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October 16, 2023

Mr. Gene Williams City of Lee's Summit 220 SE Green Street Lee's Summit, MO 64063

RE: Comment Response Letter Wilshire Hills 4th Plat NE Wilshire Drive Lee's Summit, MO 64064

Dear Mr. Williams:

Please find enclosed the civil related comment responses for Wilshire Hills 4th Plat Construction Document review submittal. Comments were received on July 17, 2023. Below are responses to site plan review comments received.

PLAT REVIEW

Reviewer: Dawn Bell, Planning Manager

- 1. North Arrow. The plan shall be oriented so north is to the top or to the left side of the sheet.
 - a. Adjusted.
- 2. The stamp states "Preliminary....or permit review purposes". This will need to be removed for the final version of the plat.
 - a. Plat signed and sealed for final version.
- 3. State Plane Coordinates are missing.
 - a. State plane coordinates updated.
- 4. Should be labeled 'Final Plat' instead of 'Minor Plat'
 - a. Label changed from Minor to Final.
- 5. The title block references 5th Plat, it should be 4th Plat
 - a. Title updated to 4th plat.
- 6. The lots are labeled 1, 2 and 5. 1 and 2 are duplicates of previous plats so the lots should be 5, 6 and 7.
 - a. Plat has been updated to specific lots. These numbers have been updated on the plat.
- 7. In the dedication, above the easement dedication paragraph verbiage it references 4th plat, lots 5 and 7. It should be lots 5 through 7.
 - a. Lot names adjusted back to match previous plats.
- 8. Change the Director of Development Services to Josh Johnson, AICP
 - a. Name updated.
- 9. The Line weight of the r/w dimension needs to change (it appears as it is a property line).
 - a. The r/w line is a property line.

- 10. Minimum 5' wide sidewalks should be shown on both sides of Wilshire Drive.
 - a. Sidewalks do not belong on plats. Shown on preliminary plat.
- 11. Label the existing sidewalk on Meadowview Dr.
 - a. Sidewalks shown in dashed form for future construction.
- 12. A minimum 5' sidewalk is required on Manhattan Dr.
 - a. Sidewalks do not belong on plats. Shown on preliminary plat.
- 13. A minimum 5' sidewalk is required along Strother Rd.
 - a. Sidewalks do not belong on plats. Shown on preliminary plat.
- 14. Include the NE quadrant prefixes on all streets.
 - a. Name updated.
- 15. Easements cannot be vacated on a plat. Please re-label 'to be vacated'. Easements can only be vacated under separate application.
 - a. Removed.
- 16. The approval paragraph and City's signature block must be on both pages. Additionally, change the approval paragraph from that of a minor plat to that of a final plat.
 - a. Approval paragraph placed on both pages. Final plat designated updated.
- 17. List lot numbers in the plat title Wilshire Hills 4th Plat, Lots 5-7
 - a. Name updated
- 18. Addresses. Please label the addresses as follows:
 - a. Addresses updated.

Reviewer: Gene Williams, Senior Staff Engineer

- 1. All street frontage shall include a minimum 10 foot utility easement, including along Strother Road.
 - a. Utility easement updated.
- 2. What is the drainage easement and the access easement within the interior of Lot 2? It is not included within the dedication language, and if it is intended for stormwater detention, the City shall have no interest in being the grantee of this easement. Please evaluate, and if an easement for stormwater, this should be within a Tract rather than an easement.
 - **a.** Detention basin marked private.
- **3.** Further review of the plat shall be conducted when the infrastructure plans have been reviewed. No further review was conducted at this time.
 - a. Acknowledged.
- 4. The legend describes "VTP" (vacated this plat), but the City does not allow easements to be vacated by plat. Are there any easements on this plat that are proposed for vacation? If so, a formal vacation of easement process is required.
 - **a.** Updated to "to be vacated" for future work.

Reviewer: Kathy Kraemer, GIS Technician

- 1. The title block states it is the 5th Plat, but in the city signature block and the dedication, it says it is the 4th plat.
 - **a.** Updated to 4th plat.
- 2. The dedication is not titled for clarity. Please add "Dedication."
 - **a.** Dedication added.
- 3. Are those lot numbers in the circles? Lots 1, 2, and 5? If so, they do not match the plat.
 - **a.** Lot names adjusted back to match previous plats.
- 4. Plat lacks state plane coordinates.
 - a. State plane coordinates updated.
- 5. Small correction: "Manhattan" is misspelled on the plat.
 - **a.** Spelling updated.
- 6. Please label street centerline dimensions, bearings, and curves
 - a. Street details added.
- 7. Drawing does not match legal. Please review and revise so they match.
 - **a.** Drawings reviewed and revised to match legal.

PUBLIC IMPROVMENTS PLAN REVIEW

Reviewer: Gene Williams, Engineering Plan Review – Public Water

- 1. Why are there two (2) cover sheets for this project?
 - a. Five sets of plans have been included in the resubmittal. The overall plan sheets contain two pages, one overall cover page and one overall plan page. The purpose of this set is to provide a contractor with an overall view of the project and the contained plan sets. Following the overall plan is the four supporting plans divided into the requested sets.
- 2. Please rename the plans "Wilshire Hills 4th Plat Water Line Extension" or equivalent language.
 - a. Name Updated.
- 3. Extend the proposed water main south along the proposed road and connect the 16inch water main on the south side of Strother Road. An 8-inch main should be large enough if any new building has a similar fire flow requirement as the Phase 3 building.
 - a. The water line has been connected to the existing main along Strother Road.
- 4. Add DR18 to the note in the profile to say "8" C-900 DR18 PVC.
 - a. Note added.
- 5. Add the vertical fitting bend angle to the profile, 45-degree bends are typical.
 - a. The bend angles of 45° have been designated on the profiles.
- 6. Label the easement between Sta. 0+00 and Sta. 3+43. State 10' proposed easement if that is the case.
 - a. Easement Labeled.

- 7. A trenching and backfill detail was missing from the plans. Please develop a trenching and backfill detail based on the Design and Construction Manual (the City does not currently have a standard detail for this), and ensure there is a minimum of 12 inches aggregate on top of pipe in accordance with newer rules from July 2020.
 - a. Detail added.

Reviewer: Gene Williams, Engineering Plan Review – Public Sanitary

- 1. Why are there two (2) cover sheets for this project?
 - a. Five sets of plans have been included in the resubmittal. The overall plan sheets contain two pages, one overall cover page and one overall plan page. The purpose of this set is to provide a contractor with an overall view of the project and the contained plan sets. Following the overall plan is the four supporting plans divided into the requested sets.
- 2. Please rename the plans to "Wilshire Hills 4th Plat Sanitary Sewer" or equivalent. a. Name updated.
- 3. Normal procedure is to show a general overview of the entire sanitary sewer line in plan view format on one (1) sheet if possible. It appears this is possible. Please provide a general overview sheet of the entire line shown on one (1) sheet.
 - a. Sheet added.
- 4. The general overview sheet discussed above should provide proposed lot lines that correspond with the plat. No such lot lines appear to exist. Please provide the lot lines to determine whether the length of the sanitary line extension is sufficient to serve all lots within Wilshire Hills 4th Plat.
 - a. Lot lines included.
- 5. Provide a callout of all existing city manhole numbers on all plan sheets. In this instance, the existing manhole that is being connected is #11-277. Please update as appropriate.
 - a. Manhole labeled.
- 6. Sheet C4.02: It appears there is a missing storm crossing in the profile at around 7+65. *a.* Crossing added.
- 7. Sanitary lines shall be SDR 26 rather than SDR 35. Please revise.
 - a. Line type revised.
- 8. Sanitary sewer stubs shall be SDR 26 rather than SDR 35. Please revise.
 - a. Line type revised.
- 9. The service connection called "standard" at 7+78.96 is approx. 7' deep at the cleanout and 11.5' where it connects to the sewer main. The service connection at 3+82.71, labeled a deep service connection, is approx. 7' deep at cleanout and 13' where it connects to the sewer main. One doesn't seem to be deeper than the other. Is there a difference in these connections?
 - a. The service for the proposed Lot 5 is shown. The service upstream has been deleted. The label now matches the detail "Sanitary Sewer Stub."

- 10. Tracer wire called out for service at 2+24.74 but none of the others. Tracer wire required for all service connections/stubs
 - a. Tracer wired called out for the service.
- 11. We noticed an existing flow line "in" elevation listed on manhole 11-277. We checked an old manhole inspection photo and identified a pipe in, and a pipe out on what is indicated to be a dead end manhole so I suspect that there is an existing stub with a cap on it. The stub should be removed and a new pipe shall be installed into the manhole in lieu of using a coupling to connect to the end of the stub.
 - a. Remove and replace noted for existing connection.

Reviewer: Gene Williams, Engineering Plan Review – Mass Grading and ESC

- 1. Turf reinforcement mat is required in all swales and drainage ditches, and along the sides of detention basins. Please revise as appropriate.
 - a. Mats added to all required areas.
- 2. It was our understanding the detention basin/retention basin was going to be utilized for temporary sediment basin. If so, are skimmers going to be installed? If so, a site-specific design is required for the skimmers. Please evaluate and revise if appropriate.
 - a. Skimmer added.

Reviewer: Gene Williams, Engineering Plan Review – Streets and Storm

- 1. Please review Section 5600 of the Design and Construction Manual related to detention basin design. A minimum freeboard of 1.0 feet is required from the 100 year clogged condition/zero available storage and the top of dam. It appears this criteria is not met.
 - a. The detention basin has been updated per comments.
- 2. Detention pond setup table was not included within the appendix of the stormwater report. Please include within the appendix of the stormwater study.
 - a. Pond setup table has been included.
- 3. Please review Section 5600 of the Design and Construction Manual related to emergency spillway freeboard and the 100 year nominal (i.e., the design) water surface elevation. A minimum of 0.5 feet from the nominal (i.e., the design) 100 year water surface elevation and the emergency spillway is required. It does not appear this condition was met. Please revise as appropriate.
 - a. The spillway has been updated per comments.
- 4. Title of the plans is Phase III, but this appears to be the 4th Plat of Wilshire Hills. To avoid confusion, please rename the plans as "Street and Stormwater for Wilshire Hills 4th Plat" or equivalent language.
 - a. Name Updated.
- 5. Why are there two (2) cover sheets for this project?
 - a. Five sets of plans have been included in the resubmittal. The overall plan sheets contain two pages, one overall cover page and one overall plan page. The

> purpose of this set is to provide a contractor with an overall view of the project and the contained plan sets. Following the overall plan is the four supporting plans divided into the requested sets.

- 6. Asphaltic concrete section shown in the plans is incorrect and does not follow the Design and Construction Manual. Please review the Design and Construction Manual, and ensure the subgrade either includes geogrid, or chemically-stabilized subgrade. In addition, ensure the pavement thickness meets the requirements for commercial streets. Please review and revise as appropriate.
 - a. Cross sections have been updated page C2.02.
- 7. A separate sheet should be developed for the detention basin/retention basin showing the following information:
 - 1. Top of dam elevation.
 - 2. Emergency spillway elevation.
 - 3. All weir and orifice elevations that are part of the outlet structure.
 - 4. 100 year nominal (i.e., design) storage volume.
 - 5. Bottom of basin elevation.
 - 6. 100 year nominal (i.e., design) water surface elevation (WSE).
 - 8. 100 year clogged/zero available storage WSE.

9. Graphical limits of the 100 year clogged/zero available storage WSE (i.e., shown on the plan view with callouts), along with dimensional callouts from property lines and buildings to ensure a minimum 20 foot setback.

10. Typical section view of the outlet works and dam, along with elevation callouts for the 100 year nominal and 100 year clogged/zero available storage to ensure there is a minimum 0.5 feet freeboard between the nominal condition and the crest of the emergency spillway, and a minimum 1.0 feet from the clogged condition/zero available storage and the top of dam.

11. Location and callouts showing the emergency spillway, and a clear path that is not directed towards buildings or other vulnerable features.

The reason for the above is an as-built Record Drawing of the detention basin and outlet works shall be required prior to occupancy. The single sheet shall make the process of review easier when occupancy permits are being sought.

- a. Sheet has been included page C2.17/
- 8. Sidewalk was missing from the plans. In addition, site-specific ADA-accessible ramps and ADA-accessible routes across intersections were also missing. No further review can be conducted until these are shown on the plans.
 - a. Per meeting on August 24, 2023, the only sidewalks to be built during this phase are along the proposed lot only. This is shown on sheet C2.04. The ADA ramps will be built for future sidewalk construction at the intersection with Strother Road only.

- 9. The pavement width as measured from back of curb to back of curb does not appear correct. Commercial roads shall be 36 feet back of curb to back of curb. Residential local, which does not appear relevant to this development, shall be 28 feet as measured from back of curb to back of curb. Please revise as appropriate.
 - a. Per email dated August 28, 2023, the width of the road can be 28 feet back of curb to back of curb with 50 foot right of way.
- 10. Type M curb inlets are called-out, but the City of Lee's Summit does not have any such detail. Please clarify that the City of Lee's Summit standard curb inlet shall be used by referencing the appropriate standard drawing.
 - a. Type M changed to Curb inlet. Detail located on C2.15.
- 11. Hydraulic grade line for the design storm shall be shown on all storm line profiles. Typical practice in City of Lee's Summit is to show the 10 year at or below the crown of pipe, with the 100 year contained within the pipe and no less than 6 inches from any throat opening. Please update on the profile view.
 - a. Hydraulic grade lines have been added to plan on page C2.13.
- 12. Pipe calculations should be shown within the plans in the form of a table(s) for each storm event. The stormwater report presents these, but in addition, the City of Lee's Summit requires these to be placed in the plans. Please update as appropriate.
 - a. Hydraulic calculation tables have been added to the plans See page C2.13.
- 13. The 60 inch pipe exiting the detention basin shall be designated private. As shown, it is public. Please revise.
 - a. The pipe has been marked as private. Page C2.13.
- 14. The 60 inch pipe exiting the detention basin is shown with an excessive slope which will lead to supercritical flow conditions and excess erosive ability. Recommend lessening the slope. Please evaluate and revise as appropriate.
 - a. The outfall pipe slope has been reduced. The pipe discharges into a large concrete energy dissipator to reduce excess erosive ability.
- 15. The outfall structure of the detention basin is shown as public. This shall be private. The City of Lee's Summit does not maintain public stormwater detention basins, outlet works, or discharge pipes. Please revise as appropriate.
 - a. The basin has been marked as private. Page C2.17.
- 16. Sheet C2.12 shows an "existing detention basin". Where is this existing detention basin?
 - a. Label removed- existing basin is a sediment trap from previous development.
- 17. Rip rap calculations were not provided, nor were there any dimensions, thickness, geofabric, rip rap sizing, etc. shown for the rip rap. Please show this information on all sheets related to rip rap.
 - a. Rip rap calculations have been provided in the Hydraulic report as a part of Appendix A.

- 18. A trenching and backfill detail was missing from the plans. Please ensure the most upto-date detail is provided with 12 inches aggregate over the top of pipe which was adopted in Jul. 2020. The City does not have a standard detail for trenching and backfill, so it will need to be a customized detail.
 - a. Detail has been added with 12 inches of aggregate called out. Page C2.15.
- 19. Plans reference "The City of Locust Grove" throughout the plan set. Please revise. Many of the references relate to concrete, and the City of Lee's Summit requires KCMMB mix for all stormwater structures, pavement, curb and gutter, etc. Please review and revise as appropriate.
 - a. Name revised to "City of Lee's Summit"
- 20. TMIs are called-out, but the City does not recognize a "TMI". What is a TMI? Is this a curb inlet?
 - a. Type M Inlets (TMIs) have been renamed Standard Curb Inlet to comply with Lee's Summit requirements.
- 21. Has the plat been reviewed in terms of right of way width for street classification? A minimum 60 feet right of way is required for commercial streets with a 36 foot back of curb to back of curb street width. Please review and revise the plat and the plans as appropriate.
 - a. Per meeting on August 24, 2023, the road width has been approved as 36' foot back of curb to back of curb for the commercial frontage section before narrowing down to 28' section for residential areas. Right of way is 60' for the commercial and 50' for the residential areas. See page C2.02.
- 22. Informational Comment: It is probable that additional comments shall be forthcoming on future submittals due to the incomplete nature of the plans.
 - a. Acknowledged.

Reviewer: Gene Williams, Traffic Review

- 1. Sidewalk will be required with these improvements. Sidewalk will need to extend past this plat and connect to the existing sidewalk on Wilshire Drive.
 - a. Per meeting on August 24, 2023, sidewalks have been shown to be constructed along the frontage of Wilshire Hills Phase III as well as the public track created by the stream and detention basin. The sidewalks' future locations have been shown on the plan to indicate the given right of way but are not required for construction on this Phase of the project.

All other comments have been modified and noted the updated changes on the Stormwater Maintenance Agreement. If you have and questions or comments, please contact me.

Sincerely,

A Vil

Matthew Kriete