



January 10, 2023

Kevin Krulik, PE, PS, AICP
Lebanon City Engineer
Engineering Department
401 S. Meridian St. 2nd Floor
Lebanon, IN 46052

**RE: The Cedars @ Lebanon Business Park – Tyre Road and John Shaw
City of Lebanon Engineering Comments**

Dear Mr. Krulik,

The plans have been revised per your Lebanon Engineering Comment Letter dated November 15, 2022. I have addressed each of the items individually with a numbering system consistent to your comment letter.

General

- 1. Satisfactorily address all comments provided by Lebanon Utilities, Police, Fire, Street, Stormwater, and Planning departments, in addition to requirements of other authorities having jurisdiction, such as: the Boone County Surveyor, Boone County REMC, the Indiana Department of Transportation, the Indiana Department of Environmental Management, the Indiana Department of Natural Resources, etc.**
Response: All comments provided by Lebanon departments and other authorities having jurisdiction have been satisfactorily addressed.
- 2. Submit required calculations and satisfactorily address all storm water runoff, detention, storm sewer, and storm water quality comments provided by Kerry Daily of Christopher Burke Engineering Limited (CBBEL) pursuant to the City of Lebanon Stormwater Control Ordinance**
Response: Calculations have been submitted and all storm water runoff, detention, storm sewer, and storm water quality comments by CBBEL have been addressed.
- 3. Provide a traffic impact study which includes any required and or recommended traffic improvements. Provide copies of all traffic studies to Matt Brown at A&F Engineering (A&F). Comply with all recommendations provided by A&F and requirements of INDOT. In addition to the proposed entry drive, the following intersections must be studied:**
 - i. Tyre Road and SR 39**
 - ii. Tyre Road and John Shaw Road.***Response: A traffic impact study of the proposed entry drives and intersections has been initiated and is currently being assessed.*

4. Indicate all utility and utility conduit crossings on all appropriate plan and profile sheets. Denote locations, size, depth, and material. Provide concrete cradles where vertical separation of 18" between outside of pipes is not attainable (6" min. clearance required).
Response: 18 inches minimum of vertical separation between water main and sanitary or storm sewers at crossing locations will be maintained or a concrete cradle will be provided as shown on the C5.0 Plan & Profile sheets.

5. All Sheets:

a. Add a note to all appropriate sheets which states the following: All work within the right-of-way shall meet current City of Lebanon Construction Standards.

Response: A note has been added to all appropriate sheets states "All work within the right-of-way shall meet current City of Lebanon Construction Standards."

b. Add a note to all appropriate sheets which states the following: The contractor/developer shall protect existing right-of-way infrastructure and be responsible for restoration as necessary.

Response: A note has been added to all appropriate sheets which states "The contractor/developer shall protect existing right-of-way infrastructure and be responsible for restoration as necessary."

c. Add a note to all appropriate sheets which states the following: Roof drain downspouts shall discharge at grade adjacent to the structure with proper grading to ensure drainage away from foundation.

Response: A note has been added to all appropriate sheets which states "Roof drain downspouts shall discharge at grade adjacent to the structure with proper grading to ensure drainage away from foundation."

d. Provide Reference to City of Lebanon Standard details where appropriate. Please note that Lebanon Standards will control where conflicts.

Response: References to City of Lebanon Standard details have been provided throughout the plan sheets where appropriate. Note #5 on Sheet C0.1 "General Notes" in the Overall Project General Notes has been updated to reflect that "LEBANON STANDARDS WILL CONTROL WHERE THERE ARE CONFLICTS."

6. Sheet C0.0 – Cover Sheet

a. "APPROVED FOR CONSTRUCTION" stamp, shall be added, when appropriate, as follows:

APPROVED FOR CONSTRUCTION

Release For Construction Date: _____

Preconstruction Conference Date: _____

By: _____ Date: _____

Kevin Krulik PE PS AICP, City Engineer

City of Lebanon, IN

Response: "APPROVED FOR CONSTRUCTION" stamp shall be added to C0.1 Cover Sheet when appropriate to provide location for written approval from City Engineer.

b. Add/Update the following contact Information:

City of Lebanon
401 S. Meridian Street
Lebanon, IN 46052
(765) 482-8845
Kevin Krulik PE PS AICP - City Engineer
Scott Calvert – MS4 Coordinator/Public Works

Response: Contact information for the City of Lebanon has been added to Sheet C0.0 in the upper left hand corner as the Local Authority.

7. Sanitary Sheet C0.1 – General Notes:

a. Provide Reference to City of Lebanon Standard details where appropriate. Please note that Lebanon Standards will control where conflicts

Response: Note #5 on Sheet C0.1 "General Notes" in the Overall Project General Notes has been updated to reflect that "LEBANON CITY STANDARD DETAIL SHEETS ARE PROVIDED AT THE END OF THESE CONSTRUCTION PLAN SHEETS. LEBANON STANDARDS WILL CONTROL WHERE THERE ARE CONFLICTS."

8. Sheet C1.0 – Overall Existing Conditions Plan:

a. No comments at this time.

Response: Noted

9. Sheet C1.1-C1.4 – Existing Conditions and Demolition Plan:

a. Please ensure that existing wells, septic field, and utilities to be removed are properly retired and or abandoned per the appropriate governing bodies.

Response: A note has been provided on all Existing Conditions and Demolition Plan sheets which states "Contractor to ensure that existing wells, septic fields, utilities and any additional existing materials to be removed are properly retired and/or abandoned per the appropriate governing bodies."

b. Provide reference to maintenance of traffic plan associated with demolition and reconstruction of existing rights-of-way.

Response: Existing Conditions and Demolition Plan will reference Maintenance of Traffic plans and reconstruction of existing rights of way. Traffic study is being undertaken and MOT plans will be finalized required street improvements are determined.

10. Sheet C2.0 – Overall Site Improvements Plan:

a. Depict proposed rights of way in compliance with the City of Lebanon Thoroughfare plan.

- i. Tyre Road – 35' half width**
- ii. John Shaw Road – 35' half width.**

Response: Proposed rights of way in compliance with the City of Lebanon Thoroughfare Plan have been depicted on the plan sheet for both Tyre Road and John Shaw Road.

- b. **Indicate any passing lanes, acceleration/deceleration lanes, and tapers as provided by the traffic impact plans previously referenced.**

*Response: Passing lanes, acceleration/deceleration lanes, and tapers have been indicated on Sheet C2.0 – Overall Site Improvements Plan. *Note: A traffic impact study of the proposed entry drives and intersections has been initiated and is currently being undertaken.*

- c. **The proposed multi-use paths should be placed at the back of the proposed rights of way.**

Response: All proposed multi-use paths have been placed at the back of the of the proposed right of ways along Tyre Road and John Shaw Road.

11. Sheet C2.1-C2.4 – Site Improvements Plan:

- a. **Max commercial drive width is 30', adjust truck court entrances accordingly.**

Response: All commercial drive widths are now a maximum of 30'.

- b. **Widening is required to accommodate acceleration/deceleration lanes, passing blisters, and tapers to accommodate turn maneuvers for traffic entering the site, as recommended by the previously referenced traffic impact study.**

Response: Widening to accommodate acceleration/deceleration lanes, passing blisters, and tapers to accommodate turn maneuvers for traffic entering the site are shown on the site improvement plans.

- c. **All striping in public rights-of-way to be thermoplastic in compliance with the AASHTO – MUTCD**

Response: All striping in public rights-of-way is designated and called out to be thermoplastic.

- d. **The following minimum street cross section improvements will be need to be accommodated. The following capacity improvement are to be provided by the city, subject to Traffic Impact Fees, or improvements may be developer installed, in lieu of said fees.**

- i. **11' Travel lanes (2 total) in addition to areas for traffic control striping along the entire project frontage.**
- ii. **2' paved shoulder**

Response: The minimum street cross section improvements and capacity improvements are being met and shown on the site improvement plans.

- e. **Pedestrian access must be provided for throughout the development, provide lead walks to buildings from adjacent multi-use paths.**

Response: Pedestrian access has been provided throughout the development with walkways from the buildings to the adjacent multi-use paths.

- f. **It is the understanding that the proposed streets within the project will remain private. Any proposed dedication of said street, now or in the future would require that all construction adhere to Lebanon Standards:**

- i. **<https://lebanon.in.gov/wp-content/uploads/2021/12/Lebanon-City-Standards-Final-Version-Jan-1-22.pdf>**
- ii. **Minimum slope of 1.0% to be provided on streets.**
- iii. **All intersections shall be high points.**

Response: Any proposed dedication of streets within the development, now or in the future, shall meet all Lebanon Construction Standards.

12. Sheet C2.0 – Overall Grading and Drainage Plan:

- a. No comments at this time.

Response: Noted

13. Sheet C3.1-C3.4 – Grading and Drainage Plan:

- a. No comments at this time.

Response: Noted

14. Sheet C4.0 – Overall Site Utility Plan:

- a. No comments at this time.

Response: Noted

15. Sheet C4.1-C4.4 – Site Utility Plan:

- a. No comments at this time.

Response: Noted

16. Sheet C4.5 – Overall Offsite Utility Plan:

- a. No comments at this time.

Response: Noted

17. Sheet C4.6-C4.7 – Offsite Sanitary Sewer Extension:

- a. No comments at this time.

Response: Noted

18. Sheet C4.8-C4.10 – Offsite Water Main Extension:

- a. No comments at this time.

Response: Noted

19. Sheet C6.0 – Overall Stormwater Pollution Prevention Plan:

- a. No comments at this time.

Response: Noted

20. Sheet C6.1-C6.4 – Stormwater Pollution Prevention Plan:

- a. No comments at this time.

Response: Noted

21. Sheet C6.5 – Stormwater Pollution Prevention Notes:

- a. Where applicable, reference to City of Lebanon Standards. Please note that Lebanon Standards will control where conflicts exist. Full Lebanon Standards Details sheets are to be incorporated into the final set of approved construction plans (inapplicable details and or sheets may be “X” out):

<https://lebanon.in.gov/wp-content/uploads/2021/12/Lebanon-City-Standards-Final-Version-Jan-1-22.pdf>

Response: Note #5 on Sheet C0.1 “General Notes” in the Overall Project General Notes has been updated to reflect that “LEBANON CITY STANDARD DETAIL SHEETS ARE PROVIDED AT THE END OF THESE CONSTRUCTION PLAN SHEETS. LEBANON STANDARDS WILL CONTROL WHERE THERE ARE CONFLICTS.”

The most recent set of Lebanon City Standards are included with the Plan Set as downloaded from the provided PDF.

22. Sheet C6.6 – Stormwater Pollution Prevention Details:

- a. No comments at this time.

Response: Noted

23. Sheet C8.0 – Construction Details:

- a. Where applicable, reference to City of Lebanon Standards. Please note that Lebanon Standards will control where conflicts exist. Full Lebanon Standards Details sheets are to be incorporated into the final set of approved construction plans (inapplicable details and or sheets may be “X” out):

<https://lebanon.in.gov/wp-content/uploads/2021/12/Lebanon-City-Standards-Final-Version-Jan-1-22.pdf>

Response: Note #5 on Sheet C0.1 “General Notes” in the Overall Project General Notes has been updated to reflect that “LEBANON CITY STANDARD DETAIL SHEETS ARE PROVIDED AT THE END OF THESE CONSTRUCTION PLAN SHEETS. LEBANON STANDARDS WILL CONTROL WHERE THERE ARE CONFLICTS.”

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24. Sheet L1.0 and L1.1-L1.4 and L2.0-L2.1 – Landscape Plans, Planting Schedules and Specifications:

- a. Ensure compliance with the requirements of the City of Lebanon Planning Department.

Response: Compliance with the requirements of the City of Lebanon Planning Department have been met with the landscape design.

25. Provide Site Lighting Plan:

- a. Ensure compliance with the requirements of the City of Lebanon Planning Department.

Response: Compliance with the requirements of the City of Lebanon Planning Department have been met with the landscape design.

26. Full Lebanon Standards Details sheets are to be incorporated into the final set of approved construction plans (inapplicable details and or sheets may be “X”d out).

<https://lebanon.in.gov/wp-content/uploads/2021/12/Lebanon-City-Standards-Final-Version-Jan-1-22.pdf>

Response: The most recent set of Lebanon City Standards are included with the Plan Set as downloaded from the provided PDF.

27. Provide Maintenance of Traffic plan in compliance with MUTCD for the construction of the proposed entrance along Ping Avenue.

Response: Traffic impact study is being undertaken and MOT plans will be finalized required street improvements are determined.

28. Provide Traffic Control Plan: (for public right of way control signage only)

- a. Combine Street name and stop signs on single post. Street name signs to match current city standard (old gold background with black lettering and “Tiger head” logo) on black painted square breakaway steel posts.

Response: Street name and stop signs shall be designated to be combined on a single post. Street name signs shall match current city standard (old gold background with black lettering and “Tiger head” logo) on black painted square breakaway steel posts.

- b. **All traffic control posts shall be black painted, square breakaway steel posts.**

Response: All traffic control posts shall be designated to be painted black on square breakaway steel posts.

- c. **All traffic control signage to have black painted sign backs.**

Response: All traffic control signage shall be designated to have black painted sign backs.

29. Provide copy of Indiana Department of Natural Resources (IDNR) CSGP (formerly Rule 5) Notice of Intent (NOI) to Scott Calvert, MS4 Coordinator. Weekly City inspections of Stormwater BMPs are required throughout construction. Inspection fees will be \$50 per month from permit issuance till a Notice of Termination (NOT) is filed. Fees shall be paid at the time of Improvement Location Permit (ILP) issuance based on the proposed anticipated construction schedule.

Response: Copies of the Indiana Department of Natural Resources (IDNR) CSGP (formerly Rule 5) Notice of Intent (NOI) shall be provided to Scott Calvert, MS4 Coordinator and all fees and inspections shall be paid and adhered to.

HWC has reviewed the comments for reference purposes in the comment letter and has no objections providing the information requested for the final construction plan submittals.

If you have any questions or require additional information, please feel free to contact me at your convenience.

Sincerely,



Ryan A. Robinson, P.E.
Project Manager