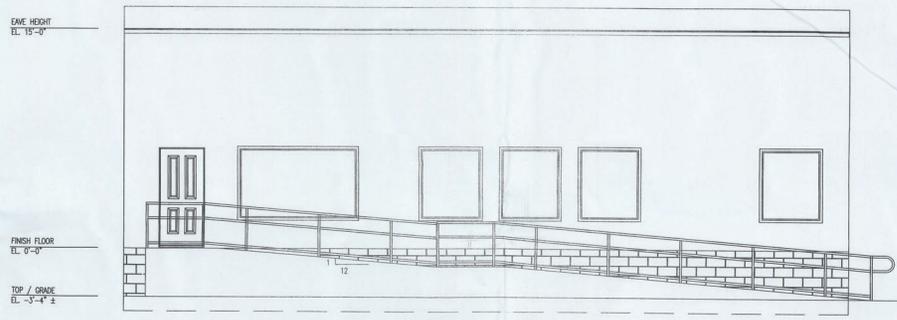




GAMBLE & ASSOCIATES CONSTRUCTION

COLUMBIA GRAIN – 2014 OFFICE EXPANSION

COLUMBIA COUNTY, FL



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

APPLICABLE CODES
 2010 FLORIDA BUILDING CODE
 2010 NATIONAL ELECTRIC CODE (NFPA 70)
 2010 FLORIDA PLUMBING CODE
 2010 FLORIDA MECHANICAL CODE
 2010 FLORIDA FIRE PROTECTION

OCCUPANCY CLASS
 BUSINESS (B)

OCCUPANCY LOADING / EGRESS REQUIREMENTS / CALCULATIONS SUMMARY
 100 GROSS OCCUPANTS PER S.F. * 1600 S.F. = 16 MAXIMUM OCCUPANTS

MAXIMUM LENGTH OF EGRESS TRAVEL DISTANCE: ...200 FT. (TABLE 1016.1)
 MAXIMUM LENGTH OF COMMON PATH OF EGRESS TRAVEL (CPET): ...75 FT
 LONGEST ACTUAL LENGTH OF EGRESS TRAVEL DISTANCE: ...58 FT
 MINIMUM NUMBER OF EXITS: ...1 (TABLE 1015.1) ACTUAL: ...2

CONSTRUCTION DOCUMENTS
 THE CUSTOMER IS RESPONSIBLE FOR DELIVERING THE REQUIRED SETS OF CONSTRUCTION DOCUMENTS TO THE PERMIT ISSUING AUTHORITIES FOR THE ISSUANCE OF CONSTRUCTION PERMITS. THE CONTRACTOR SHALL REVIEW THE CONSTRUCTION DOCUMENTS AND VERIFY ALL DIMENSIONS. ANY DISCREPANCIES SHALL BE REPORTED TO YOUR SALES REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF ANY WORK OR FABRICATION OF ANY MATERIALS.

DO NOT SCALE OFF THESE PLANS
 AMPLE DIMENSIONS ARE SHOWN ON THE PLANS TO LOCATE ALL ITEMS. SIMPLE ARITHMETIC MAY BE USED TO DETERMINE THE LOCATIONS OF THOSE ITEMS NOT DIMENSIONED.

BUILDING CRITERIA
 CONSTRUCTION TYPE VB (TABLE 601) UNPROTECTED – NON SPRINKLED
 ALLOWABLE AREA: ...9000 S.F. ACTUAL: ...1,600 S.F.
 ALLOWABLE STORIES: ...1 ACTUAL: ...1

WIND DESIGN INFORMATION
 WIND SPEED: ...120 MPH
 CATEGORY: ...J
 EXPOSURE: ...B
 INTERNAL PRESSURE: ...0.18 +/-

CLADDING COMPONENTS
 ZONE 1: 10 S.F. ...23.7/-25.9 PSF
 ZONE 2: 10 S.F. ...23.7/-30.3 PSF
 ZONE 3: 10 S.F. ...23.7/-51.28 PSF
 ZONE 4: 10 S.F. ...25.9/-28.1 PSF
 ZONE 5: 10 S.F. ...25.9/-34.7 PSF

LEGEND	
SYMBOL	DESCRIPTION
	ELEVATION MARK
	SECTION MARK
	DETAIL CALLOUT
	ELEVATION INDICATOR
	DOOR TAG
	WINDOW TAG
	ROOM TAG
	REVISION CLOUD W/ TAG

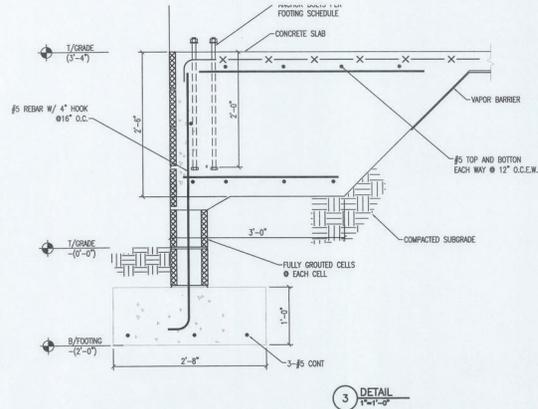
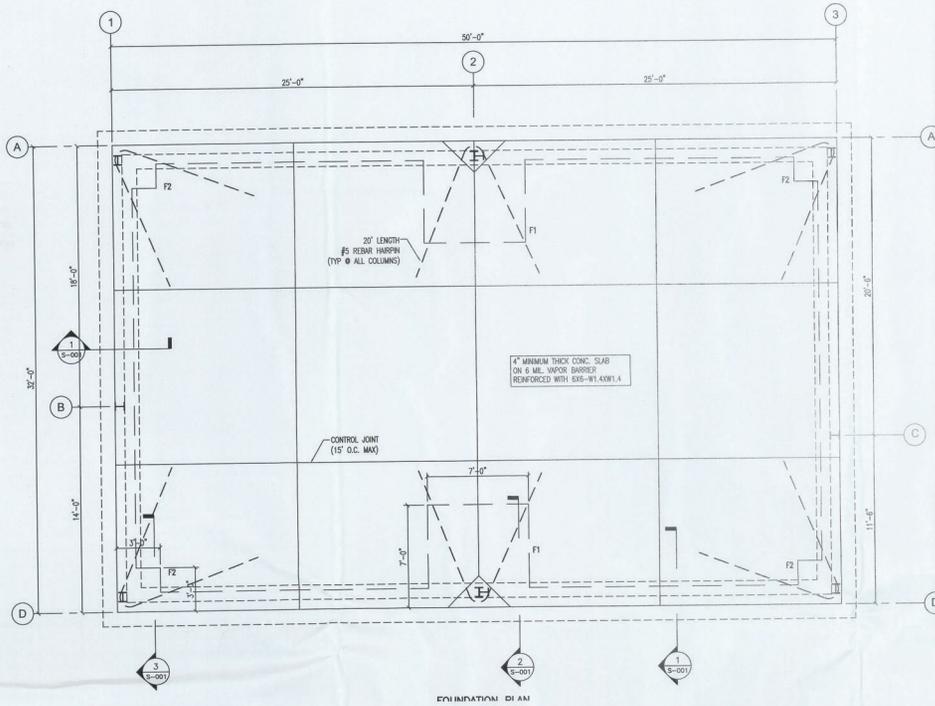
DRAWING LIST

14028-T-001	TITLE
14028-S-001	STRUCTURAL AND GENERAL NOTES
14028-S-002	FOUNDATION PLAN
14028-A-001	FLOOR PLAN
14028-A-002	ELEVATIONS VIEWS
14028-A-003	LIFE SAFETY PLAN
14028-E-001	LIGHTING AND POWER PLAN
14028-M-001	MECHANICAL PLANS
14028-P-001	PLUMBING AND SEWER PLAN

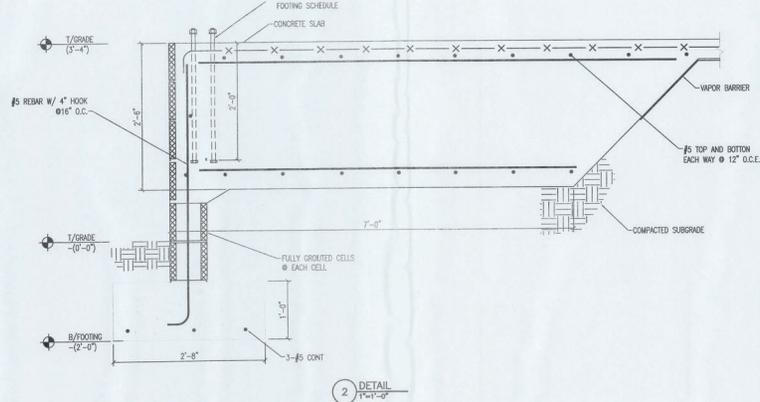
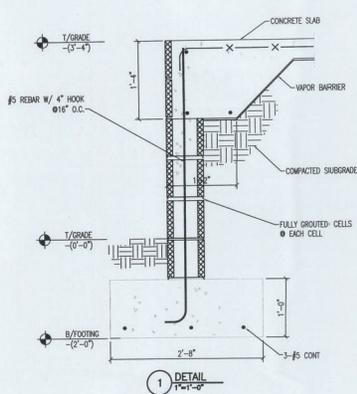


0	RELEASED FOR CONSTRUCTION	GG	GG	8/14			
REV	DESCRIPTION	APPRD	BY	CHK'D DATE			
COLUMBIA GRAIN – 2014 OFFICE EXPANSION							
LAKE CITY, FL							
GAMBLE & ASSOCIATES CONSTRUCTION		GILL ENGINEERING SERVICES					
DRAWN BY GG		AUTH # 30824					
CHKD BY GG		GARY GILL, PE 51342					
APPRD BY		426 SW COMMERCE DR 1088-M					
TITLE		LAKE CITY, FL 32025					
		386-590-1242					
TITLE							
PROJECT #:	14028	DWG. NO.:	14028-T-001	SHT.:	1	REV.:	0

PLOTSCALE

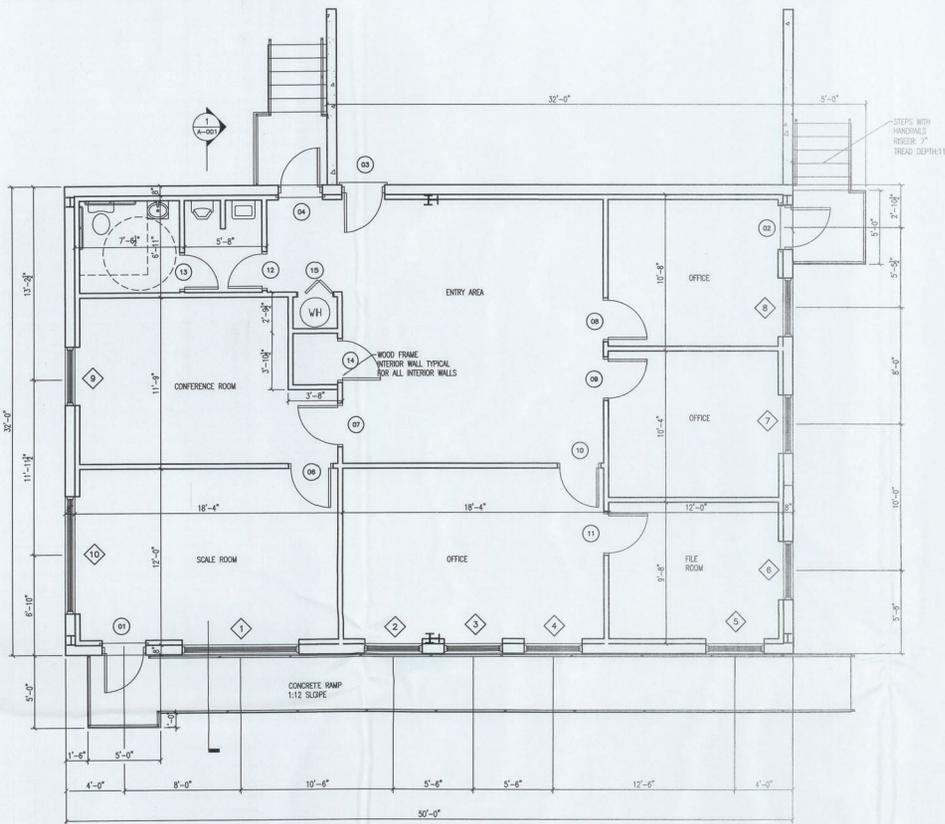


FOOTING MARK	FOOTING DIMENSIONS		BOTTOM REBAR		TOP REBAR		ANCHOR BOLT	
	SIZE	DEPTH	SIZE	SPACING	SIZE	SPACING	LENGTH	EMBEDMENT
F1	7'-0"x7'-0"	2'-8"	5# @ 12" E.W.	12"	5# @ 12" E.W.	12"	30"	24" MIN
F2	3'-0"x3'-0"	2'-8"	5# @ 12" E.W.	12"	5# @ 12" E.W.	12"	30"	24" MIN



0	RELEASED FOR CONSTRUCTION	GG	GG	8/14
REV	DESCRIPTION	APPROD	BY	CHKD/ DATE
COLUMBIA GRAIN - 2014 OFFICE EXPANSION LAKE CITY, FL				
GAMBLE & ASSOCIATES CONSTRUCTION		GILL ENGINEERING SERVICES, INC.		
DRAWN BY: GG	SCALE	AUTH # 30824		
CHKD BY: GG	SCALE	GARY GILL, P.E. 51942		
APPROD BY:		426 SW COMMERCE DR. #100		
		LAKE CITY, FL 32025		
		386-590-1242		
FOUNDATION PLAN				
PROJECT #:	14028	DWG. NO.:	14028-S-002	SHT. 3
				REV. 0

PLOTS/SCALE



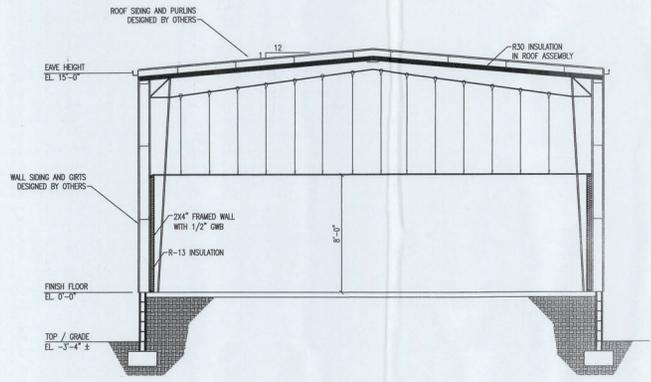
FLOOR PLAN
1/4" = 1'-0"
BUILDING AREA: 1600 S.F.

DOOR AND FRAME SCHEDULE

MARK	DOOR SIZE			MATL	FRAME		NOTES
	WD	HGT	THK		MATL	MATL	
1	3'-0"	6'-8"	1 3/4"	METAL	METAL	---	---
2	3'-0"	6'-8"	1 3/4"	METAL	METAL	---	---
3	3'-0"	6'-8"	1 3/4"	METAL	METAL	---	Existing
4	3'-0"	6'-8"	1 3/4"	METAL	METAL	---	---
6	3'-0"	6'-8"	1 3/4"	WOOD	WOOD	---	---
7	3'-0"	6'-8"	1 3/4"	WOOD	WOOD	---	---
8	3'-0"	6'-8"	1 3/4"	WOOD	WOOD	---	---
9	3'-0"	6'-8"	1 3/4"	WOOD	WOOD	---	---
10	3'-0"	6'-8"	1 3/4"	WOOD	WOOD	---	---
11	3'-0"	6'-8"	1 3/4"	WOOD	WOOD	---	---
12	2'-8"	6'-8"	1 3/4"	WOOD	WOOD	---	Self-closer
13	2'-8"	6'-8"	1 3/4"	WOOD	WOOD	---	---
14	3'-0"	6'-8"	1 3/4"	WOOD	WOOD	---	---
15	2'-6"	6'-8"	1 3/4"	---	---	---	---

WINDOW SCHEDULE

MARK	SIZE		TYPE	MATERIAL	NOTES
	WIDTH	HEIGHT			
1	8'-0"	5'-0"	SINGLE HUNG	PER OWNER	---
2	4'-0"	5'-0"	SINGLE HUNG	PER OWNER	---
3	4'-0"	5'-0"	SINGLE HUNG	PER OWNER	---
4	4'-0"	5'-0"	SINGLE HUNG	PER OWNER	---
5	4'-0"	5'-0"	SINGLE HUNG	PER OWNER	---
6	4'-0"	5'-0"	SINGLE HUNG	PER OWNER	---
7	4'-0"	5'-0"	SINGLE HUNG	PER OWNER	---
8	4'-0"	5'-0"	SINGLE HUNG	PER OWNER	---
9	4'-0"	5'-0"	SINGLE HUNG	PER OWNER	---
10	8'-0"	5'-0"	SINGLE HUNG	PER OWNER	---



SECTION 1
1/4" = 1'-0"



REV	DESCRIPTION	APPRD BY	CHKD	DATE
0	RELEASED FOR CONSTRUCTION	GG	GG	8/14

COLUMBIA GRAIN - 2014 OFFICE EXPANSION
LAKE CITY, FL

GAMBLE & ASSOCIATES CONSTRUCTION DRAWN BY: GG CHKD BY: GG APPRD BY:	GILL ENGINEERING SERVICES AUTH # 30824 GARY GILL, PE 51942 426 SW COMMERCE DR 150 LAKE CITY, FL 32025 386-590-1242
--	---

FLOOR PLAN

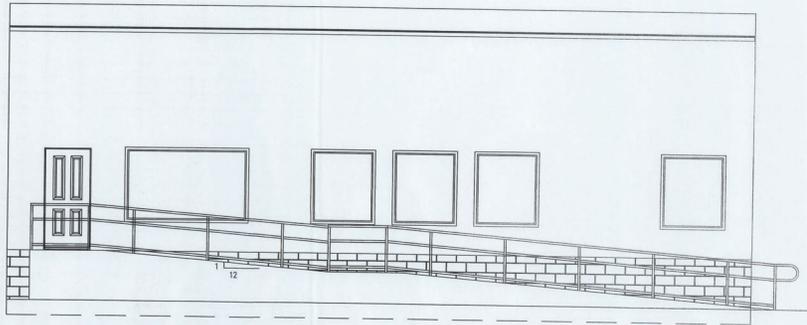
PROJECT #:	14028	DWG. NO.:	14028-A-001	SHT.	4	REV.	0
------------	-------	-----------	-------------	------	---	------	---

PLOTSCALE

EAVE HEIGHT
EL. 15'-0"

FINISH FLOOR
EL. 0'-0"

TOP / GRADE
EL. -3'-4" ±

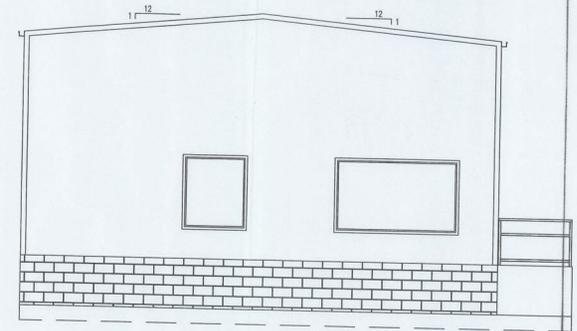


FRONT ELEVATION
1/4" = 1'-0"

EAVE HEIGHT
EL. 15'-0"

FINISH FLOOR
EL. 0'-0"

TOP / GRADE
EL. -3'-4" ±

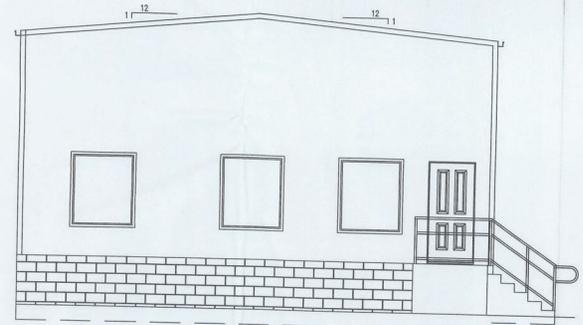


LEFT ELEVATION
1/4" = 1'-0"

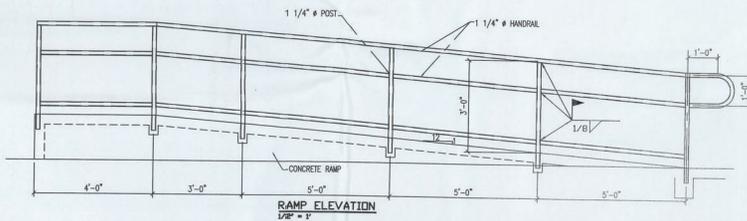
EAVE HEIGHT
EL. 15'-0"

FINISH FLOOR
EL. 0'-0"

TOP / GRADE
EL. -3'-4" ±



RIGHT VIEW
1/4" = 1'-0"

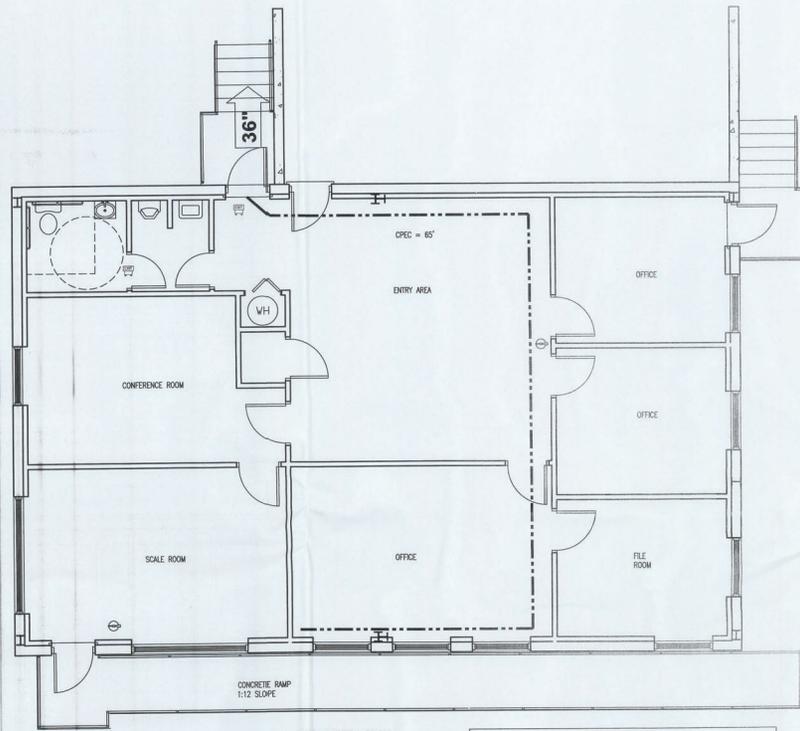


RAMP ELEVATION
1/8" = 1'-0"



0	RELEASED FOR CONSTRUCTION	GG	GG	B/
REV	DESCRIPTION	APPRO	BY	CHK'D DA
COLUMBIA GRAIN - 2014 OFFICE EXPANSION LAKE CITY, FL.				
GAMBLE & ASSOCIATES CONSTRUCTION		GILL ENGINEERING SERVICES		
DRAWN BY	GG	SCALE	GILL AUTH # 30824	
CHKD BY	GG	SCALE	GARY GILL, PE 51942	
APPRO BY		SCALE	426 SW COMMERCE DR	
			LAKE CITY, FL 32025	
			386-590-1242	
ELEVATIONS VIEWS				
PROJECT #:	14028	DWG. NO.	14028-A-002	SHT.
				5
				REV.
				0

PLOTSCALE



36" 3/4" x 1/2" FOR OCCUPANT = 10 OCCUPANTS

72" 3/4" x 1/2" FOR OCCUPANT = 50 OCCUPANTS

OCCUPANT LOAD FOR NEW BUILDING
 BUILDING AREA (GROSS) = 1600 SF :
 100 GROSS SQ. FT. / OCCUPANT (BUSINESS AREA)
 1600 / 100 = 16 OCCUPANTS
 TOTAL OCCUPANT LOAD = 16 OCCUPANTS

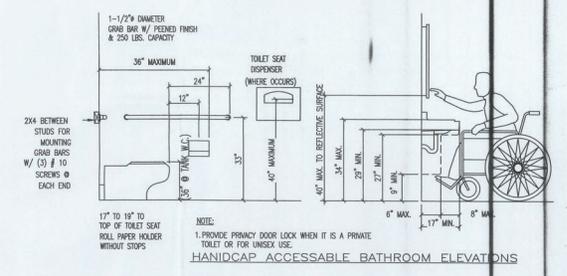
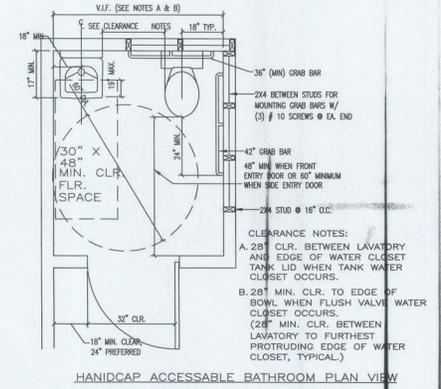
EXIT SIGNS WITH LIGHTS

2410BC PORTABLE FIRE EXTINGUISHER

LIFE SAFETY PLAN
 1/4" = 1'-0"

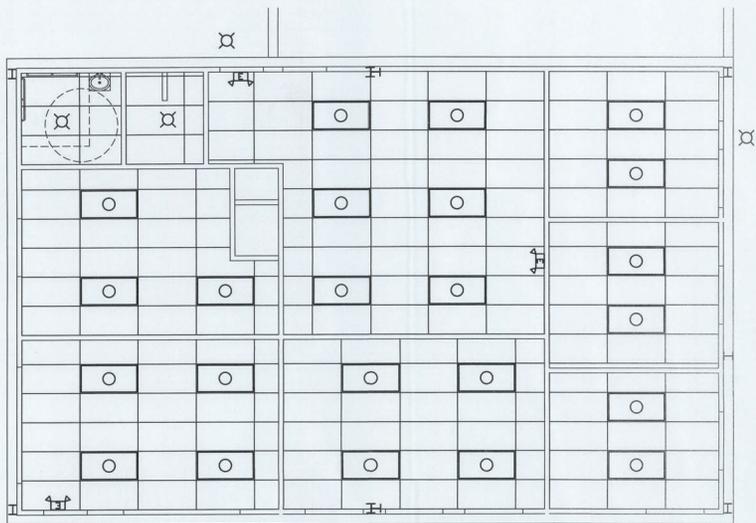
☉ = 2410BC PORTABLE FIRE EXTINGUISHER (2 REQUIRED)

NOTE:
 EACH PORTABLE FIRE EXTINGUISHER SHALL BE MOUNTED NO HIGHER THAN 5" FROM THE FLOOR.
 SHALL BE CLEARLY VISIBLE AND EASILY ACCESSIBLE. TAGS SHALL BE COPIED
 AND TAGGED BY A STATE LICENSED FIRE EXTINGUISHER CONTRACTOR INITIALLY AND ON
 AN ANNUAL BASIS THEREAFTER.

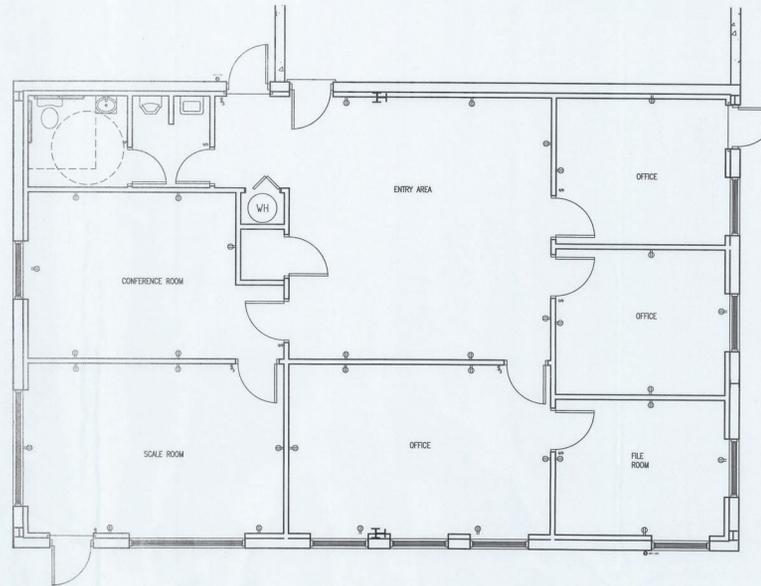


0	RELEASED FOR CONSTRUCTION	GG	GG	8/14
REV	DESCRIPTION	APPRD	BY	CHK'D DATE
COLUMBIA GRAIN - 2014 OFFICE EXPANSION				
LAKE CITY, FL				
GAMBLE & ASSOCIATES CONSTRUCTION	GILL ENGINEERING SERVICES	AUTH	30824	12
DRWN BY	SCALE	GARY SILL, PE	51942	12
CHKD BY	SCALE	426 SW COMMERCE DR	13034	12
APPRD BY		LAKE CITY, FL 32025		12
		386-590-1242		12
LIFE SAFETY PLAN				
PROJECT #:	DWG. NO.	SHT.	REV.	
14028	14028-A-003	6	0	

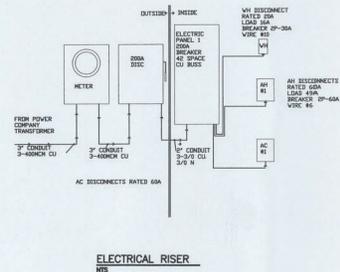
PLOTSCALE



LIGHTING PLAN
1/4" = 1'-0"



ELECTRICAL LEGEND		
SYMBOL	QUANTITY	DESCRIPTION
○	-	STANDARD OUTLET
⊕	-	GFI OUTLET
⊕	-	GFI OUTLET WITH WEATHER-PROOF COVER
⊕	-	3-WAY SWITCH
⊕	-	4-WAY SWITCH
⊕	-	DOUBLE POLE 20A SWITCH (WH DISCONNECT)
⊕	-	48" FLUORESCENT 4 BULB LIGHT FIXTURE
⊕	-	CEILING MOUNTED LIGHT FIXTURE 300W
⊕	-	CEILING MOUNTED LIGHT FIXTURE 75-100W
⊕	-	WALL SCONCE
⊕	-	INTERIOR FLOOD LIGHT
⊕	-	BATH VANITY LIGHT BAR
⊕	-	EXTERIOR FLOOD LIGHT WITH MOTION SENSOR
⊕	-	CEILING MOUNTED LIGHT FIXTURE 300W LISTED FOR DAMP OR WET LOCATIONS
⊕	-	CHANDOLIER
⊕	-	EXHAUST FAN-LIGHT
⊕	-	EXTERIOR COACH LIGHT
⊕	-	PHONE JACK
⊕	-	200V 4-WIRE 50A STOVE OUTLET
⊕	-	PANEL DESIGNATION-A CIRCUIT NUMBER-14
⊕	-	WEATHER-PROOF 3P DISCONNECT 60A
⊕	-	DISCONNECT 60A



ELECTRICAL RISER
1/8"

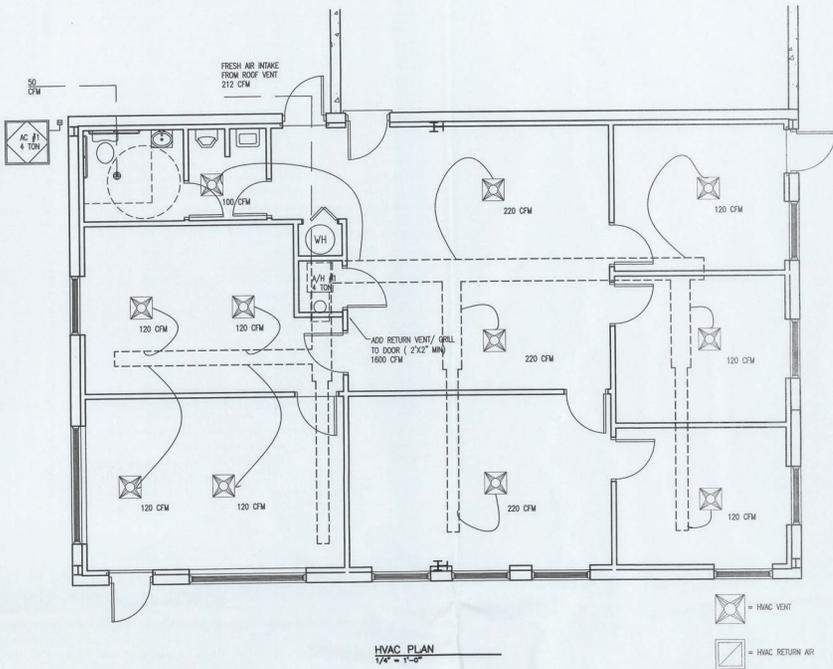
PANEL				FEEDER			
210 FROM	MAIN SWITCH BOARD	50		210 TO	NUMBER OF CIRCUITS	2	
41 VOLTAGE	740			41 VOLTAGE	WIRE SIZE 1L	250	
100 VOLTAGE	100			100 VOLTAGE	WIRE SIZE 1L	250	
PERSON LOAD AMPS	187			PERSON LOAD AMPS	WIRE SIZE NEUTRAL	250	
NEUTRAL BUS	15			NEUTRAL BUS	WIRE SIZE (ROUND)	25	
GROUND BUS	15			GROUND BUS			
AVAILABLE FAULT CURRENT AT THIS PANEL	38,200						
MAIN BREAKER SIZE AMPS	200						

#	BRK	CIRCUIT DESCRIPTION	R	T	W	V	F	C	CIRCUIT DESCRIPTION	BRK	F
1	20A	XXX	0	1	1	1	1	1	XXX	20A	1
2	20A	4 10A AC #1	0	1	1	1	1	1	4 10A AC#1 - SW# #1	20A	4
3	20A	LIGHTS	0	1	1	1	1	1	LIGHTS	20A	1
4	20A	LIGHTS	0	1	1	1	1	1	LIGHTS	20A	1
5	20A	LIGHTS	0	1	1	1	1	1	LIGHTS	20A	1
6	20A	LIGHTS	0	1	1	1	1	1	LIGHTS	20A	1
7	20A	LIGHTS	0	1	1	1	1	1	LIGHTS	20A	1
8	20A	LIGHTS	0	1	1	1	1	1	LIGHTS	20A	1
9	20A	OUTLETS	0	1	1	1	1	1	OUTLETS	20A	12
10	20A	OUTLETS	0	1	1	1	1	1	OUTLETS	20A	14
11	20A	OUTLETS	0	1	1	1	1	1	OUTLETS	20A	14
12	20A	OUTLETS	0	1	1	1	1	1	OUTLETS	20A	14
13	20A	OUTLETS	0	1	1	1	1	1	OUTLETS	20A	14
14	20A	OUTLETS	0	1	1	1	1	1	OUTLETS	20A	14
15	20A	OUTLETS	0	1	1	1	1	1	OUTLETS	20A	14
16	20A	OUTLETS	0	1	1	1	1	1	OUTLETS	20A	14
17	20A	OUTLETS	0	1	1	1	1	1	OUTLETS	20A	14
18	20A	WATER HEATER	0	1	1	1	1	1	WATER HEATER	20A	1
19	20A	XXX	0	1	1	1	1	1	XXX	20A	1
20	20A	XXX	0	1	1	1	1	1	XXX	20A	1
21	20A	XXX	0	1	1	1	1	1	XXX	20A	1
22	20A	XXX	0	1	1	1	1	1	XXX	20A	1
23	20A	XXX	0	1	1	1	1	1	XXX	20A	1
24	20A	XXX	0	1	1	1	1	1	XXX	20A	1
25	20A	XXX	0	1	1	1	1	1	XXX	20A	1
26	20A	XXX	0	1	1	1	1	1	XXX	20A	1
27	20A	XXX	0	1	1	1	1	1	XXX	20A	1
28	20A	XXX	0	1	1	1	1	1	XXX	20A	1
29	20A	XXX	0	1	1	1	1	1	XXX	20A	1
30	20A	XXX	0	1	1	1	1	1	XXX	20A	1
31	20A	XXX	0	1	1	1	1	1	XXX	20A	1
32	20A	XXX	0	1	1	1	1	1	XXX	20A	1
33	20A	XXX	0	1	1	1	1	1	XXX	20A	1
34	20A	XXX	0	1	1	1	1	1	XXX	20A	1
35	20A	XXX	0	1	1	1	1	1	XXX	20A	1
36	20A	XXX	0	1	1	1	1	1	XXX	20A	1
37	20A	XXX	0	1	1	1	1	1	XXX	20A	1
38	20A	XXX	0	1	1	1	1	1	XXX	20A	1
39	20A	XXX	0	1	1	1	1	1	XXX	20A	1
40	20A	XXX	0	1	1	1	1	1	XXX	20A	1
41	20A	XXX	0	1	1	1	1	1	XXX	20A	1
42	20A	XXX	0	1	1	1	1	1	XXX	20A	1
43	20A	XXX	0	1	1	1	1	1	XXX	20A	1
44	20A	XXX	0	1	1	1	1	1	XXX	20A	1
45	20A	XXX	0	1	1	1	1	1	XXX	20A	1
46	20A	XXX	0	1	1	1	1	1	XXX	20A	1
47	20A	XXX	0	1	1	1	1	1	XXX	20A	1
48	20A	XXX	0	1	1	1	1	1	XXX	20A	1



0	RELEASED FOR CONSTRUCTION	GG	GG	8/14	
REV	DESCRIPTION	APPRO	BY	CHK'D DATE	
COLUMBIA GRAIN - 2014 OFFICE EXPANSION LAKE CITY, FL					
GAMBLE & ASSOCIATES CONSTRUCTION		GILL ENGINEERING SERVICES			
DRAWN BY: GG		AUTH # 30824			
CHKD BY: GG		GARY GILL, PE 51942			
APPRO BY:		LAKE CITY, FL 32025			
		386-590-1242			
TITLE LIGHTING AND POWER PLAN					
PROJECT #:	14028	DWG. NO.:	14028-E-001	SHT.:	7
				REV.:	0

PLOTSCALE



GRILLS, REGISTERS, DIFFUSERS AND FLEXIBLE DUCT SIZING CHART

INSTALL DIFFUSERS PER SCHEDULE BELOW. DO NOT EXCEED MAXIMUM CFM INDICATED. ALL SUPPLY GRILLS TO BE TITUS TDC OR EQUIVALENT. MAX 25 NO.

NECK SIZE	RD NECK SIZE	MAX CFM	DESIGNATOR	WITH #
9 X 9	8" DIA	225	1	1
12 X 12	12" DIA	400	2	2
15 X 15	14" DIA	600	3	3
18 X 18	16" DIA	700	4	4
21 X 21	21" X 21"	1500	5	5
24 X 24	24" X 24"	2000	6	6

INSTALL RETURN GRILLS PER SCHEDULE BELOW. DO NOT EXCEED MAXIMUM CFM INDICATED. ALL RETURN AIR GRILLS TO BE TITUS TDC OR EQUIVALENT. MAX 25 NO.

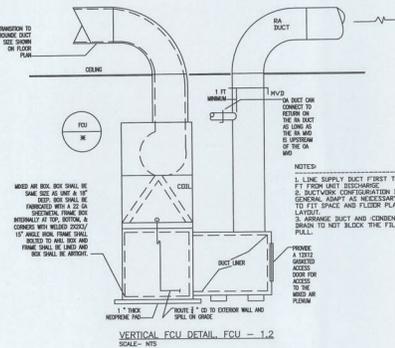
MODULE	NECK SIZE	MAX CFM	DESIGNATOR	WITH #
24 X 12	12" X 24"	1100	7	7
24 X 24	24" X 24"	1800	8	8

USE SIZES OF FLEXIBLE DUCT SHOWN BELOW. DO NOT EXCEED UFM LIMITS. NOTE: FLEX DUCTWORK SHALL BE A MAXIMUM OF 8' LONG AND MATCH THE NECK SIZE OF THE DIFFUSER OR GRILL.

DUCT SIZE	MAX CFM	DESIGNATOR
4"	20	(1)
5"	50	(2)
6"	75	(3)
7"	120	(4)
8"	160	(5)
9"	220	(6)
10"	300	(7)
12"	500	(8)
14"	700	(9)
16"	1000	(10)
18"	1400	(11)

GENERAL MECHANICAL NOTES

1. THE MECHANICAL/HVAC CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE HEATING, COOLING, AIR EXCHANGE SYSTEM. ALL WORK SHALL BE DONE TO CONFORM TO THE APPLICABLE BUILDING CODES AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LATEST ADDITION OF THE FOLLOWING PUBLICATIONS, ASHRAE, NPSA 90A, 90B, 91, AND ANSI 8-91 MECHANICAL REFRIGERATION.
2. THE MECHANICAL/HVAC CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS, AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
3. THE MECHANICAL/HVAC CONTRACTOR SHALL SUBMIT THE OWNER AND ENGINEER/ARCHITECT WITH AS BUILT DRAWINGS UPON COMPLETION OF THIS PROJECT.
4. ALL MATERIAL SHALL BE NEW OF GOOD QUALITY, ALL WORK SHALL BE PERFORMED BY A WORKMANLIKE MANNER BY A SKILLED MECHANICAL/HVAC WORKMAN.
5. ALL AIR CONDITIONING DUCT SHALL BE OF 1-1/2" STANDARD DUTY FOIL REINFORCED FIBERGLASS WITH MANUFACTURER'S LOGO PRINTED ON THE VAPOR BARRIER. ALL FLEX TO BE R-8 WITH NO FLEX RUN MORE THAN 8'.
6. ALL EXHAUST DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED SHEET METAL WITH SEALED SEAMS AND JOINTS. DUCT SIZES SHOWN ARE INSIDE DIMENSIONS. THE MECHANICAL/HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF CONDENSATE DRAIN LINES TO A LOCATION TO BE DETERMINED BY THE OWNER OR CONSTRUCTION SUPERINTENDENT.
7. ALL AIR DEVICES (DIFFUSERS, REGISTERS, AND GRILLS) SHALL BE ALL WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY OWNER OR ENGINEER/ARCHITECT. DEVICES SHALL BE TITUS, METALAIR, AND AIRDUKE. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS.
8. THERMOSTAT SHALL BE ELECTRONIC 7-DAY PROGRAMMABLE WITH COMBINATION COOLING/HEATING WITH SYSTEM "COOL-AUTO-HEAT-OFF" AND FAN "ON-AUTO" SELECTOR SWITCHES.
9. REFRIGERANT LINES SHALL BE COPPER TYPE "L" HARD DRAWN WITH WROUGHT COPPER SOLDER-JOINT TYPE FITTINGS. USE 95/5 SOLDER. REFRIGERANT LINES SHALL BE SIZED AS PER MANUFACTURER RECOMMENDATIONS.
10. ARMAFLEX 3/4" INSULATION SHALL BE USED FOR SECTION AND CONDENSATE DRAIN LINES, FILTER/DRYER AND SIGHT GLASS SHALL BE PROVIDED AT LIQUID LINES.
11. ALL BRANCH TAKE-OFFS TO BE PROVIDED W/MANUAL VELLINE DAMPERS. ALL ELBOWS AND TEE'S MUST BE FURNISHED W/TURNING VANES. PROVIDE 45 DEGREE BRANCH TAKE-OFF AS PER BRANCH DUCT TAKE-OFF DETAIL.
12. PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE STARTING THEM. REPLACE THEM PRIOR TO ACCEPTANCE BY OWNER.
13. PROVIDE SMOKE DETECTORS WITH ACCESS DOORS IN ALL SUPPLY AIR DUCTS FOR FANS AND AHU'S SERVING A COMMON PLENUM OF 2000 CFM OR ABOVE. ALL SMOKE DETECTORS SHALL BE BY ONE MANUFACTURER, COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING.
14. PROVIDE TYPE "B" FIRE DAMPERS IN ALL DUCTS OR OPENINGS PENETRATING FIRE RATED WALLS, MECHANICAL AND ELECTRICAL ROOMS, TENANT SEPARATION, PARTITIONS, FLOOR OR ROOF SLABS AND AT O/A INTAKES. PROVIDE RADIATION DAMPERS IN RATED CEILING FOR ALL CEILING OPENING, CEILING FANS, DIFFUSERS OR GRILLS RATED FOR USE IN THE CEILING ASSEMBLY.
15. HVAC CONTRACTOR SHALL PROVIDE AN INDEPENDENT TEST AND BALANCE REPORT FOR ALL MECHANICAL EQUIPMENT, AIR DEVICE, DAMPERS, AHU'S AND FANS. THE TAB SHALL BE IN ACCORDANCE WITH THE AIR BALANCE COUNCIL STANDARDS AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLS, RETURN GRILLS, AND EXHAUST GRILLS AND LEAVING AND ENTERING AIR TEMPERATURE FROM THE SUPPLY GRILLS AND EVAPORATORS.
16. THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER AND ENGINEER/ARCHITECT BY INSTALLATION.
17. ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 50/50.
18. MECHANICAL/HVAC PLANS IN GENERAL ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL, AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
19. THE MECHANICAL/HVAC CONTRACTOR SHALL INSTALL ALL OUTDOOR EQUIPMENT TO WITHSTAND A SUSTAINED 120 MPH WIND WITH A GUST FACTOR OF 30% (156MPH). MECHANICAL/HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR THE CERTIFICATION OF ROOF MOUNTING.
20. PROVIDE ALL NECESSARY CONTRACTS, RELAYS, ETC., FOR A COMPLETE OPERATING HEAT, A/C, AIR EXCHANGE SYSTEM. THE MECHANICAL/HVAC CONTRACTOR SHALL PROVIDE ALL BATHROOM AIR EXCHANGE/VENTING SYSTEMS.



VENTILATION CALCULATIONS

CONDITIONED AREAS									
OCCUPANCY CLASSIFICATION	S.F.	/1000 =	PEOPLE OUTDOOR AIRFLOW RATE (Pa) CFM/PERSON	AREA OUTDOOR AIRFLOW RATE (Pa) CFM/FT ²	DETAILED OCCUPANT DENSITY #/1000 FT ²	NUMBER OF OCCUPANTS IN SPACE	OUTSIDE AIR PER PERSON (Pa/OCCUPANTS)	OUTSIDE AIR CFM PER UNIT AREA (Pa/UNIT AREA)	TOTAL OUTDOOR AIRFLOW RATE REQUIRED (CFM)
OFFICE	450	0.45000	5.00000	0.06	5	3	15	27	42
CONFERENCE	202	0.20200	5	0.06000	50	10	50	12	63
WORKROOM (COMPUTER)	208	0.20800	5	0.06000	4	1	5	12	17
TOILET ROOM							50 (PER WATER CLOSET)		50
MAIN ENTRY	358	0.35800	5	0.06000	10	4	20	22	42
TOTAL MAKEUP OUTSIDE AIR REQUIRED (CFM) =								214	



0	RELEASED FOR CONSTRUCTION	GG	GS	8/14	
REV	DESCRIPTION	APPRD	BY	CHK'D DATE	
COLUMBIA GRAIN - 2014 OFFICE EXPANSION					
LAKE CITY, FL					
GAMBLE & ASSOCIATES CONSTRUCTION		GILL ENGINEERING SERVICES AUTH # 30824 GARY GILL, PE 51942 426 SW COMMERCE DR 1300 LAKE CITY, FL 32025 386-590-1242			
DRAWN BY	00	SCALE			
CHK'D BY	02	SCALE			
APPRO'D BY	02				
MECHANICAL PLANS					
PROJECT #:	14028	DWG. NO.	14028-M-001	SHT.	8
PLOTSCALE					
REV. 0					

