#### **MEMORANDUM**

TO:

Christopher Schlaps, AIA

**Director, Facilities Planning** 

FROM:

Heather Graham Lewis, AIA

Architectural Manager

DATE:

September 8, 2016

REVISED November 27, 2017

**SUBJECT:** 

**University Hospital South (UHS) Complex** 

Buildings 0309, 0312, 0314 and 0318 Authorities Having Jurisdiction (AHJs)

# **Summary:**

Questions have arisen over the Authorities Having Jurisdiction for various areas of the University Hospital South complex. Please refer to the current Fire/Smoke Partitions Drawings on the UMHS Facilities Planning Website.

http://www.med.umich.edu/facilities/plan/vn/bldg/0312.html.

The areas marked with diagonal crosshatching are non-Health Care Occupancies within a Health Care Occupancy Building, separated by two-hour fire rated occupancy barriers. These areas are NOT subject to the state of Michigan Bureau of Fire Services plan review; however, they are subject to University of Michigan Department of Environmental Health and Safety, fire safety services plan review, code inspection and approval. See below for information on shared fire alarm and fire suppression shop drawing review.

# **History:**

#### Unit 1, Building 0309:

Women's Hospital opened in 1950 as an inpatient hospital. It has been decommissioned as a hospital, and has been used for staff offices. Note all of UHS Unit 1 (old Women's Hospital) building #0309 is separated from the rest of the complex with 2-hour rated walls. This building is entirely business, is not fully fire suppressed, and has its own fire alarm system. It falls entirely under the UM EHS and is not under state jurisdiction.

# Unit 2, Building 0312:

"Old Mott" CS Mott Children's Hospital (Unit 2, Building 0312) opened in 1969 as an inpatient Hospital. A replacement Mott Children's Hospital opened in 2011, and the active inpatient licensed beds, ORs, and Imaging licenses were transferred to the new Hospital (Building 5173).

The Mott Expansion project in the early 1990's added a Business wing to the west of the original "Old Mott" Hospital, with occupancy separations from the inpatient hospital building. It also connects to, but has occupancy separations from, the Med Inn Building (0308) and the East Mechanical Building (0306). It has never been inpatient space, although outpatients were seen in some areas until 2011.

In March, 2013, a written agreement was made by Bob Harris with Kasra Zarbinian, PE, then Manager of the Michigan Health Facilities Engineering Section. This agreement allowed for reuse of portions of the "old Mott" hospital for inpatient use, "as-is" with no physical changes to the floor plans (note in this context "old Mott" refers to Units 2, 3 and 4.)

In 2015 Level 4 of Unit 2 has opened with a combination short-stay/inpatient nursing unit with 13 licensed beds. Two additional inpatient palliative care beds opened in 2016.

In 2015, Rob Gruesbeck from HFES walked levels 5 and 6 of Unit 2 with Samir Karim and Heather Lewis, identifying inactive ("banked") licensed private inpatient beds. As of November 2017, Unit 2 Level 5 has 20 licensed beds and Unit 2 Level 6 has 9 licensed beds. These rooms are being utilized as office space as of this date, however the area remains inpatient. It is planned that the "banked" licenses will be moved to a new Inpatient building in the future.

# Unit 3, Building 0314

Holden Hospital was opened in 1972 as an inpatient building. When Unit 4, Building 0318 was constructed, this building was no longer visible from the exterior; it was surrounded by other buildings.

# Unit 4, Building 0318

Maternal and Child Health Center opened in 1990 as an inpatient building. The Child and Adolescent Psych inpatient beds were moved from MCHC (Unit 4) to new Mott in 2016, so there are no longer inpatient beds in MCHC. The main lobby of the MCHC was physically attached to the outpatient Taubman Health Center, and the occupancy separation was such that the main lobby was B occupancy (similar to the main entrance to UH). Prior to the new Mott hospital opening in 2011, a portion of the original main "Big Bird" lobby was separated from the rest, to create an inpatient corridor connecting the new Mott Hospital to the rest of the campus with a 2-hour occupancy separation.

## Fire Suppression, Alarms, and Separations:

## Unit 1, Building 0309

All of old Women's Hospital building #0309 is separated from the rest of the complex with 2-hour rated walls. The building is not fully fire suppressed, and has its own fire alarm system.

#### Units 2, 3 and 4:

These buildings are fully fire suppressed. A multi-year fire alarm replacement project is currently being completed on all floors. These buildings are mixed Inpatient Healthcare and Business Occupancies, with 2-hour occupancy separations between the occupancies.

# **<u>Authorities Having Jurisdiction:</u>**

## Unit 1 (0309)

This building is entirely business, and it falls entirely under the UM Environmental Health and Safety. It is not under state jurisdiction.

#### Units 2, 3 and 4:

Renovations within these buildings in the inpatient zones are under the jurisdiction of the Michigan BFS, and if they are patient care areas, Michigan HFES. As the fire alarm system and the fire suppression systems in these buildings, are one system, all modifications to these systems in these buildings are required to be submitted to MBFS for shop drawing approval and inspection. Floor plan review and renovations in the non-healthcare portions of these buildings fall to the UM Environmental Health and Safety.

#### **Exiting:**

If it is necessary for healthcare occupancy to exit through non-healthcare occupancy spaces, per NFPA 101, 2012, Chapters 18 and 19, the means of egress on the non-healthcare side of the 2-hour occupancy separation would need to either:

- 1. Meet the means of egress requirements for Healthcare, or
- 2. The occupancy separation would need to be changed to a horizontal exit, in which case the means of egress on the other (non-healthcare) side of the horizontal exit would need to meet the requirements for the other occupancy.

At this time, it is FPD's intention to comply with option 1.

#### **Summary:**

<u>Updated Fire Wall Documentation:</u> The Fire Wall Drawing documentation from July, 2016 is attached. Renovations continue within the UHS complex, and the documentation at <a href="http://www.med.umich.edu/facilities/plan/vn/index.html">http://www.med.umich.edu/facilities/plan/vn/index.html</a> is continually being updated.

Michigan BFS/HFES Plan Review and Inspection: Renovation project within the Inpatient (Healthcare) areas, including adjacent areas within the two-hour occupancy separation fire barriers are subject to Michigan BFS plan review and inspection, and HFES plan review and inspection for Healthcare use.

<u>Fire alarm/Fire Suppression modifications in Units 2, 3 and 4</u>: Renovation projects which modify fire alarm or fire suppression systems within Units 2, 3 and 4 are subject to Michigan BFS shop drawing review for the impacted system.

<u>Means of egress:</u> Renovation projects in non-healthcare occupancies must keep required means of egress up to the standards for Healthcare Occupancy, if not doing so would create a dead-end condition. Renovations in healthcare occupancies must keep required means of egress up to the standards for the other occupancies, if not doing so would create a dead-end condition.

Smoke compartments: Smoke compartments shall be maintained within the Healthcare Occupancy areas, and are not required in non-healthcare areas as outlined in NFPA 101, 2012, 18/19.3.7.2.

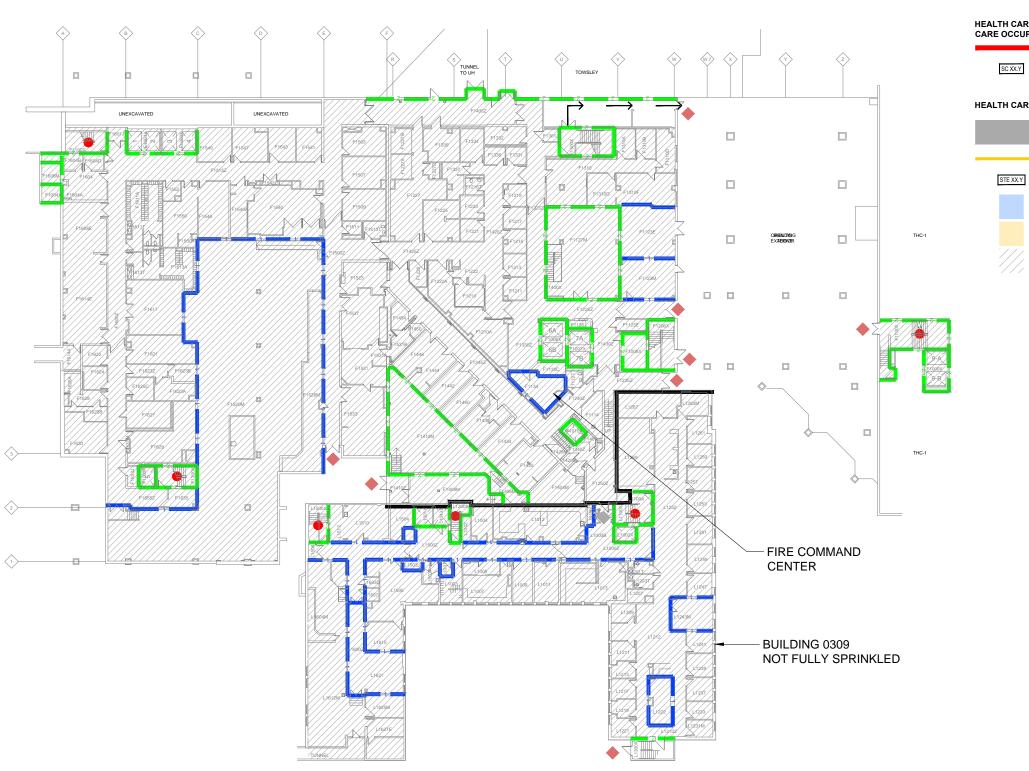
# **Confirmation with AHJ's:**

On July 1, 2015, Mr. Ian Steinman and the team of University of Michigan Fire Inspectors reviewed the drawings and this approach; they concurred unanimously. They have access to the FPD website for updates as projects modify the keyed plans.

On July 1, 2015, Mr. Brian Williams at the Michigan Bureau of Fire Services reviewed the UHS Fire/Smoke Barrier drawings. He confirmed by email on July 6, 2015 that he concurred with this approach, and had copied the state Fire Marshal and the Detroit Regional Field Supervisor.

On July 22, 2015, Mr. Rob Gruesbeck from the Michigan Health Facilities Engineering Section reviewed a copy of the UHS Fire/Smoke Barrier drawings. In the conversation, he was satisfied with the approach and concurred with MBFS.

Please contact me if further clarification is required.



LEGEND

GENERAL: 1-HOUR FIRE BARRIER 2-HOUR FIRE BARRIER 3-HOUR FIRE BARRIER EXIT

HEALTH CARE INCLUDING AMBULATORY HEALTH CARE OCCUPANCIES:

EXIT STAIR

SMOKE BARRIER

SMOKE COMPARTMENT TAG

#### HEALTH CARE (INPATIENT) OCCUPANCY ONLY:



SUITE TAG

NON PATIENT SUITE (NP) NON PATIENT PATIENT CARE SUITE
(S) SLEEPING
(NS) NON SLEEPING

NON HEALTH CARE
OCCUPANCY WITHIN A BUILDING
WITH HEALTH CARE (INPATIENT)
OCCUPANCY. SEPARATED FROM
HEALTH CARE WITH 2-HOUR
FIRE BARRIER

2101 Commonwealth, Suite B Ann Arbor, Michigan 48105-5759 www.med.umich.edufacilitiesplan/

FIRE/SMOKE PARTITIONS

Building No.: 0312, 0314, 0318, 03. UNIVERSITY HOSPITAL SOUTH LEVEL(s) of 1500 E. MEDICAL CENTER DR 1500 E. MEDICAL CENTER DR MAN ARRON, MI 4810 MIN GREAT AND ARRONGE AND ARRONGE MIN STATE AND ARRONGE AND ARRON

JUNE 2015 FW-0312-01

# SCHEDULES

SMOKE COMPARTMENT	AREA
SC 2.1	2050 SF
SC 2.2	17050 SF
SC 2.3	19737 SF
SC 2.4	6761 SF
SC 2.5	8390 SF

SUITE	S/NP/NS	AREA
STE 2A	S	7019 SF
STE 2B	NP	988 SF
STE 2C	NP	1381 SF
STE 2D	NP	461 SF
STE 2E	NP	686 SF
STE 2F	NP	880 SF
STE 2G	NP	1004 SF
OTE OU		700.05

	GENER	ΑL
	1 =	
:	2	
		_
	•	0
_		Ĭ

LEGEND



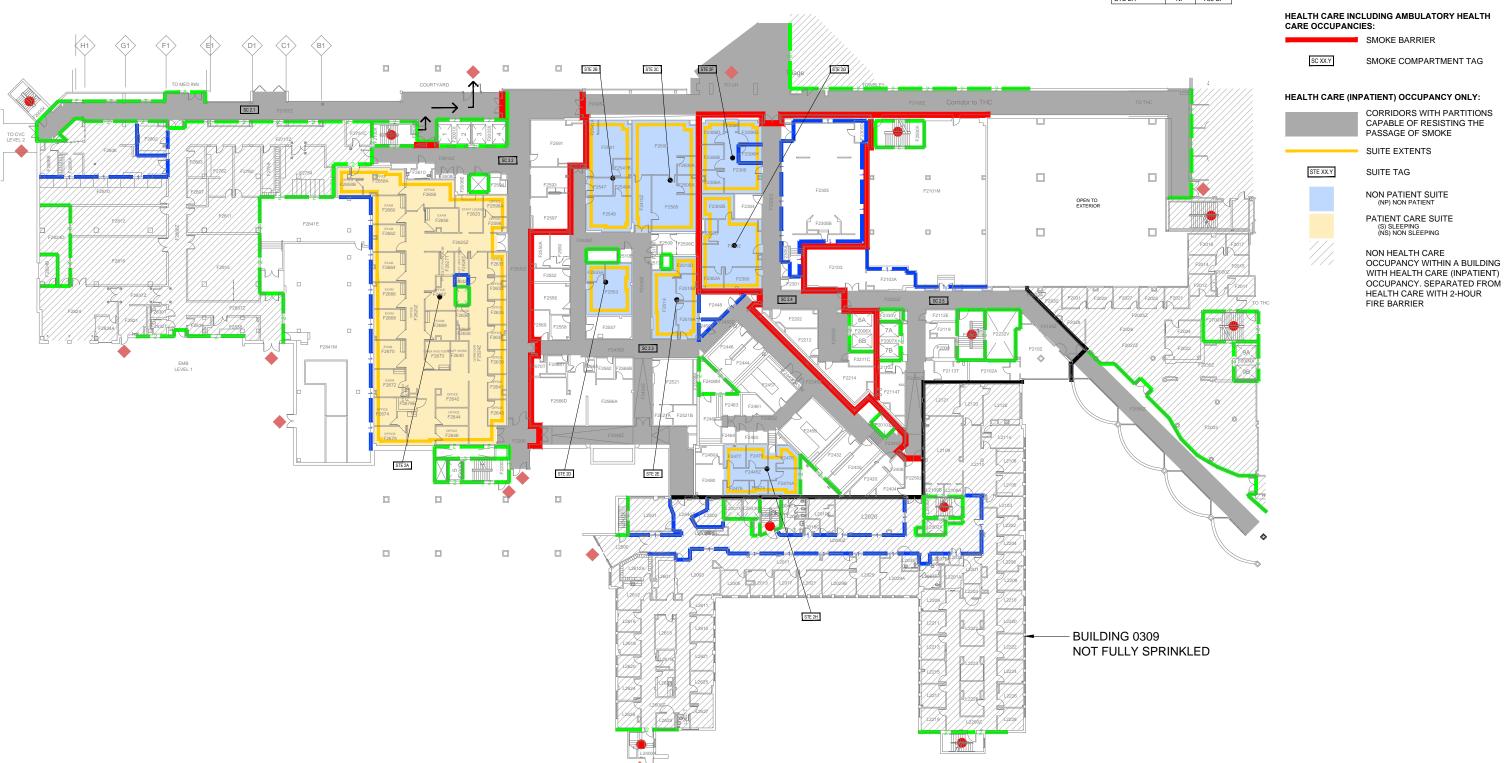
2101 Commonwealth, Suite B Ann Arbor, Michigan 48105-5759 www.med.umich.edu/facilitiesplan/

FIRE/SMOKE PARTITIONS

Building Owner: UMHHC MBC Const. Type: 1A MBC Bldg Occupancy: I-2/B Gross SqFt of Floor: 90, 103

Building No.: 0312, 0314, 0318, 03 UNIGERSITY HOSPITAL SOUTH LEVEL(s) 02 1500 E. MEDICAL CENTER DR NN ARBOR, MI 48109 NN ARBOR, MI 48109

JUNE 2015



SMOKE COMPARTMENT	AREA
SC 3.1	11607 SF
SC 3.2	15065 SF
SC 3.3	19784 SF
SC 3.4	2389 SF

SUITE	S/NP/NS	AREA
STE 3A	NS	1174 SF
STE 3B	NP	2046 SF
STE 3C	NP	5996 SF
STE 3D	NS	1358 SF
STE 3E	NS	4997 SF
STE 3F	NP	866 SF



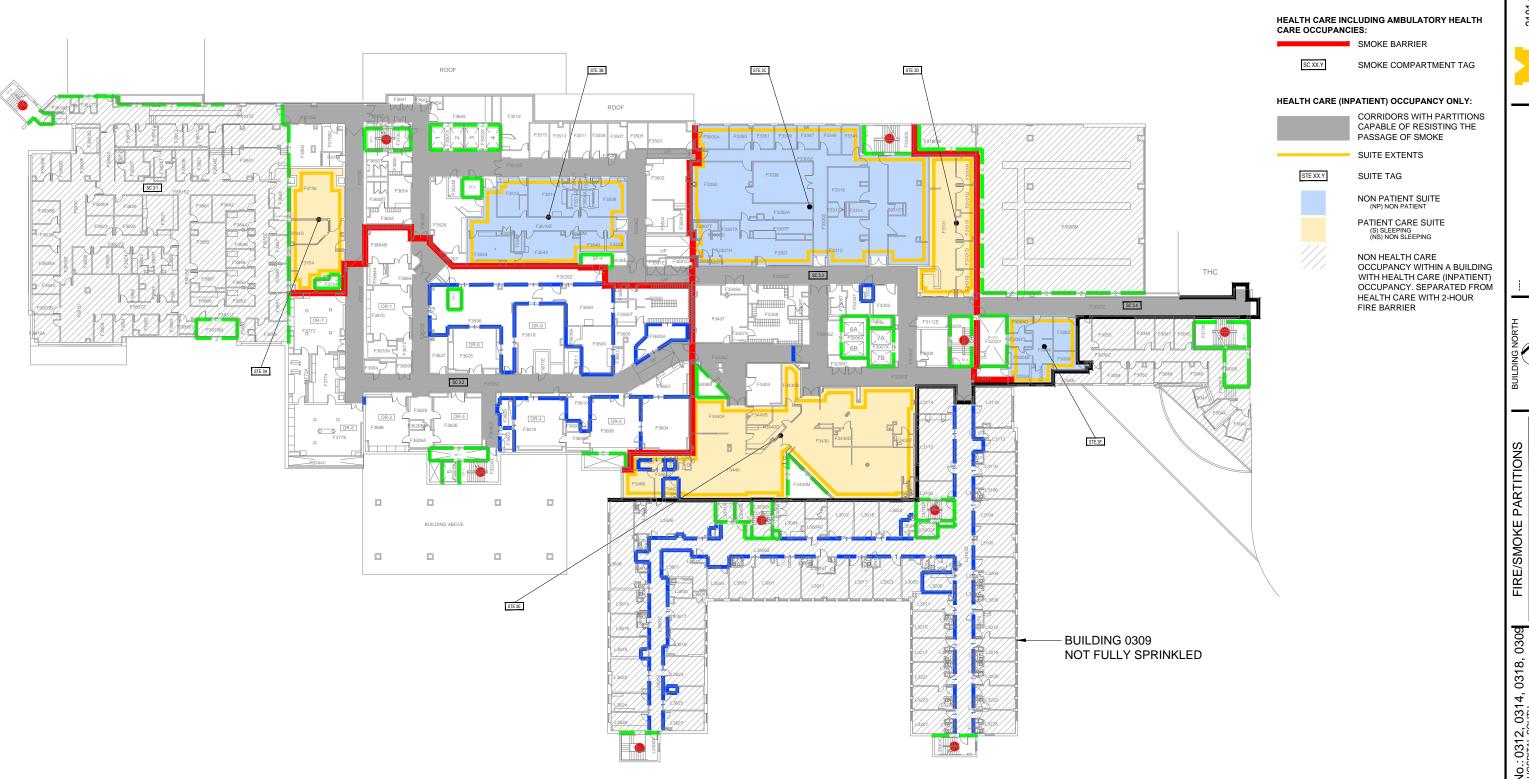


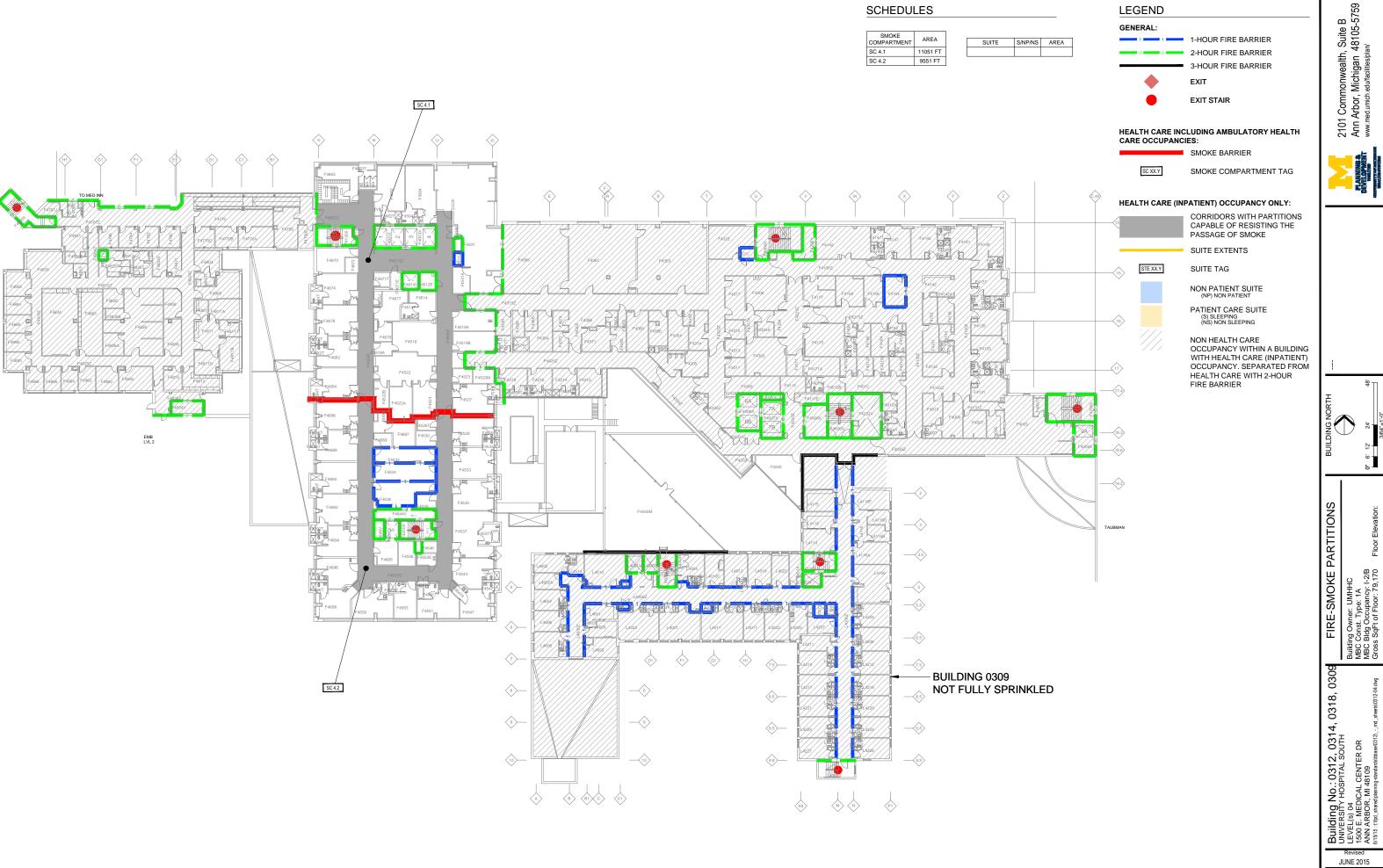
2101 Commonwealth, Suite B Ann Arbor, Michigan 48105-5759 www.med.umich.edufacilitiesplan/

Building Owner: UMHHC MBC Const. Type: 1A MBC Bldg Occupancy: 1-2/B Gross SqFt of Floor: 89,189

Building No.: 0312, 0314, 0318, 0.
UNIVERSITY HOSPITAL SOUTH
LEVEL(s) 03
1500 E. MEDICAL CENTER DR
1500 E. MARBOR, MI 48109
6/0015; Elba; singeldbannicateneralelbannicateneralebannicatenera

JUNE 2015 FW-0312-03





SMOKE			
COMPARTMENT	AREA		SUITE
SC 5.1	9125 SF		
SC 5.2	11737 SF	l	•

S/NP/NS AREA

LEGEND

GENERAL: 1-HOUR FIRE BARRIER 2-HOUR FIRE BARRIER 3-HOUR FIRE BARRIER EXIT

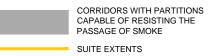
HEALTH CARE INCLUDING AMBULATORY HEALTH CARE OCCUPANCIES:

EXIT STAIR

SMOKE BARRIER SC XX.Y

SMOKE COMPARTMENT TAG

#### HEALTH CARE (INPATIENT) OCCUPANCY ONLY:



STE XX.Y SUITE TAG

> NON PATIENT SUITE (NP) NON PATIENT PATIENT CARE SUITE (S) SLEEPING (NS) NON SLEEPING

NON HEALTH CARE OCCUPANCY WITHIN A BUILDING WITH HEALTH CARE (INPATIENT)
OCCUPANCY. SEPARATED FROM
HEALTH CARE WITH 2-HOUR
FIRE BARRIER

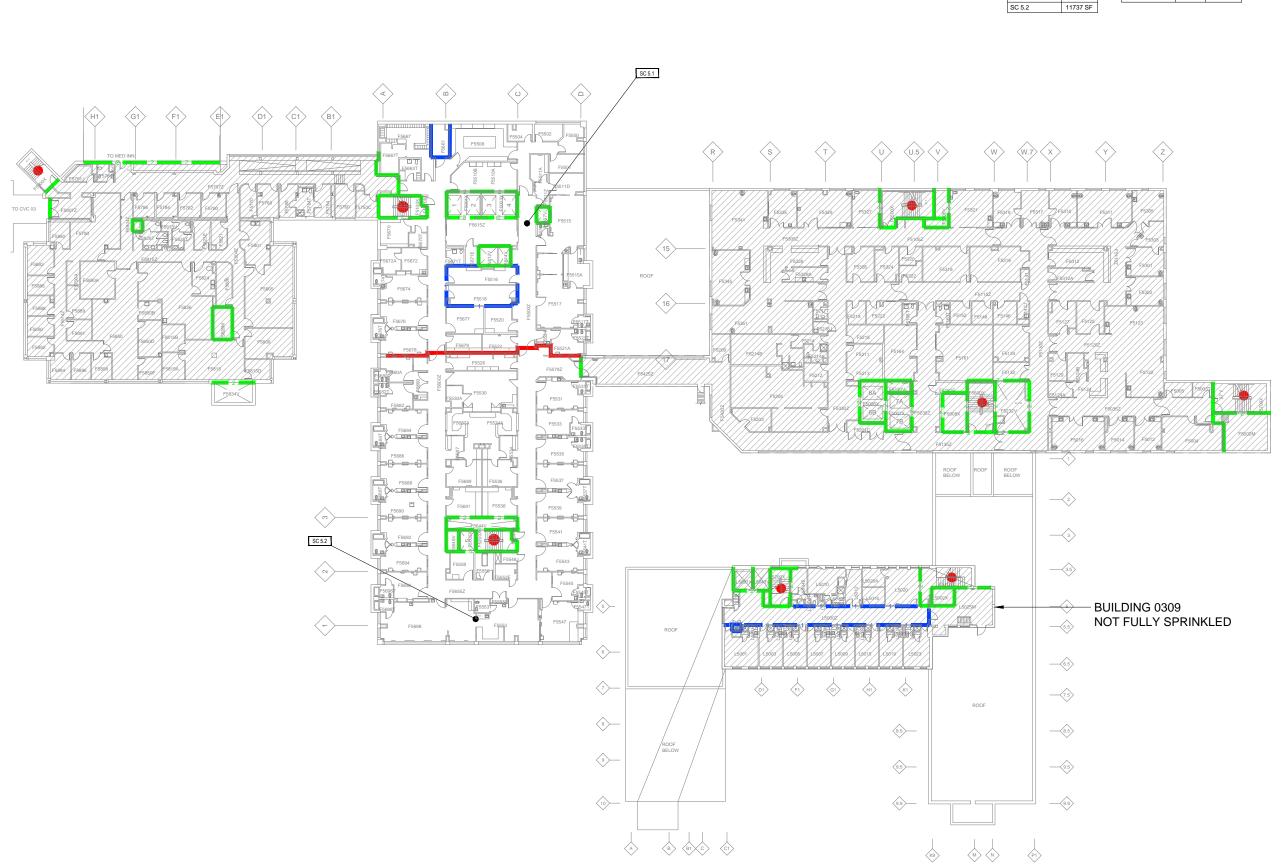
2101 Commonwealth, Suite B Ann Arbor, Michigan 48105-5759 www.med.umich.edufacilitiesplan/

FIRE/SMOKE PARTITIONS

Building Owner: UMHHC MBC Const. Type: 1A MBC Bldg Occupancy: I-2B Gross SqFt of Floor: 65,712

0318, Building No.: 0312, 0314, 0. UNIVERSITY HOSPITAL SOUTH LEVEL(8) 05 1500 E. MEDICAL CENTER DR ANN ARBOR, MI 48109 E. (Fift sharedness) and MI 48109 E. (Fift sharedness) and MI 48109 E. (Fift sharedness) and MI 48109 E.

JUNE 2015



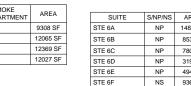
SMOKE COMPARTMENT	AREA
SC 6.1	9308 SF
SC 6.2	12065 SF
SC 6.3	12369 SF
SC 6.4	12027 SF

SUITE	S/NP/NS	AREA
STE 6A	NP	1486 SF
STE 6B	NP	853 SF
STE 6C	NP	780 SF
STE 6D	NP	319 SF
STE 6E	NP	494 SF
STE 6F	NS	936 SF
STE 6G	NS	179 SF

# **SCHEDULES**

SMOKE MPARTMENT	AREA	SUITE	S/NP/NS	Al
6.1	9308 SF	STE 6A	NP	148
6.2	12065 SF	STE 6B	NP	85
6.3	12369 SF	STE 6C	NP	78
6.4	12027 SF	STE 6D	NP	31
		STE 6E	NP	49
		STE 6F	NS	93







2-HOUR FIRE BARRIER 3-HOUR FIRE BARRIER EXIT

SC XX.Y

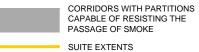
EXIT STAIR

# HEALTH CARE INCLUDING AMBULATORY HEALTH CARE OCCUPANCIES:

SMOKE BARRIER

SMOKE COMPARTMENT TAG

#### HEALTH CARE (INPATIENT) OCCUPANCY ONLY:



SUITE TAG

NON PATIENT SUITE (NP) NON PATIENT

PATIENT CARE SUITE
(S) SLEEPING
(NS) NON SLEEPING

NON HEALTH CARE OCCUPANCY WITHIN A BUILDING WITH HEALTH CARE (INPATIENT)
OCCUPANCY. SEPARATED FROM
HEALTH CARE WITH 2-HOUR
FIRE BARRIER

STE XX.Y

2101 Commonwealth, Suite B Ann Arbor, Michigan 48105-5759 www.med.umich.edufacilitiesplan/

FIRE-SMOKE PARTITIONS

Building Owner: UMHHC MBC Const. Type: 1A MBC Bldg Occupancy: 1-2/B Gross SqFt of Floor: 60,193

Building No.: 0312, 0314, 0318, 0.
UNIVERSITY HOSPITAL SOUTH
LEVEL(S) 06
1500 E. MEDICAL CENTER DR
1500 E. MASHOR, MI 48109
5/14/15; Elbig, singeligaminatement elements.

JUNE 2015



SMOKE COMPARTMENT	AREA
SC 7.1	7853 SF
SC 7.2	13718 SF

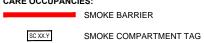


# LEGEND

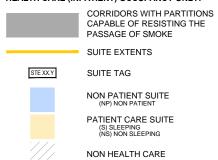


EXIT STAIR

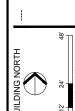
# HEALTH CARE INCLUDING AMBULATORY HEALTH CARE OCCUPANCIES:



#### HEALTH CARE (INPATIENT) OCCUPANCY ONLY:



NON HEALTH CARE OCCUPANCY WITHIN A BUILDING WITH HEALTH CARE (INPATIENT)
OCCUPANCY. SEPARATED FROM
HEALTH CARE WITH 2-HOUR
FIRE BARRIER



2101 Commonwealth, Suite B Ann Arbor, Michigan 48105-5759 www.med.umich.edufacilitiesplan/

FIRE/SMOKE PARTITIONS

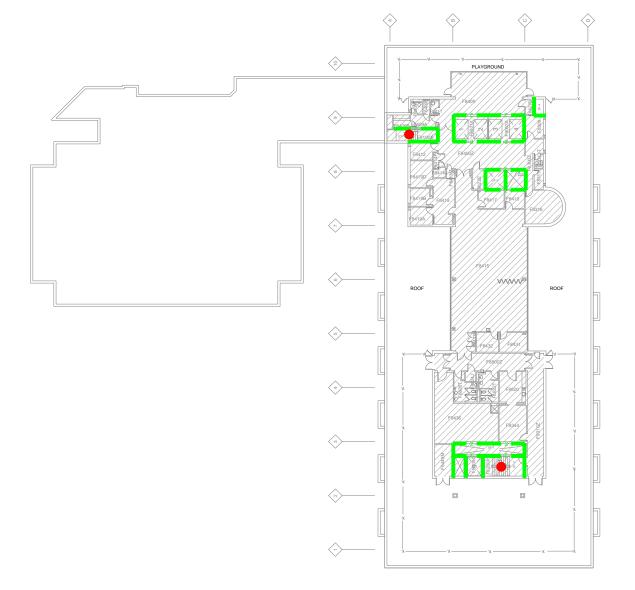
Building No.: 0312, 0314, 0318, 0.
UNIVERSITY HOSPITAL SOUTH
LEVEL(s) 07
1500 E. MEDICAL CENTER DR
MAN RARBO, MI 4810
64415; tight sprachaenon annumber and annumber annumber and annumber annumber and annumber a

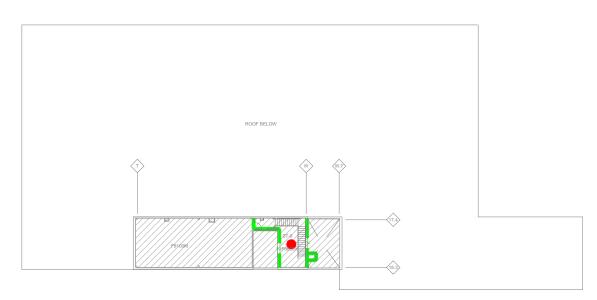
JUNE 2015

FW-0312-07



SC 7.2





# LEGEND

GENERAL: 1-HOUR FIRE BARRIER 2-HOUR FIRE BARRIER 3-HOUR FIRE BARRIER EXIT

# HEALTH CARE INCLUDING AMBULATORY HEALTH CARE OCCUPANCIES:

EXIT STAIR

SMOKE BARRIER SC XX.Y SMOKE COMPARTMENT TAG

#### HEALTH CARE (INPATIENT) OCCUPANCY ONLY:

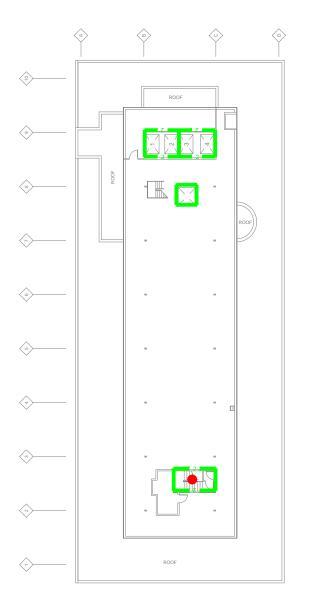


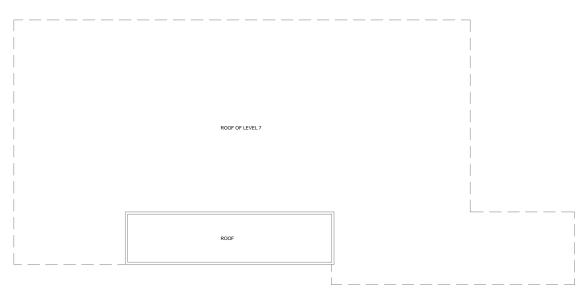
2101 Commonwealth, Suite B Ann Arbor, Michigan 48105-5759 www.med.umich.edufacilitiesplan/

Building Owner: UMHHC
MBC Const. Type: 1A
MBC Bldg Occupancy: 1-2
Gross SqFt of Floor: 10,577 Floor Elevation:

Building No.: 0312, 0314, 0318, 03 LEVEL(s) BE LEVEL(s) BE LEVEL(s) BE ANN ARBOR, MI 4109 SIRBORAL CENTER DR

JUNE 2015
Sheet Number
FW-0312-08







GENERAL: 1-HOUR FIRE BARRIER 2-HOUR FIRE BARRIER 3-HOUR FIRE BARRIER EXIT EXIT STAIR

# HEALTH CARE INCLUDING AMBULATORY HEALTH CARE OCCUPANCIES:

SMOKE BARRIER SC XX.Y SMOKE COMPARTMENT TAG

#### HEALTH CARE (INPATIENT) OCCUPANCY ONLY:



CORRIDORS WITH PARTITIONS CAPABLE OF RESISTING THE PASSAGE OF SMOKE

SUITE EXTENTS

SUITE TAG NON PATIENT SUITE (NP) NON PATIENT

PATIENT CARE SUITE (S) SLEEPING (NS) NON SLEEPING

NON HEALTH CARE OCCUPANCY WITHIN A BUILDING WITH HEALTH CARE (INPATIENT)
OCCUPANCY. SEPARATED FROM
HEALTH CARE WITH 2-HOUR
FIRE BARRIER

2101 Commonwealth, Suite B Ann Arbor, Michigan 48105-5759 www.med.umich.edufacilitiesplan/

EIRE/SMOKE PARTITIONS
Building Owner. UMHHC
MBC Const. Type: 1A
MBC Bldg Occupancy: 1-2
Gross SqFt of Floor: 9,675 Floor Elevation:

Building No.: 0312, 0314, 0318, 0; UNIVERSITY HOSPITAL SOUTH EVEL(s) 09 1500 C. MEDICAL CENTER DR ANN ARBOR. MI 48109 S/1915; typic shreetyleiming-sentraletylesentral.

JUNE 2015
Sheet Number
FW-0312-09