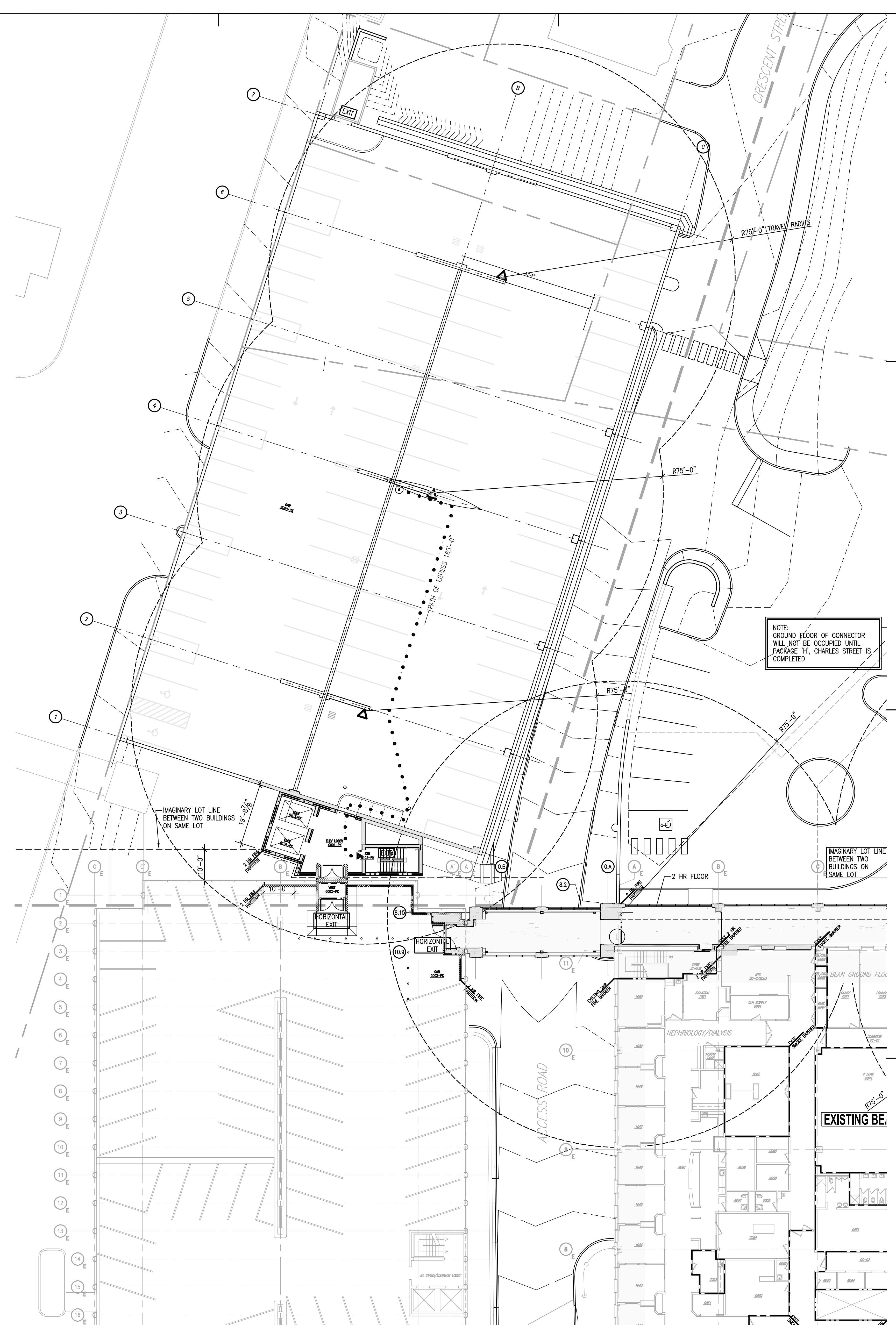


**B4** BASEMENT LEVEL LIFE SAFETY PLAN  
SCALE: 1/16" = 1'-0"

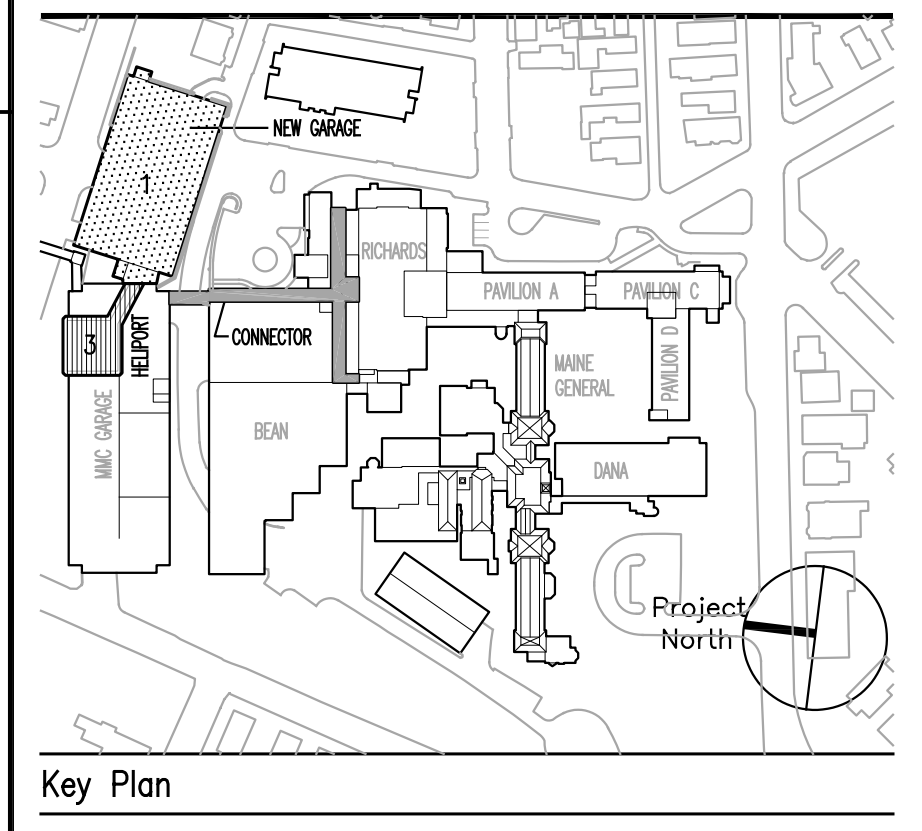


**D4** GROUND LEVEL LIFE SAFETY PLAN  
SCALE: 1/16" = 1'-0"

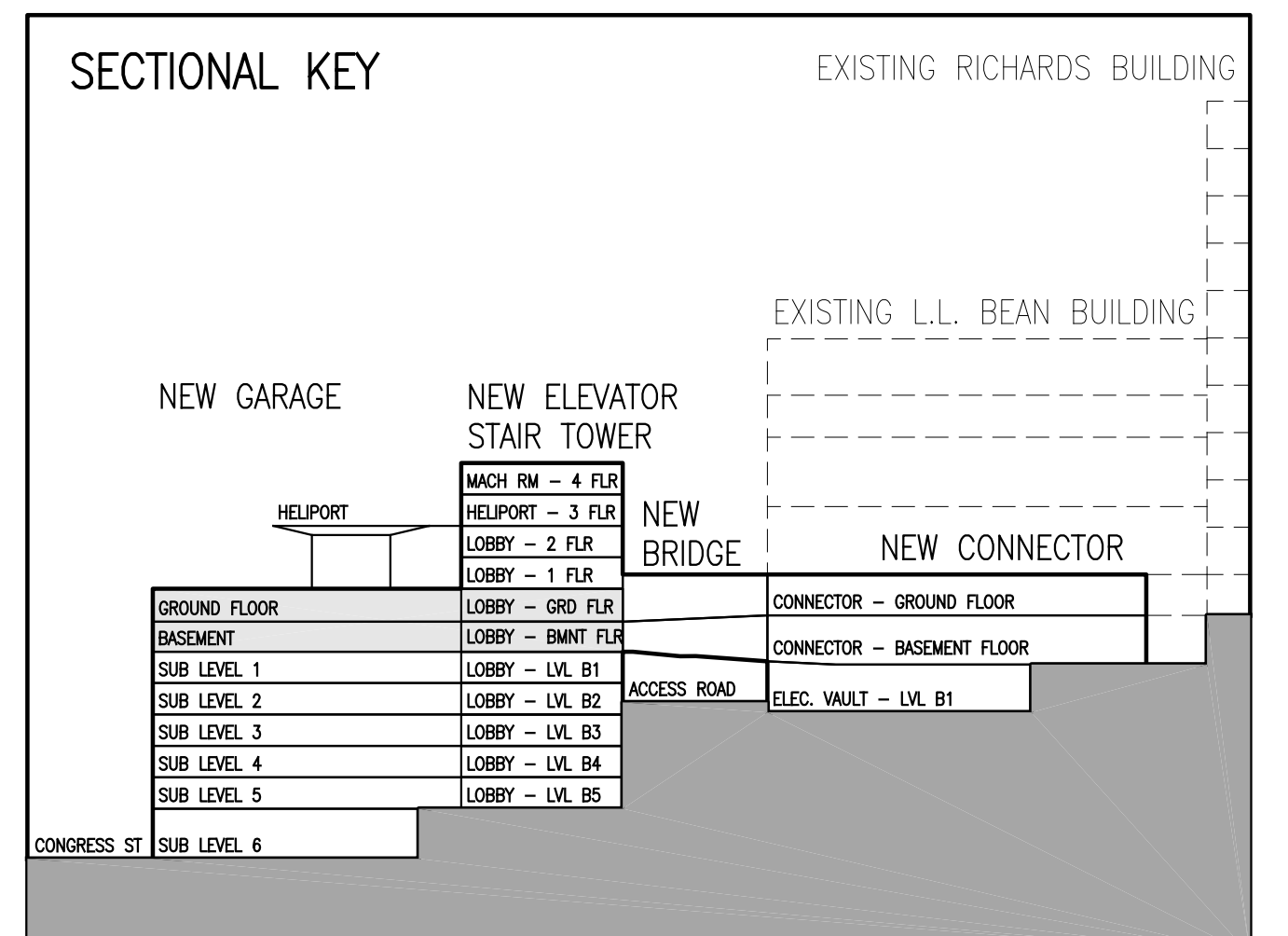
- General Notes:**
- LIFE SAFETY LEGEND**
- 1. RATED PARTITIONS ARE INDICATED AS FOLLOWS:
  - 1HR FIRE RATED PARTITION
  - 2HR FIRE RATED PARTITION
  - NON-RATED SMOKE RESISTANT PARTITION
  - 1HR SMOKE BARRIER
  - 2HR RATED FIRE AND SMOKE BARRIER
  - ... PATH OF EXIT TRAVEL
  - EXIT INDICATES EXIT LOCATION
  - SUITE (UNRATED)
  - CONNECTOR PROJECT SCOPE
  - EXISTING EGRESS STAR
  - ... POINT OF EGRESS ACCESS
  - △ PORTABLE FIRE EXTINGUISHER
  - EXIT SIGN
  - HOSE STATION

MARK	ISSUE DATE	DESCRIPTION
PERMIT	09/18/04	PERMIT SET
BD	08/28/04	BD SET

Issue Log



**TRO**  
ARCHITECTURAL  
PLANNING  
ENGINEERING  
INTERIOR  
The Ritchie Organization  
80 Bridge Street  
Newton, MA 02459-1111  
617-552-9444



GARAGE CODE ANALYSIS - LIFE SAFETY			
NFPA 101 2003 - CONSTRUCTION: NA, OCCUPANCY: STORAGE			
SECTION	SECTION DESCRIPTION	REQUIREMENT	COMMENTS
6.1.1.3	CLASSIFICATION OF OCCUPANCY	CHAPTER 42	STORAGE
42.1.5	CLASSIFICATION OF HAZARD CONTENTS	COMPLY WITH SECTION 6.2	ORDINARY HAZARD
42.1.6	MINIMUM CONSTRUCTION REQUIREMENTS	NONE	
42.1.7	OCCUPANT LOAD (137 PEOPLE PER LEVEL BASED ON BOCA 99)	THE OCCUPANT LOAD SHALL BE DETERMINED ON THE BASIS OF THE MAXIMUM PROBABLE POPULATION OF THE SPACE	REFER TO THE BUILDING CODE OCCUPANCY SECTION
42.2	MEANS OF EGRESS REQUIREMENTS	DOOR OPENINGS IN MEANS OF EGRESS SHALL NOT BE LESS THAN 32 CLEAR WIDTH	

TRAVEL DISTANCES			
TRAVEL	ALLOWED MAX.	PROVIDED	COMMENTS
A TO EXIT	300' BOCA 400' NFPA	REFER TO PLANS	BOCA 1999, EXIT ACCESS TRAVEL; TABLE 1006.5 REMOTE POINT TO NEAREST EXIT
B TO EXIT	300' BOCA 400' NFPA	REFER TO PLANS	BOCA, EXIT ACCESS TRAVEL; TABLE 1006.5 REMOTE POINT TO NEAREST EXIT
REMOVEDNESS	> 3' MAX DIA. OVERALL DIA.	REFER TO PLANS	BOCA, 1006.4.1 REMOVEDNESS; EXITS OR EXIT ACCESS DOORS

GARAGE FIRE RATINGS - LIFE SAFETY		
NFPA 101 2003 - ORDINARY HAZARD STORAGE *		
ITEM DESCRIPTION	FIRE RATING	COMMENTS
EXTERIOR BEARING WALLS	1 HRS.	
INTERIOR BEARING WALLS	1 HRS.	
COLUMNS	1 HRS.	
BEAMS, GIRDERS, TRUSSES, AND ARCHES	1 HRS.	
FLOOR CONSTRUCTION	1 HRS.	
ROOF CONSTRUCTION	1 HRS.	
EXTERIOR NONBEARING WALLS	0 HRS.	

\* INFORMATION TAKEN FROM 1999 NFPA 220 TABLE 3-1 TYPE II(11) CONSTRUCTION

GARAGE FIRE RATINGS - BUILDING CODE		
BOCA 1999 - TABLE 602 & 705.2 CONSTRUCTION TYPE 2B		
ITEM DESCRIPTION	FIRE RATING	COMMENTS
EXTERIOR WALLS (FIRE SEPARATION 0-5')	2 HRS.	
EXTERIOR WALLS (FIRE SEPARATION GREATER THAN 10')	1 HRS.	
FIRE ENCLOSURE OF EXITS	2 HRS.	
SHAFTS (OTHER THAN EXITS AND ELEVATOR HOISTWAYS)	2 HRS.	
OTHER NONBEARING PARTITIONS	0 HRS.	
INTERIOR COLUMNS AND FRAMING	1 HRS.	
STRUCTURAL MEMBERS SUPPORTING WALL	1 HRS.	
FLOOR CONSTRUCTION INCLUDING BEAM	1 HRS.	
ROOF CONSTRUCTION INCLUDING BEAMS, TRUSSES AND FRAMING, ARCHES AND ROOF DECK	1 HRS.	
EGRESS CONVERGENCE (OCCURS @ SUBLEVEL 2 CONCRETE ST. EXIT)	1 HRS.	
15' OR LESS IN HEIGHT TO LOWEST MEMBER	0 HRS.	

GARAGE CODE ANALYSIS - BUILDING CODE			
BOCA 1999 - CONSTRUCTION: TYPE 2B, OCCUPANCY: S-2			
SECTION	SECTION DESCRIPTION	REQUIREMENT	COMMENTS
302.1, 308.3	USE GROUP	S-2 STORAGE	ADDITION TO EXISTING PARKING FACILITY
SECTION 603/TABLE 602	CONSTRUCTION CLASSIFICATION	2B	EXISTING AND NEW ADDITION
SECTION 406.1	OPEN PARKING STRUCTURES; GENERAL		OPEN PARKING STRUCTURES ARE NOT REQUIRED TO CONFORM TO SECTION 408.0 FOR PUBLIC GARAGES
TABLE 406.4	HEIGHT AND AREA LIMITATION FOR OPEN PARKING STRUCTURES	10 STORES = 100' HT. 50,000 SQ.FT. AREA	PARKING ADDITION IS TO MATCH THE EXISTING 2B CONSTRUCTION. HEIGHTS AND AREAS MENTIONED HERE ARE SUBJECT TO POTENTIAL INCREASES PERMANENT 504.0 AND 504.0
SECTION 506.2	STREET FRONTAGE INCREASE		EXISTING GARAGE PERIMETER EQUALS 1,579 LF. CRESCENT ST + CONGRESS STREET PERIMETER OF THE ADDITION = 850/1579 = 53.9%. -25% PER 506.2 = 28.8%. 28.8% x 2% = 0.576%. 57.6% x 50,000 = A POSSIBLE PERMETER INCREASE OF 28,800'. 50,000 + 28,800 = 78,800' OF ALLOWABLE SQUARE FOOTAGE. ACTUAL SQUARE FOOTAGE OF GARAGE AND LINK = 69,300'SQ'
TABLE 1008.1.2	MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT	200 GROSS SQUARE FEET PER OCCUPANT	27,296 SF PER LEVEL. 27,296 DIVIDED BY 200=136.43 OR 137 PEOPLE PER FLOOR
TABLE 1010.2	MINIMUM NUMBER OF EXITS FOR OCCUPANT LOAD	2 EXITS FOR 500 OR LESS PEOPLE	137 PEOPLE PER FLOOR DIVIDED BY 2 EXITS = 68.5 OR 69 PEOPLE PER EXIT
TABLE 1009.4	EGRESS CAPACITY SHALL NOT BE LESS THAN THE SUM OF THE TWO		69 PEOPLE PER EXIT, PER LEVEL, X2 = 138 PEOPLE
TABLE 1009.2	EGRESS WIDTH PER OCCUPANT		STAR: 138 X 3" = 41.4". REQ. 45.5" PROVIDED DOOR: 138 X 2" = 27.6". REQ. 41.25" PROVIDED
TABLE 1010.2	NUMBER OF EXITS REQUIRED PER LEVEL		UN-SPRINKLERED, USE GROUP S STAIRWAYS ARE ALLOWED 3" PER PERSON, DOORS 3" PER PERSON PROVIDED: 2
TABLE 1006.5	EXIT ACCESS TRAVEL REQUIRED MAX	300' FT. (MAX) 165' FT. (LOWEST)	SEE PLANS

**Maine Medical Center**  
Pkg F - Garage / Vault / Conn / Heliport  
Portland, ME MMC Project No. 21845

Drawing Title  
**BASEMENT & GROUND LEVEL GARAGE LIFE SAFETY PLANS**

Scale: 1/16" = 1'-0"

Revision No. 4678 Date Issued 08/28/04

Scale 1/16" = 1'-0" Sheet Number PKG-F

Drawn By JLN/NB

Approved By BS

Filename 46780103-1.dwg

Project No. 21845

**G103.1**