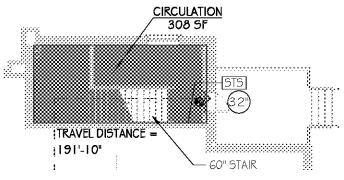
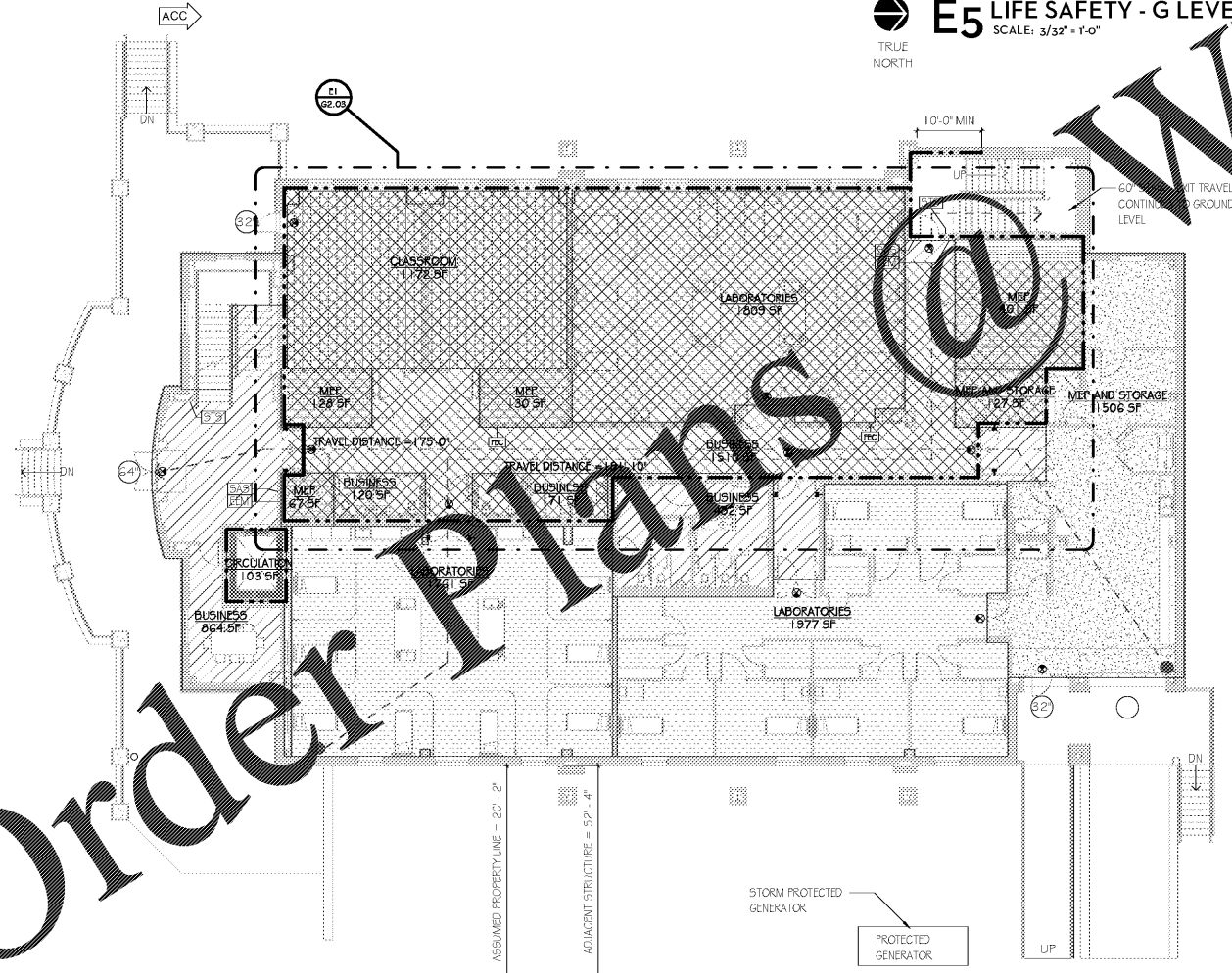


G1 LIFE SAFETY - LEVEL 2
SCALE: 3/32" = 1'-0"



E5 LIFE SAFETY - G LEVEL
SCALE: 3/32" = 1'-0"



A1 LIFE SAFETY - LEVEL 1
SCALE: 3/32" = 1'-0"

LIFE SAFETY PLAN LEGEND

- NON-RATED PARTITION
- 1 HR. RATED PARTITION
- 2 HR. RATED PARTITION / FIRE BARRIER
- 4 HR. RATED PARTITION
- FIRE EXTINGUISHER CABINET
- EMERGENCY EVACUATION MAP SIGNAGE
- DOOR REQUIRING MANUAL CLOSURE SIGNAGE
- STORM SHELTER ACCESS SIGNAGE
- STORM SHELTER ENTRANCE SIGNAGE
- STORM SHELTER DESIGN INFORMATION SIGNAGE
- STAIR IDENTIFICATION SIGN - NOTES ROOF ACCESS IF APPLICABLE
- FIRST AID KIT
- MAGNETIC HOLD-OPEN DEVICE
- EXIT SIGN
- MAXIMUM TRAVEL DISTANCE TO EXIT
- COMMON PATH OF TRAVEL
- CLEAR EXIT WIDTH IN INCHES
- ADA ACCESSIBLE ROUTE
- 1 HOUR RATED HORIZONTAL SHAFTWALL CEILING ASSEMBLY, COMPLY WITH ALL REQUIREMENTS OF UL #415.
- 2 HOUR RATED ROOF/CEILING ASSEMBLY AT STORM SHELTER, SPRAY APPLIED FIREPROOFING TO UNDERSIDE OF STRUCTURAL STEEL DECK AND FRAMING. DECK PROTECTION PER UL# D779
- JOIST PROTECTION PER UL# N777

OCCUPANCY:

LEVEL 1

BUSINESS: 3,123 SF @ 100 PER OCC = 31.23 OCC
 CLASSROOM: 1,172 SF @ 20 PER OCC = 58.60 OCC
 VOCATIONAL: 5,571 SF @ 50 PER OCC = 111.42 OCC
 ME/S: 2,359 SF @ 300 PER OCC = 7.86 OCC
LEVEL 1 TOTAL OCCUPANCY = 210.11 OCC

LEVEL 2

BUSINESS: 4,482 SF @ 100 PER OCC = 44.82 OCC
 CLASSROOM: 1,330 SF @ 20 PER OCC = 66.50 OCC
 VOCATIONAL: 1,079 SF @ 50 PER OCC = 21.58 OCC
 ME/S: 529 SF @ 300 PER OCC = 1.76 OCC
LEVEL 2 TOTAL OCCUPANCY = 214.66 OCC

LEVEL 3 (FUTURE SCOPE)

BUSINESS: 5,286 SF @ 100 PER OCC = 52.86 OCC
 CLASSROOM: 1,656 SF @ 20 PER OCC = 82.80 OCC
 VOCATIONAL: 5,229 SF @ 50 PER OCC = 104.58 OCC
 ME/S: 529 SF @ 300 PER OCC = 1.76 OCC
LEVEL 3 TOTAL OCCUPANCY = 242.00 OCC

TOTAL OCCUPANCY INCLUDING FUTURE 3RD FLOOR = 731 OCC

OCCUPANCY LEGEND

- BUSINESS
- CIRCULATION
- CLASSROOM
- LABORATORIES
- MEP
- MEP AND STORAGE
- Calculating...

OVERALL BUILDING AREA

LEVEL	AREA (GROSS SQUARE FEET)
LEVEL 1	13,270 GSF
LEVEL 2	14,160 GSF
LEVEL 3	13,296 GSF
TOTAL	40,726 GSF

APPLICABLE CODES & REGULATIONS

2015	INTERNATIONAL BUILDING CODE (IBC)
2015	INTERNATIONAL FUEL GAS CODE (IFGC)
2015	INTERNATIONAL MECHANICAL CODE (IMC)
2015	INTERNATIONAL PLUMBING CODE (IPC)
2015	INTERNATIONAL FIRE CODE (IFC)
2014	NATIONAL ELECTRICAL CODE (NEC)
2013	ANSI/ASHRAE/IESNA STANDARD 90.1-2013
2013	NATIONAL FIRE ALARM AND SIGNALING CODE
2010	ADA STANDARDS FOR ACCESSIBLE DESIGN
ICC 500-2014	ICC/ANSI STANDARD FOR THE DESIGN AND CONSTRUCTION OF STORM SHELTERS

OCCUPANCY CLASSIFICATION

OCCUPANCY	GROUP
BUSINESS	B

CONSTRUCTION CLASSIFICATION

CONSTRUCTION TYPE	TYPE	IB - FULLY SPRINKLED
HEIGHT	ALLOWABLE: 75'	ACTUAL: 47'
# OF STORIES	ALLOWABLE: 3	ACTUAL: 3
AREA PER FLOOR	ALLOWABLE: 92,000	ACTUAL: 13,270
HEIGHT MODIFICATIONS	N/A	
AREA MODIFICATIONS	N/A	

MEANS OF EGRESS

MEANS OF EGRESS	REQUIRED	PROVIDED
MAXIMUM ALLOWABLE TRAVEL DISTANCE TO EXIT	300 FT	300 FT
COMMON PATH OF TRAVEL	100 FT	100 FT
DEAD END WIDTH	50 FT	50 FT
EGRESS OCCUPANTS	731 TOTAL, 521 UPSTAIRS	
FAIRWAY WIDTH	REQUIRED: 0.2' PER OCCUPANT x 521 OCCUPANTS = 104.2'	PROVIDED: 119'
EGRESS WIDTH	REQUIRED: 0.15' PER OCCUPANT x 731 OCCUPANTS = 109.65'	PROVIDED: 256'

FIRE RESISTANCE-STRUCT. ELEMENTS

STRUCTURAL ELEMENT	IBC TYPE	RESISTANCE PROVIDED
	TBL 601	RATING ACHIEVED BY
EXTERIOR BEARING WALL		
*SUPPORTING MORE THAN ONE FLOOR, COLUMNS, BEARING WALLS	0 HR	N/A
*SUPPORTING ONE FLOOR ONLY	0 HR	N/A
*SUPPORTING A ROOF ONLY	0 HR	N/A
INTERIOR BEARING WALL		
*SUPPORTING MORE THAN ONE FLOOR, COLUMNS, BEARING WALLS	0 HR	N/A
*SUPPORTING ONE FLOOR ONLY	0 HR	N/A
*SUPPORTING A ROOF ONLY	0 HR	N/A
COLUMNS		
*SUPPORTING MORE THAN ONE FLOOR, COLUMNS, BEARING WALLS	0 HR	N/A
*SUPPORTING ONE FLOOR ONLY	0 HR	N/A
*SUPPORTING A ROOF ONLY	0 HR	N/A
BEAMS, GIRDERS, TRUSSES		
*SUPPORTING MORE THAN ONE FLOOR, COLUMNS, BEARING WALLS		
FLOOR CONSTRUCTION	0 HR	N/A
ROOF CONSTRUCTION	0 HR	N/A
EXTERIOR NON-BEARING WALLS	0 HR	N/A

FIRE RESISTANCE - WALLS & PARTITIONS

WALLS AND PARTITIONS	IBC TBL 715.4	OPENING PROTECTION	RESISTANCE PROVIDED
			RATING ACHIEVED BY
SHAFT ENCLOSURES			
* LESS THAN 4 STORIES	2 HR	45 MIN	2 HR UL #
FIRE WALLS	N/A	N/A	N/A
HORIZONTAL EXITS	N/A	N/A	N/A
EXIT PASSAGEWAYS	N/A	N/A	N/A

FIRE RESISTANCE - HORIZONTAL ASSEMBLIES

HORIZONTAL ASSEMBLIES	IBC	RESISTANCE PROVIDED
		RATING ACHIEVED BY
FLVCLG - STORM SHELTER	2 HR	2 HR UL # D916

PLUMBING FIXTURE TABULATIONS

LEVEL	OCCUPANCY	OCCUPANT LOAD	CALCULATIONS							
			WC	LAV	BATH/SHOWERS	DRINKING FOUNTAINS	SVC SINKS			
LEVEL 1 & 2	EDUCATIONAL/VOC	370.66	3.7	3.7	-	3.7	3.7	-	3.71	1
	20 NSF/OCC	186M								
LEVEL 3 (FUTURE SCOPE)	BUSINESS	106.05	2.08	2.08	-	1.35	1.35	-	1.06	1
	100 GSF/OCC	54M 54W								
TOTAL	ME/S	11.05	.06	.06	-	.06	.06	-	.01	1
	300 GSF/OCC	6M 6W								
TOTAL	REQUIRED		5.8	5.8	-	5.11	5.11	-	4.78	1
	PROVIDED		7	7	-	6	6	-	6	2

NOTE: LEVEL 3 IS NOT BEING BUILT OUT IN THIS CONTRACT. THESE CALCULATIONS ARE TO SHOW WHAT WILL BE REQUIRED IN FUTURE WORK.

EDUCATIONAL/VOC	187.38	1.88	1.88	-	1.88	1.88	-	1.88	1	
20 NSF/OCC	94M									
50 GSF/OCC	94W									
BUSINESS	52.86	1.04	1.04	-	0.68	0.68	-	0.53	1	
100 GSF/OCC	27M 27W									
ME/S	1.76	.01	.01	-	.01	.01	-	.002	1	
300 GSF/OCC	1M 1W									
TOTAL	REQUIRED		2.93	2.93	-	2.57	2.57	-	2.41	1
	MIN TO BE PROVIDED IN FUTURE WORK		3	3	-	3	3	-	3	1

GMC
2701 1st Avenue S
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE

ISSUE FOR BID	DATE
2019.05.25	

SIMULATION LABORATORY
BUILDING - USA JOB #16-07
MOBILE, ALABAMA
ABC #2017372
GMC # AMOB160019



LIFE SAFETY PLANS
G2.01
sheet 2 of 2