

#### PLANNING AND DEVELOPMENT

# Commercial Final Development Plan Applicant's Letter

Date: Friday, March 30, 2018

To:

**Applicant**: WSKF ARCHITECTS INC Email: RKUHL@WSKFARCH.COM

Fax #: (816) 300-4102

Engineer: Bartlett & West Email: casey.colbern@bartwest.com

Fax #: <NO FAX NUMBER>

Property Owner: PREMIERLIFE REAL ESTATE

HOLDING Fax #: <NO FAX NUMBER>

From: Shannon McGuire, Planner

Re:

**Application Number:** PL2018022

Application Type: Commercial Final Development Plan
Application Name: LEE'S SUMMIT FIRE STATION #3

Location:

### **Electronic Plans for Resubmittal**

Beginning Monday, May 23, 2016, all Planning application and development engineering plan resubmittals shall include an electronic copy of the documents as well as the required number of paper copies.

Electronic copies shall be provided on CD in the following formats

- Plats All plats shall be provided in Tagged Image Format File (TIFF) Group 4 compression.
- Engineered Civil Plans All engineered civil plans shall be provided in Tagged Image Format File (TIFF) Group 4 compression. All sheets shall be individually saved and titled with the sheet title.
- Architectural and other plan drawings Architectural and other plan drawings, such as site electrical and landscaping, shall be provided in Portable Document Format (PDF).
- Studies Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).
- It is requested that each plan sheet be a maximum of 2MB.

Please contact Staff with any questions or concerns.

#### **Excise Tax**

On April 1, 1998, an excise tax on new development for road construction went into effect. This tax is levied based on the type of development and trips generated. If you require additional information about this development cost, as well as other permit costs and related fees, please contact the Development Services Department at (816) 969-1200.

#### **Review Status:**

Revisions Required: One or more departments have unresolved issues regarding this development application. See comments below to determine the required revisions. Resubmit six (6) full size sets (no larger than 24"x36") folded to 8-½"x11", and one (1) digital copy following the electronic plan submittal guides as stated above of the revised drawings to the Development Services Department. Revised plans will be reviewed within five (5) business days of the resubmittal.

## **Required Corrections:**

Planning Review	Shannon McGuire	Planner	Corrections
	(816) 969-1237	Shannon.McGuire@cityofls.net	

- 1. Once the property is rezoned a high impact buffer will not be required along the south property line. However, due to the intensity of use of this property abutting residential a high impact buffer shall is required by the UDO. Existing vegetation may be used to satisfy this requirement as long as it meets the minimum standards as outlined in Article 14, Section 14.050 of the UDO. Please update the landscaping plan to reflect this requirement.
- 2. Thank you for submitting the manufacture's specification sheets for the proposed lighting. Sheets for Voltaire Medium Architectural Flood Lights were submitted but there is no corresponding location labeled on the lighting plan. It appears these maybe intended for lighting around the proposed monument sign. Please update the plans to reflect the location of the proposed flood lighting.
- 3. Per previous City commit the sidewalk was required to be extended to the west property line. On sheets C2.0 & C3.0 it appears that this was completed, however it also appears that the line indicating the previous sidewalk's limit remains on the plan sheets. Please remove this line and confirm the sidewalk has been extended to the property line.

<b>Engineering Review</b>	Gene Williams	Senior Staff Engineer	Corrections
	(816) 969-1223	Gene. Williams@cityofls.net	

- 1. The "Micro Storm Water Drainage Study" dated Mar. 21, 2018 is incomplete. As stated in the previous comment letter, this report appears to be a summary of findings and conclusions, missing several key exhibits and appendices to support the findings. In particular, the following items are missing: 1) elevation-area-volume curves for the detention facility, 2) inflow hydrographs for all storm events, 3) stage-discharge rating curves for each emergency spillway, primary outlet works, and combined outlets and overflows, 4) routing curves for all storm events with time plotted as the abscissa and the cumulative inflow volume, cumulative discharge, stage elevation, and cumulative storage plotted as the ordinate.
- 2. Without the above information, it is difficult to comment on the adequacy of the design.
- 3. Also missing from the stormwater report were soil maps showing the native soil present on the site, soil group to determine an appropriate curve number, time of concentration calculations and assumptions, supporting documentation concerning the design of the outlet structure (i.e., orifices, weirs, etc.), and rationale behind the use of a composite curve number shown in the report.
- 4. Page 7 Stormwater Study: Watershed 1 Proposed Peak Discharge Table appears suspect for the 10 and 100 year event for watershed B. Without supporting documentation described in the previous comments, however, it is difficult to determine whether these low peak discharge numbers are correct.

- 5. A waiver request is required for the undetained portion along the fringes. This waiver request should include a discussion of: 1) existing drainage area, and existing drainage patterns (i.e., sheet flow, concentrated flow to a point, etc.), 2) proposed drainage area after development, including a discussion of the proposed drainage patterns (i.e., sheet flow, concentrated flow, or a combination thereof, 3) pre-development peak flow rate versus post-development peak flow rate, 4) additional downstream concerns, including impacts to Sterling Hills subdivision to the southwest of the project, and 5) any additional BMPs or other engineered methods to mitigate water quality concerns. The waiver request should also include exhibits, calculations, and other quantifiable results justifying the necessity of the waiver.
- 6. Sheet C2.0: The previous applicant letter asked that construction along Shamrock Ave. to be performed by others be shown on the Final Development Plan. The note "City to Install..." should be changed to read "installed by others". This will clarify who is responsible for each aspect of the project along Shamrock Ave.
- 7. Sheet C2.0: A specific design for ADA-accessible ramps in the right of way must be submitted for those portions of the ramps constructed under this Final Development Plan. At a minimum, it would appear this pertains to the west commercial entrance. A plan and profile view should be provided, which conforms to the design standards set forth in Section 5300 of the Design and Construction Manual. As part of the review of the Final Development Plan, our group shall not review nor inspect the interior sidewalks for compliance, but rather, sidewalks within the right of way. If the commercial entrance to the east is being constructed with this Final Development Plan, then it must be constructed with a 5 foot route across the driveway, which is no more than 1.5% cross slope. Placing a note on the plans that "the City shall construct ADA ramps" is not sufficient, since the commercial entrance is part of this ADA-accessible ramp.
- 8. KCMMB concrete mix must be specified for all commercial entrances. In addition, please provide sufficient notes on who will be responsible for constructing these entrances. The note on the easternmost commercial entrance is confusing, since the entrance is integral to the ADA-accessible ramp.
- 9. Sheet C2.0: A backflow vault and backflow assembly is warranted near the property line. This is required due to the distance being greater than 50 feet to the building, as measured from the water line. A gate valve must also be installed prior to the backflow vault, within an easement or right of way. The vault should be completely contained on the private side, outside of any easement or right of way.
- 10. Sheet C4.0: An ADA Access Grading Detail is provided in the lower right hand corner of the drawing, but it is unclear where this is being constructed. Again, the Engineering Group is only interested in the design details for ADA-accessible ramps within right of way. Specific design criteria and required submittals within the drawings are outlined in Section 5300 of the Design and Construction Manual. No "field design" of these features are allowed.
- 11. Where are the plans for the off-site sanitary sewer? A plan and profile view is required.
- 12. Detention Basin Issues: We do not see 2% slope at the bottom of the basin. Without elevations called-out on the grading plan, however, it is difficult to determine. Please call-out the elevations of all contours shown on the grading plan, not only in the vicinity of the detention basin, but all other areas. It is difficult to determine whether adequate drainage is being provided.
- 13. The 100 year water surface elevation is still not shown within the detention basin. Please show the location, in graphic form, the outline of the 100 year water surface elevation within the detention basin, along with the elevation of the 100 year water surface. Finally, provide a dimension showing the 20 foot rule has been satisfied.
- 14. Sheet C4.0: The stormwater report did not discuss the emergency spillway. It appears from the grading plan that an earthen emergency spillway is being proposed, with the overflow path directed toward homeowners within Sterling Hills subdivision. This does not appear acceptable.

- 15. Where are the profile views of the stormwater structures and lines greater than 6 inches in diameter? It appears there are several of these lines missing from the plan set.
- 16. Rip rap calculations are still not shown on the plans. Although the response letter provided sizing information, calculations were not provided. Although not specifically required, the City recommends showing the calculations on the plans. If not, then a separate design memorandum should be provided showing the calculations, or the calculations could be shown within the stormwater report.
- 17. Where are the calculations showing the downstream storm drain system is capable of managing the 100 year event, or if not, capable of providing a suitable overflow route for the 100 year event? It does not appear this has been addressed anywhere in the plans, stormwater report, or design memorandum. Again, the City recommends this information be provided in tabluature format within the plans.
- 18. Sheet C5.0, and Other Sheets: Various linetypes are shown, with no identification concerning what they represent. The previous comment letter requested these features be identified, but the response directed the City to a demolition and existing condition sheet, and therefore, we still do not know what these linetypes represent.
- 19. Sheet C6.0: The previous applicant letter asked why the detention basin was not being used for a temporary sediment basin. The response appeared to miss the point of the question (i.e., the response discussed 40 hour extended detention, which has no pertinence to a temporary sediment basin). It is the opinion of the City that this basin should be utilized as a temporary sediment basin, with an appropriate design shown on the plans for a temporary sediment basin. Without this feature, it is unclear how the proposed erosion and sediment control plan will mitigate the off-site transfer of sediment to the receiving storm sewer system.
- 20. The previous applicant letter requested that standard details be provided within the plans. We were given 8 1/2 by 11 copies of these standard drawings, but they must be shown within the plans.
- 21. A curb and gutter detail must be provided, showing not only the curb and gutter, but also the aggregate subgrade extending a minimum of 1 foot beyond the back of curb.
- 22. Sheet C9.0: It is our opinion that the detention basin outlet structure shown on this sheet is inadequate to serve its intended purpose. Small orifices are shown, with no provision for clogging upstream of these orifices, and no design calculations are evident within the stormwater report to support the placement of these orifices. In addition, other questions remain, such as whether the top grated inlet is intended as an emergency spillway, or whether the grass-lined swale shown on the grading plan will act as the emergency spillway. Finally, the report does not appear to support the use of a 12" RCP as the emergency overflow route.
- 23. The hydraulic grade line for the design storm should be shown on the profile view of the stormwater plans. If the system is not capable of managing the 100 year event, then a suitable overflow route must be established and shown for the 100 year event. Please be aware that a suitable overflow route for the 100 year event should not be assumed to be a downstream lot within the Sterling Hills subdivision.
- 24. Sheet C9.0: The placement of the manhole frame and cover will make it impossible to access the structure, since there is no offset on the lid. Please correct.
- 25. Sheet C9.0: A potential sanitary sewer line conflict is shown in profile, with no additional information concerning the location of this potential conflict.
- 26. Sheet C9.0: Is the "Outlet Structure" also AI-1? If so, then clearly show it on the plans. The profile view does not correspond to the call-out in the plan or section views.

- 27. It is unclear at this time whether the temporary sanitary sewer extension to the southeast will be public or private. As such, easement call-outs will need to be evaluated at a later date.
- 28. Although the sediment forebay is not specifically required, the design for a sediment forebay should be considered and discussed in the stormwater report. If it is not utilized in the design, it should specify why it is not being utilized.
- 29. A Stormwater Pollution Prevention Plan (SWPPP) shall be required prior to approval of the Final Development Plan.
- 30. Please see comments #36, #37, and #38 of the previous applicant letter. None of the standard details were included within the plans. Submission of separate standard details on 8 1/2 by 11 inch paper is not sufficient to meet this requirement.
- 31. An itemized and sealed Engineer's Estimate of Probable Construction Costs should accompany your re-submittal drawings. The Engineering Plan Review and Inspection Fee is based on this estimate, and calculated at 3% of the total, plus a nominal water testing fee for the observation and collection of water samples.

Fire Review	Jim Eden	Assistant Chief	Corrections
	(816) 969-1303	Jim.Eden@cityofls.net	

- 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.
- 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.

Traffic Review	Michael Park	City Traffic Engineer	No Comments
	(816) 969-1820	Michael.Park@citlyofls.net	