LEE'S SUMMIT MISSOURI

FIRE DEPARTMENT

PLAN REVIEW CONDITIONS

May 16, 2017

Gould Turner Group
4400 Harding Pike. Suite 1000
Nashville, TN 37205

Permit No:	PRCOM20170916
Project Title:	Lee's Summit Medical Center Tower Expansion
Project Address:	2100 SE BLUE PKWY, LEES SUMMIT, MO 64063
Parcel Number:	60420990900000000
Location:	HCA MIDWEST, LOTS 1A & 1B---LOT 1A
Type of Work:	ADDITION COMMERCIAL
Occupancy Group:	INSTITTIONAL, INCAPACITATED
Description:	ADDITION OF 3RD FLOOR TO EXISTING HOSPITAL - INCLUDES NEW GRADE LEVEL CHILLER ROOM AND ALTERATIONS ON 2ND FLOOR

The following is a list of requirements from the City of Lee's Summit that have not been satisfactorily addressed in the plans and specifications. Please contact the appropriate department regarding clarification of comments.

Codes Administration (816) 969-1200 Fire Department (816) 969-1300

Fire Plan Review **Reviewed By: Joe Dir** **Approved with Conditions**

1. Fire Sprinkler system coverage:
ACTION REQUIRED:
Fire sprinkler coverage shall remain active during all phases of the project in all areas of renovation. (information purposes)

2. 2012 IFC 907.1.1- Construction documents. Construction documents for fire alarm systems shall be submitted for review and approval prior to system installation. Construction documents shall include, but not be limited to, all of the following: 1. .A floor plan which indicates the use of all rooms. 2. Locations of alarm-initiating and notification appliances. 3. Alarm control and trouble signaling equipment. 4. Annunciation. 5. Power connection. 6. Battery calculations. 7. Conductor type and sizes. 8. Voltage drop calculations. 9. Manufacturers, model numbers and listing information for equipment, devices and materials. 10. Details of ceiling height and construction. 11. The interface of fire safety control functions.
ACTION REQUIRED:
Have the fire alarm system contractor provide shop drawings of the modifications to be done to the fire alarm system. (information purposes)

3. 2012 IFC 901.2- Construction documents. The fire code official shall have the authority to require construction documents and calculations for all fire protection systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection system. Construction documents for fire

protection systems shall be submitted for review and approval prior to system installation.
ACTION REQUIRED:
Have the fire sprinkler system contractor provide shop drawings of the modifications to be done to the fire sprinkler system. (information purposes)

4. 2012 IFC 901.5- Installation acceptance testing. Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other fire protection systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing. The fire code official shall be notified 48 hours before any required acceptance test.
ACTION REQUIRED:
Field tests and acceptance testing of the fire sprinkler and fire alarm systems will be required prior to the final occupancy inspection. To schedule a test contact the fire department at 816-969-1300.
(information purposes)

5. 2012 IFC 901.6- Inspection, testing and maintenance. Fire detection, alarm and extinguishing systems shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Not required fire protection systems and equipment shall be inspected, tested and maintained or removed.
ACTION REQUIRED:
The existing fire sprinkler and fire alarm systems shall be current with all required tests, service and maintenance. A current service tag shall be posted on the fire sprinkler system riser.
(verified at inspection)

6. 2012 IFC 906.2 - General requirements. Portable fire extinguishers shall be selected, installed and maintained in accordance with this section and NFPA 10.
ACTION REQUIRED:
Add 2A-10BC fire extinguishers to the 3rd floor as needed. One extinguisher for every 3,000 square feet of additional useable space.

11. Emergency responder radio coverage. The Fire Department is switching to a 800 MZ radio system. Contact the Fire Department for the compatibility requirements. 816-969-1300
ACTION REQUIRED:
1103.2 Emergency responder radio coverage in existing buildings.
Existing buildings that do not have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building, shall be equipped with such coverage according to one of the following:

1. Whenever an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 510.1, Exception 1.

2. Within a time frame established by the adopting authority.

Exception: Where it is determined by the fire code official that the radio coverage system is not needed.

Building Plan Review **Reviewed By: Joe Frogge** **Pending**

1. 2012 IBC 1704.2 Special inspections. Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more approved agencies to perform inspections during construction on the types of work listed under Section 1705. These inspections are in addition to the inspections identified in Lee's Summit Code of Ordinances Chapter 7. (see code section for exceptions)

Action required: Provide statement of special inspections / letter of responsibility from company contracted to perform special inspections.

2. Prior to the installation or construction of any elevator equipment, an elevator equipment permit shall be obtained from the Missouri Department of Public Safety or its authorized representative.

Action required: Comment is for informational purposes.

3. Prior to the operation of any new elevator equipment or the issuance of the operating certificate, such elevator equipment shall be inspected by a licensed inspector. Testing must be performed in accordance with these rules and regulations. The testing must be witnessed by a licensed inspector. Contact the Lee's Summit Codes Administration.

Action required: Comment is for informational purposes.

4. Elevator Safety Act and Rules 701.361 - Each privately owned or operated installation and each installation owned or operated by the state of Missouri or any political subdivision of the state shall have a certificate of inspection and meet the safety code promulgated prusuant to sections 701.350 to 701.380.

Action required: Comment is for informational purposes.

5. ICC A117.1-2009 Section 404.2.3.2 Swinging Doors. Swinging doors shall have maneuvering clearances complying with Table 404.2.3.2.

Action required: Provide minimum 18" clearance at latch side of door into Eq. Stor. 3-163.

6. 2012 IBC 1210.2.2 – Walls and partitions. Walls and partitions with 2 feet of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture. (See code section for possible exceptions.)

Action required: Specify compliant wall finish materials at restrooms and mop sink. (if paint is used it must be epoxy based)

7. 2012 IBC 602.2 – Types I and II. Types I and II construction are those types of construction in which the building elements listed in Table 601 are of noncombustible materials, except as permitted in Section 603 and elsewhere in this code.

Action required: Wood is not allowed in parapet or built-in casework unless fire-retardant-treated. Modify details to show compliant materials.

8. Additional information required.

Action required: Provide nail/screw patterns for all fire rated assemblies.

9. 2011 NEC 517.13 Grounding of Receptacles and Fixed Electrical Equipment in Patient Care Areas. Wiring in patient care areas shall comply with 517.13(A) and (B).
(A) Wiring methods. All branch circuits serving patient care areas shall be provided with an effective ground-fault current path by installation in a metal raceway system, or a cable having a metallic armor or sheath assembly. The metal raceway system, or metallic cable armor, or sheath assembly shall itself qualify as an equipment grounding conductor in accordance with 250.118.
(B) Insulated Equipment Grounding Conductor.
(1) General. The following shall be directly connected to an insulated copper equipment grounding conductor that is installed with the branch circuit conductors in the wiring methods as provided in 517.13(A).
1. The grounding terminals of all receptacles.
2. Metal Boxes and enclosures containing receptacles.

3. All non-current-carrying conductive surfaces of fixed electrical equipment likely to become energized that are subject to personal contact, operating at over 100 volts.
(refer code for exceptions)
(2) Sizing. Equipment grounding conductors and equipment bonding jumpers shall be sized in accordance with 250.122.

Action required: Modify drawings to show that all circuits in patient care areas will have redundant ground system.

10. 2011 NEC 517.19(B)(2) Receptacle Requirements. The receptacles required in 517.19(B)(1) shall be permitted to be single, duplex, or quadruplex type or any combination thereof. All receptacles shall be listed "hospital grade" and shall be so identified. The grounding terminal of each receptacle shall be connected to the reference grounding point by means of an insulated copper equipment grounding conductor.

Action required: Modify documents to demonstrate compliance.

Fire Plan Review **Reviewed By: Jim Eden** **Pending**

1. Fire Sprinkler system coverage:
ACTION REQUIRED:
Fire sprinkler coverage shall remain active during all phases of the project in all areas of renovation.
(information purposes)

2. 2012 IFC 907.1.1- Construction documents. Construction documents for fire alarm systems shall be submitted for review and approval prior to system installation. Construction documents shall include, but not be limited to, all of the following: 1. .A floor plan which indicates the use of all rooms. 2. Locations of alarm-initiating and notification appliances. 3. Alarm control and trouble signaling equipment. 4. Annunciation. 5. Power connection. 6. Battery calculations. 7. Conductor type and sizes. 8. Voltage drop calculations. 9. Manufacturers, model numbers and listing information for equipment, devices and materials. 10. Details of ceiling height and construction. 11. The interface of fire safety control functions.
ACTION REQUIRED:
Have the fire alarm system contractor provide shop drawings of the modifications to be done to the fire alarm system. (information purposes)

3. 2012 IFC 901.2- Construction documents. The fire code official shall have the authority to require construction documents and calculations for all fire protection systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection system. Construction documents for fire protection systems shall be submitted for review and approval prior to system installation.
ACTION REQUIRED:
Have the fire sprinkler system contractor provide shop drawings of the modifications to be done to the fire sprinkler system. (information purposes)

4. 2012 IFC 901.5- Installation acceptance testing. Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other fire protection systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing. The fire code official shall be notified 48 hours before any required acceptance test.
ACTION REQUIRED:
Field tests and acceptance testing of the fire sprinkler and fire alarm systems will be required prior to the final occupancy inspection. To schedule a test contact the fire department at 816-969-1300.
(information purposes)

5. 2012 IFC 901.6- Inspection, testing and maintenance. Fire detection, alarm and extinguishing systems shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Not required fire protection systems and equipment shall be inspected, tested and maintained or removed.
ACTION REQUIRED:
The existing fire sprinkler and fire alarm systems shall be current with all required tests, service and maintenance. A current service tag shall be posted on the fire sprinkler system riser.
(verified at inspection)

6. 2012 IFC 906.2 - General requirements. Portable fire extinguishers shall be selected, installed and maintained in accordance with this section and NFPA 10.
ACTION REQUIRED:
Add 2A-10BC fire extinguishers to the 3rd floor as needed. One extinguisher for every 3,000 square feet of additional useable space.

7. MED GAS Central plant addition
ACTION REQUIRED:
Provide plans for the central plant addition as per comment on plan sheet P2.01 comment #1

8. Med Gases:
ACTION REQUIRED:
5306.4 Medical gas systems.
Medical gas systems including, but not limited to, distribution piping, supply manifolds, connections, pressure regulators and relief devices and valves, shall comply with NFPA 99 and the general provisions of this chapter. (information purposes)

9. Fire Sprinkler system:
ACTION REQUIRED:
Have engineers make a determination if the size of the renovation project may require that a fire pump be installed on the existing fire sprinkler system system. (information purposes)

10. Elevator tests:
ACTION REQUIRED:
All elevators shall be current with all required state tests and maintenance. A current state certificate shall be posted in the elevator mechanical rooms.
(verified at inspection)

11. Emergency responder radio coverage. The Fire Department is switching to a 800 MZ radio system. Contact the Fire Department for the compatibility requirements. 816-969-1300
ACTION REQUIRED:
1103.2 Emergency responder radio coverage in existing buildings.
Existing buildings that do not have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building, shall be equipped with such coverage according to one of the following:

1. Whenever an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 510.1, Exception 1.

2. Within a time frame established by the adopting authority.

Exception: Where it is determined by the fire code official that the radio coverage system is not needed.

12. DOOR OPERATIONS
ACTION REQUIRED:
[B] 1008.1.9 Door operations.
Except as specifically permitted by this section egress doors shall be readily openable from the egress side

without the use of a key or special knowledge or effort.
B] 1008.1.4.2 Power-operated doors.
Where means of egress doors are operated by power, such as doors with a photoelectric-actuated mechanism to open the door upon the approach of a person, or doors with power-assisted manual operation, the design shall be such that in the event of power failure, the door is capable of being opened manually to permit means of egress travel or closed where necessary to safeguard means of egress. The forces required to open these doors manually shall not exceed those specified in Section 1008.1.3, except that the force to set the door in motion shall not exceed 50 pounds (220 N). The door shall be capable of swinging from any position to the full width of the opening in which such door is installed when a force is applied to the door on the side from which egress is made. Full-power-operated doors shall comply with BHMA A156.10. Power-assisted and low-energy doors shall comply with BHMA A156.19.
[B] 1008.1.9.6 Special locking arrangements in Group I-2.
Approved special egress locks shall be permitted in a Group I-2 occupancy where the clinical needs of persons receiving care require such locking. Special egress locks shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with Items 1 through 7 below.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.

2. The doors unlock upon loss of power controlling the lock or lock mechanism.

3. The door locks shall have the capability of being unlocked by a signal from the fire command center, a nursing station or other approved location.

4. A building occupant shall not be required to pass through more than one door equipped with a special egress lock before entering an exit.

5. The procedures for the operation(s) of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Chapter 4.

6. All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.

7. Emergency lighting shall be provided at the door.

Exception: Items 1 through 4 shall not apply to doors to areas where persons, which because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.

[B] 1008.1.9.7 Delayed egress locks.
Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E and H occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.

2. The doors unlock upon loss of power controlling the lock or lock mechanism.

3. The door locks shall have the capability of being unlocked by a signal from the fire command center.

4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

Exception: Where approved, a delay of not more than 30 seconds is permitted.

5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.

6. Emergency lighting shall be provided at the door.

[B] 1008.1.9.8 Access-controlled egress doors.
The entrance doors in a means of egress in buildings with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2, and entrance doors to tenant spaces in occupancies in Groups A, B, E, I-2, M, R-1 or R-2, are permitted to be equipped with an approved entrance and egress access control system, listed in accordance with UL 294, which shall be installed in accordance with all of the following criteria:

1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.

2. Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.

3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads “PUSH TO EXIT.” When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of the access control system electronics—and the doors shall remain unlocked for a minimum of 30 seconds.

4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.

5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.

6. Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.

[B] 1008.1.9.9 Electromagnetically locked egress doors.
Doors in the means of egress in buildings with an occupancy in Group A, B, E, M, R-1 or R-2, and doors to tenant spaces in Group A, B, E, M, R-1 or R-2, shall be permitted to be electromagnetically locked if equipped with listed hardware that incorporates a built-in switch and meet the requirements below:

1. The listed hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.

2. The listed hardware is capable of being operated with one hand.

3. Operation of the listed hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.

4. Loss of power to the listed hardware automatically unlocks the door.

5. Where panic or fire exit hardware is required by Section 1008.1.10, operation of the listed panic or fire exit hardware also releases the electromagnetic lock.
(information purposes)

Building Plan Review **Reviewed By: Joe Frogge** **Pending**

1. 2012 IBC 1704.2 Special inspections. Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more approved agencies to perform inspections during construction on the types of work listed under Section 1705. These inspections are in addition to the inspections identified in Lee's Summit Code of Ordinances Chapter 7. (see code section for exceptions)

Action required: Provide statement of special inspections / letter of responsibility from company contracted to perform special inspections.

2. Prior to the installation or construction of any elevator equipment, an elevator equipment permit shall be obtained from the Missouri Department of Public Safety or its authorized representative.

Action required: Comment is for informational purposes.

3. Prior to the operation of any new elevator equipment or the issuance of the operating certificate, such elevator equipment shall be inspected by a licensed inspector. Testing must be performed in accordance with these rules and regulations. The testing must be witnessed by a licensed inspector. Contact the Lee's Summit Codes Administration.

Action required: Comment is for informational purposes.

4. Elevator Safety Act and Rules 701.361 - Each privately owned or operated installation and each installation owned or operated by the state of Missouri or any political subdivision of the state shall have a certificate of inspection and meet the safety code promulgated prusuant to sections 701.350 to 701.380.

Action required: Comment is for informational purposes.

5. ICC A117.1-2009 Section 404.2.3.2 Swinging Doors. Swinging doors shall have maneuvering clearances complying with Table 404.2.3.2.

Action required: Provide minimum 18" clearance at latch side of door into Eq. Stor. 3-163.

6. 2012 IBC 1210.2.2 – Walls and partitions. Walls and partitions with 2 feet of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture. (See code section for possible exceptions.)

Action required: Specify compliant wall finish materials at restrooms and mop sink. (if paint is used it must be epoxy based)

7. 2012 IBC 602.2 – Types I and II. Types I and II construction are those types of construction in which the building elements listed in Table 601 are of noncombustible materials, except as permitted in Section 603 and elsewhere in this code.

Action required: Wood is not allowed in parapet or built-in casework unless fire-retardant-treated. Modify details to show compliant materials.

8. Additional information required.

Action required: Provide nail/screw patterns for all fire rated assemblies.

9. 2011 NEC 517.13 Grounding of Receptacles and Fixed Electrical Equipment in Patient Care Areas. Wiring in patient care areas shall comply with 517.13(A) and (B).
(A) Wiring methods. All branch circuits serving patient care areas shall be provided with an effective ground-fault current path by installation in a metal raceway system, or a cable having a metallic armor or sheath assembly. The metal raceway system, or metallic cable armor, or sheath assembly shall itself qualify as an equipment grounding conductor in accordance with 250.118.
(B) Insulated Equipment Grounding Conductor.
(1) General. The following shall be directly connected to an insulated copper equipment grounding conductor that is installed with the branch circuit conductors in the wiring methods as provided in 517.13(A).
1. The grounding terminals of all receptacles.
2. Metal Boxes and enclosures containing receptacles.
3. All non-current-carrying conductive surfaces of fixed electrical equipment likely to become energized that are subject to personal contact, operating at over 100 volts.
(refer code for exceptions)
(2) Sizing. Equipment grounding conductors and equipment bonding jumpers shall be sized in accordance with 250.122.

Action required: Modify drawings to show that all circuits in patient care areas will have redundant ground system.

10. 2011 NEC 517.19(B)(2) Receptacle Requirements. The receptacles required in 517.19(B)(1) shall be permitted to be single, duplex, or quadruplex type or any combination thereof. All receptacles shall be listed “hospital grade” and shall be so identified. The grounding terminal of each receptacle shall be connected to the reference grounding point by means of an insulated copper equipment grounding conductor.

Action required: Modify documents to demonstrate compliance.

The approval of plans and specifications does not permit the violation of any section of the Building Codes or other City Ordinances or State Law.

The review conducted by the City of Lee's Summit Codes Administration Department shall not be construed as a structural review of the project.