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Ruthie Herman
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125 Westpark Road
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Re: 19-456; CBC-22379 - 140 Acre Undeveloped Prairie Land Property

Project: The proposed project involves the future development of the site.

Location: The proposed project is located in the City of Dayton, Montgomery County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following records at or within a one-mile radius of the project area:

Arabis pycnocarpa var. *adpressipilis* – Southern Hairy Rock Cress, P
Anomodon viticulosus – Long Tail Moss, E
Lipocarpha micrantha – Dwarf Bulrush, T
Maple Ash Oak Swamp Plant Community
Bartramia longicauda – Upland Sandpiper, E
Circus hudsonius – Northern Harrier, E
Cave or Cavern
Stillwater State Scenic River
Englewood MetroPark – Five Rivers MetroParks

The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that

rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Statuses are defined as: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; A = species recently added to state inventory, status not yet determined; X = presumed extirpated in Ohio; FE = federal endangered, FT = federal threatened, FSC = federal species of concern, FC = federal candidate species.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees to include: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the club shell (*Pleurobema clava*), a state endangered and federally endangered mussel, the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel, the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel, and the pocketbook (*Lampsilis ovate*), a state endangered mussel. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the channel darter (*Percina copelandi*), a state threatened fish. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, the type of habitat present at the project site and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat present at the project site and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus cyaneus*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 1. If this habitat will not be impacted, the project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the U.S. Fish & Wildlife Service.

Scenic Rivers: The Ohio Scenic Rivers Program has the following comments.

The Ohio Scenic Rivers Program has reviewed the proposed development project in Montgomery County, Ohio. As a component of their review, the Scenic Rivers Program staff recently walked portions of the undeveloped prairie land, also known as the "Paul Knoop Prairie" at the intersection of U.S. Route 40 and Frederick Pike. This site drains into the Wiles Creek which is a tributary to the Stillwater State Scenic River, approximately 1.5 miles in length, flowing through forested portions of the Aullwood Audubon Center and Farm and appears to have good water quality and in stream habitat. Scenic Rivers Program staff conducted some brief fish collections from the Wiles Creek during their site assessment using minnow seines and a minnow trap and found numerous specimens of the western blacknose dace, *Rhinichthys obtusus* which is a species indicative of cool, clear headwater streams possessing good in stream habitat and substrate.

The following are being put forward as recommendations to minimize potential downstream impacts associated with this proposed development on the Wiles Creek and ultimately the Stillwater State Scenic River and do not constitute any regulatory authority contained within the Ohio Scenic River Law over this project. However, the following should be fully implemented before any earthwork commences on the site to minimize any potential negative impacts to the Wiles Creek and Stillwater River and be adhered to throughout the duration of the project:

1. **Erosion Controls:** A sediment and erosion control plan should be developed for the site and implemented before earthwork commences. Once the site is cleared and grubbed, temporary sediment and erosion controls should be implemented and maintained until final site stabilization is achieved. Particular attention should be given to any drainage ways, ditches and streams that could convey sediment laden water directly to the Wiles Creek and Stillwater River. Properly installed (framed and entrenched) sediment fence should be utilized around the work site perimeter and storm water inlets. Appropriately designed rock-check dams and other erosion

controls should be utilized in ditches and drainage ways. All temporary sediment and erosion controls should be removed upon completion of site stabilization. Site stabilization should be achieved within seven days of the completion of earthwork. All denuded areas, including ditches, culverts and river/stream banks, should be permanently seeded and mulched (or fiber mat) immediately upon completion of earthwork or temporarily seeded and mulched (or fiber mat). Denuded areas should be revegetated with native seed mixes that are consistent with the current prairie habitat on site. Straw bales should not be permitted as a form of erosion control. Access roads constructed on slopes should be graveled to prevent erosion from surface runoff.

2. **Stormwater Treatment:** The development should incorporate the highest level of stormwater treatment possible. Post construction stormwater treatments should include detention structures designed to treat stormwater with regard to improvement of water quality and control of discharge quantity. All sediment and erosion controls and detention structures should be located above one-hundred year flood elevations of any drainage ways. Locating these structures within one-hundred year floodplains allows for the potential mixing of river water and stormwater which reduces their effectiveness with regard to water quality improvements.

Site development plans should maximize green\open space areas and reduce impervious surfaces to the greatest extent possible to increase stormwater infiltration and reduce the volume of stormwater runoff created on the site. **Post construction stormwater discharge volumes should not exceed the existing pre-development condition.** As part of the proposal it has been suggested that approximately 27.5 acres of the existing 140-acre site will be left undisturbed. Prior to development an appropriate land use analysis and subsequent stormwater modelling should be conducted to determine what amount of open space that may be needed to avoid any net increase in stormwater runoff volumes from the site from pre to post construction conditions.

Additionally, there should be no net increase in stormwater pollutant loading being discharged from the site from a pre-development to a post development condition. Increases in stormwater pollutant loading could potentially degrade the Wiles Creek and ultimately the Stillwater Scenic River. Treatment ponds should be designed to provide extended (24-48 hours) detention time for a 0.90 inch storm event. No untreated stormwater discharges should be permitted. Untreated stormwater discharges negatively impact water quality and stream ecosystems as well as intensify the severity of flood events. All final stormwater discharges should be protective of the existing high-quality ecosystems of the Wiles Creek and the Stillwater River. The Scenic Rivers Program would like to request a copy of the facility's Stormwater Pollution Prevention Plan (SWPPP) including pre and post construction stormwater management facilities.

Any drainage ways being utilized for the conveyance of stormwater during and after construction should be vegetated. Vegetated drainage ways will reduce stormwater flow velocities as well as filter some non-point source pollutants. Any such drainage ways should be of sufficient length to allow for the infiltration of surface runoff rather than direct conveyance to natural streams. All stormwater should still be treated to remove sediment and other pollutants before discharge into drainage ways leaving the site.

3. **Riparian Forest Buffers and Natural Features:** Scenic Rivers Program staff could not identify any clearly defined stream channels with the southern portion of the prairie/proposed development site. However two clearly defined drainage ways/swales do exist. These swales should be left undisturbed with the greatest

maximum natural vegetative buffer (either prairie or forest) as is possible to provide for complete filtration and infiltration of any surface runoff leaving the proposed development site. As recommended above; post construction stormwater discharge volumes and pollutant loads should not exceed the existing pre-development conditions. In addition to the preceding best management practices outlined above, any sensitive areas, buffers, wetlands, or stream corridor should be placed under a permanent conservation easement with an appropriate conservation organization or transferred in fee simple ownership to an appropriate conservation organization. This will help to ensure the long-term protection of these sensitive, high quality areas.

4. **Low Impact Development:** Site development plans should incorporate principles that decrease impervious surfaces. Increases in impervious surfaces are found to be in a direct correlation with the degradation of stream ecosystems. Reducing road widths, clustering of buildings, shorter driveways, pervious parking areas and other methods used to reduce the overall amount of impervious surfaces should be incorporated. Preservation of woodlots, wetlands, and other more permeable surfaces should be encouraged to increase the recharge of groundwater and store surface water.

The Ohio Scenic Rivers Program staff appreciate the opportunity to provide comments on this proposal. If the applicants have any additional questions or would like to meet with Scenic Rivers Program staff on site, please contact either Bob Gable, Scenic Rivers Program Manager at (614) 265-6814 or robert.gable@dnr.state.oh.us; or Aaron Rourke, Scenic Rivers Southwest Regional Manager at (614) 230-8534 or aaron.rourke@dnr.state.oh.us

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact Sarah Tebbe, Environmental Specialist, at (614) 265-6397 or Sarah.Tebbe@dnr.state.oh.us if you have questions about these comments or need additional information.

John Kessler
Environmental Services Administrator