

RESPONSE TO DEVELOPMENT REVIEW COMMITTEE MEMORANDUM

**VILLAGE OF LIBERTYVILLE
COMMUNITY DEVELOPMENT DEPARTMENT
200 EAST COOK AVENUE
LIBERTYVILLE, ILLINOIS 60048-2090**

FROM: CHILM Libertyville Residential LLC (the “Applicant”) and
1783 N. Milwaukee Parking, LLC (the “Co-Applicant”), collectively, the Co-
Applicants.

DATE: September 23, 2021

SUBJECT: Applicant and Co-Applicant’s Response to Development Review Committee
(DRC) Report dated August 20, 2021 and re-issued September 22, 2021

CASE NOS.: **PC 21-18 Zoning Map Amendment**
 PC 21-19 Special Use Permit for Planned Development
 PC 21-20 Planned Development Concept Plan
 PC 21-21 Preliminary Plat of Subdivision

PLANNING DIVISION COMMENTS:

1. Staff recommends that the residential townhome development, Wildberry restaurant parking lot expansion and the grading and seeding of the vacant commercial lot south of the Wildberry restaurant parcel shall be developed in a unified and concurrent manner. Staff recommends that occupancy permits shall be issued for any of the townhome units only after the completion of the Wildberry restaurant parking lot expansion and the grading and seeding of the vacant commercial lot. Staff recommends that a construction/phasing plan be submitted for review. Please note Engineering Division comments #21 and #22.

RESPONSE: *The Applicant objects to occupancy permits being tied to completion of the Co-Applicant’s development. The Co-Applicants will submit a construction/phasing plan for review.*

2. Staff questions the rationale behind the carving out of the existing Wildberry restaurant lot out of the Planned Development land area. The proposed plat of subdivision creates lot lines that run through the Wildberry restaurant parking lot area. This may be legally acceptable provided that both the parking lot expansion and the restaurant lot itself remain under single ownership. However, the exclusion of the Wildberry restaurant lot from the Planned Development but incorporating the Wildberry parking lot expansion as part of the Planned Development could be confusing or problematic if there are property improvements on the restaurant lot are contemplated in the future.
 - Please confirm whether or not the owner of the Wildberry restaurant will be party

to a commercial owner's association with governing covenants and restrictions.

- The existing Wildberry restaurant lot line appears to intersect existing parking lot islands.
- If future construction/repair/new development work is proposed in any of these areas of the parking lot expansion lot area or the restaurant building lot area, the application of Planned Development regulations versus the application of standard Zoning regulations can become confusing.

RESPONSE: The existing Wildberry restaurant parcel will not be part of the PUD. The owner of the Wildberry restaurant will enter into a private agreement regarding the use and maintenance of the parking lot expansion parcel. For future construction/repair/new development work, the applicability of the Planned Development regulations will be dependent on whether such work will take place on property within the PUD area or not. We do not see this as being problematic.

3. Staff recommends that the intersection of the new public road and Adler Drive be configured to reflect the Libertyville 2030 Comprehensive Plan concept plan for this area so that Adler would curve slightly and redirect vehicles towards the new road to help calm traffic and discourage thru-traffic on nearby streets. Please note Engineering comment #18.

RESPONSE: The Applicant is willing to reconfigure the intersection to match the Comprehensive Plan design if required to do so.

4. **RESIDENTIAL PROPERTY** - Please revise the Sight Line Location Exhibits by Pearson, Brown & Associates, Inc. to include the proposed landscaping and fencing screening.

RESPONSE: These exhibits were prepared only to show the similar sight lines between two similar building heights to the upper portions of the buildings.

5. **WILDBERRY PROPERTY** - Per the Zoning Code (26-13-3.1), every parking lot shall be buffered and screened with appropriate screening devices such as decorative walls, fences, or berms. The landscaping and screening treatment shall be designed and maintained to a height of at least six (6) feet along every lot line abutting a Residential District and to a height of at least three (3) feet along every other lot line (See Figure 13-2). Provide the required screening along the western and southern edge of the improved parking lot in accordance with the Zoning Code standards.

RESPONSE: Additional landscaping will be provided including at least three (3) feet of screening along the southern and southwestern corner of the proposed parking lot. This is part of a coordinated, comprehensive, and cohesive landscape and screening treatment between the residential and commercial areas.

6. **WILDBERRY PROPERTY** - Per the Zoning Code (26-13-3.2)(c), interior landscaping shall consist of tree planting islands with a minimum area of one hundred seventy-one

(171) square feet and a minimum width of nine (9) feet, measured from back of curb to back of curb. One (1) shade tree having a minimum trunk size of three (3) inches in diameter shall be included for every one hundred seventy-one (171) square feet of tree planting islands. Document the size of the landscape islands and plant trees where applicable.

RESPONSE: All islands have been sized to the required dimensions where possible. The islands include the required trees except in those instances where they cannot be accommodated due to light pole installation requirements.

7. **WILDBERRY PROPERTY** - Per the Zoning Code (13-3.2)(b), interior landscaping shall constitute at least ten percent (10%) of the area of the parking lot. The updated Narrative, dated August 9, 2021, indicates a deviation is being requested to reduce the required amount of landscaping for the parking lot expansion area to 9.57%.

RESPONSE: The 10% interior landscaping requirement will be met as part of the development of the commercial lots as a whole. Consequently, this minor deficiency on the parking lot parcel will be balanced by the future commercial development.

8. **WILDBERRY PROPERTY** - Staff notes that the maximum permitted lot coverage for a property in the C-3 district is permitted to be up to 85%. The applicant is asking for a deviation from the Zoning Code for lot coverage of 75%. This looks to be a typo as documents note 86% coverage. Please revisit the lot coverage calculation and clarify that the proposed lot coverage includes the existing Wildberry restaurant building lot and expanded parking lot area as one Zoning Lot.

RESPONSE: The maximum lot coverage requirement will be met as part of the development of the commercial lots as a whole. Consequently, this minor lot coverage deficiency the parking lot parcel will be balanced by the future commercial development.

9. **WILDBERRY PROPERTY** – Please revise the Wildberry parking lot photometric plan by KSA Lighting & Controls to include property lines.

RESPONSE: The photometric plan by KSA does show all the property lines.

10. **COMMERCIAL PROPERTY** – Per the Zoning Code (26-11-12)(d)(2), only one multi-tenant sign may be permitted for each development; provided, however, that no multi-tenant sign shall be permitted on a zoning lot containing a freestanding business sign. Wildberry contains an existing masonry monument sign. A future multi-tenant masonry monument sign shall be considered at the time of redevelopment for the commercial property. Please be advised, all future signs shall comply with the requirements (height, square footage, illumination, landscaping) set forth in the Zoning Code.

RESPONSE: The commercial developer will withdraw its request for sign approval at this time.

11. **RESIDENTIAL PROPERTY AND NEW PUBLIC ROAD** - The Photometric Plan shows ten (10) light poles to be installed throughout the site. Provide cutsheets for the proposed light poles, including their overall height, color, and style.

RESPONSE: *The cut-sheets and details for the lights are included in the preliminary engineering plans and were also provided separately as part of the ARC materials. The lights are the Village standard for use in subdivisions. We were advised by Village staff to use the same lights and poles for the public road and new residential zones.*

ECONOMIC DEVELOPMENT DIVISION COMMENTS:

Economic Development Division:

The subject property has been consistently listed as Key Land Redevelopment Opportunity and Priority in the Village’s Economic Development Strategy since the initial Strategy development by the Economic Development Commission in 2010. The proposed development would assist in diversifying the Village’s housing type mix, offering new units to meet the interests of new and potential residents. Such residences will serve the needs of area employees, and will help strengthen the customer base for area businesses—these are objectives frequently referenced in the 2030 Comprehensive Plan and Economic Development Strategy. The expanded parking field will help the long term viability of an existing restaurant that serves a large customer base of Libertyville area residents, as well as neighboring hotel guest. The future commercial parcel proposed may provide additional community amenities and revenue benefits, impacts of such cannot be determined at this time without a known use.

Fiscal Impact Report:

The developer has provided a Fiscal Impact Report by Laube Companies (dated 5-20-21) addressing the anticipated fiscal impact on the Village and serving school districts, specifically focusing on required impact fees and property tax production. Staff has reviewed the provided documentation and provides the following comments:

- Staff does not have the expertise to comment on the appropriateness of assumptions related to school costs, student production, assessment growth rates, or future changes to fair market value.

RESPONSE: *No response required.*

- It should be noted however that the report relies on “operational” costs to the school only and not the “instructional” costs, the IL State Board of Education’s IL Report Card for both schools would indicate that the combined operational and instructional costs to the schools may be substantially higher on a per student basis than that reflected in the report assumptions noted.

RESPONSE: *Operational costs are defined as instructional costs plus any additional non-instructional costs. Instructional costs are included in the number provided.*

- The school impact fee calculations are in alignment with the Village’s School and Park Donation schedule. No Park Impact Fee calculations are provided.

RESPONSE: *We are estimating the school impact fees to be approximately \$93,000. Park impact fees will be paid as required but are not included in the report as the scope of the report was to assess impact to the Village and the schools.*

- The submitted Appendices do not include School District 70 and 128 Property Tax Projections (Tables 9 and 10), nor the District 70 Cost Assumptions (Table 11).

RESPONSE: *All tables and appendices have been provided.*

- The tax rate utilized for the Village only represents a portion of the full rate 0.679725 for Tax Year 2020 (payable 2021-22), therefore total Village property tax revenues would be nearly double the figure suggested.

RESPONSE: *For purposes of the report, the Village rate of 0.362092% was used, representing the portion that goes toward general Village operations. The pension fund levy was not included.*

- The report does address future costs which the Village would occur in the form of municipal services (fire, police, public works, parks, administration, etc.), therefore the full property tax Benefit to the Village reflected would be somewhat less than reflected.

RESPONSE: *Acknowledged. However, the impact of this project will not result in the Village having to make additional capital or facility expenditures as a result of the development.*

- Staff would concur with the identified “Qualitative Benefits” stated.

RESPONSE: *Noted.*

BUILDING DIVISION COMMENTS:

1. At the time of building permit application please provide complete construction permit documents signed and sealed by IL Licensed Architect prior to Building Permit review.

RESPONSE: *Noted.*

2. At the retention and detention ponds, verify how all raised walking surfaces more than 18” above a surface below shall have 42” high guards (wrought iron / aluminum fencing) per 2018-IBC-1015.2. Retaining walls next to paving, grass and other walking surfaces shall show compliance with 2018 IBC 1015.2 for all retaining walls higher than 18 inches above grade below.

RESPONSE: *We do not have any proposed retaining walls or sheer vertical drops adjacent to the ponds. That section of the 2018 IBC refers to drops more than 30 inches within horizontal distances of 36 inches. We are not proposing any drops in elevations that steep*

adjacent to the ponds. Based on standard 3:1 slope pond grading we have drops of up to 12 inches in 36 inches of horizontal distance.

FIRE DEPARTMENT COMMENTS:

1. Provide a fire department turning template diagram of the entire development for the Libertyville Fire Department Ladder Truck, to include the new configuration of the Wildberry parking lot.
 - Note: Ensure the fire department maintains access to the FDC, knox box and sprinkler riser room at Wildberry.
 - Note: The non-standard turnaround in the southwest corner shall be marked as a fire lane with signs and/or striping to prevent parking. If the turnaround only functions in one direction, it shall be indicated with signs and/or striping.

RESPONSE: We will provide additional auto-turn exhibits as needed. We will provide the appropriate signage for the southwest turnaround if it remains proposed on the plans at the time of final engineering.

2. Plans show parallel parking along the private access road for the residential development. The road width including the parking is listed as 27 feet. Note that per the IFC the unobstructed width is 24 feet.
 - **2018 IFC Section 503.2.1 Dimensions (as amended by the Libertyville Municipal Code).**
Fire apparatus access roads shall have an unobstructed width of not less than 24 feet, 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).
 - **503.4 Obstruction of fire apparatus access roads.**
Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Sections 503.2.1 and 503.2.2 shall be maintained at all times.

RESPONSE: This comment has been withdrawn by the Village.

3. Note: per section 503.2.3 (as amended by the Libertyville Municipal Code) "The minimum weight the road shall support is 80,000 lbs."

RESPONSE: The proposed roadway can support the indicated weight.

4. Note: all residential buildings require a sprinkler system, minimally NFPA 13D.

RESPONSE: Acknowledged.

5. Note: once the configuration of the new water main is approved, the development will require a hydrant layout approved by the Fire Department. Layout will be reviewed against Section 507 and Appendix C of the International Fire Code (2018 edition).

- Note that the project may contain a mixture of public and private hydrants. Maintenance of private hydrants remains the responsibility of the property owner or designee.

RESPONSE: We will work with the Village to develop an acceptable configuration. We acknowledge the potential for private hydrants and their maintenance.

PUBLIC WORKS DEPARTMENT COMMENTS:

The Public Works Department offers the following comments related to the preliminary submittal for the project. It should be noted that comments provided at this time are those that staff felt were requiring attention in accordance with the requested Plan Commission actions. The developer(s) should anticipate additional comments upon the provision of subsequent plan submittals.

The following items should be addressed prior to a staff recommendation for approval:

Director of Public Works Comments

1. The Traffic Impact Study (TIS) indicates that existing counts were taken back in January 2021. Given that these were gathered during the height of the COVID-19 pandemic, additional counts need to be obtained now that school activities have resumed.

RESPONSE: The intersections were recounted on Thursday, August 26, 2021 and the results will be incorporated in the revised traffic study.

2. The TIS indicates that the AM delay time for the eastbound Adler Drive approach (left turn onto Milwaukee) will increase by 18 seconds. It is anticipated that this time will increase upon the update of traffic counts as requested in the previous comment.

RESPONSE: Noted.

3. The TIS indicates only 35 trips out and in for the peak-hours for the proposed 90-unit townhome development. This value seems low. Please verify and provide additional feedback on this matter.

RESPONSE: The trip estimated were based on trip rates published by the Institute of Transportation Engineers (ITE). The application of these rates is the standard in the industry and accurately represents the estimated trips for this type and size development. Furthermore, CivilTech, the village’s consultant has reviewed and confirmed the accuracy of this methodology.

4. The TIS indicates that the PM delay time for the left turn from Milwaukee onto Adler will not increase. Please verify and provide additional feedback on this matter.

RESPONSE: As shown in Tables 6 and 7, the average delays for the northbound lefts will increase by 0.2 second in the PM peak hour.

5. Please include the Bulletin 75 routing table within the Preliminary Stormwater Management Report. It will need to be verified that all provided detention is based on this new rainfall data in accordance with the current Lake County Watershed Development Ordinance.

RESPONSE: All detention sizing described in both the preliminary report and within the preliminary engineering plan (where the calculations are provided) is based on the new ISWS Bulletin 75 rainfall.

6. Four separate ponds are not conducive to best stormwater management practices. Can any of these be combined into one or two larger ponds?

RESPONSE: We maintain the four naturalized basins are simply part of one overall connected system and can be considered a proper best management practice. However, reducing the number of basins is being evaluated.

7. Stop signs should be indicated throughout the site on the plans to identify how traffic is intended to be controlled throughout the development and along the proposed public roadway.

RESPONSE: Noted.

8. The Village would not be able to accept perpetual ownership and maintenance of the water main system as currently designed. The ‘serpentine’ layout and proximity to buildings and private features would cause the system to be very difficult for long-term maintenance. Please explore alternative layouts for the system that would be similar to those implemented by the design engineers for the Parkside of Libertyville development. That development utilized a main line along the roadway that is publicly-owned and maintained, but also provided ‘private loops’ that were routed between and around buildings as needed for individual services and/or hydrant coverages. In this instance it would be preferred if the publicly owned portion was routed predominantly along the private roadway while being ‘looped’ between the proposed public roadway and potentially alongside the southernmost detention system to an Adler Drive connection. The Engineering Division would encourage the opportunity to work together with the design engineers towards a preferred layout.

RESPONSE: We will work with the Village to arrive at an acceptable configuration.

9. The sanitary sewer system must be routed to the existing system parallel to Milwaukee Avenue and should not discharge to the system along Adler Drive. The previous use of the site discharged to the Milwaukee Avenue system, and the proposed conditions should reflect the same. The Adler Drive sanitary sewer is ultimately tributary to a lift station that is not intended to take the discharge from this site. Based on initial review of the proposed elevations in relation to the existing sanitary sewer inverts along Milwaukee, it appears that a gravity feed to this sewer is feasible. (Additional Note: A public sanitary sewer easement

exists which is depicted on the survey and which was required when Wildberry was constructed, because the sewer served more than one property at the time. If a connection is not made to the existing manhole within the Wildberry property, the easement would likely need to be vacated, as it appears the sewer currently serves only one property.)

RESPONSE: *We will agree to route the sanitary sewer system to the requested location. This will be completed during final engineering.*

10. A 2-foot sump should be incorporated to the upstream side of the Outlet Control Structure.

RESPONSE: *The current detail on the preliminary plans shows a 3-foot sump on the upstream side. We will incorporate a 2-foot sump to the upstream side of the Outlet Control structure instead of a 3-foot during final if required. Please note we are using the same structure that has recently been approved on projects within the Village. The structure will, of course, also be privately maintained.*

11. Add a 4-inch CA-6 base to the roadway pavement section and increase the thickness of the asphalt pavement to 12-inches for the public roadway due to its shared use between residential and commercial properties.

RESPONSE: *We will agree to adjust the proposed section for the public roadway during final engineering.*

12. All street lighting will need to incorporate LED light fixtures.

RESPONSE: *Acknowledged.*

Engineering Division Comments

13. The development as currently designed is reliant on two (2) significant factors that are critical to the stormwater management functions of the site. It is staff's opinion that analyses of each of these items need to be provided and reviewed as part of the preliminary approval process due to the integral nature of their impacts to the site design:

- a. The preliminary documents indicate that restricted flows from the on-site detention system, along with 'some' of the emergency overflows from the site, are to be routed through the existing public storm sewer system along Adler Drive. Storm sewer modeling and calculations are needed to demonstrate that sufficient capacity exists within these and downstream sewers. (Note: It would be staff's preference to utilize the existing sewer system for at least a portion of site overflows rather than the adjacent rear yards (see #1b below) if determined that sufficient capacity exists).
- b. Emergency overland flows are to exit the site at the far northwest corner of the development and would be required to travel through the rear yards along the north side of Cedar Glen Ct. and Cedar Glen Drive. Detailed topography will need to be gathered for this path and stormwater modeling and analyses will need to be performed for the full extent of the overland flow path to identify any potential

impacts to downstream properties. The analyses will need to include ‘existing’ and ‘proposed’ conditions to allow for comparisons that depict the true impacts of the design.

RESPONSE:

a. Our proposed restricted releases are planned to drain to the existing storm sewer along Adler Drive. Given the timing of our onsite storage system peak release rates which will be on the order of hours for the required design storms compared to the time of concentration associated with the existing storm sewers (typically about 30 minutes or so (much shorter than the timing associated with the proposed pond system) our flows will be able to be accepted by the sewers. Our system is also elevated compared to the receiving system. Also, our current design for the restrictors calls for a single lower 4” diameter circular orifice and a single upper 4” diameter orifice.

b. We have obtained detailed topography downstream of the northwest corner of the property. Our preliminary modeling shows a reduction in flows delivered to the downstream route for events up to and including a single 100yr event. This is due to our restricted flows being conveyed to the Adler Drive storm sewer system and not to the primary overland route from the site from the northwest corner. We have also run preliminary critical duration models to determine the flow rate needed for the spillway design. This flow rate will not be delivered downstream from a single 100yr event – only from a very rare second 100yr event should that occur specifically when our system is already at or near capacity. We also have responses related to this comment in the CBBEL reply letter. The system is planned to function such that with a single, 100yr event, the only flows of any significance would be the planned restricted outflows that will not be released from the northwest corner but rather to Adler Drive. Any flows from the pervious areas associated with the back side of basin berms etc. are expected to be minor. Also, in proposed conditions, runoff from area that currently drains undetained to the Adler Drive storm sewer system will be diverted and routed through the proposed pond system and released via restrictors to the Adler system. The expected controlled releases are lower than the existing, undetained peak rates to the system for similar events we examined. Calculations describing this condition have been provided to the Village.

14. An exhibit should be provided to identify existing depressional areas within the property, along with the existing volume for each. The Preliminary Stormwater Management Report should also be expanded to identify that the on-site detention basins are accounting for both the existing depressional area that requires compensation as well as the development’s detention requirements. It is anticipated that depressional areas exist, at a minimum, at the northwest corner of the property and at the south end adjacent to Adler Drive.

RESPONSE: *The only significant feature onsite that could potentially be considered depressional storage is the former man-made golf-course irrigation pond that is currently in a drained condition that has been exempted from wetland requirements at the northwest corner. This pond was not constructed as part of a previous stormwater ordinance permit with an associated volume that needs to be maintained. There is a very small depressional area in the south along Adler Drive that we estimate is no more than a few hundredths of an acre-foot in*

volume.

15. Emergency overland flow routes should be delineated through the site on the preliminary plans.

RESPONSE: As stated in the preliminary plans we plan to incorporate 100yr storm sewer (and also 100yr inlet capacity) throughout the development. Given the total area involved, these flows can be conveyed by pipes to the basins per ordinance.

16. The current design shows proposed public storm sewers along the new roadway being connected to private sewers within the Wildberry site. The roadway storm sewer system should be designed so that it is separate and not reliant on a downstream connection to a private system, and should rather be routed and connected directly to the existing public system along Milwaukee Avenue.

RESPONSE: Noted.

17. Staff is not aware of any formal feedback being received from the Illinois Department of Transportation (IDOT) regarding the currently proposed entrance location along Peterson Road for the proposed public roadway. Given the crucial nature of IDOT acceptance of this entrance location to the overall site plan, staff is requesting that at least some form of feedback be received from IDOT concurring with the entrance location at this preliminary stage of the project.

RESPONSE: KLOA has submitted the Traffic Impact Study and proposed access geometry from IL 137 to IDOT and the submittals are currently under review. Feedback from IDOT will be shared with Village when received.

18. Additional means and/or an alternate configuration needs to be explored by the development team for the new roadway connection to Adler Drive that would address concerns about cut-through traffic and/or vehicles missing the turn and requiring turnarounds within the Adler Drive subdivision. The Village's Comprehensive Plan identifies a complete reconfiguration of Adler Drive to provide a curved roadway into the proposed development. Given that this layout was heavily vetted and adopted as part of the Comprehensive Plan, staff would be supportive of a similar layout for this development, but with certain modifications to address snow removal operations.

RESPONSE: The Applicant is willing to reconfigure the intersection to match the Comprehensive Plan design if required to do so.

19. All review comments provided within the Civiltech Technical Memorandum should be addressed on a point-by-point basis.

RESPONSE: The comments have been addressed. Please see responses attached hereto.

20. All review comments provided within the Christopher B. Burke Engineering review letter

should be addressed on a point-by-point basis.

RESPONSE: *The comments have been addressed. Please see responses attached hereto.*

21. Please provide a construction sequencing summary for the overall development. It will be an important consideration of the construction phasing that parking be accommodated for the Wildberry restaurant. The proposed public roadway is eliminating some of the overflow gravel parking areas, and staff is well aware of the parking demands for this site.

RESPONSE: *We will coordinate with Wildberry to ensure that their parking will not be adversely affected during the proposed construction of the new public roadway. It is anticipated that additional temporary parking can be provided south of the existing lot near the future commercial development.*

22. In correlation with the comment above, please provide a demolition plan within the preliminary plan set for the residential development to clarify the full extent of removals required for this portion of the development, including any existing parking areas for the Wildberry site.

RESPONSE: *Noted.*

23. Please extend the sidewalk along the entire east side of the proposed public roadway into the IL Route 137 right-of-way, and then east to connect to the existing sidewalk/crosswalk at the intersection of IL Route 137 and Milwaukee Avenue.

RESPONSE: *The locations and limits of sidewalk shown on the plans are based on discussions with Village Staff.*

24. Expand the note on Sheet 4 of the civil plans to further clarify that striping will not be installed for the parallel parking stalls as shown on the plans.

RESPONSE: *The striping is not planned to be installed and we will agree to expand the note to further clarify.*

25. Provide a dimension on Sheet 4 to identify how close the proposed asphalt turnaround is to the southernmost unit of Building 8.

RESPONSE: *We have added a dimension that will be included on all future sets (4.1').*

26. Please provide preliminary layouts for proposed easements on the Preliminary Plat as feasible. Legal descriptions and detailed dimensions are not required at this time but will need to be included on the Final Plat.

RESPONSE: *We will work with the surveyor to create preliminary easement layouts.*

The following additional items are being provided for informational purposes at this time

and are among the items that staff will require be addressed as the project advances:

27. The project will result in a hydrologic disturbance of 1-acre or more. Therefore, an IEPA NPDES permit will be required, as well as a Storm Water Pollution Prevention Plan (SWPPP).

RESPONSE: Acknowledged.

28. The project will require a Development Agreement be established between the developer and the Village prior to approval of the Final Plat of Subdivision.

RESPONSE: Acknowledged.

29. Easements will need to be established throughout the site for both private and public utilities. These items will either need to be incorporated into the Final Plat of Subdivision or should be addressed via the provision of separate Plat(s) of Easement.

RESPONSE: Acknowledged.

30. Permit approval will be required from the IEPA for the proposed water main installation.

RESPONSE: Acknowledged.

31. Permit approval will be required from the IEPA for the proposed sanitary sewer installation.

RESPONSE: Acknowledged.

32. Additional information will be required in subsequent plan sets to clarify striping, signage, and the intentions on traffic control at the various proposed intersections.

RESPONSE: Acknowledged.

33. Show property lines lightly on the Geometric, Grading, and Utility Plans for reference. Dimensions for all building setbacks should be given (likely on separate larger-scale building location plans).

RESPONSE: Property lines are shown on the Geometric, Grading and Utility Plans (with the exception of the individual proposed unit property lines). We can add those to future plan sets as requested.

34. The southernmost detention basin abuts proposed public sidewalk and is 6-8 feet deep. It is recommended that a fence be provided along the west, south, and east boundaries. Fencing should also be considered along the west side of the NW detention basin.

RESPONSE: The proposed basins do not have sheer vertical drops or retaining walls.

35. It appears that further investigation of existing utilities (sewer and water) may be needed to verify what structures and pipes remain on the property which may need to be abandoned.

RESPONSE: *We are continuing to collect information of existing utilities associated with the property and will adjust the plans accordingly.*

RESPONSES TO CIVILTECH MEMORANDUM DATED AUGUST 17, 2021

May 10, 2021 Traffic Impact Study Comments (Civiltech)

1. We generally concur with the concept of using 2015 traffic counts at intersections within the study area as a baseline for adjusting 2021 traffic counts to account for the impact of the COVID-19 pandemic, however, it is unclear if the 2021 counts were adjusted to 2015 levels or if the 2015 counts were adjusted to 2019 and then the 2021 counts were adjusted. Clarification of the adjustment process is needed for us to fully concur with the 2021 baseline volumes.

RESPONSE: *The 2015 counts were adjusted using growth factors to reflect 2021 traffic conditions.*

2. We concur that a majority of the trips generated by the proposed redevelopment will approach and depart from the east along IL Route 137 and from the south along Milwaukee Avenue, and therefore the proposed directional distribution shown on Figure 5 of the TIS is reasonable.

RESPONSE: *Noted.*

3. We concur with the use of the ITE *Trip Generation* manual in determining the magnitude of site-generated trips for the proposed development. The A.M. and P.M. peak hour trip generation estimates as presented in Table 3 of the TIS are reasonable using the number of housing units as the input variable.

RESPONSE: *Noted.*

4. We concur with the background growth rate of 0.5% per year used to generate 2027 background traffic volumes per CMAP traffic projections.

RESPONSE: *Noted.*

5. We concur that the addition of traffic generated by the proposed development will have a negligible impact on the operations of the IL Route 137/Milwaukee Avenue intersection.

RESPONSE: *Noted.*

6. We concur that, while the addition of site-generated traffic decreases the performance of the eastbound left turn from Adler Drive onto Milwaukee Avenue from a LOS D to a LOS E, the gaps created by the existing signal at IL Route 137/Milwaukee Avenue will allow additional opportunities for vehicles to turn onto IL Route 21, resulting in lower delays than indicated by the capacity analysis.

RESPONSE: Noted.

7. While it is possible that traffic from Adler Drive may use the north-south access roadway to go eastbound on IL Route 137 as stated in the TIS, the neighborhood to the west has access onto IL Route 137 via Cass Avenue along its western boundary, so the reduction in left turns from Adler Drive onto Milwaukee Avenue is likely to be minimal. We concur that existing residents coming from the west on IL Route 137 (especially those on the eastern end of the current neighborhood) may find the southbound direction on the new north-south access roadway an attractive alternative to Cass Avenue. This is especially true during the morning peak hour, when southbound travel on Cass Avenue is restricted south of IL Route 137.

RESPONSE: Noted.

8. We note that while no new trips were assigned along this route, there is potential for new development residents destined to the west on IL Route 137 to use the residential street system to make a left turn onto IL Route 137 at Cass Avenue. The petitioner should be prepared to address the likelihood, magnitude, and any impacts of this possibility.

RESPONSE: Given the low volume of traffic estimated to travel west on IL 137 during the peak hours (9 in the morning and 5 in the evening), the impact on the existing residential street system should this traffic utilizes Cass Avenue to access IL 137 will be minimal.

9. Consideration should be given to guide signage on Adler Drive at the north-south roadway intersection to minimize the potential for townhome residents or guests to miss the turn into the roadway and end up circulating through the residential neighborhood to the west.

RESPONSE: Noted.

July 27, 2021 Preliminary Engineering Plan Comments (Civiltech)

10. The Village of Libertyville Comprehensive Plan shows the potential north-south public street connection as continuous, with Adler Drive forming a “T”-intersection with the proposed roadway, whereas the proposed development plan shows Adler Drive as the continuous route. From a traffic perspective, it is not anticipated that the ultimate geometrics of the intersection between Adler Drive and the north-south connecting roadway will change anticipated travel

patterns or magnitudes significantly.

RESPONSE: Based on input provided to our team by Village Staff early in 2021, we prepared the plans with the simple “T” intersection, keeping Adler Drive as the continuous route.

11. The geometric plans for the proposed right-in/right-out access roadway entrance onto IL Route 137 as shown in the Commercial Preliminary Engineering plans show that the existing utility pole and street light pole will be located within the proposed channelizing island. It should be noted that it is generally undesirable to include utility poles and other sight obstructions within the field of view of motorists attempting to make turning movements as they can block visibility of approaching traffic. It is recommended that these be relocated if feasible.

RESPONSE: We investigated the current operating access which is also adjacent to the two poles in question. For the right turn only exit movements associated with this access and the proposed restricted access the poles do not appear to adversely obstruct the view of oncoming vehicles from the west.

12. The southern parking aisle for the Wildberry Café lot is slightly misaligned with respect to the south parking lot access to the proposed north-south roadway. It is recommended that this parking aisle be shifted further south to align with the north-south roadway access to improve site circulation.

RESPONSE: When the plan was developed it was decided that this slight misalignment would not present a major concern in the space provided given the distance vehicles have to navigate the aisles. However, we are studying a potential realignment.

13. Consideration should be given to shifting the existing Wildberry Café access onto IL Route 21 (Milwaukee Avenue) further south to align with the south parking aisle. This will not only provide better overall site circulation, but it will move the access further away from the IL Route 137 intersection, improving safety.

RESPONSE: Shifting the existing Wildberry Café access location IL Route 21 is not currently planned as part of this project. Based on discussions with Wildberry, their existing access locations along Route 21 are to remain unchanged.

14. It should be noted that when Lot 2 is developed, a new traffic study for that development will be required and the development will need to proceed through the full Village development review process.

RESPONSE: Understood.

RESPONSES TO CHRISTOPHER B. BURKE ENGINEERING LETTER DATED AUGUST 18, 2021

1. A Lake County Watershed Development Permit Application is required signed by all applicable parties. This includes the property owner, engineer of record and wetland specialist.

RESPONSE: Understood. We plan on completing the watershed development permit application during final engineering as is typically done.

2. The development will hydrologically disturb more than 1 acre. Please provide an Illinois Environmental Protection Agency (IEPA) National Pollution Discharge Elimination System (NPDES) ILR10 permit upon receipt.

RESPONSE: Understood. Prior to any site hydrologic disturbance, the required NPDES permit will be obtained and a copy of the coverage letter will be provided.

3. The development proposes work within the Illinois Department of Transportation (IDOT) Right-of-Way. Please provide documentation from IDOT authorizing the proposed work.

RESPONSE: We are currently in preliminary geometric review phase with IDOT. IDOT authorization of the proposed work will not be available until after final engineering submittals have been made to and reviewed and approved by IDOT.

4. The off-site receiving storm sewer system, located southwest of the development, should be analyzed to determine if there is adequate downstream capacity. The proposed development may increase the flow rate through the system that may adversely impact adjacent property owners. Additional analysis should be performed for both the normal flow conveyance system and the emergency overland flow route through the adjacent private property.

RESPONSE: For events up to and including an initial 100yr, 24hr event, our project proposes to connect only restricted releases to the existing Adler Drive storm sewer system.

5. The proposed development has some off-site tributary area. The engineer should verify the requirements of the on-stream detention provisions of the WDO are met.

RESPONSE: We agree that there is some offsite tributary area. However, not all of this area will actually be tributary to the proposed detention system due to elevation. Any small areas that are will accordingly be used in the standard detention volume safety factor (DVSF) calculation to demonstrate compliance with the on-stream provisions. We are looking at potentially making one of our basins a wet-detention facility or perhaps bypassing the small tributary flows around our basins.

6. The northwest corner of the development appears to be a depressional storage area, the

engineer should verify that sufficient compensatory storage associated with filling any regulatory depressional storage areas is provided within the development.

RESPONSE: The northwest corner area consists of a man-made pond that was used by the earlier golf course. This area has been exempted from all wetland permitting and is in a drained condition. Based on the years the golf course was in operation, we can state this area was not constructed as part of an earlier permitted stormwater facility with a storage volume that needs to be maintained. The exemption letter is on file with the Village.

7. The following items will be required as part of the stormwater detention calculations:

- a. Provide all equalizer pipe calculations demonstrating that it is adequately sized to convey the 100-year peak flow associated with the critical duration for the tributary area to each stormwater management basin.

RESPONSE: We have started work on these calculations. We have executed critical duration models of the proposed condition using all actual tributary area without subtracting any impervious area. The amount of direct tributary area to each basin has also been calculated and used to determine the 100yr critical duration peak flows. The results so far indicate that the equalizer between the southeast basin and the south basin only needs to be an 18" diameter pipe and that the others will need to be dual 24" pipes or possibly a larger single pipe. We may also explore alternate equalizer configurations during final engineering.

- b. Emergency overflow weir calculations for each basin proposed stormwater management basin.

RESPONSE: Based on the tributary area to each basin (less than 20 acres), the emergency flows may be conveyed by the proposed equalizers. It is anticipated that we will also have overland routes that will provide additional protection.

- c. Detailed stage-storage table for each stormwater management basin.

RESPONSE: We will provide the requested tabular information.

- d. Detailed restrictor calculations for the ultimate outfall of the development.

RESPONSE: We have prepared detailed restrictor calculations based on the preliminary engineering and the results indicate two 4" diameter restrictors (upper and lower) can provide the needed control.

- e. All applicable hydrologic parameters and modeling associated with determining the required stormwater detention volume for the development.

RESPONSE: The new 2020 Lake County WMO includes the updated CN based unit area chart that is based on the new ISWS Bulletin 75 rainfall. For preliminary engineering, the use of the chart is reasonable for initial sizing as we have done. The preliminary sizing

calculations are included in the preliminary plan set.

8. The following stormwater conveyance calculations should be provided:

- a. Storm sewer calculations demonstrating the capacity to convey the 10-year critical duration rainfall event to the stormwater management basins.

RESPONSE: We will have storm sewer and inlet capacity calculations during final engineering based on full 100yr design level. The sewers will be able to convey the 100yr flows to the basins.

- b. Overland flow calculations demonstrating freeboard requirements for the elevation associated with the critical duration peak flow are met. This should also include the peak flow associated with the emergency overflow weir.

RESPONSE: We will have 100yr storm sewer and 100yr inlet capacity throughout including 100yr capacity for the equalizers with allowable head differences that maintain the required freeboard to the lowest attached garage openings. The design of these items will confirm that the freeboard requirements are met. Our current estimates for the design weir flow rate based on the 100yr unattenuated critical duration peak inflow is about 60-65 cfs.

9. Prior to project close out, the following items will be required:

- a. As-built survey of all stormwater management features.

RESPONSE: Understood. This is customary.

- b. Deed and plat restriction of all stormwater management features.

RESPONSE: Understood. This is required by ordinance.

- c. A maintenance plan clearly identifying the maintenance tasks, the funding source, the frequency of the maintenance activities.

RESPONSE: Understood.

10. Additional comments may be provided during review of the Final Engineering Documents.

RESPONSE: Understood.