

March 22, 2018

Shannon McGuire, Planner
Lee's Summit Planning and Development
220 SE Green Street
Lee's Summit, MO 64063

**Re: Applicant Number: PL2018022
 Commercial Final Development Plan
 For Lee's Summit Fire Station #3
 WSKF Architects, Inc., Applicant**

Dear Ms. McGuire:

In regards to the Planning and Development comments of February 28, 2018 regarding the above mentioned permit application, please find listed below each comment requiring correction or comment, followed by our response.

FIRE REVIEW:

1. 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.

For information only.

Applicant's Response:
Acknowledged.

2. 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: Show the location of the FDC on the building.

Applicant's Response:
The FDC is located on the North Elevation of the building. See Keynote 21 on the architectural plans.

PLANNING REVIEW:

1. Please show the proposed 5' sidewalk extended to the west property line.

Applicant's Response:

Sidewalk to be installed per city plans. Contact city engineers to extend sidewalk.

2. Please label the width and depth of all proposed parking stalls, including the width and depth of ADA stalls and required isles.

Applicant's Response:

Typical dimensions have been called out on each bay of proposed parking stalls. See Sheet C3.0.

3. Please label the location of all oil and/or gas wells within the subject property. If none are present please add a note to the plans stating so and cite the source of your information.

Applicant's Response:

None present. Noted added on Sheet C1.0.

4. Is any roof top mechanical equipment being proposed? Is any ground mounted mechanical equipment (aside from the transformer and generator) being proposed? If so, please show the location on the plans along with the screening method to be used.

Applicant's Response:

No rooftop mechanical equipment is being proposed for this site. Ground mounted equipment is labeled on the west side of the building. Screening is shown on the Landscape Plan, Sheet C7.0.

5. Please note that all vegetation proposed for screening must be at a minimum the same height of the mechanical equipment to be screened at the time of planting.

Applicant's Response:

Mechanical equipment to be less than 4'-0" tall; screening plants to be 8'-0" tall when planted. See Sheet C7.0.

6. The subject property and adjacent properties are currently zoned RP-3. This is a residential zoning. Per the UDO requirements all parking lots (including drive isles) must be set back a minimum of 20' to any residential use or district. The proposed parking on the east side of the project is showing a 0' shared drive isle. As it is currently zoned this is not allowed. If the subject property and adjacent property were to be rezoned to a commercial zoning district the proposed layout could be approved.

Applicant's Response:

This property is being rezoned to PMIX which allows us to follow the CP-2 setback requirements - 15' front setback, 0' side setbacks, 20' rear setback with 6' parking setback.

7. Sheet C8.0 shows 6' to the bottom of the proposed ADA sign. Per UDO requirements the bottom of the sign shall be 3'-5' above the ground. Please update the plans accordingly.

Applicant's Response:

Detail updated. See Sheet C8.0.

8. Please label the color and material to be used for the trash enclosure gate.

Applicant's Response:

The trash enclosure gate will be steel and will be painted champagne in color to match the roof, windows, doors, etc. See Sheet SP1.02.

9. Please provide the manufacturer's specification sheets for all proposed lighting to be used.

Applicant's Response:

Manufacturer's specification sheets for all proposed lighting are attached to this revised submittal.

10. A final plat must be submitted and approved prior to the issuance of any building permit.

Applicant's Response:

City to submit final plat.

11. Please provide a completed ownership affidavit form.

Mike Weisenborn 02/28/2018 3:26 PM – I have provided an affidavit to JKV for completion.

Applicant's Response:

Acknowledged.

12. A high impact buffer is going to be required along the south and west property lines due to the residential zoning and uses.

Applicant's Response:

This comment is not applicable to the design requirements for the project based on our understanding of the ultimate development requirements and property status/disposition as directed by the Fire Department.

13. Please label the monument sign height.

Applicant's Response:

The monument sign is 6'-0". Refer to Sheet SP1.02 for dimensions.

ENGINEERING REVIEW:

1. The "Micro Storm Water Drainage Study" dated Jan. 16, 2018 (hereinafter referred to the Detention Study) appears to show the allowable release rate for the 2 year storm event will be exceeded.

Applicant's Response:

The allowable release rates through the detention pond (Watershed B) are no longer exceeded. However, the allowable release rates to the west for the undetained area (Watershed A) are slightly exceeded. These increases in flows for Watershed a will be attenuated with the future planned regional detention basin offsite to the NW. Refer to the revised (3/21/2018) Micro Storm Water Drainage Study for further detail.

2. The Detention Study discusses the undetained portion of the western portion of the site "...maintains the original drainage pattern of the watershed". What was the original drainage area before grading? What is the proposed drainage area after grading and re-routing stormwater to the various facilities? If it can be shown the original drainage area's allowable release rate is not exceeded by the modified drainage area, then it would be acceptable to allow this portion to flow undetained. Without supporting documentation, however, it is difficult to determine. Please clarify.

Applicant's Response:

The site has since been divided into Watershed A & B. Under existing conditions, Watershed A was 0.69 acres and Watershed B was 1.54 acres. Under proposed conditions, Watershed A was reduced to 0.37 acres and Watershed B was increased to 1.86 acres. The allowable release rates through the detention pond are no longer exceeded. These increases in flows for Watershed A will be attenuated with the future planned regional detention basin to the NW. Refer to the revised (3/21/2018) Micro Storm Water Study for detail.

3. It does not appear that any pipe sizing, orifice sizing, or weir sizing was provided in the Detention Study. In addition, it does not appear any elevation or location information was provided showing the geometry of the detention basin outlet structure, and how it relates to the stormwater report. In other words, it appears the Detention Study is a summary of findings rather than contain all the necessary information. Please provide this information within the revised Detention Study.

Applicant's Response:

See revised Storm Water Study and Sheet C9.0 Outlet Structure.

4. The Detention Study discusses the dry detention pond having 3:1 side slopes. Section 5600 of the Design and Construction Manual requires that one fourth of the perimeter of the detention basin include side slopes no greater than 5:1.

Applicant's Response:

Based on conversations with Gene Williams this comment is no longer applicable.

5. The Final Development Plan appears to be incomplete in terms of the required infrastructure necessary to complete this project. As such, this review will be cursory in nature.

Applicant's Response:

Acknowledged.

6. Has a Minor Plat or Final Plat been submitted for this project?

Applicant's Response:

City to submit final plat.

7. It appears there are discrepancies in the City street plans versus that what is shown in the Final Development Plan. Curb elevations do not reconcile, curb return radii do not reconcile, and from the Final Development Plan, it appears these features will be installed as part of the Final Development Plan. Please make it clear who will be installing the various features shown near the road, including ADA-accessible ramps, commercial entrances, side, etc.

Applicant's Response:

The most current City Street plans are being used in these documents. There should no longer be any discrepancies.

8. Sheet C2.0: Rip rap is shown within the detention basin, with no corresponding calculations showing how the area was calculated. In addition, it does not appear any dimensions, including width, length, depth, and rip rap size, was provided anywhere within the plans.

Applicant's Response:

Rip Rap depth, area, and size have been defined based on a 100-year proposed site runoff of 17 CFS.

9. Sheet C2.0: A "water service" is shown crossing the unnamed road to the north. Who is this serving, and why is it shown? The City does not allow the installation of domestic water lines when no business or residence is being served.

Applicant's Response:

This is from the street plans provided to us by the City of Lee's Summit. Refer to City for water service questions.

10. Sheet C2.0: There is a note referring to "Sheet C7.0 for more utility information". Sheet C7.0 appears to be a landscaping plan, not a utility sheet. There are at least two (2) instances where this mistake is made.

Applicant's Response:

Notes have been updated.

11. Sheet C2.0: There is a note in the northwest portion of the project concerning the placement of a fire hydrant. It is not clear where the fire hydrant is being placed, and it is not clear by whom the fire hydrant is being placed.

Applicant's Response:

Notes (C2.0) and Dimensions (C3.0) have been updated. City to install hydrant.

12. All Sheets: What are the dashed lines near the edge of the property? Are these easements? Are they building lines? Please label these dashed lines, and make them different linetype if they represent different features.

Applicant's Response:

See Sheet C1.0 for labels. Line types have been changed.

13. Sheet C4.0 Grading Plan: There are numerous issues with this sheet, including the call-out of what appears to be insufficient slope. Normally, 2.0% slope is required in a grassed-area. It appears this is not achieved in several areas of the site.

Applicant's Response:

Refer to Sheet C4.0 Grading Plan. Grading has been updated to meet 2% slope.

14. Sheet C4.0 Grading Plan: No contours are evident in the area between the two (2) commercial entrances, and in the vicinity of the field inlets. Please show the grading in this area, and please show how the area will be graded to drain towards the field inlets. Please show the field inlets on this sheet since this provides a necessary frame of reference for the grading plan.

Applicant's Response:

Refer to Sheet C4.0 Grading Plan. Contours are visible between entrances and field inlets have been turned on to show low points.

15. A sanitary sewer service is shown extending to the north. There is no sanitary sewer line to the north.

Applicant's Response:

A temporary sanitary sewer line has been shown, routed to the east. The line to north of Shamrock is future.

16. Sheet C4.0 Grading Plan: The detention basin does not appear to meet the 20 foot rule. The 100 year water surface elevation should be a minimum of 20 feet from the property line.

Applicant's Response:

See Sheet C4.0 plans have been updated to meet the 20' rule.

17. Sheet C4.0 Grading Plan: Where are the limits of the 100 year water surface elevation within the detention basin? What is the 100 year water surface elevation within the basin? Without this information shown graphically on the plans, it is difficult to determine whether the 20 foot rule is met.

Applicant's Response:

100 year WSEL = 973.96. See drainage report for details.

18. Sheet C4.0 Grading Plan: The bottom of the detention basin shows insufficient slope. A 2% minimum slope must be provided within the detention basin.

Applicant's Response:

See Sheet C4.0, grading has been updated to provide sufficient slope.

19. Sheet C4.0 Grading Plan: Where is the required sediment forebay? A sediment forebay is required to conform to the MARC manual for the 90% mean annual event, in order to facilitate sediment removal on a period basis.

Applicant's Response:

Based on conversations with Dena Metzger & Gene Williams, this MARC manual requirement is optional, not required.

20. Sheet C4.0 Grading Plan: There does not appear to be any side slopes with 5:1 or less slope around the detention basin. The Design and Construction Manual requires a minimum of $\frac{1}{4}$ of the perimeter be at 5:1 slope or less.

Applicant's Response:

Based on conversations with Gene Williams, this comment is no longer applicable.

21. Sheet C4.0 Grading Plan: Straw bales are referenced in the notes. The City of Lee's Summit does not allow straw bales for erosion and sediment control.

Applicant's Response:

Notes have been updated. See Sheets C4.0 and C6.0.

22. Sheet C4.0 Grading Plan: The notes call out the maximum cross-slope of sidewalks being 2%. The maximum design cross-slope in the City of Lee's Summit is 1.5%, not 2.0%.

Applicant's Response:

Notes and grading have been updated. See Sheet C4.0.

23. A separate storm sewer sheet must be provided, showing the plan and profile view of all storm lines greater than 6 inches diameter.

Applicant's Response:

Sheet C9.0 Outlet Structure has been added and provides profile view.

24. Sheet C5.0 Utility Plan: Where is the off-site stormwater system exiting the detention basin? It was not shown. A plan and profile is required for this private stormwater feature.

Applicant's Response:

See Sheet C9.0 Outlet Structure.

25. Sheet C5.0 Utility Plan: Where is the off-site "temporary" sanitary sewer? The plan shows a connection to the north, and there is currently no sewer existing at this location.

Applicant's Response:

A temporary line added to the drawings.

26. Sheet C5.0 Utility Plan: Profile view for all storm lines greater than 6" must be provided, preferably with a separate plan view for each.

Applicant's Response:

This comment is not applicable to the design requirements for the project based on our understanding of the ultimate development requirements and property status/disposition as directed by the Fire Department. We have not provided profile views for roof drain storm water before.

27. Sheet C5.0: No further review of this sheet will be completed. The utility plan is incomplete, and the above review comments should be considered cursory in nature.

Applicant's Response:

Acknowledged.

28. Sheet C5.0: Note 10 is incorrect. Sanitary sewer mains must be at least ten (10) feet from any storm sewer. This requirement was changed by the MDNR.

Applicant's Response:

Note updated. See Sheet C5.0.

29. Sheet C5.0: Note 5 is incorrect. The maximum time period is eight (8) hours for a disconnect of water service to occur, and this is contingent upon the work being performed at night.

Applicant's Response:

Note updated. See Sheet C5.0.

30. A Stormwater Pollution Prevention Plan (SWPPP) shall be required prior to formal approval of the plans. Two (2) copies are required.

Applicant's Response:

The Contractor shall provide and keep on site for reference.

31. Sheet C6.0: The trench and backfill method for silt fence installation is not allowed in the City of Lee's Summit. All silt fence installation shall be performed using machine-laid methods.

Applicant's Response:

Note updated. See Sheet C6.0.

32. Sheet C6.0: Will the detention basin be utilized as a sediment basin or trap? If not, why?

Applicant's Response:

The detention basin's outfall structure will provide a 40-hr extended detention time for the water quality event, which in turn, will capture sediment from site runoff.

33. Sheet C6.0: Why is the silt fence shown around the detention basin? It does not appear to serve any purpose, other than directing water around the perimeter and toward the residences to the south.

Applicant's Response:

The silt fence has been updated.

34. Sheet C6.0: No further review of this sheet is being performed. It appears incomplete and does not appear meet its intended purpose of limiting off-site migration of sediment to adjoining properties and storm sewers.

Applicant's Response:

Acknowledged.

35. No design details were provided for the detention basin outlet structure. Please be aware that all aspects of dry detention basin design must be addressed, including sizing of weirs, orifices, anti-clogging measures, construction of the outlet structure, sizing of orifices or perforated risers for water quality events, etc. The design must also show the method of construction of the*(There was no text after this partial sentence.)*

Applicant's Response:

See Sheet C9.0 Outlet Structure.

36. If any ADA-accessible ramps are installed as part of this project, then a specific design is required which conforms to the minimum information and design criteria listed in Section 5304 of the Design and Construction Manual. The City no longer allows for design of these features in the field. Please be aware of the City's requirements in terms of cross-slope (i.e., no more than 1.5%), and ADA-accessible ramp slope (i.e., no more than 7.5%). These design parameters are more stringent than PROWAG, and must be included in the design of ADA-accessible ramps and ADA-accessible routes.

Applicant's Response:

The ADA ramp has been further detailed and meets the above guidelines. See Sheet C4.0.

37. A concrete curb and gutter detail was missing. CG-1 curb and gutter is required. The curb and gutter detail must show that the aggregate base and compaction of native subgrade extends a minimum of one (1) foot beyond the back of curb. If asphaltic concrete is used, which does not appear to be the case, please see the Unified Development Ordinance, Article 12 "Parking" for specific requirements concerning pavement thickness, aggregate base, and subgrade stabilization or geogrid.

Applicant's Response:

City details are attached to this resubmittal.

38. Details were not provided for sanitary sewer cleanouts, water meters, sanitary sewer wye connections, manhole frame and lids for stormwater facilities with the word "STORM", manhole frame and lid details for sanitary facilities with the word "SEWER", water valves, water valve boxes, trenching and backfill detail for storm lines, sanitary sewer lines, or water lines, or trench checks for sanitary sewer lines.

Applicant's Response:

City details are attached to this resubmittal.

39. A permanent off-site easement shall be required for the temporary sanitary sewer line to be installed to the southeast. This shall be required prior to approval of the Final Development Plan.

Applicant's Response:

To be addressed by the City in final plat.

March 22, 2018
Ms. Shannon McGuire
City Planning & Development Department
Page 9 of 8

40. A permanent off-site easement shall be required for any off-site stormwater lines installed to the east of the detention basin. It is anticipated this line shall be a private storm line, contained within a private drainage easement. This easement shall be required prior to approval of the Final Development Plan.

Applicant's Response:

To be addressed by the City in final plat.

With these responses and enclosures, we trust that all necessary and appropriate information has been provided.

Respectfully,

Williams Spurgeon Kuhl & Freshnock Architects, Inc.



Rick Kuhl, RA MBA LEED_{AP}

Enc Revised Documents
Cc: file