Innovative
ENGINEERING & CONSULTING

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November 18, 2022

Town of Brownsburg
Attn: Jenna Wertman – Senior Planner
61 North Green ST
Brownsburg, IN 46112

RE: PSDP-22-29 Westwind Apartments Advisory Plan Commission Technical Review Committee

The following is a clarification in response to comments received on November 8, 2022, regarding the Presubmittal submission for the above referenced project. The comments received are written below for reference with IECI responses written underneath the comments in blue Italics.

(A) DEVELOPMENT SERVICES

(1) Bring a hard copy of plans to TECH Review for our folders, 11x 17 is fine.

- *One full set of 11x17 drawings was supplied at the TECH Meeting.*

(2) What is the height of each building at the tallest point?

- *42-feet 7-inches*

(3) Provide material notes on the architectural set

- *See Architectural sheets A.200-.201*

(4) Need lighting measurements in lux to confirm compliance with PD/UDO

- *Site Photometric Plan has been recalculated from foot candles (fc) to Lux.*

(5) Provide cut sheets for lights and/or confirm that lights are full cutoff

- *Cut sheets for the lighting fixtures has been added.*

(6) Where is this 50' drainage easement on the plat in relation to the buildings? I may be missing it on the site plan but it does not look like it is there:

- *A replat of Block B will be submitted showing changes to the easements. See note 10 below. The current easements have been shown on the Site Plan Sheets, C102-C104, as requested.*

(7) Provide architectural information on the trash area screening and how it will significantly match or complement the primary structures on the site per the UDO.

- *See Architectural sheet A.201*

(8) Provide architectural information for the maintenance building materials should match or significantly resemble those used on the main buildings

- *See Architectural sheet A.201*

(9) This would be considered a dead end parking aisle in the southeast corner. Typically this is resolved by striping out the parking stall closest to the dead end

and putting a no parking sign in it

- *The end parking stall has been removed and the required 18-feet of depth for the modified hammer head has been created.*

(10) Will you be doing a final plat to take this from Block B to a lot #?

- *Yes, and to revise/add easements as required.*

(11) Confirm that the subdivision name noted in the details section of the application will be changing - WestWind Apartments at Wynne Farms is confusing since this is in West Wynne Farms. Something with a unique naming convention would be welcomed given all the West Wynne/Wynne references

- *Yes, the name of the project will be changed. Currently the new name options are being investigated as part of the owner's marketing program. Subsequent drawing submissions will reflect the new project name.*

(B) BUILDING

(1) Where Roadway connections accrue on Northfield Drive and CO RD 300N Town of Brownsburg Construction Standards Widening Detail TR-14 and Roadway New Entrance Detail TR-16 and TR-17 must be shown on Civil Plans. Drawings should reflect the TR-16 & TR-17.

- *The project does not directly connect to Northfield Drive or CO RD 300N. It is connecting to the private drive that has been approved and is currently under construction, as the Access Drive for West Wynne Farms Lot 4. This private road will serve this project, Day Care Center, and current lots in the current association.*

(C) ECONOMIC DEVELOPMENT

(1) No comments.

(D) WATER

(1) No comments. This is in Citizens Energy Group's water service area.

(E) WASTEWATER

(1) This is outside of Brownsburg's sanitary sewer service area. The title page references Brownsburg and needs to be changed to West Central Conservancy.

(F) STREET/PUBLIC WORKS

(1) No comments.

(G) PARKS

(1) No comments.

(H) FIRE TERRITORY

(1) Brownsburg Fire Tech comments based on initial site plan submittal.

1. Fire Hydrants. All private hydrants and water mains shall be installed and

maintained as set forth in the 2013 edition of NFPA Standard #24. The Fire Chief in determining location and spacing of hydrants shall use the IFC (675 IAC 22) Appendix B as a guide. (The Town of Brownsburg has adopted Appendix B through local ordinance § 92.049.)

- *Fire Hydrants and Fire Department Connections will be coordinated with the Brownsburg Fire Department. Preliminary locations are shown on sheets C108 through C110.*

2. Consider increasing size of water main on north side of buildings as it will provide water for supplying fire suppression systems and fire apparatus. (6" as drawn)

- *The water main running north-south has been increased to an 8" main. The water main running east-west north of the buildings will serve only the fire hydrants. No fire suppression systems for the building will be connected to this section of the water main so it has been left as a 6" main. See sheets C108 through C110.*

3. One fire hydrant shall be installed within 100 feet of any fire department connection (FDC) that serves as standpipe and/or sprinkler system. Consideration for placement of hydrants should take into account not blocking access for emergency vehicles by stretching across roadways. (FDC) locations not indicated on plans provided at this time.)

- *FDC locations have been added and a fire hydrant is located within 100 feet of each. See sheets C108 through C110.*

4. As drawn Buildings 1 and 3 do not meet the requirements of Indiana Fire Code § 503.1.1 unless a NFPA 13 sprinkler system is installed. (NFPA 13R systems typical of apartment construction do not meet the exception listed below.)

- *The buildings will have a sprinkler system meeting the NFPA 13 requirements.*

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45.72 m) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured around the perimeter of the exterior of the building or facility. Exception: Buildings protected throughout by a supervised automatic fire sprinkler system and not

used for high-piled combustible storage in excess of twelve thousand (12,000) square feet.

- *The buildings will be protected throughout by a supervised automatic fire sprinkler system and will not be used to high-piled combustible storage.*

5. Although not required, consider installing elevators meeting the requirements of Indiana Building Code § 3002.4 to accommodate an ambulance stretcher.

- *Current proposed elevators meet this specification.*

(I) POLICE

(1) No comment.

(J) STORMWATER

(1) Stormwater comments are attached.

(K) BROWNSBURG COMMUNITY SCHOOL CORPORATION

(1) See attached information sheet.

(L) HENDRICKS COUNTY SURVEYOR

(1) No comments at the time of tech reports.

(M) HENDRICKS COUNTY ENGINEER

(1) No comments at the time of tech reports.

(N) COUNTRYMARK

(1) No comments at the time of tech reports.

(O) VECTREN

(1) No comments at the time of tech reports.

(P) Wessler Review Table

- *See response within table below.*

		Wessler – Reviewer to complete		Designer to complete	
No.	PAGE/SHEET REFERENCE	CO	COMMENT	CR	RESPONSE
1	Drainage Basins	RS	There appears to be an area of development that is not included in the drainage basins (directly west of the pond) The sq ft listed on the map on pg 36 of the drainage report do not match the areas in the chart of pg 37 of the drainage report. Consider labeling the basins on the map with the corresponding basin number from the chart.		*We have revised the drainage map to include the east portion of building 3. A downspout collector has been added and will be connected to proposed catch basin structure #113. All other areas west of the pond will drain directly to the pond as shown on the Master Plan included with the TIR.* *We have revised the rational spreadsheet such that the drainage areas match those shown on Exhibit B.*
2	HGL	RS	HGL is above the crown of the pipe in several lines. Ch 151.21 D(1)(a).		*We have revised the system of catch basins and therefore also revised the hydraulic design. Each run of storm sewer has a capacity which exceeds the flow value. Therefore, the HGL will be lower than the crown of each pipe.*
3	Post-construction stormwater quality	RS	Post-construction stormwater quality BMPs must be in accordance with Chapter 151.23 of the Brownsburg ordinances. An upstream BMP is required for detention ponds/underground. An Operation and Maintenance Manual will be required and easements for BMPs.		*We have revised the plan to include Aqua-Swirls for each run which discharges into the pond. The TIR has likewise been revised to document the design procedure and results.*
4	Flood routing	RS	Evaluate stormwater ponding and overflow path routing. Provide information listed in Ch. 151.21 I.		*Stormwater overflow design has been added for each catch basin. The path is defined as shown on Exhibit D included in the revised TIR.*

		Wessler - Reviewer to complete		Designer to complete	
No.	PAGE/SHEET REFERENCE	CO	COMMENT	CR	RESPONSE
5	Construction Details	RS	Refer to the Town's Standard Details when developing Construction Plans.		*We have revised the drawing set to address this comment.*
6	Construction Plans	RS	Refer to Ch 151.20 B for design plan requirements. The cover sheet indicates pages for storm plan/profile and other required sheets but not all are present in the file.		*We have added drawings to complete the drawing set.*
7	Grading and Building Pad Elevation	RS	Refer to Ch 151.21 K for guidance on minimum required elevations for structures.		*We have revised the site grading to address structure finish floor elevations with consideration given to the overflow design.*
8	Drainage Easements	RS	Refer to Ch 151.21 J for guidance on drainage easements.		*The storm sewer will be private and will not require easements. Easements will be included on the re-plat for the proposed Aqua-Swirl units. These easements will include access paths from public R/W.*
9	Impervious Area	RS	Provide the total amount of impervious surface area in square feet for the completed project. In addition to the total, provide a breakdown of total compacted gravel, total concrete/asphalt, and total building footprint (in square feet). This is used for stormwater utility billing.		*The impervious areas have been added to the cover sheet in the drawing set.*
These comments should not be construed as a comprehensive list of comments, and the reviewer may make additional comments based on subsequent submittals					

*Please provide a written response to this report by **November 21, 2022,** addressing each issue and, if necessary, indicate where on the revised plans the modification has been made.*

TOWN OF Brownsburg	**Construction/ Stormwater Pollution Prevention Plan Technical Review Town of Brownsburg Stormwater Management Ordinance** https://codelibrary.amlegal.com/codes/brownsburg/latest/brownsburg_in/0-0-0-26557 **IDEM Construction Stormwater General Permit:** https://www.in.gov/idem/stormwater/construction-land-disturbance-permitting/ (INRA00000 effective 12/18/2021)

Construction/Stormwater Pollution Prevention Plan Technical Review and Comment

Project Name: Westwind Apartments at West Wynne Farms **Scope of Project:** Apartment Complex **Location of Project: County(ies):** Hendricks **Latitude:** 39°48'5.64"N **Longitude:** 86°23'59.40"W	**Plan Submittal Date:** **November 1, 2022** **Plan Review Date:** **November 4, 2022**

Plan Preparer: **Affiliation:** Innovative Engineering & Consulting
Address: 3961 Perry Boulevard
City: Whitestown **State:** IN **Zip:** 46075
Phone: 317-769-2916 **Cell Phone:** **Email:** jkittle@innovativeeci.com

Project Site Owner Contact: Doug Meekhoff **Company Name (if applicable):** Westwind Construction
Address: 1435 Fulton
City: Grand Haven **State:** MI
Phone: 616-260-3642 **Cell Phone:** **Zip:** 49417
Email: doug@westwind.build

Plan Reviewer: Mary Atkins, PE, CPESC **Affiliation:** Wessler Engineering **On behalf of:** Town of Brownsburg
Assisted By: Michaela Tauil, Wessler Engineering
Address: 6219 South East Street
City: Indianapolis, IN **State:** IN **Zip:** 46227
Phone: 317-788-4551 **Cell Phone:** **Email:** MaryA@wesslerengineering.com

Plan Review Status:

☐	**Plan is Adequate**	A comprehensive plan review has been completed and it has been determined that the plan satisfies the minimum requirements of the Town of Brownsburg Stormwater Management Ordinance and Construction Standards, and the Construction Stormwater General Permit INRA00000 (Effective 12-18-2021).
☐	**Preliminary Review**	A comprehensive review will not be completed at this time. The plan review authority reserves the right to perform a comprehensive review at a later date, and revisions may be required at that time.
☐	**Conditional Acceptance**	Acceptance of the plan is conditional. The conditional acceptance is contingent upon addressing the issues identified in the comment sections.
☒	**Plan is Deficient**	Significant deficiencies were identified and must be addressed. Refer to the comment sections.

Action:

☐	**Submit a Notice of Intent:** Submit the Notice of Intent (NOI) online through the IDEM Regulatory ePortal. It is required to upload a copy of this review form when submitting the NOI through the IDEM Regulatory ePortal: (https://stormwater.idem.in.gov/ncore/external/home)
☐	**Do not file a Notice of Intent or commence land-disturbing activities:** Deficiencies must be adequately addressed and an acceptable plan review completed.
☐	**Comments:** Refer to Plan Review Comments Sections of this document.
☒	**Revisions:** Update and submit the revised Construction/Stormwater Pollution Prevention Plan as indicated below.
	☒ Update and submit a complete plan set that addresses plan deficiencies.
	☒ Update and submit a document (narrative and/or plan sheets) that address plan deficiencies.
	☐ Update and submit a complete plan set that addresses plan deficiencies. A comprehensive plan review will not be completed.

Plan Review Information

- *The technical review and comment is intended to evaluate the completeness of the Construction/Stormwater Pollution Prevention Plan for the project. The Plan submitted was not reviewed for the adequacy of engineering design. All measures included in the plan, as well as those recommended in the comments should be evaluated as to their feasibility by a qualified individual with structural measures designed by a qualified engineer. The Plan has not been reviewed for other local, state, or federal permits that may be required to proceed with this project.*
- *Additional information, including design calculations may be requested to further evaluate the plan.*
- *All proposed stormwater pollution prevention measures and those referenced in this review must meet the design criteria and standards set forth in the "Indiana Stormwater Quality Manual" from the Indiana Department of Environmental Management or similar Guidance Documents.*
- *Construction activities and unforeseen weather conditions may affect the performance of the erosion and sediment control system, individual measures, or the effectiveness of the plan. The plan must be a flexible document, with provisions to modify or substitute measures as necessary to ensure compliance.*

Priority Site Information:

☐	**Nature and Extent of Construction**	☐	**Close Proximity to Wetlands**
☐	**Close Proximity to Sensitive Area**	☐	**Potential for Direct Runoff to Receiving Waters**
☐	**Steep Topography on Proposed Construction Site**	☒	**Not a Priority Site**

Section A: Construction Plan Elements

Adequate	Deficient	NA	A	*The construction plan elements include general information associated with the project site that are critical for the evaluation of the stormwater pollution prevention plan component. This information includes, but is not limited to an index, resource information, reference maps, grading information, project layout and design, and drainage plan*
☐	☒	☐	1	Index of the location of required plan elements in the construction plan *Legend and Notes have been added. See sheets C11-C113*
☒	☐	☐	2	A vicinity map depicting the project site location in relationship to recognizable local landmarks, towns, and major roads
☒	☐	☐	3	Narrative of the nature and purpose of the project

Adequate	Deficient	NA	A	*The construction plan elements include general information associated with the project site that are critical for the evaluation of the stormwater pollution prevention plan component. This information includes, but is not limited to an index, resource information, reference maps, grading information, project layout and design, and drainage plan*
☒	☐	☐	**4**	Latitude and longitude to the nearest fifteen (15) seconds
☒	☐	☐	**5**	Legal description of the project site
☒	☐	☐	**6**	11 X 17-inch plat showing building lot numbers/boundaries and road layout/names
☒	☐	☐	**7**	Boundaries of the one hundred (100) year floodplains, floodway fringes, and floodways
☒	☐	☐	**8**	Land use of all adjacent properties
☐	☒	☐	**9**	Identification of a U.S. EPA approved or established TMDL *West Fork of White River and Lick Creek. See notes on sheets C111-C113*
☒	☐	☐	**10**	Name(s) of the receiving water(s)
☐	☒	☐	**11**	Identification of discharges to a water on the current 303d list of impaired waters and the pollutant(s) for which it is impaired *West Fork of White River and Lick Creek. See notes on sheets C111-C113.*
☒	☐	☐	**12**	Soil map of the predominant soil types
☒	☐	☐	**13**	Identification and location of all known wetlands, lakes and water courses on or adjacent to the project site (construction plan, existing site layout)
☒	☐	☐	**14**	Identification of any other state or federal water quality permits or authorizations that are required for construction activities
☒	☐	☐	**15**	Identification and delineation of existing cover, including natural buffers
☒	☐	☐	**16**	Existing topography at a contour interval appropriate to indicate drainage patterns
☐	☒	☐	**17**	Location(s) of where run-off enters the project site *This site is the high point of the area and sheds water off-site.*
☐	☒	☐	**18**	Location(s) of where run-off discharges from the project site prior to land disturbance *Water sheds in all directions away from the site and to the existing pond where it finally discharges to the storm sewer system*
☒	☐	☐	**19**	Location of all existing structures on the project site
☐	☒	☐	**20**	Existing permanent retention or detention facilities, including manmade wetlands, designed for the purpose of stormwater management *Existing ponds and BMPs are shown on sheet C101 and have been identified on sheets C111 through C113*
☒	☐	☐	**21**	Locations where stormwater may be directly discharged into ground water, such as abandoned wells, sinkholes, or karst features
☐	☒	☐	**22**	Size of the project area expressed in acres *Parcel size is noted in sheet C100*
☒	☐	☐	**23**	Total expected land disturbance expressed in acres
☒	☐	☐	**24**	Proposed final topography
☒	☐	☐	**25**	Locations and approximate boundaries of all disturbed areas

Adequate	Deficient	NA	A	*The construction plan elements include general information associated with the project site that are critical for the evaluation of the stormwater pollution prevention plan component. This information includes, but is not limited to an index, resource information, reference maps, grading information, project layout and design, and drainage plan*
☒	☐	☐	**26**	Location, size, and dimensions of all stormwater drainage systems, such as culverts, storm sewers, and conveyance channels
☒	☐	☐	**27**	Locations of specific points where stormwater and non-stormwater discharges will leave the project site
☒	☐	☐	**28**	Location of all proposed site improvements, including roads, utilities, lot delineation and identification, proposed structures, and common areas
☐	☒	☐	**29**	Location of all on-site soil stockpiles and borrow areas *No soil will be stock piled on this site.*
☐	☒	☐	**30**	Construction support activities that are expected to be part of the project *Refer to sheet C115, Assessment of Stormwater Pollution Prevention Construction Component (Section B)ze*
☐	☐	☒	**31**	Location of any in-stream activities that are planned for the project including, but not limited to stream crossings and pump arounds

Section A – Comments:

- (A1) Ensure that all elements required by the Construction Stormwater General Permit are included in the SWPPP.
- (A9) Please specify whether or not there is a TMDL associated with the project's receiving water.
- (A11) Please specify if the project discharges to a 303(d) waterbody and list any applicable impairments in the SWPPP.
- (A17) Indicate the location(s) of where run-off enters the project site prior to land distrubance.
- (A18) Indicate the location(s) of where run-off discharges from the project site prior to land disturbance.
- (A22) Provide the total size of the project area in acres.
- (A29) The SWPPP indicates that soil stockpiles are shown on Sheet C102 however there are no stockpiles shown, please update the plans accordingly.
- (A30) Indicate if there are any construction support activites expected to be part of the project.

Section B: Stormwater Pollution Prevention Plan – Erosion and Sediment Control/Project Site Management

Adequate	Deficient	NA	B	*The construction component of the Stormwater Pollution Prevention Plan includes stormwater quality measures to address erosion, sedimentation, and other pollutants associated with land disturbance and construction activities. Proper implementation of the plan, maintenance of measures, and administering a self-monitoring program is required to manage the project site to minimize the discharge of sediment and other pollutants. Construction activities and unforeseen weather conditions may affect the performance of the erosion and sediment control system, individual measures, or the effectiveness of the plan. The plan must be a flexible document, with provisions to modify or substitute measures as necessary to ensure compliance.*
☒	☐	☐	**1**	Description of the potential pollutant generating sources and pollutants, including all potential non-stormwater discharges
				Where applicable, Items in 2 through 10 below will be evaluated for Location, dimensions, detailed specifications, and construction details

Adequate	Deficient	NA	B	*The construction plan elements include general information associated with the project site that are critical for the evaluation of the stormwater pollution prevention plan component. This information includes, but is not limited to an index, resource information, reference maps, grading information, project layout and design, and drainage plan*
☐	☒	☐	**2**	Stable construction entrance locations and specifications *Refer to sheet C113.*
☒	☐	☐	**3**	Specifications for temporary and permanent stabilization
☐	☒	☐	**4**	Sediment control measures for concentrated flow areas *See sheets C111 through C113*
☒	☐	☐	**5**	Sediment control measures for sheet flow areas
☒	☐	☐	**6**	Run-off control measures
☐	☒	☐	**7**	Stormwater outlet protection locations and specifications *See sheets C111 through C113*
☐	☐	☒	**8**	Grade stabilization structure locations and specifications
☐	☒	☐	**9**	Dewatering applications and management methods *Roof drains are connected to the proposed storm/BMP network and will be shown on the plans when these structures are finalized by the architect*
☐	☐	☒	**10**	Measures utilized for work within waterbodies
☐	☐	☐	**11**	Maintenance guidelines for each proposed temporary stormwater quality measure
☒	☐	☐	**12**	Planned construction sequence describing the relationship between implementation of stormwater quality measures in relation to land disturbance
☐	☐	☒	**13**	Provisions for erosion and sediment control on individual building lots regulated under the proposed project
☒	☐	☐	**14**	Material handling and spill prevention and spill response plan meeting the requirements in 327 IAC 2-6.1
☐	☒	☐	**15**	Material handling and storage procedures associated with construction activity *Refer to sheet C115*

Section B – Comments:

- (B2) Include a construction detail for the construction entrance.
- (B4) Include a construction detail for the rock check dam.
- (B7) Include a construction detail the riprap contained in gabion basket outlet protection measure.
- (B7) The SWPPP on Sheet C115 indicates that outlet protection measures are not applicable however multiple outlets are protected with riprap in gabion baskets, update the SWPPP accordingly.
- (B9) Include a detail and/or specifications for dewatering in the event that it becomes necessary during construction activities.
- (B15) In the material handling and spill response plan include guidance regarding the proper management of wastes per the Construction Stormwater General Permit.

Section C: Stormwater Pollution Prevention Plan – Post-Construction

Adequate	Deficient	NA	C	*The post-construction component of the Stormwater Pollution Prevention Plan includes the implementation of stormwater quality measures to address pollutants that will be associated with the final project land use. Post- construction stormwater measures should be functional upon completion of the project. Long term functionality of the measures is critical to their performance and should be monitored and maintained.*
☒	☐	☐	**1**	Description of pollutants and their sources associated with the proposed land use
☐	☒	☐	**2**	Description of proposed post-construction stormwater measures *See sheets C111 through C113*
☐	☒	☐	**3**	Plan details for each stormwater measure *See sheets C114 through C115*
☐	☒	☐	**4**	Sequence describing stormwater measure implementation *See sheets C111 through C115*
☐	☒	☐	**5**	Maintenance guidelines for proposed post-construction stormwater measures *See sheet C115*
☒	☐	☐	**6**	Entity that will be responsible for operation and maintenance of the post-construction stormwater measures

Section C – Comments:

- Section C: Per the requirements of the Town of Brownsburg an upstream BMP is required before discharge to the pond, refer to the associated stormwater drainage comments. Update Section C of the SWPPP on Sheet C115 to detail the selected upstream BMP.
- C2-C5: The post construction stormwater treatment at this project site consists of the pond and an upstream BMP, update plans accordingly.
- C5: Ensure that the selected upstream BMP is included in the drainage manual.
- Rock dam basins are not considered to be permanent post construction measures, update plans accordingly.
- O&M Manual: An O&M Manual shall be provided for the selected upstream BMP.

Jerry W. Kittle – Director of Engineering
Innovative Engineering and Consulting, Inc.