JUSTIFICATION

To justify approval of any variance, the Planning Commission considers the following criteria. Please answer **all** the following items. Use additional sheets if needed. Responses of **yes, no,** or **n/a** will **not** be accepted.

Explain how the variance will not adversely affect the public health, safety, or welfare.

The proposed new construction single family residential unit with a footprint of 917 SQ FT and the distant setback of this property and others, there is no affect on public health, safety, or welfare.

Explain how the variance will not alter the essential character of the general vicinity.

The proposed single family residential home of this property is located in an area of irregular size lots and housing locations and will not alter the essential character of the general vicinity.

Explain how the variance will not cause a hazard or a nuisance to the public.

The proposed single family residential home of this property is far away from any public right of way / street / sidewalk, and therefore will not cause a hazard or nuisance to the public.

Explain how the variance will not allow an unreasonable circumvention of the requirements of the zoning regulations.

The proposed single family residential unit with a footprint of 917 SQ FT will be out of the floodplain but because of the limitations of the lot size (Attachment 1) a denial of the variance would result an an undue hardship on the plans to build the single family residence.

Explain how the variance arises from special circumstances, which do not generally apply to land in the general vicinity (please specify/identify).

The physical characteristics of the property are such that it cannot be used for any permitted purpose and the property has no value or only a distressed value if restricted. Other properties in the area already exist in the restricted area or are not affected by this restriction.

Explain how the strict application of the provisions of the regulation would deprive the applicant of the reasonable use of the land or would create unnecessary hardship.

Because of the limitations of the lot size a denial of the variance would result in an undue hardship on building the single family residence. the physical characteristics of the property are such that it cannot be used for any purpose and the property has little or no value if restricted.

Are the circumstances the result of actions of the applicant taken *after* the adoption of the regulation from which relief is sought?

No. We are requesting this variance so that we may have the plans approved for construction.

RECEIVED

APR 0 2 2024

OFFICE OF PLANNING

24-VARIANCE-0045

Justification For Variance
2800 S Pope Lick Road

Explain how the variance will not adversely affect the public health, safety, or welfare.

The property itself is a narrow 2.3-acre lot that is located directly between Pope Lick Creek and Pope Lick Road. Most of the property is wooded with a large amount of invasive honeysuckle on the hillsides. There is approximately 1/3 of an acre that has been cleared since before my son purchased the property that directly abuts Pope Lick Creek.

The Proposed single family residential home will have a minimal footprint and during construction we will provide and pledge to contract with an approved EPSC company to insure that are no impacts from the construction process or stormwater runoff to the stream.

The proposed Wastewater treatment system (Norweco Singulair Green) is the industry standard for single family residential direct discharges. The Norweco Singulair Green system is proven to comply with stringent NSF International standards for generation of clean effluent. NSF Certification involves 26 weeks of rigorous testing of the system and is your assurance that the system will consistently perform to exacting standards. The installation of this treatment system will be located outside of the 100-year floodplain.

The Kentucky Division of Water has permitted 40 of these types of systems over the last year and 130 since 2020 in Jefferson County alone. Many of which discharge into Floyds Fork and Pope Lick Creek and similar creeks and streams. This treatment system is a watertight closed system that produces a high-quality effluent and is monitored and maintained on a regular basis by the owner and operator.

Contacts with the Louisville Board of Health (Michael Ballard) and Louisville Metropolitan Sewer District (Lori Rafferty) have both stated this system meet their criteria and have no objections to its installation. The owner has contracted with Zaring Septic to apply for a KPDES permit with the KYDOW and they will be the installer and operator of record.

"We have no problem with treatment units as many have gone in already and they are approved by the Division of Water …"
This was relayed to the planner working on this case…

Michael Ballard
Engineer Manager
Department of Public Health & Wellness
502-574-6656

From: *Lori Rafferty <lori.rafferty@louisvillemsd.org>*
Sent: *Thursday, October 21, 2021 7:59 AM*
To: *Matt Schaaf <Matt.Schaaf@louisvillemsd.org>*
Subject: *Re: Septic in the floodplain*

The system is allowed in the flood ordinance. The Health Department determines if a septic system is allowed on a specific property.

Lori Rafferty, PE, CFM
Louisville Metropolitan Sewer District
700 West Liberty Street
Louisville, KY 40203
(502) 540-6344

Justification For Variance
2800 S Pope Lick Road

We propose to abide by the landscape design plan that we believe will improve water quality in Pope Lick Creek. The Native plantings of trees, shrubs, and wildflowers will enhance the area's ability to absorb any stormwater runoff. The plants used will be Kentucky Native species that are known to provide stream bank stabilization and buffers to slow down and mitigate the effects of any stormwater runoff.

We will also install rain barrels on all the roof downspouts to capture any runoff to allow for the slow release of any rainwater to minimize the impact to the stream. We pledge to be good environmental stewards of the property and will do whatever it takes to insure the health, welfare, and beauty of the stream.

Explain how the variance will not alter the essential character of the general vicinity.

The area is generally comprised of single-family homes in a rural type and setting. This proposed single-family dwelling will be compatible with the area and in fact will likely not be seen from the road. Everything in the design and scope of this project has been done with the concept of fitting into the natural geography and character of the area.

Explain how the variance will not cause a hazard or a nuisance to the public.

As stated in the above justification statement the design and development of this project has been done to not only compliment the area but also enhance the intent of what the **protected waterways ordinance** was designed to accomplish.

There will be no impact to the local stream or local roadways as this is a very small single-family dwelling.

Explain how the variance will not allow an unreasonable circumvention of the requirements of the zoning regulations.

There are several homes in the direct vicinity of this area that are not only directly located in the protected waterways buffer but also in the 100-year flood plain and have cleared and mowed lawns that go all the way from Pope Lick Road to Pope Lick Creek. This proposed single-family home will be outside of the flood plain and will include a riparian buffer zone as indicated in the Landscape Design Plan.

This piece of property was originally laid out as a parcel in 1977 and the size, shape, or topography of the property is such that it is not possible to construct a single family detached dwelling without encroaching into the required Buffer Area. **Any Encroachment into the required Buffer Area shall be limited to the minimum necessary to accommodate the proposed use.**

Justification For Variance
2800 S Pope Lick Road

We fully commit, to the satisfaction of the County, to mitigation measures that will offset any potential adverse impacts of the proposed encroachment during site preparation, construction, and post-construction.

Any approval of the variance will not result in a reduction in water quality.

Explain how the variance arises from special circumstances, which do not generally apply to land in the general vicinity (please specify/identify).

This piece of property was originally laid out as a parcel in 1977 and the size, shape, or topography of the property is such that it is not possible to construct a single family detached dwelling without encroaching into the required Buffer Area.

Explain how the strict application of the provisions of the regulation would deprive the applicant of the reasonable use of the land or would create unnecessary hardship.

Because of the limitations of the lot size a denial of the variance would result in an undue hardship on building the single-family residence. the physical characteristics of the property are such that it cannot be used for any purpose and the property has little or no value if restricted.

The strict applications of the provisions of the regulation would deprive us the reasonable use of the land and create an unnecessary hardship as the lot on which the home is proposed was a legally created lot in existence prior to the adoption of the regulations of Chapter 4, Section 8.

Are the circumstances the result of actions of the applicant taken *after* the adoption of the regulation from which relief is sought?

Yes, the lot on which the home is proposed was a legally created lot in existence prior to the adoption of the regulations of Chapter 4, Section 8.

We are requesting this variance to reduce the buffer zone so that we may have the plans approved for construction.

d. The Applicant shall commit, to the satisfaction of the County, to mitigation measures that substantially offset any potential adverse impacts of the proposed encroachment during site preparation, construction, and post-construction.

minimization strategies during site preparation and construction:

- We will Minimize construction impacts on Pope Lick Creek by implementing an MSD approved Erosion Prevention and Sediment Control (EPSC) plan and following best management practices.

- Limit vegetation clearing to what is necessary to construct the residence. Only trees and shrubs within the limits of construction and tree limbs extending into the clearance area shall be removed.

- The bulk of the vegetation that will be removed for the site excavation consist of invasive plants and will be offset by the planting along the open areas and the streamside bank with Kentucky native plants.

- Limit grading, excavation activities to what is necessary to construct the residence. There will be no excavations within the 100-year floodplain of the stream.

- Use appropriate "housekeeping" procedures for handling any materials, chemicals and petroleum products during construction.

minimization strategies post-construction:

- Revegetation of disturbed areas with native trees, shrubs, and herbaceous plants. This would compensate for impacts and minimize colonization by invasive species. A diverse mixture of vegetation in three canopy layers would stabilize soils, minimize erosion, and eventually shade aquatic habitats. Sediment control features would be retained until the plants cover the site.

- The house will be constructed utilizing rain barrels on each gutter downspout to further reduce the potential for stormwater runoff to impact the stream. The discharge from the rain barrels will be located to disperse the flows through a proposed rain garden to minimize any impacts to the stream.

e. Approval of the variance will not result in a reduction in water quality.

- We pledge to minimize impacts on Pope Lick Creek by implementing an MSD approved Erosion Prevention and Sediment Control (EPSC) plan and following best management practies.

- The property owner has taken a course on Backyard Streams from the University of Kentucky College of Agriculture on best management practices for riparian restoration and protection of streams and is currently enrolled in The Kentucky Woodland Owners Short Course (WOSC) which is designed to assist Kentucky's woodland owners in the care and management of their woodland resources.

- The owners have contacted Margaret Shea of Dropseed Nursery to provide a landscape management plan to provide a riparian buffer and to plant Kentucky Native plants over the majority of the unforested property. The landscape plan will consist of planting of Kentucky Native trees, shrubs, and wildflowers. The plan will also include a rain garden area that will serve to disperse any rainwater runoff. Rain gardens are effective in removing up to 90% of nutrients and chemicals and up to 80% of sediments from the rainwater runoff. This plan will be implemented in phases with the priority being the area directly bordering Pope Lick creek.

- The property in the buffer area will not be disturbed or graded to provide stormwater runoff the opportunity to be absorbed by the natural vegetation.

- We believe that with the measures taken above the result of this project will have a positive impact on the water quality of Pope Lick Creek.

Ratliff Landscape

Sun-loving Pollinator Garden

You will need to find an area that receives at least 6 hrs of sunlight per day during the growing season. Perennials can be planted in the spring or fall. Water weekly the first growing season. Plants are available in plugs ($3.25) and 4" pots (6.5). Space plants 18" apart. The proposed mix of plants are for a 200 sq ft garden. I am picturing this between the house and the creek so I am suggesting a low mix.

Plant Name		number	
Penstemon hirsutus	Hairy Beardtongue	9	
Asclepias incarnata	Swamp Milkweed	6	
Aster oblongifolia	Aromatic Aster	9	
Echinacea purpurea	Purple Coneflower	7	
Baptisia australis	False Blue Indigo	7	
Eupatorium coelestinum	Mist Flower	7	
Helianthus hirsutus	Rough Leaf Sunflower	7	
Monarda fistulosa	Bee Balm	7	
Pycnanthemum verticillatum	Whorled Mt. Mint	7	
Rudbeckia hirta	Black Eyed Susan	9	
Solidago rugosa	Rough Leaf Goldenrod	7	
Sporobolus heterolepis	Prairie Dropseed	11	
Zizia aurea	Golden Alexanders	7	100 X $3.25 = $325
		100	100 X $6,50 = $650

Vegetated Swale to accept stormwater runoff

This proposed 500 sq ft area would include shrubs and perennials that can tolerate part shade and occasionally wet conditions. This area could be tied to downspouts, or to overflow from rain barrels, or both. Trays of 50 plugs of the same species are $1.75/plug. This mix is less diverse, but will save costs.

Species	Common	Number	spacing
Cephalanthus occidentalis	Buttonbush	5	5'
Spiraea tomentosa	Steeplebush	5	3'
Carex vulpinoidea	Fox Sedge	50	18"
Chasmanthium latifolium	River Oats	50	18"
Lobelia siphilitica	Great Blue Lobelia	50	18"
Penstemon digitalis	Foxglove Beardtongue	50	18"
		210	

210 X $1.75 = $ 367.50

Sun-loving Tall Perennial Garden

You will need to find an area that receives at least 6 hrs of sunlight per day during the growing season. Perennials can be planted in the spring or fall. Water weekly the first growing season. Plants are available in plugs ($3.25) and 4" pots (6.5). Space plants 18" apart. The proposed mix of plants are for a 100 sq ft garden. It seemed like there were some sunny spots along the driveway into the property.

Plant Name		number
Andropogon gerardii	Big Bluestem	6
Coreopsis tripteris	Tall Coreopsis	6
Aster novae-angliae	New England Aster	5
Solidago rigida	Stiff Goldenrod	7
Eupatorium fistulosum	Joe Pye Weed	5
Silphium pinnatifidum	Cut Leaf Prairie Dock	7
Helianthus maximillianii	Maximillian's Sunflower	7
Asclepias syriaca	Common Milkweed	5

48 X $3.25 = $156
48 X $6.50 = $312

Trees and shrubs to add into landscape

With each species suggested, I have included its approximate width at maturity. When planting, aim to space each plant ½ of its width's distance from existing trees or shrubs. Cages are suggested around each plant to protect from deer damage. Planting in late fall is recommended. Water newly planted shrubs immediately after planting and once weekly during the first year of growth (watering only needed during the growing season when leaves are present) Trees and shrubs are available at Dropseed Nursery for $30 for a 3 gallon pot.

Redbud (Cercis Canadensis) 30'

Serviceberry (Amelanchier laevis) 20'

Pawpaw (Asimina triloba) 15'

American Plum (Prunus Americana) 15'

American Hornbeam (Carpinus caroliniana) 25' (fall color)

Black Haw Viburnum (Viburnum prunifolium) 8' width

Black Chokeberry (Aronia melanocarpa) 5' width

Wild Hydrangea (Hydrangea arborescens) 3' width

Spicebush (Lindera benzoin) 8' width

Hazelnut (Corlyus Americana) 8' width

Bladdernut (Staphylea trifoliata) 8' width

Hop Tree (Ptelea trifoliata) 15’ width

Coralberry (Symphoricarpos orbiculatus) 3-5’ width (nice for the edge of the stream where you don’t want something too tall to block the view.)

Shade Perennials

Because this is such a large area, and the existing vegetation would have to be removed before planting native perennials, I would suggest starting with bare areas along the creek and add very aggressive perennials like: Bottlebrush Grass (Elymus hystrix), River Oats (Chasmanthium latifolium), Columbine(Aqueligea Canadensis) and Zig Zag Goldenrod (Solidago flexicaulis). These are all available in trays of 50 plants and the tray of all one species is $87.5. Spacing is 18” – a tray of 50 covers approx.. 100 sq ft.

Other shade-loving perennials. in 4” pots $6.5 per plant.

- Wild Ginger, Dwarf Crested Iris, Foam Flower, Christmas Fern, Giant Bellwort, Jacob’s Ladder, Wild Geranium, Wild Poppy, Mayapple, Phlox, Solomon’s Seal, Black Cohosh.