FIRE PROTECTION CODE SUMMARY

CODES

Primary Codes Used for Summary:
2003 International Building Code (IBC)
NFPA 101 Life Safety Code, 2001 Edition (NFPA101)

Additional Codes Used:
2003 Uniform Mechanical Code (UMC)
2005 National Electrical Code (NEC)
2000 Uniform Plumbing Code (UPC)
2003 International Energy Code

BUILDING DESCRIPTION

Building: TrinityMedical Center, Davenport

Building Use:
The hospital portion of the building will be partially renovated as a Long Term Acute Care Hospital. The attached medical office building is separately owned and will not be part of this facility. This submittal is for the hospital occupancy only. The existing 2-hour occupancy separation wall between the hospital and business occupancies will remain.

OCCUPANCY

Occupancy Classification: Long-term Acute Care Hospital and Related Activities

Occupancy Group: Hospital, I-2 Occupancy [Sec407, IBC]

CONSTRUCTION

Construction Type:
Existing: Type II, 222 and Type II, 000 Construction Partially Sprinklered [Table 13-1,6.3, NFPA101]
Proposed: Type 2B, [Table 503 and Table 601, IBC]

Sprinklered: Fully

HEIGHT AND AREA

Allowable Building Area:
Basic: 11,000 sf [Table 503, IBC]
Increase for fully-sprinklered: 300% [Sec. 506.3]
Increase for Frontage: 67% [Sec. 506.2]
Total Allow. Area above Grade: 51,370 sf

Existing Hospital Building Area:
First Floor (non-conforming as single fire area): 69,100 gsf

Allowable Basement Area:
Basement: 11,000 sf [Table 503, IBC]
Increase for fully-sprinklered: 300% [Sec. 506]
Total Allow. Basement Area: 51,370 sf

Actual Basement Area: 11,750 gsf

Allowable Height:
Basic: 55 ft, 1-story [Table 503, IBC]
Increase for fully-sprinklered: Not allowed [Sec. 504.2, IBC]
Total Allowable: 55 ft, 1-story [Sec. 504, IBC]
Existing Building: 10 ft plus penthouses, 1-story
Stories:
Basement: Allowed [Sec. 506.1.1, IBC]
First Floor: Allowed [Table 503, IBC]

BUILDING ELEMENTS - FIRE RESISTIVE REQUIREMENTS

Exterior Walls:
Load bearing: 0-hour [distance greater than 10'-0"]

Fire and Smoke Separation Assemblies:
Separation between I-2 and B
Occupancies: 2-hour [Table 302,3,2 IBC]
Area separations: 2-hour [Table 706,3,7 IBC]
Smoke Barrier Walls: 1-hour (Section 709.3, IBC)
Smoke Resistant Construction (Corridor Walls): 0-hour (Section 710, IBC)

Smoke Compartment:
2 min. required per floor: 22,500sf max. [407.4 IBC, 19.3.7.1 NFPA101]
Refuge areas per smoke compartment in sleeping areas: 30sf Net / bed
Refuge areas per smoke compartment in other areas: 6sf Net / occupant [407.4.1, IBC]

Incidental Use Rated Separations:
Mechanical Rooms: 1-hour [Table 302,1,1, IBC]
Soiled Linen Rooms: 1-hour [Table 302.1.1, IBC]
Storage Rooms:
>50 sf < 100 sf: Smoke Partitions [Table 302.1.1, IBC]
>100 sf: 1-hour [Table 302.1.1, IBC]

EXITS

Occupant Load Factors: [Table 1004,1,2, IBC]
Sleeping Rooms: 120sf per occupant
Treatment Areas: 240sf per occupant
Business Areas: 100sf per occupant
Locker Rooms: 50sf per occupant
Storage Areas: 300sf per occupant
Mechanical Spaces: 300sf per occupant

Occupants per Floor:
Basement: 30
First: 556

Required Number of Exits: 2 for occupant load <500 [Table 1018,1 IBC]

Exit Travel Distance: I-2 Occupancy - 200ft [Table 1015,1 IBC]

Dead End Corridors: Max. 20ft length [1018.3 IBC]

Elevator as Egress: Not Required

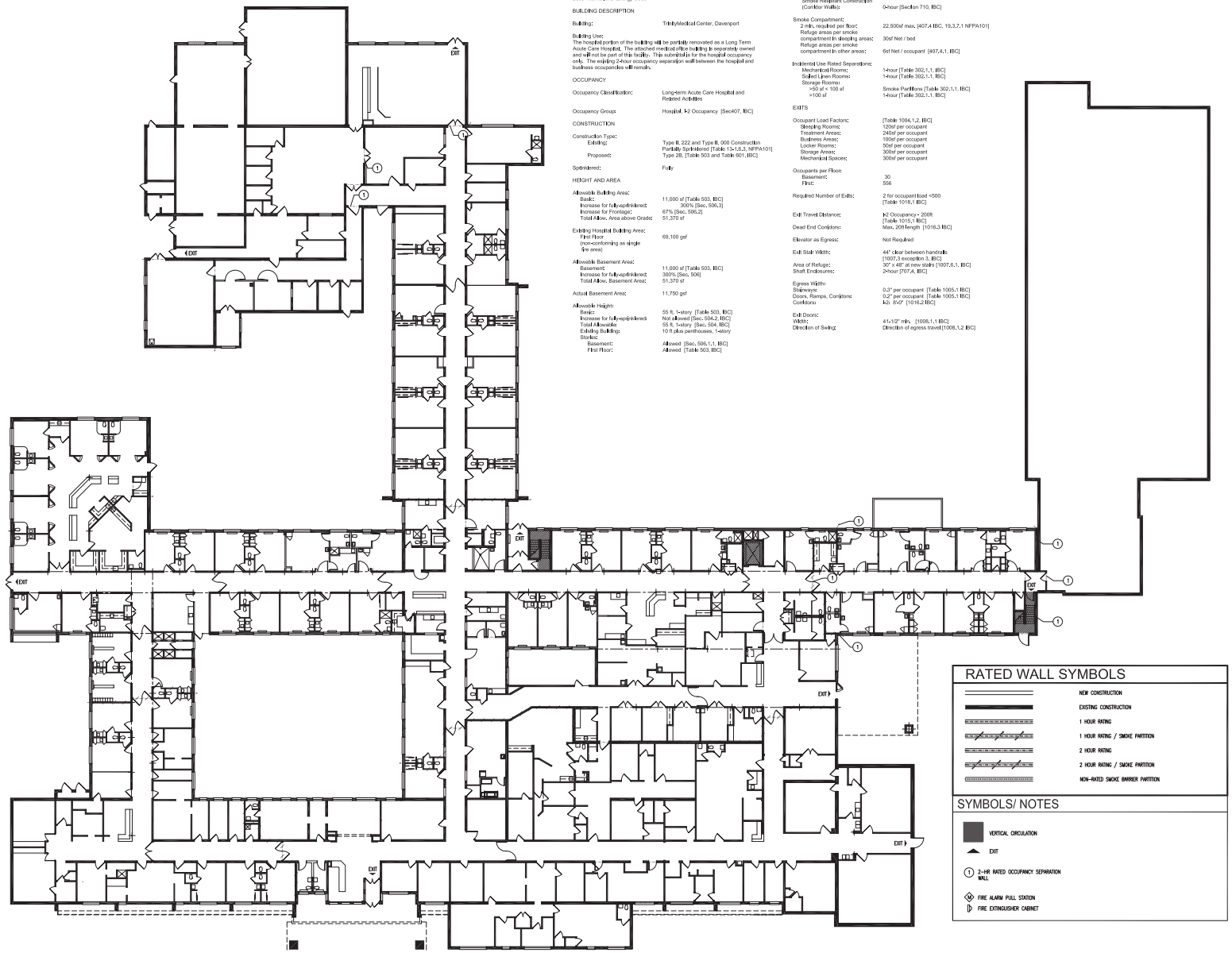
Exit Stair Width: 44" clear between handrails [1007.2 exception 3, IBC]

Area of Refuge: 30" x 48" at new stairs [1007.6.1, IBC]

Shaft Enclosures: 2-hour [707.4, IBC]

Egress Widths:
Stairways: 0.3" per occupant [Table 1005.1 IBC]
Doors, Ramps, Corridors: 0.2" per occupant [Table 1005.1 IBC]
Corridors: I-2: 8'-0" [1018.2 IBC]

Exit Doors:
Width: 41-1/2" min. [1008.1.1 IBC]
Direction of Swing: Direction of egress travel [1008.1.2 IBC]



01 FIRST FLOOR LIFE SAFETY PLAN
SCALE 1/16" = 1'-0" 020IB01

RATED WALL SYMBOLS

- NEW CONSTRUCTION
- EXISTING CONSTRUCTION
- 1 HOUR RATING
- 1 HOUR RATING / SMOKE PARTITION
- 2 HOUR RATING
- 2 HOUR RATING / SMOKE PARTITION
- NON-RATED SMOKE BARRIER PARTITION

SYMBOLS/ NOTES

- VERTICAL CIRCULATION
- EXIT
- (1) 2-HR RATED OCCUPANCY SEPARATION WALL
- FIRE ALARM PULL STATION
- FIRE EXTINGUISHER CABINET

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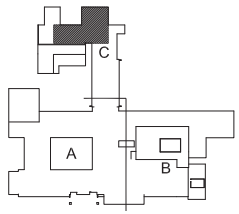

KEY PLAN

NORTH

MARK	DATE	DESCRIPTION
1	23 JULY 2005	ADDENDUM 1
2	09 AUG 2005	POST BID REVISION 1
3	04 JAN 2005	CLARIFICATION #008
4	12 JUNE 2009	SMOKE ZONES ADDED

FIRST FLOOR LIFE SAFETY PLAN

SCALE	1/16"=1'-0"	CLIENT NO.	505
DATE	9 DECEMBER 2005	COMMISSION	505020
COORD	TAJ		
DRAWN	JLC		A2
APPROVED	KHS		
FILE NAME	020LS01		

[redacted]

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