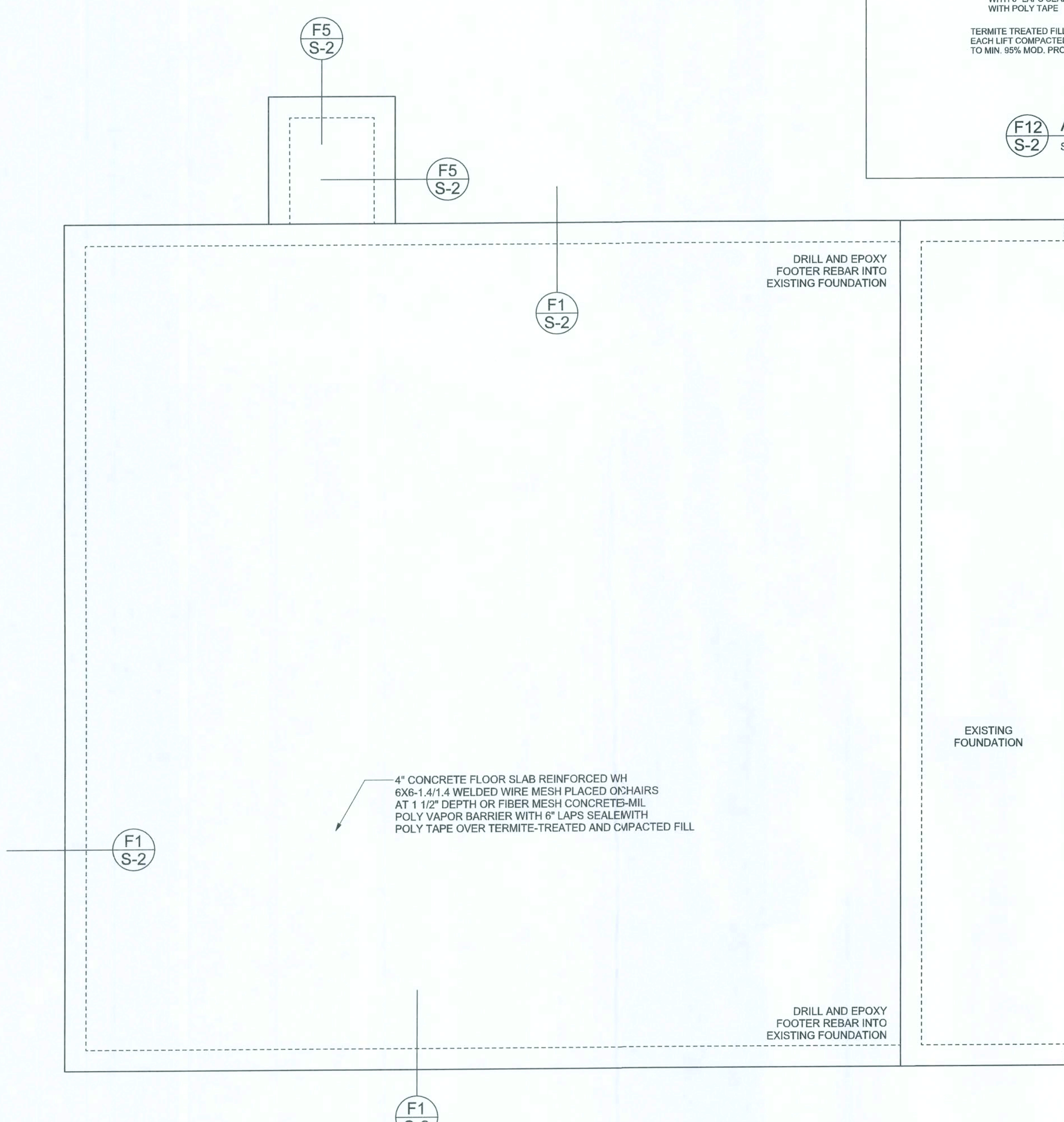
F5 S-2 PORCH FOOTING
SCALE: 1/2" = 1'-0"



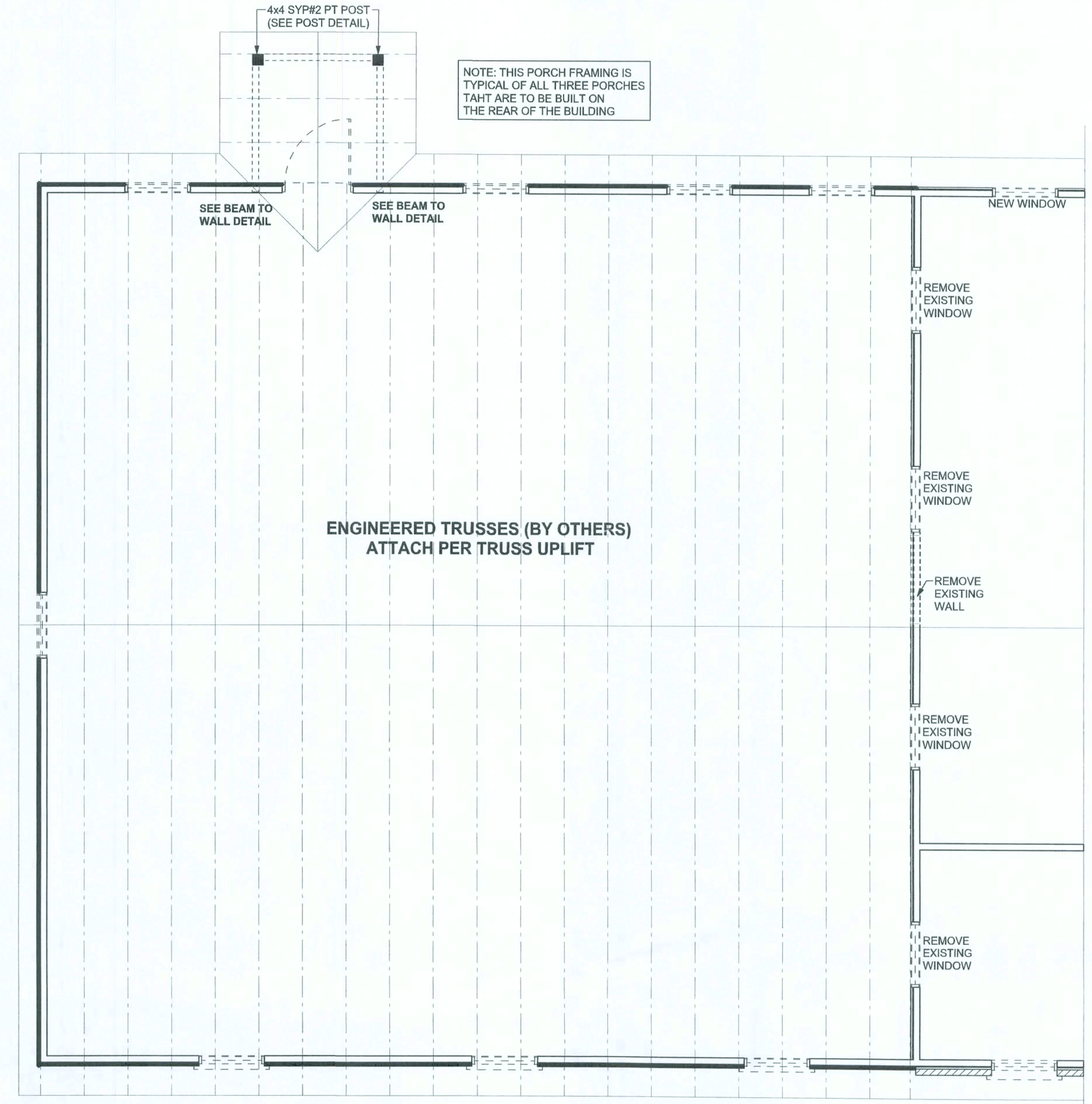
F1 S-2 ALT. STEM WALL FOOTING
SCALE: 1/2" = 1'-0"



F12 S-2 ALT. STEM WALL PORCH FOOTING
SCALE: 1/2" = 1'-0"



FOUNDATION PLAN
SCALE: 1/4" = 1'-0"
DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS



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

STRUCTURAL PLAN NOTES

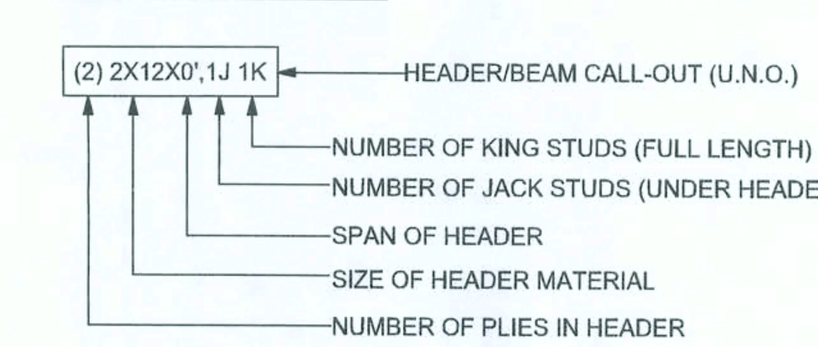
SN-1 ALL LOAD BEARING FRAME WALL & PORCH HEADERS SHALL BE A MINIMUM OF (2) 2X10 SYP#2 (U.N.O.)

SN-2 ALL LOAD BEARING FRAME WALL HEADERS SHALL HAVE (1) JACK STUD & (1) KING STUD EACH SIDE (U.N.O.)

SN-3 DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS

SN-4 PERMANENT TRUSS BRACING IS TO BE INSTALLED AT LOCATIONS AS SHOWN ON THE SEALED TRUSS DRAWINGS. LATERAL BRACING IS TO BE RESTRAINED PER BCSI1-03, BCSI-B1, BCSI-B2, & BCSI-B3. BCSI-B1, BCSI-B2, & BCSI-B3 ARE FURNISHED BY THE TRUSS SUPPLIER, WITH THE SEALED TRUSS PACKAGE

HEADER LEGEND



TOTAL SHEAR WALL SEGMENTS

INDICATES SHEAR WALL SEGMENTS

	REQUIRED	ACTUAL
TRANSVERSE	30.3'	37.0'
LONGITUDINAL	32.4'	53.0'

WALL LEGEND

	EXTERIOR WALL
	INTERIOR NON-LOAD BEARING WALL
	INTERIOR LOAD BEARING WALL w/ NO UPLIFT
	INTERIOR LOAD BEARING WALL w/ UPLIFT

REVISIONS

SOFTPLAN ARCHITECTURAL DESIGN SOFTWARE

ENGINEER OFRECORD: Mark Disosway, PE No.53915, IOB 868, Lake City, FL 32056, 386-754-5419

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MARK DISOSWAY P.E. 53915
SEAL
06 JUL 12

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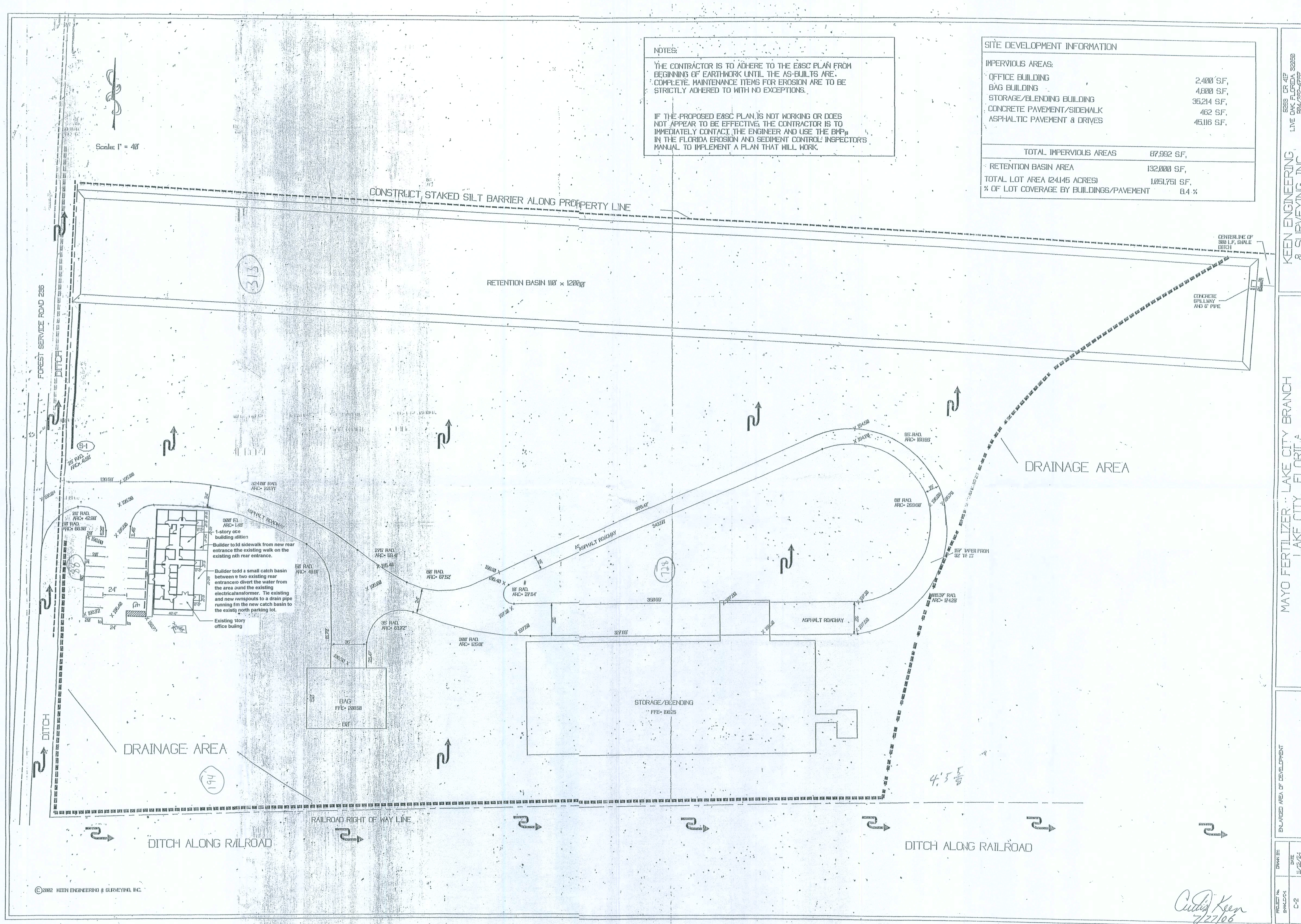
DRAWN BY: Evan Beamley	CHECKED BY:
FINALES DATE: 2012-07-06	

JOB NUMBER: 1205066

DRAWING NUMBER
S-2
OF 8 SHEETS


NOTES:
THE CONTRACTOR IS TO ADHERE TO THE E&SC PLAN FROM BEGINNING OF EARTHWORK UNTIL THE AS-BUILTS ARE COMPLETE. MAINTENANCE ITEMS FOR EROSION ARE TO BE STRICTLY ADHERED TO WITH NO EXCEPTIONS.
IF THE PROPOSED E&SC PLAN IS NOT WORKING OR DOES NOT APPEAR TO BE EFFECTIVE, THE CONTRACTOR IS TO IMMEDIATELY CONTACT THE ENGINEER AND USE THE BMPs IN THE FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL TO IMPLEMENT A PLAN THAT WILL WORK.
SITE DEVELOPMENT INFORMATION
IMPERVIOUS AREAS:
OFFICE BUILDING 2,400 S.F.
BAG BUILDING 4,800 S.F.
STORAGE/BLENDING BUILDING 35,214 S.F.
CONCRETE PAVEMENT/SIDEWALK 462 S.F.
ASPHALTIC PAVEMENT & DRIVES 45,116 S.F.
TOTAL IMPERVIOUS AREAS 87,992 S.F.
RETENTION BASIN AREA 132,000 S.F.
TOTAL LOT AREA (24.145 ACRES) 1,051,751 S.F.
% OF LOT COVERAGE BY BUILDINGS/PAVEMENT 8.4 %
Scale: 1" = 40'
CONSTRUCT STAKED SILT BARRIER ALONG PROPERTY LINE
RETENTION BASIN 110' x 1200'
CENTERLINE OF 300 L.F. SWALE DITCH
CONCRETE SPILLWAY AND 6" PIPE
FOREST SERVICE ROAD 236
DITCH
DRAINAGE AREA
ASPHALT ROADWAY
1-story oce building idition
Builder todd sidewalk from new rear entrance tthe existing walk on the existing nth rear entrance.
Builder todd a small catch basin between e two existing rear entranceo divert the water from the area ound the existing electricalansformer. Tie existing and new ownspouts to a drain pipe running fm the new catch basin to the existi north parking lot.
Existing story office buiing
BAG
FFE= 200.50
STORAGE/BLENDING
FFE= 198.25
157' TAPER FROM 32' TO 15'
RAILROAD RIGHT OF WAY LINE
DITCH ALONG RAILROAD
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KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
904/362-4767
ENG. LIC. EB 5761
MAYO FERTILIZER :: LAKE CITY BRANCH
LAKE CITY, FLORIDA
ENLARGED AREA OF DEVELOPMENT
PROJECT No. DRAWN BY: DATE 11/12/04
C-2
Curtis Keen
7/27/06
AiNC-2.dwg 2/14/2005