

January 25, 2018

Hector Soto, Jr.
Planning Division Manager
City of Lee's Summit
220 SE Green Street
Lee's Summit, MO 64063

RE: Lee's Summit Medical Center – Medical Office Building PL2017190 Comment Response Letter Lee's Summit, Missouri

Dear Mr. Soto:

Please consider this submittal as a formal response to comments received September 25, 2017 for the above referenced project. Below, please find a summary of how each comment has been addressed.

Engineering Comments

Gene Williams

- 1) The "Drainage Design Summary" dated December 28, 2017 does not appear to show the 24" RCP being used in the routing calculations. In addition, there is concern that the existing 18" pipe is being replaced with a 24" pipe, with no explanation given in the report.
 - The 18" pipe is proposed to be replaced with a 24" pipe since it was determined that an 18" pipe does not allow for 1' of freeboard in the pond during the design storms. Additional clarification and supporting documents have been added to the Drainage Design Summary. With the up-sizing of pipe, the post development flow is still less than the pre-developed condition.
- 2) Is the storage volume being increased? It is not clear from the above report.
 - Pond volume added was to mitigate for the storage volume lost due to the parking lot encroaching into the existing pond by adding the retaining wall. Additional volume was added to account for the proposed impervious areas which exceeded the existing impervious area. All of these changes are accounted for in the pond modelling included within the Drainage Design Summary.
- 3) Sheet C7.1: The inset for the area near the backflow vault should be revised to show an external gate valve prior to the vault. Even though the standard detail shows this valve, the inset should also show the location of this valve. The limits of the easements should end at this valve.
 - Additional gate valves have been added in the proposed easement limits per City of Lee's Summit detail WAT-12.
- 4) Sheet C7.2: A tee is called-out as "U12b" along the private fire line. It does not appear that a tee is needed at this location.
 - The U12b key note has been removed.
- 5) Sheet C7.4: A minimum of 18" of clearance is required between any storm line, and the fire line. It appears this rule is violated in serval locations as shown on the profile view.

- The fire line profile has been adjusted to provide a minimum of 18" clearance between the fire line and storm lines.
- 6) Sheet C8.0: The pavement design does not comply with the Unified Development Ordinance (UDO) Article 12 "Parking". In particular, either geogrid or chemical stabilized subgrade (typically flyash) is required. Compacted subgrade, although required in all instances, does not substitute for the chemically stabilized subgrade or geogrid alternatives.
 - Asphalt Pavement Detail 1 on Sheet C8.0 has been revised to update 6" aggregate base (MoDOT Type 5 or similar) to 6" granular base course with geogrid or 6" granular base course with 6" stabilized subgrade per UDO Article 12 requirements.
- 7) Sheet C9.0: Curb and gutter details were provided, but a detail must also be provided showing the extension of aggregate base course and chemically stabilized geogrid subgrade a minimum of 1 foot beyond the back of curb.
 - Detail 3 on Sheet C8.1 has been added to detail requirements 1' beyond the back of curb.
- 8) Sheet C9.1: Our previous comment letter requested that the storm lid detail be shown as blank, since these are private lids. However, the City detail was completely removed. We still need the detail; however, the words "City of Lee's Summit" should be removed. The lid can either be blank, or include the word "STORM", or "SANITARY", but should not include the words "City of Lee's Summit". It is acceptable to "cross-out" the phrases that are not needed if this is easier for the resubmittal.
 - Detail STM-6 has been modified per request to remove "City of Lee's Summit".
- 9) It appears the Engineer's Estimate of Probable Construction Costs was missing the following items: 1) geogrid or chemical subgrade stabilization, including the area one (1) foot beyond the back of curb, 2) aggregate subgrade one (1) foot beyond the back of curb, 3) base course asphaltic concrete pavement, 4) grading within the detention basin to provide the necessary storage volume, 5) erosion and sediment control measures and devices, 6) final restoration, including sodding, seeding, topsoil, mulch, fertilizer, 7) fire line bends, 8) additional gate valves per the comment letter.
 - A revised Opinion of Probable Construction Cost has been included with this resubmittal.

Fire Comments Jim Eder

- 1) IFC 503.2.1 Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm). Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm), approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater. D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof. Action required: Correct fire lane width. There is still only 24 feet between parking spaces
 - The drive aisle parallel with the proposed MOB has been revised to be 26 feet wide to meet fire code D105.2.

Traffic Comments Michael Park

1) Recommend removing the proposed parking along the east side of the eastern driveway (ER Access Drive). At a minimum, remove the 10 southern spaces that diminish the minimum required driveway throat depth defined in the Access Management Code that protects the driveway function and efficiency in relation to Blue Parkway and parking circulation. Parking activity along this driveway may negatively impede critical traffic going to the ER as originally designed.

- These parking spaces were shown in the previously approved Preliminary Development Plan. The spaces are also needed in order to meet the code parking requirement. As such, and due to the fact that this occurs on a private development site, it is requested that these spaces be allowed to remain.
- 2) The minimum driveway throat depth required in the Access Management Code along the western driveway between the parking and Blue Parkway has been diminished below standards in consideration of the proposed parking and median break along the main driveway (western driveway). Some additional driveway separation may be provided if the first 2-3 parking spaces on the north and south side of the new lot nearest the driveway are removed to further the parking maneuver/conflict from the driveway activity and intersection of Blue Parkway. Maintaining the driveway throat depth for the egress movement, or east side of the driveway, is more important in this situation than the west side of the driveway since vehicles can queue in the parking lot rather than queue on the street/driveway.
 - These parking spaces were shown in the previously approved Preliminary Development Plan. The spaces are also needed in order to meet the code parking requirement. As such, and due to the fact that this occurs on a private development site, it is requested that these spaces be allowed to remain.

Sincerely,

S&ME, INC.

George Huddleston, PE Senior Project Manager