



December 28, 2017

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.

<b>Planning Comments</b>	<b>Hector Soto, Jr.</b>
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- 1) Add the following information to the Site Data Tables on Sheet C0.0: impervious coverage, building square footage, update parking table.
  - The Site Data information on sheet C0.0 has been updated accordingly.
- 2) The minimum parking lot drive aisle widths for two-way traffic is 24' of actual pavement (i.e. exclusive of curb-and-gutters). The areas where the aisles are flanked by islands and other curbed areas show 24' wide aisles measured to the back-of-curb. Revise by pulling the curbed areas back in order to provide 24' of actual pavement width.
  - The drive aisle widths have been adjusted to be 24' of pavement exclusive of curb and gutters.
- 3) The ADA spaces on the south side of the proposed MOB are shown as 8' wide. To meet City requirements, the spaces shall be a minimum 9' in width. Revise the detail on Sheet C8.0 and the site plan on Sheet C5.2. Detail 5 on Sheet 8.0 has been updated as well.
  - ADA spaces have been revised to be a minimum of 9' as shown on C5.2 Site Layout Plan.
- 4) Update pavement details. Neither the asphalt nor concrete pavement details shown meet the minimum design requirements for the City. Please refer to Article 12, Section 12.120.F of the City's Unified Development Ordinance (UDO) for the minimum design requirements. Revise accessible parking sign to meet the following requirements: 1) The accessible parking sign to be mounted at the head of every ADA space shall be sign type R7-8 (white background, green border/text and blue wheelchair symbol) as identified in the Manual of Uniform Traffic Control Devices (MUTCD). 2) The detail incorrectly shows a minimum mounting height of 60". To meet ordinance requirements, signs shall be mounted no lower than 36" and no higher than 60" above finished grade.
  - Detail 1, asphalt pavement, on Sheet 8.0 has been revised to meet the UDO design requirements and increased to meet the recommendations from the geotechnical report.

- Detail 7, accessible parking sign, on Sheet 8.0 has been revised to specify MUTCD sign R7-8.
  - Federal ADA requirements mandate that ADA parking signs be mounted a minimum of 60" above finished grade. In light of this and the City standard, Detail #7 on sheet C8.0 has been revised to specify a mounting height of exactly 60".
- 5) Update Landscape Plan to meet ordinance requirements, all deciduous trees (shade or ornamental) shall be a minimum 3" caliper at the time of planting. The Kousa Dogwood listed on the Plant Schedule on Sheet L1.0 is listed as 2" caliper. Revise. The new parking areas along the SE Blue Pkwy frontage are required to be screened from view using evergreen shrubs planted at a ratio of 12 shrubs per 40 linear feet of parking lot frontage. Please provide the calculations to verify that this screening requirement is met.
- The size of the Kousa Dogwood has been increased to 3" caliper. The parking lot screening has been increased and the calculation added to Sheet L1.0.
- 6) If wallpacks are proposed for the MOB, please show them on the building elevations to the extent possible. Wall-mounted lighting shall comply with the standards of Article 7, Section 7.270 of the UDO. Provide manufacturer specifications for all proposed wallpacks and pole light fixtures for review and approval. Parking lot pole fixtures shall comply with the standards of Section 7.250 of the UDO. Provide a photometric plan for the project area in accordance with Section 7.230 of the UDO.
- Wall packs are indeed proposed above the exit doors. They are shown on the submitted Electrical First Floor Plan (E101), and their cut sheets have been included on the submitted Site Electrical Plan (E006).
  - Cut sheets for the proposed exterior light fixtures (site light poles, lighted bollards, and wall packs) have been included on the submitted Site Electrical Plan (E006).
  - The Site Photometric Plan (EP-1) has been included with this resubmittal.
- 7) If any roof-top mechanical equipment (exclusive of the elevator penthouse) is proposed on the building, please show it on the roof plan. Any roof-top mechanical equipment shall be totally screened from view by raising the building parapets to a height at least equal to the height of the units being screened.
- With the proposed ground-mounted chiller (in the screened enclosure adjacent to the dumpster), there isn't any proposed roof-mounted equipment.

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**Engineering Comments**

**Gene Williams**

- 1) Label the existing hospital building on all sheets.
  - The existing hospital has been labeled on all sheets.
- 2) The pavement design does not follow the Unified Development Ordinance (UDO) Article 12, "Parking", in terms of pavement thickness, aggregate thickness, and subgrade stabilization or geogrid. In addition, there appears to be confusion concerning "light duty asphalt" and "heavy duty asphalt". The UDO does not differentiate between drive aisles and parking stalls. Heavy duty asphalt is required where trucks, delivery vehicles, or emergency vehicles are accessing the parking lot. Normal asphalt thickness is required in all other instances, and should be specified as 1.5 inch surface course over 4 inch base course, over a 6 inch aggregate base, over geogrid or flyash stabilized subgrade. The only difference between "heavy duty asphalt" is the base course of asphalt should be 5 inches rather than 4 inches, with all other aspects of the design remaining the same. If a geotechnical report is used to aid in the design of the pavement, then it must show an equal or

better design than shown in the UDO.

- The asphalt detail has been revised, see Sheet C8.0. The proposed pavement section thicknesses are actually greater than the City requirements in some cases (per recommendation from the geotechnical engineer).
- 3) Grading appears to be shown encroaching within the existing detention basin, and the "Drainage Design Summary" dated Sept. 1, 2017 does not appear to address this issue, other than the discussion of a retaining wall and handrail. Will there be sufficient storage volume after grading and installation of the retaining wall?
- Yes, the referenced drainage report and analysis completely re-modeled the detention basin based on the proposed modifications (including the referenced encroachment, walls, expansion, etc.). Please reference the Drainage Design Summary for more information (particularly Appendices IV & VI).
- 4) Please call-out the elevations of the contours on Sheet C6.1. Will the grading near the public water line create a situation where the depth of cover is less than 42 inches or greater than 7 feet?
- Contour elevation labels are shown on the grading plan sheets. The grading near the public water line closely matches the existing grading. As such, the depth of cover should not be less than 42 inches or greater than 7 feet.
- 5) Profile views of the storm drainage system were not shown in the plans. Please provide the profile views for all pipes greater than 6 inches diameter, along with the hydraulic grade line for the design storm.
- Storm pipe profiles have been added as sheets C6.4-C6.10. Hydraulic grade lines are shown in the profiles provided in Appendix VIII of the Drainage Design Summary.
- 6) Please clean-up this Sheet C7.0 as it is difficult to determine what is proposed. The line work appears to have been drawn in haste.
- Sheet 7.0 is shown as an overall utility plan. A note has been added to Sheet C7.0 stating "This Sheet is for general orientation only. See Sheet C7.1 and C7.2 for Detailed Utility Plans."
- 7) On Sheet C7.0 a 3" domestic water service line is shown, but it is unclear where it is connected to the public water main.
- Per our discussions and the response to comment #6 above, sheet C7.0 is for general orientation only. Please refer to Sheet C7.1 for the 3" domestic water line connection.
- 8) A new private sanitary sewer service is shown on Sheet C7.0, but the existing private service which serves the main hospital building does not appear to have been shown.
- Per our discussions and the response to comment #6 above, sheet C7.0 is for general orientation only. Refer to Sheet C7.0 for private sanitary sewer connections.
- 9) Please label all private sanitary sewer service lines and manholes, private water mains and fire lines, and private storm sewers on all utility sheets.
- All proposed utilities shown on C7.1 and C7.2 are private utilities with the exception of 54 LF of water main (shown within the proposed easement on sheet C7.1). A general note to this effect has been added to the Utility Plans.
- 10) Tapping sleeves are not allowed for the water line connection on Sheet C7.1. These must be cut-in tees.
- Per our coordination with Mr. Williams, there is sufficient feed from either direction to allow for the installation of a cut-in tee for the proposed fire lines. Based on our coordination with

Mr. Williams and the existing valving present, a segment of the line will be temporarily shut down to facilitate the cut-in, but it will not disrupt water service to the hospital. Notation on the plans (for the cut-in tees) has been updated accordingly.

- 11) The "utility plan inset" on Sheet C7.1 shows what is presumably a backflow vault?
  - Yes, vaults are proposed on sheets C7.1 and C7.2. Per our coordination with Mr. Williams, the vaults have been separated (for the double detector check valves and the meter assemblies).
- 12) On Sheet C7.1, the backflow vault should be closer to the public main. In general, it should be shown within ten (10) feet of the public main, outside of any public easement. A gate valve must be shown prior to the backflow vault.
  - The backflow vault cannot be moved closer to the public main due to the drive aisle location. Per our coordination with Mr. Williams, the Hospital will dedicate an easement to the City up to the proposed vault location. This proposed easement has been shown on the plans.
- 13) On Sheet C7.1, a new private fire hydrant is shown as U10. This will require a separate backflow vault.
  - The fire hydrant on sheet C7.1 has been relocated to connect to the private fire line.
- 14) On Sheet C7.1, the new 3" water line is shown connected to what appears to be the backflow vault. A separate connection to the public water main is required, along with a specially-designed water meter vault.
  - The domestic water line has been revised to have a separate connection to the public water main, as well as a water meter vault.
- 15) Profile views of the private sanitary lines were not provided.
  - The Sanitary Sewer profile has been added as sheet C7.3.
- 16) The same comments apply to the "utility plan inset" shown on Sheet C7.2. A separate connection to the public water main is required, and the backflow vault and backflow assembly should be closer to the public water main.
  - Separate water main taps and separate vaults have been provided accordingly. The vaults have been positioned as close to the main as is feasible due to the parking lot, though it should be noted that this is a private water main in this location (behind the master backflow shown on sheet C7.1).
- 17) The pavement detail does not comply with the Unified Development Ordinance (UDO) Article 12, "Parking" on Sheet C8.0.
  - Detail 1, pavement detail, on Sheet 8.0 has been revised per UDO requirements. The proposed pavement section thicknesses are actually greater than the City requirements in some cases (per recommendation from the geotechnical engineer).
- 18) CG-1 curb and gutter is required on Sheet C9.0, so please provide a specific reference to CG-1.
  - The curb and gutter type (CG-1) has been specified in the key note legend on the Site Layout Plan sheets (C5 sheet series).
- 19) A curb and gutter section should be provided showing the extension of aggregate base, geogrid or subgrade stabilization a minimum of one (1) foot beyond the back of curb.
  - The City's standard detail has been included on sheet C9.0.
- 20) The "storm" lid should be blank since this is a private lid on Sheet C9.1.
  - The Lee's Summit Storm Manhole Cover Detail has been removed from Sheet C9.1.
- 21) A profile view of the fire line appeared to be missing.

- The fire line profile has been added to Sheet C7.4.
- 22) An itemized and sealed Engineer's Estimate of Probable Construction Costs should accompany your final submittal drawings. The Engineering Plan Review and Inspection Fee is based on this estimate, and calculated at 3% of the total, plus a water testing observation fee.
  - An Opinion of Probable Construction Cost has been included with this resubmittal.
- 23) Please be aware the retaining wall must be designed and sealed by an engineer registered in the State of Missouri. Please submit the design to Codes.
  - The plans specify that the wall design must be designed and sealed by a licensed Missouri engineer. The current direction is for this wall to be provided under the General Contractor's contract on a design/build basis. It is requested that the individual permit for this wall be deferred until the appropriate stage of construction where this design will be completed and submitted under separate cover.

#### **Fire Comments**

**Jim Eden**

- 1) For information only, all issues pertaining to life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to the safety to fire fighters and emergency responders during emergency operations, shall be in accordance with the 2012 International Fire Code.
  - This has been noted.
- 2) IFC 506.1 -Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the fire code official. 506.1.1 Locks. An approved lock shall be installed on gates or similar barriers when required by the fire code official. Action required: A Knox switch shall be provided on the physician parking lot gates and a Knox box shall be provided for the building
  - Knox switches have been specified on physician lot gates (see note in Detail #7 on sheet C8.1), and a Knox Box will be included in the building (see note on sheet C5.2).
- 3) 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.
  - The proposed curb layout has been revised. The minimum asphalt width is 24', adjacent to curb and gutter. The proposed gutter width is 1.5' on each side, therefore providing a total clear width of 27' between the curbs.
- 4) IFC 903.3.7- Fire department connections. The location of fire department connections shall be approved by the fire code official. Connections shall be a 4 inch Storz type fitting and located within

100 feet of a fire hydrant, or as approved by the code official. Action required: The parking space in front of the FDC shall be blocked out and posted No Parking, or relocate the FDC to an accessible island next to parking and within 100 feet of a fire hydrant.

- The FDC and fire hydrant have been relocated. The fire hydrant has been moved to an island to the north and the FDC has been relocated across the drive aisle from the proposed fire hydrant.
- 5) The replacement water main and fire hydrants shall be in place prior to building construction.
- It has been noted on the utility plan sheets that replacement water mains and fire hydrants shall be in place prior to building construction.

**Traffic Comments**

**Michael Park**

- 1) Review the parking lot design, particularly the proposed lot expansion west of the primary driveway along Blue Parkway that has an aisle limited in access to right-in/right-out at the driveway. Consider improvements in traffic circulation so that traffic does not have to leave the property/use Blue Parkway when circulating to a parking space. Several other parking spaces that encroach the driveway areas may be relocated.
- Upon review, a cut has been proposed through the entry drive median that will provide full access internal to the site (without requiring drivers to leave the site and turn around).

Sincerely,

**S&ME, INC.**

A handwritten signature in black ink, appearing to read "G. Huddleston, PE".

George Huddleston, PE  
Senior Project Manager